

EPHEMERIDES

7 13.9

7 14.0

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>449945</b>	2015 <i>OD</i> <sub>46</sub>		7 13.9 41°62'	4.1°/12.9 18			<b>247695</b>	2003 <i>BE</i> <sub>37</sub>		7 14.0 35°78'	6.0°/17.2 16		
6 10	20 2.52	-32 53.4	1.831	2.702	13.5	20.3	6 10	19 54.78	-3 36.5	1.890	2.718	14.9	20.2
6 20	19 56.40	-33 4.4	1.773	2.711	10.2	20.1	6 20	19 50.49	-3 39.4	1.824	2.726	12.1	20.0
6 30	19 47.94	-33 9.1	1.737	2.720	6.8	19.9	6 30	19 44.37	-4 0.5	1.780	2.734	9.1	19.8
7 10	19 38.06	-33 3.3	1.727	2.730	4.3	19.8	7 10	19 37.08	-4 39.7	1.759	2.743	6.6	19.7
7 20	19 27.89	-32 44.6	1.742	2.740	5.1	19.8	7 20	19 29.42	-5 34.9	1.763	2.752	6.1	19.7
7 30	19 18.66	-32 13.0	1.784	2.750	8.1	20.0	7 30	19 22.28	-6 42.3	1.793	2.761	7.9	19.8
8 9	19 11.36	-31 30.8	1.851	2.760	11.4	20.2	8 9	19 16.50	-7 57.0	1.848	2.771	10.6	20.0
8 19	19 6.60	-30 41.4	1.939	2.771	14.3	20.5	8 19	19 12.65	-9 13.8	1.926	2.781	13.4	20.2
<b>181829</b>	1998 <i>SY</i> <sub>62</sub>		7 13.9 253°51'	4.2°/15.4 18			<b>77396</b>	2001 <i>FM</i> <sub>159</sub>		7 14.0 215°40'	0.3°/13.9 18		
6 10	19 59.24	-10 51.1	1.717	2.569	15.1	20.7	6 10	19 59.48	-21 34.6	1.978	2.845	12.8	19.7
6 20	19 54.16	-10 39.1	1.633	2.558	11.8	20.4	6 20	19 54.07	-21 48.8	1.902	2.843	9.5	19.5
6 30	19 46.79	-10 39.9	1.571	2.546	8.2	20.2	6 30	19 46.60	-22 6.8	1.849	2.840	5.7	19.3
7 10	19 37.81	-10 53.3	1.532	2.535	4.9	20.0	7 10	19 37.75	-22 25.8	1.823	2.837	1.7	19.0
7 20	19 28.16	-11 18.0	1.520	2.523	4.7	19.9	7 20	19 28.42	-22 43.0	1.823	2.834	2.6	19.0
7 30	19 18.98	-11 51.5	1.533	2.511	8.0	20.1	7 30	19 19.65	-22 56.4	1.851	2.831	6.6	19.3
8 9	19 11.35	-12 30.4	1.571	2.498	11.9	20.3	8 9	19 12.37	-23 5.0	1.904	2.828	10.3	19.5
8 19	19 6.05	-13 11.5	1.630	2.486	15.4	20.5	8 19	19 7.25	-23 8.7	1.980	2.825	13.5	19.7
<b>490006</b>	2008 <i>ST</i> <sub>218</sub>		7 13.9 303°38'	9.9°/16.9 18			<b>119015</b>	2000 <i>YX</i> <sub>136</sub>		7 14.0 146°03'	5.7°/17.2 18		
6 10	19 55.80	+ 0 33.4	1.625	2.442	17.4	21.4	6 10	19 55.10	- 0 47.6	2.873	3.661	11.3	20.4
6 20	19 51.77	+ 1 28.0	1.536	2.421	14.9	21.2	6 20	19 50.14	- 0 23.8	2.800	3.669	9.4	20.3
6 30	19 45.45	+ 2 2.3	1.467	2.400	12.3	21.0	6 30	19 43.93	- 0 12.6	2.750	3.677	7.5	20.2
7 10	19 37.44	+ 2 12.2	1.418	2.379	10.4	20.8	7 10	19 36.93	- 0 14.9	2.725	3.684	6.1	20.1
7 20	19 28.66	+ 1 55.7	1.393	2.359	10.0	20.7	7 20	19 29.67	- 0 30.3	2.726	3.692	5.7	20.1
7 30	19 20.22	+ 1 13.6	1.390	2.339	11.5	20.8	7 30	19 22.77	- 0 57.7	2.755	3.698	6.8	20.1
8 9	19 13.25	+ 0 10.3	1.410	2.319	14.3	20.9	8 9	19 16.78	- 1 34.5	2.811	3.705	8.5	20.3
8 19	19 8.59	- 1 7.5	1.449	2.299	17.3	21.0	8 19	19 12.12	- 2 17.9	2.890	3.711	10.4	20.4
<b>59833</b>	Danimatter		7 14.0 352°45'	2°8'/13.1 18			<b>206190</b>	2002 <i>TH</i> <sub>376</sub>		7 14.0 311°54'	1°9'/13.2 18		
6 10	20 0.07	-29 34.9	2.019	2.889	12.4	18.5	6 10	19 57.84	-24 11.0	1.763	2.641	13.5	20.1
6 20	19 54.49	-29 45.1	1.947	2.888	9.3	18.3	6 20	19 53.25	-24 50.3	1.684	2.630	10.1	19.9
6 30	19 46.80	-29 52.3	1.899	2.887	5.9	18.1	6 30	19 46.30	-25 33.4	1.627	2.619	6.2	19.6
7 10	19 37.76	-29 52.8	1.877	2.886	3.1	17.9	7 10	19 37.71	-26 15.9	1.596	2.609	2.4	19.4
7 20	19 28.32	-29 44.4	1.881	2.885	4.0	17.9	7 20	19 28.46	-26 53.4	1.590	2.598	3.6	19.4
7 30	19 19.56	-29 26.3	1.913	2.884	7.2	18.1	7 30	19 19.72	-27 22.3	1.611	2.588	7.7	19.7
8 9	19 12.42	-28 59.5	1.969	2.884	10.5	18.3	8 9	19 12.62	-27 41.2	1.656	2.578	11.7	19.9
8 19	19 7.53	-28 26.0	2.048	2.884	13.5	18.5	8 19	19 7.93	-27 50.4	1.721	2.569	15.1	20.1
<b>206066</b>	2002 <i>QK</i> <sub>121</sub>		7 14.0 271°44'	0°1'/14.0 18			<b>444199</b>	2005 <i>SQ</i> <sub>146</sub>		7 14.0 274°01'	1°6'/13.3 15		
6 10	19 59.19	-21 18.5	1.951	2.819	12.9	20.9	6 10	19 58.24	-25 20.4	2.298	3.165	11.3	22.1
6 20	19 53.93	-21 22.5	1.868	2.809	9.6	20.6	6 20	19 53.09	-25 46.1	2.207	3.147	8.4	21.9
6 30	19 46.54	-21 30.0	1.808	2.799	5.8	20.4	6 30	19 46.01	-26 13.2	2.140	3.129	5.2	21.7
7 10	19 37.72	-21 38.7	1.774	2.788	1.7	20.1	7 10	19 37.61	-26 38.5	2.099	3.111	2.1	21.4
7 20	19 28.36	-21 46.4	1.767	2.778	2.6	20.1	7 20	19 28.64	-26 59.0	2.086	3.093	3.0	21.5
7 30	19 19.50	-21 51.3	1.787	2.768	6.7	20.4	7 30	19 20.04	-27 12.6	2.101	3.075	6.4	21.6
8 9	19 12.13	-21 52.6	1.832	2.758	10.6	20.6	8 9	19 12.70	-27 18.7	2.141	3.057	9.8	21.8
8 19	19 6.95	-21 50.3	1.899	2.747	13.9	20.8	8 19	19 7.29	-27 17.4	2.205	3.038	12.7	22.0
<b>289063</b>	2004 <i>TR</i> <sub>200</sub>		7 14.0 164°32'	0°8'/14.4 18			<b>476053</b>	2007 <i>RB</i> <sub>313</sub>		7 14.0 296°29'	6°5'/12.1 18		
6 10	19 55.97	-18 5.9	2.591	3.446	10.5	21.3	6 10	20 4.46	-37 38.0	1.795	2.660	14.0	20.9
6 20	19 51.00	-18 18.5	2.514	3.448	7.8	21.1	6 20	19 58.42	-38 10.4	1.714	2.643	11.1	20.7
6 30	19 44.52	-18 36.0	2.462	3.449	4.8	21.0	6 30	19 49.53	-38 33.9	1.655	2.626	8.3	20.5
7 10	19 37.09	-18 56.6	2.438	3.451	1.6	20.7	7 10	19 38.67	-38 41.9	1.621	2.610	6.6	20.3
7 20	19 29.33	-19 18.6	2.441	3.452	2.0	20.8	7 20	19 27.09	-38 30.1	1.611	2.593	7.3	20.3
7 30	19 21.98	-19 40.2	2.474	3.454	5.2	21.0	7 30	19 16.29	-37 57.1	1.627	2.577	10.1	20.5
8 9	19 15.69	-19 59.9	2.532	3.455	8.2	21.2	8 9	19 7.58	-37 5.9	1.666	2.561	13.3	20.6
8 19	19 10.97	-20 16.9	2.615	3.456	10.8	21.4	8 19	19 1.83	-36 1.3	1.726	2.545	16.3	20.8
<b>75719</b>	2000 <i>AZ</i> <sub>122</sub>		7 14.0 90°69'	2°4'/14.9 18			<b>522935</b>	2016 <i>PC</i> <sub>112</sub>		7 14.0 238°67'	0°5'/13.8 18		
6 10	19 58.16	-14 34.2	1.906	2.764	13.6	19.9	6 10	19 58.15	-21 33.2	2.105	2.972	12.1	21.5
6 20	19 53.01	-14 30.2	1.837	2.769	10.3	19.7	6 20	19 53.02	-21 58.7	2.027	2.968	9.0	21.3
6 30	19 45.89	-14 35.1	1.791	2.774	6.7	19.5	6 30	19 45.95	-22 28.4	1.973	2.963	5.4	21.1
7 10	19 37.51	-14 47.6	1.770	2.779	3.2	19.3	7 10	19 37.58	-22 59.3	1.945	2.959	1.6	20.8
7 20	19 28.74	-15 5.8	1.776	2.784	3.3	19.3	7 20	19 28.73	-23 28.3	1.944	2.954	2.5	20.9
7 30	19 20.55	-15 27.6	1.808	2.789	6.7	19.5	7 30	19 20.35	-23 53.0	1.970	2.950	6.4	21.1
8 9	19 13.84	-15 50.9	1.866	2.794	10.3	19.7	8 9	19 13.33	-24 12.0	2.023	2.945	9.9	21.3
8 19	19 9.20	-16 13.7	1.946	2.799	13.4	20.0	8 19	19 8.33	-24 24.8	2.098	2.940	13.0	21.5
<b>159382</b>	1998 <i>FQ</i> <sub>110</sub>		7 14.0 12°10'	8°8'/15.7 18			<b>351899</b>	2006 <i>SZ</i> <sub>249</sub>		7 14.0 230°46'	0°6'/13.8 18		
6 10	19 51.48	- 9 26.0	0.908	1.807	21.2	17.7	6 10	19 58.56	-22 37.4	2.235	3.099	11.6	21.6
6 20	19 49.25	- 7 49.4	0.869	1.815	17.0	17.5	6 20	19 53.22	-22 52.8	2.155	3.094	8.6	21.4
6 30	19 44.04	- 6 33.0	0.847	1.826	12.7	17.3	6 30	19 46.02	-23 10.7	2.099	3.089	5.2	21.2
7 10	19 37.01	- 5 41.9	0.844	1.840	9.4	17.2	7 10	19 37.59	-23 28.6	2.069	3.083	1.6	20.9
7 20	19 29.58	- 5 18.2	0.860	1.856	9.1	17.2	7 20	19 28.72	-23 44.1	2.067	3.078	2.5	21.0
7 30	19 23.30	- 5 20.1	0.896	1.875	11.9	17.4	7 30	19 20.32	-23 55.3	2.093	3.072	6.1	21.2
8 9	19 19.40	- 5 41.8	0.950	1.896	15.7	17.7	8 9	19 13.23	-24 1.5	2.145	3.066	9.5	21.4
8 19	19 18.53	- 6 16.3	1.022	1.919	19.3	18.0	8 19	19 8.06	-24 2.7	2.220	3.059	12.5	21.6
<b>388826</b>	2008 <i>CU</i> <sub>154</sub>		7 14.0 8°43'	0°3'/13.9 18			<b>92309</b>	2					

EPHEMERIDES

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	
<b>390204</b>	2012 XE <sub>2</sub>	7 14.0 153°09 0°6/13.7 16						<b>263407</b>	2008 DQ <sub>26</sub>	7 14.0 50°30 3°4/15.0 17				
6 10	19 58.33	-20 46.2	2.177	3.041	11.9	20.9	6 10	19 59.96	-14 7.0	1.360	2.233	17.1	20.2	
6 20	19 53.07	-21 29.3	2.106	3.045	8.8	20.7	6 20	19 54.90	-13 49.2	1.304	2.243	13.1	20.0	
6 30	19 45.94	-22 17.5	2.058	3.048	5.3	20.5	6 30	19 47.27	-13 43.3	1.269	2.254	8.5	19.8	
7 10	19 37.58	-23 7.3	2.037	3.051	1.6	20.3	7 10	19 38.00	-13 48.5	1.256	2.265	4.3	19.6	
7 20	19 28.77	-23 55.1	2.044	3.054	2.5	20.3	7 20	19 28.30	-14 2.7	1.268	2.276	4.3	19.6	
7 30	19 20.44	-24 37.8	2.078	3.057	6.2	20.6	7 30	19 19.51	-14 23.1	1.304	2.288	8.4	19.9	
8 9	19 13.44	-25 13.3	2.140	3.059	9.6	20.8	8 9	19 12.76	-14 46.8	1.364	2.299	12.6	20.1	
8 19	19 8.37	-25 41.2	2.224	3.061	12.5	21.0	8 19	19 8.75	-15 11.2	1.443	2.312	16.4	20.4	
<b>67934</b>	2000 WY <sub>133</sub>	7 14.0 101°75 1°1/14.3 18						<b>233316</b>	2006 BO <sub>135</sub>	7 14.0 306°02 4°2/16.1 18				
6 10	20 2.68	-19 36.5	1.843	2.705	13.8	18.6	6 10	19 56.19	- 8 24.8	1.551	2.407	16.3	20.4	
6 20	19 56.31	-19 14.4	1.781	2.718	10.3	18.4	6 20	19 52.29	- 8 59.0	1.460	2.386	12.9	20.2	
6 30	19 47.84	-18 56.0	1.742	2.730	6.3	18.2	6 30	19 45.92	- 9 54.4	1.390	2.366	8.9	19.9	
7 10	19 38.10	-18 40.1	1.729	2.743	2.2	17.9	7 10	19 37.70	-11 10.0	1.342	2.346	5.2	19.6	
7 20	19 28.08	-18 25.7	1.744	2.755	2.7	18.0	7 20	19 28.58	-12 41.7	1.320	2.326	4.6	19.5	
7 30	19 18.85	-18 12.1	1.786	2.767	6.8	18.3	7 30	19 19.78	-14 23.2	1.324	2.307	8.3	19.7	
8 9	19 11.33	-17 59.2	1.853	2.778	10.5	18.5	8 9	19 12.53	-16 6.9	1.352	2.288	12.7	19.9	
8 19	19 6.10	-17 46.8	1.943	2.790	13.7	18.8	8 19	19 7.77	-17 46.4	1.401	2.270	16.7	20.1	
<b>384135</b>	2008 YC <sub>91</sub>	7 14.0 109°81 0°8/14.2 18						<b>462802</b>	2010 PR <sub>74</sub>	7 14.0 355°50 7°3/17.3 17				
6 10	20 1.43	-20 11.3	2.042	2.902	12.7	20.9	6 10	19 35.09	- 8 16.6	0.625	1.561	23.0	19.0	
6 20	19 55.26	-19 51.8	1.976	2.912	9.5	20.7	6 20	19 37.96	- 8 7.0	0.575	1.545	18.6	18.7	
6 30	19 47.17	-19 35.2	1.933	2.921	5.8	20.5	6 30	19 37.75	- 8 32.1	0.539	1.532	13.6	18.4	
7 10	19 37.91	-19 20.2	1.917	2.930	1.9	20.3	7 10	19 35.36	- 9 34.6	0.517	1.524	8.9	18.1	
7 20	19 28.36	-19 5.9	1.929	2.940	2.5	20.3	7 20	19 32.13	-11 10.2	0.510	1.520	7.6	18.0	
7 30	19 19.50	-18 51.7	1.968	2.949	6.3	20.6	7 30	19 29.83	-13 7.3	0.520	1.520	11.4	18.2	
8 9	19 12.17	-18 37.6	2.034	2.957	9.8	20.8	8 9	19 30.11	-15 9.8	0.545	1.524	16.7	18.5	
8 19	19 6.93	-18 23.4	2.122	2.966	12.8	21.0	8 19	19 33.88	-17 3.4	0.584	1.532	21.7	18.8	
<b>497843</b>	2006 UB <sub>73</sub>	7 14.0 189°94 1°7/13.5 17						<b>40741</b>	1999 TD	7 14.0 208°86 7°7/18.6 18				
6 10	20 3.74	-25 20.8	1.908	2.774	13.2	22.4	6 10	19 54.67	+ 7 47.1	3.090	3.823	11.7	19.5	
6 20	19 57.35	-25 40.8	1.833	2.773	9.9	22.2	6 20	19 49.87	+ 8 21.8	3.004	3.817	10.3	19.4	
6 30	19 48.64	-26 1.5	1.782	2.772	6.0	21.9	6 30	19 43.83	+ 8 41.2	2.939	3.810	9.0	19.3	
7 10	19 38.39	-26 19.1	1.757	2.770	2.3	21.7	7 10	19 36.97	+ 8 43.6	2.898	3.803	8.0	19.2	
7 20	19 27.62	-26 30.4	1.759	2.767	3.3	21.8	7 20	19 29.80	+ 8 28.4	2.881	3.795	7.7	19.1	
7 30	19 17.50	-26 33.6	1.789	2.764	7.3	22.0	7 30	19 22.88	+ 7 56.4	2.890	3.788	8.2	19.2	
8 9	19 9.10	-26 28.6	1.844	2.760	11.0	22.2	8 9	19 16.76	+ 7 10.1	2.924	3.779	9.4	19.2	
8 19	19 3.11	-26 16.7	1.921	2.756	14.3	22.4	8 19	19 11.89	+ 6 12.7	2.981	3.770	10.8	19.3	
<b>45709</b>	2000 FR <sub>36</sub>	7 14.0 146°48 4°4/16.6 18						<b>124976</b>	2001 TQ <sub>113</sub>	7 14.0 182°97 1°9/13.3 18				
6 10	19 53.97	- 5 32.4	2.627	3.445	11.5	19.0	6 10	20 2.82	-26 8.8	2.182	3.043	12.0	20.4	
6 20	19 49.49	- 5 29.0	2.549	3.447	9.2	18.8	6 20	19 56.43	-26 32.5	2.107	3.044	8.9	20.2	
6 30	19 43.64	- 5 37.6	2.493	3.448	6.8	18.7	6 30	19 47.99	-26 56.4	2.056	3.044	5.5	20.0	
7 10	19 36.89	- 5 58.0	2.464	3.449	4.9	18.6	7 10	19 38.21	-27 16.7	2.032	3.044	2.3	19.8	
7 20	19 29.84	- 6 29.3	2.461	3.450	4.6	18.5	7 20	19 27.99	-27 30.5	2.036	3.043	3.2	19.9	
7 30	19 23.13	- 7 9.4	2.486	3.451	6.2	18.6	7 30	19 18.34	-27 36.2	2.068	3.041	6.7	20.1	
8 9	19 17.38	- 7 55.7	2.538	3.453	8.5	18.8	8 9	19 10.18	-27 33.7	2.127	3.038	10.0	20.3	
8 19	19 13.07	- 8 45.2	2.613	3.454	10.8	19.0	8 19	19 4.18	-27 24.1	2.208	3.035	12.9	20.5	
<b>139027</b>	2001 DS <sub>83</sub>	7 14.0 30°79 0°7/13.8 17						<b>116263</b>	2003 YR <sub>32</sub>	7 14.0 170°04 8°4/ 8.6 18				
6 10	19 58.73	-21 23.3	1.110	2.008	18.2	19.5	6 10	20 7.48	-45 0.5	2.379	3.210	12.1	20.2	
6 20	19 54.52	-21 49.6	1.064	2.020	13.5	19.2	6 20	20 0.48	-46 43.2	2.322	3.213	10.3	20.1	
6 30	19 47.23	-22 23.1	1.037	2.032	8.1	19.0	6 30	19 50.76	-48 15.1	2.290	3.216	8.8	20.0	
7 10	19 38.00	-22 58.5	1.031	2.046	2.4	18.7	7 10	19 39.09	-49 28.7	2.283	3.219	8.4	20.0	
7 20	19 28.28	-23 30.5	1.049	2.060	3.7	18.8	7 20	19 26.61	-50 18.4	2.302	3.221	9.2	20.1	
7 30	19 19.73	-23 55.2	1.089	2.076	9.1	19.2	7 30	19 14.71	-50 42.1	2.347	3.222	10.7	20.2	
8 9	19 13.65	-24 10.9	1.151	2.092	14.0	19.5	8 9	19 4.66	-50 41.8	2.413	3.223	12.5	20.3	
8 19	19 10.79	-24 18.0	1.231	2.108	18.0	19.8	8 19	18 57.38	-50 21.9	2.499	3.224	14.3	20.4	
<b>304322</b>	2006 SO <sub>178</sub>	7 14.0 268°68 0°7/13.8 18						<b>472551</b>	2015 DM <sub>38</sub>	7 14.0 17°93 1°0/14.5 17				
6 10	19 58.44	-22 34.2	2.065	2.933	12.3	21.7	6 10	19 56.64	-15 54.5	1.371	2.252	16.5	19.7	
6 20	19 53.30	-22 50.8	1.985	2.926	9.1	21.5	6 20	19 52.64	-16 41.9	1.310	2.256	12.4	19.5	
6 30	19 46.16	-23 10.4	1.928	2.919	5.5	21.3	6 30	19 46.05	-17 43.3	1.269	2.261	7.6	19.2	
7 10	19 37.67	-23 30.3	1.897	2.912	1.7	21.0	7 10	19 37.70	-18 54.1	1.252	2.266	2.6	18.9	
7 20	19 28.68	-23 47.6	1.894	2.904	2.6	21.1	7 20	19 28.75	-20 8.1	1.259	2.271	3.1	19.0	
7 30	19 20.19	-24 0.4	1.918	2.897	6.5	21.3	7 30	19 20.53	-21 19.1	1.292	2.278	8.1	19.3	
8 9	19 13.10	-24 7.7	1.967	2.890	10.1	21.5	8 9	19 14.24	-22 22.4	1.347	2.285	12.6	19.6	
8 19	19 8.08	-24 9.6	2.039	2.882	13.2	21.7	8 19	19 10.69	-23 15.3	1.423	2.292	16.5	19.9	
<b>68312</b>	2001 FV <sub>117</sub>	7 14.0 12°28 3°6/15.3 18						<b>192710</b>	1999 TF <sub>107</sub>	7 14.0 260°04 3°8/15.1 18				
6 10	19 56.33	-11 20.7	2.304	3.146	12.1	19.3	6 10	20 0.34	-11 52.7	2.166	3.006	12.8	20.7	
6 20	19 51.39	-10 53.2	2.228	3.146	9.4	19.2	6 20	19 54.66	-11 20.9	2.066	2.984	10.1	20.5	
6 30	19 44.84	-10 34.2	2.175	3.147	6.5	19.0	6 30	19 47.02	-10 56.8	1.989	2.961	7.0	20.3	
7 10	19 37.25	-10 23.8	2.148	3.147	4.1	18.8	7 10	19 37.97	-10 41.0	1.937	2.938	4.3	20.1	
7 20	19 29.34	-10 21.6	2.148	3.148	4.0	18.8	7 20	19 28.30	-10 33.3	1.914	2.914	4.3	20.0	
7 30	19 21.87	-10 26.7	2.175	3.148	6.3	19.0	7 30	19 18.95	-10 33.2	1.918	2.890	7.1	20.1	
8 9	19 15.56	-10 37.4	2.229	3.149	9.2	19.1	8 9	19 10.81	-10 39.3	1.948	2.865	10.5	20.3	
8 19	19 10.95	-10 52.0	2.305	3.150	11.9	19.3	8 19	19 4.59	-10 50.1	2.001	2.840	13.6	20.5	
<b>329742</b>	2004 AB <sub>4</sub>	7 14.0 206°12 0°8/13.7 17						<b>191294</b>	2003 FM <sub>108</sub>	7 14.0 15°52 0°8/14.3 17				
6 10	20 2.50	-21 58.8	1.932	2.796	13.2	22.0	6 10	19 55.14	-17 9.4	1.185	2.080	17.6	19.2	
6 20	19 56.46	-22 28.9	1.852	2.791	9.8	21.8	6 20	19 51.78	-17 47					

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7 14.0

7 14.0

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>509319</b>	2006 <i>WG</i> <sub>97</sub>		7 14.0 276°30	2°0/14.6	17		<b>295286</b>	2008 <i>GG</i> <sub>97</sub>		7 14.0 18°07	1°8/13.6	17	
6 10	20 1.18	-16 43.0	1.649	2.515	15.0	22.5	6 10	19 57.77	-24 1.2	1.118	2.020	17.8	20.6
6 20	19 55.95	-16 34.6	1.554	2.491	11.5	22.2	6 20	19 53.92	-24 21.9	1.068	2.026	13.2	20.3
6 30	19 48.11	-16 34.0	1.479	2.466	7.3	21.9	6 30	19 46.95	-24 46.3	1.038	2.034	8.0	20.1
7 10	19 38.36	-16 40.0	1.429	2.441	3.1	21.6	7 10	19 37.99	-25 9.1	1.028	2.043	2.7	19.8
7 20	19 27.69	-16 50.8	1.406	2.416	3.4	21.6	7 20	19 28.49	-25 25.6	1.042	2.053	4.1	19.9
7 30	19 17.38	-17 4.3	1.408	2.390	8.0	21.8	7 30	19 20.12	-25 33.0	1.078	2.064	9.3	20.3
8 9	19 8.72	-17 18.4	1.434	2.364	12.6	22.0	8 9	19 14.23	-25 31.0	1.135	2.076	14.1	20.6
8 19	19 2.62	-17 32.0	1.481	2.338	16.7	22.2	8 19	19 11.57	-25 20.7	1.211	2.089	18.2	20.9
<b>227963</b>	2007 <i>HR</i> <sub>17</sub>		7 14.0 53°99	4°6/15.6	17		<b>418218</b>	2008 <i>CB</i> <sub>170</sub>		7 14.0 231°44	0°2/13.9	17	
6 10	19 58.69	-10 41.8	1.543	2.401	16.2	20.0	6 10	20 3.34	-21 48.6	1.775	2.641	14.0	22.3
6 20	19 53.72	-10 21.1	1.484	2.412	12.6	19.8	6 20	19 57.29	-21 54.4	1.691	2.631	10.5	22.0
6 30	19 46.47	-10 14.2	1.446	2.422	8.7	19.6	6 30	19 48.76	-22 3.7	1.630	2.620	6.4	21.7
7 10	19 37.78	-10 20.9	1.431	2.433	5.3	19.4	7 10	19 38.53	-22 13.6	1.595	2.609	1.9	21.4
7 20	19 28.70	-10 39.8	1.441	2.444	5.1	19.5	7 20	19 27.62	-22 21.3	1.586	2.597	2.8	21.5
7 30	19 20.37	-11 8.1	1.477	2.455	8.2	19.7	7 30	19 17.28	-22 24.8	1.604	2.585	7.4	21.7
8 9	19 13.82	-11 42.2	1.536	2.467	11.8	19.9	8 9	19 8.66	-22 23.6	1.648	2.572	11.6	21.9
8 19	19 9.69	-12 18.6	1.616	2.478	15.2	20.2	8 19	19 2.56	-22 18.1	1.713	2.558	15.3	22.2
<b>499477</b>	2010 <i>JG</i> <sub>48</sub>		7 14.0 8°66	1°6/14.6	17		<b>94336</b>	2001 <i>PE</i> <sub>16</sub>		7 14.0 254°55	11°7/12.9	18	
6 10	19 52.16	-15 44.5	0.846	1.761	20.8	20.4	6 10	20 20.58	-45 19.8	1.212	2.067	19.9	20.1
6 20	19 50.32	-16 16.9	0.799	1.762	15.7	20.1	6 20	20 12.06	-45 55.8	1.143	2.056	16.7	19.8
6 30	19 45.07	-17 8.7	0.767	1.764	9.8	19.8	6 30	19 58.49	-46 10.1	1.092	2.045	13.6	19.6
7 10	19 37.48	-18 14.9	0.755	1.769	3.5	19.5	7 10	19 41.45	-45 49.2	1.062	2.033	11.8	19.5
7 20	19 29.12	-19 27.7	0.762	1.775	4.0	19.5	7 20	19 23.48	-44 45.1	1.054	2.021	12.3	19.5
7 30	19 21.88	-20 38.5	0.790	1.783	10.1	19.9	7 30	19 7.49	-42 59.6	1.069	2.008	15.1	19.6
8 9	19 17.32	-21 40.4	0.836	1.793	15.7	20.2	8 9	18 55.70	-40 44.4	1.104	1.995	18.7	19.8
8 19	19 16.33	-22 29.6	0.900	1.805	20.5	20.6	8 19	18 49.03	-38 14.2	1.158	1.982	22.4	20.0
<b>191690</b>	2004 <i>RY</i> <sub>142</sub>		7 14.0 190°42	2°2/13.5	18		<b>201432</b>	2003 <i>BS</i> <sub>43</sub>		7 14.0 158°32	0°7/13.8	17	
6 10	20 4.54	-28 3.7	1.933	2.799	13.1	20.1	6 10	20 4.27	-21 9.5	1.553	2.425	15.4	21.3
6 20	19 57.88	-28 1.9	1.860	2.798	9.8	19.9	6 20	19 58.12	-21 44.6	1.488	2.430	11.5	21.1
6 30	19 48.92	-27 57.2	1.809	2.797	6.1	19.7	6 30	19 49.29	-22 25.9	1.444	2.436	6.9	20.8
7 10	19 38.50	-27 46.4	1.785	2.796	2.6	19.5	7 10	19 38.68	-23 8.6	1.426	2.440	2.0	20.5
7 20	19 27.66	-27 27.5	1.788	2.795	3.5	19.5	7 20	19 27.47	-23 48.0	1.433	2.444	3.2	20.6
7 30	19 17.57	-27 0.1	1.818	2.793	7.2	19.8	7 30	19 17.05	-24 20.2	1.467	2.448	8.0	20.9
8 9	19 9.26	-26 25.8	1.874	2.791	10.9	20.0	8 9	19 8.63	-24 43.8	1.526	2.450	12.3	21.2
8 19	19 3.40	-25 46.7	1.953	2.788	14.1	20.2	8 19	19 3.02	-24 58.7	1.605	2.453	16.0	21.4
<b>88249</b>	2001 <i>EV</i> <sub>16</sub>		7 14.0 14°30	22°6/30.7	18		<b>336987</b>	2011 <i>KR</i> <sub>47</sub>		7 14.0 162°85	0°1/13.9	17	
6 10	19 54.82	+22 25.9	1.002	1.747	30.2	19.2	6 10	19 59.65	-20 4.6	1.863	2.731	13.4	21.1
6 20	19 51.96	+23 42.1	0.954	1.748	28.4	19.1	6 20	19 54.33	-20 33.0	1.792	2.733	10.0	20.9
6 30	19 45.95	+24 5.6	0.915	1.750	26.5	18.9	6 30	19 46.86	-21 7.5	1.744	2.734	6.0	20.7
7 10	19 37.74	+23 25.7	0.886	1.753	24.6	18.8	7 10	19 37.95	-21 44.6	1.721	2.736	1.8	20.4
7 20	19 28.71	+21 37.3	0.870	1.756	23.2	18.7	7 20	19 28.54	-22 20.8	1.726	2.737	2.6	20.5
7 30	19 20.56	+18 43.5	0.868	1.761	22.6	18.7	7 30	19 19.71	-22 52.9	1.757	2.738	6.8	20.7
8 9	19 14.80	+14 58.6	0.883	1.766	23.1	18.8	8 9	19 12.44	-23 19.1	1.814	2.739	10.7	21.0
8 19	19 12.40	+10 42.8	0.915	1.771	24.5	18.9	8 19	19 7.42	-23 38.9	1.893	2.740	14.0	21.2
<b>314077</b>	2005 <i>CF</i> <sub>22</sub>		7 14.0 170°04	1°3/14.6	17		<b>175572</b>	2006 <i>TB</i> <sub>42</sub>		7 14.0 288°18	0°3/13.9	18	
6 10	20 1.93	-15 47.3	1.776	2.634	14.4	21.6	6 10	19 57.94	-21 32.0	2.043	2.911	12.4	20.6
6 20	19 56.08	-16 20.8	1.704	2.638	10.9	21.3	6 20	19 52.97	-21 45.7	1.962	2.903	9.2	20.4
6 30	19 47.93	-17 4.8	1.655	2.641	6.8	21.1	6 30	19 46.00	-22 3.2	1.905	2.896	5.6	20.2
7 10	19 38.24	-17 56.0	1.631	2.644	2.5	20.8	7 10	19 37.70	-22 21.9	1.874	2.888	1.6	19.9
7 20	19 27.99	-18 50.2	1.634	2.646	2.8	20.9	7 20	19 28.90	-22 39.3	1.869	2.880	2.5	19.9
7 30	19 18.33	-19 43.2	1.665	2.647	7.1	21.1	7 30	19 20.58	-22 53.2	1.892	2.873	6.4	20.2
8 9	19 10.31	-20 31.9	1.722	2.647	11.1	21.4	8 9	19 13.65	-23 2.6	1.940	2.865	10.1	20.4
8 19	19 4.66	-21 14.3	1.800	2.648	14.6	21.6	8 19	19 8.77	-23 7.2	2.011	2.858	13.3	20.6
<b>324380</b>	2006 <i>RW</i> <sub>37</sub>		7 14.0 273°90	6°4/11.7	18		<b>219934</b>	2002 <i>GD</i> <sub>109</sub>		7 14.0 65°15	2°0/15.0	16	
6 10	20 4.29	-33 59.7	1.545	2.421	15.2	20.4	6 10	19 56.25	-14 11.3	2.159	3.013	12.4	20.5
6 20	19 58.73	-35 1.0	1.468	2.407	11.9	20.2	6 20	19 51.41	-14 25.2	2.097	3.027	9.3	20.3
6 30	19 49.99	-35 58.2	1.413	2.392	8.5	19.9	6 30	19 44.90	-14 47.8	2.058	3.040	6.0	20.2
7 10	19 38.94	-36 43.0	1.382	2.378	6.4	19.8	7 10	19 37.34	-15 17.3	2.045	3.054	2.8	20.0
7 20	19 26.92	-37 8.6	1.375	2.363	7.6	19.8	7 20	19 29.48	-15 51.5	2.059	3.068	2.7	20.0
7 30	19 15.62	-37 11.6	1.393	2.348	10.9	20.0	7 30	19 22.15	-16 27.6	2.101	3.082	5.9	20.2
8 9	19 6.57	-36 53.3	1.433	2.333	14.6	20.1	8 9	19 16.10	-17 3.3	2.168	3.096	9.1	20.4
8 19	19 0.80	-36 18.2	1.492	2.319	18.1	20.3	8 19	19 11.85	-17 36.8	2.260	3.110	11.9	20.7
<b>387166</b>	2012 <i>TZ</i> <sub>249</sub>		7 14.0 149°12	1°8/13.4	17		<b>398903</b>	2013 <i>CJ</i> <sub>131</sub>		7 14.0 183°30	2°8/15.6	18	
6 10	20 1.53	-26 33.3	2.314	3.175	11.4	21.8	6 10	19 56.31	-10 47.6	2.722	3.554	10.7	22.2
6 20	19 55.30	-26 48.1	2.245	3.182	8.4	21.7	6 20	19 51.22	-10 54.4	2.641	3.555	8.3	22.0
6 30	19 47.22	-27 2.1	2.201	3.189	5.2	21.5	6 30	19 44.71	-11 10.0	2.583	3.555	5.7	21.9
7 10	19 37.99	-27 12.4	2.184	3.196	2.2	21.3	7 10	19 37.28	-11 33.6	2.552	3.554	3.3	21.7
7 20	19 28.44	-27 16.7	2.195	3.202	3.0	21.3	7 20	19 29.53	-12 3.8	2.550	3.553	3.1	21.7
7 30	19 19.50	-27 13.9	2.235	3.208	6.2	21.6	7 30	19 22.11	-12 38.6	2.577	3.552	5.4	21.8
8 9	19 11.97	-27 4.3	2.301	3.213	9.3	21.8	8 9	19 15.66	-13 15.8	2.631	3.550	8.0	22.0
8 19	19 6.43	-26 48.8	2.390	3.218	12.0	22.0	8 19	19 10.67	-13 53.3	2.709	3.548	10.5	22.2
<b>492335</b>	2014 <i>EB</i> <sub>10</sub>		7 14.0 243°71	0°5/14.3	18		<b>473811</b>						

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7 14.0

7 14.1

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>45171</b>	1999 <i>XB</i> <sub>134</sub>		7 14.0 155°97	1°9/13.5	18		<b>48348</b>	4124 <i>P-L</i>		7 14.0 271°87	5°0/15.9	18	
6 10	20 3.88	-28 3.0	2.456	3.310	11.0	19.6	6 10	19 56.90	-7 34.7	2.065	2.899	13.6	19.1
6 20	19 56.90	-28 3.2	2.385	3.318	8.2	19.5	6 20	19 52.17	-7 17.2	1.974	2.883	10.9	18.9
6 30	19 48.13	-28 0.9	2.339	3.325	5.1	19.3	6 30	19 45.54	-7 12.5	1.904	2.868	8.0	18.6
7 10	19 38.27	-27 53.5	2.321	3.332	2.2	19.1	7 10	19 37.59	-7 21.2	1.859	2.852	5.5	18.5
7 20	19 28.14	-27 39.4	2.332	3.338	3.0	19.2	7 20	19 29.08	-7 42.7	1.841	2.835	5.2	18.4
7 30	19 18.66	-27 18.2	2.372	3.343	6.0	19.4	7 30	19 20.90	-8 15.1	1.849	2.819	7.5	18.5
8 9	19 10.61	-26 51.0	2.439	3.348	9.0	19.6	8 9	19 13.94	-8 55.6	1.882	2.803	10.6	18.7
8 19	19 4.53	-26 19.5	2.530	3.353	11.6	19.8	8 19	19 8.86	-9 40.7	1.938	2.786	13.6	18.8
<b>315861</b>	2008 <i>HC</i> <sub>49</sub>		7 14.0 259°98	1°9/13.1	18		<b>375706</b>	2009 <i>PN</i> <sub>7</sub>		7 14.0 304°04	2°9/14.9	17	
6 10	19 58.41	-25 50.6	2.415	3.279	10.9	21.4	6 10	19 57.93	-14 49.7	1.404	2.280	16.5	21.2
6 20	19 53.19	-26 27.9	2.324	3.263	8.1	21.2	6 20	19 53.86	-14 44.9	1.315	2.257	12.7	20.9
6 30	19 46.12	-27 6.8	2.258	3.246	5.0	20.9	6 30	19 47.03	-14 52.0	1.247	2.234	8.3	20.6
7 10	19 37.74	-27 43.8	2.218	3.229	2.2	20.7	7 10	19 38.13	-15 10.2	1.201	2.212	3.9	20.3
7 20	19 28.81	-28 15.5	2.207	3.212	3.2	20.8	7 20	19 28.24	-15 37.3	1.180	2.190	4.0	20.2
7 30	19 20.22	-28 39.5	2.224	3.195	6.4	20.9	7 30	19 18.78	-16 10.0	1.183	2.168	8.8	20.4
8 9	19 12.81	-28 54.9	2.267	3.178	9.5	21.1	8 9	19 11.13	-16 44.7	1.208	2.147	13.7	20.7
8 19	19 7.26	-29 1.8	2.333	3.160	12.3	21.3	8 19	19 6.30	-17 18.6	1.253	2.126	18.1	20.9
<b>150517</b>	2000 <i>RF</i> <sub>54</sub>		7 14.0 255°17	4°9/16.0	18		<b>237533</b>	2000 <i>SJ</i> <sub>317</sub>		7 14.1 204°79	5°9/16.0	18	
6 10	19 56.28	-6 7.6	2.583	3.401	11.7	20.1	6 10	20 0.09	-4 13.7	2.415	3.220	12.7	20.8
6 20	19 51.34	-5 41.4	2.487	3.384	9.4	20.0	6 20	19 54.17	-3 30.7	2.329	3.215	10.4	20.6
6 30	19 44.87	-5 25.6	2.414	3.367	7.1	19.8	6 30	19 46.58	-2 59.3	2.265	3.208	8.1	20.5
7 10	19 37.36	-5 21.2	2.366	3.350	5.2	19.6	7 10	19 37.87	-2 41.1	2.227	3.201	6.3	20.3
7 20	19 29.40	-5 28.1	2.346	3.332	5.0	19.6	7 20	19 28.74	-2 36.6	2.217	3.193	6.1	20.3
7 30	19 21.71	-5 45.3	2.353	3.314	6.7	19.7	7 30	19 19.97	-2 45.1	2.234	3.185	7.7	20.4
8 9	19 14.98	-6 11.0	2.387	3.296	9.2	19.8	8 9	19 12.32	-3 4.6	2.277	3.175	10.0	20.5
8 19	19 9.76	-6 42.6	2.444	3.277	11.6	19.9	8 19	19 6.36	-3 32.3	2.343	3.165	12.4	20.7
<b>295068</b>	2008 <i>EH</i> <sub>123</sub>		7 14.0 96°46	3°5/15.4	17		<b>476806</b>	2008 <i>UJ</i> <sub>185</sub>		7 14.1 244°58	3°0/12.7	18	
6 10	20 1.35	-11 50.2	1.646	2.499	15.6	21.5	6 10	20 1.22	-28 8.8	2.081	2.948	12.2	22.2
6 20	19 55.52	-11 49.2	1.590	2.517	12.0	21.3	6 20	19 55.58	-28 53.3	1.996	2.935	9.2	22.0
6 30	19 47.50	-12 1.0	1.557	2.535	8.0	21.1	6 30	19 47.70	-29 38.2	1.936	2.922	5.9	21.7
7 10	19 38.11	-12 24.0	1.547	2.553	4.3	21.0	7 10	19 38.25	-30 18.6	1.901	2.909	3.2	21.5
7 20	19 28.39	-12 55.8	1.564	2.570	4.1	21.0	7 20	19 28.15	-30 50.3	1.894	2.895	4.3	21.6
7 30	19 19.47	-13 33.1	1.607	2.587	7.5	21.2	7 30	19 18.49	-31 10.5	1.915	2.881	7.6	21.8
8 9	19 12.31	-14 12.4	1.675	2.603	11.2	21.5	8 9	19 10.33	-31 18.6	1.960	2.867	11.0	21.9
8 19	19 7.54	-14 50.9	1.765	2.619	14.5	21.7	8 19	19 4.42	-31 15.9	2.028	2.852	14.0	22.1
<b>225853</b>	2001 <i>XX</i> <sub>171</sub>		7 14.0 210°39	0°5/14.3	18		<b>31258</b>	1998 <i>EE</i>		7 14.1 3°82	5°2/11.7	18	
6 10	20 0.28	-18 35.5	2.068	2.927	12.6	21.4	6 10	19 59.45	-33 2.0	1.901	2.775	12.9	17.6
6 20	19 54.67	-18 58.5	1.986	2.922	9.5	21.1	6 20	19 54.43	-34 5.3	1.837	2.775	9.9	17.4
6 30	19 47.03	-19 28.1	1.928	2.916	5.8	20.9	6 30	19 47.04	-35 5.1	1.795	2.775	7.0	17.2
7 10	19 38.01	-20 1.6	1.895	2.909	1.8	20.6	7 10	19 38.05	-35 55.2	1.779	2.775	5.2	17.1
7 20	19 28.45	-20 35.8	1.891	2.902	2.4	20.7	7 20	19 28.49	-36 30.5	1.789	2.776	6.2	17.2
7 30	19 19.34	-21 8.0	1.915	2.895	6.4	20.9	7 30	19 19.57	-36 48.6	1.824	2.777	8.9	17.3
8 9	19 11.61	-21 36.3	1.964	2.887	10.1	21.1	8 9	19 12.40	-36 49.7	1.883	2.778	11.9	17.5
8 19	19 5.95	-21 59.6	2.037	2.878	13.3	21.3	8 19	19 7.69	-36 36.5	1.963	2.780	14.7	17.7
<b>185068</b>	2006 <i>RJ</i> <sub>44</sub>		7 14.0 226°85	0°6/14.3	17		<b>253491</b>	2003 <i>SL</i> <sub>91</sub>		7 14.1 292°97	0°4/14.2	17	
6 10	20 1.68	-18 56.4	1.826	2.689	13.9	21.5	6 10	20 0.50	-19 58.1	1.382	2.264	16.3	20.8
6 20	19 55.98	-19 11.7	1.742	2.680	10.4	21.3	6 20	19 55.75	-20 6.0	1.304	2.252	12.3	20.5
6 30	19 47.95	-19 33.7	1.682	2.670	6.4	21.1	6 30	19 48.12	-20 21.2	1.247	2.240	7.6	20.2
7 10	19 38.31	-19 59.7	1.647	2.660	2.0	20.7	7 10	19 38.43	-20 40.5	1.214	2.228	2.3	19.8
7 20	19 28.00	-20 26.5	1.638	2.650	2.7	20.8	7 20	19 27.90	-21 0.4	1.205	2.217	3.2	19.9
7 30	19 18.20	-20 51.4	1.658	2.639	7.1	21.0	7 30	19 18.02	-21 17.7	1.220	2.205	8.6	20.1
8 9	19 9.99	-21 12.4	1.702	2.627	11.2	21.2	8 9	19 10.17	-21 30.6	1.258	2.194	13.5	20.4
8 19	19 4.14	-21 28.9	1.768	2.615	14.8	21.5	8 19	19 5.31	-21 38.5	1.316	2.183	17.7	20.6
<b>359529</b>	2010 <i>RT</i> <sub>102</sub>		7 14.0 43°38	0°3/14.2	18		<b>1837</b>	<i>Osita</i>		7 14.1 46°51	0°7/14.2	18	R
6 10	19 57.33	-20 11.2	2.183	3.047	11.9	21.2	6 10	20 2.69	-20 31.0	1.173	2.062	18.1	15.8
6 20	19 52.30	-20 17.3	2.111	3.049	8.8	21.0	6 20	19 57.40	-20 20.3	1.118	2.069	13.6	15.5
6 30	19 45.49	-20 27.5	2.062	3.051	5.3	20.8	6 30	19 49.02	-20 15.6	1.083	2.076	8.3	15.2
7 10	19 37.53	-20 39.6	2.039	3.054	1.6	20.6	7 10	19 38.63	-20 14.1	1.070	2.084	2.6	14.9
7 20	19 29.21	-20 51.7	2.044	3.056	2.2	20.6	7 20	19 27.73	-20 13.1	1.081	2.093	3.5	15.0
7 30	19 21.41	-21 2.2	2.077	3.058	5.9	20.9	7 30	19 17.96	-20 10.7	1.115	2.101	9.0	15.4
8 9	19 14.91	-21 10.0	2.135	3.061	9.3	21.1	8 9	19 10.68	-20 6.3	1.171	2.110	13.9	15.7
8 19	19 10.30	-21 14.7	2.217	3.063	12.2	21.3	8 19	19 6.65	-19 59.9	1.246	2.119	18.1	15.9
<b>112551</b>	2002 <i>PA</i> <sub>44</sub>		7 14.0 347°29	1°9/13.6	18		<b>57402</b>	2001 <i>RR</i> <sub>94</sub>		7 14.1 251°69	5°2/15.8	18	
6 10	19 55.01	-24 21.7	1.023	1.934	18.4	18.3	6 10	19 58.98	-8 36.2	1.791	2.634	15.0	19.2
6 20	19 52.35	-24 34.4	0.960	1.922	13.8	18.0	6 20	19 53.93	-8 13.4	1.708	2.624	11.9	19.0
6 30	19 46.33	-24 50.6	0.914	1.912	8.4	17.7	6 30	19 46.70	-8 4.0	1.645	2.613	8.6	18.8
7 10	19 37.91	-25 5.7	0.889	1.903	2.9	17.3	7 10	19 37.96	-8 8.7	1.607	2.602	5.8	18.6
7 20	19 28.60	-25 14.8	0.885	1.896	4.4	17.4	7 20	19 28.60	-8 26.8	1.594	2.591	5.5	18.5
7 30	19 20.24	-25 14.7	0.902	1.891	10.1	17.7	7 30	19 19.70	-8 56.5	1.608	2.580	8.2	18.7
8 9	19 14.44	-25 5.0	0.939	1.887	15.5	18.0	8 9	19 12.25	-9 34.4	1.645	2.569	11.7	18.8
8 19	19 12.17	-24 47.0	0.993	1.885	20.2	18.3	8 19	19 7.02	-10 16.8	1.705	2.557	15.0	19.0
<b>488947</b>	2005 <i>UN</i> <sub>167</sub>		7 14.0 325°90	1°8/13.4	15		<b>513684</b>	2012 <i>AY</i> <sub>14</sub>		7 14.1 223°22	1°6/15.0	18	

EPHEMERIDES

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>513740</b>	2012 <i>UR</i> <sub>59</sub>		7 14.1 271°09	1°4/13.5	18		<b>94395</b>	2001 <i>SR</i> <sub>168</sub>		7 14.1 359°54	2°6/13.3	18	
6 10	20 0.96	-24 29.3	2.003	2.871	12.6	22.3	6 10	19 57.75	-24 8.0	0.995	1.904	19.0	19.2
6 20	19 55.46	-24 48.3	1.908	2.848	9.5	22.1	6 20	19 54.44	-24 47.2	0.939	1.901	14.2	18.9
6 30	19 47.69	-25 9.3	1.835	2.825	5.8	21.8	6 30	19 47.61	-25 32.2	0.902	1.899	8.7	18.6
7 10	19 38.28	-25 28.9	1.789	2.802	2.1	21.5	7 10	19 38.33	-26 16.2	0.884	1.898	3.3	18.3
7 20	19 28.13	-25 43.9	1.769	2.778	3.1	21.6	7 20	19 28.20	-26 52.0	0.888	1.899	4.9	18.4
7 30	19 18.37	-25 52.0	1.778	2.754	7.2	21.8	7 30	19 19.15	-27 14.6	0.914	1.900	10.6	18.7
8 9	19 10.06	-25 52.4	1.811	2.730	11.0	22.0	8 9	19 12.84	-27 23.1	0.960	1.903	15.8	19.0
8 19	19 4.01	-25 45.9	1.866	2.706	14.5	22.1	8 19	19 10.19	-27 18.9	1.022	1.906	20.3	19.3
<b>392043</b>	2009 <i>BY</i> <sub>92</sub>		7 14.1 286°10	1°6/13.5	17		<b>33672</b>	1999 <i>JU</i> <sub>99</sub>		7 14.1 233°03	6°5/17.2	18	
6 10	20 0.39	-25 39.3	1.927	2.798	12.9	21.2	6 10	19 57.66	-2 28.5	1.949	2.764	15.0	18.1
6 20	19 54.88	-25 49.9	1.853	2.795	9.6	21.0	6 20	19 52.79	-2 23.4	1.865	2.757	12.3	17.9
6 30	19 47.19	-26 0.6	1.802	2.792	5.9	20.8	6 30	19 45.95	-2 36.7	1.802	2.749	9.5	17.7
7 10	19 38.08	-26 8.3	1.776	2.789	2.2	20.5	7 10	19 37.76	-3 9.3	1.762	2.741	7.2	17.5
7 20	19 28.50	-26 10.4	1.778	2.787	3.2	20.6	7 20	19 29.00	-4 0.0	1.749	2.733	6.6	17.5
7 30	19 19.55	-26 5.4	1.806	2.784	7.0	20.8	7 30	19 20.64	-5 5.6	1.761	2.724	8.4	17.6
8 9	19 12.20	-25 53.5	1.860	2.781	10.7	21.0	8 9	19 13.58	-6 21.4	1.799	2.715	11.2	17.7
8 19	19 7.14	-25 35.9	1.935	2.778	13.9	21.2	8 19	19 8.50	-7 42.0	1.859	2.706	14.2	17.9
<b>47058</b>	1998 <i>XC</i> <sub>15</sub>		7 14.1 268°09	4°0/15.3	18		<b>203344</b>	2001 <i>UL</i> <sub>103</sub>		7 14.1 191°44	0°3/13.9	16	
6 10	19 58.10	-11 3.6	2.050	2.894	13.3	19.0	6 10	20 3.46	-20 39.6	1.556	2.428	15.4	21.5
6 20	19 53.07	-10 39.5	1.960	2.879	10.4	18.8	6 20	19 57.60	-21 5.7	1.485	2.427	11.5	21.3
6 30	19 46.09	-10 25.0	1.892	2.865	7.3	18.6	6 30	19 49.07	-21 38.3	1.435	2.426	7.0	21.0
7 10	19 37.78	-10 20.6	1.849	2.850	4.5	18.4	7 10	19 38.70	-22 13.3	1.410	2.424	2.0	20.7
7 20	19 28.90	-10 25.6	1.834	2.834	4.4	18.4	7 20	19 27.66	-22 46.4	1.411	2.422	3.1	20.8
7 30	19 20.41	-10 39.0	1.845	2.819	7.2	18.5	7 30	19 17.32	-23 14.1	1.438	2.420	8.0	21.1
8 9	19 13.19	-10 58.6	1.881	2.804	10.5	18.7	8 9	19 8.94	-23 34.7	1.490	2.416	12.4	21.3
8 19	19 7.92	-11 22.1	1.940	2.788	13.6	18.9	8 19	19 3.33	-23 47.9	1.562	2.413	16.2	21.6
<b>7244</b>	Villa-Lobos		7 14.1 324°34	0°9/14.4	18 R		<b>20379</b>	Christijohns		7 14.1 106°72	1°6/14.7	18	
6 10	19 57.03	-17 59.2	1.840	2.709	13.5	17.1	6 10	19 59.11	-16 0.3	1.844	2.706	13.8	18.8
6 20	19 52.46	-18 12.1	1.763	2.703	10.1	16.8	6 20	19 53.87	-16 16.1	1.778	2.713	10.4	18.6
6 30	19 45.78	-18 32.5	1.708	2.697	6.3	16.6	6 30	19 46.56	-16 40.8	1.734	2.720	6.5	18.4
7 10	19 37.69	-18 57.9	1.678	2.691	2.2	16.3	7 10	19 37.91	-17 12.0	1.715	2.727	2.6	18.1
7 20	19 29.06	-19 25.7	1.674	2.686	2.6	16.3	7 20	19 28.84	-17 46.7	1.724	2.734	2.8	18.2
7 30	19 20.94	-19 53.0	1.697	2.681	6.8	16.6	7 30	19 20.39	-18 21.9	1.759	2.741	6.7	18.4
8 9	19 14.30	-20 17.8	1.745	2.676	10.7	16.8	8 9	19 13.47	-18 55.1	1.819	2.748	10.4	18.7
8 19	19 9.83	-20 38.7	1.815	2.671	14.1	17.0	8 19	19 8.73	-19 24.6	1.902	2.755	13.7	18.9
<b>436046</b>	2009 <i>QB</i> <sub>19</sub>		7 14.1 302°17	0°7/13.8	18		<b>370681</b>	2004 <i>ER</i> <sub>78</sub>		7 14.1 162°64	1°6/13.5	17	
6 10	19 59.06	-21 15.0	1.424	2.309	15.8	20.9	6 10	20 3.05	-24 22.1	1.826	2.695	13.6	21.0
6 20	19 54.86	-21 42.0	1.333	2.283	11.9	20.6	6 20	19 56.94	-24 52.0	1.758	2.699	10.1	20.8
6 30	19 47.74	-22 17.1	1.263	2.256	7.3	20.3	6 30	19 48.48	-25 24.0	1.713	2.703	6.1	20.6
7 10	19 38.39	-22 56.3	1.215	2.230	2.2	19.9	7 10	19 38.49	-25 54.0	1.693	2.706	2.2	20.4
7 20	19 27.91	-23 34.6	1.192	2.204	3.5	19.9	7 20	19 28.00	-26 18.1	1.701	2.709	3.3	20.4
7 30	19 17.83	-24 7.5	1.194	2.178	8.9	20.2	7 30	19 18.19	-26 33.9	1.736	2.712	7.4	20.7
8 9	19 9.62	-24 32.3	1.218	2.152	14.0	20.4	8 9	19 10.14	-26 40.8	1.795	2.714	11.2	20.9
8 19	19 4.38	-24 48.2	1.262	2.127	18.4	20.6	8 19	19 4.54	-26 39.8	1.877	2.715	14.4	21.1
<b>59079</b>	1998 <i>VY</i> <sub>19</sub>		7 14.1 3°46	3°5/11.9	18		<b>514687</b>	2005 <i>YL</i> <sub>25</sub>		7 14.1 224°81	0°2/14.1	18	
6 10	19 55.20	-30 50.1	2.524	3.393	10.3	17.7	6 10	19 56.57	-20 0.3	2.735	3.590	10.0	22.7
6 20	19 50.74	-31 43.2	2.455	3.393	7.8	17.6	6 20	19 51.52	-20 17.0	2.648	3.583	7.4	22.5
6 30	19 44.59	-32 34.6	2.411	3.393	5.2	17.4	6 30	19 44.98	-20 37.5	2.587	3.575	4.5	22.3
7 10	19 37.31	-33 20.3	2.393	3.394	3.5	17.3	7 10	19 37.44	-20 59.9	2.553	3.567	1.4	22.1
7 20	19 29.64	-33 56.8	2.403	3.395	4.4	17.3	7 20	19 29.52	-21 22.2	2.548	3.559	1.9	22.1
7 30	19 22.39	-34 22.2	2.440	3.397	6.7	17.5	7 30	19 21.93	-21 42.6	2.571	3.550	5.1	22.3
8 9	19 16.33	-34 35.8	2.502	3.399	9.3	17.7	8 9	19 15.35	-21 59.9	2.622	3.541	8.0	22.5
8 19	19 12.03	-34 38.6	2.587	3.402	11.6	17.8	8 19	19 10.29	-22 13.7	2.696	3.532	10.6	22.7
<b>349392</b>	2007 <i>XQ</i> <sub>28</sub>		7 14.1 101°61	0°3/13.9	17		<b>435294</b>	2007 <i>TM</i> <sub>423</sub>		7 14.1 352°39	0°6/14.2	16	
6 10	19 59.33	-21 30.8	2.187	3.050	11.9	21.5	6 10	19 56.64	-20 2.1	1.446	2.332	15.5	20.7
6 20	19 53.71	-21 46.6	2.126	3.064	8.8	21.4	6 20	19 52.63	-20 2.2	1.377	2.326	11.6	20.4
6 30	19 46.30	-22 5.4	2.088	3.077	5.3	21.2	6 30	19 46.08	-20 8.4	1.329	2.322	7.1	20.2
7 10	19 37.80	-22 24.9	2.076	3.091	1.5	20.9	7 10	19 37.83	-20 18.5	1.304	2.318	2.2	19.9
7 20	19 29.00	-22 42.5	2.093	3.104	2.3	21.0	7 20	19 28.98	-20 29.5	1.303	2.315	3.0	19.9
7 30	19 20.80	-22 56.5	2.137	3.117	5.9	21.3	7 30	19 20.84	-20 39.2	1.327	2.313	7.9	20.2
8 9	19 13.99	-23 6.0	2.208	3.130	9.2	21.5	8 9	19 14.59	-20 46.1	1.374	2.312	12.4	20.4
8 19	19 9.12	-23 11.0	2.302	3.142	12.0	21.7	8 19	19 10.98	-20 49.5	1.441	2.312	16.2	20.7
<b>161844</b>	2007 <i>AZ</i> <sub>9</sub>		7 14.1 238°47	0°3/13.9	18		<b>90555</b>	2004 <i>FM</i> <sub>131</sub>		7 14.1 11°87	6°5/11.4	18	
6 10	19 57.03	-19 31.8	2.316	3.177	11.4	20.1	6 10	20 0.63	-36 19.7	1.774	2.646	13.8	18.8
6 20	19 52.14	-20 21.3	2.235	3.172	8.4	19.9	6 20	19 55.50	-37 21.0	1.715	2.648	10.8	18.7
6 30	19 45.48	-21 17.2	2.178	3.168	5.1	19.7	6 30	19 47.77	-38 15.2	1.677	2.650	8.1	18.5
7 10	19 37.60	-22 16.3	2.149	3.163	1.5	19.5	7 10	19 38.31	-38 55.7	1.665	2.653	6.5	18.4
7 20	19 29.22	-23 14.8	2.148	3.159	2.3	19.5	7 20	19 28.30	-39 17.5	1.677	2.656	7.4	18.5
7 30	19 21.21	-24 9.1	2.175	3.154	5.9	19.7	7 30	19 19.09	-39 18.6	1.714	2.659	9.9	18.6
8 9	19 14.38	-24 56.8	2.229	3.149	9.2	19.9	8 9	19 11.86	-39 0.8	1.773	2.663	12.8	18.8
8 19	19 9.33	-25 36.7	2.307	3.144	12.1	20.1	8 19	19 7.37	-38 27.9	1.853	2.668	15.5	19.0
<b>370907</b>	2005 <i>GW</i> <sub>115</sub>		7 14.1 102°33	1°2/13.6	17		<b>174177</b>	2002 <i>PH</i> <sub>116</sub>		7 14.1 304°			

EPHEMERIDES

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7 14.1

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>468629</b>	2008 <i>PH</i> <sub>10</sub>		7 14.1	2°46'	9°1'/17.5	17	<b>14366</b>	Wilhelmraabe		7 14.1	324°62'	2°4'/15.0	18
6 10	19 49.29	- 4 21.7	0.999	1.881	21.2	20.0	6 10	19 56.96	-14 31.7	1.775	2.639	14.2	18.8
6 20	19 47.73	- 3 44.4	0.945	1.878	17.4	19.8	6 20	19 52.47	-14 37.1	1.698	2.633	10.8	18.5
6 30	19 43.35	- 3 34.9	0.907	1.877	13.4	19.5	6 30	19 45.85	-14 52.8	1.643	2.628	7.0	18.3
7 10	19 37.07	- 3 55.9	0.887	1.878	10.1	19.4	7 10	19 37.79	-15 17.2	1.613	2.623	3.3	18.1
7 20	19 30.12	- 4 46.5	0.886	1.881	9.2	19.3	7 20	19 29.18	-15 48.1	1.608	2.618	3.3	18.0
7 30	19 24.00	- 6 1.0	0.906	1.886	11.6	19.5	7 30	19 21.08	-16 22.3	1.630	2.613	7.0	18.3
8 9	19 20.02	- 7 30.0	0.945	1.894	15.3	19.7	8 9	19 14.48	-16 57.1	1.676	2.609	10.9	18.5
8 19	19 19.00	- 9 4.0	1.002	1.904	19.2	20.0	8 19	19 10.07	-17 30.2	1.744	2.604	14.4	18.7
<b>7225</b>	Huntress		7 14.1	168°10'	1°1'/14.4	18	<b>340264</b>	2006 <i>BU</i> <sub>158</sub>		7 14.1	335°92'	5°5'/12.8	17
6 10	20 4.05	-18 36.8	1.942	2.797	13.5	17.7	6 10	20 2.50	-33 39.1	1.474	2.356	15.5	19.8
6 20	19 57.44	-18 31.4	1.870	2.802	10.1	17.4	6 20	19 57.28	-34 3.2	1.405	2.347	12.0	19.5
6 30	19 48.69	-18 30.9	1.820	2.807	6.2	17.2	6 30	19 49.04	-34 20.4	1.356	2.340	8.3	19.3
7 10	19 38.56	-18 33.6	1.798	2.810	2.2	17.0	7 10	19 38.76	-34 24.4	1.331	2.333	5.6	19.1
7 20	19 28.00	-18 37.5	1.803	2.813	2.7	17.0	7 20	19 27.82	-34 10.9	1.330	2.326	6.5	19.1
7 30	19 18.09	-18 41.3	1.836	2.816	6.7	17.3	7 30	19 17.81	-33 39.1	1.353	2.320	10.0	19.3
8 9	19 9.80	-18 44.0	1.895	2.817	10.5	17.5	8 9	19 10.11	-32 51.7	1.399	2.315	13.9	19.5
8 19	19 3.77	-18 45.3	1.976	2.818	13.7	17.7	8 19	19 5.56	-31 53.5	1.464	2.310	17.4	19.8
<b>306957</b>	2001 <i>UW</i> <sub>209</sub>		7 14.1	203°80'	0°5'/13.9	17	<b>146013</b>	2000 <i>CO</i> <sub>98</sub>		7 14.1	263°70'	1°5'/14.6	18
6 10	20 5.16	-22 30.1	1.610	2.479	15.1	21.3	6 10	20 0.35	-16 33.6	1.676	2.542	14.8	21.3
6 20	19 58.81	-22 34.8	1.534	2.476	11.3	21.1	6 20	19 55.28	-16 46.2	1.588	2.526	11.2	21.0
6 30	19 49.78	-22 42.6	1.481	2.472	6.8	20.8	6 30	19 47.73	-17 8.5	1.522	2.510	7.1	20.7
7 10	19 38.93	-22 49.9	1.453	2.468	2.0	20.5	7 10	19 38.40	-17 38.3	1.481	2.494	2.7	20.4
7 20	19 27.44	-22 54.0	1.451	2.463	3.1	20.6	7 20	19 28.27	-18 12.5	1.466	2.477	3.1	20.6
7 30	19 16.69	-22 52.9	1.476	2.457	7.9	20.9	7 30	19 18.57	-18 47.7	1.477	2.460	7.6	20.4
8 9	19 7.91	-22 46.4	1.525	2.451	12.3	21.1	8 9	19 10.50	-19 21.1	1.513	2.443	12.0	20.9
8 19	19 1.90	-22 35.5	1.596	2.444	16.1	21.3	8 19	19 4.91	-19 50.7	1.569	2.426	15.9	21.1
<b>40103</b>	1998 <i>QX</i> <sub>3</sub>		7 14.1	267°84'	2°7'/15.5	18	<b>508404</b>	2016 <i>GF</i> <sub>248</sub>		7 14.1	6°26'	2°3'/14.6	17
6 10	19 55.35	-11 16.7	2.460	3.300	11.5	18.8	6 10	19 54.10	-17 28.5	0.960	1.868	19.5	20.4
6 20	19 50.79	-11 32.7	2.367	3.287	8.9	18.6	6 20	19 51.53	-17 15.3	0.908	1.868	14.8	20.1
6 30	19 44.63	-11 59.0	2.299	3.274	6.0	18.4	6 30	19 45.74	-17 13.8	0.874	1.869	9.3	19.8
7 10	19 37.38	-12 34.6	2.256	3.260	3.3	18.2	7 10	19 37.81	-17 22.4	0.859	1.873	3.7	19.5
7 20	19 29.67	-13 17.4	2.241	3.247	3.1	18.1	7 20	19 29.23	-17 38.0	0.865	1.878	4.0	19.5
7 30	19 22.25	-14 4.9	2.255	3.233	5.8	18.3	7 30	19 21.70	-17 57.0	0.893	1.884	9.6	19.9
8 9	19 15.83	-14 54.2	2.295	3.220	8.8	18.4	8 9	19 16.68	-18 16.0	0.939	1.893	14.9	20.2
8 19	19 10.99	-15 42.9	2.359	3.206	11.6	18.6	8 19	19 14.98	-18 32.4	1.004	1.903	19.4	20.5
<b>483160</b>	2015 <i>PN</i> <sub>12</sub>		7 14.1	258°44'	0°7'/14.3	18	<b>384808</b>	2012 <i>QX</i> <sub>36</sub>		7 14.1	225°57'	6°7'/13.1	17
6 10	19 57.83	-19 38.4	2.393	3.251	11.2	21.3	6 10	20 11.69	-40 13.8	1.830	2.679	14.4	20.2
6 20	19 52.60	-19 31.1	2.309	3.244	8.3	21.2	6 20	20 3.55	-40 20.1	1.760	2.677	11.5	20.0
6 30	19 45.70	-19 27.1	2.250	3.237	5.1	20.9	6 30	19 52.53	-40 12.8	1.711	2.675	8.7	19.8
7 10	19 37.69	-19 25.1	2.217	3.230	1.7	20.7	7 10	19 39.72	-39 46.1	1.688	2.673	6.8	19.7
7 20	19 29.29	-19 23.9	2.212	3.223	2.2	20.7	7 20	19 26.56	-38 57.3	1.691	2.671	7.3	19.7
7 30	19 21.32	-19 22.4	2.235	3.216	5.6	20.9	7 30	19 14.59	-37 47.7	1.721	2.668	9.8	19.8
8 9	19 14.54	-19 19.9	2.285	3.208	8.9	21.1	8 9	19 5.05	-36 22.6	1.775	2.666	12.8	20.0
8 19	19 9.49	-19 16.2	2.358	3.201	11.7	21.3	8 19	18 58.63	-34 48.4	1.852	2.663	15.6	20.2
<b>296040</b>	2009 <i>AH</i> <sub>2</sub>		7 14.1	129°37'	0°2'/14.1	17	<b>103165</b>	1999 <i>XN</i> <sub>227</sub>		7 14.1	315°93'	0°1'/14.1	18
6 10	19 59.66	-20 37.2	1.989	2.854	12.8	20.7	6 10	19 56.53	-19 31.9	1.215	2.109	17.2	19.0
6 20	19 54.20	-20 43.1	1.918	2.857	9.5	20.5	6 20	19 53.41	-20 0.0	1.126	2.080	13.1	18.6
6 30	19 46.74	-20 52.9	1.871	2.861	5.8	20.3	6 30	19 47.12	-20 40.0	1.056	2.051	8.1	18.2
7 10	19 38.00	-21 4.5	1.849	2.864	1.7	20.0	7 10	19 38.34	-21 28.4	1.008	2.023	2.4	17.8
7 20	19 28.86	-21 15.4	1.855	2.867	2.4	20.1	7 20	19 28.25	-22 19.6	0.983	1.995	3.6	17.8
7 30	19 20.32	-21 24.1	1.888	2.870	6.4	20.4	7 30	19 18.52	-23 7.8	0.980	1.968	9.7	18.1
8 9	19 13.26	-21 29.5	1.947	2.873	10.0	20.6	8 9	19 10.85	-23 48.4	0.999	1.942	15.3	18.3
8 19	19 8.31	-21 31.5	2.028	2.875	13.2	20.8	8 19	19 6.49	-24 19.3	1.035	1.917	20.3	18.5
<b>300874</b>	2008 <i>AV</i> <sub>54</sub>		7 14.1	275°55'	0°2'/14.2	18	<b>247465</b>	2002 <i>HC</i> <sub>13</sub>		7 14.1	55°36'	10°3'/21.6	17
6 10	19 57.58	-19 30.4	2.063	2.928	12.4	21.1	6 10	19 57.65	+ 9 21.4	1.723	2.484	18.7	19.7
6 20	19 52.75	-19 53.6	1.980	2.919	9.3	20.9	6 20	19 52.85	+ 9 2.5	1.658	2.496	16.2	19.6
6 30	19 45.94	-20 22.8	1.921	2.911	5.6	20.7	6 30	19 46.00	+ 8 12.4	1.610	2.507	13.7	19.4
7 10	19 37.80	-20 55.3	1.888	2.902	1.7	20.4	7 10	19 37.82	+ 6 49.6	1.584	2.519	11.5	19.3
7 20	19 29.13	-21 28.2	1.882	2.893	2.4	20.4	7 20	19 29.21	+ 4 56.6	1.581	2.531	10.3	19.3
7 30	19 20.88	-21 58.7	1.903	2.885	6.4	20.7	7 30	19 21.21	+ 2 39.8	1.603	2.543	10.9	19.3
8 9	19 13.96	-22 24.8	1.950	2.876	10.0	20.9	8 9	19 14.75	+ 0 8.6	1.651	2.555	12.8	19.5
8 19	19 9.05	-22 45.7	2.020	2.867	13.2	21.1	8 19	19 10.46	- 2 26.9	1.722	2.568	15.2	19.7
<b>90147</b>	2002 <i>YK</i> <sub>14</sub>		7 14.1	301°78'	13°4'/ 8.3	14	<b>275558</b>	1999 <i>RH</i> <sub>33</sub>		7 14.1	115°23'	12°5'/19.0	16
6 10	20 36.83	-27 52.9	0.611	1.506	28.9	19.4	6 10	20 10.02	+ 2 23.7	0.789	1.638	28.3	20.8
6 20	20 29.18	-22 42.4	0.507	1.459	23.8	18.8	6 20	20 3.51	+ 2 45.1	0.751	1.659	23.6	20.6
6 30	20 12.83	-15 20.6	0.420	1.411	17.0	18.1	6 30	19 53.02	+ 2 22.7	0.726	1.679	18.5	20.4
7 10	19 47.17	- 5 13.9	0.359	1.362	13.7	17.5	7 10	19 39.94	+ 1 13.3	0.718	1.697	14.1	20.2
7 20	19 13.83	+ 6 56.9	0.329	1.312	22.5	17.6	7 20	19 26.25	- 0 38.3	0.728	1.715	12.5	20.2
7 30	18 37.78	+18 45.1	0.331	1.263	36.3	17.9	7 30	19 14.20	- 2 58.9	0.759	1.731	14.7	20.4
8 9	18 5.07	+28 1.2	0.356	1.214	48.5	18.3	8 9	19 5.51	- 5 31.3	0.809	1.746	18.8	20.7
8 19	17 39.28	+34 31.2	0.391	1.166	57.6	18.7	8 19	19 1.07	- 8 0.7	0.876	1.759	23.0	21.0
<b>74775</b>	1999 <i>RB</i> <sub>237</sub>		7 14.1	350°16'	1°7'/13.4	18	<b>141849</b>	200					

EPHEMERIDES

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>45109</b>	1999 XZ <sub>76</sub>		7 14.1 100°12	1.7/14.8	18	R	<b>206111</b>	2002 RC <sub>221</sub>		7 14.1 265°83	0.6/14.4	18	
6 10	19 57.08	-16 21.8	2.425	3.277	11.2	19.0	6 10	19 58.14	-18 15.5	1.999	2.862	12.8	20.7
6 20	19 51.94	-16 13.0	2.353	3.283	8.5	18.8	6 20	19 53.25	-18 37.8	1.915	2.852	9.6	20.5
6 30	19 45.25	-16 9.7	2.306	3.290	5.4	18.6	6 30	19 46.32	-19 7.4	1.854	2.842	5.9	20.3
7 10	19 37.58	-16 10.8	2.285	3.296	2.4	18.4	7 10	19 37.98	-19 41.6	1.818	2.832	1.9	20.0
7 20	19 29.62	-16 15.4	2.293	3.302	2.5	18.5	7 20	19 29.06	-20 17.4	1.810	2.821	2.5	20.0
7 30	19 22.14	-16 22.1	2.328	3.308	5.5	18.7	7 30	19 20.56	-20 51.9	1.829	2.811	6.5	20.3
8 9	19 15.81	-16 29.7	2.390	3.314	8.5	18.9	8 9	19 13.43	-21 22.8	1.873	2.800	10.3	20.5
8 19	19 11.14	-16 37.4	2.476	3.320	11.2	19.1	8 19	19 8.36	-21 48.9	1.941	2.790	13.6	20.7
<b>442067</b>	2010 RD <sub>144</sub>		7 14.1 32°59	9.4/18.5	16		<b>400460</b>	2008 FT <sub>65</sub>		7 14.1 21°44	5.6/16.5	18	
6 10	19 54.94	+ 3 27.1	1.893	2.686	16.2	20.3	6 10	19 55.17	- 5 33.4	2.054	2.884	13.8	20.5
6 20	19 50.67	+ 4 16.3	1.833	2.696	13.9	20.2	6 20	19 50.78	- 5 11.1	1.983	2.887	11.2	20.3
6 30	19 44.61	+ 4 44.4	1.793	2.706	11.6	20.0	6 30	19 44.68	- 5 2.9	1.934	2.890	8.4	20.1
7 10	19 37.41	+ 4 48.9	1.774	2.717	9.9	20.0	7 10	19 37.46	- 5 9.7	1.909	2.894	6.1	20.0
7 20	19 29.87	+ 4 29.3	1.778	2.728	9.4	20.0	7 20	19 29.87	- 5 30.7	1.909	2.897	5.8	20.0
7 30	19 22.87	+ 3 47.9	1.807	2.740	10.3	20.0	7 30	19 22.75	- 6 3.8	1.936	2.902	7.6	20.1
8 9	19 17.22	+ 2 49.2	1.858	2.752	12.1	20.2	8 9	19 16.88	- 6 45.8	1.987	2.906	10.2	20.3
8 19	19 13.47	+ 1 38.9	1.930	2.764	14.3	20.3	8 19	19 12.81	- 7 33.0	2.061	2.911	12.9	20.4
<b>335063</b>	2004 RV <sub>217</sub>		7 14.1 280°99	20°8/19.4	17		<b>417981</b>	2007 TP <sub>216</sub>		7 14.1 291°03	7.1/11.6	17	
6 10	19 59.03	+15 42.1	1.203	1.960	25.4	19.9	6 10	20 3.95	-33 51.2	1.349	2.233	16.5	20.6
6 20	19 54.96	+18 1.4	1.142	1.950	23.8	19.8	6 20	19 59.01	-35 1.4	1.273	2.216	13.0	20.3
6 30	19 47.86	+19 45.5	1.094	1.940	22.3	19.6	6 30	19 50.52	-36 8.4	1.217	2.198	9.4	20.1
7 10	19 38.51	+20 43.4	1.060	1.931	21.2	19.5	7 10	19 39.36	-37 2.7	1.184	2.181	7.2	19.9
7 20	19 28.14	+20 47.3	1.042	1.921	20.8	19.4	7 20	19 27.00	-37 35.6	1.174	2.163	8.4	19.9
7 30	19 18.31	+20 55.8	1.039	1.911	21.3	19.4	7 30	19 15.36	-37 42.5	1.188	2.146	12.1	20.1
8 9	19 10.54	+18 15.4	1.052	1.901	22.6	19.5	8 9	19 6.24	-37 24.8	1.222	2.128	16.2	20.3
8 19	19 5.90	+15 57.7	1.079	1.892	24.4	19.6	8 19	19 0.79	-36 47.5	1.274	2.111	20.0	20.4
<b>233328</b>	2006 BE <sub>255</sub>		7 14.1 234°52	1°2/14.6	18		<b>365480</b>	2010 PE <sub>41</sub>		7 14.1 163°04	4.6/16.3	18	
6 10	19 59.63	-17 10.5	1.943	2.803	13.3	21.4	6 10	19 55.77	- 5 47.7	2.786	3.598	11.0	21.1
6 20	19 54.36	-17 23.0	1.860	2.795	10.0	21.1	6 20	19 50.81	- 5 22.1	2.708	3.602	8.9	20.9
6 30	19 46.98	-17 43.2	1.800	2.787	6.2	20.9	6 30	19 44.52	- 5 6.6	2.654	3.605	6.7	20.8
7 10	19 38.15	-18 8.8	1.766	2.779	2.3	20.6	7 10	19 37.39	- 5 1.9	2.626	3.607	5.0	20.7
7 20	19 28.76	-18 37.3	1.759	2.770	2.6	20.6	7 20	19 29.98	- 5 7.6	2.626	3.610	4.7	20.7
7 30	19 19.82	-19 5.9	1.779	2.761	6.7	20.9	7 30	19 22.92	- 5 22.8	2.653	3.612	6.2	20.8
8 9	19 12.31	-19 32.5	1.824	2.751	10.5	21.1	8 9	19 16.80	- 5 45.4	2.707	3.614	8.3	20.9
8 19	19 6.95	-19 55.8	1.893	2.742	13.9	21.3	8 19	19 12.06	- 6 13.4	2.785	3.616	10.4	21.1
<b>380291</b>	2002 CO <sub>66</sub>		7 14.1 157°32	0°9/14.6	17		<b>96279</b>	1995 WE <sub>20</sub>		7 14.1 141°02	4°7/11.7	17	
6 10	19 59.98	-16 6.3	2.022	2.877	13.0	21.1	6 10	20 2.39	-31 26.5	2.001	2.868	12.7	19.8
6 20	19 54.47	-16 47.9	1.950	2.882	9.8	20.9	6 20	19 56.55	-32 42.7	1.938	2.874	9.6	19.7
6 30	19 46.96	-17 38.8	1.901	2.887	6.0	20.7	6 30	19 48.36	-33 56.8	1.900	2.880	6.6	19.5
7 10	19 38.13	-18 35.8	1.878	2.891	2.1	20.4	7 10	19 38.59	-35 2.3	1.887	2.885	4.8	19.4
7 20	19 28.82	-19 34.9	1.884	2.895	2.4	20.5	7 20	19 28.24	-35 53.9	1.902	2.890	5.8	19.5
7 30	19 20.01	-20 32.2	1.918	2.899	6.3	20.7	7 30	19 18.49	-36 28.4	1.943	2.895	8.5	19.6
8 9	19 12.60	-21 24.6	1.978	2.902	10.0	20.9	8 9	19 10.42	-36 45.7	2.009	2.900	11.5	19.8
8 19	19 7.25	-22 10.3	2.061	2.905	13.1	21.2	8 19	19 4.78	-36 48.0	2.096	2.904	14.2	20.0
<b>234271</b>	2000 WP <sub>16</sub>		7 14.1 256°16	5°3/15.5	18		<b>164014</b>	2003 UO <sub>200</sub>		7 14.1 351°35	2°0/13.5	17	
6 10	19 59.84	- 8 51.2	1.965	2.801	14.1	20.4	6 10	19 59.75	-25 25.5	1.642	2.522	14.3	19.6
6 20	19 54.46	- 8 8.8	1.875	2.787	11.3	20.2	6 20	19 54.80	-25 47.6	1.573	2.520	10.6	19.4
6 30	19 47.03	- 7 36.9	1.808	2.773	8.2	20.0	6 30	19 47.37	-26 11.1	1.526	2.518	6.5	19.1
7 10	19 38.18	- 7 17.0	1.766	2.758	5.7	19.8	7 10	19 38.30	-26 31.8	1.504	2.517	2.6	18.9
7 20	19 28.73	- 7 9.4	1.749	2.743	5.6	19.8	7 20	19 28.67	-26 46.1	1.507	2.516	3.7	18.9
7 30	19 19.69	- 7 13.6	1.760	2.728	8.0	19.9	7 30	19 19.76	-26 51.6	1.536	2.515	7.9	19.2
8 9	19 11.98	- 7 27.6	1.795	2.712	11.3	20.0	8 9	19 12.68	-26 48.2	1.589	2.514	11.9	19.4
8 19	19 6.33	- 7 48.8	1.853	2.696	14.4	20.2	8 19	19 8.18	-26 37.1	1.662	2.514	15.4	19.7
<b>62859</b>	2000 UW <sub>78</sub>		7 14.1 93°05	2°0/13.2	18		<b>91158</b>	1998 QG <sub>70</sub>		7 14.1 338°15	2°4/14.6	18	
6 10	19 58.58	-25 55.1	2.257	3.124	11.4	19.0	6 10	19 58.85	-16 43.4	2.055	2.913	12.7	18.5
6 20	19 53.28	-26 31.5	2.193	3.133	8.4	18.9	6 20	19 53.55	-16 3.4	1.976	2.908	9.7	18.3
6 30	19 46.16	-27 8.5	2.153	3.142	5.2	18.7	6 30	19 46.36	-15 27.8	1.921	2.904	6.3	18.1
7 10	19 37.88	-27 42.7	2.139	3.151	2.3	18.5	7 10	19 37.96	-14 56.8	1.891	2.900	3.0	17.9
7 20	19 29.24	-28 10.8	2.154	3.159	3.2	18.6	7 20	19 29.17	-14 30.5	1.888	2.896	3.2	17.9
7 30	19 21.14	-28 30.7	2.196	3.168	6.3	18.8	7 30	19 20.91	-14 8.7	1.913	2.892	6.5	18.1
8 9	19 14.41	-28 42.0	2.263	3.177	9.4	19.0	8 9	19 14.02	-13 51.0	1.964	2.889	10.0	18.3
8 19	19 9.61	-28 45.2	2.354	3.185	12.1	19.2	8 19	19 9.11	-13 37.1	2.037	2.886	13.0	18.5
<b>231598</b>	2008 YE <sub>135</sub>		7 14.1 237°04	2°3/14.9	18		<b>302378</b>	2002 CY <sub>45</sub>		7 14.1 108°83	5°0/16.3	16	
6 10	19 59.08	-15 19.9	1.911	2.769	13.5	20.7	6 10	19 57.10	- 5 46.3	2.478	3.294	12.1	20.7
6 20	19 53.88	-15 10.4	1.834	2.766	10.3	20.5	6 20	19 51.86	- 5 17.3	2.412	3.308	9.8	20.5
6 30	19 46.64	-15 8.7	1.780	2.763	6.7	20.3	6 30	19 45.16	- 4 59.7	2.369	3.321	7.3	20.4
7 10	19 38.05	-15 13.9	1.750	2.760	3.1	20.0	7 10	19 37.58	- 4 54.2	2.352	3.334	5.4	20.3
7 20	19 28.97	-15 24.5	1.748	2.756	3.2	20.0	7 20	19 29.75	- 5 0.4	2.362	3.346	5.1	20.3
7 30	19 20.42	-15 38.6	1.772	2.753	6.8	20.2	7 30	19 22.37	- 5 16.9	2.399	3.359	6.7	20.4
8 9	19 13.33	-15 54.3	1.821	2.749	10.5	20.5	8 9	19 16.10	- 5 41.5	2.462	3.371	8.9	20.6
8 19	19 8.35	-16 10.3	1.893	2.746	13.7	20.7	8 19	19 11.39	- 6 11.7	2.549	3.383	11.2	20.8
<b>96058</b>	2831 P-L		7 14.1 334°93	1°3/13.6	18		<b>378360</b>	2007 LH <sub>7</sub>		7 14.1 135°97	1°1/14.6	17	
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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>260379</b>	2004 <i>VK</i> <sub>33</sub>		7 14.1 199°24	1°2/13.4	18		<b>106723</b>	2000 <i>WE</i> <sub>179</sub>		7 14.1 226°97	1°3/13.3	18	R
6 10	19 56.94	-23 59.1	2.622	3.484	10.2	20.7	6 10	19 57.73	-23 14.6	2.419	3.283	10.9	20.2
6 20	19 51.92	-24 31.2	2.545	3.483	7.5	20.5	6 20	19 52.69	-24 2.3	2.339	3.278	8.1	20.0
6 30	19 45.30	-25 5.2	2.492	3.481	4.6	20.3	6 30	19 45.88	-24 53.6	2.283	3.272	4.9	19.8
7 10	19 37.65	-25 38.4	2.466	3.479	1.7	20.1	7 10	19 37.87	-25 44.8	2.254	3.267	1.8	19.6
7 20	19 29.62	-26 8.1	2.469	3.477	2.5	20.1	7 20	19 29.37	-26 32.4	2.253	3.261	2.7	19.6
7 30	19 21.96	-26 32.2	2.501	3.475	5.5	20.3	7 30	19 21.24	-27 13.5	2.281	3.256	6.0	19.8
8 9	19 15.41	-26 49.8	2.559	3.473	8.4	20.5	8 9	19 14.27	-27 46.4	2.336	3.250	9.1	20.0
8 19	19 10.48	-27 0.9	2.640	3.471	11.0	20.7	8 19	19 9.08	-28 10.9	2.413	3.244	11.9	20.2
<b>514909</b>	2008 <i>SY</i> <sub>235</sub>		7 14.1 246°45	2°4/12.9	18		<b>98380</b>	2000 <i>TR</i> <sub>35</sub>		7 14.1 158°35	1°1/14.4	17	
6 10	20 2.15	-27 27.9	2.379	3.238	11.2	22.8	6 10	20 2.34	-18 22.8	1.468	2.342	16.1	20.0
6 20	19 56.12	-28 3.8	2.282	3.218	8.4	22.6	6 20	19 56.84	-18 26.1	1.401	2.343	12.1	19.7
6 30	19 48.05	-28 40.0	2.211	3.197	5.3	22.4	6 30	19 48.67	-18 37.2	1.355	2.345	7.5	19.4
7 10	19 38.51	-29 12.7	2.166	3.175	2.7	22.2	7 10	19 38.73	-18 53.5	1.332	2.346	2.6	19.2
7 20	19 28.32	-29 38.3	2.150	3.153	3.6	22.2	7 20	19 28.18	-19 12.0	1.335	2.347	3.1	19.2
7 30	19 18.45	-29 54.4	2.162	3.130	6.8	22.4	7 30	19 18.42	-19 29.9	1.364	2.348	8.0	19.5
8 9	19 9.85	-30 0.5	2.201	3.106	10.0	22.5	8 9	19 10.65	-19 45.2	1.416	2.349	12.5	19.8
8 19	19 3.25	-29 57.3	2.262	3.081	12.9	22.7	8 19	19 5.66	-19 57.2	1.489	2.350	16.4	20.0
<b>441393</b>	2008 <i>FU</i> <sub>44</sub>		7 14.1 182°49	5°9/11.6	18		<b>162125</b>	1998 <i>SC</i> <sub>81</sub>		7 14.1 305°47	0°8/14.4	18	
6 10	20 3.81	-39 48.6	2.491	3.337	11.2	21.5	6 10	19 58.19	-19 6.2	1.680	2.554	14.3	19.6
6 20	19 57.27	-40 29.7	2.423	3.337	9.0	21.3	6 20	19 53.73	-19 9.0	1.590	2.533	10.8	19.3
6 30	19 48.63	-41 2.3	2.379	3.337	6.9	21.2	6 30	19 46.85	-19 18.2	1.522	2.512	6.7	19.0
7 10	19 38.64	-41 21.7	2.362	3.337	5.9	21.1	7 10	19 38.22	-19 32.0	1.478	2.491	2.2	18.7
7 20	19 28.24	-41 24.7	2.371	3.336	6.5	21.2	7 20	19 28.82	-19 47.7	1.459	2.471	2.8	18.7
7 30	19 18.49	-41 10.5	2.407	3.335	8.3	21.3	7 30	19 19.85	-20 2.8	1.467	2.451	7.5	18.9
8 9	19 10.34	-40 40.8	2.467	3.334	10.5	21.4	8 9	19 12.47	-20 15.7	1.498	2.431	11.9	19.1
8 19	19 4.41	-39 58.9	2.550	3.333	12.6	21.6	8 19	19 7.53	-20 25.3	1.551	2.412	15.8	19.3
<b>239869</b>	2000 <i>GD</i> <sub>53</sub>		7 14.1 22°24	4°6/15.2	17		<b>338150</b>	2002 <i>QY</i> <sub>129</sub>		7 14.1 333°31	1°1/13.8	16	
6 10	19 56.61	-13 49.8	0.897	1.800	21.1	19.2	6 10	20 0.51	-24 18.9	1.838	2.710	13.4	21.2
6 20	19 53.37	-13 19.1	0.854	1.808	16.2	18.9	6 20	19 55.09	-24 25.8	1.766	2.709	9.9	20.9
6 30	19 46.82	-13 5.3	0.828	1.818	10.7	18.7	6 30	19 47.44	-24 33.9	1.716	2.707	6.0	20.7
7 10	19 38.16	-13 8.3	0.821	1.830	5.7	18.4	7 10	19 38.33	-24 40.3	1.692	2.706	2.0	20.4
7 20	19 28.98	-13 25.6	0.834	1.843	5.5	18.5	7 20	19 28.75	-24 42.3	1.695	2.705	3.0	20.5
7 30	19 21.04	-13 53.0	0.868	1.858	10.2	18.8	7 30	19 19.83	-24 38.5	1.724	2.704	7.1	20.8
8 9	19 15.76	-14 25.5	0.921	1.873	15.2	19.1	8 9	19 12.56	-24 28.8	1.778	2.703	10.9	21.0
8 19	19 13.88	-14 58.5	0.992	1.890	19.6	19.5	8 19	19 7.63	-24 14.3	1.854	2.702	14.2	21.2
<b>225825</b>	2001 <i>XQ</i> <sub>26</sub>		7 14.1 203°63	2°4/12.9	18		<b>127352</b>	2002 <i>JC</i> <sub>124</sub>		7 14.1 326°38	1°1/13.4	18	
6 10	20 2.24	-26 38.3	2.215	3.077	11.8	20.9	6 10	19 56.95	-22 9.7	2.321	3.186	11.2	19.5
6 20	19 56.19	-27 20.7	2.135	3.072	8.8	20.7	6 20	19 52.13	-23 1.2	2.246	3.186	8.3	19.3
6 30	19 48.06	-28 4.1	2.080	3.067	5.5	20.5	6 30	19 45.55	-23 57.3	2.195	3.185	5.0	19.1
7 10	19 38.51	-28 44.1	2.051	3.061	2.7	20.3	7 10	19 37.77	-24 54.1	2.171	3.185	1.7	18.9
7 20	19 28.40	-29 16.8	2.051	3.055	3.6	20.3	7 20	19 29.53	-25 47.8	2.176	3.185	2.7	19.0
7 30	19 18.76	-29 39.7	2.078	3.047	6.9	20.5	7 30	19 21.70	-26 35.3	2.209	3.185	6.0	19.2
8 9	19 10.54	-29 52.2	2.132	3.040	10.2	20.7	8 9	19 15.06	-27 14.5	2.267	3.184	9.2	19.4
8 19	19 4.43	-29 55.1	2.208	3.031	13.1	20.9	8 19	19 10.23	-27 45.0	2.350	3.184	12.0	19.6
<b>387929</b>	2005 <i>CE</i> <sub>29</sub>		7 14.1 165°25	3°1/12.9	16		<b>440993</b>	2007 <i>DG</i> <sub>18</sub>		7 14.1 62°46	7°1/18.8	18	
6 10	20 3.17	-30 27.4	2.232	3.093	11.8	22.1	6 10	19 54.82	+ 2 51.1	2.348	3.129	13.7	21.1
6 20	19 56.75	-30 50.3	2.162	3.097	8.9	21.9	6 20	19 50.37	+ 2 48.9	2.272	3.132	11.6	21.0
6 30	19 48.30	-31 9.9	2.117	3.100	5.8	21.7	6 30	19 44.39	+ 2 27.7	2.217	3.135	9.5	20.8
7 10	19 38.55	-31 22.4	2.097	3.103	3.3	21.6	7 10	19 37.41	+ 1 46.9	2.185	3.139	7.7	20.7
7 20	19 28.42	-31 25.0	2.106	3.106	4.1	21.7	7 20	19 30.08	+ 0 47.5	2.179	3.142	7.1	20.7
7 30	19 18.93	-31 16.7	2.143	3.108	7.0	21.8	7 30	19 23.12	- 0 27.3	2.199	3.145	8.0	20.8
8 9	19 11.00	-30 58.4	2.205	3.110	10.0	22.0	8 9	19 17.24	- 1 53.1	2.245	3.148	10.0	20.9
8 19	19 5.23	-30 32.0	2.290	3.111	12.7	22.2	8 19	19 12.94	- 3 24.6	2.315	3.151	12.1	21.0
<b>161331</b>	2003 <i>QA</i> <sub>90</sub>		7 14.1 309°54	5°8/15.2	18		<b>215657</b>	2003 <i>UT</i> <sub>162</sub>		7 14.1 279°89	4°7/12.3	17	
6 10	19 58.58	-10 2.7	1.620	2.473	15.8	19.5	6 10	20 2.47	-28 51.9	1.455	2.339	15.6	20.3
6 20	19 54.25	- 9 15.8	1.510	2.433	12.7	19.2	6 20	19 57.50	-29 57.7	1.379	2.325	11.9	20.0
6 30	19 47.35	- 8 39.0	1.420	2.392	9.3	18.9	6 30	19 49.42	-31 5.4	1.323	2.312	7.8	19.8
7 10	19 38.43	- 8 14.4	1.354	2.351	6.4	18.6	7 10	19 39.05	-32 7.1	1.292	2.298	4.8	19.6
7 20	19 28.38	- 8 3.7	1.312	2.310	6.3	18.5	7 20	19 27.66	-32 55.3	1.285	2.285	6.2	19.6
7 30	19 18.46	- 8 6.8	1.296	2.269	9.6	18.6	7 30	19 16.88	-33 25.0	1.303	2.271	10.2	19.8
8 9	19 9.95	- 8 22.1	1.302	2.229	13.8	18.7	8 9	19 8.26	-33 35.7	1.343	2.257	14.5	20.0
8 19	19 3.90	- 8 46.7	1.328	2.188	18.0	18.9	8 19	19 2.83	-33 29.9	1.403	2.244	18.3	20.2
<b>290253</b>	2005 <i>SB</i> <sub>111</sub>		7 14.1 336°31	0°2/14.2	18		<b>521207</b>	2015 <i>FC</i> <sub>414</sub>		7 14.1 78°17	5°3/16.3	17	
6 10	19 57.03	-20 10.0	1.903	2.775	13.0	20.8	6 10	19 57.80	- 7 4.8	1.837	2.675	14.9	21.6
6 20	19 52.46	-20 19.9	1.827	2.769	9.7	20.6	6 20	19 52.89	- 6 48.1	1.771	2.682	11.9	21.4
6 30	19 45.84	-20 35.0	1.773	2.764	5.9	20.3	6 30	19 46.03	- 6 46.3	1.726	2.690	8.6	21.2
7 10	19 37.86	-20 52.7	1.744	2.759	1.8	20.0	7 10	19 37.92	- 6 59.5	1.706	2.697	6.0	21.1
7 20	19 29.37	-21 10.6	1.742	2.754	2.5	20.1	7 20	19 29.40	- 7 26.7	1.710	2.705	5.6	21.1
7 30	19 21.41	-21 26.4	1.767	2.750	6.6	20.3	7 30	19 21.47	- 8 5.1	1.741	2.712	7.8	21.2
8 9	19 14.90	-21 38.8	1.816	2.746	10.4	20.6	8 9	19 14.98	- 8 50.9	1.797	2.720	10.9	21.4
8 19	19 10.51	-21 47.2	1.887	2.742	13.7	20.8	8 19	19 10.55	- 9 40.3	1.874	2.728	13.8	21.6
<b>388708</b>	2007 <i>VV</i> <sub>84</sub>		7 14.1 298°55	4°8/16.4	18		<b>205037</b>						



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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>369485</b>	2010 <i>UP</i> <sub>6</sub>		7 14.1 278°39	0°1/14.1 18			<b>122971</b>	2000 <i>SQ</i> <sub>225</sub>		7 14.1 187°01	0°5/14.4 18		
6 10	20 0.21	-17 46.1	1.525	2.399	15.5	20.8	6 10	20 0.19	-18 9.4	2.406	3.257	11.4	20.1
6 20	19 55.58	-18 41.9	1.437	2.380	11.7	20.5	6 20	19 54.42	-18 36.7	2.326	3.257	8.5	19.9
6 30	19 48.18	-19 51.4	1.369	2.361	7.2	20.2	6 30	19 46.91	-19 9.9	2.269	3.256	5.2	19.7
7 10	19 38.69	-21 10.0	1.327	2.341	2.2	19.8	7 10	19 38.22	-19 46.5	2.240	3.254	1.7	19.4
7 20	19 28.15	-22 31.4	1.310	2.321	3.2	19.8	7 20	19 29.10	-20 23.9	2.240	3.252	2.1	19.5
7 30	19 17.95	-23 48.7	1.319	2.301	8.4	20.1	7 30	19 20.38	-20 59.4	2.269	3.249	5.6	19.7
8 9	19 9.47	-24 56.9	1.352	2.281	13.2	20.3	8 9	19 12.84	-21 31.2	2.325	3.245	8.9	19.9
8 19	19 3.77	-25 53.4	1.405	2.261	17.4	20.5	8 19	19 7.08	-21 58.3	2.405	3.241	11.7	20.1
<b>199086</b>	2005 <i>XS</i> <sub>114</sub>		7 14.1 355°02	0°9/13.8 18			<b>349862</b>	2009 <i>DX</i> <sub>43</sub>		7 14.1 237°21	4°5/12.0 18		
6 10	19 59.04	-21 54.4	1.554	2.435	14.9	20.1	6 10	20 1.73	-32 29.6	2.117	2.982	12.1	21.5
6 20	19 54.37	-22 22.9	1.486	2.433	11.1	19.9	6 20	19 56.06	-33 23.7	2.041	2.975	9.3	21.3
6 30	19 47.19	-22 56.8	1.439	2.432	6.7	19.6	6 30	19 48.13	-34 14.9	1.988	2.967	6.5	21.1
7 10	19 38.31	-23 32.1	1.417	2.431	2.1	19.3	7 10	19 38.62	-34 57.8	1.961	2.959	4.6	21.0
7 20	19 28.83	-24 4.6	1.420	2.431	3.2	19.4	7 20	19 28.51	-35 27.8	1.961	2.951	5.5	21.1
7 30	19 20.03	-24 30.8	1.448	2.431	7.8	19.7	7 30	19 18.90	-35 42.5	1.988	2.943	8.2	21.2
8 9	19 13.07	-24 49.0	1.500	2.431	12.1	19.9	8 9	19 10.87	-35 42.0	2.040	2.934	11.2	21.4
8 19	19 8.73	-24 59.3	1.573	2.431	15.8	20.2	8 19	19 5.16	-35 28.7	2.113	2.925	14.0	21.6
<b>133875</b>	2004 <i>NH</i> <sub>12</sub>		7 14.1 299°97	3°4/13.1 18			<b>434664</b>	2005 <i>YM</i> <sub>125</sub>		7 14.1 137°00	1°8/13.3 17		
6 10	20 1.30	-28 7.6	1.553	2.434	14.9	19.8	6 10	20 2.19	-24 33.0	2.154	3.016	12.1	22.4
6 20	19 56.45	-28 37.0	1.466	2.412	11.3	19.5	6 20	19 56.05	-25 19.1	2.091	3.028	8.9	22.2
6 30	19 48.71	-29 6.5	1.400	2.390	7.2	19.3	6 30	19 47.93	-26 7.2	2.052	3.040	5.4	22.0
7 10	19 38.84	-29 30.6	1.358	2.368	3.7	19.0	7 10	19 38.52	-26 53.0	2.040	3.052	2.2	21.8
7 20	19 28.03	-29 44.3	1.342	2.346	4.9	19.0	7 20	19 28.72	-27 32.6	2.056	3.063	3.2	21.9
7 30	19 17.75	-29 44.6	1.350	2.325	9.2	19.2	7 30	19 19.51	-28 3.4	2.100	3.073	6.6	22.1
8 9	19 9.42	-29 31.6	1.381	2.304	13.5	19.4	8 9	19 11.78	-28 24.5	2.171	3.083	9.8	22.4
8 19	19 4.04	-29 7.7	1.432	2.283	17.5	19.6	8 19	19 6.14	-28 36.6	2.264	3.092	12.7	22.6
<b>91570</b>	1999 <i>RN</i> <sub>249</sub>		7 14.1 132°01	4°2/16.2 18			<b>17260</b>	Kušnirák		7 14.1 153°81	3°4/15.3 18		
6 10	19 55.89	-7 45.1	2.351	3.181	12.3	19.8	6 10	20 3.77	-12 19.8	1.707	2.555	15.4	18.3
6 20	19 51.16	-7 36.2	2.276	3.183	9.7	19.6	6 20	19 57.49	-12 15.8	1.640	2.564	11.8	18.1
6 30	19 44.88	-7 38.9	2.223	3.186	7.0	19.5	6 30	19 48.92	-12 23.6	1.594	2.572	7.9	17.9
7 10	19 37.58	-7 53.1	2.196	3.188	4.8	19.3	7 10	19 38.84	-12 42.0	1.574	2.579	4.2	17.7
7 20	19 29.94	-8 17.7	2.196	3.191	4.5	19.3	7 20	19 28.28	-13 8.7	1.580	2.586	4.1	17.7
7 30	19 22.70	-8 50.7	2.223	3.193	6.4	19.4	7 30	19 18.42	-13 41.0	1.613	2.591	7.6	17.9
8 9	19 16.57	-9 29.5	2.276	3.196	9.1	19.6	8 9	19 10.29	-14 15.6	1.671	2.596	11.4	18.2
8 19	19 12.07	-10 11.2	2.353	3.198	11.7	19.8	8 19	19 4.59	-14 50.2	1.751	2.601	14.8	18.4
<b>420765</b>	2013 <i>FX</i> <sub>22</sub>		7 14.1 348°28	8°2/11.9 17			<b>371910</b>	2008 <i>DO</i> <sub>32</sub>		7 14.1 190°36	0°3/14.0 17		
6 10	19 58.63	-34 2.4	0.949	1.859	19.5	19.8	6 10	20 2.71	-20 48.0	1.845	2.709	13.7	21.9
6 20	19 55.75	-35 5.8	0.893	1.850	15.3	19.5	6 20	19 56.78	-21 14.0	1.770	2.708	10.2	21.7
6 30	19 48.79	-36 2.7	0.854	1.842	11.0	19.3	6 30	19 48.54	-21 45.3	1.717	2.707	6.2	21.4
7 10	19 38.92	-36 42.0	0.835	1.836	8.3	19.1	7 10	19 38.75	-22 18.5	1.691	2.705	1.8	21.1
7 20	19 28.00	-36 54.7	0.836	1.831	9.6	19.2	7 20	19 28.38	-22 49.9	1.691	2.702	2.7	21.2
7 30	19 18.33	-36 37.5	0.857	1.827	13.6	19.4	7 30	19 18.59	-23 16.5	1.719	2.699	7.1	21.5
8 9	19 11.85	-35 54.2	0.895	1.825	18.2	19.6	8 9	19 10.43	-23 36.8	1.773	2.696	11.0	21.7
8 19	19 9.59	-34 52.0	0.950	1.825	22.3	19.9	8 19	19 4.64	-23 50.6	1.848	2.691	14.4	21.9
<b>17438</b>	Quasimodo		7 14.1 141°49	0°4/13.9 18			<b>15813</b>	1994 <i>PL</i> <sub>12</sub>		7 14.1 107°28	0°5/14.3 17		
6 10	20 3.37	-20 40.0	1.682	2.550	14.6	18.8	6 10	20 2.99	-19 30.3	1.656	2.524	14.8	18.7
6 20	19 57.33	-21 10.6	1.618	2.559	10.9	18.6	6 20	19 56.95	-19 39.9	1.598	2.537	11.0	18.5
6 30	19 48.86	-21 47.2	1.577	2.567	6.6	18.3	6 30	19 48.57	-19 55.3	1.561	2.551	6.7	18.3
7 10	19 38.80	-22 25.4	1.560	2.575	1.9	18.1	7 10	19 38.72	-20 13.6	1.550	2.564	2.1	18.0
7 20	19 28.24	-23 1.3	1.571	2.582	2.9	18.1	7 20	19 28.49	-20 32.0	1.565	2.577	2.7	18.1
7 30	19 18.42	-23 31.6	1.608	2.589	7.4	18.4	7 30	19 19.08	-20 47.9	1.607	2.589	7.2	18.4
8 9	19 10.44	-23 54.5	1.670	2.595	11.5	18.7	8 9	19 11.52	-21 0.1	1.673	2.601	11.2	18.7
8 19	19 5.00	-24 10.1	1.754	2.601	14.9	18.9	8 19	19 6.47	-21 8.4	1.761	2.613	14.6	18.9
<b>156336</b>	2001 <i>XC</i> <sub>133</sub>		7 14.1 93°26	0°8/13.8 17			<b>472936</b>	2015 <i>GB</i> <sub>24</sub>		7 14.1 92°32	1°3/14.8 16		
6 10	20 2.43	-21 20.0	1.796	2.663	13.9	20.4	6 10	20 0.87	-15 14.5	1.952	2.805	13.5	21.8
6 20	19 56.37	-21 58.8	1.744	2.685	10.2	20.2	6 20	19 55.02	-15 50.6	1.898	2.829	10.1	21.6
6 30	19 48.13	-22 42.2	1.715	2.706	6.1	20.0	6 30	19 47.26	-16 35.8	1.868	2.853	6.3	21.4
7 10	19 38.55	-23 25.9	1.712	2.727	1.8	19.8	7 10	19 38.32	-17 26.9	1.864	2.876	2.4	21.2
7 20	19 28.65	-24 5.8	1.737	2.747	2.8	19.9	7 20	19 29.08	-18 20.1	1.888	2.899	2.5	21.3
7 30	19 19.54	-24 38.8	1.788	2.767	6.9	20.2	7 30	19 20.53	-19 11.8	1.940	2.922	6.2	21.6
8 9	19 12.17	-25 3.8	1.865	2.787	10.6	20.5	8 9	19 13.50	-19 59.3	2.018	2.944	9.7	21.8
8 19	19 7.16	-25 20.7	1.964	2.806	13.7	20.7	8 19	19 8.55	-20 40.8	2.120	2.965	12.7	22.0
<b>510875</b>	2013 <i>CF</i> <sub>122</sub>		7 14.1 135°53	0°1/14.2 18			<b>74760</b>	1999 <i>RY</i> <sub>210</sub>		7 14.1 267°79	0°8/14.3 18		
6 10	19 57.92	-19 48.6	2.604	3.459	10.5	22.4	6 10	20 2.74	-20 9.7	1.555	2.427	15.4	19.5
6 20	19 52.55	-20 10.9	2.535	3.469	7.8	22.3	6 20	19 57.23	-19 57.2	1.473	2.415	11.6	19.3
6 30	19 45.66	-20 37.2	2.491	3.478	4.7	22.1	6 30	19 49.03	-19 49.2	1.412	2.402	7.2	19.0
7 10	19 37.82	-21 5.2	2.474	3.488	1.4	21.9	7 10	19 38.94	-19 43.7	1.375	2.389	2.4	18.6
7 20	19 29.68	-21 32.7	2.486	3.497	1.9	21.9	7 20	19 28.10	-19 38.7	1.364	2.376	3.0	18.7
7 30	19 21.98	-21 57.8	2.526	3.506	5.2	22.2	7 30	19 17.87	-19 32.7	1.379	2.363	8.0	18.9
8 9	19 15.39	-22 19.1	2.594	3.514	8.1	22.4	8 9	19 9.51	-19 25.3	1.418	2.349	12.6	19.2
8 19	19 10.41	-22 36.2	2.686	3.522	10.6	22.6	8 19	19 3.90	-19 16.4	1.477	2.336	16.6	19.4
<b>380809</b>	2005 <i>YG</i> <sub>38</sub>		7 14.1 226°35	6°4/11.2 18			<b>20</b>						

EPHEMERIDES

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>99591</b>	2002 <i>GH</i> <sub>21</sub>		7 14.1 60°68	0°6/14.4	18		<b>58107</b>	1979 <i>OZ</i> <sub>10</sub>		7 14.1 330°72	0°6/14.2	18	
6 10	19 57.85	-19 27.9	2.154	3.016	12.1	19.6	6 10	20 13.74	-28 43.7	0.970	1.861	20.8	18.2
6 20	19 52.72	-19 30.1	2.091	3.028	8.9	19.4	6 20	20 6.54	-27 16.2	0.904	1.856	15.8	17.9
6 30	19 45.85	-19 36.7	2.052	3.040	5.5	19.2	6 30	19 55.07	-25 34.6	0.857	1.851	9.8	17.5
7 10	19 37.90	-19 45.8	2.039	3.052	1.8	19.0	7 10	19 40.77	-23 37.7	0.831	1.846	3.0	17.1
7 20	19 29.67	-19 55.6	2.053	3.064	2.2	19.0	7 20	19 25.78	-21 29.6	0.830	1.842	4.2	17.2
7 30	19 22.01	-20 4.6	2.095	3.077	5.8	19.3	7 30	19 12.46	-19 19.0	0.851	1.838	11.0	17.6
8 9	19 15.70	-20 11.6	2.163	3.089	9.1	19.5	8 9	19 2.65	-17 15.8	0.895	1.835	17.0	17.9
8 19	19 11.27	-20 16.2	2.254	3.102	12.0	19.7	8 19	18 57.21	-15 27.1	0.956	1.832	22.1	18.2
<b>50434</b>	2000 <i>DG</i> <sub>23</sub>		7 14.1 22°95	0°3/14.0	18		<b>498085</b>	2007 <i>RF</i> <sub>221</sub>		7 14.1 315°65	0°8/14.3	17	
6 10	19 58.18	-21 31.9	1.493	2.376	15.3	18.2	6 10	19 59.54	-19 43.8	1.192	2.083	17.7	21.0
6 20	19 53.67	-21 43.1	1.435	2.384	11.3	18.0	6 20	19 55.52	-19 42.4	1.117	2.069	13.4	20.7
6 30	19 46.72	-21 59.0	1.398	2.391	6.8	17.7	6 30	19 48.33	-19 49.0	1.061	2.055	8.3	20.4
7 10	19 38.21	-22 16.5	1.386	2.400	2.0	17.4	7 10	19 38.83	-20 0.7	1.027	2.042	2.7	20.0
7 20	19 29.26	-22 32.3	1.398	2.410	2.9	17.5	7 20	19 28.35	-20 14.3	1.016	2.029	3.5	20.0
7 30	19 21.12	-22 44.0	1.435	2.420	7.6	17.8	7 30	19 18.57	-20 26.5	1.028	2.016	9.3	20.3
8 9	19 14.89	-22 50.5	1.496	2.430	11.8	18.1	8 9	19 11.06	-20 35.4	1.062	2.005	14.7	20.6
8 19	19 11.24	-22 51.8	1.577	2.442	15.4	18.4	8 19	19 6.84	-20 40.3	1.113	1.994	19.3	20.8
<b>310617</b>	2002 <i>AY</i> <sub>25</sub>		7 14.1 338°09	0°7/14.5	18		<b>447130</b>	2004 <i>XJ</i> <sub>9</sub>		7 14.1 315°86	3°5/14.8	17	
6 10	19 56.54	-16 56.2	2.044	2.907	12.6	20.2	6 10	19 57.86	-14 24.9	1.915	2.773	13.5	20.1
6 20	19 52.02	-17 33.9	1.967	2.904	9.4	20.0	6 20	19 53.24	-13 42.1	1.814	2.744	10.5	19.9
6 30	19 45.59	-18 20.4	1.914	2.902	5.8	19.8	6 30	19 46.50	-13 5.0	1.734	2.714	7.2	19.6
7 10	19 37.88	-19 12.8	1.886	2.900	2.0	19.5	7 10	19 38.21	-12 34.3	1.680	2.685	4.1	19.3
7 20	19 29.67	-20 7.2	1.886	2.898	2.3	19.6	7 20	19 29.22	-12 10.5	1.651	2.656	4.2	19.3
7 30	19 21.89	-21 0.2	1.914	2.896	6.2	19.8	7 30	19 20.54	-11 53.6	1.649	2.628	7.5	19.4
8 9	19 15.42	-21 48.7	1.967	2.895	9.8	20.0	8 9	19 13.17	-11 43.0	1.672	2.599	11.3	19.6
8 19	19 10.89	-22 30.9	2.043	2.893	13.0	20.2	8 19	19 7.90	-11 37.7	1.717	2.572	14.8	19.8
<b>423955</b>	2006 <i>UN</i> <sub>72</sub>		7 14.1 267°92	2°5/14.8	18		<b>38274</b>	1999 <i>RR</i> <sub>44</sub>		7 14.1 342°44	4°6/16.0	18	
6 10	20 1.38	-15 59.1	1.597	2.463	15.4	21.7	6 10	19 54.62	-8 59.6	1.819	2.670	14.4	18.7
6 20	19 56.16	-15 44.2	1.512	2.448	11.8	21.5	6 20	19 50.74	-8 49.3	1.741	2.662	11.4	18.5
6 30	19 48.38	-15 37.5	1.447	2.433	7.6	21.2	6 30	19 44.89	-8 52.9	1.684	2.655	8.1	18.3
7 10	19 38.77	-15 38.3	1.407	2.418	3.5	20.9	7 10	19 37.70	-9 10.4	1.651	2.649	5.3	18.1
7 20	19 28.38	-15 44.9	1.393	2.402	3.6	20.9	7 20	19 30.00	-9 40.5	1.643	2.643	4.9	18.1
7 30	19 18.50	-15 55.5	1.404	2.387	8.0	21.1	7 30	19 22.75	-10 20.6	1.660	2.638	7.5	18.2
8 9	19 10.34	-16 8.1	1.439	2.371	12.4	21.3	8 9	19 16.86	-11 7.0	1.702	2.633	10.9	18.4
8 19	19 4.77	-16 21.3	1.495	2.355	16.4	21.5	8 19	19 12.99	-11 56.0	1.766	2.629	14.1	18.6
<b>498209</b>	2007 <i>TU</i> <sub>412</sub>		7 14.1 312°41	2°3/13.3	18		<b>144266</b>	2004 <i>CZ</i> <sub>95</sub>		7 14.1 226°27	2°4/13.5	17	
6 10	19 57.93	-22 55.7	1.138	2.038	17.8	21.0	6 10	20 4.45	-27 1.7	1.687	2.559	14.4	20.4
6 20	19 54.80	-23 43.9	1.053	2.010	13.5	20.6	6 20	19 58.36	-27 17.3	1.612	2.554	10.8	20.2
6 30	19 48.21	-24 42.5	0.987	1.984	8.3	20.2	6 30	19 49.64	-27 32.2	1.559	2.548	6.7	19.9
7 10	19 38.88	-25 45.5	0.943	1.957	3.1	19.8	7 10	19 39.13	-27 41.9	1.531	2.542	2.9	19.7
7 20	19 28.09	-26 44.9	0.921	1.931	4.8	19.9	7 20	19 28.00	-27 43.2	1.529	2.536	3.9	19.7
7 30	19 17.71	-27 33.4	0.922	1.906	10.7	20.1	7 30	19 17.59	-27 34.2	1.554	2.530	8.1	19.9
8 9	19 9.63	-28 6.9	0.942	1.882	16.4	20.3	8 9	19 9.11	-27 15.7	1.603	2.523	12.1	20.2
8 19	19 5.20	-28 25.0	0.980	1.858	21.4	20.5	8 19	19 3.36	-26 50.0	1.673	2.516	15.7	20.4
<b>511107</b>	2013 <i>VV</i> <sub>24</sub>		7 14.1 240°76	0°2/14.2	18		<b>279120</b>	2009 <i>ON</i> <sub>10</sub>		7 14.1 328°97	12°2/10.2	18	
6 10	20 2.00	-21 6.0	2.051	2.911	12.7	22.2	6 10	19 57.86	-40 19.3	1.001	1.903	19.4	19.2
6 20	19 56.12	-21 4.1	1.962	2.898	9.5	22.0	6 20	19 56.02	-41 35.5	0.916	1.862	16.4	18.8
6 30	19 48.12	-21 5.3	1.897	2.885	5.8	21.8	6 30	19 49.67	-42 42.5	0.847	1.821	13.5	18.5
7 10	19 38.65	-21 7.5	1.857	2.871	1.8	21.5	7 10	19 39.50	-43 26.2	0.797	1.782	12.2	18.3
7 20	19 28.61	-21 8.7	1.846	2.857	2.5	21.5	7 20	19 27.20	-43 32.9	0.766	1.744	13.6	18.2
7 30	19 19.02	-21 7.4	1.862	2.843	6.6	21.7	7 30	19 15.48	-42 54.8	0.752	1.709	17.3	18.3
8 9	19 10.87	-21 3.3	1.905	2.828	10.4	21.9	8 9	19 7.04	-41 34.4	0.754	1.675	21.8	18.4
8 19	19 4.87	-20 56.3	1.970	2.812	13.7	22.1	8 19	19 3.60	-39 41.3	0.771	1.644	26.3	18.5
<b>439144</b>	2011 <i>UM</i> <sub>78</sub>		7 14.1 335°31	5°3/15.8	18		<b>510705</b>	2012 <i>UP</i> <sub>169</sub>		7 14.1 209°32	5°3/15.9	18	
6 10	19 57.34	-8 16.2	1.975	2.813	14.0	21.1	6 10	19 59.57	-5 24.0	2.601	3.408	11.9	22.4
6 20	19 52.54	-7 36.6	1.898	2.810	11.1	20.9	6 20	19 53.81	-4 42.0	2.512	3.401	9.7	22.2
6 30	19 45.87	-7 8.6	1.844	2.808	8.2	20.7	6 30	19 46.50	-4 10.0	2.447	3.393	7.4	22.0
7 10	19 37.96	-6 53.3	1.814	2.805	5.8	20.6	7 10	19 38.17	-3 49.4	2.408	3.385	5.6	21.9
7 20	19 29.62	-6 50.9	1.810	2.803	5.5	20.6	7 20	19 29.44	-3 40.6	2.397	3.377	5.4	21.9
7 30	19 21.76	-7 0.3	1.832	2.800	7.7	20.7	7 30	19 21.04	-3 43.2	2.414	3.368	7.0	22.0
8 9	19 15.22	-7 19.2	1.879	2.798	10.7	20.9	8 9	19 13.67	-3 55.5	2.458	3.358	9.3	22.1
8 19	19 10.62	-7 44.7	1.948	2.797	13.6	21.1	8 19	19 7.85	-4 15.3	2.525	3.348	11.6	22.2
<b>206077</b>	2002 <i>RQ</i> <sub>56</sub>		7 14.1 318°25	0°9/13.9	18		<b>41673</b>	2000 <i>TU</i> <sub>39</sub>		7 14.1 235°45	7°6/10.7	18	
6 10	19 58.93	-23 31.3	1.630	2.510	14.4	19.9	6 10	20 6.60	-40 16.2	1.980	2.832	13.4	19.2
6 20	19 54.36	-23 35.2	1.547	2.494	10.8	19.6	6 20	20 0.16	-41 27.1	1.907	2.823	10.9	19.0
6 30	19 47.28	-23 41.5	1.485	2.478	6.6	19.3	6 30	19 50.87	-42 29.4	1.857	2.813	8.7	18.9
7 10	19 38.44	-23 47.2	1.448	2.463	2.1	19.0	7 10	19 39.56	-43 15.5	1.831	2.802	7.6	18.8
7 20	19 28.89	-23 49.3	1.436	2.448	3.1	19.0	7 20	19 27.45	-43 39.6	1.832	2.791	8.5	18.8
7 30	19 19.91	-23 46.1	1.450	2.433	7.8	19.3	7 30	19 16.01	-43 39.4	1.857	2.780	10.7	18.9
8 9	19 12.66	-23 37.1	1.488	2.419	12.1	19.5	8 9	19 6.58	-43 16.8	1.905	2.769	13.3	19.1
8 19	19 7.99	-23 23.1	1.546	2.406	15.9	19.7	8 19	19 0.06	-42 36.5	1.974	2.757	15.8	19.2
<b>294320</b>	2007 <i>VE</i> <sub>52</sub>		7 14.1 282°82	0°8/13.8	18		<b>434749</b>	2006 <i>HQ</i> <sub>22&lt;/</sub>					

EPHEMERIDES

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	
<b>372879</b>	2010 XZ <sub>2</sub>	7 14.1 225°31 0°8/14.4 17						<b>412012</b>	2012 XB <sub>111</sub>	7 14.2 204°52 0°4/14.3 18				
6 10	20 3.07	-19 5.7	1.882	2.741	13.7	21.5	6 10	20 0.41	-20 7.3	2.441	3.295	11.1	21.7	
6 20	19 57.08	-19 5.6	1.797	2.732	10.3	21.3	6 20	19 54.59	-20 7.4	2.358	3.290	8.3	21.5	
6 30	19 48.79	-19 10.7	1.734	2.722	6.4	21.1	6 30	19 47.05	-20 10.6	2.298	3.285	5.1	21.3	
7 10	19 38.91	-19 19.0	1.697	2.711	2.2	20.8	7 10	19 38.38	-20 15.4	2.266	3.280	1.6	21.1	
7 20	19 28.40	-19 28.3	1.688	2.699	2.7	20.8	7 20	19 29.30	-20 20.0	2.262	3.274	2.1	21.1	
7 30	19 18.40	-19 36.6	1.706	2.687	7.0	21.0	7 30	19 20.65	-20 23.3	2.287	3.267	5.6	21.3	
8 9	19 9.95	-19 42.9	1.750	2.675	11.0	21.2	8 9	19 13.20	-20 24.5	2.339	3.260	8.8	21.5	
8 19	19 3.83	-19 46.7	1.815	2.661	14.5	21.4	8 19	19 7.52	-20 23.5	2.415	3.252	11.6	21.7	
<b>17647</b>	1996 TR <sub>41</sub>	7 14.1 182°04 0°4/14.3 18						<b>319855</b>	2006 WE <sub>39</sub>	7 14.2 199°92 0°4/14.0 17				
6 10	20 0.61	-18 49.7	2.002	2.862	12.9	18.8	6 10	20 2.36	-21 2.3	1.897	2.761	13.4	22.0	
6 20	19 55.06	-19 12.2	1.927	2.863	9.7	18.5	6 20	19 56.53	-21 27.7	1.820	2.758	10.0	21.7	
6 30	19 47.46	-19 41.1	1.875	2.863	5.9	18.3	6 30	19 48.46	-21 58.2	1.765	2.755	6.1	21.5	
7 10	19 38.49	-20 13.5	1.849	2.863	1.9	18.0	7 10	19 38.85	-22 30.3	1.737	2.751	1.8	21.2	
7 20	19 29.03	-20 46.4	1.851	2.862	2.4	18.1	7 20	19 28.66	-23 0.6	1.735	2.746	2.7	21.3	
7 30	19 20.08	-21 16.9	1.880	2.861	6.4	18.3	7 30	19 19.01	-23 26.1	1.762	2.741	6.9	21.5	
8 9	19 12.58	-21 43.3	1.935	2.860	10.1	18.6	8 9	19 10.92	-23 45.3	1.813	2.736	10.8	21.8	
8 19	19 7.19	-22 4.5	2.013	2.858	13.3	18.8	8 19	19 5.15	-23 58.2	1.887	2.730	14.2	22.0	
<b>111516</b>	2001 YW <sub>91</sub>	7 14.1 153°08 0°1/14.1 18						<b>28019</b>	Warchal	7 14.2 238°33 3°3/15.1 18				
6 10	19 57.51	-19 39.1	2.344	3.204	11.3	19.5	6 10	20 2.17	-13 48.4	1.582	2.442	15.8	19.2	
6 20	19 52.51	-20 11.2	2.270	3.207	8.4	19.3	6 20	19 56.74	-13 34.7	1.501	2.433	12.2	18.9	
6 30	19 45.80	-20 48.7	2.220	3.209	5.1	19.1	6 30	19 48.75	-13 31.6	1.441	2.423	8.1	18.7	
7 10	19 37.98	-21 28.5	2.197	3.211	1.5	18.8	7 10	19 38.98	-13 38.6	1.406	2.413	4.2	18.4	
7 20	19 29.76	-22 8.0	2.202	3.213	2.1	18.9	7 20	19 28.46	-13 54.0	1.395	2.403	4.1	18.4	
7 30	19 21.96	-22 44.3	2.235	3.215	5.7	19.1	7 30	19 18.50	-14 15.5	1.411	2.392	8.1	18.6	
8 9	19 15.35	-23 15.7	2.295	3.217	8.9	19.3	8 9	19 10.28	-14 40.5	1.451	2.381	12.4	18.8	
8 19	19 10.51	-23 41.4	2.378	3.219	11.7	19.5	8 19	19 4.66	-15 6.4	1.512	2.370	16.3	19.0	
<b>34365</b>	2000 RS <sub>34</sub>	7 14.1 331°27 0°3/14.2 17						<b>88624</b>	2001 RR <sub>21</sub>	7 14.2 265°00 2°7/13.5 18				
6 10	19 59.32	-21 7.2	1.432	2.316	15.8	18.9	6 10	20 5.21	-26 33.5	1.422	2.302	16.1	20.2	
6 20	19 54.83	-21 0.5	1.358	2.306	11.9	18.6	6 20	19 59.57	-26 54.9	1.340	2.286	12.2	20.0	
6 30	19 47.65	-20 58.4	1.304	2.297	7.3	18.3	6 30	19 50.76	-27 17.0	1.279	2.270	7.6	19.7	
7 10	19 38.61	-20 58.3	1.274	2.289	2.2	18.0	7 10	19 39.63	-27 34.5	1.242	2.254	3.3	19.4	
7 20	19 28.86	-20 57.9	1.269	2.281	3.0	18.0	7 20	19 27.51	-27 42.5	1.229	2.237	4.5	19.4	
7 30	19 19.82	-20 55.5	1.288	2.273	8.1	18.3	7 30	19 16.05	-27 38.2	1.242	2.220	9.4	19.6	
8 9	19 12.73	-20 50.2	1.330	2.267	12.8	18.5	8 9	19 6.81	-27 22.0	1.277	2.203	14.1	19.9	
8 19	19 8.44	-20 42.2	1.392	2.261	16.8	18.8	8 19	19 0.80	-26 56.7	1.332	2.186	18.3	20.1	
<b>472110</b>	2014 AB <sub>53</sub>	7 14.2 217°31 4°3/12.5 17						<b>196519</b>	2003 OL <sub>4</sub>	7 14.2 291°29 2°1/14.9 18				
6 10	20 5.82	-34 10.8	2.353	3.205	11.5	21.9	6 10	19 58.11	-14 53.2	1.725	2.589	14.5	19.6	
6 20	19 58.89	-34 40.0	2.269	3.195	8.9	21.7	6 20	19 53.61	-15 5.9	1.639	2.575	11.1	19.3	
6 30	19 49.78	-35 3.9	2.211	3.185	6.2	21.5	6 30	19 46.82	-15 29.6	1.575	2.560	7.1	19.1	
7 10	19 39.20	-35 17.8	2.178	3.175	4.4	21.4	7 10	19 38.40	-16 2.5	1.535	2.546	3.1	18.8	
7 20	19 28.08	-35 18.5	2.174	3.163	5.1	21.4	7 20	19 29.26	-16 41.9	1.521	2.531	3.2	18.7	
7 30	19 17.53	-35 4.9	2.198	3.151	7.6	21.5	7 30	19 20.53	-17 24.1	1.533	2.517	7.3	19.0	
8 9	19 8.54	-34 38.2	2.248	3.139	10.5	21.7	8 9	19 13.32	-18 5.9	1.570	2.503	11.5	19.2	
8 19	19 1.79	-34 1.1	2.320	3.125	13.1	21.9	8 19	19 8.41	-18 44.8	1.628	2.489	15.2	19.4	
<b>299852</b>	2006 SC <sub>254</sub>	7 14.2 41°23 1°3/13.7 18						<b>441802</b>	2009 FH <sub>64</sub>	7 14.2 21°65 4°2/15.8 15				
6 10	19 59.16	-23 54.9	1.943	2.814	12.8	21.2	6 10	19 55.80	-10 49.5	1.605	2.467	15.5	20.9	
6 20	19 54.05	-24 18.2	1.874	2.817	9.5	21.0	6 20	19 51.71	-10 38.1	1.545	2.475	12.1	20.7	
6 30	19 46.86	-24 43.8	1.829	2.820	5.7	20.8	6 30	19 45.51	-10 40.4	1.506	2.483	8.3	20.5	
7 10	19 38.32	-25 8.2	1.809	2.823	2.0	20.6	7 10	19 37.95	-10 56.0	1.490	2.492	5.0	20.4	
7 20	19 29.34	-25 28.3	1.816	2.826	2.9	20.7	7 20	19 29.98	-11 22.9	1.498	2.503	4.6	20.4	
7 30	19 20.96	-25 42.1	1.850	2.829	6.8	20.9	7 30	19 22.67	-11 58.1	1.532	2.513	7.6	20.6	
8 9	19 14.10	-25 48.6	1.909	2.832	10.3	21.1	8 9	19 16.97	-12 37.9	1.590	2.525	11.2	20.8	
8 19	19 9.43	-25 48.5	1.990	2.835	13.5	21.3	8 19	19 13.51	-13 18.8	1.669	2.537	14.5	21.1	
<b>442050</b>	2010 RK <sub>48</sub>	7 14.2 272°89 2°1/13.3 18						<b>477743</b>	2010 TX <sub>166</sub>	7 14.2 198°51 2°6/13.1 18				
6 10	19 59.18	-27 10.4	2.310	3.175	11.2	21.4	6 10	19 59.82	-29 26.3	2.501	3.362	10.6	22.0	
6 20	19 53.94	-27 33.4	2.223	3.162	8.4	21.2	6 20	19 54.21	-29 46.2	2.425	3.361	8.0	21.8	
6 30	19 46.78	-27 56.2	2.160	3.148	5.3	21.0	6 30	19 46.83	-30 3.8	2.375	3.360	5.1	21.6	
7 10	19 38.31	-28 15.6	2.123	3.134	2.5	20.8	7 10	19 38.32	-30 16.1	2.351	3.358	2.8	21.5	
7 20	19 29.32	-28 28.6	2.114	3.120	3.3	20.8	7 20	19 29.45	-30 20.8	2.355	3.356	3.5	21.5	
7 30	19 20.75	-28 33.6	2.133	3.105	6.5	21.0	7 30	19 21.07	-30 16.8	2.387	3.354	6.2	21.7	
8 9	19 13.46	-28 30.3	2.178	3.091	9.7	21.2	8 9	19 13.97	-30 4.2	2.445	3.352	9.1	21.9	
8 19	19 8.12	-28 19.4	2.245	3.077	12.6	21.3	8 19	19 8.72	-29 44.5	2.527	3.350	11.6	22.0	
<b>309141</b>	2006 XE <sub>59</sub>	7 14.2 190°10 1°6/13.3 18						<b>149115</b>	Lauriecantillo	7 14.2 322°43 2°8/15.6 18				
6 10	19 58.10	-23 57.6	2.276	3.142	11.4	20.5	6 10	19 55.40	-11 39.3	1.940	2.794	13.5	20.0	
6 20	19 53.09	-24 43.2	2.202	3.142	8.4	20.3	6 20	19 51.32	-12 1.3	1.856	2.784	10.5	19.7	
6 30	19 46.23	-25 31.7	2.152	3.142	5.1	20.1	6 30	19 45.29	-12 36.3	1.795	2.774	7.0	19.5	
7 10	19 38.14	-26 19.4	2.129	3.141	2.0	19.9	7 10	19 37.91	-13 22.8	1.758	2.765	3.7	19.3	
7 20	19 29.59	-27 2.5	2.133	3.141	2.9	19.9	7 20	19 29.97	-14 18.0	1.748	2.755	3.4	19.2	
7 30	19 21.48	-27 38.4	2.166	3.140	6.3	20.1	7 30	19 22.41	-15 18.0	1.764	2.747	6.7	19.4	
8 9	19 14.63	-28 5.6	2.225	3.140	9.5	20.3	8 9	19 16.14	-16 18.9	1.806	2.738	10.3	19.6	
8 19	19 9.66	-28 24.0	2.306	3.139	12.3	20.5	8 19	19 11.83	-17 17.2	1.870	2.730	13.6	19.8	
<b>450124</b>	2015 RB <sub>139</sub>	7 14.2 257°50 0°2/14.1 18						<b>386392</b>	2008 UU <sub>148</sub>	7 14.2 290°72 1°6/13.6 18				
6 10	19 57.08	-21 19.1	2.460	3.321	10.8	21.4	6 10	20 0.14	-24 15.0	1.732	2.607	13.9	21.1	
6 20	19 52.17	-21 34.3	2.378	3.315	8.0	21.2	6 20	19 55.20	-24 40.6	1.650	2.594			

EPHEMERIDES

7 14.2

7 14.2

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>245471</b>	2005 <i>NO</i> <sub>27</sub>		7 14.2 351°63	1.8/14.8	18		<b>128522</b>	2004 <i>PD</i> <sub>42</sub>		7 14.2 215°88	3.9/16.7	18	
6 10	19 57.82	-16 57.5	1.833	2.699	13.7	20.6	6 10	19 55.74	-5 45.7	2.876	3.687	10.8	20.6
6 20	19 53.11	-16 48.9	1.760	2.697	10.3	20.3	6 20	19 50.94	-5 54.5	2.785	3.680	8.6	20.4
6 30	19 46.34	-16 47.3	1.708	2.695	6.5	20.1	6 30	19 44.80	-6 14.8	2.718	3.672	6.4	20.3
7 10	19 38.21	-16 51.3	1.682	2.694	2.7	19.9	7 10	19 37.75	-6 46.2	2.677	3.664	4.4	20.1
7 20	19 29.62	-16 59.4	1.682	2.692	2.9	19.9	7 20	19 30.35	-7 27.5	2.664	3.656	4.1	20.1
7 30	19 21.58	-17 9.7	1.708	2.691	6.7	20.1	7 30	19 23.20	-8 16.5	2.680	3.647	5.7	20.2
8 9	19 15.03	-17 20.6	1.759	2.691	10.5	20.3	8 9	19 16.90	-9 10.6	2.723	3.637	8.0	20.3
8 19	19 10.63	-17 31.0	1.832	2.691	13.9	20.6	8 19	19 11.94	-10 6.9	2.791	3.628	10.3	20.5
<b>285422</b>	1999 <i>VJ</i> <sub>96</sub>		7 14.2 261°97	5°0/12.3	17		<b>369765</b>	2012 <i>FL</i> <sub>78</sub>		7 14.2 115°92	1°9/13.5	17	
6 10	20 3.82	-30 39.4	1.567	2.444	15.0	21.2	6 10	20 3.81	-24 16.7	1.606	2.480	14.9	20.8
6 20	19 58.38	-31 39.2	1.491	2.433	11.5	21.0	6 20	19 57.85	-24 52.5	1.547	2.490	11.0	20.6
6 30	19 49.96	-32 38.2	1.438	2.423	7.7	20.8	6 30	19 49.33	-25 31.0	1.510	2.500	6.7	20.4
7 10	19 39.39	-33 28.8	1.409	2.412	5.1	20.6	7 10	19 39.14	-26 7.2	1.497	2.510	2.5	20.1
7 20	19 27.91	-34 4.5	1.405	2.401	6.3	20.6	7 20	19 28.47	-26 36.5	1.511	2.520	3.6	20.2
7 30	19 17.08	-34 21.4	1.426	2.389	9.9	20.8	7 30	19 18.63	-26 56.2	1.551	2.529	7.9	20.5
8 9	19 8.36	-34 19.9	1.470	2.378	13.8	21.0	8 9	19 10.77	-27 5.6	1.615	2.538	11.9	20.8
8 19	19 2.68	-34 3.0	1.533	2.366	17.3	21.2	8 19	19 5.62	-27 6.1	1.701	2.546	15.4	21.0
<b>38105</b>	1999 <i>JB</i> <sub>21</sub>		7 14.2 29°54	4°7/15.4	18		<b>350189</b>	2011 <i>UT</i> <sub>336</sub>		7 14.2 278°46	4°3/15.5	18	
6 10	19 59.32	-12 55.7	1.103	1.987	19.4	18.2	6 10	19 58.48	-10 40.2	2.025	2.868	13.5	20.5
6 20	19 55.06	-12 24.1	1.052	1.995	15.0	17.9	6 20	19 53.44	-10 5.5	1.943	2.861	10.6	20.3
6 30	19 47.83	-12 7.7	1.019	2.004	10.1	17.7	6 30	19 46.50	-9 40.4	1.883	2.854	7.5	20.1
7 10	19 38.69	-12 6.7	1.007	2.014	5.7	17.5	7 10	19 38.30	-9 25.5	1.849	2.847	4.9	19.9
7 20	19 29.02	-12 19.3	1.017	2.024	5.4	17.5	7 20	19 29.61	-9 20.9	1.841	2.840	4.7	19.9
7 30	19 20.39	-12 42.3	1.050	2.035	9.6	17.8	7 30	19 21.37	-9 25.5	1.860	2.833	7.2	20.0
8 9	19 14.11	-13 11.5	1.104	2.048	14.2	18.1	8 9	19 14.45	-9 37.5	1.904	2.826	10.4	20.2
8 19	19 10.93	-13 42.9	1.177	2.060	18.2	18.4	8 19	19 9.46	-9 54.7	1.970	2.819	13.4	20.4
<b>6609</b>	1992 <i>BN</i>		7 14.2 302°17	1°0/14.7	18		<b>54472</b>	2000 <i>OL</i> <sub>11</sub>		7 14.2 6°06	0°5/14.4	18	
6 10	19 56.56	-16 4.8	2.017	2.878	12.8	16.6	6 10	19 57.68	-18 57.3	1.884	2.753	13.3	18.6
6 20	19 52.17	-16 41.4	1.931	2.867	9.7	16.3	6 20	19 53.02	-19 16.4	1.812	2.753	9.9	18.4
6 30	19 45.82	-17 28.0	1.869	2.856	6.0	16.1	6 30	19 46.31	-19 42.0	1.763	2.753	6.1	18.2
7 10	19 38.09	-18 21.9	1.832	2.845	2.2	15.8	7 10	19 38.24	-20 11.5	1.740	2.754	1.9	17.9
7 20	19 29.76	-19 19.4	1.822	2.834	2.4	15.8	7 20	19 29.71	-20 41.9	1.743	2.755	2.4	18.0
7 30	19 21.79	-20 16.7	1.840	2.823	6.4	16.1	7 30	19 21.71	-21 10.4	1.772	2.756	6.6	18.2
8 9	19 15.10	-21 10.2	1.884	2.813	10.1	16.3	8 9	19 15.17	-21 35.0	1.827	2.757	10.3	18.5
8 19	19 10.39	-21 57.9	1.950	2.802	13.4	16.5	8 19	19 10.77	-21 54.7	1.904	2.759	13.6	18.7
<b>23048</b>	Davidnelson		7 14.2 317°04	0°1/14.1	18		<b>243098</b>	2007 <i>RX</i> <sub>21</sub>		7 14.2 4°13	8°1/11.8	16	
6 10	19 57.96	-19 41.1	1.634	2.510	14.5	18.5	6 10	20 4.59	-39 49.3	1.606	2.473	15.2	19.6
6 20	19 53.63	-20 11.1	1.555	2.500	10.9	18.2	6 20	19 58.92	-40 41.6	1.547	2.473	12.3	19.4
6 30	19 46.89	-20 49.2	1.498	2.490	6.6	18.0	6 30	19 50.19	-41 22.6	1.509	2.473	9.6	19.3
7 10	19 38.45	-21 31.7	1.466	2.480	2.0	17.6	7 10	19 39.44	-41 44.6	1.494	2.474	8.1	19.2
7 20	19 29.30	-22 14.5	1.459	2.471	2.8	17.7	7 20	19 28.09	-41 42.7	1.503	2.475	8.8	19.3
7 30	19 20.67	-22 53.6	1.478	2.462	7.5	17.9	7 30	19 17.79	-41 16.0	1.536	2.477	11.3	19.4
8 9	19 13.69	-23 26.4	1.521	2.454	11.8	18.2	8 9	19 9.89	-40 28.0	1.591	2.479	14.2	19.6
8 19	19 9.20	-23 51.6	1.585	2.445	15.6	18.4	8 19	19 5.18	-39 24.5	1.665	2.481	17.0	19.8
<b>152845</b>	1999 <i>VX</i> <sub>146</sub>		7 14.2 313°98	0°1/14.1	16		<b>154556</b>	2003 <i>HZ</i> <sub>5</sub>		7 14.2 31°56	5°3/16.9	18	
6 10	19 56.93	-20 54.9	1.958	2.830	12.7	20.9	6 10	19 56.60	-6 6.0	1.382	2.237	17.9	18.5
6 20	19 52.55	-21 8.5	1.870	2.812	9.5	20.6	6 20	19 52.63	-6 35.8	1.324	2.246	14.2	18.3
6 30	19 46.10	-21 26.9	1.804	2.795	5.8	20.4	6 30	19 46.24	-7 28.7	1.286	2.257	10.1	18.1
7 10	19 38.19	-21 47.6	1.764	2.778	1.7	20.1	7 10	19 38.24	-8 42.8	1.269	2.268	6.4	17.9
7 20	19 29.67	-22 7.9	1.750	2.761	2.5	20.1	7 20	19 29.73	-10 13.2	1.277	2.280	5.5	17.9
7 30	19 21.55	-22 25.4	1.762	2.745	6.6	20.3	7 30	19 21.93	-11 52.5	1.310	2.292	8.5	18.1
8 9	19 14.79	-22 38.7	1.800	2.729	10.5	20.5	8 9	19 15.96	-13 33.1	1.366	2.305	12.4	18.3
8 19	19 10.14	-22 47.1	1.860	2.714	13.9	20.7	8 19	19 12.53	-15 8.4	1.444	2.318	16.0	18.6
<b>153219</b>	2000 <i>YM</i> <sub>29</sub>		7 14.2 164°52	1°7/15.3	16		<b>440233</b>	2004 <i>QS</i> <sub>15</sub>		7 14.2 188°91	2°0/13.4	18	
6 10	20 9.77	-10 38.9	2.139	2.957	13.7	23.2	6 10	20 0.28	-28 1.7	2.429	3.290	10.9	20.9
6 20	20 1.78	-12 3.0	2.057	2.967	10.5	23.0	6 20	19 54.55	-28 10.3	2.354	3.290	8.1	20.7
6 30	19 51.58	-13 42.4	2.001	2.976	6.7	22.8	6 30	19 47.06	-28 17.1	2.303	3.290	5.1	20.5
7 10	19 39.82	-15 32.4	1.975	2.984	2.9	22.5	7 10	19 38.44	-28 19.5	2.279	3.289	2.4	20.3
7 20	19 27.41	-17 26.8	1.980	2.990	2.7	22.5	7 20	19 29.48	-28 15.4	2.283	3.289	3.1	20.4
7 30	19 15.43	-19 18.7	2.018	2.995	6.5	22.8	7 30	19 21.04	-28 4.0	2.316	3.288	6.1	20.6
8 9	19 4.90	-21 2.6	2.086	2.998	10.2	23.0	8 9	19 13.91	-27 45.7	2.374	3.287	9.0	20.8
8 19	18 56.56	-22 35.4	2.180	3.000	13.3	23.3	8 19	19 8.66	-27 21.9	2.456	3.286	11.7	20.9
<b>446955</b>	2003 <i>SC</i> <sub>11</sub>		7 14.2 188°86	30°5/7.4	15		<b>465063</b>	2006 <i>SM</i> <sub>89</sub>		7 14.2 339°01	4°7/13.0	17	
6 10	20 18.42	+46 12.4	1.397	1.853	32.8	23.6	6 10	19 55.55	-28 45.9	0.999	1.911	18.5	20.1
6 20	20 10.25	+48 7.5	1.351	1.855	32.4	23.6	6 20	19 53.27	-29 18.8	0.930	1.893	14.1	19.7
6 30	19 57.69	+49 14.4	1.306	1.855	31.9	23.5	6 30	19 47.35	-29 51.3	0.880	1.875	9.2	19.4
7 10	19 41.83	+49 20.0	1.263	1.852	31.4	23.4	7 10	19 38.73	-30 16.2	0.849	1.860	5.1	19.1
7 20	19 24.58	+48 13.7	1.225	1.847	31.0	23.3	7 20	19 28.97	-30 26.4	0.839	1.846	6.5	19.1
7 30	19 8.42	+45 50.3	1.194	1.840	30.6	23.2	7 30	19 20.10	-30 18.0	0.850	1.833	11.5	19.4
8 9	18 55.51	+42 13.9	1.172	1.830	30.5	23.2	8 9	19 13.96	-29 52.0	0.879	1.823	16.8	19.6
8 19	18 47.10	+37 35.9	1.161	1.817	30.8	23.1	8 19	19 11.64	-29 12.0	0.925	1.814	21.5	19.9
<b>262975</b>	2007 <i>EK</i> <sub>14</sub>		7 14.2 138°77	6°3/18.2	18		<b>333979</b>	2000 <i>QZ</i> <sub>195</sub>		7 14.			

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>491521</b>	2012 <i>KF</i> <sub>1</sub>	7 14.2 229°35' 19°0' / 4.2 18					<b>47759</b>	2000 <i>DR</i> <sub>99</sub>	7 14.2 233°31' 0°9' / 13.8 18				
6 10	20 22.77	-54 50.6	1.183	2.015	21.7	20.9	6 10	19 59.27	-21 47.6	1.985	2.852	12.7	19.1
6 20	20 16.51	-57 48.1	1.139	2.008	20.1	20.8	6 20	19 54.22	-22 24.0	1.909	2.850	9.5	18.9
6 30	20 3.23	-60 21.2	1.113	2.001	19.1	20.7	6 30	19 47.09	-23 5.3	1.857	2.847	5.7	18.7
7 10	19 43.90	-62 8.9	1.105	1.993	19.2	20.7	7 10	19 38.55	-23 47.8	1.830	2.844	1.8	18.4
7 20	19 21.69	-62 56.2	1.114	1.984	20.3	20.7	7 20	19 29.48	-24 27.7	1.831	2.841	2.7	18.5
7 30	19 1.40	-62 40.4	1.140	1.976	22.1	20.8	7 30	19 20.89	-25 1.9	1.859	2.838	6.7	18.7
8 9	18 47.04	-61 32.7	1.179	1.966	24.2	21.0	8 9	19 13.74	-25 28.6	1.912	2.835	10.3	18.9
8 19	18 40.21	-59 49.1	1.231	1.956	26.3	21.1	8 19	19 8.72	-25 47.5	1.988	2.832	13.5	19.1
<b>90763</b>	1993 <i>TB</i> <sub>6</sub>	7 14.2 227°24' 1°7' / 13.4 18					<b>512127</b>	2015 <i>PN</i> <sub>29</sub>	7 14.2 18°76' 3°1' / 13.7 18				
6 10	19 58.67	-26 15.3	2.590	3.451	10.3	20.0	6 10	20 4.55	-31 36.8	1.888	2.755	13.3	20.5
6 20	19 53.35	-26 35.7	2.509	3.445	7.7	19.8	6 20	19 58.08	-31 20.8	1.821	2.758	10.1	20.3
6 30	19 46.36	-26 56.3	2.451	3.439	4.7	19.6	6 30	19 49.32	-30 58.2	1.777	2.762	6.5	20.0
7 10	19 38.27	-27 14.1	2.421	3.433	2.0	19.4	7 10	19 39.17	-30 26.3	1.758	2.766	3.5	19.9
7 20	19 29.79	-27 27.1	2.420	3.426	2.8	19.5	7 20	19 28.73	-29 43.7	1.766	2.770	4.1	19.9
7 30	19 21.71	-27 33.5	2.446	3.420	5.7	19.7	7 30	19 19.17	-28 51.4	1.802	2.775	7.4	20.1
8 9	19 14.78	-27 33.1	2.500	3.413	8.6	19.8	8 9	19 11.49	-27 52.1	1.863	2.780	10.9	20.4
8 19	19 9.56	-27 26.5	2.577	3.406	11.2	20.0	8 19	19 6.30	-26 49.3	1.947	2.786	14.0	20.6
<b>305840</b>	2009 <i>DT</i> <sub>138</sub>	7 14.2 313°28' 0°1' / 14.2 18					<b>268051</b>	2004 <i>QZ</i> <sub>28</sub>	7 14.2 317°99' 2°5' / 12.9 18				
6 10	19 58.28	-20 17.4	1.989	2.856	12.7	21.1	6 10	19 57.34	-25 33.8	1.949	2.824	12.6	20.1
6 20	19 53.43	-20 39.6	1.914	2.854	9.5	20.9	6 20	19 53.00	-26 28.6	1.867	2.811	9.4	19.8
6 30	19 46.56	-21 7.2	1.861	2.851	5.8	20.7	6 30	19 46.48	-27 26.9	1.808	2.798	5.9	19.6
7 10	19 38.36	-21 37.3	1.835	2.849	1.7	20.4	7 10	19 38.40	-28 23.8	1.774	2.785	2.8	19.4
7 20	19 29.67	-22 6.8	1.835	2.847	2.4	20.5	7 20	19 29.66	-29 14.5	1.767	2.772	3.9	19.4
7 30	19 21.48	-22 33.2	1.863	2.845	6.4	20.7	7 30	19 21.31	-29 55.2	1.787	2.760	7.5	19.6
8 9	19 14.69	-22 54.6	1.916	2.843	10.1	20.9	8 9	19 14.40	-30 24.0	1.832	2.748	11.1	19.8
8 19	19 9.97	-23 10.6	1.992	2.841	13.3	21.1	8 19	19 9.69	-30 41.1	1.898	2.737	14.3	20.0
<b>304525</b>	2006 <i>UQ</i> <sub>243</sub>	7 14.2 226°26' 2°8' / 12.9 18					<b>23250</b>	2000 <i>WQ</i> <sub>181</sub>	7 14.2 186°46' 7°3' / 18.5 17				
6 10	20 0.32	-28 36.5	2.237	3.102	11.6	22.0	6 10	20 1.38	+ 2 36.4	2.270	3.042	14.4	20.0
6 20	19 54.86	-29 11.4	2.160	3.098	8.7	21.8	6 20	19 55.43	+ 2 33.5	2.185	3.042	12.2	19.8
6 30	19 47.40	-29 45.3	2.107	3.093	5.6	21.6	6 30	19 47.68	+ 2 10.8	2.122	3.041	9.8	19.7
7 10	19 38.61	-30 14.4	2.081	3.089	3.0	21.4	7 10	19 38.71	+ 1 27.5	2.083	3.039	7.9	19.6
7 20	19 29.33	-30 35.3	2.082	3.084	3.9	21.5	7 20	19 29.27	+ 0 24.8	2.071	3.036	7.3	19.5
7 30	19 20.55	-30 46.0	2.111	3.079	6.9	21.7	7 30	19 20.20	- 0 54.3	2.087	3.033	8.4	19.6
8 9	19 13.15	-30 46.3	2.165	3.073	10.0	21.9	8 9	19 12.32	- 2 24.6	2.129	3.028	10.6	19.7
8 19	19 7.81	-30 37.5	2.242	3.068	12.8	22.0	8 19	19 6.22	- 4 0.7	2.196	3.022	13.0	19.9
<b>106005</b>	2000 <i>SO</i> <sub>285</sub>	7 14.2 282°42' 2°3' / 13.4 18					<b>118986</b>	2000 <i>XM</i> <sub>30</sub>	7 14.2 317°41' 3°6' / 13.0 18				
6 10	20 0.62	-28 5.3	2.146	3.013	11.9	19.2	6 10	20 0.49	-30 53.1	1.929	2.801	12.8	19.4
6 20	19 55.11	-28 16.8	2.066	3.005	8.9	19.0	6 20	19 55.33	-31 12.3	1.849	2.789	9.8	19.2
6 30	19 47.56	-28 26.7	2.010	2.998	5.6	18.8	6 30	19 47.85	-31 27.9	1.791	2.776	6.4	19.0
7 10	19 38.66	-28 31.6	1.980	2.990	2.7	18.5	7 10	19 38.79	-31 35.9	1.759	2.764	3.8	18.8
7 20	19 29.29	-28 29.2	1.977	2.983	3.5	18.6	7 20	19 29.16	-31 32.9	1.752	2.753	4.6	18.8
7 30	19 20.47	-28 18.3	2.002	2.975	6.8	18.8	7 30	19 20.12	-31 17.7	1.772	2.741	7.9	19.0
8 9	19 13.11	-27 59.4	2.052	2.968	10.1	19.0	8 9	19 12.74	-30 51.1	1.816	2.730	11.3	19.2
8 19	19 7.86	-27 34.0	2.125	2.961	13.1	19.2	8 19	19 7.74	-30 15.6	1.882	2.720	14.4	19.4
<b>358229</b>	2006 <i>SC</i> <sub>265</sub>	7 14.2 271°34' 1°0' / 13.8 18					<b>519645</b>	2012 <i>UK</i> <sub>183</sub>	7 14.2 153°33' 2°2' / 13.3 16				
6 10	19 59.97	-24 5.2	2.152	3.018	12.0	21.5	6 10	20 0.90	-26 24.8	2.035	2.903	12.4	21.5
6 20	19 54.66	-24 15.9	2.063	3.003	8.9	21.3	6 20	19 55.37	-26 55.3	1.965	2.905	9.3	21.3
6 30	19 47.34	-24 28.1	1.998	2.988	5.5	21.0	6 30	19 47.74	-27 26.2	1.919	2.908	5.7	21.1
7 10	19 38.63	-24 39.0	1.959	2.973	1.8	20.8	7 10	19 38.74	-27 53.7	1.898	2.910	2.6	20.9
7 20	19 29.35	-24 46.3	1.948	2.958	2.7	20.8	7 20	19 29.28	-28 14.3	1.905	2.911	3.5	21.0
7 30	19 20.51	-24 48.2	1.964	2.942	6.4	21.0	7 30	19 20.40	-28 25.9	1.939	2.913	6.9	21.2
8 9	19 13.01	-24 44.3	2.006	2.927	10.0	21.2	8 9	19 13.06	-28 28.3	1.999	2.915	10.3	21.4
8 19	19 7.55	-24 35.1	2.070	2.912	13.2	21.4	8 19	19 7.90	-28 22.5	2.081	2.916	13.3	21.6
<b>369732</b>	2012 <i>EZ</i> <sub>2</sub>	7 14.2 32°85' 1°7' / 13.8 17					<b>507676</b>	2013 <i>SL</i> <sub>23</sub>	7 14.2 275°73' 0°8' / 14.4 17				
6 10	20 2.82	-24 56.4	1.316	2.202	16.7	20.5	6 10	20 1.11	-18 42.4	1.630	2.500	14.9	22.0
6 20	19 57.57	-25 4.7	1.257	2.207	12.5	20.3	6 20	19 56.13	-18 54.2	1.540	2.481	11.3	21.7
6 30	19 49.37	-25 14.3	1.219	2.212	7.6	20.0	6 30	19 48.55	-19 14.0	1.472	2.461	7.0	21.4
7 10	19 39.25	-25 21.0	1.203	2.217	2.7	19.7	7 10	19 39.07	-19 39.0	1.427	2.441	2.3	21.1
7 20	19 28.58	-25 21.1	1.213	2.223	3.8	19.8	7 20	19 28.71	-20 6.1	1.409	2.421	2.9	21.1
7 30	19 18.92	-25 13.0	1.246	2.229	8.7	20.1	7 30	19 18.76	-20 32.0	1.417	2.401	7.8	21.3
8 9	19 11.58	-24 57.3	1.302	2.236	13.3	20.4	8 9	19 10.47	-20 54.5	1.448	2.380	12.4	21.5
8 19	19 7.32	-24 35.9	1.378	2.243	17.2	20.7	8 19	19 4.78	-21 12.3	1.501	2.359	16.4	21.7
<b>348521</b>	2005 <i>UF</i> <sub>57</sub>	7 14.2 312°75' 5°8' / 16.2 18					<b>142100</b>	2002 <i>QE</i> <sub>66</sub>	7 14.2 330°79' 0°2' / 14.2 17				
6 10	19 55.48	- 6 40.3	1.862	2.702	14.6	20.7	6 10	19 55.98	-19 40.0	1.136	2.036	17.8	20.3
6 20	19 51.57	- 6 16.5	1.765	2.676	11.9	20.5	6 20	19 53.10	-19 59.6	1.061	2.018	13.5	19.9
6 30	19 45.61	- 6 7.0	1.688	2.650	8.9	20.3	6 30	19 47.07	-20 30.0	1.005	2.001	8.3	19.6
7 10	19 38.15	- 6 13.2	1.634	2.624	6.4	20.1	7 10	19 38.70	-21 7.3	0.970	1.985	2.6	19.2
7 20	19 29.97	- 6 35.3	1.605	2.598	6.1	20.0	7 20	19 29.27	-21 46.7	0.958	1.970	3.5	19.2
7 30	19 22.05	- 7 11.4	1.602	2.573	8.4	20.1	7 30	19 20.47	-22 22.8	0.967	1.957	9.5	19.5
8 9	19 15.39	- 7 58.2	1.623	2.549	11.7	20.2	8 9	19 13.91	-22 52.1	0.997	1.944	14.9	19.8
8 19	19 10.75	- 8 51.6	1.665	2.524	15.0	20.4	8 19	19 10.65	-23 13.0	1.045	1.933	19.7	20.0
<b>383248</b>	2006 <i>BU</i> <sub>250</sub>	7 14.2 239°68' 2°5' / 15.3 18					<b>185044</b>	2006 <i>QW</i> <sub>156</sub>	7 14.2 228°34' 2°9' / 15.3 18				
6 10	19 59.34	-12 52.3	2.002	2.850	13.4	21.6	6 10	20 1.40	-12 53.0	1.836	2.686	14.4	21.3

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>139344</b>	2001 <i>KH</i> <sub>66</sub>		7 14.2 122°31'	13°1'/21.1	17		<b>134963</b>	2001 <i>DM</i> <sub>78</sub>		7 14.2 196°21'	2°8'/15.3	18	
6 10	19 59.94	+12 29.0	1.799	2.532	18.9	20.1	6 10	20 1.06	-13 2.0	1.671	2.528	15.3	20.5
6 20	19 54.66	+13 31.9	1.740	2.543	17.0	19.9	6 20	19 55.79	-13 14.0	1.597	2.526	11.7	20.2
6 30	19 47.31	+14 6.8	1.699	2.554	15.2	19.8	6 30	19 48.18	-13 38.7	1.543	2.525	7.7	20.0
7 10	19 38.62	+14 9.4	1.676	2.564	13.7	19.8	7 10	19 38.96	-14 14.2	1.515	2.523	3.8	19.8
7 20	19 29.50	+13 38.3	1.674	2.574	13.1	19.7	7 20	19 29.11	-14 57.6	1.512	2.521	3.6	19.7
7 30	19 20.97	+12 35.6	1.695	2.583	13.5	19.8	7 30	19 19.83	-15 45.0	1.536	2.518	7.5	20.0
8 9	19 13.96	+11 7.5	1.736	2.592	14.7	19.9	8 9	19 12.19	-16 32.6	1.584	2.515	11.5	20.2
8 19	19 9.12	+9 22.0	1.798	2.601	16.4	20.0	8 19	19 6.95	-17 17.7	1.655	2.512	15.2	20.4
<b>44049</b>	1998 <i>FG</i> <sub>4</sub>		7 14.2 321°16'	0°4'/14.4	18		<b>12363</b>	Marinmarais		7 14.2 40°91'	0°3'/14.1	18	
6 10	19 56.47	-17 5.9	1.214	2.105	17.5	18.2	6 10	19 57.67	-21 1.0	1.971	2.841	12.7	17.6
6 20	19 53.36	-17 53.5	1.134	2.086	13.3	17.8	6 20	19 52.91	-21 23.6	1.909	2.850	9.4	17.4
6 30	19 47.22	-18 57.6	1.074	2.068	8.3	17.5	6 30	19 46.23	-21 50.6	1.870	2.860	5.7	17.2
7 10	19 38.76	-20 13.9	1.036	2.051	2.6	17.1	7 10	19 38.33	-22 19.1	1.856	2.870	1.7	16.9
7 20	19 29.17	-21 35.5	1.021	2.034	3.4	17.1	7 20	19 30.06	-22 46.1	1.869	2.881	2.4	17.0
7 30	19 20.06	-22 54.5	1.030	2.018	9.3	17.4	7 30	19 22.38	-23 9.2	1.910	2.892	6.3	17.3
8 9	19 13.01	-24 4.6	1.060	2.003	14.7	17.7	8 9	19 16.15	-23 27.1	1.975	2.903	9.8	17.5
8 19	19 9.13	-25 2.2	1.109	1.989	19.4	17.9	8 19	19 11.95	-23 39.3	2.064	2.914	12.8	17.8
<b>355670</b>	2008 <i>ET</i> <sub>131</sub>		7 14.2 218°91'	3°4'/16.0	18		<b>33735</b>	1999 <i>NW</i> <sub>34</sub>		7 14.2 178°76'	0°8'/14.7	18	
6 10	19 56.37	-9 22.0	2.345	3.179	12.2	21.1	6 10	20 0.19	-16 14.7	2.085	2.939	12.7	18.3
6 20	19 51.70	-9 31.3	2.263	3.177	9.5	20.9	6 20	19 54.79	-16 57.8	2.008	2.940	9.6	18.1
6 30	19 45.41	-9 52.1	2.205	3.174	6.6	20.7	6 30	19 47.42	-17 50.3	1.955	2.941	5.9	17.9
7 10	19 38.05	-10 23.5	2.172	3.171	4.1	20.6	7 10	19 38.72	-18 48.8	1.928	2.941	2.1	17.6
7 20	19 30.27	-11 3.9	2.166	3.168	3.7	20.5	7 20	19 29.50	-19 49.5	1.930	2.941	2.3	17.6
7 30	19 22.86	-11 50.6	2.189	3.165	6.1	20.7	7 30	19 20.71	-20 48.3	1.960	2.941	6.2	17.9
8 9	19 16.53	-12 40.6	2.237	3.162	9.0	20.9	8 9	19 13.25	-21 42.2	2.016	2.940	9.8	18.1
8 19	19 11.84	-13 30.9	2.310	3.158	11.7	21.0	8 19	19 7.79	-22 29.4	2.096	2.939	12.9	18.3
<b>73524</b>	2003 <i>MO</i> <sub>6</sub>		7 14.2 3°72'	0°5'/14.2	18		<b>276863</b>	2004 <i>RW</i> <sub>154</sub>		7 14.2 329°58'	11°4'/18.6	16	
6 10	20 4.91	-24 4.9	1.883	2.746	13.5	17.9	6 10	19 54.97	+3 20.8	1.455	2.269	19.2	21.0
6 20	19 58.24	-23 3.9	1.809	2.746	10.1	17.7	6 20	19 51.57	+4 14.0	1.379	2.257	16.7	20.8
6 30	19 49.40	-22 0.0	1.758	2.747	6.2	17.5	6 30	19 45.79	+4 41.5	1.320	2.245	14.1	20.6
7 10	19 39.23	-20 53.2	1.733	2.747	1.9	17.2	7 10	19 38.30	+4 38.6	1.281	2.233	12.1	20.4
7 20	19 28.75	-19 44.7	1.738	2.749	2.6	17.3	7 20	19 30.07	+4 3.5	1.263	2.223	11.4	20.3
7 30	19 19.07	-18 36.6	1.770	2.751	6.8	17.5	7 30	19 22.31	+2 58.3	1.266	2.213	12.6	20.4
8 9	19 11.15	-17 31.1	1.828	2.754	10.6	17.8	8 9	19 16.15	+1 29.4	1.291	2.204	15.0	20.5
8 19	19 5.59	-16 30.2	1.910	2.757	13.9	18.0	8 19	19 12.43	-0 14.6	1.335	2.195	17.9	20.7
<b>313915</b>	2004 <i>PW</i> <sub>108</sub>		7 14.2 293°69'	3°9'/13.3	17		<b>497525</b>	2006 <i>BC</i> <sub>164</sub>		7 14.2 226°30'	1°6'/13.8	17	
6 10	20 4.34	-28 45.6	1.277	2.165	17.0	20.8	6 10	20 6.10	-24 43.1	1.529	2.402	15.5	22.2
6 20	19 59.43	-29 9.5	1.194	2.143	13.0	20.5	6 20	19 59.97	-24 56.6	1.452	2.395	11.7	21.9
6 30	19 51.00	-29 32.3	1.130	2.121	8.4	20.2	6 30	19 50.93	-25 11.7	1.396	2.387	7.2	21.6
7 10	19 39.91	-29 47.5	1.089	2.099	4.4	19.9	7 10	19 39.86	-25 24.2	1.365	2.379	2.6	21.3
7 20	19 27.61	-29 49.1	1.072	2.077	5.6	19.9	7 20	19 28.02	-25 30.1	1.360	2.370	3.6	21.4
7 30	19 15.97	-29 34.1	1.077	2.056	10.5	20.1	7 30	19 16.89	-25 27.3	1.381	2.360	8.4	21.6
8 9	19 6.76	-29 3.8	1.105	2.034	15.6	20.3	8 9	19 7.84	-25 15.9	1.425	2.351	13.0	21.9
8 19	19 1.15	-28 22.2	1.151	2.013	20.1	20.5	8 19	19 1.77	-24 57.9	1.490	2.340	16.9	22.1
<b>61162</b>	2000 <i>NV</i> <sub>18</sub>		7 14.2 20°87'	1°2'/13.8	18		<b>477740</b>	2010 <i>TW</i> <sub>138</sub>		7 14.2 136°13'	11°9'/21.5	17	
6 10	19 58.36	-20 49.4	1.022	1.925	19.0	18.4	6 10	19 56.73	+19 48.4	2.738	3.382	14.8	21.2
6 20	19 54.85	-21 37.6	0.972	1.930	14.2	18.2	6 20	19 51.82	+21 5.7	2.675	3.387	13.8	21.1
6 30	19 48.01	-22 36.1	0.940	1.937	8.6	17.9	6 30	19 45.46	+22 1.5	2.629	3.392	12.9	21.0
7 10	19 38.92	-23 38.1	0.929	1.944	2.7	17.6	7 10	19 38.13	+22 32.2	2.602	3.397	12.2	21.0
7 20	19 29.12	-24 36.0	0.941	1.953	4.0	17.7	7 20	19 30.45	+22 36.2	2.595	3.402	11.9	21.0
7 30	19 20.40	-25 23.4	0.974	1.962	9.8	18.0	7 30	19 23.10	+22 13.8	2.608	3.406	12.1	21.0
8 9	19 14.27	-25 57.4	1.029	1.972	14.9	18.4	8 9	19 16.74	+21 27.7	2.642	3.411	12.6	21.0
8 19	19 11.59	-26 17.9	1.100	1.983	19.3	18.7	8 19	19 11.87	+20 22.5	2.695	3.415	13.5	21.1
<b>131273</b>	2001 <i>FQ</i> <sub>64</sub>		7 14.2 338°99'	6°8'/11.9	18		<b>431346</b>	2007 <i>BT</i> <sub>72</sub>		7 14.2 202°01'	0°9'/13.8	18	
6 10	20 0.96	-35 15.8	1.501	2.383	15.3	18.6	6 10	20 2.21	-21 23.3	2.012	2.873	12.8	21.8
6 20	19 56.42	-36 11.6	1.434	2.374	12.0	18.4	6 20	19 56.48	-22 10.0	1.932	2.870	9.6	21.5
6 30	19 48.86	-37 1.1	1.387	2.365	8.8	18.2	6 30	19 48.56	-23 2.4	1.876	2.865	5.8	21.3
7 10	19 39.18	-37 36.7	1.363	2.357	6.9	18.0	7 10	19 39.12	-23 56.5	1.847	2.861	1.9	21.0
7 20	19 28.73	-37 52.3	1.364	2.350	7.8	18.1	7 20	19 29.07	-24 47.7	1.845	2.855	2.8	21.1
7 30	19 19.09	-37 45.5	1.387	2.343	10.9	18.2	7 30	19 19.45	-25 32.4	1.871	2.849	6.8	21.3
8 9	19 11.70	-37 18.1	1.433	2.338	14.3	18.4	8 9	19 11.29	-26 8.4	1.924	2.842	10.5	21.6
8 19	19 7.43	-36 34.5	1.497	2.333	17.6	18.6	8 19	19 5.32	-26 35.4	1.999	2.835	13.8	21.8
<b>269387</b>	2009 <i>QT</i> <sub>22</sub>		7 14.2 313°28'	0°4'/14.1	17		<b>91642</b>	1999 <i>TE</i> <sub>91</sub>		7 14.2 173°51'	1°3'/13.5	18	
6 10	19 58.23	-20 30.8	1.320	2.209	16.5	20.6	6 10	19 58.42	-24 52.2	2.869	3.726	9.6	19.7
6 20	19 54.55	-20 55.2	1.235	2.186	12.5	20.3	6 20	19 53.02	-25 19.1	2.793	3.728	7.1	19.5
6 30	19 47.88	-21 28.7	1.170	2.164	7.7	20.0	6 30	19 46.16	-25 46.9	2.742	3.730	4.3	19.3
7 10	19 38.96	-22 7.5	1.128	2.143	2.3	19.6	7 10	19 38.34	-26 13.1	2.719	3.732	1.7	19.1
7 20	19 28.95	-22 46.6	1.109	2.121	3.4	19.6	7 20	19 30.19	-26 35.3	2.725	3.733	2.4	19.2
7 30	19 19.41	-23 21.2	1.115	2.101	9.0	19.9	7 30	19 22.41	-26 52.2	2.760	3.734	5.1	19.4
8 9	19 11.86	-23 48.4	1.142	2.081	14.2	20.1	8 9	19 15.66	-27 2.8	2.822	3.734	7.8	19.6
8 19	19 7.38	-24 6.9	1.188	2.062	18.7	20.3	8 19	19 10.43	-27 7.5	2.909	3.734	10.2	19.7
<b>198183</b>	2004 <i>TD</i> <sub>109</sub>		7 14.2 248°36'	8°3'/16.9	18		<b>85909</b>	1999 <i>CJ</i> <sub>85</sub>					

EPHEMERIDES

7 14.2

7 14.2

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>9465</b>	1998 <i>HJ</i> <sub>121</sub>		7 14.2 350°20	6°0/16.9	18	R	<b>389936</b>	2012 <i>TT</i> <sub>134</sub>		7 14.2 304°92	1°0/14.6	18	
6 10	19 55.40	- 4 54.1	1.920	2.751	14.6	17.9	6 10	19 59.03	-18 25.6	1.666	2.538	14.5	21.0
6 20	19 51.30	- 4 35.8	1.844	2.748	11.9	17.7	6 20	19 54.45	-18 29.1	1.584	2.526	11.0	20.8
6 30	19 45.34	- 4 33.3	1.790	2.745	9.0	17.6	6 30	19 47.48	-18 39.7	1.524	2.514	6.9	20.5
7 10	19 38.13	- 4 47.5	1.758	2.743	6.6	17.4	7 10	19 38.85	-18 55.5	1.488	2.501	2.4	20.2
7 20	19 30.46	- 5 17.7	1.752	2.741	6.1	17.4	7 20	19 29.52	-19 13.8	1.478	2.490	2.8	20.2
7 30	19 23.24	- 6 1.4	1.772	2.739	8.0	17.5	7 30	19 20.70	-19 32.1	1.493	2.478	7.4	20.5
8 9	19 17.30	- 6 54.6	1.816	2.738	10.8	17.7	8 9	19 13.51	-19 48.4	1.533	2.467	11.6	20.7
8 19	19 13.27	- 7 53.0	1.882	2.738	13.7	17.8	8 19	19 8.73	-20 1.5	1.593	2.455	15.4	20.9
<b>422609</b>	2014 <i>TR</i> <sub>74</sub>		7 14.2 195°54	1°7/13.5	17		<b>474267</b>	2001 <i>TY</i> <sub>155</sub>		7 14.2 296°62	3°2/15.5	18	
6 10	20 4.38	-23 20.3	1.780	2.646	14.0	21.9	6 10	19 57.27	-12 27.3	1.951	2.804	13.5	21.8
6 20	19 58.34	-24 7.4	1.704	2.644	10.5	21.6	6 20	19 52.80	-12 21.1	1.863	2.790	10.5	21.5
6 30	19 49.81	-24 59.1	1.652	2.642	6.4	21.4	6 30	19 46.33	-12 25.3	1.798	2.776	7.1	21.3
7 10	19 39.53	-25 50.4	1.625	2.638	2.4	21.1	7 10	19 38.48	-12 39.4	1.757	2.762	3.9	21.1
7 20	19 28.55	-26 36.1	1.626	2.634	3.5	21.2	7 20	19 30.04	-13 1.9	1.743	2.749	3.7	21.1
7 30	19 18.13	-27 12.5	1.653	2.629	7.7	21.4	7 30	19 21.98	-13 30.6	1.755	2.735	6.9	21.2
8 9	19 9.45	-27 37.9	1.706	2.624	11.7	21.7	8 9	19 15.22	-14 2.9	1.792	2.722	10.5	21.4
8 19	19 3.32	-27 52.9	1.781	2.618	15.1	21.9	8 19	19 10.46	-14 36.3	1.852	2.709	13.8	21.6
<b>491906</b>	2013 <i>CH</i> <sub>46</sub>		7 14.2 129°02	3°9/12.7	18		<b>336170</b>	2008 <i>RL</i> <sub>34</sub>		7 14.2 79°04	7°8/17.9	17	
6 10	20 1.74	-32 28.2	2.245	3.107	11.6	21.9	6 10	19 58.42	- 0 46.6	1.744	2.558	16.5	20.6
6 20	19 55.91	-32 57.0	2.177	3.110	8.9	21.8	6 20	19 53.58	- 0 22.9	1.683	2.569	13.7	20.5
6 30	19 48.07	-33 21.5	2.133	3.113	6.0	21.6	6 30	19 46.72	- 0 19.7	1.641	2.580	10.8	20.3
7 10	19 38.94	-33 37.8	2.115	3.116	4.0	21.5	7 10	19 38.57	- 0 38.5	1.621	2.591	8.5	20.2
7 20	19 29.41	-33 42.7	2.124	3.119	4.7	21.5	7 20	19 30.01	- 1 18.2	1.626	2.602	7.9	20.2
7 30	19 20.50	-33 35.3	2.161	3.121	7.3	21.7	7 30	19 22.05	- 2 15.7	1.656	2.613	9.3	20.3
8 9	19 13.11	-33 16.3	2.223	3.124	10.1	21.9	8 9	19 15.59	- 3 25.3	1.710	2.624	11.9	20.5
8 19	19 7.85	-32 48.1	2.307	3.126	12.7	22.0	8 19	19 11.26	- 4 41.5	1.785	2.635	14.6	20.7
<b>15028</b>	Soushiyou		7 14.2 227°85	1°8/13.5	18		<b>119655</b>	2001 <i>XV</i> <sub>55</sub>		7 14.2 279°95	0°5/14.0	18	
6 10	20 2.90	-24 24.4	1.870	2.737	13.4	19.2	6 10	20 0.10	-20 31.5	1.656	2.530	14.5	19.3
6 20	19 57.19	-24 59.0	1.788	2.729	10.0	19.0	6 20	19 55.32	-21 8.3	1.578	2.521	10.9	19.1
6 30	19 49.09	-25 36.6	1.730	2.720	6.2	18.7	6 30	19 48.06	-21 52.7	1.521	2.512	6.6	18.8
7 10	19 39.31	-26 12.9	1.697	2.710	2.4	18.5	7 10	19 39.04	-22 40.5	1.489	2.503	2.0	18.5
7 20	19 28.85	-26 43.6	1.692	2.700	3.4	18.5	7 20	19 29.29	-23 27.2	1.483	2.494	2.9	18.5
7 30	19 18.89	-27 5.8	1.713	2.690	7.4	18.8	7 30	19 20.05	-24 8.4	1.503	2.486	7.6	18.8
8 9	19 10.55	-27 18.3	1.760	2.679	11.3	19.0	8 9	19 12.49	-24 41.8	1.548	2.477	11.9	19.0
8 19	19 4.63	-27 21.9	1.829	2.668	14.7	19.2	8 19	19 7.45	-25 6.3	1.613	2.468	15.6	19.3
<b>347846</b>	2002 <i>QX</i> <sub>70</sub>		7 14.2 316°24	1°9/14.9	18		<b>238306</b>	2003 <i>XH</i> <sub>30</sub>		7 14.2 35°93	1°3/14.7	18	
6 10	19 57.44	-15 25.2	1.712	2.579	14.4	20.9	6 10	19 59.41	-17 47.2	1.773	2.640	14.0	20.8
6 20	19 53.17	-15 38.3	1.631	2.568	11.0	20.7	6 20	19 54.42	-17 46.1	1.705	2.643	10.6	20.5
6 30	19 46.66	-16 2.0	1.572	2.558	7.0	20.4	6 30	19 47.29	-17 51.8	1.659	2.646	6.6	20.3
7 10	19 38.58	-16 34.3	1.537	2.549	3.0	20.2	7 10	19 38.75	-18 2.6	1.637	2.650	2.5	20.1
7 20	19 29.85	-17 12.2	1.528	2.539	3.0	20.2	7 20	19 29.76	-18 16.1	1.642	2.653	2.7	20.1
7 30	19 21.59	-17 52.3	1.545	2.530	7.1	20.4	7 30	19 21.39	-18 30.4	1.673	2.657	6.8	20.3
8 9	19 14.85	-18 31.4	1.587	2.522	11.3	20.6	8 9	19 14.60	-18 43.7	1.729	2.661	10.7	20.6
8 19	19 10.39	-19 7.2	1.650	2.513	14.9	20.8	8 19	19 10.06	-18 55.0	1.807	2.665	14.1	20.8
<b>248544</b>	2005 <i>XJ</i> <sub>24</sub>		7 14.2 287°22	0°4/14.3	17	R	<b>500162</b>	2012 <i>EH</i> <sub>17</sub>		7 14.2 93°51	4°4/12.6	17	
6 10	20 1.09	-21 41.7	2.260	3.118	11.7	20.7	6 10	20 4.99	-29 15.9	1.510	2.388	15.4	20.8
6 20	19 55.46	-21 20.9	2.159	3.094	8.8	20.4	6 20	19 59.07	-30 16.4	1.457	2.400	11.6	20.6
6 30	19 47.87	-21 1.0	2.083	3.071	5.4	20.2	6 30	19 50.31	-31 15.6	1.425	2.412	7.6	20.4
7 10	19 38.92	-20 40.7	2.033	3.047	1.7	19.9	7 10	19 39.69	-32 6.1	1.418	2.424	4.6	20.3
7 20	19 29.40	-20 19.2	2.011	3.023	2.3	19.9	7 20	19 28.52	-32 42.1	1.436	2.435	5.7	20.4
7 30	19 20.25	-19 56.2	2.018	2.999	6.1	20.1	7 30	19 18.31	-33 0.6	1.480	2.447	9.3	20.6
8 9	19 12.35	-19 31.7	2.051	2.975	9.7	20.3	8 9	19 10.31	-33 2.4	1.547	2.458	13.0	20.9
8 19	19 6.39	-19 6.5	2.108	2.950	12.9	20.4	8 19	19 5.31	-32 50.5	1.633	2.470	16.3	21.1
<b>437490</b>	2013 <i>YT</i> <sub>58</sub>		7 14.2 235°48	2°7/14.8	18		<b>464705</b>	2002 <i>PK</i> <sub>166</sub>		7 14.2 11°49	3°4/13.3	17	
6 10	20 3.09	-16 16.1	1.909	2.762	13.8	20.6	6 10	19 57.58	-25 55.7	1.012	1.921	18.7	20.5
6 20	19 57.05	-15 35.5	1.826	2.755	10.5	20.4	6 20	19 54.43	-26 36.0	0.962	1.923	14.0	20.2
6 30	19 48.85	-14 59.8	1.767	2.748	6.9	20.1	6 30	19 47.87	-27 19.2	0.931	1.927	8.7	20.0
7 10	19 39.21	-14 29.0	1.733	2.741	3.4	19.9	7 10	19 39.01	-27 57.8	0.920	1.933	3.9	19.7
7 20	19 29.05	-14 3.3	1.727	2.734	3.5	19.9	7 20	19 29.45	-28 25.4	0.931	1.940	5.3	19.8
7 30	19 19.45	-13 42.6	1.748	2.726	7.1	20.1	7 30	19 21.05	-28 38.0	0.963	1.948	10.4	20.1
8 9	19 11.38	-13 26.5	1.794	2.719	10.8	20.3	8 9	19 15.31	-28 35.7	1.016	1.958	15.3	20.4
8 19	19 5.53	-13 14.5	1.864	2.710	14.2	20.5	8 19	19 13.09	-28 20.9	1.086	1.968	19.5	20.7
<b>471909</b>	2013 <i>CR</i> <sub>109</sub>		7 14.2 227°77	2°8/12.9	18		<b>445372</b>	2010 <i>PO</i> <sub>27</sub>		7 14.2 244°45	3°7/15.8	18	
6 10	20 1.49	-29 42.9	2.512	3.370	10.7	22.3	6 10	19 56.61	- 9 56.7	2.457	3.291	11.7	21.5
6 20	19 55.63	-30 10.6	2.426	3.360	8.1	22.1	6 20	19 51.85	- 9 40.3	2.374	3.286	9.2	21.3
6 30	19 47.90	-30 36.3	2.366	3.350	5.2	21.9	6 30	19 45.54	- 9 33.2	2.313	3.281	6.5	21.1
7 10	19 38.92	-30 56.6	2.333	3.339	3.0	21.8	7 10	19 38.21	- 9 35.4	2.279	3.276	4.2	20.9
7 20	19 29.45	-31 8.6	2.328	3.327	3.7	21.8	7 20	19 30.50	- 9 46.2	2.271	3.270	3.9	20.9
7 30	19 20.40	-31 10.9	2.351	3.316	6.5	22.0	7 30	19 23.14	-10 4.3	2.292	3.265	6.1	21.0
8 9	19 12.61	-31 3.4	2.400	3.304	9.4	22.1	8 9	19 16.82	-10 27.6	2.339	3.259	8.8	21.2
8 19	19 6.72	-30 47.5	2.473	3.291	12.0	22.3	8 19	19 12.07	-10 54.2	2.409	3.254	11.4	21.4
<b>519702</b>	2013 <i>AT</i> <sub>187</sub>		7 14.2 146°81	1°2/13.9	18		<b>137339</b>	1999 <i>TD</i>					

EPHEMERIDES

7 14.2

7 14.3

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>48174</b>	2001 <i>HF</i> <sub>21</sub>		7 14.2 218°48	4.7/12.5	18		<b>76541</b>	2000 <i>GX</i> <sub>79</sub>		7 14.3 219°46	5.4/16.3	18	
6 10	20 4.99	-30 59.9	1.671	2.543	14.5	19.5	6 10	19 58.39	-6 26.9	2.172	2.996	13.4	19.1
6 20	19 59.10	-31 53.2	1.600	2.539	11.1	19.2	6 20	19 53.35	-5 56.5	2.091	2.992	10.8	19.0
6 30	19 50.41	-32 44.4	1.551	2.535	7.5	19.0	6 30	19 46.55	-5 38.3	2.032	2.988	8.1	18.8
7 10	19 39.77	-33 26.7	1.527	2.530	4.9	18.8	7 10	19 38.57	-5 33.4	1.998	2.983	5.9	18.6
7 20	19 28.38	-33 54.4	1.529	2.525	5.9	18.9	7 20	19 30.15	-5 41.6	1.990	2.979	5.5	18.6
7 30	19 17.70	-34 4.6	1.557	2.520	9.3	19.1	7 30	19 22.13	-6 1.5	2.009	2.974	7.4	18.7
8 9	19 9.04	-33 58.0	1.608	2.514	13.0	19.3	8 9	19 15.31	-6 30.5	2.054	2.969	10.1	18.9
8 19	19 3.27	-33 37.7	1.679	2.508	16.3	19.5	8 19	19 10.27	-7 5.7	2.121	2.964	12.8	19.0
<b>252939</b>	2002 <i>PD</i> <sub>21</sub>		7 14.2 40°60	0.4/14.3	17		<b>7120</b>	Davidgavine		7 14.3 252°33	0.2/14.2	18	
6 10	20 3.51	-21 51.1	1.147	2.038	18.3	19.6	6 10	19 59.54	-21 24.9	2.070	2.935	12.4	17.9
6 20	19 58.16	-21 28.7	1.101	2.052	13.7	19.4	6 20	19 54.39	-21 37.8	1.991	2.930	9.2	17.6
6 30	19 49.76	-21 10.2	1.074	2.068	8.3	19.1	6 30	19 47.26	-21 54.5	1.936	2.925	5.6	17.4
7 10	19 39.50	-20 53.3	1.069	2.084	2.6	18.8	7 10	19 38.80	-22 12.4	1.906	2.920	1.7	17.1
7 20	19 28.90	-20 36.3	1.088	2.101	3.3	18.9	7 20	19 29.85	-22 29.0	1.904	2.915	2.4	17.2
7 30	19 19.56	-20 18.5	1.131	2.118	8.7	19.3	7 30	19 21.38	-22 42.2	1.929	2.910	6.3	17.4
8 9	19 12.76	-19 59.9	1.195	2.136	13.6	19.6	8 9	19 14.29	-22 50.9	1.980	2.905	9.9	17.6
8 19	19 9.16	-19 41.2	1.279	2.155	17.6	19.9	8 19	19 9.24	-22 55.1	2.053	2.900	13.0	17.8
<b>22678</b>	1998 <i>QB</i> <sub>42</sub>		7 14.2 328°83	4.5/12.5	18 R		<b>214162</b>	2005 <i>CU</i> <sub>20</sub>		7 14.3 94°63	1.0/14.6	17	
6 10	20 0.45	-33 24.8	2.082	2.949	12.2	18.9	6 10	20 3.16	-18 23.2	1.453	2.325	16.2	20.5
6 20	19 55.24	-33 59.7	2.008	2.943	9.4	18.7	6 20	19 57.57	-18 31.9	1.394	2.335	12.2	20.3
6 30	19 47.82	-34 30.1	1.958	2.937	6.5	18.5	6 30	19 49.36	-18 48.7	1.356	2.345	7.5	20.1
7 10	19 38.94	-34 51.2	1.934	2.932	4.6	18.4	7 10	19 39.45	-19 10.5	1.341	2.355	2.6	19.8
7 20	19 29.55	-34 59.5	1.935	2.927	5.4	18.4	7 20	19 29.05	-19 33.9	1.353	2.365	3.0	19.8
7 30	19 20.76	-34 53.5	1.963	2.922	8.0	18.6	7 30	19 19.51	-19 55.9	1.389	2.374	7.8	20.1
8 9	19 13.55	-34 34.0	2.016	2.917	11.0	18.7	8 9	19 11.99	-20 14.6	1.450	2.384	12.2	20.4
8 19	19 8.62	-34 3.5	2.090	2.913	13.7	18.9	8 19	19 7.24	-20 29.1	1.531	2.393	15.9	20.7
<b>168236</b>	2006 <i>KA</i> <sub>80</sub>		7 14.2 299°78	1.7/14.9	18		<b>183536</b>	2003 <i>GF</i> <sub>50</sub>		7 14.3 142°24	4.5/11.9	18	
6 10	19 58.14	-15 33.2	1.795	2.659	14.0	20.1	6 10	20 1.27	-33 34.2	2.355	3.215	11.2	20.5
6 20	19 53.60	-15 51.4	1.716	2.651	10.7	19.9	6 20	19 55.63	-34 28.8	2.290	3.220	8.7	20.3
6 30	19 46.90	-16 19.9	1.658	2.644	6.8	19.6	6 30	19 47.98	-35 19.4	2.248	3.224	6.1	20.2
7 10	19 38.69	-16 56.3	1.625	2.636	2.8	19.4	7 10	19 39.02	-36 1.3	2.233	3.228	4.5	20.1
7 20	19 29.87	-17 37.7	1.618	2.629	2.8	19.3	7 20	19 29.60	-36 30.6	2.246	3.231	5.3	20.1
7 30	19 21.51	-18 20.4	1.638	2.622	6.9	19.6	7 30	19 20.71	-36 45.4	2.286	3.235	7.6	20.3
8 9	19 14.62	-19 1.5	1.682	2.615	10.9	19.8	8 9	19 13.25	-36 46.1	2.350	3.238	10.2	20.5
8 19	19 9.93	-19 38.7	1.749	2.608	14.4	20.0	8 19	19 7.86	-36 34.6	2.437	3.242	12.5	20.6
<b>371537</b>	2006 <i>UF</i> <sub>266</sub>		7 14.2 235°94	0.6/14.4	17		<b>244683</b>	2003 <i>OL</i> <sub>19</sub>		7 14.3 319°99	6.1/15.3	18	
6 10	20 2.48	-19 1.5	1.819	2.682	13.9	22.1	6 10	19 57.80	-12 3.0	1.154	2.035	18.9	19.2
6 20	19 56.89	-19 15.4	1.734	2.670	10.5	21.9	6 20	19 54.43	-11 6.0	1.073	2.013	15.1	18.9
6 30	19 48.95	-19 35.9	1.671	2.659	6.5	21.6	6 30	19 47.97	-10 20.7	1.010	1.992	10.7	18.6
7 10	19 39.33	-20 0.4	1.633	2.647	2.1	21.3	7 10	19 39.18	-9 50.0	0.968	1.971	6.9	18.3
7 20	19 29.02	-20 25.9	1.622	2.634	2.6	21.3	7 20	19 29.30	-9 35.5	0.948	1.952	6.8	18.2
7 30	19 19.16	-20 49.5	1.638	2.621	7.1	21.6	7 30	19 19.93	-9 37.0	0.950	1.933	10.8	18.4
8 9	19 10.86	-21 9.3	1.680	2.607	11.3	21.8	8 9	19 12.65	-9 51.9	0.972	1.915	15.7	18.6
8 19	19 4.93	-21 24.6	1.744	2.593	14.9	22.0	8 19	19 8.56	-10 16.1	1.011	1.898	20.3	18.8
<b>438897</b>	2009 <i>WN</i>		7 14.2 170°93	29.7/10.6	18		<b>256446</b>	2007 <i>CM</i> <sub>41</sub>		7 14.3 264°25	2.9/15.8	18	
6 10	20 28.37	+18 37.8	0.937	1.663	33.0	21.1	6 10	19 56.40	-11 6.5	2.337	3.177	12.0	20.9
6 20	20 18.21	+24 6.9	0.903	1.672	31.4	21.0	6 20	19 51.86	-11 20.4	2.250	3.169	9.3	20.7
6 30	20 3.00	+28 53.5	0.884	1.679	30.2	21.0	6 30	19 45.66	-11 45.0	2.187	3.161	6.3	20.5
7 10	19 43.83	+32 33.0	0.881	1.683	29.7	20.9	7 10	19 38.34	-12 19.3	2.149	3.153	3.5	20.3
7 20	19 22.83	+34 48.8	0.893	1.686	30.0	21.0	7 20	19 30.55	-13 1.2	2.139	3.145	3.2	20.3
7 30	19 2.90	+35 37.7	0.917	1.686	30.9	21.1	7 30	19 23.09	-13 48.1	2.157	3.136	5.9	20.4
8 9	18 46.55	+35 12.2	0.951	1.683	32.2	21.2	8 9	19 16.70	-14 37.0	2.201	3.128	9.0	20.6
8 19	18 35.58	+33 51.3	0.993	1.679	33.5	21.3	8 19	19 11.96	-15 25.3	2.269	3.119	11.8	20.8
<b>150035</b>	Williamson		7 14.3 321°81	4.1/12.1	18		<b>142758</b>	Connolly		7 14.3 152°45	0.5/14.4	17	
6 10	19 59.16	-30 37.3	2.093	2.963	12.0	19.5	6 10	20 3.17	-19 19.6	1.805	2.667	14.0	20.7
6 20	19 54.32	-31 38.4	2.019	2.958	9.2	19.3	6 20	19 57.23	-19 33.1	1.737	2.673	10.5	20.5
6 30	19 47.32	-32 38.5	1.970	2.953	6.2	19.1	6 30	19 49.04	-19 52.5	1.691	2.679	6.4	20.3
7 10	19 38.83	-33 32.1	1.946	2.948	4.2	19.0	7 10	19 39.37	-20 15.0	1.671	2.685	2.1	20.0
7 20	19 29.75	-34 14.6	1.949	2.943	5.1	19.0	7 20	19 29.22	-20 37.6	1.678	2.690	2.6	20.0
7 30	19 21.14	-34 43.0	1.979	2.938	7.9	19.2	7 30	19 19.72	-20 57.8	1.712	2.694	6.9	20.3
8 9	19 14.01	-34 56.8	2.033	2.934	10.9	19.4	8 9	19 11.90	-21 14.0	1.771	2.698	10.8	20.6
8 19	19 9.07	-34 57.4	2.109	2.930	13.7	19.5	8 19	19 6.42	-21 25.9	1.853	2.701	14.2	20.8
<b>486959</b>	2014 <i>NX</i> <sub>1</sub>		7 14.3 41°53	3.4/16.2	17		<b>238690</b>	2005 <i>EK</i> <sub>255</sub>		7 14.3 333°38	3.6/15.6	17	
6 10	19 55.99	-9 13.8	2.063	2.905	13.3	21.0	6 10	19 57.84	-11 51.4	1.775	2.630	14.6	20.8
6 20	19 51.61	-9 36.5	1.995	2.913	10.4	20.8	6 20	19 53.33	-11 45.2	1.699	2.626	11.3	20.5
6 30	19 45.48	-10 12.7	1.949	2.922	7.1	20.6	6 30	19 46.71	-11 51.0	1.645	2.623	7.7	20.3
7 10	19 38.23	-11 0.8	1.929	2.930	4.2	20.4	7 10	19 38.68	-12 8.1	1.616	2.620	4.4	20.1
7 20	19 30.60	-11 58.2	1.935	2.939	3.8	20.4	7 20	19 30.11	-12 34.6	1.612	2.617	4.1	20.1
7 30	19 23.43	-13 1.0	1.968	2.948	6.3	20.6	7 30	19 22.05	-13 8.0	1.634	2.615	7.2	20.3
8 9	19 17.51	-14 5.3	2.027	2.957	9.5	20.8	8 9	19 15.46	-13 45.1	1.680	2.612	10.9	20.5
8 19	19 13.39	-15 7.7	2.110	2.966	12.4	21.0	8 19	19 11.02	-14 22.9	1.749	2.610	14.3	20.7
<b>424534</b>	2008 <i>EH</i> <sub>100</sub>		7 14.3 190°29	0.1/14.2	17		<b>508881</b>	2003 <i>SZ</i> <sub>121</sub>		7 14.3 292°80	4.1/15.3	1	



EPHEMERIDES

7 14.3

7 14.3

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>206977</b>	2004 <i>TF</i> <sub>103</sub>		7 14.3 125°84	5°3/12.4	18		<b>5225</b>	Loral		7 14.3 289°19	0°3/14.2	18	
6 10	20 6.97	-31 3.2	1.495	2.370	15.7	19.8	6 10	19 57.99	-20 59.4	2.193	3.057	11.8	17.3
6 20	20 0.74	-32 10.1	1.439	2.379	12.0	19.6	6 20	19 53.29	-21 19.6	2.100	3.039	8.8	17.1
6 30	19 51.47	-33 14.3	1.405	2.388	8.1	19.4	6 30	19 46.67	-21 44.4	2.031	3.020	5.4	16.9
7 10	19 40.16	-34 7.6	1.394	2.396	5.4	19.3	7 10	19 38.71	-22 11.2	1.988	3.002	1.6	16.6
7 20	19 28.21	-34 43.6	1.410	2.404	6.5	19.3	7 20	19 30.14	-22 37.5	1.972	2.984	2.3	16.6
7 30	19 17.22	-34 59.2	1.450	2.412	10.0	19.6	7 30	19 21.91	-23 0.6	1.984	2.966	6.2	16.8
8 9	19 8.57	-34 55.8	1.513	2.419	13.7	19.8	8 9	19 14.89	-23 19.0	2.022	2.947	9.7	17.0
8 19	19 3.09	-34 37.3	1.596	2.426	16.9	20.0	8 19	19 9.77	-23 32.2	2.083	2.929	12.9	17.2
<b>356868</b>	2011 <i>WJ</i> <sub>79</sub>		7 14.3 81°37	4°7/16.3	17		<b>517707</b>	2015 <i>FS</i> <sub>403</sub>		7 14.3 55°71	3°7/15.2	17	
6 10	19 58.59	-7 16.1	2.342	3.165	12.6	20.8	6 10	20 2.31	-14 10.4	1.609	2.469	15.6	20.5
6 20	19 53.19	-6 45.0	2.285	3.186	10.0	20.7	6 20	19 56.51	-13 26.1	1.557	2.487	11.9	20.4
6 30	19 46.30	-6 25.1	2.250	3.207	7.3	20.5	6 30	19 48.51	-12 50.9	1.527	2.506	8.0	20.2
7 10	19 38.50	-6 16.9	2.241	3.227	5.2	20.4	7 10	19 39.21	-12 25.1	1.520	2.526	4.4	20.0
7 20	19 30.49	-6 19.8	2.258	3.248	4.9	20.4	7 20	19 29.64	-12 8.5	1.540	2.545	4.3	20.1
7 30	19 23.00	-6 32.5	2.304	3.268	6.6	20.6	7 30	19 20.94	-12 0.3	1.586	2.565	7.6	20.3
8 9	19 16.71	-6 52.8	2.375	3.288	9.0	20.8	8 9	19 14.05	-11 58.7	1.656	2.585	11.3	20.6
8 19	19 12.06	-7 18.2	2.470	3.308	11.4	21.0	8 19	19 9.56	-12 2.0	1.747	2.605	14.5	20.8
<b>113070</b>	2002 <i>RN</i> <sub>61</sub>		7 14.3 274°95	7°5/10.9	18		<b>508003</b>	2015 <i>BC</i> <sub>259</sub>		7 14.3 300°51	3°5/15.6	18	
6 10	20 4.66	-40 11.1	1.966	2.821	13.3	19.3	6 10	19 58.55	-11 54.9	1.328	2.200	17.5	21.3
6 20	19 58.82	-41 18.0	1.898	2.815	10.8	19.1	6 20	19 54.88	-12 12.7	1.235	2.172	13.8	21.0
6 30	19 50.25	-42 16.1	1.852	2.809	8.6	19.0	6 30	19 48.28	-12 49.4	1.161	2.145	9.3	20.7
7 10	19 39.81	-42 58.1	1.831	2.803	7.6	18.9	7 10	19 39.36	-13 44.3	1.109	2.118	4.8	20.4
7 20	19 28.65	-43 18.9	1.835	2.796	8.3	18.9	7 20	19 29.18	-14 53.9	1.081	2.090	4.4	20.3
7 30	19 18.20	-43 16.4	1.864	2.790	10.4	19.0	7 30	19 19.24	-16 12.2	1.076	2.063	9.1	20.4
8 9	19 9.70	-42 52.5	1.915	2.784	13.0	19.2	8 9	19 11.07	-17 32.5	1.094	2.037	14.4	20.7
8 19	19 4.00	-42 11.6	1.987	2.778	15.5	19.4	8 19	19 5.86	-18 49.0	1.132	2.010	19.2	20.9
<b>198356</b>	2004 <i>VC</i> <sub>10</sub>		7 14.3 233°61	1°9/15.1	18		<b>508635</b>	2017 <i>TF</i> <sub>8</sub>		7 14.3 250°51	5°0/12.6	17	
6 10	19 59.80	-15 0.6	2.027	2.880	13.1	20.5	6 10	20 5.73	-31 33.1	1.633	2.505	14.8	21.6
6 20	19 54.65	-15 13.7	1.942	2.871	10.0	20.3	6 20	19 59.88	-32 22.1	1.555	2.493	11.4	21.3
6 30	19 47.49	-15 35.9	1.879	2.862	6.4	20.0	6 30	19 51.07	-33 8.6	1.498	2.481	7.7	21.1
7 10	19 38.94	-16 5.5	1.843	2.853	2.8	19.8	7 10	19 40.12	-33 45.6	1.467	2.469	5.1	20.9
7 20	19 29.81	-16 40.0	1.833	2.843	2.8	19.8	7 20	19 28.30	-34 7.4	1.460	2.456	6.1	21.0
7 30	19 21.07	-17 16.6	1.851	2.833	6.4	20.0	7 30	19 17.12	-34 10.8	1.480	2.443	9.7	21.1
8 9	19 13.66	-17 52.6	1.895	2.823	10.1	20.2	8 9	19 8.01	-33 56.7	1.522	2.430	13.5	21.3
8 19	19 8.26	-18 26.1	1.962	2.812	13.4	20.4	8 19	19 1.92	-33 28.7	1.585	2.416	17.0	21.5
<b>521487</b>	2015 <i>OG</i> <sub>94</sub>		7 14.3 61°65	5°8/12.5	18		<b>338687</b>	2003 <i>TF</i> <sub>38</sub>		7 14.3 332°93	6°2/12.5	16	
6 10	20 5.16	-39 15.7	2.228	3.078	12.2	20.7	6 10	20 4.85	-36 20.7	1.701	2.570	14.5	20.6
6 20	19 58.57	-39 38.8	2.164	3.082	9.7	20.6	6 20	19 59.02	-36 56.1	1.634	2.566	11.4	20.4
6 30	19 49.75	-39 52.3	2.124	3.087	7.3	20.4	6 30	19 50.38	-37 23.2	1.588	2.562	8.3	20.2
7 10	19 39.57	-39 51.6	2.109	3.092	5.9	20.3	7 10	19 39.86	-37 35.7	1.567	2.559	6.3	20.1
7 20	19 29.07	-39 34.1	2.121	3.096	6.4	20.4	7 20	19 28.75	-37 29.4	1.570	2.556	7.1	20.1
7 30	19 19.38	-38 59.7	2.160	3.101	8.4	20.5	7 30	19 18.53	-37 3.1	1.599	2.553	9.8	20.3
8 9	19 11.48	-38 11.0	2.223	3.106	10.9	20.7	8 9	19 10.44	-36 19.7	1.650	2.551	13.0	20.5
8 19	19 5.98	-37 11.8	2.308	3.111	13.2	20.9	8 19	19 5.28	-35 23.7	1.722	2.548	16.1	20.7
<b>135630</b>	2002 <i>JS</i> <sub>80</sub>		7 14.3 341°94	7°3/11.8	17		<b>377803</b>	2006 <i>AH</i> <sub>67</sub>		7 14.3 158°28	1°6/15.0	17	
6 10	20 0.88	-32 59.9	1.146	2.044	17.8	19.2	6 10	20 0.94	-15 29.4	2.138	2.987	12.6	22.2
6 20	19 57.15	-34 13.1	1.084	2.035	13.9	18.9	6 20	19 55.28	-15 42.4	2.066	2.994	9.6	22.0
6 30	19 49.77	-35 22.9	1.043	2.028	9.9	18.7	6 30	19 47.77	-16 3.3	2.016	2.999	6.1	21.8
7 10	19 39.76	-36 19.0	1.022	2.021	7.4	18.5	7 10	19 39.03	-16 30.2	1.994	3.004	2.6	21.6
7 20	19 28.71	-36 52.6	1.023	2.015	8.7	18.6	7 20	19 29.88	-17 0.7	1.999	3.009	2.6	21.6
7 30	19 18.64	-36 59.4	1.046	2.011	12.5	18.8	7 30	19 21.23	-17 32.3	2.032	3.013	6.0	21.8
8 9	19 11.32	-36 41.1	1.088	2.007	16.7	19.0	8 9	19 13.91	-18 2.7	2.091	3.016	9.5	22.0
8 19	19 7.79	-36 3.1	1.148	2.004	20.5	19.2	8 19	19 8.52	-18 30.6	2.174	3.019	12.5	22.2
<b>416304</b>	2003 <i>SS</i> <sub>8</sub>		7 14.3 243°30	2°3/13.6	17		<b>408646</b>	2014 <i>MB</i> <sub>14</sub>		7 14.3 270°96	3°0/15.9	18	
6 10	20 4.49	-25 42.7	1.599	2.473	14.9	22.1	6 10	19 56.28	-10 40.5	2.329	3.169	12.1	20.8
6 20	19 58.79	-26 9.1	1.521	2.464	11.2	21.9	6 20	19 51.80	-10 53.8	2.243	3.161	9.4	20.6
6 30	19 50.30	-26 37.2	1.464	2.454	7.0	21.6	6 30	19 45.66	-11 18.0	2.180	3.154	6.4	20.4
7 10	19 39.85	-27 2.1	1.432	2.444	2.9	21.3	7 10	19 38.41	-11 52.3	2.143	3.146	3.7	20.2
7 20	19 28.61	-27 19.3	1.426	2.434	3.9	21.4	7 20	19 30.69	-12 34.6	2.134	3.138	3.4	20.2
7 30	19 18.00	-27 26.0	1.446	2.424	8.4	21.6	7 30	19 23.31	-13 22.2	2.152	3.131	5.9	20.3
8 9	19 9.34	-27 22.2	1.489	2.413	12.7	21.8	8 9	19 16.99	-14 12.1	2.196	3.123	9.0	20.5
8 19	19 3.52	-27 9.3	1.554	2.401	16.5	22.0	8 19	19 12.33	-15 1.7	2.265	3.116	11.8	20.7
<b>55937</b>	1998 <i>FN</i> <sub>105</sub>		7 14.3 270°97	3°1/13.2	18		<b>7175</b>	Janegoodall		7 14.3 321°11	12°4/18.4	18	
6 10	20 1.69	-30 9.3	2.177	3.041	11.9	18.5	6 10	19 55.53	+ 4 54.6	1.485	2.289	19.4	16.8
6 20	19 56.06	-30 27.3	2.095	3.031	9.0	18.3	6 20	19 52.09	+ 6 2.7	1.406	2.272	17.1	16.6
6 30	19 48.32	-30 42.4	2.037	3.021	5.9	18.1	6 30	19 46.24	+ 6 45.7	1.343	2.256	14.8	16.4
7 10	19 39.18	-30 50.9	2.005	3.012	3.3	17.9	7 10	19 38.67	+ 6 58.0	1.300	2.241	13.0	16.3
7 20	19 29.54	-30 50.1	2.000	3.002	4.0	18.0	7 20	19 30.29	+ 6 36.5	1.278	2.226	12.4	16.2
7 30	19 20.42	-30 38.7	2.023	2.992	7.1	18.1	7 30	19 22.32	+ 5 42.2	1.277	2.212	13.5	16.2
8 9	19 12.78	-30 17.3	2.071	2.982	10.3	18.3	8 9	19 15.90	+ 4 20.5	1.296	2.199	15.7	16.3
8 19	19 7.29	-29 47.9	2.142	2.972	13.2	18.5	8 19	19 11.92	+ 2 39.8	1.335	2.186	18.4	16.5
<b>462530</b>	2008 <i>YF</i> <sub>160</sub>		7 14.3 20°35										

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>380319</b>	2002 <i>GU</i> <sub>172</sub>		7 14.3 91°60	3°4/12.9	17		<b>40204</b>	1998 <i>SV</i> <sub>27</sub>		7 14.3 285°51	0°2/14.4	18	
6 10	20 4.02	-28 23.2	1.837	2.706	13.5	21.4	6 10	19 57.13	-17 51.7	2.335	3.192	11.4	19.0
6 20	19 57.88	-29 12.9	1.786	2.725	10.1	21.2	6 20	19 52.50	-18 40.6	2.254	3.188	8.5	18.8
6 30	19 49.43	-30 1.3	1.758	2.744	6.4	21.0	6 30	19 46.15	-19 37.2	2.197	3.184	5.2	18.6
7 10	19 39.54	-30 43.1	1.756	2.763	3.6	20.9	7 10	19 38.61	-20 38.4	2.167	3.181	1.6	18.3
7 20	19 29.28	-31 13.7	1.780	2.782	4.5	21.0	7 20	19 30.58	-21 40.4	2.165	3.177	2.1	18.3
7 30	19 19.84	-31 31.2	1.832	2.800	7.8	21.2	7 30	19 22.89	-22 39.7	2.192	3.173	5.7	18.6
8 9	19 12.21	-31 35.8	1.908	2.818	11.1	21.4	8 9	19 16.31	-23 33.4	2.245	3.169	9.0	18.8
8 19	19 7.06	-31 29.4	2.006	2.835	14.0	21.7	8 19	19 11.46	-24 20.0	2.323	3.166	11.9	19.0
<b>416000</b>	2002 <i>AO</i> <sub>151</sub>		7 14.3 80°63	2°8/15.8	17		<b>368362</b>	2002 <i>QZ</i> <sub>140</sub>		7 14.3 255°45	0°7/14.1	18	
6 10	20 0.79	-10 50.2	1.740	2.588	15.1	20.2	6 10	20 5.73	-23 56.2	1.778	2.642	14.1	21.6
6 20	19 55.38	-11 31.7	1.685	2.609	11.6	20.0	6 20	19 59.51	-23 49.9	1.686	2.625	10.6	21.3
6 30	19 47.89	-12 27.8	1.652	2.631	7.6	19.8	6 30	19 50.71	-23 44.3	1.617	2.607	6.5	21.0
7 10	19 39.08	-13 35.4	1.644	2.651	3.8	19.7	7 10	19 40.06	-23 36.3	1.574	2.588	2.1	20.7
7 20	19 29.89	-14 49.7	1.664	2.672	3.4	19.7	7 20	19 28.63	-23 23.8	1.558	2.569	2.9	20.7
7 30	19 21.39	-16 5.5	1.710	2.693	6.8	19.9	7 30	19 17.73	-23 5.7	1.569	2.549	7.5	21.0
8 9	19 14.50	-17 18.2	1.782	2.713	10.5	20.2	8 9	19 8.55	-22 42.4	1.605	2.529	11.9	21.2
8 19	19 9.84	-18 24.6	1.877	2.733	13.7	20.4	8 19	19 1.96	-22 15.5	1.663	2.509	15.6	21.4
<b>361458</b>	2007 <i>CY</i> <sub>27</sub>		7 14.3 139°93	0°3/14.4	18		<b>230057</b>	2000 <i>SY</i> <sub>182</sub>		7 14.3 233°81	1°4/14.8	17	
6 10	19 58.14	-19 34.5	2.603	3.457	10.5	22.2	6 10	20 1.08	-16 52.1	2.091	2.945	12.7	21.5
6 20	19 52.94	-19 49.6	2.531	3.464	7.8	22.1	6 20	19 55.61	-16 58.3	2.002	2.933	9.7	21.3
6 30	19 46.23	-20 8.6	2.483	3.470	4.8	21.9	6 30	19 48.13	-17 11.5	1.937	2.921	6.1	21.0
7 10	19 38.56	-20 29.7	2.463	3.477	1.5	21.7	7 10	19 39.23	-17 30.0	1.897	2.909	2.4	20.8
7 20	19 30.57	-20 50.8	2.471	3.483	1.9	21.7	7 20	19 29.75	-17 51.5	1.885	2.896	2.5	20.8
7 30	19 23.00	-21 10.2	2.509	3.489	5.1	21.9	7 30	19 20.65	-18 13.8	1.901	2.883	6.3	21.0
8 9	19 16.51	-21 26.7	2.572	3.495	8.0	22.1	8 9	19 12.86	-18 35.2	1.943	2.869	10.0	21.2
8 19	19 11.61	-21 39.7	2.661	3.500	10.6	22.3	8 19	19 7.08	-18 54.3	2.008	2.855	13.3	21.4
<b>420325</b>	2012 <i>AS</i> <sub>17</sub>		7 14.3 253°41	4°0/13.3	17		<b>260632</b>	2005 <i>GP</i> <sub>104</sub>		7 14.3 41°40	2°4/15.1	17	
6 10	20 6.70	-29 59.2	1.479	2.355	15.8	21.4	6 10	20 0.29	-15 17.9	1.215	2.097	18.1	20.8
6 20	20 0.71	-30 24.0	1.404	2.346	12.0	21.1	6 20	19 55.79	-15 23.5	1.164	2.109	13.7	20.5
6 30	19 51.61	-30 45.8	1.350	2.337	7.9	20.9	6 30	19 48.47	-15 42.2	1.132	2.121	8.7	20.3
7 10	19 40.31	-30 58.5	1.319	2.327	4.4	20.6	7 10	19 39.34	-16 11.5	1.123	2.134	3.8	20.0
7 20	19 28.19	-30 57.4	1.314	2.317	5.4	20.7	7 20	19 29.71	-16 47.3	1.137	2.148	3.7	20.1
7 30	19 16.88	-30 40.6	1.335	2.308	9.5	20.9	7 30	19 21.05	-17 25.3	1.174	2.162	8.5	20.4
8 9	19 7.84	-30 9.7	1.378	2.297	13.8	21.1	8 9	19 14.60	-18 1.7	1.234	2.177	13.1	20.7
8 19	19 2.00	-29 28.8	1.441	2.287	17.6	21.3	8 19	19 11.09	-18 34.0	1.314	2.192	17.1	21.0
<b>47770</b>	2000 <i>DN</i> <sub>104</sub>		7 14.3 237°85	0°2/14.4	18		<b>66929</b>	1999 <i>VS</i> <sub>199</sub>		7 14.3 216°86	4°3/16.4	18	
6 10	19 59.35	-18 41.6	2.128	2.987	12.3	19.2	6 10	19 58.86	-7 37.3	2.202	3.029	13.1	19.8
6 20	19 54.32	-19 16.1	2.044	2.979	9.2	18.9	6 20	19 53.79	-7 39.2	2.116	3.023	10.4	19.6
6 30	19 47.32	-19 57.7	1.983	2.971	5.7	18.7	6 30	19 46.94	-7 54.1	2.053	3.016	7.5	19.4
7 10	19 38.96	-20 43.5	1.949	2.963	1.8	18.4	7 10	19 38.86	-8 22.0	2.015	3.009	4.9	19.2
7 20	19 30.03	-21 29.9	1.942	2.954	2.3	18.5	7 20	19 30.28	-9 1.1	2.004	3.001	4.5	19.2
7 30	19 21.48	-22 13.8	1.963	2.945	6.2	18.7	7 30	19 22.04	-9 49.0	2.020	2.993	6.7	19.3
8 9	19 14.19	-22 52.6	2.011	2.935	9.8	18.9	8 9	19 14.97	-10 42.1	2.063	2.985	9.8	19.5
8 19	19 8.86	-23 25.1	2.081	2.926	13.0	19.1	8 19	19 9.68	-11 37.2	2.129	2.976	12.6	19.7
<b>249642</b>	1999 <i>TU</i> <sub>188</sub>		7 14.3 202°63	1°6/13.6	18		<b>257501</b>	1995 <i>YS</i> <sub>5</sub>		7 14.3 82°25	0°7/14.0	18	
6 10	19 59.93	-27 1.1	2.880	3.735	9.6	21.2	6 10	19 58.71	-21 54.4	2.164	3.028	11.9	20.8
6 20	19 54.24	-27 13.2	2.797	3.731	7.1	21.0	6 20	19 53.71	-22 21.5	2.094	3.033	8.8	20.6
6 30	19 47.02	-27 24.3	2.740	3.726	4.4	20.8	6 30	19 46.87	-22 52.1	2.048	3.037	5.3	20.4
7 10	19 38.82	-27 32.4	2.711	3.722	1.9	20.7	7 10	19 38.83	-23 23.5	2.028	3.042	1.7	20.2
7 20	19 30.28	-27 35.4	2.710	3.717	2.6	20.7	7 20	19 30.37	-23 52.6	2.035	3.046	2.4	20.2
7 30	19 22.13	-27 32.3	2.739	3.711	5.3	20.9	7 30	19 22.42	-24 17.0	2.071	3.051	6.0	20.5
8 9	19 15.04	-27 23.2	2.795	3.705	7.9	21.0	8 9	19 15.78	-24 35.5	2.132	3.055	9.4	20.7
8 19	19 9.53	-27 8.8	2.875	3.699	10.3	21.2	8 19	19 11.07	-24 47.8	2.216	3.060	12.3	20.9
<b>180201</b>	2003 <i>ST</i> <sub>251</sub>		7 14.3 245°65	1°9/13.6	18 R		<b>565</b>	Marbachia		7 14.3 124°04	6°2/16.4	18 A	
6 10	20 4.65	-24 51.6	1.787	2.654	13.9	21.2	6 10	20 1.99	-6 6.0	1.787	2.615	15.6	15.1
6 20	19 58.79	-25 22.7	1.699	2.638	10.5	20.9	6 20	19 56.25	-5 27.9	1.724	2.626	12.6	14.9
6 30	19 50.31	-25 56.7	1.632	2.622	6.5	20.7	6 30	19 48.44	-5 4.8	1.681	2.637	9.4	14.7
7 10	19 39.94	-26 28.9	1.592	2.604	2.6	20.4	7 10	19 39.30	-4 58.0	1.662	2.647	6.8	14.6
7 20	19 28.72	-26 55.0	1.578	2.586	3.6	20.4	7 20	19 29.77	-5 7.1	1.669	2.657	6.4	14.6
7 30	19 17.94	-27 11.7	1.591	2.568	7.9	20.6	7 30	19 20.87	-5 30.1	1.702	2.667	8.5	14.7
8 9	19 8.85	-27 18.2	1.629	2.549	12.0	20.8	8 9	19 13.54	-6 3.8	1.759	2.676	11.5	14.9
8 19	19 2.35	-27 15.6	1.689	2.529	15.7	21.0	8 19	19 8.39	-6 44.0	1.839	2.685	14.4	15.2
<b>47780</b>	2000 <i>EM</i> <sub>13</sub>		7 14.3 46°72	1°0/14.7	18		<b>314644</b>	2006 <i>KE</i> <sub>7</sub>		7 14.3 139°66	1°8/13.7	17	
6 10	19 59.61	-18 17.9	1.798	2.664	13.9	18.8	6 10	20 5.78	-23 49.7	1.622	2.491	15.0	21.9
6 20	19 54.62	-18 21.8	1.730	2.669	10.4	18.6	6 20	19 59.50	-24 27.9	1.560	2.501	11.1	21.6
6 30	19 47.50	-18 32.3	1.685	2.674	6.5	18.4	6 30	19 50.61	-25 9.5	1.521	2.511	6.8	21.4
7 10	19 39.00	-18 47.2	1.665	2.678	2.3	18.1	7 10	19 40.00	-25 49.1	1.506	2.519	2.5	21.2
7 20	19 30.06	-19 4.1	1.672	2.683	2.6	18.1	7 20	19 28.85	-26 22.2	1.518	2.527	3.5	21.3
7 30	19 21.74	-19 20.8	1.704	2.688	6.7	18.4	7 30	19 18.50	-26 45.5	1.557	2.535	7.9	21.5
8 9	19 14.98	-19 35.6	1.762	2.694	10.5	18.7	8 9	19 10.13	-26 58.3	1.620	2.542	11.9	21.8
8 19	19 10.44	-19 47.6	1.842	2.699	13.9	18.9	8 19	19 4.50	-27 1.9	1.705	2.549	15.4	22.0
<b>108328</b>	2001 <i>KG</i> <sub>1</sub>		7 14.3 2°44	6°2/15.9	17		<b>225370</b>	1999 <i>FF</i> <sub>17</sub>		7 14.3 100			

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>196891</b>	2003 <i>SK</i> <sub>329</sub>	7 14.3 358°72		3°9/15.6 16			<b>338688</b>	2003 <i>TE</i> <sub>39</sub>	7 14.3 263°33		1°2/13.9 18		
6 10	19 54.03	-13 7.9	1.196	2.083	18.0	19.8	6 10	20 1.89	-24 22.3	1.856	2.725	13.4	21.2
6 20	19 51.32	-12 57.3	1.133	2.079	13.9	19.6	6 20	19 56.42	-24 30.8	1.782	2.723	10.0	21.0
6 30	19 45.90	-13 2.0	1.089	2.076	9.3	19.3	6 30	19 48.69	-24 40.6	1.730	2.720	6.1	20.7
7 10	19 38.62	-13 21.5	1.066	2.074	5.0	19.0	7 10	19 39.46	-24 48.7	1.704	2.718	2.1	20.5
7 20	19 30.67	-13 53.1	1.065	2.074	4.6	19.0	7 20	19 29.72	-24 52.2	1.705	2.715	2.9	20.5
7 30	19 23.44	-14 32.9	1.087	2.075	8.8	19.3	7 30	19 20.59	-24 49.7	1.732	2.712	7.0	20.8
8 9	19 18.21	-15 16.0	1.130	2.078	13.4	19.5	8 9	19 13.09	-24 41.0	1.785	2.710	10.8	21.0
8 19	19 15.79	-15 58.2	1.192	2.083	17.5	19.8	8 19	19 7.93	-24 27.0	1.859	2.707	14.1	21.2
<b>172737</b>	2004 <i>CD</i> <sub>9</sub>	7 14.3 34°81		1°1/13.8 16			<b>521504</b>	2015 <i>OA</i> <sub>96</sub>	7 14.3 5°73		0°6/14.1 18		
6 10	19 59.67	-23 0.3	1.855	2.727	13.3	20.6	6 10	19 58.24	-22 53.4	1.861	2.735	13.2	20.5
6 20	19 54.73	-23 29.1	1.787	2.729	9.9	20.4	6 20	19 53.63	-22 56.4	1.792	2.735	9.8	20.3
6 30	19 47.63	-24 1.3	1.742	2.732	6.0	20.2	6 30	19 46.95	-23 1.7	1.745	2.736	5.9	20.1
7 10	19 39.11	-24 33.4	1.722	2.735	2.0	19.9	7 10	19 38.92	-23 6.9	1.724	2.738	1.8	19.8
7 20	19 30.09	-25 1.8	1.728	2.739	2.9	20.0	7 20	19 30.45	-23 9.9	1.728	2.740	2.5	19.9
7 30	19 21.67	-25 23.8	1.762	2.742	6.9	20.2	7 30	19 22.60	-23 9.1	1.760	2.743	6.6	20.1
8 9	19 14.81	-25 38.1	1.820	2.746	10.6	20.5	8 9	19 16.27	-23 3.9	1.816	2.746	10.3	20.3
8 19	19 10.20	-25 45.1	1.900	2.749	13.8	20.7	8 19	19 12.12	-22 54.8	1.894	2.750	13.6	20.6
<b>174105</b>	2002 <i>JJ</i> <sub>51</sub>	7 14.3 49°01		2°2/13.7 17			<b>511788</b>	2015 <i>EV</i> <sub>64</sub>	7 14.3 17°79		1°2/14.9 17		
6 10	20 3.41	-24 50.5	1.220	2.110	17.5	20.2	6 10	19 55.13	-14 55.5	1.206	2.096	17.7	19.6
6 20	19 58.27	-25 19.0	1.171	2.123	13.0	19.9	6 20	19 52.08	-15 50.4	1.155	2.104	13.3	19.4
6 30	19 50.05	-25 50.1	1.142	2.135	8.0	19.7	6 30	19 46.32	-17 1.7	1.123	2.115	8.3	19.2
7 10	19 39.86	-26 17.8	1.135	2.148	3.1	19.4	7 10	19 38.77	-18 24.2	1.113	2.127	3.0	18.9
7 20	19 29.17	-26 37.3	1.152	2.162	4.2	19.6	7 20	19 30.64	-19 50.5	1.127	2.140	3.1	18.9
7 30	19 19.61	-26 45.7	1.193	2.176	9.1	19.9	7 30	19 23.34	-21 13.0	1.165	2.154	8.2	19.3
8 9	19 12.51	-26 43.3	1.256	2.190	13.7	20.2	8 9	19 18.08	-22 26.0	1.225	2.170	12.9	19.6
8 19	19 8.63	-26 32.0	1.339	2.205	17.5	20.5	8 19	19 15.63	-23 26.2	1.305	2.187	16.9	19.9
<b>170977</b>	2005 <i>CV</i> <sub>35</sub>	7 14.3 263°81		2°7/13.4 18			<b>484972</b>	2009 <i>TG</i> <sub>39</sub>	7 14.3 313°47		3°8/12.0 17		
6 10	20 4.02	-25 34.8	1.483	2.362	15.6	20.5	6 10	19 58.15	-28 4.8	2.062	2.935	12.1	20.5
6 20	19 58.76	-26 12.9	1.403	2.349	11.8	20.2	6 20	19 53.84	-29 23.3	1.972	2.913	9.2	20.3
6 30	19 50.52	-26 54.3	1.345	2.336	7.4	19.9	6 30	19 47.31	-30 45.2	1.906	2.892	6.1	20.1
7 10	19 40.10	-27 33.3	1.310	2.322	3.2	19.6	7 10	19 39.11	-32 4.7	1.866	2.871	3.9	19.9
7 20	19 28.72	-28 4.0	1.301	2.308	4.4	19.7	7 20	19 30.08	-33 15.6	1.853	2.850	5.0	19.9
7 30	19 17.93	-28 22.7	1.316	2.294	9.0	19.9	7 30	19 21.31	-34 13.3	1.867	2.829	8.1	20.1
8 9	19 9.17	-28 28.5	1.355	2.280	13.6	20.1	8 9	19 13.86	-34 55.6	1.906	2.809	11.4	20.2
8 19	19 3.45	-28 23.0	1.414	2.266	17.6	20.3	8 19	19 8.58	-35 22.5	1.966	2.789	14.5	20.4
<b>151481</b>	2002 <i>JV</i> <sub>9</sub>	7 14.3 350°65		1°9/15.6 18			<b>94728</b>	2001 <i>XL</i> <sub>65</sub>	7 14.3 76°50		2°2/14.8 18		
6 10	19 56.77	-11 35.6	2.062	2.910	13.1	19.0	6 10	20 4.45	-17 50.3	1.653	2.515	15.1	19.0
6 20	19 52.43	-12 37.5	1.981	2.907	10.0	18.8	6 20	19 58.19	-17 11.6	1.594	2.529	11.4	18.8
6 30	19 46.21	-13 53.9	1.924	2.905	6.5	18.5	6 30	19 49.65	-16 38.3	1.557	2.542	7.2	18.6
7 10	19 38.70	-15 21.5	1.893	2.903	3.0	18.3	7 10	19 39.72	-16 9.9	1.546	2.556	3.2	18.4
7 20	19 30.63	-16 55.7	1.890	2.901	2.6	18.3	7 20	19 29.47	-15 46.0	1.560	2.570	3.3	18.4
7 30	19 22.91	-18 31.0	1.916	2.899	6.1	18.5	7 30	19 20.09	-15 26.5	1.602	2.584	7.3	18.7
8 9	19 16.41	-20 2.3	1.968	2.898	9.7	18.7	8 9	19 12.55	-15 10.7	1.668	2.598	11.2	19.0
8 19	19 11.77	-21 25.8	2.045	2.898	12.8	18.9	8 19	19 7.48	-14 58.3	1.756	2.611	14.5	19.2
<b>388921</b>	2008 <i>SW</i> <sub>136</sub>	7 14.3 206°59		1°8/15.1 18			<b>248570</b>	2006 <i>AY</i> <sub>83</sub>	7 14.3 218°99		1°9/13.4 18		
6 10	20 0.70	-15 13.3	2.432	3.274	11.5	22.5	6 10	19 59.28	-27 7.0	2.735	3.593	9.9	21.2
6 20	19 55.03	-15 13.8	2.344	3.268	8.8	22.3	6 20	19 53.91	-27 29.0	2.652	3.587	7.4	21.0
6 30	19 47.65	-15 20.9	2.281	3.261	5.7	22.1	6 30	19 46.93	-27 50.6	2.594	3.581	4.6	20.8
7 10	19 39.11	-15 33.6	2.245	3.254	2.6	21.9	7 10	19 38.90	-28 9.1	2.564	3.574	2.2	20.7
7 20	19 30.12	-15 50.1	2.237	3.246	2.6	21.9	7 20	19 30.47	-28 22.2	2.562	3.567	2.8	20.7
7 30	19 21.50	-16 8.9	2.258	3.238	5.7	22.1	7 30	19 22.41	-28 28.4	2.589	3.560	5.6	20.9
8 9	19 14.00	-16 28.3	2.306	3.229	8.8	22.3	8 9	19 15.45	-28 27.5	2.642	3.553	8.3	21.0
8 19	19 8.22	-16 47.0	2.378	3.219	11.7	22.4	8 19	19 10.12	-28 20.1	2.720	3.546	10.8	21.2
<b>314325</b>	2005 <i>SN</i> <sub>281</sub>	7 14.3 190°21		0°4/14.6 18			<b>355187</b>	2006 <i>WZ</i> <sub>139</sub>	7 14.3 231°53		2°1/13.1 18		
6 10	19 56.92	-17 58.2	2.649	3.502	10.4	20.6	6 10	19 59.50	-25 8.2	2.243	3.108	11.6	20.7
6 20	19 52.14	-18 31.5	2.569	3.501	7.8	20.4	6 20	19 54.44	-26 3.2	2.165	3.104	8.6	20.5
6 30	19 45.85	-19 10.6	2.514	3.500	4.8	20.2	6 30	19 47.44	-27 0.9	2.111	3.099	5.3	20.3
7 10	19 38.56	-19 53.3	2.486	3.499	1.6	20.0	7 10	19 39.09	-27 57.1	2.084	3.095	2.5	20.1
7 20	19 30.88	-20 36.9	2.486	3.498	1.8	20.0	7 20	19 30.19	-28 47.5	2.085	3.090	3.4	20.2
7 30	19 23.52	-21 18.8	2.516	3.497	5.0	20.2	7 30	19 21.68	-29 28.9	2.114	3.086	6.6	20.4
8 9	19 17.17	-21 57.2	2.573	3.496	8.0	20.4	8 9	19 14.45	-29 59.8	2.169	3.081	9.8	20.6
8 19	19 12.33	-22 30.8	2.654	3.494	10.6	20.6	8 19	19 9.17	-30 20.2	2.247	3.076	12.7	20.7
<b>178366</b>	1997 <i>CU</i> <sub>7</sub>	7 14.3 188°97		1°3/14.8 17			<b>419743</b>	2010 <i>VN</i> <sub>74</sub>	7 14.3 233°96		4°8/12.5 18		
6 10	20 2.98	-17 11.0	1.789	2.648	14.3	21.3	6 10	20 4.87	-30 27.2	1.599	2.474	14.9	20.9
6 20	19 57.25	-17 19.9	1.714	2.647	10.8	21.1	6 20	19 59.26	-31 27.1	1.528	2.468	11.4	20.7
6 30	19 49.22	-17 36.6	1.660	2.646	6.8	20.8	6 30	19 50.75	-32 26.0	1.479	2.463	7.6	20.5
7 10	19 39.63	-17 59.0	1.633	2.645	2.6	20.6	7 10	19 40.17	-33 16.6	1.454	2.457	5.0	20.3
7 20	19 29.47	-18 24.1	1.632	2.643	2.7	20.6	7 20	19 28.77	-33 52.5	1.455	2.451	6.0	20.3
7 30	19 19.88	-18 49.3	1.658	2.641	7.0	20.8	7 30	19 18.05	-34 10.3	1.481	2.445	9.6	20.5
8 9	19 11.90	-19 12.5	1.709	2.638	11.0	21.1	8 9	19 9.39	-34 10.1	1.530	2.438	13.4	20.7
8 19	19 6.27	-19 32.5	1.783	2.634	14.5	21.3	8 19	19 3.71	-33 55.1	1.599	2.432	16.8	20.9
<b>260706</b>	2005 <i>JQ</i> <sub>133</sub>	7 14.3 4°05		3°0/13.1 17			<b>491762</b>	2012 <i>VB</i> <sub>98</sub>	7 14.3 238°53		2°7/15.3 18		
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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>393797</b>	2005 <i>NB</i> <sub>14</sub>	7 14.3 341°52		3°6/15.8 18			<b>511221</b>	2014 <i>AV</i> <sub>54</sub>	7 14.3 269°09		2°3/15.5 18		
6 10	19 55.21	-11 36.2	1.637	2.500	15.2	20.5	6 10	19 59.87	-12 43.2	1.837	2.689	14.3	22.1
6 20	19 51.67	-11 38.4	1.558	2.490	11.8	20.3	6 20	19 55.12	-13 15.5	1.743	2.671	11.0	21.8
6 30	19 45.93	-11 54.5	1.501	2.480	8.0	20.0	6 30	19 48.10	-14 1.8	1.671	2.652	7.3	21.6
7 10	19 38.66	-12 23.7	1.466	2.472	4.5	19.8	7 10	19 39.40	-15 0.2	1.624	2.633	3.4	21.3
7 20	19 30.77	-13 3.7	1.457	2.464	4.1	19.7	7 20	19 29.90	-16 7.0	1.604	2.614	3.1	21.2
7 30	19 23.33	-13 51.0	1.472	2.457	7.5	19.9	7 30	19 20.66	-17 17.4	1.611	2.594	7.1	21.4
8 9	19 17.39	-14 41.6	1.512	2.450	11.4	20.1	8 9	19 12.79	-18 26.9	1.643	2.574	11.2	21.6
8 19	19 13.70	-15 31.6	1.573	2.445	15.0	20.4	8 19	19 7.11	-19 31.8	1.698	2.554	14.9	21.8
<b>509867</b>	2009 <i>AR</i> <sub>31</sub>	7 14.3 149°40		0°7/14.6 17			<b>259601</b>	2003 <i>UF</i> <sub>274</sub>	7 14.3 308°24		1°3/14.6 18		
6 10	20 0.68	-18 44.6	2.290	3.143	11.8	22.3	6 10	20 0.82	-19 25.1	1.245	2.132	17.5	20.5
6 20	19 55.03	-18 50.1	2.218	3.150	8.8	22.1	6 20	19 57.00	-19 11.3	1.148	2.097	13.4	20.2
6 30	19 47.63	-19 0.3	2.171	3.157	5.4	21.9	6 30	19 49.88	-19 4.1	1.070	2.062	8.6	19.8
7 10	19 39.11	-19 13.4	2.150	3.163	1.9	21.7	7 10	19 40.11	-19 1.7	1.013	2.027	3.1	19.4
7 20	19 30.24	-19 27.3	2.157	3.169	2.1	21.7	7 20	19 28.86	-19 1.9	0.980	1.992	3.6	19.3
7 30	19 21.87	-19 40.5	2.193	3.174	5.7	22.0	7 30	19 17.85	-19 2.2	0.970	1.958	9.7	19.5
8 9	19 14.77	-19 51.8	2.255	3.179	8.9	22.2	8 9	19 8.84	-19 1.3	0.981	1.924	15.5	19.7
8 19	19 9.50	-20 0.5	2.340	3.183	11.8	22.4	8 19	19 3.14	-18 58.6	1.010	1.891	20.7	19.9
<b>17814</b>	1998 <i>FH</i> <sub>113</sub>	7 14.3 321°53		3°4/15.3 18 A			<b>289303</b>	2005 <i>AX</i> <sub>6</sub>	7 14.3 193°40		0°8/13.9 18		
6 10	19 58.20	-13 33.3	1.922	2.776	13.6	16.4	6 10	20 1.14	-21 31.9	2.422	3.276	11.2	21.6
6 20	19 53.56	-13 3.4	1.839	2.767	10.6	16.2	6 20	19 55.49	-22 18.6	2.340	3.274	8.3	21.4
6 30	19 46.92	-12 41.5	1.779	2.757	7.1	16.0	6 30	19 48.03	-23 10.0	2.284	3.272	5.0	21.2
7 10	19 38.94	-12 27.9	1.744	2.748	4.0	15.8	7 10	19 39.32	-24 2.4	2.255	3.268	1.6	20.9
7 20	19 30.44	-12 22.2	1.735	2.740	3.9	15.7	7 20	19 30.10	-24 52.2	2.255	3.264	2.4	21.0
7 30	19 22.39	-12 23.3	1.752	2.731	7.0	15.9	7 30	19 21.23	-25 36.5	2.284	3.260	5.8	21.2
8 9	19 15.70	-12 29.8	1.794	2.723	10.5	16.1	8 9	19 13.54	-26 13.3	2.339	3.255	9.1	21.4
8 19	19 11.04	-12 39.8	1.858	2.716	13.8	16.3	8 19	19 7.65	-26 42.1	2.419	3.249	11.9	21.6
<b>149015</b>	2002 <i>AY</i> <sub>52</sub>	7 14.3 95°52		0°5/14.1 18			<b>371558</b>	2006 <i>VQ</i> <sub>30</sub>	7 14.3 307°65		2°4/13.6 17		
6 10	20 0.99	-23 0.9	2.408	3.265	11.1	19.7	6 10	20 0.65	-24 44.4	1.311	2.201	16.5	21.3
6 20	19 55.09	-23 5.7	2.349	3.284	8.2	19.5	6 20	19 56.77	-25 16.6	1.221	2.172	12.6	21.0
6 30	19 47.57	-23 11.7	2.315	3.303	5.0	19.3	6 30	19 49.65	-25 54.0	1.151	2.144	7.9	20.6
7 10	19 39.07	-23 17.1	2.308	3.322	1.5	19.1	7 10	19 40.01	-26 31.3	1.103	2.116	3.2	20.3
7 20	19 30.35	-23 19.9	2.329	3.340	2.1	19.2	7 20	19 29.05	-27 2.4	1.079	2.088	4.5	20.3
7 30	19 22.22	-23 19.3	2.379	3.358	5.4	19.5	7 30	19 18.48	-27 22.3	1.078	2.061	9.8	20.5
8 9	19 15.39	-23 14.9	2.455	3.376	8.5	19.7	8 9	19 9.99	-27 29.4	1.099	2.034	15.1	20.7
8 19	19 10.35	-23 7.1	2.556	3.393	11.1	19.9	8 19	19 4.79	-27 24.5	1.139	2.008	19.7	20.9
<b>428319</b>	2007 <i>GN</i> <sub>67</sub>	7 14.3 114°33		1°9/13.6 17			<b>65680</b>	1990 <i>EH</i> <sub>1</sub>	7 14.3 45°31		2°5/13.8 18		
6 10	20 3.08	-25 1.5	1.811	2.680	13.7	21.9	6 10	20 4.74	-27 57.4	1.471	2.350	15.7	17.6
6 20	19 57.29	-25 32.5	1.748	2.689	10.2	21.7	6 20	19 58.87	-27 56.9	1.415	2.360	11.7	17.3
6 30	19 49.21	-26 5.0	1.709	2.698	6.2	21.5	6 30	19 50.27	-27 53.7	1.381	2.372	7.3	17.1
7 10	19 39.64	-26 34.9	1.695	2.707	2.5	21.3	7 10	19 39.99	-27 44.0	1.372	2.383	3.2	16.9
7 20	19 29.62	-26 58.2	1.708	2.716	3.4	21.4	7 20	19 29.34	-27 25.2	1.387	2.395	4.0	17.0
7 30	19 20.31	-27 12.7	1.747	2.724	7.2	21.6	7 30	19 19.74	-26 57.2	1.428	2.407	8.2	17.3
8 9	19 12.73	-27 18.0	1.812	2.732	10.9	21.9	8 9	19 12.35	-26 21.9	1.492	2.420	12.3	17.5
8 19	19 7.57	-27 15.1	1.898	2.740	14.1	22.1	8 19	19 7.84	-25 41.9	1.577	2.433	15.8	17.8
<b>480606</b>	2015 <i>MT</i> <sub>103</sub>	7 14.3 51°95		0°6/14.7 18			<b>336679</b>	2010 <i>AM</i> <sub>39</sub>	7 14.3 189°99		6°2/13.5 16		
6 10	19 58.03	-17 0.0	2.006	2.867	12.9	21.0	6 10	20 17.55	-41 31.5	2.205	3.032	13.1	20.8
6 20	19 53.36	-17 41.8	1.936	2.872	9.6	20.8	6 20	20 7.81	-41 31.1	2.128	3.031	10.5	20.6
6 30	19 46.77	-18 32.4	1.890	2.877	5.9	20.5	6 30	19 55.46	-41 16.8	2.075	3.030	8.0	20.5
7 10	19 38.90	-19 28.4	1.869	2.883	2.0	20.3	7 10	19 41.54	-40 43.6	2.049	3.028	6.3	20.3
7 20	19 30.57	-20 26.1	1.876	2.888	2.3	20.3	7 20	19 27.37	-39 49.1	2.051	3.025	6.7	20.4
7 30	19 22.70	-21 21.4	1.910	2.893	6.2	20.6	7 30	19 14.34	-38 34.9	2.083	3.022	8.8	20.5
8 9	19 16.19	-22 11.4	1.970	2.899	9.8	20.8	8 9	19 3.57	-37 5.9	2.141	3.019	11.4	20.7
8 19	19 11.65	-22 54.4	2.053	2.905	12.9	21.0	8 19	18 55.72	-35 28.4	2.223	3.015	14.0	20.8
<b>319324</b>	2006 <i>BV</i> <sub>174</sub>	7 14.3 220°61		4°1/12.6 18			<b>443624</b>	2014 <i>ML</i> <sub>34</sub>	7 14.3 322°93		4°0/16.3 18		
6 10	20 2.45	-35 30.7	2.750	3.599	10.1	21.2	6 10	19 55.80	- 8 51.7	2.004	2.846	13.6	20.9
6 20	19 56.34	-35 53.8	2.671	3.593	7.9	21.1	6 20	19 51.75	- 8 58.2	1.920	2.837	10.8	20.7
6 30	19 48.44	-36 11.3	2.616	3.587	5.6	20.9	6 30	19 45.85	- 9 18.5	1.858	2.828	7.6	20.4
7 10	19 39.39	-36 19.6	2.588	3.581	4.2	20.8	7 10	19 38.67	- 9 52.1	1.820	2.819	4.8	20.3
7 20	19 29.96	-36 16.4	2.589	3.574	4.7	20.8	7 20	19 30.95	-10 37.1	1.808	2.810	4.3	20.2
7 30	19 21.01	-36 0.9	2.617	3.567	6.7	21.0	7 30	19 23.60	-11 30.4	1.823	2.802	6.8	20.4
8 9	19 13.35	-35 34.1	2.672	3.560	9.1	21.1	8 9	19 17.46	-12 28.1	1.864	2.794	10.1	20.5
8 19	19 7.54	-34 58.0	2.749	3.552	11.3	21.2	8 19	19 13.19	-13 26.6	1.927	2.787	13.2	20.7
<b>481079</b>	2005 <i>SC</i> <sub>85</sub>	7 14.3 36°58		8°1/10.8 18			<b>182853</b>	2002 <i>CB</i> <sub>102</sub>	7 14.3 88°68		5°3/17.5 18		
6 10	20 5.91	-44 19.6	2.162	3.002	12.8	20.7	6 10	19 56.32	- 3 19.5	2.298	3.109	13.1	20.1
6 20	19 59.63	-45 19.1	2.103	3.004	10.7	20.6	6 20	19 51.81	- 3 26.9	2.222	3.113	10.7	20.0
6 30	19 50.74	-46 6.6	2.066	3.005	9.0	20.5	6 30	19 45.73	- 3 50.0	2.169	3.117	8.1	19.8
7 10	19 40.15	-46 35.8	2.053	3.006	8.1	20.4	7 10	19 38.60	- 4 28.6	2.140	3.121	5.9	19.7
7 20	19 29.01	-46 42.5	2.065	3.008	8.7	20.5	7 20	19 31.09	- 5 20.9	2.138	3.125	5.4	19.7
7 30	19 18.69	-46 25.7	2.102	3.009	10.4	20.6	7 30	19 23.96	- 6 24.0	2.163	3.129	6.9	19.8
8 9	19 10.34	-45 48.2	2.161	3.011	12.5	20.7	8 9	19 17.93	- 7 33.9	2.214	3.133	9.3	19.9
8 19	19 4.71	-44 54.5	2.241	3.012	14.5	20.9	8 19	19 13.52	- 8 46.4	2.289	3.137	11.8	20.1
<b>254412</b>	2004 <i>UE</i> <sub>2</sub>	7 14.3 255°71		3°9/12.2 18			<b>316072</b>	2009 <i>HW</i> <sub>99</sub>	7 14.3 58°59		2°4/13.6 17		
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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>444304</b>	2005 <i>VD</i> <sub>68</sub>		7 14.3 289°20	0°5/14.5 18			<b>442166</b>	2010 <i>VK</i> <sub>206</sub>		7 14.4 280°18	2°7/15.3 18		
6 10	19 57.88	-18 53.2	2.171	3.032	12.0	21.7	6 10	19 58.13	-13 50.8	2.282	3.129	12.0	21.1
6 20	19 53.29	-19 11.1	2.080	3.016	9.0	21.5	6 20	19 53.26	-13 31.7	2.197	3.120	9.3	20.9
6 30	19 46.79	-19 35.1	2.012	3.000	5.6	21.3	6 30	19 46.67	-13 19.6	2.134	3.112	6.2	20.7
7 10	19 38.97	-20 3.1	1.970	2.984	1.8	21.0	7 10	19 38.94	-13 14.3	2.098	3.104	3.4	20.5
7 20	19 30.57	-20 32.4	1.956	2.968	2.2	21.0	7 20	19 30.77	-13 15.2	2.089	3.095	3.2	20.5
7 30	19 22.50	-21 0.4	1.969	2.952	6.1	21.2	7 30	19 22.97	-13 20.9	2.108	3.087	6.0	20.6
8 9	19 15.63	-21 25.3	2.008	2.936	9.7	21.4	8 9	19 16.33	-13 30.3	2.153	3.078	9.2	20.8
8 19	19 10.64	-21 45.9	2.070	2.920	12.8	21.6	8 19	19 11.42	-13 41.7	2.221	3.070	12.1	21.0
<b>433434</b>	2013 <i>TO</i> <sub>104</sub>		7 14.3 238°64	0°1/14.3 18			<b>340424</b>	2006 <i>FO</i> <sub>24</sub>		7 14.4 76°63	3°5/15.8 17		
6 10	20 2.97	-20 47.2	1.903	2.765	13.4	22.1	6 10	19 59.65	-11 42.3	1.785	2.636	14.7	20.9
6 20	19 57.31	-20 59.3	1.816	2.753	10.1	21.8	6 20	19 54.65	-11 39.8	1.721	2.646	11.3	20.7
6 30	19 49.36	-21 16.1	1.752	2.741	6.2	21.6	6 30	19 47.60	-11 49.5	1.679	2.656	7.6	20.5
7 10	19 39.79	-21 34.9	1.714	2.728	1.9	21.3	7 10	19 39.23	-12 10.1	1.662	2.666	4.3	20.3
7 20	19 29.54	-21 52.7	1.702	2.714	2.5	21.3	7 20	19 30.45	-12 39.6	1.671	2.677	3.9	20.3
7 30	19 19.73	-22 7.2	1.718	2.700	6.9	21.5	7 30	19 22.29	-13 15.0	1.706	2.687	7.0	20.5
8 9	19 11.44	-22 17.1	1.760	2.686	10.9	21.8	8 9	19 15.65	-13 53.1	1.766	2.697	10.6	20.8
8 19	19 5.43	-22 22.2	1.824	2.671	14.4	22.0	8 19	19 11.15	-14 31.2	1.849	2.708	13.8	21.0
<b>352437</b>	2008 <i>AS</i> <sub>23</sub>		7 14.3 170°96	0°8/14.8 18			<b>519171</b>	2010 <i>OA</i> <sub>28</sub>		7 14.4 268°86	9°3/11.3 18		
6 10	19 58.11	-16 34.1	2.164	3.020	12.2	21.1	6 10	20 13.66	-51 27.0	2.398	3.201	12.9	21.4
6 20	19 53.35	-17 10.8	2.088	3.021	9.2	20.9	6 20	20 5.37	-52 3.7	2.330	3.194	11.3	21.3
6 30	19 46.76	-17 55.9	2.035	3.021	5.7	20.7	6 30	19 54.22	-52 23.7	2.284	3.186	9.9	21.2
7 10	19 38.95	-18 46.7	2.008	3.021	2.0	20.5	7 10	19 41.26	-52 21.0	2.261	3.179	9.3	21.1
7 20	19 30.66	-19 39.7	2.010	3.021	2.2	20.5	7 20	19 27.89	-51 51.8	2.262	3.172	9.7	21.1
7 30	19 22.78	-20 31.5	2.039	3.022	5.9	20.7	7 30	19 15.63	-50 56.4	2.289	3.165	10.9	21.2
8 9	19 16.12	-21 19.3	2.094	3.022	9.3	20.9	8 9	19 5.73	-49 39.0	2.338	3.157	12.6	21.3
8 19	19 11.32	-22 1.3	2.173	3.022	12.4	21.1	8 19	19 58.88	-48 5.7	2.408	3.150	14.4	21.4
<b>471273</b>	2011 <i>FU</i> <sub>10</sub>		7 14.3 57°98	1°8/13.7 16			<b>217132</b>	2002 <i>ED</i> <sub>132</sub>		7 14.4 9°87	5°2/16.9 18		
6 10	20 2.18	-24 5.4	1.528	2.406	15.2	21.3	6 10	19 55.70	-6 5.7	1.982	2.815	14.1	19.6
6 20	19 56.93	-24 37.6	1.473	2.419	11.3	21.1	6 20	19 51.61	-6 1.3	1.909	2.816	11.3	19.5
6 30	19 49.12	-25 12.7	1.440	2.432	6.9	20.8	6 30	19 45.73	-6 12.2	1.857	2.817	8.4	19.3
7 10	19 39.68	-25 45.8	1.431	2.444	2.5	20.6	7 10	19 38.67	-6 38.4	1.830	2.820	5.8	19.1
7 20	19 29.78	-26 12.6	1.448	2.458	3.5	20.7	7 20	19 31.17	-7 18.5	1.828	2.822	5.3	19.1
7 30	19 20.75	-26 30.3	1.490	2.471	7.9	21.0	7 30	19 24.11	-8 9.4	1.852	2.825	7.3	19.2
8 9	19 13.70	-26 38.4	1.556	2.484	11.9	21.3	8 9	19 18.30	-9 7.1	1.901	2.828	10.2	19.4
8 19	19 9.33	-26 37.7	1.643	2.498	15.4	21.5	8 19	19 14.34	-10 7.6	1.973	2.831	13.0	19.6
<b>394260</b>	2006 <i>UH</i> <sub>62</sub>		7 14.3 222°32	4°9/11.8 18			<b>20693</b>	Ramondiaz		7 14.4 20°84	0°1/14.4 18		
6 10	20 1.98	-34 18.8	2.322	3.182	11.4	21.2	6 10	19 58.11	-20 31.1	1.848	2.719	13.3	18.2
6 20	19 56.41	-35 17.4	2.249	3.177	8.9	21.1	6 20	19 53.56	-20 42.5	1.782	2.724	9.9	18.0
6 30	19 48.72	-36 12.0	2.200	3.173	6.4	20.9	6 30	19 46.97	-20 58.8	1.739	2.729	6.1	17.8
7 10	19 39.59	-36 57.5	2.177	3.168	4.9	20.8	7 10	19 39.05	-21 17.3	1.721	2.735	1.9	17.5
7 20	19 29.88	-37 29.6	2.181	3.163	5.7	20.8	7 20	19 30.71	-21 35.5	1.729	2.741	2.4	17.5
7 30	19 20.64	-37 46.1	2.212	3.158	8.0	21.0	7 30	19 22.97	-21 51.0	1.764	2.748	6.5	17.8
8 9	19 12.84	-37 47.3	2.268	3.153	10.6	21.1	8 9	19 16.73	-22 2.6	1.823	2.755	10.2	18.1
8 19	19 7.18	-37 35.2	2.345	3.148	13.0	21.3	8 19	19 12.64	-22 9.9	1.905	2.762	13.5	18.3
<b>88169</b>	2000 <i>XS</i> <sub>25</sub>		7 14.3 238°39	3°9/12.4 18			<b>150030</b>	2005 <i>VD</i> <sub>60</sub>		7 14.4 252°10	1°8/13.6 18		
6 10	20 1.91	-33 42.5	2.645	3.499	10.4	19.2	6 10	20 0.73	-26 56.4	2.432	3.292	10.9	20.5
6 20	19 56.10	-34 17.7	2.560	3.487	8.0	19.0	6 20	19 55.22	-27 8.6	2.345	3.281	8.2	20.3
6 30	19 48.42	-34 48.9	2.500	3.475	5.6	18.8	6 30	19 47.89	-27 20.1	2.284	3.271	5.1	20.1
7 10	19 39.47	-35 12.3	2.467	3.463	4.0	18.7	7 10	19 39.34	-27 28.2	2.249	3.260	2.2	19.9
7 20	19 30.03	-35 24.9	2.461	3.450	4.7	18.7	7 20	19 30.32	-27 30.6	2.242	3.249	2.9	19.9
7 30	19 21.00	-35 25.0	2.484	3.437	6.9	18.9	7 30	19 21.72	-27 25.9	2.263	3.237	6.0	20.1
8 9	19 13.21	-35 13.1	2.532	3.423	9.4	19.0	8 9	19 14.36	-27 14.3	2.310	3.226	9.2	20.3
8 19	19 7.29	-34 50.9	2.604	3.409	11.8	19.2	8 19	19 8.86	-26 56.7	2.381	3.214	11.9	20.4
<b>505372</b>	2013 <i>HV</i> <sub>40</sub>		7 14.3 331°54	2°1/13.9 17			<b>212427</b>	2006 <i>OL</i>		7 14.4 329°94	0°9/14.1 18		
6 10	19 56.34	-25 6.9	0.941	1.854	19.3	21.0	6 10	19 58.74	-22 52.2	1.120	2.020	18.0	20.1
6 20	19 54.24	-25 12.0	0.867	1.831	14.7	20.6	6 20	19 55.45	-22 58.2	1.047	2.003	13.6	19.8
6 30	19 48.40	-25 19.5	0.811	1.809	9.2	20.2	6 30	19 48.84	-23 9.2	0.992	1.988	8.4	19.5
7 10	19 39.69	-25 24.4	0.774	1.789	3.4	19.8	7 10	19 39.78	-23 21.2	0.959	1.973	2.7	19.1
7 20	19 29.65	-25 21.9	0.758	1.770	4.6	19.8	7 20	19 29.68	-23 29.9	0.947	1.960	3.7	19.1
7 30	19 20.35	-25 8.6	0.761	1.752	10.9	20.1	7 30	19 20.29	-23 32.3	0.958	1.947	9.6	19.4
8 9	19 13.75	-24 44.7	0.783	1.737	17.0	20.4	8 9	19 13.29	-23 27.3	0.990	1.936	15.1	19.6
8 19	19 11.09	-24 12.5	0.821	1.723	22.2	20.6	8 19	19 9.71	-23 15.7	1.039	1.926	19.8	19.9
<b>91057</b>	1998 <i>FR</i> <sub>50</sub>		7 14.4 190°91	5°1/16.8 18			<b>151701</b>	2003 <i>BK</i> <sub>18</sub>		7 14.4 194°45	0°2/14.4 17		
6 10	19 59.83	-5 18.4	2.265	3.079	13.2	20.8	6 10	20 2.93	-20 0.6	1.980	2.839	13.1	21.6
6 20	19 54.49	-5 12.2	2.183	3.078	10.7	20.6	6 20	19 57.11	-20 14.0	1.902	2.837	9.8	21.4
6 30	19 47.41	-5 19.8	2.123	3.076	7.9	20.4	6 30	19 49.15	-20 32.5	1.847	2.835	6.0	21.2
7 10	19 39.17	-5 41.5	2.088	3.074	5.7	20.3	7 10	19 39.74	-20 53.3	1.818	2.832	1.9	20.9
7 20	19 30.47	-6 16.1	2.080	3.071	5.2	20.3	7 20	19 29.80	-21 13.7	1.817	2.829	2.4	20.9
7 30	19 22.14	-7 1.3	2.100	3.067	7.0	20.4	7 30	19 20.38	-21 31.4	1.844	2.825	6.5	21.2
8 9	19 14.96	-7 53.7	2.147	3.063	9.7	20.5	8 9	19 12.44	-21 45.0	1.896	2.821	10.3	21.4
8 19	19 9.53	-8 49.7	2.217	3.058	12.4	20.7	8 19	19 6.68	-21 54.3	1.971	2.816	13.6	21.6
<b>161343</b>	2003 <i>SL</i> <sub>62</sub>		7 14.4 40°84	3°6/13.8 18			<b>172550</b>	2003 <i>UC</i> <sub>92</sub>		7 14.4 181°56</			

EPHEMERIDES

7 14.4

7 14.4

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>165053</b>	2000 <i>EM</i> <sub>61</sub>	7 14.4 173°89		6°6/17.6 18			<b>55964</b>	1998 <i>KB</i> <sub>2</sub>	7 14.4 300°14		20°3/15.7 18		
6 10	19 57.94	- 1 17.3	2.201	3.002	13.9	20.5	6 10	20 1.30	+10 9.8	1.103	1.898	25.2	18.3
6 20	19 53.10	- 0 57.5	2.124	3.003	11.6	20.3	6 20	19 57.23	+13 6.1	1.042	1.886	23.3	18.1
6 30	19 46.58	- 0 54.0	2.069	3.004	9.1	20.2	6 30	19 49.91	+15 33.5	0.996	1.875	21.6	17.9
7 10	19 38.93	- 1 7.9	2.037	3.005	7.2	20.1	7 10	19 40.16	+17 18.9	0.966	1.863	20.5	17.8
7 20	19 30.86	- 1 38.7	2.031	3.006	6.7	20.0	7 20	19 29.23	+18 12.4	0.952	1.852	20.4	17.7
7 30	19 23.19	- 2 24.2	2.052	3.006	8.0	20.1	7 30	19 18.83	+18 10.3	0.954	1.842	21.4	17.8
8 9	19 16.68	- 3 20.8	2.098	3.006	10.3	20.3	8 9	19 10.59	+17 17.8	0.971	1.831	23.2	17.8
8 19	19 11.89	- 4 24.0	2.166	3.006	12.7	20.4	8 19	19 5.66	+15 45.5	1.001	1.821	25.4	18.0
<b>26164</b>	1995 <i>FK</i> <sub>4</sub>	7 14.4 243°19		3°3/15.9 18			<b>478373</b>	2011 <i>YX</i> <sub>56</sub>	7 14.4 158°23		0°6/14.1 18		
6 10	19 58.73	-10 14.9	2.319	3.153	12.3	18.5	6 10	19 58.90	-23 19.1	3.082	3.933	9.1	22.4
6 20	19 53.76	-10 20.8	2.225	3.139	9.6	18.3	6 20	19 53.41	-23 30.2	3.007	3.939	6.7	22.3
6 30	19 47.04	-10 37.7	2.155	3.125	6.7	18.0	6 30	19 46.58	-23 42.3	2.958	3.945	4.1	22.1
7 10	19 39.10	-11 5.0	2.110	3.111	4.0	17.9	7 10	19 38.92	-23 53.7	2.938	3.951	1.3	21.9
7 20	19 30.61	-11 41.1	2.092	3.096	3.6	17.8	7 20	19 30.99	-24 2.8	2.946	3.956	1.8	22.0
7 30	19 22.41	-12 23.4	2.103	3.080	6.2	17.9	7 30	19 23.43	-24 8.4	2.984	3.961	4.6	22.2
8 9	19 15.27	-13 9.2	2.140	3.065	9.3	18.1	8 9	19 16.83	-24 10.2	3.050	3.966	7.2	22.3
8 19	19 9.85	-13 55.8	2.202	3.048	12.3	18.3	8 19	19 11.63	-24 8.1	3.140	3.970	9.4	22.5
<b>144766</b>	2004 <i>HS</i> <sub>17</sub>	7 14.4 18°15		5°9/12.2 18			<b>132390</b>	2002 <i>GN</i> <sub>91</sub>	7 14.4 20°46		2°3/15.3 17		
6 10	20 2.51	-35 34.3	1.829	2.698	13.6	19.1	6 10	19 57.82	-13 44.0	1.108	1.996	19.1	19.2
6 20	19 57.17	-36 21.7	1.768	2.701	10.6	19.0	6 20	19 54.38	-14 19.5	1.053	2.000	14.5	18.9
6 30	19 49.32	-37 2.3	1.729	2.704	7.7	18.8	6 30	19 47.95	-15 13.6	1.017	2.006	9.3	18.7
7 10	19 39.80	-37 30.3	1.715	2.707	5.9	18.7	7 10	19 39.46	-16 22.2	1.001	2.013	3.9	18.4
7 20	19 29.77	-37 41.2	1.726	2.711	6.7	18.8	7 20	19 30.27	-17 38.8	1.009	2.021	3.6	18.4
7 30	19 20.52	-37 33.7	1.763	2.715	9.2	18.9	7 30	19 21.96	-18 55.6	1.040	2.030	8.9	18.7
8 9	19 13.17	-37 9.4	1.822	2.719	12.2	19.1	8 9	19 15.90	-20 6.3	1.092	2.039	13.9	19.0
8 19	19 8.45	-36 31.9	1.903	2.724	14.9	19.3	8 19	19 12.95	-21 6.9	1.163	2.050	18.2	19.3
<b>431001</b>	2005 <i>YD</i> <sub>21</sub>	7 14.4 87°22		0°3/14.3 16			<b>126065</b>	2001 <i>YL</i> <sub>81</sub>	7 14.4 253°54		0°5/14.1 18		
6 10	20 3.24	-21 24.7	1.769	2.636	14.1	22.0	6 10	20 1.57	-21 1.2	1.861	2.727	13.5	20.1
6 20	19 57.31	-21 39.7	1.715	2.654	10.4	21.9	6 20	19 56.39	-21 31.7	1.775	2.714	10.1	19.9
6 30	19 49.19	-21 58.6	1.683	2.672	6.3	21.7	6 30	19 48.90	-22 8.2	1.712	2.701	6.2	19.6
7 10	19 39.72	-22 18.2	1.676	2.691	1.9	21.4	7 10	19 39.74	-22 47.2	1.674	2.688	1.9	19.3
7 20	19 29.93	-22 35.6	1.697	2.709	2.6	21.5	7 20	19 29.86	-23 24.7	1.663	2.674	2.7	19.3
7 30	19 20.92	-22 48.7	1.744	2.726	6.8	21.8	7 30	19 20.39	-23 57.4	1.679	2.660	7.1	19.6
8 9	19 13.65	-22 56.6	1.817	2.744	10.5	22.1	8 9	19 12.42	-24 23.2	1.720	2.646	11.1	19.8
8 19	19 8.75	-22 59.5	1.911	2.761	13.7	22.3	8 19	19 6.75	-24 41.6	1.784	2.632	14.6	20.0
<b>137544</b>	1999 <i>VG</i> <sub>72</sub>	7 14.4 278°01		1°4/14.7 18			<b>431884</b>	2008 <i>SL</i> <sub>232</sub>	7 14.4 352°96		2°4/13.9 16		
6 10	20 2.60	-18 5.5	1.590	2.457	15.3	20.0	6 10	20 0.23	-26 36.6	1.279	2.172	16.7	20.4
6 20	19 57.56	-18 2.7	1.496	2.435	11.7	19.7	6 20	19 56.11	-26 40.7	1.214	2.166	12.5	20.1
6 30	19 49.81	-18 7.3	1.424	2.412	7.4	19.4	6 30	19 48.97	-26 44.4	1.168	2.162	7.8	19.9
7 10	19 40.05	-18 17.4	1.376	2.389	2.8	19.1	7 10	19 39.78	-26 43.1	1.145	2.158	3.2	19.6
7 20	19 29.33	-18 30.7	1.354	2.365	3.1	19.0	7 20	19 29.90	-26 33.7	1.146	2.156	4.1	19.6
7 30	19 18.98	-18 44.7	1.357	2.342	8.0	19.3	7 30	19 20.90	-26 14.6	1.170	2.154	9.0	19.9
8 9	19 10.31	-18 57.4	1.385	2.318	12.7	19.5	8 9	19 14.18	-25 46.9	1.216	2.154	13.7	20.2
8 19	19 4.30	-19 7.9	1.433	2.294	16.9	19.7	8 19	19 10.55	-25 13.1	1.281	2.154	17.7	20.4
<b>446492</b>	2014 <i>KX</i> <sub>51</sub>	7 14.4 54°45		6°2/18.2 15			<b>50033</b>	Perelman	7 14.4 49°29		0°5/14.6 18		
6 10	19 56.53	- 1 29.7	2.064	2.873	14.5	21.3	6 10	19 59.14	-17 19.8	1.766	2.633	14.1	19.0
6 20	19 52.07	- 1 35.6	2.002	2.888	11.9	21.1	6 20	19 54.46	-18 2.5	1.700	2.638	10.6	18.8
6 30	19 45.93	- 1 59.9	1.960	2.902	9.2	21.0	6 30	19 47.61	-18 54.8	1.655	2.644	6.5	18.6
7 10	19 38.73	- 2 42.3	1.942	2.917	6.9	20.9	7 10	19 39.31	-19 52.9	1.636	2.650	2.1	18.3
7 20	19 31.19	- 3 40.9	1.950	2.932	6.2	20.9	7 20	19 30.49	-20 52.2	1.644	2.656	2.5	18.4
7 30	19 24.15	- 4 52.0	1.984	2.947	7.6	21.0	7 30	19 22.22	-21 48.5	1.678	2.662	6.8	18.7
8 9	19 18.34	- 6 10.6	2.044	2.963	10.0	21.2	8 9	19 15.50	-22 38.4	1.738	2.669	10.7	18.9
8 19	19 14.30	- 7 31.9	2.127	2.978	12.5	21.4	8 19	19 11.01	-23 20.2	1.819	2.675	14.1	19.1
<b>327117</b>	2005 <i>EH</i> <sub>63</sub>	7 14.4 194°95		0°6/14.7 18			<b>152509</b>	2005 <i>XE</i> <sub>39</sub>	7 14.4 48°87		0°6/14.2 18		
6 10	19 56.57	-18 32.4	2.733	3.585	10.1	21.6	6 10	20 2.03	-22 6.3	1.581	2.456	15.0	20.4
6 20	19 51.86	-18 43.5	2.653	3.585	7.5	21.4	6 20	19 56.84	-22 21.1	1.515	2.459	11.2	20.2
6 30	19 45.73	-18 59.0	2.598	3.584	4.7	21.2	6 30	19 49.15	-22 40.2	1.471	2.462	6.8	19.9
7 10	19 38.66	-19 17.3	2.571	3.584	1.6	21.0	7 10	19 39.79	-23 0.0	1.451	2.466	2.1	19.6
7 20	19 31.27	-19 36.7	2.571	3.583	1.8	21.0	7 20	19 29.89	-23 17.1	1.457	2.469	2.9	19.7
7 30	19 24.21	-19 55.6	2.600	3.582	4.9	21.3	7 30	19 20.71	-23 28.9	1.489	2.473	7.5	20.0
8 9	19 18.13	-20 12.7	2.657	3.581	7.7	21.4	8 9	19 13.40	-23 34.7	1.545	2.476	11.8	20.2
8 19	19 13.52	-20 27.1	2.737	3.580	10.3	21.6	8 19	19 8.69	-23 34.5	1.622	2.480	15.4	20.5
<b>13297</b>	1998 <i>RX</i>	7 14.4 264°64		4°3/12.5 18			<b>203040</b>	2000 <i>DH</i> <sub>11</sub>	7 14.4 200°82		1°6/13.8 18		
6 10	20 1.54	-34 24.3	2.406	3.264	11.1	17.8	6 10	20 2.04	-25 19.1	2.134	2.997	12.1	20.7
6 20	19 55.94	-34 56.7	2.330	3.259	8.6	17.6	6 20	19 56.36	-25 36.6	2.057	2.995	9.1	20.5
6 30	19 48.38	-35 24.3	2.279	3.254	6.1	17.4	6 30	19 48.66	-25 54.9	2.005	2.993	5.6	20.2
7 10	19 39.50	-35 42.7	2.254	3.249	4.4	17.3	7 10	19 39.62	-26 10.8	1.978	2.990	2.2	20.0
7 20	19 30.18	-35 49.1	2.256	3.244	5.1	17.3	7 20	19 30.10	-26 21.4	1.979	2.988	2.9	20.1
7 30	19 21.38	-35 42.0	2.285	3.238	7.3	17.5	7 30	19 21.11	-26 25.1	2.008	2.985	6.5	20.3
8 9	19 13.98	-35 22.4	2.339	3.233	10.0	17.6	8 9	19 13.55	-26 21.6	2.062	2.981	9.9	20.5
8 19	19 8.61	-34 52.5	2.416	3.228	12.4	17.8	8 19	19 8.07	-26 11.9	2.140	2.978	12.9	20.7
<b>106110</b>	2000 <i>TW</i> <sub>21</sub>	7 14.4 173°60		0°9/14.0 17			<b>373391</b>	2013 <i>OA</i> <sub>7</sub>	7 14.4 1°93		5°8/16.0 18		
6 10	20 5.44												

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>398937</b>	2013 <i>CP</i> <sub>193</sub>		7 14.4 133°57'	6°3'/18.1	18		<b>228614</b>	2002 <i>CV</i> <sub>30</sub>		7 14.4 210°51'	1°9'/13.6	18	
6 10	19 56.43	- 0 32.4	2.310	3.107	13.5	21.2	6 10	20 3.36	-25 30.5	2.179	3.039	12.0	21.2
6 20	19 51.94	- 0 27.3	2.233	3.109	11.2	21.0	6 20	19 57.42	-26 2.9	2.097	3.033	9.0	21.0
6 30	19 45.87	- 0 38.9	2.177	3.111	8.9	20.9	6 30	19 49.38	-26 36.8	2.038	3.026	5.6	20.8
7 10	19 38.75	- 1 7.9	2.145	3.112	6.9	20.7	7 10	19 39.89	-27 8.3	2.007	3.018	2.4	20.6
7 20	19 31.24	- 1 53.3	2.139	3.114	6.4	20.7	7 20	19 29.84	-27 33.9	2.003	3.010	3.2	20.6
7 30	19 24.10	- 2 52.5	2.159	3.115	7.6	20.8	7 30	19 20.22	-27 51.1	2.028	3.002	6.7	20.8
8 9	19 18.03	- 4 1.5	2.206	3.116	9.7	20.9	8 9	19 12.01	-27 59.3	2.078	2.992	10.1	21.0
8 19	19 13.57	- 5 15.7	2.276	3.118	12.1	21.1	8 19	19 5.90	-27 59.3	2.152	2.982	13.1	21.2
<b>396451</b>	2014 <i>FB</i> <sub>10</sub>		7 14.4 218°15'	1°1'/13.9	18		<b>477669</b>	2010 <i>OA</i> <sub>63</sub>		7 14.4 108°48'	3°7'/12.7	17	
6 10	20 0.71	-23 34.0	2.042	2.908	12.5	21.4	6 10	20 3.51	-30 17.9	2.076	2.940	12.4	21.3
6 20	19 55.45	-23 54.6	1.967	2.907	9.3	21.2	6 20	19 57.51	-31 7.6	2.019	2.954	9.4	21.1
6 30	19 48.14	-24 17.6	1.915	2.905	5.7	21.0	6 30	19 49.37	-31 54.9	1.985	2.968	6.2	20.9
7 10	19 39.48	-24 39.8	1.889	2.903	1.9	20.7	7 10	19 39.86	-32 34.8	1.978	2.981	3.9	20.8
7 20	19 30.32	-24 58.4	1.891	2.901	2.7	20.8	7 20	19 29.94	-33 3.2	1.998	2.995	4.7	20.9
7 30	19 21.67	-25 11.2	1.920	2.899	6.5	21.0	7 30	19 20.70	-33 18.3	2.046	3.008	7.5	21.1
8 9	19 14.47	-25 17.3	1.974	2.897	10.1	21.2	8 9	19 13.08	-33 20.3	2.118	3.021	10.5	21.3
8 19	19 9.36	-25 17.2	2.051	2.895	13.2	21.4	8 19	19 7.71	-33 11.2	2.213	3.033	13.1	21.5
<b>182033</b>	2000 <i>CJ</i> <sub>15</sub>		7 14.4 118°28'	0°9'/13.9	17		<b>108945</b>	2001 <i>PH</i> <sub>27</sub>		7 14.4 340°50'	2°2'/14.9	17	
6 10	20 3.59	-21 34.3	1.696	2.564	14.5	20.3	6 10	19 54.99	-16 54.4	1.112	2.010	18.3	19.3
6 20	19 57.83	-22 13.8	1.635	2.575	10.8	20.1	6 20	19 52.52	-16 49.4	1.040	1.994	14.0	19.0
6 30	19 49.68	-22 58.6	1.596	2.586	6.5	19.9	6 30	19 47.01	-16 56.3	0.987	1.980	9.0	18.7
7 10	19 39.95	-23 44.2	1.583	2.597	2.1	19.6	7 10	19 39.28	-17 13.8	0.954	1.966	3.7	18.3
7 20	19 29.73	-24 26.0	1.596	2.607	2.9	19.7	7 20	19 30.58	-17 38.8	0.942	1.955	3.7	18.3
7 30	19 20.22	-25 0.6	1.636	2.617	7.3	20.0	7 30	19 22.54	-18 7.3	0.953	1.944	9.2	18.6
8 9	19 12.50	-25 26.2	1.701	2.626	11.3	20.2	8 9	19 16.65	-18 35.6	0.984	1.936	14.5	18.8
8 19	19 7.29	-25 43.1	1.788	2.635	14.6	20.5	8 19	19 13.94	-19 0.8	1.033	1.929	19.2	19.1
<b>473984</b>	2016 <i>ER</i> <sub>198</sub>		7 14.4 357°23'	2°7'/15.2	17		<b>162500</b>	2000 <i>QE</i> <sub>38</sub>		7 14.4 13°76'	3°3'/13.8	17	
6 10	19 56.90	-15 13.3	1.041	1.936	19.4	20.5	6 10	20 1.77	-27 39.5	0.997	1.902	19.2	18.8
6 20	19 53.94	-15 15.8	0.980	1.932	14.8	20.2	6 20	19 57.79	-27 49.9	0.946	1.905	14.5	18.5
6 30	19 47.82	-15 33.8	0.938	1.930	9.6	19.9	6 30	19 50.19	-27 58.6	0.914	1.909	9.1	18.2
7 10	19 39.48	-16 5.3	0.916	1.928	4.2	19.6	7 10	19 40.20	-28 0.0	0.901	1.914	4.1	18.0
7 20	19 30.30	-16 46.1	0.915	1.927	4.0	19.6	7 20	19 29.54	-27 49.4	0.911	1.920	5.1	18.0
7 30	19 21.97	-17 31.0	0.937	1.928	9.4	19.9	7 30	19 20.18	-27 25.8	0.942	1.928	10.3	18.4
8 9	19 15.98	-18 14.7	0.979	1.930	14.7	20.2	8 9	19 13.67	-26 51.6	0.993	1.936	15.4	18.7
8 19	19 13.28	-18 53.8	1.038	1.933	19.2	20.5	8 19	19 10.83	-26 10.2	1.061	1.946	19.7	19.0
<b>151501</b>	2002 <i>JW</i> <sub>119</sub>		7 14.4 62°75'	9°1'/20.6	18		<b>468785</b>	2012 <i>BZ</i> <sub>53</sub>		7 14.4 181°76'	2°0'/15.2	17	
6 10	19 55.79	+ 8 22.9	2.331	3.077	14.8	19.7	6 10	20 2.09	-14 29.0	1.557	2.419	15.9	21.6
6 20	19 51.44	+ 8 42.3	2.261	3.084	13.0	19.6	6 20	19 56.95	-14 52.8	1.485	2.419	12.1	21.4
6 30	19 45.55	+ 8 40.4	2.209	3.090	11.2	19.5	6 30	19 49.30	-15 29.6	1.435	2.420	7.8	21.2
7 10	19 38.65	+ 8 15.4	2.179	3.096	9.7	19.4	7 10	19 39.91	-16 16.4	1.409	2.420	3.3	20.9
7 20	19 31.41	+ 7 27.4	2.173	3.102	9.1	19.4	7 20	19 29.84	-17 9.3	1.408	2.419	3.2	20.9
7 30	19 24.56	+ 6 18.9	2.192	3.109	9.6	19.4	7 30	19 20.36	-18 3.5	1.434	2.419	7.6	21.1
8 9	19 18.78	+ 4 54.3	2.235	3.115	11.0	19.5	8 9	19 12.66	-18 55.0	1.484	2.418	11.9	21.4
8 19	19 14.60	+ 3 19.4	2.301	3.121	12.7	19.6	8 19	19 7.52	-19 41.2	1.556	2.417	15.7	21.6
<b>447076</b>	2004 <i>SB</i> <sub>39</sub>		7 14.4 244°05'	4°1'/12.0	18		<b>152061</b>	2004 <i>PM</i> <sub>77</sub>		7 14.4 310°38'	0°6'/14.2	18	
6 10	20 1.66	-35 22.4	3.022	3.869	9.4	21.6	6 10	20 0.81	-23 53.9	2.090	2.955	12.3	19.7
6 20	19 55.81	-36 1.8	2.931	3.852	7.3	21.4	6 20	19 55.48	-23 44.3	2.008	2.947	9.2	19.5
6 30	19 48.26	-36 37.0	2.865	3.834	5.3	21.2	6 30	19 48.15	-23 35.1	1.950	2.939	5.6	19.2
7 10	19 39.51	-37 4.3	2.827	3.816	4.1	21.1	7 10	19 39.51	-23 24.3	1.917	2.931	1.8	19.0
7 20	19 30.28	-37 20.9	2.816	3.797	4.7	21.1	7 20	19 30.40	-23 10.6	1.913	2.924	2.4	19.0
7 30	19 21.35	-37 25.1	2.834	3.778	6.6	21.2	7 30	19 21.80	-22 53.2	1.935	2.917	6.3	19.2
8 9	19 13.50	-37 17.3	2.879	3.758	8.8	21.4	8 9	19 14.62	-22 32.2	1.984	2.910	9.9	19.4
8 19	19 7.32	-36 58.9	2.946	3.738	10.9	21.5	8 19	19 9.49	-22 8.6	2.055	2.903	13.0	19.6
<b>459574</b>	2013 <i>GD</i> <sub>109</sub>		7 14.4 71°64'	1°7'/14.8	17		<b>121345</b>	1999 <i>TA</i> <sub>32</sub>		7 14.4 339°46'	5°7'/16.3	18	
6 10	20 5.15	-18 24.2	1.249	2.128	18.0	20.7	6 10	19 58.11	- 8 14.5	1.600	2.450	16.1	19.3
6 20	19 59.45	-18 7.3	1.196	2.140	13.5	20.4	6 20	19 53.87	- 7 44.1	1.526	2.445	12.9	19.1
6 30	19 50.82	-17 58.2	1.163	2.152	8.5	20.2	6 30	19 47.36	- 7 28.6	1.473	2.440	9.4	18.9
7 10	19 40.32	-17 54.9	1.152	2.164	3.2	19.9	7 10	19 39.30	- 7 29.1	1.442	2.436	6.5	18.7
7 20	19 29.35	-17 55.2	1.165	2.177	3.4	20.0	7 20	19 30.65	- 7 45.2	1.435	2.432	6.0	18.7
7 30	19 19.45	-17 57.2	1.203	2.189	8.5	20.3	7 30	19 22.52	- 8 14.7	1.454	2.429	8.6	18.8
8 9	19 11.89	-17 59.4	1.264	2.202	13.2	20.6	8 9	19 15.97	- 8 53.8	1.495	2.426	12.1	19.0
8 19	19 7.42	-18 1.1	1.344	2.214	17.2	20.9	8 19	19 11.73	- 9 38.3	1.558	2.424	15.5	19.2
<b>420402</b>	2012 <i>CB</i> <sub>50</sub>		7 14.4 137°94'	1°1'/13.9	17		<b>37925</b>	1998 <i>FL</i> <sub>114</sub>		7 14.4 65°13'	6°7'/16.5	18	
6 10	20 5.26	-22 58.3	1.686	2.553	14.6	21.9	6 10	20 0.76	- 6 9.5	1.652	2.488	16.4	18.2
6 20	19 59.10	-23 24.4	1.623	2.563	10.9	21.7	6 20	19 55.54	- 5 21.7	1.595	2.501	13.2	18.1
6 30	19 50.47	-23 53.9	1.582	2.571	6.6	21.4	6 30	19 48.20	- 4 49.8	1.558	2.515	9.9	17.9
7 10	19 40.22	-24 22.7	1.566	2.580	2.2	21.2	7 10	19 39.51	- 4 35.3	1.544	2.529	7.3	17.8
7 20	19 29.46	-24 46.7	1.577	2.587	3.0	21.3	7 20	19 30.45	- 4 38.2	1.555	2.543	6.9	17.8
7 30	19 19.46	-25 3.5	1.615	2.595	7.4	21.5	7 30	19 22.09	- 4 56.8	1.591	2.557	8.9	17.9
8 9	19 11.34	-25 12.2	1.677	2.602	11.4	21.8	8 9	19 15.37	- 5 27.3	1.651	2.571	11.9	18.2
8 19	19 5.80	-25 13.6	1.761	2.608	14.9	22.0	8 19	19 10.91	- 6 5.4	1.732	2.585	14.8	18.4
<b>333952</b>	2000 <i>AP</i> <sub>215</sub>		7 14.4 155°41'	0°1'/14.4	18		<b>137550</b>						

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>137906</b>	2000 <i>AL</i> <sub>227</sub>		7 14.4 263°42'		2°0'/13.8 18		<b>131966</b>	2004 <i>RJ</i> <sub>346</sub>		7 14.4 330°11'		5°0'/12.3 18	
6 10	20 4.60	-25 58.9	1.623	2.496	14.8	19.9	6 10	20 1.04	-34 3.9	2.047	2.913	12.4	20.0
6 20	19 58.96	-26 10.2	1.543	2.486	11.1	19.6	6 20	19 55.96	-34 48.2	1.974	2.907	9.6	19.8
6 30	19 50.60	-26 21.9	1.485	2.475	6.9	19.3	6 30	19 48.61	-35 27.9	1.925	2.902	6.8	19.6
7 10	19 40.34	-26 29.8	1.452	2.464	2.8	19.1	7 10	19 39.72	-35 57.8	1.901	2.896	5.1	19.5
7 20	19 29.32	-26 30.4	1.444	2.453	3.6	19.1	7 20	19 30.27	-36 13.9	1.903	2.891	5.8	19.6
7 30	19 18.95	-26 21.8	1.462	2.442	8.1	19.3	7 30	19 21.39	-36 14.2	1.931	2.886	8.4	19.7
8 9	19 10.48	-26 4.5	1.505	2.431	12.4	19.6	8 9	19 14.12	-35 59.5	1.983	2.882	11.3	19.9
8 19	19 4.78	-25 40.4	1.568	2.419	16.2	19.8	8 19	19 9.18	-35 32.3	2.057	2.877	14.0	20.1
<b>443611</b>	2014 <i>LZ</i> <sub>14</sub>		7 14.4 332°26'		7°2'/18.8 18		<b>19940</b>	1981 <i>EK</i> <sub>20</sub>		7 14.4 15°71'		8°7'/12.5 18	
6 10	19 55.52	+ 1 17.1	2.094	2.890	14.7	20.8	6 10	20 5.08	-39 28.0	1.318	2.197	17.2	17.9
6 20	19 51.50	+ 1 12.3	2.011	2.884	12.4	20.7	6 20	19 59.97	-40 15.3	1.268	2.201	13.8	17.7
6 30	19 45.74	+ 0 47.1	1.948	2.879	9.9	20.5	6 30	19 51.41	-40 49.4	1.237	2.206	10.6	17.6
7 10	19 38.78	+ 0 0.5	1.909	2.873	7.9	20.4	7 10	19 40.61	-41 1.9	1.228	2.213	8.8	17.5
7 20	19 31.33	- 1 6.1	1.894	2.868	7.2	20.3	7 20	19 29.24	-40 47.7	1.241	2.220	9.5	17.5
7 30	19 24.23	- 2 29.4	1.906	2.863	8.3	20.4	7 30	19 19.18	-40 6.7	1.277	2.228	12.1	17.7
8 9	19 18.26	- 4 3.8	1.943	2.858	10.6	20.5	8 9	19 11.90	-39 3.9	1.334	2.237	15.3	17.9
8 19	19 14.04	- 5 43.6	2.003	2.854	13.2	20.7	8 19	19 8.16	-37 46.6	1.410	2.247	18.4	18.2
<b>434661</b>	2005 <i>YW</i> <sub>115</sub>		7 14.4 81°64'		1°6'/13.8 16		<b>323218</b>	2003 <i>SL</i> <sub>54</sub>		7 14.4 310°31'		2°8'/14.9 18	R
6 10	20 2.79	-23 53.9	1.715	2.586	14.2	21.8	6 10	20 0.53	-17 7.0	1.239	2.123	17.7	19.9
6 20	19 57.19	-24 25.6	1.658	2.601	10.5	21.6	6 20	19 56.59	-16 38.4	1.155	2.101	13.7	19.6
6 30	19 49.26	-24 59.8	1.624	2.615	6.4	21.4	6 30	19 49.53	-16 17.6	1.091	2.080	8.9	19.3
7 10	19 39.86	-25 32.4	1.616	2.629	2.3	21.2	7 10	19 40.14	-16 4.4	1.047	2.059	4.0	18.9
7 20	19 30.03	-25 59.3	1.633	2.643	3.2	21.3	7 20	19 29.64	-15 57.7	1.027	2.038	4.1	18.9
7 30	19 20.98	-26 17.9	1.677	2.657	7.3	21.6	7 30	19 19.65	-15 56.1	1.031	2.018	9.3	19.1
8 9	19 13.73	-26 27.7	1.746	2.670	11.1	21.8	8 9	19 11.72	-15 58.1	1.055	1.999	14.6	19.3
8 19	19 8.93	-26 29.5	1.836	2.684	14.3	22.1	8 19	19 6.95	-16 2.0	1.098	1.980	19.4	19.6
<b>442134</b>	2010 <i>UW</i> <sub>42</sub>		7 14.4 331°89'		2°9'/15.5 18		<b>91148</b>	1998 <i>OY</i> <sub>2</sub>		7 14.4 271°24'		0°3'/14.5 18	
6 10	19 56.44	-13 21.4	1.856	2.715	13.8	21.1	6 10	20 1.13	-21 41.0	2.359	3.215	11.4	19.4
6 20	19 52.44	-13 16.8	1.773	2.704	10.7	20.9	6 20	19 55.53	-21 22.5	2.270	3.204	8.5	19.2
6 30	19 46.42	-13 22.6	1.713	2.694	7.1	20.6	6 30	19 48.15	-21 5.2	2.205	3.192	5.3	19.0
7 10	19 39.02	-13 37.9	1.677	2.684	3.8	20.4	7 10	19 39.56	-20 48.0	2.167	3.181	1.7	18.7
7 20	19 31.05	-14 1.2	1.667	2.675	3.5	20.4	7 20	19 30.53	-20 29.8	2.157	3.169	2.1	18.7
7 30	19 23.49	-14 29.9	1.682	2.666	6.8	20.6	7 30	19 21.93	-20 10.3	2.176	3.157	5.7	18.9
8 9	19 17.28	-15 1.4	1.723	2.657	10.5	20.8	8 9	19 14.56	-19 49.5	2.221	3.146	9.0	19.1
8 19	19 13.11	-15 33.2	1.785	2.650	13.9	21.0	8 19	19 9.00	-19 27.8	2.290	3.134	12.0	19.3
<b>339319</b>	2004 <i>XL</i> <sub>112</sub>		7 14.4 316°86'		4°4'/14.9 18		<b>62401</b>	2000 <i>SD</i> <sub>171</sub>		7 14.4 74°61'		1°5'/14.8 18	
6 10	20 0.75	-14 50.4	1.461	2.331	16.3	20.3	6 10	20 3.60	-18 0.8	1.361	2.236	17.0	18.7
6 20	19 56.25	-13 49.6	1.373	2.309	12.8	20.1	6 20	19 58.25	-17 57.0	1.302	2.244	12.8	18.5
6 30	19 49.05	-12 54.7	1.305	2.287	8.8	19.8	6 30	19 50.13	-18 1.7	1.263	2.252	8.0	18.2
7 10	19 39.90	-12 7.2	1.261	2.266	5.1	19.5	7 10	19 40.21	-18 12.3	1.247	2.260	3.0	18.0
7 20	19 29.88	-11 28.7	1.241	2.246	5.1	19.5	7 20	19 29.75	-18 26.0	1.256	2.268	3.2	18.0
7 30	19 20.33	-11 0.1	1.246	2.226	9.0	19.6	7 30	19 20.17	-18 40.3	1.290	2.276	8.1	18.3
8 9	19 12.55	-10 41.0	1.273	2.207	13.5	19.8	8 9	19 12.70	-18 53.1	1.347	2.284	12.7	18.6
8 19	19 7.47	-10 30.4	1.320	2.189	17.6	20.0	8 19	19 8.10	-19 3.4	1.424	2.292	16.6	18.9
<b>452397</b>	2002 <i>PD</i> <sub>130</sub>		7 14.4 313°70'		6°4'/13.9 16	C	<b>368917</b>	2006 <i>UX</i> <sub>77</sub>		7 14.4 273°10'		0°2'/14.5 18	
6 10	20 1.18	-17 57.9	0.827	1.735	21.8	22.2	6 10	20 3.06	-20 31.2	1.604	2.475	15.1	21.1
6 20	19 58.85	-16 16.7	0.731	1.690	17.5	21.8	6 20	19 57.92	-20 38.5	1.515	2.456	11.4	20.9
6 30	19 52.09	-14 26.9	0.651	1.644	12.1	21.3	6 30	19 50.09	-20 51.7	1.447	2.437	7.1	20.6
7 10	19 41.28	-12 29.9	0.589	1.598	7.1	20.8	7 10	19 40.28	-21 7.7	1.404	2.418	2.3	20.2
7 20	19 27.66	-10 30.7	0.545	1.553	8.2	20.6	7 20	19 29.56	-21 23.5	1.386	2.399	2.8	20.2
7 30	19 13.56	- 8 37.7	0.520	1.508	15.0	20.7	7 30	19 19.28	-21 36.3	1.395	2.379	7.8	20.5
8 9	19 1.75	- 6 59.6	0.511	1.465	22.8	20.9	8 9	19 10.74	-21 44.6	1.427	2.359	12.5	20.7
8 19	18 54.42	- 5 42.0	0.514	1.424	30.0	21.0	8 19	19 4.87	-21 48.2	1.480	2.339	16.5	20.9
<b>398988</b>	2013 <i>EF</i> <sub>99</sub>		7 14.4 307°50'		5°0'/16.6 18		<b>321458</b>	2009 <i>RL</i> <sub>22</sub>		7 14.4 47°58'		2°0'/13.8 18	
6 10	19 56.16	- 6 56.0	2.038	2.872	13.8	20.8	6 10	20 1.65	-28 5.8	2.280	3.142	11.5	20.0
6 20	19 52.11	- 6 48.2	1.947	2.855	11.1	20.6	6 20	19 55.94	-28 6.8	2.208	3.145	8.6	19.8
6 30	19 46.20	- 6 54.7	1.877	2.839	8.2	20.4	6 30	19 48.36	-28 5.6	2.161	3.147	5.4	19.6
7 10	19 38.97	- 7 15.8	1.832	2.823	5.6	20.2	7 10	19 39.62	-27 59.6	2.139	3.150	2.4	19.4
7 20	19 31.16	- 7 50.6	1.812	2.808	5.2	20.2	7 20	19 30.53	-27 47.2	2.146	3.153	3.0	19.5
7 30	19 23.65	- 8 36.6	1.818	2.792	7.3	20.3	7 30	19 22.03	-27 27.6	2.180	3.155	6.2	19.7
8 9	19 17.31	- 9 30.2	1.850	2.777	10.4	20.4	8 9	19 14.93	-27 1.6	2.241	3.158	9.3	19.9
8 19	19 12.80	-10 27.6	1.904	2.762	13.5	20.6	8 19	19 9.81	-26 30.8	2.325	3.161	12.1	20.1
<b>35972</b>	1999 <i>LL</i> <sub>26</sub>		7 14.4 26°94'		0°9'/14.7 18		<b>445467</b>	2010 <i>VK</i> <sub>77</sub>		7 14.4 284°19'		5°7'/17.2 18	
6 10	20 1.63	-18 57.0	1.218	2.104	17.8	17.6	6 10	19 56.33	- 3 36.7	2.301	3.113	13.1	21.1
6 20	19 57.08	-19 0.1	1.160	2.108	13.4	17.3	6 20	19 52.04	- 3 23.8	2.208	3.098	10.7	21.0
6 30	19 49.56	-19 11.9	1.121	2.113	8.3	17.0	6 30	19 46.08	- 3 25.4	2.137	3.083	8.3	20.8
7 10	19 40.04	-19 29.5	1.104	2.118	2.8	16.7	7 10	19 38.96	- 3 42.3	2.090	3.068	6.3	20.6
7 20	19 29.88	-19 49.1	1.111	2.124	3.2	16.8	7 20	19 31.33	- 4 14.1	2.070	3.053	5.8	20.6
7 30	19 20.65	-20 7.4	1.142	2.130	8.6	17.1	7 30	19 23.97	- 4 58.8	2.076	3.039	7.3	20.6
8 9	19 13.68	-20 22.4	1.194	2.136	13.5	17.4	8 9	19 17.64	- 5 53.1	2.107	3.024	9.9	20.8
8 19	19 9.79	-20 33.0	1.266	2.143	17.6	17.7	8 19	19 12.93	- 6 53.2	2.162	3.009	12.5	20.9
<b>107099</b>	2001												



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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>462576</b>	2009 <i>DM</i> <sub>139</sub>	7 14.4 358°37		9°7/11.9 17			<b>41695</b>	2000 <i>UN</i> <sub>43</sub>	7 14.4 199°39		0°9/14.8 17		
6 10	20 1.18	-37 17.0	1.009	1.911	19.4	19.8	6 10	20 1.66	-18 4.0	2.147	3.000	12.4	20.7
6 20	19 57.97	-38 27.5	0.958	1.906	15.5	19.6	6 20	19 56.09	-18 14.9	2.066	2.997	9.4	20.5
6 30	19 50.67	-39 27.2	0.924	1.903	11.9	19.3	6 30	19 48.59	-18 31.8	2.008	2.994	5.8	20.3
7 10	19 40.53	-40 4.6	0.910	1.902	9.8	19.2	7 10	19 39.77	-18 52.6	1.977	2.990	2.1	20.0
7 20	19 29.42	-40 11.2	0.916	1.902	10.8	19.3	7 20	19 30.46	-19 14.9	1.974	2.986	2.3	20.0
7 30	19 19.64	-39 44.9	0.942	1.903	14.1	19.5	7 30	19 21.58	-19 36.7	1.999	2.981	6.0	20.2
8 9	19 13.06	-38 50.7	0.987	1.906	17.9	19.7	8 9	19 14.02	-19 56.1	2.050	2.976	9.6	20.5
8 19	19 10.59	-37 36.8	1.047	1.910	21.6	20.0	8 19	19 8.41	-20 12.4	2.124	2.970	12.7	20.7
<b>191110</b>	2002 <i>EG</i> <sub>67</sub>	7 14.4 180°45		1°0/14.0 18			<b>314113</b>	2005 <i>EN</i> <sub>94</sub>	7 14.4 85°73		2°8/13.7 17		
6 10	20 3.36	-23 41.0	2.132	2.991	12.3	21.0	6 10	20 7.02	-27 17.3	1.444	2.320	16.1	20.8
6 20	19 57.36	-23 56.5	2.056	2.992	9.2	20.8	6 20	20 0.74	-27 37.9	1.391	2.334	12.0	20.6
6 30	19 49.33	-24 13.6	2.005	2.993	5.6	20.5	6 30	19 51.61	-27 57.4	1.359	2.349	7.5	20.4
7 10	19 39.97	-24 29.6	1.980	2.993	1.9	20.3	7 10	19 40.71	-28 10.6	1.352	2.363	3.4	20.2
7 20	19 30.14	-24 41.7	1.982	2.993	2.6	20.3	7 20	19 29.38	-28 13.6	1.370	2.377	4.3	20.2
7 30	19 20.85	-24 48.1	2.013	2.992	6.3	20.6	7 30	19 19.11	-28 5.2	1.413	2.391	8.5	20.5
8 9	19 13.00	-24 48.5	2.070	2.991	9.8	20.8	8 9	19 11.15	-27 46.6	1.480	2.405	12.6	20.8
8 19	19 7.24	-24 43.4	2.150	2.989	12.8	21.0	8 19	19 6.18	-27 20.6	1.567	2.418	16.2	21.1
<b>345897</b>	2007 <i>RM</i> <sub>96</sub>	7 14.4 247°15		0°8/14.1 18			<b>29352</b>	1995 <i>JR</i>	7 14.4 154°22		3°1/13.0 18		
6 10	20 0.59	-22 7.0	2.077	2.941	12.4	21.7	6 10	20 4.87	-28 12.7	2.145	3.005	12.2	19.4
6 20	19 55.46	-22 34.9	1.994	2.932	9.3	21.5	6 20	19 58.55	-29 3.0	2.079	3.013	9.2	19.2
6 30	19 48.28	-23 7.1	1.934	2.923	5.7	21.2	6 30	19 50.11	-29 52.9	2.037	3.021	5.9	19.0
7 10	19 39.68	-23 40.2	1.900	2.914	1.8	20.9	7 10	19 40.24	-30 37.4	2.021	3.028	3.3	18.9
7 20	19 30.49	-24 10.9	1.893	2.904	2.5	21.0	7 20	19 29.89	-31 12.3	2.034	3.035	4.1	18.9
7 30	19 21.70	-24 36.6	1.915	2.895	6.4	21.2	7 30	19 20.11	-31 35.3	2.075	3.041	7.1	19.1
8 9	19 14.27	-24 55.7	1.961	2.885	10.1	21.4	8 9	19 11.87	-31 46.0	2.141	3.046	10.3	19.3
8 19	19 8.90	-25 7.9	2.031	2.875	13.3	21.6	8 19	19 5.84	-31 45.9	2.230	3.050	13.0	19.5
<b>203155</b>	2000 <i>WU</i> <sub>101</sub>	7 14.4 290°56		2°5/15.3 18			<b>127012</b>	2002 <i>GU</i> <sub>11</sub>	7 14.4 23°25		4°3/12.7 18		
6 10	19 59.89	-14 48.4	1.692	2.554	14.8	20.5	6 10	20 1.19	-28 37.6	1.499	2.382	15.2	19.2
6 20	19 55.37	-14 45.4	1.601	2.535	11.4	20.2	6 20	19 56.59	-29 39.6	1.440	2.387	11.5	19.0
6 30	19 48.45	-14 52.5	1.531	2.515	7.5	20.0	6 30	19 49.24	-30 41.7	1.403	2.391	7.5	18.8
7 10	19 39.79	-15 8.7	1.486	2.495	3.6	19.7	7 10	19 40.02	-31 36.9	1.390	2.397	4.5	18.6
7 20	19 30.32	-15 32.0	1.466	2.476	3.4	19.6	7 20	19 30.16	-32 19.2	1.402	2.403	5.6	18.7
7 30	19 21.20	-15 59.8	1.472	2.456	7.5	19.8	7 30	19 21.09	-32 44.9	1.439	2.409	9.2	18.9
8 9	19 13.59	-16 29.2	1.502	2.437	11.8	20.0	8 9	19 14.06	-32 53.8	1.498	2.416	13.0	19.2
8 19	19 8.35	-16 57.9	1.554	2.417	15.7	20.2	8 19	19 9.87	-32 48.2	1.577	2.423	16.3	19.4
<b>471737</b>	2012 <i>UG</i> <sub>43</sub>	7 14.4 242°11		3°6/12.9 16			<b>475017</b>	2005 <i>UC</i> <sub>8</sub>	7 14.4 213°21		4°9/11.5 18		
6 10	20 2.46	-29 17.0	1.913	2.782	13.1	21.5	6 10	20 2.89	-38 8.4	2.965	3.807	9.7	22.1
6 20	19 57.10	-30 3.4	1.840	2.779	9.9	21.3	6 20	19 56.83	-38 57.6	2.886	3.800	7.7	22.0
6 30	19 49.37	-30 49.0	1.790	2.775	6.5	21.1	6 30	19 48.97	-39 41.2	2.833	3.792	5.9	21.8
7 10	19 40.03	-31 28.6	1.765	2.771	3.8	20.9	7 10	19 39.89	-40 14.9	2.806	3.784	4.9	21.7
7 20	19 30.07	-31 57.6	1.767	2.767	4.7	21.0	7 20	19 30.32	-40 35.5	2.807	3.775	5.5	21.8
7 30	19 20.67	-32 13.3	1.796	2.763	7.9	21.1	7 30	19 21.13	-40 41.7	2.836	3.765	7.2	21.9
8 9	19 12.92	-32 15.7	1.849	2.759	11.3	21.3	8 9	19 13.13	-40 33.8	2.890	3.756	9.2	22.0
8 19	19 7.56	-32 6.4	1.924	2.755	14.4	21.5	8 19	19 6.93	-40 13.9	2.968	3.745	11.1	22.1
<b>511598</b>	2015 <i>AT</i> <sub>233</sub>	7 14.4 21°56		1°5/14.7 17			<b>384559</b>	2010 <i>FL</i> <sub>28</sub>	7 14.4 150°17		4°9/17.1 18		
6 10	20 0.60	-19 41.6	1.218	2.107	17.6	19.9	6 10	19 59.02	-5 29.5	2.074	2.896	14.0	21.2
6 20	19 56.19	-19 14.9	1.165	2.115	13.2	19.6	6 20	19 54.09	-5 37.7	1.999	2.900	11.2	21.0
6 30	19 48.94	-18 54.2	1.132	2.124	8.2	19.4	6 30	19 47.34	-6 1.7	1.946	2.904	8.2	20.8
7 10	19 39.88	-18 38.3	1.120	2.134	3.0	19.1	7 10	19 39.39	-6 40.9	1.918	2.908	5.7	20.7
7 20	19 30.35	-18 25.6	1.133	2.145	3.3	19.2	7 20	19 30.99	-7 33.4	1.917	2.911	5.1	20.7
7 30	19 21.83	-18 15.1	1.168	2.157	8.4	19.5	7 30	19 23.02	-8 35.8	1.942	2.914	7.1	20.8
8 9	19 15.54	-18 5.7	1.226	2.170	13.0	19.8	8 9	19 16.29	-9 43.7	1.994	2.917	10.0	21.0
8 19	19 12.20	-17 57.0	1.304	2.184	17.0	20.1	8 19	19 11.41	-10 53.0	2.069	2.920	12.8	21.2
<b>211707</b>	2003 <i>XZ</i> <sub>6</sub>	7 14.4 276°00		2°7/14.1 18			<b>272865</b>	2006 <i>BG</i> <sub>69</sub>	7 14.4 329°39		4°0/13.1 16		
6 10	20 12.22	-31 13.1	2.107	2.954	12.9	19.3	6 10	20 1.65	-28 59.7	1.505	2.388	15.2	20.2
6 20	20 4.26	-30 48.3	2.000	2.927	9.9	19.1	6 20	19 57.05	-29 39.2	1.434	2.380	11.5	20.0
6 30	19 53.72	-30 15.7	1.918	2.899	6.4	18.8	6 30	19 49.61	-30 18.0	1.384	2.373	7.5	19.7
7 10	19 41.40	-29 31.9	1.863	2.871	3.2	18.6	7 10	19 40.18	-30 50.3	1.357	2.365	4.3	19.5
7 20	19 28.35	-28 35.3	1.837	2.842	3.7	18.5	7 20	19 29.97	-31 10.6	1.356	2.359	5.3	19.6
7 30	19 15.88	-27 26.6	1.841	2.813	7.4	18.7	7 30	19 20.47	-31 16.0	1.378	2.352	9.1	19.8
8 9	19 5.16	-26 9.2	1.872	2.783	11.2	18.9	8 9	19 12.99	-31 6.9	1.424	2.346	13.2	20.0
8 19	18 57.00	-24 47.6	1.928	2.753	14.6	19.0	8 19	19 8.42	-30 45.6	1.489	2.341	16.8	20.2
<b>30896</b>	1993 <i>FX</i> <sub>26</sub>	7 14.4 101°63		0°1/14.4 18			<b>514477</b>	2016 <i>VB</i> <sub>9</sub>	7 14.4 300°84		1°1/13.9 18		
6 10	20 0.19	-21 16.3	2.172	3.033	12.0	19.4	6 10	19 59.43	-23 3.6	1.962	2.831	12.8	21.8
6 20	19 54.90	-21 24.7	2.103	3.039	9.0	19.2	6 20	19 54.73	-23 30.6	1.881	2.822	9.5	21.6
6 30	19 47.78	-21 36.3	2.057	3.046	5.4	19.0	6 30	19 47.90	-24 1.2	1.822	2.812	5.8	21.3
7 10	19 39.49	-21 48.9	2.038	3.052	1.7	18.8	7 10	19 39.60	-24 32.1	1.789	2.803	2.0	21.0
7 20	19 30.82	-22 0.3	2.046	3.058	2.2	18.8	7 20	19 30.70	-24 59.9	1.783	2.794	2.8	21.1
7 30	19 22.69	-22 9.0	2.082	3.064	5.9	19.1	7 30	19 22.25	-25 21.7	1.804	2.785	6.7	21.3
8 9	19 15.89	-22 14.1	2.144	3.070	9.2	19.3	8 9	19 15.21	-25 36.3	1.850	2.776	10.5	21.5
8 19	19 11.01	-22 15.4	2.229	3.076	12.2	19.5	8 19	19 10.32	-25 43.7	1.918	2.767	13.7	21.7
<b>362877</b>	2012 <i>BP</i> <sub>101</sub>	7 14.4 267°87		0°4/14.6 18			<b>434665</b>	2005 <i>YC</i> <sub>134</sub>	7 14.4 217°92		2°3/13.4 18		
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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>93979</b>	2000 <i>XF</i> <sub>11</sub>		7 14.4 133°60	2°4/13.8	18		<b>510872</b>	2013 <i>CK</i> <sub>115</sub>		7 14.4 47°52	2°1/15.6	18	
6 10	20 6.75	-28 47.6	2.005	2.865	12.9	19.6	6 10	19 57.34	-13 10.9	2.154	3.004	12.6	20.8
6 20	19 59.90	-28 50.1	1.940	2.874	9.7	19.4	6 20	19 52.84	-13 35.3	2.082	3.008	9.6	20.6
6 30	19 50.87	-28 49.4	1.897	2.883	6.1	19.2	6 30	19 46.59	-14 10.0	2.032	3.012	6.3	20.4
7 10	19 40.46	-28 42.3	1.882	2.891	2.9	19.0	7 10	19 39.20	-14 53.1	2.009	3.017	3.0	20.2
7 20	19 29.72	-28 26.7	1.893	2.899	3.5	19.0	7 20	19 31.39	-15 41.7	2.012	3.022	2.7	20.2
7 30	19 19.76	-28 2.1	1.933	2.907	6.9	19.3	7 30	19 24.00	-16 32.6	2.044	3.027	5.8	20.4
8 9	19 11.53	-27 30.0	1.999	2.914	10.3	19.5	8 9	19 17.82	-17 22.7	2.101	3.032	9.1	20.6
8 19	19 5.67	-26 52.8	2.087	2.921	13.3	19.7	8 19	19 13.41	-18 9.6	2.182	3.037	12.1	20.8
<b>257108</b>	2008 <i>GO</i> <sub>64</sub>		7 14.4 326°64	4°9/16.7	18		<b>470002</b>	2006 <i>KW</i> <sub>137</sub>		7 14.4 298°26	5°1/11.9	18	
6 10	19 56.28	-7 4.8	2.007	2.842	13.9	20.5	6 10	20 1.85	-31 0.5	1.759	2.633	13.8	20.8
6 20	19 52.19	-6 58.6	1.925	2.834	11.1	20.3	6 20	19 57.20	-32 9.7	1.670	2.609	10.6	20.6
6 30	19 46.26	-7 6.7	1.864	2.827	8.1	20.1	6 30	19 49.81	-33 19.7	1.603	2.585	7.4	20.3
7 10	19 39.08	-7 29.3	1.828	2.821	5.6	19.9	7 10	19 40.34	-34 23.3	1.561	2.561	5.2	20.1
7 20	19 31.38	-8 5.1	1.818	2.814	5.1	19.9	7 20	19 29.84	-35 13.9	1.545	2.538	6.3	20.2
7 30	19 24.06	-8 51.5	1.834	2.808	7.2	20.0	7 30	19 19.66	-35 46.7	1.554	2.514	9.6	20.3
8 9	19 17.95	-9 44.8	1.875	2.802	10.2	20.2	8 9	19 11.18	-36 0.6	1.586	2.490	13.3	20.5
8 19	19 13.69	-10 41.2	1.938	2.797	13.2	20.3	8 19	19 5.42	-35 57.5	1.639	2.467	16.6	20.6
<b>11383</b>	1998 <i>SD</i> <sub>128</sub>		7 14.4 200°56	0°1/14.4	18		<b>506594</b>	2005 <i>YV</i> <sub>32</sub>		7 14.4 214°95	0°7/14.7	17	
6 10	20 0.65	-20 1.4	2.203	3.061	12.0	18.3	6 10	20 2.33	-18 40.1	2.149	3.002	12.4	22.2
6 20	19 55.34	-20 23.2	2.124	3.058	9.0	18.1	6 20	19 56.66	-18 51.1	2.064	2.995	9.4	22.0
6 30	19 48.13	-20 50.0	2.068	3.056	5.5	17.8	6 30	19 49.00	-19 7.6	2.002	2.987	5.8	21.7
7 10	19 39.65	-21 19.2	2.039	3.053	1.7	17.6	7 10	19 39.98	-19 27.6	1.966	2.979	2.0	21.5
7 20	19 30.68	-21 47.9	2.037	3.049	2.2	17.6	7 20	19 30.40	-19 48.7	1.958	2.970	2.2	21.5
7 30	19 22.14	-22 13.8	2.064	3.045	5.9	17.9	7 30	19 21.23	-20 8.6	1.979	2.961	6.1	21.7
8 9	19 14.87	-22 35.2	2.117	3.041	9.4	18.1	8 9	19 13.36	-20 25.8	2.026	2.951	9.7	21.9
8 19	19 9.52	-22 51.6	2.193	3.037	12.4	18.3	8 19	19 7.48	-20 39.6	2.096	2.940	12.9	22.1
<b>120092</b>	2003 <i>EB</i> <sub>36</sub>		7 14.4 120°93	1°3/13.8	18		<b>77487</b>	2001 <i>HN</i> <sub>33</sub>		7 14.4 65°48	5°0/16.3	18	
6 10	20 0.74	-24 22.6	2.427	3.285	11.0	20.5	6 10	19 59.56	-8 36.3	1.819	2.659	14.9	19.8
6 20	19 55.16	-24 48.0	2.362	3.297	8.2	20.3	6 20	19 54.64	-8 11.1	1.754	2.668	11.8	19.6
6 30	19 47.89	-25 14.6	2.321	3.309	5.0	20.1	6 30	19 47.74	-7 59.2	1.711	2.677	8.5	19.4
7 10	19 39.55	-25 39.6	2.307	3.320	1.9	19.9	7 10	19 39.56	-8 1.0	1.691	2.686	5.7	19.2
7 20	19 30.88	-26 0.4	2.322	3.331	2.5	20.0	7 20	19 30.97	-8 15.7	1.697	2.694	5.2	19.2
7 30	19 22.71	-26 15.2	2.365	3.342	5.7	20.2	7 30	19 22.97	-8 41.1	1.729	2.703	7.6	19.4
8 9	19 15.80	-26 23.4	2.435	3.352	8.7	20.5	8 9	19 16.42	-9 13.9	1.786	2.712	10.7	19.6
8 19	19 10.67	-26 25.5	2.528	3.362	11.3	20.6	8 19	19 11.95	-9 50.9	1.865	2.721	13.8	19.8
<b>53224</b>	1999 <i>CA</i> <sub>94</sub>		7 14.4 130°51	3°4/13.4	18		<b>20865</b>	2000 <i>VL</i> <sub>36</sub>		7 14.4 253°92	0°7/14.8	18	
6 10	20 7.30	-27 40.5	1.500	2.374	15.7	19.4	6 10	20 0.53	-16 25.8	1.975	2.832	13.2	18.1
6 20	20 1.07	-28 21.3	1.441	2.383	11.8	19.2	6 20	19 55.59	-17 11.0	1.886	2.819	10.0	17.9
6 30	19 51.94	-29 1.9	1.403	2.391	7.5	19.0	6 30	19 48.51	-18 7.0	1.819	2.805	6.3	17.6
7 10	19 40.89	-29 36.0	1.390	2.399	3.8	18.8	7 10	19 39.88	-19 10.4	1.779	2.792	2.2	17.3
7 20	19 29.25	-29 58.3	1.402	2.406	4.8	18.8	7 20	19 30.52	-20 17.0	1.766	2.778	2.4	17.3
7 30	19 18.53	-30 6.4	1.440	2.413	8.8	19.1	7 30	19 21.46	-21 22.2	1.781	2.764	6.6	17.6
8 9	19 10.03	-30 0.9	1.501	2.420	12.9	19.4	8 9	19 13.71	-22 22.2	1.822	2.749	10.5	17.8
8 19	19 4.54	-29 44.5	1.583	2.426	16.4	19.6	8 19	19 8.04	-23 14.8	1.885	2.734	13.9	18.0
<b>152722</b>	1998 <i>UG</i> <sub>3</sub>		7 14.4 309°49	0°2/14.5	18		<b>289906</b>	2005 <i>NP</i> <sub>5</sub>		7 14.4 218°58	1°0/15.0	18	
6 10	20 0.21	-20 28.0	1.346	2.230	16.5	20.1	6 10	19 58.78	-16 25.3	2.605	3.451	10.7	21.8
6 20	19 56.32	-20 33.6	1.257	2.206	12.6	19.8	6 20	19 53.73	-16 46.7	2.516	3.443	8.1	21.7
6 30	19 49.42	-20 46.4	1.189	2.181	7.9	19.4	6 30	19 47.09	-17 14.6	2.452	3.435	5.1	21.5
7 10	19 40.24	-21 3.5	1.142	2.157	2.5	19.0	7 10	19 39.37	-17 47.2	2.415	3.427	2.0	21.2
7 20	19 29.93	-21 21.2	1.120	2.133	3.1	19.0	7 20	19 31.21	-18 22.5	2.407	3.418	2.0	21.2
7 30	19 20.04	-21 36.2	1.122	2.109	8.8	19.3	7 30	19 23.34	-18 57.9	2.427	3.409	5.2	21.4
8 9	19 12.08	-21 46.5	1.146	2.087	14.0	19.5	8 9	19 16.46	-19 31.6	2.475	3.399	8.2	21.6
8 19	19 7.16	-21 51.5	1.189	2.065	18.6	19.7	8 19	19 11.15	-20 2.2	2.547	3.390	11.0	21.8
<b>315135</b>	2007 <i>EJ</i> <sub>112</sub>		7 14.4 167°86	3°7/12.5	18		<b>157333</b>	2004 <i>TH</i> <sub>21</sub>		7 14.4 339°01	12°0/9.6	16	
6 10	20 1.18	-33 11.8	2.772	3.626	9.9	21.6	6 10	20 5.59	-44 54.2	1.385	2.251	17.3	19.8
6 20	19 55.49	-33 49.8	2.702	3.629	7.6	21.4	6 20	20 1.07	-46 32.5	1.327	2.242	14.8	19.6
6 30	19 48.12	-34 24.1	2.656	3.631	5.3	21.3	6 30	19 52.62	-47 56.3	1.289	2.233	12.8	19.4
7 10	19 39.65	-34 51.1	2.637	3.633	3.7	21.2	7 10	19 41.28	-48 53.8	1.271	2.225	12.0	19.4
7 20	19 30.81	-35 8.0	2.646	3.635	4.3	21.2	7 20	19 28.82	-49 16.4	1.275	2.218	12.9	19.4
7 30	19 22.41	-35 13.6	2.684	3.637	6.4	21.3	7 30	19 17.42	-49 1.4	1.300	2.212	15.1	19.5
8 9	19 15.19	-35 8.0	2.747	3.638	8.8	21.5	8 9	19 9.00	-48 13.3	1.343	2.207	17.7	19.7
8 19	19 9.72	-34 52.8	2.834	3.639	11.0	21.7	8 19	19 4.63	-47 0.3	1.403	2.202	20.3	19.9
<b>136250</b>	2003 <i>XP</i> <sub>16</sub>		7 14.4 222°66	4°5/15.9	18		<b>199437</b>	2006 <i>DN</i> <sub>26</sub>		7 14.4 18°94	0°9/14.8	17	
6 10	20 2.51	-10 27.4	1.753	2.597	15.2	20.5	6 10	20 0.64	-18 25.3	1.660	2.529	14.7	20.5
6 20	19 57.11	-10 7.3	1.671	2.590	12.0	20.3	6 20	19 55.80	-18 32.6	1.590	2.530	11.1	20.3
6 30	19 49.42	-9 59.5	1.611	2.583	8.4	20.1	6 30	19 48.62	-18 47.2	1.543	2.531	6.9	20.1
7 10	19 40.13	-10 4.2	1.575	2.575	5.2	19.9	7 10	19 39.89	-19 6.7	1.519	2.533	2.4	19.8
7 20	19 30.18	-10 20.3	1.565	2.567	4.8	19.8	7 20	19 30.61	-19 28.1	1.522	2.534	2.6	19.8
7 30	19 20.71	-10 45.9	1.581	2.558	7.9	20.0	7 30	19 21.95	-19 48.9	1.551	2.536	7.1	20.1
8 9	19 12.76	-11 17.9	1.622	2.549	11.6	20.2	8 9	19 14.96	-20 7.0	1.604	2.538	11.2	20.3
8 19	19 7.10	-11 53.2	1.685	2.540	15.1	20.4	8 19	19 10.38	-20 21.5	1.679	2.540	14.8	20.6
<b>495624</b>	2015 <i>TK</i> <sub>239</sub>		7 14.4 342°55	22°6/19.7	17		<b>499731</b>	2011 <i>BN</i> <sub>25</sub>		7 14.			

EPHEMERIDES

7 14.4

7 14.5

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	
<b>45163</b>	1999 XE <sub>127</sub>	7 14.4 326°19 5°6/12.9 18						<b>286514</b>	2002 CG <sub>30</sub>	7 14.5 230°25 1°7/13.8 18				
6 10	20 3.52	-31 34.6	1.281	2.170	16.9	17.4	6 10	20 5.05	-23 16.7	1.610	2.481	15.0	21.2	
6 20	19 58.99	-32 17.1	1.213	2.160	13.0	17.2	6 20	19 59.46	-23 56.3	1.531	2.472	11.3	21.0	
6 30	19 51.09	-32 56.3	1.164	2.151	8.9	16.9	6 30	19 51.12	-24 41.1	1.473	2.463	7.0	20.7	
7 10	19 40.76	-33 24.3	1.138	2.142	5.8	16.7	7 10	19 40.78	-25 26.0	1.440	2.453	2.6	20.4	
7 20	19 29.50	-33 34.9	1.135	2.134	6.8	16.7	7 20	19 29.58	-26 5.8	1.434	2.443	3.5	20.5	
7 30	19 19.10	-33 25.0	1.154	2.126	10.8	16.9	7 30	19 18.91	-26 36.3	1.453	2.433	8.2	20.7	
8 9	19 11.19	-32 56.6	1.196	2.119	15.1	17.2	8 9	19 10.09	-26 56.1	1.497	2.421	12.5	20.9	
8 19	19 6.74	-32 14.0	1.255	2.113	19.0	17.4	8 19	19 4.04	-27 5.6	1.562	2.410	16.4	21.2	
<b>513682</b>	2011 YR <sub>79</sub>	7 14.4 275°00 0°9/14.9 18						<b>376926</b>	2002 CH <sub>44</sub>	7 14.5 214°47 13°0/14.3 17				
6 10	19 58.03	-16 39.8	2.275	3.130	11.8	21.2	6 10	20 29.77	-47 35.5	1.095	1.943	22.1	21.2	
6 20	19 53.45	-17 9.0	2.184	3.116	8.9	21.0	6 20	20 19.95	-48 4.9	1.034	1.940	18.7	21.0	
6 30	19 47.07	-17 46.4	2.117	3.102	5.6	20.7	6 30	20 4.35	-48 7.5	0.990	1.936	15.4	20.8	
7 10	19 39.42	-18 29.6	2.076	3.088	2.1	20.5	7 10	19 44.93	-47 27.3	0.966	1.932	13.2	20.6	
7 20	19 31.20	-19 15.8	2.062	3.074	2.1	20.5	7 20	19 24.82	-45 56.5	0.963	1.928	13.4	20.6	
7 30	19 23.27	-20 1.8	2.077	3.060	5.8	20.7	7 30	19 7.42	-43 39.8	0.983	1.923	16.0	20.8	
8 9	19 16.45	-20 45.0	2.118	3.046	9.2	20.9	8 9	19 18.91	-40 53.3	1.023	1.918	19.6	21.0	
8 19	19 11.38	-21 23.7	2.183	3.032	12.3	21.0	8 19	18 48.32	-37 55.2	1.082	1.912	23.2	21.2	
<b>146763</b>	2001 XF <sub>193</sub>	7 14.5 148°24 0°6/14.8 18						<b>96836</b>	1999 RU <sub>200</sub>	7 14.5 331°52 7°4/13.3 18				
6 10	19 58.79	-17 17.8	2.786	3.631	10.2	21.1	6 10	20 6.93	-38 21.6	1.401	2.275	16.6	18.6	
6 20	19 53.56	-17 48.8	2.713	3.640	7.6	20.9	6 20	20 1.48	-38 34.9	1.326	2.260	13.3	18.4	
6 30	19 46.91	-18 25.3	2.664	3.648	4.7	20.7	6 30	19 52.56	-38 35.4	1.272	2.246	9.9	18.1	
7 10	19 39.32	-19 5.3	2.643	3.656	1.7	20.5	7 10	19 41.25	-38 15.6	1.239	2.232	7.6	18.0	
7 20	19 31.40	-19 46.3	2.652	3.663	1.8	20.6	7 20	19 29.13	-37 31.0	1.230	2.219	8.1	17.9	
7 30	19 23.84	-20 26.0	2.689	3.670	4.8	20.8	7 30	19 18.07	-36 21.9	1.245	2.207	11.2	18.1	
8 9	19 17.25	-21 2.5	2.755	3.677	7.6	21.0	8 9	19 9.64	-34 53.8	1.282	2.196	15.0	18.3	
8 19	19 12.13	-21 34.8	2.845	3.683	10.1	21.2	8 19	19 4.75	-33 14.2	1.338	2.186	18.6	18.5	
<b>238201</b>	2003 TE <sub>17</sub>	7 14.5 174°15 11°1/ 9.4 18						<b>321892</b>	2010 SO <sub>37</sub>	7 14.5 269°86 0°1/14.4 18				
6 10	20 13.80	-51 50.7	2.058	2.869	14.5	20.5	6 10	19 59.32	-21 22.2	2.367	3.226	11.2	21.1	
6 20	20 6.35	-53 12.4	2.006	2.870	12.8	20.4	6 20	19 54.33	-21 28.6	2.279	3.214	8.4	20.9	
6 30	19 55.42	-54 16.8	1.974	2.871	11.6	20.3	6 30	19 47.56	-21 38.1	2.214	3.202	5.2	20.7	
7 10	19 42.09	-54 55.3	1.965	2.871	11.1	20.2	7 10	19 39.60	-21 48.7	2.176	3.190	1.6	20.4	
7 20	19 27.98	-55 2.5	1.978	2.872	11.7	20.3	7 20	19 31.15	-21 58.3	2.167	3.178	2.0	20.4	
7 30	19 14.97	-54 37.9	2.014	2.872	13.0	20.4	7 30	19 23.06	-22 5.5	2.185	3.166	5.6	20.7	
8 9	19 4.67	-53 45.7	2.071	2.872	14.6	20.5	8 9	19 16.13	-22 9.3	2.229	3.154	9.0	20.8	
8 19	18 57.96	-52 32.9	2.146	2.872	16.3	20.6	8 19	19 10.97	-22 9.6	2.297	3.142	11.9	21.0	
<b>339428</b>	2005 EQ <sub>82</sub>	7 14.5 193°42 5°4/17.1 18						<b>461621</b>	2005 BS <sub>48</sub>	7 14.5 99°07 0°5/14.6 16				
6 10	19 59.07	- 4 13.5	2.328	3.137	13.0	21.5	6 10	20 6.81	-19 44.2	1.563	2.428	15.7	21.9	
6 20	19 54.01	- 4 1.1	2.245	3.135	10.6	21.3	6 20	20 0.27	-19 48.8	1.511	2.449	11.7	21.7	
6 30	19 47.30	- 4 2.7	2.186	3.133	8.1	21.1	6 30	19 51.26	-19 58.9	1.481	2.469	7.2	21.4	
7 10	19 39.47	- 4 18.6	2.151	3.131	6.0	21.0	7 10	19 40.73	-20 11.8	1.475	2.489	2.3	21.2	
7 20	19 31.21	- 4 48.2	2.142	3.128	5.5	21.0	7 20	19 29.86	-20 24.3	1.496	2.509	2.7	21.3	
7 30	19 23.30	- 5 29.3	2.161	3.124	7.1	21.1	7 30	19 19.94	-20 34.5	1.544	2.528	7.3	21.6	
8 9	19 16.49	- 6 18.8	2.207	3.121	9.6	21.2	8 9	19 12.03	-20 41.2	1.616	2.546	11.4	21.9	
8 19	19 11.33	- 7 13.1	2.275	3.117	12.1	21.4	8 19	19 6.77	-20 44.5	1.710	2.564	14.9	22.1	
<b>248526</b>	2005 WR <sub>108</sub>	7 14.5 171°65 0°9/13.9 18						<b>75509</b>	1999 XL <sub>197</sub>	7 14.5 117°11 4°3/12.9 18				
6 10	19 58.54	-22 10.3	2.763	3.618	9.9	20.2	6 10	20 5.55	-33 3.9	2.071	2.931	12.6	19.8	
6 20	19 53.49	-22 53.8	2.686	3.620	7.4	20.1	6 20	19 59.15	-33 36.4	2.011	2.942	9.6	19.6	
6 30	19 46.93	-23 40.7	2.634	3.621	4.5	19.9	6 30	19 50.53	-34 3.8	1.974	2.952	6.6	19.4	
7 10	19 39.35	-24 28.0	2.610	3.623	1.5	19.7	7 10	19 40.50	-34 21.4	1.964	2.963	4.5	19.3	
7 20	19 31.38	-25 12.8	2.614	3.624	2.1	19.7	7 20	19 30.10	-34 25.9	1.980	2.973	5.1	19.4	
7 30	19 23.72	-25 52.7	2.648	3.625	5.1	19.9	7 30	19 20.44	-34 16.3	2.023	2.983	7.7	19.6	
8 9	19 17.07	-26 26.0	2.710	3.626	7.9	20.1	8 9	19 12.51	-33 54.0	2.092	2.993	10.7	19.8	
8 19	19 11.93	-26 52.4	2.795	3.626	10.4	20.3	8 19	19 6.94	-33 21.8	2.182	3.002	13.3	20.0	
<b>262567</b>	2006 VT <sub>33</sub>	7 14.5 16°56 2°5/13.7 17						<b>436604</b>	2011 KR <sub>17</sub>	7 14.5 351°60 2°9/13.1 17				
6 10	19 59.78	-24 14.1	1.130	2.029	17.9	19.5	6 10	20 0.21	-24 29.5	1.568	2.449	14.8	20.1	
6 20	19 56.08	-24 54.1	1.077	2.033	13.4	19.3	6 20	19 55.86	-25 39.8	1.500	2.446	11.1	19.9	
6 30	19 49.19	-25 38.8	1.044	2.039	8.2	19.0	6 30	19 48.90	-26 55.7	1.453	2.444	6.9	19.7	
7 10	19 40.15	-26 21.9	1.032	2.045	3.3	18.7	7 10	19 40.09	-28 10.6	1.432	2.443	3.2	19.4	
7 20	19 30.42	-26 57.0	1.042	2.052	4.4	18.8	7 20	19 30.52	-29 17.8	1.436	2.442	4.4	19.5	
7 30	19 21.69	-27 19.9	1.076	2.060	9.5	19.2	7 30	19 21.52	-30 11.8	1.465	2.441	8.5	19.8	
8 9	19 15.40	-27 29.6	1.130	2.070	14.3	19.5	8 9	19 14.34	-30 50.5	1.518	2.440	12.6	20.0	
8 19	19 12.37	-27 27.5	1.203	2.080	18.4	19.7	8 19	19 9.82	-31 14.2	1.591	2.440	16.1	20.2	
<b>269344</b>	2008 TH <sub>95</sub>	7 14.5 29°10 1°5/14.9 17						<b>92537</b>	2000 OS <sub>16</sub>	7 14.5 98°54 0°4/14.4 18				
6 10	19 59.90	-17 41.5	1.308	2.190	17.1	20.2	6 10	20 7.66	-22 57.7	1.390	2.264	16.7	19.1	
6 20	19 55.60	-17 43.0	1.254	2.200	12.8	20.0	6 20	20 1.29	-22 49.5	1.332	2.275	12.5	18.9	
6 30	19 48.62	-17 54.0	1.220	2.210	8.0	19.7	6 30	19 52.06	-22 43.6	1.296	2.286	7.6	18.6	
7 10	19 39.93	-18 12.0	1.208	2.221	3.0	19.5	7 10	19 41.01	-22 36.9	1.283	2.297	2.4	18.3	
7 20	19 30.73	-18 33.5	1.221	2.233	3.1	19.5	7 20	19 29.50	-22 26.9	1.296	2.308	3.0	18.4	
7 30	19 22.41	-18 55.6	1.258	2.246	7.9	19.8	7 30	19 19.04	-22 12.6	1.334	2.319	8.1	18.7	
8 9	19 16.16	-19 15.5	1.318	2.260	12.5	20.1	8 9	19 10.85	-21 54.6	1.396	2.329	12.6	19.0	
8 19	19 12.67	-19 32.0	1.397	2.274	16.3	20.4	8 19	19 5.68	-21 34.2	1.479	2.339	16.5	19.3	
<b>19448</b>	Jenniferling	7 14.5 223°28 1°2/14.8 18						<b>429466</b>	2010 WW <sub>64</sub>	7 14.5 204°33 1°7/13.8 17				
6 10	20 3.84	-17 57.8	1.663	2.526	15.0	19.3	6 10	20 5.00	-24 24.8	1.878	2.741	13.5	22.9	
6 20	19 58.30	-18 0.5	1.584	2.520	11.4	19.0	6 20	19 59.01	-24 54.1	1.800	2.737	10.1	22.7	

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>428726</b>	2008 <i>RF</i> <sub>70</sub>		7 14.5	3°55'	2°5'/15.4	17	<b>311155</b>	2004 <i>TE</i> <sub>17</sub>		7 14.5	8°91'	2°8'/14.5	18
6 10	19 59.13	-14 36.3	1.506	2.376	15.9	21.2	6 10	20 6.96	-19 38.4	1.749	2.607	14.6	18.5
6 20	19 54.88	-14 41.3	1.438	2.375	12.2	21.0	6 20	20 0.20	-18 8.2	1.677	2.609	11.1	18.3
6 30	19 48.19	-14 58.1	1.390	2.375	7.9	20.8	6 30	19 51.17	-16 37.6	1.628	2.611	7.2	18.1
7 10	19 39.84	-15 25.0	1.366	2.376	3.7	20.5	7 10	19 40.73	-15 8.6	1.606	2.615	3.5	17.9
7 20	19 30.88	-15 59.1	1.366	2.377	3.4	20.5	7 20	19 29.95	-13 44.0	1.612	2.619	3.7	17.9
7 30	19 22.54	-16 36.7	1.392	2.378	7.6	20.7	7 30	19 20.00	-12 26.8	1.646	2.624	7.5	18.1
8 9	19 15.94	-17 14.4	1.441	2.380	11.9	21.0	8 9	19 11.86	-11 19.1	1.706	2.630	11.3	18.4
8 19	19 11.83	-17 49.4	1.511	2.382	15.6	21.2	8 19	19 6.16	-10 21.7	1.788	2.636	14.6	18.6
<b>131733</b>	2001 <i>YY</i> <sub>108</sub>		7 14.5	182°37'	1°8'/13.9	17	<b>505581</b>	2014 <i>BR</i> <sub>47</sub>		7 14.5	131°19'	3°6'/16.7	18
6 10	20 6.68	-24 24.9	1.691	2.557	14.6	21.0	6 10	19 59.82	-7 35.5	2.292	3.114	12.8	21.7
6 20	20 0.43	-24 55.5	1.619	2.558	11.0	20.8	6 20	19 54.56	-8 2.1	2.221	3.126	10.1	21.6
6 30	19 51.57	-25 28.8	1.570	2.558	6.8	20.5	6 30	19 47.64	-8 42.1	2.172	3.137	7.1	21.4
7 10	19 40.90	-26 0.0	1.546	2.558	2.6	20.3	7 10	19 39.63	-9 34.2	2.150	3.147	4.4	21.2
7 20	19 29.58	-26 24.7	1.548	2.557	3.4	20.3	7 20	19 31.25	-10 35.6	2.156	3.158	3.8	21.2
7 30	19 18.93	-26 40.1	1.578	2.556	7.8	20.6	7 30	19 23.29	-11 42.8	2.191	3.167	6.0	21.4
8 9	19 10.16	-26 45.7	1.632	2.554	11.9	20.8	8 9	19 16.49	-12 51.8	2.253	3.177	8.9	21.6
8 19	19 4.07	-26 42.7	1.708	2.551	15.4	21.0	8 19	19 11.39	-13 59.3	2.339	3.186	11.6	21.8
<b>367710</b>	2010 <i>TY</i> <sub>19</sub>		7 14.5	150°85'	2°4'/13.7	17	<b>30714</b>	4282 <i>T</i> <sub>-3</sub>		7 14.5	7°02'	7°1'/17.5	18
6 10	20 6.05	-25 58.7	1.587	2.459	15.1	21.3	6 10	19 57.96	-3 21.5	1.685	2.514	16.4	19.2
6 20	20 0.05	-26 25.4	1.521	2.463	11.3	21.1	6 20	19 53.73	-3 1.1	1.614	2.514	13.5	19.0
6 30	19 51.35	-26 53.1	1.478	2.467	7.1	20.8	6 30	19 47.38	-2 59.9	1.563	2.514	10.4	18.8
7 10	19 40.83	-27 16.7	1.459	2.470	3.0	20.6	7 10	19 39.60	-3 19.2	1.534	2.515	7.8	18.7
7 20	19 29.71	-27 32.1	1.466	2.474	3.9	20.7	7 20	19 31.27	-3 58.1	1.530	2.516	7.1	18.7
7 30	19 19.39	-27 36.9	1.499	2.477	8.1	20.9	7 30	19 23.44	-4 53.4	1.550	2.517	8.9	18.8
8 9	19 11.09	-27 31.3	1.556	2.479	12.2	21.2	8 9	19 17.09	-5 59.9	1.594	2.519	11.9	18.9
8 19	19 5.60	-27 17.2	1.634	2.482	15.8	21.4	8 19	19 12.90	-7 12.2	1.660	2.521	14.9	19.1
<b>510477</b>	2011 <i>WO</i> <sub>105</sub>		7 14.5	263°04'	2°2'/15.2	18	<b>64708</b>	2001 <i>XP</i> <sub>94</sub>		7 14.5	175°56'	1°5'/14.9	18
6 10	19 59.67	-15 35.5	2.201	3.052	12.3	20.8	6 10	20 0.59	-17 40.8	2.228	3.080	12.1	19.4
6 20	19 54.55	-15 16.8	2.124	3.051	9.4	20.6	6 20	19 55.22	-17 25.9	2.151	3.081	9.1	19.2
6 30	19 47.66	-15 4.3	2.071	3.051	6.1	20.4	6 30	19 48.08	-17 15.6	2.098	3.081	5.8	19.0
7 10	19 39.63	-14 57.4	2.043	3.051	3.0	20.2	7 10	19 39.77	-17 9.2	2.070	3.082	2.4	18.8
7 20	19 31.20	-14 55.2	2.042	3.051	2.9	20.2	7 20	19 31.08	-17 5.4	2.071	3.082	2.4	18.8
7 30	19 23.22	-14 56.6	2.070	3.051	6.0	20.4	7 30	19 22.87	-17 3.3	2.100	3.082	5.8	19.0
8 9	19 16.49	-15 0.4	2.123	3.050	9.2	20.6	8 9	19 15.91	-17 2.0	2.155	3.082	9.1	19.2
8 19	19 11.57	-15 5.5	2.199	3.050	12.1	20.8	8 19	19 10.80	-17 0.9	2.233	3.082	12.1	19.4
<b>511489</b>	2014 <i>NT</i> <sub>17</sub>		7 14.5	43°03'	0°2'/14.4	18	<b>478395</b>	2012 <i>BW</i> <sub>67</sub>		7 14.5	196°26'	3°9'/13.3	18
6 10	19 58.16	-19 8.5	2.129	2.991	12.2	21.2	6 10	20 6.65	-35 50.4	2.751	3.594	10.3	21.6
6 20	19 53.58	-19 55.9	2.059	2.996	9.1	21.0	6 20	19 59.52	-35 53.4	2.673	3.591	8.0	21.5
6 30	19 47.15	-20 50.1	2.012	3.001	5.5	20.8	6 30	19 50.58	-35 49.5	2.619	3.589	5.7	21.3
7 10	19 39.48	-21 47.7	1.992	3.006	1.7	20.5	7 10	19 40.53	-35 35.5	2.592	3.586	4.0	21.2
7 20	19 31.36	-22 44.7	2.000	3.012	2.2	20.6	7 20	19 30.19	-35 9.7	2.595	3.583	4.4	21.2
7 30	19 23.67	-23 37.5	2.036	3.018	6.0	20.8	7 30	19 20.44	-34 32.0	2.626	3.580	6.5	21.4
8 9	19 17.25	-24 23.4	2.098	3.024	9.4	21.0	8 9	19 12.09	-33 44.4	2.684	3.577	8.9	21.5
8 19	19 12.72	-25 1.5	2.182	3.030	12.4	21.2	8 19	19 5.69	-32 49.6	2.767	3.573	11.2	21.7
<b>62954</b>	2000 <i>VD</i> <sub>36</sub>		7 14.5	160°10'	0°2'/14.6	18	<b>507172</b>	2010 <i>EM</i> <sub>30</sub>		7 14.5	167°92'	5°2'/17.1	17
6 10	19 58.53	-18 15.5	2.616	3.466	10.6	18.9	6 10	20 0.07	-4 18.1	2.412	3.218	12.7	22.9
6 20	19 53.54	-18 58.6	2.539	3.470	7.9	18.7	6 20	19 54.68	-4 6.5	2.335	3.222	10.4	22.7
6 30	19 47.00	-19 47.8	2.487	3.473	4.8	18.5	6 30	19 47.69	-4 8.4	2.280	3.227	7.8	22.6
7 10	19 39.42	-20 40.2	2.463	3.476	1.5	18.3	7 10	19 39.66	-4 23.9	2.250	3.230	5.8	22.5
7 20	19 31.44	-21 32.9	2.467	3.479	1.8	18.3	7 20	19 31.24	-4 52.3	2.248	3.233	5.3	22.4
7 30	19 23.79	-22 22.9	2.501	3.482	5.1	18.5	7 30	19 23.20	-5 31.5	2.273	3.235	6.8	22.5
8 9	19 17.16	-23 8.1	2.562	3.484	8.1	18.7	8 9	19 16.25	-6 18.4	2.325	3.237	9.3	22.7
8 19	19 12.09	-23 47.2	2.647	3.486	10.7	18.9	8 19	19 10.93	-7 9.7	2.401	3.238	11.7	22.9
<b>419799</b>	2010 <i>WP</i> <sub>29</sub>		7 14.5	234°45'	0°5'/14.2	17	<b>256413</b>	2007 <i>BJ</i> <sub>6</sub>		7 14.5	169°54'	2°7'/15.9	18
6 10	20 3.43	-20 20.6	1.764	2.629	14.2	21.8	6 10	19 58.06	-11 19.2	2.814	3.643	10.5	21.7
6 20	19 58.04	-20 59.7	1.680	2.618	10.7	21.6	6 20	19 53.01	-11 15.6	2.734	3.646	8.2	21.6
6 30	19 50.17	-21 46.4	1.619	2.608	6.6	21.3	6 30	19 46.59	-11 19.9	2.679	3.649	5.6	21.4
7 10	19 40.51	-22 36.6	1.582	2.596	2.1	21.0	7 10	19 39.30	-11 31.5	2.651	3.651	3.3	21.3
7 20	19 30.05	-23 25.6	1.573	2.585	2.8	21.0	7 20	19 31.69	-11 49.2	2.651	3.654	3.0	21.2
7 30	19 20.00	-24 9.1	1.591	2.572	7.4	21.3	7 30	19 24.41	-12 11.6	2.679	3.655	5.1	21.4
8 9	19 11.55	-24 44.7	1.634	2.560	11.6	21.5	8 9	19 18.06	-12 36.9	2.735	3.657	7.7	21.5
8 19	19 5.56	-25 11.5	1.698	2.546	15.3	21.7	8 19	19 13.10	-13 3.5	2.816	3.657	10.1	21.7
<b>252168</b>	2001 <i>CC</i> <sub>42</sub>		7 14.5	153°06'	3°0'/12.5	18	<b>347444</b>	2012 <i>TJ</i> <sub>189</sub>		7 14.5	322°39'	2°6'/13.5	16
6 10	20 0.44	-30 1.3	2.839	3.694	9.7	20.5	6 10	20 0.93	-25 59.6	1.602	2.482	14.6	21.1
6 20	19 54.96	-30 56.8	2.769	3.700	7.3	20.4	6 20	19 56.38	-26 34.4	1.527	2.473	11.0	20.9
6 30	19 47.87	-31 50.9	2.726	3.706	4.9	20.2	6 30	19 49.22	-27 11.3	1.474	2.464	6.9	20.6
7 10	19 39.70	-32 40.0	2.710	3.712	3.1	20.1	7 10	19 40.23	-27 45.4	1.445	2.456	3.1	20.4
7 20	19 31.13	-33 20.8	2.723	3.717	3.8	20.2	7 20	19 30.50	-28 11.9	1.441	2.449	4.1	20.4
7 30	19 22.92	-33 51.1	2.764	3.722	6.0	20.3	7 30	19 21.35	-28 27.7	1.463	2.441	8.2	20.6
8 9	19 15.80	-34 10.4	2.832	3.727	8.4	20.5	8 9	19 14.02	-28 32.0	1.508	2.434	12.3	20.9
8 19	19 10.30	-34 19.5	2.924	3.731	10.6	20.7	8 19	19 9.35	-28 25.9	1.573	2.428	16.0	21.1
<b>186547</b>	2002 <i>XM</i> <sub>8</sub>		7 14.5	255°47'	0°9'/14.1	18	<b>318930</b>	2005 <i>UC</i> <sub>104</sub>		7 14.5			

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>428272</b>	2007 <i>DN</i> <sub>63</sub>		7 14.5 205°65	0°1/14.5 17			<b>1698</b>	Christophe		7 14.5 123°99	0°6/14.2 18		
6 10	20 2.91	-19 26.1	1.976	2.834	13.2	22.1	6 10	19 59.62	-22 36.7	2.497	3.355	10.8	16.6
6 20	19 57.32	-19 52.9	1.895	2.829	9.9	21.9	6 20	19 54.38	-22 55.4	2.428	3.363	8.0	16.4
6 30	19 49.56	-20 26.1	1.837	2.825	6.1	21.7	6 30	19 47.53	-23 16.3	2.382	3.370	4.9	16.2
7 10	19 40.30	-21 2.6	1.805	2.819	1.9	21.4	7 10	19 39.65	-23 37.2	2.364	3.377	1.6	16.0
7 20	19 30.43	-21 39.1	1.801	2.813	2.4	21.4	7 20	19 31.42	-23 55.6	2.374	3.385	2.1	16.1
7 30	19 21.01	-22 12.3	1.825	2.807	6.5	21.6	7 30	19 23.65	-24 10.0	2.412	3.392	5.3	16.3
8 9	19 13.02	-22 40.2	1.875	2.800	10.4	21.9	8 9	19 17.03	-24 19.5	2.477	3.398	8.4	16.5
8 19	19 7.20	-23 2.1	1.947	2.793	13.7	22.1	8 19	19 12.10	-24 24.1	2.566	3.405	11.0	16.7
<b>282566</b>	2004 <i>XY</i> <sub>90</sub>		7 14.5 344°64	2°1/13.6 18			<b>443025</b>	2013 <i>EX</i> <sub>22</sub>		7 14.5 319°72	1°5/14.9 18		
6 10	20 0.99	-24 22.7	1.671	2.547	14.3	20.6	6 10	20 0.09	-18 29.7	1.945	2.807	13.2	20.9
6 20	19 56.27	-25 6.0	1.601	2.545	10.7	20.3	6 20	19 55.19	-18 9.1	1.863	2.798	10.0	20.6
6 30	19 49.07	-25 53.2	1.553	2.544	6.6	20.1	6 30	19 48.24	-17 53.0	1.803	2.789	6.3	20.4
7 10	19 40.17	-26 39.2	1.530	2.542	2.7	19.8	7 10	19 39.91	-17 40.4	1.769	2.781	2.5	20.1
7 20	19 30.62	-27 19.1	1.532	2.541	3.6	19.9	7 20	19 31.07	-17 30.5	1.762	2.773	2.6	20.1
7 30	19 21.65	-27 49.2	1.561	2.540	7.8	20.1	7 30	19 22.70	-17 22.2	1.782	2.766	6.5	20.4
8 9	19 14.42	-28 8.2	1.613	2.539	11.7	20.4	8 9	19 15.75	-17 14.9	1.827	2.758	10.2	20.6
8 19	19 9.71	-28 16.7	1.687	2.538	15.2	20.6	8 19	19 10.86	-17 8.1	1.894	2.751	13.5	20.8
<b>95624</b>	2002 <i>GP</i> <sub>24</sub>		7 14.5 289°92	7°7/17.3 18	R	R	<b>347867</b>	2002 <i>RB</i> <sub>241</sub>		7 14.5 262°21	1°0/14.8 18		
6 10	19 58.52	- 2 24.9	1.755	2.575	16.2	19.8	6 10	20 0.81	-18 31.2	2.019	2.878	12.9	21.3
6 20	19 54.31	- 1 55.1	1.662	2.555	13.5	19.6	6 20	19 55.72	-18 30.9	1.934	2.868	9.7	21.1
6 30	19 47.88	- 1 43.8	1.588	2.534	10.7	19.4	6 30	19 48.58	-18 36.1	1.871	2.858	6.1	20.8
7 10	19 39.83	- 1 53.3	1.538	2.513	8.4	19.2	7 10	19 40.03	-18 45.1	1.834	2.847	2.2	20.5
7 20	19 30.98	- 2 24.3	1.511	2.492	7.8	19.1	7 20	19 30.91	-18 55.9	1.825	2.837	2.4	20.5
7 30	19 22.41	- 3 14.7	1.509	2.471	9.6	19.2	7 30	19 22.21	-19 6.8	1.842	2.826	6.3	20.8
8 9	19 15.16	- 4 20.2	1.530	2.450	12.6	19.3	8 9	19 14.86	-19 16.4	1.886	2.815	10.1	21.0
8 19	19 10.07	- 5 35.0	1.573	2.430	15.9	19.5	8 19	19 9.56	-19 23.8	1.952	2.804	13.4	21.2
<b>499696</b>	2010 <i>XA</i> <sub>77</sub>		7 14.5 165°77	0°3/14.4 17			<b>122518</b>	2000 <i>QZ</i> <sub>205</sub>		7 14.5 251°96	0°4/14.3 18		
6 10	20 4.29	-20 41.6	1.985	2.842	13.2	22.8	6 10	20 2.78	-21 37.5	1.977	2.838	13.0	20.4
6 20	19 58.24	-21 8.9	1.913	2.848	9.8	22.6	6 20	19 57.35	-21 54.0	1.886	2.823	9.8	20.2
6 30	19 50.06	-21 41.2	1.864	2.852	6.0	22.4	6 30	19 49.68	-22 14.9	1.819	2.807	6.0	19.9
7 10	19 40.44	-22 15.0	1.842	2.856	1.9	22.1	7 10	19 40.41	-22 37.0	1.777	2.791	1.9	19.6
7 20	19 30.32	-22 47.0	1.848	2.859	2.4	22.2	7 20	19 30.43	-22 57.4	1.763	2.775	2.5	19.6
7 30	19 20.74	-23 14.4	1.881	2.862	6.5	22.4	7 30	19 20.83	-23 13.6	1.776	2.757	6.7	19.9
8 9	19 12.68	-23 35.6	1.941	2.864	10.2	22.7	8 9	19 12.66	-23 24.4	1.815	2.740	10.7	20.1
8 19	19 6.82	-23 50.5	2.023	2.865	13.4	22.9	8 19	19 6.69	-23 29.5	1.876	2.722	14.1	20.2
<b>133788</b>	2003 <i>WD</i> <sub>119</sub>		7 14.5 329°74	5°5/12.1 18			<b>4386</b>	Lüst		7 14.5 118°03	4°5/12.2 18		
6 10	19 59.83	-30 52.3	1.489	2.375	15.1	18.6	6 10	20 3.32	-35 50.3	2.642	3.492	10.5	18.4
6 20	19 55.99	-32 3.3	1.414	2.360	11.7	18.3	6 20	19 57.19	-36 34.3	2.585	3.506	8.2	18.3
6 30	19 49.22	-33 14.4	1.361	2.346	8.1	18.1	6 30	19 49.26	-37 12.7	2.552	3.520	5.9	18.1
7 10	19 40.30	-34 17.9	1.332	2.333	5.6	17.9	7 10	19 40.19	-37 41.2	2.546	3.533	4.6	18.1
7 20	19 30.41	-35 6.4	1.326	2.321	6.8	17.9	7 20	19 30.79	-37 57.0	2.567	3.546	5.2	18.1
7 30	19 21.09	-35 35.1	1.345	2.309	10.3	18.1	7 30	19 21.95	-37 59.0	2.616	3.559	7.1	18.3
8 9	19 13.77	-35 43.3	1.385	2.298	14.2	18.3	8 9	19 14.47	-37 48.0	2.691	3.572	9.3	18.4
8 19	19 9.44	-35 33.6	1.444	2.288	17.7	18.5	8 19	19 8.91	-37 26.3	2.788	3.584	11.4	18.6
<b>67841</b>	2000 <i>VR</i> <sub>61</sub>		7 14.5 148°06	0°1/14.5 18			<b>193538</b>	2000 <i>YX</i> <sub>112</sub>		7 14.5 214°36	1°1/14.0 18		
6 10	20 11.96	-24 24.3	2.200	3.042	12.6	18.9	6 10	20 2.54	-23 6.6	2.227	3.085	11.9	21.5
6 20	20 3.50	-23 39.6	2.124	3.051	9.4	18.7	6 20	19 56.90	-23 35.5	2.143	3.078	8.9	21.3
6 30	19 53.01	-22 52.3	2.075	3.059	5.8	18.5	6 30	19 49.27	-24 7.6	2.083	3.071	5.4	21.1
7 10	19 41.30	-22 1.6	2.053	3.067	1.8	18.2	7 10	19 40.26	-24 39.4	2.050	3.063	1.9	20.8
7 20	19 29.35	-21 7.7	2.063	3.074	2.2	18.3	7 20	19 30.69	-25 7.9	2.044	3.054	2.6	20.9
7 30	19 18.20	-20 11.9	2.103	3.081	6.1	18.5	7 30	19 21.52	-25 30.4	2.068	3.046	6.2	21.1
8 9	19 8.73	-19 16.3	2.171	3.087	9.6	18.8	8 9	19 13.65	-25 45.9	2.117	3.036	9.7	21.3
8 19	19 1.53	-18 22.7	2.264	3.093	12.6	19.0	8 19	19 7.76	-25 54.4	2.190	3.026	12.7	21.5
<b>489718</b>	2007 <i>VK</i> <sub>245</sub>		7 14.5 306°46	18°5/ 1.3 17			<b>255172</b>	2005 <i>UO</i> <sub>221</sub>		7 14.5 237°29	2°6/15.6 18		
6 10	20 9.68	-46 41.8	0.982	1.862	21.6	20.5	6 10	19 58.68	-12 46.5	2.628	3.464	11.0	20.9
6 20	20 6.93	-50 46.2	0.935	1.848	19.5	20.3	6 20	19 53.67	-12 34.7	2.537	3.453	8.5	20.7
6 30	19 58.17	-54 38.2	0.907	1.835	18.5	20.2	6 30	19 47.13	-12 30.0	2.469	3.442	5.8	20.5
7 10	19 43.73	-57 51.9	0.899	1.823	19.1	20.1	7 10	19 39.56	-12 32.1	2.428	3.431	3.2	20.3
7 20	19 25.71	-60 6.1	0.909	1.810	21.1	20.2	7 20	19 31.57	-12 40.1	2.415	3.420	3.0	20.3
7 30	19 8.16	-61 11.6	0.935	1.798	23.7	20.3	7 30	19 23.87	-12 52.7	2.430	3.408	5.5	20.4
8 9	18 55.36	-61 15.6	0.973	1.787	26.5	20.5	8 9	19 17.14	-13 8.5	2.473	3.396	8.3	20.6
8 19	18 49.78	-60 32.7	1.022	1.776	29.0	20.7	8 19	19 11.91	-13 26.1	2.539	3.383	10.9	20.8
<b>268727</b>	2006 <i>JK</i> <sub>51</sub>		7 14.5 232°89	0°5/14.8 18			<b>102198</b>	1999 <i>SU</i> <sub>11</sub>		7 14.5 243°10	3°3/15.7 18		
6 10	19 56.63	-17 56.5	2.815	3.665	9.9	20.7	6 10	20 1.88	-12 14.2	1.683	2.535	15.4	19.7
6 20	19 52.08	-18 25.5	2.731	3.661	7.4	20.5	6 20	19 56.89	-12 19.5	1.599	2.526	11.9	19.5
6 30	19 46.12	-19 0.1	2.671	3.656	4.6	20.3	6 30	19 49.49	-12 37.9	1.537	2.516	8.0	19.2
7 10	19 39.20	-19 38.0	2.639	3.652	1.6	20.1	7 10	19 40.39	-13 8.3	1.499	2.505	4.3	19.0
7 20	19 31.90	-20 17.2	2.635	3.647	1.7	20.1	7 20	19 30.54	-13 48.3	1.487	2.495	3.9	18.9
7 30	19 24.87	-20 55.3	2.660	3.642	4.8	20.3	7 30	19 21.10	-14 34.2	1.501	2.484	7.6	19.1
8 9	19 18.75	-21 30.4	2.713	3.637	7.6	20.5	8 9	19 13.22	-15 22.2	1.540	2.472	11.7	19.3
8 19	19 14.04	-22 1.5	2.790	3.632	10.1	20.7	8 19	19 7.72	-16 9.0	1.600	2.461	15.4	19.5
<b>349232</b>	2007 <i>TY</i> <sub>34</sub>		7 14.5 333°77	4°0/12.8 16			<b>366290</b>	2013 <i>BW</i> <sub>33</sub>		7 14.			

EPHEMERIDES

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>482953</b>	2014 <i>KR</i> <sub>26</sub>		7 14.5 352°41	5°7/16.8	18		<b>450048</b>	2015 <i>RH</i> <sub>26</sub>		7 14.5 358°61	0°3/14.4	18	
6 10	19 56.71	- 6 19.8	1.936	2.769	14.4	21.1	6 10	19 58.77	-22 45.9	1.592	2.473	14.6	19.8
6 20	19 52.61	- 5 53.0	1.860	2.766	11.6	20.9	6 20	19 54.60	-22 35.5	1.523	2.470	10.9	19.6
6 30	19 46.65	- 5 40.4	1.805	2.764	8.7	20.7	6 30	19 48.05	-22 27.3	1.475	2.467	6.7	19.3
7 10	19 39.44	- 5 42.9	1.774	2.762	6.3	20.5	7 10	19 39.94	-22 19.3	1.452	2.466	2.1	19.0
7 20	19 31.76	- 6 0.1	1.769	2.760	5.8	20.5	7 20	19 31.29	-22 9.6	1.453	2.466	2.6	19.1
7 30	19 24.51	- 6 30.1	1.789	2.759	7.7	20.6	7 30	19 23.32	-21 57.0	1.480	2.466	7.2	19.3
8 9	19 18.52	- 7 9.6	1.833	2.758	10.6	20.8	8 9	19 17.09	-21 41.5	1.531	2.468	11.4	19.6
8 19	19 14.43	- 7 54.8	1.900	2.758	13.5	21.0	8 19	19 13.30	-21 23.5	1.602	2.471	15.0	19.8
<b>89867</b>	2002 <i>CP</i> <sub>139</sub>		7 14.5 254°14	2°3/15.3	18		<b>193620</b>	2001 <i>CZ</i> <sub>21</sub>		7 14.5 158°87	1°0/14.1	18	
6 10	20 2.48	-15 6.9	2.025	2.873	13.3	20.3	6 10	20 3.08	-23 27.9	2.184	3.042	12.1	20.7
6 20	19 57.04	-14 57.9	1.928	2.854	10.2	20.1	6 20	19 57.22	-23 50.1	2.112	3.048	9.0	20.5
6 30	19 49.48	-14 56.4	1.855	2.835	6.7	19.8	6 30	19 49.41	-24 14.5	2.065	3.053	5.5	20.3
7 10	19 40.38	-15 1.6	1.807	2.815	3.2	19.6	7 10	19 40.33	-24 37.9	2.044	3.057	1.9	20.1
7 20	19 30.58	-15 12.2	1.786	2.795	3.1	19.5	7 20	19 30.82	-24 57.4	2.051	3.061	2.5	20.2
7 30	19 21.09	-15 26.5	1.793	2.774	6.7	19.7	7 30	19 21.83	-25 11.2	2.086	3.065	6.1	20.4
8 9	19 12.90	-15 42.5	1.826	2.753	10.5	19.9	8 9	19 14.23	-25 18.5	2.148	3.068	9.5	20.6
8 19	19 6.77	-15 58.9	1.881	2.731	13.9	20.0	8 19	19 8.65	-25 19.6	2.233	3.071	12.4	20.8
<b>335083</b>	2004 <i>SF</i> <sub>28</sub>		7 14.5 260°57	1°6/15.1	18		<b>179372</b>	2001 <i>XF</i> <sub>232</sub>		7 14.5 231°84	0°2/14.4	18	
6 10	20 1.51	-15 57.8	1.986	2.839	13.3	22.1	6 10	20 0.24	-21 23.2	2.235	3.095	11.8	21.1
6 20	19 56.41	-16 10.3	1.890	2.820	10.2	21.9	6 20	19 55.11	-21 33.7	2.156	3.091	8.8	20.9
6 30	19 49.13	-16 31.6	1.816	2.800	6.5	21.6	6 30	19 48.14	-21 47.6	2.100	3.088	5.4	20.7
7 10	19 40.29	-17 0.0	1.768	2.779	2.7	21.3	7 10	19 39.94	-22 2.6	2.070	3.084	1.7	20.4
7 20	19 30.69	-17 32.8	1.748	2.759	2.6	21.3	7 20	19 31.28	-22 16.4	2.068	3.080	2.1	20.5
7 30	19 21.37	-18 7.3	1.754	2.737	6.6	21.5	7 30	19 23.05	-22 27.3	2.094	3.076	5.8	20.7
8 9	19 13.35	-18 40.7	1.787	2.716	10.6	21.7	8 9	19 16.08	-22 34.2	2.147	3.072	9.2	20.9
8 19	19 7.42	-19 11.3	1.842	2.694	14.1	21.9	8 19	19 10.99	-22 37.1	2.222	3.068	12.2	21.1
<b>335079</b>	2004 <i>RU</i> <sub>343</sub>		7 14.5 343°41	0°3/14.5	16		<b>3719</b>	Karamzin		7 14.5 269°78	0°1/14.5	18	
6 10	20 2.08	-22 31.5	1.360	2.243	16.4	20.4	6 10	20 3.93	-21 0.3	1.705	2.571	14.5	17.8
6 20	19 57.46	-22 4.9	1.288	2.236	12.4	20.1	6 20	19 58.61	-21 6.7	1.612	2.551	11.0	17.6
6 30	19 49.98	-21 39.9	1.237	2.229	7.7	19.9	6 30	19 50.69	-21 18.0	1.541	2.530	6.8	17.3
7 10	19 40.56	-21 14.7	1.209	2.223	2.5	19.5	7 10	19 40.85	-21 31.5	1.495	2.509	2.2	16.9
7 20	19 30.44	-20 48.2	1.205	2.218	3.0	19.5	7 20	19 30.12	-21 44.0	1.475	2.487	2.7	16.9
7 30	19 21.11	-20 20.0	1.226	2.213	8.2	19.8	7 30	19 19.76	-21 53.2	1.481	2.465	7.5	17.2
8 9	19 13.86	-19 50.8	1.269	2.210	13.0	20.1	8 9	19 11.04	-21 57.7	1.512	2.443	12.0	17.4
8 19	19 9.53	-19 21.6	1.333	2.207	17.1	20.3	8 19	19 4.86	-21 57.6	1.565	2.420	16.0	17.6
<b>483662</b>	2005 <i>EY</i> <sub>223</sub>		7 14.5 151°27	13°5/23.2	17		<b>224213</b>	2005 <i>ST</i> <sub>23</sub>		7 14.5 271°14	1°0/14.9	18	
6 10	20 11.22	+15 34.3	1.647	2.348	21.5	23.6	6 10	20 1.76	-17 11.0	1.745	2.608	14.4	21.0
6 20	20 3.64	+15 44.2	1.581	2.364	19.3	23.4	6 20	19 56.92	-17 35.3	1.652	2.588	11.0	20.7
6 30	19 53.48	+15 18.4	1.531	2.379	16.9	23.3	6 30	19 49.63	-18 9.6	1.581	2.568	7.0	20.5
7 10	19 41.62	+14 12.3	1.500	2.393	14.8	23.2	7 10	19 40.52	-18 51.3	1.535	2.547	2.5	20.1
7 20	19 29.18	+12 26.3	1.493	2.404	13.6	23.2	7 20	19 30.52	-19 36.6	1.515	2.527	2.6	20.1
7 30	19 17.49	+10 5.9	1.509	2.414	13.9	23.2	7 30	19 20.82	-20 21.5	1.521	2.506	7.3	20.3
8 9	19 7.71	+ 7 22.2	1.551	2.422	15.4	23.3	8 9	19 12.60	-21 2.8	1.553	2.485	11.7	20.5
8 19	19 0.61	+ 4 27.3	1.616	2.428	17.5	23.5	8 19	19 6.77	-21 38.5	1.606	2.463	15.5	20.7
<b>520935</b>	2014 <i>XZ</i> <sub>42</sub>		7 14.5 142°25	7°8/12.1	17		<b>517165</b>	2013 <i>NV</i> <sub>26</sub>		7 14.5 295°69	4°9/16.2	17	
6 10	20 10.48	-39 32.8	1.662	2.520	15.3	21.3	6 10	20 0.08	- 9 59.6	1.426	2.286	17.2	21.6
6 20	20 3.69	-40 27.8	1.603	2.524	12.3	21.1	6 20	19 55.92	- 9 48.4	1.346	2.273	13.7	21.3
6 30	19 53.76	-41 12.0	1.566	2.528	9.5	20.9	6 30	19 49.10	- 9 53.6	1.285	2.261	9.6	21.0
7 10	19 41.73	-41 37.3	1.553	2.532	7.9	20.9	7 10	19 40.36	-10 15.4	1.247	2.249	5.9	20.8
7 20	19 29.08	-41 38.5	1.564	2.535	8.6	20.8	7 20	19 30.75	-10 52.3	1.232	2.236	5.3	20.7
7 30	19 17.48	-41 14.5	1.600	2.539	11.0	21.0	7 30	19 21.61	-11 40.6	1.242	2.225	8.8	20.9
8 9	19 8.33	-40 29.2	1.658	2.542	13.9	21.2	8 9	19 14.20	-12 35.4	1.275	2.213	13.1	21.1
8 19	19 2.44	-39 28.4	1.737	2.545	16.7	21.4	8 19	19 9.45	-13 31.9	1.328	2.201	17.2	21.3
<b>36150</b>	1999 <i>RE</i> <sub>193</sub>		7 14.5 139°08	3°2/16.5	18		<b>73928</b>	1997 <i>NK</i> <sub>2</sub>		7 14.5 170°40	4°8/16.7	18	
6 10	19 57.70	- 8 46.3	2.519	3.345	11.7	18.5	6 10	19 59.75	- 6 21.4	2.362	3.178	12.7	20.4
6 20	19 52.94	- 9 5.4	2.443	3.351	9.1	18.4	6 20	19 54.54	- 6 1.8	2.284	3.181	10.2	20.3
6 30	19 46.68	- 9 35.8	2.390	3.357	6.4	18.2	6 30	19 47.70	- 5 54.1	2.229	3.183	7.6	20.1
7 10	19 39.45	-10 16.5	2.364	3.362	3.9	18.1	7 10	19 39.80	- 5 58.8	2.200	3.185	5.4	20.0
7 20	19 31.85	-11 5.5	2.365	3.367	3.4	18.0	7 20	19 31.51	- 6 15.2	2.197	3.187	5.0	19.9
7 30	19 24.60	-11 59.8	2.395	3.372	5.6	18.2	7 30	19 23.61	- 6 41.7	2.222	3.188	6.7	20.1
8 9	19 18.37	-12 56.4	2.452	3.377	8.3	18.4	8 9	19 16.81	- 7 15.7	2.273	3.189	9.3	20.2
8 19	19 13.65	-13 52.4	2.534	3.381	10.8	18.5	8 19	19 11.66	- 7 54.3	2.348	3.189	11.8	20.4
<b>509815</b>	2008 <i>VP</i> <sub>71</sub>		7 14.5 217°37	0°7/14.8	18		<b>256929</b>	2008 <i>EO</i> <sub>23</sub>		7 14.5 185°92	0°4/14.7	17	
6 10	20 2.06	-18 51.6	2.370	3.220	11.6	22.8	6 10	20 3.80	-18 7.9	1.880	2.737	13.8	21.1
6 20	19 56.39	-18 55.9	2.282	3.211	8.7	22.6	6 20	19 58.10	-18 42.0	1.804	2.737	10.4	20.9
6 30	19 48.90	-19 4.8	2.217	3.202	5.4	22.4	6 30	19 50.14	-19 24.4	1.750	2.737	6.4	20.7
7 10	19 40.17	-19 16.5	2.180	3.193	1.9	22.1	7 10	19 40.63	-20 11.5	1.722	2.736	2.1	20.4
7 20	19 30.95	-19 29.1	2.171	3.183	2.1	22.1	7 20	19 30.50	-20 59.3	1.722	2.734	2.4	20.4
7 30	19 22.09	-19 41.0	2.190	3.172	5.6	22.4	7 30	19 20.85	-21 44.2	1.749	2.732	6.7	20.7
8 9	19 14.41	-19 50.9	2.237	3.161	9.0	22.6	8 9	19 12.72	-22 23.3	1.802	2.729	10.6	20.9
8 19	19 8.52	-19 58.4	2.307	3.149	12.0	22.7	8 19	19 6.85	-22 55.6	1.878	2.725	14.1	21.1
<b>254653</b>	2005 <i>JY</i> <sub>162</sub>		7 14.5 112°29	5°4/16.3	17		<b>95919</b>	2003 <i>HC</i> <sub>51</sub>					

EPHEMERIDES

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>311208</b>	2004 <i>XH</i> <sub>163</sub>		7 14.5 133°94	2.7/13.5	17		<b>507205</b>	2010 <i>UE</i> <sub>31</sub>		7 14.5 305°39	0.6/14.4	17	
6 10	20 5.76	-25 17.1	1.530	2.404	15.5	21.5	6 10	20 2.34	-22 14.1	1.317	2.202	16.8	21.6
6 20	20 0.01	-26 5.4	1.468	2.410	11.6	21.3	6 20	19 58.00	-22 21.5	1.238	2.186	12.7	21.3
6 30	19 51.49	-26 56.5	1.427	2.417	7.2	21.0	6 30	19 50.57	-22 33.9	1.178	2.171	7.9	21.0
7 10	19 41.07	-27 44.4	1.411	2.423	3.2	20.8	7 10	19 40.89	-22 47.8	1.141	2.156	2.5	20.6
7 20	19 30.00	-28 23.5	1.421	2.428	4.2	20.9	7 20	19 30.21	-22 59.3	1.128	2.141	3.3	20.6
7 30	19 19.72	-28 50.0	1.457	2.434	8.4	21.1	7 30	19 20.12	-23 5.3	1.140	2.126	8.8	20.9
8 9	19 11.48	-29 3.3	1.516	2.439	12.6	21.4	8 9	19 12.13	-23 4.8	1.173	2.112	13.9	21.2
8 19	19 6.12	-29 5.0	1.596	2.443	16.1	21.6	8 19	19 7.25	-22 58.2	1.225	2.099	18.3	21.4
<b>44302</b>	1998 <i>QQ</i> <sub>99</sub>		7 14.5 32°99	0.3/14.7	18		<b>259728</b>	2003 <i>YM</i> <sub>96</sub>		7 14.5 172°01	0.9/14.9	17	
6 10	20 0.36	-18 58.9	1.784	2.651	14.0	18.8	6 10	20 4.44	-17 56.7	1.886	2.741	13.8	22.0
6 20	19 55.57	-19 21.7	1.714	2.653	10.5	18.6	6 20	19 58.48	-18 9.0	1.813	2.745	10.4	21.7
6 30	19 48.59	-19 51.6	1.666	2.654	6.5	18.3	6 30	19 50.33	-18 28.2	1.762	2.747	6.5	21.5
7 10	19 40.13	-20 25.6	1.643	2.656	2.1	18.0	7 10	19 40.70	-18 51.8	1.737	2.750	2.3	21.3
7 20	19 31.14	-21 0.2	1.646	2.659	2.4	18.1	7 20	19 30.53	-19 17.0	1.739	2.751	2.4	21.3
7 30	19 22.69	-21 32.3	1.676	2.661	6.7	18.4	7 30	19 20.92	-19 41.1	1.769	2.752	6.6	21.5
8 9	19 15.79	-21 59.7	1.731	2.663	10.7	18.6	8 9	19 12.86	-20 2.4	1.825	2.752	10.5	21.8
8 19	19 11.14	-22 21.3	1.808	2.666	14.1	18.8	8 19	19 7.05	-20 19.9	1.903	2.752	13.8	22.0
<b>430947</b>	2005 <i>UV</i> <sub>296</sub>		7 14.5 71°33	2.9/13.4	17		<b>444993</b>	2008 <i>GR</i> <sub>4</sub>		7 14.5 15°96	9.1/19.5	15	
6 10	20 3.43	-26 42.1	1.628	2.503	14.6	21.6	6 10	19 54.28	+ 1 27.5	1.525	2.345	18.2	19.9
6 20	19 58.18	-27 24.0	1.563	2.506	11.0	21.4	6 20	19 51.14	+ 1 47.3	1.468	2.354	15.4	19.7
6 30	19 50.32	-28 7.1	1.519	2.508	6.9	21.1	6 30	19 45.90	+ 1 41.5	1.429	2.364	12.4	19.6
7 10	19 40.70	-28 46.0	1.500	2.511	3.4	20.9	7 10	19 39.30	+ 1 8.6	1.411	2.376	10.0	19.5
7 20	19 30.46	-29 15.6	1.508	2.513	4.3	21.0	7 20	19 32.25	+ 0 9.9	1.415	2.388	9.1	19.5
7 30	19 20.91	-29 33.1	1.540	2.516	8.2	21.2	7 30	19 25.80	- 1 9.9	1.442	2.402	10.2	19.6
8 9	19 13.26	-29 38.0	1.597	2.518	12.1	21.5	8 9	19 20.88	- 2 43.7	1.492	2.417	12.6	19.7
8 19	19 8.29	-29 31.9	1.674	2.521	15.5	21.7	8 19	19 18.13	- 4 23.8	1.564	2.433	15.3	19.9
<b>384696</b>	2011 <i>HN</i> <sub>6</sub>		7 14.5 74°29	4.6/15.6	17		<b>144247</b>	2004 <i>CG</i> <sub>79</sub>		7 14.5 241°94	0.1/14.5	18	
6 10	20 3.92	-12 4.7	1.697	2.545	15.5	20.0	6 10	20 0.25	-20 3.9	2.084	2.945	12.5	20.3
6 20	19 58.01	-11 12.2	1.638	2.559	12.0	19.8	6 20	19 55.30	-20 26.3	2.005	2.941	9.3	20.1
6 30	19 49.94	-10 29.6	1.600	2.572	8.4	19.7	6 30	19 48.37	-20 54.1	1.948	2.936	5.7	19.8
7 10	19 40.53	- 9 58.0	1.587	2.586	5.2	19.5	7 10	19 40.09	-21 24.5	1.917	2.931	1.8	19.6
7 20	19 30.76	- 9 37.6	1.600	2.600	5.0	19.5	7 20	19 31.29	-21 54.7	1.914	2.926	2.2	19.6
7 30	19 21.75	- 9 27.8	1.639	2.614	7.8	19.7	7 30	19 22.90	-22 22.0	1.939	2.921	6.1	19.8
8 9	19 14.43	- 9 26.9	1.703	2.628	11.2	19.9	8 9	19 15.83	-22 44.5	1.989	2.916	9.8	20.1
8 19	19 9.42	- 9 32.6	1.788	2.642	14.4	20.2	8 19	19 10.75	-23 1.7	2.062	2.911	12.9	20.3
<b>95701</b>	2002 <i>JH</i> <sub>109</sub>		7 14.5 333°80	6.8/16.4	18		<b>394333</b>	2006 <i>WR</i> <sub>192</sub>		7 14.5 194°88	0.1/14.6	18	
6 10	19 58.45	- 4 18.7	2.115	2.932	13.9	18.8	6 10	19 59.89	-20 13.1	2.450	3.305	11.1	22.3
6 20	19 53.78	- 3 16.8	2.035	2.926	11.5	18.6	6 20	19 54.72	-20 26.2	2.371	3.303	8.3	22.1
6 30	19 47.35	- 2 27.2	1.977	2.920	9.1	18.4	6 30	19 47.87	-20 43.1	2.315	3.302	5.1	21.9
7 10	19 39.73	- 1 52.4	1.943	2.915	7.2	18.3	7 10	19 39.91	-21 2.0	2.286	3.300	1.6	21.7
7 20	19 31.65	- 1 33.6	1.935	2.910	6.9	18.3	7 20	19 31.54	-21 20.5	2.286	3.298	1.9	21.7
7 30	19 23.96	- 1 30.6	1.952	2.905	8.4	18.4	7 30	19 23.56	-21 37.0	2.313	3.295	5.4	21.9
8 9	19 17.45	- 1 41.4	1.994	2.901	10.8	18.5	8 9	19 16.71	-21 50.2	2.368	3.293	8.5	22.1
8 19	19 12.72	- 2 3.1	2.058	2.897	13.3	18.7	8 19	19 11.56	-21 59.6	2.446	3.290	11.3	22.3
<b>349404</b>	2007 <i>YR</i> <sub>13</sub>		7 14.5 240°71	2.1/13.9	18		<b>431207</b>	2006 <i>SZ</i> <sub>170</sub>		7 14.5 231°23	1.3/15.0	17	
6 10	20 3.58	-27 46.3	2.122	2.984	12.2	21.0	6 10	20 3.69	-17 9.6	1.831	2.688	14.1	22.9
6 20	19 57.72	-27 49.4	2.045	2.981	9.2	20.8	6 20	19 58.15	-17 16.8	1.745	2.677	10.8	22.6
6 30	19 49.79	-27 50.6	1.991	2.978	5.8	20.6	6 30	19 50.28	-17 31.7	1.681	2.666	6.8	22.4
7 10	19 40.50	-27 46.8	1.964	2.974	2.6	20.4	7 10	19 40.75	-17 52.5	1.643	2.655	2.7	22.1
7 20	19 30.75	-27 36.1	1.964	2.971	3.2	20.4	7 20	19 30.50	-18 16.4	1.631	2.643	2.7	22.1
7 30	19 21.59	-27 17.5	1.991	2.967	6.6	20.7	7 30	19 20.68	-18 40.8	1.647	2.630	6.9	22.3
8 9	19 13.92	-26 51.8	2.045	2.964	10.0	20.9	8 9	19 12.37	-19 3.5	1.688	2.617	11.1	22.5
8 19	19 8.39	-26 20.7	2.121	2.960	13.0	21.1	8 19	19 6.36	-19 23.3	1.751	2.603	14.7	22.7
<b>27308</b>	2000 <i>AW</i> <sub>229</sub>		7 14.5 183°04	3.4/13.1	18		<b>438397</b>	2006 <i>UT</i> <sub>94</sub>		7 14.5 255°60	2.6/15.7	18	
6 10	20 4.83	-31 21.9	2.357	3.212	11.4	18.9	6 10	19 58.79	-13 5.4	2.181	3.027	12.6	21.9
6 20	19 58.55	-31 50.4	2.283	3.213	8.7	18.7	6 20	19 54.09	-13 8.3	2.097	3.020	9.7	21.7
6 30	19 50.25	-32 15.6	2.233	3.213	5.8	18.5	6 30	19 47.59	-13 20.4	2.036	3.014	6.5	21.5
7 10	19 40.64	-32 33.4	2.210	3.212	3.6	18.4	7 10	19 39.86	-13 41.0	2.001	3.007	3.4	21.3
7 20	19 30.58	-32 40.9	2.215	3.211	4.2	18.4	7 20	19 31.64	-14 8.1	1.993	3.000	3.1	21.3
7 30	19 21.06	-32 36.8	2.247	3.210	6.9	18.6	7 30	19 23.77	-14 39.4	2.012	2.994	6.1	21.5
8 9	19 12.97	-32 21.7	2.306	3.208	9.8	18.8	8 9	19 17.09	-15 12.6	2.057	2.987	9.4	21.7
8 19	19 6.95	-31 57.6	2.388	3.206	12.4	19.0	8 19	19 12.19	-15 45.5	2.126	2.980	12.4	21.8
<b>51104</b>	2000 <i>HJ</i> <sub>13</sub>		7 14.5 109°77	1.1/14.1	18		<b>471579</b>	2012 <i>RR</i> <sub>3</sub>		7 14.5 343°16	1.6/14.2	16	
6 10	20 1.34	-23 27.6	2.031	2.896	12.6	19.3	6 10	19 58.68	-24 33.2	1.217	2.114	17.1	20.8
6 20	19 56.08	-23 49.8	1.961	2.900	9.4	19.1	6 20	19 55.37	-24 37.5	1.146	2.101	12.9	20.5
6 30	19 48.80	-24 14.5	1.915	2.904	5.7	18.9	6 30	19 48.98	-24 44.0	1.095	2.089	8.0	20.2
7 10	19 40.19	-24 38.5	1.894	2.908	2.0	18.6	7 10	19 40.41	-24 48.8	1.065	2.079	2.8	19.8
7 20	19 31.13	-24 58.8	1.901	2.912	2.6	18.7	7 20	19 30.97	-24 48.3	1.058	2.070	3.7	19.8
7 30	19 22.61	-25 13.2	1.935	2.915	6.4	18.9	7 30	19 22.27	-24 40.1	1.074	2.062	9.0	20.1
8 9	19 15.54	-25 20.9	1.995	2.919	9.9	19.2	8 9	19 15.78	-24 24.2	1.111	2.056	14.0	20.4
8 19	19 10.56	-25 22.2	2.077	2.923	13.0	19.4	8 19	19 12.45	-24 1.8	1.167	2.051	18.4	20.6
<b>169573</b>	2002 <i>FQ</i> <sub>21</sub>		7 14.5 206°18	4.6/16.2	17		<b>246515</b>	2008 <i></i>					

EPHEMERIDES

7 14.5

7 14.6

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>292531</b>	2006 <i>TH</i> <sub>41</sub>	7 14.5 333°26		5°7/16.6 18			<b>182788</b>	2002 <i>AX</i> <sub>11</sub>	7 14.5 182°84		0°9/14.1 18		
6 10	19 58.48	- 6 45.7	1.960	2.791	14.3	20.3	6 10	20 0.29	-23 37.2	2.804	3.656	9.9	21.6
6 20	19 53.96	- 6 10.6	1.882	2.787	11.6	20.1	6 20	19 54.87	-24 1.1	2.724	3.657	7.3	21.4
6 30	19 47.54	- 5 48.5	1.826	2.784	8.7	19.9	6 30	19 47.92	-24 26.7	2.670	3.657	4.5	21.2
7 10	19 39.86	- 5 40.8	1.794	2.781	6.3	19.8	7 10	19 39.97	-24 51.6	2.643	3.656	1.6	21.0
7 20	19 31.68	- 5 47.4	1.788	2.778	5.9	19.7	7 20	19 31.65	-25 13.4	2.645	3.655	2.1	21.1
7 30	19 23.93	- 6 6.9	1.807	2.776	7.8	19.9	7 30	19 23.68	-25 30.5	2.677	3.654	5.1	21.3
8 9	19 17.47	- 6 36.5	1.851	2.773	10.7	20.0	8 9	19 16.73	-25 42.1	2.736	3.652	7.9	21.5
8 19	19 12.92	- 7 12.7	1.918	2.771	13.6	20.2	8 19	19 11.33	-25 48.2	2.819	3.650	10.3	21.6
<b>337334</b>	2001 <i>EH</i> <sub>5</sub>	7 14.5 203°48		2°0/15.6 18			<b>385318</b>	2001 <i>YT</i> <sub>138</sub>	7 14.5 227°86		0°3/14.4 18		
6 10	20 0.91	-13 36.0	2.469	3.306	11.6	21.5	6 10	20 2.83	-20 17.7	2.144	2.999	12.4	22.4
6 20	19 55.48	-13 52.2	2.381	3.301	8.9	21.3	6 20	19 57.29	-20 49.2	2.055	2.988	9.3	22.2
6 30	19 48.37	-14 16.9	2.318	3.295	5.8	21.1	6 30	19 49.68	-21 26.4	1.989	2.976	5.7	21.9
7 10	19 40.11	-14 48.7	2.281	3.289	2.8	20.9	7 10	19 40.60	-22 6.3	1.950	2.964	1.8	21.6
7 20	19 31.37	-15 25.4	2.273	3.281	2.5	20.8	7 20	19 30.86	-22 45.5	1.939	2.951	2.3	21.6
7 30	19 22.94	-16 4.5	2.293	3.274	5.5	21.0	7 30	19 21.45	-23 20.7	1.956	2.937	6.3	21.9
8 9	19 15.57	-16 43.8	2.341	3.265	8.6	21.2	8 9	19 13.33	-23 50.0	2.000	2.923	10.0	22.1
8 19	19 9.85	-17 21.2	2.413	3.256	11.5	21.4	8 19	19 7.23	-24 12.7	2.067	2.908	13.2	22.3
<b>473052</b>	2015 <i>HR</i> <sub>85</sub>	7 14.5 200°65		5°4/11.9 17			<b>212115</b>	2005 <i>EP</i> <sub>184</sub>	7 14.5 253°57		6°7/17.2 18		
6 10	20 5.41	-33 43.8	1.978	2.840	13.0	21.3	6 10	19 59.13	- 2 52.2	2.105	2.914	14.2	20.6
6 20	19 59.55	-34 50.8	1.908	2.838	10.1	21.1	6 20	19 54.40	- 2 18.9	2.018	2.904	11.8	20.5
6 30	19 51.19	-35 54.4	1.861	2.835	7.2	20.9	6 30	19 47.84	- 2 0.6	1.953	2.894	9.3	20.3
7 10	19 41.06	-36 47.7	1.839	2.832	5.5	20.8	7 10	19 40.00	- 1 58.9	1.911	2.883	7.2	20.1
7 20	19 30.22	-37 25.4	1.845	2.829	6.3	20.9	7 20	19 31.61	- 2 14.2	1.895	2.873	6.8	20.1
7 30	19 19.95	-37 44.7	1.876	2.826	8.9	21.0	7 30	19 23.54	- 2 45.0	1.905	2.862	8.3	20.2
8 9	19 11.40	-37 46.0	1.932	2.822	11.9	21.2	8 9	19 16.64	- 3 28.2	1.939	2.851	10.8	20.3
8 19	19 5.38	-37 32.0	2.009	2.818	14.7	21.4	8 19	19 11.54	- 4 19.8	1.997	2.840	13.5	20.4
<b>43636</b>	2002 <i>EC</i> <sub>22</sub>	7 14.5 346°97		4°9/13.0 18			<b>489732</b>	2007 <i>WX</i> <sub>61</sub>	7 14.6 216°75		4°1/13.1 17		
6 10	19 58.27	-28 2.7	1.013	1.921	18.7	18.3	6 10	20 7.36	-29 41.9	1.700	2.567	14.5	21.5
6 20	19 55.69	-28 55.9	0.952	1.911	14.2	18.0	6 20	20 1.27	-30 26.4	1.624	2.561	11.1	21.3
6 30	19 49.49	-29 51.2	0.909	1.903	9.3	17.7	6 30	19 52.38	-31 9.7	1.571	2.555	7.3	21.0
7 10	19 40.64	-30 40.1	0.886	1.895	5.3	17.5	7 10	19 41.50	-31 45.7	1.542	2.548	4.3	20.9
7 20	19 30.71	-31 14.3	0.884	1.889	6.5	17.5	7 20	19 29.82	-32 8.8	1.540	2.541	5.2	20.9
7 30	19 21.70	-31 28.7	0.903	1.885	11.4	17.8	7 30	19 18.77	-32 16.4	1.564	2.533	8.8	21.1
8 9	19 15.37	-31 23.1	0.942	1.882	16.4	18.0	8 9	19 9.68	-32 8.8	1.613	2.524	12.6	21.3
8 19	19 12.79	-31 0.7	0.997	1.880	20.8	18.3	8 19	19 3.42	-31 48.8	1.682	2.515	16.0	21.5
<b>448622</b>	2010 <i>UE</i> <sub>78</sub>	7 14.5 328°12		1°4/14.9 18			<b>487724</b>	2015 <i>RY</i> <sub>84</sub>	7 14.6 321°98		0°5/14.6 17		
6 10	19 59.79	-18 27.7	2.007	2.868	12.9	21.1	6 10	20 2.81	-22 50.5	1.781	2.649	13.9	20.7
6 20	19 54.96	-18 7.1	1.926	2.860	9.8	20.8	6 20	19 57.62	-22 9.3	1.686	2.626	10.5	20.4
6 30	19 48.17	-17 50.8	1.867	2.853	6.2	20.6	6 30	19 50.02	-21 27.0	1.615	2.604	6.6	20.1
7 10	19 40.06	-17 38.0	1.834	2.846	2.5	20.4	7 10	19 40.73	-20 42.5	1.568	2.582	2.2	19.8
7 20	19 31.46	-17 27.8	1.827	2.839	2.5	20.3	7 20	19 30.73	-19 55.8	1.548	2.560	2.6	19.8
7 30	19 23.32	-17 19.4	1.848	2.832	6.3	20.6	7 30	19 21.21	-19 7.6	1.554	2.539	7.1	20.0
8 9	19 16.54	-17 11.9	1.894	2.826	9.9	20.8	8 9	19 13.29	-18 19.4	1.586	2.519	11.4	20.2
8 19	19 11.76	-17 5.0	1.963	2.820	13.1	21.0	8 19	19 7.77	-17 32.7	1.640	2.499	15.2	20.4
<b>125410</b>	2001 <i>VW</i> <sub>106</sub>	7 14.5 353°89		2°5/14.9 17			<b>420656</b>	2012 <i>JP</i> <sub>24</sub>	7 14.6 115°36		3°2/13.2 15		
6 10	19 57.09	-19 5.8	0.889	1.799	20.4	18.4	6 10	20 6.57	-26 37.1	1.742	2.609	14.3	21.6
6 20	19 54.73	-18 25.2	0.831	1.792	15.6	18.1	6 20	20 0.32	-27 39.5	1.687	2.625	10.6	21.4
6 30	19 48.81	-17 52.1	0.790	1.785	10.0	17.8	6 30	19 51.58	-28 43.0	1.654	2.641	6.7	21.2
7 10	19 40.39	-17 26.2	0.768	1.781	4.1	17.5	7 10	19 41.19	-29 41.3	1.648	2.656	3.5	21.0
7 20	19 31.06	-17 6.9	0.766	1.778	4.2	17.4	7 20	19 30.28	-30 28.8	1.668	2.671	4.4	21.1
7 30	19 22.72	-16 53.1	0.784	1.777	10.1	17.8	7 30	19 20.15	-31 2.3	1.716	2.686	8.0	21.4
8 9	19 17.05	-16 43.5	0.820	1.778	15.8	18.1	8 9	19 11.89	-31 21.4	1.788	2.700	11.6	21.6
8 19	19 15.00	-16 36.6	0.874	1.781	20.7	18.4	8 19	19 6.24	-31 27.7	1.881	2.713	14.7	21.9
<b>46045</b>	2001 <i>DU</i> <sub>68</sub>	7 14.5 157°49		2°7/15.9 18			<b>383597</b>	2007 <i>HO</i> <sub>9</sub>	7 14.6 0°12		4°5/12.9 17		
6 10	19 57.69	-11 31.8	2.633	3.466	11.0	19.6	6 10	20 4.06	-30 34.7	1.634	2.509	14.6	20.6
6 20	19 52.93	-11 34.9	2.555	3.469	8.5	19.4	6 20	19 58.81	-31 21.9	1.568	2.508	11.1	20.4
6 30	19 46.72	-11 46.6	2.501	3.473	5.8	19.3	6 30	19 50.83	-32 6.8	1.524	2.508	7.5	20.2
7 10	19 39.57	-12 6.0	2.473	3.475	3.3	19.1	7 10	19 40.99	-32 43.3	1.504	2.508	4.7	20.0
7 20	19 32.08	-12 31.8	2.473	3.478	3.0	19.1	7 20	19 30.49	-33 6.2	1.510	2.508	5.6	20.0
7 30	19 24.93	-13 2.0	2.502	3.481	5.3	19.2	7 30	19 20.71	-33 12.8	1.541	2.508	9.0	20.2
8 9	19 18.76	-13 34.6	2.558	3.483	8.0	19.4	8 9	19 12.91	-33 3.9	1.595	2.509	12.6	20.5
8 19	19 14.05	-14 7.6	2.638	3.485	10.5	19.6	8 19	19 7.89	-32 42.2	1.670	2.509	15.9	20.7
<b>443336</b>	2014 <i>GB</i> <sub>6</sub>	7 14.5 9°89		11°7/11.9 17			<b>43523</b>	2001 <i>DJ</i> <sub>22</sub>	7 14.6 325°80		4°9/11.8 18		
6 10	20 2.11	-45 20.7	1.263	2.137	18.1	19.3	6 10	20 0.81	-33 21.6	2.219	3.083	11.7	18.4
6 20	19 58.32	-46 22.9	1.222	2.143	15.3	19.1	6 20	19 55.90	-34 27.6	2.147	3.079	9.1	18.2
6 30	19 50.82	-47 5.4	1.201	2.151	12.9	19.0	6 30	19 48.87	-35 30.9	2.100	3.075	6.5	18.0
7 10	19 40.95	-47 19.1	1.198	2.161	11.7	19.0	7 10	19 40.35	-36 25.7	2.078	3.071	4.9	17.9
7 20	19 30.55	-46 59.0	1.217	2.173	12.2	19.0	7 20	19 31.24	-37 7.6	2.083	3.068	5.7	18.0
7 30	19 21.62	-46 5.9	1.256	2.186	14.1	19.2	7 30	19 22.55	-37 33.7	2.115	3.064	8.1	18.1
8 9	19 15.65	-44 46.3	1.315	2.201	16.6	19.4	8 9	19 15.29	-37 43.8	2.171	3.061	10.8	18.3
8 19	19 13.32	-43 8.8	1.392	2.218	19.1	19.6	8 19	19 10.17	-37 39.8	2.249	3.058	13.3	18.5
<b>141103</b>	2001 <i>XM</i> <sub>56</sub>	7 14.5 235°08		1°4/15.2 18			<b>156970</b>	2003 <i>HY</i> <sub>44</sub>	7 14.6 122°55		2°5/13.5 17		



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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>309216</b>	2007 <i>MG</i> <sub>24</sub>		7 14.6	2°07'	3°6'/11.8	18	<b>510583</b>	2012 <i>SQ</i> <sub>5</sub>		7 14.6	241°90'	0°4'/14.7	18
6 10	20 2.03	-23 11.7	1.818	2.687	13.6	19.2	6 10	20 2.19	-19 21.1	2.239	3.092	12.0	22.6
6 20	19 57.24	-25 33.7	1.745	2.686	10.2	19.0	6 20	19 56.74	-19 32.8	2.146	3.077	9.1	22.4
6 30	19 49.95	-28 5.8	1.698	2.686	6.4	18.8	6 30	19 49.33	-19 49.7	2.076	3.061	5.6	22.2
7 10	19 40.79	-30 38.5	1.679	2.686	3.7	18.6	7 10	19 40.54	-20 9.4	2.032	3.045	1.9	21.9
7 20	19 30.67	-33 1.4	1.690	2.687	5.2	18.7	7 20	19 31.14	-20 29.8	2.017	3.029	2.1	21.9
7 30	19 20.83	-35 5.8	1.729	2.689	8.8	18.9	7 30	19 22.06	-20 48.5	2.030	3.012	6.0	22.1
8 9	19 12.49	-36 47.3	1.794	2.691	12.3	19.2	8 9	19 14.19	-21 4.3	2.069	2.994	9.6	22.3
8 19	19 6.59	-38 5.4	1.881	2.694	15.4	19.4	8 19	19 8.21	-21 16.3	2.132	2.976	12.7	22.5
<b>107685</b>	2001 <i>FJ</i> <sub>12</sub>		7 14.6	17°79'	1°6'/15.1	18	<b>511272</b>	2014 <i>DM</i> <sub>4</sub>		7 14.6	153°98'	4°6'/16.7	18
6 10	19 58.75	-16 49.7	1.114	2.006	18.7	19.0	6 10	19 59.96	-7 18.2	2.194	3.018	13.2	22.0
6 20	19 55.31	-17 2.4	1.060	2.011	14.1	18.7	6 20	19 54.87	-7 6.9	2.119	3.022	10.6	21.8
6 30	19 48.86	-17 28.0	1.025	2.017	8.9	18.5	6 30	19 48.05	-7 8.2	2.067	3.027	7.7	21.6
7 10	19 40.40	-18 3.4	1.012	2.025	3.4	18.2	7 10	19 40.09	-7 22.2	2.040	3.031	5.2	21.5
7 20	19 31.27	-18 43.7	1.020	2.033	3.3	18.2	7 20	19 31.73	-7 47.7	2.040	3.035	4.8	21.5
7 30	19 23.05	-19 23.9	1.052	2.042	8.7	18.6	7 30	19 23.78	-8 22.5	2.067	3.038	6.8	21.6
8 9	19 17.10	-20 0.1	1.104	2.053	13.7	18.9	8 9	19 17.03	-9 3.7	2.120	3.041	9.5	21.8
8 19	19 14.23	-20 30.0	1.176	2.064	17.9	19.2	8 19	19 12.04	-9 48.2	2.196	3.044	12.3	22.0
<b>71138</b>	1999 <i>XY</i> <sub>179</sub>		7 14.6	251°62'	3°0'/13.3	18	<b>106791</b>	2000 <i>XF</i> <sub>24</sub>		7 14.6	276°94'	4°3'/12.9	18
6 10	20 3.33	-28 21.2	2.085	2.948	12.4	19.8	6 10	20 3.46	-33 36.2	2.265	3.123	11.7	18.7
6 20	19 57.84	-28 58.2	1.999	2.935	9.4	19.6	6 20	19 57.83	-34 4.7	2.179	3.108	9.1	18.5
6 30	19 50.10	-29 35.2	1.937	2.922	6.1	19.3	6 30	19 50.05	-34 28.8	2.117	3.093	6.3	18.3
7 10	19 40.78	-30 7.5	1.900	2.908	3.3	19.1	7 10	19 40.77	-34 44.0	2.080	3.078	4.4	18.1
7 20	19 30.77	-30 31.2	1.892	2.894	4.1	19.2	7 20	19 30.90	-34 46.9	2.071	3.063	5.0	18.1
7 30	19 21.18	-30 43.8	1.910	2.880	7.3	19.3	7 30	19 21.50	-34 36.1	2.089	3.048	7.6	18.3
8 9	19 13.04	-30 44.9	1.953	2.865	10.7	19.5	8 9	19 13.54	-34 12.2	2.132	3.033	10.5	18.4
8 19	19 7.13	-30 35.7	2.019	2.851	13.8	19.7	8 19	19 7.76	-33 37.8	2.198	3.017	13.2	18.6
<b>35633</b>	1998 <i>KM</i> <sub>28</sub>		7 14.6	151°26'	3°3'/13.1	18	<b>287436</b>	2002 <i>XP</i> <sub>3</sub>		7 14.6	247°27'	0°5'/14.8	18
6 10	20 3.44	-27 49.6	1.885	2.753	13.3	18.4	6 10	20 3.36	-18 41.5	1.855	2.714	13.9	22.1
6 20	19 58.00	-28 44.4	1.817	2.756	10.0	18.2	6 20	19 58.02	-19 1.4	1.764	2.699	10.5	21.9
6 30	19 50.20	-29 39.9	1.773	2.759	6.4	18.0	6 30	19 50.33	-19 28.7	1.697	2.684	6.6	21.6
7 10	19 40.80	-30 30.4	1.754	2.761	3.6	17.9	7 10	19 40.93	-20 0.7	1.654	2.668	2.2	21.3
7 20	19 30.80	-31 11.1	1.762	2.764	4.4	17.9	7 20	19 30.74	-20 34.1	1.639	2.651	2.5	21.3
7 30	19 21.36	-31 38.8	1.797	2.766	7.8	18.1	7 30	19 20.90	-21 5.7	1.651	2.634	6.9	21.5
8 9	19 13.58	-31 52.8	1.856	2.768	11.2	18.3	8 9	19 12.53	-21 33.1	1.688	2.617	11.1	21.7
8 19	19 8.20	-31 54.7	1.937	2.769	14.3	18.6	8 19	19 6.46	-21 55.2	1.747	2.599	14.7	21.9
<b>41564</b>	2000 <i>RX</i> <sub>71</sub>		7 14.6	221°58'	5°2'/16.3	18	<b>21976</b>	1999 <i>XV</i> <sub>2</sub>		7 14.6	101°47'	3°0'/15.4	18
6 10	20 2.91	-8 35.2	1.669	2.508	16.0	18.8	6 10	20 6.09	-14 54.5	1.622	2.476	15.8	17.3
6 20	19 57.68	-8 15.4	1.588	2.502	12.8	18.6	6 20	19 59.79	-14 30.6	1.565	2.493	12.0	17.1
6 30	19 50.07	-8 10.3	1.529	2.496	9.2	18.3	6 30	19 51.17	-14 15.7	1.530	2.511	7.9	16.9
7 10	19 40.78	-8 20.4	1.493	2.489	6.1	18.1	7 10	19 41.10	-14 9.0	1.520	2.527	3.9	16.7
7 20	19 30.80	-8 44.7	1.482	2.481	5.5	18.1	7 20	19 30.67	-14 9.1	1.536	2.544	3.7	16.7
7 30	19 21.27	-9 20.8	1.498	2.474	8.3	18.2	7 30	19 21.07	-14 14.5	1.578	2.560	7.4	17.0
8 9	19 13.32	-10 4.8	1.537	2.465	12.0	18.4	8 9	19 13.32	-14 23.2	1.645	2.576	11.2	17.2
8 19	19 7.74	-10 52.6	1.598	2.457	15.6	18.6	8 19	19 8.05	-14 33.7	1.734	2.591	14.6	17.5
<b>277514</b>	2005 <i>WP</i> <sub>185</sub>		7 14.6	223°68'	2°0'/13.4	18	<b>129</b>	Antigone		7 14.6	29°17'	3°5'/16.4	18
6 10	20 0.04	-26 11.8	2.741	3.597	10.0	21.2	6 10	19 57.59	-9 52.4	1.476	2.337	16.7	10.5
6 20	19 54.86	-26 54.5	2.655	3.589	7.5	21.0	6 20	19 53.77	-10 29.5	1.420	2.350	12.9	10.3
6 30	19 48.04	-27 38.5	2.594	3.580	4.7	20.8	6 30	19 47.65	-11 24.7	1.385	2.364	8.7	10.1
7 10	19 40.09	-28 20.4	2.562	3.571	2.3	20.7	7 10	19 40.02	-12 35.2	1.373	2.379	4.7	10.0
7 20	19 31.65	-28 57.1	2.557	3.562	2.9	20.7	7 20	19 31.91	-13 55.8	1.386	2.395	3.9	10.0
7 30	19 23.50	-29 26.4	2.582	3.552	5.6	20.9	7 30	19 24.47	-15 20.2	1.425	2.412	7.4	10.2
8 9	19 16.38	-29 47.2	2.633	3.543	8.4	21.0	8 9	19 18.73	-16 42.2	1.488	2.429	11.4	10.4
8 19	19 10.85	-29 59.6	2.709	3.532	10.9	21.2	8 19	19 15.36	-17 57.5	1.572	2.447	14.9	10.6
<b>288647</b>	2004 <i>PG</i> <sub>43</sub>		7 14.6	326°11'	3°7'/16.4	18	<b>16363</b>	1979 <i>MT</i> <sub>4</sub>		7 14.6	233°85'	2°0'/15.1	18
6 10	19 56.97	-9 45.7	2.009	2.852	13.6	20.6	6 10	20 4.48	-17 12.4	2.032	2.881	13.2	18.1
6 20	19 52.91	-9 52.6	1.926	2.845	10.7	20.4	6 20	19 58.52	-16 46.2	1.944	2.871	10.1	17.9
6 30	19 46.98	-10 12.6	1.866	2.837	7.5	20.2	6 30	19 50.45	-16 24.6	1.878	2.860	6.5	17.6
7 10	19 39.77	-10 45.0	1.829	2.830	4.5	20.0	7 10	19 40.93	-16 7.0	1.839	2.849	2.9	17.4
7 20	19 32.03	-11 27.8	1.819	2.823	4.0	19.9	7 20	19 30.83	-15 52.7	1.828	2.837	2.9	17.4
7 30	19 24.64	-12 18.0	1.836	2.817	6.6	20.1	7 30	19 21.17	-15 41.2	1.844	2.825	6.5	17.6
8 9	19 18.46	-13 11.9	1.878	2.810	9.9	20.3	8 9	19 12.91	-15 31.8	1.887	2.813	10.3	17.8
8 19	19 14.14	-14 6.0	1.943	2.805	13.1	20.4	8 19	19 6.75	-15 24.2	1.952	2.800	13.6	18.0
<b>337160</b>	1999 <i>UE</i> <sub>19</sub>		7 14.6	298°13'	7°8'/11.0	18	<b>475286</b>	2005 <i>WV</i> <sub>164</sub>		7 14.6	144°60'	5°2'/16.7	18
6 10	20 4.86	-37 37.2	1.696	2.563	14.6	20.3	6 10	20 0.01	-3 31.6	2.992	3.782	10.9	21.5
6 20	19 59.89	-38 53.7	1.616	2.544	11.7	20.1	6 20	19 54.43	-2 43.9	2.918	3.791	9.0	21.3
6 30	19 51.83	-40 4.7	1.558	2.524	9.1	19.9	6 30	19 47.59	-2 6.1	2.867	3.800	7.0	21.2
7 10	19 41.44	-41 1.5	1.523	2.505	7.8	19.8	7 10	19 39.94	-1 39.4	2.843	3.808	5.6	21.1
7 20	19 29.97	-41 36.8	1.513	2.486	8.7	19.8	7 20	19 32.04	-1 24.3	2.847	3.816	5.3	21.1
7 30	19 19.01	-41 46.7	1.527	2.467	11.4	19.9	7 30	19 24.47	-1 20.4	2.879	3.824	6.4	21.2
8 9	19 10.09	-41 32.2	1.563	2.448	14.5	20.0	8 9	19 17.80	-1 26.2	2.938	3.831	8.2	21.3
8 19	19 4.28	-40 57.5	1.619	2.429	17.6	20.2	8 19	19 12.44	-1 39.8	3.021	3.838	10.1	21.5
<b>388578</b>	2007 <i>RV</i> <sub>73</sub>		7 14.6	226°19'	3°5'/16.3	18	<b>281504</b>	2008 <i>SZ</i> <sub>302</sub>		7 14.6	247°84'	1°9'/15.	

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>118937</b>	2000 <i>WT</i> <sub>46</sub>		7 14.6 126°73	2°4/13.3	18		<b>355513</b>	2007 <i>YX</i> <sub>63</sub>		7 14.6 236°41	1°1/14.3	18	
6 10	20 0.40	-26 3.2	2.301	3.164	11.4	19.8	6 10	20 3.25	-25 8.6	2.123	2.984	12.3	21.2
6 20	19 55.37	-26 56.6	2.230	3.168	8.5	19.6	6 20	19 57.51	-25 4.1	2.046	2.982	9.2	21.0
6 30	19 48.46	-27 51.7	2.184	3.171	5.3	19.4	6 30	19 49.76	-24 59.4	1.992	2.980	5.7	20.8
7 10	19 40.28	-28 44.2	2.164	3.174	2.6	19.3	7 10	19 40.70	-24 52.0	1.965	2.978	2.0	20.6
7 20	19 31.62	-29 30.2	2.172	3.177	3.4	19.3	7 20	19 31.20	-24 40.2	1.965	2.975	2.5	20.6
7 30	19 23.38	-30 6.8	2.209	3.180	6.4	19.5	7 30	19 22.25	-24 23.3	1.993	2.973	6.2	20.8
8 9	19 16.40	-30 32.7	2.271	3.182	9.5	19.7	8 9	19 14.74	-24 1.7	2.047	2.970	9.7	21.1
8 19	19 11.31	-30 48.4	2.356	3.185	12.1	19.9	8 19	19 9.31	-23 36.5	2.124	2.968	12.8	21.3
<b>68242</b>	2001 <i>DW</i> <sub>59</sub>		7 14.6 266°83	1°7/14.2	18		<b>354535</b>	2004 <i>RB</i> <sub>211</sub>		7 14.6 354°88	6°3/13.5	18	
6 10	20 6.17	-25 26.2	1.509	2.383	15.6	19.0	6 10	20 6.99	-38 35.5	1.756	2.617	14.4	19.5
6 20	20 0.59	-25 31.2	1.429	2.372	11.8	18.8	6 20	20 0.88	-38 40.0	1.687	2.613	11.5	19.3
6 30	19 52.09	-25 36.9	1.371	2.361	7.4	18.5	6 30	19 52.03	-38 32.7	1.640	2.610	8.5	19.1
7 10	19 41.53	-25 39.1	1.337	2.350	2.8	18.2	7 10	19 41.43	-38 8.7	1.617	2.607	6.4	19.0
7 20	19 30.13	-25 34.3	1.329	2.339	3.5	18.2	7 20	19 30.39	-37 25.2	1.619	2.606	6.8	19.0
7 30	19 19.40	-25 20.9	1.345	2.328	8.3	18.5	7 30	19 20.33	-36 23.0	1.647	2.605	9.4	19.2
8 9	19 10.70	-24 59.5	1.386	2.316	12.9	18.7	8 9	19 12.44	-35 6.2	1.699	2.604	12.5	19.4
8 19	19 4.93	-24 32.1	1.447	2.305	16.9	18.9	8 19	19 7.40	-33 40.5	1.773	2.605	15.4	19.6
<b>305537</b>	2008 <i>GM</i> <sub>64</sub>		7 14.6 223°22	1°2/13.9	18		<b>128613</b>	2004 <i>QB</i> <sub>22</sub>		7 14.6 263°07	2°0/15.0	18	
6 10	20 0.46	-23 57.1	2.442	3.301	11.0	21.6	6 10	20 4.03	-17 34.7	2.497	3.338	11.3	19.7
6 20	19 55.30	-24 23.8	2.360	3.295	8.2	21.4	6 20	19 57.82	-16 49.6	2.400	3.323	8.7	19.5
6 30	19 48.38	-24 52.5	2.302	3.289	5.0	21.2	6 30	19 49.86	-16 6.5	2.328	3.308	5.6	19.3
7 10	19 40.25	-25 20.5	2.270	3.283	1.9	21.0	7 10	19 40.73	-15 25.6	2.284	3.292	2.7	19.1
7 20	19 31.66	-25 44.9	2.267	3.277	2.5	21.0	7 20	19 31.15	-14 47.1	2.269	3.277	2.7	19.0
7 30	19 23.43	-26 3.7	2.292	3.270	5.7	21.2	7 30	19 21.93	-14 11.6	2.283	3.261	5.7	19.2
8 9	19 16.35	-26 16.0	2.344	3.263	8.9	21.4	8 9	19 13.86	-13 39.4	2.325	3.246	8.9	19.4
8 19	19 11.04	-26 21.7	2.419	3.256	11.6	21.6	8 19	19 7.52	-13 10.7	2.392	3.230	11.7	19.6
<b>468130</b>	2014 <i>UF</i> <sub>85</sub>		7 14.6 177°96	4°8/12.8	17		<b>470375</b>	2007 <i>TS</i> <sub>166</sub>		7 14.6 243°62	2°5/13.6	18	
6 10	20 6.87	-29 59.5	1.540	2.414	15.4	21.5	6 10	20 3.96	-28 12.8	2.311	3.169	11.5	21.9
6 20	20 1.14	-31 1.6	1.475	2.414	11.8	21.3	6 20	19 58.12	-28 35.7	2.221	3.154	8.7	21.7
6 30	19 52.43	-32 2.8	1.431	2.415	7.9	21.0	6 30	19 50.22	-28 57.6	2.154	3.139	5.6	21.5
7 10	19 41.63	-32 55.6	1.412	2.415	5.0	20.9	7 10	19 40.89	-29 14.9	2.114	3.123	2.8	21.3
7 20	19 30.03	-33 33.4	1.418	2.416	6.0	20.9	7 20	19 30.95	-29 24.7	2.103	3.107	3.5	21.3
7 30	19 19.19	-33 52.7	1.449	2.415	9.6	21.1	7 30	19 21.40	-29 25.1	2.119	3.091	6.6	21.5
8 9	19 10.49	-33 53.9	1.504	2.415	13.4	21.4	8 9	19 13.17	-29 16.2	2.162	3.074	9.9	21.7
8 19	19 4.84	-33 40.1	1.578	2.414	16.8	21.6	8 19	19 6.97	-28 59.1	2.227	3.056	12.8	21.8
<b>171826</b>	2001 <i>FZ</i> <sub>82</sub>		7 14.6 51°78	1°0/14.9	17		<b>471836</b>	2012 <i>XZ</i> <sub>74</sub>		7 14.6 272°58	0°7/14.3	18	
6 10	20 2.58	-17 46.1	1.305	2.184	17.3	20.4	6 10	20 2.57	-21 30.6	2.103	2.961	12.5	21.8
6 20	19 57.79	-18 3.2	1.252	2.196	13.0	20.2	6 20	19 57.35	-22 1.2	1.999	2.934	9.4	21.6
6 30	19 50.24	-18 30.6	1.219	2.209	8.1	19.9	6 30	19 49.93	-22 37.4	1.918	2.906	5.8	21.3
7 10	19 40.88	-19 4.5	1.208	2.222	2.9	19.6	7 10	19 40.85	-23 15.9	1.864	2.878	1.9	21.0
7 20	19 30.98	-19 40.6	1.222	2.235	2.9	19.7	7 20	19 30.93	-23 53.1	1.838	2.849	2.5	21.0
7 30	19 21.98	-20 14.8	1.260	2.248	8.0	20.0	7 30	19 21.19	-24 25.8	1.839	2.820	6.6	21.2
8 9	19 15.10	-20 44.2	1.322	2.262	12.6	20.3	8 9	19 12.69	-24 51.7	1.867	2.790	10.5	21.4
8 19	19 11.09	-21 7.6	1.403	2.276	16.5	20.6	8 19	19 6.26	-25 10.4	1.917	2.759	14.0	21.5
<b>481018</b>	2004 <i>TK</i> <sub>62</sub>		7 14.6 246°44	2°1/15.7	17		<b>168662</b>	2000 <i>EH</i> <sub>89</sub>		7 14.6 74°09	1°5/15.4	17	
6 10	19 58.34	-13 19.2	2.989	3.821	9.9	22.9	6 10	19 59.98	-14 48.8	1.889	2.745	13.8	19.8
6 20	19 53.41	-13 16.2	2.888	3.803	7.6	22.8	6 20	19 55.20	-15 20.6	1.822	2.753	10.4	19.6
6 30	19 47.10	-13 19.6	2.811	3.785	5.1	22.6	6 30	19 48.41	-16 3.0	1.778	2.762	6.7	19.4
7 10	19 39.83	-13 28.7	2.762	3.767	2.7	22.4	7 10	19 40.29	-16 53.1	1.759	2.770	2.8	19.1
7 20	19 32.15	-13 42.6	2.741	3.748	2.5	22.3	7 20	19 31.70	-17 47.2	1.768	2.779	2.5	19.1
7 30	19 24.67	-14 0.1	2.750	3.729	4.8	22.5	7 30	19 23.62	-18 41.4	1.803	2.788	6.3	19.4
8 9	19 18.01	-14 19.6	2.786	3.709	7.5	22.6	8 9	19 16.96	-19 32.3	1.864	2.797	10.0	19.6
8 19	19 12.66	-14 39.8	2.848	3.688	10.0	22.8	8 19	19 12.37	-20 17.8	1.948	2.805	13.2	19.9
<b>268314</b>	2005 <i>QK</i> <sub>152</sub>		7 14.6 283°27	7°7/12.7	18		<b>281499</b>	2008 <i>SH</i> <sub>290</sub>		7 14.6 335°89	1°9/13.9	17	
6 10	20 10.64	-39 16.2	1.604	2.464	15.6	20.9	6 10	20 2.43	-24 42.6	1.732	2.605	14.0	20.9
6 20	20 4.21	-39 50.2	1.527	2.450	12.6	20.7	6 20	19 57.38	-25 12.2	1.662	2.604	10.5	20.6
6 30	19 54.42	-40 13.2	1.471	2.436	9.6	20.5	6 30	19 49.91	-25 44.3	1.613	2.603	6.5	20.4
7 10	19 42.28	-40 17.1	1.438	2.422	7.8	20.4	7 10	19 40.81	-26 14.7	1.589	2.602	2.6	20.2
7 20	19 29.27	-39 56.6	1.429	2.408	8.4	20.4	7 20	19 31.09	-26 39.2	1.592	2.601	3.4	20.2
7 30	19 17.18	-39 10.5	1.445	2.394	11.1	20.5	7 30	19 21.98	-26 55.1	1.620	2.600	7.4	20.5
8 9	19 7.55	-38 3.0	1.484	2.381	14.5	20.7	8 9	19 14.56	-27 1.7	1.673	2.599	11.4	20.7
8 19	19 1.32	-36 40.9	1.543	2.367	17.7	20.8	8 19	19 9.61	-26 59.7	1.748	2.599	14.8	20.9
<b>137729</b>	1999 <i>XW</i> <sub>118</sub>		7 14.6 284°34	2°1/13.8	18		<b>70957</b>	1999 <i>XQ</i> <sub>5</sub>		7 14.6 241°36	3°8/15.4	18	
6 10	20 3.97	-24 15.8	1.534	2.410	15.3	20.7	6 10	20 3.59	-13 2.5	2.036	2.876	13.5	19.0
6 20	19 59.18	-24 51.9	1.441	2.385	11.7	20.4	6 20	19 57.79	-12 13.7	1.951	2.869	10.6	18.8
6 30	19 51.43	-25 33.2	1.369	2.360	7.3	20.1	6 30	19 49.98	-11 31.5	1.889	2.861	7.3	18.6
7 10	19 41.40	-26 14.7	1.321	2.334	2.9	19.7	7 10	19 40.81	-10 56.7	1.852	2.853	4.4	18.4
7 20	19 30.20	-26 50.7	1.299	2.308	3.9	19.7	7 20	19 31.11	-10 30.1	1.844	2.845	4.3	18.4
7 30	19 19.31	-27 16.9	1.302	2.282	8.8	20.0	7 30	19 21.87	-10 11.5	1.862	2.837	7.1	18.5
8 9	19 10.24	-27 31.2	1.328	2.256	13.5	20.2	8 9	19 13.99	-10 0.2	1.907	2.829	10.4	18.7
8 19	19 4.07	-27 34.3	1.375	2.230	17.8	20.4	8 19	19 8.12	-9 55.1	1.974	2.820	13.5	18.9
<b>222438</b>	2001 <i>QQ</i> <sub>44</sub>												

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>122949</b>	2000 SC <sub>198</sub>		7 14.6 297°14	0°1/14.6 18			<b>75582</b>	2000 AV <sub>13</sub>		7 14.6 129°99	0°1/14.6 18		
6 10	20 1.38	-20 30.7	1.605	2.479	14.9	20.2	6 10	20 5.65	-21 22.9	1.620	2.487	15.1	19.5
6 20	19 56.95	-20 45.6	1.514	2.457	11.3	20.0	6 20	19 59.75	-21 20.5	1.553	2.492	11.3	19.2
6 30	19 49.90	-21 7.2	1.445	2.435	7.0	19.7	6 30	19 51.34	-21 21.8	1.509	2.498	7.0	19.0
7 10	19 40.89	-21 32.5	1.399	2.413	2.3	19.3	7 10	19 41.29	-21 24.2	1.489	2.503	2.2	18.7
7 20	19 30.93	-21 57.9	1.379	2.392	2.7	19.3	7 20	19 30.71	-21 25.4	1.495	2.508	2.6	18.8
7 30	19 21.35	-22 20.1	1.385	2.370	7.7	19.5	7 30	19 20.88	-21 23.5	1.528	2.512	7.3	19.1
8 9	19 13.40	-22 36.9	1.414	2.349	12.3	19.7	8 9	19 12.92	-21 18.2	1.585	2.517	11.5	19.3
8 19	19 8.05	-22 47.7	1.464	2.328	16.4	19.9	8 19	19 7.57	-21 9.9	1.664	2.521	15.1	19.6
<b>441199</b>	2007 UU <sub>64</sub>		7 14.6 299°20	3°0/15.7 18			<b>467602</b>	2007 VF <sub>273</sub>		7 14.6 302°15	8°5/10.6 17		
6 10	19 59.69	-13 28.7	1.842	2.696	14.1	21.6	6 10	20 4.58	-34 12.2	1.289	2.175	17.0	20.7
6 20	19 55.14	-13 19.1	1.759	2.687	11.0	21.4	6 20	20 0.48	-36 3.1	1.218	2.159	13.5	20.5
6 30	19 48.48	-13 19.3	1.698	2.677	7.3	21.1	6 30	19 52.66	-37 53.9	1.167	2.144	10.2	20.2
7 10	19 40.36	-13 28.9	1.662	2.668	3.9	20.9	7 10	19 41.94	-39 32.2	1.139	2.129	8.5	20.1
7 20	19 31.63	-13 46.2	1.651	2.659	3.6	20.9	7 20	19 29.75	-40 46.4	1.134	2.115	9.9	20.1
7 30	19 23.31	-14 9.2	1.667	2.650	6.9	21.0	7 30	19 18.12	-41 29.5	1.152	2.100	13.4	20.3
8 9	19 16.39	-14 35.3	1.708	2.642	10.7	21.2	8 9	19 9.00	-41 41.2	1.189	2.086	17.2	20.5
8 19	19 11.58	-15 2.3	1.771	2.633	14.1	21.4	8 19	19 3.71	-41 26.5	1.243	2.073	20.8	20.7
<b>68920</b>	2002 LT <sub>3</sub>		7 14.6 305°75	7°9/18.3 18			<b>426000</b>	2011 JX <sub>7</sub>		7 14.6 26°57	5°6/17.4 18		
6 10	19 58.04	-0 36.7	1.762	2.575	16.4	19.3	6 10	19 57.67	-6 6.6	1.363	2.217	18.2	19.9
6 20	19 53.97	-0 18.8	1.681	2.566	13.8	19.1	6 20	19 54.03	-6 24.7	1.306	2.226	14.5	19.7
6 30	19 47.81	-0 21.8	1.619	2.558	11.0	18.9	6 30	19 47.94	-7 5.5	1.267	2.236	10.4	19.5
7 10	19 40.16	-0 47.5	1.579	2.549	8.6	18.7	7 10	19 40.22	-8 7.9	1.250	2.247	6.8	19.4
7 20	19 31.87	-1 35.6	1.563	2.541	7.9	18.7	7 20	19 31.95	-9 27.4	1.257	2.259	5.7	19.3
7 30	19 23.95	-2 43.0	1.571	2.533	9.4	18.7	7 30	19 24.35	-10 57.6	1.288	2.271	8.5	19.5
8 9	19 17.38	-4 4.3	1.604	2.525	12.1	18.9	8 9	19 18.54	-12 30.8	1.343	2.284	12.3	19.8
8 19	19 12.90	-5 32.9	1.659	2.517	15.1	19.0	8 19	19 15.25	-14 0.6	1.418	2.298	15.9	20.0
<b>78101</b>	2002 LB <sub>46</sub>		7 14.6 12°44	8°6/17.0 18			<b>296363</b>	2009 FH <sub>26</sub>		7 14.6 222°86	0°2/14.7 18		
6 10	19 58.88	-3 50.5	1.493	2.330	17.7	18.6	6 10	20 0.47	-19 32.6	2.099	2.958	12.5	20.8
6 20	19 54.74	-2 40.8	1.430	2.333	14.7	18.4	6 20	19 55.52	-19 53.5	2.021	2.956	9.3	20.6
6 30	19 48.29	-1 49.1	1.387	2.336	11.6	18.3	6 30	19 48.63	-20 20.0	1.966	2.954	5.8	20.4
7 10	19 40.30	-1 19.0	1.365	2.340	9.2	18.1	7 10	19 40.42	-20 49.5	1.937	2.951	1.9	20.1
7 20	19 31.78	-1 11.8	1.366	2.345	8.7	18.1	7 20	19 31.70	-21 19.2	1.936	2.948	2.1	20.1
7 30	19 23.88	-1 26.4	1.390	2.351	10.5	18.2	7 30	19 23.42	-21 46.5	1.962	2.946	6.0	20.4
8 9	19 17.65	-1 58.7	1.437	2.357	13.3	18.4	8 9	19 16.43	-22 9.6	2.015	2.943	9.6	20.6
8 19	19 13.78	-2 43.3	1.503	2.364	16.3	18.6	8 19	19 11.40	-22 27.8	2.090	2.940	12.7	20.8
<b>509885</b>	2009 BY <sub>73</sub>		7 14.6 190°05	1°9/13.8 18			<b>395752</b>	2012 VP <sub>14</sub>		7 14.6 213°72	3°9/12.5 18		
6 10	20 3.86	-27 16.4	2.620	3.472	10.5	22.7	6 10	20 4.52	-32 57.2	2.656	3.505	10.4	22.5
6 20	19 57.69	-27 33.4	2.540	3.470	7.9	22.5	6 20	19 58.39	-33 42.2	2.572	3.497	8.1	22.3
6 30	19 49.79	-27 49.5	2.484	3.468	5.0	22.3	6 30	19 50.34	-34 24.0	2.513	3.488	5.6	22.2
7 10	19 40.74	-28 1.9	2.456	3.466	2.3	22.1	7 10	19 40.97	-34 58.5	2.482	3.478	4.0	22.0
7 20	19 31.28	-28 8.2	2.457	3.463	2.8	22.1	7 20	19 31.05	-35 22.2	2.479	3.467	4.6	22.1
7 30	19 22.25	-28 7.2	2.487	3.459	5.7	22.3	7 30	19 21.50	-35 33.2	2.504	3.456	6.8	22.2
8 9	19 14.43	-27 58.9	2.543	3.455	8.6	22.5	8 9	19 13.17	-35 31.5	2.555	3.445	9.4	22.3
8 19	19 8.37	-27 44.4	2.624	3.450	11.2	22.7	8 19	19 6.73	-35 18.8	2.630	3.432	11.8	22.5
<b>357872</b>	2005 UG <sub>367</sub>		7 14.6 106°15	5°9/11.2 18			<b>160951</b>	2002 AR <sub>110</sub>		7 14.6 271°90	0°8/14.3 18		
6 10	20 3.18	-36 51.5	2.310	3.165	11.6	20.1	6 10	20 3.54	-20 29.6	1.436	2.312	16.2	19.9
6 20	19 57.69	-38 7.1	2.248	3.169	9.2	20.0	6 20	19 58.88	-21 12.4	1.352	2.296	12.3	19.6
6 30	19 50.03	-39 17.2	2.210	3.174	7.0	19.8	6 30	19 51.27	-22 5.3	1.289	2.280	7.6	19.3
7 10	19 40.86	-40 15.8	2.198	3.178	5.9	19.8	7 10	19 41.41	-23 3.2	1.250	2.264	2.5	18.9
7 20	19 31.11	-40 58.3	2.213	3.182	6.6	19.8	7 20	19 30.46	-24 0.2	1.236	2.248	3.3	18.9
7 30	19 21.86	-41 22.3	2.254	3.186	8.6	20.0	7 30	19 19.93	-24 50.5	1.247	2.231	8.6	19.2
8 9	19 14.10	-41 28.4	2.319	3.190	10.9	20.1	8 9	19 11.28	-25 30.7	1.281	2.215	13.5	19.4
8 19	19 8.55	-41 19.1	2.406	3.194	13.1	20.3	8 19	19 5.58	-25 59.7	1.336	2.198	17.8	19.7
<b>168332</b>	1993 TC <sub>28</sub>		7 14.6 263°00	2°5/13.5 18			<b>433332</b>	2013 RE <sub>3</sub>		7 14.6 195°05	1°1/15.0 17		
6 10	20 2.11	-26 34.5	1.979	2.846	12.8	20.4	6 10	20 3.70	-17 21.0	1.960	2.813	13.5	22.5
6 20	19 57.00	-27 11.8	1.900	2.839	9.6	20.2	6 20	19 58.03	-17 32.4	1.880	2.811	10.2	22.3
6 30	19 49.65	-27 50.3	1.844	2.832	6.1	20.0	6 30	19 50.23	-17 51.1	1.824	2.808	6.4	22.0
7 10	19 40.76	-28 25.8	1.814	2.825	2.9	19.7	7 10	19 40.96	-18 14.8	1.793	2.805	2.4	21.8
7 20	19 31.24	-28 54.1	1.811	2.817	3.7	19.8	7 20	19 31.11	-18 40.9	1.790	2.802	2.4	21.8
7 30	19 22.18	-29 12.5	1.835	2.810	7.2	20.0	7 30	19 21.73	-19 6.7	1.814	2.798	6.4	22.0
8 9	19 14.62	-29 20.3	1.884	2.802	10.7	20.2	8 9	19 13.79	-19 30.4	1.865	2.793	10.2	22.2
8 19	19 9.29	-29 18.4	1.955	2.795	13.9	20.4	8 19	19 8.00	-19 50.7	1.938	2.788	13.6	22.4
<b>416472</b>	2003 WW <sub>88</sub>		7 14.6 249°32	2°7/15.5 17			<b>521623</b>	2015 PN <sub>321</sub>		7 14.6 195°86	3°7/13.2 18		
6 10	20 4.04	-14 29.4	1.772	2.623	14.7	22.1	6 10	20 3.62	-32 43.6	2.384	3.240	11.3	21.6
6 20	19 58.62	-14 23.1	1.680	2.607	11.4	21.8	6 20	19 57.73	-33 3.2	2.310	3.239	8.6	21.5
6 30	19 50.78	-14 26.4	1.609	2.589	7.6	21.5	6 30	19 49.90	-33 18.2	2.260	3.238	5.9	21.3
7 10	19 41.17	-14 38.3	1.563	2.571	3.7	21.3	7 10	19 40.81	-33 25.2	2.237	3.238	3.8	21.2
7 20	19 30.73	-14 57.0	1.544	2.553	3.4	21.2	7 20	19 31.32	-33 21.5	2.241	3.237	4.4	21.2
7 30	19 20.63	-15 20.2	1.551	2.534	7.4	21.4	7 30	19 22.37	-33 6.2	2.273	3.236	6.8	21.3
8 9	19 12.02	-15 45.3	1.584	2.514	11.6	21.6	8 9	19 14.83	-32 40.4	2.331	3.234	9.6	21.5
8 19	19 5.76	-16 10.5	1.638	2.494	15.4	21.8	8 19	19 9.32	-32 6.1	2.412	3.233	12.2	21.7
<b>505463</b>	2013 TV <sub>92</sub>		7 14.6 244°77	2°2/13.6 18			<b>347086</b>	2010 GM <sub>105</sub>		7 14.6 316°31	1°6/13.9 18		
6 10	20 6.28	-26 24.5											

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>279043</b>	2008 VT <sub>33</sub>		7 14.6 306°55	0.4/14.8	18	R	<b>505793</b>	2015 BZ <sub>303</sub>		7 14.6 140°52	0.6/14.9	17	
6 10	19 59.90	-18 45.1	1.573	2.447	15.1	20.8	6 10	20 3.47	-18 8.5	2.058	2.910	12.9	22.1
6 20	19 55.88	-19 6.4	1.484	2.426	11.5	20.5	6 20	19 57.68	-18 33.7	1.990	2.921	9.7	22.0
6 30	19 49.28	-19 37.0	1.416	2.405	7.2	20.2	6 30	19 49.92	-19 5.6	1.946	2.931	6.0	21.8
7 10	19 40.75	-20 13.9	1.371	2.385	2.4	19.8	7 10	19 40.87	-19 41.2	1.928	2.941	2.1	21.5
7 20	19 31.29	-20 53.3	1.352	2.365	2.7	19.8	7 20	19 31.37	-20 17.4	1.938	2.950	2.2	21.5
7 30	19 22.17	-21 31.1	1.358	2.345	7.7	20.1	7 30	19 22.41	-20 51.4	1.976	2.959	6.0	21.8
8 9	19 14.67	-22 4.2	1.388	2.325	12.3	20.3	8 9	19 14.86	-21 21.1	2.040	2.967	9.6	22.0
8 19	19 9.73	-22 30.9	1.438	2.306	16.4	20.5	8 19	19 9.35	-21 45.7	2.128	2.974	12.7	22.3
<b>377717</b>	2005 WD <sub>111</sub>		7 14.6 61°60	6°6/16.4	17		<b>385545</b>	2004 RS <sub>237</sub>		7 14.6 243°22	0°5/14.4	18	R
6 10	20 3.01	-7 43.2	1.561	2.402	16.9	20.4	6 10	20 3.96	-22 6.6	2.178	3.034	12.2	22.0
6 20	19 57.61	-6 43.8	1.504	2.415	13.6	20.2	6 20	19 58.23	-22 20.7	2.084	3.017	9.2	21.8
6 30	19 49.95	-5 59.0	1.468	2.429	10.1	20.0	6 30	19 50.40	-22 38.1	2.013	3.000	5.7	21.6
7 10	19 40.84	-5 31.0	1.455	2.443	7.2	19.9	7 10	19 41.07	-22 56.1	1.968	2.982	1.9	21.3
7 20	19 31.33	-5 20.3	1.466	2.457	6.8	19.9	7 20	19 31.08	-23 11.9	1.952	2.963	2.3	21.3
7 30	19 22.58	-5 25.6	1.503	2.472	9.0	20.1	7 30	19 21.41	-23 23.4	1.964	2.944	6.3	21.5
8 9	19 15.57	-5 43.7	1.563	2.486	12.2	20.3	8 9	19 13.03	-23 29.7	2.002	2.925	10.0	21.7
8 19	19 10.95	-6 10.6	1.644	2.500	15.3	20.5	8 19	19 6.68	-23 30.8	2.063	2.904	13.2	21.9
<b>238592</b>	2004 YQ <sub>25</sub>		7 14.6 114°56	1°6/15.5	18		<b>154181</b>	2002 GW <sub>113</sub>		7 14.6 61°28	3°7/12.7	18	
6 10	20 1.67	-14 8.0	2.226	3.068	12.5	20.6	6 10	20 1.18	-30 19.4	2.203	3.068	11.7	19.7
6 20	19 56.14	-14 41.8	2.163	3.086	9.4	20.4	6 20	19 56.11	-31 12.8	2.137	3.072	8.9	19.5
6 30	19 48.87	-15 24.8	2.123	3.103	6.0	20.3	6 30	19 49.02	-32 4.5	2.095	3.077	6.0	19.3
7 10	19 40.49	-16 14.4	2.109	3.119	2.6	20.1	7 10	19 40.60	-32 50.0	2.080	3.082	3.9	19.2
7 20	19 31.74	-17 7.4	2.124	3.135	2.3	20.1	7 20	19 31.68	-33 25.1	2.091	3.087	4.6	19.2
7 30	19 23.48	-18 0.5	2.168	3.151	5.6	20.3	7 30	19 23.26	-33 47.4	2.130	3.092	7.2	19.4
8 9	19 16.48	-18 50.7	2.239	3.166	8.8	20.6	8 9	19 16.24	-33 56.7	2.193	3.097	10.1	19.6
8 19	19 11.29	-19 36.2	2.334	3.181	11.7	20.8	8 19	19 11.28	-33 54.4	2.279	3.102	12.7	19.8
<b>159990</b>	2006 DY <sub>38</sub>		7 14.6 328°68	5°4/17.9	18		<b>147922</b>	2006 UD <sub>262</sub>		7 14.6 63°29	2°6/15.3	18	
6 10	19 56.27	-2 44.9	2.432	3.238	12.6	19.9	6 10	20 2.32	-15 50.3	2.148	2.995	12.7	19.8
6 20	19 52.10	-2 47.1	2.350	3.235	10.4	19.8	6 20	19 56.69	-15 10.3	2.074	2.999	9.7	19.6
6 30	19 46.41	-3 4.4	2.290	3.233	8.0	19.6	6 30	19 49.24	-14 35.5	2.023	3.002	6.4	19.4
7 10	19 39.72	-3 36.8	2.254	3.231	6.0	19.5	7 10	19 40.64	-14 5.8	1.999	3.006	3.3	19.2
7 20	19 32.61	-4 23.3	2.245	3.229	5.4	19.4	7 20	19 31.67	-13 41.4	2.003	3.010	3.2	19.2
7 30	19 25.81	-5 21.1	2.263	3.227	6.7	19.5	7 30	19 23.23	-13 21.9	2.034	3.014	6.2	19.4
8 9	19 19.99	-6 26.8	2.307	3.225	9.0	19.7	8 9	19 16.11	-13 7.0	2.092	3.018	9.4	19.6
8 19	19 15.67	-7 36.3	2.375	3.223	11.4	19.8	8 19	19 10.88	-12 55.9	2.173	3.022	12.3	19.8
<b>442020</b>	2010 OB <sub>103</sub>		7 14.6 321°86	5°0/12.4	17		<b>506973</b>	2008 SE <sub>86</sub>		7 14.6 261°99	6°1/12.6	18	
6 10	20 0.20	-31 39.2	1.743	2.620	13.7	20.6	6 10	20 8.43	-36 54.3	1.926	2.782	13.6	22.1
6 20	19 56.15	-32 33.5	1.655	2.596	10.6	20.3	6 20	20 2.09	-37 30.6	1.843	2.767	10.8	21.9
6 30	19 49.47	-33 26.8	1.590	2.572	7.4	20.1	6 30	19 52.99	-37 59.5	1.783	2.752	8.0	21.7
7 10	19 40.82	-34 12.9	1.548	2.549	5.2	19.9	7 10	19 41.94	-38 14.7	1.747	2.736	6.2	21.6
7 20	19 31.24	-34 45.8	1.532	2.526	6.1	19.9	7 20	19 30.11	-38 11.4	1.737	2.720	6.8	21.6
7 30	19 22.05	-35 1.9	1.541	2.504	9.3	20.1	7 30	19 18.91	-37 48.2	1.754	2.704	9.4	21.7
8 9	19 14.55	-35 0.5	1.572	2.483	12.9	20.2	8 9	19 9.62	-37 7.0	1.794	2.687	12.5	21.9
8 19	19 9.68	-34 43.7	1.624	2.463	16.3	20.4	8 19	19 3.11	-36 12.2	1.856	2.671	15.5	22.0
<b>336689</b>	2010 AF <sub>72</sub>		7 14.6 271°03	3°4/15.6	17		<b>448984</b>	2011 YH <sub>78</sub>		7 14.6 43°47	2°3/13.2	18	
6 10	20 2.52	-13 33.5	1.820	2.670	14.5	20.8	6 10	19 59.75	-25 44.9	2.350	3.213	11.2	20.4
6 20	19 57.41	-13 8.7	1.727	2.652	11.3	20.6	6 20	19 54.94	-26 44.5	2.276	3.214	8.3	20.2
6 30	19 50.01	-12 52.4	1.656	2.633	7.7	20.3	6 30	19 48.29	-27 46.4	2.227	3.214	5.2	20.0
7 10	19 40.95	-12 44.9	1.609	2.614	4.3	20.1	7 10	19 40.38	-28 46.2	2.205	3.215	2.6	19.8
7 20	19 31.13	-12 45.3	1.589	2.595	4.0	20.0	7 20	19 31.95	-29 39.8	2.211	3.215	3.4	19.9
7 30	19 21.65	-12 52.6	1.595	2.575	7.4	20.2	7 30	19 23.89	-30 24.1	2.245	3.216	6.4	20.1
8 9	19 13.59	-13 4.8	1.626	2.556	11.4	20.4	8 9	19 17.03	-30 57.5	2.305	3.216	9.4	20.3
8 19	19 7.76	-13 20.1	1.678	2.536	15.0	20.6	8 19	19 12.00	-31 20.0	2.388	3.217	12.0	20.5
<b>291853</b>	2006 OM <sub>9</sub>		7 14.6 322°86	4°4/13.6	17		<b>147178</b>	2002 VY <sub>48</sub>		7 14.6 220°91	0°1/14.7	17	
6 10	20 2.37	-29 17.6	1.173	2.068	17.7	20.7	6 10	20 3.88	-19 29.4	1.923	2.781	13.5	21.0
6 20	19 58.66	-29 41.4	1.096	2.049	13.6	20.4	6 20	19 58.34	-19 53.5	1.839	2.773	10.2	20.8
6 30	19 51.41	-30 3.6	1.039	2.030	8.9	20.1	6 30	19 50.54	-20 24.1	1.778	2.765	6.3	20.5
7 10	19 41.52	-30 17.5	1.003	2.013	4.9	19.8	7 10	19 41.15	-20 58.3	1.742	2.755	2.1	20.2
7 20	19 30.45	-30 17.0	0.990	1.996	5.8	19.8	7 20	19 31.07	-21 32.5	1.734	2.746	2.4	20.3
7 30	19 20.11	-29 59.1	0.999	1.980	10.6	20.1	7 30	19 21.40	-22 3.7	1.753	2.736	6.7	20.5
8 9	19 12.25	-29 25.4	1.028	1.965	15.6	20.3	8 9	19 13.19	-22 29.7	1.798	2.725	10.6	20.7
8 19	19 8.00	-28 39.8	1.075	1.951	20.1	20.5	8 19	19 7.21	-22 49.8	1.866	2.714	14.1	20.9
<b>328665</b>	2009 SE <sub>278</sub>		7 14.6 339°34	1°3/14.2	17		<b>470674</b>	2008 SV <sub>220</sub>		7 14.6 250°22	2°8/15.6	16	
6 10	19 57.37	-22 4.2	1.136	2.036	17.8	21.0	6 10	20 1.31	-13 43.7	1.910	2.760	13.9	22.1
6 20	19 54.71	-22 33.8	1.065	2.022	13.4	20.7	6 20	19 56.34	-13 37.6	1.826	2.752	10.7	21.9
6 30	19 48.87	-23 11.8	1.013	2.008	8.3	20.4	6 30	19 49.27	-13 41.0	1.764	2.743	7.2	21.6
7 10	19 40.69	-23 53.3	0.982	1.996	2.8	20.1	7 10	19 40.73	-13 53.1	1.727	2.734	3.7	21.4
7 20	19 31.47	-24 32.3	0.973	1.985	3.7	20.1	7 20	19 31.57	-14 12.3	1.716	2.725	3.4	21.4
7 30	19 22.90	-25 3.5	0.987	1.976	9.4	20.4	7 30	19 22.82	-14 36.3	1.733	2.715	6.8	21.6
8 9	19 16.57	-25 24.1	1.021	1.968	14.7	20.6	8 9	19 15.44	-15 2.7	1.774	2.706	10.5	21.8
8 19	19 13.51	-25 33.7	1.073	1.961	19.3	20.9	8 19	19 10.15	-15 29.5	1.839	2.696	13.9	22.0
<b>434642</b>	2005 WJ <sub>186</sub>		7 14.6 124°28	0°5/14.9	17		<b>310212</b>	2011 SF <sub>176</sub>		7 14.6 348°02	0°1/14.6	18	
6 10	20 2.55</												

EPHEMERIDES

7 14.6

7 14.7

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>443374</b>	2014 <i>HG</i> <sub>2</sub>		7 14.6	30°98	6°0/16.9	17	<b>314110</b>	2005 <i>ED</i> <sub>90</sub>		7 14.6	153°80	10°6/20.9	17
6 10	19 58.54	- 5 50.1	1.955	2.783	14.5	20.3	6 10	20 2.85	+ 9 15.4	1.954	2.695	17.4	21.1
6 20	19 54.03	- 5 10.2	1.888	2.789	11.8	20.1	6 20	19 57.31	+ 9 38.1	1.884	2.704	15.3	21.0
6 30	19 47.70	- 4 44.2	1.842	2.796	8.9	20.0	6 30	19 49.78	+ 9 35.1	1.832	2.711	13.1	20.8
7 10	19 40.19	- 4 33.3	1.820	2.803	6.6	19.8	7 10	19 40.93	+ 9 3.8	1.801	2.719	11.4	20.8
7 20	19 32.28	- 4 37.6	1.823	2.810	6.1	19.8	7 20	19 31.59	+ 8 4.0	1.794	2.725	10.6	20.7
7 30	19 24.86	- 4 55.6	1.852	2.817	7.9	19.9	7 30	19 22.73	+ 6 39.0	1.811	2.731	11.1	20.8
8 9	19 18.73	- 5 24.3	1.905	2.825	10.5	20.1	8 9	19 15.24	+ 4 55.2	1.853	2.736	12.7	20.9
8 19	19 14.49	- 6 0.1	1.981	2.834	13.2	20.3	8 19	19 9.77	+ 3 0.0	1.917	2.740	14.8	21.0
<b>355680</b>	2008 <i>EE</i> <sub>169</sub>		7 14.6	17°23	1°0/15.1	18	<b>500957</b>	2013 <i>QX</i> <sub>35</sub>		7 14.6	249°38	0°3/14.6	18
6 10	19 57.69	-17 6.8	1.851	2.717	13.6	20.4	6 10	20 4.94	-21 15.8	1.858	2.719	13.8	22.4
6 20	19 53.62	-17 29.2	1.784	2.721	10.2	20.2	6 20	19 59.33	-21 29.8	1.767	2.702	10.4	22.2
6 30	19 47.55	-18 0.1	1.740	2.727	6.4	20.0	6 30	19 51.30	-21 48.5	1.697	2.685	6.5	21.9
7 10	19 40.16	-18 36.7	1.720	2.733	2.4	19.7	7 10	19 41.50	-22 8.9	1.653	2.667	2.1	21.6
7 20	19 32.31	-19 16.0	1.727	2.739	2.3	19.7	7 20	19 30.89	-22 27.8	1.637	2.649	2.5	21.6
7 30	19 24.97	-19 54.6	1.760	2.746	6.3	20.0	7 30	19 20.64	-22 42.7	1.647	2.630	7.0	21.8
8 9	19 19.04	-20 30.0	1.818	2.754	10.0	20.2	8 9	19 11.91	-22 52.2	1.683	2.610	11.2	22.0
8 19	19 15.15	-21 0.4	1.899	2.762	13.2	20.5	8 19	19 5.54	-22 56.2	1.741	2.590	14.9	22.2
<b>206965</b>	2004 <i>SL</i> <sub>43</sub>		7 14.6	201°02	1°8/14.2	17	<b>177036</b>	2003 <i>CG</i> <sub>21</sub>		7 14.7	321°66	0°4/14.5	18
6 10	20 8.33	-25 30.7	1.535	2.405	15.7	20.7	6 10	20 0.69	-21 48.3	2.062	2.926	12.5	20.8
6 20	20 2.13	-25 40.4	1.463	2.403	11.8	20.4	6 20	19 55.77	-22 0.6	1.986	2.924	9.3	20.6
6 30	19 53.05	-25 50.8	1.412	2.401	7.4	20.2	6 30	19 48.87	-22 16.4	1.933	2.922	5.7	20.4
7 10	19 41.99	-25 57.4	1.385	2.398	2.8	19.9	7 10	19 40.65	-22 33.1	1.906	2.920	1.8	20.2
7 20	19 30.21	-25 56.6	1.384	2.394	3.5	19.9	7 20	19 31.94	-22 48.2	1.906	2.918	2.2	20.2
7 30	19 19.19	-25 46.8	1.410	2.391	8.2	20.2	7 30	19 23.71	-22 59.7	1.933	2.916	6.1	20.4
8 9	19 10.27	-25 28.6	1.459	2.387	12.6	20.5	8 9	19 16.83	-23 6.6	1.986	2.915	9.7	20.6
8 19	19 4.28	-25 4.2	1.530	2.382	16.4	20.7	8 19	19 11.96	-23 8.8	2.062	2.913	12.8	20.8
<b>298048</b>	2002 <i>QL</i> <sub>16</sub>		7 14.6	304°55	3°7/13.8	18	<b>237258</b>	2008 <i>WU</i> <sub>80</sub>		7 14.7	61°21	1°8/15.4	18
6 10	20 5.76	-31 7.9	1.724	2.593	14.2	20.7	6 10	20 0.80	-15 40.3	1.817	2.675	14.1	20.7
6 20	20 0.22	-31 11.0	1.634	2.572	11.0	20.4	6 20	19 56.01	-15 50.6	1.745	2.677	10.7	20.5
6 30	19 51.92	-31 9.0	1.566	2.551	7.3	20.1	6 30	19 49.08	-16 10.1	1.695	2.679	6.9	20.3
7 10	19 41.65	-30 57.5	1.523	2.530	4.1	19.9	7 10	19 40.73	-16 36.8	1.671	2.681	3.0	20.1
7 20	19 30.57	-30 33.0	1.506	2.509	4.7	19.9	7 20	19 31.85	-17 8.2	1.672	2.684	2.7	20.0
7 30	19 20.06	-29 54.9	1.514	2.489	8.4	20.1	7 30	19 23.49	-17 41.1	1.701	2.686	6.6	20.3
8 9	19 11.43	-29 5.0	1.547	2.468	12.4	20.2	8 9	19 16.61	-18 12.9	1.754	2.688	10.4	20.5
8 19	19 5.55	-28 7.2	1.601	2.448	16.1	20.4	8 19	19 11.88	-18 41.8	1.830	2.690	13.8	20.8
<b>520312</b>	2014 <i>FB</i> <sub>76</sub>		7 14.6	201°40	10°2/20.9	16	<b>389965</b>	2012 <i>TN</i> <sub>200</sub>		7 14.7	169°54	4°5/12.6	17
6 10	19 58.81	+13 23.8	2.622	3.317	14.4	21.9	6 10	20 5.73	-33 41.8	2.291	3.145	11.7	21.7
6 20	19 53.95	+14 6.6	2.541	3.313	13.1	21.8	6 20	19 59.52	-34 28.1	2.222	3.148	9.1	21.5
6 30	19 47.57	+14 29.0	2.478	3.309	11.7	21.7	6 30	19 51.17	-35 10.0	2.177	3.151	6.4	21.4
7 10	19 40.16	+14 28.1	2.437	3.305	10.7	21.6	7 10	19 41.39	-35 42.7	2.159	3.154	4.6	21.3
7 20	19 32.33	+14 2.7	2.418	3.300	10.2	21.6	7 20	19 31.11	-36 2.3	2.168	3.156	5.2	21.3
7 30	19 24.77	+13 13.8	2.422	3.294	10.6	21.6	7 30	19 21.38	-36 7.1	2.204	3.157	7.6	21.5
8 9	19 18.18	+12 4.8	2.450	3.289	11.5	21.6	8 9	19 13.16	-35 57.9	2.266	3.158	10.3	21.6
8 19	19 13.07	+10 40.6	2.500	3.282	12.9	21.7	8 19	19 7.13	-35 36.9	2.350	3.159	12.8	21.8
<b>40742</b>	1999 <i>TK</i>		7 14.6	246°78	0°5/14.4	18	<b>37212</b>	2000 <i>WO</i> <sub>126</sub>		7 14.7	331°35	5°0/16.2	18 R
6 10	19 59.89	-22 6.0	2.636	3.490	10.4	20.0	6 10	19 58.53	- 9 31.8	1.869	2.713	14.4	18.7
6 20	19 54.85	-22 26.6	2.544	3.476	7.8	19.8	6 20	19 54.28	- 8 52.5	1.787	2.703	11.5	18.5
6 30	19 48.18	-22 50.2	2.476	3.463	4.8	19.6	6 30	19 48.03	- 8 24.3	1.727	2.694	8.3	18.3
7 10	19 40.37	-23 14.6	2.436	3.449	1.6	19.3	7 10	19 40.40	- 8 8.3	1.690	2.685	5.7	18.1
7 20	19 32.08	-23 37.2	2.424	3.435	2.0	19.3	7 20	19 32.22	- 8 4.8	1.679	2.676	5.3	18.1
7 30	19 24.06	-23 56.3	2.440	3.420	5.3	19.5	7 30	19 24.44	- 8 12.8	1.694	2.669	7.7	18.2
8 9	19 17.05	-24 10.7	2.484	3.406	8.3	19.7	8 9	19 17.98	- 8 30.0	1.733	2.661	10.9	18.4
8 19	19 11.64	-24 20.0	2.552	3.391	11.1	19.9	8 19	19 13.52	- 8 53.5	1.794	2.654	14.0	18.6
<b>120242</b>	2004 <i>FE</i> <sub>109</sub>		7 14.6	27°57	5°6/16.6	18	<b>59429</b>	1999 <i>GK</i> <sub>8</sub>		7 14.7	23°19	1°0/14.9	18 R
6 10	20 0.28	- 8 33.4	1.403	2.259	17.7	19.7	6 10	20 0.78	-19 10.4	1.261	2.147	17.3	18.5
6 20	19 56.01	- 8 13.9	1.340	2.263	14.0	19.5	6 20	19 56.64	-19 5.8	1.207	2.154	13.1	18.2
6 30	19 49.23	- 8 11.8	1.296	2.267	10.1	19.3	6 30	19 49.71	-19 9.0	1.172	2.163	8.1	18.0
7 10	19 40.76	- 8 27.7	1.274	2.272	6.6	19.1	7 10	19 40.96	-19 17.5	1.159	2.173	2.9	17.7
7 20	19 31.68	- 8 59.7	1.276	2.277	5.9	19.1	7 20	19 31.67	-19 28.3	1.171	2.183	2.9	17.7
7 30	19 23.27	- 9 44.4	1.302	2.282	8.8	19.3	7 30	19 23.27	-19 38.9	1.206	2.195	8.0	18.1
8 9	19 16.66	-10 36.6	1.351	2.288	12.6	19.5	8 9	19 17.00	-19 47.3	1.263	2.207	12.7	18.4
8 19	19 12.62	-11 31.4	1.420	2.294	16.2	19.7	8 19	19 13.58	-19 52.8	1.340	2.220	16.7	18.7
<b>522538</b>	2016 <i>EL</i> <sub>238</sub>		7 14.6	132°90	0°6/14.9	17	<b>287979</b>	2003 <i>UH</i> <sub>160</sub>		7 14.7	260°51	1°0/14.3	17
6 10	20 4.60	-17 31.3	1.436	2.305	16.6	21.5	6 10	20 2.21	-22 56.2	1.902	2.769	13.3	21.3
6 20	19 59.35	-18 7.2	1.371	2.311	12.5	21.2	6 20	19 57.12	-23 16.7	1.824	2.763	9.9	21.1
6 30	19 51.35	-18 54.2	1.328	2.316	7.8	21.0	6 30	19 49.82	-23 40.6	1.769	2.758	6.1	20.8
7 10	19 41.46	-19 48.0	1.308	2.321	2.6	20.7	7 10	19 40.99	-24 4.6	1.739	2.753	2.1	20.5
7 20	19 30.86	-20 43.3	1.313	2.326	2.8	20.7	7 20	19 31.57	-24 25.4	1.736	2.748	2.7	20.6
7 30	19 20.97	-21 34.9	1.344	2.330	7.8	21.0	7 30	19 22.63	-24 40.5	1.760	2.742	6.7	20.8
8 9	19 13.04	-22 19.3	1.399	2.335	12.4	21.3	8 9	19 15.20	-24 48.9	1.809	2.737	10.6	21.0
8 19	19 7.92	-22 55.1	1.475	2.338	16.4	21.6	8 19	19 10.00	-24 50.8	1.881	2.731	13.9	21.2
<b>507740</b>	2013 <i>XO</i> <sub>11</sub>		7 14.6	214°04	2°2/13.7	18	<b>250437</b>	20					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>470716</b>	2008 <i>UX</i> <sub>2</sub>	7 14.7 278°34'		1.8°/15.5 18			<b>285795</b>	2000 <i>WK</i> <sub>162</sub>	7 14.7 233°47'		1.0°/14.9 17		
6 10	20 1.75	-13 59.0	1.961	2.809	13.6	21.6	6 10	20 5.64	-18 41.9	1.702	2.562	14.9	21.6
6 20	19 56.95	-14 30.1	1.854	2.780	10.6	21.3	6 20	19 59.95	-18 41.2	1.618	2.552	11.3	21.4
6 30	19 49.89	-15 13.8	1.770	2.751	6.9	21.1	6 30	19 51.72	-18 46.9	1.555	2.541	7.1	21.1
7 10	19 41.10	-16 8.3	1.711	2.721	3.1	20.8	7 10	19 41.68	-18 56.8	1.517	2.530	2.6	20.8
7 20	19 31.37	-17 10.0	1.680	2.691	2.7	20.7	7 20	19 30.86	-19 8.4	1.506	2.518	2.7	20.8
7 30	19 21.75	-18 14.9	1.677	2.661	6.8	20.9	7 30	19 20.52	-19 19.4	1.521	2.505	7.3	21.0
8 9	19 13.33	-19 18.5	1.699	2.629	10.9	21.0	8 9	19 11.85	-19 28.4	1.561	2.492	11.7	21.3
8 19	19 6.98	-20 17.8	1.744	2.598	14.7	21.2	8 19	19 5.68	-19 34.8	1.623	2.479	15.5	21.5
<b>383613</b>	2007 <i>KW</i> <sub>7</sub>	7 14.7 29°49'		7.6°/11.1 17			<b>349137</b>	2007 <i>JS</i> <sub>24</sub>	7 14.7 0°90'		9.0°/18.8 18		
6 10	20 3.72	-34 5.4	1.413	2.295	16.1	19.7	6 10	19 55.68	-0 50.2	1.324	2.164	19.4	20.4
6 20	19 59.23	-35 53.6	1.363	2.302	12.6	19.5	6 20	19 52.77	-0 29.6	1.259	2.161	16.3	20.2
6 30	19 51.55	-37 37.7	1.334	2.310	9.3	19.4	6 30	19 47.38	-0 35.7	1.211	2.160	12.9	19.9
7 10	19 41.64	-39 7.0	1.329	2.318	7.6	19.3	7 10	19 40.28	-1 10.6	1.183	2.160	10.1	19.8
7 20	19 30.87	-40 12.8	1.347	2.327	8.8	19.4	7 20	19 32.49	-2 13.3	1.176	2.161	9.0	19.7
7 30	19 20.96	-40 50.9	1.390	2.337	11.7	19.6	7 30	19 25.27	-3 38.9	1.192	2.163	10.6	19.8
8 9	19 13.38	-41 2.4	1.453	2.347	14.9	19.8	8 9	19 19.78	-5 19.1	1.230	2.166	13.7	20.0
8 19	19 9.06	-40 51.7	1.535	2.357	17.9	20.0	8 19	19 16.81	-7 5.0	1.289	2.170	17.1	20.2
<b>245580</b>	2005 <i>UT</i> <sub>348</sub>	7 14.7 227°31'		5.6°/16.9 18			<b>147146</b>	2002 <i>TU</i> <sub>260</sub>	7 14.7 263°99'		5.0°/16.3 18		
6 10	19 59.34	-3 30.0	2.694	3.491	11.8	20.7	6 10	20 2.29	-9 10.7	1.761	2.601	15.3	20.3
6 20	19 54.30	-2 48.3	2.605	3.483	9.7	20.5	6 20	19 57.38	-8 48.7	1.668	2.583	12.3	20.1
6 30	19 47.80	-2 17.5	2.538	3.474	7.7	20.4	6 30	19 50.14	-8 39.8	1.597	2.564	8.8	19.9
7 10	19 40.31	-1 59.0	2.497	3.465	6.0	20.3	7 10	19 41.19	-8 44.9	1.549	2.545	5.8	19.6
7 20	19 32.41	-1 53.3	2.483	3.456	5.7	20.2	7 20	19 31.43	-9 3.3	1.526	2.526	5.3	19.6
7 30	19 24.78	-1 59.8	2.496	3.446	7.0	20.3	7 30	19 21.96	-9 33.3	1.530	2.507	8.1	19.7
8 9	19 18.06	-2 16.9	2.535	3.436	9.0	20.4	8 9	19 13.90	-10 11.5	1.558	2.487	11.9	19.9
8 19	19 12.77	-2 42.1	2.598	3.426	11.2	20.5	8 19	19 8.08	-10 54.3	1.608	2.467	15.5	20.0
<b>344104</b>	1999 <i>TH</i> <sub>148</sub>	7 14.7 290°05'		2.0°/15.3 18			<b>18937</b>	2000 <i>QF</i> <sub>42</sub>	7 14.7 64°92'		3.0°/13.7 18		
6 10	20 1.15	-15 54.3	1.787	2.646	14.3	21.4	6 10	20 4.10	-29 45.0	2.042	2.905	12.6	18.4
6 20	19 56.59	-15 55.7	1.689	2.622	11.0	21.1	6 20	19 58.35	-29 57.9	1.974	2.909	9.5	18.2
6 30	19 49.69	-16 6.0	1.613	2.597	7.2	20.8	6 30	19 50.46	-30 7.7	1.929	2.914	6.2	18.0
7 10	19 41.03	-16 24.2	1.561	2.572	3.2	20.5	7 10	19 41.20	-30 10.9	1.910	2.918	3.3	17.9
7 20	19 31.50	-16 47.9	1.536	2.547	2.9	20.5	7 20	19 31.53	-30 5.0	1.919	2.922	3.9	17.9
7 30	19 22.23	-17 14.5	1.537	2.522	7.1	20.7	7 30	19 22.50	-29 49.0	1.954	2.927	7.0	18.1
8 9	19 14.34	-17 41.6	1.562	2.497	11.4	20.9	8 9	19 15.08	-29 23.8	2.015	2.931	10.2	18.3
8 19	19 8.72	-18 7.0	1.609	2.472	15.3	21.0	8 19	19 9.88	-28 51.7	2.098	2.936	13.1	18.5
<b>503806</b>	2017 <i>JP</i> <sub>1</sub>	7 14.7 44°63'		5.4°/11.4 18			<b>34550</b>	2000 <i>SU</i> <sub>238</sub>	7 14.7 94°76'		0.4°/14.5 18		
6 10	20 6.89	-19 15.9	0.969	1.862	20.7	19.9	6 10	20 0.58	-20 29.8	2.290	3.146	11.7	18.5
6 20	20 2.69	-22 43.2	0.913	1.866	15.5	19.6	6 20	19 55.44	-21 4.5	2.226	3.160	8.7	18.3
6 30	19 54.37	-26 37.3	0.878	1.871	9.6	19.3	6 30	19 48.57	-21 43.7	2.187	3.174	5.3	18.1
7 10	19 42.76	-30 37.6	0.867	1.876	5.4	19.1	7 10	19 40.58	-22 24.4	2.175	3.188	1.7	17.9
7 20	19 29.46	-34 18.9	0.882	1.882	8.1	19.3	7 20	19 32.23	-23 3.4	2.190	3.202	2.0	18.0
7 30	19 16.79	-37 21.1	0.921	1.888	13.6	19.6	7 30	19 24.36	-23 38.2	2.234	3.216	5.5	18.2
8 9	19 7.03	-39 36.7	0.982	1.894	18.7	19.9	8 9	19 17.72	-24 7.1	2.305	3.229	8.7	18.5
8 19	19 1.62	-41 8.5	1.059	1.900	22.9	20.2	8 19	19 12.88	-24 29.6	2.399	3.242	11.5	18.7
<b>148555</b>	2001 <i>QM</i> <sub>164</sub>	7 14.7 294°31'		3.9°/16.6 18			<b>286599</b>	2002 <i>CM</i> <sub>303</sub>	7 14.7 67°59'		7.0°/19.2 18		
6 10	19 59.98	-8 47.3	1.550	2.400	16.5	20.0	6 10	19 57.62	+ 1 56.1	2.252	3.036	14.2	20.2
6 20	19 55.96	-9 23.5	1.461	2.384	13.1	19.8	6 20	19 53.25	+ 1 54.6	2.176	3.040	12.0	20.0
6 30	19 49.41	-10 20.6	1.393	2.368	9.1	19.5	6 30	19 47.25	+ 1 33.9	2.121	3.043	9.7	19.9
7 10	19 40.97	-11 37.2	1.349	2.353	5.1	19.2	7 10	19 40.18	+ 0 53.5	2.088	3.046	7.7	19.8
7 20	19 31.59	-13 9.0	1.330	2.337	4.3	19.1	7 20	19 32.68	-0 5.6	2.082	3.050	7.0	19.7
7 30	19 22.50	-14 49.4	1.336	2.322	7.9	19.3	7 30	19 25.55	-1 20.2	2.101	3.054	8.0	19.8
8 9	19 14.93	-16 31.0	1.368	2.307	12.3	19.5	8 9	19 19.50	-2 45.5	2.147	3.057	10.0	19.9
8 19	19 9.85	-18 7.4	1.421	2.292	16.4	19.7	8 19	19 15.08	-4 16.3	2.216	3.061	12.3	20.1
<b>428683</b>	2008 <i>KQ</i> <sub>20</sub>	7 14.7 340°42'		4.8°/12.3 18			<b>511211</b>	2014 <i>AY</i> <sub>19</sub>	7 14.7 295°11'		0.8°/14.9 18		
6 10	19 58.52	-25 40.3	1.211	2.109	17.1	19.9	6 10	20 2.86	-19 37.0	1.629	2.497	15.0	21.2
6 20	19 55.68	-27 20.6	1.143	2.098	12.9	19.7	6 20	19 58.18	-19 33.1	1.530	2.470	11.5	20.9
6 30	19 49.62	-29 10.2	1.095	2.087	8.4	19.4	6 30	19 50.85	-19 35.0	1.453	2.442	7.3	20.6
7 10	19 41.11	-30 59.1	1.069	2.077	5.0	19.2	7 10	19 41.49	-19 40.6	1.401	2.414	2.6	20.2
7 20	19 31.43	-32 36.4	1.066	2.069	6.5	19.2	7 20	19 31.11	-19 47.5	1.373	2.386	2.7	20.2
7 30	19 22.30	-33 53.1	1.087	2.061	11.0	19.4	7 30	19 21.01	-19 53.5	1.372	2.358	7.7	20.4
8 9	19 15.38	-34 45.5	1.129	2.055	15.6	19.7	8 9	19 12.51	-19 57.2	1.394	2.330	12.4	20.6
8 19	19 11.81	-35 14.3	1.188	2.049	19.6	19.9	8 19	19 6.58	-19 58.1	1.437	2.302	16.6	20.8
<b>150043</b>	2005 <i>WA</i> <sub>185</sub>	7 14.7 46°17'		3.5°/16.8 18			<b>254590</b>	2005 <i>GL</i> <sub>67</sub>	7 14.7 349°87'		5.8°/12.9 17		
6 10	19 58.01	-8 23.2	2.154	2.986	13.2	19.1	6 10	20 3.31	-31 16.2	1.210	2.102	17.5	19.9
6 20	19 53.62	-8 52.8	2.080	2.991	10.3	18.9	6 20	19 59.24	-32 7.6	1.148	2.097	13.5	19.7
6 30	19 47.51	-9 36.5	2.028	2.996	7.2	18.7	6 30	19 51.72	-32 56.2	1.106	2.093	9.2	19.4
7 10	19 40.24	-10 32.8	2.002	3.002	4.3	18.6	7 10	19 41.77	-33 33.8	1.086	2.090	6.0	19.3
7 20	19 32.54	-11 38.7	2.003	3.007	3.7	18.5	7 20	19 30.89	-33 53.4	1.088	2.087	7.0	19.3
7 30	19 25.22	-12 50.3	2.032	3.013	6.1	18.7	7 30	19 20.94	-33 51.5	1.113	2.086	11.0	19.5
8 9	19 19.05	-14 3.3	2.087	3.018	9.2	18.9	8 9	19 13.54	-33 29.9	1.159	2.085	15.3	19.8
8 19	19 14.62	-15 14.1	2.167	3.024	12.1	19.1	8 19	19 9.63	-32 52.9	1.223	2.084	19.1	20.0
<b>68016</b>	2000 <i>YW</i> <sub>10</sub>	7 14.7 29°13'		0.8°/14.5 18			<b>349824</b>	2009 <i>BJ</i> <sub>186</sub>	7 14.7 207°26'		2.2°/13.7 18		
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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>208558</b>	2002 <i>AF</i> <sub>186</sub>		7 14.7 129°90	4.6/12.9	18		<b>69692</b>	1998 <i>HZ</i> <sub>32</sub>		7 14.7 97°14	1.1/15.1	17	
6 10	20 6.67	-28 50.7	1.408	2.287	16.3	20.4	6 10	20 5.96	-17 56.5	1.515	2.380	16.1	19.9
6 20	20 1.29	-29 54.3	1.347	2.290	12.4	20.2	6 20	20 0.08	-18 3.2	1.459	2.396	12.1	19.6
6 30	19 52.77	-30 58.3	1.306	2.293	8.1	20.0	6 30	19 51.68	-18 17.9	1.425	2.411	7.6	19.4
7 10	19 42.08	-31 54.7	1.289	2.295	4.9	19.8	7 10	19 41.66	-18 37.8	1.414	2.427	2.8	19.2
7 20	19 30.56	-32 36.5	1.297	2.298	5.9	19.8	7 20	19 31.18	-18 59.6	1.430	2.442	2.7	19.2
7 30	19 19.85	-32 59.7	1.330	2.300	9.8	20.1	7 30	19 21.55	-19 20.6	1.471	2.457	7.3	19.5
8 9	19 11.43	-33 4.4	1.385	2.302	13.9	20.3	8 9	19 13.87	-19 38.8	1.537	2.471	11.6	19.8
8 19	19 6.19	-32 53.7	1.459	2.304	17.5	20.6	8 19	19 8.84	-19 53.2	1.624	2.485	15.2	20.1
<b>40126</b>	1998 <i>QL</i> <sub>40</sub>		7 14.7 359°18	10 <sup>1</sup> /18.8	18		<b>242590</b>	2005 <i>GO</i> <sub>227</sub>		7 14.7 48°67	1 <sup>3</sup> /15.1	16	
6 10	19 53.96	- 0 35.8	1.251	2.096	20.0	17.6	6 10	20 3.08	-18 42.5	1.612	2.479	15.2	20.3
6 20	19 51.60	+ 0 8.1	1.187	2.091	16.9	17.4	6 20	19 57.71	-18 28.7	1.561	2.499	11.4	20.2
6 30	19 46.72	+ 0 25.6	1.141	2.089	13.7	17.2	6 30	19 50.09	-18 21.0	1.533	2.520	7.1	20.0
7 10	19 40.10	+ 0 13.1	1.114	2.087	11.0	17.0	7 10	19 41.11	-18 17.6	1.528	2.541	2.7	19.7
7 20	19 32.79	- 0 29.7	1.107	2.087	10.1	17.0	7 20	19 31.83	-18 16.9	1.550	2.562	2.6	19.8
7 30	19 26.07	- 1 39.0	1.122	2.089	11.6	17.1	7 30	19 23.39	-18 17.2	1.598	2.584	6.8	20.1
8 9	19 21.11	- 3 7.1	1.157	2.092	14.5	17.2	8 9	19 16.75	-18 17.4	1.670	2.606	10.7	20.4
8 19	19 18.72	- 4 45.0	1.212	2.097	17.7	17.5	8 19	19 12.48	-18 17.0	1.764	2.628	14.1	20.6
<b>42123</b>	2001 <i>BY</i> <sub>8</sub>		7 14.7 170°82	1 <sup>9</sup> /13.7	18		<b>130937</b>	2000 <i>WM</i> <sub>40</sub>		7 14.7 250°08	1 <sup>8</sup> /15.5	18	
6 10	20 0.94	-26 51.2	2.690	3.546	10.2	20.5	6 10	20 1.75	-15 7.7	2.021	2.870	13.3	20.3
6 20	19 55.60	-27 19.7	2.615	3.548	7.6	20.3	6 20	19 56.73	-15 19.4	1.929	2.857	10.2	20.1
6 30	19 48.65	-27 48.2	2.565	3.550	4.8	20.1	6 30	19 49.63	-15 40.2	1.861	2.842	6.6	19.8
7 10	19 40.63	-28 13.6	2.542	3.551	2.3	19.9	7 10	19 41.04	-16 8.6	1.818	2.828	2.9	19.6
7 20	19 32.22	-28 33.6	2.547	3.553	2.8	20.0	7 20	19 31.78	-16 42.1	1.802	2.813	2.7	19.5
7 30	19 24.21	-28 46.4	2.581	3.554	5.5	20.2	7 30	19 22.83	-17 17.8	1.813	2.797	6.4	19.7
8 9	19 17.29	-28 51.6	2.642	3.554	8.3	20.3	8 9	19 15.14	-17 53.2	1.851	2.781	10.2	19.9
8 19	19 12.01	-28 49.7	2.727	3.555	10.7	20.5	8 19	19 9.47	-18 26.1	1.911	2.765	13.6	20.1
<b>54036</b>	2000 <i>GP</i> <sub>109</sub>		7 14.7 175°87	2 <sup>1</sup> /15.6	18		<b>65611</b>	3498 <i>T</i> <sub>-3</sub>		7 14.7 280°12	0 <sup>9</sup> /15.1	18	
6 10	20 2.77	-14 9.8	1.828	2.679	14.4	19.0	6 10	20 0.24	-17 52.7	2.024	2.882	12.9	19.5
6 20	19 57.52	-14 29.0	1.754	2.681	11.0	18.7	6 20	19 55.57	-18 5.5	1.938	2.872	9.8	19.3
6 30	19 50.09	-14 59.3	1.701	2.682	7.2	18.5	6 30	19 48.88	-18 25.2	1.876	2.862	6.1	19.0
7 10	19 41.15	-15 38.5	1.673	2.683	3.3	18.3	7 10	19 40.79	-18 49.8	1.839	2.852	2.3	18.8
7 20	19 31.63	-16 23.4	1.673	2.683	2.9	18.3	7 20	19 32.10	-19 16.8	1.829	2.841	2.2	18.7
7 30	19 22.59	-17 10.2	1.699	2.683	6.7	18.5	7 30	19 23.79	-19 43.5	1.846	2.831	6.2	19.0
8 9	19 15.03	-17 55.8	1.751	2.683	10.6	18.7	8 9	19 16.76	-20 7.9	1.889	2.821	9.9	19.2
8 19	19 9.67	-18 37.6	1.826	2.682	14.0	18.9	8 19	19 11.72	-20 28.7	1.955	2.811	13.2	19.4
<b>92292</b>	2000 <i>EL</i> <sub>88</sub>		7 14.7 297°54	2 <sup>4</sup> /14.6	18		<b>369260</b>	2009 <i>JW</i> <sub>17</sub>		7 14.7 37°41	3 <sup>4</sup> /13.5	17	
6 10	20 14.29	-23 37.8	1.038	1.921	20.4	17.7	6 10	20 3.64	-25 42.9	1.221	2.111	17.5	20.6
6 20	20 7.75	-21 57.3	0.962	1.908	15.7	17.4	6 20	19 59.16	-26 38.8	1.168	2.119	13.1	20.3
6 30	19 57.12	-20 7.7	0.905	1.896	10.0	17.0	6 30	19 51.50	-27 38.1	1.136	2.127	8.3	20.1
7 10	19 43.57	-18 10.2	0.870	1.883	3.9	16.6	7 10	19 41.69	-28 33.2	1.125	2.136	3.9	19.9
7 20	19 28.89	-16 9.5	0.860	1.871	4.5	16.6	7 20	19 31.15	-29 17.1	1.138	2.145	5.0	20.0
7 30	19 15.34	-14 13.5	0.873	1.859	10.9	16.9	7 30	19 21.58	-29 45.4	1.175	2.155	9.6	20.2
8 9	19 4.80	-12 29.5	0.908	1.848	16.9	17.2	8 9	19 14.41	-29 57.5	1.233	2.165	14.1	20.5
8 19	18 58.36	-11 2.0	0.961	1.837	22.0	17.5	8 19	19 10.48	-29 55.4	1.311	2.176	17.9	20.8
<b>172607</b>	2003 <i>WS</i> <sub>83</sub>		7 14.7 199°42	3 <sup>4</sup> /15.9	17		<b>74489</b>	1999 <i>CC</i> <sub>120</sub>		7 14.7 202°14	5 <sup>1</sup> /12.1	18	
6 10	20 1.66	-12 28.6	2.016	2.859	13.5	20.4	6 10	20 5.47	-36 1.1	2.438	3.288	11.3	19.6
6 20	19 56.47	-12 7.4	1.938	2.858	10.5	20.2	6 20	19 59.40	-36 54.1	2.364	3.284	8.9	19.5
6 30	19 49.33	-11 55.3	1.882	2.856	7.2	20.0	6 30	19 51.20	-37 42.0	2.313	3.280	6.6	19.3
7 10	19 40.89	-11 52.2	1.852	2.855	4.2	19.8	7 10	19 41.54	-38 19.6	2.289	3.276	5.2	19.2
7 20	19 31.96	-11 57.1	1.849	2.853	3.8	19.8	7 20	19 31.30	-38 43.0	2.293	3.271	5.8	19.2
7 30	19 23.49	-12 8.7	1.872	2.851	6.6	19.9	7 30	19 21.53	-38 50.4	2.323	3.265	7.9	19.4
8 9	19 16.33	-12 25.0	1.921	2.849	10.0	20.1	8 9	19 13.19	-38 42.2	2.379	3.260	10.4	19.5
8 19	19 11.14	-12 43.9	1.993	2.847	13.1	20.3	8 19	19 6.97	-38 21.0	2.457	3.253	12.7	19.7
<b>127143</b>	2002 <i>GX</i> <sub>115</sub>		7 14.7 234°33	4 <sup>2</sup> /12.4	18		<b>444986</b>	2008 <i>FV</i> <sub>35</sub>		7 14.7 58°94	2 <sup>7</sup> /15.9	15	
6 10	20 1.96	-32 33.5	2.415	3.274	11.1	20.0	6 10	19 59.16	-12 45.8	2.053	2.900	13.2	21.4
6 20	19 56.73	-33 26.2	2.340	3.270	8.5	19.8	6 20	19 54.52	-12 51.3	1.987	2.911	10.1	21.3
6 30	19 49.52	-34 16.2	2.289	3.266	5.9	19.6	6 30	19 48.08	-13 6.8	1.945	2.922	6.7	21.1
7 10	19 40.97	-34 59.0	2.265	3.261	4.2	19.5	7 10	19 40.50	-13 31.2	1.928	2.933	3.5	20.9
7 20	19 31.87	-35 30.6	2.268	3.257	4.9	19.6	7 20	19 32.54	-14 2.1	1.937	2.945	3.1	20.9
7 30	19 23.17	-35 48.8	2.298	3.253	7.3	19.7	7 30	19 25.07	-14 37.1	1.974	2.957	6.0	21.1
8 9	19 15.78	-35 53.5	2.354	3.248	9.9	19.9	8 9	19 18.88	-15 13.3	2.036	2.968	9.3	21.3
8 19	19 10.34	-35 46.2	2.432	3.244	12.4	20.0	8 19	19 14.54	-15 48.4	2.122	2.980	12.2	21.5
<b>239700</b>	2008 <i>YU</i> <sub>156</sub>		7 14.7 282°10	0 <sup>9</sup> /14.9	18		<b>238236</b>	2003 <i>US</i> <sub>218</sub>		7 14.7 280°63	2 <sup>4</sup> /13.6	18	
6 10	20 1.96	-19 6.7	1.880	2.741	13.6	20.9	6 10	20 2.15	-25 21.1	1.852	2.722	13.4	20.2
6 20	19 57.01	-19 3.1	1.792	2.727	10.3	20.7	6 20	19 57.27	-26 8.7	1.777	2.717	10.1	20.0
6 30	19 49.85	-19 4.7	1.726	2.712	6.5	20.4	6 30	19 50.06	-26 59.3	1.724	2.713	6.3	19.7
7 10	19 41.11	-19 9.8	1.685	2.698	2.4	20.2	7 10	19 41.22	-27 48.0	1.697	2.708	2.9	19.5
7 20	19 31.69	-19 16.5	1.671	2.683	2.4	20.1	7 20	19 31.69	-28 30.1	1.696	2.703	3.7	19.6
7 30	19 22.67	-19 22.9	1.684	2.669	6.7	20.4	7 30	19 22.64	-29 1.9	1.722	2.698	7.4	19.8
8 9	19 15.09	-19 27.8	1.721	2.654	10.7	20.6	8 9	19 15.15	-29 22.3	1.773	2.693	11.1	20.0
8 19	19 9.70	-19 30.6	1.782	2.639	14.2	20.8	8 19	19 9.99	-29 31.5	1.845	2.689	14.4	20.2
<b>29517</b>	1997 <i>YQ</i> <sub>10</sub>		7 14.7 177°1										

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>68841</b>	2002 <i>GJ</i> <sub>118</sub>		7 14.7 330°46	6°2/17.9	18		<b>144990</b>	2005 <i>ES</i> <sub>179</sub>		7 14.7 21°16	1°6/15.1	17	
6 10	19 58.36	- 3 49.6	1.612	2.445	16.8	19.0	6 10	20 0.98	-17 45.1	1.131	2.020	18.6	20.0
6 20	19 54.52	- 4 3.8	1.533	2.438	13.7	18.8	6 20	19 57.13	-17 43.2	1.076	2.026	14.1	19.8
6 30	19 48.42	- 4 40.4	1.474	2.432	10.3	18.5	6 30	19 50.24	-17 51.9	1.041	2.032	8.9	19.5
7 10	19 40.70	- 5 39.5	1.437	2.426	7.2	18.3	7 10	19 41.31	-18 8.7	1.026	2.039	3.4	19.2
7 20	19 32.27	- 6 58.4	1.425	2.420	6.3	18.3	7 20	19 31.73	-18 30.1	1.035	2.048	3.3	19.3
7 30	19 24.24	- 8 31.8	1.438	2.415	8.4	18.4	7 30	19 23.08	-18 52.2	1.066	2.057	8.6	19.6
8 9	19 17.69	-10 12.7	1.475	2.410	11.9	18.6	8 9	19 16.72	-19 12.4	1.119	2.067	13.6	19.9
8 19	19 13.40	-11 54.0	1.535	2.406	15.4	18.8	8 19	19 13.46	-19 28.7	1.191	2.077	17.8	20.2
<b>53523</b>	2000 <i>AC</i> <sub>153</sub>		7 14.7 25°69	1°5/14.2	18		<b>155374</b>	1991 <i>VZ</i> <sub>10</sub>		7 14.7 327°43	2°3/13.8	18	
6 10	20 0.55	-20 39.1	0.980	1.883	19.7	17.0	6 10	19 58.63	-23 49.9	1.336	2.228	16.2	19.2
6 20	19 57.25	-21 34.1	0.933	1.890	14.7	16.8	6 20	19 55.52	-24 32.1	1.255	2.207	12.3	18.9
6 30	19 50.51	-22 40.4	0.903	1.899	9.0	16.5	6 30	19 49.46	-25 21.1	1.193	2.186	7.7	18.6
7 10	19 41.42	-23 50.5	0.894	1.909	3.0	16.2	7 10	19 41.16	-26 11.6	1.154	2.167	3.1	18.3
7 20	19 31.54	-24 55.8	0.907	1.920	3.9	16.3	7 20	19 31.77	-26 57.4	1.138	2.148	4.1	18.3
7 30	19 22.72	-25 49.3	0.942	1.931	9.8	16.6	7 30	19 22.82	-27 33.0	1.146	2.130	9.1	18.5
8 9	19 16.54	-26 27.6	0.998	1.944	15.0	17.0	8 9	19 15.82	-27 55.7	1.176	2.114	14.0	18.8
8 19	19 13.86	-26 50.8	1.071	1.958	19.4	17.3	8 19	19 11.83	-28 5.6	1.224	2.098	18.3	19.0
<b>190286</b>	1993 <i>FV</i> <sub>9</sub>		7 14.7 190°10	4°2/16.9	18		<b>357160</b>	2002 <i>CY</i> <sub>127</sub>		7 14.7 155°32	1°6/15.7	18	
6 10	20 1.16	- 6 59.8	2.420	3.235	12.4	21.2	6 10	19 59.31	-14 3.1	2.955	3.788	10.0	22.6
6 20	19 55.84	- 7 1.4	2.336	3.234	9.9	21.0	6 20	19 54.17	-14 19.5	2.878	3.795	7.6	22.4
6 30	19 48.87	- 7 15.2	2.274	3.232	7.2	20.9	6 30	19 47.71	-14 42.5	2.826	3.803	4.9	22.3
7 10	19 40.77	- 7 41.1	2.238	3.229	4.8	20.7	7 10	19 40.40	-15 10.8	2.802	3.810	2.4	22.1
7 20	19 32.23	- 8 17.6	2.230	3.226	4.3	20.7	7 20	19 32.77	-15 42.6	2.807	3.816	2.1	22.1
7 30	19 24.00	- 9 2.4	2.250	3.222	6.3	20.8	7 30	19 25.45	-16 16.1	2.841	3.822	4.5	22.3
8 9	19 16.83	- 9 52.4	2.298	3.218	9.0	20.9	8 9	19 19.02	-16 49.3	2.903	3.828	7.2	22.5
8 19	19 11.28	-10 44.6	2.369	3.213	11.6	21.1	8 19	19 13.94	-17 20.9	2.991	3.833	9.5	22.6
<b>94090</b>	2000 <i>YH</i> <sub>60</sub>		7 14.7 265°30	0°4/14.8	18		<b>400457</b>	2008 <i>FU</i> <sub>37</sub>		7 14.7 300°81	5°8/11.8	18	
6 10	20 3.58	-20 0.4	2.013	2.870	13.0	20.2	6 10	20 3.17	-36 13.0	2.138	2.998	12.3	21.1
6 20	19 58.22	-20 5.2	1.915	2.848	9.9	19.9	6 20	19 58.01	-37 13.5	2.065	2.990	9.7	20.9
6 30	19 50.64	-20 14.8	1.840	2.826	6.2	19.7	6 30	19 50.52	-38 8.8	2.015	2.983	7.3	20.7
7 10	19 41.43	-20 27.0	1.791	2.804	2.1	19.3	7 10	19 41.40	-38 53.1	1.990	2.976	5.9	20.6
7 20	19 31.46	-20 39.5	1.769	2.781	2.3	19.3	7 20	19 31.61	-39 21.7	1.992	2.969	6.6	20.7
7 30	19 21.78	-20 50.1	1.774	2.758	6.5	19.5	7 30	19 22.31	-39 32.1	2.019	2.962	8.8	20.8
8 9	19 13.43	-20 57.6	1.805	2.734	10.5	19.7	8 9	19 14.57	-39 24.9	2.070	2.955	11.5	20.9
8 19	19 7.20	-21 1.5	1.860	2.710	14.1	19.9	8 19	19 9.17	-39 2.8	2.143	2.948	14.0	21.1
<b>12316</b>	1992 <i>HG</i>		7 14.7 349°28	4°6/16.4	18		<b>18480</b>	1995 <i>YB</i>		7 14.7 332°08	3°1/13.1	18	
6 10	19 58.01	- 9 34.3	1.879	2.724	14.3	16.6	6 10	19 57.19	-22 13.1	1.304	2.197	16.4	16.8
6 20	19 53.90	- 9 9.0	1.803	2.720	11.4	16.4	6 20	19 54.57	-23 45.2	1.223	2.176	12.4	16.5
6 30	19 47.85	- 8 55.7	1.747	2.716	8.1	16.2	6 30	19 48.97	-25 31.3	1.163	2.156	7.8	16.1
7 10	19 40.48	- 8 55.0	1.716	2.713	5.3	16.0	7 10	19 41.05	-27 23.8	1.125	2.137	3.5	15.8
7 20	19 32.60	- 9 6.2	1.710	2.710	4.9	15.9	7 20	19 31.90	-29 12.4	1.112	2.120	5.0	15.9
7 30	19 25.15	- 9 27.6	1.730	2.708	7.3	16.1	7 30	19 23.07	-30 47.6	1.123	2.103	9.9	16.1
8 9	19 19.01	- 9 56.4	1.775	2.706	10.5	16.3	8 9	19 16.15	-32 3.3	1.156	2.088	14.8	16.3
8 19	19 14.84	-10 29.5	1.842	2.705	13.6	16.5	8 19	19 12.30	-32 57.6	1.207	2.074	19.0	16.6
<b>387222</b>	2012 <i>UO</i> <sub>30</sub>		7 14.7 247°55	0°1/14.7	18		<b>370268</b>	2002 <i>QA</i> <sub>52</sub>		7 14.7 346°49	0°9/15.0	17	
6 10	20 1.56	-19 50.3	1.957	2.818	13.1	21.0	6 10	19 54.02	-17 47.3	0.979	1.886	19.3	20.0
6 20	19 56.62	-20 12.4	1.877	2.813	9.9	20.8	6 20	19 52.54	-18 8.0	0.912	1.872	14.7	19.7
6 30	19 49.57	-20 40.5	1.820	2.807	6.1	20.5	6 30	19 47.80	-18 43.6	0.864	1.860	9.3	19.3
7 10	19 41.05	-21 11.8	1.788	2.802	2.0	20.2	7 10	19 40.66	-19 30.8	0.835	1.849	3.3	19.0
7 20	19 31.94	-21 43.0	1.784	2.796	2.2	20.2	7 20	19 32.43	-20 23.7	0.826	1.840	3.3	18.9
7 30	19 23.25	-22 11.4	1.806	2.790	6.4	20.5	7 30	19 24.88	-21 15.8	0.839	1.833	9.5	19.3
8 9	19 15.96	-22 34.8	1.855	2.784	10.2	20.7	8 9	19 19.66	-22 1.3	0.871	1.828	15.2	19.5
8 19	19 10.77	-22 52.7	1.925	2.778	13.5	20.9	8 19	19 17.84	-22 37.1	0.920	1.825	20.1	19.8
<b>184344</b>	2005 <i>HO</i> <sub>2</sub>		7 14.7 41°38	1°4/14.3	17		<b>277544</b>	2005 <i>YG</i> <sub>76</sub>		7 14.7 241°35	1°9/13.8	17	
6 10	20 3.72	-22 55.2	1.208	2.096	17.8	20.1	6 10	20 3.64	-23 53.8	1.916	2.780	13.3	21.3
6 20	19 59.04	-23 19.2	1.158	2.108	13.3	19.9	6 20	19 58.40	-24 42.8	1.831	2.769	10.0	21.1
6 30	19 51.32	-23 48.2	1.128	2.121	8.1	19.7	6 30	19 50.82	-25 36.4	1.771	2.759	6.2	20.8
7 10	19 41.63	-24 16.9	1.120	2.134	2.8	19.4	7 10	19 41.53	-26 30.0	1.735	2.747	2.5	20.6
7 20	19 31.37	-24 40.4	1.136	2.148	3.5	19.5	7 20	19 31.47	-27 18.5	1.728	2.736	3.3	20.6
7 30	19 22.16	-24 55.4	1.176	2.163	8.6	19.8	7 30	19 21.79	-27 58.0	1.747	2.724	7.2	20.8
8 9	19 15.30	-25 1.2	1.238	2.178	13.3	20.1	8 9	19 13.58	-28 26.7	1.792	2.712	11.1	21.0
8 19	19 11.57	-24 58.7	1.320	2.193	17.3	20.4	8 19	19 7.67	-28 44.6	1.858	2.699	14.4	21.2
<b>294104</b>	2007 <i>TA</i> <sub>231</sub>		7 14.7 281°56	0°8/15.0	18		<b>485136</b>	2010 <i>NY</i> <sub>74</sub>		7 14.7 285°87	0°6/14.5	17	
6 10	20 0.58	-17 57.0	1.935	2.796	13.3	21.0	6 10	20 2.29	-23 5.3	2.351	3.207	11.4	22.8
6 20	19 55.94	-18 13.4	1.849	2.784	10.1	20.8	6 20	19 57.05	-23 10.0	2.244	3.177	8.6	22.6
6 30	19 49.19	-18 37.4	1.786	2.772	6.3	20.6	6 30	19 49.84	-23 16.6	2.160	3.147	5.4	22.3
7 10	19 40.95	-19 6.5	1.748	2.761	2.3	20.3	7 10	19 41.20	-23 22.9	2.103	3.117	1.8	22.0
7 20	19 32.05	-19 38.0	1.737	2.749	2.3	20.3	7 20	19 31.86	-23 26.6	2.075	3.086	2.2	22.0
7 30	19 23.52	-20 9.0	1.753	2.738	6.4	20.5	7 30	19 22.75	-23 26.2	2.074	3.055	5.9	22.2
8 9	19 16.34	-20 37.0	1.794	2.726	10.3	20.7	8 9	19 14.76	-23 21.1	2.100	3.024	9.5	22.3
8 19	19 11.24	-21 0.7	1.857	2.715	13.8	20.9	8 19	19 8.62	-23 11.5	2.150	2.992	12.7	22.5
<b>87209</b>	2000 <i>OW</i> <sub>32</sub>		7 14.7 9°07	0°3/14.7	18		<b>214092</b>	2004 <i>JY</i> <sub>31</sub>					



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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>239466</b>	2007 <i>TJ</i> <sub>375</sub>	7 14.7 319°71		4°0/16.5 16			<b>339213</b>	2004 <i>TQ</i> <sub>274</sub>	7 14.7 200°40		2°0/15.5 18		
6 10	19 59.66	-9 33.5	1.854	2.696	14.6	20.3	6 10	20 2.62	-15 7.6	2.236	3.079	12.4	22.1
6 20	19 55.20	-9 37.4	1.777	2.694	11.5	20.1	6 20	19 57.12	-15 5.7	2.153	3.076	9.5	21.9
6 30	19 48.70	-9 55.2	1.722	2.692	8.0	19.9	6 30	19 49.76	-15 11.0	2.093	3.072	6.2	21.7
7 10	19 40.81	-10 26.3	1.690	2.691	4.9	19.7	7 10	19 41.16	-15 22.4	2.059	3.067	2.9	21.5
7 20	19 32.35	-11 8.7	1.685	2.689	4.3	19.7	7 20	19 32.05	-15 38.3	2.053	3.063	2.6	21.5
7 30	19 24.33	-11 58.9	1.707	2.688	7.0	19.8	7 30	19 23.33	-15 56.8	2.075	3.057	5.9	21.7
8 9	19 17.65	-12 53.0	1.753	2.686	10.5	20.0	8 9	19 15.82	-16 16.2	2.124	3.051	9.2	21.9
8 19	19 13.02	-13 47.3	1.822	2.685	13.7	20.2	8 19	19 10.15	-16 35.0	2.197	3.045	12.3	22.1
<b>298718</b>	2004 <i>FM</i> <sub>58</sub>	7 14.7 129°07		1°0/14.2 18			<b>130342</b>	2000 <i>FK</i> <sub>53</sub>	7 14.7 252°75		6°8/11.0 18		
6 10	20 2.40	-23 16.0	2.338	3.194	11.5	21.8	6 10	20 5.31	-43 27.3	2.667	3.500	10.9	20.3
6 20	19 56.83	-23 41.2	2.271	3.205	8.5	21.6	6 20	19 59.34	-44 20.1	2.595	3.492	9.1	20.2
6 30	19 49.50	-24 8.7	2.228	3.215	5.2	21.4	6 30	19 51.22	-45 3.7	2.546	3.485	7.5	20.1
7 10	19 41.02	-24 35.4	2.212	3.225	1.8	21.2	7 10	19 41.64	-45 33.2	2.523	3.477	6.8	20.0
7 20	19 32.16	-24 58.7	2.224	3.235	2.3	21.2	7 20	19 31.51	-45 44.8	2.525	3.469	7.3	20.0
7 30	19 23.80	-25 16.5	2.265	3.244	5.7	21.5	7 30	19 21.87	-45 37.3	2.553	3.461	8.8	20.1
8 9	19 16.70	-25 28.0	2.332	3.253	8.8	21.7	8 9	19 13.70	-45 12.1	2.606	3.453	10.6	20.2
8 19	19 11.44	-25 33.4	2.423	3.262	11.6	21.9	8 19	19 7.70	-44 32.2	2.679	3.445	12.5	20.4
<b>398222</b>	2010 <i>OR</i> <sub>89</sub>	7 14.7 306°60		2°9/15.9 18			<b>397058</b>	2005 <i>UD</i> <sub>126</sub>	7 14.7 309°49		3°7/16.2 18		
6 10	19 58.31	-12 45.9	2.067	2.915	13.0	20.9	6 10	19 59.21	-10 39.3	2.246	3.081	12.6	20.2
6 20	19 54.11	-12 43.8	1.977	2.901	10.1	20.6	6 20	19 54.51	-10 19.3	2.166	3.080	9.6	20.1
6 30	19 48.02	-12 51.6	1.909	2.886	6.9	20.4	6 30	19 48.13	-10 8.8	2.110	3.079	6.9	19.9
7 10	19 40.60	-13 8.7	1.867	2.872	3.7	20.2	7 10	19 40.62	-10 7.9	2.079	3.077	4.4	19.7
7 20	19 32.60	-13 33.5	1.851	2.858	3.3	20.1	7 20	19 32.68	-10 15.9	2.075	3.076	4.0	19.7
7 30	19 24.90	-14 3.9	1.862	2.844	6.3	20.3	7 30	19 25.13	-10 31.4	2.098	3.075	6.3	19.8
8 9	19 18.38	-14 37.0	1.898	2.831	9.8	20.5	8 9	19 18.71	-10 52.3	2.147	3.074	9.2	20.0
8 19	19 13.70	-15 10.7	1.957	2.818	13.0	20.7	8 19	19 13.99	-11 16.4	2.220	3.073	12.0	20.2
<b>59105</b>	1998 <i>WP</i> <sub>20</sub>	7 14.7 280°73		0°6/14.9 18			<b>255332</b>	2005 <i>WR</i> <sub>43</sub>	7 14.7 50°52		2°2/15.6 18		
6 10	20 2.98	-18 44.3	1.621	2.488	15.1	19.6	6 10	20 0.07	-15 11.6	2.234	3.082	12.2	20.2
6 20	19 58.28	-18 58.5	1.529	2.467	11.5	19.3	6 20	19 55.14	-14 54.7	2.160	3.085	9.3	20.0
6 30	19 50.95	-19 20.9	1.459	2.447	7.3	19.0	6 30	19 48.49	-14 44.4	2.109	3.088	6.1	19.8
7 10	19 41.65	-19 49.1	1.412	2.426	2.5	18.7	7 10	19 40.72	-14 40.0	2.083	3.091	3.1	19.7
7 20	19 31.37	-20 19.5	1.392	2.404	2.6	18.6	7 20	19 32.58	-14 40.6	2.086	3.094	2.8	19.6
7 30	19 21.43	-20 48.5	1.397	2.383	7.6	18.9	7 30	19 24.87	-14 44.9	2.115	3.097	5.8	19.8
8 9	19 13.10	-21 13.6	1.427	2.362	12.2	19.1	8 9	19 18.37	-14 51.7	2.171	3.101	8.9	20.0
8 19	19 7.33	-21 33.6	1.477	2.340	16.3	19.3	8 19	19 13.62	-14 59.6	2.251	3.104	11.8	20.2
<b>73776</b>	1994 <i>PJ</i> <sub>27</sub>	7 14.7 18°76		0°9/14.4 18			<b>390152</b>	2012 <i>VP</i> <sub>88</sub>	7 14.7 228°70		1°4/14.1 17		
6 10	19 59.08	-20 48.4	1.056	1.957	18.8	18.0	6 10	20 2.01	-23 18.1	2.008	2.872	12.7	21.3
6 20	19 55.95	-21 23.3	1.007	1.964	14.1	17.8	6 20	19 56.98	-23 55.8	1.931	2.869	9.5	21.0
6 30	19 49.63	-22 7.6	0.977	1.972	8.6	17.5	6 30	19 49.84	-24 37.2	1.878	2.866	5.9	20.8
7 10	19 41.18	-22 55.6	0.967	1.981	2.8	17.2	7 10	19 41.22	-25 18.6	1.850	2.863	2.2	20.6
7 20	19 32.03	-23 40.7	0.980	1.992	3.4	17.3	7 20	19 32.02	-25 55.9	1.850	2.860	2.8	20.6
7 30	19 23.88	-24 17.8	1.015	2.004	9.1	17.6	7 30	19 23.25	-26 26.3	1.877	2.856	6.6	20.8
8 9	19 18.14	-24 44.1	1.070	2.018	14.1	18.0	8 9	19 15.89	-26 48.0	1.929	2.852	10.2	21.1
8 19	19 15.62	-24 59.2	1.144	2.032	18.3	18.3	8 19	19 10.65	-27 1.2	2.004	2.849	13.4	21.3
<b>297763</b>	2001 <i>XC</i> <sub>141</sub>	7 14.7 214°63		0°1/14.8 18			<b>98738</b>	2000 <i>YG</i> <sub>38</sub>	7 14.7 262°55		3°5/15.7 18		
6 10	20 0.69	-20 2.9	2.433	3.286	11.2	21.4	6 10	20 2.94	-13 40.3	1.834	2.683	14.4	19.4
6 20	19 55.60	-20 20.3	2.350	3.281	8.4	21.2	6 20	19 57.68	-13 5.8	1.753	2.677	11.2	19.2
6 30	19 48.79	-20 42.1	2.290	3.276	5.2	21.0	6 30	19 50.26	-12 39.3	1.695	2.671	7.6	18.9
7 10	19 40.82	-21 6.0	2.258	3.271	1.7	20.8	7 10	19 41.36	-12 21.2	1.662	2.666	4.3	18.7
7 20	19 32.39	-21 29.7	2.253	3.265	1.9	20.8	7 20	19 31.88	-12 11.0	1.654	2.660	4.0	18.7
7 30	19 24.30	-21 51.2	2.277	3.260	5.4	21.0	7 30	19 22.88	-12 8.2	1.674	2.654	7.2	18.9
8 9	19 17.33	-22 9.1	2.328	3.254	8.6	21.2	8 9	19 15.35	-12 11.0	1.718	2.648	10.9	19.1
8 19	19 12.05	-22 22.8	2.403	3.247	11.5	21.4	8 19	19 10.00	-12 17.9	1.785	2.642	14.2	19.3
<b>472032</b>	2013 <i>YX</i> <sub>19</sub>	7 14.7 264°34		2°5/13.6 17			<b>475453</b>	2006 <i>RL</i> <sub>68</sub>	7 14.7 228°97		3°0/13.5 18		
6 10	20 3.39	-25 10.7	1.840	2.708	13.6	21.0	6 10	20 3.28	-29 7.4	2.147	3.009	12.1	21.7
6 20	19 58.37	-26 0.1	1.754	2.694	10.2	20.7	6 20	19 57.85	-29 38.2	2.071	3.006	9.2	21.5
6 30	19 50.88	-26 53.4	1.691	2.679	6.5	20.5	6 30	19 50.32	-30 7.8	2.018	3.002	6.0	21.3
7 10	19 41.60	-27 45.6	1.654	2.665	2.9	20.2	7 10	19 41.37	-30 31.8	1.992	2.998	3.3	21.1
7 20	19 31.47	-28 31.4	1.643	2.650	3.8	20.2	7 20	19 31.87	-30 47.1	1.992	2.995	4.0	21.1
7 30	19 21.70	-29 6.9	1.659	2.635	7.7	20.5	7 30	19 22.88	-30 51.6	2.021	2.991	7.0	21.3
8 9	19 13.48	-29 30.3	1.700	2.620	11.6	20.7	8 9	19 15.32	-30 45.3	2.074	2.987	10.2	21.5
8 19	19 7.67	-29 42.0	1.762	2.604	15.1	20.8	8 19	19 9.89	-30 29.9	2.150	2.983	13.0	21.7
<b>469577</b>	2003 <i>WN</i> <sub>119</sub>	7 14.7 261°45		2°1/15.4 18			<b>80699</b>	2000 <i>CM</i> <sub>1</sub>	7 14.7 193°32		1°0/14.4 18		
6 10	20 2.96	-16 3.8	2.175	3.020	12.6	21.6	6 10	20 5.80	-23 3.5	1.918	2.778	13.4	19.9
6 20	19 57.55	-15 47.4	2.076	3.000	9.7	21.4	6 20	19 59.86	-23 24.8	1.841	2.776	10.1	19.7
6 30	19 50.15	-15 36.8	2.000	2.980	6.3	21.2	6 30	19 51.63	-23 49.2	1.786	2.774	6.2	19.5
7 10	19 41.31	-15 31.3	1.950	2.959	3.0	20.9	7 10	19 41.81	-24 13.1	1.758	2.771	2.2	19.2
7 20	19 31.83	-15 29.9	1.928	2.938	2.8	20.9	7 20	19 31.39	-24 33.2	1.757	2.768	2.7	19.2
7 30	19 22.62	-15 31.5	1.934	2.916	6.2	21.0	7 30	19 21.49	-24 47.1	1.784	2.765	6.8	19.5
8 9	19 14.61	-15 35.0	1.966	2.894	9.9	21.2	8 9	19 13.16	-24 53.8	1.836	2.760	10.6	19.7
8 19	19 8.51	-15 39.4	2.022	2.871	13.1	21.4	8 19	19 7.14	-24 54.0	1.911	2.755	14.0	19.9
<b>234072</b>	1999 <i>RJ</i> <sub>190</sub>	7 14.7 291°72		0°2/14.8 18			<b>213525</b>	2002 <i>GC</i> <sub>176</sub>	7 14.7 18°76		4°7/16.2 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>294942</b>	2008 <i>DM</i> <sub>59</sub>		7 14.7 47°39	4.5/16.3	17		<b>12830</b>	1997 <i>BP</i> <sub>1</sub>		7 14.7 276°61	1.4/14.3	18	
6 10	20 1.70	-10 49.6	1.371	2.232	17.7	20.8	6 10	20 4.93	-23 13.8	1.573	2.445	15.2	18.8
6 20	19 57.19	-10 40.4	1.312	2.241	13.8	20.5	6 20	19 59.96	-23 39.3	1.482	2.424	11.6	18.5
6 30	19 50.11	-10 47.2	1.273	2.250	9.5	20.3	6 30	19 52.13	-24 9.9	1.412	2.402	7.2	18.2
7 10	19 41.33	-11 9.3	1.256	2.260	5.6	20.1	7 10	19 42.14	-24 41.2	1.367	2.380	2.6	17.8
7 20	19 31.98	-11 44.2	1.263	2.269	4.9	20.1	7 20	19 31.08	-25 8.4	1.347	2.358	3.3	17.8
7 30	19 23.37	-12 27.9	1.295	2.280	8.3	20.3	7 30	19 20.38	-25 28.0	1.353	2.335	8.2	18.1
8 9	19 16.65	-13 15.6	1.350	2.290	12.4	20.6	8 9	19 11.44	-25 38.1	1.382	2.313	12.9	18.3
8 19	19 12.57	-14 3.4	1.426	2.301	16.1	20.9	8 19	19 5.29	-25 39.4	1.432	2.290	17.1	18.5
<b>54699</b>	2001 <i>FP</i> <sub>137</sub>		7 14.7 325°78	1.0/14.3	18		<b>424388</b>	2007 <i>XY</i> <sub>15</sub>		7 14.7 273°55	0.7/14.6	17	
6 10	20 0.96	-21 25.6	1.774	2.644	13.9	19.0	6 10	20 6.04	-22 53.4	1.490	2.363	15.9	21.1
6 20	19 56.44	-22 7.8	1.699	2.640	10.4	18.8	6 20	20 0.82	-22 57.3	1.404	2.346	12.1	20.8
6 30	19 49.62	-22 56.4	1.647	2.636	6.4	18.6	6 30	19 52.65	-23 4.6	1.338	2.328	7.5	20.5
7 10	19 41.18	-23 47.3	1.619	2.633	2.2	18.3	7 10	19 42.30	-23 11.9	1.297	2.311	2.5	20.2
7 20	19 32.09	-24 35.8	1.618	2.630	2.8	18.3	7 20	19 30.95	-23 15.7	1.281	2.293	3.0	20.1
7 30	19 23.46	-25 17.8	1.644	2.627	7.0	18.6	7 30	19 20.09	-23 13.5	1.290	2.275	8.2	20.4
8 9	19 16.36	-25 51.2	1.694	2.624	11.0	18.8	8 9	19 11.15	-23 5.0	1.322	2.257	13.1	20.6
8 19	19 11.57	-26 15.1	1.766	2.621	14.5	19.0	8 19	19 5.13	-22 51.1	1.375	2.238	17.3	20.9
<b>401478</b>	2013 <i>CG</i> <sub>196</sub>		7 14.7 82°88	1.8/15.7	18		<b>97114</b>	1999 <i>VK</i> <sub>87</sub>		7 14.7 185°26	2.8/13.5	18	
6 10	19 59.00	-13 42.2	2.212	3.058	12.4	21.2	6 10	20 5.01	-28 57.5	2.451	3.304	11.1	20.7
6 20	19 54.44	-14 10.8	2.136	3.060	9.5	21.0	6 20	19 58.91	-29 30.7	2.374	3.304	8.4	20.6
6 30	19 48.13	-14 49.3	2.083	3.063	6.2	20.8	6 30	19 50.90	-30 2.5	2.321	3.303	5.4	20.4
7 10	19 40.65	-15 35.8	2.056	3.065	2.8	20.6	7 10	19 41.60	-30 29.3	2.296	3.302	3.0	20.2
7 20	19 32.70	-16 27.2	2.057	3.067	2.4	20.6	7 20	19 31.82	-30 47.9	2.299	3.301	3.6	20.2
7 30	19 25.13	-17 20.2	2.085	3.070	5.6	20.8	7 30	19 22.48	-30 56.5	2.331	3.298	6.4	20.4
8 9	19 18.71	-18 11.8	2.141	3.072	9.0	21.0	8 9	19 14.44	-30 55.1	2.389	3.295	9.3	20.6
8 19	19 14.04	-18 59.6	2.220	3.074	11.9	21.2	8 19	19 8.33	-30 44.9	2.470	3.292	11.9	20.8
<b>384924</b>	2012 <i>TR</i> <sub>84</sub>		7 14.7 156°06	1.5/14.1	18		<b>59655</b>	1999 <i>JN</i> <sub>94</sub>		7 14.7 204°73	5.5/17.6	18	
6 10	20 3.49	-24 33.0	2.005	2.868	12.8	21.4	6 10	20 1.02	-4 36.2	1.931	2.749	15.0	19.4
6 20	19 58.01	-24 56.7	1.933	2.870	9.6	21.2	6 20	19 56.20	-4 44.4	1.850	2.747	12.2	19.2
6 30	19 50.41	-25 22.1	1.885	2.873	5.9	20.9	6 30	19 49.36	-5 10.4	1.790	2.744	9.1	19.0
7 10	19 41.40	-25 45.7	1.863	2.875	2.3	20.7	7 10	19 41.13	-5 54.0	1.754	2.741	6.3	18.8
7 20	19 31.88	-26 4.5	1.868	2.877	2.9	20.7	7 20	19 32.31	-6 53.4	1.744	2.738	5.6	18.7
7 30	19 22.91	-26 16.1	1.900	2.879	6.6	21.0	7 30	19 23.86	-8 4.6	1.761	2.734	7.6	18.9
8 9	19 15.42	-26 20.0	1.958	2.881	10.1	21.2	8 9	19 16.70	-9 22.6	1.804	2.730	10.6	19.0
8 19	19 10.10	-26 16.9	2.038	2.883	13.2	21.4	8 19	19 11.52	-10 42.4	1.870	2.726	13.7	19.2
<b>161645</b>	2006 <i>BO</i> <sub>40</sub>		7 14.7 19°23	3.8/13.9	17		<b>159595</b>	2001 <i>XF</i> <sub>211</sub>		7 14.7 175°83	2.3/15.7	18	
6 10	20 6.63	-28 49.4	1.160	2.050	18.2	19.4	6 10	20 3.37	-13 48.8	2.306	3.142	12.3	21.5
6 20	20 1.65	-29 5.7	1.103	2.052	13.8	19.2	6 20	19 57.60	-13 48.5	2.227	3.145	9.4	21.4
6 30	19 53.19	-29 19.4	1.065	2.055	8.9	18.9	6 30	19 50.05	-13 56.1	2.171	3.147	6.2	21.2
7 10	19 42.38	-29 24.3	1.048	2.058	4.5	18.7	7 10	19 41.32	-14 10.6	2.142	3.149	3.2	21.0
7 20	19 30.84	-29 15.8	1.055	2.062	5.2	18.7	7 20	19 32.14	-14 30.3	2.141	3.150	2.8	20.9
7 30	19 20.43	-28 52.6	1.085	2.067	9.9	19.0	7 30	19 23.37	-14 53.2	2.169	3.150	5.8	21.1
8 9	19 12.68	-28 17.0	1.136	2.071	14.6	19.3	8 9	19 15.80	-15 17.5	2.224	3.149	9.0	21.3
8 19	19 8.45	-27 33.2	1.206	2.077	18.7	19.6	8 19	19 10.01	-15 41.5	2.302	3.148	11.9	21.5
<b>281424</b>	2008 <i>RG</i> <sub>139</sub>		7 14.7 170°49	7.1/17.1	18		<b>251914</b>	1999 <i>VQ</i> <sub>154</sub>		7 14.7 133°74	1.2/14.3	17	
6 10	20 2.14	-3 36.6	1.955	2.767	15.1	20.2	6 10	20 6.34	-22 56.3	1.725	2.589	14.5	21.6
6 20	19 56.89	-2 45.3	1.881	2.768	12.5	20.0	6 20	20 0.38	-23 25.9	1.661	2.598	10.8	21.4
6 30	19 49.69	-2 8.7	1.828	2.770	9.8	19.9	6 30	19 51.99	-23 59.2	1.619	2.608	6.7	21.1
7 10	19 41.18	-1 49.0	1.798	2.771	7.6	19.7	7 10	19 41.98	-24 31.8	1.603	2.617	2.3	20.9
7 20	19 32.17	-1 46.9	1.794	2.771	7.2	19.7	7 20	19 31.43	-24 59.9	1.614	2.625	2.9	20.9
7 30	19 23.62	-2 1.3	1.816	2.772	8.7	19.8	7 30	19 21.58	-25 20.4	1.652	2.633	7.2	21.2
8 9	19 16.39	-2 29.5	1.863	2.772	11.3	20.0	8 9	19 13.51	-25 32.5	1.714	2.640	11.1	21.5
8 19	19 11.14	-3 7.3	1.931	2.773	14.0	20.1	8 19	19 7.95	-25 36.8	1.799	2.648	14.5	21.7
<b>479996</b>	2014 <i>KD</i> <sub>42</sub>		7 14.7 65°97	2.0/13.7	18		<b>14225</b>	Alisahamilton		7 14.7 349°68	2.7/13.9	18	
6 10	20 0.81	-24 9.1	2.116	2.980	12.2	20.8	6 10	19 54.94	-23 47.7	0.951	1.865	19.1	17.4
6 20	19 55.99	-25 5.2	2.047	2.985	9.1	20.6	6 20	19 53.47	-24 30.1	0.889	1.853	14.4	17.1
6 30	19 49.19	-26 4.8	2.002	2.989	5.6	20.4	6 30	19 48.53	-25 20.5	0.845	1.843	9.0	16.8
7 10	19 41.04	-27 3.3	1.983	2.994	2.4	20.2	7 10	19 41.02	-26 12.2	0.821	1.834	3.7	16.4
7 20	19 32.37	-27 56.3	1.992	2.999	3.2	20.3	7 20	19 32.42	-26 57.3	0.817	1.828	4.8	16.5
7 30	19 24.13	-28 40.5	2.028	3.004	6.5	20.5	7 30	19 24.63	-27 29.5	0.833	1.823	10.5	16.8
8 9	19 17.23	-29 14.1	2.090	3.009	9.8	20.7	8 9	19 19.36	-27 46.1	0.868	1.821	15.9	17.1
8 19	19 12.33	-29 37.1	2.175	3.013	12.7	20.9	8 19	19 17.70	-27 47.5	0.920	1.820	20.6	17.3
<b>304512</b>	2006 <i>UY</i> <sub>202</sub>		7 14.7 292°01	1.8/13.9	18		<b>509113</b>	2005 <i>WT</i> <sub>67</sub>		7 14.7 242°71	5.0/16.1	18	
6 10	20 0.99	-24 11.8	1.988	2.855	12.7	20.6	6 10	20 3.71	-9 33.4	1.939	2.771	14.4	22.0
6 20	19 56.34	-24 54.7	1.907	2.846	9.5	20.4	6 20	19 58.25	-8 50.1	1.850	2.759	11.5	21.7
6 30	19 49.53	-25 41.5	1.849	2.837	5.9	20.2	6 30	19 50.66	-8 16.8	1.783	2.747	8.4	21.5
7 10	19 41.19	-26 27.8	1.816	2.828	2.4	19.9	7 10	19 41.58	-7 54.9	1.742	2.735	5.7	21.3
7 20	19 32.19	-27 9.4	1.811	2.820	3.2	20.0	7 20	19 31.86	-7 44.9	1.726	2.722	5.3	21.3
7 30	19 23.58	-27 42.9	1.833	2.811	6.9	20.2	7 30	19 22.50	-7 46.1	1.738	2.709	7.8	21.4
8 9	19 16.36	-28 6.7	1.880	2.802	10.5	20.4	8 9	19 14.48	-7 56.7	1.775	2.696	11.1	21.6
8 19	19 11.27	-28 20.7	1.949	2.794	13.7	20.6	8 19	19 8.54	-8 14.3	1.834	2.682	14.3	21.8
<b>280107</b>	2002 <i>GD</i> <sub>72</sub>		7 14.7 16°91	11.1/10.9	17		<b>198497</b>	2004 <i>XA</i> <sub>73</sub>		7 14.7 260°17			

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>384072</b>	2008 <i>UG</i> <sub>361</sub>		7 14.7 322°25	2°3/14.4	18		<b>415075</b>	2012 <i>BS</i> <sub>72</sub>		7 14.8 210°75	0°5/14.6	17	
6 10	20 6.97	-28 35.2	1.539	2.413	15.4	19.7	6 10	20 6.84	-21 3.2	1.805	2.664	14.2	22.7
6 20	20 1.31	-28 14.9	1.460	2.402	11.7	19.4	6 20	20 0.88	-21 29.0	1.723	2.657	10.7	22.5
6 30	19 52.78	-27 50.0	1.403	2.391	7.5	19.2	6 30	19 52.43	-22 0.5	1.663	2.650	6.6	22.2
7 10	19 42.30	-27 17.0	1.369	2.381	3.2	18.9	7 10	19 42.21	-22 33.9	1.629	2.642	2.2	21.9
7 20	19 31.11	-26 34.2	1.362	2.371	3.7	18.9	7 20	19 31.23	-23 5.4	1.621	2.633	2.6	21.9
7 30	19 20.70	-25 42.0	1.380	2.362	8.1	19.1	7 30	19 20.70	-23 31.6	1.642	2.624	7.1	22.2
8 9	19 12.35	-24 43.4	1.421	2.353	12.5	19.4	8 9	19 11.80	-23 51.0	1.688	2.614	11.3	22.4
8 19	19 6.91	-23 41.8	1.485	2.345	16.4	19.6	8 19	19 5.35	-24 3.2	1.756	2.603	14.9	22.6
<b>521222</b>	2015 <i>GA</i> <sub>53</sub>		7 14.7 326°59	5°3/17.5	16		<b>202953</b>	1999 <i>RS</i> <sub>45</sub>		7 14.8 293°57	3°0/13.8	18	
6 10	19 58.44	-5 44.5	1.639	2.478	16.3	20.9	6 10	20 4.34	-27 51.9	1.729	2.600	14.1	20.3
6 20	19 54.65	-6 4.3	1.558	2.469	13.2	20.7	6 20	19 59.38	-28 17.2	1.635	2.575	10.8	20.0
6 30	19 48.61	-6 44.9	1.497	2.461	9.6	20.5	6 30	19 51.71	-28 42.7	1.564	2.551	7.0	19.7
7 10	19 40.95	-7 45.9	1.459	2.453	6.4	20.3	7 10	19 42.03	-29 3.6	1.517	2.527	3.5	19.5
7 20	19 32.56	-9 4.3	1.445	2.446	5.4	20.2	7 20	19 31.39	-29 15.4	1.496	2.502	4.2	19.4
7 30	19 24.54	-10 34.7	1.458	2.439	7.9	20.3	7 30	19 21.12	-29 15.2	1.501	2.478	8.2	19.6
8 9	19 17.96	-12 10.4	1.495	2.432	11.6	20.5	8 9	19 12.53	-29 3.0	1.530	2.453	12.4	19.8
8 19	19 13.62	-13 45.1	1.554	2.426	15.2	20.7	8 19	19 6.58	-28 40.6	1.580	2.429	16.2	20.0
<b>223003</b>	2002 <i>RS</i> <sub>184</sub>		7 14.7 197°76	1°7/15.6	18		<b>248099</b>	2004 <i>RO</i> <sub>87</sub>		7 14.8 349°09	6°7/17.3	18	
6 10	19 58.62	-15 15.4	3.008	3.845	9.7	20.7	6 10	19 57.36	-4 20.6	1.874	2.701	15.1	19.7
6 20	19 53.73	-15 6.3	2.923	3.842	7.4	20.5	6 20	19 53.50	-3 43.0	1.798	2.696	12.4	19.5
6 30	19 47.54	-15 2.3	2.863	3.840	4.8	20.3	6 30	19 47.72	-3 21.0	1.742	2.691	9.6	19.3
7 10	19 40.49	-15 2.5	2.830	3.838	2.4	20.1	7 10	19 40.63	-3 16.2	1.709	2.687	7.3	19.1
7 20	19 33.13	-15 6.3	2.826	3.835	2.2	20.1	7 20	19 33.02	-3 28.8	1.700	2.684	6.8	19.1
7 30	19 26.05	-15 12.4	2.851	3.832	4.6	20.3	7 30	19 25.82	-3 57.3	1.717	2.681	8.4	19.2
8 9	19 19.83	-15 20.0	2.904	3.829	7.1	20.5	8 9	19 19.88	-4 38.1	1.757	2.679	11.1	19.4
8 19	19 14.92	-15 28.2	2.981	3.825	9.5	20.6	8 19	19 15.86	-5 26.9	1.819	2.678	13.9	19.5
<b>375772</b>	2009 <i>SX</i> <sub>152</sub>		7 14.7 242°75	2°2/15.5	18		<b>47550</b>	2000 <i>AS</i> <sub>126</sub>		7 14.8 55°12	0°3/14.9	18	
6 10	20 3.78	-15 1.2	1.946	2.794	13.8	22.0	6 10	20 2.28	-20 5.0	1.881	2.744	13.5	18.6
6 20	19 58.41	-15 1.4	1.854	2.779	10.6	21.7	6 20	19 57.20	-20 9.9	1.809	2.745	10.2	18.4
6 30	19 50.84	-15 10.3	1.784	2.764	7.0	21.5	6 30	19 50.00	-20 19.8	1.759	2.746	6.3	18.2
7 10	19 41.67	-15 26.7	1.739	2.748	3.3	21.2	7 10	19 41.37	-20 32.2	1.734	2.748	2.1	17.9
7 20	19 31.77	-15 48.6	1.722	2.732	2.9	21.2	7 20	19 32.23	-20 44.8	1.737	2.749	2.2	17.9
7 30	19 22.19	-16 13.7	1.732	2.715	6.7	21.4	7 30	19 23.63	-20 55.5	1.766	2.751	6.4	18.2
8 9	19 13.96	-16 39.6	1.768	2.698	10.6	21.6	8 9	19 16.53	-21 3.1	1.820	2.752	10.2	18.5
8 19	19 7.85	-17 4.4	1.826	2.680	14.1	21.8	8 19	19 11.59	-21 7.2	1.897	2.754	13.5	18.7
<b>29840</b>	1999 <i>FV</i> <sub>12</sub>		7 14.7 166°55	1°9/13.8	18		<b>506770</b>	2006 <i>WH</i> <sub>171</sub>		7 14.8 270°94	1°2/15.2	17	
6 10	20 3.06	-26 46.2	2.765	3.615	10.1	19.5	6 10	20 3.96	-17 44.8	1.665	2.527	15.0	23.1
6 20	19 57.21	-27 14.3	2.690	3.620	7.5	19.4	6 20	19 58.99	-17 50.1	1.572	2.507	11.5	22.8
6 30	19 49.74	-27 42.2	2.641	3.625	4.7	19.2	6 30	19 51.43	-18 3.5	1.501	2.487	7.3	22.5
7 10	19 41.23	-28 7.0	2.620	3.629	2.2	19.0	7 10	19 41.94	-18 23.2	1.454	2.466	2.8	22.2
7 20	19 32.33	-28 26.2	2.627	3.633	2.7	19.1	7 20	19 31.51	-18 46.2	1.433	2.445	2.7	22.1
7 30	19 23.83	-28 38.2	2.664	3.636	5.4	19.3	7 30	19 21.40	-19 9.5	1.438	2.424	7.5	22.4
8 9	19 16.44	-28 42.7	2.727	3.638	8.1	19.5	8 9	19 12.87	-19 30.9	1.467	2.402	12.0	22.6
8 19	19 10.69	-28 40.2	2.816	3.640	10.5	19.6	8 19	19 6.83	-19 49.0	1.518	2.380	16.1	22.8
<b>466111</b>	2012 <i>DL</i> <sub>20</sub>		7 14.7 166°00	2°2/15.7	17		<b>296019</b>	2008 <i>YM</i> <sub>149</sub>		7 14.8 288°10	0°3/14.9	18	
6 10	20 5.38	-14 11.7	1.855	2.700	14.4	22.5	6 10	20 1.91	-20 0.4	1.832	2.696	13.8	21.3
6 20	19 59.49	-14 23.8	1.782	2.706	11.1	22.3	6 20	19 57.11	-20 7.6	1.750	2.687	10.4	21.0
6 30	19 51.40	-14 46.2	1.731	2.710	7.2	22.1	6 30	19 50.05	-20 20.1	1.690	2.677	6.5	20.8
7 10	19 41.82	-15 17.0	1.705	2.714	3.4	21.9	7 10	19 41.43	-20 35.8	1.654	2.668	2.2	20.5
7 20	19 31.67	-15 53.2	1.707	2.717	2.9	21.8	7 20	19 32.14	-20 51.8	1.646	2.658	2.3	20.5
7 30	19 22.05	-16 31.7	1.737	2.720	6.7	22.1	7 30	19 23.31	-21 5.8	1.664	2.649	6.7	20.7
8 9	19 13.95	-17 9.5	1.792	2.722	10.5	22.3	8 9	19 15.95	-21 16.5	1.707	2.640	10.7	20.9
8 19	19 8.08	-17 44.5	1.870	2.723	13.9	22.5	8 19	19 10.83	-21 23.1	1.772	2.631	14.2	21.1
<b>146043</b>	2000 <i>ET</i> <sub>7</sub>		7 14.7 243°23	1°5/15.4	18		<b>57948</b>	2002 <i>JO</i> <sub>62</sub>		7 14.8 82°90	2°9/16.2	18	
6 10	20 3.71	-15 58.3	1.850	2.703	14.1	20.8	6 10	19 58.67	-11 22.5	2.348	3.184	12.1	19.5
6 20	19 58.49	-16 15.6	1.759	2.689	10.8	20.6	6 20	19 54.07	-11 24.0	2.275	3.191	9.4	19.3
6 30	19 50.95	-16 42.7	1.691	2.675	7.0	20.3	6 30	19 47.87	-11 35.2	2.226	3.198	6.4	19.2
7 10	19 41.73	-17 17.5	1.649	2.660	2.9	20.0	7 10	19 40.64	-11 55.2	2.203	3.205	3.7	19.0
7 20	19 31.71	-17 56.7	1.633	2.645	2.6	20.0	7 20	19 33.05	-12 22.4	2.207	3.212	3.2	19.0
7 30	19 22.01	-18 36.9	1.644	2.629	6.8	20.2	7 30	19 25.85	-12 54.7	2.239	3.219	5.6	19.1
8 9	19 13.73	-19 15.2	1.681	2.612	11.0	20.4	8 9	19 19.74	-13 29.5	2.297	3.226	8.6	19.3
8 19	19 7.69	-19 49.5	1.740	2.595	14.6	20.6	8 19	19 15.24	-14 4.6	2.379	3.233	11.2	19.5
<b>476178</b>	2007 <i>TH</i> <sub>438</sub>		7 14.8 139°36	1°5/14.1	18		<b>40567</b>	1999 <i>RB</i> <sub>126</sub>		7 14.8 167°42	6°6/18.3	18	
6 10	20 2.68	-24 15.6	2.006	2.870	12.8	21.2	6 10	20 0.71	-1 4.1	2.135	2.931	14.5	19.0
6 20	19 57.45	-24 42.1	1.934	2.872	9.5	21.0	6 20	19 55.74	-0 54.0	2.058	2.934	12.0	18.8
6 30	19 50.13	-25 10.8	1.886	2.874	5.9	20.7	6 30	19 48.99	-1 1.3	2.002	2.937	9.4	18.7
7 10	19 41.40	-25 38.2	1.863	2.876	2.3	20.5	7 10	19 41.04	-1 27.0	1.970	2.939	7.3	18.5
7 20	19 32.16	-26 0.9	1.868	2.878	2.8	20.5	7 20	19 32.62	-2 10.1	1.964	2.941	6.6	18.5
7 30	19 23.43	-26 16.7	1.900	2.879	6.5	20.8	7 30	19 24.58	-3 7.8	1.984	2.943	7.9	18.6
8 9	19 16.17	-26 24.6	1.957	2.881	10.1	21.0	8 9	19 17.72	-4 15.8	2.030	2.944	10.3	18.7
8 19	19 11.04	-26 25.2	2.037	2.883	13.2	21.2	8 19	19 12.64	-5 29.5	2.100	2.945	12.9	18.9
<b>329304</b>	2000 <i>RB</i> <sub>100</sub>		7 14.8 347°10	7°4/15.4	18		<b>143581</b>	2003 <i>FV</i> <sub>12</sub>		7 14			

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>97171</b>	1999 VE <sub>195</sub>	7 14.8 265°26		0°4/14.6 18			<b>300677</b>	2007 VB <sub>20</sub>	7 14.8 243°24		0°6/14.9 18		
6 10	20 2.19	-20 43.7	1.898	2.761	13.4	20.3	6 10	20 2.07	-19 23.6	2.090	2.947	12.6	21.5
6 20	19 57.31	-21 9.2	1.813	2.750	10.1	20.0	6 20	19 56.95	-19 28.5	2.007	2.940	9.5	21.3
6 30	19 50.20	-21 40.6	1.751	2.739	6.3	19.8	6 30	19 49.85	-19 38.3	1.947	2.933	6.0	21.1
7 10	19 41.49	-22 14.7	1.714	2.728	2.1	19.5	7 10	19 41.39	-19 51.1	1.913	2.926	2.1	20.8
7 20	19 32.07	-22 47.9	1.704	2.716	2.4	19.5	7 20	19 32.37	-20 4.7	1.907	2.919	2.1	20.8
7 30	19 23.07	-23 17.1	1.721	2.705	6.7	19.7	7 30	19 23.76	-20 17.1	1.927	2.912	6.0	21.0
8 9	19 15.47	-23 40.4	1.763	2.693	10.6	20.0	8 9	19 16.46	-20 27.2	1.974	2.904	9.7	21.2
8 19	19 10.07	-23 57.0	1.828	2.681	14.1	20.2	8 19	19 11.14	-20 34.1	2.044	2.897	12.9	21.4
<b>215428</b>	2002 JB <sub>61</sub>	7 14.8 85°18		0°1/14.8 17			<b>390156</b>	2012 VK <sub>93</sub>	7 14.8 230°66		1°8/15.5 17		
6 10	20 7.20	-20 51.7	1.418	2.289	16.6	20.3	6 10	20 1.28	-15 28.7	2.101	2.950	12.8	21.8
6 20	20 1.27	-20 58.8	1.365	2.306	12.4	20.1	6 20	19 56.33	-15 33.3	2.018	2.945	9.8	21.6
6 30	19 52.62	-21 11.3	1.333	2.322	7.7	19.9	6 30	19 49.45	-15 45.9	1.958	2.939	6.4	21.4
7 10	19 42.23	-21 35.7	1.325	2.338	2.5	19.6	7 10	19 41.25	-16 5.0	1.924	2.934	2.9	21.2
7 20	19 31.39	-21 58.6	1.342	2.354	2.7	19.7	7 20	19 32.52	-16 28.5	1.917	2.928	2.6	21.1
7 30	19 21.51	-21 47.7	1.384	2.370	7.7	20.0	7 30	19 24.16	-16 54.3	1.938	2.922	6.0	21.3
8 9	19 13.76	-21 51.9	1.451	2.386	12.1	20.3	8 9	19 17.05	-17 20.1	1.984	2.915	9.6	21.5
8 19	19 8.85	-21 51.7	1.538	2.401	15.8	20.6	8 19	19 11.84	-17 44.3	2.054	2.909	12.7	21.7
<b>238793</b>	2005 KE <sub>14</sub>	7 14.8 330°50		0°3/14.6 18			<b>140452</b>	2001 TX <sub>122</sub>	7 14.8 265°43		4°8/13.1 18		
6 10	19 59.99	-18 46.4	1.940	2.803	13.2	20.3	6 10	20 5.65	-34 40.2	2.130	2.987	12.4	19.9
6 20	19 55.58	-19 39.1	1.862	2.799	9.9	20.1	6 20	19 59.81	-35 8.8	2.053	2.981	9.7	19.7
6 30	19 49.08	-20 40.6	1.808	2.796	6.1	19.9	6 30	19 51.67	-35 31.7	2.000	2.974	6.9	19.5
7 10	19 41.12	-21 46.9	1.779	2.793	2.0	19.6	7 10	19 41.99	-35 44.1	1.972	2.968	4.9	19.4
7 20	19 32.52	-22 53.3	1.778	2.790	2.3	19.6	7 20	19 31.75	-35 42.6	1.971	2.961	5.5	19.4
7 30	19 24.31	-23 55.2	1.804	2.787	6.4	19.9	7 30	19 22.09	-35 25.9	1.997	2.954	8.0	19.5
8 9	19 17.43	-24 49.5	1.855	2.785	10.2	20.1	8 9	19 14.04	-34 55.5	2.048	2.948	10.9	19.7
8 19	19 12.62	-25 34.3	1.930	2.782	13.5	20.3	8 19	19 8.32	-34 14.1	2.120	2.941	13.6	19.9
<b>168906</b>	2000 XE <sub>12</sub>	7 14.8 297°42		1°6/14.4 18			<b>343465</b>	2010 EC <sub>67</sub>	7 14.8 52°39		0°3/14.9 17		
6 10	20 5.62	-24 57.2	1.334	2.216	16.8	19.3	6 10	20 1.73	-18 50.7	1.663	2.531	14.7	20.5
6 20	20 0.95	-24 57.6	1.246	2.193	12.9	18.9	6 20	19 56.97	-19 17.0	1.604	2.543	11.0	20.3
6 30	19 53.00	-24 59.3	1.178	2.169	8.1	18.6	6 30	19 49.94	-19 50.9	1.566	2.555	6.8	20.1
7 10	19 42.55	-24 58.1	1.132	2.146	3.0	18.2	7 10	19 41.43	-20 29.0	1.554	2.567	2.3	19.9
7 20	19 30.87	-24 50.0	1.111	2.122	3.6	18.2	7 20	19 32.43	-21 7.3	1.567	2.580	2.4	19.9
7 30	19 19.68	-24 33.1	1.113	2.099	9.1	18.5	7 30	19 24.09	-21 42.4	1.607	2.593	6.8	20.2
8 9	19 10.61	-24 7.7	1.138	2.076	14.4	18.7	8 9	19 17.41	-22 12.0	1.671	2.606	10.8	20.5
8 19	19 4.80	-23 36.1	1.182	2.053	19.0	18.9	8 19	19 13.08	-22 35.1	1.757	2.619	14.2	20.7
<b>471519</b>	2012 FC <sub>12</sub>	7 14.8 47°69		0°8/15.0 16			<b>447056</b>	2004 RS <sub>232</sub>	7 14.8 303°80		6°1/12.0 18		
6 10	20 3.33	-18 23.6	1.273	2.153	17.6	21.4	6 10	20 3.95	-37 40.0	2.162	3.018	12.3	21.0
6 20	19 58.64	-18 38.9	1.222	2.166	13.2	21.2	6 20	19 58.72	-38 30.0	2.083	3.005	9.8	20.8
6 30	19 51.13	-19 3.8	1.190	2.180	8.2	20.9	6 30	19 51.12	-39 13.5	2.028	2.992	7.5	20.7
7 10	19 41.78	-19 34.6	1.181	2.194	2.9	20.7	7 10	19 41.86	-39 44.9	1.998	2.980	6.1	20.6
7 20	19 31.89	-20 6.9	1.196	2.209	2.8	20.7	7 20	19 31.93	-39 59.8	1.993	2.968	6.8	20.6
7 30	19 22.92	-20 36.8	1.235	2.224	8.0	21.1	7 30	19 22.48	-39 56.2	2.014	2.956	8.9	20.7
8 9	19 16.11	-21 1.7	1.297	2.239	12.6	21.4	8 9	19 14.62	-39 35.1	2.059	2.944	11.5	20.8
8 19	19 12.20	-21 20.6	1.379	2.254	16.6	21.7	8 19	19 9.11	-38 59.5	2.126	2.932	14.1	21.0
<b>282070</b>	1999 XB <sub>80</sub>	7 14.8 302°53		4°9/15.9 18			<b>476113</b>	2007 TG <sub>172</sub>	7 14.8 279°48		0°4/14.9 16		
6 10	20 1.82	-11 23.9	1.714	2.563	15.3	20.0	6 10	20 1.95	-18 50.0	2.037	2.894	12.9	21.6
6 20	19 57.13	-10 35.5	1.627	2.548	12.1	19.7	6 20	19 57.14	-19 10.5	1.936	2.869	9.8	21.4
6 30	19 50.14	-9 56.4	1.561	2.533	8.6	19.5	6 30	19 50.17	-19 38.0	1.858	2.844	6.2	21.1
7 10	19 41.50	-9 28.2	1.519	2.518	5.6	19.3	7 10	19 41.58	-20 10.2	1.805	2.818	2.1	20.8
7 20	19 32.13	-9 11.5	1.502	2.503	5.3	19.2	7 20	19 32.19	-20 44.1	1.780	2.792	2.2	20.7
7 30	19 23.17	-9 6.1	1.511	2.488	8.2	19.3	7 30	19 23.01	-21 16.6	1.782	2.766	6.4	21.0
8 9	19 15.67	-9 10.2	1.544	2.474	11.9	19.5	8 9	19 15.05	-21 45.4	1.810	2.740	10.4	21.1
8 19	19 10.44	-9 21.6	1.598	2.460	15.4	19.7	8 19	19 9.13	-22 9.1	1.861	2.713	13.9	21.3
<b>393367</b>	1999 TG <sub>60</sub>	7 14.8 332°59		5°4/17.0 18			<b>269635</b>	2011 AS <sub>45</sub>	7 14.8 239°39		1°7/15.5 18		
6 10	19 57.51	-6 43.5	1.903	2.738	14.5	20.9	6 10	20 3.22	-15 17.5	1.783	2.637	14.5	21.0
6 20	19 53.65	-6 25.0	1.821	2.729	11.8	20.7	6 20	19 58.20	-15 38.4	1.697	2.627	11.1	20.7
6 30	19 47.86	-6 21.0	1.760	2.720	8.8	20.5	6 30	19 50.85	-16 10.3	1.634	2.617	7.2	20.5
7 10	19 40.73	-6 32.4	1.722	2.712	6.2	20.3	7 10	19 41.80	-16 50.7	1.596	2.607	3.0	20.2
7 20	19 33.03	-6 58.4	1.709	2.704	5.6	20.3	7 20	19 31.99	-17 36.4	1.584	2.596	2.7	20.2
7 30	19 25.68	-7 36.9	1.722	2.696	7.6	20.4	7 30	19 22.55	-18 23.5	1.599	2.584	6.9	20.4
8 9	19 19.58	-8 24.1	1.760	2.690	10.7	20.5	8 9	19 14.58	-19 8.4	1.639	2.573	11.1	20.6
8 19	19 15.40	-9 16.2	1.820	2.683	13.7	20.7	8 19	19 8.89	-19 49.0	1.702	2.561	14.7	20.8
<b>519465</b>	2012 BP <sub>157</sub>	7 14.8 27°64		2°0/14.2 18			<b>450238</b>	2002 XN <sub>40</sub>	7 14.8 154°34		5°3/16.2 16		
6 10	20 3.72	-28 14.6	2.312	3.170	11.5	21.2	6 10	20 11.77	-7 46.9	2.211	3.012	13.9	23.1
6 20	19 57.96	-28 12.1	2.237	3.170	8.7	21.0	6 20	20 3.77	-6 52.1	2.138	3.026	11.1	22.9
6 30	19 50.32	-28 7.2	2.186	3.171	5.5	20.8	6 30	19 53.84	-6 7.3	2.089	3.039	8.2	22.8
7 10	19 41.48	-27 57.4	2.162	3.172	2.5	20.7	7 10	19 42.68	-5 33.7	2.067	3.051	5.8	22.7
7 20	19 32.27	-27 41.1	2.166	3.173	2.9	20.7	7 20	19 31.14	-5 12.2	2.074	3.061	5.5	22.7
7 30	19 23.61	-27 17.7	2.197	3.174	6.0	20.9	7 30	19 20.18	-5 2.5	2.111	3.070	7.5	22.8
8 9	19 16.31	-26 48.1	2.256	3.175	9.2	21.1	8 9	19 10.67	-5 2.9	2.175	3.078	10.2	23.0
8 19	19 10.97	-26 13.9	2.337	3.176	11.9	21.3	8 19	19 3.19	-5 11.4	2.264	3.084	12.9	23.2
<b>137752</b>	1999 XU <sub>160</sub>	7 14.8 187°79		2°1/15.5 17			<b>143122</b>	2002 XH <sub>31</sub>	7 14.8 292°05		1°3/14.3 18		
6 10	20 5.77	-15 27.6	2.105	2.946	13.1	21.4	6 10	20 2.20					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>256627</b>	2007 VQ <sub>228</sub>	7 14.8 175°96		0°8/14.6 17			<b>463171</b>	2012 BW <sub>70</sub>	7 14.8 59°80		0°4/14.9 17		
6 10	20 9.28	-24 12.6	1.849	2.705	14.0	21.1	6 10	20 4.36	-18 10.0	1.282	2.159	17.6	20.9
6 20	20 2.51	-24 4.5	1.774	2.708	10.5	20.9	6 20	19 59.43	-18 42.4	1.232	2.176	13.2	20.7
6 30	19 53.33	-23 56.6	1.723	2.709	6.5	20.6	6 30	19 51.67	-19 25.3	1.203	2.193	8.2	20.5
7 10	19 42.57	-23 46.3	1.697	2.711	2.2	20.4	7 10	19 42.06	-20 13.8	1.196	2.210	2.8	20.2
7 20	19 31.28	-23 31.5	1.699	2.711	2.6	20.4	7 20	19 31.92	-21 2.6	1.214	2.227	2.8	20.3
7 30	19 20.68	-23 11.6	1.729	2.711	6.8	20.7	7 30	19 22.71	-21 46.7	1.257	2.245	8.0	20.6
8 9	19 11.84	-22 47.3	1.785	2.711	10.8	20.9	8 9	19 15.67	-22 23.1	1.322	2.262	12.6	20.9
8 19	19 5.47	-22 20.1	1.864	2.709	14.2	21.1	8 19	19 11.56	-22 50.8	1.408	2.280	16.5	21.2
<b>129681</b>	1998 RB <sub>60</sub>	7 14.8 316°39		7°3/17.0 18			<b>380842</b>	2006 AA <sub>79</sub>	7 14.8 41°06		0°9/14.7 18		
6 10	19 58.08	- 5 26.6	1.569	2.410	16.8	19.2	6 10	20 7.39	-25 30.4	1.496	2.368	15.8	19.7
6 20	19 54.65	- 4 49.6	1.475	2.384	13.9	18.9	6 20	20 1.38	-25 3.3	1.437	2.378	11.9	19.5
6 30	19 48.82	- 4 29.5	1.401	2.359	10.7	18.7	6 30	19 52.70	-24 34.9	1.399	2.388	7.3	19.3
7 10	19 41.20	- 4 28.8	1.348	2.334	8.0	18.5	7 10	19 42.37	-24 2.8	1.386	2.399	2.5	19.0
7 20	19 32.64	- 4 48.6	1.319	2.310	7.4	18.4	7 20	19 31.63	-23 26.2	1.398	2.410	2.8	19.0
7 30	19 24.33	- 5 27.4	1.314	2.286	9.6	18.4	7 30	19 21.88	-22 45.4	1.436	2.422	7.5	19.3
8 9	19 17.44	- 6 20.9	1.331	2.263	13.2	18.6	8 9	19 14.23	-22 2.4	1.499	2.433	11.8	19.6
8 19	19 12.88	- 7 23.8	1.369	2.241	16.8	18.7	8 19	19 9.37	-21 19.2	1.583	2.445	15.5	19.9
<b>347859</b>	2002 RT <sub>132</sub>	7 14.8 329°83		25°5/22.6 17			<b>390408</b>	2013 YJ <sub>16</sub>	7 14.8 94°03		0°6/14.9 17		
6 10	19 57.43	+18 38.7	0.976	1.744	29.5	20.4	6 10	20 4.44	-20 15.7	1.901	2.759	13.6	21.5
6 20	19 55.18	+21 34.0	0.926	1.733	28.2	20.3	6 20	19 58.72	-20 5.5	1.835	2.769	10.2	21.3
6 30	19 49.63	+23 47.8	0.886	1.723	27.0	20.1	6 30	19 50.92	-19 59.1	1.793	2.779	6.3	21.1
7 10	19 41.56	+25 6.4	0.857	1.715	26.0	20.0	7 10	19 41.78	-19 54.7	1.776	2.789	2.2	20.8
7 20	19 32.25	+25 19.6	0.839	1.706	25.6	19.9	7 20	19 32.24	-19 50.7	1.786	2.798	2.2	20.8
7 30	19 23.46	+24 24.1	0.833	1.699	25.7	19.9	7 30	19 23.35	-19 45.9	1.823	2.808	6.3	21.1
8 9	19 16.90	+22 26.5	0.839	1.693	26.5	20.0	8 9	19 16.01	-19 39.7	1.886	2.817	10.0	21.4
8 19	19 13.76	+19 39.7	0.857	1.688	27.8	20.0	8 19	19 10.86	-19 32.1	1.972	2.827	13.2	21.6
<b>311183</b>	2004 VQ <sub>70</sub>	7 14.8 289°00		2°2/15.4 17			<b>338829</b>	2003 WR <sub>99</sub>	7 14.8 226°93		3°2/13.3 18		
6 10	20 3.80	-16 49.2	1.340	2.214	17.3	20.5	6 10	20 6.12	-31 12.6	2.647	3.494	10.5	22.1
6 20	19 59.38	-16 37.2	1.256	2.196	13.3	20.2	6 20	19 59.82	-31 41.8	2.555	3.481	8.1	21.9
6 30	19 51.96	-16 34.7	1.192	2.179	8.7	19.9	6 30	19 51.60	-32 8.5	2.488	3.466	5.4	21.7
7 10	19 42.27	-16 40.4	1.150	2.161	3.8	19.5	7 10	19 42.05	-32 28.8	2.449	3.451	3.4	21.6
7 20	19 31.50	-16 52.1	1.131	2.143	3.5	19.5	7 20	19 31.93	-32 39.8	2.438	3.435	3.9	21.6
7 30	19 21.18	-17 7.2	1.138	2.126	8.6	19.7	7 30	19 22.16	-32 39.9	2.456	3.419	6.4	21.7
8 9	19 12.78	-17 23.3	1.166	2.108	13.7	19.9	8 9	19 13.58	-32 29.1	2.501	3.401	9.2	21.9
8 19	19 7.37	-17 38.4	1.215	2.091	18.3	20.2	8 19	19 6.87	-32 9.1	2.570	3.383	11.7	22.0
<b>474356</b>	2002 QO <sub>95</sub>	7 14.8 312°26		3°8/13.5 18			<b>418095</b>	2007 WN <sub>6</sub>	7 14.8 202°59		5°3/12.9 17		
6 10	20 3.51	-29 44.6	1.732	2.605	14.0	21.2	6 10	20 8.61	-31 54.0	1.573	2.443	15.4	20.8
6 20	19 58.65	-30 17.8	1.655	2.595	10.7	20.9	6 20	20 2.76	-32 48.4	1.505	2.441	11.8	20.5
6 30	19 51.20	-30 49.5	1.600	2.585	7.1	20.7	6 30	19 53.89	-33 39.9	1.459	2.439	8.2	20.3
7 10	19 41.94	-31 14.5	1.569	2.575	4.1	20.5	7 10	19 42.89	-34 21.0	1.436	2.437	5.5	20.2
7 20	19 31.93	-31 28.3	1.563	2.565	4.8	20.5	7 20	19 31.05	-34 45.7	1.439	2.434	6.3	20.2
7 30	19 22.48	-31 28.5	1.584	2.556	8.3	20.7	7 30	19 19.96	-34 50.8	1.468	2.431	9.7	20.4
8 9	19 14.78	-31 15.3	1.628	2.547	12.0	20.9	8 9	19 11.01	-34 37.7	1.519	2.428	13.4	20.6
8 19	19 9.68	-30 51.0	1.693	2.539	15.4	21.1	8 19	19 5.12	-34 10.0	1.590	2.425	16.8	20.8
<b>239773</b>	2010 CN <sub>65</sub>	7 14.8 99°79		1°7/14.2 17			<b>203946</b>	2003 RA <sub>8</sub>	7 14.8 310°17		5°4/13.9 18		
6 10	20 4.52	-25 15.4	1.879	2.744	13.4	21.0	6 10	20 10.00	-34 40.9	1.571	2.438	15.5	19.8
6 20	19 58.92	-25 34.6	1.814	2.752	10.1	20.8	6 20	20 4.25	-34 43.9	1.468	2.401	12.3	19.5
6 30	19 51.11	-25 54.8	1.772	2.760	6.2	20.6	6 30	19 55.12	-34 37.9	1.386	2.365	8.7	19.2
7 10	19 41.84	-26 12.2	1.756	2.768	2.5	20.4	7 10	19 43.40	-34 16.3	1.328	2.329	5.8	18.9
7 20	19 32.11	-26 23.9	1.766	2.776	3.0	20.5	7 20	19 30.41	-33 34.1	1.294	2.293	6.3	18.8
7 30	19 23.02	-26 27.9	1.804	2.783	6.8	20.7	7 30	19 17.89	-32 30.2	1.286	2.257	10.0	19.0
8 9	19 15.57	-26 24.1	1.866	2.791	10.4	20.9	8 9	19 7.53	-31 8.3	1.302	2.222	14.4	19.1
8 19	19 10.41	-26 13.6	1.951	2.798	13.6	21.2	8 19	19 0.47	-29 34.8	1.338	2.187	18.6	19.3
<b>400911</b>	2010 TH <sub>49</sub>	7 14.8 345°21		4°5/16.8 18			<b>495176</b>	2012 MA <sub>2</sub>	7 14.8 238°71		6°0/11.2 17		
6 10	19 58.28	- 8 0.3	2.100	2.933	13.5	21.2	6 10	20 10.65	-22 48.5	1.146	2.027	19.0	20.2
6 20	19 54.04	- 7 47.6	2.022	2.930	10.7	21.0	6 20	20 5.72	-25 50.6	1.072	2.019	14.5	19.9
6 30	19 48.03	- 7 47.5	1.965	2.928	7.8	20.9	6 30	19 56.67	-29 15.4	0.921	2.010	9.5	19.6
7 10	19 40.84	- 8 0.3	1.933	2.926	5.3	20.7	7 10	19 44.12	-32 45.9	0.995	2.000	6.1	19.4
7 20	19 33.17	- 8 24.8	1.927	2.924	4.7	20.7	7 20	19 29.45	-36 0.8	0.995	1.991	8.4	19.5
7 30	19 25.87	- 8 58.9	1.947	2.923	6.8	20.8	7 30	19 14.89	-38 42.2	1.021	1.980	13.5	19.7
8 9	19 19.73	- 9 39.6	1.993	2.921	9.7	21.0	8 9	19 2.81	-40 42.5	1.070	1.970	18.5	20.0
8 19	19 15.36	-10 23.6	2.062	2.920	12.5	21.1	8 19	18 54.92	-42 3.8	1.135	1.959	22.8	20.2
<b>302220</b>	2001 UD <sub>227</sub>	7 14.8 236°12		5°5/12.1 18			<b>347964</b>	2003 RE <sub>8</sub>	7 14.8 334°63		11°5/16.8 18		
6 10	20 4.68	-35 31.2	2.187	3.044	12.1	21.0	6 10	19 55.40	- 1 51.6	1.259	2.106	19.8	19.1
6 20	19 59.18	-36 30.5	2.115	3.039	9.5	20.9	6 20	19 53.08	- 0 17.8	1.176	2.081	17.0	18.8
6 30	19 51.38	-37 24.9	2.066	3.035	7.0	20.7	6 30	19 48.07	+ 0 57.5	1.111	2.057	14.2	18.6
7 10	19 41.97	-38 8.9	2.043	3.030	5.5	20.6	7 10	19 41.04	+ 1 47.6	1.065	2.034	12.1	18.4
7 20	19 31.93	-38 37.8	2.046	3.026	6.2	20.6	7 20	19 32.98	+ 2 7.5	1.039	2.012	11.7	18.3
7 30	19 22.36	-38 49.3	2.076	3.021	8.5	20.8	7 30	19 25.24	+ 1 55.7	1.034	1.992	13.4	18.3
8 9	19 14.34	-38 43.8	2.130	3.016	11.2	20.9	8 9	19 19.19	+ 1 15.6	1.048	1.974	16.5	18.5
8 19	19 8.60	-38 24.1	2.205	3.011	13.7	21.1	8 19	19 15.85	+ 0 14.0	1.079	1.957	19.9	18.6
<b>202614</b>	Kayleigh	7 14.8 173°04		6°8/17.5 18			<b>2055</b>	Dvořák	7 14.8 33°27		19°1/20.5 18		
6 10	20 1.55	- 2 38.5	2.136	2.939	14.3	20.7	6 10						

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>44373</b>	1998 <i>SU</i> <sub>42</sub>		7 14.8 145°20	3°4/16.5	18		<b>247125</b>	2000 <i>UQ</i> <sub>102</sub>		7 14.8 178°73	3°6/16.1	18	
6 10	20 1.49	-10 0.3	2.328	3.156	12.5	19.6	6 10	20 3.83	-11 3.0	2.354	3.179	12.4	21.3
6 20	19 56.21	-9 57.2	2.255	3.164	9.8	19.4	6 20	19 57.96	-10 36.5	2.273	3.181	9.7	21.1
6 30	19 49.28	-10 4.6	2.206	3.172	6.8	19.2	6 30	19 50.38	-10 18.3	2.216	3.182	6.8	21.0
7 10	19 41.26	-10 21.8	2.182	3.180	4.2	19.1	7 10	19 41.65	-10 8.7	2.185	3.183	4.2	20.8
7 20	19 32.87	-10 47.3	2.185	3.187	3.7	19.1	7 20	19 32.51	-10 7.2	2.183	3.183	3.9	20.8
7 30	19 24.88	-11 19.1	2.217	3.194	5.9	19.2	7 30	19 23.76	-10 12.7	2.208	3.182	6.2	20.9
8 9	19 18.03	-11 54.5	2.275	3.200	8.8	19.4	8 9	19 16.17	-10 23.7	2.261	3.181	9.1	21.1
8 19	19 12.07	-12 31.2	2.358	3.206	11.5	19.6	8 19	19 10.32	-10 38.5	2.337	3.180	11.8	21.3
<b>328132</b>	2008 <i>BZ</i> <sub>16</sub>		7 14.8 146°88	1°3/14.4	17		<b>40630</b>	1999 <i>RA</i> <sub>174</sub>		7 14.8 268°59	6°8/12.4	18	
6 10	20 7.90	-24 30.7	1.655	2.520	14.9	21.2	6 10	20 8.37	-37 56.1	1.855	2.712	14.0	18.3
6 20	20 1.74	-24 38.3	1.587	2.525	11.2	21.0	6 20	20 2.42	-38 43.6	1.779	2.701	11.2	18.1
6 30	19 52.99	-24 47.1	1.542	2.530	6.9	20.8	6 30	19 53.62	-39 23.1	1.726	2.691	8.5	17.9
7 10	19 42.53	-24 53.5	1.522	2.535	2.5	20.5	7 10	19 42.82	-39 48.0	1.696	2.680	6.9	17.8
7 20	19 31.51	-24 54.5	1.528	2.539	3.0	20.5	7 20	19 31.23	-39 52.9	1.692	2.669	7.5	17.8
7 30	19 21.25	-24 48.4	1.561	2.543	7.4	20.8	7 30	19 20.30	-39 36.0	1.713	2.659	9.9	17.9
8 9	19 12.89	-24 35.6	1.619	2.547	11.5	21.1	8 9	19 11.36	-38 59.5	1.758	2.648	12.9	18.1
8 19	19 7.19	-24 17.4	1.698	2.550	15.1	21.3	8 19	19 5.27	-38 7.7	1.823	2.637	15.8	18.3
<b>136867</b>	1998 <i>FW</i> <sub>48</sub>		7 14.8 28°71	2°6/15.8	18		<b>108431</b>	2001 <i>KD</i> <sub>40</sub>		7 14.8 80°80	2°1/13.6	18	
6 10	19 59.65	-14 24.6	1.704	2.565	14.8	19.4	6 10	20 9.15	-19 48.9	1.535	2.397	16.1	18.7
6 20	19 55.34	-14 17.7	1.643	2.575	11.3	19.2	6 20	20 2.77	-21 47.1	1.489	2.426	11.9	18.5
6 30	19 48.94	-14 20.9	1.604	2.585	7.4	19.0	6 30	19 53.68	-23 54.4	1.467	2.455	7.2	18.3
7 10	19 41.18	-14 33.0	1.588	2.596	3.7	18.8	7 10	19 42.80	-26 1.4	1.471	2.483	2.8	18.1
7 20	19 32.98	-14 51.8	1.598	2.608	3.2	18.8	7 20	19 31.33	-27 58.1	1.504	2.512	3.8	18.2
7 30	19 25.39	-15 15.0	1.634	2.620	6.7	19.1	7 30	19 20.67	-29 37.4	1.564	2.539	8.1	18.6
8 9	19 19.33	-15 39.9	1.694	2.632	10.4	19.3	8 9	19 12.04	-30 56.1	1.650	2.566	12.1	18.9
8 19	19 15.42	-16 4.2	1.776	2.645	13.8	19.5	8 19	19 6.21	-31 54.7	1.758	2.593	15.4	19.1
<b>100656</b>	1997 <i>WD</i> <sub>17</sub>		7 14.8 146°92	2°3/15.6	18		<b>322577</b>	2012 <i>AF</i> <sub>7</sub>		7 14.8 111°55	1°7/15.7	18	
6 10	20 4.80	-14 52.4	2.062	2.904	13.3	20.2	6 10	19 59.07	-14 53.1	2.477	3.320	11.3	20.8
6 20	19 58.86	-14 43.6	1.991	2.913	10.2	20.0	6 20	19 54.40	-15 3.3	2.402	3.325	8.6	20.6
6 30	19 50.98	-14 42.5	1.944	2.922	6.7	19.8	6 30	19 48.18	-15 20.8	2.351	3.330	5.6	20.4
7 10	19 41.84	-14 47.9	1.922	2.930	3.2	19.6	7 10	19 40.94	-15 44.1	2.326	3.335	2.6	20.2
7 20	19 32.27	-14 58.3	1.929	2.938	2.9	19.6	7 20	19 33.33	-16 11.3	2.329	3.340	2.2	20.2
7 30	19 23.24	-15 11.9	1.963	2.945	6.1	19.8	7 30	19 26.08	-16 40.5	2.361	3.344	5.1	20.4
8 9	19 15.60	-15 27.1	2.023	2.951	9.6	20.0	8 9	19 19.87	-17 9.5	2.419	3.349	8.1	20.6
8 19	19 9.95	-15 42.4	2.107	2.957	12.6	20.2	8 19	19 15.23	-17 36.9	2.502	3.354	10.8	20.8
<b>146374</b>	2001 <i>QG</i> <sub>4</sub>		7 14.8 347°67	0°6/14.9	18		<b>476595</b>	2008 <i>SE</i> <sub>44</sub>		7 14.8 252°02	2°5/15.8	18	
6 10	19 57.90	-18 52.1	1.142	2.037	18.1	19.6	6 10	20 2.43	-13 48.9	2.065	2.908	13.2	22.4
6 20	19 55.20	-19 8.1	1.074	2.027	13.7	19.3	6 20	19 57.37	-13 47.8	1.971	2.893	10.3	22.1
6 30	19 49.45	-19 35.2	1.026	2.019	8.6	19.0	6 30	19 50.26	-13 55.9	1.899	2.877	6.9	21.9
7 10	19 41.49	-20 10.0	0.998	2.012	3.0	18.6	7 10	19 41.70	-14 12.2	1.853	2.860	3.5	21.7
7 20	19 32.59	-20 47.6	0.993	2.006	3.0	18.6	7 20	19 32.46	-14 35.0	1.835	2.844	3.1	21.6
7 30	19 24.36	-21 23.2	1.010	2.002	8.7	18.9	7 30	19 23.50	-15 2.1	1.844	2.826	6.4	21.8
8 9	19 18.27	-21 53.2	1.048	1.999	14.0	19.2	8 9	19 15.76	-15 31.1	1.878	2.809	10.1	22.0
8 19	19 15.30	-22 15.5	1.105	1.997	18.5	19.5	8 19	19 9.98	-15 59.9	1.936	2.791	13.4	22.1
<b>303951</b>	2005 <i>YN</i> <sub>21</sub>		7 14.8 215°27	0°1/14.8	17		<b>147427</b>	2003 <i>GN</i> <sub>44</sub>		7 14.8 15°44	4°8/11.9	18	
6 10	20 8.26	-21 23.5	1.479	2.346	16.3	21.0	6 10	20 0.75	-27 42.5	1.653	2.532	14.3	18.8
6 20	20 2.38	-21 18.9	1.403	2.342	12.3	20.7	6 20	19 56.72	-29 33.5	1.594	2.537	10.8	18.6
6 30	19 53.61	-21 18.4	1.349	2.338	7.7	20.4	6 30	19 50.12	-31 27.8	1.558	2.543	7.2	18.4
7 10	19 42.81	-21 19.2	1.319	2.333	2.6	20.1	7 10	19 41.69	-33 16.7	1.547	2.549	4.9	18.3
7 20	19 31.21	-21 18.4	1.315	2.327	2.8	20.1	7 20	19 32.48	-34 51.9	1.562	2.557	6.0	18.4
7 30	19 20.30	-21 14.2	1.336	2.322	7.9	20.4	7 30	19 23.78	-36 7.3	1.604	2.565	9.3	18.6
8 9	19 11.41	-21 6.3	1.381	2.316	12.6	20.7	8 9	19 16.81	-37 0.9	1.669	2.574	12.7	18.8
8 19	19 5.42	-20 55.2	1.447	2.309	16.7	20.9	8 19	19 12.43	-37 33.9	1.754	2.583	15.7	19.0
<b>139804</b>	2001 <i>RH</i> <sub>16</sub>		7 14.8 330°97	5°5/16.6	18		<b>161055</b>	2002 <i>JV</i> <sub>46</sub>		7 14.8 337°65	4°8/13.6	18	
6 10	19 58.92	-8 29.9	1.703	2.548	15.5	20.3	6 10	20 1.31	-30 55.0	1.304	2.195	16.5	18.8
6 20	19 54.97	-7 56.6	1.622	2.538	12.5	20.1	6 20	19 57.80	-31 20.0	1.229	2.178	12.8	18.5
6 30	19 48.85	-7 36.9	1.562	2.528	9.2	19.9	6 30	19 51.10	-31 41.7	1.174	2.162	8.6	18.2
7 10	19 41.21	-7 31.9	1.525	2.519	6.3	19.7	7 10	19 42.07	-31 53.6	1.141	2.148	5.2	18.0
7 20	19 32.92	-7 41.6	1.513	2.510	5.8	19.7	7 20	19 32.07	-31 50.5	1.131	2.134	6.0	18.0
7 30	19 25.03	-8 4.4	1.525	2.502	8.2	19.8	7 30	19 22.78	-31 30.0	1.144	2.122	10.0	18.2
8 9	19 18.56	-8 37.0	1.562	2.494	11.6	20.0	8 9	19 15.72	-30 53.6	1.178	2.111	14.5	18.4
8 19	19 14.25	-9 15.7	1.620	2.487	14.9	20.2	8 19	19 11.89	-30 5.2	1.231	2.101	18.5	18.6
<b>216080</b>	2006 <i>QK</i> <sub>60</sub>		7 14.8 308°49	3°4/16.1	18		<b>290977</b>	2005 <i>XG</i> <sub>25</sub>		7 14.8 81°59	0°3/14.9	18	
6 10	19 59.65	-12 25.4	1.287	2.160	17.9	20.3	6 10	20 0.52	-19 33.0	2.306	3.161	11.6	21.3
6 20	19 56.47	-12 39.5	1.197	2.135	14.1	19.9	6 20	19 55.57	-19 44.8	2.238	3.170	8.7	21.1
6 30	19 50.32	-13 12.0	1.126	2.110	9.5	19.6	6 30	19 48.93	-20 1.0	2.194	3.180	5.4	21.0
7 10	19 41.85	-14 2.2	1.076	2.085	4.9	19.3	7 10	19 41.19	-20 19.7	2.177	3.190	1.8	20.7
7 20	19 32.11	-15 6.6	1.050	2.060	4.1	19.1	7 20	19 33.10	-20 38.6	2.187	3.200	1.9	20.8
7 30	19 22.60	-16 19.4	1.047	2.036	8.9	19.3	7 30	19 25.47	-20 55.9	2.225	3.209	5.4	21.0
8 9	19 14.86	-17 34.0	1.066	2.013	14.2	19.6	8 9	19 19.04	-21 10.3	2.290	3.219	8.6	21.2
8 19	19 10.06	-18 44.8	1.104	1.990	19.0	19.8	8 19	19 14.35	-21 21.2	2.378	3.229	11.4	21.4
<b>21517</b>	Dobi		7 14.8 78°65	4°0/16.5	18		<b>87506</b>	2000 <i>QG</i> <sub>174</sub>		7 14			

EPHEMERIDES

7 14.8

7 14.8

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>276088</b>	2002 <i>DG</i> <sub>9</sub>		7 14.8 184°88	3°3/13.0	18		<b>346733</b>	2009 <i>AH</i> <sub>46</sub>		7 14.8 236°93	0°4/15.0	17	
6 10	20 5.19	-26 53.0	2.036	2.897	12.7	20.8	6 10	20 1.48	-18 16.7	1.975	2.834	13.2	20.9
6 20	19 59.60	-28 6.0	1.962	2.897	9.6	20.6	6 20	19 56.70	-18 47.6	1.897	2.831	9.9	20.7
6 30	19 51.72	-29 21.5	1.913	2.897	6.2	20.4	6 30	19 49.86	-19 26.3	1.841	2.828	6.2	20.5
7 10	19 42.21	-30 33.5	1.890	2.896	3.5	20.2	7 10	19 41.59	-20 9.8	1.812	2.825	2.1	20.2
7 20	19 31.98	-31 36.3	1.894	2.895	4.3	20.3	7 20	19 32.73	-20 54.4	1.809	2.822	2.1	20.2
7 30	19 22.16	-32 25.9	1.927	2.894	7.5	20.5	7 30	19 24.26	-21 36.8	1.834	2.818	6.2	20.4
8 9	19 13.81	-33 0.8	1.985	2.892	10.9	20.7	8 9	19 17.15	-22 14.3	1.884	2.815	10.0	20.7
8 19	19 7.72	-33 21.6	2.065	2.889	13.8	20.9	8 19	19 12.07	-22 45.6	1.957	2.812	13.3	20.9
<b>444681</b>	2007 <i>DO</i> <sub>83</sub>		7 14.8 222°60	3°4/13.4	18		<b>213535</b>	2002 <i>JT</i> <sub>29</sub>		7 14.8 42°79	0°3/14.7	17	
6 10	20 3.30	-31 21.0	2.403	3.260	11.2	21.4	6 10	20 3.53	-19 56.0	1.134	2.023	18.6	20.1
6 20	19 57.81	-31 47.3	2.327	3.257	8.5	21.2	6 20	19 59.16	-20 27.7	1.089	2.038	13.9	19.8
6 30	19 50.39	-32 10.6	2.275	3.254	5.7	21.0	6 30	19 51.69	-21 8.8	1.062	2.054	8.6	19.6
7 10	19 41.71	-32 27.1	2.249	3.252	3.6	20.9	7 10	19 42.21	-21 53.7	1.056	2.071	2.8	19.3
7 20	19 32.56	-32 34.1	2.251	3.249	4.1	20.9	7 20	19 32.16	-22 36.6	1.075	2.088	3.1	19.4
7 30	19 23.88	-32 30.1	2.281	3.246	6.6	21.0	7 30	19 23.15	-23 12.7	1.116	2.105	8.6	19.7
8 9	19 16.52	-32 15.6	2.337	3.243	9.4	21.2	8 9	19 16.53	-23 39.6	1.180	2.123	13.4	20.1
8 19	19 11.10	-31 52.2	2.415	3.240	12.0	21.4	8 19	19 13.06	-23 56.9	1.262	2.142	17.5	20.4
<b>181461</b>	2006 <i>TZ</i> <sub>49</sub>		7 14.8 188°47	4°1/12.6	18		<b>479580</b>	2014 <i>CC</i> <sub>18</sub>		7 14.8 200°39	2°0/15.6	17	
6 10	20 3.58	-31 40.9	2.366	3.223	11.3	20.5	6 10	20 2.43	-15 14.6	2.227	3.071	12.4	21.8
6 20	19 58.14	-32 39.9	2.293	3.223	8.7	20.3	6 20	19 57.13	-15 12.6	2.145	3.068	9.5	21.6
6 30	19 50.68	-33 36.8	2.245	3.222	6.0	20.2	6 30	19 49.99	-15 17.7	2.086	3.065	6.2	21.4
7 10	19 41.83	-34 26.9	2.223	3.221	4.2	20.1	7 10	19 41.61	-15 28.9	2.053	3.061	2.9	21.2
7 20	19 32.41	-35 5.8	2.229	3.220	4.8	20.1	7 20	19 32.74	-15 44.6	2.048	3.058	2.6	21.2
7 30	19 23.39	-35 31.1	2.262	3.218	7.3	20.2	7 30	19 24.25	-16 2.9	2.071	3.053	5.8	21.4
8 9	19 15.69	-35 42.5	2.321	3.217	10.0	20.4	8 9	19 16.96	-16 21.9	2.120	3.049	9.2	21.6
8 19	19 9.99	-35 41.3	2.403	3.215	12.5	20.6	8 19	19 11.49	-16 40.4	2.193	3.044	12.2	21.8
<b>479563</b>	2014 <i>CU</i> <sub>5</sub>		7 14.8 245°14	8°4/12.9	18		<b>252172</b>	2001 <i>DG</i> <sub>10</sub>		7 14.8 146°16	3°9/13.5	17	
6 10	20 19.52	-46 4.5	2.114	2.931	13.9	21.5	6 10	20 8.08	-29 2.6	1.588	2.458	15.2	20.7
6 20	20 10.62	-46 29.7	2.031	2.917	11.7	21.3	6 20	20 2.19	-29 45.9	1.524	2.463	11.5	20.5
6 30	19 58.58	-46 39.6	1.970	2.903	9.7	21.1	6 30	19 53.47	-30 28.0	1.482	2.467	7.6	20.3
7 10	19 44.45	-46 26.9	1.933	2.888	8.5	21.0	7 10	19 42.82	-31 2.9	1.464	2.471	4.3	20.1
7 20	19 29.68	-45 47.2	1.923	2.873	8.9	21.0	7 20	19 31.48	-31 25.1	1.472	2.475	5.0	20.1
7 30	19 15.95	-44 40.7	1.940	2.857	10.6	21.1	7 30	19 20.92	-31 32.1	1.506	2.478	8.7	20.4
8 9	19 4.65	-43 12.0	1.981	2.841	13.0	21.2	8 9	19 12.42	-31 24.6	1.563	2.481	12.6	20.6
8 19	18 56.60	-41 28.6	2.044	2.824	15.4	21.4	8 19	19 6.79	-31 5.2	1.642	2.484	16.0	20.8
<b>47872</b>	2000 <i>FV</i> <sub>15</sub>		7 14.8 199°53	1°9/15.8	18		<b>86039</b>	1999 <i>NC</i> <sub>43</sub>		7 14.8 278°76	2°2/14.4	18	R
6 10	20 1.40	-13 51.7	2.442	3.279	11.7	19.6	6 10	20 22.14	-24 45.5	1.451	2.300	17.5	19.4
6 20	19 56.24	-14 9.0	2.357	3.276	8.9	19.4	6 20	20 14.51	-25 9.0	1.321	2.250	13.7	19.1
6 30	19 49.39	-14 34.9	2.295	3.272	5.9	19.2	6 30	20 2.46	-25 37.5	1.213	2.197	9.0	18.6
7 10	19 41.39	-15 7.7	2.260	3.268	2.8	19.0	7 10	19 46.31	-26 4.1	1.129	2.141	3.6	18.2
7 20	19 32.91	-15 45.2	2.253	3.263	2.4	19.0	7 20	19 27.22	-26 20.5	1.073	2.083	4.4	18.0
7 30	19 24.73	-16 25.0	2.275	3.257	5.4	19.2	7 30	19 7.30	-26 20.0	1.045	2.021	11.0	18.2
8 9	19 17.60	-17 4.6	2.324	3.252	8.5	19.4	8 9	18 49.09	-26 1.2	1.041	1.956	17.6	18.4
8 19	19 12.12	-17 42.1	2.398	3.245	11.4	19.6	8 19	18 34.65	-25 28.4	1.059	1.889	23.6	18.5
<b>384499</b>	2010 <i>CV</i> <sub>93</sub>		7 14.8 188°67	2°6/13.7	17		<b>213830</b>	2003 <i>QY</i> <sub>84</sub>		7 14.8 298°59	1°5/15.2	18	
6 10	20 5.69	-28 17.8	2.345	3.199	11.5	22.7	6 10	20 3.00	-17 53.2	1.334	2.211	17.1	20.5
6 20	19 59.61	-28 50.5	2.268	3.198	8.7	22.5	6 20	19 58.89	-17 49.6	1.249	2.191	13.2	20.2
6 30	19 51.54	-29 22.4	2.214	3.197	5.6	22.3	6 30	19 51.77	-17 55.2	1.184	2.172	8.5	19.8
7 10	19 42.11	-29 49.6	2.188	3.195	3.0	22.1	7 10	19 42.37	-18 8.1	1.141	2.153	3.3	19.5
7 20	19 32.16	-30 8.9	2.189	3.192	3.5	22.2	7 20	19 31.86	-18 25.6	1.121	2.134	3.1	19.4
7 30	19 22.66	-30 18.2	2.219	3.189	6.5	22.3	7 30	19 21.76	-18 44.3	1.127	2.116	8.5	19.7
8 9	19 14.50	-30 17.6	2.276	3.186	9.5	22.5	8 9	19 13.59	-19 1.9	1.154	2.097	13.7	19.9
8 19	19 8.34	-30 8.1	2.355	3.181	12.3	22.7	8 19	19 8.39	-19 16.6	1.201	2.079	18.3	20.1
<b>511194</b>	2013 <i>YB</i> <sub>124</sub>		7 14.8 213°87	1°2/14.3	18		<b>381832</b>	2009 <i>WX</i> <sub>20</sub>		7 14.8 215°95	2°0/13.8	18	
6 10	20 4.26	-23 32.2	2.233	3.088	12.0	23.0	6 10	20 5.19	-25 39.2	2.422	3.274	11.3	22.0
6 20	19 58.63	-23 59.7	2.148	3.081	9.0	22.8	6 20	19 59.28	-26 20.6	2.333	3.264	8.5	21.8
6 30	19 50.99	-24 29.9	2.087	3.074	5.6	22.6	6 30	19 51.39	-27 3.9	2.269	3.253	5.4	21.6
7 10	19 41.95	-24 59.6	2.053	3.066	2.1	22.3	7 10	19 42.11	-27 45.1	2.232	3.242	2.4	21.4
7 20	19 32.31	-25 25.5	2.047	3.058	2.5	22.4	7 20	19 32.20	-28 20.6	2.224	3.230	3.0	21.4
7 30	19 23.06	-25 45.3	2.070	3.049	6.1	22.6	7 30	19 22.59	-28 47.8	2.245	3.218	6.2	21.6
8 9	19 15.08	-25 57.9	2.118	3.039	9.6	22.8	8 9	19 14.18	-29 5.5	2.292	3.204	9.4	21.8
8 19	19 9.08	-26 3.4	2.190	3.029	12.6	23.0	8 19	19 7.65	-29 14.2	2.364	3.190	12.2	21.9
<b>351833</b>	2006 <i>QV</i> <sub>71</sub>		7 14.8 319°97	5°2/13.1	18		<b>222579</b>	2001 <i>WF</i> <sub>6</sub>		7 14.8 192°04	2°4/15.8	18	
6 10	20 5.16	-34 6.9	1.797	2.664	13.9	20.7	6 10	20 3.91	-14 0.6	2.198	3.036	12.7	21.9
6 20	19 59.91	-34 38.9	1.723	2.655	10.8	20.5	6 20	19 58.25	-13 58.3	2.115	3.034	9.8	21.7
6 30	19 52.02	-35 5.3	1.670	2.647	7.6	20.3	6 30	19 50.69	-14 4.3	2.056	3.032	6.5	21.5
7 10	19 42.32	-35 20.4	1.641	2.639	5.4	20.1	7 10	19 41.86	-14 17.3	2.022	3.029	3.3	21.3
7 20	19 31.93	-35 20.1	1.638	2.631	6.0	20.1	7 20	19 32.50	-14 35.9	2.017	3.026	2.9	21.2
7 30	19 22.19	-35 2.8	1.661	2.623	8.9	20.3	7 30	19 23.54	-14 57.9	2.040	3.021	6.0	21.4
8 9	19 14.30	-34 29.9	1.707	2.616	12.2	20.5	8 9	19 15.81	-15 21.4	2.089	3.017	9.4	21.6
8 19	19 9.06	-33 45.0	1.775	2.609	15.3	20.7	8 19	19 9.95	-15 44.7	2.163	3.011	12.4	21.8
<b>315343</b>	2007 <i>UW</i> <sub>2</sub>		7 14.8 157°22	1°5/14.3	17		<b>95333</b>	2002 <i>CA</i> <sub>118</sub>	</				

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>342798</b>	2008 WW <sub>135</sub>		7 14.8 111°34'	3°7/16.1	17		<b>280952</b>	2006 BS <sub>181</sub>		7 14.8 234°35'	0°4/14.7	18	
6 10	20 3.42	-11 42.0	2.103	2.937	13.4	20.9	6 10	20 3.53	-21 5.2	1.883	2.745	13.6	21.7
6 20	19 57.77	-11 12.1	2.036	2.950	10.4	20.8	6 20	19 58.38	-21 26.0	1.803	2.739	10.2	21.5
6 30	19 50.31	-10 51.3	1.992	2.962	7.2	20.6	6 30	19 50.98	-21 51.9	1.746	2.733	6.3	21.3
7 10	19 41.70	-10 39.6	1.974	2.974	4.4	20.4	7 10	19 42.01	-22 19.8	1.714	2.727	2.1	21.0
7 20	19 32.73	-10 36.5	1.984	2.986	4.0	20.4	7 20	19 32.39	-22 46.3	1.709	2.721	2.4	21.0
7 30	19 24.30	-10 40.8	2.020	2.997	6.5	20.6	7 30	19 23.21	-23 8.6	1.731	2.714	6.6	21.3
8 9	19 17.19	-10 50.8	2.083	3.008	9.5	20.8	8 9	19 15.52	-23 25.2	1.778	2.708	10.6	21.5
8 19	19 11.98	-11 4.5	2.169	3.019	12.3	21.0	8 19	19 10.06	-23 35.7	1.848	2.701	14.0	21.7
<b>451310</b>	2010 UU <sub>2</sub>		7 14.8 334°47'	6°8/17.3	18		<b>507991</b>	2015 BS <sub>171</sub>		7 14.8 293°16'	1°5/14.5	17	
6 10	19 58.99	-3 14.9	2.116	2.926	14.1	21.0	6 10	20 6.14	-24 58.7	1.419	2.297	16.3	21.4
6 20	19 54.60	-2 25.1	2.036	2.922	11.7	20.8	6 20	20 1.16	-24 58.2	1.336	2.280	12.4	21.2
6 30	19 48.46	-1 49.2	1.978	2.917	9.3	20.6	6 30	19 53.10	-24 58.6	1.273	2.264	7.8	20.9
7 10	19 41.12	-1 29.1	1.943	2.913	7.4	20.5	7 10	19 42.80	-24 56.1	1.234	2.247	2.9	20.5
7 20	19 33.30	-1 25.7	1.934	2.909	6.9	20.5	7 20	19 31.50	-24 47.3	1.219	2.231	3.4	20.5
7 30	19 25.84	-1 38.2	1.950	2.905	8.3	20.5	7 30	19 20.78	-24 30.4	1.229	2.215	8.5	20.8
8 9	19 19.51	-2 4.0	1.991	2.902	10.6	20.7	8 9	19 12.10	-24 6.0	1.263	2.199	13.4	21.0
8 19	19 14.94	-2 39.6	2.054	2.899	13.1	20.8	8 19	19 6.47	-23 36.0	1.316	2.183	17.7	21.2
<b>233800</b>	2008 UZ <sub>111</sub>		7 14.8 19°13'	1°3/14.5	17		<b>72226</b>	2001 AJ <sub>13</sub>		7 14.8 158°74'	1°6/15.5	18	
6 10	20 2.95	-23 51.4	1.464	2.344	15.7	20.1	6 10	20 6.19	-16 11.6	1.884	2.732	14.1	20.4
6 20	19 58.34	-24 1.7	1.402	2.348	11.8	19.9	6 20	20 0.17	-16 19.4	1.813	2.739	10.8	20.2
6 30	19 51.06	-24 14.8	1.361	2.352	7.3	19.7	6 30	19 51.97	-16 35.3	1.764	2.746	6.9	19.9
7 10	19 42.02	-24 26.8	1.343	2.357	2.6	19.4	7 10	19 42.31	-16 57.3	1.741	2.752	2.9	19.7
7 20	19 32.39	-24 34.3	1.351	2.362	3.1	19.4	7 20	19 32.11	-17 22.8	1.745	2.757	2.6	19.7
7 30	19 23.52	-24 35.1	1.383	2.368	7.7	19.7	7 30	19 22.48	-17 49.0	1.777	2.761	6.5	19.9
8 9	19 16.61	-24 29.1	1.438	2.375	12.1	20.0	8 9	19 14.37	-18 13.9	1.835	2.765	10.3	20.2
8 19	19 12.41	-24 17.0	1.515	2.382	15.8	20.2	8 19	19 8.48	-18 36.0	1.916	2.768	13.6	20.4
<b>63558</b>	2001 QR <sub>10</sub>		7 14.8 326°68'	1°9/15.5	17		<b>470731</b>	2008 UN <sub>70</sub>		7 14.8 283°49'	2°7/13.9	18	
6 10	19 59.19	-15 34.9	1.065	1.957	19.3	19.2	6 10	20 5.10	-27 27.6	1.804	2.672	13.8	21.6
6 20	19 56.49	-15 54.6	0.992	1.942	14.9	18.9	6 20	19 59.91	-27 50.3	1.713	2.651	10.5	21.4
6 30	19 50.49	-16 31.4	0.938	1.929	9.7	18.5	6 30	19 52.13	-28 13.3	1.643	2.630	6.8	21.1
7 10	19 41.99	-17 22.9	0.904	1.916	4.0	18.2	7 10	19 42.45	-28 31.9	1.598	2.608	3.3	20.8
7 20	19 32.29	-18 23.5	0.891	1.904	3.5	18.1	7 20	19 31.88	-28 42.2	1.580	2.587	3.9	20.8
7 30	19 23.13	-19 26.5	0.901	1.893	9.4	18.4	7 30	19 21.70	-28 41.6	1.588	2.565	7.8	21.0
8 9	19 16.19	-20 25.4	0.931	1.883	15.0	18.7	8 9	19 13.14	-28 29.9	1.621	2.544	11.9	21.2
8 19	19 12.64	-21 16.2	0.978	1.874	20.0	18.9	8 19	19 7.10	-28 8.9	1.675	2.522	15.5	21.4
<b>241218</b>	2007 TK <sub>68</sub>		7 14.8 111°49'	2°2/15.8	18		<b>287203</b>	2002 SW <sub>32</sub>		7 14.8 297°10'	4°0/13.4	18	
6 10	20 1.12	-14 32.3	1.949	2.800	13.6	20.8	6 10	20 4.84	-30 42.1	1.829	2.697	13.6	20.2
6 20	19 56.36	-14 38.2	1.874	2.801	10.4	20.6	6 20	19 59.79	-31 11.6	1.736	2.673	10.5	19.9
6 30	19 49.61	-14 53.5	1.821	2.802	6.8	20.3	6 30	19 52.09	-31 38.9	1.665	2.648	7.1	19.6
7 10	19 41.51	-15 16.6	1.794	2.803	3.2	20.1	7 10	19 42.45	-31 59.0	1.619	2.624	4.3	19.4
7 20	19 32.90	-15 45.4	1.793	2.803	2.8	20.1	7 20	19 31.88	-32 7.2	1.598	2.599	5.0	19.4
7 30	19 24.73	-16 17.0	1.819	2.804	6.3	20.3	7 30	19 21.70	-32 1.1	1.604	2.575	8.4	19.6
8 9	19 17.90	-16 49.0	1.871	2.805	9.9	20.5	8 9	19 13.16	-31 40.8	1.634	2.550	12.2	19.7
8 19	19 13.08	-17 19.2	1.946	2.806	13.1	20.8	8 19	19 7.21	-31 9.0	1.685	2.526	15.7	19.9
<b>185214</b>	2006 TZ <sub>54</sub>		7 14.8 259°73'	0°5/15.0	18		<b>103480</b>	2000 AS <sub>223</sub>		7 14.8 262°93'	0°2/14.9	18	
6 10	20 4.00	-18 11.6	1.688	2.550	14.8	20.6	6 10	20 0.07	-19 59.9	2.570	3.421	10.7	20.9
6 20	19 59.09	-18 37.9	1.599	2.535	11.3	20.3	6 20	19 55.28	-20 12.6	2.476	3.407	8.1	20.7
6 30	19 51.62	-19 13.7	1.532	2.519	7.1	20.1	6 30	19 48.84	-20 29.5	2.407	3.393	5.0	20.5
7 10	19 42.28	-19 55.7	1.490	2.503	2.5	19.7	7 10	19 41.27	-20 48.5	2.365	3.378	1.7	20.2
7 20	19 32.02	-20 40.0	1.474	2.487	2.5	19.7	7 20	19 33.19	-21 7.8	2.350	3.363	1.8	20.2
7 30	19 22.09	-21 22.4	1.484	2.470	7.3	20.0	7 30	19 25.38	-21 25.5	2.365	3.348	5.2	20.4
8 9	19 13.72	-21 59.8	1.519	2.453	11.8	20.2	8 9	19 18.56	-21 40.2	2.406	3.333	8.3	20.6
8 19	19 7.82	-22 30.6	1.576	2.436	15.7	20.4	8 19	19 13.33	-21 51.3	2.471	3.317	11.1	20.8
<b>292771</b>	2006 UL <sub>204</sub>		7 14.8 154°98'	0°3/14.7	18		<b>502464</b>	2015 BQ <sub>310</sub>		7 14.8 215°17'	1°0/15.2	17	
6 10	20 3.42	-23 1.1	2.795	3.640	10.1	21.1	6 10	20 5.56	-17 45.7	1.868	2.721	14.0	22.3
6 20	19 57.45	-22 52.7	2.719	3.647	7.5	20.9	6 20	19 59.91	-17 57.0	1.784	2.714	10.7	22.1
6 30	19 49.99	-22 44.8	2.668	3.652	4.6	20.7	6 30	19 51.94	-18 15.7	1.722	2.706	6.8	21.8
7 10	19 41.58	-22 36.2	2.645	3.658	1.5	20.5	7 10	19 42.35	-18 39.5	1.686	2.698	2.6	21.6
7 20	19 32.88	-22 25.7	2.651	3.663	1.7	20.6	7 20	19 32.04	-19 5.5	1.677	2.689	2.4	21.5
7 30	19 24.60	-22 12.6	2.687	3.668	4.8	20.8	7 30	19 22.16	-19 30.9	1.695	2.680	6.7	21.8
8 9	19 17.41	-21 57.1	2.750	3.672	7.6	21.0	8 9	19 13.76	-19 53.7	1.740	2.670	10.7	22.0
8 19	19 11.79	-21 39.5	2.839	3.676	10.1	21.1	8 19	19 7.62	-20 12.7	1.806	2.659	14.3	22.2
<b>77062</b>	2001 DA <sub>19</sub>		7 14.8 46°61'	4°6/13.3	18	R	<b>472442</b>	2015 BZ <sub>306</sub>		7 14.8 245°62'	4°9/12.9	17	
6 10	20 5.72	-28 7.0	1.193	2.082	17.9	18.5	6 10	20 7.27	-30 40.1	1.659	2.528	14.7	21.2
6 20	20 0.88	-29 10.0	1.151	2.100	13.4	18.3	6 20	20 1.80	-31 38.8	1.582	2.518	11.3	21.0
6 30	19 52.79	-30 12.7	1.128	2.118	8.7	18.1	6 30	19 53.41	-32 36.8	1.527	2.509	7.7	20.8
7 10	19 42.60	-31 6.7	1.128	2.136	5.0	17.9	7 10	19 42.90	-33 27.0	1.496	2.498	5.1	20.6
7 20	19 31.83	-31 45.0	1.152	2.155	5.9	18.0	7 20	19 31.45	-34 3.0	1.491	2.488	5.9	20.6
7 30	19 22.22	-32 4.1	1.199	2.175	9.9	18.3	7 30	19 20.52	-34 21.0	1.512	2.477	9.3	20.8
8 9	19 15.14	-32 5.1	1.267	2.195	14.1	18.6	8 9	19 11.52	-34 20.9	1.556	2.466	13.1	21.0
8 19	19 11.38	-31 51.3	1.355	2.215	17.7	18.9	8 19	19 5.41	-34 5.6	1.621	2.454	16.5	21.2
<b>398847</b>	2013 CD <sub>42</sub>		7 14.8 319°77'	4°4/16.7	18		<b>341226</b>	2007 RW <sub>143</sub>		7 14.8 225°12'	1°9/14.1	18	
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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>516445</b>	2004 <i>WO</i> <sub>8</sub>	7 14.8 277°33 6°2/10.8 18					<b>335053</b>	2004 <i>RJ</i> <sub>110</sub>	7 14.9 192°43 16°9/20.6 18				
6 10	20 4.15	-38 13.7	2.470	3.318	11.2	21.2	6 10	20 5.77	+12 46.4	1.390	2.138	23.0	20.5
6 20	19 58.89	-39 30.5	2.385	3.300	9.0	21.0	6 20	20 0.63	+14 35.0	1.327	2.137	21.0	20.3
6 30	19 51.38	-40 42.7	2.324	3.281	7.1	20.8	6 30	19 52.67	+15 52.2	1.278	2.136	19.0	20.1
7 10	19 42.20	-41 44.4	2.289	3.262	6.2	20.7	7 10	19 42.68	+16 29.6	1.247	2.134	17.5	20.0
7 20	19 32.20	-42 30.5	2.281	3.243	6.9	20.8	7 20	19 31.79	+16 22.2	1.234	2.131	16.9	20.0
7 30	19 22.46	-42 57.9	2.300	3.224	8.8	20.8	7 30	19 21.43	+15 30.2	1.240	2.128	17.4	20.0
8 9	19 14.02	-43 6.4	2.342	3.205	11.1	21.0	8 9	19 12.92	+14 0.2	1.265	2.125	18.9	20.1
8 19	19 7.71	-42 58.3	2.406	3.186	13.4	21.1	8 19	19 7.20	+12 2.7	1.307	2.120	20.8	20.2
<b>389890</b>	2012 <i>TE</i> <sub>7</sub>	7 14.8 270°39 2°6/14.1 18					<b>315380</b>	2007 <i>VE</i> <sub>55</sub>	7 14.9 132°82 3°1/13.6 17				
6 10	20 7.46	-28 33.0	2.016	2.874	12.9	21.0	6 10	20 6.21	-25 19.0	1.482	2.357	15.8	20.6
6 20	20 1.44	-28 40.6	1.918	2.851	9.9	20.7	6 20	20 0.99	-26 21.1	1.418	2.361	11.9	20.3
6 30	19 52.97	-28 46.1	1.844	2.828	6.4	20.5	6 30	19 52.87	-27 27.4	1.376	2.364	7.5	20.1
7 10	19 42.72	-28 45.5	1.795	2.804	3.1	20.2	7 10	19 42.73	-28 30.9	1.357	2.368	3.6	19.9
7 20	19 31.68	-28 36.0	1.774	2.780	3.6	20.2	7 20	19 31.78	-29 24.9	1.365	2.371	4.5	19.9
7 30	19 21.02	-28 15.9	1.780	2.756	7.3	20.4	7 30	19 21.53	-30 4.4	1.397	2.374	8.7	20.2
8 9	19 11.90	-27 46.2	1.812	2.731	11.1	20.6	8 9	19 13.30	-30 28.4	1.453	2.377	12.9	20.5
8 19	19 5.14	-27 9.1	1.867	2.706	14.5	20.7	8 19	19 7.99	-30 38.0	1.530	2.379	16.6	20.7
<b>61945</b>	2000 <i>RO</i> <sub>13</sub>	7 14.8 254°72 3°5/16.1 18 R					<b>189186</b>	2003 <i>CU</i> <sub>25</sub>	7 14.9 16°11 6°6/13.0 17				
6 10	20 1.02	-11 37.6	2.266	3.101	12.5	19.5	6 10	20 3.69	-33 16.1	1.201	2.092	17.6	18.7
6 20	19 56.07	-11 11.5	2.179	3.093	9.8	19.3	6 20	19 59.66	-34 9.2	1.150	2.097	13.7	18.5
6 30	19 49.36	-10 53.7	2.115	3.085	6.9	19.1	6 30	19 52.23	-34 56.3	1.119	2.103	9.6	18.3
7 10	19 41.46	-10 44.4	2.077	3.077	4.2	18.9	7 10	19 42.52	-35 29.1	1.110	2.110	6.8	18.2
7 20	19 33.07	-10 43.2	2.066	3.068	3.8	18.9	7 20	19 32.08	-35 41.0	1.123	2.118	7.6	18.2
7 30	19 25.02	-10 49.2	2.083	3.060	6.3	19.0	7 30	19 22.73	-35 30.2	1.158	2.127	11.1	18.4
8 9	19 18.08	-11 0.7	2.125	3.051	9.3	19.2	8 9	19 15.98	-34 59.2	1.214	2.137	15.0	18.7
8 19	19 12.87	-11 15.9	2.191	3.043	12.2	19.4	8 19	19 12.63	-34 13.3	1.289	2.148	18.5	19.0
<b>315295</b>	2007 <i>TB</i> <sub>157</sub>	7 14.8 328°86 4°8/15.8 17					<b>342783</b>	2008 <i>WE</i> <sub>113</sub>	7 14.9 310°44 0°3/14.9 16				
6 10	19 58.86	-14 15.3	1.048	1.939	19.7	20.3	6 10	20 2.38	-19 55.1	1.743	2.610	14.3	21.6
6 20	19 56.26	-13 30.7	0.973	1.920	15.5	20.0	6 20	19 57.65	-20 4.0	1.667	2.605	10.8	21.4
6 30	19 50.37	-12 57.8	0.915	1.901	10.7	19.7	6 30	19 50.60	-20 18.8	1.612	2.600	6.7	21.1
7 10	19 42.00	-12 38.3	0.876	1.884	6.0	19.4	7 10	19 41.94	-20 36.9	1.581	2.595	2.3	20.8
7 20	19 32.43	-12 32.5	0.859	1.868	5.5	19.3	7 20	19 32.65	-20 55.3	1.577	2.590	2.3	20.8
7 30	19 23.39	-12 39.2	0.862	1.853	10.2	19.5	7 30	19 23.85	-21 11.7	1.600	2.586	6.8	21.1
8 9	19 16.55	-12 55.1	0.886	1.839	15.5	19.7	8 9	19 16.61	-21 24.3	1.647	2.582	10.9	21.3
8 19	19 13.06	-13 16.7	0.926	1.827	20.5	20.0	8 19	19 11.69	-21 32.6	1.715	2.577	14.5	21.5
<b>390097</b>	2012 <i>UQ</i> <sub>163</sub>	7 14.9 293°28 0°6/15.0 18					<b>481255</b>	2005 <i>WL</i> <sub>181</sub>	7 14.9 228°25 5°5/17.7 18				
6 10	20 3.09	-19 54.6	1.865	2.726	13.7	20.9	6 10	19 58.88	-1 47.9	2.922	3.707	11.2	22.1
6 20	19 57.98	-19 50.0	1.788	2.723	10.3	20.7	6 20	19 54.14	-1 22.7	2.828	3.696	9.4	21.9
6 30	19 50.70	-19 49.9	1.734	2.720	6.5	20.5	6 30	19 48.05	-1 9.1	2.756	3.684	7.5	21.8
7 10	19 41.94	-19 52.5	1.704	2.717	2.3	20.2	7 10	19 41.03	-1 8.2	2.709	3.673	5.9	21.7
7 20	19 32.62	-19 55.8	1.702	2.715	2.3	20.2	7 20	19 33.62	-1 20.1	2.690	3.661	5.5	21.6
7 30	19 23.81	-19 58.1	1.726	2.712	6.5	20.4	7 30	19 26.40	-1 43.8	2.698	3.648	6.6	21.7
8 9	19 16.49	-19 58.5	1.776	2.709	10.4	20.7	8 9	19 19.99	-2 17.2	2.733	3.635	8.4	21.8
8 19	19 11.37	-19 56.6	1.848	2.706	13.8	20.9	8 19	19 14.85	-2 57.8	2.792	3.622	10.5	21.9
<b>419773</b>	2010 <i>VR</i> <sub>147</sub>	7 14.9 208°04 2°3/13.9 17					<b>388912</b>	2008 <i>SY</i> <sub>96</sub>	7 14.9 196°85 5°4/17.4 18				
6 10	20 5.93	-24 31.5	1.715	2.582	14.4	21.5	6 10	20 1.79	-3 55.8	2.501	3.299	12.5	22.3
6 20	20 0.50	-25 21.1	1.640	2.579	10.9	21.3	6 20	19 56.47	-3 34.3	2.415	3.296	10.3	22.2
6 30	19 52.46	-26 14.9	1.587	2.575	6.8	21.1	6 30	19 49.55	-3 25.4	2.351	3.292	7.9	22.0
7 10	19 42.58	-27 7.5	1.559	2.571	2.9	20.8	7 10	19 41.54	-3 29.9	2.312	3.288	6.0	21.9
7 20	19 31.90	-27 53.4	1.558	2.566	3.7	20.9	7 20	19 33.08	-3 47.5	2.301	3.282	5.5	21.8
7 30	19 21.74	-28 28.4	1.584	2.562	7.8	21.1	7 30	19 24.92	-4 16.9	2.317	3.277	6.9	21.9
8 9	19 13.29	-28 51.1	1.634	2.556	11.8	21.3	8 9	19 17.75	-4 55.2	2.360	3.270	9.2	22.1
8 19	19 7.43	-29 2.1	1.706	2.551	15.3	21.5	8 19	19 12.14	-5 39.6	2.426	3.263	11.6	22.2
<b>203429</b>	2001 <i>XB</i> <sub>264</sub>	7 14.9 92°38 0°1/14.8 17					<b>273832</b>	2007 <i>GB</i> <sub>23</sub>	7 14.9 15°11 6°5/12.7 17				
6 10	20 9.39	-22 8.5	1.369	2.240	17.1	20.1	6 10	20 2.28	-32 20.1	1.240	2.132	17.2	19.7
6 20	20 3.15	-21 57.2	1.312	2.253	12.8	19.9	6 20	19 58.54	-33 26.9	1.190	2.137	13.2	19.5
6 30	19 54.02	-21 49.1	1.277	2.266	7.9	19.7	6 30	19 51.53	-34 29.7	1.159	2.143	9.3	19.3
7 10	19 43.03	-21 41.4	1.265	2.278	2.6	19.4	7 10	19 42.30	-35 19.7	1.150	2.150	6.6	19.2
7 20	19 31.54	-21 31.6	1.278	2.291	2.8	19.4	7 20	19 32.32	-35 49.8	1.163	2.158	7.5	19.2
7 30	19 21.07	-21 18.8	1.317	2.303	7.9	19.8	7 30	19 23.32	-35 56.9	1.200	2.167	11.0	19.5
8 9	19 12.87	-21 3.0	1.379	2.315	12.5	20.1	8 9	19 16.76	-35 42.6	1.257	2.177	14.8	19.7
8 19	19 7.66	-20 45.3	1.462	2.327	16.4	20.3	8 19	19 13.49	-35 11.4	1.333	2.189	18.2	20.0
<b>141520</b>	2002 <i>EL</i> <sub>144</sub>	7 14.9 154°56 0°9/15.2 17					<b>280588</b>	2004 <i>TB</i> <sub>346</sub>	7 14.9 284°35 7°3/16.7 18				
6 10	20 3.15	-17 44.4	1.900	2.757	13.7	21.1	6 10	20 2.05	-5 14.2	1.782	2.607	15.8	20.6
6 20	19 57.97	-17 59.2	1.828	2.760	10.4	20.9	6 20	19 57.38	-4 17.2	1.691	2.589	13.1	20.4
6 30	19 50.66	-18 21.2	1.777	2.762	6.5	20.7	6 30	19 50.47	-3 33.6	1.621	2.571	10.2	20.2
7 10	19 41.92	-18 48.2	1.753	2.765	2.4	20.4	7 10	19 41.93	-3 6.3	1.575	2.554	7.8	20.0
7 20	19 32.64	-19 17.2	1.755	2.767	2.3	20.4	7 20	19 32.63	-2 57.0	1.553	2.536	7.4	19.9
7 30	19 23.86	-19 45.4	1.784	2.769	6.3	20.7	7 30	19 23.62	-3 5.3	1.556	2.518	9.4	20.0
8 9	19 16.54	-20 10.7	1.839	2.771	10.1	20.9	8 9	19 15.96	-3 28.8	1.582	2.500	12.4	20.1
8 19	19 11.34	-20 31.9	1.917	2.773	13.4	21.1	8 19	19 10.44	-4 3.6	1.630	2.483	15.6	20.3
<b>175800</b>	1999 <i>RE</i> <sub>148</sub>	7 14.9 270°45 2°1/14.3 18					<b>78502</b>	2002 <i>RV</i> <sub>80</sub>	7 14.9 357°50 5°8/13.2 18				
6 10	20 7.45	-26 3.3	1.551	2.422	15.5	20.2	6 10	20 4.59	-34 4.0	1.525	2.401	15.4	18.4
6 20	20 1.97	-26 12.4	1.466	2.407	11.8	20.0							

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>142586</b>	2002 TL <sub>100</sub>		7 14.9 350°12	3°3/14.3	18		<b>360223</b>	1999 TU <sub>63</sub>		7 14.9 182°76	7°3/18.7	18	
6 10	20 5.33	-28 39.9	1.210	2.099	17.7	19.2	6 10	19 58.85	+ 3 49.6	2.783	3.539	12.4	20.9
6 20	20 0.82	-28 40.7	1.145	2.094	13.5	19.0	6 20	19 54.14	+ 4 32.3	2.703	3.539	10.7	20.8
6 30	19 52.96	-28 38.2	1.099	2.090	8.6	18.7	6 30	19 48.05	+ 5 0.4	2.644	3.539	9.0	20.7
7 10	19 42.79	-28 27.5	1.075	2.086	4.1	18.4	7 10	19 41.06	+ 5 12.1	2.609	3.539	7.8	20.6
7 20	19 31.81	-28 4.9	1.074	2.083	4.6	18.5	7 20	19 33.71	+ 5 6.7	2.600	3.539	7.4	20.6
7 30	19 21.78	-27 29.8	1.097	2.082	9.4	18.7	7 30	19 26.63	+ 4 45.1	2.616	3.538	8.0	20.6
8 9	19 14.22	-26 44.6	1.142	2.081	14.2	19.0	8 9	19 20.41	+ 4 9.5	2.658	3.537	9.4	20.7
8 19	19 10.04	-25 53.2	1.205	2.080	18.4	19.2	8 19	19 15.55	+ 3 23.4	2.722	3.535	11.1	20.8
<b>338038</b>	2002 JA <sub>77</sub>		7 14.9 32°80	8°9/11.5	17		<b>437212</b>	2012 WS <sub>13</sub>		7 14.9 320°08	2°1/13.9	18	
6 10	20 8.37	-40 57.7	1.638	2.497	15.4	20.1	6 10	20 1.99	-24 4.6	1.770	2.641	13.8	20.9
6 20	20 2.81	-42 14.0	1.583	2.501	12.6	19.9	6 20	19 57.48	-24 53.5	1.695	2.636	10.4	20.7
6 30	19 54.07	-43 19.3	1.550	2.505	10.1	19.8	6 30	19 50.58	-25 46.8	1.643	2.632	6.5	20.5
7 10	19 43.14	-44 4.8	1.539	2.509	8.9	19.7	7 10	19 42.00	-26 39.7	1.615	2.627	2.7	20.2
7 20	19 31.45	-44 24.3	1.553	2.513	9.6	19.8	7 20	19 32.70	-27 27.3	1.614	2.622	3.4	20.3
7 30	19 20.68	-44 16.1	1.589	2.518	11.8	19.9	7 30	19 23.86	-28 5.3	1.639	2.618	7.4	20.5
8 9	19 12.27	-43 43.2	1.648	2.523	14.4	20.1	8 9	19 16.59	-28 32.1	1.688	2.614	11.3	20.7
8 19	19 7.10	-42 51.5	1.725	2.528	17.0	20.3	8 19	19 11.68	-28 47.7	1.759	2.610	14.7	20.9
<b>140559</b>	2001 TQ <sub>204</sub>		7 14.9 184°65	4°4/12.4	18		<b>21164</b>	1993 UZ <sub>7</sub>		7 14.9 257°78	1°7/15.8	18	
6 10	20 5.01	-34 42.7	2.645	3.493	10.5	20.4	6 10	19 59.26	-14 42.7	2.502	3.344	11.2	18.3
6 20	19 59.09	-35 33.8	2.572	3.493	8.2	20.2	6 20	19 54.71	-14 57.5	2.411	3.333	8.6	18.1
6 30	19 51.26	-36 20.7	2.524	3.493	5.9	20.1	6 30	19 48.55	-15 20.1	2.343	3.323	5.6	17.9
7 10	19 42.14	-36 59.0	2.502	3.492	4.5	20.0	7 10	19 41.26	-15 49.1	2.303	3.311	2.6	17.7
7 20	19 32.50	-37 25.2	2.509	3.491	5.1	20.0	7 20	19 33.48	-16 22.5	2.290	3.300	2.2	17.6
7 30	19 23.27	-37 37.4	2.543	3.489	7.1	20.2	7 30	19 25.96	-16 58.0	2.305	3.289	5.2	17.8
8 9	19 15.30	-37 35.9	2.603	3.487	9.5	20.3	8 9	19 19.41	-17 33.4	2.347	3.277	8.3	18.0
8 19	19 9.22	-37 22.5	2.685	3.484	11.7	20.5	8 19	19 14.42	-18 6.8	2.414	3.266	11.2	18.2
<b>263999</b>	2009 OL <sub>4</sub>		7 14.9 341°91	1°3/15.3	18		<b>416728</b>	2005 CW <sub>80</sub>		7 14.9 117°90	2°7/15.7	17	
6 10	20 1.09	-18 20.5	2.103	2.959	12.6	20.3	6 10	20 7.40	-15 0.0	1.646	2.497	15.7	21.5
6 20	19 56.25	-18 5.8	2.025	2.956	9.5	20.1	6 20	20 1.22	-14 46.0	1.586	2.512	12.0	21.3
6 30	19 49.53	-17 55.7	1.969	2.953	6.1	19.9	6 30	19 52.69	-14 41.2	1.547	2.527	7.9	21.1
7 10	19 41.56	-17 49.2	1.940	2.951	2.5	19.7	7 10	19 42.63	-14 44.5	1.532	2.541	3.8	20.9
7 20	19 33.13	-17 45.2	1.937	2.949	2.3	19.6	7 20	19 32.12	-14 53.8	1.544	2.554	3.4	20.9
7 30	19 25.14	-17 42.4	1.962	2.947	5.9	19.9	7 30	19 22.37	-15 7.2	1.583	2.567	7.1	21.2
8 9	19 18.43	-17 40.1	2.012	2.945	9.4	20.1	8 9	19 14.39	-15 22.5	1.647	2.579	11.1	21.4
8 19	19 13.62	-17 37.6	2.086	2.944	12.5	20.3	8 19	19 8.89	-15 38.2	1.733	2.591	14.5	21.7
<b>467550</b>	2007 TY <sub>92</sub>		7 14.9 317°83	8°3/16.8	18		<b>42604</b>	1998 BT <sub>15</sub>		7 14.9 189°04	3°7/13.7	18	
6 10	19 57.52	- 7 13.5	1.102	1.974	20.3	20.9	6 10	20 9.51	-29 24.9	1.697	2.562	14.7	18.2
6 20	19 55.28	- 6 25.6	1.013	1.943	16.8	20.6	6 20	20 3.22	-29 59.5	1.626	2.561	11.2	18.0
6 30	19 49.89	- 5 56.8	0.941	1.912	12.8	20.2	6 30	19 54.16	-30 32.4	1.577	2.560	7.3	17.8
7 10	19 41.95	- 5 51.8	0.888	1.882	9.3	19.9	7 10	19 43.19	-30 57.9	1.552	2.559	4.1	17.6
7 20	19 32.55	- 6 13.2	0.855	1.853	8.5	19.8	7 20	19 31.50	-31 11.2	1.554	2.557	4.8	17.6
7 30	19 23.30	- 6 59.5	0.842	1.825	11.7	19.8	7 30	19 20.49	-31 10.1	1.583	2.554	8.4	17.8
8 9	19 15.93	- 8 5.2	0.849	1.799	16.6	20.0	8 9	19 11.46	-30 55.3	1.636	2.552	12.2	18.0
8 19	19 11.77	- 9 22.6	0.873	1.773	21.5	20.2	8 19	19 5.22	-30 29.9	1.710	2.548	15.6	18.3
<b>11692</b>	1998 FV <sub>67</sub>		7 14.9 22°88	1°5/15.5	18		<b>440290</b>	2004 RS <sub>220</sub>		7 14.9 271°39	7°1/11.2	17	
6 10	19 58.98	-16 24.1	1.564	2.436	15.3	17.3	6 10	20 10.24	-45 8.9	2.767	3.586	10.9	21.8
6 20	19 55.12	-16 39.2	1.507	2.446	11.6	17.0	6 20	20 3.35	-45 52.9	2.673	3.559	9.2	21.6
6 30	19 49.00	-17 4.4	1.471	2.457	7.4	16.8	6 30	19 54.09	-46 27.0	2.602	3.532	7.8	21.5
7 10	19 41.41	-17 37.0	1.458	2.470	3.0	16.6	7 10	19 43.16	-46 45.9	2.557	3.504	7.1	21.4
7 20	19 33.34	-18 13.6	1.470	2.483	2.6	16.6	7 20	19 31.49	-46 45.5	2.538	3.476	7.5	21.4
7 30	19 25.92	-18 50.5	1.508	2.496	6.8	16.9	7 30	19 20.25	-46 24.4	2.545	3.447	9.0	21.4
8 9	19 20.14	-19 24.7	1.570	2.511	10.9	17.2	8 9	19 10.51	-45 44.1	2.577	3.418	10.9	21.5
8 19	19 16.66	-19 54.3	1.653	2.526	14.4	17.4	8 19	19 3.06	-44 48.1	2.631	3.389	12.9	21.6
<b>507925</b>	2014 YK <sub>5</sub>		7 14.9 60°87	1°2/14.6	17		<b>476011</b>	2007 RL <sub>96</sub>		7 14.9 304°48	3°0/13.6	18	
6 10	20 6.55	-24 10.2	1.466	2.341	16.0	20.6	6 10	20 3.49	-27 34.3	1.865	2.733	13.4	21.2
6 20	20 1.02	-24 11.8	1.406	2.348	12.0	20.4	6 20	19 58.50	-28 15.2	1.792	2.730	10.1	21.0
6 30	19 52.74	-24 15.2	1.366	2.356	7.4	20.2	6 30	19 51.15	-28 56.7	1.742	2.728	6.5	20.8
7 10	19 42.67	-24 16.6	1.350	2.363	2.6	19.9	7 10	19 42.18	-29 33.9	1.717	2.725	3.4	20.6
7 20	19 32.05	-24 13.2	1.359	2.371	3.0	19.9	7 20	19 32.56	-30 2.4	1.718	2.722	4.1	20.6
7 30	19 22.29	-24 3.6	1.394	2.379	7.7	20.3	7 30	19 23.46	-30 19.5	1.746	2.720	7.5	20.8
8 9	19 14.60	-23 48.0	1.453	2.388	12.1	20.5	8 9	19 15.96	-30 24.4	1.798	2.718	11.1	21.0
8 19	19 9.72	-23 27.9	1.532	2.396	15.8	20.8	8 19	19 10.81	-30 18.7	1.873	2.715	14.3	21.2
<b>358378</b>	2006 XJ <sub>71</sub>		7 14.9 209°49	0°4/15.0	18		<b>351547</b>	2005 TF <sub>36</sub>		7 14.9 135°42	1°6/15.7	18	
6 10	20 2.19	-20 25.9	2.434	3.285	11.3	21.0	6 10	20 0.28	-15 21.2	2.321	3.167	11.9	21.4
6 20	19 56.86	-20 21.0	2.352	3.282	8.5	20.8	6 20	19 55.48	-15 31.1	2.246	3.171	9.1	21.2
6 30	19 49.83	-20 19.0	2.294	3.279	5.3	20.6	6 30	19 49.00	-15 48.4	2.194	3.174	5.9	21.0
7 10	19 41.66	-20 18.4	2.263	3.276	1.8	20.4	7 10	19 41.41	-16 11.7	2.168	3.177	2.6	20.8
7 20	19 33.08	-20 17.8	2.260	3.272	1.8	20.4	7 20	19 33.40	-16 38.8	2.169	3.180	2.3	20.8
7 30	19 24.88	-20 16.1	2.285	3.269	5.3	20.6	7 30	19 25.76	-17 7.6	2.199	3.183	5.4	21.0
8 9	19 17.83	-20 12.6	2.338	3.265	8.5	20.8	8 9	19 19.26	-17 35.9	2.255	3.186	8.6	21.2
8 19	19 12.50	-20 7.2	2.414	3.261	11.3	21.0	8 19	19 14.44	-18 2.3	2.336	3.189	11.4	21.4
<b>442583</b>	2012 BE <sub>102</sub>		7 14.9 254°80	0°3/14.8	18		<b>373610</b>	2002 DE <sub>7</sub>		7 14.9 144°40	5°7/12.1	18	
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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>123918</b>	2001 <i>DM</i> <sub>98</sub>		7 14.9 151°57'	6°1/18.9 18			<b>502086</b>	2015 <i>AT</i> <sub>239</sub>		7 14.9 173°25'	2°0/14.1 17		
6 10	19 58.38	+ 1 21.5	2.791	3.562	12.0	20.3	6 10	20 6.74	-25 11.4	1.891	2.752	13.6	21.9
6 20	19 53.76	+ 1 31.3	2.713	3.568	10.1	20.2	6 20	20 0.81	-25 42.8	1.819	2.754	10.2	21.7
6 30	19 47.81	+ 1 26.4	2.657	3.573	8.2	20.1	6 30	19 52.52	-26 16.0	1.770	2.756	6.4	21.4
7 10	19 40.99	+ 1 6.1	2.626	3.579	6.6	20.0	7 10	19 42.64	-26 46.7	1.746	2.758	2.7	21.2
7 20	19 33.84	+ 0 31.0	2.621	3.583	6.1	19.9	7 20	19 32.15	-27 10.9	1.750	2.759	3.2	21.2
7 30	19 26.98	- 0 17.2	2.643	3.588	6.9	20.0	7 30	19 22.22	-27 26.0	1.782	2.759	7.0	21.5
8 9	19 20.99	- 1 15.2	2.692	3.592	8.6	20.1	8 9	19 13.92	-27 31.6	1.838	2.760	10.8	21.7
8 19	19 16.33	- 2 19.5	2.764	3.596	10.5	20.3	8 19	19 8.00	-27 28.5	1.917	2.759	14.0	21.9
<b>369261</b>	2009 <i>KB</i> <sub>2</sub>		7 14.9 25°28'	4°9/13.2 17			<b>443119</b>	2014 <i>AN</i> <sub>32</sub>		7 14.9 226°77'	10°7/21.5 17		
6 10	20 0.71	-26 31.4	0.948	1.857	19.7	19.7	6 10	20 4.89	+ 6 49.1	1.109	1.915	24.5	20.5
6 20	19 57.76	-27 50.4	0.910	1.869	14.8	19.5	6 20	20 0.60	+ 6 1.4	1.037	1.914	21.0	20.2
6 30	19 51.20	-29 12.2	0.890	1.884	9.5	19.2	6 30	19 53.03	+ 4 26.3	0.980	1.913	17.0	20.0
7 10	19 42.25	-30 26.5	0.890	1.900	5.3	19.1	7 10	19 42.97	+ 2 0.4	0.941	1.912	13.0	19.7
7 20	19 32.59	-31 23.9	0.912	1.917	6.4	19.2	7 20	19 31.71	- 1 11.4	0.925	1.910	10.7	19.6
7 30	19 24.15	-31 58.9	0.955	1.936	11.0	19.5	7 30	19 20.97	- 4 54.6	0.934	1.909	12.1	19.7
8 9	19 18.49	-32 11.8	1.017	1.956	15.6	19.8	8 9	19 12.40	- 8 48.6	0.966	1.908	15.9	19.9
8 19	19 16.41	-32 5.9	1.097	1.977	19.6	20.2	8 19	19 7.16	-12 34.0	1.021	1.907	20.2	20.2
<b>304652</b>	2006 <i>WC</i> <sub>23</sub>		7 14.9 157°92'	2°7/13.3 18			<b>479282</b>	2013 <i>GM</i> <sub>34</sub>		7 14.9 152°83'	4°7/12.0 18		
6 10	20 2.21	-26 52.7	2.320	3.180	11.4	20.7	6 10	20 4.60	-37 16.5	2.928	3.770	9.8	22.1
6 20	19 57.13	-27 49.6	2.248	3.182	8.6	20.6	6 20	19 58.63	-38 8.5	2.864	3.777	7.8	21.9
6 30	19 50.13	-28 47.8	2.200	3.184	5.5	20.4	6 30	19 50.92	-38 54.8	2.824	3.784	5.9	21.8
7 10	19 41.81	-29 42.9	2.179	3.186	2.9	20.2	7 10	19 42.06	-39 31.6	2.811	3.791	4.8	21.7
7 20	19 32.96	-30 30.7	2.185	3.188	3.6	20.3	7 20	19 32.77	-39 55.7	2.826	3.797	5.3	21.8
7 30	19 24.49	-31 8.3	2.220	3.189	6.5	20.4	7 30	19 23.90	-40 5.6	2.869	3.803	6.9	21.9
8 9	19 17.27	-31 34.5	2.281	3.191	9.5	20.6	8 9	19 16.22	-40 2.0	2.938	3.808	8.9	22.0
8 19	19 11.94	-31 49.7	2.364	3.192	12.2	20.8	8 19	19 10.31	-39 46.6	3.029	3.813	10.8	22.2
<b>344654</b>	2003 <i>SK</i> <sub>7</sub>		7 14.9 336°34'	2°1/14.3 17			<b>383656</b>	2007 <i>TE</i> <sub>101</sub>		7 14.9 51°32'	0°7/14.6 18		
6 10	20 3.38	-26 12.2	1.490	2.369	15.5	20.4	6 10	20 2.49	-21 40.5	1.761	2.629	14.1	20.7
6 20	19 58.87	-26 18.1	1.416	2.361	11.7	20.1	6 20	19 57.65	-22 6.0	1.696	2.636	10.5	20.5
6 30	19 51.58	-26 24.1	1.363	2.353	7.4	19.9	6 30	19 50.56	-22 36.3	1.654	2.643	6.5	20.3
7 10	19 42.36	-26 26.2	1.333	2.345	3.0	19.6	7 10	19 41.97	-23 7.8	1.637	2.651	2.2	20.0
7 20	19 32.39	-26 21.1	1.328	2.338	3.6	19.6	7 20	19 32.87	-23 36.8	1.646	2.658	2.5	20.1
7 30	19 23.08	-26 7.2	1.348	2.332	8.1	19.9	7 30	19 24.37	-24 0.5	1.682	2.666	6.7	20.4
8 9	19 15.71	-25 45.0	1.391	2.327	12.5	20.1	8 9	19 17.46	-24 17.4	1.742	2.674	10.6	20.6
8 19	19 11.12	-25 16.4	1.455	2.322	16.4	20.3	8 19	19 12.85	-24 27.4	1.825	2.682	13.9	20.8
<b>72126</b>	2000 <i>YQ</i> <sub>68</sub>		7 14.9 81°21'	1°4/14.5 17			<b>511095</b>	2013 <i>TN</i> <sub>139</sub>		7 14.9 288°02'	2°3/13.9 18		
6 10	20 5.83	-25 13.9	1.809	2.674	13.9	18.7	6 10	20 4.08	-23 55.0	1.583	2.456	15.1	21.4
6 20	20 0.02	-25 18.0	1.746	2.684	10.4	18.5	6 20	19 59.61	-24 45.3	1.489	2.432	11.5	21.1
6 30	19 51.94	-25 22.3	1.706	2.694	6.4	18.3	6 30	19 52.28	-25 42.6	1.417	2.407	7.3	20.8
7 10	19 42.39	-25 23.9	1.692	2.704	2.4	18.1	7 10	19 42.71	-26 41.5	1.369	2.381	3.1	20.5
7 20	19 32.42	-25 20.1	1.704	2.714	2.8	18.1	7 20	19 31.95	-27 35.7	1.347	2.356	3.9	20.5
7 30	19 23.18	-25 10.0	1.743	2.725	6.8	18.4	7 30	19 21.42	-28 19.6	1.351	2.330	8.6	20.7
8 9	19 15.65	-24 53.8	1.807	2.735	10.5	18.6	8 9	19 12.56	-28 50.5	1.377	2.305	13.2	20.9
8 19	19 10.50	-24 32.8	1.893	2.745	13.8	18.9	8 19	19 6.48	-29 8.1	1.425	2.279	17.3	21.1
<b>35510</b>	1998 <i>FF</i> <sub>47</sub>		7 14.9 51°14'	8°4/13.2 18			<b>206936</b>	2004 <i>RX</i> <sub>69</sub>		7 14.9 202°26'	2°7/14.1 17		
6 10	20 12.28	-40 24.9	1.444	2.306	16.9	18.2	6 10	20 9.30	-26 47.1	1.573	2.441	15.5	21.1
6 20	20 5.56	-41 9.0	1.406	2.328	13.6	18.1	6 20	20 3.23	-27 13.9	1.500	2.439	11.7	20.8
6 30	19 55.55	-41 38.9	1.388	2.350	10.4	17.9	6 30	19 54.27	-27 41.2	1.449	2.436	7.4	20.6
7 10	19 43.57	-41 46.9	1.393	2.372	8.5	17.9	7 10	19 43.28	-28 3.8	1.421	2.432	3.4	20.3
7 20	19 31.30	-41 28.9	1.421	2.395	9.0	18.0	7 20	19 31.48	-28 17.0	1.420	2.428	4.1	20.4
7 30	19 20.47	-40 46.0	1.473	2.419	11.3	18.2	7 30	19 20.38	-28 18.2	1.445	2.423	8.3	20.6
8 9	19 12.40	-39 43.7	1.548	2.442	14.1	18.4	8 9	19 11.30	-28 7.7	1.494	2.418	12.6	20.8
8 19	19 7.74	-38 28.7	1.642	2.465	16.8	18.6	8 19	19 5.13	-27 48.0	1.564	2.413	16.3	21.1
<b>36604</b>	2000 <i>QP</i> <sub>142</sub>		7 14.9 299°73'	2°5/13.9 18			<b>258806</b>	2002 <i>LA</i> <sub>61</sub>		7 14.9 210°35'	1°2/15.6 18		
6 10	20 3.50	-25 42.3	1.595	2.470	14.9	19.0	6 10	19 59.21	-15 23.6	2.561	3.404	11.0	20.8
6 20	19 58.97	-26 15.0	1.512	2.455	11.3	18.7	6 20	19 54.62	-15 52.4	2.478	3.402	8.4	20.6
6 30	19 51.71	-26 50.5	1.451	2.440	7.2	18.5	6 30	19 48.47	-16 28.9	2.419	3.400	5.3	20.4
7 10	19 42.45	-27 23.9	1.414	2.425	3.2	18.2	7 10	19 41.26	-17 11.1	2.387	3.397	2.2	20.2
7 20	19 32.27	-27 50.2	1.402	2.411	3.9	18.2	7 20	19 33.61	-17 56.6	2.383	3.395	1.9	20.2
7 30	19 22.56	-28 6.0	1.416	2.396	8.2	18.4	7 30	19 26.24	-18 42.5	2.408	3.392	5.0	20.4
8 9	19 14.62	-28 10.1	1.453	2.382	12.5	18.6	8 9	19 19.84	-19 26.5	2.460	3.389	8.0	20.6
8 19	19 9.37	-28 3.8	1.511	2.368	16.3	18.8	8 19	19 14.97	-20 6.8	2.537	3.386	10.8	20.7
<b>476421</b>	2008 <i>DE</i> <sub>34</sub>		7 14.9 78°85'	2°0/14.3 16			<b>383937</b>	2008 <i>SP</i> <sub>221</sub>		7 14.9 227°76'	1°7/15.5 17		
6 10	20 5.32	-27 29.1	2.161	3.019	12.2	21.3	6 10	20 3.09	-16 3.1	1.999	2.849	13.4	22.3
6 20	19 59.26	-27 33.8	2.103	3.036	9.1	21.1	6 20	19 57.95	-16 7.7	1.915	2.842	10.2	22.0
6 30	19 51.29	-27 36.9	2.068	3.053	5.7	21.0	6 30	19 50.73	-16 20.2	1.853	2.835	6.6	21.8
7 10	19 42.14	-27 35.6	2.060	3.071	2.5	20.8	7 10	19 42.06	-16 39.0	1.817	2.828	2.9	21.6
7 20	19 32.72	-27 27.8	2.080	3.088	2.9	20.8	7 20	19 32.78	-17 2.0	1.808	2.820	2.5	21.5
7 30	19 23.97	-27 12.9	2.127	3.105	6.1	21.1	7 30	19 23.88	-17 26.6	1.827	2.811	6.3	21.7
8 9	19 16.72	-26 51.5	2.201	3.122	9.3	21.3	8 9	19 16.31	-17 50.9	1.871	2.803	10.0	21.9
8 19	19 11.53	-26 25.3	2.298	3.138	12.1	21.5	8 19	19 10.77	-18 13.1	1.938	2.794	13.3	22.1
<b>98258</b>	2000 <i>SG</i> <sub>182</sub>		7 14.9 295°53'	5°2/12.9 18			<b>275699</b>	2000					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>389013</b>	2008 <i>UF</i> <sub>204</sub>		7 14.9 289°31	2°3/14.1	18		<b>43639</b>	2002 <i>EZ</i> <sub>30</sub>		7 14.9 45°29	4°0/16.9	18	
6 10	20 4.50	-26 0.3	1.734	2.604	14.2	21.7	6 10	19 58.95	-8 57.1	2.047	2.883	13.6	18.8
6 20	19 59.61	-26 23.9	1.642	2.582	10.8	21.4	6 20	19 54.63	-8 57.9	1.981	2.893	10.7	18.7
6 30	19 52.08	-26 49.3	1.572	2.560	6.9	21.1	6 30	19 48.54	-9 11.6	1.937	2.904	7.6	18.5
7 10	19 42.60	-27 12.1	1.526	2.538	3.0	20.8	7 10	19 41.31	-9 37.5	1.917	2.914	4.8	18.3
7 20	19 32.19	-27 28.0	1.507	2.516	3.6	20.8	7 20	19 33.68	-10 13.6	1.923	2.925	4.1	18.3
7 30	19 22.13	-27 34.3	1.514	2.494	7.8	21.0	7 30	19 26.51	-10 57.2	1.957	2.936	6.4	18.5
8 9	19 13.69	-27 30.2	1.545	2.471	12.1	21.2	8 9	19 20.56	-11 44.8	2.016	2.948	9.4	18.7
8 19	19 7.82	-27 16.8	1.597	2.449	15.8	21.4	8 19	19 16.40	-12 33.2	2.098	2.959	12.2	18.9
<b>266720</b>	2009 <i>RJ</i>		7 14.9 330°44	0°9/14.7	17		<b>355101</b>	2006 <i>TK</i> <sub>87</sub>		7 14.9 216°52	0°5/15.1	18	
6 10	20 1.22	-22 46.8	1.211	2.103	17.5	20.0	6 10	20 1.75	-19 6.3	2.563	3.410	10.9	22.5
6 20	19 57.83	-22 52.7	1.136	2.087	13.3	19.7	6 20	19 56.53	-19 13.6	2.476	3.403	8.2	22.3
6 30	19 51.27	-23 3.4	1.080	2.073	8.3	19.4	6 30	19 49.67	-19 25.2	2.413	3.396	5.1	22.1
7 10	19 42.38	-23 15.2	1.045	2.059	2.9	19.1	7 10	19 41.70	-19 39.3	2.376	3.389	1.8	21.9
7 20	19 32.44	-23 24.2	1.034	2.046	3.2	19.0	7 20	19 33.27	-19 54.2	2.369	3.381	1.8	21.8
7 30	19 23.11	-23 27.2	1.045	2.035	8.9	19.3	7 30	19 25.15	-20 8.2	2.390	3.373	5.1	22.1
8 9	19 15.95	-23 23.1	1.078	2.024	14.2	19.6	8 9	19 18.07	-20 20.1	2.438	3.365	8.2	22.2
8 19	19 11.99	-23 12.6	1.129	2.014	18.7	19.8	8 19	19 12.59	-20 29.3	2.510	3.356	11.0	22.4
<b>355596</b>	2008 <i>CF</i> <sub>182</sub>		7 14.9 284°10	0°8/15.3	18		<b>412060</b>	2013 <i>EL</i> <sub>40</sub>		7 14.9 53°90	4°6/16.4	17	
6 10	20 0.15	-16 40.6	2.135	2.988	12.5	20.7	6 10	20 4.11	-11 32.7	1.145	2.016	19.7	21.1
6 20	19 55.65	-17 15.1	2.054	2.984	9.5	20.5	6 20	19 59.55	-11 20.8	1.095	2.030	15.4	20.9
6 30	19 49.26	-17 58.4	1.996	2.981	6.0	20.2	6 30	19 52.02	-11 26.7	1.063	2.043	10.5	20.7
7 10	19 41.57	-18 47.6	1.965	2.977	2.2	20.0	7 10	19 42.54	-11 49.2	1.052	2.057	5.9	20.4
7 20	19 33.33	-19 39.4	1.961	2.973	2.0	20.0	7 20	19 32.45	-12 25.2	1.064	2.072	5.0	20.4
7 30	19 25.41	-20 30.3	1.984	2.970	5.8	20.2	7 30	19 23.32	-13 9.9	1.099	2.087	9.0	20.7
8 9	19 18.70	-21 17.4	2.034	2.966	9.3	20.4	8 9	19 16.45	-13 58.0	1.156	2.102	13.5	21.0
8 19	19 13.82	-21 58.7	2.108	2.962	12.4	20.6	8 19	19 12.61	-14 44.9	1.233	2.117	17.6	21.3
<b>113038</b>	2002 <i>RG</i> <sub>49</sub>		7 14.9 309°41	3°7/16.2	18		<b>275042</b>	2009 <i>UL</i> <sub>68</sub>		7 14.9 174°08	11°6/ 8.2	17	
6 10	19 59.97	-12 3.9	1.337	2.206	17.6	19.7	6 10	20 12.53	-47 6.8	1.750	2.587	15.5	20.1
6 20	19 56.65	-12 10.8	1.249	2.184	13.9	19.4	6 20	20 6.59	-49 14.2	1.698	2.587	13.5	20.0
6 30	19 50.49	-12 35.0	1.180	2.162	9.5	19.1	6 30	19 56.89	-51 7.7	1.668	2.587	12.0	19.9
7 10	19 42.14	-13 16.0	1.132	2.140	5.1	18.7	7 10	19 44.32	-52 36.1	1.661	2.587	11.6	19.9
7 20	19 32.64	-14 10.8	1.108	2.118	4.3	18.6	7 20	19 30.44	-53 31.0	1.677	2.588	12.4	19.9
7 30	19 23.41	-15 14.5	1.108	2.097	8.6	18.8	7 30	19 17.30	-53 49.5	1.715	2.588	14.2	20.0
8 9	19 15.90	-16 21.2	1.130	2.077	13.6	19.0	8 9	19 6.78	-53 35.1	1.773	2.588	16.2	20.2
8 19	19 11.21	-17 25.6	1.172	2.057	18.2	19.3	8 19	19 0.06	-52 54.6	1.848	2.588	18.2	20.3
<b>183815</b>	2004 <i>BH</i> <sub>70</sub>		7 14.9 261°71	0°5/14.7	18		<b>279431</b>	2010 <i>NL</i> <sub>51</sub>		7 14.9 310°99	4°1/13.5	18	
6 10	20 4.41	-20 13.4	1.624	2.492	15.1	20.7	6 10	20 3.66	-31 45.1	1.956	2.822	13.0	20.4
6 20	19 59.58	-20 50.4	1.539	2.478	11.4	20.4	6 20	19 58.71	-32 10.4	1.870	2.805	10.0	20.1
6 30	19 52.08	-21 36.0	1.475	2.464	7.1	20.1	6 30	19 51.37	-32 32.3	1.807	2.788	6.8	19.9
7 10	19 42.61	-22 26.1	1.436	2.450	2.4	19.8	7 10	19 42.33	-32 46.2	1.769	2.772	4.3	19.7
7 20	19 32.20	-23 15.7	1.423	2.435	2.7	19.8	7 20	19 32.58	-32 48.2	1.757	2.755	4.9	19.7
7 30	19 22.14	-24 0.0	1.436	2.420	7.6	20.1	7 30	19 23.29	-32 36.6	1.771	2.739	7.9	19.9
8 9	19 13.74	-24 36.1	1.473	2.405	12.1	20.3	8 9	19 15.58	-32 12.0	1.809	2.724	11.3	20.1
8 19	19 7.93	-25 3.0	1.532	2.390	16.1	20.5	8 19	19 10.23	-31 36.9	1.870	2.708	14.5	20.2
<b>128610</b>	Stasihabenicht		7 14.9 212°22	4°6/16.7	18		<b>175193</b>	2005 <i>EK</i> <sub>243</sub>		7 14.9 107°92	3°9/13.3	17	
6 10	20 0.45	-7 8.1	2.612	3.424	11.7	20.1	6 10	20 6.85	-27 18.3	1.481	2.356	15.8	20.0
6 20	19 55.44	-6 31.9	2.527	3.421	9.4	19.9	6 20	20 1.53	-28 23.7	1.421	2.362	12.0	19.8
6 30	19 48.93	-6 5.2	2.465	3.417	7.1	19.7	6 30	19 53.28	-29 31.0	1.382	2.368	7.7	19.5
7 10	19 41.42	-5 48.7	2.429	3.413	5.1	19.6	7 10	19 42.99	-30 32.9	1.367	2.374	4.3	19.3
7 20	19 33.52	-5 42.8	2.420	3.408	4.7	19.6	7 20	19 31.93	-31 22.5	1.377	2.380	5.2	19.4
7 30	19 25.92	-5 46.6	2.440	3.404	6.3	19.7	7 30	19 21.62	-31 55.3	1.413	2.386	9.1	19.6
8 9	19 19.28	-5 58.7	2.485	3.399	8.7	19.8	8 9	19 13.40	-32 11.0	1.472	2.391	13.1	19.9
8 19	19 14.11	-6 17.0	2.555	3.394	11.0	20.0	8 19	19 8.15	-32 11.7	1.551	2.397	16.6	20.1
<b>376187</b>	2011 <i>CT</i> <sub>51</sub>		7 14.9 265°48	1°3/14.5	17		<b>439707</b>	2014 <i>LT</i> <sub>4</sub>		7 14.9 20°10	9°0/17.8	15	
6 10	20 5.52	-23 49.0	1.651	2.520	14.8	21.8	6 10	19 59.20	-1 11.3	1.698	2.514	16.8	20.5
6 20	20 0.33	-24 5.4	1.568	2.508	11.2	21.6	6 20	19 55.07	+0 3.8	1.639	2.523	14.2	20.4
6 30	19 52.48	-24 24.9	1.508	2.496	7.0	21.3	6 30	19 48.92	+1 0.5	1.600	2.532	11.5	20.2
7 10	19 42.72	-24 43.6	1.471	2.484	2.6	21.0	7 10	19 41.46	+1 35.5	1.583	2.543	9.6	20.2
7 20	19 32.13	-24 57.8	1.461	2.472	3.0	21.0	7 20	19 33.56	+1 47.3	1.589	2.554	9.0	20.1
7 30	19 22.03	-25 4.7	1.477	2.460	7.6	21.2	7 30	19 26.22	+1 36.9	1.619	2.566	10.2	20.2
8 9	19 13.67	-25 3.7	1.517	2.447	12.0	21.5	8 9	19 20.32	+1 8.1	1.671	2.579	12.5	20.4
8 19	19 7.94	-24 55.5	1.578	2.435	15.8	21.7	8 19	19 16.49	+0 25.8	1.744	2.593	14.9	20.6
<b>371526</b>	2006 <i>UV</i> <sub>213</sub>		7 14.9 312°78	2°8/15.5	17		<b>499124</b>	2009 <i>KA</i> <sub>10</sub>		7 14.9 37°63	3°6/13.5	17	
6 10	20 2.54	-16 37.0	1.327	2.202	17.3	20.7	6 10	20 4.61	-25 40.1	1.293	2.179	17.0	20.5
6 20	19 58.52	-16 9.8	1.245	2.185	13.4	20.4	6 20	20 0.14	-26 46.5	1.236	2.184	12.8	20.2
6 30	19 51.58	-15 51.0	1.182	2.169	8.8	20.1	6 30	19 52.54	-27 57.3	1.199	2.189	8.1	20.0
7 10	19 42.47	-15 40.1	1.142	2.152	4.1	19.8	7 10	19 42.77	-29 4.5	1.185	2.195	4.1	19.7
7 20	19 32.36	-15 36.1	1.126	2.137	3.8	19.8	7 20	19 32.19	-30 0.4	1.195	2.201	5.1	19.8
7 30	19 22.74	-15 37.4	1.133	2.122	8.6	20.0	7 30	19 22.41	-30 39.9	1.230	2.208	9.5	20.1
8 9	19 15.02	-15 42.2	1.163	2.107	13.5	20.2	8 9	19 14.89	-31 1.8	1.286	2.215	13.8	20.4
8 19	19 10.21	-15 48.7	1.212	2.093	18.0	20.5	8 19	19 10.52	-31 7.8	1.362	2.222	17.7	20.6
<b>411675</b>	2011 <i>WG</i> <sub>116</sub>		7 14.9 298°84	0°1/14.9	17		<b>263698</b>	2008 <i>HO</i> <sub>11</sub>		7 14.9 12			

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>190572</b>	2000 <i>SK</i> <sub>209</sub>		7 14.9 251°45	2°6/13.7	18		<b>75465</b>	1999 <i>XN</i> <sub>159</sub>		7 14.9 245°37	1°4/15.4	18	
6 10	20 5.36	-26 17.0	2.066	2.926	12.6	20.5	6 10	20 4.98	-16 52.4	1.793	2.648	14.5	20.1
6 20	19 59.91	-27 1.8	1.974	2.908	9.6	20.2	6 20	19 59.72	-17 1.2	1.704	2.634	11.1	19.8
6 30	19 52.12	-27 48.9	1.905	2.890	6.1	20.0	6 30	19 52.06	-17 18.5	1.636	2.620	7.1	19.6
7 10	19 42.63	-28 33.9	1.862	2.871	3.0	19.7	7 10	19 42.63	-17 42.4	1.593	2.605	2.9	19.3
7 20	19 32.30	-29 12.1	1.846	2.852	3.7	19.8	7 20	19 32.39	-18 10.0	1.577	2.589	2.6	19.2
7 30	19 22.25	-29 40.1	1.858	2.832	7.2	19.9	7 30	19 22.49	-18 38.5	1.588	2.573	6.9	19.5
8 9	19 13.58	-29 56.6	1.896	2.812	10.8	20.1	8 9	19 14.06	-19 5.2	1.624	2.557	11.2	19.7
8 19	19 7.11	-30 2.2	1.956	2.791	14.1	20.3	8 19	19 7.95	-19 28.7	1.682	2.540	14.9	19.9
<b>230354</b>	2002 <i>CH</i> <sub>310</sub>		7 14.9 353°44	5°3/14.1	16		<b>508413</b>	2016 <i>JD</i> <sub>8</sub>		7 14.9 29°92	1°1/15.4	17	
6 10	20 9.88	-34 45.6	1.509	2.378	15.9	19.5	6 10	20 0.17	-15 41.9	1.035	1.928	19.7	20.4
6 20	20 3.78	-34 46.5	1.441	2.375	12.4	19.3	6 20	19 56.91	-16 27.1	0.992	1.942	14.9	20.2
6 30	19 54.61	-34 38.1	1.394	2.373	8.6	19.1	6 30	19 50.54	-17 28.8	0.967	1.958	9.3	19.9
7 10	19 43.42	-34 14.8	1.371	2.372	5.6	18.9	7 10	19 42.11	-18 41.3	0.962	1.975	3.5	19.6
7 20	19 31.62	-33 33.5	1.372	2.370	6.0	18.9	7 20	19 33.05	-19 56.7	0.980	1.994	3.0	19.7
7 30	19 20.84	-32 35.1	1.399	2.370	9.3	19.1	7 30	19 24.99	-21 7.6	1.021	2.013	8.6	20.1
8 9	19 12.41	-31 23.6	1.449	2.370	13.2	19.3	8 9	19 19.30	-22 8.4	1.083	2.033	13.7	20.4
8 19	19 7.13	-30 4.7	1.520	2.370	16.7	19.6	8 19	19 16.74	-22 56.7	1.164	2.054	17.9	20.7
<b>490695</b>	2010 <i>OC</i> <sub>24</sub>		7 14.9 335°83	6°9/15.9	15		<b>129756</b>	1999 <i>EG</i> <sub>13</sub>		7 14.9 352°43	0°7/15.1	17	
6 10	19 55.35	-10 34.5	1.296	2.170	17.7	21.1	6 10	20 2.80	-18 23.5	1.199	2.083	18.1	19.6
6 20	19 53.28	-9 27.9	1.197	2.131	14.4	20.7	6 20	19 58.86	-18 41.0	1.134	2.081	13.8	19.4
6 30	19 48.49	-8 31.1	1.117	2.092	10.8	20.4	6 30	19 51.83	-19 9.6	1.088	2.079	8.7	19.1
7 10	19 41.54	-7 47.8	1.058	2.056	7.6	20.1	7 10	19 42.60	-19 45.7	1.064	2.077	3.1	18.7
7 20	19 33.39	-7 21.0	1.021	2.020	7.3	20.0	7 20	19 32.47	-20 24.3	1.063	2.076	2.9	18.7
7 30	19 25.41	-7 12.0	1.005	1.987	10.5	20.1	7 30	19 23.06	-21 0.7	1.086	2.076	8.6	19.1
8 9	19 19.02	-7 19.5	1.010	1.955	15.0	20.2	8 9	19 15.84	-21 31.4	1.130	2.076	13.7	19.3
8 19	19 15.38	-7 40.1	1.033	1.926	19.4	20.4	8 19	19 11.74	-21 54.9	1.194	2.076	18.1	19.6
<b>447189</b>	2005 <i>SF</i> <sub>114</sub>		7 14.9 207°45	3°6/16.6	18		<b>444641</b>	2006 <i>XU</i> <sub>37</sub>		7 14.9 227°24	0°3/14.7	18	
6 10	19 59.75	-9 36.3	2.404	3.231	12.1	21.7	6 10	20 0.97	-20 34.7	2.403	3.256	11.3	21.8
6 20	19 55.08	-9 29.6	2.321	3.229	9.6	21.5	6 20	19 56.12	-21 4.7	2.319	3.251	8.5	21.6
6 30	19 48.80	-9 33.2	2.262	3.227	6.8	21.3	6 30	19 49.52	-21 39.5	2.260	3.246	5.2	21.4
7 10	19 41.44	-9 46.9	2.228	3.225	4.3	21.2	7 10	19 41.72	-22 16.4	2.227	3.240	1.7	21.1
7 20	19 33.64	-10 9.3	2.221	3.222	3.8	21.1	7 20	19 33.40	-22 52.5	2.222	3.234	1.9	21.1
7 30	19 26.17	-10 38.9	2.242	3.219	5.9	21.3	7 30	19 25.40	-23 25.2	2.246	3.228	5.4	21.3
8 9	19 19.72	-11 12.9	2.290	3.216	8.7	21.4	8 9	19 18.49	-23 52.7	2.296	3.222	8.7	21.5
8 19	19 14.86	-11 49.2	2.361	3.213	11.4	21.6	8 19	19 13.29	-24 14.3	2.370	3.216	11.6	21.7
<b>335768</b>	2007 <i>EH</i> <sub>150</sub>		7 14.9 11°46	1°2/15.3	17		<b>28046</b>	1998 <i>HB</i> <sub>14</sub>		7 14.9 105°54	3°7/13.2	18	
6 10	19 59.07	-16 51.1	1.228	2.114	17.7	20.5	6 10	20 7.02	-25 49.1	1.519	2.392	15.6	17.7
6 20	19 55.86	-17 15.0	1.170	2.117	13.4	20.2	6 20	20 1.58	-27 9.9	1.461	2.402	11.8	17.4
6 30	19 49.83	-17 51.9	1.130	2.121	8.5	20.0	6 30	19 53.31	-28 34.5	1.425	2.412	7.5	17.2
7 10	19 41.87	-18 37.9	1.113	2.126	3.2	19.7	7 10	19 43.05	-29 55.0	1.414	2.422	4.0	17.0
7 20	19 33.20	-19 28.2	1.118	2.132	2.8	19.7	7 20	19 32.05	-31 3.9	1.429	2.432	5.0	17.1
7 30	19 25.25	-20 17.2	1.148	2.139	8.0	20.0	7 30	19 21.75	-31 55.8	1.469	2.442	8.9	17.4
8 9	19 19.33	-21 0.9	1.199	2.147	12.9	20.3	8 9	19 13.47	-32 29.6	1.534	2.451	12.8	17.6
8 19	19 16.25	-21 36.7	1.270	2.156	17.0	20.6	8 19	19 8.08	-32 46.7	1.619	2.460	16.2	17.9
<b>300997</b>	2008 <i>GM</i> <sub>23</sub>		7 14.9 229°29	2°6/16.3	18		<b>337190</b>	1999 <i>VU</i> <sub>158</sub>		7 14.9 262°50	0°8/15.2	18	
6 10	20 0.08	-11 42.9	2.611	3.441	11.2	21.2	6 10	20 4.05	-18 55.5	2.117	2.968	12.7	21.5
6 20	19 55.28	-11 50.1	2.519	3.431	8.7	21.0	6 20	19 58.75	-18 57.8	2.018	2.947	9.7	21.3
6 30	19 48.92	-12 6.2	2.450	3.421	6.0	20.8	6 30	19 51.33	-19 5.2	1.941	2.925	6.1	21.0
7 10	19 41.49	-12 30.3	2.408	3.411	3.3	20.6	7 10	19 42.38	-19 16.1	1.891	2.903	2.3	20.8
7 20	19 33.59	-13 1.0	2.394	3.400	2.9	20.6	7 20	19 32.69	-19 28.4	1.868	2.881	2.1	20.7
7 30	19 25.92	-13 36.2	2.408	3.389	5.3	20.7	7 30	19 23.26	-19 39.9	1.873	2.857	6.2	20.9
8 9	19 19.19	-14 13.6	2.450	3.377	8.2	20.9	8 9	19 15.05	-19 49.5	1.905	2.834	10.0	21.1
8 19	19 13.94	-14 51.1	2.516	3.365	10.9	21.0	8 19	19 8.84	-19 56.4	1.959	2.810	13.4	21.3
<b>299757</b>	2006 <i>RR</i> <sub>120</sub>		7 14.9 211°97	2°8/16.4	18		<b>192131</b>	2006 <i>DD</i> <sub>116</sub>		7 14.9 284°72	1°2/15.4	18	R
6 10	20 0.74	-11 9.9	2.642	3.468	11.2	22.2	6 10	20 2.12	-17 1.6	1.779	2.639	14.3	19.8
6 20	19 55.72	-11 10.5	2.552	3.462	8.8	22.0	6 20	19 57.63	-17 15.7	1.688	2.622	10.9	19.5
6 30	19 49.17	-11 19.9	2.486	3.455	6.0	21.8	6 30	19 50.79	-17 39.0	1.619	2.604	7.0	19.2
7 10	19 41.57	-11 37.4	2.446	3.447	3.5	21.7	7 10	19 42.24	-18 9.2	1.574	2.586	2.8	18.9
7 20	19 33.52	-12 1.8	2.435	3.439	3.1	21.6	7 20	19 32.85	-18 43.3	1.555	2.568	2.5	18.9
7 30	19 25.73	-12 31.2	2.452	3.430	5.3	21.8	7 30	19 23.77	-19 18.1	1.563	2.550	6.9	19.1
8 9	19 18.88	-13 3.5	2.496	3.421	8.1	21.9	8 9	19 16.10	-19 50.8	1.596	2.532	11.1	19.3
8 19	19 13.51	-13 36.7	2.565	3.412	10.8	22.1	8 19	19 10.69	-20 19.4	1.651	2.514	14.9	19.5
<b>96344</b>	Scottweaver		7 14.9 344°57	3°0/15.6	18		<b>21161</b>	Yamashitaruo		7 14.9 269°21	6°2/11.7	18	
6 10	19 59.44	-16 45.2	0.999	1.896	19.9	18.9	6 10	20 4.86	-38 43.8	2.349	3.197	11.7	17.9
6 20	19 56.77	-16 18.2	0.934	1.886	15.4	18.6	6 20	19 59.40	-39 42.8	2.278	3.193	9.4	17.7
6 30	19 50.74	-16 2.3	0.886	1.877	10.1	18.3	6 30	19 51.72	-40 35.2	2.230	3.188	7.3	17.6
7 10	19 42.27	-15 57.3	0.858	1.869	4.6	17.9	7 10	19 42.49	-41 15.3	2.208	3.184	6.2	17.5
7 20	19 32.76	-16 1.3	0.851	1.863	4.1	17.9	7 20	19 32.65	-41 39.0	2.213	3.179	6.8	17.5
7 30	19 23.99	-16 11.8	0.865	1.858	9.6	18.2	7 30	19 23.28	-41 44.3	2.243	3.175	8.7	17.7
8 9	19 17.61	-16 25.6	0.899	1.854	15.1	18.4	8 9	19 15.39	-41 32.0	2.298	3.170	11.0	17.8
8 19	19 14.64	-16 40.0	0.950	1.852	19.9	18.7	8 19	19 9.73	-41 5.0	2.373	3.166	13.2	17.9
<b>309408</b>	2007 <i>TN</i> <sub>280</sub>		7 14.9 7°98	9°4/12.9	16		<b>361096</b>	2006 <i>DW</i> <sub>14</sub>		7 14.9 258°88			

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>195174</b>	2002 <i>CF</i> <sub>244</sub>		7 14.9 91°07'	6°7/18.2	18		<b>208616</b>	2002 <i>DR</i> <sub>15</sub>		7 14.9 30°33'	1°0/14.8	17	
6 10	20 0.87	- 2 49.7	1.805	2.621	16.0	19.7	6 10	20 5.95	-24 2.7	1.102	1.994	18.9	19.5
6 20	19 56.35	- 2 38.7	1.733	2.625	13.1	19.6	6 20	20 1.26	-23 51.9	1.051	2.002	14.2	19.2
6 30	19 49.79	- 2 46.7	1.682	2.628	10.1	19.4	6 30	19 53.25	-23 43.2	1.018	2.011	8.8	19.0
7 10	19 41.84	- 3 14.5	1.653	2.632	7.5	19.2	7 10	19 43.07	-23 33.0	1.007	2.021	3.0	18.7
7 20	19 33.35	- 4 0.9	1.649	2.636	6.7	19.2	7 20	19 32.29	-23 18.4	1.019	2.032	3.3	18.7
7 30	19 25.31	- 5 2.4	1.671	2.639	8.4	19.3	7 30	19 22.65	-22 58.5	1.054	2.044	8.9	19.1
8 9	19 18.64	- 6 14.0	1.718	2.643	11.2	19.5	8 9	19 15.59	-22 34.1	1.111	2.056	13.9	19.4
8 19	19 14.01	- 7 30.1	1.787	2.646	14.1	19.7	8 19	19 11.87	-22 6.9	1.186	2.069	18.2	19.7
<b>215164</b>	2000 <i>CN</i> <sub>15</sub>		7 14.9 105°18'	0°7/15.1	18		<b>443545</b>	2014 <i>KK</i> <sub>10</sub>		7 14.9 356°09'	0°3/15.0	18	
6 10	20 6.69	-20 13.6	2.134	2.983	12.7	20.3	6 10	19 58.49	-19 50.2	1.638	2.514	14.5	20.4
6 20	20 0.26	-19 54.8	2.072	3.000	9.5	20.1	6 20	19 54.92	-20 1.6	1.566	2.510	11.0	20.2
6 30	19 51.95	-19 39.0	2.034	3.018	5.9	19.9	6 30	19 49.08	-20 19.5	1.516	2.506	6.8	19.9
7 10	19 42.50	-19 24.7	2.023	3.035	2.2	19.7	7 10	19 41.67	-20 41.5	1.490	2.503	2.3	19.6
7 20	19 32.76	-19 10.9	2.040	3.052	2.0	19.7	7 20	19 33.65	-21 4.3	1.488	2.502	2.3	19.6
7 30	19 23.67	-18 57.0	2.085	3.068	5.7	20.0	7 30	19 26.14	-21 25.2	1.513	2.501	6.8	19.9
8 9	19 16.04	-18 42.9	2.157	3.084	9.1	20.2	8 9	19 20.19	-21 42.1	1.560	2.501	11.0	20.1
8 19	19 10.42	-18 28.6	2.253	3.100	12.0	20.4	8 19	19 16.53	-21 54.0	1.630	2.502	14.6	20.4
<b>249712</b>	2000 <i>QU</i> <sub>68</sub>		7 14.9 301°99'	6°1/16.4	17		<b>190613</b>	2000 <i>VJ</i> <sub>49</sub>		7 14.9 219°02'	1°5/15.5	18	
6 10	20 2.17	- 9 53.5	1.307	2.168	18.4	20.4	6 10	20 4.08	-16 23.2	2.332	3.173	12.0	20.4
6 20	19 58.28	- 9 13.2	1.224	2.151	14.8	20.1	6 20	19 58.48	-16 23.3	2.241	3.164	9.2	20.2
6 30	19 51.50	- 8 47.8	1.161	2.134	10.7	19.8	6 30	19 51.03	-16 29.5	2.174	3.154	5.9	19.9
7 10	19 42.55	- 8 39.2	1.119	2.118	7.1	19.6	7 10	19 42.29	-16 40.6	2.133	3.143	2.6	19.7
7 20	19 32.55	- 8 48.0	1.099	2.101	6.4	19.5	7 20	19 33.00	-16 54.9	2.120	3.131	2.3	19.7
7 30	19 22.95	- 9 12.4	1.103	2.085	9.8	19.6	7 30	19 24.01	-17 10.7	2.137	3.119	5.6	19.9
8 9	19 15.18	- 9 48.3	1.129	2.070	14.2	19.8	8 9	19 16.16	-17 26.3	2.180	3.107	9.0	20.1
8 19	19 10.27	-10 31.1	1.174	2.055	18.5	20.1	8 19	19 10.09	-17 40.8	2.247	3.094	12.1	20.2
<b>404750</b>	2014 <i>JV</i> <sub>33</sub>		7 14.9 344°33'	9°8/18.9	17		<b>509874</b>	2009 <i>BT</i> <sub>6</sub>		7 14.9 241°03'	1°5/15.5	18	
6 10	19 56.28	+ 2 19.5	1.742	2.545	17.0	20.6	6 10	20 3.83	-16 59.0	2.290	3.133	12.1	21.8
6 20	19 53.09	+ 3 10.0	1.664	2.535	14.7	20.4	6 20	19 58.35	-16 51.4	2.195	3.119	9.3	21.6
6 30	19 47.88	+ 3 39.5	1.604	2.525	12.3	20.3	6 30	19 50.99	-16 49.2	2.123	3.104	6.0	21.4
7 10	19 41.25	+ 3 44.3	1.565	2.516	10.4	20.1	7 10	19 42.29	-16 51.4	2.078	3.088	2.6	21.1
7 20	19 33.99	+ 3 23.3	1.549	2.508	9.8	20.1	7 20	19 32.99	-16 56.5	2.061	3.072	2.3	21.1
7 30	19 27.09	+ 2 37.8	1.555	2.501	10.8	20.1	7 30	19 23.99	-17 3.2	2.073	3.056	5.8	21.3
8 9	19 21.47	+ 1 32.5	1.584	2.494	12.9	20.2	8 9	19 16.14	-17 10.2	2.111	3.039	9.2	21.5
8 19	19 17.85	+ 0 13.6	1.634	2.489	15.4	20.4	8 19	19 10.10	-17 16.7	2.173	3.022	12.4	21.6
<b>33287</b>	1998 <i>KE</i> <sub>1</sub>		7 14.9 342°85'	5°5/12.2	18		<b>255473</b>	2005 <i>YW</i> <sub>158</sub>		7 14.9 167°17'	2°1/15.7	18	
6 10	20 2.98	-33 38.0	1.949	2.815	13.0	17.7	6 10	20 1.36	-15 19.8	2.499	3.339	11.3	20.2
6 20	19 58.29	-34 46.1	1.880	2.812	10.1	17.5	6 20	19 56.21	-14 58.4	2.419	3.340	8.7	20.0
6 30	19 51.19	-35 51.2	1.833	2.808	7.3	17.3	6 30	19 49.49	-14 42.6	2.364	3.341	5.7	19.8
7 10	19 42.38	-36 46.7	1.812	2.805	5.6	17.2	7 10	19 41.74	-14 31.8	2.335	3.342	2.9	19.7
7 20	19 32.86	-37 27.4	1.817	2.802	6.3	17.2	7 20	19 33.61	-14 25.3	2.334	3.342	2.6	19.6
7 30	19 23.84	-37 50.1	1.847	2.800	8.9	17.4	7 30	19 25.87	-14 22.5	2.361	3.343	5.3	19.8
8 9	19 16.42	-37 54.9	1.902	2.798	11.8	17.5	8 9	19 19.19	-14 22.2	2.416	3.343	8.3	20.0
8 19	19 11.41	-37 44.0	1.977	2.796	14.5	17.7	8 19	19 14.11	-14 23.6	2.494	3.344	10.9	20.2
<b>376906</b>	2001 <i>YE</i> <sub>53</sub>		7 14.9 153°06'	1°5/15.3	18		<b>63740</b>	2001 <i>QO</i> <sub>251</sub>		7 14.9 34°59'	6°1/17.2	18	
6 10	20 6.20	-18 23.6	1.867	2.720	14.0	20.2	6 10	20 1.72	- 7 5.0	1.466	2.312	17.6	19.3
6 20	20 0.30	-18 2.6	1.794	2.723	10.7	20.0	6 20	19 57.40	- 6 44.2	1.401	2.315	14.1	19.1
6 30	19 52.20	-17 46.5	1.744	2.727	6.8	19.8	6 30	19 50.63	- 6 41.6	1.354	2.319	10.4	18.8
7 10	19 42.66	-17 34.0	1.719	2.730	2.8	19.5	7 10	19 42.20	- 6 58.0	1.330	2.323	7.1	18.7
7 20	19 32.63	-17 24.0	1.722	2.733	2.5	19.5	7 20	19 33.13	- 7 31.9	1.330	2.328	6.3	18.6
7 30	19 23.19	-17 15.7	1.752	2.736	6.5	19.8	7 30	19 24.65	- 8 19.7	1.354	2.333	8.7	18.8
8 9	19 15.31	-17 8.2	1.807	2.739	10.3	20.0	8 9	19 17.87	- 9 16.4	1.402	2.338	12.4	19.0
8 19	19 9.66	-17 1.2	1.886	2.741	13.7	20.3	8 19	19 13.56	-10 16.6	1.470	2.343	15.9	19.2
<b>96748</b>	1999 <i>RE</i> <sub>4</sub>		7 14.9 332°92'	8°8/18.9	18		<b>106369</b>	2000 <i>VE</i> <sub>10</sub>		7 14.9 143°40'	3°6/13.1	18	
6 10	19 57.07	- 0 33.7	1.428	2.258	18.7	18.4	6 10	20 3.12	-30 19.1	2.283	3.142	11.6	19.8
6 20	19 54.15	- 0 15.9	1.347	2.244	15.8	18.2	6 20	19 57.92	-31 7.1	2.212	3.144	8.8	19.6
6 30	19 48.79	- 0 23.6	1.285	2.230	12.7	17.9	6 30	19 50.73	-31 53.6	2.166	3.146	5.9	19.4
7 10	19 41.62	- 0 59.6	1.242	2.218	9.9	17.7	7 10	19 42.19	-32 34.0	2.146	3.148	3.7	19.3
7 20	19 33.61	- 2 3.6	1.222	2.206	8.9	17.7	7 20	19 33.13	-33 4.6	2.153	3.150	4.4	19.3
7 30	19 25.95	- 3 31.6	1.225	2.195	10.4	17.7	7 30	19 24.51	-33 23.1	2.187	3.151	7.0	19.5
8 9	19 19.83	- 5 16.0	1.250	2.185	13.6	17.9	8 9	19 17.24	-33 29.2	2.247	3.153	9.8	19.7
8 19	19 16.16	- 7 7.9	1.295	2.176	17.1	18.1	8 19	19 11.96	-33 24.2	2.330	3.154	12.4	19.9
<b>376951</b>	2002 <i>EG</i> <sub>119</sub>		7 14.9 180°08'	1°5/15.6	17		<b>90648</b>	1030 <i>T</i> <sub>-3</sub>		7 14.9 344°63'	10°9/19.3	18	
6 10	20 4.22	-15 49.9	2.403	3.240	11.8	22.5	6 10	19 58.77	+ 7 47.5	2.085	2.837	16.1	19.1
6 20	19 58.44	-15 54.8	2.322	3.242	9.0	22.3	6 20	19 54.62	+ 9 2.0	2.011	2.834	14.3	19.0
6 30	19 50.91	-16 6.2	2.264	3.243	5.8	22.1	6 30	19 48.69	+ 9 56.3	1.955	2.830	12.6	18.9
7 10	19 42.22	-16 22.7	2.234	3.244	2.6	21.9	7 10	19 41.52	+10 26.3	1.921	2.827	11.4	18.8
7 20	19 33.07	-16 42.5	2.232	3.243	2.2	21.9	7 20	19 33.84	+10 30.1	1.909	2.824	10.9	18.7
7 30	19 24.29	-17 3.5	2.260	3.242	5.4	22.1	7 30	19 26.48	+10 7.9	1.920	2.822	11.5	18.8
8 9	19 16.66	-17 24.3	2.314	3.240	8.6	22.3	8 9	19 20.27	+ 9 23.0	1.953	2.820	12.9	18.9
8 19	19 10.76	-17 43.5	2.393	3.238	11.5	22.5	8 19	19 15.82	+ 8 20.7	2.006	2.818	14.6	19.0
<b>461511</b> </													

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>514819</b>	2007 VY <sub>1</sub>		7 14.9 258°41	2°4/15.8	18		<b>312595</b>	2009 KJ <sub>6</sub>		7 14.9 341°57	0°9/14.6	18	
6 10	20 2.99	-14 48.2	2.217	3.058	12.5	21.9	6 10	20 0.41	-22 6.3	1.817	2.688	13.6	20.4
6 20	19 57.82	-14 34.9	2.119	3.040	9.7	21.7	6 20	19 56.27	-22 35.3	1.741	2.682	10.2	20.2
6 30	19 50.72	-14 28.5	2.045	3.022	6.5	21.4	6 30	19 49.91	-23 9.4	1.687	2.677	6.3	20.0
7 10	19 42.24	-14 28.4	1.996	3.003	3.3	21.2	7 10	19 42.01	-23 45.0	1.658	2.672	2.2	19.7
7 20	19 33.13	-14 33.6	1.976	2.984	2.9	21.2	7 20	19 33.48	-24 18.2	1.655	2.667	2.6	19.7
7 30	19 24.28	-14 42.7	1.983	2.965	6.1	21.3	7 30	19 25.38	-24 46.0	1.678	2.663	6.7	20.0
8 9	19 16.56	-14 54.2	2.016	2.945	9.6	21.5	8 9	19 18.75	-25 6.5	1.726	2.659	10.6	20.2
8 19	19 10.68	-15 6.7	2.073	2.925	12.7	21.7	8 19	19 14.32	-25 19.3	1.796	2.656	14.0	20.4
<b>510856</b>	2013 CM <sub>75</sub>		7 14.9 180°16	1°3/14.4	18		<b>481178</b>	2005 UM <sub>267</sub>		7 14.9 296°16	4°1/12.8	18	
6 10	20 3.56	-25 23.8	2.428	3.283	11.1	21.8	6 10	20 2.62	-30 57.2	2.182	3.044	11.9	21.0
6 20	19 58.01	-25 32.0	2.351	3.283	8.4	21.6	6 20	19 57.77	-31 55.3	2.106	3.039	9.1	20.8
6 30	19 50.67	-25 40.5	2.298	3.283	5.2	21.4	6 30	19 50.78	-32 52.4	2.054	3.033	6.3	20.7
7 10	19 42.17	-25 46.6	2.272	3.283	2.0	21.2	7 10	19 42.30	-33 43.1	2.028	3.028	4.2	20.5
7 20	19 33.25	-25 48.4	2.273	3.283	2.4	21.2	7 20	19 33.18	-34 23.0	2.029	3.023	4.9	20.6
7 30	19 24.78	-25 44.5	2.304	3.283	5.6	21.4	7 30	19 24.45	-34 49.1	2.057	3.017	7.6	20.7
8 9	19 17.52	-25 35.0	2.361	3.282	8.7	21.6	8 9	19 17.08	-35 0.9	2.109	3.012	10.5	20.9
8 19	19 12.07	-25 20.6	2.442	3.282	11.4	21.8	8 19	19 11.81	-34 59.7	2.184	3.007	13.2	21.1
<b>515069</b>	2010 OG <sub>32</sub>		7 14.9 302°05	5°7/17.6	18		<b>247466</b>	2002 JG <sub>6</sub>		7 14.9 62°63	4°4/12.2	18	
6 10	19 58.47	-4 37.4	2.095	2.914	14.0	21.2	6 10	20 3.11	-30 51.4	2.199	3.060	11.9	20.0
6 20	19 54.52	-4 26.7	1.999	2.894	11.5	21.0	6 20	19 58.07	-32 16.9	2.138	3.070	9.1	19.8
6 30	19 48.72	-4 31.3	1.924	2.875	8.8	20.8	6 30	19 50.93	-33 41.4	2.102	3.080	6.3	19.6
7 10	19 41.59	-4 52.2	1.873	2.856	6.4	20.6	7 10	19 42.34	-34 58.7	2.093	3.090	4.5	19.5
7 20	19 33.80	-5 28.8	1.847	2.837	5.8	20.6	7 20	19 33.16	-36 3.6	2.111	3.100	5.3	19.6
7 30	19 26.23	-6 18.9	1.847	2.818	7.5	20.6	7 30	19 24.40	-36 52.5	2.157	3.110	7.8	19.8
8 9	19 19.73	-7 18.7	1.873	2.799	10.3	20.8	8 9	19 17.04	-37 24.6	2.227	3.120	10.5	20.0
8 19	19 14.98	-8 24.1	1.922	2.780	13.3	20.9	8 19	19 11.75	-37 41.3	2.320	3.130	12.9	20.2
<b>238662</b>	2005 EN <sub>128</sub>		7 14.9 327°03	1°3/15.4	18		<b>125697</b>	2001 XJ <sub>92</sub>		7 14.9 159°72	0°8/15.2	18	
6 10	20 1.53	-17 28.2	1.741	2.604	14.4	20.5	6 10	20 4.85	-18 36.1	1.878	2.733	13.9	20.9
6 20	19 57.10	-17 31.0	1.663	2.599	11.0	20.3	6 20	19 59.37	-18 43.4	1.805	2.737	10.5	20.7
6 30	19 50.41	-17 41.7	1.608	2.593	7.0	20.0	6 30	19 51.72	-18 57.0	1.755	2.740	6.6	20.5
7 10	19 42.16	-17 58.2	1.576	2.588	2.8	19.7	7 10	19 42.59	-19 14.6	1.730	2.743	2.4	20.2
7 20	19 33.26	-18 18.1	1.571	2.583	2.5	19.7	7 20	19 32.93	-19 33.4	1.732	2.745	2.2	20.2
7 30	19 24.83	-18 38.9	1.591	2.578	6.7	20.0	7 30	19 23.78	-19 51.3	1.762	2.747	6.4	20.5
8 9	19 17.89	-18 58.4	1.636	2.574	10.8	20.2	8 9	19 16.15	-20 6.5	1.817	2.749	10.2	20.7
8 19	19 13.21	-19 15.2	1.704	2.570	14.4	20.4	8 19	19 10.70	-20 18.3	1.895	2.751	13.6	21.0
<b>315196</b>	2007 PG <sub>43</sub>		7 14.9 344°75	4°2/16.4	18		<b>218944</b>	2008 DG <sub>20</sub>		7 14.9 357°67	0°8/14.7	17	
6 10	19 56.04	-12 23.3	0.969	1.865	20.5	18.8	6 10	19 56.94	-20 32.4	1.014	1.919	19.0	19.2
6 20	19 54.31	-12 21.8	0.903	1.853	16.1	18.5	6 20	19 54.94	-21 4.6	0.955	1.914	14.3	18.9
6 30	19 49.34	-12 41.0	0.854	1.842	11.0	18.2	6 30	19 49.66	-21 47.9	0.914	1.910	8.9	18.6
7 10	19 41.94	-13 20.4	0.824	1.833	5.9	17.9	7 10	19 42.04	-22 36.9	0.893	1.907	3.0	18.3
7 20	19 33.43	-14 16.4	0.814	1.825	4.8	17.8	7 20	19 33.47	-23 25.2	0.893	1.907	3.4	18.3
7 30	19 25.54	-15 22.4	0.825	1.819	9.7	18.0	7 30	19 25.68	-24 6.5	0.915	1.908	9.3	18.6
8 9	19 19.92	-16 30.8	0.856	1.815	15.2	18.3	8 9	19 20.24	-24 37.1	0.957	1.911	14.7	18.9
8 19	19 17.64	-17 35.1	0.903	1.812	20.1	18.6	8 19	19 18.11	-24 55.9	1.017	1.915	19.3	19.2
<b>472984</b>	2015 HZ <sub>12</sub>		7 14.9 31°08	2°8/15.6	17		<b>427980</b>	2005 YQ <sub>239</sub>		7 14.9 81°09	0°7/15.3	16	
6 10	20 3.60	-16 5.9	1.536	2.400	16.0	20.0	6 10	20 4.84	-16 1.4	1.772	2.625	14.6	21.6
6 20	19 58.70	-15 33.9	1.473	2.406	12.2	19.8	6 20	19 59.31	-16 52.2	1.720	2.650	11.0	21.4
6 30	19 51.37	-15 9.8	1.430	2.413	8.0	19.6	6 30	19 51.61	-17 53.1	1.690	2.674	6.9	21.2
7 10	19 42.45	-14 53.3	1.411	2.420	3.9	19.3	7 10	19 42.53	-18 59.8	1.686	2.698	2.5	21.0
7 20	19 33.02	-14 43.6	1.418	2.427	3.5	19.3	7 20	19 33.04	-20 7.1	1.709	2.722	2.2	21.0
7 30	19 24.30	-14 39.4	1.449	2.435	7.4	19.6	7 30	19 24.20	-21 10.5	1.760	2.745	6.4	21.3
8 9	19 17.34	-14 39.3	1.505	2.443	11.5	19.8	8 9	19 16.98	-22 6.6	1.837	2.768	10.2	21.6
8 19	19 12.85	-14 41.8	1.582	2.452	15.1	20.1	8 19	19 11.99	-22 53.8	1.936	2.791	13.4	21.8
<b>131252</b>	2001 FJ <sub>16</sub>		7 14.9 121°37	6°3/18.1	18		<b>212979</b>	2009 CN <sub>34</sub>		7 14.9 212°21	0°8/15.3	18	
6 10	20 1.23	-2 53.1	2.042	2.849	14.7	20.2	6 10	20 2.05	-17 37.8	2.144	2.995	12.5	21.6
6 20	19 56.40	-2 36.8	1.971	2.856	12.1	20.1	6 20	19 57.12	-17 58.6	2.063	2.992	9.5	21.4
6 30	19 49.75	-2 37.1	1.921	2.864	9.3	19.9	6 30	19 50.28	-18 26.4	2.005	2.989	6.0	21.2
7 10	19 41.89	-2 54.7	1.895	2.871	7.0	19.8	7 10	19 42.12	-18 59.0	1.973	2.986	2.2	20.9
7 20	19 33.58	-3 28.7	1.895	2.878	6.3	19.8	7 20	19 33.41	-19 33.6	1.969	2.982	2.0	20.9
7 30	19 25.70	-4 16.5	1.921	2.884	7.8	19.9	7 30	19 25.06	-20 7.3	1.993	2.978	5.8	21.1
8 9	19 19.06	-5 14.1	1.972	2.891	10.3	20.0	8 9	19 17.94	-20 38.1	2.043	2.974	9.3	21.3
8 19	19 14.25	-6 16.9	2.047	2.897	12.9	20.2	8 19	19 12.71	-21 4.4	2.116	2.970	12.5	21.5
<b>216100</b>	2006 RA <sub>23</sub>		7 14.9 325°44	1°2/14.5	18		<b>296954</b>	2010 EE <sub>34</sub>		7 14.9 117°94	3°3/16.6	17	
6 10	19 57.36	-19 33.3	1.092	1.991	18.4	19.4	6 10	20 3.34	-10 3.6	2.344	3.167	12.5	21.5
6 20	19 55.44	-20 28.8	1.009	1.965	14.1	19.1	6 20	19 57.68	-10 4.8	2.280	3.187	9.8	21.3
6 30	19 50.22	-21 41.1	0.944	1.939	8.9	18.7	6 30	19 50.41	-10 16.4	2.240	3.206	6.8	21.2
7 10	19 42.33	-23 5.1	0.900	1.915	3.0	18.3	7 10	19 42.11	-10 37.4	2.226	3.225	4.1	21.1
7 20	19 32.94	-24 32.4	0.879	1.891	3.7	18.3	7 20	19 33.50	-11 6.2	2.240	3.243	3.5	21.0
7 30	19 23.83	-25 53.6	0.879	1.869	10.0	18.5	7 30	19 25.35	-11 40.4	2.283	3.260	5.7	21.2
8 9	19 16.82	-27 1.3	0.899	1.848	15.8	18.8	8 9	19 18.38	-12 17.5	2.352	3.277	8.6	21.4
8 19	19 13.27	-27 52.3	0.936	1.829	21.0	19.0	8 19	19 13.11	-12 55.0	2.446	3.294	11.2	21.6
<b>149127</b>	2002 EK <sub>28</sub>		7 14.9 226°58	2°4/13.8	18		<b>345844</b>	2007 MD <sub>3</sub>		7 14.9 287°27	1°1/15.0	18	
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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>18785</b>	Betsywelsh		7 14.9 286°79	2°8/15.7	18		<b>260205</b>	2004 <i>RK</i> <sub>181</sub>		7 14.9 284°31	4°1/13.4	18	
6 10	20 4.40	-15 46.6	1.407	2.274	17.0	17.6	6 10	20 5.15	-33 35.6	2.285	3.140	11.7	20.6
6 20	19 59.91	-15 29.2	1.321	2.257	13.2	17.3	6 20	19 59.58	-33 57.5	2.201	3.128	9.1	20.4
6 30	19 52.54	-15 21.5	1.256	2.240	8.7	17.0	6 30	19 51.87	-34 14.7	2.139	3.115	6.4	20.2
7 10	19 43.02	-15 22.7	1.213	2.223	4.2	16.7	7 10	19 42.70	-34 23.0	2.104	3.102	4.3	20.1
7 20	19 32.46	-15 31.3	1.195	2.206	3.7	16.7	7 20	19 32.95	-34 19.3	2.096	3.089	4.8	20.1
7 30	19 22.31	-15 44.9	1.201	2.189	8.3	16.9	7 30	19 23.66	-34 2.4	2.115	3.077	7.3	20.2
8 9	19 13.98	-16 1.1	1.230	2.172	13.2	17.1	8 9	19 15.79	-33 33.3	2.159	3.064	10.2	20.4
8 19	19 8.47	-16 17.9	1.279	2.155	17.6	17.3	8 19	19 10.04	-32 54.3	2.226	3.051	12.9	20.5
<b>176734</b>	2002 <i>RB</i> <sub>52</sub>		7 14.9 313°96	8°2/12.2	17		<b>122353</b>	2000 <i>QT</i> <sub>44</sub>		7 14.9 268°35	5°7/13.2	18	
6 10	20 6.14	-36 0.8	1.311	2.192	17.1	19.4	6 10	20 10.22	-35 29.9	1.847	2.703	14.0	20.3
6 20	20 2.03	-37 8.6	1.236	2.174	13.7	19.1	6 20	20 4.03	-36 1.0	1.760	2.685	11.1	20.1
6 30	19 54.26	-38 11.0	1.181	2.156	10.3	18.9	6 30	19 54.97	-36 25.7	1.695	2.667	8.0	19.8
7 10	19 43.69	-38 58.1	1.147	2.138	8.3	18.7	7 10	19 43.83	-36 37.5	1.655	2.648	5.9	19.7
7 20	19 31.80	-39 21.0	1.136	2.121	9.2	18.7	7 20	19 31.81	-36 31.6	1.641	2.630	6.4	19.7
7 30	19 20.57	-39 15.5	1.147	2.105	12.5	18.9	7 30	19 20.34	-36 6.2	1.652	2.610	9.3	19.8
8 9	19 11.85	-38 43.2	1.179	2.089	16.4	19.0	8 9	19 10.78	-35 23.3	1.689	2.591	12.7	20.0
8 19	19 6.83	-37 50.0	1.228	2.074	20.1	19.2	8 19	19 4.05	-34 27.2	1.746	2.571	15.9	20.1
<b>470733</b>	2008 <i>UU</i> <sub>76</sub>		7 14.9 288°57	3°6/13.5	18		<b>210429</b>	2008 <i>UG</i> <sub>230</sub>		7 14.9 175°51	0°7/15.3	18	
6 10	20 5.05	-28 23.0	1.767	2.636	14.0	21.9	6 10	20 2.91	-18 7.0	2.483	3.327	11.3	21.3
6 20	20 0.20	-29 4.9	1.674	2.612	10.7	21.7	6 20	19 57.49	-18 21.6	2.404	3.329	8.5	21.1
6 30	19 52.65	-29 48.2	1.603	2.588	7.1	21.4	6 30	19 50.40	-18 41.6	2.348	3.331	5.4	20.9
7 10	19 43.06	-30 27.1	1.557	2.564	3.9	21.2	7 10	19 42.18	-19 4.9	2.320	3.332	2.0	20.7
7 20	19 32.44	-30 56.4	1.536	2.539	4.7	21.2	7 20	19 33.53	-19 29.4	2.321	3.333	1.8	20.7
7 30	19 22.13	-31 12.2	1.542	2.515	8.4	21.3	7 30	19 25.24	-19 53.0	2.350	3.333	5.2	20.9
8 9	19 13.43	-31 13.9	1.571	2.490	12.4	21.5	8 9	19 18.04	-20 14.2	2.406	3.333	8.3	21.1
8 19	19 7.33	-31 2.7	1.622	2.466	16.1	21.7	8 19	19 12.51	-20 32.1	2.487	3.333	11.1	21.3
<b>199051</b>	2005 <i>WF</i> <sub>188</sub>		7 14.9 339°32	1°3/14.6	17		<b>522879</b>	2016 <i>OL</i> <sub>7</sub>		7 14.9 275°13	1°5/15.5	18	
6 10	20 4.55	-23 49.9	1.578	2.451	15.1	20.5	6 10	20 2.61	-17 40.4	2.161	3.011	12.5	21.2
6 20	19 59.65	-24 2.3	1.507	2.448	11.4	20.2	6 20	19 57.55	-17 23.5	2.072	3.000	9.5	21.0
6 30	19 52.13	-24 17.5	1.457	2.446	7.1	20.0	6 30	19 50.57	-17 11.5	2.007	2.989	6.1	20.8
7 10	19 42.81	-24 31.7	1.431	2.444	2.6	19.7	7 10	19 42.27	-17 3.3	1.967	2.978	2.6	20.5
7 20	19 32.80	-24 41.5	1.430	2.442	2.9	19.7	7 20	19 33.42	-16 58.0	1.956	2.967	2.4	20.5
7 30	19 23.43	-24 44.5	1.456	2.440	7.5	20.0	7 30	19 24.93	-16 54.5	1.971	2.956	5.9	20.7
8 9	19 15.87	-24 40.3	1.505	2.439	11.8	20.2	8 9	19 17.67	-16 51.9	2.013	2.945	9.4	20.9
8 19	19 10.95	-24 29.6	1.575	2.438	15.5	20.5	8 19	19 12.27	-16 49.6	2.078	2.933	12.6	21.1
<b>264006</b>	2009 <i>OC</i> <sub>15</sub>		7 14.9 269°05	2°1/15.9	18		<b>69619</b>	1998 <i>FM</i> <sub>53</sub>		7 14.9 233°43	4°7/16.6	18	
6 10	19 59.95	-14 27.6	2.508	3.348	11.3	21.3	6 10	20 4.09	-9 59.5	1.599	2.444	16.4	19.4
6 20	19 55.34	-14 23.8	2.414	3.334	8.7	21.1	6 20	19 59.21	-9 45.2	1.520	2.438	13.0	19.2
6 30	19 49.10	-14 26.9	2.343	3.320	5.8	20.9	6 30	19 51.86	-9 45.4	1.462	2.433	9.2	19.0
7 10	19 41.74	-14 36.2	2.299	3.306	2.9	20.7	7 10	19 42.77	-10 0.1	1.426	2.426	5.7	18.8
7 20	19 33.88	-14 50.5	2.283	3.292	2.5	20.7	7 20	19 32.90	-10 27.9	1.416	2.420	5.0	18.7
7 30	19 26.27	-15 8.0	2.295	3.277	5.3	20.8	7 30	19 23.49	-11 5.8	1.432	2.413	8.0	18.9
8 9	19 19.64	-15 27.3	2.333	3.263	8.4	21.0	8 9	19 15.67	-11 50.0	1.472	2.406	12.0	19.1
8 19	19 14.55	-15 46.7	2.396	3.248	11.2	21.2	8 19	19 10.28	-12 36.5	1.533	2.399	15.7	19.3
<b>123796</b>	2001 <i>BD</i> <sub>43</sub>		7 14.9 226°10	2°6/14.1	18		<b>70822</b>	1999 <i>VZ</i> <sub>79</sub>		7 14.9 12°30	10°2/11.1	18	
6 10	20 8.13	-31 43.2	2.814	3.655	10.2	20.1	6 10	20 6.27	-41 25.3	1.392	2.263	16.9	18.4
6 20	20 1.26	-31 37.9	2.723	3.645	7.8	19.9	6 20	20 1.88	-42 55.0	1.343	2.266	14.0	18.2
6 30	19 52.65	-31 27.8	2.658	3.635	5.2	19.8	6 30	19 53.94	-44 12.2	1.313	2.270	11.5	18.1
7 10	19 42.90	-31 10.5	2.621	3.625	2.9	19.6	7 10	19 43.51	-45 6.8	1.305	2.274	10.3	18.0
7 20	19 32.75	-30 44.4	2.613	3.614	3.2	19.6	7 20	19 32.21	-45 31.2	1.319	2.279	11.0	18.1
7 30	19 23.06	-30 9.3	2.635	3.603	5.7	19.7	7 30	19 21.93	-45 23.3	1.355	2.285	13.3	18.2
8 9	19 14.60	-29 26.5	2.685	3.592	8.4	19.9	8 9	19 14.30	-44 47.0	1.411	2.292	16.0	18.4
8 19	19 7.92	-28 38.1	2.760	3.581	10.8	20.1	8 19	19 10.25	-43 49.1	1.485	2.300	18.7	18.6
<b>279779</b>	1999 <i>TX</i> <sub>205</sub>		7 14.9 310°64	1°7/15.4	18		<b>260342</b>	2004 <i>TK</i> <sub>244</sub>		7 14.9 326°89	2°8/13.9	18	
6 10	20 1.80	-17 47.4	1.543	2.414	15.6	20.3	6 10	20 2.08	-28 19.0	1.942	2.811	12.9	20.4
6 20	19 57.89	-17 37.8	1.445	2.384	12.0	20.0	6 20	19 57.53	-28 41.0	1.861	2.800	9.8	20.2
6 30	19 51.29	-17 35.8	1.368	2.355	7.8	19.7	6 30	19 50.73	-29 2.2	1.803	2.788	6.3	20.0
7 10	19 42.64	-17 40.1	1.314	2.325	3.2	19.3	7 10	19 42.36	-29 18.7	1.769	2.778	3.3	19.8
7 20	19 32.90	-17 48.8	1.284	2.296	2.9	19.2	7 20	19 33.36	-29 27.0	1.762	2.768	3.8	19.8
7 30	19 23.39	-17 59.5	1.279	2.268	7.8	19.5	7 30	19 24.81	-29 25.2	1.781	2.758	7.2	20.0
8 9	19 15.44	-18 10.3	1.298	2.240	12.6	19.7	8 9	19 17.74	-29 13.3	1.825	2.748	10.7	20.2
8 19	19 10.07	-18 19.7	1.337	2.212	17.0	19.9	8 19	19 12.91	-28 52.7	1.891	2.739	13.9	20.4
<b>366687</b>	2003 <i>UW</i> <sub>276</sub>		7 14.9 242°36	3°2/15.9	18		<b>307180</b>	2002 <i>ES</i> <sub>65</sub>		7 14.9 194°29	4°0/12.8	18	
6 10	20 6.23	-13 27.0	1.851	2.693	14.6	21.5	6 10	20 5.84	-36 9.4	3.118	3.956	9.4	22.1
6 20	20 0.64	-13 9.2	1.757	2.677	11.4	21.3	6 20	19 59.56	-36 40.2	3.039	3.953	7.3	21.9
6 30	19 52.70	-13 0.5	1.685	2.661	7.8	21.0	6 30	19 51.62	-37 5.9	2.985	3.950	5.4	21.8
7 10	19 43.03	-13 0.7	1.638	2.643	4.2	20.8	7 10	19 42.60	-37 23.0	2.959	3.946	4.1	21.7
7 20	19 32.55	-13 8.6	1.618	2.625	3.7	20.7	7 20	19 33.17	-37 29.2	2.961	3.941	4.5	21.7
7 30	19 22.38	-13 22.6	1.625	2.607	7.2	20.9	7 30	19 24.12	-37 23.3	2.992	3.936	6.2	21.8
8 9	19 13.61	-13 40.5	1.657	2.587	11.2	21.1	8 9	19 16.17	-37 6.0	3.049	3.931	8.3	22.0
8 19	19 7.08	-14 0.5	1.712	2.567	14.8	21.2	8 19	19 9.89	-36 39.1	3.130	3.925	10.3	22.1
<b>89411</b>	2001 <i>WO</i> <sub>16</sub>		7 14.9 292°13	0°1/14.9	18		<b>51475</b>	2001 <i>FQ</i> <sub>55</sub>					



EPHEMERIDES

7 14.9

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>48449</b>	1991 <i>EK</i> <sub>4</sub>		7 14.9 59°20	2.6/15.8	18		<b>401202</b>	2011 <i>YD</i> <sub>7</sub>		7 14.9 41°57	1.6/15.5	18	
6 10	20 5.38	-15 16.1	1.170	2.047	19.1	18.0	6 10	20 2.33	-17 41.5	2.059	2.912	12.9	20.5
6 20	20 0.73	-15 16.1	1.114	2.055	14.6	17.7	6 20	19 57.30	-17 24.0	1.988	2.917	9.8	20.4
6 30	19 53.00	-15 29.6	1.077	2.063	9.5	17.5	6 30	19 50.38	-17 11.7	1.939	2.922	6.3	20.2
7 10	19 43.17	-15 54.4	1.061	2.072	4.3	17.2	7 10	19 42.23	-17 3.6	1.917	2.927	2.7	19.9
7 20	19 32.63	-16 26.7	1.069	2.081	3.6	17.2	7 20	19 33.67	-16 58.6	1.921	2.933	2.4	19.9
7 30	19 22.97	-17 2.0	1.100	2.090	8.6	17.5	7 30	19 25.60	-16 55.7	1.953	2.938	5.9	20.2
8 9	19 15.59	-17 36.4	1.153	2.099	13.5	17.8	8 9	19 18.87	-16 53.8	2.011	2.944	9.3	20.4
8 19	19 11.33	-18 7.4	1.226	2.108	17.8	18.1	8 19	19 14.06	-16 52.3	2.091	2.949	12.4	20.6
<b>511143</b>	2013 <i>YU</i> <sub>4</sub>		7 14.9 214°53	0°5/15.2	17		<b>335623</b>	2006 <i>HZ</i> <sub>4</sub>		7 14.9 167°71	3°9/16.6	17	
6 10	20 4.72	-19 32.4	2.074	2.926	12.9	22.6	6 10	20 2.67	-9 53.1	2.075	2.906	13.6	21.2
6 20	19 59.22	-19 37.4	1.990	2.920	9.7	22.4	6 20	19 57.56	-9 42.4	1.999	2.909	10.8	21.0
6 30	19 51.66	-19 47.4	1.930	2.914	6.1	22.1	6 30	19 50.57	-9 43.1	1.944	2.911	7.6	20.8
7 10	19 42.68	-20 0.0	1.895	2.908	2.2	21.9	7 10	19 42.31	-9 55.0	1.915	2.913	4.7	20.6
7 20	19 33.11	-20 13.2	1.889	2.901	2.1	21.8	7 20	19 33.56	-10 16.8	1.913	2.915	4.1	20.6
7 30	19 23.94	-20 24.9	1.910	2.894	6.0	22.1	7 30	19 25.22	-10 46.3	1.938	2.916	6.6	20.8
8 9	19 16.11	-20 33.9	1.957	2.887	9.8	22.3	8 9	19 18.13	-11 20.8	1.988	2.917	9.7	21.0
8 19	19 10.31	-20 39.6	2.028	2.879	13.0	22.5	8 19	19 12.91	-11 57.5	2.062	2.917	12.7	21.1
<b>126234</b>	2002 <i>AQ</i> <sub>58</sub>		7 14.9 339°43	2°1/14.6	18		<b>430536</b>	2002 <i>DW</i> <sub>9</sub>		7 14.9 68°66	9°3/12.0	17	
6 10	20 9.20	-28 9.0	1.661	2.526	14.9	19.3	6 10	20 12.98	-42 47.1	1.633	2.483	15.9	20.6
6 20	20 3.00	-27 53.7	1.588	2.525	11.3	19.1	6 20	20 6.26	-44 2.2	1.595	2.504	13.1	20.5
6 30	19 54.14	-27 34.8	1.537	2.523	7.2	18.9	6 30	19 56.30	-45 3.0	1.578	2.525	10.6	20.4
7 10	19 43.51	-27 9.1	1.511	2.522	3.1	18.6	7 10	19 44.27	-45 40.9	1.584	2.546	9.4	20.3
7 20	19 32.32	-26 34.7	1.512	2.521	3.4	18.6	7 20	19 31.73	-45 50.7	1.614	2.567	9.9	20.4
7 30	19 21.92	-25 52.0	1.539	2.521	7.5	18.9	7 30	19 20.43	-45 32.0	1.667	2.588	11.8	20.6
8 9	19 13.49	-25 3.0	1.591	2.520	11.6	19.1	8 9	19 11.72	-44 49.5	1.743	2.609	14.2	20.8
8 19	19 7.77	-24 10.8	1.665	2.519	15.2	19.4	8 19	19 6.36	-43 49.8	1.837	2.630	16.4	21.0
<b>337026</b>	1995 <i>SQ</i> <sub>26</sub>		7 14.9 258°16	3°1/16.2	18		<b>261831</b>	2006 <i>DP</i> <sub>31</sub>		7 14.9 46°27	1°5/14.6	17	
6 10	20 2.83	-12 14.7	2.070	2.909	13.4	21.4	6 10	20 6.72	-23 38.1	1.101	1.992	19.0	20.4
6 20	19 57.89	-12 9.9	1.974	2.891	10.5	21.1	6 20	20 1.88	-23 54.3	1.056	2.006	14.2	20.1
6 30	19 50.92	-12 15.2	1.899	2.873	7.2	20.9	6 30	19 53.73	-24 14.4	1.029	2.021	8.8	19.9
7 10	19 42.46	-12 30.1	1.850	2.854	4.0	20.7	7 10	19 43.43	-24 33.2	1.024	2.037	3.2	19.6
7 20	19 33.30	-12 53.3	1.828	2.835	3.5	20.6	7 20	19 32.57	-24 45.9	1.041	2.053	3.5	19.7
7 30	19 24.37	-13 22.5	1.833	2.815	6.5	20.8	7 30	19 22.89	-24 49.8	1.082	2.070	8.9	20.1
8 9	19 16.62	-13 55.1	1.865	2.795	10.1	20.9	8 9	19 15.79	-24 44.9	1.145	2.087	13.8	20.4
8 19	19 10.79	-14 28.8	1.919	2.775	13.4	21.1	8 19	19 12.04	-24 32.8	1.226	2.105	18.0	20.7
<b>521421</b>	2015 <i>MM</i> <sub>147</sub>		7 14.9 312°00	5°0/16.7	18		<b>478278</b>	2011 <i>VH</i> <sub>19</sub>		7 14.9 213°54	0°2/14.9	18	
6 10	20 0.24	-8 49.7	1.974	2.809	14.1	21.1	6 10	20 2.00	-20 59.8	2.852	3.697	9.9	23.5
6 20	19 55.91	-8 16.5	1.888	2.798	11.3	20.9	6 20	19 56.73	-21 16.3	2.761	3.689	7.5	23.3
6 30	19 49.64	-7 54.6	1.825	2.788	8.3	20.7	6 30	19 49.93	-21 35.8	2.696	3.680	4.6	23.1
7 10	19 42.01	-7 45.2	1.785	2.777	5.7	20.5	7 10	19 42.09	-21 56.6	2.658	3.671	1.6	22.9
7 20	19 33.79	-7 48.1	1.771	2.767	5.1	20.5	7 20	19 33.82	-22 16.5	2.650	3.662	1.6	22.8
7 30	19 25.90	-8 2.2	1.783	2.757	7.4	20.6	7 30	19 25.80	-22 33.8	2.670	3.652	4.7	23.1
8 9	19 19.24	-8 25.1	1.820	2.748	10.5	20.8	8 9	19 18.71	-22 47.5	2.719	3.642	7.6	23.2
8 19	19 14.48	-8 53.8	1.879	2.739	13.5	20.9	8 19	19 13.09	-22 57.1	2.792	3.631	10.2	23.4
<b>392831</b>	2012 <i>TJ</i> <sub>308</sub>		7 14.9 179°50	0°9/15.3	18		<b>355737</b>	2008 <i>GG</i> <sub>143</sub>		7 14.9 46°79	5°1/12.3	18	
6 10	20 4.52	-18 57.7	2.444	3.287	11.4	21.4	6 10	20 3.70	-33 17.6	2.060	2.923	12.5	20.0
6 20	19 58.69	-18 48.9	2.364	3.289	8.7	21.2	6 20	19 58.70	-34 25.8	1.999	2.929	9.7	19.9
6 30	19 51.15	-18 43.8	2.307	3.289	5.5	21.0	6 30	19 51.45	-35 30.7	1.961	2.935	6.9	19.7
7 10	19 42.47	-18 41.0	2.278	3.290	2.1	20.8	7 10	19 42.65	-36 26.2	1.949	2.942	5.2	19.6
7 20	19 33.38	-18 39.2	2.278	3.290	1.9	20.8	7 20	19 33.27	-37 7.5	1.963	2.949	5.9	19.7
7 30	19 24.69	-18 37.5	2.306	3.289	5.3	21.0	7 30	19 24.41	-37 31.8	2.004	2.956	8.3	19.8
8 9	19 17.17	-18 35.1	2.361	3.288	8.5	21.2	8 9	19 17.10	-37 39.4	2.069	2.963	11.1	20.0
8 19	19 11.38	-18 31.6	2.441	3.287	11.3	21.4	8 19	19 12.06	-37 32.3	2.155	2.970	13.6	20.2
<b>326934</b>	2004 <i>CB</i> <sub>7</sub>		7 14.9 104°26	6°7/17.8	17		<b>222895</b>	2002 <i>GF</i> <sub>138</sub>		7 14.9 312°44	7°4/18.3	18	
6 10	20 4.74	-4 5.8	1.712	2.530	16.6	21.4	6 10	19 58.59	-0 1.6	2.211	3.004	14.1	19.8
6 20	19 59.27	-3 40.8	1.653	2.546	13.5	21.2	6 20	19 54.48	+0 35.6	2.127	2.996	12.0	19.6
6 30	19 51.65	-3 33.9	1.614	2.563	10.3	21.0	6 30	19 48.67	+0 56.8	2.064	2.989	9.7	19.5
7 10	19 42.66	-3 46.0	1.598	2.579	7.5	20.9	7 10	19 41.70	+1 0.0	2.024	2.981	8.0	19.4
7 20	19 33.22	-4 16.0	1.608	2.595	6.8	20.9	7 20	19 34.22	+0 44.8	2.008	2.974	7.4	19.3
7 30	19 24.41	-5 0.6	1.643	2.610	8.5	21.0	7 30	19 27.03	+0 12.4	2.019	2.967	8.5	19.4
8 9	19 17.16	-5 55.4	1.703	2.625	11.4	21.3	8 9	19 20.88	-0 34.1	2.053	2.960	10.5	19.5
8 19	19 12.13	-6 55.2	1.785	2.640	14.3	21.5	8 19	19 16.39	-1 30.4	2.111	2.954	12.9	19.6
<b>441990</b>	2010 <i>NC</i> <sub>84</sub>		7 14.9 347°91	6°3/13.4	18		<b>446413</b>	2014 <i>JU</i> <sub>4</sub>		7 14.9 349°21	6°6/11.0	18	
6 10	20 7.59	-38 9.5	1.837	2.695	14.0	20.2	6 10	19 59.51	-31 42.6	1.559	2.443	14.7	19.4
6 20	20 1.87	-38 29.8	1.767	2.691	11.2	20.0	6 20	19 56.40	-33 34.4	1.490	2.433	11.5	19.2
6 30	19 53.47	-38 40.2	1.719	2.686	8.3	19.8	6 30	19 50.48	-35 27.7	1.444	2.424	8.3	19.0
7 10	19 43.30	-38 35.4	1.695	2.683	6.5	19.7	7 10	19 42.45	-37 13.1	1.422	2.416	6.6	18.9
7 20	19 32.57	-38 11.8	1.696	2.679	6.9	19.7	7 20	19 33.40	-38 41.2	1.425	2.409	7.8	18.9
7 30	19 22.64	-37 29.1	1.722	2.677	9.3	19.8	7 30	19 24.76	-39 45.9	1.452	2.404	10.8	19.1
8 9	19 14.69	-36 30.3	1.773	2.674	12.2	20.0	8 9	19 17.94	-40 25.3	1.500	2.399	14.2	19.3
8 19	19 9.47	-35 20.3	1.845	2.673	15.1	20.2	8 19	19 13.96	-40 41.4	1.568	2.396	17.3	19.5
<b>505553</b>	2013 <i>YS</i> <sub>149</sub>		7 14.9 157°63	3°6/16.4	18		<b>419587</b>	2010 <i>RK</i> <sub>98</sub>		7 1			

EPHEMERIDES

7 14.9

7 15.0

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>40618</b>	1999 <i>RG</i> <sub>164</sub>	7 14.9 347°33		1.8/15.6 17			<b>516510</b>	2006 <i>BS</i> <sub>182</sub>	7 15.0 245°91		5.4/18.8 18		
6 10	20 1.89	-16 33.9	1.571	2.437	15.5	19.2	6 10	19 59.25	-0 1.8	2.829	3.605	11.8	22.0
6 20	19 57.62	-16 34.6	1.498	2.434	11.9	18.9	6 20	19 54.68	-0 14.9	2.729	3.592	9.8	21.8
6 30	19 50.92	-16 44.7	1.446	2.431	7.7	18.7	6 30	19 48.71	-0 43.2	2.651	3.578	7.8	21.6
7 10	19 42.53	-17 2.3	1.418	2.429	3.3	18.4	7 10	19 41.73	-1 27.0	2.599	3.564	6.0	21.5
7 20	19 33.45	-17 24.8	1.415	2.427	2.8	18.4	7 20	19 34.30	-2 25.2	2.574	3.549	5.4	21.4
7 30	19 24.91	-17 49.3	1.437	2.425	7.1	18.6	7 30	19 27.03	-3 35.6	2.577	3.535	6.4	21.5
8 9	19 18.01	-18 13.2	1.484	2.424	11.4	18.9	8 9	19 20.55	-4 54.3	2.608	3.520	8.4	21.6
8 19	19 13.55	-18 34.6	1.551	2.423	15.2	19.1	8 19	19 15.38	-6 17.6	2.664	3.504	10.6	21.7
<b>43087</b>	1999 <i>WW</i> <sub>8</sub>	7 14.9 193°86		2.8/13.1 18			<b>91058</b>	1998 <i>FU</i> <sub>50</sub>	7 15.0 335°55		9.8/11.8 17		
6 10	20 2.31	-29 36.1	3.058	3.907	9.2	19.1	6 10	20 9.16	-42 25.7	1.510	2.370	16.4	18.3
6 20	19 56.99	-30 27.3	2.978	3.904	7.0	18.9	6 20	20 4.01	-43 32.2	1.446	2.363	13.6	18.2
6 30	19 50.12	-31 18.0	2.923	3.901	4.7	18.8	6 30	19 55.32	-44 26.0	1.403	2.356	11.2	18.0
7 10	19 42.19	-32 4.5	2.896	3.898	2.9	18.7	7 10	19 44.11	-44 57.8	1.382	2.350	9.9	17.9
7 20	19 33.79	-32 43.8	2.899	3.895	3.4	18.7	7 20	19 31.96	-45 0.7	1.383	2.344	10.5	17.9
7 30	19 25.64	-33 13.9	2.930	3.891	5.6	18.8	7 30	19 20.74	-44 32.8	1.407	2.338	12.8	18.0
8 9	19 18.43	-33 33.8	2.988	3.886	7.9	19.0	8 9	19 12.12	-43 38.1	1.451	2.334	15.6	18.2
8 19	19 12.70	-33 44.2	3.071	3.882	10.1	19.1	8 19	19 7.05	-42 23.5	1.515	2.329	18.4	18.4
<b>250469</b>	2004 <i>CH</i> <sub>18</sub>	7 14.9 100°46		1.7/14.4 17			<b>151472</b>	2002 <i>GJ</i> <sub>167</sub>	7 15.0 129°75		1.0/15.4 18		
6 10	20 7.97	-24 0.5	1.641	2.506	15.0	21.0	6 10	20 1.60	-17 55.6	2.509	3.355	11.1	20.3
6 20	20 1.98	-24 32.9	1.585	2.523	11.2	20.8	6 20	19 56.48	-17 56.3	2.436	3.362	8.4	20.1
6 30	19 53.48	-25 8.0	1.552	2.539	7.0	20.6	6 30	19 49.79	-18 1.8	2.386	3.368	5.3	20.0
7 10	19 43.34	-25 41.0	1.543	2.555	2.7	20.4	7 10	19 42.08	-18 10.6	2.364	3.375	2.1	19.8
7 20	19 32.72	-26 7.8	1.561	2.571	3.1	20.4	7 20	19 34.01	-18 21.2	2.369	3.381	1.8	19.7
7 30	19 22.88	-26 25.5	1.606	2.587	7.3	20.7	7 30	19 26.34	-18 32.1	2.403	3.388	5.0	20.0
8 9	19 14.95	-26 33.6	1.675	2.602	11.3	21.0	8 9	19 19.75	-18 42.1	2.464	3.394	8.0	20.2
8 19	19 9.62	-26 33.2	1.766	2.617	14.6	21.2	8 19	19 14.75	-18 50.5	2.550	3.400	10.7	20.4
<b>253416</b>	2003 <i>QR</i> <sub>36</sub>	7 14.9 307°96		0.7/15.2 17			<b>352179</b>	2007 <i>RP</i> <sub>138</sub>	7 15.0 298°87		2.7/13.9 18		
6 10	20 2.46	-17 45.2	1.294	2.173	17.4	20.7	6 10	20 3.82	-26 33.4	1.750	2.621	14.0	21.1
6 20	19 58.73	-18 12.2	1.216	2.160	13.3	20.4	6 20	19 59.27	-27 5.2	1.658	2.598	10.7	20.8
6 30	19 52.00	-18 52.0	1.158	2.147	8.5	20.1	6 30	19 52.12	-27 39.0	1.587	2.575	6.9	20.6
7 10	19 43.00	-19 40.8	1.122	2.135	3.1	19.7	7 10	19 43.03	-28 10.2	1.542	2.552	3.3	20.3
7 20	19 32.92	-20 33.6	1.109	2.123	2.8	19.7	7 20	19 32.98	-28 34.2	1.522	2.529	3.9	20.3
7 30	19 23.30	-21 24.6	1.121	2.111	8.4	20.0	7 30	19 23.24	-28 47.5	1.528	2.506	7.9	20.5
8 9	19 15.62	-22 9.5	1.155	2.099	13.6	20.2	8 9	19 15.09	-28 49.2	1.558	2.484	12.0	20.7
8 19	19 10.95	-22 45.8	1.208	2.088	18.1	20.4	8 19	19 9.44	-28 40.3	1.609	2.461	15.7	20.8
<b>56892</b>	2000 <i>QB</i> <sub>142</sub>	7 14.9 310°84		5.4/12.7 18			<b>159039</b>	2004 <i>TO</i> <sub>93</sub>	7 15.0 191°93		0.3/14.9 18		
6 10	20 4.91	-34 57.3	1.994	2.856	12.9	19.1	6 10	20 0.99	-21 28.1	2.800	3.649	10.0	21.8
6 20	19 59.79	-35 42.8	1.919	2.847	10.2	18.9	6 20	19 55.98	-21 43.5	2.718	3.648	7.5	21.6
6 30	19 52.23	-36 23.3	1.866	2.839	7.4	18.8	6 30	19 49.48	-22 1.8	2.661	3.646	4.6	21.4
7 10	19 42.97	-36 53.1	1.839	2.831	5.6	18.6	7 10	19 41.99	-22 20.8	2.631	3.644	1.6	21.2
7 20	19 33.02	-37 7.8	1.837	2.823	6.2	18.7	7 20	19 34.11	-22 38.8	2.630	3.642	1.7	21.2
7 30	19 23.60	-37 5.2	1.861	2.815	8.7	18.8	7 30	19 26.53	-22 54.0	2.657	3.640	4.7	21.4
8 9	19 15.82	-36 46.2	1.909	2.808	11.6	19.0	8 9	19 19.91	-23 5.4	2.712	3.637	7.6	21.6
8 19	19 10.46	-36 13.7	1.978	2.801	14.4	19.1	8 19	19 14.77	-23 12.8	2.792	3.634	10.1	21.8
<b>420310</b>	2011 <i>YJ</i> <sub>57</sub>	7 14.9 119°81		1.2/14.5 17			<b>429400</b>	2010 <i>RC</i> <sub>128</sub>	7 15.0 270°16		0.7/15.2 17		
6 10	20 6.67	-21 29.6	1.490	2.360	16.0	21.5	6 10	20 6.61	-19 50.8	1.542	2.408	15.8	21.4
6 20	20 1.36	-22 13.9	1.427	2.367	12.0	21.3	6 20	20 1.50	-19 45.9	1.453	2.391	12.1	21.1
6 30	19 53.30	-23 5.2	1.385	2.374	7.5	21.0	6 30	19 53.57	-19 46.7	1.386	2.373	7.7	20.8
7 10	19 43.35	-23 58.2	1.368	2.381	2.6	20.7	7 10	19 43.54	-19 51.0	1.342	2.355	2.8	20.5
7 20	19 32.67	-24 47.1	1.376	2.387	3.0	20.8	7 20	19 32.51	-19 56.1	1.323	2.336	2.6	20.4
7 30	19 22.69	-25 27.5	1.410	2.394	7.8	21.1	7 30	19 21.89	-19 59.7	1.331	2.318	7.8	20.7
8 9	19 14.66	-25 57.1	1.468	2.400	12.2	21.4	8 9	19 13.02	-20 0.7	1.362	2.299	12.6	20.9
8 19	19 9.41	-26 16.1	1.547	2.406	16.0	21.6	8 19	19 6.88	-19 58.9	1.414	2.280	16.8	21.1
<b>196454</b>	2003 <i>HF</i> <sub>50</sub>	7 14.9 26°50		1.4/15.6 17			<b>381754</b>	2009 <i>SP</i> <sub>146</sub>	7 15.0 320°92		5.2/16.5 16		
6 10	20 1.65	-16 20.3	1.419	2.292	16.5	19.9	6 10	19 58.85	-11 10.3	1.252	2.125	18.3	20.9
6 20	19 57.58	-16 39.8	1.358	2.298	12.6	19.7	6 20	19 56.11	-10 46.7	1.164	2.099	14.6	20.6
6 30	19 50.93	-17 10.9	1.317	2.304	8.0	19.5	6 30	19 50.46	-10 38.7	1.094	2.074	10.4	20.2
7 10	19 42.53	-17 50.5	1.299	2.311	3.2	19.2	7 10	19 42.56	-10 48.0	1.045	2.049	6.4	19.9
7 20	19 33.50	-18 34.3	1.306	2.319	2.7	19.2	7 20	19 33.45	-11 13.8	1.018	2.025	5.6	19.8
7 30	19 25.13	-19 18.0	1.337	2.327	7.4	19.5	7 30	19 24.61	-11 53.5	1.014	2.002	9.4	20.0
8 9	19 18.58	-19 58.0	1.392	2.335	11.9	19.8	8 9	19 17.54	-12 42.2	1.031	1.980	14.3	20.2
8 19	19 14.63	-20 32.1	1.468	2.344	15.7	20.0	8 19	19 13.36	-13 34.6	1.067	1.960	19.0	20.4
<b>180108</b>	2003 <i>FU</i> <sub>23</sub>	7 15.0 202°89		4.3/13.1 18			<b>433712</b>	2014 <i>XL</i> <sub>37</sub>	7 15.0 132°89		1.7/14.4 17		
6 10	20 5.41	-33 29.2	2.323	3.177	11.6	20.5	6 10	20 7.47	-24 22.7	1.819	2.680	14.0	21.3
6 20	19 59.74	-34 5.3	2.249	3.176	9.0	20.3	6 20	20 1.51	-24 54.2	1.755	2.690	10.5	21.1
6 30	19 51.99	-34 37.2	2.199	3.174	6.3	20.1	6 30	19 53.19	-25 28.1	1.714	2.700	6.5	20.9
7 10	19 42.85	-35 0.5	2.175	3.172	4.4	20.0	7 10	19 43.30	-25 59.9	1.698	2.710	2.6	20.7
7 20	19 33.18	-35 11.9	2.179	3.169	4.9	20.0	7 20	19 32.87	-26 25.8	1.709	2.719	3.0	20.7
7 30	19 24.00	-35 9.6	2.209	3.167	7.3	20.2	7 30	19 23.09	-26 43.0	1.748	2.727	7.0	21.0
8 9	19 16.24	-34 54.4	2.265	3.164	10.0	20.3	8 9	19 15.01	-26 51.1	1.811	2.735	10.7	21.3
8 19	19 10.56	-34 28.4	2.343	3.162	12.6	20.5	8 19	19 9.33	-26 50.8	1.897	2.743	14.0	21.5
<b>264857</b>	2002 <i>RS</i> <sub>82</sub>	7 15.0 303°42		3.6/13.9 18			<b>503646</b>	2016 <i>GQ</i> <sub>189</sub>	7 15.0 173°95		0.6/15.3 17		