

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>					

EPHEMERIDES

7 15.0

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>157187</b>	2004 <i>PZ</i> <sub>99</sub>		7 15.0 269°53	4.1/12.7	18		<b>233656</b>	2008 <i>QA</i> <sub>20</sub>		7 15.0 270°92	2.3/13.8	18	
6 10	20 3.29	-32 31.0	2.486	3.341	10.9	20.0	6 10	20 4.30	-22 54.1	1.822	2.687	13.8	20.4
6 20	19 58.21	-33 20.7	2.399	3.326	8.4	19.8	6 20	19 59.57	-24 7.0	1.732	2.670	10.4	20.2
6 30	19 51.13	-34 8.3	2.335	3.310	5.9	19.6	6 30	19 52.33	-25 28.1	1.666	2.653	6.6	19.9
7 10	19 42.64	-34 49.3	2.298	3.295	4.2	19.5	7 10	19 43.17	-26 51.8	1.625	2.636	2.9	19.7
7 20	19 33.50	-35 19.9	2.289	3.279	4.8	19.5	7 20	19 33.01	-28 11.3	1.611	2.619	3.7	19.7
7 30	19 24.64	-35 37.4	2.307	3.263	7.1	19.6	7 30	19 23.06	-29 20.7	1.625	2.601	7.7	19.9
8 9	19 16.98	-35 41.6	2.350	3.247	9.8	19.8	8 9	19 14.54	-30 16.6	1.663	2.583	11.8	20.1
8 19	19 11.21	-35 33.7	2.416	3.230	12.4	19.9	8 19	19 8.39	-30 57.8	1.723	2.566	15.3	20.3
<b>400464</b>	2008 <i>FW</i> <sub>131</sub>		7 15.0 223°48	4.5/17.3	18		<b>37076</b>	2000 <i>UK</i> <sub>54</sub>		7 15.0 249°78	3.4/13.1	18	
6 10	19 59.78	-6 52.2	2.353	3.172	12.6	21.7	6 10	20 3.06	-29 21.7	2.366	3.225	11.3	18.4
6 20	19 55.28	-6 41.5	2.271	3.169	10.2	21.5	6 20	19 58.04	-30 15.8	2.284	3.216	8.6	18.2
6 30	19 49.15	-6 43.0	2.211	3.167	7.5	21.4	6 30	19 51.04	-31 9.8	2.227	3.208	5.7	18.0
7 10	19 41.93	-6 56.7	2.176	3.164	5.2	21.2	7 10	19 42.64	-31 59.4	2.195	3.199	3.5	17.9
7 20	19 34.26	-7 21.9	2.167	3.161	4.6	21.2	7 20	19 33.61	-32 40.3	2.192	3.190	4.2	17.9
7 30	19 26.89	-7 56.6	2.186	3.159	6.4	21.3	7 30	19 24.88	-33 9.6	2.216	3.181	6.8	18.1
8 9	19 20.54	-8 37.9	2.231	3.156	9.0	21.4	8 9	19 17.37	-33 26.5	2.266	3.171	9.8	18.2
8 19	19 15.79	-9 22.8	2.300	3.153	11.6	21.6	8 19	19 11.77	-33 31.7	2.339	3.162	12.4	18.4
<b>406806</b>	2008 <i>UB</i> <sub>120</sub>		7 15.0 274°94	2.0/15.4	17		<b>355209</b>	2006 <i>YR</i> <sub>15</sub>		7 15.0 79°06	0.0/15.0	17	
6 10	20 7.69	-18 33.8	1.300	2.172	17.8	20.7	6 10	20 2.08	-18 28.5	2.315	3.165	11.8	21.4
6 20	20 2.56	-18 4.1	1.224	2.164	13.7	20.4	6 20	19 56.96	-19 16.1	2.257	3.187	8.8	21.3
6 30	19 54.31	-17 40.4	1.169	2.155	8.8	20.1	6 30	19 50.16	-20 9.7	2.224	3.208	5.4	21.1
7 10	19 43.81	-17 21.7	1.135	2.147	3.7	19.8	7 10	19 42.28	-21 6.2	2.217	3.230	1.8	20.9
7 20	19 32.37	-17 6.8	1.127	2.139	3.3	19.7	7 20	19 34.03	-22 1.7	2.239	3.252	1.8	20.9
7 30	19 21.59	-16 54.6	1.142	2.130	8.6	20.0	7 30	19 26.24	-22 53.2	2.289	3.273	5.3	21.2
8 9	19 12.93	-16 44.5	1.180	2.122	13.6	20.3	8 9	19 19.65	-23 38.3	2.367	3.294	8.4	21.4
8 19	19 7.38	-16 35.9	1.238	2.114	18.1	20.5	8 19	19 14.80	-24 16.0	2.468	3.315	11.1	21.7
<b>763</b>	Cupido		7 15.0 291°34	0.2/15.1	18 R		<b>505970</b>	2015 <i>FS</i> <sub>311</sub>		7 15.0 84°30	5.1/12.9	17	
6 10	20 6.00	-21 12.8	1.345	2.222	17.0	15.9	6 10	20 7.61	-31 46.9	1.742	2.607	14.3	21.6
6 20	20 1.45	-21 6.8	1.259	2.203	13.0	15.6	6 20	20 1.88	-32 52.0	1.689	2.623	11.0	21.4
6 30	19 53.75	-21 5.8	1.194	2.183	8.3	15.3	6 30	19 53.55	-33 53.7	1.659	2.638	7.6	21.2
7 10	19 43.68	-21 7.1	1.150	2.164	2.9	14.9	7 10	19 43.50	-34 45.3	1.654	2.653	5.2	21.1
7 20	19 32.45	-21 7.6	1.131	2.145	2.8	14.8	7 20	19 32.88	-35 21.4	1.676	2.668	5.9	21.2
7 30	19 21.67	-21 4.9	1.137	2.125	8.5	15.1	7 30	19 23.02	-35 39.4	1.722	2.683	8.8	21.4
8 9	19 12.88	-20 58.3	1.165	2.106	13.8	15.3	8 9	19 15.08	-35 40.0	1.793	2.698	12.0	21.6
8 19	19 7.19	-20 48.0	1.212	2.088	18.4	15.6	8 19	19 9.80	-35 26.2	1.885	2.712	14.8	21.9
<b>198248</b>	2004 <i>TB</i> <sub>214</sub>		7 15.0 260°46	1.4/15.5	18		<b>264289</b>	1998 <i>SG</i> <sub>6</sub>		7 15.0 252°99	3.7/13.9	18	
6 10	20 4.27	-17 13.7	1.969	2.820	13.5	21.3	6 10	20 8.32	-29 16.6	1.699	2.564	14.6	20.9
6 20	19 59.15	-17 13.0	1.874	2.803	10.3	21.1	6 20	20 2.69	-29 47.2	1.617	2.553	11.2	20.7
6 30	19 51.83	-17 19.2	1.802	2.785	6.7	20.8	6 30	19 54.26	-30 16.5	1.557	2.541	7.4	20.4
7 10	19 42.92	-17 30.7	1.756	2.767	2.8	20.5	7 10	19 43.81	-30 39.1	1.522	2.529	4.1	20.2
7 20	19 33.25	-17 45.4	1.736	2.748	2.4	20.5	7 20	19 32.49	-30 50.3	1.513	2.517	4.7	20.2
7 30	19 23.88	-18 1.4	1.744	2.730	6.4	20.7	7 30	19 21.70	-30 47.5	1.530	2.504	8.4	20.4
8 9	19 15.81	-18 16.8	1.778	2.710	10.4	20.9	8 9	19 12.76	-30 31.1	1.572	2.491	12.4	20.6
8 19	19 9.83	-18 30.4	1.834	2.691	13.9	21.1	8 19	19 6.57	-30 3.8	1.634	2.478	15.9	20.8
<b>125021</b>	2001 <i>TH</i> <sub>183</sub>		7 15.0 310°73	5.5/13.6	17		<b>382590</b>	2002 <i>CJ</i> <sub>288</sub>		7 15.0 218°76	0.3/15.1	18	
6 10	20 6.87	-30 47.9	1.192	2.080	18.0	19.6	6 10	20 4.10	-18 51.3	1.922	2.778	13.6	21.3
6 20	20 2.63	-31 28.7	1.120	2.067	13.9	19.3	6 20	19 59.02	-19 18.0	1.841	2.774	10.3	21.1
6 30	19 54.71	-32 7.5	1.067	2.054	9.5	19.0	6 30	19 51.73	-19 52.1	1.783	2.769	6.4	20.9
7 10	19 44.03	-32 36.1	1.036	2.041	5.9	18.8	7 10	19 42.90	-20 30.5	1.750	2.763	2.2	20.6
7 20	19 32.14	-32 47.3	1.027	2.029	6.7	18.8	7 20	19 33.40	-21 9.7	1.745	2.758	2.1	20.6
7 30	19 20.99	-32 37.3	1.041	2.017	11.0	19.0	7 30	19 24.29	-21 46.2	1.767	2.752	6.4	20.8
8 9	19 12.40	-32 7.7	1.076	2.006	15.7	19.2	8 9	19 16.58	-22 17.8	1.814	2.745	10.3	21.0
8 19	19 7.51	-31 23.3	1.128	1.996	20.0	19.5	8 19	19 11.01	-22 43.2	1.884	2.739	13.7	21.3
<b>514287</b>	2015 <i>SP</i> <sub>1</sub>		7 15.0 283°97	1.4/15.5	18		<b>432614</b>	2010 <i>UP</i> <sub>66</sub>		7 15.0 270°83	1.8/14.4	17	
6 10	20 2.41	-18 4.7	2.275	3.124	12.0	21.2	6 10	20 6.68	-24 0.0	1.583	2.453	15.3	22.1
6 20	19 57.32	-17 46.2	2.192	3.119	9.1	21.0	6 20	20 1.68	-24 29.8	1.493	2.433	11.6	21.8
6 30	19 50.45	-17 32.0	2.132	3.115	5.9	20.8	6 30	19 53.79	-25 4.3	1.425	2.413	7.4	21.5
7 10	19 42.38	-17 21.1	2.099	3.110	2.5	20.5	7 10	19 43.71	-25 38.7	1.381	2.393	2.9	21.2
7 20	19 33.86	-17 12.6	2.094	3.105	2.2	20.5	7 20	19 32.54	-26 8.0	1.362	2.373	3.4	21.2
7 30	19 25.72	-17 5.8	2.116	3.101	5.5	20.7	7 30	19 21.72	-26 28.3	1.369	2.352	8.2	21.4
8 9	19 18.77	-16 59.8	2.165	3.096	8.9	20.9	8 9	19 12.64	-26 37.9	1.400	2.330	12.8	21.6
8 19	19 13.59	-16 54.1	2.238	3.092	11.9	21.1	8 19	19 6.36	-26 37.7	1.452	2.309	16.9	21.8
<b>283654</b>	2002 <i>LJ</i> <sub>47</sub>		7 15.0 3°59	8.5/18.0	16		<b>356397</b>	2010 <i>RL</i> <sub>78</sub>		7 15.0 281°58	3.9/13.5	18	
6 10	19 59.73	-2 35.3	1.531	2.360	17.7	19.9	6 10	20 4.71	-32 10.9	2.201	3.060	12.0	20.5
6 20	19 55.95	-1 43.0	1.464	2.360	14.8	19.7	6 20	19 59.35	-32 40.5	2.124	3.054	9.2	20.3
6 30	19 49.88	-1 10.3	1.415	2.360	11.8	19.5	6 30	19 51.86	-33 6.6	2.070	3.048	6.3	20.1
7 10	19 42.24	-1 0.2	1.387	2.360	9.3	19.4	7 10	19 42.92	-33 24.9	2.042	3.043	4.1	19.9
7 20	19 33.98	-1 13.4	1.382	2.362	8.6	19.4	7 20	19 33.42	-33 32.1	2.041	3.037	4.6	20.0
7 30	19 26.23	-1 48.0	1.401	2.364	10.1	19.5	7 30	19 24.41	-33 26.5	2.067	3.032	7.3	20.1
8 9	19 20.02	-2 39.1	1.442	2.367	12.9	19.6	8 9	19 16.83	-33 8.8	2.118	3.026	10.2	20.3
8 19	19 16.10	-3 40.9	1.504	2.370	15.9	19.8	8 19	19 11.37	-32 40.9	2.192	3.020	13.0	20.5
<b>39501</b>	1981 <i>EV</i> <sub>31</sub>		7 15.0 268°36	3.2/16.1	18		<b>338006</b>	2002 <i>EN</i> <sub>106</sub>		7 15.0 4°83	2.		

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7 15.0

7 15.0

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>16521</b>	1990 <i>WR</i> <sub>5</sub>		7 15.0 323°02	1°5/14.3	18		<b>37906</b>	2012 <i>JR</i> <sub>27</sub>		7 15.0 262°61	3°9/16.2	17	
6 10	20 1.05	-22 25.7	1.937	2.804	13.0	18.3	6 10	20 4.33	-12 41.4	1.595	2.447	16.0	21.6
6 20	19 56.81	-23 16.7	1.857	2.796	9.8	18.1	6 20	19 59.46	-12 17.8	1.519	2.443	12.6	21.4
6 30	19 50.41	-24 13.7	1.801	2.789	6.1	17.9	6 30	19 52.13	-12 5.5	1.463	2.439	8.6	21.2
7 10	19 42.47	-25 12.2	1.770	2.782	2.3	17.6	7 10	19 43.09	-12 4.3	1.431	2.435	4.9	20.9
7 20	19 33.84	-26 7.6	1.766	2.776	2.8	17.6	7 20	19 33.34	-12 13.2	1.425	2.431	4.3	20.9
7 30	19 25.57	-26 55.6	1.788	2.770	6.7	17.9	7 30	19 24.09	-12 30.2	1.444	2.427	7.7	21.1
8 9	19 18.64	-27 33.9	1.836	2.764	10.4	18.1	8 9	19 16.48	-12 52.6	1.487	2.423	11.7	21.3
8 19	19 13.82	-28 1.8	1.906	2.758	13.7	18.3	8 19	19 11.29	-13 17.6	1.551	2.419	15.4	21.5
<b>115417</b>	2003 <i>SR</i> <sub>299</sub>		7 15.0 267°91	3°3/15.6	18		<b>57400</b>	2001 <i>RR</i> <sub>90</sub>		7 15.0 237°00	1°3/15.6	18	
6 10	20 7.78	-16 3.7	1.574	2.430	16.1	19.3	6 10	20 3.96	-16 15.8	1.788	2.643	14.5	20.2
6 20	20 2.21	-15 16.3	1.487	2.415	12.5	19.0	6 20	19 59.08	-16 36.8	1.705	2.636	11.1	20.0
6 30	19 53.95	-14 34.4	1.420	2.400	8.4	18.7	6 30	19 51.87	-17 7.7	1.645	2.629	7.1	19.7
7 10	19 43.72	-13 58.5	1.378	2.385	4.4	18.5	7 10	19 43.01	-17 46.1	1.610	2.621	2.9	19.4
7 20	19 32.61	-13 28.9	1.361	2.370	4.0	18.4	7 20	19 33.41	-18 28.5	1.601	2.613	2.4	19.4
7 30	19 21.96	-13 5.7	1.371	2.354	8.1	18.6	7 30	19 24.20	-19 11.3	1.619	2.605	6.7	19.6
8 9	19 13.03	-12 48.7	1.405	2.339	12.5	18.8	8 9	19 16.44	-19 51.2	1.662	2.597	10.8	19.9
8 19	19 6.73	-12 37.1	1.460	2.323	16.5	19.0	8 19	19 10.93	-20 26.3	1.728	2.589	14.4	20.1
<b>426454</b>	2013 <i>QZ</i> <sub>64</sub>		7 15.0 344°41	1°4/14.6	17		<b>397997</b>	2009 <i>BT</i> <sub>166</sub>		7 15.0 49°97	3°1/13.9	15	
6 10	19 58.30	-21 28.8	1.054	1.957	18.7	20.5	6 10	20 5.22	-27 58.9	1.705	2.575	14.3	20.9
6 20	19 56.13	-22 5.5	0.987	1.945	14.2	20.2	6 20	19 59.90	-28 31.5	1.657	2.596	10.7	20.7
6 30	19 50.65	-22 52.8	0.939	1.934	8.9	19.9	6 30	19 52.21	-29 2.9	1.630	2.616	6.9	20.6
7 10	19 42.70	-23 45.0	0.910	1.924	3.1	19.5	7 10	19 43.05	-29 28.4	1.629	2.638	3.5	20.4
7 20	19 33.63	-24 35.3	0.904	1.917	3.6	19.5	7 20	19 33.49	-29 44.2	1.654	2.659	4.0	20.5
7 30	19 25.20	-25 17.2	0.919	1.910	9.5	19.8	7 30	19 24.75	-29 48.6	1.704	2.680	7.5	20.7
8 9	19 19.07	-25 47.0	0.954	1.905	15.0	20.1	8 9	19 17.83	-29 42.0	1.779	2.702	11.0	21.0
8 19	19 16.32	-26 3.7	1.007	1.902	19.7	20.4	8 19	19 13.37	-29 26.2	1.876	2.724	14.0	21.2
<b>119606</b>	2001 <i>WM</i> <sub>19</sub>		7 15.0 157°00	0°9/15.4	18		<b>446733</b>	2015 <i>OT</i> <sub>74</sub>		7 15.0 251°23	6°7/12.3	18	
6 10	20 5.65	-18 13.3	2.020	2.870	13.3	20.3	6 10	20 11.83	-44 59.0	2.745	3.563	11.1	21.2
6 20	19 59.93	-18 21.0	1.948	2.876	10.0	20.1	6 20	20 4.55	-45 27.3	2.662	3.549	9.3	21.1
6 30	19 52.16	-18 34.7	1.898	2.881	6.3	19.9	6 30	19 55.04	-45 44.6	2.602	3.535	7.7	21.0
7 10	19 43.03	-18 52.2	1.874	2.886	2.4	19.6	7 10	19 44.02	-45 46.1	2.568	3.520	6.8	20.9
7 20	19 33.39	-19 11.3	1.878	2.891	2.1	19.6	7 20	19 32.50	-45 28.7	2.561	3.506	7.1	20.9
7 30	19 24.25	-19 29.5	1.910	2.895	6.0	19.9	7 30	19 21.57	-44 51.8	2.580	3.491	8.6	21.0
8 9	19 16.52	-19 45.5	1.968	2.899	9.7	20.1	8 9	19 12.25	-43 57.5	2.624	3.476	10.4	21.1
8 19	19 10.85	-19 58.3	2.049	2.902	12.9	20.3	8 19	19 5.21	-42 49.9	2.691	3.461	12.4	21.2
<b>27573</b>	2000 <i>RU</i> <sub>2</sub>		7 15.0 299°52	4°9/17.3	18		<b>68781</b>	2002 <i>FN</i> <sub>7</sub>		7 15.0 75°74	10°4/19.9	18	
6 10	19 59.65	-7 2.9	2.090	2.916	13.7	18.7	6 10	20 2.20	+ 5 12.0	1.807	2.581	17.5	19.1
6 20	19 55.45	-6 51.1	2.005	2.908	11.1	18.5	6 20	19 57.40	+ 6 10.9	1.749	2.594	15.2	18.9
6 30	19 49.42	-6 52.8	1.941	2.899	8.2	18.3	6 30	19 50.61	+ 6 46.8	1.709	2.608	12.9	18.8
7 10	19 42.12	-7 8.3	1.901	2.891	5.6	18.2	7 10	19 42.52	+ 6 56.5	1.691	2.622	11.1	18.7
7 20	19 34.26	-7 36.8	1.887	2.883	5.0	18.1	7 20	19 33.98	+ 6 39.3	1.695	2.636	10.4	18.7
7 30	19 26.69	-8 16.0	1.900	2.875	7.0	18.2	7 30	19 25.98	+ 5 57.2	1.723	2.650	11.1	18.8
8 9	19 20.26	-9 2.7	1.938	2.867	9.9	18.4	8 9	19 19.38	+ 4 55.1	1.773	2.664	12.8	18.9
8 19	19 15.60	-9 53.2	2.000	2.859	12.8	18.5	8 19	19 14.82	+ 3 39.6	1.845	2.678	14.9	19.1
<b>39104</b>	2000 <i>WO</i> <sub>18</sub>		7 15.0 204°03	0°6/14.7	18		<b>253824</b>	2003 <i>YO</i> <sub>62</sub>		7 15.0 251°08	0°1/15.0	17	
6 10	20 2.00	-22 30.8	2.708	3.557	10.3	20.2	6 10	20 6.90	-20 34.0	1.757	2.616	14.5	21.3
6 20	19 56.86	-22 49.7	2.624	3.554	7.7	20.0	6 20	20 1.48	-20 45.6	1.666	2.600	11.0	21.1
6 30	19 50.12	-23 11.0	2.564	3.550	4.8	19.8	6 30	19 53.49	-21 2.9	1.596	2.583	7.0	20.8
7 10	19 42.32	-23 32.5	2.532	3.545	1.7	19.6	7 10	19 43.61	-21 22.9	1.552	2.565	2.4	20.5
7 20	19 34.08	-23 52.0	2.529	3.540	1.8	19.6	7 20	19 32.83	-21 42.3	1.535	2.547	2.4	20.4
7 30	19 26.15	-24 7.7	2.554	3.535	5.0	19.8	7 30	19 22.38	-21 58.4	1.544	2.529	7.1	20.7
8 9	19 19.22	-24 18.6	2.606	3.530	7.9	20.0	8 9	19 13.49	-22 9.4	1.578	2.510	11.5	20.9
8 19	19 13.84	-24 24.7	2.683	3.524	10.5	20.1	8 19	19 7.05	-22 15.2	1.634	2.491	15.4	21.1
<b>79057</b>	1183 <i>T</i> <sub>-3</sub>		7 15.0 271°09	0°6/15.2	18		<b>380823</b>	2005 <i>YT</i> <sub>185</sub>		7 15.0 131°00	0°5/14.8	17	
6 10	20 6.09	-19 59.2	1.583	2.448	15.5	19.8	6 10	20 5.38	-20 31.4	2.063	2.916	12.9	21.8
6 20	20 1.04	-19 56.1	1.496	2.433	11.8	19.5	6 20	19 59.72	-21 7.4	1.997	2.928	9.7	21.6
6 30	19 53.28	-19 58.5	1.431	2.418	7.5	19.2	6 30	19 52.03	-21 48.5	1.954	2.940	6.0	21.4
7 10	19 43.53	-20 4.3	1.390	2.403	2.7	18.9	7 10	19 43.01	-22 31.4	1.938	2.951	2.0	21.1
7 20	19 32.86	-20 10.7	1.374	2.387	2.5	18.9	7 20	19 33.50	-23 12.2	1.950	2.962	2.1	21.2
7 30	19 22.61	-20 15.4	1.384	2.371	7.5	19.1	7 30	19 24.50	-23 48.0	1.990	2.973	6.0	21.4
8 9	19 14.08	-20 17.4	1.418	2.355	12.2	19.4	8 9	19 16.91	-24 16.9	2.056	2.983	9.5	21.7
8 19	19 8.19	-20 16.2	1.474	2.339	16.2	19.6	8 19	19 11.36	-24 38.6	2.146	2.992	12.6	21.9
<b>513645</b>	2011 <i>RG</i> <sub>10</sub>		7 15.0 265°19	4°6/17.0	18		<b>58691</b>	1998 <i>BG</i> <sub>14</sub>		7 15.0 212°53	0°6/15.3	18	
6 10	20 0.95	-7 50.8	2.128	2.954	13.5	21.9	6 10	20 3.96	-17 58.6	1.861	2.717	13.9	19.6
6 20	19 56.43	-7 37.9	2.038	2.942	10.9	21.7	6 20	19 58.96	-18 22.9	1.782	2.714	10.6	19.4
6 30	19 50.05	-7 37.5	1.969	2.929	8.0	21.5	6 30	19 51.74	-18 55.3	1.726	2.711	6.7	19.2
7 10	19 42.35	-7 50.1	1.925	2.917	5.4	21.3	7 10	19 42.96	-19 33.0	1.695	2.708	2.4	18.9
7 20	19 34.04	-8 14.8	1.907	2.904	4.8	21.2	7 20	19 33.51	-20 12.5	1.691	2.704	2.2	18.9
7 30	19 26.01	-8 49.7	1.916	2.892	6.9	21.3	7 30	19 24.48	-20 50.2	1.714	2.700	6.4	19.1
8 9	19 19.09	-9 31.6	1.951	2.879	9.9	21.5	8 9	19 16.89	-21 23.7	1.763	2.696	10.4	19.3
8 19	19 13.95	-10 17.4	2.009	2.866	12.9	21.7	8 19	19 11.49	-21 51.5	1.834	2.692	13.9	19.6
<b>257656</b>	1999 <i>UY</i> <sub>47</sub>		7 15.0 291°56	0°1/15.1	18		<b>169872</b>	2002 <i>RN</i> <sub>103</sub>					

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7 15.0

7 15.1

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	
<b>195451</b>	2002 GX <sub>85</sub>	7 15.0 201°29' 11.7"/8.7 18						<b>129419</b>	2619 T-3	7 15.1 137°26' 7.1"/19.4 18				
6 10	20 15.45	-50 50.6	1.938	2.754	15.0	20.2	6 10	19 59.77	+ 4 5.4	2.815	3.567	12.4	20.1	
6 20	20 8.85	-52 35.8	1.885	2.752	13.3	20.0	6 20	19 54.99	+ 4 37.9	2.742	3.576	10.6	20.0	
6 30	19 58.51	-54 4.9	1.852	2.751	12.1	20.0	6 30	19 48.89	+ 4 55.2	2.691	3.586	8.9	19.9	
7 10	19 45.40	-55 8.0	1.843	2.750	11.7	19.9	7 10	19 41.92	+ 4 56.0	2.664	3.595	7.6	19.9	
7 20	19 31.10	-55 38.3	1.855	2.748	12.4	20.0	7 20	19 34.64	+ 4 40.0	2.662	3.603	7.1	19.8	
7 30	19 17.66	-55 33.9	1.890	2.746	13.8	20.1	7 30	19 27.65	+ 4 8.6	2.687	3.612	7.7	19.9	
8 9	19 6.87	-54 58.6	1.944	2.744	15.5	20.2	8 9	19 21.55	+ 3 24.4	2.737	3.620	9.1	20.0	
8 19	18 59.84	-53 59.4	2.016	2.742	17.3	20.3	8 19	19 16.77	+ 2 31.0	2.810	3.627	10.7	20.1	
<b>338613</b>	2003 SQ <sub>209</sub>	7 15.0 271°73' 3°9/16.5 18						<b>428161</b>	2006 SD <sub>311</sub>	7 15.1 223°69' 2°4/15.9 17				
6 10	20 2.48	-10 57.3	1.975	2.813	14.0	20.8	6 10	20 5.86	-14 46.0	1.875	2.720	14.3	21.9	
6 20	19 57.80	-10 43.1	1.880	2.795	11.1	20.6	6 20	20 0.39	-14 41.1	1.788	2.712	11.1	21.7	
6 30	19 51.03	-10 39.8	1.806	2.776	7.8	20.4	6 30	19 52.66	-14 45.3	1.724	2.702	7.3	21.5	
7 10	19 42.74	-10 47.6	1.757	2.758	4.7	20.1	7 10	19 43.30	-14 57.2	1.685	2.693	3.6	21.2	
7 20	19 33.72	-11 5.4	1.735	2.739	4.1	20.1	7 20	19 33.23	-15 15.0	1.672	2.682	3.0	21.2	
7 30	19 24.94	-11 31.5	1.739	2.720	6.9	20.2	7 30	19 23.53	-15 36.5	1.687	2.671	6.7	21.4	
8 9	19 17.38	-12 3.1	1.769	2.700	10.5	20.4	8 9	19 15.25	-15 59.4	1.727	2.660	10.7	21.6	
8 19	19 11.79	-12 37.5	1.821	2.681	13.9	20.5	8 19	19 9.15	-16 21.8	1.791	2.648	14.2	21.8	
<b>471293</b>	2011 GW <sub>64</sub>	7 15.1 32°52' 3°8/13.3 16						<b>84784</b>	2002 XH <sub>74</sub>	7 15.1 325°43' 6°3/11.9 18				
6 10	20 2.87	-25 20.9	1.318	2.205	16.7	20.6	6 10	20 2.84	-33 4.0	1.620	2.496	14.6	18.7	
6 20	19 58.88	-26 44.6	1.270	2.218	12.5	20.4	6 20	19 58.94	-34 22.9	1.543	2.481	11.5	18.4	
6 30	19 51.97	-28 12.8	1.242	2.232	8.0	20.2	6 30	19 52.17	-35 40.7	1.488	2.466	8.3	18.2	
7 10	19 43.07	-29 36.8	1.237	2.247	4.2	20.0	7 10	19 43.23	-36 49.3	1.457	2.451	6.4	18.1	
7 20	19 33.47	-30 48.5	1.257	2.262	5.2	20.1	7 20	19 33.26	-37 41.3	1.450	2.438	7.3	18.1	
7 30	19 24.69	-31 42.3	1.302	2.278	9.2	20.4	7 30	19 23.71	-38 11.9	1.468	2.424	10.4	18.2	
8 9	19 18.04	-32 16.8	1.368	2.295	13.3	20.7	8 9	19 16.01	-38 20.4	1.508	2.412	13.8	18.4	
8 19	19 14.35	-32 33.5	1.454	2.313	16.8	20.9	8 19	19 11.17	-38 9.5	1.567	2.400	17.1	18.6	
<b>173363</b>	2000 AD <sub>49</sub>	7 15.1 288°71' 8°5/14.2 18						<b>27236</b>	Millermatt	7 15.1 188°36' 1°9/14.3 18				
6 10	20 16.96	-14 40.2	1.072	1.935	21.4	19.3	6 10	20 5.36	-25 7.8	1.973	2.834	13.1	19.2	
6 20	20 10.05	-11 59.8	0.997	1.925	17.2	19.0	6 20	19 59.95	-25 36.4	1.899	2.834	9.8	19.0	
6 30	19 59.26	-9 16.9	0.943	1.916	12.6	18.7	6 30	19 52.32	-26 6.9	1.847	2.833	6.2	18.8	
7 10	19 45.66	-6 39.8	0.911	1.906	9.0	18.5	7 10	19 43.16	-26 35.2	1.821	2.833	2.6	18.5	
7 20	19 30.89	-4 19.1	0.904	1.897	9.3	18.5	7 20	19 33.41	-26 57.8	1.822	2.832	3.0	18.6	
7 30	19 17.04	-2 24.4	0.920	1.888	13.4	18.7	7 30	19 24.15	-27 12.3	1.851	2.830	6.7	18.8	
8 9	19 5.93	-1 0.1	0.958	1.879	18.2	18.9	8 9	19 16.38	-27 17.8	1.905	2.829	10.3	19.0	
8 19	18 58.66	-0 4.8	1.014	1.870	22.6	19.2	8 19	19 10.81	-27 15.2	1.982	2.827	13.5	19.2	
<b>211584</b>	2003 SL <sub>185</sub>	7 15.1 313°13' 6°3/16.7 18						<b>245608</b>	2005 WP <sub>36</sub>	7 15.1 245°42' 0°1/15.0 18				
6 10	20 0.25	- 9 39.1	1.206	2.075	19.1	19.6	6 10	20 1.35	-20 21.7	2.541	3.391	10.9	21.2	
6 20	19 57.32	- 9 5.1	1.119	2.050	15.5	19.3	6 20	19 56.52	-20 40.6	2.451	3.380	8.2	21.0	
6 30	19 51.36	- 8 47.8	1.049	2.025	11.3	18.9	6 30	19 50.02	-21 3.9	2.385	3.370	5.1	20.8	
7 10	19 43.01	- 8 49.8	1.000	2.000	7.4	18.6	7 10	19 42.36	-21 29.1	2.346	3.359	1.7	20.5	
7 20	19 33.37	- 9 11.4	0.973	1.976	6.6	18.5	7 20	19 34.19	-21 54.2	2.335	3.348	1.7	20.5	
7 30	19 23.98	- 9 50.6	0.967	1.953	10.2	18.6	7 30	19 26.28	-22 16.9	2.353	3.337	5.1	20.7	
8 9	19 16.40	-10 42.1	0.983	1.930	15.0	18.8	8 9	19 19.38	-22 35.8	2.398	3.325	8.3	20.9	
8 19	19 11.84	-11 40.1	1.016	1.909	19.7	19.0	8 19	19 14.09	-22 50.3	2.467	3.314	11.1	21.1	
<b>475619</b>	2006 UT <sub>168</sub>	7 15.1 275°82' 0°1/15.1 18						<b>95296</b>	2002 CQ <sub>91</sub>	7 15.1 352°97' 2°4/16.4 18				
6 10	20 1.91	-19 51.4	2.082	2.940	12.6	21.6	6 10	19 59.47	-12 15.7	2.007	2.853	13.5	19.5	
6 20	19 57.26	-20 12.9	1.998	2.932	9.5	21.4	6 20	19 55.41	-12 40.8	1.928	2.851	10.4	19.3	
6 30	19 50.62	-20 40.1	1.937	2.924	6.0	21.1	6 30	19 49.45	-13 18.1	1.873	2.850	7.0	19.1	
7 10	19 42.58	-21 10.5	1.902	2.916	2.0	20.9	7 10	19 42.19	-14 5.7	1.842	2.848	3.6	18.8	
7 20	19 33.93	-21 41.1	1.895	2.908	2.0	20.8	7 20	19 34.37	-15 0.7	1.837	2.847	2.8	18.8	
7 30	19 25.63	-22 9.1	1.914	2.899	6.0	21.1	7 30	19 26.90	-15 59.2	1.861	2.847	6.0	19.0	
8 9	19 18.58	-22 32.6	1.960	2.891	9.6	21.3	8 9	19 20.64	-16 57.4	1.909	2.846	9.5	19.2	
8 19	19 13.47	-22 50.7	2.028	2.883	12.9	21.5	8 19	19 16.24	-17 52.3	1.981	2.846	12.7	19.4	
<b>250052</b>	2002 CC <sub>297</sub>	7 15.1 307°24' 5°4/13.1 18						<b>33256</b>	1998 HK <sub>35</sub>	7 15.1 141°53' 4°4/17.3 18				
6 10	20 6.31	-36 24.6	2.135	2.989	12.5	20.1	6 10	20 0.28	- 6 59.9	2.285	3.104	12.9	18.0	
6 20	20 0.73	-36 56.5	2.060	2.983	9.9	19.9	6 20	19 55.72	- 6 55.5	2.208	3.107	10.4	17.8	
6 30	19 52.81	-37 21.8	2.007	2.976	7.2	19.7	6 30	19 49.50	- 7 3.9	2.152	3.110	7.6	17.7	
7 10	19 43.32	-37 35.4	1.980	2.970	5.5	19.6	7 10	19 42.17	- 7 24.9	2.122	3.112	5.2	17.5	
7 20	19 33.24	-37 33.7	1.979	2.963	6.0	19.6	7 20	19 34.40	- 7 57.2	2.119	3.115	4.5	17.5	
7 30	19 23.73	-37 15.5	2.005	2.957	8.3	19.7	7 30	19 26.98	- 8 38.5	2.143	3.117	6.3	17.6	
8 9	19 15.83	-36 42.2	2.055	2.951	11.0	19.9	8 9	19 20.63	- 9 25.6	2.193	3.119	9.0	17.8	
8 19	19 10.27	-35 57.0	2.127	2.946	13.6	20.1	8 19	19 15.91	-10 15.4	2.266	3.121	11.7	18.0	
<b>184236</b>	2004 RQ <sub>197</sub>	7 15.1 343°73' 1°3/14.6 18						<b>483616</b>	2004 TG <sub>16</sub>	7 15.1 325°05' 23°1/11.0 17				
6 10	20 1.45	-24 34.1	1.782	2.655	13.7	19.6	6 10	19 58.27	+22 41.4	1.459	2.147	24.4	20.9	
6 20	19 57.22	-24 40.7	1.705	2.646	10.3	19.3	6 20	19 55.61	+25 43.0	1.386	2.117	23.8	20.8	
6 30	19 50.71	-24 48.8	1.650	2.639	6.5	19.1	6 30	19 50.23	+28 16.0	1.325	2.088	23.3	20.6	
7 10	19 42.62	-24 55.5	1.619	2.632	2.4	18.8	7 10	19 42.65	+30 9.0	1.278	2.059	23.1	20.5	
7 20	19 33.91	-24 58.0	1.614	2.625	2.7	18.8	7 20	19 33.77	+31 12.7	1.244	2.032	23.3	20.4	
7 30	19 25.70	-24 54.6	1.635	2.620	6.8	19.1	7 30	19 24.91	+31 21.6	1.222	2.006	23.8	20.4	
8 9	19 19.03	-24 44.8	1.680	2.615	10.8	19.3	8 9	19 17.51	+30 36.7	1.212	1.981	24.6	20.3	
8 19	19 14.62	-24 29.5	1.748	2.611	14.2	19.5	8 19	19 12.78	+29 3.7	1.214	1.957	25.7	20.4	
<b>408956</b>	2002 GH <sub>2</sub>	7 15.1 171°81' 18°1/31.4 17						<b>201797</b>	2003 WS <sub>154</sub>	7 15.1 172°70' 0°8/14.7 18				
6 10	20 7.86	+36 13.2	2.320	2.804	20.2	21.9	6 10	20 4.36	-22 43.8	2.566	3.413	10.8	21.8	
6 20	20 1.81	+37 54.4	2.267	2.808	19.6	21.8	6 20	19 58.67	-23 6.4	2.488	3.417			

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>238679</b>	2005 <i>EL</i> <sub>207</sub>	7 15.1 150°18'		3°5'/16.8 18			<b>125248</b>	2001 <i>UO</i> <sub>179</sub>	7 15.1 311°92'		0°4'/14.9 17		
6 10	20 2.36	-9 31.7	2.286	3.111	12.7	21.1	6 10	20 3.72	-21 52.4	1.142	2.032	18.4	20.1
6 20	19 57.24	-9 33.5	2.211	3.118	10.0	20.9	6 20	20 0.25	-21 53.7	1.061	2.012	14.1	19.7
6 30	19 50.43	-9 46.4	2.159	3.124	7.1	20.8	6 30	19 53.33	-22 1.0	1.000	1.992	8.9	19.4
7 10	19 42.49	-10 9.9	2.133	3.130	4.3	20.6	7 10	19 43.74	-22 11.0	0.959	1.973	3.1	19.0
7 20	19 34.12	-10 42.2	2.134	3.136	3.7	20.6	7 20	19 32.83	-22 19.4	0.941	1.954	3.2	18.9
7 30	19 26.12	-11 21.0	2.163	3.141	5.9	20.7	7 30	19 22.41	-22 22.9	0.945	1.936	9.3	19.2
8 9	19 19.25	-12 3.3	2.218	3.146	8.9	20.9	8 9	19 14.23	-22 20.1	0.970	1.918	15.1	19.5
8 19	19 14.08	-12 46.4	2.298	3.150	11.6	21.1	8 19	19 9.51	-22 11.4	1.013	1.902	20.1	19.7
<b>373578</b>	2001 <i>YU</i> <sub>151</sub>	7 15.1 179°59'		2°5'/14.1 18			<b>256469</b>	2007 <i>DT</i> <sub>34</sub>	7 15.1 270°33'		3°9'/17.2 18		
6 10	20 7.89	-27 40.1	2.159	3.013	12.4	21.5	6 10	19 59.30	-7 55.3	2.375	3.198	12.4	20.8
6 20	20 1.67	-28 6.0	2.084	3.015	9.4	21.3	6 20	19 55.00	-7 56.7	2.290	3.193	9.9	20.7
6 30	19 53.31	-28 31.3	2.032	3.016	6.0	21.1	6 30	19 49.09	-8 10.0	2.227	3.188	7.1	20.5
7 10	19 43.49	-28 51.9	2.007	3.016	3.0	20.9	7 10	19 42.07	-8 35.1	2.189	3.183	4.7	20.3
7 20	19 33.13	-29 4.7	2.010	3.016	3.4	20.9	7 20	19 34.57	-9 10.6	2.179	3.178	4.1	20.3
7 30	19 23.28	-29 7.7	2.041	3.015	6.6	21.1	7 30	19 27.35	-9 54.0	2.196	3.173	6.0	20.4
8 9	19 14.89	-29 1.2	2.098	3.014	9.9	21.3	8 9	19 21.13	-10 42.5	2.239	3.168	8.8	20.6
8 19	19 8.66	-28 46.4	2.178	3.012	12.9	21.5	8 19	19 16.47	-11 32.9	2.307	3.163	11.5	20.7
<b>511459</b>	2014 <i>KA</i> <sub>18</sub>	7 15.1 189°52'		1°5'/14.2 18			<b>256084</b>	2006 <i>UR</i> <sub>205</sub>	7 15.1 59°20'		1°4'/14.6 17		
6 10	20 2.19	-23 36.6	2.319	3.176	11.5	21.2	6 10	20 6.53	-22 59.4	1.347	2.225	16.9	20.4
6 20	19 57.31	-24 23.2	2.242	3.176	8.6	21.1	6 20	20 1.43	-23 25.1	1.294	2.238	12.7	20.2
6 30	19 50.58	-25 13.3	2.189	3.176	5.4	20.9	6 30	19 53.45	-23 55.3	1.262	2.252	7.9	19.9
7 10	19 42.57	-26 3.1	2.163	3.175	2.2	20.6	7 10	19 43.59	-24 25.0	1.253	2.266	2.8	19.7
7 20	19 34.02	-26 48.9	2.165	3.174	2.6	20.7	7 20	19 33.16	-24 49.5	1.269	2.281	3.2	19.7
7 30	19 25.81	-27 27.6	2.195	3.173	5.9	20.9	7 30	19 23.64	-25 5.8	1.310	2.295	8.0	20.1
8 9	19 18.77	-27 57.6	2.252	3.172	9.1	21.1	8 9	19 16.28	-25 12.9	1.373	2.310	12.5	20.4
8 19	19 13.55	-28 18.7	2.332	3.171	11.9	21.3	8 19	19 11.84	-25 11.7	1.457	2.325	16.3	20.6
<b>161407</b>	2003 <i>UB</i> <sub>213</sub>	7 15.1 348°65'		6°0'/13.1 17			<b>246134</b>	2007 <i>MA</i> <sub>4</sub>	7 15.1 88°29'		4°8'/13.4 17		
6 10	20 4.63	-30 42.2	1.203	2.093	17.7	19.6	6 10	20 9.28	-28 30.4	1.298	2.178	17.3	20.6
6 20	20 0.82	-31 45.6	1.141	2.089	13.6	19.4	6 20	20 3.90	-29 38.2	1.245	2.188	13.2	20.3
6 30	19 53.54	-32 48.3	1.098	2.084	9.4	19.1	6 30	19 55.22	-30 46.5	1.212	2.198	8.7	20.1
7 10	19 43.73	-33 41.1	1.077	2.081	6.2	18.9	7 10	19 44.26	-31 46.5	1.202	2.208	5.1	19.9
7 20	19 32.88	-34 15.9	1.079	2.078	7.1	19.0	7 20	19 32.51	-32 30.8	1.217	2.218	6.0	20.0
7 30	19 22.84	-34 28.3	1.104	2.076	11.0	19.2	7 30	19 21.70	-32 55.2	1.256	2.228	10.0	20.3
8 9	19 15.29	-34 19.0	1.149	2.075	15.3	19.4	8 9	19 13.33	-33 0.1	1.317	2.238	14.1	20.5
8 19	19 11.23	-33 52.0	1.212	2.075	19.2	19.7	8 19	19 8.30	-32 49.0	1.397	2.248	17.8	20.8
<b>508305</b>	2015 <i>KF</i> <sub>62</sub>	7 15.1 74°33'		2°7'/13.7 17			<b>392893</b>	2012 <i>VW</i> <sub>33</sub>	7 15.1 265°12'		2°2'/16.1 18		
6 10	20 4.26	-24 47.3	1.776	2.644	14.0	21.3	6 10	20 1.93	-13 59.6	1.941	2.789	13.8	21.0
6 20	19 59.37	-25 56.8	1.712	2.651	10.5	21.1	6 20	19 57.38	-14 12.8	1.857	2.782	10.6	20.7
6 30	19 52.08	-27 10.4	1.670	2.658	6.6	20.8	6 30	19 50.76	-14 36.6	1.796	2.775	7.0	20.5
7 10	19 43.12	-28 22.2	1.655	2.664	3.2	20.6	7 10	19 42.69	-15 9.3	1.760	2.768	3.4	20.3
7 20	19 33.49	-29 26.0	1.665	2.671	3.9	20.7	7 20	19 33.98	-15 48.3	1.750	2.761	2.8	20.2
7 30	19 24.39	-30 17.3	1.703	2.678	7.6	20.9	7 30	19 25.61	-16 30.5	1.768	2.754	6.3	20.4
8 9	19 16.90	-30 54.4	1.765	2.685	11.2	21.2	8 9	19 18.53	-17 12.6	1.811	2.746	10.0	20.6
8 19	19 11.81	-31 17.6	1.849	2.692	14.4	21.4	8 19	19 13.45	-17 52.4	1.877	2.739	13.4	20.8
<b>262957</b>	2007 <i>DQ</i> <sub>77</sub>	7 15.1 329°63'		7°2'/18.8 18			<b>513246</b>	2006 <i>CB</i> <sub>11</sub>	7 15.1 182°80'		0°8'/14.7 18		
6 10	19 57.62	-0 50.4	1.972	2.779	15.1	20.1	6 10	20 2.61	-24 7.9	3.020	3.865	9.4	22.9
6 20	19 54.08	-0 35.7	1.886	2.767	12.7	19.9	6 20	19 57.14	-24 14.6	2.938	3.865	7.1	22.7
6 30	19 48.68	-0 39.9	1.819	2.755	10.1	19.8	6 30	19 50.25	-24 21.8	2.881	3.865	4.4	22.5
7 10	19 41.95	-1 4.4	1.775	2.744	8.0	19.6	7 10	19 42.44	-24 27.9	2.852	3.865	1.6	22.3
7 20	19 34.62	-1 48.9	1.755	2.734	7.2	19.5	7 20	19 34.28	-24 31.2	2.853	3.864	1.8	22.3
7 30	19 27.56	-2 50.8	1.761	2.723	8.5	19.6	7 30	19 26.44	-24 30.8	2.883	3.863	4.6	22.5
8 9	19 21.64	-4 5.5	1.791	2.714	10.9	19.7	8 9	19 19.55	-24 26.2	2.941	3.861	7.2	22.7
8 19	19 17.51	-5 27.5	1.844	2.705	13.7	19.9	8 19	19 14.08	-24 17.7	3.023	3.859	9.6	22.9
<b>153280</b>	2001 <i>DB</i> <sub>52</sub>	7 15.1 162°20'		3°4'/17.7 18			<b>345954</b>	2007 <i>SX</i> <sub>7</sub>	7 15.1 333°06'		3°2'/13.9 17		
6 10	20 0.62	-5 52.2	2.797	3.600	11.2	20.4	6 10	20 3.23	-27 12.1	1.632	2.508	14.6	21.1
6 20	19 55.72	-6 29.2	2.713	3.603	9.0	20.3	6 20	19 58.90	-27 51.0	1.558	2.500	11.1	20.8
6 30	19 49.41	-7 19.1	2.652	3.607	6.5	20.1	6 30	19 51.95	-28 31.2	1.506	2.493	7.1	20.6
7 10	19 42.14	-8 20.6	2.619	3.610	4.2	20.0	7 10	19 43.15	-29 7.5	1.478	2.487	3.7	20.4
7 20	19 34.48	-9 31.4	2.614	3.613	3.5	19.9	7 20	19 33.56	-29 34.9	1.475	2.481	4.3	20.4
7 30	19 27.06	-10 48.0	2.640	3.616	5.2	20.0	7 30	19 24.51	-29 50.3	1.497	2.475	8.1	20.6
8 9	19 20.50	-12 7.0	2.693	3.618	7.6	20.2	8 9	19 17.21	-29 52.8	1.543	2.470	12.1	20.8
8 19	19 15.30	-13 24.8	2.773	3.620	10.0	20.4	8 19	19 12.50	-29 43.9	1.610	2.465	15.6	21.0
<b>315346</b>	2007 <i>UT</i> <sub>10</sub>	7 15.1 221°88'		3°8'/13.7 17			<b>478366</b>	2011 <i>YW</i> <sub>30</sub>	7 15.1 258°40'		0°6'/14.9 18		
6 10	20 9.49	-28 44.7	1.685	2.549	14.8	21.3	6 10	20 3.10	-23 1.3	2.319	3.174	11.6	20.9
6 20	20 3.63	-29 28.1	1.607	2.542	11.3	21.1	6 20	19 57.96	-23 4.1	2.235	3.168	8.7	20.7
6 30	19 54.92	-30 11.5	1.551	2.534	7.4	20.8	6 30	19 50.97	-23 8.6	2.175	3.161	5.4	20.5
7 10	19 44.16	-30 48.9	1.520	2.526	4.2	20.6	7 10	19 42.73	-23 12.8	2.141	3.154	1.9	20.3
7 20	19 32.50	-31 14.6	1.515	2.517	4.8	20.6	7 20	19 34.00	-23 14.6	2.134	3.147	2.0	20.3
7 30	19 21.38	-31 25.5	1.536	2.508	8.5	20.8	7 30	19 25.64	-23 12.9	2.156	3.139	5.6	20.5
8 9	19 12.13	-31 21.6	1.581	2.498	12.5	21.0	8 9	19 18.49	-23 7.0	2.204	3.132	8.9	20.7
8 19	19 5.69	-31 5.3	1.648	2.488	16.0	21.2	8 19	19 13.14	-22 57.3	2.276	3.125	11.9	20.9
<b>228597</b>	2002 <i>AQ</i> <sub>96</sub>	7 15.1 195°58'		1°0'/14.6 18			<b>278845</b>	2008 <i></i>					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>360660</b>	2004 <i>RM</i> <sub>73</sub>	7 15.1 334°82		4.7/16.6 17			<b>500928</b>	2013 <i>PO</i> <sub>39</sub>	7 15.1 21°32		1°0/15.4 17		
6 10	19 55.79	-12 7.1	0.949	1.846	20.7	19.9	6 10	20 0.40	-17 22.6	1.027	1.922	19.6	20.5
6 20	19 54.45	-11 57.9	0.877	1.827	16.4	19.6	6 20	19 57.43	-17 45.5	0.978	1.930	14.9	20.2
6 30	19 49.80	-12 9.3	0.821	1.808	11.4	19.3	6 30	19 51.27	-18 22.1	0.948	1.940	9.4	19.9
7 10	19 42.57	-12 42.2	0.784	1.792	6.3	18.9	7 10	19 42.96	-19 8.1	0.937	1.951	3.5	19.6
7 20	19 34.04	-13 34.0	0.766	1.777	5.2	18.8	7 20	19 33.92	-19 57.4	0.949	1.963	3.0	19.7
7 30	19 25.97	-14 38.9	0.769	1.763	10.0	19.0	7 30	19 25.81	-20 44.2	0.983	1.976	8.7	20.0
8 9	19 20.12	-15 48.9	0.790	1.751	15.7	19.3	8 9	19 20.07	-21 24.1	1.038	1.991	13.8	20.4
8 19	19 17.73	-16 56.8	0.828	1.742	20.9	19.5	8 19	19 17.51	-21 55.0	1.111	2.006	18.2	20.7
<b>333489</b>	2004 <i>XQ</i> <sub>7</sub>	7 15.1 305°08		3°8/13.6 18			<b>39573</b>	1993 <i>FO</i> <sub>4</sub>	7 15.1 160°96		5°0/17.7 18		
6 10	20 4.66	-27 36.2	1.559	2.435	15.1	20.0	6 10	20 2.69	-5 19.8	2.199	3.009	13.7	20.1
6 20	20 0.52	-28 21.4	1.459	2.401	11.7	19.7	6 20	19 57.59	-5 15.2	2.123	3.014	11.1	19.9
6 30	19 53.35	-29 10.0	1.380	2.367	7.7	19.4	6 30	19 50.73	-5 25.0	2.068	3.019	8.2	19.8
7 10	19 43.77	-29 56.0	1.325	2.334	4.2	19.1	7 10	19 42.68	-5 49.1	2.038	3.023	5.8	19.6
7 20	19 32.83	-30 32.9	1.295	2.300	5.0	19.1	7 20	19 34.17	-6 26.2	2.035	3.027	5.1	19.6
7 30	19 22.04	-30 55.6	1.289	2.266	9.3	19.2	7 30	19 26.01	-7 13.9	2.059	3.030	6.8	19.7
8 9	19 12.94	-31 2.3	1.307	2.233	13.9	19.4	8 9	19 19.01	-8 8.4	2.110	3.033	9.5	19.9
8 19	19 6.75	-30 54.2	1.344	2.200	18.1	19.6	8 19	19 13.75	-9 6.1	2.184	3.035	12.2	20.0
<b>389215</b>	2009 <i>DZ</i> <sub>67</sub>	7 15.1 159°85		2°0/16.1 18			<b>181803</b>	1998 <i>QY</i> <sub>73</sub>	7 15.1 342°82		8°6/17.5 18		
6 10	20 2.49	-13 23.9	2.350	3.186	12.1	21.6	6 10	19 57.74	-2 54.6	1.656	2.484	16.7	18.3
6 20	19 57.37	-13 43.8	2.274	3.191	9.3	21.4	6 20	19 54.50	-1 47.6	1.576	2.470	14.0	18.1
6 30	19 50.55	-14 12.8	2.220	3.196	6.1	21.2	6 30	19 49.12	-0 56.8	1.514	2.457	11.3	17.9
7 10	19 42.58	-14 49.2	2.193	3.200	3.0	21.0	7 10	19 42.20	-0 26.0	1.475	2.445	9.2	17.7
7 20	19 34.16	-15 30.6	2.194	3.204	2.4	21.0	7 20	19 34.60	-0 17.1	1.458	2.434	8.7	17.6
7 30	19 26.08	-16 14.2	2.224	3.207	5.4	21.2	7 30	19 27.34	-0 29.9	1.465	2.424	10.2	17.7
8 9	19 19.12	-16 57.4	2.280	3.210	8.5	21.4	8 9	19 21.43	-1 1.2	1.494	2.415	12.8	17.8
8 19	19 13.83	-17 38.1	2.361	3.213	11.4	21.6	8 19	19 17.63	-1 46.2	1.544	2.407	15.7	18.0
<b>342448</b>	2008 <i>UA</i> <sub>100</sub>	7 15.1 262°49		2°0/15.8 18			<b>99396</b>	2002 <i>AE</i> <sub>23</sub>	7 15.1 343°39		4°8/15.6 18		
6 10	20 3.98	-15 33.6	2.019	2.865	13.4	21.5	6 10	19 57.41	-16 43.8	0.887	1.794	20.8	17.4
6 20	19 58.96	-15 31.3	1.922	2.847	10.3	21.3	6 20	19 55.80	-15 34.0	0.821	1.777	16.3	17.1
6 30	19 51.80	-15 37.0	1.848	2.827	6.8	21.0	6 30	19 50.66	-14 31.2	0.771	1.762	11.1	16.8
7 10	19 43.09	-15 49.4	1.799	2.808	3.2	20.7	7 10	19 42.88	-13 38.0	0.739	1.749	6.1	16.4
7 20	19 33.62	-16 6.8	1.777	2.788	2.7	20.7	7 20	19 33.91	-12 57.0	0.727	1.737	5.6	16.4
7 30	19 24.40	-16 27.1	1.782	2.767	6.4	20.9	7 30	19 25.65	-12 29.2	0.735	1.728	10.7	16.6
8 9	19 16.41	-16 48.3	1.814	2.746	10.2	21.0	8 9	19 19.86	-12 13.8	0.760	1.721	16.3	16.9
8 19	19 10.44	-17 8.6	1.868	2.725	13.7	21.2	8 19	19 17.65	-12 8.1	0.802	1.716	21.3	17.1
<b>308581</b>	2005 <i>UK</i> <sub>482</sub>	7 15.1 321°17		2°3/15.9 18			<b>439078</b>	2011 <i>NU</i> <sub>1</sub>	7 15.1 319°83		5°5/16.0 16		
6 10	20 2.08	-15 16.4	2.142	2.988	12.7	20.1	6 10	20 2.39	-11 33.7	1.596	2.449	16.0	20.4
6 20	19 57.22	-14 58.2	2.062	2.986	9.8	19.9	6 20	19 58.19	-10 30.6	1.506	2.428	12.8	20.2
6 30	19 50.53	-14 46.8	2.006	2.984	6.5	19.7	6 30	19 51.54	-9 35.8	1.437	2.408	9.3	19.9
7 10	19 42.60	-14 41.6	1.975	2.983	3.3	19.5	7 10	19 43.08	-8 51.6	1.390	2.388	6.2	19.7
7 20	19 34.20	-14 41.5	1.972	2.981	2.8	19.4	7 20	19 33.76	-8 19.8	1.369	2.368	5.8	19.6
7 30	19 26.19	-14 45.3	1.995	2.979	5.9	19.6	7 30	19 24.77	-8 1.0	1.372	2.349	8.7	19.7
8 9	19 19.41	-14 51.7	2.045	2.978	9.2	19.8	8 9	19 17.30	-7 54.1	1.398	2.331	12.6	19.9
8 19	19 14.45	-14 59.3	2.118	2.976	12.3	20.0	8 19	19 12.20	-7 57.0	1.445	2.314	16.3	20.1
<b>129032</b>	2004 <i>TS</i> <sub>356</sub>	7 15.1 265°23		7°8/20.0 18			<b>343693</b>	2011 <i>CF</i> <sub>115</sub>	7 15.1 16°90		5°6/16.9 17		
6 10	19 58.98	+ 6 5.5	2.660	3.405	13.2	20.1	6 10	19 57.64	-10 45.7	1.031	1.917	20.3	19.9
6 20	19 54.69	+ 6 20.8	2.561	3.388	11.5	19.9	6 20	19 55.17	-10 18.1	0.985	1.926	16.0	19.7
6 30	19 48.90	+ 6 18.3	2.483	3.371	9.8	19.8	6 30	19 49.77	-10 10.0	0.956	1.938	11.2	19.4
7 10	19 42.05	+ 5 56.2	2.427	3.354	8.4	19.6	7 10	19 42.44	-10 21.7	0.947	1.951	6.9	19.2
7 20	19 34.70	+ 5 14.2	2.396	3.336	7.8	19.6	7 20	19 34.50	-10 50.9	0.959	1.966	5.8	19.2
7 30	19 27.52	+ 4 13.8	2.391	3.319	8.4	19.6	7 30	19 27.46	-11 32.7	0.993	1.983	9.3	19.5
8 9	19 21.17	+ 2 58.4	2.412	3.301	9.9	19.6	8 9	19 22.58	-12 21.2	1.047	2.001	13.6	19.8
8 19	19 16.20	+ 1 32.5	2.457	3.283	11.8	19.8	8 19	19 20.61	-13 10.6	1.120	2.020	17.7	20.1
<b>382961</b>	2004 <i>XX</i> <sub>23</sub>	7 15.1 212°79		1°4/15.6 18			<b>186813</b>	2004 <i>FT</i> <sub>7</sub>	7 15.1 99°52		1°1/14.7 17		
6 10	20 6.14	-17 34.3	2.434	3.271	11.7	21.4	6 10	20 7.34	-22 43.5	1.625	2.491	15.2	20.8
6 20	20 0.11	-17 18.3	2.343	3.264	8.9	21.2	6 20	20 1.68	-23 9.5	1.566	2.504	11.4	20.6
6 30	19 52.27	-17 6.3	2.276	3.255	5.8	21.0	6 30	19 53.50	-23 39.4	1.529	2.517	7.0	20.3
7 10	19 43.20	-16 57.6	2.236	3.246	2.5	20.8	7 10	19 43.67	-24 9.1	1.516	2.529	2.5	20.1
7 20	19 33.62	-16 51.0	2.225	3.236	2.2	20.7	7 20	19 33.30	-24 34.4	1.530	2.542	2.8	20.1
7 30	19 24.37	-16 45.8	2.243	3.225	5.4	20.9	7 30	19 23.67	-24 52.5	1.570	2.554	7.2	20.4
8 9	19 16.27	-16 41.2	2.288	3.214	8.7	21.1	8 9	19 15.88	-25 2.6	1.635	2.566	11.2	20.7
8 19	19 9.91	-16 36.8	2.358	3.202	11.7	21.3	8 19	19 10.66	-25 5.0	1.722	2.578	14.7	21.0
<b>478893</b>	2012 <i>WA</i> <sub>15</sub>	7 15.1 294°88		0°9/14.7 18			<b>249810</b>	2001 <i>DR</i> <sub>34</sub>	7 15.1 244°31		3°6/17.5 18		
6 10	20 2.64	-21 40.7	1.815	2.682	13.8	21.2	6 10	20 0.37	-6 22.0	2.843	3.648	11.0	21.4
6 20	19 58.20	-22 15.0	1.732	2.671	10.4	21.0	6 20	19 55.66	-6 40.8	2.740	3.631	8.9	21.2
6 30	19 51.43	-22 55.3	1.671	2.659	6.5	20.7	6 30	19 49.49	-7 11.7	2.660	3.614	6.5	21.0
7 10	19 42.99	-23 37.9	1.635	2.648	2.3	20.4	7 10	19 42.28	-7 54.2	2.607	3.597	4.3	20.8
7 20	19 33.78	-24 18.6	1.625	2.637	2.6	20.4	7 20	19 34.57	-8 46.6	2.582	3.579	3.7	20.8
7 30	19 24.93	-24 53.6	1.642	2.627	6.9	20.7	7 30	19 27.01	-9 46.6	2.587	3.561	5.4	20.9
8 9	19 17.53	-25 20.7	1.684	2.616	10.9	20.9	8 9	19 20.22	-10 51.0	2.619	3.543	7.9	21.0
8 19	19 12.40	-25 39.4	1.748	2.605	14.5	21.1	8 19	19 14.76	-11 56.8	2.677	3.524	10.4	21.1
<b>257611</b>	1999 <i>SC</i> <sub>1</sub>	7 15.1 202°88		2°2/13.9 18			<b>289996</b>	2005 <i>PV</i> <sub>10</sub>	7 15.1 325°22		0°5/15.4 18		
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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>286428</b>	2001 YD <sub>162</sub>	7 15.1 195°87' 2°3/14.3 18					<b>507389</b>	2012 GA <sub>14</sub>	7 15.1 29°47' 1°7/15.6 18				
6 10	20 4.99	-28 7.7	2.266	3.123	11.8	20.5	6 10	20 3.64	-17 36.2	1.233	2.113	18.0	20.9
6 20	19 59.43	-28 18.8	2.190	3.122	8.9	20.3	6 20	19 59.45	-17 30.6	1.178	2.121	13.7	20.7
6 30	19 51.91	-28 28.4	2.138	3.122	5.7	20.1	6 30	19 52.37	-17 34.8	1.141	2.130	8.8	20.4
7 10	19 43.10	-28 33.3	2.112	3.121	2.8	19.9	7 10	19 43.36	-17 46.7	1.127	2.139	3.6	20.2
7 20	19 33.83	-28 31.2	2.114	3.120	3.1	19.9	7 20	19 33.70	-18 3.1	1.136	2.149	3.0	20.1
7 30	19 25.04	-28 21.0	2.143	3.120	6.2	20.1	7 30	19 24.88	-18 20.9	1.169	2.159	8.0	20.5
8 9	19 17.61	-28 3.0	2.199	3.119	9.3	20.3	8 9	19 18.19	-18 37.5	1.224	2.170	12.8	20.8
8 19	19 12.15	-27 38.6	2.278	3.118	12.2	20.5	8 19	19 14.41	-18 51.4	1.299	2.182	16.9	21.1
<b>519743</b>	2013 CO <sub>226</sub>	7 15.1 89°01' 2°5/14.2 18					<b>307042</b>	2001 XN <sub>242</sub>	7 15.1 210°03' 0°1/15.1 18				
6 10	20 5.06	-28 48.7	2.229	3.086	11.9	21.4	6 10	20 2.56	-20 35.0	2.795	3.639	10.2	23.0
6 20	19 59.48	-29 0.6	2.159	3.091	9.0	21.2	6 20	19 57.30	-20 50.0	2.706	3.632	7.6	22.8
6 30	19 51.93	-29 10.3	2.112	3.095	5.8	21.0	6 30	19 50.50	-21 8.4	2.641	3.625	4.8	22.6
7 10	19 43.10	-29 14.8	2.091	3.099	3.0	20.9	7 10	19 42.65	-21 28.2	2.605	3.617	1.6	22.4
7 20	19 33.85	-29 11.7	2.098	3.103	3.3	20.9	7 20	19 34.34	-21 47.5	2.597	3.609	1.6	22.4
7 30	19 25.14	-28 59.9	2.133	3.108	6.3	21.1	7 30	19 26.31	-22 4.5	2.618	3.601	4.8	22.6
8 9	19 17.83	-28 40.0	2.193	3.112	9.4	21.3	8 9	19 19.22	-22 18.1	2.667	3.592	7.7	22.8
8 19	19 12.53	-28 13.5	2.277	3.116	12.2	21.5	8 19	19 13.61	-22 27.9	2.741	3.583	10.3	22.9
<b>371502</b>	2006 UK <sub>41</sub>	7 15.1 341°83' 14°0/16.9 17					<b>285184</b>	1996 TD <sub>36</sub>	7 15.1 210°41' 3°0/16.2 17				
6 10	19 54.81	-1 35.6	0.990	1.855	22.6	19.5	6 10	20 6.50	-13 6.6	1.916	2.755	14.3	22.2
6 20	19 53.45	+ 0 29.7	0.921	1.835	19.7	19.2	6 20	20 0.86	-12 59.6	1.831	2.748	11.2	22.0
6 30	19 49.05	+ 2 14.3	0.868	1.817	16.7	19.0	6 30	19 53.00	-13 2.5	1.767	2.741	7.6	21.8
7 10	19 42.33	+ 3 28.4	0.833	1.801	14.5	18.8	7 10	19 43.57	-13 14.5	1.729	2.734	4.0	21.5
7 20	19 34.48	+ 4 4.4	0.815	1.787	14.1	18.7	7 20	19 33.45	-13 34.1	1.717	2.725	3.4	21.5
7 30	19 27.09	+ 3 59.6	0.815	1.774	15.8	18.8	7 30	19 23.69	-13 58.8	1.734	2.716	6.7	21.7
8 9	19 21.72	+ 3 18.3	0.831	1.764	18.8	18.9	8 9	19 15.32	-14 26.2	1.776	2.707	10.5	21.9
8 19	19 19.48	+ 2 9.5	0.863	1.757	22.3	19.1	8 19	19 9.10	-14 54.2	1.841	2.696	14.0	22.1
<b>248503</b>	2005 UN <sub>480</sub>	7 15.1 284°24' 1°5/14.8 17 R					<b>35544</b>	1998 FT <sub>102</sub>	7 15.1 67°16' 9°3/18.8 18				
6 10	20 8.23	-27 15.2	2.211	3.063	12.2	20.5	6 10	20 2.31	+ 1 6.9	1.735	2.533	17.2	18.4
6 20	20 2.04	-26 56.9	2.111	3.040	9.3	20.3	6 20	19 57.68	+ 2 2.3	1.671	2.541	14.7	18.3
6 30	19 53.67	-26 35.5	2.034	3.018	5.9	20.0	6 30	19 50.96	+ 2 37.3	1.625	2.548	12.0	18.1
7 10	19 43.76	-26 8.8	1.984	2.995	2.4	19.7	7 10	19 42.84	+ 2 48.7	1.602	2.556	10.0	18.0
7 20	19 33.19	-25 35.2	1.962	2.973	2.6	19.7	7 20	19 34.19	+ 2 35.8	1.601	2.563	9.3	18.0
7 30	19 23.01	-24 54.6	1.969	2.950	6.3	19.9	7 30	19 26.05	+ 2 0.4	1.625	2.571	10.3	18.1
8 9	19 14.21	-24 8.3	2.003	2.927	9.9	20.1	8 9	19 19.34	+ 1 7.2	1.672	2.579	12.5	18.2
8 19	19 7.52	-23 18.5	2.061	2.904	13.1	20.3	8 19	19 14.73	+ 0 1.9	1.740	2.587	15.0	18.4
<b>72823</b>	2001 HO <sub>3</sub>	7 15.1 128°06' 5°2/12.6 18					<b>355616</b>	2008 DT <sub>36</sub>	7 15.1 63°66' 0°8/15.4 14 C				
6 10	20 7.69	-34 8.3	2.139	2.993	12.5	18.8	6 10	20 2.30	-18 19.9	2.063	2.918	12.8	21.5
6 20	20 1.73	-35 11.6	2.079	3.003	9.7	18.6	6 20	19 57.40	-18 28.6	2.001	2.931	9.7	21.3
6 30	19 53.48	-36 10.4	2.042	3.013	7.0	18.5	6 30	19 50.64	-18 43.1	1.961	2.945	6.1	21.1
7 10	19 43.68	-36 59.0	2.031	3.022	5.2	18.4	7 10	19 42.70	-19 1.5	1.947	2.959	2.3	20.9
7 20	19 33.31	-37 32.6	2.048	3.032	5.9	18.4	7 20	19 34.37	-19 21.3	1.960	2.973	2.0	20.9
7 30	19 23.51	-37 49.1	2.091	3.041	8.2	18.6	7 30	19 26.55	-19 40.4	2.001	2.987	5.6	21.1
8 9	19 15.31	-37 49.1	2.159	3.049	10.9	18.8	8 9	19 20.06	-19 57.2	2.067	3.001	9.1	21.4
8 19	19 9.43	-37 35.1	2.249	3.057	13.3	19.0	8 19	19 15.47	-20 10.9	2.157	3.015	12.1	21.6
<b>371473</b>	2006 TG <sub>18</sub>	7 15.1 344°08' 2°4/15.8 17					<b>25476</b>	Sealfon	7 15.1 277°11' 1°5/15.5 18				
6 10	19 56.36	-16 10.5	1.001	1.902	19.6	20.1	6 10	20 5.31	-17 43.9	1.533	2.397	16.0	19.1
6 20	19 54.75	-16 8.6	0.933	1.887	15.2	19.8	6 20	20 0.58	-17 38.9	1.448	2.384	12.3	18.8
6 30	19 49.90	-16 21.3	0.881	1.873	9.9	19.4	6 30	19 53.13	-17 41.9	1.384	2.370	7.9	18.5
7 10	19 42.64	-16 47.4	0.850	1.862	4.4	19.1	7 10	19 43.69	-17 51.1	1.344	2.355	3.2	18.2
7 20	19 34.25	-17 23.1	0.839	1.852	3.6	19.0	7 20	19 33.32	-18 4.1	1.329	2.341	2.8	18.2
7 30	19 26.45	-18 3.3	0.848	1.844	9.2	19.3	7 30	19 23.37	-18 18.4	1.339	2.327	7.6	18.4
8 9	19 20.88	-18 43.0	0.878	1.837	14.8	19.6	8 9	19 15.13	-18 31.9	1.373	2.313	12.3	18.6
8 19	19 18.61	-19 18.0	0.925	1.833	19.8	19.8	8 19	19 9.52	-18 43.2	1.428	2.298	16.4	18.9
<b>441350</b>	2008 DL <sub>3</sub>	7 15.1 48°99' 4°5/13.8 18					<b>398594</b>	2011 WQ <sub>90</sub>	7 15.1 333°91' 3°7/13.2 18				
6 10	20 8.01	-34 28.7	2.023	2.879	13.0	21.1	6 10	20 2.03	-27 32.7	1.846	2.718	13.4	20.4
6 20	20 1.92	-34 42.8	1.958	2.884	10.1	20.9	6 20	19 57.85	-28 41.0	1.771	2.710	10.1	20.2
6 30	19 53.53	-34 50.1	1.916	2.890	7.0	20.7	6 30	19 51.30	-29 51.9	1.718	2.704	6.7	19.9
7 10	19 43.67	-34 46.6	1.899	2.896	4.8	20.6	7 10	19 43.03	-30 59.5	1.691	2.697	3.9	19.8
7 20	19 33.39	-34 29.4	1.909	2.903	5.2	20.6	7 20	19 33.99	-31 57.8	1.690	2.691	4.7	19.8
7 30	19 23.84	-33 58.1	1.945	2.909	7.7	20.8	7 30	19 25.33	-32 42.5	1.715	2.686	8.0	20.0
8 9	19 16.02	-33 15.0	2.007	2.915	10.7	21.0	8 9	19 18.17	-33 11.9	1.765	2.680	11.5	20.2
8 19	19 10.59	-32 23.3	2.091	2.922	13.4	21.2	8 19	19 13.34	-33 26.6	1.835	2.676	14.6	20.4
<b>287398</b>	2002 VO <sub>92</sub>	7 15.1 315°85' 5°1/16.6 18					<b>396006</b>	2013 BW <sub>60</sub>	7 15.1 101°43' 2°5/14.2 18				
6 10	20 0.28	-10 1.6	1.643	2.493	15.8	20.2	6 10	20 5.14	-28 42.8	2.240	3.097	11.9	21.2
6 20	19 56.61	-9 30.7	1.549	2.469	12.7	20.0	6 20	19 59.54	-28 59.4	2.172	3.104	9.0	21.0
6 30	19 50.58	-9 12.4	1.476	2.446	9.2	19.7	6 30	19 51.99	-29 14.0	2.127	3.110	5.8	20.9
7 10	19 42.79	-9 7.8	1.426	2.423	6.0	19.5	7 10	19 43.17	-29 23.6	2.109	3.117	3.0	20.7
7 20	19 34.11	-9 17.0	1.400	2.401	5.4	19.4	7 20	19 33.94	-29 25.4	2.118	3.123	3.3	20.7
7 30	19 25.69	-9 38.6	1.398	2.379	8.2	19.5	7 30	19 25.25	-29 18.4	2.155	3.130	6.3	20.9
8 9	19 18.64	-10 9.5	1.421	2.358	12.1	19.7	8 9	19 17.95	-29 2.9	2.218	3.136	9.4	21.1
8 19	19 13.87	-10 46.2	1.464	2.338	15.9	19.8	8 19	19 12.65	-28 40.4	2.304	3.142	12.1	21.3
<b>254124</b>	2004 PO <sub>3</sub>	7 15.1 346°66' 3°7/14.1 18					<b>431343</b>	2007 AE <sub>22</sub>	7 15.1 161°76' 0°7/14.8 17				
6 10	20 4.31	-30 58.2	1.739	2.610	14.1	19.6	6 10	20 6.04	-21 11.2	1.881	2.738	13.8	21.6
6 20	19 59.56	-31 8.8	1.665	2.603	10.8	19.4	6 20	20 0.56	-21 43.9	1.809	2.742	10.3	21.4

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>60695</b>	2000 <i>GM</i> <sub>42</sub>		7 15.1 306°33	8°6/12.4 18			<b>74655</b>	1999 <i>RG</i> <sub>87</sub>		7 15.1 210°14	1°0/14.8 18		
6 10	20 7.83	-35 28.6	1.176	2.062	18.3	18.4	6 10	20 8.06	-22 42.4	1.857	2.713	13.9	20.4
6 20	20 4.00	-36 35.3	1.098	2.039	14.7	18.1	6 20	20 2.23	-23 3.1	1.775	2.708	10.5	20.2
6 30	19 56.09	-37 37.7	1.038	2.016	11.1	17.8	6 30	19 53.97	-23 27.6	1.716	2.702	6.6	19.9
7 10	19 44.92	-38 24.7	0.999	1.993	8.7	17.6	7 10	19 43.98	-23 52.2	1.682	2.695	2.4	19.6
7 20	19 32.09	-38 46.0	0.981	1.970	9.6	17.6	7 20	19 33.26	-24 13.3	1.676	2.688	2.5	19.6
7 30	19 19.82	-38 36.0	0.985	1.948	13.3	17.7	7 30	19 22.99	-24 28.2	1.697	2.680	6.8	19.9
8 9	19 10.27	-37 56.5	1.008	1.926	17.8	17.9	8 9	19 14.29	-24 36.0	1.744	2.671	10.9	20.1
8 19	19 4.86	-36 54.4	1.048	1.905	22.0	18.1	8 19	19 7.96	-24 36.9	1.813	2.662	14.4	20.3
<b>514016</b>	2014 <i>JT</i> <sub>84</sub>		7 15.1 153°81	2°9/16.8 18			<b>426608</b>	2013 <i>SS</i> <sub>43</sub>		7 15.1 338°06	13°0/ 8.9 17		
6 10	20 0.34	-10 23.1	2.436	3.265	11.9	21.5	6 10	20 5.57	-42 49.7	1.181	2.061	18.7	19.6
6 20	19 55.77	-10 36.6	2.357	3.267	9.3	21.4	6 20	20 2.60	-44 57.4	1.123	2.048	16.0	19.4
6 30	19 49.60	-11 0.9	2.301	3.270	6.5	21.2	6 30	19 55.35	-46 53.9	1.085	2.037	13.8	19.2
7 10	19 42.38	-11 34.6	2.271	3.272	3.8	21.0	7 10	19 44.72	-48 24.6	1.066	2.026	13.0	19.1
7 20	19 34.72	-12 15.9	2.269	3.274	3.1	21.0	7 20	19 32.48	-49 17.5	1.068	2.017	14.2	19.2
7 30	19 27.37	-13 2.2	2.295	3.276	5.4	21.1	7 30	19 21.09	-49 27.3	1.088	2.009	16.7	19.3
8 9	19 21.03	-13 50.5	2.348	3.278	8.3	21.3	8 9	19 12.79	-48 57.5	1.127	2.002	19.6	19.5
8 19	19 16.24	-14 38.3	2.425	3.280	11.0	21.5	8 19	19 8.91	-47 56.4	1.180	1.996	22.5	19.6
<b>125249</b>	2001 <i>UO</i> <sub>196</sub>		7 15.1 73°72	4°4/13.9 17			<b>387525</b>	1999 <i>XA</i> <sub>164</sub>		7 15.1 233°78	0°6/14.8 18		
6 10	20 9.40	-28 54.5	1.286	2.167	17.4	19.9	6 10	20 4.85	-21 35.3	2.538	3.383	11.0	22.2
6 20	20 4.04	-29 38.0	1.230	2.174	13.3	19.7	6 20	19 59.32	-22 4.6	2.440	3.367	8.3	22.0
6 30	19 55.38	-30 20.6	1.194	2.181	8.7	19.5	6 30	19 51.95	-22 37.9	2.367	3.351	5.2	21.7
7 10	19 44.46	-30 54.8	1.181	2.188	4.9	19.3	7 10	19 43.27	-23 12.5	2.321	3.333	1.8	21.5
7 20	19 32.77	-31 14.5	1.191	2.195	5.5	19.3	7 20	19 33.95	-23 45.5	2.303	3.315	2.0	21.4
7 30	19 22.05	-31 16.8	1.226	2.203	9.6	19.6	7 30	19 24.83	-24 14.4	2.315	3.296	5.4	21.7
8 9	19 13.78	-31 2.9	1.283	2.210	14.0	19.9	8 9	19 16.75	-24 37.6	2.355	3.277	8.7	21.8
8 19	19 8.85	-30 36.5	1.359	2.218	17.8	20.1	8 19	19 10.35	-24 54.6	2.419	3.257	11.6	22.0
<b>439592</b>	2014 <i>DH</i> <sub>125</sub>		7 15.1 316°37	0°1/15.1 17			<b>352976</b>	2009 <i>BB</i> <sub>67</sub>		7 15.1 255°21	1°9/15.9 18		
6 10	20 2.29	-18 49.9	1.799	2.662	14.0	21.0	6 10	20 2.38	-15 1.7	2.029	2.877	13.3	21.6
6 20	19 57.90	-19 25.2	1.722	2.658	10.6	20.8	6 20	19 57.69	-15 7.4	1.945	2.870	10.2	21.4
6 30	19 51.25	-20 8.8	1.667	2.654	6.7	20.5	6 30	19 51.02	-15 21.9	1.884	2.864	6.7	21.2
7 10	19 43.02	-20 57.5	1.637	2.650	2.3	20.2	7 10	19 42.95	-15 43.7	1.848	2.857	3.1	20.9
7 20	19 34.09	-21 46.9	1.633	2.646	2.2	20.2	7 20	19 34.28	-16 10.7	1.839	2.850	2.6	20.9
7 30	19 25.57	-22 33.0	1.656	2.642	6.6	20.5	7 30	19 25.96	-16 40.4	1.858	2.844	6.1	21.1
8 9	19 18.49	-23 13.0	1.704	2.639	10.6	20.7	8 9	19 18.89	-17 10.2	1.902	2.837	9.7	21.3
8 19	19 13.61	-23 45.3	1.774	2.636	14.1	21.0	8 19	19 13.74	-17 38.3	1.969	2.830	13.0	21.5
<b>128643</b>	2004 <i>RM</i> <sub>30</sub>		7 15.1 220°97	4°1/13.9 17			<b>251934</b>	1999 <i>VN</i> <sub>217</sub>		7 15.1 321°38	13°2/ 4.9 18		
6 10	20 12.38	-30 27.6	1.647	2.509	15.2	21.0	6 10	20 12.90	-55 1.8	1.977	2.780	15.2	19.3
6 20	20 5.93	-30 56.0	1.568	2.501	11.7	20.8	6 20	20 7.71	-57 8.0	1.920	2.765	14.0	19.2
6 30	19 56.47	-31 21.6	1.511	2.492	7.8	20.5	6 30	19 58.41	-58 57.5	1.883	2.751	13.3	19.1
7 10	19 44.85	-31 38.4	1.478	2.483	4.6	20.3	7 10	19 45.79	-60 19.8	1.867	2.737	13.3	19.1
7 20	19 32.34	-31 41.5	1.472	2.474	5.1	20.3	7 20	19 31.43	-61 7.1	1.872	2.724	14.1	19.1
7 30	19 20.46	-31 28.5	1.491	2.463	8.8	20.5	7 30	19 17.63	-61 16.4	1.897	2.711	15.4	19.2
8 9	19 10.62	-31 1.1	1.535	2.452	12.8	20.7	8 9	19 6.57	-60 51.0	1.939	2.698	16.9	19.3
8 19	19 3.76	-30 22.7	1.601	2.441	16.4	20.9	8 19	19 59.68	-59 57.5	1.997	2.686	18.4	19.4
<b>478359</b>	2011 <i>YR</i> <sub>7</sub>		7 15.1 188°49	1°0/14.5 18			<b>257481</b>	1995 <i>OX</i> <sub>3</sub>		7 15.1 341°38	1°7/15.7 17		
6 10	20 1.75	-22 54.5	2.863	3.711	9.8	21.9	6 10	19 58.90	-16 33.9	1.100	1.993	18.8	19.6
6 20	19 56.72	-23 33.5	2.781	3.710	7.4	21.7	6 20	19 56.50	-16 46.0	1.031	1.981	14.5	19.3
6 30	19 50.16	-24 15.4	2.724	3.708	4.6	21.5	6 30	19 50.96	-17 12.5	0.979	1.970	9.4	18.9
7 10	19 42.57	-24 57.4	2.695	3.707	1.7	21.3	7 10	19 43.08	-17 51.0	0.947	1.960	3.8	18.6
7 20	19 34.55	-25 36.7	2.695	3.705	2.0	21.3	7 20	19 34.12	-18 36.8	0.938	1.951	3.1	18.5
7 30	19 26.77	-26 11.0	2.724	3.703	4.9	21.5	7 30	19 25.73	-19 24.4	0.950	1.944	8.8	18.8
8 9	19 19.93	-26 39.0	2.781	3.700	7.6	21.7	8 9	19 19.46	-20 8.6	0.984	1.938	14.2	19.1
8 19	19 14.54	-27 0.1	2.862	3.697	10.1	21.9	8 19	19 16.36	-20 46.0	1.035	1.933	19.0	19.4
<b>349760</b>	2009 <i>AY</i> <sub>19</sub>		7 15.1 308°03	0°8/14.8 18			<b>28741</b>	2000 <i>GJ</i> <sub>136</sub>		7 15.1 315°87	3°6/13.1 18		
6 10	20 2.24	-21 8.9	1.704	2.574	14.4	20.9	6 10	20 3.31	-27 4.2	1.867	2.736	13.4	18.0
6 20	19 58.10	-21 43.4	1.620	2.560	10.9	20.7	6 20	19 58.83	-28 19.8	1.791	2.730	10.1	17.8
6 30	19 51.52	-22 25.1	1.558	2.547	6.8	20.4	6 30	19 51.96	-29 38.7	1.739	2.724	6.6	17.6
7 10	19 43.16	-23 10.0	1.521	2.534	2.4	20.1	7 10	19 43.33	-30 54.7	1.712	2.718	3.9	17.4
7 20	19 33.96	-23 53.7	1.509	2.522	2.6	20.1	7 20	19 33.90	-32 1.5	1.712	2.713	4.7	17.4
7 30	19 25.12	-24 32.1	1.524	2.509	7.1	20.3	7 30	19 24.83	-32 54.4	1.739	2.708	8.0	17.6
8 9	19 17.79	-25 2.5	1.563	2.497	11.4	20.6	8 9	19 17.26	-33 31.3	1.790	2.703	11.5	17.8
8 19	19 12.84	-25 24.1	1.623	2.486	15.1	20.8	8 19	19 12.01	-33 52.8	1.862	2.698	14.6	18.0
<b>174672</b>	2003 <i>SB</i> <sub>252</sub>		7 15.1 317°72	1°8/15.6 18			<b>443073</b>	2013 <i>GC</i> <sub>20</sub>		7 15.1 315°53	7°4/18.9 18		
6 10	20 0.73	-17 50.2	1.148	2.037	18.4	18.9	6 10	19 58.74	+ 1 6.2	2.245	3.031	14.1	20.7
6 20	19 58.09	-17 42.6	1.058	2.007	14.4	18.5	6 20	19 54.74	+ 1 33.5	2.161	3.025	12.0	20.5
6 30	19 52.15	-17 45.5	0.987	1.978	9.4	18.2	6 30	19 49.08	+ 1 43.8	2.098	3.018	9.9	20.3
7 10	19 43.56	-17 57.6	0.936	1.949	3.9	17.8	7 10	19 42.27	+ 1 35.2	2.058	3.012	8.1	20.2
7 20	19 33.49	-18 16.0	0.907	1.921	3.3	17.6	7 20	19 34.96	+ 1 7.7	2.042	3.006	7.4	20.2
7 30	19 23.63	-18 37.4	0.900	1.893	9.3	17.9	7 30	19 27.92	+ 0 22.9	2.052	3.000	8.4	20.2
8 9	19 15.77	-18 58.2	0.914	1.867	15.2	18.1	8 9	19 21.90	- 0 35.6	2.086	2.994	10.4	20.3
8 19	19 11.20	-19 16.2	0.945	1.842	20.5	18.3	8 19	19 17.48	- 1 43.3	2.144	2.989	12.6	20.5
<b>187406</b>	2005 <i>VJ</i> <sub>49</sub>		7 15.1 290°48	7°3/10.6 18			<b>3516</b>						



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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>394316</b>	2006 WA <sub>52</sub>	7 15.1 219°88		3°3/13.5 18			<b>13763</b>	1998 SO <sub>135</sub>	7 15.1 238°70		4°3/12.7 18		
6 10	20 4.02	-29 18.5	2.301	3.159	11.6	21.0	6 10	20 4.17	-34 13.7	2.664	3.514	10.4	19.6
6 20	19 58.88	-30 4.5	2.224	3.155	8.8	20.8	6 20	19 58.85	-35 0.2	2.583	3.505	8.1	19.5
6 30	19 51.73	-30 49.9	2.171	3.152	5.8	20.6	6 30	19 51.67	-35 43.2	2.526	3.496	5.9	19.3
7 10	19 43.20	-31 30.4	2.144	3.149	3.5	20.5	7 10	19 43.19	-36 18.4	2.496	3.488	4.4	19.2
7 20	19 34.08	-32 2.1	2.145	3.145	4.0	20.5	7 20	19 34.14	-36 42.5	2.493	3.478	4.9	19.2
7 30	19 25.34	-32 22.6	2.174	3.141	6.8	20.7	7 30	19 25.43	-36 53.6	2.519	3.469	6.9	19.3
8 9	19 17.88	-32 31.2	2.228	3.137	9.7	20.9	8 9	19 17.87	-36 51.5	2.569	3.460	9.3	19.5
8 19	19 12.38	-32 29.0	2.305	3.133	12.4	21.0	8 19	19 12.12	-36 37.8	2.643	3.450	11.6	19.6
<b>276988</b>	2004 XQ <sub>26</sub>	7 15.1 313°19		3°7/13.6 18			<b>217749</b>	2000 EK <sub>66</sub>	7 15.1 65°96		4°9/13.6 17		
6 10	20 2.84	-26 40.1	1.446	2.329	15.7	20.0	6 10	20 8.86	-31 4.0	1.469	2.343	16.0	20.0
6 20	19 59.31	-27 32.1	1.354	2.300	12.1	19.7	6 20	20 3.29	-31 48.8	1.416	2.355	12.3	19.8
6 30	19 52.74	-28 29.2	1.282	2.271	7.9	19.4	6 30	19 54.76	-32 30.2	1.384	2.367	8.3	19.6
7 10	19 43.75	-29 25.2	1.233	2.242	4.2	19.1	7 10	19 44.28	-33 1.3	1.376	2.379	5.2	19.4
7 20	19 33.43	-30 13.0	1.208	2.214	5.0	19.1	7 20	19 33.19	-33 16.8	1.392	2.391	5.8	19.5
7 30	19 23.33	-30 46.8	1.207	2.186	9.5	19.2	7 30	19 23.03	-33 14.6	1.434	2.404	9.2	19.7
8 9	19 15.02	-31 4.0	1.229	2.159	14.2	19.4	8 9	19 15.11	-32 56.5	1.498	2.417	12.9	20.0
8 19	19 9.70	-31 5.5	1.269	2.133	18.5	19.6	8 19	19 10.19	-32 26.0	1.582	2.429	16.2	20.2
<b>432683</b>	2011 BW <sub>38</sub>	7 15.1 91°66		5°8/18.2 16			<b>290077</b>	2005 QA <sub>85</sub>	7 15.1 180°85		3°2/13.9 18		
6 10	20 3.93	-4 4 8	1.779	2.596	16.1	22.3	6 10	20 5.78	-30 58.4	2.364	3.218	11.4	20.6
6 20	19 58.81	-4 9.2	1.720	2.615	13.1	22.1	6 20	20 0.06	-31 19.9	2.290	3.218	8.7	20.4
6 30	19 51.64	-4 32.4	1.681	2.633	9.7	22.0	6 30	19 52.38	-31 38.2	2.239	3.218	5.8	20.3
7 10	19 43.14	-5 14.0	1.666	2.651	6.8	21.8	7 10	19 43.41	-31 49.9	2.215	3.218	3.5	20.1
7 20	19 34.20	-6 11.5	1.676	2.669	5.9	21.8	7 20	19 33.97	-31 52.3	2.218	3.218	3.9	20.1
7 30	19 25.82	-7 20.5	1.713	2.686	7.7	22.0	7 30	19 25.02	-31 44.0	2.249	3.218	6.5	20.3
8 9	19 18.91	-8 35.6	1.775	2.704	10.6	22.2	8 9	19 17.41	-31 25.6	2.307	3.217	9.4	20.5
8 19	19 14.10	-9 51.8	1.860	2.720	13.6	22.4	8 19	19 11.77	-30 58.9	2.387	3.216	12.0	20.7
<b>193552</b>	2000 YR <sub>126</sub>	7 15.1 234°08		1°9/14.2 18			<b>328619</b>	2009 SU <sub>144</sub>	7 15.1 343°34		5°0/13.7 17		
6 10	20 6.49	-25 50.4	2.336	3.187	11.6	21.7	6 10	20 2.08	-29 29.5	1.136	2.033	18.0	20.1
6 20	20 0.74	-26 21.1	2.243	3.173	8.8	21.5	6 20	19 59.13	-30 9.1	1.069	2.022	13.8	19.8
6 30	19 52.93	-26 53.1	2.173	3.157	5.6	21.2	6 30	19 52.70	-30 48.2	1.021	2.011	9.3	19.5
7 10	19 43.64	-27 23.0	2.131	3.141	2.5	21.0	7 10	19 43.72	-31 19.1	0.994	2.002	5.4	19.2
7 20	19 33.66	-27 47.3	2.117	3.124	2.9	21.0	7 20	19 33.64	-31 35.1	0.989	1.994	6.2	19.3
7 30	19 23.95	-28 3.6	2.131	3.107	6.2	21.2	7 30	19 24.32	-31 32.2	1.006	1.988	10.6	19.5
8 9	19 15.46	-28 11.0	2.172	3.089	9.6	21.4	8 9	19 17.45	-31 11.3	1.044	1.982	15.3	19.7
8 19	19 8.91	-28 10.0	2.237	3.070	12.6	21.5	8 19	19 14.06	-30 35.9	1.099	1.978	19.6	20.0
<b>243055</b>	2007 DL <sub>20</sub>	7 15.1 20°66		1°9/15.8 17			<b>261739</b>	2006 AH <sub>66</sub>	7 15.1 277°02		4°7/12.1 18		
6 10	20 2.29	-15 37.0	1.410	2.280	16.8	20.1	6 10	20 3.74	-32 34.9	2.382	3.238	11.3	20.2
6 20	19 58.27	-15 51.1	1.346	2.284	12.8	19.9	6 20	19 58.86	-33 48.9	2.297	3.224	8.8	20.0
6 30	19 51.64	-16 17.3	1.302	2.288	8.3	19.6	6 30	19 51.87	-35 2.1	2.237	3.210	6.3	19.9
7 10	19 43.21	-16 53.1	1.281	2.292	3.6	19.4	7 10	19 43.32	-36 8.7	2.203	3.196	4.7	19.7
7 20	19 34.10	-17 34.6	1.285	2.297	2.9	19.3	7 20	19 34.01	-37 3.9	2.197	3.182	5.4	19.8
7 30	19 25.61	-18 17.5	1.313	2.303	7.4	19.6	7 30	19 24.92	-37 44.0	2.218	3.167	7.8	19.9
8 9	19 18.93	-18 57.9	1.365	2.309	11.9	19.9	8 9	19 17.04	-38 8.0	2.264	3.153	10.5	20.0
8 19	19 14.86	-19 33.4	1.437	2.315	15.8	20.2	8 19	19 11.13	-38 17.1	2.332	3.139	13.0	20.2
<b>116312</b>	2003 YS <sub>65</sub>	7 15.1 349°90		0°4/15.4 18			<b>89319</b>	2001 VO <sub>42</sub>	7 15.1 295°05		4°3/12.9 18		
6 10	20 0.49	-16 7.7	1.620	2.486	15.2	18.4	6 10	20 3.90	-30 46.5	2.030	2.894	12.6	19.1
6 20	19 56.80	-17 7.6	1.545	2.482	11.5	18.1	6 20	19 59.17	-31 46.2	1.951	2.885	9.7	18.9
6 30	19 50.72	-18 21.2	1.491	2.478	7.3	17.9	6 30	19 52.13	-32 45.3	1.895	2.875	6.7	18.7
7 10	19 42.92	-19 44.2	1.462	2.475	2.6	17.6	7 10	19 43.42	-33 38.2	1.865	2.865	4.5	18.5
7 20	19 34.34	-21 10.4	1.459	2.472	2.3	17.5	7 20	19 33.95	-34 19.7	1.861	2.856	5.2	18.6
7 30	19 26.15	-22 33.5	1.482	2.470	7.0	17.8	7 30	19 24.85	-34 46.6	1.883	2.846	8.0	18.7
8 9	19 19.47	-23 48.3	1.530	2.469	11.3	18.1	8 9	19 17.19	-34 58.1	1.930	2.837	11.1	18.9
8 19	19 15.14	-24 51.7	1.600	2.468	15.0	18.3	8 19	19 11.78	-34 55.6	1.999	2.827	14.1	19.1
<b>621</b>	Verdandi	7 15.1 194°03		0°7/14.8 18 R			<b>90127</b>	2002 XE <sub>81</sub>	7 15.1 187°15		3°0/13.8 18		
6 10	20 2.17	-22 29.6	2.710	3.559	10.3	16.1	6 10	20 7.52	-26 58.1	1.914	2.775	13.4	20.1
6 20	19 57.09	-22 50.9	2.628	3.557	7.7	15.9	6 20	20 1.84	-27 47.0	1.841	2.774	10.2	19.9
6 30	19 50.44	-23 14.9	2.570	3.555	4.8	15.7	6 30	19 53.75	-28 37.3	1.790	2.774	6.6	19.7
7 10	19 42.73	-23 39.0	2.540	3.553	1.7	15.5	7 10	19 43.96	-29 23.8	1.764	2.773	3.4	19.5
7 20	19 34.59	-24 1.1	2.538	3.550	1.8	15.5	7 20	19 33.47	-30 1.6	1.767	2.771	4.0	19.5
7 30	19 26.75	-24 19.3	2.566	3.547	4.9	15.7	7 30	19 23.45	-30 27.4	1.796	2.769	7.4	19.7
8 9	19 19.91	-24 32.5	2.620	3.544	7.9	15.9	8 9	19 15.02	-30 40.5	1.850	2.767	11.0	19.9
8 19	19 14.60	-24 40.7	2.699	3.540	10.4	16.1	8 19	19 8.96	-30 42.0	1.927	2.764	14.2	20.1
<b>461512</b>	2003 ST <sub>27</sub>	7 15.1 348°07		6°3/16.7 17			<b>251889</b>	1999 VR <sub>94</sub>	7 15.1 191°35		5°4/18.3 18		
6 10	20 0.32	-10 43.1	1.099	1.976	19.9	19.6	6 10	19 59.86	-0 57.9	3.052	3.828	11.0	21.4
6 20	19 57.40	-9 56.5	1.033	1.969	15.9	19.3	6 20	19 55.13	-0 34.2	2.966	3.826	9.2	21.3
6 30	19 51.41	-9 26.4	0.984	1.962	11.5	19.0	6 30	19 49.13	-0 22.3	2.902	3.824	7.4	21.2
7 10	19 43.22	-9 15.0	0.956	1.957	7.4	18.8	7 10	19 42.28	-0 23.0	2.863	3.822	5.9	21.1
7 20	19 34.09	-9 22.3	0.948	1.953	6.6	18.7	7 20	19 35.09	-0 36.3	2.852	3.819	5.4	21.0
7 30	19 25.59	-9 46.2	0.963	1.950	10.0	18.9	7 30	19 28.11	-1 1.1	2.868	3.815	6.3	21.1
8 9	19 19.19	-10 21.7	0.998	1.948	14.6	19.2	8 9	19 21.91	-1 35.3	2.911	3.812	8.0	21.2
8 19	19 15.85	-11 3.5	1.051	1.947	18.9	19.4	8 19	19 16.92	-2 16.3	2.978	3.807	9.9	21.3
<b>24076</b>	1999 TL <sub>223</sub>	7 15.1 205°29		4°4/17.7 18			<b>259767</b>	2004 BR <sub>7</sub>	7 15.1 220°33		0°4/15.3 17		
6 10	19 59.81	-5 50.3	2.410	3.223	12.5	17.7	6 10	20 7.95	-20 30.8	1.751</			

EPHEMERIDES

7 15.1

7 15.2

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>503267</b>	2015 <i>MG</i> <sub>51</sub>		7 15.1 332°59	2°8/13.7	18		<b>375806</b>	2009 <i>TE</i> <sub>22</sub>		7 15.2 294°80	3°7/16.1	18	
6 10	20 1.79	-25 54.2	1.903	2.772	13.1	20.4	6 10	20 3.95	-13 31.5	1.544	2.401	16.2	21.2
6 20	19 57.61	-26 52.4	1.826	2.765	9.9	20.2	6 20	19 59.70	-13 8.0	1.447	2.375	12.8	20.9
6 30	19 51.16	-27 54.0	1.772	2.758	6.3	19.9	6 30	19 52.77	-12 55.0	1.371	2.350	8.8	20.6
7 10	19 43.10	-28 53.9	1.743	2.752	3.2	19.7	7 10	19 43.77	-12 52.6	1.318	2.324	4.9	20.3
7 20	19 34.31	-29 46.7	1.741	2.746	3.9	19.8	7 20	19 33.69	-13 0.1	1.290	2.298	4.2	20.2
7 30	19 25.90	-30 28.6	1.765	2.740	7.3	20.0	7 30	19 23.82	-13 15.9	1.286	2.272	8.2	20.4
8 9	19 18.90	-30 57.6	1.814	2.735	10.9	20.2	8 9	19 15.48	-13 37.2	1.306	2.246	12.7	20.6
8 19	19 14.12	-31 14.0	1.885	2.730	14.1	20.4	8 19	19 9.68	-14 1.5	1.347	2.221	17.0	20.8
<b>70867</b>	1999 <i>VA</i> <sub>150</sub>		7 15.1 292°69	1°5/15.7	18 R		<b>420983</b>	2013 <i>PO</i> <sub>32</sub>		7 15.2 313°67	0°4/15.4	16	
6 10	20 3.35	-17 14.4	1.764	2.623	14.5	19.3	6 10	19 59.01	-19 47.5	2.806	3.656	10.0	21.2
6 20	19 58.77	-17 11.2	1.680	2.613	11.1	19.1	6 20	19 54.72	-19 47.5	2.715	3.644	7.5	21.0
6 30	19 51.88	-17 15.5	1.618	2.602	7.2	18.8	6 30	19 49.00	-19 50.8	2.649	3.632	4.7	20.8
7 10	19 43.35	-17 25.9	1.580	2.591	3.0	18.6	7 10	19 42.30	-19 56.1	2.609	3.621	1.7	20.6
7 20	19 34.09	-17 40.0	1.569	2.581	2.5	18.5	7 20	19 35.19	-20 2.0	2.597	3.610	1.5	20.6
7 30	19 25.23	-17 55.8	1.583	2.571	6.7	18.8	7 30	19 28.34	-20 7.4	2.614	3.599	4.6	20.8
8 9	19 17.82	-18 11.1	1.623	2.561	10.8	19.0	8 9	19 22.36	-20 11.2	2.657	3.588	7.5	20.9
8 19	19 12.66	-18 24.7	1.684	2.551	14.5	19.2	8 19	19 17.77	-20 13.1	2.725	3.577	10.0	21.1
<b>89909</b>	Linie		7 15.1 77°14	0°7/15.5	18		<b>400474</b>	2008 <i>GC</i> <sub>43</sub>		7 15.2 180°75	4°2/17.2	18	
6 10	20 1.98	-18 22.4	2.214	3.066	12.2	20.1	6 10	20 0.68	-7 50.6	2.402	3.221	12.4	21.7
6 20	19 57.15	-18 33.5	2.146	3.075	9.2	19.9	6 20	19 56.08	-7 37.9	2.321	3.221	9.9	21.5
6 30	19 50.56	-18 50.2	2.100	3.084	5.8	19.7	6 30	19 49.88	-7 36.5	2.263	3.221	7.2	21.3
7 10	19 42.81	-19 10.5	2.081	3.093	2.2	19.5	7 10	19 42.61	-7 46.2	2.231	3.221	4.9	21.2
7 20	19 34.65	-19 32.1	2.089	3.102	1.8	19.5	7 20	19 34.91	-8 6.3	2.225	3.221	4.3	21.2
7 30	19 26.93	-19 52.9	2.125	3.111	5.4	19.7	7 30	19 27.52	-8 35.1	2.247	3.221	6.1	21.3
8 9	19 20.43	-20 11.4	2.187	3.120	8.7	20.0	8 9	19 21.15	-9 9.9	2.295	3.221	8.7	21.4
8 19	19 15.71	-20 26.6	2.273	3.129	11.6	20.2	8 19	19 16.33	-9 48.1	2.367	3.220	11.3	21.6
<b>481725</b>	2008 <i>ER</i> <sub>168</sub>		7 15.1 169°64	4°7/12.8	18		<b>161284</b>	2003 <i>GL</i> <sub>43</sub>		7 15.2 339°50	2°9/16.1	18	
6 10	20 6.39	-35 58.1	2.592	3.437	10.8	21.4	6 10	20 0.47	-14 16.6	1.087	1.974	19.5	18.9
6 20	20 0.51	-36 41.6	2.522	3.440	8.5	21.3	6 20	19 57.71	-14 22.0	1.019	1.964	15.1	18.6
6 30	19 52.68	-37 19.9	2.476	3.442	6.2	21.1	6 30	19 51.76	-14 44.4	0.968	1.956	10.1	18.3
7 10	19 43.56	-37 48.5	2.457	3.444	4.8	21.0	7 10	19 43.45	-15 22.1	0.938	1.948	4.8	18.0
7 20	19 33.95	-38 4.1	2.465	3.445	5.3	21.1	7 20	19 34.06	-16 11.0	0.929	1.942	3.8	17.9
7 30	19 24.79	-38 5.4	2.501	3.447	7.2	21.2	7 30	19 25.25	-17 5.4	0.943	1.936	9.0	18.2
8 9	19 16.95	-37 52.9	2.562	3.448	9.5	21.4	8 9	19 18.59	-17 59.3	0.977	1.931	14.3	18.5
8 19	19 11.05	-37 28.8	2.646	3.448	11.7	21.5	8 19	19 15.14	-18 48.2	1.030	1.928	19.1	18.8
<b>430548</b>	2002 <i>GZ</i> <sub>123</sub>		7 15.1 90°49	5°7/17.8	17		<b>471619</b>	2012 <i>TB</i> <sub>13</sub>		7 15.2 299°67	8°3/18.6	18	
6 10	20 3.95	-5 15.6	1.855	2.673	15.5	21.2	6 10	20 0.49	-0 43.0	1.729	2.539	16.8	20.6
6 20	19 58.76	-5 2.6	1.796	2.692	12.5	21.1	6 20	19 56.68	-0 12.5	1.639	2.522	14.2	20.4
6 30	19 51.59	-5 6.1	1.758	2.711	9.3	20.9	6 30	19 50.65	-0 2.1	1.568	2.504	11.5	20.2
7 10	19 43.17	-5 26.0	1.744	2.730	6.6	20.8	7 10	19 42.99	-0 14.6	1.518	2.487	9.1	20.0
7 20	19 34.35	-6 0.9	1.756	2.748	5.8	20.8	7 20	19 34.51	-0 50.6	1.493	2.470	8.3	19.9
7 30	19 26.09	-6 47.5	1.794	2.766	7.6	20.9	7 30	19 26.27	-1 48.0	1.491	2.453	9.8	20.0
8 9	19 19.25	-7 41.7	1.857	2.784	10.4	21.1	8 9	19 19.31	-3 1.9	1.513	2.436	12.6	20.1
8 19	19 14.43	-8 39.0	1.944	2.801	13.2	21.4	8 19	19 14.47	-4 26.1	1.557	2.420	15.7	20.2
<b>137483</b>	1999 <i>UT</i> <sub>32</sub>		7 15.1 119°45	2°0/14.5	17		<b>383112</b>	2005 <i>SS</i> <sub>231</sub>		7 15.2 242°60	1°1/14.7	17	
6 10	20 8.82	-24 46.0	1.649	2.513	15.0	21.0	6 10	20 6.71	-22 53.0	2.011	2.867	13.1	23.0
6 20	20 2.91	-25 17.7	1.588	2.525	11.3	20.8	6 20	20 1.21	-23 17.2	1.919	2.852	9.9	22.7
6 30	19 54.42	-25 51.7	1.549	2.536	7.1	20.6	6 30	19 53.41	-23 45.3	1.850	2.836	6.2	22.5
7 10	19 44.19	-26 23.1	1.535	2.547	2.9	20.4	7 10	19 43.93	-24 13.8	1.807	2.820	2.3	22.2
7 20	19 33.39	-26 47.5	1.547	2.557	3.3	20.4	7 20	19 33.65	-24 39.2	1.792	2.803	2.5	22.2
7 30	19 23.32	-27 2.2	1.586	2.567	7.4	20.7	7 30	19 23.68	-24 58.5	1.804	2.786	6.6	22.4
8 9	19 15.12	-27 6.9	1.650	2.577	11.4	20.9	8 9	19 15.08	-25 10.5	1.842	2.768	10.5	22.6
8 19	19 9.55	-27 2.6	1.735	2.586	14.9	21.2	8 19	19 8.66	-25 15.3	1.903	2.750	13.9	22.8
<b>143526</b>	2003 <i>EG</i> <sub>15</sub>		7 15.2 128°71	1°7/14.5	18		<b>159060</b>	2004 <i>TQ</i> <sub>148</sub>		7 15.2 75°05	0°4/14.9	18	
6 10	20 5.26	-26 23.2	2.365	3.218	11.5	20.2	6 10	20 2.71	-22 3.4	2.285	3.140	11.7	20.6
6 20	19 59.55	-26 33.9	2.295	3.225	8.6	20.0	6 20	19 57.66	-22 15.3	2.219	3.152	8.8	20.4
6 30	19 52.02	-26 44.2	2.249	3.233	5.4	19.8	6 30	19 50.87	-22 30.0	2.178	3.163	5.4	20.2
7 10	19 43.32	-26 51.3	2.230	3.240	2.3	19.7	7 10	19 42.95	-22 45.1	2.162	3.175	1.9	20.0
7 20	19 34.23	-26 53.0	2.239	3.247	2.6	19.7	7 20	19 34.66	-22 58.4	2.174	3.187	1.9	20.0
7 30	19 25.63	-26 48.2	2.276	3.254	5.7	19.9	7 30	19 26.84	-23 8.3	2.215	3.199	5.4	20.3
8 9	19 18.32	-26 36.9	2.340	3.261	8.8	20.1	8 9	19 20.26	-23 13.8	2.281	3.210	8.6	20.5
8 19	19 12.88	-26 20.2	2.427	3.267	11.5	20.3	8 19	19 15.47	-23 15.0	2.371	3.222	11.4	20.7
<b>342170</b>	2008 <i>SE</i> <sub>177</sub>		7 15.2 314°07	7°0/17.9	17 R		<b>170008</b>	Michaelstraus		7 15.2 190°04	2°4/16.3	17	
6 10	20 0.14	-4 34.4	1.568	2.403	17.1	20.5	6 10	20 2.15	-13 21.2	2.030	2.874	13.4	20.3
6 20	19 56.59	-4 15.1	1.483	2.388	14.1	20.2	6 20	19 57.51	-13 31.7	1.952	2.874	10.4	20.1
6 30	19 50.66	-4 15.2	1.417	2.373	10.8	20.0	6 30	19 50.93	-13 52.5	1.897	2.873	6.9	19.9
7 10	19 42.99	-4 36.7	1.373	2.359	7.9	19.8	7 10	19 43.02	-14 22.1	1.866	2.873	3.5	19.7
7 20	19 34.46	-5 19.0	1.352	2.345	7.0	19.7	7 20	19 34.56	-14 58.2	1.863	2.873	2.8	19.6
7 30	19 26.24	-6 19.2	1.356	2.331	9.1	19.8	7 30	19 26.48	-15 37.7	1.887	2.872	6.0	19.8
8 9	19 19.45	-7 31.8	1.383	2.318	12.5	20.0	8 9	19 19.64	-16 17.9	1.937	2.872	9.5	20.1
8 19	19 14.96	-8 50.5	1.431	2.306	16.1	20.2	8 19	19 14.70	-16 56.2	2.010	2.871	12.7	20.3
<b>369907</b>	2013 <i>AA</i> <sub>81</sub>		7 15.2 296°49	0°4/14.9	18		<b>440163</b>	2003 <i>WR</i> <sub>66</sub>		7 15.2 257°93	3°3/16.3	18	

EPHEMERIDES

7 15.2

7 15.2

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>211109</b>	2002 <i>EY</i> <sub>160</sub>		7 15.2	26°01'	2°2'/14.2	18	<b>441762</b>	2009 <i>CD</i> <sub>39</sub>		7 15.2	64°45'	16°8'/26.9	18
6 10	20 3.82	-21 40.0	1.187	2.075	18.0	19.3	6 10	20 4.02	+16 11.8	1.065	1.826	27.9	20.2
6 20	20 0.05	-22 50.3	1.130	2.080	13.6	19.0	6 20	20 0.21	+16 26.5	1.010	1.834	25.2	20.0
6 30	19 53.10	-24 10.8	1.093	2.085	8.5	18.8	6 30	19 53.21	+15 51.0	0.966	1.843	22.2	19.8
7 10	19 43.89	-25 33.8	1.078	2.091	3.3	18.5	7 10	19 43.95	+14 17.9	0.937	1.852	19.3	19.7
7 20	19 33.77	-26 50.5	1.087	2.097	4.0	18.6	7 20	19 33.79	+11 46.5	0.925	1.861	17.3	19.6
7 30	19 24.40	-27 53.7	1.119	2.105	9.1	18.9	7 30	19 24.38	+ 8 25.8	0.933	1.870	16.9	19.6
8 9	19 17.28	-28 40.0	1.174	2.112	14.0	19.2	8 9	19 17.24	+ 4 33.8	0.962	1.880	18.4	19.7
8 19	19 13.36	-29 9.3	1.247	2.120	18.1	19.4	8 19	19 13.31	+ 0 31.8	1.011	1.889	21.0	19.9
<b>78454</b>	2002 <i>RD</i> <sub>29</sub>		7 15.2	308°56'	1°6'/15.7	18	<b>363725</b>	2004 <i>VC</i> <sub>72</sub>		7 15.2	252°63'	2°0'/14.1	18
6 10	20 3.56	-17 24.5	1.814	2.671	14.2	19.2	6 10	20 2.37	-26 33.1	2.623	3.477	10.4	21.3
6 20	19 58.82	-17 13.1	1.734	2.666	10.9	19.0	6 20	19 57.48	-27 6.9	2.535	3.466	7.9	21.1
6 30	19 51.87	-17 8.3	1.677	2.660	7.0	18.8	6 30	19 50.86	-27 41.6	2.471	3.454	5.0	20.9
7 10	19 43.37	-17 8.7	1.644	2.654	3.0	18.5	7 10	19 43.03	-28 14.1	2.433	3.443	2.4	20.7
7 20	19 34.25	-17 12.9	1.637	2.649	2.5	18.5	7 20	19 34.67	-28 41.4	2.425	3.431	2.8	20.7
7 30	19 25.57	-17 19.0	1.656	2.643	6.5	18.7	7 30	19 26.56	-29 1.3	2.444	3.418	5.6	20.9
8 9	19 18.35	-17 25.6	1.701	2.638	10.5	18.9	8 9	19 19.49	-29 13.0	2.490	3.406	8.5	21.0
8 19	19 13.30	-17 31.6	1.768	2.633	14.0	19.1	8 19	19 14.06	-29 16.5	2.560	3.394	11.2	21.2
<b>343504</b>	2010 <i>EK</i> <sub>108</sub>		7 15.2	254°64'	3°8'/13.6	18	<b>257637</b>	1999 <i>TW</i> <sub>241</sub>		7 15.2	279°50'	1°8'/15.8	18
6 10	20 6.22	-29 58.3	1.902	2.765	13.4	20.7	6 10	20 5.21	-15 41.3	1.604	2.462	15.7	20.9
6 20	20 0.97	-30 38.6	1.826	2.760	10.2	20.5	6 20	20 0.68	-15 53.9	1.506	2.437	12.2	20.7
6 30	19 53.28	-31 17.5	1.774	2.756	6.8	20.3	6 30	19 53.44	-16 18.1	1.428	2.411	8.0	20.3
7 10	19 43.88	-31 49.9	1.747	2.751	4.1	20.1	7 10	19 44.09	-16 52.3	1.373	2.384	3.5	20.0
7 20	19 33.78	-32 11.3	1.746	2.746	4.7	20.1	7 20	19 33.58	-17 33.1	1.345	2.357	2.8	19.9
7 30	19 24.18	-32 19.1	1.771	2.741	7.8	20.3	7 30	19 23.21	-18 16.5	1.342	2.330	7.6	20.1
8 9	19 16.20	-32 13.5	1.821	2.736	11.2	20.5	8 9	19 14.33	-18 58.9	1.363	2.302	12.4	20.3
8 19	19 10.62	-31 56.3	1.893	2.731	14.3	20.7	8 19	19 7.98	-19 37.5	1.406	2.274	16.7	20.5
<b>12526</b>	de Coninck		7 15.2	23°11'	0°8'/14.9	18 R	<b>470717</b>	2008 <i>UE</i> <sub>3</sub>		7 15.2	278°87'	3°0'/16.4	18
6 10	20 2.60	-21 34.2	1.049	1.946	19.2	18.0	6 10	20 4.63	-12 15.5	2.060	2.895	13.6	22.0
6 20	19 59.20	-21 52.9	1.001	1.954	14.4	17.8	6 20	19 59.70	-12 16.9	1.947	2.862	10.7	21.7
6 30	19 52.52	-22 19.2	0.971	1.964	9.0	17.5	6 30	19 52.56	-12 29.1	1.856	2.828	7.4	21.4
7 10	19 43.65	-22 48.0	0.961	1.975	3.1	17.2	7 10	19 43.73	-12 51.7	1.790	2.794	4.1	21.2
7 20	19 34.06	-23 14.1	0.974	1.988	3.1	17.2	7 20	19 33.93	-13 23.2	1.751	2.758	3.4	21.1
7 30	19 25.49	-23 33.5	1.009	2.001	8.8	17.6	7 30	19 24.17	-14 1.1	1.740	2.723	6.7	21.2
8 9	19 19.35	-23 44.3	1.066	2.015	13.9	18.0	8 9	19 15.49	-14 42.3	1.754	2.686	10.6	21.3
8 19	19 16.48	-23 46.8	1.140	2.031	18.2	18.3	8 19	19 8.73	-15 24.1	1.793	2.649	14.2	21.5
<b>334370</b>	2002 <i>AN</i> <sub>58</sub>		7 15.2	209°65'	2°3'/16.5	18	<b>35364</b>	Donaldpray		7 15.2	243°47'	4°7'/16.6	18 A
6 10	20 3.90	-11 42.4	2.042	2.877	13.7	20.6	6 10	20 5.79	-11 1.1	1.509	2.358	17.0	18.9
6 20	19 58.90	-12 18.2	1.956	2.873	10.6	20.4	6 20	20 0.91	-10 36.5	1.430	2.351	13.5	18.6
6 30	19 51.87	-13 7.4	1.894	2.868	7.1	20.2	6 30	19 53.40	-10 25.2	1.372	2.344	9.5	18.4
7 10	19 43.39	-14 7.6	1.856	2.863	3.6	20.0	7 10	19 44.00	-10 27.8	1.336	2.337	5.8	18.1
7 20	19 34.24	-15 15.4	1.847	2.857	2.8	19.9	7 20	19 33.75	-10 43.2	1.325	2.330	5.0	18.1
7 30	19 25.37	-16 26.4	1.866	2.851	6.1	20.1	7 30	19 23.96	-11 9.2	1.339	2.322	8.3	18.2
8 9	19 17.72	-17 36.1	1.911	2.844	9.8	20.3	8 9	19 15.86	-11 42.1	1.377	2.314	12.5	18.5
8 19	19 12.00	-18 41.4	1.981	2.837	13.1	20.5	8 19	19 10.33	-12 18.5	1.436	2.306	16.3	18.7
<b>342457</b>	2008 <i>UQ</i> <sub>112</sub>		7 15.2	350°78'	1°8'/14.7	16	<b>67653</b>	2000 <i>SU</i> <sub>235</sub>		7 15.2	31°65'	0°9'/14.9	18
6 10	20 1.41	-24 39.8	1.241	2.133	17.2	20.4	6 10	20 5.71	-22 19.7	1.131	2.019	18.7	19.5
6 20	19 58.18	-24 48.1	1.173	2.125	13.0	20.1	6 20	20 1.43	-22 30.7	1.077	2.027	14.1	19.2
6 30	19 51.91	-24 59.0	1.125	2.118	8.2	19.9	6 30	19 53.90	-22 47.4	1.043	2.035	8.8	18.9
7 10	19 43.48	-25 8.3	1.099	2.112	3.2	19.5	7 10	19 44.16	-23 5.2	1.030	2.043	3.1	18.6
7 20	19 34.18	-25 12.1	1.095	2.108	3.4	19.5	7 20	19 33.70	-23 19.7	1.040	2.053	3.1	18.7
7 30	19 25.57	-25 7.8	1.115	2.104	8.6	19.8	7 30	19 24.21	-23 27.6	1.073	2.063	8.7	19.0
8 9	19 19.09	-24 55.1	1.157	2.102	13.4	20.1	8 9	19 17.13	-23 28.3	1.127	2.073	13.7	19.3
8 19	19 15.64	-24 35.2	1.217	2.102	17.7	20.4	8 19	19 13.32	-23 22.2	1.201	2.084	18.0	19.6
<b>408617</b>	2014 <i>KQ</i> <sub>34</sub>		7 15.2	309°37'	2°7'/16.9	18	<b>105697</b>	2000 <i>SV</i> <sub>64</sub>		7 15.2	261°05'	0°3'/15.1	18
6 10	20 0.83	- 9 23.6	2.121	2.953	13.4	20.2	6 10	20 6.75	-20 47.7	1.468	2.337	16.3	20.1
6 20	19 56.55	-10 14.8	2.033	2.946	10.5	20.0	6 20	20 1.87	-21 3.6	1.389	2.329	12.4	19.8
6 30	19 50.39	-11 21.6	1.967	2.939	7.2	19.7	6 30	19 54.13	-21 26.3	1.332	2.320	7.8	19.5
7 10	19 42.88	-12 42.0	1.928	2.932	3.9	19.5	7 10	19 44.28	-21 52.2	1.297	2.311	2.7	19.2
7 20	19 34.72	-14 11.8	1.916	2.925	3.0	19.4	7 20	19 33.50	-22 17.1	1.288	2.301	2.6	19.1
7 30	19 26.80	-15 46.0	1.932	2.918	5.9	19.6	7 30	19 23.21	-22 37.5	1.305	2.292	7.8	19.4
8 9	19 19.97	-17 19.3	1.976	2.911	9.4	19.8	8 9	19 14.80	-22 51.6	1.345	2.283	12.6	19.7
8 19	19 14.92	-18 47.2	2.045	2.905	12.6	20.0	8 19	19 9.20	-22 59.0	1.405	2.273	16.7	19.9
<b>338030</b>	2002 <i>GH</i> <sub>172</sub>		7 15.2	3°80'	10°3'/11.4	16	<b>442549</b>	2011 <i>YA</i> <sub>45</sub>		7 15.2	209°97'	0°7'/15.5	18
6 10	20 6.95	-41 24.0	1.382	2.253	17.0	19.7	6 10	20 3.01	-19 26.3	2.562	3.407	10.9	21.1
6 20	20 2.74	-42 50.4	1.329	2.252	14.1	19.5	6 20	19 57.79	-19 17.7	2.478	3.404	8.3	20.9
6 30	19 54.93	-44 4.8	1.296	2.252	11.6	19.3	6 30	19 50.96	-19 12.4	2.419	3.401	5.2	20.7
7 10	19 44.55	-44 56.7	1.284	2.253	10.3	19.3	7 10	19 43.04	-19 9.1	2.386	3.398	2.0	20.5
7 20	19 33.22	-45 18.7	1.294	2.255	11.1	19.3	7 20	19 34.71	-19 6.7	2.381	3.394	1.7	20.5
7 30	19 22.85	-45 8.2	1.326	2.258	13.3	19.5	7 30	19 26.72	-19 4.1	2.406	3.390	5.0	20.7
8 9	19 15.11	-44 29.0	1.377	2.262	16.1	19.6	8 9	19 19.79	-19 0.6	2.457	3.387	8.1	20.9
8 19	19 10.97	-43 27.8	1.447	2.266	18.9	19.8	8 19	19 14.45	-18 56.0	2.533	3.383	10.8	21.0
<b>164116</b>	2003 <i>XP</i> <sub>33</sub>		7 15.2	244°77'	0°3'/15.3	18	<b>344027</b>	2012 <i>JJ</i> <sub>11</sub>					

EPHEMERIDES

7 15.2

7 15.2

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>343579</b>	2010 <i>FO</i> <sub>88</sub>	7 15.2 127°40		0°4/15.0 17			<b>356860</b>	2011 <i>WV</i> <sub>55</sub>	7 15.2 92°80		1°7/14.3 18		
6 10	20 4.60	-20 53.5	2.068	2.923	12.8	21.7	6 10	20 3.35	-24 38.6	2.256	3.113	11.8	20.7
6 20	19 59.32	-21 18.6	1.999	2.931	9.6	21.5	6 20	19 58.29	-25 15.9	2.190	3.124	8.8	20.6
6 30	19 52.05	-21 48.4	1.953	2.938	6.0	21.3	6 30	19 51.38	-25 55.0	2.149	3.134	5.5	20.4
7 10	19 43.45	-22 19.8	1.933	2.946	2.1	21.0	7 10	19 43.23	-26 32.6	2.133	3.145	2.3	20.2
7 20	19 34.35	-22 49.7	1.941	2.953	2.0	21.0	7 20	19 34.65	-27 5.1	2.146	3.155	2.7	20.2
7 30	19 25.73	-23 15.4	1.976	2.960	5.9	21.3	7 30	19 26.51	-27 30.3	2.186	3.165	5.9	20.5
8 9	19 18.47	-23 35.4	2.037	2.967	9.4	21.5	8 9	19 19.65	-27 47.0	2.253	3.175	9.0	20.7
8 19	19 13.20	-23 49.3	2.122	2.973	12.5	21.7	8 19	19 14.65	-27 55.6	2.343	3.185	11.8	20.9
<b>71713</b>	2000 <i>GN</i> <sub>98</sub>	7 15.2 65°88		7°5/19.3 18			<b>394309</b>	2006 <i>WY</i> <sub>5</sub>	7 15.2 282°35		0°3/15.0 18		
6 10	19 59.18	+ 3 3.9	2.516	3.282	13.3	19.3	6 10	20 2.34	-20 31.8	2.094	2.952	12.5	21.2
6 20	19 54.87	+ 3 42.9	2.444	3.289	11.4	19.1	6 20	19 57.82	-20 58.1	2.006	2.939	9.5	21.0
6 30	19 49.12	+ 4 5.8	2.394	3.297	9.5	19.0	6 30	19 51.26	-21 30.0	1.941	2.927	5.9	20.7
7 10	19 42.41	+ 4 10.9	2.366	3.304	8.1	18.9	7 10	19 43.25	-22 4.8	1.901	2.914	2.1	20.5
7 20	19 35.33	+ 3 58.1	2.364	3.312	7.5	18.9	7 20	19 34.58	-22 39.1	1.889	2.902	2.0	20.4
7 30	19 28.58	+ 3 28.3	2.387	3.319	8.2	19.0	7 30	19 26.20	-23 10.1	1.904	2.889	6.0	20.7
8 9	19 22.77	+ 2 44.8	2.435	3.327	9.7	19.1	8 9	19 19.04	-23 35.7	1.945	2.877	9.7	20.9
8 19	19 18.41	+ 1 51.2	2.506	3.334	11.5	19.2	8 19	19 13.82	-23 55.1	2.010	2.865	13.0	21.1
<b>464762</b>	2003 <i>SU</i> <sub>427</sub>	7 15.2 326°84		5°5/16.6 17			<b>98808</b>	2000 <i>YP</i> <sub>118</sub>	7 15.2 322°18		6°8/11.8 18		
6 10	20 1.81	-11 5.9	1.210	2.080	19.0	21.0	6 10	20 3.77	-31 59.6	1.467	2.347	15.6	18.0
6 20	19 58.47	-10 30.2	1.135	2.068	15.1	20.7	6 20	20 0.13	-33 36.4	1.391	2.332	12.3	17.8
6 30	19 52.15	-10 9.8	1.079	2.057	10.8	20.4	6 30	19 53.35	-35 14.7	1.338	2.317	8.9	17.6
7 10	19 43.65	-10 6.2	1.044	2.046	6.7	20.2	7 10	19 44.15	-36 44.8	1.307	2.303	6.8	17.4
7 20	19 34.12	-10 19.2	1.030	2.036	5.9	20.1	7 20	19 33.70	-37 57.5	1.301	2.289	7.9	17.4
7 30	19 25.09	-10 46.3	1.040	2.026	9.5	20.2	7 30	19 23.64	-38 46.1	1.318	2.276	11.2	17.6
8 9	19 18.00	-11 23.0	1.071	2.018	14.1	20.5	8 9	19 15.56	-39 9.3	1.358	2.263	14.9	17.8
8 19	19 13.86	-12 4.6	1.120	2.010	18.5	20.7	8 19	19 10.62	-39 9.6	1.415	2.251	18.4	18.0
<b>134964</b>	2001 <i>DB</i> <sub>97</sub>	7 15.2 241°94		1°3/15.7 18			<b>296111</b>	2009 <i>BU</i> <sub>50</sub>	7 15.2 305°54		1°6/14.6 18		
6 10	20 5.77	-16 7.4	1.693	2.548	15.2	20.1	6 10	20 4.19	-24 33.4	1.789	2.656	13.9	20.5
6 20	20 0.81	-16 30.7	1.607	2.536	11.7	19.9	6 20	19 59.52	-24 53.2	1.708	2.647	10.5	20.2
6 30	19 53.34	-17 5.0	1.542	2.525	7.5	19.6	6 30	19 52.46	-25 15.4	1.649	2.637	6.6	20.0
7 10	19 44.01	-17 47.8	1.502	2.513	3.1	19.3	7 10	19 43.70	-25 36.3	1.616	2.628	2.6	19.7
7 20	19 33.79	-18 35.1	1.488	2.501	2.5	19.2	7 20	19 34.21	-25 52.4	1.608	2.619	2.9	19.7
7 30	19 23.90	-19 22.8	1.501	2.488	7.0	19.5	7 30	19 25.16	-26 1.2	1.626	2.610	7.0	20.0
8 9	19 15.52	-20 7.3	1.539	2.475	11.4	19.7	8 9	19 17.66	-26 1.8	1.670	2.601	11.0	20.2
8 19	19 9.55	-20 46.4	1.598	2.461	15.3	19.9	8 19	19 12.51	-25 54.8	1.735	2.593	14.5	20.4
<b>374832</b>	2006 <i>UH</i> <sub>233</sub>	7 15.2 305°30		2°1/14.5 18			<b>71364</b>	2000 <i>AW</i> <sub>134</sub>	7 15.2 271°89		3°2/13.6 18		
6 10	20 4.60	-24 15.3	1.333	2.216	16.8	21.3	6 10	20 4.71	-27 4.3	1.897	2.762	13.3	18.7
6 20	20 0.86	-24 42.2	1.242	2.189	12.9	21.0	6 20	19 59.93	-28 1.6	1.817	2.753	10.1	18.4
6 30	19 53.88	-25 14.6	1.171	2.162	8.2	20.7	6 30	19 52.75	-29 1.4	1.760	2.744	6.6	18.2
7 10	19 44.34	-25 47.5	1.122	2.135	3.3	20.3	7 10	19 43.82	-29 58.2	1.728	2.735	3.6	18.0
7 20	19 33.41	-26 15.2	1.097	2.108	3.8	20.3	7 20	19 34.08	-30 46.6	1.723	2.726	4.2	18.0
7 30	19 22.75	-26 32.9	1.096	2.082	9.2	20.5	7 30	19 24.71	-31 22.7	1.744	2.717	7.7	18.2
8 9	19 14.02	-26 38.6	1.117	2.056	14.4	20.7	8 9	19 16.82	-31 45.0	1.791	2.708	11.3	18.4
8 19	19 8.47	-26 33.2	1.156	2.031	19.1	20.9	8 19	19 11.26	-31 54.2	1.859	2.699	14.5	18.6
<b>257513</b>	1997 <i>AJ</i> <sub>24</sub>	7 15.2 149°98		0°4/15.3 17			<b>504268</b>	2006 <i>VD</i> <sub>118</sub>	7 15.2 251°97		1°2/14.8 17		
6 10	20 7.49	-18 53.6	1.764	2.619	14.6	21.8	6 10	20 7.01	-22 49.8	1.721	2.584	14.6	22.3
6 20	20 1.79	-19 12.0	1.695	2.626	11.1	21.6	6 20	20 1.81	-23 13.9	1.635	2.571	11.1	22.0
6 30	19 53.73	-19 37.4	1.648	2.633	7.0	21.4	6 30	19 54.00	-23 42.6	1.571	2.558	7.0	21.7
7 10	19 44.07	-20 6.6	1.626	2.639	2.5	21.1	7 10	19 44.28	-24 12.0	1.532	2.545	2.6	21.4
7 20	19 33.81	-20 36.3	1.631	2.644	2.2	21.1	7 20	19 33.66	-24 38.0	1.519	2.530	2.8	21.4
7 30	19 24.11	-21 3.3	1.663	2.649	6.6	21.4	7 30	19 23.42	-24 57.2	1.532	2.516	7.3	21.7
8 9	19 16.04	-21 25.8	1.721	2.654	10.7	21.7	8 9	19 14.80	-25 8.2	1.570	2.501	11.6	21.9
8 19	19 10.32	-21 43.0	1.801	2.658	14.1	21.9	8 19	19 8.69	-25 11.3	1.630	2.486	15.4	22.1
<b>223223</b>	2003 <i>DY</i> <sub>5</sub>	7 15.2 223°34		0°4/15.0 18			<b>418069</b>	2007 <i>VP</i> <sub>210</sub>	7 15.2 272°78		0°8/14.9 17		
6 10	20 6.56	-21 1.1	2.008	2.861	13.2	21.3	6 10	20 7.84	-22 47.6	1.470	2.341	16.2	21.7
6 20	20 1.04	-21 23.7	1.921	2.852	10.0	21.0	6 20	20 2.84	-22 55.3	1.385	2.325	12.4	21.4
6 30	19 53.30	-21 51.4	1.857	2.842	6.3	20.8	6 30	19 54.85	-23 7.2	1.321	2.309	7.8	21.1
7 10	19 43.95	-22 21.1	1.819	2.832	2.2	20.5	7 10	19 44.63	-23 19.4	1.280	2.293	2.8	20.7
7 20	19 33.89	-22 49.4	1.808	2.821	2.2	20.5	7 20	19 33.34	-23 28.3	1.264	2.277	2.8	20.7
7 30	19 24.16	-23 13.5	1.826	2.810	6.3	20.7	7 30	19 22.49	-23 31.0	1.273	2.260	8.1	21.0
8 9	19 15.80	-23 31.7	1.869	2.798	10.2	20.9	8 9	19 13.54	-23 26.6	1.306	2.243	13.0	21.2
8 19	19 9.58	-23 43.7	1.935	2.785	13.6	21.1	8 19	19 7.49	-23 16.1	1.359	2.227	17.3	21.4
<b>12297</b>	1991 <i>PT</i> <sub>14</sub>	7 15.2 90°40		1°0/15.6 18			<b>342727</b>	2008 <i>WP</i> <sub>32</sub>	7 15.2 319°18		11°8/17.9 18		
6 10	20 5.67	-17 29.6	1.499	2.364	16.2	18.0	6 10	19 59.08	+ 1 30.9	1.438	2.255	19.3	20.2
6 20	20 0.77	-17 46.9	1.434	2.369	12.3	17.8	6 20	19 56.16	+ 2 49.4	1.346	2.226	16.9	20.0
6 30	19 53.26	-18 14.0	1.389	2.375	7.8	17.5	6 30	19 50.68	+ 3 47.5	1.272	2.199	14.4	19.7
7 10	19 43.95	-18 47.7	1.368	2.380	3.0	17.3	7 10	19 43.20	+ 4 18.8	1.217	2.171	12.4	19.5
7 20	19 33.96	-19 24.0	1.372	2.386	2.5	17.2	7 20	19 34.62	+ 4 19.0	1.183	2.144	11.8	19.4
7 30	19 24.59	-19 59.0	1.403	2.391	7.3	17.6	7 30	19 26.19	+ 3 47.0	1.170	2.118	13.2	19.4
8 9	19 17.04	-20 30.0	1.457	2.396	11.7	17.8	8 9	19 19.19	+ 2 46.7	1.177	2.093	15.9	19.5
8 19	19 12.10	-20 55.4	1.532	2.402	15.5	18.1	8 19	19 14.65	+ 1 25.1	1.203	2.069	19.1	19.7
<b>464645</b>	2000 <i>SB</i> <sub>49</sub>	7 15.2 277°22		3°7/16.2 17			<b>495804</b>	2017 <i>FF</i> <sub>91</sub>	7 15.2 252°56		22°1/21.2 17		

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>133969</b>	2004 <i>TX</i> <sub>203</sub>		7 15.2 254°82	2°9/14.0 18			<b>142185</b>	2002 <i>RV</i> <sub>47</sub>		7 15.2 262°38	2°0/14.5 18		
6 10	20 6.45	-27 31.9	1.921	2.783	13.3	20.6	6 10	20 6.95	-24 8.9	1.679	2.545	14.7	20.1
6 20	20 1.20	-28 7.8	1.837	2.771	10.1	20.4	6 20	20 1.93	-24 44.7	1.592	2.529	11.2	19.8
6 30	19 53.52	-28 44.4	1.775	2.760	6.6	20.1	6 30	19 54.19	-25 25.1	1.526	2.513	7.1	19.5
7 10	19 44.10	-29 17.2	1.739	2.748	3.4	19.9	7 10	19 44.41	-26 5.4	1.485	2.497	2.9	19.2
7 20	19 33.88	-29 41.6	1.730	2.735	3.9	19.9	7 20	19 33.64	-26 40.4	1.470	2.480	3.4	19.2
7 30	19 24.06	-29 54.8	1.747	2.723	7.4	20.1	7 30	19 23.20	-27 6.2	1.481	2.463	7.8	19.5
8 9	19 15.76	-29 56.3	1.790	2.710	11.1	20.3	8 9	19 14.42	-27 21.1	1.517	2.445	12.1	19.7
8 19	19 9.80	-29 47.2	1.854	2.697	14.4	20.5	8 19	19 8.24	-27 25.6	1.573	2.428	16.0	19.9
<b>52830</b>	1998 <i>RN</i> <sub>46</sub>		7 15.2 340°03	1°9/14.9 17			<b>317272</b>	2002 <i>EQ</i> <sub>106</sub>		7 15.2 61°49	0°2/15.1 17		
6 10	19 59.96	-25 34.2	1.021	1.926	18.9	18.4	6 10	20 5.88	-18 43.5	1.284	2.160	17.7	19.9
6 20	19 57.80	-25 27.0	0.949	1.907	14.5	18.1	6 20	20 1.27	-19 29.0	1.229	2.172	13.4	19.7
6 30	19 52.10	-25 20.2	0.895	1.890	9.2	17.8	6 30	19 53.73	-20 25.6	1.194	2.184	8.3	19.5
7 10	19 43.75	-25 9.7	0.860	1.874	3.6	17.4	7 10	19 44.19	-21 27.7	1.182	2.196	2.9	19.2
7 20	19 34.18	-24 51.8	0.847	1.860	3.8	17.3	7 20	19 33.93	-22 28.7	1.195	2.208	2.7	19.2
7 30	19 25.29	-24 24.8	0.854	1.847	9.7	17.6	7 30	19 24.47	-23 22.9	1.232	2.221	8.0	19.5
8 9	19 18.84	-23 49.7	0.881	1.837	15.3	17.9	8 9	19 17.13	-24 6.9	1.293	2.234	12.7	19.9
8 19	19 15.95	-23 8.8	0.926	1.828	20.3	18.2	8 19	19 12.74	-24 39.5	1.373	2.246	16.7	20.1
<b>447696</b>	2007 <i>DB</i> <sub>9</sub>		7 15.2 198°67	1°1/15.8 18			<b>202507</b>	2006 <i>BW</i> <sub>164</sub>		7 15.2 320°74	0°4/15.1 16		
6 10	20 1.39	-16 27.7	2.737	3.576	10.5	21.9	6 10	20 3.98	-21 23.6	1.611	2.481	15.0	20.8
6 20	19 56.55	-16 42.3	2.652	3.573	8.0	21.7	6 20	19 59.54	-21 36.6	1.534	2.474	11.4	20.6
6 30	19 50.21	-17 2.8	2.591	3.570	5.1	21.6	6 30	19 52.56	-21 54.9	1.479	2.467	7.2	20.3
7 10	19 42.86	-17 27.8	2.557	3.567	2.2	21.3	7 10	19 43.79	-22 15.3	1.447	2.461	2.5	20.0
7 20	19 35.09	-17 55.2	2.551	3.563	1.7	21.3	7 20	19 34.26	-22 34.6	1.441	2.455	2.4	20.0
7 30	19 27.57	-18 23.1	2.575	3.559	4.7	21.5	7 30	19 25.22	-22 49.6	1.461	2.449	7.2	20.3
8 9	19 20.98	-18 49.9	2.626	3.555	7.6	21.7	8 9	19 17.84	-22 59.0	1.505	2.443	11.5	20.5
8 19	19 15.82	-19 14.3	2.701	3.550	10.2	21.9	8 19	19 12.96	-23 2.6	1.570	2.438	15.3	20.8
<b>111325</b>	2001 <i>XX</i> <sub>79</sub>		7 15.2 212°30	0°1/15.2 17			<b>103438</b>	2000 <i>AT</i> <sub>182</sub>		7 15.2 151°00	3°0/16.3 18		
6 10	20 7.15	-18 58.0	1.529	2.393	16.0	20.2	6 10	20 5.02	-12 48.6	2.311	3.140	12.5	19.8
6 20	20 2.05	-19 29.3	1.454	2.390	12.2	19.9	6 20	19 59.38	-12 25.2	2.236	3.147	9.7	19.7
6 30	19 54.21	-20 10.1	1.399	2.386	7.7	19.7	6 30	19 52.00	-12 9.5	2.184	3.154	6.6	19.5
7 10	19 44.38	-20 56.3	1.369	2.382	2.7	19.4	7 10	19 43.50	-12 1.2	2.159	3.160	3.8	19.3
7 20	19 33.66	-21 43.0	1.364	2.377	2.5	19.3	7 20	19 34.59	-11 59.6	2.161	3.166	3.3	19.3
7 30	19 23.43	-22 25.6	1.386	2.373	7.5	19.6	7 30	19 26.10	-12 3.7	2.192	3.171	5.8	19.5
8 9	19 14.99	-23 1.1	1.431	2.367	12.1	19.9	8 9	19 18.78	-12 11.9	2.249	3.176	8.8	19.7
8 19	19 9.26	-23 28.4	1.498	2.362	16.1	20.1	8 19	19 13.21	-12 22.8	2.331	3.181	11.6	19.9
<b>260625</b>	2005 <i>GV</i> <sub>74</sub>		7 15.2 141°64	0°7/15.5 17			<b>186741</b>	2004 <i>CE</i> <sub>42</sub>		7 15.2 72°29	2°6/14.2 18		
6 10	20 7.77	-18 3.8	1.735	2.588	14.9	20.9	6 10	20 6.55	-24 4.1	1.466	2.341	16.0	19.8
6 20	20 2.03	-18 23.6	1.667	2.597	11.3	20.7	6 20	20 1.63	-25 2.8	1.408	2.350	12.0	19.6
6 30	19 53.92	-18 51.2	1.622	2.606	7.1	20.5	6 30	19 53.90	-26 6.3	1.372	2.360	7.6	19.4
7 10	19 44.20	-19 23.5	1.602	2.614	2.6	20.2	7 10	19 44.25	-27 8.3	1.359	2.370	3.3	19.2
7 20	19 33.89	-19 57.1	1.609	2.622	2.2	20.2	7 20	19 33.89	-28 2.2	1.372	2.380	3.9	19.2
7 30	19 24.16	-20 28.6	1.643	2.629	6.6	20.5	7 30	19 24.23	-28 43.4	1.410	2.390	8.2	19.5
8 9	19 16.09	-20 55.7	1.702	2.636	10.7	20.7	8 9	19 16.56	-29 10.2	1.471	2.400	12.4	19.8
8 19	19 10.39	-21 17.4	1.784	2.642	14.2	21.0	8 19	19 11.69	-29 23.7	1.553	2.410	16.0	20.0
<b>52314</b>	1991 <i>XD</i>		7 15.2 220°61	14°0/6.9 18 R			<b>250057</b>	2002 <i>CS</i> <sub>308</sub>		7 15.2 32°94	3°8/14.4 17		
6 10	20 18.32	-42 51.7	1.252	2.112	19.1	17.3	6 10	20 7.98	-28 16.8	1.147	2.036	18.5	19.7
6 20	20 12.99	-46 2.4	1.197	2.107	16.4	17.1	6 20	20 3.28	-28 39.0	1.095	2.044	14.0	19.4
6 30	20 2.58	-49 5.4	1.163	2.101	14.4	17.0	6 30	19 55.15	-28 59.9	1.062	2.052	9.1	19.2
7 10	19 47.74	-51 41.0	1.151	2.094	14.1	16.9	7 10	19 44.70	-29 12.9	1.051	2.061	4.6	19.0
7 20	19 30.33	-53 32.1	1.161	2.087	15.5	17.0	7 20	19 33.54	-29 13.1	1.062	2.070	5.0	19.0
7 30	19 13.33	-54 30.8	1.192	2.079	18.1	17.1	7 30	19 23.48	-28 58.6	1.097	2.080	9.6	19.3
8 9	19 59.75	-54 41.2	1.241	2.071	20.9	17.3	8 9	19 16.01	-28 31.3	1.153	2.091	14.2	19.6
8 19	18 51.51	-54 14.1	1.304	2.062	23.6	17.5	8 19	19 11.98	-27 54.8	1.227	2.102	18.3	19.9
<b>102111</b>	1999 <i>RQ</i> <sub>167</sub>		7 15.2 249°83	3°9/13.8 18			<b>508263</b>	2015 <i>HK</i> <sub>134</sub>		7 15.2 138°04	5°6/12.5 17		
6 10	20 9.55	-29 1.3	1.742	2.605	14.4	19.3	6 10	20 9.26	-34 56.1	2.055	2.908	12.9	21.5
6 20	20 3.91	-29 44.1	1.655	2.589	11.1	19.1	6 20	20 3.20	-36 2.7	1.994	2.916	10.1	21.4
6 30	19 55.43	-30 27.2	1.590	2.573	7.4	18.8	6 30	19 54.69	-37 4.4	1.956	2.925	7.4	21.2
7 10	19 44.84	-31 4.6	1.550	2.556	4.2	18.6	7 10	19 44.50	-37 54.8	1.944	2.933	5.7	21.1
7 20	19 33.23	-31 30.7	1.537	2.539	4.9	18.6	7 20	19 33.68	-38 28.8	1.959	2.940	6.3	21.2
7 30	19 22.00	-31 42.0	1.549	2.521	8.5	18.7	7 30	19 23.44	-38 44.0	2.000	2.947	8.6	21.3
8 9	19 12.53	-31 38.1	1.586	2.503	12.5	18.9	8 9	19 14.90	-38 41.4	2.066	2.954	11.4	21.5
8 19	19 5.78	-31 21.4	1.644	2.484	16.1	19.1	8 19	19 8.80	-38 23.8	2.153	2.960	13.9	21.7
<b>21060</b>	1991 <i>JC</i>		7 15.2 18°17	2°6/14.4 18			<b>236929</b>	2007 <i>TN</i> <sub>205</sub>		7 15.2 50°42	1°1/14.9 17		
6 10	20 1.52	-23 40.7	1.000	1.903	19.4	17.1	6 10	20 5.76	-23 40.4	1.643	2.512	14.9	20.2
6 20	19 58.68	-24 25.0	0.953	1.910	14.6	16.8	6 20	20 0.63	-23 49.3	1.583	2.522	11.2	20.0
6 30	19 52.40	-25 15.8	0.923	1.918	9.1	16.6	6 30	19 53.06	-24 0.7	1.544	2.532	6.9	19.8
7 10	19 43.77	-26 5.8	0.914	1.927	3.7	16.3	7 10	19 43.91	-24 11.0	1.530	2.543	2.5	19.5
7 20	19 34.32	-26 47.7	0.927	1.938	4.3	16.4	7 20	19 34.25	-24 17.2	1.542	2.554	2.6	19.6
7 30	19 25.88	-27 16.3	0.961	1.950	9.6	16.7	7 30	19 25.31	-24 17.7	1.579	2.565	6.9	19.9
8 9	19 19.97	-27 30.2	1.015	1.963	14.6	17.0	8 9	19 18.13	-24 11.9	1.642	2.576	11.0	20.1
8 19	19 17.47	-27 30.6	1.087	1.977	18.9	17.3	8 19	19 13.42	-24 0.8	1.725	2.588	14.4	20.4
<b>214134</b>	2005 <i>AP</i> <sub>9</sub>		7 15.2 189°70	3°2/16.4 18			<b>249478</b>	2009 <i>ON</i> <sub>3</sub>					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>179689</b>	2002 <i>RP</i> <sub>6</sub>		7 15.2 303°73	0°9/14.9	18		<b>137324</b>	1999 <i>TX</i> <sub>35</sub>		7 15.2 299°69	10°9/10.9	18	
6 10	20 5.83	-22 59.6	1.401	2.278	16.5	19.9	6 10	20 11.28	-41 58.2	1.394	2.258	17.3	19.7
6 20	20 1.41	-23 5.5	1.321	2.265	12.6	19.6	6 20	20 6.55	-43 26.0	1.320	2.239	14.5	19.5
6 30	19 53.99	-23 15.3	1.262	2.251	7.9	19.3	6 30	19 57.79	-44 44.1	1.266	2.220	12.1	19.3
7 10	19 44.38	-23 25.5	1.225	2.238	2.8	19.0	7 10	19 45.88	-45 40.4	1.233	2.201	10.9	19.2
7 20	19 33.78	-23 32.3	1.213	2.226	2.9	19.0	7 20	19 32.44	-46 5.0	1.222	2.182	11.8	19.1
7 30	19 23.69	-23 33.0	1.225	2.213	8.1	19.2	7 30	19 19.66	-45 53.4	1.233	2.164	14.3	19.2
8 9	19 15.55	-23 26.8	1.261	2.201	13.0	19.5	8 9	19 9.62	-45 8.6	1.264	2.145	17.5	19.4
8 19	19 10.34	-23 14.7	1.316	2.190	17.3	19.7	8 19	19 3.62	-43 58.3	1.312	2.128	20.7	19.5
<b>342428</b>	2008 <i>UG</i> <sub>87</sub>		7 15.2 338°49	2°7/14.2	17		<b>129108</b>	Kristianwaldorff		7 15.2 296°27	1°4/15.7	18	
6 10	20 0.96	-24 43.3	1.325	2.214	16.5	20.1	6 10	20 3.40	-17 19.4	1.670	2.533	15.0	19.7
6 20	19 57.90	-25 25.1	1.251	2.201	12.5	19.8	6 20	19 59.13	-17 23.6	1.582	2.516	11.5	19.4
6 30	19 51.88	-26 12.3	1.197	2.188	8.0	19.6	6 30	19 52.39	-17 36.5	1.514	2.499	7.5	19.1
7 10	19 43.67	-26 59.2	1.165	2.177	3.5	19.3	7 10	19 43.83	-17 56.2	1.470	2.482	3.1	18.8
7 20	19 34.44	-27 39.6	1.157	2.167	4.1	19.3	7 20	19 34.39	-18 19.9	1.452	2.465	2.5	18.7
7 30	19 25.72	-28 8.6	1.172	2.157	8.8	19.5	7 30	19 25.27	-18 44.8	1.460	2.448	7.0	19.0
8 9	19 18.96	-28 24.1	1.209	2.149	13.6	19.8	8 9	19 17.63	-19 8.3	1.492	2.432	11.4	19.2
8 19	19 15.16	-28 26.6	1.266	2.142	17.7	20.0	8 19	19 12.37	-19 28.7	1.545	2.416	15.4	19.4
<b>238901</b>	2005 <i>YP</i> <sub>172</sub>		7 15.2 217°25	7°0/13.1	18		<b>317249</b>	2002 <i>CZ</i> <sub>290</sub>		7 15.2 264°74	4°3/13.0	18	
6 10	20 11.52	-39 7.3	2.047	2.892	13.3	20.6	6 10	20 4.91	-32 12.4	2.251	3.108	11.8	20.2
6 20	20 5.20	-40 9.2	1.973	2.885	10.8	20.5	6 20	19 59.84	-33 4.1	2.171	3.099	9.1	20.1
6 30	19 56.12	-41 3.6	1.922	2.879	8.4	20.3	6 30	19 52.61	-33 53.7	2.114	3.090	6.4	19.9
7 10	19 45.08	-41 43.4	1.896	2.871	7.1	20.2	7 10	19 43.85	-34 36.3	2.083	3.080	4.5	19.7
7 20	19 33.21	-42 3.2	1.896	2.864	7.6	20.2	7 20	19 34.41	-35 7.4	2.079	3.071	5.0	19.7
7 30	19 21.89	-42 0.7	1.922	2.856	9.8	20.3	7 30	19 25.33	-35 24.4	2.103	3.062	7.5	19.9
8 9	19 12.40	-41 37.4	1.972	2.847	12.4	20.5	8 9	19 17.58	-35 27.1	2.151	3.052	10.4	20.0
8 19	19 5.62	-40 57.5	2.042	2.838	14.9	20.6	8 19	19 11.91	-35 17.0	2.221	3.042	13.1	20.2
<b>84984</b>	2003 <i>YL</i> <sub>66</sub>		7 15.2 88°13	2°9/16.1	18		<b>357914</b>	2005 <i>WQ</i> <sub>8</sub>		7 15.2 116°68	0°3/15.1	18	
6 10	20 6.40	-14 57.9	1.529	2.386	16.4	19.5	6 10	20 2.68	-21 21.5	2.456	3.307	11.2	21.8
6 20	20 1.22	-14 39.9	1.464	2.393	12.6	19.3	6 20	19 57.66	-21 38.1	2.385	3.315	8.4	21.7
6 30	19 53.52	-14 31.8	1.419	2.399	8.4	19.0	6 30	19 50.98	-21 58.0	2.337	3.322	5.2	21.5
7 10	19 44.13	-14 32.7	1.398	2.406	4.2	18.8	7 10	19 43.21	-22 18.9	2.317	3.330	1.8	21.3
7 20	19 34.14	-14 40.8	1.402	2.412	3.5	18.8	7 20	19 35.05	-22 38.4	2.324	3.337	1.7	21.3
7 30	19 24.79	-14 54.1	1.432	2.419	7.4	19.0	7 30	19 27.28	-22 54.8	2.360	3.344	5.1	21.5
8 9	19 17.23	-15 10.0	1.487	2.426	11.6	19.3	8 9	19 20.62	-23 7.0	2.423	3.351	8.2	21.7
8 19	19 12.19	-15 26.6	1.562	2.432	15.3	19.5	8 19	19 15.63	-23 14.7	2.510	3.358	10.9	21.9
<b>514579</b>	2000 <i>SS</i> <sub>364</sub>		7 15.2 293°28	4°8/13.2	18		<b>328160</b>	2008 <i>CE</i> <sub>138</sub>		7 15.2 6°72	0°2/15.3	17	
6 10	20 8.18	-30 28.8	1.734	2.599	14.4	21.6	6 10	20 4.55	-18 39.3	1.426	2.297	16.5	21.1
6 20	20 3.27	-31 24.1	1.629	2.563	11.2	21.3	6 20	20 0.20	-19 9.5	1.357	2.297	12.5	20.8
6 30	19 55.34	-32 21.0	1.546	2.526	7.8	21.0	6 30	19 53.11	-19 49.9	1.309	2.298	7.9	20.6
7 10	19 44.97	-33 12.6	1.487	2.489	5.1	20.8	7 10	19 44.08	-20 36.3	1.285	2.298	2.8	20.2
7 20	19 33.18	-33 51.9	1.454	2.452	5.9	20.7	7 20	19 34.23	-21 23.9	1.285	2.299	2.5	20.2
7 30	19 21.45	-34 13.8	1.447	2.414	9.5	20.8	7 30	19 24.95	-22 7.7	1.311	2.300	7.6	20.5
8 9	19 11.30	-34 16.9	1.463	2.375	13.6	21.0	8 9	19 17.53	-22 44.6	1.360	2.301	12.2	20.8
8 19	19 3.94	-34 3.1	1.500	2.337	17.5	21.1	8 19	19 12.83	-23 13.1	1.429	2.302	16.2	21.1
<b>188789</b>	2005 <i>VL</i> <sub>52</sub>		7 15.2 207°54	3°6/17.1	18		<b>357131</b>	2001 <i>YC</i> <sub>152</sub>		7 15.2 236°21	5°1/12.1	18	
6 10	20 0.86	- 8 36.1	2.786	3.599	11.0	21.1	6 10	20 6.07	-35 1.5	2.454	3.303	11.2	21.0
6 20	19 56.12	- 8 24.5	2.697	3.595	8.8	20.9	6 20	20 0.68	-36 10.3	2.373	3.293	8.9	20.9
6 30	19 49.96	- 8 22.1	2.632	3.590	6.4	20.8	6 30	19 53.14	-37 15.8	2.317	3.284	6.6	20.7
7 10	19 42.83	- 8 28.9	2.593	3.585	4.2	20.6	7 10	19 44.05	-38 12.8	2.288	3.274	5.2	20.6
7 20	19 35.31	- 8 44.1	2.582	3.579	3.7	20.6	7 20	19 34.24	-38 56.3	2.286	3.264	5.8	20.6
7 30	19 28.02	- 9 6.5	2.600	3.574	5.4	20.7	7 30	19 24.71	-39 23.6	2.311	3.253	7.9	20.7
8 9	19 21.59	- 9 34.0	2.644	3.567	7.8	20.8	8 9	19 16.44	-39 34.3	2.361	3.243	10.4	20.9
8 19	19 16.52	-10 4.7	2.714	3.561	10.2	21.0	8 19	19 10.21	-39 30.2	2.434	3.231	12.7	21.0
<b>474058</b>	2016 <i>HL</i> <sub>16</sub>		7 15.2 98°36	1°5/14.7	17		<b>277534</b>	2005 <i>YB</i> <sub>6</sub>		7 15.2 131°43	1°0/14.8	17	
6 10	20 9.43	-22 58.1	1.514	2.381	16.0	21.7	6 10	20 6.76	-22 14.9	2.024	2.878	13.1	22.0
6 20	20 3.55	-23 33.0	1.460	2.398	12.0	21.4	6 20	20 1.06	-22 51.4	1.958	2.890	9.8	21.8
6 30	19 54.98	-24 12.2	1.427	2.414	7.5	21.2	6 30	19 53.25	-23 31.8	1.916	2.901	6.1	21.6
7 10	19 44.63	-24 50.6	1.418	2.431	2.8	21.0	7 10	19 44.05	-24 12.4	1.899	2.912	2.2	21.4
7 20	19 33.72	-25 23.2	1.436	2.447	3.0	21.0	7 20	19 34.33	-24 49.4	1.911	2.922	2.4	21.4
7 30	19 23.63	-25 46.7	1.479	2.463	7.6	21.4	7 30	19 25.13	-25 19.8	1.951	2.933	6.2	21.7
8 9	19 15.56	-26 0.4	1.547	2.478	11.7	21.6	8 9	19 17.38	-25 42.2	2.016	2.942	9.7	21.9
8 19	19 10.24	-26 4.8	1.636	2.493	15.3	21.9	8 19	19 11.74	-25 56.6	2.105	2.951	12.8	22.1
<b>440464</b>	2005 <i>SH</i> <sub>198</sub>		7 15.2 282°75	4°1/13.6	18		<b>188167</b>	2002 <i>GT</i> <sub>133</sub>		7 15.2 41°54	6°4/18.3	18	
6 10	20 6.07	-32 20.3	2.148	3.006	12.3	20.9	6 10	20 0.20	- 2 37.8	2.196	2.999	13.9	20.4
6 20	20 0.74	-32 48.4	2.065	2.994	9.5	20.7	6 20	19 55.91	- 2 7.1	2.123	3.004	11.5	20.2
6 30	19 53.16	-33 12.9	2.005	2.982	6.6	20.5	6 30	19 49.95	- 1 51.3	2.072	3.009	9.1	20.1
7 10	19 44.02	-33 29.4	1.970	2.970	4.3	20.3	7 10	19 42.88	- 1 51.6	2.044	3.014	7.0	20.0
7 20	19 34.22	-33 34.3	1.962	2.958	4.8	20.3	7 20	19 35.39	- 2 8.0	2.042	3.019	6.4	19.9
7 30	19 24.85	-33 26.0	1.981	2.947	7.4	20.5	7 30	19 28.25	- 2 38.6	2.065	3.025	7.6	20.0
8 9	19 16.93	-33 4.8	2.025	2.935	10.5	20.6	8 9	19 22.21	- 3 20.4	2.114	3.031	9.8	20.2
8 19	19 11.21	-32 33.2	2.092	2.923	13.4	20.8	8 19	19 17.81	- 4 9.5	2.186	3.036	12.2	20.3
<b>74609</b>	1999 <i>RE</i> <sub>17</sub>		7 15.2 272°09	2°8/16.0	18		<b>73168</b>	2002 <i>GM</i> <sub>170</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>355636</b>	2008 <i>EM</i> <sub>25</sub>		7 15.2 98°70	4.4/13.0	18		<b>120177</b>	2003 <i>LW</i> <sub>3</sub>		7 15.2 101°47	6°0/13.4	18	
6 10	20 5.10	-32 33.2	2.245	3.102	11.9	20.4	6 10	20 13.70	-36 45.4	1.883	2.732	14.1	19.5
6 20	19 59.87	-33 27.0	2.179	3.107	9.1	20.3	6 20	20 6.52	-37 29.5	1.834	2.753	11.1	19.3
6 30	19 52.56	-34 17.9	2.137	3.112	6.4	20.1	6 30	19 56.71	-38 5.1	1.808	2.774	8.1	19.2
7 10	19 43.83	-35 0.9	2.121	3.117	4.5	20.0	7 10	19 45.25	-38 26.0	1.806	2.794	6.2	19.1
7 20	19 34.54	-35 31.7	2.132	3.122	5.1	20.0	7 20	19 33.39	-38 28.4	1.832	2.813	6.6	19.2
7 30	19 25.73	-35 48.3	2.169	3.127	7.4	20.2	7 30	19 22.47	-38 11.5	1.883	2.833	8.9	19.3
8 9	19 18.31	-35 50.6	2.232	3.132	10.1	20.4	8 9	19 13.62	-37 38.1	1.959	2.851	11.7	19.5
8 19	19 12.97	-35 40.4	2.317	3.136	12.7	20.6	8 19	19 7.53	-36 52.5	2.056	2.870	14.2	19.8
<b>10416</b>	Kottler		7 15.2 114°30	6°9/17.5	18		<b>87679</b>	2000 <i>RY</i> <sub>104</sub>		7 15.2 259°81	1°2/14.9	18	
6 10	20 13.37	- 4 3.8	1.956	2.747	15.8	19.0	6 10	20 8.92	-25 11.0	1.946	2.802	13.4	19.2
6 20	20 5.63	- 3 3.3	1.901	2.777	12.9	18.9	6 20	20 3.02	-25 6.4	1.853	2.785	10.2	18.9
6 30	19 55.88	- 2 17.6	1.869	2.806	9.9	18.7	6 30	19 54.71	-25 1.6	1.782	2.767	6.5	18.7
7 10	19 44.91	- 1 48.7	1.863	2.833	7.5	18.7	7 10	19 44.65	-24 53.7	1.737	2.750	2.5	18.4
7 20	19 33.65	- 1 37.1	1.884	2.860	7.0	18.7	7 20	19 33.82	-24 40.4	1.720	2.732	2.6	18.3
7 30	19 23.13	- 1 41.7	1.932	2.885	8.5	18.8	7 30	19 23.38	-24 20.6	1.730	2.713	6.7	18.6
8 9	19 14.20	- 1 59.3	2.007	2.909	11.0	19.0	8 9	19 14.45	-23 54.7	1.766	2.694	10.7	18.8
8 19	19 7.45	- 2 26.4	2.104	2.932	13.5	19.2	8 19	19 7.85	-23 24.3	1.825	2.675	14.3	19.0
<b>499117</b>	2009 <i>HZ</i> <sub>93</sub>		7 15.2 19°82	5°8/13.5	17		<b>48306</b>	2002 <i>LA</i> <sub>48</sub>		7 15.2 338°89	6°6/18.7	17	
6 10	20 1.25	-28 31.2	0.910	1.821	20.1	19.8	6 10	19 59.66	- 3 7.1	1.581	2.410	17.3	18.7
6 20	19 58.85	-29 41.3	0.871	1.831	15.3	19.6	6 20	19 56.26	- 3 14.5	1.502	2.402	14.2	18.5
6 30	19 52.70	-30 51.6	0.850	1.842	10.1	19.3	6 30	19 50.57	- 3 44.8	1.441	2.395	10.9	18.3
7 10	19 43.99	-31 51.7	0.848	1.856	6.1	19.2	7 10	19 43.22	- 4 38.7	1.403	2.389	7.8	18.1
7 20	19 34.47	-32 32.8	0.866	1.870	7.0	19.3	7 20	19 35.11	- 5 54.1	1.389	2.383	6.7	18.0
7 30	19 26.16	-32 50.4	0.905	1.887	11.4	19.6	7 30	19 27.35	- 7 25.9	1.400	2.378	8.5	18.1
8 9	19 20.68	-32 45.7	0.964	1.905	16.0	19.9	8 9	19 21.01	- 9 6.8	1.434	2.373	11.9	18.3
8 19	19 18.87	-32 22.9	1.039	1.924	19.9	20.2	8 19	19 16.91	-10 49.6	1.491	2.369	15.4	18.5
<b>447309</b>	2005 <i>WS</i> <sub>161</sub>		7 15.2 87°72	3°4/13.4	18		<b>239762</b>	2010 <i>CV</i> <sub>18</sub>		7 15.2 194°55	5°4/17.9	18	
6 10	20 3.65	-29 14.3	2.290	3.148	11.6	20.7	6 10	20 3.56	- 3 46.7	2.461	3.256	12.8	21.9
6 20	19 58.71	-30 8.1	2.221	3.152	8.8	20.5	6 20	19 58.33	- 3 30.4	2.375	3.253	10.5	21.7
6 30	19 51.81	-31 1.4	2.176	3.156	5.9	20.3	6 30	19 51.46	- 3 27.3	2.310	3.250	8.1	21.5
7 10	19 43.57	-31 49.7	2.157	3.160	3.6	20.2	7 10	19 43.45	- 3 38.1	2.271	3.246	6.0	21.4
7 20	19 34.79	-32 28.9	2.166	3.164	4.1	20.3	7 20	19 34.95	- 4 2.3	2.258	3.242	5.4	21.4
7 30	19 26.41	-32 56.4	2.202	3.169	6.7	20.4	7 30	19 26.72	- 4 38.1	2.274	3.237	6.8	21.4
8 9	19 19.31	-33 11.5	2.264	3.173	9.6	20.6	8 9	19 19.49	- 5 22.8	2.316	3.231	9.2	21.6
8 19	19 14.14	-33 15.2	2.348	3.177	12.2	20.8	8 19	19 13.82	- 6 13.0	2.382	3.224	11.6	21.7
<b>345972</b>	2007 <i>TM</i> <sub>105</sub>		7 15.2 315°35	0°3/15.4	18		<b>243513</b>	2009 <i>YL</i> <sub>15</sub>		7 15.2 90°72	8°1/12.9	18	
6 10	20 3.14	-19 35.4	1.772	2.635	14.2	21.4	6 10	20 14.42	-43 3.2	1.903	2.741	14.4	20.5
6 20	19 58.73	-19 47.1	1.692	2.628	10.8	21.1	6 20	20 7.34	-43 46.5	1.849	2.751	11.9	20.4
6 30	19 52.02	-20 5.2	1.634	2.621	6.8	20.9	6 30	19 57.36	-44 16.9	1.816	2.762	9.6	20.2
7 10	19 43.69	-20 27.1	1.601	2.614	2.5	20.6	7 10	19 45.52	-44 27.3	1.807	2.772	8.2	20.2
7 20	19 34.67	-20 49.9	1.594	2.607	2.1	20.5	7 20	19 33.19	-44 13.9	1.824	2.782	8.6	20.2
7 30	19 26.06	-21 10.8	1.613	2.601	6.6	20.8	7 30	19 21.88	-43 36.5	1.865	2.793	10.4	20.3
8 9	19 18.93	-21 27.9	1.657	2.595	10.7	21.0	8 9	19 12.84	-42 39.0	1.930	2.803	12.7	20.5
8 19	19 14.03	-21 40.2	1.723	2.589	14.3	21.3	8 19	19 6.79	-41 27.2	2.016	2.812	15.1	20.7
<b>368149</b>	2013 <i>LX</i> <sub>22</sub>		7 15.2 356°91	0°2/15.3	17		<b>139639</b>	2001 <i>QZ</i> <sub>160</sub>		7 15.2 270°13	0°1/15.2	18	
6 10	19 58.33	-16 28.0	0.988	1.887	19.9	19.7	6 10	20 3.64	-20 39.6	2.052	2.908	12.8	20.1
6 20	19 56.44	-17 25.7	0.928	1.882	15.2	19.5	6 20	19 58.83	-20 51.1	1.968	2.901	9.7	19.9
6 30	19 51.23	-18 43.2	0.885	1.879	9.6	19.1	6 30	19 51.97	-21 7.1	1.908	2.893	6.1	19.7
7 10	19 43.55	-20 14.5	0.863	1.876	3.4	18.8	7 10	19 43.67	-21 25.4	1.873	2.886	2.1	19.4
7 20	19 34.77	-21 50.4	0.862	1.876	3.0	18.7	7 20	19 34.77	-21 43.3	1.865	2.878	2.0	19.4
7 30	19 26.64	-23 20.9	0.882	1.876	9.2	19.1	7 30	19 26.23	-21 58.5	1.885	2.871	6.0	19.6
8 9	19 20.82	-24 38.1	0.923	1.878	14.9	19.4	8 9	19 18.98	-22 9.7	1.930	2.863	9.7	19.8
8 19	19 18.38	-25 38.4	0.982	1.882	19.6	19.7	8 19	19 13.72	-22 16.4	1.999	2.855	12.9	20.0
<b>103100</b>	1999 <i>XU</i> <sub>173</sub>		7 15.2 202°45	3°2/13.3	18		<b>155583</b>	2000 <i>AY</i> <sub>148</sub>		7 15.2 152°89	7°6/18.7	18	
6 10	20 6.42	-27 56.9	2.431	3.282	11.3	20.0	6 10	20 1.57	+ 3 22.4	2.702	3.457	12.8	19.9
6 20	20 0.81	-29 6.5	2.350	3.278	8.6	19.8	6 20	19 56.66	+ 4 20.6	2.626	3.461	11.0	19.8
6 30	19 53.18	-30 17.6	2.293	3.273	5.7	19.6	6 30	19 50.32	+ 5 4.6	2.571	3.465	9.3	19.7
7 10	19 44.09	-31 25.2	2.263	3.267	3.4	19.5	7 10	19 43.04	+ 5 32.1	2.540	3.468	8.0	19.6
7 20	19 34.31	-32 24.5	2.263	3.261	4.0	19.5	7 20	19 35.37	+ 5 42.1	2.534	3.471	7.6	19.6
7 30	19 24.77	-33 12.0	2.291	3.255	6.7	19.7	7 30	19 27.98	+ 5 35.0	2.555	3.474	8.3	19.6
8 9	19 16.41	-33 46.2	2.346	3.248	9.6	19.8	8 9	19 21.50	+ 5 12.9	2.600	3.477	9.7	19.7
8 19	19 9.93	-34 7.6	2.424	3.240	12.3	20.0	8 19	19 16.40	+ 4 38.9	2.668	3.479	11.4	19.8
<b>354228</b>	2002 <i>JV</i> <sub>139</sub>		7 15.2 82°40	3°5/13.6	17		<b>126939</b>	2002 <i>EM</i> <sub>153</sub>		7 15.3 21°14	1°4/14.7	18	
6 10	20 5.07	-30 54.9	2.304	3.160	11.6	20.9	6 10	20 2.23	-23 59.8	1.841	2.710	13.5	19.4
6 20	19 59.66	-31 32.7	2.244	3.174	8.8	20.8	6 20	19 57.89	-24 21.5	1.777	2.716	10.1	19.2
6 30	19 52.31	-32 7.8	2.208	3.187	6.0	20.6	6 30	19 51.39	-24 45.7	1.735	2.723	6.3	19.0
7 10	19 43.72	-32 36.2	2.199	3.201	3.7	20.5	7 10	19 43.46	-25 9.0	1.717	2.730	2.4	18.7
7 20	19 34.72	-32 54.5	2.216	3.214	4.2	20.5	7 20	19 35.03	-25 28.1	1.727	2.738	2.7	18.8
7 30	19 26.24	-33 1.3	2.262	3.227	6.6	20.7	7 30	19 27.14	-25 40.7	1.762	2.746	6.5	19.0
8 9	19 19.14	-32 56.8	2.332	3.240	9.4	20.9	8 9	19 20.75	-25 46.0	1.822	2.755	10.2	19.3
8 19	19 14.00	-32 42.5	2.426	3.253	11.9	21.1	8 19	19 16.51	-25 44.2	1.904	2.764	13.4	19.5
<b>155573</b>	1999 <i>XG</i> <sub>66</sub>		7 15.2 216°50	1°6/14.4	18		<b>234110</b>	1999 <i>VL</i> <sub>126&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>107754</b>	2001 FZ <sub>36</sub>		7 15.3 313°96	3°1/16.6	17		<b>145683</b>	3275 T-2		7 15.3 311°56	0°5/15.1	17	
6 10	20 2.26	-12 11.8	1.784	2.632	14.8	19.6	6 10	20 2.91	-20 38.5	1.287	2.171	17.2	20.5
6 20	19 57.99	-12 16.0	1.705	2.627	11.6	19.4	6 20	19 59.65	-20 59.3	1.199	2.145	13.2	20.2
6 30	19 51.54	-12 32.5	1.647	2.623	7.9	19.1	6 30	19 53.26	-21 29.4	1.129	2.120	8.4	19.9
7 10	19 43.56	-13 0.5	1.614	2.619	4.3	18.9	7 10	19 44.39	-22 5.3	1.082	2.095	3.0	19.5
7 20	19 34.92	-13 37.4	1.606	2.615	3.5	18.9	7 20	19 34.17	-22 41.8	1.058	2.071	2.9	19.4
7 30	19 26.66	-14 20.1	1.625	2.611	6.7	19.0	7 30	19 24.22	-23 14.1	1.057	2.047	8.7	19.7
8 9	19 19.78	-15 4.9	1.668	2.607	10.5	19.3	8 9	19 16.14	-23 38.8	1.078	2.024	14.2	19.9
8 19	19 15.01	-15 48.8	1.734	2.604	14.0	19.5	8 19	19 11.15	-23 54.6	1.118	2.002	19.0	20.1
<b>509143</b>	2006 BY <sub>101</sub>		7 15.3 246°79	0°1/15.2	18		<b>181557</b>	2006 UJ <sub>282</sub>		7 15.3 183°37	0°4/15.5	18	
6 10	20 6.78	-21 1.8	2.087	2.938	12.9	22.6	6 10	20 3.04	-19 0.3	2.512	3.357	11.1	21.4
6 20	20 1.28	-21 11.9	1.992	2.921	9.8	22.4	6 20	19 57.98	-19 13.7	2.431	3.357	8.4	21.2
6 30	19 53.59	-21 26.3	1.919	2.904	6.2	22.1	6 30	19 51.27	-19 31.9	2.374	3.357	5.3	21.0
7 10	19 44.30	-21 42.3	1.873	2.886	2.2	21.8	7 10	19 43.44	-19 52.9	2.344	3.357	2.0	20.8
7 20	19 34.25	-21 57.3	1.854	2.867	2.0	21.8	7 20	19 35.16	-20 14.5	2.343	3.356	1.6	20.8
7 30	19 24.47	-22 9.2	1.864	2.848	6.2	22.0	7 30	19 27.21	-20 34.9	2.370	3.355	5.0	21.0
8 9	19 15.97	-22 16.6	1.899	2.829	10.0	22.2	8 9	19 20.30	-20 52.6	2.424	3.354	8.1	21.2
8 19	19 9.53	-22 19.4	1.958	2.808	13.4	22.4	8 19	19 15.01	-21 6.9	2.502	3.352	10.9	21.4
<b>404729</b>	2014 JM <sub>21</sub>		7 15.3 330°89	0°1/15.3	18		<b>151741</b>	2003 CT <sub>14</sub>		7 15.3 191°21	3°0/16.5	17	
6 10	20 1.44	-18 52.3	2.060	2.917	12.7	20.3	6 10	20 4.88	-12 20.9	1.853	2.695	14.6	21.2
6 20	19 57.19	-19 30.2	1.980	2.913	9.6	20.1	6 20	19 59.87	-12 26.5	1.775	2.694	11.4	21.0
6 30	19 50.96	-20 15.6	1.924	2.909	6.0	19.9	6 30	19 52.69	-12 43.8	1.719	2.693	7.7	20.8
7 10	19 43.35	-21 5.3	1.893	2.906	2.1	19.6	7 10	19 44.00	-13 11.8	1.687	2.692	4.1	20.6
7 20	19 35.14	-21 55.7	1.889	2.903	1.9	19.6	7 20	19 34.66	-13 47.9	1.681	2.690	3.3	20.5
7 30	19 27.25	-22 43.1	1.913	2.900	5.9	19.9	7 30	19 25.72	-14 29.1	1.703	2.688	6.6	20.7
8 9	19 20.59	-23 24.8	1.963	2.897	9.5	20.1	8 9	19 18.16	-15 11.9	1.750	2.686	10.3	20.9
8 19	19 15.83	-23 59.3	2.036	2.894	12.7	20.3	8 19	19 12.72	-15 53.5	1.820	2.683	13.8	21.1
<b>211058</b>	2002 CR <sub>126</sub>		7 15.3 115°47	0°2/15.2	17		<b>356381</b>	2010 OL <sub>20</sub>		7 15.3 4°57	4°4/13.6	18	
6 10	20 9.97	-20 51.2	1.565	2.426	15.9	21.3	6 10	20 5.95	-33 27.0	2.137	2.994	12.3	20.5
6 20	20 3.91	-21 6.3	1.506	2.440	12.0	21.0	6 20	20 0.61	-33 56.5	2.067	2.994	9.6	20.3
6 30	19 55.23	-21 26.7	1.468	2.454	7.5	20.8	6 30	19 53.09	-34 21.5	2.019	2.995	6.7	20.1
7 10	19 44.84	-21 49.0	1.455	2.468	2.6	20.6	7 10	19 44.11	-34 37.4	1.997	2.995	4.6	20.0
7 20	19 33.88	-22 9.2	1.468	2.481	2.4	20.6	7 20	19 34.59	-34 40.8	2.002	2.995	5.0	20.0
7 30	19 23.70	-22 24.8	1.508	2.494	7.1	20.9	7 30	19 25.62	-34 30.5	2.033	2.996	7.5	20.2
8 9	19 15.44	-22 34.6	1.572	2.506	11.4	21.2	8 9	19 18.16	-34 7.2	2.090	2.997	10.4	20.3
8 19	19 9.85	-22 38.7	1.658	2.518	15.0	21.4	8 19	19 12.89	-33 33.6	2.168	2.998	13.1	20.5
<b>397775</b>	2008 HO <sub>13</sub>		7 15.3 89°43	11°7/23.6	18		<b>32869</b>	1993 FW <sub>26</sub>		7 15.3 323°02	5°0/13.4	18	
6 10	20 1.20	+16 48.7	2.458	3.127	15.8	21.1	6 10	20 6.22	-33 53.7	1.933	2.794	13.3	18.0
6 20	19 56.54	+17 53.0	2.399	3.141	14.5	21.0	6 20	20 1.14	-34 27.9	1.857	2.787	10.4	17.8
6 30	19 50.32	+18 34.3	2.357	3.155	13.3	20.9	6 30	19 53.59	-34 57.3	1.804	2.780	7.4	17.6
7 10	19 43.07	+18 49.4	2.335	3.169	12.3	20.9	7 10	19 44.33	-35 16.6	1.776	2.773	5.2	17.5
7 20	19 35.45	+18 36.9	2.333	3.182	11.8	20.9	7 20	19 34.38	-35 21.7	1.774	2.766	5.7	17.5
7 30	19 28.18	+17 57.9	2.353	3.196	11.9	20.9	7 30	19 24.98	-35 10.7	1.797	2.760	8.3	17.7
8 9	19 21.96	+16 55.9	2.395	3.209	12.5	21.0	8 9	19 17.24	-34 44.9	1.845	2.754	11.5	17.8
8 19	19 17.30	+15 36.2	2.456	3.223	13.5	21.1	8 19	19 11.94	-34 7.0	1.915	2.748	14.4	18.0
<b>390055</b>	2012 UZ <sub>81</sub>		7 15.3 296°50	2°5/14.5	18		<b>66174</b>	1998 VZ <sub>52</sub>		7 15.3 312°90	7°5/12.6	18	
6 10	20 6.32	-27 22.6	1.815	2.680	13.8	21.0	6 10	20 11.95	-45 1.0	2.356	3.181	12.4	18.4
6 20	20 1.18	-27 38.3	1.737	2.673	10.5	20.8	6 20	20 5.20	-45 33.7	2.287	3.178	10.4	18.3
6 30	19 53.59	-27 53.6	1.681	2.666	6.8	20.6	6 30	19 55.97	-45 54.3	2.241	3.175	8.6	18.1
7 10	19 44.30	-28 4.4	1.650	2.660	3.2	20.3	7 10	19 45.11	-45 57.2	2.219	3.173	7.6	18.1
7 20	19 34.31	-28 7.4	1.645	2.653	3.5	20.3	7 20	19 33.75	-45 39.2	2.222	3.170	7.9	18.1
7 30	19 24.84	-28 0.6	1.666	2.646	7.2	20.6	7 30	19 23.15	-44 59.7	2.252	3.167	9.4	18.2
8 9	19 17.00	-27 44.4	1.712	2.640	11.1	20.8	8 9	19 14.38	-44 1.7	2.305	3.165	11.4	18.3
8 19	19 11.57	-27 20.3	1.781	2.633	14.5	21.0	8 19	19 8.15	-42 49.8	2.380	3.162	13.5	18.5
<b>100096</b>	1993 FG <sub>18</sub>		7 15.3 35°11	1°9/16.1	18		<b>386797</b>	2010 EW <sub>112</sub>		7 15.3 52°79	3°1/14.1	17	
6 10	20 3.49	-14 34.4	1.367	2.235	17.3	19.3	6 10	20 5.89	-27 43.6	1.740	2.608	14.2	20.6
6 20	19 59.41	-15 2.6	1.305	2.241	13.3	19.1	6 20	20 0.83	-28 18.5	1.679	2.617	10.7	20.4
6 30	19 52.63	-15 45.2	1.262	2.247	8.6	18.9	6 30	19 53.33	-28 53.1	1.641	2.626	6.9	20.2
7 10	19 43.99	-16 39.2	1.242	2.253	3.8	18.6	7 10	19 44.22	-29 22.6	1.627	2.635	3.6	20.0
7 20	19 34.60	-17 39.5	1.247	2.260	2.8	18.5	7 20	19 34.54	-29 42.8	1.639	2.645	4.0	20.1
7 30	19 25.84	-18 40.4	1.277	2.267	7.5	18.8	7 30	19 25.52	-29 51.4	1.677	2.654	7.5	20.3
8 9	19 18.94	-19 37.1	1.329	2.274	12.1	19.1	8 9	19 18.23	-29 48.4	1.740	2.664	11.1	20.5
8 19	19 14.72	-20 26.5	1.403	2.282	16.1	19.4	8 19	19 13.39	-29 35.5	1.824	2.674	14.3	20.7
<b>121609</b>	Josephnicholas		7 15.3 174°78	0°7/15.0	18		<b>99451</b>	2002 CL <sub>37</sub>		7 15.3 251°08	2°0/14.6	18	
6 10	20 5.32	-24 14.3	2.818	3.661	10.1	19.7	6 10	20 7.33	-25 33.3	1.925	2.784	13.4	20.8
6 20	19 59.46	-24 8.6	2.737	3.663	7.6	19.6	6 20	20 1.92	-25 55.2	1.837	2.771	10.2	20.6
6 30	19 52.07	-24 2.9	2.681	3.664	4.7	19.4	6 30	19 54.11	-26 18.7	1.772	2.757	6.5	20.3
7 10	19 43.69	-23 55.7	2.653	3.665	1.7	19.2	7 10	19 44.55	-26 39.9	1.732	2.744	2.8	20.1
7 20	19 34.95	-23 45.7	2.654	3.666	1.7	19.2	7 20	19 34.20	-26 55.1	1.720	2.729	3.1	20.1
7 30	19 26.59	-23 32.2	2.685	3.667	4.7	19.4	7 30	19 24.22	-27 1.8	1.734	2.715	7.0	20.3
8 9	19 19.28	-23 15.2	2.744	3.667	7.6	19.6	8 9	19 15.73	-26 59.4	1.774	2.700	10.8	20.5
8 19	19 13.53	-22 55.3	2.827	3.667	10.1	19.7	8 19	19 9.55	-26 48.9	1.836	2.684	14.3	20.7
<b>131163</b>	2001 CT <sub>26</sub>		7 15.3 38°73	4°3/14.3	18		<b>134962</b>	2001 DB <sub>64</sub>		7 15.3 135°94	0°4/15.1	17	
6 10	20 9.85	-32 1											



EPHEMERIDES

7 15.3

7 15.3

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>443623</b>	2014 <i>MM</i> <sub>23</sub>		7 15.3 43°77'	2.8/16.3	18		<b>368371</b>	2002 <i>RS</i> <sub>9</sub>		7 15.3 328°27'	2.4/16.0	17	
6 10	20 2.82	-13 55.7	2.241	3.080	12.5	20.3	6 10	20 2.43	-15 49.7	1.270	2.147	17.8	20.5
6 20	19 57.92	-13 31.7	2.164	3.081	9.7	20.2	6 20	19 59.01	-15 46.6	1.195	2.136	13.8	20.2
6 30	19 51.27	-13 14.8	2.109	3.083	6.6	20.0	6 30	19 52.66	-15 55.8	1.139	2.125	9.1	19.9
7 10	19 43.47	-13 4.8	2.080	3.084	3.6	19.8	7 10	19 44.15	-16 15.8	1.104	2.115	4.1	19.6
7 20	19 35.23	-13 0.9	2.078	3.085	3.1	19.7	7 20	19 34.63	-16 43.6	1.093	2.106	3.3	19.5
7 30	19 27.37	-13 2.3	2.104	3.087	5.8	19.9	7 30	19 25.60	-17 15.4	1.105	2.097	8.2	19.8
8 9	19 20.67	-13 7.5	2.157	3.088	8.9	20.1	8 9	19 18.48	-17 47.4	1.140	2.089	13.3	20.1
8 19	19 15.69	-13 15.1	2.232	3.090	11.8	20.3	8 19	19 14.25	-18 16.7	1.193	2.082	17.7	20.3
<b>447370</b>	2006 <i>AQ</i> <sub>44</sub>		7 15.3 317°23'	1.1/14.7	18		<b>318619</b>	2005 <i>JV</i> <sub>102</sub>		7 15.3 26°33'	3.8/16.9	17	
6 10	20 1.05	-22 9.4	1.970	2.835	12.9	20.6	6 10	20 2.51	-10 57.4	1.277	2.142	18.5	19.9
6 20	19 57.16	-22 45.5	1.879	2.816	9.8	20.4	6 20	19 58.81	-11 11.7	1.216	2.147	14.5	19.7
6 30	19 51.12	-23 27.3	1.810	2.798	6.1	20.1	6 30	19 52.35	-11 44.8	1.174	2.153	9.9	19.5
7 10	19 43.51	-24 11.3	1.767	2.780	2.3	19.8	7 10	19 43.98	-12 34.8	1.153	2.159	5.4	19.2
7 20	19 35.13	-24 53.6	1.750	2.762	2.5	19.8	7 20	19 34.85	-13 37.3	1.156	2.166	4.2	19.2
7 30	19 27.00	-25 30.5	1.761	2.745	6.5	20.0	7 30	19 26.35	-14 46.3	1.183	2.173	8.1	19.4
8 9	19 20.13	-25 59.7	1.796	2.728	10.3	20.2	8 9	19 19.76	-15 55.6	1.233	2.181	12.6	19.7
8 19	19 15.29	-26 20.3	1.853	2.712	13.7	20.4	8 19	19 15.91	-17 0.3	1.303	2.189	16.6	20.0
<b>408229</b>	2013 <i>EM</i> <sub>96</sub>		7 15.3 327°84'	4.1/17.3	18		<b>477533</b>	2010 <i>EX</i> <sub>97</sub>		7 15.3 186°34'	0.7/15.6	17	
6 10	20 0.10	- 8 38.2	2.131	2.961	13.4	21.1	6 10	20 4.59	-17 39.2	2.107	2.955	12.8	21.7
6 20	19 56.04	- 8 36.4	2.048	2.956	10.7	20.9	6 20	19 59.48	-18 2.6	2.027	2.954	9.8	21.5
6 30	19 50.20	- 8 47.2	1.987	2.951	7.7	20.7	6 30	19 52.39	-18 33.3	1.971	2.954	6.2	21.3
7 10	19 43.13	- 9 10.5	1.951	2.947	4.9	20.5	7 10	19 43.93	-19 8.9	1.941	2.953	2.4	21.1
7 20	19 35.52	- 9 44.8	1.941	2.942	4.2	20.5	7 20	19 34.89	-19 46.1	1.939	2.952	1.9	21.0
7 30	19 28.22	-10 27.5	1.958	2.938	6.3	20.6	7 30	19 26.21	-20 22.2	1.964	2.950	5.8	21.3
8 9	19 22.01	-11 15.4	2.001	2.934	9.4	20.8	8 9	19 18.79	-20 54.7	2.016	2.949	9.4	21.5
8 19	19 17.52	-12 5.1	2.067	2.931	12.3	20.9	8 19	19 13.28	-21 22.3	2.092	2.946	12.5	21.7
<b>314485</b>	2005 <i>WZ</i> <sub>141</sub>		7 15.3 267°56'	2.6/14.0	17		<b>429637</b>	2011 <i>FP</i> <sub>120</sub>		7 15.3 33°06'	2.3/14.6	17	
6 10	20 4.27	-27 48.2	2.330	3.186	11.5	21.6	6 10	20 5.58	-25 27.1	1.333	2.215	16.8	20.8
6 20	19 59.29	-28 22.5	2.240	3.171	8.7	21.4	6 20	20 1.07	-25 47.9	1.281	2.227	12.7	20.6
6 30	19 52.31	-28 57.3	2.173	3.156	5.7	21.1	6 30	19 53.68	-26 10.3	1.249	2.239	8.0	20.4
7 10	19 43.90	-29 28.6	2.134	3.141	3.0	20.9	7 10	19 44.40	-26 29.5	1.241	2.253	3.3	20.2
7 20	19 34.82	-29 53.1	2.121	3.126	3.4	20.9	7 20	19 34.54	-26 41.1	1.256	2.267	3.6	20.2
7 30	19 26.03	-30 8.2	2.137	3.110	6.4	21.1	7 30	19 25.58	-26 42.9	1.296	2.281	8.1	20.5
8 9	19 18.43	-30 13.3	2.178	3.095	9.6	21.3	8 9	19 18.76	-26 34.9	1.358	2.297	12.5	20.8
8 19	19 12.72	-30 9.0	2.243	3.079	12.5	21.4	8 19	19 14.83	-26 18.8	1.441	2.313	16.2	21.1
<b>521562</b>	2015 <i>OM</i> <sub>104</sub>		7 15.3 58°38'	1.9/15.9	18		<b>128747</b>	2004 <i>RL</i> <sub>176</sub>		7 15.3 241°80'	2.3/14.6	18	
6 10	20 4.26	-16 56.2	2.059	2.907	13.1	20.7	6 10	20 9.82	-27 49.9	2.030	2.883	13.1	20.7
6 20	19 59.09	-16 32.9	1.989	2.914	10.0	20.5	6 20	20 3.66	-27 55.3	1.941	2.871	10.0	20.5
6 30	19 52.03	-16 15.3	1.942	2.922	6.5	20.3	6 30	19 55.14	-27 59.1	1.875	2.858	6.4	20.2
7 10	19 43.74	-16 2.5	1.920	2.929	3.0	20.1	7 10	19 44.93	-27 57.5	1.835	2.844	3.0	20.0
7 20	19 35.03	-15 53.7	1.926	2.936	2.5	20.0	7 20	19 34.02	-27 47.9	1.822	2.830	3.2	20.0
7 30	19 26.81	-15 47.9	1.959	2.944	5.8	20.3	7 30	19 23.54	-27 29.0	1.838	2.816	6.8	20.2
8 9	19 19.92	-15 44.2	2.018	2.952	9.3	20.5	8 9	19 14.59	-27 1.5	1.879	2.801	10.5	20.4
8 19	19 14.95	-15 41.7	2.100	2.959	12.3	20.7	8 19	19 7.95	-26 27.5	1.943	2.786	13.8	20.6
<b>158330</b>	2001 <i>WK</i> <sub>2</sub>		7 15.3 108°15'	4.3/13.2	18		<b>478035</b>	2011 <i>SB</i> <sub>255</sub>		7 15.3 283°76'	2.7/16.2	17	
6 10	20 10.04	-30 9.9	1.954	2.810	13.4	20.5	6 10	20 3.99	-14 26.6	2.020	2.864	13.5	21.7
6 20	20 3.75	-31 19.2	1.902	2.831	10.2	20.3	6 20	19 59.25	-14 8.5	1.920	2.841	10.5	21.5
6 30	19 55.09	-32 26.6	1.873	2.851	6.9	20.2	6 30	19 52.40	-13 58.1	1.842	2.818	7.1	21.2
7 10	19 44.84	-33 25.8	1.870	2.871	4.5	20.0	7 10	19 44.00	-13 54.9	1.789	2.795	3.8	20.9
7 20	19 34.07	-34 11.7	1.895	2.890	5.1	20.1	7 20	19 34.82	-13 58.2	1.762	2.771	3.2	20.9
7 30	19 23.94	-34 41.2	1.947	2.908	7.8	20.3	7 30	19 25.85	-14 6.5	1.763	2.748	6.5	21.0
8 9	19 15.53	-34 54.6	2.024	2.927	10.9	20.5	8 9	19 18.06	-14 18.1	1.790	2.724	10.2	21.2
8 19	19 9.54	-34 54.2	2.123	2.944	13.6	20.8	8 19	19 12.23	-14 31.5	1.839	2.700	13.7	21.4
<b>24460</b>	2000 <i>RF</i> <sub>105</sub>		7 15.3 57°44'	4.4/16.2	18		<b>369699</b>	2012 <i>CU</i> <sub>47</sub>		7 15.3 70°52'	1.5/15.9	17	
6 10	20 7.24	-13 9.3	1.584	2.433	16.3	17.0	6 10	20 5.20	-15 32.3	1.438	2.302	16.8	20.6
6 20	20 1.73	-12 13.3	1.522	2.443	12.8	16.8	6 20	20 0.69	-16 1.5	1.371	2.306	12.9	20.4
6 30	19 53.84	-11 26.6	1.481	2.454	8.9	16.6	6 30	19 53.49	-16 43.9	1.324	2.309	8.3	20.1
7 10	19 44.40	-10 50.3	1.464	2.465	5.4	16.4	7 10	19 44.39	-17 36.1	1.301	2.313	3.4	19.8
7 20	19 34.49	-10 25.0	1.473	2.476	4.8	16.4	7 20	19 34.51	-18 33.2	1.303	2.316	2.6	19.8
7 30	19 25.27	-10 10.3	1.507	2.488	7.8	16.6	7 30	19 25.21	-19 29.8	1.330	2.320	7.4	20.1
8 9	19 17.80	-10 4.7	1.566	2.499	11.5	16.9	8 9	19 17.71	-20 21.7	1.381	2.323	12.0	20.4
8 19	19 12.74	-10 5.9	1.646	2.511	14.9	17.1	8 19	19 12.88	-21 6.2	1.453	2.327	16.0	20.6
<b>64497</b>	2001 <i>VF</i> <sub>64</sub>		7 15.3 119°66'	1.8/15.9	18		<b>111837</b>	2002 <i>EW</i> <sub>20</sub>		7 15.3 148°81'	2.5/16.2	18	
6 10	20 7.52	-16 18.3	1.957	2.800	13.9	19.9	6 10	20 7.04	-14 15.1	1.573	2.425	16.2	20.1
6 20	20 1.58	-16 9.8	1.892	2.815	10.6	19.7	6 20	20 1.82	-14 20.1	1.503	2.430	12.5	19.9
6 30	19 53.59	-16 8.4	1.851	2.830	6.9	19.5	6 30	19 54.07	-14 36.7	1.455	2.434	8.3	19.6
7 10	19 44.30	-16 12.5	1.835	2.844	3.1	19.3	7 10	19 44.57	-15 3.3	1.430	2.438	4.0	19.4
7 20	19 34.58	-16 20.4	1.846	2.857	2.5	19.3	7 20	19 34.38	-15 36.8	1.431	2.442	3.1	19.3
7 30	19 25.44	-16 30.4	1.885	2.871	6.0	19.5	7 30	19 24.75	-16 13.6	1.458	2.446	7.2	19.6
8 9	19 17.78	-16 41.0	1.951	2.883	9.6	19.8	8 9	19 16.84	-16 50.4	1.510	2.449	11.4	19.8
8 19	19 12.20	-16 51.0	2.039	2.895	12.8	20.0	8 19	19 11.42	-17 24.6	1.583	2.451	15.2	20.1
<b>42221</b>	2001 <i>DA</i> <sub>62</sub>		7 15.3 186°88'	2.1/16.5	18		<b>44409</b>	1998 <i>SW</i> <sub>1</sub>					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>342555</b>	2008 <i>UO</i> <sub>242</sub>		7 15.3 198°38	2°2/16.1	18		<b>68896</b>	2002 <i>JN</i> <sub>85</sub>		7 15.3 300°49	4°8/17.2	18	
6 10	20 5.95	-14 54.7	2.482	3.312	11.7	21.5	6 10	20 0.91	-7 41.7	2.262	3.083	13.0	19.0
6 20	20 0.17	-14 37.1	2.394	3.308	9.0	21.3	6 20	19 56.59	-7 13.1	2.174	3.074	10.5	18.8
6 30	19 52.68	-14 25.4	2.330	3.304	6.0	21.1	6 30	19 50.56	-6 55.4	2.108	3.065	7.8	18.6
7 10	19 44.03	-14 18.9	2.293	3.299	3.1	20.9	7 10	19 43.34	-6 49.5	2.068	3.056	5.5	18.4
7 20	19 34.89	-14 16.9	2.285	3.294	2.6	20.9	7 20	19 35.59	-6 55.3	2.053	3.047	4.9	18.4
7 30	19 26.08	-14 18.3	2.306	3.288	5.4	21.0	7 30	19 28.12	-7 11.6	2.066	3.038	6.7	18.5
8 9	19 18.34	-14 22.0	2.354	3.281	8.5	21.2	8 9	19 21.68	-7 36.2	2.103	3.029	9.4	18.6
8 19	19 12.27	-14 27.1	2.427	3.274	11.3	21.4	8 19	19 16.87	-8 6.4	2.165	3.021	12.1	18.8
<b>509580</b>	2008 <i>CW</i> <sub>191</sub>		7 15.3 208°86	2°5/16.6	18		<b>397754</b>	2008 <i>FF</i> <sub>113</sub>		7 15.3 12°24	6°0/18.1	15	
6 10	20 2.03	-12 17.4	2.410	3.242	12.0	22.4	6 10	19 58.41	-6 0.8	1.592	2.434	16.6	20.5
6 20	19 57.32	-12 23.7	2.325	3.238	9.3	22.2	6 20	19 55.21	-5 46.2	1.528	2.439	13.4	20.3
6 30	19 50.95	-12 39.2	2.263	3.235	6.3	22.0	6 30	19 49.89	-5 49.8	1.484	2.445	10.0	20.1
7 10	19 43.43	-13 3.0	2.227	3.231	3.5	21.8	7 10	19 43.12	-6 12.2	1.462	2.452	7.0	20.0
7 20	19 35.43	-13 33.2	2.219	3.227	2.8	21.8	7 20	19 35.81	-6 51.8	1.464	2.460	6.1	20.0
7 30	19 27.70	-14 7.7	2.239	3.222	5.4	21.9	7 30	19 28.98	-7 45.0	1.490	2.469	8.0	20.1
8 9	19 20.98	-14 44.0	2.286	3.218	8.4	22.1	8 9	19 23.60	-8 46.6	1.540	2.479	11.2	20.3
8 19	19 15.86	-15 20.0	2.357	3.213	11.3	22.3	8 19	19 20.34	-9 51.4	1.612	2.491	14.4	20.5
<b>297134</b>	2010 <i>TK</i> <sub>37</sub>		7 15.3 295°74	2°1/15.8	18		<b>494330</b>	2016 <i>TY</i> <sub>16</sub>		7 15.3 261°63	3°2/14.2	18	
6 10	20 5.82	-17 34.8	1.371	2.241	17.2	21.0	6 10	20 6.75	-30 22.0	2.178	3.034	12.2	21.4
6 20	20 1.57	-17 16.0	1.284	2.222	13.3	20.7	6 20	20 1.22	-30 39.1	2.098	3.027	9.3	21.2
6 30	19 54.33	-17 5.1	1.216	2.202	8.7	20.4	6 30	19 53.54	-30 53.5	2.040	3.020	6.2	21.0
7 10	19 44.80	-17 0.9	1.171	2.182	3.8	20.1	7 10	19 44.40	-31 1.2	2.009	3.014	3.6	20.9
7 20	19 34.13	-17 1.6	1.150	2.163	3.2	20.0	7 20	19 34.68	-30 59.5	2.004	3.007	3.9	20.9
7 30	19 23.82	-17 5.3	1.154	2.143	8.2	20.2	7 30	19 25.41	-30 47.0	2.027	3.000	6.8	21.0
8 9	19 15.33	-17 10.2	1.180	2.124	13.4	20.5	8 9	19 17.57	-30 24.2	2.076	2.993	10.0	21.2
8 19	19 9.74	-17 15.1	1.225	2.105	17.9	20.7	8 19	19 11.85	-29 53.2	2.148	2.986	12.9	21.4
<b>515181</b>	2011 <i>TB</i> <sub>15</sub>		7 15.3 318°16	6°5/12.3	18		<b>369964</b>	1995 <i>SY</i> <sub>31</sub>		7 15.3 344°57	1°5/14.9	17	
6 10	20 4.03	-32 37.0	1.533	2.411	15.3	20.1	6 10	20 0.25	-23 3.2	1.046	1.947	18.8	20.9
6 20	20 0.57	-33 50.3	1.437	2.376	12.1	19.8	6 20	19 58.00	-23 20.9	0.979	1.935	14.4	20.6
6 30	19 53.95	-35 4.8	1.363	2.342	8.8	19.5	6 30	19 52.34	-23 45.1	0.930	1.924	9.1	20.3
7 10	19 44.77	-36 12.2	1.311	2.308	6.6	19.3	7 10	19 44.16	-24 11.0	0.901	1.915	3.4	19.9
7 20	19 34.12	-37 4.1	1.284	2.274	7.6	19.3	7 20	19 34.84	-24 33.2	0.894	1.907	3.5	19.9
7 30	19 23.59	-37 34.1	1.280	2.241	11.0	19.4	7 30	19 26.19	-24 47.1	0.908	1.900	9.4	20.2
8 9	19 14.86	-37 40.4	1.298	2.209	15.1	19.5	8 9	19 19.88	-24 51.0	0.942	1.895	14.9	20.5
8 19	19 9.20	-37 25.3	1.334	2.178	18.9	19.7	8 19	19 16.97	-24 45.1	0.993	1.892	19.6	20.8
<b>161039</b>	2002 <i>GY</i> <sub>126</sub>		7 15.3 353°39	12°7/19.4	16		<b>399799</b>	2005 <i>QV</i> <sub>177</sub>		7 15.3 278°57	2°6/16.6	18	
6 10	19 53.99	+ 0 47.3	1.119	1.967	21.7	18.7	6 10	20 1.47	-12 14.2	2.239	3.076	12.6	21.1
6 20	19 52.71	+ 2 13.8	1.054	1.955	18.9	18.4	6 20	19 57.15	-12 26.8	2.143	3.059	9.8	20.9
6 30	19 48.73	+ 3 13.9	1.006	1.945	16.0	18.2	6 30	19 51.01	-12 50.0	2.069	3.042	6.7	20.7
7 10	19 42.80	+ 3 40.6	0.975	1.938	13.6	18.1	7 10	19 43.54	-13 22.8	2.021	3.026	3.6	20.5
7 20	19 36.00	+ 3 30.4	0.962	1.932	12.7	18.0	7 20	19 35.42	-14 3.2	2.000	3.009	2.9	20.4
7 30	19 29.68	+ 2 44.2	0.969	1.929	13.8	18.1	7 30	19 27.50	-14 48.4	2.007	2.992	5.8	20.6
8 9	19 25.16	+ 1 29.1	0.994	1.928	16.4	18.2	8 9	19 20.61	-15 35.3	2.040	2.975	9.1	20.7
8 19	19 23.35	- 0 5.1	1.037	1.929	19.4	18.4	8 19	19 15.41	-16 21.2	2.097	2.958	12.3	20.9
<b>368510</b>	2003 <i>UK</i> <sub>212</sub>		7 15.3 216°16	2°9/16.2	17		<b>176414</b>	2001 <i>VO</i> <sub>7</sub>		7 15.3 171°74	4°3/13.2	18	
6 10	20 7.27	-14 35.3	1.664	2.513	15.6	21.0	6 10	20 5.77	-31 53.3	2.156	3.014	12.2	20.9
6 20	20 1.96	-14 17.0	1.585	2.509	12.1	20.7	6 20	20 0.58	-32 45.0	2.085	3.014	9.4	20.7
6 30	19 54.18	-14 7.9	1.527	2.505	8.2	20.5	6 30	19 53.21	-33 34.2	2.038	3.015	6.5	20.5
7 10	19 44.66	-14 7.5	1.494	2.500	4.2	20.2	7 10	19 44.32	-34 15.9	2.017	3.015	4.5	20.4
7 20	19 34.39	-14 14.3	1.486	2.496	3.5	20.2	7 20	19 34.81	-34 45.8	2.022	3.015	5.0	20.4
7 30	19 24.60	-14 26.4	1.505	2.490	7.2	20.4	7 30	19 25.75	-35 1.5	2.054	3.015	7.5	20.6
8 9	19 16.40	-14 41.7	1.548	2.485	11.4	20.6	8 9	19 18.12	-35 2.8	2.112	3.015	10.4	20.8
8 19	19 10.62	-14 58.2	1.613	2.479	15.1	20.8	8 19	19 12.64	-34 51.6	2.191	3.015	13.1	21.0
<b>335503</b>	2005 <i>YJ</i> <sub>55</sub>		7 15.3 141°87	1°0/15.0	17		<b>433319</b>	2013 <i>QG</i> <sub>26</sub>		7 15.3 270°60	5°0/13.9	18	
6 10	20 10.35	-24 47.6	2.151	2.999	12.6	21.2	6 10	20 11.37	-32 28.7	1.571	2.436	15.6	21.3
6 20	20 3.63	-24 41.6	2.082	3.009	9.5	21.0	6 20	20 5.68	-32 55.3	1.490	2.423	12.2	21.0
6 30	19 54.87	-24 35.5	2.036	3.019	6.0	20.8	6 30	19 56.83	-33 17.5	1.430	2.410	8.4	20.8
7 10	19 44.80	-24 26.8	2.017	3.029	2.2	20.6	7 10	19 45.70	-33 28.5	1.394	2.396	5.4	20.6
7 20	19 34.33	-24 13.8	2.026	3.038	2.2	20.6	7 20	19 33.56	-33 23.3	1.383	2.382	5.9	20.6
7 30	19 24.47	-23 55.8	2.064	3.046	5.9	20.9	7 30	19 22.04	-32 59.8	1.398	2.369	9.4	20.7
8 9	19 16.11	-23 33.4	2.129	3.054	9.3	21.1	8 9	19 12.62	-32 19.8	1.435	2.355	13.4	20.9
8 19	19 9.86	-23 7.7	2.218	3.062	12.3	21.3	8 19	19 6.28	-31 27.9	1.494	2.341	17.1	21.1
<b>362705</b>	2011 <i>UB</i> <sub>180</sub>		7 15.3 203°81	3°9/13.0	18		<b>310637</b>	2002 <i>CN</i> <sub>165</sub>		7 15.3 152°98	0°7/15.0	17	
6 10	20 5.40	-32 25.4	2.601	3.451	10.7	21.4	6 10	20 8.58	-20 27.8	1.606	2.467	15.5	20.8
6 20	19 59.99	-33 17.1	2.524	3.447	8.2	21.3	6 20	20 3.08	-21 7.6	1.538	2.473	11.7	20.6
6 30	19 52.70	-34 6.4	2.470	3.444	5.8	21.1	6 30	19 54.95	-21 55.1	1.492	2.478	7.3	20.4
7 10	19 44.09	-34 49.1	2.444	3.440	4.1	21.0	7 10	19 44.97	-22 45.4	1.470	2.483	2.6	20.1
7 20	19 34.91	-35 21.5	2.445	3.435	4.5	21.0	7 20	19 34.25	-23 33.3	1.475	2.487	2.5	20.1
7 30	19 26.05	-35 41.1	2.475	3.430	6.7	21.2	7 30	19 24.10	-24 14.6	1.506	2.491	7.3	20.4
8 9	19 18.35	-35 47.9	2.530	3.425	9.3	21.3	8 9	19 15.72	-24 46.8	1.562	2.494	11.6	20.7
8 19	19 12.47	-35 43.0	2.608	3.420	11.6	21.5	8 19	19 9.96	-25 9.6	1.639	2.497	15.2	20.9
<b>519603</b>	2012 <i>TA</i> <sub>330</sub>		7 15.3 235°04	1°2/14.8	18		<b>375250</b>	2008 <i>GQ</i> <sub></sub>					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>72268</b>	2001 <i>AO</i> <sub>41</sub>		7 15.3 265°21	0°9/15.1	18		<b>395081</b>	2009 <i>HG</i> <sub>79</sub>		7 15.3 329°05	5°0/12.9	18	
6 10	20 8.25	-22 59.6	1.548	2.415	15.7	19.4	6 10	20 4.50	-31 58.3	1.917	2.782	13.2	20.7
6 20	20 3.14	-23 8.5	1.464	2.402	12.0	19.2	6 20	19 59.98	-33 1.8	1.843	2.776	10.2	20.5
6 30	19 55.18	-23 21.2	1.402	2.389	7.6	18.9	6 30	19 53.03	-34 3.8	1.793	2.770	7.2	20.3
7 10	19 45.12	-23 34.0	1.363	2.376	2.8	18.5	7 10	19 44.33	-34 57.9	1.767	2.765	5.1	20.2
7 20	19 34.10	-23 43.2	1.350	2.363	2.7	18.5	7 20	19 34.86	-35 38.9	1.768	2.759	5.8	20.2
7 30	19 23.53	-23 46.1	1.363	2.349	7.7	18.8	7 30	19 25.81	-36 3.3	1.794	2.754	8.5	20.4
8 9	19 14.76	-23 42.1	1.399	2.335	12.4	19.0	8 9	19 18.31	-36 10.7	1.844	2.749	11.6	20.5
8 19	19 8.77	-23 31.9	1.457	2.322	16.4	19.2	8 19	19 13.19	-36 3.0	1.915	2.745	14.5	20.7
<b>439250</b>	2012 <i>TS</i> <sub>265</sub>		7 15.3 23°09	2°9/14.1	16		<b>420827</b>	2013 <i>HX</i> <sub>128</sub>		7 15.3 346°05	6°1/16.5	17	
6 10	20 5.46	-26 28.2	1.781	2.648	14.0	21.4	6 10	20 1.27	-12 28.8	1.012	1.898	20.6	20.2
6 20	20 0.64	-27 14.3	1.711	2.649	10.6	21.2	6 20	19 58.60	-11 28.8	0.947	1.889	16.4	19.9
6 30	19 53.38	-28 2.4	1.664	2.649	6.8	20.9	6 30	19 52.65	-10 42.6	0.899	1.881	11.7	19.7
7 10	19 44.42	-28 47.2	1.641	2.650	3.4	20.7	7 10	19 44.29	-10 13.0	0.870	1.874	7.3	19.4
7 20	19 34.76	-29 23.9	1.645	2.651	3.9	20.8	7 20	19 34.89	-10 1.2	0.862	1.868	6.5	19.3
7 30	19 25.61	-29 49.1	1.675	2.652	7.5	21.0	7 30	19 26.14	-10 6.1	0.875	1.864	10.3	19.5
8 9	19 18.08	-30 1.9	1.730	2.653	11.2	21.2	8 9	19 19.63	-10 24.0	0.907	1.861	15.3	19.8
8 19	19 12.95	-30 3.2	1.806	2.655	14.5	21.4	8 19	19 16.40	-10 50.3	0.957	1.859	19.8	20.0
<b>66548</b>	1999 <i>RL</i> <sub>124</sub>		7 15.3 292°94	4°9/14.1	18		<b>440285</b>	2004 <i>RQ</i> <sub>213</sub>		7 15.3 305°28	2°0/14.8	17	
6 10	20 10.29	-33 23.4	1.738	2.599	14.5	17.7	6 10	20 7.34	-28 12.9	2.070	2.927	12.7	20.6
6 20	20 4.67	-33 40.6	1.648	2.578	11.4	17.4	6 20	20 1.86	-28 1.8	1.972	2.904	9.7	20.3
6 30	19 56.14	-33 52.1	1.579	2.556	8.0	17.2	6 30	19 54.09	-27 47.7	1.896	2.880	6.3	20.1
7 10	19 45.46	-33 52.3	1.534	2.535	5.2	17.0	7 10	19 44.69	-27 27.6	1.847	2.857	2.9	19.8
7 20	19 33.81	-33 36.6	1.515	2.513	5.6	17.0	7 20	19 34.55	-26 59.6	1.825	2.834	3.0	19.8
7 30	19 22.66	-33 3.5	1.522	2.492	8.9	17.1	7 30	19 24.79	-26 23.2	1.830	2.811	6.6	20.0
8 9	19 13.37	-32 14.9	1.553	2.470	12.7	17.3	8 9	19 16.45	-25 39.5	1.862	2.789	10.3	20.1
8 19	19 6.92	-31 15.0	1.605	2.449	16.2	17.4	8 19	19 10.30	-24 50.9	1.916	2.766	13.7	20.3
<b>476216</b>	2007 <i>UX</i> <sub>109</sub>		7 15.3 280°95	2°4/16.3	18		<b>473138</b>	2015 <i>KR</i> <sub>3</sub>		7 15.3 350°35	8°1/17.3	17	
6 10	20 3.24	-14 27.9	1.931	2.779	13.9	21.6	6 10	20 3.53	-5 13.2	1.546	2.378	17.5	20.2
6 20	19 58.69	-14 22.9	1.846	2.770	10.7	21.4	6 20	19 59.21	-4 1.7	1.474	2.375	14.5	20.0
6 30	19 52.05	-14 27.0	1.784	2.762	7.2	21.2	6 30	19 52.51	-3 5.7	1.422	2.372	11.3	19.8
7 10	19 43.95	-14 39.2	1.746	2.753	3.6	21.0	7 10	19 44.14	-2 28.6	1.392	2.370	8.8	19.7
7 20	19 35.18	-14 57.8	1.734	2.744	2.9	20.9	7 20	19 35.08	-2 12.3	1.385	2.368	8.2	19.6
7 30	19 26.76	-15 20.5	1.750	2.736	6.3	21.1	7 30	19 26.49	-2 16.6	1.403	2.367	10.0	19.8
8 9	19 19.62	-15 45.0	1.790	2.727	10.1	21.3	8 9	19 19.47	-2 38.1	1.443	2.366	13.0	19.9
8 19	19 14.49	-16 9.2	1.854	2.719	13.4	21.5	8 19	19 14.79	-3 12.2	1.503	2.366	16.1	20.1
<b>132761</b>	2002 <i>PH</i> <sub>71</sub>		7 15.3 318°01	8°0/18.9	18		<b>279460</b>	2010 <i>RA</i> <sub>153</sub>		7 15.3 173°18	3°8/17.5	18	
6 10	19 59.60	-1 18.0	1.633	2.452	17.3	19.0	6 10	20 0.96	-7 47.9	2.546	3.361	11.9	21.2
6 20	19 56.35	-1 1.1	1.543	2.433	14.6	18.8	6 20	19 56.42	-7 44.9	2.464	3.362	9.5	21.0
6 30	19 50.81	-1 6.1	1.471	2.414	11.6	18.6	6 30	19 50.38	-7 52.9	2.406	3.363	6.9	20.9
7 10	19 43.57	-1 35.5	1.422	2.396	9.0	18.4	7 10	19 43.31	-8 11.6	2.373	3.364	4.6	20.7
7 20	19 35.46	-2 29.4	1.395	2.379	8.0	18.3	7 20	19 35.83	-8 40.0	2.367	3.365	3.9	20.7
7 30	19 27.57	-3 44.6	1.392	2.362	9.5	18.3	7 30	19 28.62	-9 16.1	2.389	3.365	5.7	20.8
8 9	19 21.00	-5 15.0	1.413	2.346	12.5	18.4	8 9	19 22.35	-9 57.2	2.438	3.365	8.2	20.9
8 19	19 16.60	-6 53.6	1.455	2.330	15.9	18.6	8 19	19 17.54	-10 40.6	2.512	3.365	10.7	21.1
<b>36147</b>	1999 <i>RA</i> <sub>186</sub>		7 15.3 109°16	0°3/15.2	18		<b>400676</b>	2009 <i>OA</i> <sub>25</sub>		7 15.3 326°21	2°3/16.6	18	
6 10	20 3.29	-20 55.3	2.352	3.203	11.6	18.8	6 10	19 59.04	-11 50.6	1.755	2.608	14.8	19.9
6 20	19 58.30	-21 15.9	2.282	3.212	8.7	18.6	6 20	19 55.94	-12 34.6	1.655	2.582	11.6	19.7
6 30	19 51.58	-21 40.4	2.236	3.221	5.4	18.4	6 30	19 50.60	-13 35.9	1.577	2.557	7.8	19.4
7 10	19 43.71	-22 6.3	2.217	3.229	1.9	18.2	7 10	19 43.54	-14 52.7	1.523	2.531	3.8	19.1
7 20	19 35.43	-22 31.0	2.225	3.238	1.8	18.2	7 20	19 35.53	-16 20.6	1.495	2.507	2.8	19.0
7 30	19 27.55	-22 52.4	2.262	3.246	5.2	18.5	7 30	19 27.64	-17 53.9	1.494	2.483	6.7	19.2
8 9	19 20.83	-23 9.3	2.325	3.254	8.4	18.7	8 9	19 20.96	-19 26.3	1.517	2.461	11.0	19.3
8 19	19 15.83	-23 21.1	2.412	3.262	11.2	18.9	8 19	19 16.39	-20 52.6	1.563	2.439	14.9	19.5
<b>468151</b>	2014 <i>WW</i> <sub>67</sub>		7 15.3 117°55	2°1/16.1	17		<b>335068</b>	2004 <i>RP</i> <sub>253</sub>		7 15.3 292°16	2°0/14.5	18	
6 10	20 8.01	-15 12.9	1.683	2.532	15.5	21.8	6 10	20 5.27	-23 46.9	1.669	2.537	14.7	21.1
6 20	20 2.32	-15 17.0	1.620	2.546	11.9	21.6	6 20	20 0.94	-24 27.5	1.574	2.513	11.2	20.8
6 30	19 54.29	-15 31.0	1.579	2.559	7.8	21.4	6 30	19 53.89	-25 14.1	1.500	2.488	7.2	20.5
7 10	19 44.70	-15 52.8	1.563	2.572	3.5	21.2	7 10	19 44.74	-26 2.0	1.451	2.463	3.0	20.2
7 20	19 34.59	-16 19.6	1.573	2.585	2.8	21.1	7 20	19 34.47	-26 45.9	1.428	2.438	3.4	20.1
7 30	19 25.10	-16 48.4	1.610	2.597	6.7	21.4	7 30	19 24.38	-27 21.0	1.430	2.413	7.9	20.3
8 9	19 17.29	-17 16.5	1.672	2.608	10.7	21.7	8 9	19 15.83	-27 44.8	1.457	2.388	12.3	20.5
8 19	19 11.84	-17 42.2	1.757	2.619	14.2	21.9	8 19	19 9.85	-27 57.2	1.504	2.363	16.3	20.7
<b>266543</b>	2008 <i>FZ</i> <sub>112</sub>		7 15.3 315°03	6°5/17.5	18		<b>439467</b>	2013 <i>YW</i> <sub>54</sub>		7 15.3 186°23	1°4/14.9	18	
6 10	20 0.50	-7 26.8	1.324	2.179	18.5	19.9	6 10	20 9.00	-25 46.2	1.920	2.777	13.6	20.7
6 20	19 57.60	-7 5.7	1.235	2.156	15.1	19.6	6 20	20 3.01	-25 40.6	1.845	2.777	10.3	20.5
6 30	19 51.91	-7 4.0	1.164	2.132	11.3	19.3	6 30	19 54.72	-25 34.3	1.792	2.777	6.5	20.3
7 10	19 44.05	-7 24.1	1.114	2.109	7.7	19.0	7 10	19 44.88	-25 24.6	1.764	2.776	2.6	20.0
7 20	19 35.02	-8 5.5	1.086	2.087	6.7	18.9	7 20	19 34.49	-25 9.3	1.764	2.776	2.6	20.0
7 30	19 26.18	-9 5.1	1.081	2.065	9.6	19.0	7 30	19 24.68	-24 47.7	1.792	2.775	6.5	20.3
8 9	19 18.96	-10 16.8	1.098	2.044	13.9	19.2	8 9	19 16.47	-24 20.6	1.845	2.774	10.3	20.5
8 19	19 14.46	-11 33.9	1.134	2.024	18.3	19.4	8 19	19 10.57	-23 49.4	1.921	2.773	13.6	20.7
<b>149921</b>	2005 <i>SZ</i> <sub>112</sub>		7 15.3 276°55	2°0/14.6	18		<b>92181</b>	1999 <i>XU</i> <sub>202</sub>	</				

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>467847</b>	2010 VL <sub>40</sub>	7 15.3 338°23		3°8/16.2 17			<b>459603</b>	2013 HB <sub>26</sub>	7 15.3 47°50		0°7/15.2 17		
6 10	20 5.30	-14 56.8	1.276	2.146	18.2	21.2	6 10	20 8.28	-21 56.7	1.075	1.963	19.5	20.8
6 20	20 1.10	-14 17.0	1.205	2.141	14.2	21.0	6 20	20 3.52	-22 6.2	1.032	1.980	14.7	20.6
6 30	19 53.95	-13 47.1	1.154	2.136	9.6	20.7	6 30	19 55.42	-22 21.8	1.007	1.998	9.1	20.3
7 10	19 44.72	-13 27.7	1.124	2.131	5.2	20.4	7 10	19 45.19	-22 38.7	1.003	2.016	3.2	20.0
7 20	19 34.60	-13 18.3	1.118	2.127	4.4	20.4	7 20	19 34.38	-22 52.4	1.022	2.035	3.0	20.1
7 30	19 25.10	-13 17.6	1.135	2.124	8.6	20.6	7 30	19 24.73	-23 0.0	1.064	2.055	8.6	20.5
8 9	19 17.58	-13 23.5	1.175	2.121	13.3	20.9	8 9	19 17.65	-23 0.8	1.128	2.075	13.6	20.8
8 19	19 12.97	-13 33.5	1.234	2.118	17.5	21.1	8 19	19 13.90	-22 55.3	1.211	2.095	17.8	21.1
<b>216716</b>	2005 EK <sub>58</sub>	7 15.3 191°84		4°5/17.0 17			<b>110643</b>	2001 TN <sub>168</sub>	7 15.3 151°97		2°3/16.2 18 R		
6 10	20 5.73	-9 43.1	1.600	2.441	16.5	20.7	6 10	20 4.62	-14 50.3	2.433	3.267	11.8	19.6
6 20	20 0.87	-9 34.6	1.526	2.441	13.1	20.5	6 20	19 59.19	-14 28.1	2.356	3.272	9.1	19.4
6 30	19 53.57	-9 41.2	1.471	2.440	9.3	20.3	6 30	19 52.11	-14 11.9	2.302	3.276	6.1	19.3
7 10	19 44.54	-10 2.7	1.440	2.439	5.7	20.1	7 10	19 43.95	-14 1.1	2.275	3.281	3.2	19.1
7 20	19 34.77	-10 37.3	1.434	2.438	4.8	20.0	7 20	19 35.39	-13 55.2	2.276	3.285	2.7	19.1
7 30	19 25.45	-11 21.5	1.454	2.436	7.7	20.2	7 30	19 27.22	-13 53.3	2.306	3.288	5.3	19.2
8 9	19 17.72	-12 11.0	1.498	2.435	11.6	20.4	8 9	19 20.15	-13 54.2	2.363	3.292	8.3	19.4
8 19	19 12.38	-13 1.8	1.563	2.433	15.3	20.6	8 19	19 14.73	-13 57.0	2.444	3.295	11.1	19.6
<b>123787</b>	2001 BG <sub>22</sub>	7 15.3 180°49		1°9/14.6 18			<b>39995</b>	1998 HC <sub>51</sub>	7 15.3 341°91		9°3/18.3 18		
6 10	20 6.82	-25 15.7	1.980	2.838	13.1	20.2	6 10	20 2.23	-1 2.8	1.611	2.425	17.7	18.5
6 20	20 1.39	-25 41.5	1.905	2.839	9.9	20.0	6 20	19 58.20	+0 3.6	1.537	2.420	15.0	18.3
6 30	19 53.74	-26 8.9	1.854	2.839	6.3	19.8	6 30	19 51.88	+0 51.2	1.483	2.416	12.2	18.1
7 10	19 44.56	-26 34.0	1.828	2.839	2.7	19.6	7 10	19 43.96	+1 16.1	1.450	2.412	10.0	18.0
7 20	19 34.77	-26 53.4	1.829	2.839	2.9	19.6	7 20	19 35.34	+1 16.6	1.439	2.409	9.3	17.9
7 30	19 25.45	-27 4.8	1.858	2.838	6.6	19.8	7 30	19 27.13	+0 53.5	1.452	2.406	10.7	18.0
8 9	19 17.62	-27 7.4	1.912	2.838	10.2	20.0	8 9	19 20.37	+0 10.9	1.488	2.404	13.2	18.1
8 19	19 11.97	-27 2.2	1.989	2.837	13.4	20.2	8 19	19 15.84	-0 45.5	1.544	2.402	16.0	18.3
<b>3817</b>	Lencarter	7 15.3 21°37		2°0/16.0 18			<b>249777</b>	2000 WE <sub>50</sub>	7 15.3 288°76		4°2/16.6 17		
6 10	20 3.70	-15 48.5	1.145	2.026	19.0	16.9	6 10	20 4.89	-12 14.7	1.407	2.265	17.5	20.6
6 20	20 0.08	-15 59.4	1.087	2.030	14.6	16.6	6 20	20 0.71	-11 55.2	1.325	2.252	13.8	20.4
6 30	19 53.38	-16 24.5	1.047	2.035	9.5	16.4	6 30	19 53.75	-11 49.2	1.262	2.239	9.6	20.1
7 10	19 44.52	-17 0.8	1.029	2.040	4.1	16.1	7 10	19 44.70	-11 56.8	1.222	2.226	5.5	19.8
7 20	19 34.84	-17 43.8	1.033	2.046	3.1	16.0	7 20	19 34.66	-12 16.9	1.205	2.213	4.6	19.7
7 30	19 25.91	-18 28.3	1.061	2.053	8.3	16.4	7 30	19 24.98	-12 46.5	1.213	2.200	8.4	19.9
8 9	19 19.15	-19 9.6	1.110	2.060	13.4	16.7	8 9	19 17.03	-13 22.0	1.244	2.187	12.9	20.1
8 19	19 15.46	-19 45.0	1.178	2.068	17.7	17.0	8 19	19 11.78	-13 59.6	1.295	2.175	17.2	20.4
<b>269928</b>	2000 OO <sub>59</sub>	7 15.3 1°90		4°8/14.8 18			<b>511052</b>	2013 RC <sub>96</sub>	7 15.3 271°57		0°5/15.1 18		
6 10	20 10.63	-33 12.6	1.301	2.178	17.5	19.2	6 10	20 6.01	-20 34.6	1.699	2.561	14.8	21.8
6 20	20 5.28	-33 2.2	1.237	2.177	13.5	18.9	6 20	20 1.33	-21 5.1	1.608	2.543	11.3	21.6
6 30	19 56.56	-32 42.7	1.193	2.176	9.2	18.7	6 30	19 54.06	-21 43.2	1.538	2.525	7.1	21.3
7 10	19 45.60	-32 8.9	1.171	2.176	5.4	18.5	7 10	19 44.81	-22 25.5	1.493	2.506	2.5	20.9
7 20	19 33.95	-31 18.0	1.173	2.178	5.5	18.5	7 20	19 34.55	-23 7.3	1.474	2.487	2.4	20.9
7 30	19 23.37	-30 11.4	1.200	2.180	9.4	18.7	7 30	19 24.55	-23 44.4	1.481	2.467	7.2	21.1
8 9	19 15.32	-28 53.9	1.249	2.183	13.7	19.0	8 9	19 16.05	-24 14.2	1.513	2.448	11.7	21.4
8 19	19 10.60	-27 31.2	1.318	2.186	17.6	19.2	8 19	19 10.02	-24 35.6	1.567	2.428	15.7	21.6
<b>803</b>	Picka	7 15.3 345°94		3°0/16.4 18 R			<b>220868</b>	2004 WH <sub>11</sub>	7 15.3 310°63		2°5/13.8 18		
6 10	20 2.05	-13 11.1	2.166	3.006	12.8	14.2	6 10	20 2.20	-24 18.0	2.107	2.969	12.3	19.4
6 20	19 57.51	-12 47.5	2.087	3.004	10.0	14.0	6 20	19 58.06	-25 30.3	2.018	2.954	9.3	19.2
6 30	19 51.18	-12 31.8	2.029	3.002	6.9	13.8	6 30	19 51.80	-26 48.6	1.953	2.939	5.9	19.0
7 10	19 43.64	-12 23.9	1.997	3.000	3.9	13.6	7 10	19 43.96	-28 7.7	1.915	2.925	2.9	18.7
7 20	19 35.62	-12 23.1	1.992	2.999	3.3	13.6	7 20	19 35.31	-29 22.1	1.904	2.910	3.5	18.8
7 30	19 27.95	-12 28.4	2.015	2.997	6.0	13.8	7 30	19 26.84	-30 26.8	1.921	2.896	6.9	18.9
8 9	19 21.45	-12 38.0	2.063	2.996	9.1	14.0	8 9	19 19.56	-31 19.0	1.964	2.882	10.3	19.1
8 19	19 16.69	-12 50.4	2.134	2.995	12.1	14.2	8 19	19 14.25	-31 57.8	2.029	2.869	13.4	19.3
<b>386390</b>	2008 US <sub>147</sub>	7 15.3 237°39		0°9/14.9 18			<b>195491</b>	2002 GR <sub>151</sub>	7 15.3 89°94		0°1/15.3 18		
6 10	20 5.66	-22 33.0	1.939	2.797	13.4	21.6	6 10	20 4.80	-19 49.4	1.787	2.648	14.2	20.1
6 20	20 0.59	-22 52.9	1.858	2.792	10.1	21.4	6 20	20 0.02	-20 16.8	1.716	2.650	10.8	19.9
6 30	19 53.30	-23 16.5	1.800	2.786	6.3	21.2	6 30	19 52.96	-20 51.0	1.667	2.653	6.7	19.6
7 10	19 44.43	-23 40.7	1.768	2.781	2.3	20.9	7 10	19 44.33	-21 28.6	1.642	2.655	2.4	19.4
7 20	19 34.90	-24 2.1	1.763	2.775	2.3	20.9	7 20	19 35.05	-22 5.8	1.645	2.658	2.1	19.3
7 30	19 25.78	-24 18.3	1.785	2.769	6.4	21.2	7 30	19 26.26	-22 39.2	1.674	2.660	6.5	19.6
8 9	19 18.07	-24 28.0	1.832	2.763	10.2	21.4	8 9	19 18.97	-23 6.6	1.728	2.663	10.5	19.9
8 19	19 12.53	-24 31.1	1.902	2.757	13.6	21.6	8 19	19 13.92	-23 27.1	1.804	2.666	13.9	20.1
<b>397782</b>	2008 HN <sub>37</sub>	7 15.3 228°13		3°1/17.1 18			<b>33832</b>	2000 EE <sub>135</sub>	7 15.3 4°02		0°9/15.1 18		
6 10	20 1.19	-10 8.9	2.290	3.119	12.6	21.1	6 10	19 58.13	-20 7.9	0.863	1.775	20.7	17.8
6 20	19 56.81	-10 23.5	2.208	3.118	9.9	20.9	6 20	19 56.71	-20 44.2	0.811	1.773	15.8	17.5
6 30	19 50.74	-10 49.9	2.149	3.117	6.9	20.7	6 30	19 51.68	-21 33.7	0.776	1.773	9.9	17.2
7 10	19 43.49	-11 26.7	2.115	3.115	4.0	20.6	7 10	19 44.03	-22 30.3	0.760	1.774	3.5	16.9
7 20	19 35.74	-12 12.1	2.108	3.114	3.3	20.5	7 20	19 35.31	-23 26.1	0.764	1.777	3.4	16.9
7 30	19 28.28	-13 3.0	2.129	3.112	5.6	20.7	7 30	19 27.49	-24 13.6	0.788	1.783	9.7	17.3
8 9	19 21.86	-13 56.1	2.177	3.111	8.7	20.8	8 9	19 22.27	-24 48.4	0.830	1.789	15.5	17.6
8 19	19 17.07	-14 48.6	2.249	3.109	11.6	21.0	8 19	19 20.65	-25 9.2	0.890	1.798	20.3	17.9
<b>32921</b>	1995 EV	7 15.3 324°92		2°7/14.6 18			<b>52879</b>	1998 SL <sub>50</sub>	7 15.3 234°33		3°8/13.9 17		
6 10	20 5.22	-26 49.9	1.367	2.249	16.5	17.8	6 10	20 9.67	-29 31.6	1.873	2.731		

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>380308</b>	2002 <i>ED</i> <sub>93</sub>		7 15.3 211°50	5°5/13.2	18		<b>148007</b>	1997 <i>JL</i> <sub>12</sub>		7 15.3 86°99	1°7/14.7	17	
6 10	20 12.68	-36 58.7	2.285	3.125	12.3	22.2	6 10	20 9.78	-23 27.2	1.556	2.421	15.8	19.8
6 20	20 5.83	-37 36.7	2.204	3.117	9.8	22.0	6 20	20 3.88	-24 4.0	1.506	2.442	11.8	19.6
6 30	19 56.56	-38 8.2	2.147	3.110	7.3	21.9	6 30	19 55.36	-24 44.3	1.477	2.463	7.3	19.4
7 10	19 45.60	-38 27.5	2.116	3.101	5.6	21.7	7 10	19 45.15	-25 22.9	1.472	2.484	2.9	19.2
7 20	19 33.96	-38 30.8	2.112	3.092	6.0	21.7	7 20	19 34.45	-25 55.2	1.494	2.505	3.1	19.3
7 30	19 22.82	-38 16.4	2.135	3.082	8.2	21.9	7 30	19 24.58	-26 18.1	1.542	2.525	7.4	19.6
8 9	19 13.30	-37 45.8	2.184	3.071	10.9	22.0	8 9	19 16.68	-26 30.7	1.614	2.545	11.4	19.9
8 19	19 6.15	-37 2.4	2.256	3.060	13.4	22.2	8 19	19 11.45	-26 34.1	1.708	2.564	14.8	20.1
<b>497776</b>	2006 <i>SM</i> <sub>332</sub>		7 15.3 234°63	2°9/14.2	17		<b>399274</b>	2014 <i>HA</i> <sub>81</sub>		7 15.3 141°07	1°0/15.8	18	
6 10	20 9.83	-27 35.4	1.911	2.767	13.6	22.6	6 10	20 3.04	-16 54.4	2.197	3.044	12.4	21.4
6 20	20 3.99	-28 9.9	1.823	2.755	10.4	22.4	6 20	19 58.28	-17 11.8	2.121	3.047	9.5	21.2
6 30	19 55.59	-28 45.0	1.758	2.741	6.8	22.1	6 30	19 51.69	-17 36.5	2.069	3.050	6.1	21.0
7 10	19 45.32	-29 15.8	1.719	2.727	3.5	21.9	7 10	19 43.86	-18 6.2	2.042	3.053	2.5	20.7
7 20	19 34.16	-29 37.9	1.707	2.712	3.9	21.9	7 20	19 35.52	-18 38.5	2.042	3.055	1.9	20.7
7 30	19 23.37	-29 48.2	1.722	2.697	7.5	22.1	7 30	19 27.56	-19 10.8	2.071	3.058	5.4	21.0
8 9	19 14.14	-29 46.4	1.762	2.681	11.3	22.3	8 9	19 20.76	-19 40.7	2.126	3.060	8.9	21.2
8 19	19 7.36	-29 33.9	1.825	2.665	14.7	22.5	8 19	19 15.76	-20 7.1	2.204	3.062	11.9	21.4
<b>222165</b>	2000 <i>AX</i> <sub>93</sub>		7 15.3 72°75	0°7/15.4	17		<b>47114</b>	1999 <i>CP</i> <sub>61</sub>		7 15.3 170°18	2°7/17.1	18	
6 10	20 30.01	-22 55.8	1.396	2.233	18.8	21.1	6 10	20 0.10	-10 12.3	2.928	3.747	10.4	18.7
6 20	20 18.18	-22 3.5	1.366	2.287	14.0	21.0	6 20	19 55.63	-10 18.3	2.845	3.749	8.2	18.5
6 30	20 3.62	-21 11.6	1.359	2.340	8.6	20.8	6 30	19 49.84	-10 33.0	2.787	3.751	5.7	18.4
7 10	19 47.80	-20 18.9	1.379	2.391	3.1	20.6	7 10	19 43.17	-10 55.7	2.754	3.752	3.5	18.2
7 20	19 32.36	-19 25.9	1.428	2.441	2.6	20.7	7 20	19 36.14	-11 24.9	2.750	3.754	2.9	18.2
7 30	19 18.82	-18 34.8	1.506	2.489	7.5	21.1	7 30	19 29.35	-11 59.0	2.775	3.755	4.7	18.3
8 9	19 8.22	-17 47.6	1.610	2.536	11.8	21.5	8 9	19 23.37	-12 35.8	2.827	3.755	7.2	18.5
8 19	19 0.98	-17 5.9	1.737	2.581	15.2	21.8	8 19	19 18.65	-13 13.3	2.904	3.756	9.5	18.6
<b>127114</b>	2002 <i>GC</i> <sub>98</sub>		7 15.3 159°40	0°6/15.1	17		<b>510982</b>	2013 <i>HR</i> <sub>12</sub>		7 15.3 139°55	8°0/10.1	18	
6 10	20 7.58	-22 28.1	2.281	3.127	12.0	21.0	6 10	20 12.43	-49 35.3	2.896	3.696	11.0	21.6
6 20	20 1.60	-22 42.9	2.207	3.134	9.1	20.8	6 20	20 5.59	-50 48.1	2.845	3.706	9.5	21.5
6 30	19 53.71	-23 0.3	2.157	3.141	5.7	20.6	6 30	19 56.38	-51 48.9	2.818	3.716	8.5	21.5
7 10	19 44.55	-23 17.5	2.134	3.146	2.0	20.4	7 10	19 45.54	-52 32.3	2.815	3.725	8.0	21.5
7 20	19 34.91	-23 32.1	2.139	3.152	2.0	20.4	7 20	19 34.07	-52 54.5	2.837	3.733	8.4	21.5
7 30	19 25.73	-23 42.2	2.173	3.156	5.6	20.6	7 30	19 23.15	-52 54.6	2.883	3.742	9.5	21.6
8 9	19 17.83	-23 47.0	2.234	3.160	8.9	20.8	8 9	19 13.83	-52 34.3	2.953	3.750	10.8	21.7
8 19	19 11.84	-23 46.9	2.319	3.163	11.8	21.0	8 19	19 6.86	-51 57.4	3.043	3.757	12.2	21.8
<b>160057</b>	1999 <i>UZ</i> <sub>60</sub>		7 15.3 280°30	0°6/15.2	18		<b>515098</b>	2010 <i>VW</i> <sub>99</sub>		7 15.3 254°86	6°7/11.4	18	
6 10	20 9.68	-24 14.4	1.963	2.816	13.5	19.5	6 10	20 9.26	-42 50.1	2.730	3.557	10.8	22.0
6 20	20 3.80	-23 58.5	1.858	2.789	10.3	19.2	6 20	20 3.22	-43 46.5	2.645	3.540	9.0	21.9
6 30	19 55.46	-23 42.2	1.777	2.761	6.6	19.0	6 30	19 54.95	-44 35.1	2.584	3.522	7.5	21.7
7 10	19 45.28	-23 23.0	1.721	2.733	2.4	18.6	7 10	19 45.07	-45 10.4	2.549	3.504	6.7	21.7
7 20	19 34.20	-22 59.2	1.692	2.705	2.3	18.6	7 20	19 34.45	-45 28.3	2.539	3.485	7.2	21.7
7 30	19 23.39	-22 30.0	1.692	2.677	6.7	18.8	7 30	19 24.15	-45 27.0	2.556	3.467	8.7	21.7
8 9	19 14.01	-21 56.2	1.718	2.648	10.9	19.0	8 9	19 15.21	-45 7.2	2.598	3.448	10.6	21.8
8 19	19 6.92	-21 19.3	1.766	2.619	14.6	19.1	8 19	19 8.38	-44 31.9	2.661	3.428	12.5	21.9
<b>342212</b>	2008 <i>ST</i> <sub>243</sub>		7 15.3 326°45	1°5/15.7	18		<b>187061</b>	2005 <i>MJ</i> <sub>37</sub>		7 15.3 28°12	1°1/15.8	18	
6 10	20 5.51	-19 15.0	1.537	2.403	15.8	20.1	6 10	20 3.96	-15 50.1	1.393	2.261	17.0	20.1
6 20	20 0.91	-18 48.6	1.458	2.395	12.1	19.8	6 20	19 59.92	-16 29.5	1.327	2.265	13.0	19.9
6 30	19 53.70	-18 27.1	1.401	2.387	7.8	19.6	6 30	19 53.15	-17 22.9	1.282	2.268	8.3	19.6
7 10	19 44.64	-18 9.2	1.367	2.379	3.2	19.3	7 10	19 44.47	-18 26.1	1.260	2.272	3.3	19.3
7 20	19 34.80	-17 53.9	1.359	2.371	2.6	19.2	7 20	19 34.99	-19 33.5	1.263	2.277	2.5	19.3
7 30	19 25.49	-17 40.3	1.375	2.364	7.3	19.5	7 30	19 26.08	-20 39.0	1.291	2.282	7.5	19.6
8 9	19 17.91	-17 27.7	1.416	2.358	11.8	19.7	8 9	19 18.99	-21 37.8	1.343	2.287	12.1	19.9
8 19	19 12.89	-17 15.8	1.478	2.352	15.7	20.0	8 19	19 14.59	-22 27.3	1.415	2.292	16.1	20.1
<b>80549</b>	2000 <i>AX</i> <sub>88</sub>		7 15.3 155°76	1°2/15.8	17		<b>424048</b>	2007 <i>BH</i> <sub>35</sub>		7 15.3 167°09	1°7/14.6	17	
6 10	20 6.39	-16 28.1	1.720	2.574	15.0	20.4	6 10	20 8.38	-24 28.5	1.947	2.803	13.4	21.9
6 20	20 1.27	-16 51.0	1.649	2.578	11.5	20.1	6 20	20 2.61	-25 0.5	1.874	2.806	10.1	21.7
6 30	19 53.77	-17 23.8	1.598	2.581	7.4	19.9	6 30	19 54.54	-25 35.0	1.825	2.810	6.4	21.4
7 10	19 44.64	-18 3.6	1.573	2.584	3.0	19.6	7 10	19 44.90	-26 7.7	1.801	2.813	2.6	21.2
7 20	19 34.82	-18 46.7	1.574	2.587	2.3	19.6	7 20	19 34.64	-26 34.9	1.805	2.815	2.9	21.2
7 30	19 25.49	-19 29.2	1.602	2.590	6.6	19.9	7 30	19 24.87	-26 53.9	1.836	2.817	6.6	21.5
8 9	19 17.73	-20 8.0	1.655	2.592	10.7	20.1	8 9	19 16.62	-27 3.6	1.894	2.818	10.3	21.7
8 19	19 12.28	-20 41.4	1.730	2.594	14.3	20.4	8 19	19 10.64	-27 4.9	1.973	2.819	13.5	21.9
<b>395615</b>	2011 <i>UW</i> <sub>378</sub>		7 15.3 234°88	0°9/14.9	18		<b>337053</b>	1996 <i>XW</i> <sub>1</sub>		7 15.3 109°54	17°5/21.8	13 C	
6 10	20 3.56	-22 6.5	2.240	3.095	12.0	21.0	6 10	20 27.05	+14 27.8	1.413	2.109	24.7	22.6
6 20	19 58.77	-22 40.2	2.158	3.090	9.0	20.8	6 20	20 16.65	+17 7.8	1.382	2.150	22.3	22.5
6 30	19 52.06	-23 18.3	2.099	3.085	5.6	20.6	6 30	20 3.21	+19 11.7	1.368	2.189	20.0	22.5
7 10	19 44.01	-23 57.4	2.067	3.080	2.1	20.4	7 10	19 47.88	+20 30.1	1.374	2.226	18.3	22.5
7 20	19 35.36	-24 34.3	2.062	3.074	2.2	20.4	7 20	19 32.18	+20 58.8	1.401	2.260	17.6	22.5
7 30	19 27.03	-25 6.1	2.086	3.069	5.8	20.6	7 30	19 17.73	+20 40.1	1.449	2.292	17.9	22.6
8 9	19 19.87	-25 31.0	2.136	3.063	9.2	20.8	8 9	19 5.87	+19 43.2	1.517	2.322	18.9	22.8
8 19	19 14.55	-25 48.7	2.209	3.058	12.2	21.0	8 19	18 57.34	+18 19.6	1.602	2.350	20.3	23.0
<b>385931</b>	2006 <i>UR</i> <sub>63</sub>		7 15.3 27°70	0°4/15.6	17		<b>475405</b>	2006 <i>JU</i> <sub></sub>					

EPHEMERIDES

7 15.3

7 15.4

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>321004</b>	2008 <i>KR</i> <sub>23</sub>		7 15.3 307°22	2°3/16.4	18		<b>92799</b>	2000 <i>QX</i> <sub>156</sub>		7 15.4 299°30	6°3/17.2	18	
6 10	20 0.86	-13 43.7	2.152	2.996	12.7	20.8	6 10	20 3.19	-7 37.9	1.612	2.450	16.6	19.6
6 20	19 56.78	-13 47.3	2.062	2.984	9.9	20.6	6 20	19 59.14	-6 57.0	1.523	2.432	13.5	19.3
6 30	19 50.84	-14 0.0	1.995	2.971	6.7	20.4	6 30	19 52.66	-6 30.2	1.454	2.415	10.2	19.1
7 10	19 43.60	-14 21.1	1.953	2.959	3.4	20.1	7 10	19 44.37	-6 19.6	1.407	2.397	7.2	18.9
7 20	19 35.75	-14 48.6	1.937	2.947	2.7	20.1	7 20	19 35.17	-6 26.0	1.384	2.380	6.5	18.8
7 30	19 28.16	-15 20.2	1.949	2.935	5.8	20.2	7 30	19 26.25	-6 48.0	1.386	2.363	8.8	18.9
8 9	19 21.66	-15 53.4	1.987	2.924	9.2	20.4	8 9	19 18.75	-7 22.3	1.412	2.346	12.5	19.0
8 19	19 16.92	-16 25.9	2.048	2.912	12.4	20.6	8 19	19 13.56	-8 4.9	1.458	2.329	16.1	19.2
<b>74923</b>	1999 <i>TE</i> <sub>151</sub>		7 15.3 221°01	3°1/16.5	18		<b>441995</b>	2010 <i>NU</i> <sub>106</sub>		7 15.4 284°56	2°5/14.4	18	
6 10	20 6.63	-12 32.9	1.855	2.693	14.7	20.7	6 10	20 5.46	-28 22.3	2.236	3.093	11.9	21.1
6 20	20 1.38	-12 30.7	1.768	2.686	11.5	20.5	6 20	20 0.33	-28 37.8	2.146	3.077	9.1	20.9
6 30	19 53.86	-12 39.6	1.704	2.677	7.9	20.3	6 30	19 53.12	-28 52.2	2.079	3.062	5.9	20.7
7 10	19 44.70	-12 58.9	1.664	2.668	4.3	20.0	7 10	19 44.46	-29 2.0	2.038	3.046	3.0	20.5
7 20	19 34.79	-13 26.7	1.650	2.658	3.5	19.9	7 20	19 35.14	-29 4.5	2.025	3.031	3.3	20.5
7 30	19 25.20	-14 0.1	1.664	2.648	6.8	20.1	7 30	19 26.17	-28 57.9	2.039	3.015	6.4	20.6
8 9	19 16.98	-14 36.1	1.703	2.637	10.7	20.3	8 9	19 18.48	-28 42.4	2.079	3.000	9.7	20.8
8 19	19 10.92	-15 12.2	1.765	2.626	14.2	20.5	8 19	19 12.77	-28 19.2	2.142	2.984	12.7	21.0
<b>198151</b>	2004 <i>TN</i> <sub>53</sub>		7 15.3 219°68	2°2/14.4	18		<b>130173</b>	2000 <i>AU</i> <sub>10</sub>		7 15.4 298°96	5°1/12.6	18	
6 10	20 6.97	-25 52.8	2.020	2.877	12.9	21.5	6 10	20 5.36	-29 46.5	1.718	2.588	14.2	19.0
6 20	20 1.59	-26 25.3	1.939	2.872	9.8	21.3	6 20	20 1.13	-31 9.2	1.632	2.569	11.0	18.8
6 30	19 53.95	-26 59.5	1.881	2.866	6.3	21.0	6 30	19 54.13	-32 35.0	1.569	2.550	7.7	18.6
7 10	19 44.72	-27 31.2	1.850	2.860	2.9	20.8	7 10	19 44.96	-33 56.4	1.530	2.531	5.2	18.4
7 20	19 34.79	-27 56.6	1.845	2.853	3.2	20.8	7 20	19 34.64	-35 5.5	1.517	2.512	6.1	18.4
7 30	19 25.27	-28 12.8	1.868	2.846	6.7	21.0	7 30	19 24.53	-35 56.6	1.530	2.493	9.4	18.5
8 9	19 17.17	-28 19.2	1.917	2.839	10.3	21.2	8 9	19 16.03	-36 27.6	1.566	2.474	13.1	18.7
8 19	19 11.25	-28 16.5	1.988	2.832	13.5	21.4	8 19	19 10.20	-36 39.6	1.622	2.456	16.5	18.9
<b>283192</b>	2010 <i>CE</i> <sub>44</sub>		7 15.4 226°30	7°3/19.9	18		<b>22256</b>	1978 <i>VP</i> <sub>9</sub>		7 15.4 338°04	5°3/16.5	18	
6 10	20 2.75	+ 1 31.8	1.979	2.764	15.8	20.8	6 10	20 3.08	-12 33.4	1.203	2.075	18.9	18.4
6 20	19 58.27	+ 1 20.5	1.895	2.760	13.4	20.6	6 20	19 59.63	-11 45.9	1.131	2.066	15.0	18.1
6 30	19 51.81	+ 0 47.0	1.830	2.757	10.7	20.4	6 30	19 53.20	-11 11.1	1.078	2.057	10.6	17.8
7 10	19 43.96	- 0 9.7	1.789	2.753	8.3	20.2	7 10	19 44.59	-10 50.5	1.046	2.049	6.4	17.5
7 20	19 35.46	- 1 27.9	1.773	2.750	7.3	20.2	7 20	19 35.02	-10 44.6	1.036	2.042	5.6	17.5
7 30	19 27.26	- 3 3.6	1.783	2.746	8.4	20.2	7 30	19 26.01	-10 52.0	1.049	2.036	9.3	17.7
8 9	19 20.23	- 4 50.3	1.820	2.742	10.8	20.4	8 9	19 18.97	-11 9.6	1.083	2.031	13.9	17.9
8 19	19 15.08	- 6 41.4	1.880	2.738	13.6	20.5	8 19	19 14.87	-11 33.4	1.136	2.027	18.2	18.2
<b>475908</b>	2007 <i>DW</i> <sub>82</sub>		7 15.4 194°10	3°1/17.4	18		<b>71021</b>	1999 <i>XY</i> <sub>58</sub>		7 15.4 111°87	5°2/16.9	18	
6 10	20 1.07	- 7 59.8	3.254	4.057	9.8	23.3	6 10	20 5.55	- 9 7.6	1.925	2.753	14.7	19.5
6 20	19 56.25	- 8 1.6	3.163	4.054	7.8	23.2	6 20	20 0.30	- 8 19.3	1.852	2.757	11.8	19.4
6 30	19 50.19	- 8 12.0	3.096	4.051	5.7	23.0	6 30	19 53.03	- 7 41.8	1.801	2.760	8.6	19.2
7 10	19 43.31	- 8 30.8	3.056	4.047	3.7	22.9	7 10	19 44.41	- 7 16.4	1.774	2.764	5.9	19.0
7 20	19 36.07	- 8 57.0	3.045	4.042	3.2	22.9	7 20	19 35.27	- 7 3.6	1.773	2.768	5.3	19.0
7 30	19 29.02	- 9 29.1	3.063	4.037	4.7	23.0	7 30	19 26.60	- 7 2.7	1.799	2.772	7.5	19.1
8 9	19 22.68	-10 5.1	3.110	4.032	6.8	23.1	8 9	19 19.27	- 7 11.6	1.850	2.775	10.5	19.3
8 19	19 17.50	-10 43.2	3.182	4.025	9.0	23.2	8 19	19 13.95	- 7 27.8	1.923	2.779	13.4	19.5
<b>213208</b>	2000 <i>UM</i> <sub>21</sub>		7 15.4 282°19	5°2/13.3	18		<b>182821</b>	2002 <i>AJ</i> <sub>187</sub>		7 15.4 134°15	4°3/13.4	18	
6 10	20 8.15	-29 24.7	1.417	2.294	16.3	19.9	6 10	20 6.68	-33 27.7	2.365	3.216	11.5	20.1
6 20	20 3.68	-30 32.4	1.338	2.278	12.7	19.7	6 20	20 1.10	-34 6.8	2.297	3.220	8.9	19.9
6 30	19 55.92	-31 42.7	1.279	2.263	8.6	19.4	6 30	19 53.51	-34 41.7	2.252	3.225	6.3	19.8
7 10	19 45.59	-32 47.1	1.243	2.247	5.5	19.2	7 10	19 44.57	-35 8.2	2.234	3.229	4.4	19.7
7 20	19 33.98	-33 37.5	1.232	2.231	6.3	19.2	7 20	19 35.13	-35 23.0	2.243	3.234	4.8	19.7
7 30	19 22.76	-34 7.9	1.245	2.216	10.2	19.4	7 30	19 26.18	-35 24.3	2.280	3.238	7.1	19.9
8 9	19 13.61	-34 17.4	1.280	2.200	14.6	19.6	8 9	19 18.59	-35 12.7	2.342	3.242	9.7	20.0
8 19	19 7.69	-34 8.4	1.334	2.184	18.5	19.8	8 19	19 13.02	-34 50.3	2.426	3.246	12.1	20.2
<b>342314</b>	2008 <i>TU</i> <sub>70</sub>		7 15.4 107°82	1°6/14.7	17		<b>314086</b>	2005 <i>CU</i> <sub>50</sub>		7 15.4 142°64	2°7/16.5	17	
6 10	20 5.73	-23 25.4	1.828	2.690	13.9	20.9	6 10	20 7.10	-13 9.2	1.635	2.482	16.0	20.8
6 20	20 0.74	-24 3.1	1.758	2.694	10.4	20.6	6 20	20 1.87	-13 19.0	1.565	2.488	12.4	20.6
6 30	19 53.44	-24 44.7	1.712	2.698	6.5	20.4	6 30	19 54.20	-13 41.5	1.517	2.495	8.3	20.4
7 10	19 44.54	-25 26.0	1.690	2.702	2.6	20.2	7 10	19 44.87	-14 14.8	1.493	2.500	4.2	20.1
7 20	19 35.01	-26 2.6	1.696	2.706	2.8	20.2	7 20	19 34.87	-14 55.8	1.496	2.506	3.2	20.1
7 30	19 25.98	-26 31.2	1.728	2.710	6.8	20.5	7 30	19 25.40	-15 40.5	1.524	2.511	7.0	20.3
8 9	19 18.49	-26 50.5	1.785	2.714	10.6	20.7	8 9	19 17.57	-16 25.2	1.578	2.516	11.1	20.6
8 19	19 13.29	-27 0.6	1.864	2.718	13.9	20.9	8 19	19 12.13	-17 7.1	1.653	2.520	14.7	20.8
<b>254502</b>	2005 <i>EH</i> <sub>73</sub>		7 15.4 63°68	1°6/15.9	17		<b>26082</b>	1981 <i>EB</i> <sub>11</sub>		7 15.4 346°98	0°8/15.6	18	
6 10	20 7.53	-16 51.5	1.297	2.167	18.0	20.7	6 10	20 1.01	-20 13.5	1.114	2.008	18.5	17.8
6 20	20 2.51	-16 58.7	1.247	2.184	13.7	20.5	6 20	19 58.37	-19 59.8	1.045	1.997	14.2	17.5
6 30	19 54.66	-17 16.6	1.216	2.201	8.7	20.2	6 30	19 52.55	-19 53.0	0.995	1.987	9.1	17.2
7 10	19 44.97	-17 42.3	1.208	2.219	3.6	20.0	7 10	19 44.40	-19 51.1	0.965	1.979	3.4	16.8
7 20	19 34.71	-18 11.9	1.224	2.237	2.7	20.0	7 20	19 35.25	-19 51.3	0.958	1.972	2.8	16.8
7 30	19 25.33	-18 41.4	1.264	2.255	7.6	20.3	7 30	19 26.74	-19 51.4	0.973	1.966	8.6	17.1
8 9	19 18.06	-19 8.1	1.328	2.272	12.2	20.6	8 9	19 20.40	-19 49.6	1.008	1.963	13.9	17.4
8 19	19 13.64	-19 30.2	1.413	2.290	16.1	20.9	8 19	19 17.21	-19 45.2	1.062	1.960	18.6	17.6
<b>172417</b>	2003 <i>FW</i> <sub>37</sub>		7 15.4 116°17	0°6/15.6	18		<b>67005</b>	1999 <i>XZ</i> <sub>120</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>178511</b>	1999 <i>TC</i> <sub>170</sub>		7 15.4	4°91	9°9/11.1	18	<b>476432</b>	2008 <i>DZ</i> <sub>82</sub>		7 15.4	151°97	4°4/13.5	18
6 10	20 9.64	-45 58.7	1.851	2.691	14.7	18.9	6 10	20 6.86	-33 25.6	2.248	3.101	12.0	21.7
6 20	20 4.42	-47 12.2	1.795	2.691	12.5	18.8	6 20	20 1.37	-34 1.2	2.177	3.102	9.3	21.6
6 30	19 56.08	-48 12.2	1.760	2.692	10.8	18.7	6 30	19 53.76	-34 32.6	2.130	3.103	6.5	21.4
7 10	19 45.58	-48 50.4	1.748	2.693	9.9	18.6	7 10	19 44.72	-34 55.3	2.108	3.104	4.5	21.3
7 20	19 34.28	-49 1.5	1.759	2.695	10.5	18.6	7 20	19 35.14	-35 5.8	2.113	3.105	5.0	21.3
7 30	19 23.80	-48 43.9	1.793	2.697	12.1	18.7	7 30	19 26.04	-35 2.6	2.146	3.106	7.3	21.5
8 9	19 15.55	-48 0.9	1.848	2.700	14.1	18.9	8 9	19 18.39	-34 46.2	2.203	3.107	10.1	21.6
8 19	19 10.38	-46 58.2	1.922	2.703	16.2	19.1	8 19	19 12.84	-34 19.0	2.283	3.108	12.7	21.8
<b>187858</b>	2000 <i>HA</i> <sub>31</sub>		7 15.4	64°21	2°0/14.3	18	<b>151414</b>	2002 <i>EL</i> <sub>139</sub>		7 15.4	192°41	2°8/16.9	18
6 10	20 6.44	-20 42.3	1.470	2.340	16.2	19.3	6 10	20 1.40	-11 12.5	2.363	3.194	12.2	20.4
6 20	20 1.74	-22 10.2	1.413	2.353	12.2	19.0	6 20	19 56.97	-11 22.1	2.282	3.194	9.5	20.2
6 30	19 54.30	-23 47.9	1.378	2.367	7.6	18.8	6 30	19 50.89	-11 42.0	2.224	3.193	6.6	20.1
7 10	19 44.95	-25 27.8	1.368	2.380	3.0	18.6	7 10	19 43.69	-12 11.1	2.191	3.193	3.7	19.9
7 20	19 34.83	-27 1.3	1.384	2.394	3.5	18.6	7 20	19 36.01	-12 47.7	2.186	3.192	3.0	19.8
7 30	19 25.33	-28 21.6	1.426	2.408	8.0	18.9	7 30	19 28.61	-13 29.1	2.208	3.192	5.4	20.0
8 9	19 17.71	-29 25.0	1.492	2.422	12.2	19.2	8 9	19 22.24	-14 12.6	2.258	3.191	8.4	20.2
8 19	19 12.81	-30 11.2	1.580	2.436	15.8	19.5	8 19	19 17.44	-14 55.7	2.331	3.191	11.3	20.4
<b>243271</b>	2008 <i>BV</i> <sub>6</sub>		7 15.4	25°59	0°8/15.7	18 R	<b>386364</b>	2008 <i>TP</i> <sub>113</sub>		7 15.4	208°42	1°6/14.6	17
6 10	20 2.77	-18 8.8	1.906	2.764	13.6	20.8	6 10	20 6.60	-24 25.1	2.219	3.071	12.1	22.1
6 20	19 58.35	-18 19.5	1.835	2.767	10.3	20.6	6 20	20 1.16	-24 58.8	2.136	3.066	9.2	21.9
6 30	19 51.88	-18 37.1	1.787	2.771	6.6	20.4	6 30	19 53.66	-25 35.1	2.077	3.061	5.8	21.7
7 10	19 44.02	-18 59.4	1.763	2.775	2.5	20.1	7 10	19 44.71	-26 10.3	2.044	3.055	2.4	21.4
7 20	19 35.63	-19 23.7	1.766	2.779	2.0	20.1	7 20	19 35.12	-26 40.9	2.039	3.048	2.7	21.5
7 30	19 27.70	-19 47.4	1.796	2.784	6.0	20.4	7 30	19 25.87	-27 4.2	2.062	3.042	6.1	21.7
8 9	19 21.12	-20 8.7	1.851	2.789	9.7	20.6	8 9	19 17.88	-27 19.0	2.112	3.034	9.5	21.9
8 19	19 16.56	-20 26.1	1.928	2.794	13.0	20.8	8 19	19 11.85	-27 25.5	2.185	3.026	12.5	22.0
<b>11212</b>	Tebbutt		7 15.4	64°69	1°5/14.9	18	<b>259979</b>	2004 <i>FA</i> <sub>38</sub>		7 15.4	24°38	3°8/14.1	18
6 10	20 8.34	-22 13.2	1.263	2.141	17.8	17.9	6 10	20 7.87	-28 11.5	1.461	2.336	16.0	20.3
6 20	20 3.38	-22 51.2	1.212	2.156	13.4	17.7	6 20	20 3.02	-28 53.4	1.397	2.338	12.2	20.1
6 30	19 55.37	-23 35.6	1.181	2.171	8.4	17.4	6 30	19 55.21	-29 35.7	1.354	2.339	8.0	19.9
7 10	19 45.31	-24 20.6	1.173	2.186	3.1	17.2	7 10	19 45.32	-30 11.9	1.333	2.341	4.4	19.7
7 20	19 34.58	-25 0.1	1.189	2.201	3.2	17.2	7 20	19 34.63	-30 36.4	1.338	2.343	4.9	19.7
7 30	19 24.75	-25 29.9	1.229	2.216	8.3	17.6	7 30	19 24.63	-30 45.9	1.368	2.346	8.7	19.9
8 9	19 17.19	-25 48.5	1.292	2.232	12.9	17.9	8 9	19 16.69	-30 40.7	1.420	2.348	12.9	20.2
8 19	19 12.69	-25 56.5	1.376	2.247	16.8	18.1	8 19	19 11.68	-30 23.2	1.493	2.351	16.5	20.4
<b>416371</b>	2003 <i>SK</i> <sub>430</sub>		7 15.4	276°91	5°0/13.9	17	<b>357196</b>	2002 <i>FN</i> <sub>32</sub>		7 15.4	111°60	0°4/15.6	18
6 10	20 10.11	-31 4.8	1.475	2.346	16.1	21.4	6 10	20 2.92	-17 21.3	2.449	3.292	11.4	20.4
6 20	20 4.98	-31 44.2	1.396	2.333	12.5	21.1	6 20	19 58.05	-18 3.1	2.379	3.303	8.6	20.3
6 30	19 56.63	-32 21.4	1.339	2.321	8.6	20.8	6 30	19 51.53	-18 51.7	2.333	3.314	5.4	20.1
7 10	19 45.87	-32 49.4	1.304	2.308	5.4	20.6	7 10	19 43.91	-19 44.5	2.313	3.325	2.0	19.9
7 20	19 34.02	-33 2.1	1.294	2.295	5.9	20.6	7 20	19 35.85	-20 38.1	2.323	3.336	1.6	19.9
7 30	19 22.73	-32 56.3	1.309	2.282	9.6	20.8	7 30	19 28.13	-21 29.3	2.361	3.346	5.0	20.1
8 9	19 13.57	-32 32.7	1.347	2.269	13.8	21.0	8 9	19 21.47	-22 15.8	2.426	3.356	8.1	20.3
8 19	19 7.57	-31 55.4	1.405	2.256	17.7	21.2	8 19	19 16.42	-22 56.1	2.516	3.367	10.8	20.5
<b>449911</b>	2015 <i>NB</i> <sub>3</sub>		7 15.4	2°18	8°9/16.0	17	<b>400476</b>	2008 <i>GS</i> <sub>49</sub>		7 15.4	84°09	4°9/17.9	17
6 10	20 7.35	- 4 31.5	1.797	2.608	16.2	19.3	6 10	20 1.41	- 5 57.9	2.292	3.104	13.1	21.0
6 20	20 1.78	- 2 26.7	1.724	2.607	13.6	19.1	6 20	19 56.94	- 5 43.3	2.219	3.112	10.6	20.9
6 30	19 54.03	- 0 32.7	1.673	2.607	11.0	19.0	6 30	19 50.84	- 5 41.7	2.168	3.119	7.9	20.7
7 10	19 44.81	+ 1 5.0	1.647	2.608	9.2	18.9	7 10	19 43.66	- 5 53.2	2.142	3.126	5.6	20.6
7 20	19 35.00	+ 2 22.1	1.647	2.609	9.0	18.9	7 20	19 36.07	- 6 16.9	2.142	3.134	4.9	20.6
7 30	19 25.67	+ 3 16.0	1.671	2.611	10.5	19.0	7 30	19 28.83	- 6 50.9	2.169	3.141	6.5	20.7
8 9	19 17.79	+ 3 47.6	1.720	2.614	12.9	19.1	8 9	19 22.65	- 7 32.2	2.223	3.148	9.0	20.8
8 19	19 12.06	+ 3 59.9	1.789	2.618	15.4	19.3	8 19	19 18.06	- 8 17.5	2.300	3.155	11.5	21.0
<b>260562</b>	2005 <i>EL</i> <sub>212</sub>		7 15.4	57°58	3°7/14.3	17	<b>85671</b>	1998 <i>QH</i> <sub>67</sub>		7 15.4	0°78	6°5/15.1	18
6 10	20 9.23	-27 36.6	1.299	2.178	17.4	20.5	6 10	20 17.91	-40 58.6	1.765	2.606	15.2	18.1
6 20	20 4.12	-28 16.2	1.247	2.190	13.2	20.2	6 20	20 10.06	-40 35.9	1.694	2.605	12.3	17.9
6 30	19 55.87	-28 56.1	1.215	2.202	8.5	20.0	6 30	19 59.25	-39 57.5	1.643	2.604	9.2	17.7
7 10	19 45.50	-29 29.3	1.206	2.215	4.4	19.8	7 10	19 46.63	-38 58.5	1.618	2.604	6.9	17.5
7 20	19 34.46	-29 50.3	1.221	2.228	4.8	19.9	7 20	19 33.65	-37 37.1	1.618	2.605	6.8	17.5
7 30	19 24.37	-29 56.2	1.261	2.241	9.0	20.2	7 30	19 21.87	-35 56.1	1.647	2.606	9.2	17.7
8 9	19 16.62	-29 47.7	1.323	2.254	13.3	20.4	8 9	19 12.52	-34 2.0	1.700	2.608	12.3	17.9
8 19	19 12.02	-29 27.7	1.404	2.268	17.0	20.7	8 19	19 6.26	-32 2.1	1.777	2.611	15.3	18.1
<b>438138</b>	2005 <i>RC</i> <sub>31</sub>		7 15.4	305°96	5°5/18.3	18	<b>177306</b>	2003 <i>YE</i> <sub>15</sub>		7 15.4	212°16	4°4/13.9	18
6 10	20 0.48	- 4 23.3	2.022	2.838	14.5	21.0	6 10	20 9.63	-29 51.4	1.560	2.429	15.5	20.4
6 20	19 56.62	- 4 26.3	1.932	2.825	11.9	20.8	6 20	20 4.29	-30 37.1	1.491	2.428	11.9	20.2
6 30	19 50.85	- 4 46.4	1.862	2.813	9.0	20.6	6 30	19 56.00	-31 21.8	1.444	2.426	8.0	20.0
7 10	19 43.71	- 5 23.9	1.817	2.801	6.4	20.4	7 10	19 45.62	-31 58.7	1.420	2.425	4.8	19.8
7 20	19 35.92	- 6 17.5	1.797	2.790	5.5	20.3	7 20	19 34.38	-32 22.2	1.422	2.423	5.4	19.8
7 30	19 28.35	- 7 24.0	1.803	2.778	7.2	20.4	7 30	19 23.77	-32 29.2	1.449	2.422	8.9	20.0
8 9	19 21.89	- 8 38.8	1.835	2.767	10.2	20.6	8 9	19 15.18	-32 20.0	1.500	2.420	12.8	20.3
8 19	19 17.22	- 9 57.0	1.891	2.756	13.2	20.8	8 19	19 9.50	-31 57.6	1.570	2.418	16.3	20.5
<b>103795</b>	2000 <i>DO</i> <sub>12</sub>		7 15.4	24°55	1°0/14.9	18	<b>48093</b>	2001 <i>FR</i> <sub>46</sub>					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>137557</b>	1999 <i>VH</i> <sub>89</sub>		7 15.4 226°00		1°1/15.8 18		<b>482942</b>	2014 <i>JS</i> <sub>61</sub>		7 15.4 354°63		2°1/16.6 18	
6 10	20 7.70	-17 39.0	1.844	2.694	14.3	21.4	6 10	20 1.06	-12 33.4	2.087	2.929	13.2	20.6
6 20	20 2.31	-17 48.1	1.758	2.685	11.0	21.2	6 20	19 56.98	-13 3.2	2.008	2.928	10.2	20.4
6 30	19 54.56	-18 4.7	1.693	2.675	7.1	20.9	6 30	19 51.04	-13 44.8	1.951	2.927	6.8	20.2
7 10	19 45.10	-18 26.9	1.653	2.665	2.8	20.6	7 10	19 43.81	-14 36.2	1.919	2.926	3.4	20.0
7 20	19 34.84	-18 51.6	1.641	2.654	2.2	20.5	7 20	19 36.02	-15 34.3	1.915	2.926	2.5	19.9
7 30	19 24.92	-19 16.2	1.656	2.643	6.5	20.8	7 30	19 28.53	-16 35.3	1.938	2.925	5.7	20.1
8 9	19 16.43	-19 38.4	1.696	2.631	10.7	21.0	8 9	19 22.18	-17 35.3	1.987	2.925	9.2	20.3
8 19	19 10.20	-19 56.9	1.759	2.618	14.3	21.2	8 19	19 17.62	-18 31.5	2.060	2.925	12.3	20.5
<b>420797</b>	2013 <i>HN</i> <sub>1</sub>		7 15.4 357°91		1°5/15.8 17		<b>363154</b>	2001 <i>SL</i> <sub>83</sub>		7 15.4 298°82		5°8/17.1 17	
6 10	19 58.02	-17 38.2	0.887	1.795	20.8	19.9	6 10	20 4.13	-9 52.0	1.252	2.112	19.1	20.9
6 20	19 56.59	-17 41.4	0.831	1.789	16.0	19.6	6 20	20 0.53	-9 25.0	1.170	2.097	15.3	20.6
6 30	19 51.66	-17 58.8	0.791	1.785	10.3	19.3	6 30	19 53.93	-9 15.0	1.107	2.081	11.1	20.3
7 10	19 44.19	-18 27.8	0.770	1.783	4.1	19.0	7 10	19 45.02	-9 23.6	1.065	2.065	7.0	20.0
7 20	19 35.64	-19 3.4	0.768	1.783	3.1	18.9	7 20	19 34.93	-9 50.2	1.046	2.050	6.0	19.9
7 30	19 27.87	-19 39.9	0.787	1.784	9.3	19.3	7 30	19 25.17	-10 31.7	1.049	2.035	9.5	20.1
8 9	19 22.58	-20 12.5	0.825	1.787	15.1	19.6	8 9	19 17.26	-11 23.0	1.074	2.020	14.2	20.3
8 19	19 20.77	-20 38.1	0.880	1.792	20.0	19.9	8 19	19 12.27	-12 18.5	1.118	2.006	18.7	20.5
<b>365476</b>	2010 <i>PT</i> <sub>27</sub>		7 15.4 218°74		10°0/20.8 18		<b>440522</b>	2005 <i>UQ</i> <sub>87</sub>		7 15.4 313°05		5°3/12.8 16	
6 10	20 1.24	+12 44.0	2.764	3.455	13.8	20.4	6 10	20 5.19	-33 34.4	2.011	2.872	12.8	21.5
6 20	19 56.68	+13 48.1	2.683	3.450	12.6	20.3	6 20	20 0.56	-34 33.7	1.934	2.863	10.1	21.3
6 30	19 50.66	+14 34.2	2.621	3.445	11.4	20.2	6 30	19 53.53	-35 30.1	1.879	2.853	7.3	21.1
7 10	19 43.62	+14 59.2	2.579	3.440	10.4	20.1	7 10	19 44.76	-36 17.9	1.850	2.843	5.4	20.9
7 20	19 36.13	+15 1.4	2.561	3.435	10.0	20.1	7 20	19 35.20	-36 51.7	1.846	2.834	6.0	21.0
7 30	19 28.84	+14 40.9	2.565	3.429	10.3	20.1	7 30	19 26.03	-37 8.5	1.869	2.825	8.5	21.1
8 9	19 22.40	+14 0.1	2.593	3.423	11.2	20.1	8 9	19 18.37	-37 8.2	1.915	2.816	11.5	21.3
8 19	19 17.31	+13 2.9	2.641	3.417	12.4	20.2	8 19	19 13.03	-36 53.0	1.983	2.807	14.3	21.4
<b>75424</b>	1999 <i>XL</i> <sub>120</sub>		7 15.4 49°88		7°2/12.7 18		<b>499598</b>	2010 <i>TT</i> <sub>114</sub>		7 15.4 270°98		3°1/14.3 17	
6 10	20 9.94	-34 24.5	1.434	2.306	16.4	18.8	6 10	20 9.65	-26 44.8	1.610	2.475	15.3	22.4
6 20	20 4.90	-35 42.3	1.376	2.310	12.9	18.6	6 20	20 4.52	-27 21.0	1.516	2.453	11.7	22.2
6 30	19 56.56	-36 55.5	1.339	2.313	9.5	18.4	6 30	19 56.37	-27 59.9	1.444	2.430	7.7	21.9
7 10	19 45.87	-37 54.7	1.325	2.317	7.3	18.3	7 10	19 45.89	-28 35.8	1.396	2.406	3.8	21.6
7 20	19 34.23	-38 32.3	1.335	2.321	8.0	18.3	7 20	19 34.17	-29 3.0	1.374	2.382	4.2	21.6
7 30	19 23.38	-38 44.7	1.368	2.324	11.0	18.5	7 30	19 22.71	-29 17.4	1.378	2.357	8.6	21.7
8 9	19 14.86	-38 33.4	1.424	2.328	14.4	18.7	8 9	19 13.00	-29 17.8	1.405	2.332	13.1	21.9
8 19	19 9.62	-38 3.3	1.499	2.333	17.6	18.9	8 19	19 6.13	-29 6.0	1.454	2.306	17.1	22.1
<b>398266</b>	2010 <i>TU</i> <sub>49</sub>		7 15.4 336°73		3°3/16.8 18		<b>391783</b>	2008 <i>QY</i> <sub>5</sub>		7 15.4 278°50		11°2/13.4 18	
6 10	20 0.19	-12 9.5	1.790	2.641	14.6	20.8	6 10	20 30.29	-51 44.7	1.890	2.685	16.1	20.9
6 20	19 56.64	-12 7.0	1.707	2.630	11.5	20.6	6 20	20 20.42	-52 14.3	1.804	2.664	14.2	20.7
6 30	19 50.97	-12 16.6	1.645	2.620	7.9	20.3	6 30	20 6.33	-52 23.3	1.737	2.643	12.4	20.5
7 10	19 43.81	-12 37.7	1.607	2.611	4.4	20.1	7 10	19 49.33	-52 1.2	1.693	2.621	11.3	20.4
7 20	19 35.96	-13 8.3	1.594	2.602	3.6	20.0	7 20	19 31.45	-51 1.5	1.674	2.599	11.5	20.4
7 30	19 28.44	-13 45.7	1.607	2.594	6.7	20.2	7 30	19 15.02	-49 24.0	1.680	2.577	13.1	20.4
8 9	19 22.21	-14 26.5	1.645	2.587	10.4	20.4	8 9	19 1.89	-47 16.4	1.709	2.555	15.4	20.5
8 19	19 18.01	-15 7.5	1.704	2.580	13.9	20.6	8 19	18 53.02	-44 49.4	1.760	2.533	17.8	20.7
<b>380270</b>	2001 <i>YX</i> <sub>138</sub>		7 15.4 123°28		1°9/15.8 17		<b>104648</b>	2000 <i>GQ</i> <sub>129</sub>		7 15.4 258°91		2°9/16.6 18	
6 10	20 9.46	-18 18.2	1.831	2.679	14.5	21.0	6 10	20 3.29	-12 31.8	2.070	2.909	13.4	20.6
6 20	20 3.36	-17 42.5	1.760	2.686	11.1	20.8	6 20	19 58.70	-12 27.9	1.983	2.900	10.5	20.4
6 30	19 55.01	-17 11.0	1.712	2.692	7.2	20.5	6 30	19 52.16	-12 34.0	1.918	2.891	7.2	20.1
7 10	19 45.19	-16 43.1	1.689	2.698	3.2	20.3	7 10	19 44.23	-12 49.4	1.878	2.882	4.0	19.9
7 20	19 34.87	-16 18.6	1.693	2.704	2.6	20.3	7 20	19 35.68	-13 12.6	1.865	2.872	3.2	19.9
7 30	19 25.16	-15 56.9	1.725	2.710	6.5	20.5	7 30	19 27.42	-13 41.3	1.879	2.863	6.1	20.0
8 9	19 17.05	-15 38.1	1.782	2.716	10.3	20.8	8 9	19 20.32	-14 12.9	1.919	2.854	9.6	20.2
8 19	19 11.20	-15 21.7	1.863	2.721	13.7	21.0	8 19	19 15.09	-14 45.1	1.982	2.844	12.8	20.4
<b>123399</b>	2000 <i>WP</i> <sub>80</sub>		7 15.4 333°50		3°3/14.3 18		<b>77605</b>	2001 <i>KK</i> <sub>30</sub>		7 15.4 112°49		1°7/14.8 17	
6 10	20 3.57	-27 0.8	1.347	2.233	16.5	19.1	6 10	20 9.03	-23 28.6	1.643	2.506	15.1	19.9
6 20	20 0.13	-27 31.8	1.272	2.219	12.6	18.8	6 20	20 3.42	-24 4.9	1.582	2.518	11.4	19.7
6 30	19 53.63	-28 4.7	1.216	2.205	8.2	18.5	6 30	19 55.25	-24 45.2	1.543	2.529	7.1	19.5
7 10	19 44.87	-28 33.8	1.183	2.193	4.1	18.2	7 10	19 45.34	-25 24.4	1.529	2.541	2.8	19.2
7 20	19 35.07	-28 53.5	1.173	2.181	4.5	18.2	7 20	19 34.81	-25 58.0	1.541	2.551	3.0	19.3
7 30	19 25.80	-29 0.1	1.187	2.171	9.0	18.5	7 30	19 24.94	-26 22.5	1.579	2.562	7.2	19.6
8 9	19 18.54	-28 53.1	1.223	2.161	13.6	18.7	8 9	19 16.89	-26 37.0	1.642	2.572	11.3	19.8
8 19	19 14.29	-28 34.2	1.278	2.152	17.7	18.9	8 19	19 11.41	-26 42.2	1.727	2.582	14.7	20.1
<b>45729</b>	2000 <i>GB</i> <sub>89</sub>		7 15.4 249°82		3°8/17.2 18		<b>474324</b>	2002 <i>CY</i> <sub>261</sub>		7 15.4 152°55		1°8/16.6 17	
6 10	20 2.87	-9 3.0	2.217	3.041	13.1	18.5	6 10	20 2.38	-12 40.3	2.967	3.789	10.2	22.6
6 20	19 58.28	-9 1.9	2.124	3.029	10.5	18.3	6 20	19 57.36	-13 2.0	2.889	3.798	7.9	22.5
6 30	19 51.85	-9 12.8	2.053	3.016	7.5	18.1	6 30	19 51.01	-13 31.5	2.835	3.806	5.3	22.3
7 10	19 44.11	-9 35.5	2.007	3.003	4.7	17.9	7 10	19 43.75	-14 7.1	2.809	3.814	2.7	22.1
7 20	19 35.74	-10 8.7	1.989	2.991	4.0	17.8	7 20	19 36.15	-14 47.1	2.812	3.821	2.1	22.1
7 30	19 27.59	-10 50.0	1.997	2.977	6.2	18.0	7 30	19 28.80	-15 29.3	2.845	3.828	4.4	22.3
8 9	19 20.49	-11 36.2	2.032	2.964	9.4	18.1	8 9	19 22.29	-16 11.4	2.906	3.835	7.0	22.5
8 19	19 15.10	-12 24.3	2.091	2.950	12.4	18.3	8 19	19 17.09	-16 51.7	2.992	3.841	9.3	22.6
<b>411663</b>	2011 <i>WC</i> <sub>59</sub>		7 15.4 241°71		2°9/16.3 17		<b>465252</b>	2007					



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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>365079</b>	2009 <i>BW</i> <sub>37</sub>		7 15.4 119°10	0°8/15.1	17		<b>469260</b>	2016 <i>JB</i> <sub>30</sub>		7 15.4	2°47	3°1/14.3	17
6 10	20 8.45	-20 41.3	1.429	2.297	16.7	21.3	6 10	19 58.59	-23 41.2	0.971	1.879	19.3	19.7
6 20	20 3.36	-21 19.6	1.365	2.303	12.6	21.0	6 20	19 56.96	-24 36.1	0.917	1.876	14.6	19.4
6 30	19 55.41	-22 5.9	1.322	2.309	7.9	20.8	6 30	19 51.89	-25 39.4	0.880	1.875	9.3	19.1
7 10	19 45.45	-22 55.2	1.302	2.315	2.8	20.5	7 10	19 44.32	-26 43.4	0.864	1.876	4.1	18.8
7 20	19 34.70	-23 41.9	1.308	2.321	2.7	20.5	7 20	19 35.71	-27 39.4	0.868	1.879	4.7	18.9
7 30	19 24.60	-24 21.2	1.339	2.326	7.7	20.8	7 30	19 27.91	-28 20.6	0.893	1.883	10.0	19.2
8 9	19 16.46	-24 50.8	1.395	2.332	12.3	21.1	8 9	19 22.56	-28 44.3	0.938	1.889	15.2	19.5
8 19	19 11.17	-25 10.4	1.470	2.337	16.2	21.4	8 19	19 20.64	-28 51.2	1.001	1.897	19.6	19.8
<b>400898</b>	2010 <i>RR</i> <sub>120</sub>		7 15.4 262°91	4°5/17.5	18		<b>177337</b>	2003 <i>YG</i> <sub>100</sub>		7 15.4 101°39	3°1/16.2	17	
6 10	20 1.45	-7 22.7	2.316	3.134	12.8	21.3	6 10	20 7.73	-15 0.0	1.536	2.390	16.4	20.3
6 20	19 57.08	-7 9.7	2.229	3.127	10.3	21.1	6 20	20 2.50	-14 34.2	1.468	2.395	12.7	20.1
6 30	19 51.04	-7 8.5	2.164	3.120	7.6	20.9	6 30	19 54.71	-14 17.8	1.420	2.399	8.5	19.8
7 10	19 43.82	-7 19.5	2.124	3.113	5.2	20.7	7 10	19 45.19	-14 10.1	1.397	2.404	4.4	19.6
7 20	19 36.08	-7 41.8	2.111	3.106	4.5	20.7	7 20	19 35.01	-14 10.0	1.398	2.408	3.6	19.6
7 30	19 28.59	-8 13.8	2.124	3.099	6.3	20.8	7 30	19 25.46	-14 15.8	1.426	2.413	7.4	19.8
8 9	19 22.12	-8 52.6	2.164	3.092	9.1	20.9	8 9	19 17.66	-14 25.3	1.478	2.417	11.6	20.1
8 19	19 17.23	-9 35.2	2.228	3.085	11.8	21.1	8 19	19 12.40	-14 36.7	1.551	2.421	15.3	20.3
<b>476759</b>	2008 <i>UJ</i> <sub>74</sub>		7 15.4 233°05	1°4/15.9	18		<b>425664</b>	2010 <i>XA</i> <sub>37</sub>		7 15.4 133°26	0°9/15.1	17	
6 10	20 6.22	-17 36.7	2.134	2.978	12.8	22.2	6 10	20 9.20	-22 51.3	1.822	2.678	14.2	22.0
6 20	20 0.88	-17 28.8	2.045	2.969	9.9	22.0	6 20	20 3.32	-23 8.9	1.755	2.687	10.7	21.8
6 30	19 53.51	-17 26.4	1.978	2.959	6.4	21.7	6 30	19 55.09	-23 29.8	1.712	2.697	6.7	21.6
7 10	19 44.72	-17 28.2	1.938	2.948	2.7	21.5	7 10	19 45.29	-23 50.2	1.694	2.706	2.5	21.4
7 20	19 35.30	-17 32.7	1.925	2.938	2.2	21.4	7 20	19 34.94	-24 6.9	1.702	2.715	2.4	21.4
7 30	19 26.21	-17 38.2	1.941	2.926	5.8	21.6	7 30	19 25.19	-24 17.7	1.739	2.723	6.5	21.7
8 9	19 18.34	-17 43.6	1.982	2.915	9.5	21.8	8 9	19 17.09	-24 21.7	1.800	2.731	10.4	21.9
8 19	19 12.39	-17 48.1	2.047	2.903	12.7	22.0	8 19	19 11.33	-24 19.5	1.884	2.738	13.8	22.2
<b>152085</b>	2004 <i>RE</i> <sub>34</sub>		7 15.4 67°15	2°8/16.9	18		<b>145767</b>	1997 <i>PW</i>		7 15.4 349°28	1°3/16.0	18	
6 10	20 1.39	-11 9.2	2.246	3.080	12.7	19.8	6 10	19 58.35	-16 59.2	2.064	2.923	12.6	19.8
6 20	19 57.05	-11 25.2	2.170	3.084	9.9	19.7	6 20	19 55.03	-17 1.2	1.981	2.913	9.7	19.5
6 30	19 51.00	-11 52.4	2.117	3.088	6.8	19.5	6 30	19 49.87	-17 10.3	1.920	2.903	6.3	19.3
7 10	19 43.80	-12 29.3	2.089	3.092	3.8	19.3	7 10	19 43.45	-17 25.1	1.884	2.895	2.7	19.1
7 20	19 36.12	-13 13.7	2.088	3.096	3.0	19.3	7 20	19 36.47	-17 43.7	1.874	2.887	2.1	19.0
7 30	19 28.77	-14 2.5	2.116	3.100	5.5	19.4	7 30	19 29.80	-18 4.0	1.891	2.880	5.6	19.2
8 9	19 22.49	-14 52.7	2.169	3.104	8.6	19.6	8 9	19 24.27	-18 24.0	1.933	2.875	9.2	19.4
8 19	19 17.88	-15 41.5	2.247	3.109	11.5	19.8	8 19	19 20.51	-18 42.0	1.998	2.870	12.3	19.6
<b>262711</b>	2006 <i>XT</i> <sub>7</sub>		7 15.4 227°02	0°5/15.6	18		<b>40488</b>	1999 <i>RV</i> <sub>66</sub>		7 15.4 271°29	0°1/15.4	18	
6 10	20 4.71	-19 44.6	2.506	3.349	11.2	21.0	6 10	20 2.87	-19 51.6	2.366	3.216	11.6	19.7
6 20	19 59.46	-19 41.4	2.417	3.342	8.5	20.8	6 20	19 58.31	-20 16.7	2.271	3.199	8.8	19.5
6 30	19 52.49	-19 41.8	2.352	3.333	5.4	20.6	6 30	19 51.91	-20 47.3	2.199	3.183	5.5	19.3
7 10	19 44.34	-19 44.1	2.313	3.325	2.0	20.4	7 10	19 44.19	-21 21.1	2.154	3.166	2.0	19.0
7 20	19 35.69	-19 46.9	2.303	3.316	1.6	20.3	7 20	19 35.83	-21 55.2	2.136	3.149	1.7	19.0
7 30	19 27.33	-19 48.8	2.321	3.307	5.0	20.5	7 30	19 27.67	-22 26.9	2.147	3.132	5.4	19.2
8 9	19 20.03	-19 49.2	2.367	3.297	8.3	20.7	8 9	19 20.54	-22 54.4	2.184	3.115	8.8	19.4
8 19	19 14.37	-19 47.5	2.437	3.287	11.1	20.9	8 19	19 15.10	-23 16.5	2.246	3.098	11.9	19.5
<b>392169</b>	2009 <i>JO</i> <sub>16</sub>		7 15.4 95°37	2°6/16.7	16		<b>307158</b>	2002 <i>CN</i> <sub>302</sub>		7 15.4 148°38	2°6/16.8	18	
6 10	20 2.91	-12 39.0	2.174	3.011	12.9	21.2	6 10	20 2.80	-11 57.3	2.789	3.611	10.8	21.8
6 20	19 58.19	-12 41.7	2.103	3.019	10.0	21.1	6 20	19 57.74	-11 51.2	2.712	3.619	8.4	21.6
6 30	19 51.71	-12 54.1	2.054	3.027	6.8	20.9	6 30	19 51.27	-11 52.6	2.659	3.627	5.8	21.5
7 10	19 44.05	-13 14.9	2.031	3.036	3.6	20.7	7 10	19 43.89	-12 0.8	2.634	3.634	3.3	21.3
7 20	19 35.95	-13 42.3	2.036	3.044	2.9	20.7	7 20	19 36.15	-12 14.9	2.636	3.641	2.8	21.3
7 30	19 28.24	-14 14.0	2.067	3.052	5.6	20.9	7 30	19 28.73	-12 33.4	2.667	3.648	4.8	21.5
8 9	19 21.70	-14 47.3	2.125	3.060	8.8	21.1	8 9	19 22.21	-12 54.6	2.726	3.654	7.4	21.6
8 19	19 16.90	-15 20.1	2.207	3.068	11.7	21.3	8 19	19 17.08	-13 16.9	2.810	3.660	9.8	21.8
<b>336790</b>	2011 <i>CD</i> <sub>47</sub>		7 15.4 166°72	15°6/24.3	18		<b>113443</b>	2002 <i>SX</i> <sub>43</sub>		7 15.4 16°68	2°8/14.4	17	
6 10	20 7.02	+14 31.8	1.412	2.145	23.3	20.4	6 10	20 5.98	-27 9.7	1.843	2.708	13.7	19.8
6 20	20 2.25	+15 23.8	1.347	2.148	21.2	20.2	6 20	20 1.06	-27 41.7	1.773	2.709	10.4	19.6
6 30	19 54.74	+15 39.6	1.295	2.151	18.9	20.1	6 30	19 53.77	-28 14.1	1.725	2.709	6.7	19.4
7 10	19 45.25	+15 12.5	1.260	2.154	16.9	20.0	7 10	19 44.86	-28 42.6	1.701	2.710	3.3	19.1
7 20	19 34.89	+13 59.8	1.243	2.155	15.7	19.9	7 20	19 35.31	-29 3.1	1.705	2.711	3.7	19.2
7 30	19 25.02	+12 4.7	1.248	2.157	15.8	19.9	7 30	19 26.28	-29 13.1	1.734	2.713	7.2	19.4
8 9	19 16.94	+9 36.7	1.273	2.157	17.2	20.0	8 9	19 18.82	-29 12.2	1.789	2.714	10.8	19.6
8 19	19 11.54	+6 48.7	1.318	2.158	19.3	20.1	8 19	19 13.69	-29 1.8	1.865	2.715	14.0	19.8
<b>509632</b>	2008 <i>FR</i> <sub>118</sub>		7 15.4 235°40	6°6/11.9	18		<b>276834</b>	2004 <i>QW</i> <sub>26</sub>		7 15.4 337°13	1°0/15.8	18	
6 10	20 8.71	-40 17.6	2.412	3.251	11.7	21.5	6 10	20 4.23	-19 8.7	2.173	3.023	12.4	20.1
6 20	20 2.99	-41 18.6	2.338	3.244	9.6	21.3	6 20	19 59.27	-18 53.6	2.093	3.021	9.5	19.9
6 30	19 54.96	-42 12.3	2.288	3.237	7.6	21.2	6 30	19 52.44	-18 42.4	2.037	3.019	6.1	19.7
7 10	19 45.28	-42 52.9	2.263	3.230	6.6	21.1	7 10	19 44.35	-18 34.0	2.007	3.018	2.4	19.5
7 20	19 34.89	-43 16.1	2.264	3.223	7.1	21.1	7 20	19 35.77	-18 27.2	2.003	3.016	1.9	19.4
7 30	19 24.91	-43 19.7	2.291	3.216	8.9	21.2	7 30	19 27.59	-18 20.9	2.028	3.015	5.5	19.7
8 9	19 16.41	-43 4.7	2.342	3.208	11.0	21.4	8 9	19 20.64	-18 14.6	2.079	3.014	9.0	19.9
8 19	19 10.16	-42 34.1	2.415	3.200	13.2	21.5	8 19	19 15.53	-18 7.7	2.153	3.013	12.1	20.1
<b>285203</b>	1996 <i>XD</i> <sub>16</sub>		7 15.4 224°55	1°2/14.9	17		<b>133196</b>	2003 <i>QQ</i> <sub>59</sub>					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>150683</b>	2001 <i>OE</i> <sub>51</sub>		7 15.4 269°57	4.1/14.0	18		<b>94281</b>	2001 <i>DN</i> <sub>44</sub>		7 15.4 273°53	3.0/14.2	18	
6 10	20 9.21	-29 43.2	1.671	2.537	14.8	20.0	6 10	20 5.48	-30 1.6	2.358	3.212	11.4	19.4
6 20	20 4.00	-30 20.0	1.588	2.522	11.4	19.7	6 20	20 0.30	-30 23.4	2.275	3.204	8.8	19.2
6 30	19 55.93	-30 56.0	1.526	2.508	7.7	19.5	6 30	19 53.15	-30 43.1	2.216	3.196	5.8	19.0
7 10	19 45.73	-31 25.3	1.488	2.493	4.5	19.2	7 10	19 44.64	-30 57.2	2.183	3.188	3.4	18.8
7 20	19 34.54	-31 42.6	1.476	2.479	5.0	19.2	7 20	19 35.58	-31 2.9	2.178	3.180	3.7	18.8
7 30	19 23.79	-31 44.7	1.490	2.464	8.6	19.4	7 30	19 26.90	-30 58.5	2.200	3.172	6.4	19.0
8 9	19 14.84	-31 31.8	1.527	2.449	12.6	19.6	8 9	19 19.47	-30 44.3	2.249	3.164	9.4	19.2
8 19	19 8.67	-31 6.3	1.586	2.433	16.2	19.8	8 19	19 13.95	-30 21.7	2.320	3.156	12.1	19.4
<b>509711</b>	2008 <i>SX</i> <sub>91</sub>		7 15.4 254°62	2.2/14.5	18		<b>399281</b>	2014 <i>HK</i> <sub>116</sub>		7 15.4 342°33	2.6/14.1	18	
6 10	20 8.14	-26 17.8	2.155	3.007	12.4	22.7	6 10	20 2.52	-24 59.1	1.816	2.686	13.6	20.3
6 20	20 2.59	-26 45.7	2.057	2.987	9.5	22.5	6 20	19 58.60	-25 57.5	1.740	2.680	10.3	20.1
6 30	19 54.77	-27 15.1	1.983	2.966	6.1	22.2	6 30	19 52.35	-27 0.3	1.687	2.674	6.6	19.9
7 10	19 45.27	-27 41.8	1.935	2.945	2.9	22.0	7 10	19 44.42	-28 2.2	1.659	2.669	3.2	19.6
7 20	19 34.94	-28 2.4	1.915	2.923	3.1	22.0	7 20	19 35.74	-28 58.0	1.657	2.664	3.7	19.7
7 30	19 24.84	-28 14.0	1.922	2.900	6.6	22.1	7 30	19 27.41	-29 43.1	1.682	2.660	7.3	19.9
8 9	19 16.03	-28 16.0	1.956	2.877	10.3	22.3	8 9	19 20.54	-30 15.5	1.730	2.656	11.0	20.1
8 19	19 9.31	-28 9.0	2.013	2.853	13.5	22.5	8 19	19 15.91	-30 35.1	1.801	2.653	14.3	20.3
<b>369719</b>	2012 <i>DE</i> <sub>74</sub>		7 15.4 150°53	0.7/15.2	17		<b>418260</b>	2008 <i>EG</i> <sub>12</sub>		7 15.4 204°82	0.8/15.1	17	
6 10	20 9.65	-21 54.8	1.745	2.602	14.7	21.8	6 10	20 8.80	-21 33.9	1.926	2.778	13.7	22.1
6 20	20 3.80	-22 15.4	1.676	2.609	11.1	21.6	6 20	20 3.13	-22 3.8	1.843	2.773	10.4	21.9
6 30	19 55.49	-22 40.5	1.630	2.615	7.0	21.4	6 30	19 55.11	-22 39.0	1.783	2.768	6.5	21.7
7 10	19 45.49	-23 6.3	1.608	2.621	2.5	21.1	7 10	19 45.40	-23 15.7	1.749	2.762	2.4	21.4
7 20	19 34.86	-23 29.1	1.614	2.627	2.3	21.1	7 20	19 34.93	-23 50.1	1.743	2.755	2.3	21.4
7 30	19 24.82	-23 46.2	1.646	2.632	6.8	21.4	7 30	19 24.83	-24 18.8	1.764	2.748	6.5	21.6
8 9	19 16.46	-23 56.5	1.704	2.636	10.8	21.6	8 9	19 16.18	-24 40.1	1.811	2.740	10.5	21.8
8 19	19 10.55	-24 0.1	1.784	2.640	14.3	21.9	8 19	19 9.78	-24 53.7	1.881	2.732	13.9	22.0
<b>307139</b>	2002 <i>CC</i> <sub>184</sub>		7 15.4 146°49	0.7/15.1	18		<b>231563</b>	2008 <i>TR</i> <sub>71</sub>		7 15.4 177°85	1.1/14.9	18	
6 10	20 4.47	-22 53.4	2.717	3.562	10.4	22.4	6 10	20 5.93	-22 20.2	1.956	2.813	13.3	20.5
6 20	19 59.11	-23 9.3	2.643	3.570	7.8	22.2	6 20	20 0.88	-22 54.8	1.881	2.814	10.0	20.3
6 30	19 52.19	-23 27.2	2.594	3.578	4.9	22.1	6 30	19 53.63	-23 34.0	1.829	2.814	6.3	20.0
7 10	19 44.24	-23 44.7	2.573	3.585	1.8	21.8	7 10	19 44.85	-24 14.0	1.802	2.815	2.4	19.8
7 20	19 35.93	-23 59.9	2.580	3.592	1.7	21.9	7 20	19 35.43	-24 50.9	1.803	2.815	2.4	19.8
7 30	19 27.97	-24 11.1	2.617	3.599	4.8	22.1	7 30	19 26.42	-25 21.4	1.831	2.815	6.4	20.0
8 9	19 21.04	-24 17.7	2.680	3.605	7.7	22.3	8 9	19 18.82	-25 44.0	1.885	2.814	10.1	20.3
8 19	19 15.65	-24 19.6	2.769	3.611	10.2	22.5	8 19	19 13.35	-25 58.3	1.961	2.814	13.3	20.5
<b>380092</b>	2013 <i>SG</i> <sub>59</sub>		7 15.4 278°30	4.0/13.7	18		<b>476163</b>	2007 <i>TB</i> <sub>379</sub>		7 15.4 322°87	1.3/15.9	18	
6 10	20 8.09	-27 35.0	1.653	2.520	14.9	21.1	6 10	20 1.11	-17 6.2	1.470	2.343	16.1	20.7
6 20	20 3.37	-28 36.2	1.560	2.497	11.5	20.9	6 20	19 58.03	-17 17.5	1.380	2.319	12.4	20.4
6 30	19 55.72	-29 41.6	1.489	2.473	7.6	20.6	6 30	19 52.28	-17 39.9	1.309	2.296	8.1	20.1
7 10	19 45.75	-30 44.5	1.443	2.449	4.4	20.3	7 10	19 44.50	-18 11.2	1.262	2.274	3.3	19.7
7 20	19 34.52	-31 37.9	1.422	2.425	5.1	20.3	7 20	19 35.65	-18 48.3	1.238	2.252	2.5	19.6
7 30	19 23.46	-32 16.1	1.427	2.400	9.0	20.5	7 30	19 27.04	-19 26.9	1.239	2.231	7.5	19.9
8 9	19 14.05	-32 37.2	1.456	2.375	13.2	20.7	8 9	19 19.99	-20 3.4	1.263	2.211	12.4	20.1
8 19	19 7.41	-32 42.3	1.505	2.350	17.0	20.8	8 19	19 15.52	-20 35.1	1.308	2.192	16.7	20.3
<b>381903</b>	2010 <i>CC</i> <sub>12</sub>		7 15.4 192°68	4.6/13.0	18		<b>260197</b>	2004 <i>RG</i> <sub>163</sub>		7 15.4 237°14	3.8/13.5	17	
6 10	20 8.44	-31 27.6	2.056	2.912	12.8	20.8	6 10	20 6.83	-34 39.5	2.943	3.783	9.8	21.6
6 20	20 2.92	-32 35.2	1.983	2.911	9.9	20.7	6 20	20 1.04	-35 7.1	2.854	3.770	7.7	21.4
6 30	19 55.00	-33 41.5	1.934	2.909	6.9	20.5	6 30	19 53.51	-35 30.5	2.789	3.757	5.5	21.2
7 10	19 45.36	-34 40.5	1.910	2.907	4.8	20.3	7 10	19 44.77	-35 46.2	2.750	3.743	4.0	21.1
7 20	19 34.95	-35 26.6	1.914	2.905	5.4	20.4	7 20	19 35.51	-35 51.6	2.741	3.728	4.3	21.1
7 30	19 24.94	-35 56.5	1.944	2.903	8.1	20.5	7 30	19 26.55	-35 45.3	2.759	3.713	6.2	21.2
8 9	19 16.43	-36 9.7	2.000	2.900	11.1	20.7	8 9	19 18.66	-35 27.7	2.805	3.698	8.5	21.4
8 19	19 10.24	-36 8.0	2.077	2.896	13.9	20.9	8 19	19 12.44	-35 0.4	2.874	3.683	10.7	21.5
<b>192465</b>	1998 <i>FM</i> <sub>14</sub>		7 15.4 72°47	0.8/15.2	17		<b>137908</b>	2000 <i>AT</i> <sub>232</sub>		7 15.4 242°25	0.1/15.4	18	
6 10	20 9.75	-22 37.4	1.658	2.518	15.2	20.2	6 10	20 7.78	-19 8.8	1.945	2.794	13.7	21.3
6 20	20 3.67	-22 49.8	1.611	2.545	11.3	20.1	6 20	20 2.48	-19 44.5	1.850	2.778	10.5	21.0
6 30	19 55.23	-23 5.2	1.585	2.571	7.0	19.9	6 30	19 54.81	-20 28.4	1.777	2.761	6.7	20.8
7 10	19 45.33	-23 20.1	1.585	2.598	2.5	19.6	7 10	19 45.35	-21 17.2	1.730	2.743	2.4	20.4
7 20	19 35.08	-23 31.5	1.611	2.624	2.3	19.7	7 20	19 34.97	-22 6.8	1.711	2.724	2.1	20.4
7 30	19 25.68	-23 37.4	1.664	2.650	6.6	20.0	7 30	19 24.77	-22 53.0	1.719	2.704	6.5	20.6
8 9	19 18.13	-23 37.4	1.743	2.676	10.5	20.3	8 9	19 15.88	-23 32.9	1.754	2.684	10.6	20.8
8 19	19 13.05	-23 32.2	1.843	2.701	13.8	20.6	8 19	19 9.16	-24 5.0	1.811	2.664	14.3	21.0
<b>330902</b>	2009 <i>SR</i> <sub>56</sub>		7 15.4 324°79	3.2/16.2	17		<b>45457</b>	2000 <i>AL</i> <sub>195</sub>		7 15.4 53°13	6.9/18.0	18	
6 10	20 4.39	-15 28.6	1.375	2.243	17.2	20.6	6 10	20 3.59	-4 22.1	1.803	2.620	15.9	18.3
6 20	20 0.45	-14 58.9	1.297	2.232	13.4	20.3	6 20	19 59.00	-3 35.9	1.737	2.628	13.1	18.2
6 30	19 53.72	-14 38.5	1.239	2.222	9.1	20.0	6 30	19 52.37	-3 5.6	1.691	2.637	10.1	18.0
7 10	19 44.96	-14 27.4	1.203	2.211	4.6	19.7	7 10	19 44.38	-2 53.1	1.668	2.645	7.7	17.9
7 20	19 35.28	-14 24.7	1.191	2.202	3.8	19.6	7 20	19 35.88	-2 58.5	1.671	2.654	7.0	17.9
7 30	19 26.07	-14 28.7	1.204	2.193	8.1	19.9	7 30	19 27.87	-3 20.4	1.698	2.663	8.5	18.0
8 9	19 18.65	-14 37.3	1.238	2.184	12.7	20.1	8 9	19 21.22	-3 55.0	1.749	2.672	11.2	18.1
8 19	19 13.96	-14 48.3	1.293	2.177	16.9	20.3	8 19	19 16.60	-4 38.1	1.823	2.681	13.9	18.3
<b>254105</b>	2004 <i>LZ</i> <sub>17</sub>		7 15.4 311°13	2.8/14.5	18		<b>135558</b>	2002 <i>EG</i> <sub>75</sub>					

EPHEMERIDES

7 15.4

7 15.5

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>74031</b>	1998 <i>HM</i> <sub>22</sub>		7 15.4 56°90	1.5/15.9	18		<b>91740</b>	1999 <i>TX</i> <sub>177</sub>		7 15.4 275°25	2.2/16.5	18	
6 10	20 6.91	-16 47.6	1.279	2.150	18.1	19.4	6 10	20 2.01	-13 59.3	2.347	3.185	12.0	20.0
6 20	20 2.23	-16 59.4	1.227	2.165	13.8	19.2	6 20	19 57.61	-14 0.1	2.256	3.174	9.3	19.8
6 30	19 54.69	-17 22.5	1.194	2.180	8.8	19.0	6 30	19 51.47	-14 8.9	2.188	3.163	6.3	19.6
7 10	19 45.25	-17 53.9	1.184	2.196	3.6	18.7	7 10	19 44.12	-14 25.0	2.146	3.152	3.2	19.4
7 20	19 35.19	-18 29.0	1.198	2.211	2.7	18.7	7 20	19 36.21	-14 46.6	2.131	3.141	2.5	19.3
7 30	19 25.97	-19 3.7	1.236	2.227	7.6	19.0	7 30	19 28.55	-15 12.0	2.144	3.129	5.4	19.5
8 9	19 18.83	-19 34.8	1.298	2.243	12.3	19.4	8 9	19 21.89	-15 38.8	2.183	3.118	8.6	19.7
8 19	19 14.55	-20 0.5	1.380	2.259	16.3	19.6	8 19	19 16.86	-16 5.4	2.247	3.107	11.6	19.8
<b>40889</b>	1999 <i>TY</i> <sub>132</sub>		7 15.4 107°96	1.1/15.8	18		<b>71929</b>	2000 <i>WD</i> <sub>61</sub>		7 15.5 166°80	0.7/15.1	18	
6 10	20 5.25	-17 52.6	1.816	2.671	14.3	19.7	6 10	20 8.70	-20 13.0	1.773	2.628	14.6	19.6
6 20	20 0.42	-17 58.1	1.742	2.672	10.9	19.5	6 20	20 3.19	-21 0.8	1.701	2.632	11.0	19.3
6 30	19 53.36	-18 10.8	1.690	2.673	7.0	19.3	6 30	19 55.22	-21 56.3	1.651	2.636	6.9	19.1
7 10	19 44.77	-18 28.6	1.663	2.674	2.8	19.0	7 10	19 45.52	-22 54.8	1.626	2.639	2.5	18.8
7 20	19 35.57	-18 48.9	1.662	2.675	2.1	19.0	7 20	19 35.06	-23 51.2	1.629	2.641	2.4	18.8
7 30	19 26.82	-19 9.2	1.688	2.676	6.3	19.3	7 30	19 25.06	-24 41.0	1.659	2.643	6.8	19.1
8 9	19 19.53	-19 27.4	1.739	2.677	10.2	19.5	8 9	19 16.64	-25 21.5	1.714	2.644	10.9	19.4
8 19	19 14.42	-19 42.6	1.812	2.677	13.7	19.7	8 19	19 10.60	-25 52.0	1.792	2.645	14.4	19.6
<b>490372</b>	2009 <i>JZ</i> <sub>3</sub>		7 15.4 216°09	16.9/18.0	17		<b>474429</b>	2003 <i>ER</i> <sub>13</sub>		7 15.5 124°48	3.0/14.1	18	
6 10	20 10.37	+ 8 15.2	1.296	2.069	23.2	20.8	6 10	20 8.10	-30 55.9	2.559	3.404	10.9	21.7
6 20	20 5.12	+10 42.6	1.230	2.065	21.0	20.7	6 20	20 1.97	-31 19.6	2.495	3.419	8.3	21.5
6 30	19 56.78	+12 44.3	1.181	2.060	18.9	20.5	6 30	19 54.05	-31 40.2	2.456	3.433	5.6	21.4
7 10	19 46.14	+14 10.1	1.150	2.055	17.4	20.4	7 10	19 44.99	-31 54.3	2.444	3.446	3.3	21.3
7 20	19 34.37	+14 52.3	1.138	2.049	17.0	20.3	7 20	19 35.57	-31 59.5	2.460	3.459	3.6	21.3
7 30	19 23.03	+14 48.7	1.145	2.043	17.8	20.4	7 30	19 26.65	-31 54.7	2.504	3.472	6.0	21.5
8 9	19 13.59	+14 4.0	1.171	2.036	19.7	20.5	8 9	19 19.02	-31 40.5	2.575	3.484	8.6	21.7
8 19	19 7.13	+12 47.5	1.212	2.029	22.0	20.6	8 19	19 13.22	-31 18.3	2.670	3.496	11.0	21.8
<b>163391</b>	2002 <i>QU</i> <sub>12</sub>		7 15.4 193°06	0.1/15.4	18		<b>323680</b>	2005 <i>EH</i> <sub>236</sub>		7 15.5 177°09	2.6/14.5	15	
6 10	20 6.84	-21 34.1	2.213	3.061	12.3	20.2	6 10	20 11.32	-26 37.3	1.836	2.692	14.1	23.1
6 20	20 1.26	-21 32.6	2.132	3.060	9.3	20.0	6 20	20 5.15	-27 10.4	1.763	2.694	10.7	22.9
6 30	19 53.73	-21 33.7	2.075	3.058	5.9	19.8	6 30	19 56.43	-27 44.5	1.713	2.696	6.9	22.6
7 10	19 44.88	-21 35.5	2.044	3.056	2.1	19.5	7 10	19 45.94	-28 14.6	1.688	2.697	3.3	22.4
7 20	19 35.50	-21 36.1	2.041	3.054	1.8	19.5	7 20	19 34.74	-28 36.2	1.690	2.697	3.6	22.4
7 30	19 26.54	-21 34.1	2.066	3.052	5.6	19.7	7 30	19 24.08	-28 46.9	1.719	2.697	7.3	22.7
8 9	19 18.84	-21 29.0	2.118	3.049	9.1	20.0	8 9	19 15.11	-28 46.2	1.774	2.696	11.1	22.9
8 19	19 13.06	-21 21.0	2.194	3.046	12.1	20.2	8 19	19 8.65	-28 36.0	1.851	2.694	14.4	23.1
<b>146261</b>	2001 <i>BA</i> <sub>10</sub>		7 15.4 83°34	6.1/11.2	18		<b>271869</b>	2004 <i>TN</i> <sub>330</sub>		7 15.5 18°78	5.0/17.3	17	
6 10	20 8.79	-35 56.5	2.280	3.128	12.0	19.4	6 10	20 3.04	- 9 43.8	1.479	2.330	17.2	20.1
6 20	20 3.09	-37 44.0	2.229	3.145	9.5	19.3	6 20	19 59.08	- 9 22.2	1.413	2.333	13.6	19.9
6 30	19 55.07	-39 26.7	2.202	3.162	7.3	19.1	6 30	19 52.68	- 9 16.0	1.366	2.337	9.8	19.7
7 10	19 45.42	-40 57.5	2.203	3.179	6.2	19.1	7 10	19 44.61	- 9 25.5	1.342	2.341	6.2	19.5
7 20	19 35.05	-42 10.4	2.231	3.196	6.9	19.2	7 20	19 35.86	- 9 49.5	1.342	2.346	5.2	19.4
7 30	19 25.08	-43 2.2	2.286	3.213	8.8	19.3	7 30	19 27.66	-10 24.7	1.367	2.351	8.0	19.6
8 9	19 16.58	-43 32.9	2.366	3.229	11.0	19.5	8 9	19 21.10	-11 7.0	1.415	2.357	11.8	19.8
8 19	19 10.31	-43 45.0	2.467	3.246	13.1	19.7	8 19	19 16.94	-11 52.1	1.484	2.363	15.4	20.1
<b>144391</b>	2004 <i>EK</i>		7 15.4 208°04	0.8/15.8	18		<b>257931</b>	2000 <i>WZ</i> <sub>152</sub>		7 15.5 157°71	0.5/15.2	18	
6 10	20 4.23	-18 17.2	2.096	2.946	12.8	20.5	6 10	20 4.39	-22 53.5	3.116	3.956	9.3	21.7
6 20	19 59.41	-18 26.6	2.017	2.945	9.8	20.3	6 20	19 58.89	-23 4.0	3.040	3.963	7.0	21.5
6 30	19 52.63	-18 42.2	1.961	2.944	6.2	20.1	6 30	19 52.02	-23 15.9	2.988	3.970	4.4	21.4
7 10	19 44.51	-19 1.8	1.931	2.943	2.4	19.8	7 10	19 44.27	-23 27.4	2.965	3.977	1.6	21.2
7 20	19 35.83	-19 23.2	1.928	2.941	1.9	19.8	7 20	19 36.18	-23 36.8	2.971	3.983	1.5	21.2
7 30	19 27.52	-19 44.1	1.952	2.940	5.7	20.0	7 30	19 28.41	-23 43.0	3.007	3.989	4.3	21.4
8 9	19 20.45	-20 2.6	2.003	2.938	9.3	20.3	8 9	19 21.54	-23 45.4	3.071	3.994	6.9	21.6
8 19	19 15.28	-20 17.9	2.077	2.936	12.4	20.5	8 19	19 16.02	-23 44.0	3.160	3.999	9.1	21.7
<b>245543</b>	2005 <i>TA</i> <sub>105</sub>		7 15.4 239°45	0.4/15.3	18		<b>344410</b>	2002 <i>AD</i> <sub>148</sub>		7 15.5 236°41	4.7/14.6	18	
6 10	20 4.79	-22 32.6	2.390	3.240	11.5	20.2	6 10	20 16.83	-35 19.8	1.956	2.798	13.9	20.5
6 20	19 59.64	-22 33.8	2.305	3.234	8.7	20.1	6 20	20 9.30	-35 19.4	1.870	2.789	10.9	20.3
6 30	19 52.69	-22 37.0	2.245	3.229	5.4	19.8	6 30	19 59.02	-35 10.2	1.808	2.779	7.7	20.1
7 10	19 44.51	-22 40.2	2.210	3.223	2.0	19.6	7 10	19 46.87	-34 47.3	1.771	2.768	5.1	19.9
7 20	19 35.83	-22 41.6	2.204	3.217	1.8	19.6	7 20	19 34.04	-34 7.8	1.762	2.758	5.3	19.9
7 30	19 27.50	-22 39.8	2.226	3.211	5.3	19.8	7 30	19 21.92	-33 11.6	1.781	2.747	8.1	20.0
8 9	19 20.30	-22 34.4	2.275	3.205	8.6	20.0	8 9	19 11.76	-32 2.2	1.826	2.735	11.5	20.2
8 19	19 14.85	-22 25.5	2.347	3.198	11.5	20.2	8 19	19 4.35	-30 44.5	1.894	2.724	14.7	20.4
<b>482188</b>	2010 <i>UD</i> <sub>63</sub>		7 15.4 283°15	2.5/16.4	18		<b>523606</b>	2005 <i>CJ</i>		7 15.5 258°87	0.8/15.2	18	
6 10	20 2.84	-14 13.9	2.318	3.156	12.2	20.8	6 10	20 21.01	-21 7.7	1.560	2.402	16.9	24.0
6 20	19 58.19	-13 55.9	2.230	3.147	9.5	20.6	6 20	20 13.82	-21 36.0	1.442	2.365	13.2	23.6
6 30	19 51.81	-13 44.7	2.165	3.139	6.4	20.4	6 30	20 2.87	-22 13.1	1.345	2.327	8.6	23.3
7 10	19 44.22	-13 40.1	2.126	3.131	3.4	20.1	7 10	19 48.64	-22 54.1	1.273	2.285	3.2	22.8
7 20	19 36.12	-13 41.2	2.115	3.123	2.8	20.1	7 20	19 32.24	-23 32.7	1.229	2.241	3.0	22.7
7 30	19 28.30	-13 46.8	2.131	3.115	5.6	20.3	7 30	19 15.45	-24 2.8	1.213	2.195	9.1	22.9
8 9	19 21.55	-13 55.5	2.174	3.107	8.7	20.4	8 9	19 0.26	-24 21.6	1.223	2.146	14.9	23.1
8 19	19 16.46	-14 5.9	2.240	3.099	11.7	20.6	8 19	19 48.27	-24 29.6	1.255	2.095	20.1	23.3
<b>287306</b>	2002 <i>TF</i> <sub>229</sub>		7 15.4 274°61	1.5/16.0	18		<b>332129</b>	2005 <i>WG</i> <sub>54</sub>					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>510641</b>	2012 <i>TA</i> <sub>216</sub>		7 15.5 244°85	1.1/15.1	18		<b>293869</b>	2007 <i>RL</i> <sub>260</sub>		7 15.5 276°45	2.4/16.2	17	
6 10	20 9.35	-25 9.6	2.176	3.025	12.5	21.5	6 10	20 6.72	-15 39.8	1.456	2.317	16.8	21.2
6 20	20 3.36	-25 5.1	2.083	3.011	9.5	21.3	6 20	20 2.29	-15 34.4	1.370	2.302	13.1	21.0
6 30	19 55.20	-25 0.4	2.013	2.997	6.0	21.1	6 30	19 55.02	-15 39.9	1.304	2.286	8.7	20.7
7 10	19 45.51	-24 52.9	1.970	2.982	2.3	20.8	7 10	19 45.60	-15 54.9	1.261	2.270	4.1	20.4
7 20	19 35.15	-24 40.5	1.955	2.967	2.3	20.8	7 20	19 35.11	-16 16.9	1.242	2.254	3.1	20.3
7 30	19 25.15	-24 22.3	1.969	2.951	6.0	21.0	7 30	19 24.94	-16 42.8	1.249	2.238	7.8	20.5
8 9	19 16.49	-23 58.6	2.009	2.936	9.7	21.2	8 9	19 16.47	-17 9.5	1.279	2.222	12.7	20.7
8 19	19 9.91	-23 30.6	2.072	2.919	12.9	21.4	8 19	19 10.71	-17 34.7	1.329	2.206	17.0	20.9
<b>198139</b>	2004 <i>TT</i> <sub>38</sub>		7 15.5 93°41	1.2/15.9	17		<b>130423</b>	2000 <i>PA</i> <sub>16</sub>		7 15.5 220°47	2.0/16.3	18	
6 10	20 5.95	-17 6.4	1.772	2.626	14.6	21.2	6 10	20 7.38	-14 33.7	1.578	2.430	16.2	19.8
6 20	20 0.94	-17 17.3	1.705	2.635	11.1	21.0	6 20	20 2.49	-14 53.6	1.498	2.425	12.5	19.5
6 30	19 53.70	-17 36.4	1.661	2.644	7.2	20.7	6 30	19 54.98	-15 26.4	1.439	2.420	8.3	19.3
7 10	19 44.96	-18 1.4	1.641	2.652	2.9	20.5	7 10	19 45.54	-16 9.8	1.404	2.414	3.8	19.0
7 20	19 35.67	-18 29.2	1.648	2.661	2.2	20.5	7 20	19 35.20	-16 59.8	1.395	2.407	2.8	18.9
7 30	19 26.90	-18 57.0	1.682	2.670	6.3	20.7	7 30	19 25.24	-17 51.9	1.412	2.401	7.2	19.2
8 9	19 19.66	-19 22.4	1.741	2.679	10.2	21.0	8 9	19 16.91	-18 41.9	1.454	2.393	11.7	19.4
8 19	19 14.63	-19 44.1	1.822	2.687	13.6	21.2	8 19	19 11.10	-19 26.9	1.517	2.386	15.7	19.6
<b>180174</b>	2003 <i>HN</i> <sub>42</sub>		7 15.5 76°50	4.3/17.6	16		<b>12266</b>	1990 <i>FL</i>		7 15.5 61°64	13.0/24.9	18	
6 10	20 2.63	- 8 0.4	2.188	3.009	13.4	20.2	6 10	20 4.91	+12 40.0	1.436	2.182	22.4	17.8
6 20	19 57.97	- 7 50.3	2.123	3.024	10.6	20.0	6 20	20 0.40	+12 48.1	1.385	2.203	19.9	17.6
6 30	19 51.62	- 7 52.4	2.080	3.039	7.7	19.9	6 30	19 53.45	+12 19.2	1.349	2.224	17.1	17.5
7 10	19 44.17	- 8 6.6	2.061	3.053	5.1	19.7	7 10	19 44.90	+11 10.3	1.330	2.246	14.7	17.4
7 20	19 36.34	- 8 31.4	2.070	3.068	4.3	19.7	7 20	19 35.82	+ 9 22.9	1.332	2.267	13.2	17.4
7 30	19 28.92	- 9 4.8	2.105	3.082	6.2	19.8	7 30	19 27.43	+ 7 3.8	1.358	2.289	13.2	17.4
8 9	19 22.65	- 9 43.6	2.166	3.097	8.9	20.0	8 9	19 20.80	+ 4 24.4	1.406	2.311	14.6	17.6
8 19	19 18.06	-10 24.9	2.252	3.111	11.6	20.2	8 19	19 16.63	+ 1 36.9	1.476	2.332	16.7	17.8
<b>440511</b>	2005 <i>UM</i> <sub>35</sub>		7 15.5 259°51	0.7/15.1	18		<b>507235</b>	2011 <i>AZ</i> <sub>45</sub>		7 15.5 231°07	0.6/15.7	17	
6 10	20 4.00	-22 25.3	2.508	3.356	11.0	22.9	6 10	20 8.05	-18 55.3	1.894	2.744	14.0	22.9
6 20	19 59.13	-22 45.5	2.411	3.340	8.3	22.7	6 20	20 2.65	-19 3.3	1.806	2.734	10.7	22.6
6 30	19 52.47	-23 9.0	2.339	3.323	5.3	22.5	6 30	19 54.91	-19 17.7	1.740	2.723	6.9	22.4
7 10	19 44.53	-23 33.1	2.294	3.306	1.9	22.2	7 10	19 45.49	-19 36.1	1.700	2.711	2.6	22.1
7 20	19 35.99	-23 55.5	2.277	3.289	1.9	22.2	7 20	19 35.27	-19 55.8	1.686	2.699	2.0	22.0
7 30	19 27.66	-24 13.9	2.288	3.272	5.3	22.4	7 30	19 25.37	-20 14.1	1.700	2.687	6.4	22.3
8 9	19 20.34	-24 27.0	2.326	3.254	8.5	22.6	8 9	19 16.88	-20 29.3	1.740	2.674	10.5	22.5
8 19	19 14.67	-24 34.6	2.388	3.236	11.4	22.7	8 19	19 10.60	-20 40.6	1.802	2.660	14.1	22.7
<b>338582</b>	2003 <i>SJ</i> <sub>125</sub>		7 15.5 275°16	1.5/15.9	18		<b>923</b>	<i>Herluga</i>		7 15.5 277°82	8.7/18.7	18	
6 10	20 5.51	-17 29.3	1.857	2.710	14.1	20.7	6 10	20 3.25	+ 0 41.4	1.916	2.707	16.1	15.9
6 20	20 0.64	-17 19.7	1.777	2.705	10.8	20.5	6 20	19 58.99	+ 1 25.9	1.821	2.687	13.8	15.7
6 30	19 53.56	-17 16.6	1.718	2.700	7.0	20.3	6 30	19 52.62	+ 1 52.5	1.744	2.667	11.4	15.5
7 10	19 44.94	-17 18.6	1.684	2.695	3.0	20.0	7 10	19 44.67	+ 1 57.8	1.690	2.647	9.4	15.4
7 20	19 35.67	-17 24.0	1.677	2.690	2.4	19.9	7 20	19 35.91	+ 1 40.5	1.660	2.626	8.7	15.3
7 30	19 26.81	-17 31.1	1.697	2.685	6.3	20.2	7 30	19 27.31	+ 1 1.2	1.655	2.605	9.9	15.3
8 9	19 19.36	-17 38.3	1.742	2.680	10.2	20.4	8 9	19 19.84	+ 0 3.8	1.673	2.584	12.3	15.4
8 19	19 14.05	-17 44.7	1.810	2.675	13.7	20.6	8 19	19 14.30	- 1 6.5	1.714	2.563	15.1	15.5
<b>163083</b>	2002 <i>AF</i> <sub>51</sub>		7 15.5 253°41	0.9/15.8	17		<b>9669</b>	<i>Symmetria</i>		7 15.5 277°73	0.1/15.5	18	
6 10	20 7.64	-17 33.3	1.528	2.389	16.2	20.5	6 10	20 2.88	-20 14.1	2.463	3.311	11.2	18.5
6 20	20 2.89	-17 53.5	1.443	2.376	12.5	20.2	6 20	19 58.29	-20 25.8	2.366	3.294	8.5	18.2
6 30	19 55.34	-18 24.3	1.379	2.363	8.1	19.9	6 30	19 51.96	-20 41.8	2.294	3.277	5.4	18.0
7 10	19 45.69	-19 2.7	1.338	2.350	3.1	19.6	7 10	19 44.37	-21 0.1	2.248	3.260	2.0	17.8
7 20	19 34.99	-19 44.5	1.323	2.336	2.4	19.5	7 20	19 36.20	-21 18.5	2.230	3.243	1.6	17.7
7 30	19 24.62	-20 25.4	1.334	2.323	7.5	19.8	7 30	19 28.24	-21 35.2	2.240	3.226	5.2	17.9
8 9	19 15.92	-21 1.9	1.368	2.308	12.3	20.0	8 9	19 21.27	-21 48.8	2.277	3.209	8.5	18.1
8 19	19 9.89	-21 32.2	1.424	2.294	16.5	20.3	8 19	19 15.93	-21 58.4	2.337	3.191	11.4	18.3
<b>256428</b>	2007 <i>BQ</i> <sub>55</sub>		7 15.5 59°77	2.8/14.5	18		<b>165252</b>	2000 <i>ST</i> <sub>182</sub>		7 15.5 229°56	1.3/15.9	17	
6 10	20 6.86	-29 32.9	2.210	3.065	12.1	20.1	6 10	20 8.34	-17 9.1	1.679	2.531	15.4	20.7
6 20	20 1.36	-29 44.1	2.138	3.068	9.2	19.9	6 20	20 3.13	-17 18.7	1.594	2.523	11.8	20.4
6 30	19 53.84	-29 52.7	2.089	3.071	6.0	19.7	6 30	19 55.34	-17 37.4	1.531	2.513	7.7	20.2
7 10	19 44.99	-29 55.5	2.067	3.074	3.2	19.5	7 10	19 45.67	-18 2.8	1.492	2.503	3.2	19.9
7 20	19 35.67	-29 50.0	2.072	3.077	3.4	19.6	7 20	19 35.11	-18 31.7	1.480	2.493	2.4	19.8
7 30	19 26.87	-29 35.3	2.104	3.080	6.3	19.7	7 30	19 24.91	-19 0.9	1.494	2.482	7.0	20.1
8 9	19 19.46	-29 11.9	2.163	3.083	9.4	19.9	8 9	19 16.28	-19 27.6	1.533	2.471	11.4	20.3
8 19	19 14.08	-28 41.5	2.244	3.086	12.3	20.1	8 19	19 10.09	-19 50.4	1.594	2.459	15.3	20.5
<b>216328</b>	2007 <i>VG</i> <sub>8</sub>		7 15.5 353°85	19.4/ 2.0	17		<b>490756</b>	2010 <i>TW</i> <sub>154</sub>		7 15.5 329°83	6.1/13.4	15	
6 10	20 13.08	-46 49.2	0.909	1.791	22.8	19.2	6 10	20 8.26	-37 3.4	1.924	2.780	13.6	21.3
6 20	20 11.14	-51 10.9	0.875	1.788	20.6	19.1	6 20	20 3.03	-37 36.1	1.849	2.771	10.8	21.1
6 30	20 3.03	-55 14.6	0.860	1.786	19.5	19.0	6 30	19 55.21	-38 1.4	1.796	2.763	8.1	20.9
7 10	19 49.18	-58 33.5	0.863	1.784	19.9	19.0	7 10	19 45.59	-38 13.5	1.768	2.756	6.2	20.8
7 20	19 31.82	-60 47.1	0.883	1.783	21.7	19.1	7 20	19 35.26	-38 8.3	1.765	2.749	6.6	20.8
7 30	19 15.15	-61 48.6	0.919	1.783	24.0	19.3	7 30	19 25.52	-37 44.5	1.787	2.742	9.0	21.0
8 9	19 3.39	-61 47.0	0.967	1.784	26.4	19.5	8 9	19 17.55	-37 3.8	1.833	2.735	11.9	21.1
8 19	18 58.77	-60 57.9	1.025	1.785	28.6	19.7	8 19	19 12.13	-36 10.0	1.901	2.729	14.7	21.3
<b>67741</b>	2000 <i>UZ</i> <sub>33</sub>		7 15.5 280°90	3.8/16.3	18		<b>66226</b>	1999 <i>CS</i> <sub>89</sub>		7 15.5 233°58			

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>284604</b>	2007 <i>TC</i> <sub>423</sub>		7 15.5 164°37'	1.2°/15.9	18		<b>404713</b>	2014 <i>JX</i> <sub>7</sub>		7 15.5 326°55'	0.6°/15.2	18	
6 10	20 4.96	-17 16.1	2.055	2.903	13.1	21.2	6 10	20 2.82	-21 16.2	1.961	2.822	13.1	21.0
6 20	20 0.00	-17 19.6	1.978	2.904	10.0	21.0	6 20	19 58.65	-21 43.5	1.880	2.815	9.9	20.8
6 30	19 53.07	-17 29.8	1.924	2.905	6.5	20.8	6 30	19 52.37	-22 16.2	1.822	2.808	6.2	20.5
7 10	19 44.79	-17 45.0	1.896	2.907	2.7	20.6	7 10	19 44.60	-22 51.3	1.788	2.801	2.3	20.3
7 20	19 35.96	-18 2.9	1.895	2.907	2.0	20.5	7 20	19 36.17	-23 25.1	1.782	2.795	2.1	20.2
7 30	19 27.52	-18 21.6	1.921	2.908	5.7	20.8	7 30	19 28.07	-23 54.7	1.802	2.789	6.1	20.5
8 9	19 20.37	-18 39.1	1.973	2.909	9.3	21.0	8 9	19 21.27	-24 18.0	1.848	2.783	9.9	20.7
8 19	19 15.14	-18 54.3	2.049	2.910	12.5	21.2	8 19	19 16.50	-24 34.3	1.917	2.778	13.2	20.9
<b>491960</b>	2013 <i>CV</i> <sub>215</sub>		7 15.5 337°32'	0.7°/15.3	18		<b>38563</b>	1999 <i>VW</i> <sub>140</sub>		7 15.5 3°9'	0.1°/15.5	18	
6 10	20 6.61	-24 16.9	2.003	2.860	13.1	20.9	6 10	20 2.44	-20 42.7	1.790	2.656	14.0	19.2
6 20	20 1.34	-24 3.7	1.924	2.856	9.9	20.6	6 20	19 58.42	-20 53.7	1.719	2.656	10.6	19.0
6 30	19 53.93	-23 50.8	1.868	2.853	6.2	20.4	6 30	19 52.23	-21 9.9	1.669	2.656	6.7	18.7
7 10	19 45.09	-23 36.1	1.838	2.850	2.3	20.2	7 10	19 44.53	-21 28.6	1.644	2.657	2.4	18.5
7 20	19 35.71	-23 18.0	1.835	2.848	2.1	20.1	7 20	19 36.25	-21 47.2	1.645	2.659	2.0	18.4
7 30	19 26.82	-22 56.0	1.859	2.845	6.0	20.4	7 30	19 28.42	-22 2.9	1.672	2.661	6.3	18.7
8 9	19 19.36	-22 30.3	1.910	2.843	9.7	20.6	8 9	19 22.04	-22 14.4	1.724	2.664	10.2	19.0
8 19	19 14.01	-22 2.0	1.983	2.841	13.0	20.8	8 19	19 17.80	-22 20.9	1.798	2.668	13.6	19.2
<b>18734</b>	Darboux		7 15.5 156°73'	5.3°/17.5	18		<b>471157</b>	2010 <i>GS</i> <sub>97</sub>		7 15.5 242°40'	5.9°/12.7	18	
6 10	20 5.59	-6 46.0	2.108	2.920	14.1	19.1	6 10	20 10.10	-36 15.8	2.153	3.000	12.6	21.8
6 20	20 0.33	-6 13.0	2.032	2.925	11.4	19.0	6 20	20 4.35	-37 12.9	2.071	2.988	10.1	21.6
6 30	19 53.21	-5 52.5	1.978	2.930	8.5	18.8	6 30	19 56.08	-38 5.2	2.012	2.976	7.5	21.4
7 10	19 44.83	-5 45.2	1.949	2.934	6.1	18.7	7 10	19 45.98	-38 46.5	1.979	2.964	6.0	21.3
7 20	19 35.95	-5 51.0	1.947	2.938	5.4	18.6	7 20	19 35.03	-39 11.6	1.972	2.950	6.5	21.3
7 30	19 27.45	-6 8.6	1.971	2.941	7.1	18.7	7 30	19 24.46	-39 18.0	1.991	2.937	8.8	21.4
8 9	19 20.17	-6 35.2	2.021	2.944	9.9	18.9	8 9	19 15.43	-39 6.1	2.035	2.923	11.5	21.6
8 19	19 14.70	-7 8.0	2.095	2.947	12.6	19.1	8 19	19 8.80	-38 38.8	2.101	2.909	14.2	21.7
<b>479585</b>	2014 <i>CB</i> <sub>21</sub>		7 15.5 168°00'	0.3°/15.3	17		<b>233519</b>	2007 <i>GX</i> <sub>29</sub>		7 15.5 78°66'	5.6°/17.8	18	
6 10	20 7.00	-21 40.6	2.304	3.150	12.0	22.0	6 10	20 4.93	-7 1.3	1.688	2.518	16.3	20.2
6 20	20 1.36	-21 52.2	2.227	3.154	9.0	21.8	6 20	20 0.20	-6 41.1	1.624	2.528	13.1	20.0
6 30	19 53.84	-22 6.7	2.174	3.157	5.7	21.6	6 30	19 53.29	-6 37.0	1.580	2.539	9.7	19.8
7 10	19 45.05	-22 22.0	2.148	3.160	2.0	21.4	7 10	19 44.91	-6 49.4	1.559	2.550	6.6	19.7
7 20	19 35.77	-22 35.5	2.150	3.163	1.8	21.4	7 20	19 35.98	-7 17.0	1.564	2.560	5.7	19.7
7 30	19 26.90	-22 45.6	2.180	3.165	5.4	21.6	7 30	19 27.57	-7 56.9	1.594	2.571	7.8	19.8
8 9	19 19.25	-22 51.3	2.237	3.166	8.8	21.8	8 9	19 20.67	-8 44.8	1.648	2.582	11.0	20.0
8 19	19 13.44	-22 52.5	2.319	3.167	11.7	22.0	8 19	19 15.93	-9 36.3	1.725	2.593	14.2	20.3
<b>263411</b>	2008 <i>DO</i> <sub>36</sub>		7 15.5 202°08'	3.4°/16.8	17		<b>18701</b>	1998 <i>HB</i> <sub>57</sub>		7 15.5 328°31'	3.8°/17.1	18	
6 10	20 6.74	-11 43.3	1.794	2.632	15.2	21.6	6 10	20 2.17	-10 29.8	2.042	2.877	13.7	18.1
6 20	20 1.65	-11 42.5	1.713	2.629	11.9	21.4	6 20	19 57.94	-10 16.6	1.960	2.872	10.8	17.9
6 30	19 54.28	-11 54.1	1.654	2.626	8.2	21.2	6 30	19 51.82	-10 14.6	1.901	2.869	7.7	17.7
7 10	19 45.29	-12 17.1	1.619	2.622	4.6	20.9	7 10	19 44.39	-10 23.5	1.866	2.865	4.7	17.5
7 20	19 35.57	-12 49.6	1.611	2.618	3.7	20.9	7 20	19 36.40	-10 42.4	1.858	2.861	4.0	17.5
7 30	19 26.22	-13 28.4	1.629	2.614	6.9	21.1	7 30	19 28.73	-11 9.2	1.876	2.858	6.4	17.6
8 9	19 18.29	-14 10.1	1.672	2.609	10.7	21.3	8 9	19 22.23	-11 41.2	1.920	2.855	9.6	17.8
8 19	19 12.55	-14 51.7	1.739	2.603	14.2	21.5	8 19	19 17.54	-12 15.6	1.986	2.852	12.6	18.0
<b>290448</b>	2005 <i>TW</i> <sub>137</sub>		7 15.5 255°11'	0.3°/15.4	18		<b>523616</b>	2007 <i>LC</i> <sub>15</sub>		7 15.5 272°79'	3.7°/14.1	18	
6 10	20 3.62	-20 47.7	2.464	3.312	11.2	21.6	6 10	20 43.22	-17 16.9	1.198	2.013	22.5	21.6
6 20	19 58.87	-21 8.6	2.371	3.298	8.5	21.4	6 20	20 34.79	-19 28.6	1.052	1.960	18.3	21.1
6 30	19 52.34	-21 33.8	2.301	3.285	5.4	21.1	6 30	20 19.63	-22 28.6	0.927	1.902	12.4	20.6
7 10	19 44.55	-22 1.0	2.259	3.271	1.9	20.9	7 10	19 56.41	-26 12.4	0.828	1.839	5.3	20.0
7 20	19 36.18	-22 27.8	2.244	3.257	1.7	20.8	7 20	19 24.85	-30 16.6	0.763	1.769	7.0	19.8
7 30	19 28.02	-22 51.6	2.258	3.243	5.2	21.1	7 30	18 47.35	-33 59.2	0.732	1.693	16.9	20.0
8 9	19 20.88	-23 11.1	2.299	3.229	8.5	21.2	8 9	18 9.20	-36 44.7	0.733	1.611	27.0	20.2
8 19	19 15.38	-23 25.6	2.363	3.214	11.4	21.4	8 19	17 35.98	-38 27.7	0.757	1.521	36.0	20.4
<b>22662</b>	1998 <i>QL</i> <sub>18</sub>		7 15.5 259°21'	1.4°/14.8	18 R		<b>93450</b>	2000 <i>SP</i> <sub>347</sub>		7 15.5 229°48'	6.1°/14.6	18	
6 10	20 4.39	-25 8.7	2.518	3.369	10.9	18.8	6 10	20 18.71	-38 34.2	1.800	2.642	15.0	19.7
6 20	19 59.43	-25 26.1	2.427	3.357	8.3	18.6	6 20	20 10.94	-38 35.4	1.725	2.639	12.0	19.5
6 30	19 52.67	-25 44.8	2.360	3.344	5.2	18.4	6 30	20 0.15	-38 24.6	1.672	2.636	8.8	19.3
7 10	19 44.67	-26 1.8	2.320	3.331	2.2	18.2	7 10	19 47.39	-37 56.1	1.644	2.633	6.5	19.2
7 20	19 36.10	-26 14.9	2.307	3.318	2.3	18.2	7 20	19 34.05	-37 6.6	1.642	2.630	6.6	19.2
7 30	19 27.80	-26 22.2	2.323	3.304	5.4	18.4	7 30	19 21.68	-35 57.1	1.668	2.627	9.1	19.3
8 9	19 20.55	-26 23.0	2.366	3.291	8.6	18.5	8 9	19 11.60	-34 32.2	1.718	2.624	12.3	19.5
8 19	19 15.00	-26 17.6	2.433	3.277	11.3	18.7	8 19	19 4.58	-32 58.5	1.792	2.620	15.4	19.7
<b>243805</b>	2000 <i>SS</i> <sub>159</sub>		7 15.5 355°99'	7.9°/17.8	17		<b>312721</b>	2010 <i>RC</i> <sub>50</sub>		7 15.5 187°5'	0.3°/15.6	18	
6 10	20 0.40	-7 33.1	1.030	1.904	21.3	19.7	6 10	20 2.82	-19 44.3	1.778	2.642	14.1	19.9
6 20	19 58.02	-6 43.8	0.969	1.899	17.4	19.4	6 20	19 58.67	-19 53.4	1.711	2.647	10.7	19.7
6 30	19 52.52	-6 16.0	0.924	1.895	13.1	19.2	6 30	19 52.36	-20 8.5	1.666	2.652	6.8	19.4
7 10	19 44.76	-6 13.1	0.898	1.893	9.2	19.0	7 10	19 44.60	-20 27.0	1.646	2.658	2.5	19.2
7 20	19 36.01	-6 35.2	0.892	1.892	8.0	18.9	7 20	19 36.28	-20 46.2	1.652	2.665	1.9	19.2
7 30	19 27.89	-7 19.1	0.907	1.892	10.7	19.0	7 30	19 28.48	-21 3.5	1.683	2.673	6.2	19.4
8 9	19 21.88	-8 17.8	0.941	1.893	15.0	19.3	8 9	19 22.13	-21 17.3	1.740	2.680	10.1	19.7
8 19	19 18.96	-9 23.6	0.994	1.896	19.2	19.6	8 19	19 17.92	-21 26.8	1.819	2.689	13.4	19.9
<b>166945</b>	2003 <i>HS</i> <sub>54</sub>												

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>19117</b>	1981 <i>EL</i> <sub>41</sub>		7 15.5 47°61	4.8/13.5	18		<b>249389</b>	2009 <i>BO</i> <sub>88</sub>		7 15.5 317°25	1.8/16.3	18	
6 10	20 7.56	-34 37.8	2.197	3.049	12.2	19.6	6 10	20 3.15	-15 10.5	1.792	2.646	14.5	20.6
6 20	20 2.13	-35 15.5	2.127	3.050	9.6	19.4	6 20	19 59.04	-15 24.0	1.711	2.639	11.2	20.4
6 30	19 54.50	-35 48.2	2.080	3.051	6.9	19.2	6 30	19 52.71	-15 48.0	1.652	2.633	7.4	20.1
7 10	19 45.37	-36 11.1	2.059	3.052	5.0	19.1	7 10	19 44.81	-16 20.6	1.617	2.626	3.4	19.9
7 20	19 35.67	-36 20.6	2.064	3.053	5.4	19.1	7 20	19 36.19	-16 58.9	1.608	2.620	2.5	19.8
7 30	19 26.49	-36 15.0	2.096	3.053	7.7	19.3	7 30	19 27.91	-17 39.5	1.625	2.614	6.4	20.0
8 9	19 18.79	-35 55.2	2.153	3.054	10.4	19.5	8 9	19 20.99	-18 19.1	1.668	2.609	10.4	20.3
8 19	19 13.27	-35 23.8	2.233	3.055	13.0	19.6	8 19	19 16.19	-18 55.2	1.732	2.603	13.9	20.5
<b>227124</b>	2005 <i>OE</i> <sub>2</sub>		7 15.5 327°92	3.3/14.2	18		<b>248105</b>	2004 <i>RT</i> <sub>102</sub>		7 15.5 250°31	0.2/15.6	18	
6 10	19 58.55	-23 42.4	1.075	1.978	18.3	19.5	6 10	20 3.55	-20 10.1	2.624	3.468	10.7	21.2
6 20	19 57.31	-24 39.5	0.986	1.944	14.2	19.1	6 20	19 58.71	-20 19.1	2.530	3.455	8.1	21.0
6 30	19 52.63	-25 49.1	0.916	1.910	9.2	18.7	6 30	19 52.22	-20 31.9	2.460	3.442	5.2	20.8
7 10	19 45.05	-27 5.0	0.866	1.878	4.3	18.3	7 10	19 44.57	-20 46.7	2.417	3.429	1.9	20.5
7 20	19 35.72	-28 18.2	0.837	1.847	5.0	18.3	7 20	19 36.40	-21 1.5	2.402	3.415	1.5	20.5
7 30	19 26.46	-29 19.2	0.829	1.818	10.7	18.5	7 30	19 28.45	-21 14.8	2.416	3.401	4.9	20.7
8 9	19 19.26	-30 2.0	0.840	1.790	16.6	18.7	8 9	19 21.45	-21 25.3	2.456	3.387	8.0	20.9
8 19	19 15.65	-30 25.0	0.868	1.764	21.9	18.9	8 19	19 15.98	-21 32.4	2.522	3.373	10.8	21.0
<b>167375</b>	2003 <i>WF</i> <sub>66</sub>		7 15.5 301°32	4.7/14.0	18		<b>185034</b>	2006 <i>QO</i> <sub>118</sub>		7 15.5 350°11	1.7/15.2	18	
6 10	20 8.56	-32 12.1	1.732	2.597	14.4	20.1	6 10	20 7.97	-25 35.6	1.219	2.102	18.0	19.4
6 20	20 3.58	-32 39.0	1.646	2.579	11.3	19.8	6 20	20 3.65	-25 27.6	1.152	2.098	13.7	19.1
6 30	19 55.79	-33 2.2	1.581	2.560	7.8	19.6	6 30	19 56.03	-25 19.8	1.104	2.094	8.7	18.8
7 10	19 45.95	-33 16.0	1.541	2.542	5.0	19.4	7 10	19 46.08	-25 8.2	1.079	2.091	3.5	18.5
7 20	19 35.16	-33 15.9	1.526	2.525	5.4	19.4	7 20	19 35.22	-24 49.7	1.077	2.089	3.3	18.5
7 30	19 24.81	-32 59.5	1.536	2.507	8.7	19.5	7 30	19 25.16	-24 23.2	1.098	2.088	8.6	18.8
8 9	19 16.24	-32 27.7	1.570	2.490	12.4	19.7	8 9	19 17.40	-23 50.0	1.141	2.087	13.6	19.1
8 19	19 10.37	-31 44.0	1.626	2.473	15.9	19.9	8 19	19 12.88	-23 12.5	1.204	2.087	18.0	19.3
<b>187912</b>	2000 <i>VS</i> <sub>38</sub>		7 15.5 159°20	4.5/18.1	18		<b>180071</b>	2003 <i>BH</i> <sub>92</sub>		7 15.5 115°59	5.8/12.5	18	
6 10	20 2.31	-4 14.1	3.061	3.848	10.7	21.3	6 10	20 8.38	-36 41.7	2.240	3.088	12.2	20.4
6 20	19 57.36	-3 53.3	2.981	3.855	8.8	21.2	6 20	20 2.83	-37 46.3	2.178	3.095	9.7	20.3
6 30	19 51.15	-3 42.7	2.925	3.861	6.8	21.1	6 30	19 55.01	-38 45.2	2.139	3.101	7.3	20.1
7 10	19 44.11	-3 42.8	2.894	3.867	5.1	21.0	7 10	19 45.62	-39 32.7	2.126	3.108	5.9	20.1
7 20	19 36.73	-3 53.3	2.891	3.872	4.5	20.9	7 20	19 35.61	-40 4.2	2.140	3.114	6.4	20.1
7 30	19 29.61	-4 13.1	2.917	3.877	5.6	21.0	7 30	19 26.09	-40 17.5	2.180	3.121	8.4	20.2
8 9	19 23.28	-4 40.3	2.970	3.882	7.5	21.1	8 9	19 18.09	-40 13.3	2.245	3.127	10.8	20.4
8 19	19 18.17	-5 12.7	3.048	3.886	9.5	21.3	8 19	19 12.31	-39 54.3	2.331	3.133	13.1	20.6
<b>444674</b>	2007 <i>DJ</i> <sub>32</sub>		7 15.5 30°58	4.8/13.7	18		<b>27186</b>	1999 <i>CA</i> <sub>39</sub>		7 15.5 208°62	1.1/15.0	18	
6 10	20 7.25	-34 50.6	2.162	3.016	12.4	20.5	6 10	20 5.15	-22 53.2	2.075	2.931	12.7	18.2
6 20	20 1.88	-35 21.0	2.096	3.019	9.7	20.3	6 20	20 0.30	-23 20.2	1.998	2.930	9.6	18.0
6 30	19 54.32	-35 45.9	2.052	3.023	6.9	20.2	6 30	19 53.38	-23 50.8	1.944	2.929	6.0	17.7
7 10	19 45.31	-36 0.6	2.034	3.027	5.0	20.1	7 10	19 45.04	-24 21.7	1.916	2.928	2.3	17.5
7 20	19 35.78	-36 1.9	2.042	3.031	5.3	20.1	7 20	19 36.10	-24 49.5	1.915	2.927	2.3	17.5
7 30	19 26.83	-35 48.5	2.077	3.036	7.6	20.2	7 30	19 27.54	-25 11.6	1.942	2.926	6.0	17.7
8 9	19 19.39	-35 21.7	2.137	3.041	10.3	20.4	8 9	19 20.29	-25 26.6	1.995	2.925	9.6	18.0
8 19	19 14.14	-34 44.1	2.219	3.045	12.9	20.6	8 19	19 15.02	-25 34.5	2.070	2.923	12.7	18.2
<b>336260</b>	2008 <i>SE</i> <sub>165</sub>		7 15.5 338°72	11.3/19.3	16		<b>142346</b>	2002 <i>RN</i> <sub>207</sub>		7 15.5 18°14	1.0/15.2	17	
6 10	19 56.19	-0 29.2	1.185	2.030	20.9	19.3	6 10	20 4.38	-22 19.2	1.102	1.994	18.8	19.2
6 20	19 54.67	+0 33.3	1.106	2.009	18.0	19.1	6 20	20 0.99	-22 34.4	1.049	2.000	14.2	18.9
6 30	19 50.42	+1 10.8	1.044	1.989	14.9	18.8	6 30	19 54.35	-22 55.9	1.014	2.006	9.0	18.6
7 10	19 44.09	+1 17.4	1.000	1.971	12.3	18.6	7 10	19 45.47	-23 19.1	1.000	2.014	3.3	18.3
7 20	19 36.68	+0 49.7	0.975	1.954	11.3	18.5	7 20	19 35.79	-23 39.0	1.009	2.022	3.0	18.4
7 30	19 29.55	-0 10.9	0.970	1.939	12.7	18.5	7 30	19 26.99	-23 52.0	1.040	2.032	8.5	18.7
8 9	19 24.09	-1 37.7	0.985	1.926	15.8	18.6	8 9	19 20.53	-23 56.7	1.093	2.043	13.6	19.0
8 19	19 21.36	-3 21.0	1.018	1.914	19.4	18.8	8 19	19 17.25	-23 53.4	1.164	2.054	17.9	19.3
<b>342805</b>	2008 <i>WO</i> <sub>141</sub>		7 15.5 168°31	5.7/18.0	18		<b>65658</b>	Gurnikovskaya		7 15.5 306°67	2.2/14.8	18	
6 10	20 4.73	-4 13.8	2.329	3.126	13.4	21.0	6 10	20 6.40	-25 28.5	1.585	2.456	15.2	19.0
6 20	19 59.58	-3 43.6	2.250	3.130	11.0	20.8	6 20	20 2.26	-25 47.3	1.484	2.424	11.7	18.7
6 30	19 52.73	-3 26.3	2.193	3.133	8.5	20.7	6 30	19 55.22	-26 8.9	1.405	2.392	7.6	18.4
7 10	19 44.73	-3 23.0	2.161	3.136	6.4	20.5	7 10	19 45.89	-26 28.9	1.349	2.360	3.3	18.0
7 20	19 36.26	-3 33.6	2.156	3.138	5.7	20.5	7 20	19 35.31	-26 42.7	1.318	2.328	3.5	18.0
7 30	19 28.11	-3 56.8	2.177	3.140	7.1	20.6	7 30	19 24.88	-26 46.8	1.312	2.297	8.1	18.2
8 9	19 21.02	-4 29.8	2.225	3.141	9.4	20.7	8 9	19 16.05	-26 40.2	1.329	2.265	12.9	18.4
8 19	19 15.57	-5 9.5	2.297	3.142	11.9	20.9	8 19	19 9.95	-26 23.8	1.367	2.234	17.2	18.5
<b>178926</b>	2001 <i>QP</i> <sub>33</sub>		7 15.5 245°91	11.3/21.8	17		<b>232840</b>	2004 <i>TE</i> <sub>65</sub>		7 15.5 291°54	0.8/15.8	18	
6 10	20 7.62	+6 50.1	1.341	2.123	22.1	20.2	6 10	20 4.76	-17 37.7	1.688	2.548	15.0	20.8
6 20	20 3.22	+6 40.7	1.254	2.111	19.3	20.0	6 20	20 0.63	-17 57.7	1.593	2.526	11.5	20.5
6 30	19 55.83	+5 53.7	1.183	2.099	16.1	19.7	6 30	19 53.97	-18 27.7	1.520	2.504	7.5	20.2
7 10	19 46.08	+4 24.3	1.131	2.087	13.0	19.5	7 10	19 45.38	-19 5.1	1.470	2.482	2.9	19.9
7 20	19 35.04	+2 12.4	1.102	2.073	11.3	19.4	7 20	19 35.78	-19 46.2	1.447	2.460	2.2	19.8
7 30	19 24.18	-0 34.9	1.096	2.060	12.2	19.4	7 30	19 26.36	-20 27.2	1.449	2.438	7.0	20.1
8 9	19 14.99	-3 44.1	1.115	2.046	15.3	19.5	8 9	19 18.34	-21 4.6	1.476	2.416	11.5	20.3
8 19	19 8.64	-6 59.7	1.156	2.031	19.1	19.7	8 19	19 12.68	-21 36.4	1.524	2.395	15.5	20.5
<b>282306</b>	2002 <i>TC</i> <sub>6</sub>		7 15.5 339°79	7.0/18.1	18		<b>364539</b>	2007 <i>FG</i> <sub>43</sub>		7 15.5 13			

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>198247</b>	2004 <i>TP</i> <sub>213</sub>		7 15.5	72°85	8°2/18.9	17	<b>515081</b>	2010 <i>SZ</i> <sub>43</sub>		7 15.5	215°72	5°8/11.8	18
6 10	20 4.48	- 1 12.2	1.726	2.531	17.0	20.0	6 10	20 8.71	-41 14.2	2.936	3.764	10.1	22.1
6 20	19 59.87	- 0 24.7	1.661	2.539	14.3	19.8	6 20	20 2.79	-42 9.0	2.859	3.757	8.3	21.9
6 30	19 53.14	+ 0 3.6	1.615	2.548	11.4	19.7	6 30	19 54.90	-42 56.8	2.806	3.749	6.7	21.8
7 10	19 44.96	+ 0 10.4	1.591	2.556	9.1	19.6	7 10	19 45.63	-43 33.1	2.780	3.741	5.9	21.7
7 20	19 36.23	- 0 4.7	1.591	2.565	8.3	19.5	7 20	19 35.75	-43 54.2	2.780	3.733	6.3	21.8
7 30	19 27.98	- 0 39.7	1.616	2.574	9.5	19.6	7 30	19 26.19	-43 58.7	2.807	3.724	7.7	21.8
8 9	19 21.14	- 1 30.2	1.665	2.582	11.9	19.8	8 9	19 17.83	-43 47.0	2.860	3.715	9.6	22.0
8 19	19 16.41	- 2 30.5	1.735	2.591	14.6	20.0	8 19	19 11.34	-43 21.4	2.934	3.706	11.4	22.1
<b>444643</b>	2006 <i>YW</i> <sub>10</sub>		7 15.5	236°08	0°1/15.5	18	<b>398991</b>	2013 <i>ET</i> <sub>109</sub>		7 15.5	29°47	0°9/15.0	18
6 10	20 3.56	-19 46.6	2.375	3.223	11.6	21.9	6 10	20 2.98	-20 29.2	2.029	2.887	12.9	20.1
6 20	19 58.87	-20 8.6	2.290	3.218	8.8	21.7	6 20	19 58.71	-21 22.7	1.958	2.891	9.7	19.9
6 30	19 52.40	-20 35.8	2.229	3.212	5.5	21.5	6 30	19 52.43	-22 23.1	1.910	2.896	6.1	19.7
7 10	19 44.69	-21 5.7	2.194	3.206	2.0	21.3	7 10	19 44.75	-23 26.1	1.888	2.900	2.2	19.4
7 20	19 36.43	-21 35.8	2.186	3.200	1.6	21.2	7 20	19 36.47	-24 27.3	1.893	2.905	2.2	19.5
7 30	19 28.45	-22 3.5	2.207	3.193	5.2	21.5	7 30	19 28.55	-25 22.5	1.925	2.910	6.0	19.7
8 9	19 21.52	-22 27.3	2.255	3.187	8.5	21.7	8 9	19 21.90	-26 9.1	1.984	2.915	9.6	19.9
8 19	19 16.28	-22 46.1	2.327	3.181	11.5	21.9	8 19	19 17.18	-26 45.9	2.066	2.921	12.6	20.2
<b>257457</b>	1981 <i>EG</i> <sub>33</sub>		7 15.5	141°26	4°7/17.3	17	<b>248087</b>	2004 <i>RR</i> <sub>5</sub>		7 15.5	323°79	2°4/16.9	18
6 10	20 8.21	- 9 5.8	1.682	2.513	16.3	21.0	6 10	20 1.35	-11 49.4	2.078	2.918	13.3	19.7
6 20	20 2.78	- 8 51.4	1.613	2.522	13.0	20.8	6 20	19 57.43	-12 20.5	1.993	2.911	10.4	19.5
6 30	19 55.02	- 8 51.5	1.566	2.530	9.3	20.6	6 30	19 51.63	-13 4.4	1.929	2.904	7.0	19.3
7 10	19 45.66	- 9 6.0	1.542	2.538	5.9	20.4	7 10	19 44.48	-13 59.3	1.891	2.897	3.6	19.0
7 20	19 35.69	- 9 33.4	1.543	2.545	4.9	20.4	7 20	19 36.69	-15 2.0	1.880	2.890	2.7	19.0
7 30	19 26.23	-10 10.6	1.571	2.552	7.5	20.6	7 30	19 29.14	-16 8.5	1.896	2.884	5.7	19.1
8 9	19 18.34	-10 53.8	1.624	2.558	11.1	20.8	8 9	19 22.70	-17 14.7	1.939	2.878	9.3	19.4
8 19	19 12.75	-11 39.2	1.699	2.564	14.5	21.0	8 19	19 18.04	-18 17.2	2.005	2.872	12.5	19.5
<b>178424</b>	1998 <i>SS</i> <sub>85</sub>		7 15.5	341°29	6°8/13.4	18	<b>469972</b>	2006 <i>DZ</i> <sub>194</sub>		7 15.5	265°55	1°8/14.9	16
6 10	20 9.47	-34 7.1	1.376	2.251	16.8	19.1	6 10	20 8.23	-25 24.9	1.814	2.674	14.0	22.0
6 20	20 4.86	-35 1.7	1.311	2.247	13.2	18.9	6 20	20 3.02	-25 37.3	1.730	2.664	10.7	21.8
6 30	19 56.88	-35 51.2	1.266	2.243	9.6	18.7	6 30	19 55.33	-25 50.8	1.669	2.654	6.8	21.5
7 10	19 46.46	-36 27.3	1.244	2.240	7.0	18.5	7 10	19 45.85	-26 1.8	1.632	2.643	2.9	21.3
7 20	19 35.03	-36 43.1	1.245	2.237	7.6	18.6	7 20	19 35.59	-26 7.0	1.622	2.633	2.9	21.3
7 30	19 24.37	-36 35.5	1.269	2.234	10.7	18.7	7 30	19 25.75	-26 4.3	1.639	2.622	7.0	21.5
8 9	19 16.05	-36 6.4	1.316	2.232	14.5	19.0	8 9	19 17.48	-25 53.4	1.680	2.612	11.0	21.7
8 19	19 11.05	-35 20.9	1.381	2.231	18.0	19.2	8 19	19 11.61	-25 35.7	1.744	2.601	14.5	21.9
<b>476629</b>	2008 <i>SG</i> <sub>198</sub>		7 15.5	324°39	8°3/11.8	16	<b>388729</b>	2007 <i>VQ</i> <sub>234</sub>		7 15.5	304°13	2°5/16.4	18
6 10	20 5.30	-35 28.7	1.371	2.251	16.5	21.2	6 10	20 3.71	-15 4.5	1.777	2.630	14.6	20.8
6 20	20 2.10	-36 55.2	1.294	2.230	13.3	21.0	6 20	19 59.59	-14 54.6	1.685	2.612	11.4	20.5
6 30	19 55.44	-38 19.3	1.237	2.210	10.2	20.7	6 30	19 53.19	-14 53.7	1.615	2.595	7.7	20.3
7 10	19 46.06	-39 30.8	1.202	2.190	8.4	20.6	7 10	19 45.10	-15 1.0	1.569	2.577	3.8	20.0
7 20	19 35.26	-40 20.2	1.189	2.171	9.3	20.6	7 20	19 36.18	-15 15.1	1.549	2.560	3.0	19.9
7 30	19 24.85	-40 41.5	1.199	2.153	12.4	20.7	7 30	19 27.52	-15 33.7	1.555	2.543	6.7	20.1
8 9	19 16.63	-40 34.4	1.230	2.136	16.1	20.9	8 9	19 20.19	-15 54.4	1.585	2.526	10.8	20.3
8 19	19 11.85	-40 3.3	1.278	2.120	19.6	21.1	8 19	19 15.03	-16 15.2	1.637	2.510	14.5	20.5
<b>33790</b>	1999 <i>SA</i> <sub>9</sub>		7 15.5	4°24	1°0/16.0	18	<b>99234</b>	2001 <i>KU</i> <sub>13</sub>		7 15.5	338°72	0°8/15.3	18
6 10	20 1.00	-14 10.0	1.315	2.189	17.5	17.3	6 10	20 1.15	-21 0.2	1.140	2.033	18.2	18.7
6 20	19 58.10	-15 15.8	1.248	2.188	13.5	17.1	6 20	19 58.79	-21 26.1	1.067	2.019	14.0	18.4
6 30	19 52.47	-16 40.5	1.202	2.188	8.7	16.8	6 30	19 53.22	-22 1.8	1.013	2.006	8.9	18.0
7 10	19 44.85	-18 19.1	1.178	2.190	3.5	16.5	7 10	19 45.23	-22 43.0	0.980	1.994	3.2	17.7
7 20	19 36.32	-20 3.6	1.178	2.192	2.4	16.4	7 20	19 36.07	-23 23.8	0.969	1.983	3.0	17.6
7 30	19 28.26	-21 45.3	1.203	2.195	7.6	16.8	7 30	19 27.39	-23 58.6	0.981	1.974	8.8	17.9
8 9	19 21.98	-23 17.0	1.252	2.200	12.4	17.0	8 9	19 20.81	-24 24.1	1.013	1.965	14.2	18.2
8 19	19 18.38	-24 34.4	1.321	2.205	16.6	17.3	8 19	19 17.41	-24 39.0	1.064	1.959	18.9	18.5
<b>217741</b>	2000 <i>CC</i> <sub>9</sub>		7 15.5	242°37	2°2/17.0	18 R	<b>231306</b>	2006 <i>BQ</i> <sub>178</sub>		7 15.5	341°66	2°7/14.9	17
6 10	20 1.97	-11 12.4	2.920	3.739	10.4	20.6	6 10	20 5.81	-27 10.4	1.346	2.229	16.7	19.7
6 20	19 57.39	-11 34.3	2.819	3.724	8.2	20.4	6 20	20 1.90	-27 15.5	1.274	2.219	12.8	19.4
6 30	19 51.37	-12 5.5	2.741	3.708	5.6	20.2	6 30	19 54.93	-27 19.9	1.221	2.210	8.3	19.1
7 10	19 44.32	-12 44.8	2.691	3.693	3.1	20.0	7 10	19 45.77	-27 19.3	1.191	2.202	3.8	18.8
7 20	19 36.77	-13 30.3	2.669	3.677	2.4	19.9	7 20	19 35.69	-27 9.7	1.184	2.195	3.8	18.8
7 30	19 29.35	-14 19.8	2.677	3.660	4.6	20.1	7 30	19 26.25	-26 49.5	1.202	2.188	8.4	19.1
8 9	19 22.68	-15 10.7	2.713	3.643	7.3	20.2	8 9	19 18.87	-26 19.6	1.241	2.183	13.1	19.3
8 19	19 17.30	-16 0.7	2.774	3.626	9.9	20.4	8 19	19 14.48	-25 42.3	1.301	2.179	17.2	19.6
<b>66910</b>	1999 <i>VZ</i> <sub>165</sub>		7 15.5	33°63	5°9/13.6	18	<b>428225</b>	2006 <i>WU</i> <sub>35</sub>		7 15.5	303°67	0°6/15.3	17
6 10	20 9.38	-31 40.7	1.324	2.203	17.1	18.9	6 10	20 4.73	-19 27.8	1.406	2.280	16.6	21.3
6 20	20 4.69	-32 38.8	1.268	2.208	13.3	18.7	6 20	20 1.06	-20 10.1	1.324	2.265	12.7	21.0
6 30	19 56.69	-33 34.0	1.231	2.213	9.2	18.5	6 30	19 54.48	-21 4.1	1.262	2.250	8.1	20.7
7 10	19 46.36	-34 18.0	1.217	2.218	6.2	18.3	7 10	19 45.67	-22 5.2	1.223	2.236	2.9	20.4
7 20	19 35.16	-34 43.9	1.227	2.224	6.8	18.4	7 20	19 35.71	-23 7.3	1.208	2.221	2.6	20.3
7 30	19 24.81	-34 48.3	1.260	2.230	10.2	18.6	7 30	19 26.06	-24 4.4	1.218	2.207	8.0	20.6
8 9	19 16.82	-34 32.7	1.315	2.237	14.1	18.8	8 9	19 18.15	-24 52.1	1.251	2.194	13.0	20.9
8 19	19 12.11	-34 1.4	1.389	2.243	17.7	19.1	8 19	19 13.06	-25 28.5	1.305	2.181	17.3	21.1
<b>364260</b>	2006 <i>SV</i> <sub>364</sub>		7 15.5	6°62	1°7/15.3	17	<b>170430</b>	2003 <i>UH</i> <sub>98&lt;/</sub>					

EPHEMERIDES

7 15.5

7 15.6

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>425300</b>	2009 XV <sub>21</sub>		7 15.5 62°13	5°3/14.3	17		<b>163040</b>	2001 XV <sub>196</sub>		7 15.6 273°79	1°3/15.9	18	
6 10	20 12.50	-34 15.1	1.624	2.485	15.4	20.7	6 10	20 9.64	-18 52.4	1.485	2.346	16.6	20.2
6 20	20 6.33	-34 37.8	1.570	2.498	12.0	20.5	6 20	20 4.71	-18 39.9	1.391	2.325	12.8	19.9
6 30	19 57.33	-34 53.2	1.537	2.512	8.4	20.3	6 30	19 56.79	-18 33.7	1.318	2.302	8.4	19.6
7 10	19 46.52	-34 55.8	1.528	2.526	5.7	20.2	7 10	19 46.55	-18 32.2	1.268	2.280	3.4	19.2
7 20	19 35.20	-34 41.8	1.544	2.539	5.9	20.2	7 20	19 35.09	-18 33.0	1.243	2.256	2.6	19.1
7 30	19 24.84	-34 10.8	1.586	2.553	8.8	20.4	7 30	19 23.88	-18 34.0	1.244	2.233	7.9	19.4
8 9	19 16.64	-33 25.7	1.652	2.567	12.1	20.7	8 9	19 14.39	-18 33.9	1.268	2.209	12.9	19.6
8 19	19 11.30	-32 30.9	1.739	2.581	15.2	20.9	8 19	19 7.71	-18 32.2	1.313	2.185	17.4	19.8
<b>293952</b>	2007 TX <sub>29</sub>		7 15.5 275°59	2°6/14.5	18		<b>178812</b>	2001 FC <sub>89</sub>		7 15.6 346°40	5°3/14.2	17	
6 10	20 6.43	-26 53.7	1.939	2.801	13.2	20.9	6 10	20 7.25	-31 1.5	1.193	2.081	18.0	19.8
6 20	20 1.56	-27 26.9	1.859	2.793	10.1	20.7	6 20	20 3.47	-31 33.7	1.128	2.074	14.0	19.5
6 30	19 54.37	-28 1.3	1.800	2.784	6.5	20.5	6 30	19 56.16	-32 2.8	1.082	2.068	9.5	19.3
7 10	19 45.51	-28 32.4	1.767	2.776	3.2	20.3	7 10	19 46.30	-32 21.2	1.058	2.063	5.9	19.1
7 20	19 35.91	-28 56.2	1.761	2.768	3.5	20.3	7 20	19 35.39	-32 22.9	1.056	2.059	6.3	19.1
7 30	19 26.70	-29 9.9	1.782	2.760	7.0	20.5	7 30	19 25.28	-32 5.1	1.076	2.056	10.3	19.3
8 9	19 18.93	-29 12.9	1.827	2.752	10.6	20.7	8 9	19 17.63	-31 29.8	1.118	2.053	14.8	19.5
8 19	19 13.40	-29 5.9	1.895	2.744	13.9	20.9	8 19	19 13.44	-30 41.5	1.178	2.052	18.9	19.8
<b>30380</b>	2000 JE <sub>76</sub>		7 15.5 234°21	2°0/16.3	18		<b>512656</b>	2016 TC <sub>68</sub>		7 15.6 292°92	2°4/16.4	18	
6 10	20 8.03	-15 19.1	1.495	2.352	16.7	18.9	6 10	20 4.74	-14 52.7	1.912	2.759	14.0	21.5
6 20	20 3.23	-15 30.5	1.416	2.345	13.0	18.7	6 20	20 0.09	-14 40.6	1.832	2.755	10.9	21.3
6 30	19 55.66	-15 54.1	1.356	2.338	8.5	18.4	6 30	19 53.35	-14 36.9	1.773	2.751	7.3	21.1
7 10	19 46.05	-16 27.7	1.320	2.330	3.8	18.1	7 10	19 45.15	-14 40.8	1.740	2.747	3.7	20.8
7 20	19 35.47	-17 7.7	1.310	2.322	2.8	18.0	7 20	19 36.33	-14 50.6	1.732	2.743	2.9	20.8
7 30	19 25.28	-17 50.0	1.324	2.314	7.5	18.3	7 30	19 27.87	-15 4.8	1.752	2.739	6.2	21.0
8 9	19 16.81	-18 30.6	1.363	2.305	12.2	18.5	8 9	19 20.74	-15 21.0	1.797	2.735	9.9	21.2
8 19	19 10.99	-19 7.0	1.424	2.296	16.3	18.8	8 19	19 15.62	-15 37.8	1.865	2.731	13.3	21.4
<b>200292</b>	2000 AY <sub>115</sub>		7 15.5 176°81	1°5/16.2	18		<b>359446</b>	2010 MZ <sub>97</sub>		7 15.6 227°04	5°5/13.3	18	
6 10	20 6.69	-16 24.6	2.554	3.385	11.4	20.9	6 10	20 10.09	-38 33.1	2.480	3.318	11.5	21.3
6 20	20 0.99	-16 16.0	2.471	3.387	8.7	20.7	6 20	20 3.96	-39 3.5	2.403	3.313	9.2	21.1
6 30	19 53.63	-16 12.6	2.413	3.389	5.7	20.5	6 30	19 55.69	-39 26.6	2.350	3.308	7.0	21.0
7 10	19 45.17	-16 13.4	2.382	3.390	2.6	20.3	7 10	19 45.97	-39 37.7	2.323	3.303	5.6	20.9
7 20	19 36.26	-16 17.2	2.379	3.391	2.0	20.3	7 20	19 35.70	-39 33.6	2.322	3.298	5.9	20.9
7 30	19 27.69	-16 22.6	2.406	3.391	5.0	20.5	7 30	19 25.92	-39 13.3	2.349	3.292	7.7	21.0
8 9	19 20.16	-16 28.7	2.460	3.390	8.0	20.7	8 9	19 17.59	-38 38.2	2.401	3.287	10.1	21.1
8 19	19 14.25	-16 34.6	2.539	3.389	10.8	20.9	8 19	19 11.38	-37 51.2	2.476	3.281	12.4	21.3
<b>75614</b>	2000 AS <sub>40</sub>		7 15.5 225°28	1°9/14.8	18		<b>262646</b>	2006 WS <sub>53</sub>		7 15.6 132°32	1°9/14.8	17	
6 10	20 7.56	-25 54.3	2.207	3.059	12.2	19.7	6 10	20 9.73	-24 34.0	1.787	2.645	14.3	21.2
6 20	20 2.12	-26 16.6	2.121	3.051	9.3	19.5	6 20	20 4.02	-25 7.5	1.722	2.655	10.8	21.0
6 30	19 54.58	-26 39.8	2.060	3.043	5.9	19.3	6 30	19 55.87	-25 43.7	1.679	2.664	6.9	20.8
7 10	19 45.57	-27 0.4	2.024	3.035	2.6	19.0	7 10	19 46.06	-26 17.9	1.661	2.672	2.9	20.5
7 20	19 35.92	-27 15.5	2.017	3.026	2.8	19.0	7 20	19 35.63	-26 45.8	1.670	2.680	3.0	20.6
7 30	19 26.61	-27 22.8	2.037	3.017	6.2	19.2	7 30	19 25.77	-27 4.6	1.706	2.688	6.9	20.8
8 9	19 18.59	-27 21.9	2.084	3.007	9.6	19.4	8 9	19 17.60	-27 13.6	1.768	2.695	10.7	21.1
8 19	19 12.56	-27 13.4	2.153	2.998	12.6	19.6	8 19	19 11.84	-27 13.5	1.851	2.702	14.1	21.3
<b>122589</b>	2000 RV <sub>27</sub>		7 15.6 278°55	3°3/14.7	18		<b>264896</b>	2002 TW <sub>46</sub>		7 15.6 332°65	4°8/16.9	18	
6 10	20 11.12	-29 53.5	1.750	2.610	14.5	19.4	6 10	19 59.55	-12 3.3	1.128	2.009	19.3	19.5
6 20	20 5.44	-29 59.7	1.663	2.594	11.2	19.2	6 20	19 57.51	-11 42.4	1.050	1.989	15.4	19.1
6 30	19 56.98	-30 2.7	1.597	2.579	7.5	18.9	6 30	19 52.43	-11 38.1	0.989	1.970	10.9	18.8
7 10	19 46.51	-29 57.7	1.555	2.563	4.0	18.7	7 10	19 45.00	-11 51.6	0.947	1.953	6.3	18.5
7 20	19 35.16	-29 41.4	1.540	2.546	4.1	18.6	7 20	19 36.36	-12 21.6	0.928	1.937	5.1	18.4
7 30	19 24.29	-29 12.3	1.552	2.530	7.8	18.8	7 30	19 28.06	-13 4.3	0.929	1.922	9.2	18.6
8 9	19 15.19	-28 31.9	1.588	2.514	11.9	19.0	8 9	19 21.66	-13 54.4	0.952	1.908	14.3	18.8
8 19	19 8.77	-27 43.5	1.646	2.498	15.5	19.2	8 19	19 18.28	-14 46.2	0.992	1.896	19.1	19.0
<b>13462</b>	2076 T <sub>-2</sub>		7 15.6 41°09	2°8/16.4	18		<b>357164</b>	2002 CW <sub>202</sub>		7 15.6 194°91	2°9/17.3	18	
6 10	20 6.54	-14 52.6	1.094	1.972	20.0	18.1	6 10	20 2.33	-10 4.9	2.445	3.268	12.1	20.8
6 20	20 2.56	-14 51.2	1.040	1.980	15.4	17.8	6 20	19 57.85	-10 22.4	2.361	3.267	9.5	20.7
6 30	19 55.36	-15 4.7	1.003	1.989	10.2	17.6	6 30	19 51.76	-10 51.0	2.300	3.266	6.6	20.5
7 10	19 45.93	-15 31.1	0.988	1.998	4.8	17.3	7 10	19 44.54	-11 29.7	2.265	3.265	3.9	20.3
7 20	19 35.68	-16 6.3	0.995	2.007	3.5	17.2	7 20	19 36.83	-12 16.3	2.257	3.263	3.0	20.2
7 30	19 26.27	-16 45.3	1.025	2.017	8.5	17.6	7 30	19 29.37	-13 8.0	2.278	3.262	5.3	20.4
8 9	19 19.15	-17 23.6	1.076	2.028	13.6	17.9	8 9	19 22.87	-14 1.7	2.326	3.260	8.2	20.6
8 19	19 15.21	-17 58.1	1.146	2.038	18.0	18.2	8 19	19 17.90	-14 54.6	2.399	3.258	11.0	20.8
<b>419829</b>	2010 XK <sub>52</sub>		7 15.6 108°59	0°2/15.6	15	C	<b>92866</b>	2000 QD <sub>212</sub>		7 15.6 182°15	5°6/14.8	18	
6 10	20 13.37	-20 40.4	2.523	3.350	11.6	23.3	6 10	20 4.76	-3 48.5	2.042	2.846	14.8	19.9
6 20	20 5.71	-20 38.3	2.468	3.384	8.7	23.2	6 20	19 59.95	-3 48.1	1.961	2.847	12.1	19.8
6 30	19 56.40	-20 38.4	2.438	3.417	5.5	23.0	6 30	19 53.20	-4 4.6	1.901	2.847	9.2	19.6
7 10	19 46.11	-20 38.9	2.437	3.449	2.0	22.9	7 10	19 45.10	-4 38.4	1.865	2.847	6.6	19.4
7 20	19 35.61	-20 38.3	2.466	3.480	1.5	22.9	7 20	19 36.41	-5 27.8	1.856	2.846	5.7	19.4
7 30	19 25.73	-20 35.6	2.526	3.509	4.9	23.2	7 30	19 28.01	-6 29.8	1.873	2.845	7.3	19.5
8 9	19 17.19	-20 30.5	2.614	3.538	7.9	23.4	8 9	19 20.80	-7 39.8	1.917	2.844	10.1	19.6
8 19	19 10.48	-20 23.2	2.728	3.565	10.5	23.6	8 19	19 15.42	-8 53.1	1.984	2.842	13.0	19.8
<b>512380</b>	2016 NH <sub>65</sub>		7 15.6 255°10	0°5/15.8	18		<b>66147</b>	1998 TC <sub>10</sub>		7 15.6 224°22	0°5/15.3	18	
6 10	20 5.48	-16											



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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>204081</b>	2003 <i>WX</i> <sub>27</sub>		7 15.6 222°46'	2°5/14.5	18		<b>211360</b>	2002 <i>TM</i> <sub>193</sub>		7 15.6 280°46'	1°9/14.9	18	
6 10	20 7.57	-27 14.4	2.054	2.910	12.8	21.1	6 10	20 6.62	-25 34.2	1.946	2.806	13.3	20.9
6 20	20 2.28	-27 42.9	1.975	2.906	9.7	20.9	6 20	20 1.73	-25 53.3	1.860	2.794	10.1	20.6
6 30	19 54.76	-28 11.6	1.919	2.902	6.3	20.7	6 30	19 54.52	-26 13.9	1.797	2.781	6.5	20.4
7 10	19 45.69	-28 36.7	1.889	2.897	3.1	20.5	7 10	19 45.65	-26 32.3	1.758	2.769	2.8	20.1
7 20	19 35.96	-28 54.3	1.886	2.893	3.4	20.5	7 20	19 36.03	-26 45.2	1.747	2.757	2.9	20.1
7 30	19 26.63	-29 2.3	1.910	2.888	6.7	20.7	7 30	19 26.76	-26 50.2	1.762	2.744	6.7	20.3
8 9	19 18.72	-29 0.3	1.960	2.883	10.1	20.9	8 9	19 18.90	-26 46.6	1.803	2.732	10.5	20.5
8 19	19 12.96	-28 49.3	2.033	2.878	13.2	21.1	8 19	19 13.25	-26 35.4	1.866	2.720	13.8	20.7
<b>90605</b>	4814 <i>P-L</i>		7 15.6 265°26'	0°5/15.8	18		<b>511210</b>	2014 <i>AW</i> <sub>19</sub>		7 15.6 260°30'	3°0/17.1	18	
6 10	20 3.94	-18 40.8	2.170	3.019	12.5	19.9	6 10	20 4.92	-10 36.5	1.960	2.792	14.3	21.9
6 20	19 59.36	-18 57.8	2.083	3.011	9.5	19.7	6 20	20 0.39	-11 3.1	1.863	2.776	11.3	21.7
6 30	19 52.86	-19 21.0	2.020	3.003	6.1	19.5	6 30	19 53.70	-11 44.4	1.788	2.759	7.8	21.4
7 10	19 44.99	-19 48.2	1.983	2.995	2.3	19.2	7 10	19 45.38	-12 39.1	1.738	2.742	4.3	21.2
7 20	19 36.50	-20 16.9	1.973	2.986	1.7	19.2	7 20	19 36.22	-13 44.2	1.715	2.724	3.2	21.1
7 30	19 28.29	-20 44.4	1.990	2.978	5.5	19.4	7 30	19 27.20	-14 55.3	1.720	2.706	6.4	21.2
8 9	19 21.24	-21 8.6	2.034	2.969	9.1	19.6	8 9	19 19.34	-16 7.7	1.751	2.688	10.2	21.4
8 19	19 16.00	-21 28.6	2.102	2.961	12.3	19.8	8 19	19 13.44	-17 17.4	1.805	2.670	13.8	21.6
<b>62952</b>	2000 <i>VV</i> <sub>34</sub>		7 15.6 308°23'	6°9/11.8	18		<b>180392</b>	2004 <i>AQ</i> <sub>7</sub>		7 15.6 93°59'	0°4/15.7	17	
6 10	20 6.33	-31 38.8	1.502	2.378	15.6	18.3	6 10	20 9.22	-19 27.5	1.567	2.427	15.9	20.4
6 20	20 2.79	-33 19.6	1.410	2.347	12.4	18.0	6 20	20 3.77	-19 36.2	1.507	2.440	12.1	20.2
6 30	19 55.97	-35 5.3	1.339	2.317	9.0	17.8	6 30	19 55.76	-19 51.6	1.468	2.453	7.6	19.9
7 10	19 46.42	-36 46.3	1.291	2.286	7.0	17.6	7 10	19 46.07	-20 10.7	1.454	2.466	2.8	19.7
7 20	19 35.21	-38 12.0	1.268	2.256	8.1	17.6	7 20	19 35.79	-20 30.1	1.465	2.479	2.1	19.6
7 30	19 23.98	-39 14.1	1.270	2.226	11.6	17.7	7 30	19 26.21	-20 47.0	1.503	2.492	6.8	20.0
8 9	19 14.52	-39 49.4	1.292	2.197	15.6	17.8	8 9	19 18.44	-20 59.9	1.565	2.504	11.1	20.3
8 19	19 8.22	-39 59.5	1.333	2.168	19.4	18.0	8 19	19 13.21	-21 8.3	1.649	2.516	14.7	20.5
<b>380018</b>	2013 <i>PB</i> <sub>70</sub>		7 15.6 9°71'	1°4/15.2	17		<b>205850</b>	2002 <i>EX</i> <sub>54</sub>		7 15.6 39°04'	0°3/15.5	17	
6 10	20 2.62	-23 14.3	0.984	1.886	19.7	19.7	6 10	20 7.03	-20 37.6	1.087	1.975	19.4	20.1
6 20	20 0.05	-23 25.1	0.931	1.887	14.9	19.5	6 20	20 2.92	-20 52.1	1.042	1.989	14.6	19.9
6 30	19 54.00	-23 41.3	0.897	1.891	9.4	19.2	6 30	19 55.55	-21 14.7	1.014	2.005	9.2	19.7
7 10	19 45.52	-23 58.2	0.882	1.895	3.6	18.9	7 10	19 46.03	-21 41.0	1.008	2.021	3.3	19.4
7 20	19 36.14	-24 10.8	0.888	1.902	3.3	18.9	7 20	19 35.85	-22 5.9	1.024	2.038	2.7	19.4
7 30	19 27.68	-24 15.6	0.916	1.910	9.1	19.2	7 30	19 26.68	-22 25.5	1.064	2.056	8.3	19.8
8 9	19 21.72	-24 11.6	0.964	1.919	14.4	19.5	8 9	19 19.93	-22 38.0	1.125	2.075	13.4	20.1
8 19	19 19.16	-23 59.7	1.030	1.930	18.9	19.9	8 19	19 16.38	-22 43.3	1.205	2.094	17.6	20.4
<b>75265</b>	1999 <i>XE</i> <sub>13</sub>		7 15.6 204°55'	6°5/18.1	18		<b>507670</b>	2013 <i>RW</i> <sub>61</sub>		7 15.6 324°24'	1°7/15.1	17	
6 10	20 6.93	-3 50.1	1.989	2.790	15.2	20.4	6 10	20 5.80	-24 14.6	1.289	2.172	17.2	21.1
6 20	20 1.67	-3 20.5	1.903	2.786	12.6	20.2	6 20	20 2.10	-24 27.4	1.213	2.159	13.2	20.9
6 30	19 54.35	-3 6.2	1.839	2.781	9.7	20.0	6 30	19 55.25	-24 43.9	1.156	2.146	8.4	20.6
7 10	19 45.55	-3 8.9	1.799	2.775	7.3	19.8	7 10	19 46.05	-24 59.7	1.121	2.134	3.4	20.2
7 20	19 36.08	-3 28.4	1.784	2.769	6.5	19.8	7 20	19 35.74	-25 10.2	1.110	2.122	3.3	20.2
7 30	19 26.90	-4 3.1	1.796	2.761	8.1	19.8	7 30	19 25.95	-25 12.1	1.122	2.111	8.5	20.5
8 9	19 18.94	-4 49.3	1.833	2.754	10.9	20.0	8 9	19 18.20	-25 4.8	1.156	2.101	13.6	20.7
8 19	19 12.93	-5 43.0	1.894	2.745	13.8	20.2	8 19	19 13.54	-24 49.2	1.210	2.092	18.0	20.9
<b>344519</b>	2002 <i>RH</i> <sub>293</sub>		7 15.6 231°19'	7°1/19.0	18		<b>257191</b>	2008 <i>LE</i> <sub>7</sub>		7 15.6 230°48'	4°8/18.2	18	
6 10	20 3.18	-0 15.1	2.209	2.994	14.4	21.4	6 10	20 1.50	-5 11.3	2.474	3.279	12.5	21.1
6 20	19 58.67	+0 10.3	2.122	2.987	12.1	21.2	6 20	19 57.22	-5 2.6	2.389	3.276	10.2	20.9
6 30	19 52.38	+0 19.1	2.055	2.980	9.8	21.1	6 30	19 51.38	-5 6.6	2.326	3.273	7.7	20.8
7 10	19 44.82	+0 9.8	2.012	2.973	7.8	20.9	7 10	19 44.47	-5 23.7	2.288	3.270	5.5	20.6
7 20	19 36.67	-0 17.9	1.994	2.965	7.1	20.9	7 20	19 37.09	-5 52.9	2.277	3.267	4.8	20.6
7 30	19 28.76	-1 2.1	2.002	2.957	8.1	20.9	7 30	19 29.94	-6 32.3	2.293	3.263	6.2	20.7
8 9	19 21.89	-1 59.2	2.036	2.949	10.3	21.1	8 9	19 23.73	-7 19.2	2.335	3.260	8.6	20.8
8 19	19 16.68	-3 4.9	2.093	2.941	12.8	21.2	8 19	19 18.98	-8 10.1	2.402	3.257	11.1	21.0
<b>480392</b>	2015 <i>KS</i> <sub>51</sub>		7 15.6 9°29'	1°7/16.1	16		<b>514321</b>	2016 <i>LE</i> <sub>57</sub>		7 15.6 18°13'	6°4/19.1	18	
6 10	20 3.92	-17 0.0	1.611	2.473	15.4	20.8	6 10	20 2.52	-3 8.1	1.557	2.382	17.7	21.2
6 20	19 59.79	-16 53.4	1.541	2.474	11.8	20.6	6 20	19 58.80	-3 21.2	1.486	2.384	14.5	21.0
6 30	19 53.30	-16 55.0	1.493	2.476	7.7	20.4	6 30	19 52.74	-3 57.5	1.434	2.387	11.0	20.8
7 10	19 45.18	-17 3.4	1.468	2.478	3.4	20.1	7 10	19 45.04	-4 57.2	1.404	2.390	7.8	20.6
7 20	19 36.42	-17 16.4	1.468	2.481	2.5	20.1	7 20	19 36.62	-6 17.2	1.398	2.393	6.4	20.5
7 30	19 28.17	-17 31.5	1.494	2.484	6.7	20.4	7 30	19 28.62	-7 52.1	1.417	2.397	8.3	20.6
8 9	19 21.49	-17 46.7	1.544	2.488	10.8	20.6	8 9	19 22.09	-9 34.2	1.461	2.402	11.6	20.8
8 19	19 17.13	-18 0.3	1.616	2.492	14.5	20.8	8 19	19 17.83	-11 16.3	1.528	2.406	15.0	21.1
<b>239580</b>	2008 <i>TP</i> <sub>140</sub>		7 15.6 177°48'	5°9/13.5	18		<b>490111</b>	2008 <i>UY</i> <sub>43</sub>		7 15.6 324°32'	9°6/18.1	16	
6 10	20 13.97	-38 0.1	2.154	2.994	12.9	20.3	6 10	20 0.99	-2 44.8	1.405	2.239	18.8	21.9
6 20	20 7.14	-38 34.7	2.084	2.995	10.3	20.1	6 20	19 58.06	-1 38.5	1.320	2.218	16.0	21.6
6 30	19 57.81	-39 1.3	2.036	2.997	7.8	20.0	6 30	19 52.55	-0 50.7	1.252	2.197	12.9	21.4
7 10	19 46.79	-39 14.3	2.014	2.997	6.0	19.9	7 10	19 45.06	-0 26.2	1.204	2.178	10.4	21.2
7 20	19 35.17	-39 9.8	2.019	2.998	6.4	19.9	7 20	19 36.55	-0 28.0	1.179	2.159	9.7	21.1
7 30	19 24.20	-38 46.9	2.051	2.997	8.5	20.0	7 30	19 28.26	-0 55.7	1.175	2.141	11.3	21.1
8 9	19 14.99	-38 7.5	2.107	2.997	11.1	20.2	8 9	19 21.46	-1 45.3	1.192	2.124	14.5	21.2
8 19	19 8.29	-37 15.7	2.186	2.996	13.6	20.4	8 19	19 17.15	-2 50.3	1.229	2.108	18.0	21.4
<b>229714</b>	2007 <i>EH</i> <sub>147</sub>		7 15.6 13°51'	4°1/14.2	17		<b>156877</b>	2003 <i>DZ</i> <sub>21</sub>		7 15.6 217°96'	0°8/15.2		

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>249028</b>	2007 <i>RS</i> <sub>297</sub>		7 15.6	18 <sup>o</sup> 75	5 <sup>o</sup> 3/14.3	18	<b>98242</b>	2000 <i>SS</i> <sub>162</sub>		7 15.6	141 <sup>o</sup> 22	1 <sup>o</sup> 8/15.1	18
6 10	20 10.71	-34 3.5	1.575	2.440	15.6	20.0	6 10	20 11.93	-25 4.0	1.570	2.432	15.8	19.6
6 20	20 5.25	-34 22.3	1.512	2.443	12.1	19.8	6 20	20 6.02	-25 19.4	1.504	2.439	12.0	19.3
6 30	19 56.86	-34 34.2	1.470	2.447	8.5	19.6	6 30	19 57.33	-25 36.4	1.459	2.444	7.6	19.1
7 10	19 46.52	-34 33.4	1.451	2.450	5.7	19.4	7 10	19 46.73	-25 50.6	1.438	2.450	3.1	18.8
7 20	19 35.53	-34 16.0	1.457	2.455	5.9	19.4	7 20	19 35.42	-25 58.0	1.444	2.455	3.1	18.9
7 30	19 25.38	-33 41.4	1.489	2.459	9.0	19.6	7 30	19 24.82	-25 56.7	1.476	2.460	7.5	19.1
8 9	19 17.36	-32 52.3	1.544	2.464	12.5	19.8	8 9	19 16.16	-25 46.5	1.532	2.464	11.7	19.4
8 19	19 12.23	-31 53.3	1.620	2.470	15.8	20.1	8 19	19 10.27	-25 29.3	1.609	2.468	15.4	19.6
<b>446489</b>	2014 <i>KS</i> <sub>39</sub>		7 15.6	336 <sup>o</sup> 03	3 <sup>o</sup> 0/17.4	18	<b>426593</b>	2013 <i>SP</i> <sub>33</sub>		7 15.6	178 <sup>o</sup> 95	3 <sup>o</sup> 9/14.3	17
6 10	20 0.01	-9 32.4	1.717	2.563	15.4	20.1	6 10	20 11.14	-29 46.6	1.688	2.550	14.9	21.2
6 20	19 56.93	-10 20.6	1.627	2.548	12.2	19.8	6 20	20 5.46	-30 19.8	1.618	2.550	11.4	21.0
6 30	19 51.64	-11 28.2	1.559	2.533	8.4	19.6	6 30	19 57.01	-30 51.2	1.570	2.551	7.6	20.8
7 10	19 44.69	-12 53.2	1.515	2.519	4.6	19.3	7 10	19 46.63	-31 15.1	1.546	2.551	4.4	20.6
7 20	19 36.89	-14 31.0	1.496	2.506	3.2	19.2	7 20	19 35.48	-31 27.0	1.548	2.551	4.7	20.6
7 30	19 29.27	-16 15.3	1.504	2.494	6.6	19.4	7 30	19 24.96	-31 24.4	1.576	2.551	8.1	20.8
8 9	19 22.91	-17 58.8	1.537	2.483	10.7	19.6	8 9	19 16.31	-31 8.1	1.629	2.550	11.9	21.0
8 19	19 18.65	-19 35.9	1.594	2.473	14.5	19.8	8 19	19 10.37	-30 40.8	1.703	2.550	15.3	21.2
<b>71856</b>	2000 <i>VV</i> <sub>4</sub>		7 15.6	164 <sup>o</sup> 28	3 <sup>o</sup> 3/16.8	17	<b>371550</b>	2006 <i>VC</i> <sub>10</sub>		7 15.6	21 <sup>o</sup> 83	1 <sup>o</sup> 7/15.1	17
6 10	20 8.80	-12 23.8	1.751	2.588	15.5	20.4	6 10	20 5.06	-23 8.2	1.129	2.019	18.6	20.4
6 20	20 3.30	-12 17.1	1.677	2.593	12.1	20.2	6 20	20 1.56	-23 34.7	1.076	2.026	14.1	20.2
6 30	19 55.47	-12 21.9	1.625	2.597	8.3	20.0	6 30	19 54.83	-24 7.0	1.042	2.034	8.9	19.9
7 10	19 46.03	-12 37.5	1.597	2.601	4.6	19.8	7 10	19 45.87	-24 39.6	1.030	2.043	3.4	19.6
7 20	19 35.92	-13 1.7	1.595	2.603	3.6	19.7	7 20	19 36.11	-25 6.9	1.040	2.053	3.3	19.7
7 30	19 26.28	-13 31.8	1.621	2.606	6.9	19.9	7 30	19 27.22	-25 24.8	1.073	2.063	8.6	20.0
8 9	19 18.16	-14 4.8	1.672	2.608	10.7	20.2	8 9	19 20.64	-25 32.1	1.127	2.075	13.5	20.3
8 19	19 12.30	-14 37.9	1.745	2.609	14.2	20.4	8 19	19 17.23	-25 29.5	1.201	2.088	17.7	20.6
<b>304360</b>	2006 <i>SM</i> <sub>333</sub>		7 15.6	281 <sup>o</sup> 60	0 <sup>o</sup> 1/15.6	18	<b>399258</b>	2014 <i>HX</i> <sub>35</sub>		7 15.6	357 <sup>o</sup> 07	10 <sup>o</sup> 0/9.9	18
6 10	20 4.45	-19 55.8	2.056	2.910	12.9	20.5	6 10	20 4.59	-40 23.6	1.540	2.409	15.7	19.4
6 20	19 59.84	-20 17.8	1.978	2.909	9.8	20.3	6 20	20 1.36	-42 19.8	1.483	2.404	13.0	19.2
6 30	19 53.22	-20 45.6	1.923	2.908	6.2	20.1	6 30	19 54.89	-44 8.0	1.447	2.400	10.9	19.1
7 10	19 45.19	-21 16.4	1.894	2.906	2.3	19.9	7 10	19 45.99	-45 37.5	1.434	2.398	10.0	19.0
7 20	19 36.57	-21 47.1	1.892	2.905	1.8	19.8	7 20	19 35.94	-46 39.7	1.443	2.397	10.9	19.1
7 30	19 28.31	-22 15.0	1.917	2.904	5.8	20.1	7 30	19 26.44	-47 10.2	1.475	2.397	13.0	19.2
8 9	19 21.30	-22 38.1	1.968	2.903	9.4	20.3	8 9	19 19.08	-47 10.3	1.527	2.398	15.6	19.4
8 19	19 16.23	-22 55.7	2.042	2.901	12.6	20.5	8 19	19 14.94	-46 44.6	1.597	2.400	18.1	19.6
<b>374935</b>	2007 <i>BL</i>		7 15.6	135 <sup>o</sup> 23	0 <sup>o</sup> 2/15.5	17	<b>346679</b>	2008 <i>YN</i> <sub>39</sub>		7 15.6	302 <sup>o</sup> 01	2 <sup>o</sup> 1/14.5	18
6 10	20 9.77	-21 10.1	1.923	2.772	13.8	21.4	6 10	20 4.57	-21 44.0	1.685	2.552	14.6	20.5
6 20	20 3.83	-21 21.6	1.855	2.784	10.4	21.2	6 20	20 0.75	-22 56.2	1.591	2.529	11.2	20.2
6 30	19 55.68	-21 37.1	1.811	2.794	6.6	21.0	6 30	19 54.29	-24 19.3	1.519	2.506	7.1	19.9
7 10	19 46.07	-21 53.8	1.792	2.805	2.4	20.8	7 10	19 45.76	-25 47.8	1.472	2.484	3.0	19.6
7 20	19 35.92	-22 8.9	1.801	2.814	1.9	20.8	7 20	19 36.07	-27 14.5	1.451	2.461	3.4	19.6
7 30	19 26.33	-22 20.1	1.837	2.823	6.1	21.0	7 30	19 26.46	-28 32.5	1.457	2.439	7.8	19.8
8 9	19 18.27	-22 26.6	1.900	2.832	9.9	21.3	8 9	19 18.24	-29 37.0	1.487	2.417	12.2	20.0
8 19	19 12.41	-22 28.3	1.986	2.840	13.1	21.5	8 19	19 12.48	-30 26.3	1.539	2.396	16.1	20.2
<b>230933</b>	2004 <i>VQ</i> <sub>83</sub>		7 15.6	83 <sup>o</sup> 29	3 <sup>o</sup> 0/14.3	17	<b>294617</b>	2008 <i>AC</i> <sub>28</sub>		7 15.6	213 <sup>o</sup> 35	1 <sup>o</sup> 7/14.9	17
6 10	20 9.43	-26 49.3	1.833	2.692	14.0	20.2	6 10	20 10.29	-24 25.4	1.820	2.676	14.2	22.0
6 20	20 3.69	-27 40.6	1.783	2.715	10.5	20.0	6 20	20 4.64	-24 52.1	1.739	2.671	10.8	21.8
6 30	19 55.63	-28 32.4	1.754	2.737	6.8	19.8	6 30	19 56.46	-25 21.7	1.680	2.664	6.9	21.6
7 10	19 46.04	-29 19.4	1.752	2.760	3.5	19.7	7 10	19 46.45	-25 50.0	1.646	2.658	2.9	21.3
7 20	19 35.97	-29 56.8	1.776	2.782	3.8	19.7	7 20	19 35.63	-26 12.8	1.640	2.650	2.9	21.3
7 30	19 26.57	-30 21.9	1.828	2.803	7.1	20.0	7 30	19 25.21	-26 27.2	1.660	2.642	7.0	21.5
8 9	19 18.86	-30 34.2	1.904	2.825	10.5	20.2	8 9	19 16.38	-26 32.3	1.706	2.634	11.0	21.8
8 19	19 13.52	-30 35.4	2.003	2.846	13.5	20.5	8 19	19 9.98	-26 28.8	1.774	2.625	14.6	22.0
<b>249793</b>	2000 <i>YB</i> <sub>14</sub>		7 15.6	207 <sup>o</sup> 48	2 <sup>o</sup> 0/16.2	17	<b>233336</b>	2006 <i>CK</i> <sub>50</sub>		7 15.6	98 <sup>o</sup> 96	0 <sup>o</sup> 9/15.9	17
6 10	20 9.41	-16 15.4	1.727	2.575	15.2	21.0	6 10	20 5.75	-17 26.6	1.776	2.631	14.6	20.8
6 20	20 3.91	-16 6.0	1.647	2.571	11.8	20.8	6 20	20 1.05	-17 44.7	1.704	2.634	11.1	20.6
6 30	19 55.95	-16 4.6	1.587	2.566	7.8	20.5	6 30	19 54.09	-18 11.4	1.654	2.636	7.1	20.3
7 10	19 46.24	-16 10.0	1.553	2.562	3.6	20.2	7 10	19 45.55	-18 44.0	1.628	2.639	2.8	20.1
7 20	19 35.75	-16 20.1	1.544	2.556	2.7	20.2	7 20	19 36.36	-19 19.1	1.628	2.642	2.0	20.0
7 30	19 25.69	-16 32.8	1.563	2.550	6.8	20.4	7 30	19 27.61	-19 53.4	1.655	2.644	6.3	20.3
8 9	19 17.18	-16 46.3	1.607	2.544	11.0	20.6	8 9	19 20.33	-20 24.2	1.708	2.647	10.3	20.5
8 19	19 11.03	-16 59.0	1.673	2.537	14.7	20.9	8 19	19 15.25	-20 50.2	1.783	2.649	13.8	20.8
<b>90888</b>	1997 <i>AB</i> <sub>3</sub>		7 15.6	235 <sup>o</sup> 80	2 <sup>o</sup> 4/14.8	18	<b>379178</b>	2009 <i>RF</i> <sub>11</sub>		7 15.6	293 <sup>o</sup> 49	0 <sup>o</sup> 9/15.9	13 C
6 10	20 10.93	-28 16.1	2.110	2.960	12.8	19.3	6 10	20 6.04	-18 23.2	1.535	2.399	15.9	21.3
6 20	20 4.84	-28 24.3	2.021	2.948	9.8	19.1	6 20	20 1.93	-18 29.8	1.442	2.378	12.3	21.0
6 30	19 56.43	-28 30.8	1.956	2.937	6.4	18.9	6 30	19 55.04	-18 45.2	1.370	2.356	8.0	20.7
7 10	19 46.39	-28 32.0	1.916	2.924	3.1	18.7	7 10	19 46.04	-19 7.1	1.322	2.334	3.2	20.4
7 20	19 35.65	-28 25.0	1.904	2.912	3.2	18.6	7 20	19 35.90	-19 32.3	1.298	2.312	2.3	20.2
7 30	19 25.31	-28 8.4	1.920	2.898	6.6	18.8	7 30	19 25.99	-19 57.2	1.299	2.290	7.4	20.5
8 9	19 16.42	-27 42.8	1.963	2.885	10.2	19.0	8 9	19 17.65	-20 19.3	1.325	2.268	12.3	20.7
8 19	19 9.74	-27 10.2	2.028	2.871	13.3	19.2	8 19</						

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>265100</b>	2003 SZ <sub>307</sub>		7 15.6 232°65	1°5/16.1	18		<b>397103</b>	2005 UF <sub>515</sub>		7 15.6 320°67	0°6/15.3	18	
6 10	20 8.97	-17 18.7	1.675	2.527	15.4	21.1	6 10	20 3.31	-19 55.4	2.136	2.990	12.5	20.8
6 20	20 3.75	-17 16.9	1.591	2.518	11.9	20.8	6 20	19 59.01	-20 45.1	2.056	2.987	9.4	20.6
6 30	19 55.96	-17 23.2	1.528	2.509	7.8	20.6	6 30	19 52.75	-21 42.0	1.999	2.984	5.9	20.3
7 10	19 46.30	-17 35.5	1.489	2.500	3.3	20.3	7 10	19 45.10	-22 42.4	1.968	2.981	2.2	20.1
7 20	19 35.77	-17 51.5	1.477	2.490	2.4	20.2	7 20	19 36.80	-23 42.1	1.965	2.978	2.0	20.1
7 30	19 25.61	-18 8.6	1.492	2.480	6.9	20.5	7 30	19 28.78	-24 37.2	1.990	2.975	5.8	20.3
8 9	19 17.03	-18 24.6	1.531	2.469	11.3	20.7	8 9	19 21.91	-25 24.7	2.041	2.973	9.3	20.5
8 19	19 10.89	-18 38.3	1.592	2.458	15.2	20.9	8 19	19 16.90	-26 3.3	2.115	2.970	12.4	20.7
<b>3835</b>	Korolenko		7 15.6 262°34	6°2/18.4	18		<b>510980</b>	2013 HZ <sub>8</sub>		7 15.6 114°95	5°7/11.6	18	
6 10	20 3.70	-3 36.9	2.028	2.834	14.8	16.9	6 10	20 9.29	-38 4.8	2.703	3.539	10.7	21.2
6 20	19 59.34	-3 22.1	1.935	2.820	12.3	16.7	6 20	20 3.36	-39 30.6	2.649	3.555	8.6	21.1
6 30	19 52.99	-3 23.6	1.862	2.805	9.5	16.5	6 30	19 55.41	-40 50.7	2.619	3.571	6.7	21.0
7 10	19 45.18	-3 42.5	1.812	2.791	7.1	16.3	7 10	19 46.04	-41 59.4	2.616	3.586	5.7	20.9
7 20	19 36.65	-4 18.6	1.788	2.775	6.2	16.3	7 20	19 36.07	-42 52.4	2.642	3.601	6.2	21.0
7 30	19 28.30	-5 9.5	1.791	2.760	7.8	16.3	7 30	19 26.46	-43 27.4	2.694	3.615	7.8	21.1
8 9	19 21.05	-6 11.3	1.818	2.745	10.6	16.5	8 9	19 18.10	-43 44.6	2.772	3.629	9.8	21.3
8 19	19 15.63	-7 19.2	1.869	2.729	13.6	16.6	8 19	19 11.68	-43 46.2	2.872	3.643	11.6	21.4
<b>68935</b>	2002 PE <sub>32</sub>		7 15.6 231°91	0°6/15.8	18		<b>505565</b>	2014 AT <sub>45</sub>		7 15.6 146°29	0°4/15.3	17	
6 10	20 6.08	-19 10.6	2.050	2.900	13.1	19.6	6 10	20 6.71	-19 45.1	2.505	3.344	11.3	22.1
6 20	20 1.08	-19 13.6	1.968	2.895	10.0	19.4	6 20	20 1.18	-20 33.9	2.432	3.355	8.5	21.9
6 30	19 54.03	-19 21.8	1.908	2.891	6.4	19.2	6 30	19 53.92	-21 28.1	2.384	3.365	5.3	21.8
7 10	19 45.53	-19 33.3	1.874	2.886	2.5	18.9	7 10	19 45.47	-22 24.5	2.363	3.375	1.9	21.5
7 20	19 36.42	-19 46.0	1.867	2.880	1.8	18.9	7 20	19 36.54	-23 19.4	2.372	3.384	1.7	21.5
7 30	19 27.66	-19 57.7	1.887	2.875	5.8	19.1	7 30	19 27.91	-24 9.7	2.410	3.393	5.1	21.8
8 9	19 20.18	-20 7.2	1.934	2.870	9.5	19.3	8 9	19 20.37	-24 53.1	2.476	3.401	8.2	22.0
8 19	19 14.68	-20 13.7	2.004	2.864	12.8	19.5	8 19	19 14.48	-25 28.8	2.567	3.409	10.9	22.2
<b>168070</b>	2006 CK <sub>41</sub>		7 15.6 350°95	5°4/17.1	17		<b>210179</b>	2006 UH <sub>114</sub>		7 15.6 340°94	1°4/15.1	18	
6 10	20 0.52	-11 47.5	0.991	1.878	20.9	19.4	6 10	20 4.85	-23 42.5	1.850	2.713	13.7	20.8
6 20	19 58.44	-11 15.9	0.928	1.870	16.6	19.1	6 20	20 0.43	-24 5.5	1.774	2.710	10.4	20.6
6 30	19 53.11	-11 2.4	0.882	1.864	11.7	18.8	6 30	19 53.75	-24 31.8	1.720	2.706	6.6	20.3
7 10	19 45.36	-11 8.2	0.854	1.859	7.0	18.5	7 10	19 45.47	-24 57.8	1.691	2.703	2.6	20.1
7 20	19 36.53	-11 32.2	0.847	1.855	5.7	18.4	7 20	19 36.52	-25 20.0	1.689	2.701	2.6	20.1
7 30	19 28.30	-12 10.4	0.860	1.853	9.7	18.6	7 30	19 28.00	-25 35.7	1.713	2.698	6.5	20.3
8 9	19 22.27	-12 56.9	0.894	1.852	14.7	18.9	8 9	19 20.92	-25 43.6	1.762	2.696	10.4	20.5
8 19	19 19.46	-13 45.6	0.945	1.853	19.4	19.2	8 19	19 16.03	-25 44.0	1.833	2.694	13.7	20.8
<b>420449</b>	2012 DE <sub>58</sub>		7 15.6 137°97	0°9/15.3	17		<b>393810</b>	2005 QX <sub>141</sub>		7 15.6 304°18	5°1/17.8	18	
6 10	20 10.27	-21 56.9	1.710	2.567	14.9	22.1	6 10	20 2.06	-6 50.2	2.065	2.886	14.0	21.2
6 20	20 4.55	-22 25.2	1.644	2.576	11.3	21.9	6 20	19 58.03	-6 31.1	1.977	2.876	11.4	21.0
6 30	19 56.33	-22 58.4	1.600	2.585	7.1	21.7	6 30	19 52.12	-6 25.3	1.910	2.865	8.5	20.8
7 10	19 46.39	-23 32.3	1.581	2.593	2.6	21.4	7 10	19 44.87	-6 33.6	1.867	2.855	6.0	20.6
7 20	19 35.80	-24 2.9	1.588	2.601	2.4	21.4	7 20	19 37.00	-6 55.4	1.850	2.845	5.2	20.5
7 30	19 25.79	-24 26.8	1.623	2.608	6.8	21.7	7 30	19 29.36	-7 29.0	1.859	2.835	7.0	20.6
8 9	19 17.48	-24 42.8	1.683	2.615	10.9	22.0	8 9	19 22.83	-8 11.0	1.894	2.825	9.9	20.8
8 19	19 11.65	-24 50.9	1.765	2.622	14.4	22.2	8 19	19 18.05	-8 58.1	1.951	2.815	12.9	21.0
<b>134120</b>	2004 YG <sub>19</sub>		7 15.6 208°84	0°2/15.5	18		<b>434002</b>	2000 SM <sub>320</sub>		7 15.6 214°70	8°5/11.1	18	
6 10	20 6.65	-20 17.2	2.389	3.232	11.7	21.2	6 10	20 14.67	-43 35.0	2.141	2.971	13.3	21.6
6 20	20 1.31	-20 44.6	2.301	3.226	8.9	21.0	6 20	20 8.29	-44 56.6	2.071	2.965	11.2	21.4
6 30	19 54.10	-21 17.0	2.237	3.219	5.6	20.7	6 30	19 58.97	-46 8.6	2.024	2.958	9.4	21.3
7 10	19 45.57	-21 51.8	2.199	3.211	2.0	20.5	7 10	19 47.47	-47 3.1	2.001	2.951	8.5	21.2
7 20	19 36.42	-22 25.9	2.190	3.204	1.7	20.4	7 20	19 34.96	-47 34.1	2.003	2.943	9.1	21.3
7 30	19 27.52	-22 56.6	2.210	3.195	5.3	20.7	7 30	19 22.94	-47 38.7	2.030	2.935	10.8	21.4
8 9	19 19.71	-23 22.4	2.257	3.186	8.7	20.9	8 9	19 12.78	-47 18.9	2.080	2.927	13.0	21.5
8 19	19 13.65	-23 42.3	2.328	3.176	11.7	21.1	8 19	19 5.47	-46 39.2	2.151	2.918	15.1	21.6
<b>439454</b>	2013 YO <sub>8</sub>		7 15.6 96°05	0°2/15.7	17 R		<b>474695</b>	2005 EQ <sub>294</sub>		7 15.6 7°69	2°2/16.5	16	
6 10	20 6.67	-19 7.0	2.001	2.850	13.4	21.4	6 10	20 4.51	-14 55.8	1.857	2.706	14.3	21.4
6 20	20 1.40	-19 28.5	1.939	2.866	10.1	21.2	6 20	20 0.03	-14 52.9	1.781	2.706	11.0	21.2
6 30	19 54.13	-19 55.9	1.899	2.882	6.4	21.0	6 30	19 53.42	-14 59.2	1.728	2.706	7.3	21.0
7 10	19 45.54	-20 26.5	1.886	2.898	2.4	20.8	7 10	19 45.36	-15 13.4	1.699	2.706	3.6	20.8
7 20	19 36.49	-20 57.1	1.899	2.913	1.8	20.7	7 20	19 36.68	-15 33.4	1.696	2.707	2.7	20.7
7 30	19 27.94	-21 24.9	1.941	2.928	5.7	21.0	7 30	19 28.41	-15 56.9	1.720	2.708	6.2	20.9
8 9	19 20.78	-21 48.3	2.009	2.943	9.3	21.3	8 9	19 21.50	-16 21.4	1.769	2.709	10.0	21.1
8 19	19 15.63	-22 6.4	2.099	2.958	12.4	21.5	8 19	19 16.63	-16 45.0	1.840	2.709	13.3	21.4
<b>84423</b>	2002 TQ <sub>209</sub>		7 15.6 319°09	3°0/16.9	18		<b>41237</b>	1999 XM <sub>25</sub>		7 15.6 310°81	0°6/15.9	18	
6 10	20 1.06	-12 9.0	1.530	2.389	16.3	18.0	6 10	20 2.88	-18 41.7	2.032	2.887	13.0	19.1
6 20	19 58.17	-12 28.2	1.430	2.359	12.9	17.7	6 20	19 58.81	-18 51.9	1.941	2.871	9.9	18.9
6 30	19 52.72	-13 4.4	1.349	2.328	8.9	17.4	6 30	19 52.71	-19 8.5	1.872	2.856	6.4	18.6
7 10	19 45.24	-13 56.8	1.292	2.299	4.6	17.1	7 10	19 45.12	-19 29.6	1.828	2.840	2.5	18.3
7 20	19 36.58	-15 2.4	1.258	2.270	3.4	16.9	7 20	19 36.84	-19 52.7	1.811	2.825	1.8	18.3
7 30	19 27.98	-16 16.0	1.250	2.241	7.5	17.1	7 30	19 28.80	-20 15.3	1.821	2.810	5.8	18.5
8 9	19 20.73	-17 31.8	1.265	2.214	12.3	17.3	8 9	19 21.94	-20 35.3	1.857	2.796	9.6	18.7
8 19	19 15.89	-18 44.3	1.301	2.187	16.7	17.5	8 19	19 16.99	-20 51.6	1.915	2.781	13.0	18.9
<b>478605</b>	2012 TT <sub>138</sub>		7 15.6 314°86	1°3/16.0	17		<b>119500</b>	2001 UO <sub>116</sub>		7 15.6 206°71	0°3/15.5	18	
6 10	20 4.81	-18 15.8											

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7 15.6

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>245544</b>	2005 <i>TB</i> <sub>167</sub>		7 15.6 328°28	4.3/17.2	18		<b>390868</b>	2004 <i>TW</i> <sub>107</sub>		7 15.6 354°07	12.3/21.9	17	
6 10	20 2.24	-10 24.6	1.893	2.732	14.4	20.2	6 10	19 56.74	+ 6 51.4	1.522	2.311	19.6	19.9
6 20	19 58.32	-10 0.8	1.809	2.722	11.5	20.0	6 20	19 54.57	+ 7 46.4	1.450	2.302	17.4	19.7
6 30	19 52.38	-9 48.4	1.745	2.713	8.3	19.8	6 30	19 50.21	+ 8 13.8	1.395	2.295	15.2	19.6
7 10	19 45.00	-9 47.7	1.706	2.703	5.2	19.6	7 10	19 44.27	+ 8 8.9	1.358	2.289	13.3	19.4
7 20	19 36.96	-9 58.3	1.692	2.695	4.4	19.5	7 20	19 37.61	+ 7 29.7	1.340	2.285	12.3	19.4
7 30	19 29.21	-10 18.4	1.704	2.686	6.9	19.6	7 30	19 31.28	+ 6 18.2	1.344	2.282	12.7	19.4
8 9	19 22.69	-10 45.3	1.741	2.678	10.3	19.8	8 9	19 26.32	+ 4 40.9	1.369	2.281	14.4	19.5
8 19	19 18.10	-11 16.2	1.800	2.671	13.5	20.0	8 19	19 23.50	+ 2 46.5	1.414	2.281	16.7	19.6
<b>328513</b>	2009 <i>QP</i> <sub>12</sub>		7 15.6 355°26	1.6/16.0	17		<b>247098</b>	2000 <i>SE</i> <sub>299</sub>		7 15.6 262°71	3.2/16.6	18	
6 10	20 0.05	-18 43.7	1.009	1.908	19.6	20.0	6 10	20 8.02	-14 8.4	1.528	2.380	16.6	20.6
6 20	19 58.12	-18 27.7	0.947	1.900	15.1	19.7	6 20	20 3.31	-13 51.5	1.442	2.367	13.1	20.3
6 30	19 52.92	-18 21.2	0.903	1.894	9.8	19.4	6 30	19 55.88	-13 45.4	1.376	2.353	8.9	20.1
7 10	19 45.33	-18 22.8	0.878	1.890	4.0	19.1	7 10	19 46.40	-13 49.6	1.333	2.340	4.7	19.8
7 20	19 36.73	-18 29.7	0.874	1.888	3.0	19.0	7 20	19 35.93	-14 2.6	1.316	2.325	3.7	19.7
7 30	19 28.82	-18 38.9	0.891	1.887	8.7	19.3	7 30	19 25.77	-14 22.0	1.323	2.311	7.7	19.9
8 9	19 23.15	-18 47.5	0.929	1.889	14.2	19.6	8 9	19 17.24	-14 45.0	1.355	2.297	12.2	20.1
8 19	19 20.70	-18 53.9	0.984	1.892	18.9	19.9	8 19	19 11.28	-15 9.1	1.408	2.282	16.4	20.3
<b>189586</b>	2000 <i>WC</i> <sub>5</sub>		7 15.6 300°80	0.3/15.5	18		<b>358874</b>	2008 <i>FM</i> <sub>125</sub>		7 15.6 76°33	4.9/18.2	18	
6 10	20 7.42	-22 28.1	1.599	2.465	15.3	19.6	6 10	20 2.08	- 5 45.9	2.294	3.104	13.2	21.0
6 20	20 2.91	-22 21.2	1.505	2.442	11.8	19.3	6 20	19 57.81	- 5 35.0	2.213	3.105	10.7	20.9
6 30	19 55.65	-22 17.2	1.433	2.420	7.6	19.0	6 30	19 51.87	- 5 37.3	2.155	3.105	8.0	20.7
7 10	19 46.31	-22 13.6	1.385	2.397	2.8	18.7	7 10	19 44.80	- 5 53.1	2.121	3.105	5.7	20.5
7 20	19 35.92	-22 7.6	1.361	2.375	2.3	18.6	7 20	19 37.23	- 6 21.5	2.113	3.105	4.9	20.5
7 30	19 25.83	-21 57.6	1.364	2.353	7.3	18.9	7 30	19 29.95	- 7 0.4	2.132	3.105	6.5	20.6
8 9	19 17.35	-21 43.0	1.390	2.331	12.0	19.1	8 9	19 23.68	- 7 46.7	2.177	3.105	9.0	20.8
8 19	19 11.48	-21 24.6	1.438	2.310	16.2	19.3	8 19	19 19.00	- 8 36.9	2.246	3.105	11.6	20.9
<b>500030</b>	2011 <i>SY</i> <sub>42</sub>		7 15.6 325°97	0.9/15.4	17		<b>177084</b>	2003 <i>FZ</i> <sub>56</sub>		7 15.6 34°89	0.8/15.3	18 R	
6 10	20 7.69	-22 3.3	1.134	2.019	18.9	21.7	6 10	20 5.09	-22 45.1	1.923	2.783	13.4	20.0
6 20	20 3.85	-22 16.3	1.066	2.013	14.5	21.4	6 20	20 0.43	-22 58.5	1.855	2.789	10.1	19.8
6 30	19 56.55	-22 36.3	1.016	2.007	9.2	21.1	6 30	19 53.66	-23 15.0	1.809	2.795	6.4	19.6
7 10	19 46.69	-22 58.7	0.988	2.001	3.4	20.7	7 10	19 45.46	-23 31.8	1.789	2.801	2.4	19.4
7 20	19 35.68	-23 18.4	0.982	1.996	3.0	20.7	7 20	19 36.74	-23 46.0	1.795	2.808	2.1	19.4
7 30	19 25.32	-23 31.4	0.999	1.991	8.9	21.0	7 30	19 28.50	-23 55.5	1.828	2.814	6.0	19.6
8 9	19 17.28	-23 36.1	1.038	1.986	14.3	21.3	8 9	19 21.68	-23 59.3	1.886	2.821	9.7	19.9
8 19	19 12.63	-23 32.8	1.095	1.982	19.0	21.5	8 19	19 16.93	-23 57.6	1.967	2.829	12.9	20.1
<b>479893</b>	2014 <i>HS</i> <sub>25</sub>		7 15.6 227°73	2.8/16.9	18		<b>519224</b>	2010 <i>UW</i> <sub>109</sub>		7 15.6 63°93	7.0/18.8	18	
6 10	20 3.95	-12 21.0	2.247	3.079	12.7	21.6	6 10	20 2.53	- 0 37.3	2.324	3.109	13.8	20.3
6 20	19 59.30	-12 17.0	2.161	3.074	10.0	21.4	6 20	19 58.05	+ 0 9.1	2.252	3.116	11.6	20.1
6 30	19 52.85	-12 22.4	2.099	3.069	6.8	21.2	6 30	19 51.97	+ 0 40.8	2.202	3.123	9.4	20.0
7 10	19 45.16	-12 36.4	2.062	3.064	3.8	21.0	7 10	19 44.81	+ 0 56.0	2.175	3.131	7.6	19.9
7 20	19 36.91	-12 57.6	2.052	3.059	3.1	20.9	7 20	19 37.24	+ 0 54.2	2.174	3.138	7.0	19.9
7 30	19 28.94	-13 24.0	2.070	3.054	5.7	21.1	7 30	19 30.00	+ 0 36.5	2.198	3.146	7.9	20.0
8 9	19 22.05	-13 53.2	2.114	3.049	8.9	21.2	8 9	19 23.78	+ 0 5.5	2.248	3.154	9.8	20.1
8 19	19 16.85	-14 23.1	2.182	3.043	11.8	21.4	8 19	19 19.12	- 0 35.2	2.320	3.161	11.9	20.2
<b>437137</b>	2012 <i>UG</i> <sub>169</sub>		7 15.6 324°76	7.9/18.9	16		<b>25000</b>	Astrometria		7 15.6 127°76	3.0/17.5	18	
6 10	20 0.51	- 2 48.1	1.477	2.308	18.2	20.8	6 10	20 2.49	- 9 18.8	2.539	3.357	11.8	18.2
6 20	19 57.63	- 2 26.8	1.391	2.290	15.2	20.6	6 20	19 57.95	- 9 38.5	2.461	3.364	9.3	18.0
6 30	19 52.29	- 2 27.7	1.323	2.273	12.0	20.3	6 30	19 51.88	-10 9.5	2.407	3.371	6.5	17.8
7 10	19 45.08	- 2 53.5	1.276	2.256	9.1	20.1	7 10	19 44.78	-10 50.3	2.379	3.377	3.9	17.7
7 20	19 36.91	- 3 44.2	1.251	2.241	7.9	20.0	7 20	19 37.26	-11 39.0	2.379	3.384	3.1	17.6
7 30	19 28.97	- 4 56.5	1.250	2.226	9.7	20.1	7 30	19 30.01	-12 32.6	2.408	3.390	5.1	17.8
8 9	19 22.45	- 6 24.0	1.272	2.211	13.0	20.2	8 9	19 23.70	-13 28.2	2.463	3.396	7.9	18.0
8 19	19 18.29	- 7 59.1	1.314	2.198	16.7	20.4	8 19	19 18.85	-14 22.9	2.544	3.402	10.5	18.2
<b>206533</b>	2003 <i>UN</i> <sub>174</sub>		7 15.6 342°22	0.2/15.7	16		<b>41493</b>	2000 <i>QO</i> <sub>101</sub>		7 15.6 273°73	2.7/14.5	18	
6 10	20 5.05	-20 19.5	1.577	2.445	15.4	20.2	6 10	20 9.04	-26 14.4	1.963	2.819	13.3	19.7
6 20	20 0.90	-20 25.1	1.503	2.440	11.8	19.9	6 20	20 3.90	-26 55.8	1.860	2.791	10.3	19.4
6 30	19 54.21	-20 36.8	1.449	2.436	7.5	19.7	6 30	19 56.22	-27 40.3	1.780	2.763	6.7	19.2
7 10	19 45.73	-20 51.9	1.419	2.432	2.8	19.4	7 10	19 46.55	-28 23.4	1.725	2.734	3.3	18.9
7 20	19 36.47	-21 7.4	1.414	2.428	2.1	19.3	7 20	19 35.79	-29 0.0	1.697	2.704	3.6	18.9
7 30	19 27.69	-21 20.5	1.435	2.425	6.9	19.6	7 30	19 25.12	-29 26.1	1.697	2.674	7.4	19.0
8 9	19 20.54	-21 29.6	1.479	2.422	11.3	19.9	8 9	19 15.78	-29 40.0	1.722	2.644	11.3	19.2
8 19	19 15.86	-21 34.1	1.545	2.420	15.1	20.1	8 19	19 8.72	-29 42.3	1.769	2.613	14.9	19.4
<b>199318</b>	2006 <i>BA</i> <sub>113</sub>		7 15.6 350°57	2.3/14.9	17		<b>437806</b>	2015 <i>DK</i> <sub>29</sub>		7 15.6 15°57	3.5/14.3	17	
6 10	20 3.49	-24 36.0	1.307	2.193	16.9	19.7	6 10	20 5.16	-26 2.5	1.327	2.210	16.8	19.9
6 20	20 0.27	-25 3.1	1.239	2.186	12.8	19.4	6 20	20 1.47	-26 55.5	1.268	2.214	12.8	19.7
6 30	19 54.08	-25 34.4	1.190	2.180	8.2	19.1	6 30	19 54.78	-27 51.9	1.229	2.218	8.2	19.5
7 10	19 45.74	-26 4.8	1.163	2.175	3.5	18.9	7 10	19 45.98	-28 45.0	1.213	2.223	4.2	19.2
7 20	19 36.46	-26 29.1	1.160	2.171	3.6	18.8	7 20	19 36.34	-29 28.2	1.221	2.229	4.6	19.3
7 30	19 27.75	-26 43.5	1.181	2.169	8.4	19.1	7 30	19 27.37	-29 56.8	1.253	2.235	8.8	19.5
8 9	19 21.03	-26 46.7	1.223	2.167	13.1	19.4	8 9	19 20.46	-30 9.8	1.307	2.242	13.1	19.8
8 19	19 17.22	-26 39.5	1.285	2.166	17.2	19.6	8 19	19 16.49	-30 8.6	1.381	2.250	16.9	20.1
<b>155807</b>	2000 <i>VU</i> <sub>29</sub>		7 15.6 309°80	7.7/17.3	18		<b>21615</b>	Guardamano					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>195483</b>	2002 <i>GV</i> <sub>137</sub>		7 15.6 146°30	6°3/12.4	17		<b>249692</b>	2000 <i>DE</i> <sub>22</sub>		7 15.6 250°00	2°9/14.3	17	
6 10	20 9.95	-34 34.0	1.877	2.734	13.8	19.9	6 10	20 7.93	-31 37.3	2.888	3.729	10.0	21.4
6 20	20 4.63	-35 57.5	1.813	2.737	10.9	19.8	6 20	20 2.13	-31 52.3	2.791	3.711	7.7	21.2
6 30	19 56.61	-37 17.6	1.771	2.739	8.1	19.6	6 30	19 54.58	-32 4.3	2.719	3.693	5.2	21.0
7 10	19 46.64	-38 26.4	1.755	2.742	6.3	19.5	7 10	19 45.82	-32 10.1	2.674	3.675	3.2	20.9
7 20	19 35.81	-39 17.6	1.764	2.744	7.0	19.5	7 20	19 36.52	-32 7.6	2.657	3.656	3.4	20.9
7 30	19 25.46	-39 47.5	1.800	2.746	9.4	19.7	7 30	19 27.47	-31 55.5	2.670	3.637	5.7	21.0
8 9	19 16.83	-39 56.4	1.859	2.748	12.3	19.9	8 9	19 19.46	-31 34.1	2.709	3.617	8.3	21.1
8 19	19 10.82	-39 47.1	1.938	2.750	15.0	20.1	8 19	19 13.08	-31 4.8	2.774	3.598	10.7	21.3
<b>151450</b>	2002 <i>GC</i> <sub>86</sub>		7 15.6 337°02	3°5/17.5	18		<b>93169</b>	2000 <i>SC</i> <sub>98</sub>		7 15.6 308°62	2°3/16.3	18	
6 10	20 1.51	-9 25.4	2.145	2.974	13.3	19.5	6 10	20 4.73	-16 12.9	1.521	2.384	16.1	19.8
6 20	19 57.55	-9 33.4	2.062	2.971	10.6	19.3	6 20	20 0.89	-16 1.8	1.432	2.365	12.6	19.5
6 30	19 51.80	-9 54.1	2.002	2.967	7.5	19.1	6 30	19 54.40	-16 0.0	1.364	2.346	8.4	19.2
7 10	19 44.81	-10 26.7	1.966	2.964	4.6	18.9	7 10	19 45.90	-16 6.5	1.318	2.328	3.9	18.9
7 20	19 37.25	-11 9.3	1.957	2.961	3.7	18.9	7 20	19 36.40	-16 19.4	1.297	2.310	3.0	18.8
7 30	19 29.97	-11 59.0	1.975	2.958	5.9	19.0	7 30	19 27.17	-16 36.2	1.302	2.292	7.4	19.0
8 9	19 23.76	-12 52.3	2.018	2.956	9.1	19.2	8 9	19 19.50	-16 54.5	1.329	2.275	12.1	19.2
8 19	19 19.24	-13 45.8	2.086	2.953	12.1	19.4	8 19	19 14.36	-17 12.2	1.377	2.258	16.3	19.4
<b>488763</b>	2004 <i>TM</i> <sub>82</sub>		7 15.6 348°90	18°7/20.3	15		<b>122606</b>	2000 <i>RN</i> <sub>43</sub>		7 15.6 241°14	4°2/14.2	18	
6 10	19 48.29	+8 34.7	1.095	1.918	23.7	20.6	6 10	20 12.36	-32 35.7	2.067	2.915	13.0	20.3
6 20	19 47.01	+10 48.4	1.020	1.887	22.0	20.4	6 20	20 6.16	-32 59.7	1.979	2.902	10.2	20.0
6 30	19 47.04	+12 33.7	0.960	1.860	20.4	20.2	6 30	19 57.45	-33 19.5	1.914	2.889	7.1	19.8
7 10	19 43.23	+13 39.6	0.915	1.835	19.2	20.0	7 10	19 46.94	-33 30.3	1.875	2.875	4.6	19.7
7 20	19 38.40	+13 57.0	0.884	1.813	18.7	19.9	7 20	19 35.64	-33 28.1	1.863	2.860	4.8	19.6
7 30	19 33.85	+13 21.9	0.869	1.795	19.2	19.8	7 30	19 24.77	-33 11.3	1.879	2.846	7.7	19.8
8 9	19 30.91	+11 57.9	0.870	1.781	20.6	19.9	8 9	19 15.48	-32 40.8	1.920	2.830	11.0	20.0
8 19	19 30.67	+9 54.8	0.885	1.770	22.6	20.0	8 19	19 8.59	-31 59.7	1.983	2.815	14.0	20.1
<b>127514</b>	2002 <i>TS</i> <sub>295</sub>		7 15.6 163°61	13°5/17.6	18		<b>306722</b>	2000 <i>WF</i> <sub>107</sub>		7 15.6 311°49	1°9/14.4	18	
6 10	20 14.02	+1 5.4	1.265	2.069	22.1	19.5	6 10	20 7.73	-16 19.2	1.478	2.338	16.7	19.6
6 20	20 8.00	+3 19.1	1.203	2.073	19.2	19.3	6 20	20 4.08	-18 22.8	1.357	2.292	13.0	19.2
6 30	19 58.87	+5 11.8	1.158	2.076	16.2	19.1	6 30	19 57.17	-20 56.8	1.259	2.246	8.4	18.8
7 10	19 47.49	+6 34.8	1.134	2.079	14.0	19.0	7 10	19 47.25	-23 55.6	1.187	2.199	3.2	18.4
7 20	19 35.17	+7 21.9	1.132	2.081	13.5	18.9	7 20	19 35.07	-27 7.6	1.142	2.153	3.9	18.3
7 30	19 23.47	+7 31.6	1.151	2.083	14.9	19.0	7 30	19 22.05	-30 17.0	1.126	2.106	9.9	18.5
8 9	19 13.86	+7 8.3	1.190	2.084	17.4	19.2	8 9	19 10.02	-33 9.3	1.136	2.060	15.7	18.7
8 19	19 7.29	+6 20.1	1.247	2.085	20.3	19.4	8 19	19 0.75	-35 35.7	1.167	2.014	20.8	18.9
<b>246627</b>	2008 <i>WK</i> <sub>89</sub>		7 15.6 230°76	0°5/15.3	18		<b>115930</b>	2003 <i>WH</i> <sub>22</sub>		7 15.6 235°67	0°6/15.2	18	
6 10	20 5.71	-20 6.0	2.157	3.006	12.5	20.9	6 10	20 2.79	-20 32.9	2.904	3.745	9.9	19.7
6 20	20 0.88	-20 49.3	2.070	2.999	9.5	20.7	6 20	19 58.20	-21 20.9	2.812	3.736	7.5	19.5
6 30	19 54.01	-21 39.3	2.007	2.991	6.0	20.5	6 30	19 52.10	-22 14.0	2.745	3.727	4.7	19.4
7 10	19 45.65	-22 32.8	1.970	2.983	2.2	20.2	7 10	19 44.92	-23 9.4	2.706	3.718	1.7	19.1
7 20	19 36.59	-23 25.6	1.961	2.974	1.9	20.2	7 20	19 37.22	-24 3.9	2.697	3.709	1.6	19.1
7 30	19 27.76	-24 14.0	1.980	2.965	5.8	20.4	7 30	19 29.66	-24 54.8	2.717	3.699	4.6	19.3
8 9	19 20.11	-24 55.4	2.026	2.956	9.4	20.6	8 9	19 22.91	-25 39.9	2.764	3.689	7.5	19.5
8 19	19 14.34	-25 28.6	2.095	2.947	12.6	20.8	8 19	19 17.53	-26 18.0	2.837	3.679	10.0	19.6
<b>287371</b>	2002 <i>UC</i> <sub>73</sub>		7 15.6 287°91	1°0/15.2	18		<b>398273</b>	2010 <i>TG</i> <sub>119</sub>		7 15.6 315°93	2°5/16.7	16	
6 10	20 4.88	-21 45.0	1.926	2.786	13.4	20.8	6 10	20 2.82	-14 1.6	2.052	2.896	13.3	21.1
6 20	20 0.51	-22 19.9	1.840	2.773	10.2	20.6	6 20	19 58.67	-13 53.2	1.966	2.887	10.4	20.9
6 30	19 53.90	-23 0.7	1.775	2.761	6.5	20.3	6 30	19 52.58	-13 53.4	1.902	2.877	7.0	20.7
7 10	19 45.64	-23 43.8	1.736	2.749	2.4	20.1	7 10	19 45.13	-14 1.7	1.863	2.868	3.7	20.5
7 20	19 36.59	-24 25.1	1.724	2.736	2.3	20.0	7 20	19 37.06	-14 16.5	1.850	2.859	2.9	20.4
7 30	19 27.81	-25 1.0	1.739	2.724	6.4	20.3	7 30	19 29.27	-14 36.1	1.864	2.851	5.9	20.6
8 9	19 20.34	-25 29.2	1.779	2.712	10.3	20.5	8 9	19 22.64	-14 58.1	1.904	2.842	9.4	20.8
8 19	19 14.97	-25 48.9	1.841	2.700	13.8	20.7	8 19	19 17.84	-15 20.6	1.966	2.834	12.7	21.0
<b>255327</b>	2005 <i>WX</i> <sub>34</sub>		7 15.6 120°42	0°3/15.8	18		<b>470753</b>	2008 <i>UN</i> <sub>143</sub>		7 15.6 283°24	2°3/16.5	18	
6 10	20 4.17	-19 36.4	2.409	3.255	11.5	21.1	6 10	20 5.63	-15 0.6	1.822	2.670	14.5	21.9
6 20	19 59.34	-19 44.5	2.333	3.259	8.7	20.9	6 20	20 1.20	-14 57.1	1.724	2.648	11.4	21.6
6 30	19 52.81	-19 57.0	2.281	3.263	5.5	20.7	6 30	19 54.43	-15 3.1	1.648	2.626	7.6	21.3
7 10	19 45.15	-20 11.9	2.256	3.268	2.1	20.5	7 10	19 45.89	-15 17.5	1.597	2.604	3.7	21.0
7 20	19 37.04	-20 27.2	2.258	3.272	1.5	20.4	7 20	19 36.43	-15 38.4	1.571	2.582	2.8	20.9
7 30	19 29.28	-20 41.2	2.289	3.276	5.0	20.7	7 30	19 27.14	-16 3.4	1.572	2.560	6.7	21.1
8 9	19 22.61	-20 52.6	2.346	3.280	8.2	20.9	8 9	19 19.14	-16 29.9	1.598	2.538	10.8	21.3
8 19	19 17.59	-21 0.9	2.428	3.284	11.0	21.1	8 19	19 13.29	-16 55.6	1.646	2.515	14.6	21.5
<b>92438</b>	2000 <i>JX</i> <sub>85</sub>		7 15.6 332°54	4°9/17.3	18		<b>86125</b>	1999 <i>RH</i> <sub>152</sub>		7 15.6 11°07	3°2/14.6	18	
6 10	20 1.92	-10 42.5	1.102	1.977	20.1	18.9	6 10	20 7.41	-30 6.1	2.015	2.873	12.9	19.1
6 20	19 59.41	-10 35.5	1.030	1.966	16.0	18.6	6 20	20 2.23	-30 22.2	1.943	2.874	9.9	18.9
6 30	19 53.77	-10 48.9	0.975	1.955	11.3	18.3	6 30	19 54.83	-30 35.5	1.895	2.875	6.6	18.7
7 10	19 45.73	-11 23.0	0.940	1.945	6.6	18.0	7 10	19 45.93	-30 42.3	1.871	2.877	3.7	18.5
7 20	19 36.51	-12 15.2	0.926	1.935	5.2	17.9	7 20	19 36.48	-30 39.5	1.874	2.878	3.9	18.5
7 30	19 27.72	-13 19.9	0.935	1.927	9.2	18.1	7 30	19 27.56	-30 26.0	1.904	2.880	6.9	18.7
8 9	19 20.92	-14 29.8	0.964	1.920	14.3	18.3	8 9	19 20.14	-30 2.2	1.960	2.882	10.2	18.9
8 19	19 17.21	-15 38.5	1.012	1.913	19.0	18.6	8 19	19 14.92	-29 30.4	2.037	2.884	13.1	19.1
<b>429668</b>	2011 <i>GB</i> <sub>67</sub>												

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>16508</b>	1990 <i>UB</i> <sub>3</sub>		7 15.6 205°09	1.3°/15.2	18		<b>471114</b>	2010 <i>CE</i> <sub>61</sub>		7 15.6 53°73	0.6°/15.5	17	
6 10	20 11.36	-23 22.9	1.782	2.636	14.6	18.8	6 10	20 8.70	-22 48.0	1.577	2.442	15.6	20.4
6 20	20 5.53	-23 46.2	1.701	2.631	11.1	18.5	6 20	20 3.42	-22 45.9	1.521	2.457	11.7	20.2
6 30	19 57.12	-24 13.2	1.642	2.627	7.0	18.3	6 30	19 55.65	-22 46.7	1.486	2.472	7.4	20.0
7 10	19 46.85	-24 39.8	1.609	2.621	2.8	18.0	7 10	19 46.25	-22 47.4	1.475	2.488	2.7	19.7
7 20	19 35.74	-25 1.9	1.603	2.615	2.6	18.0	7 20	19 36.36	-22 45.5	1.490	2.503	2.2	19.7
7 30	19 25.06	-25 16.6	1.623	2.608	7.0	18.2	7 30	19 27.22	-22 39.6	1.531	2.519	6.8	20.0
8 9	19 16.01	-25 22.9	1.670	2.600	11.1	18.5	8 9	19 19.92	-22 29.3	1.596	2.536	10.9	20.3
8 19	19 9.43	-25 21.4	1.738	2.592	14.7	18.7	8 19	19 15.13	-22 15.4	1.684	2.552	14.4	20.6
<b>247530</b>	2002 <i>QL</i> <sub>123</sub>		7 15.6 10°72	2.6°/14.8	17		<b>262995</b>	2007 <i>EP</i> <sub>97</sub>		7 15.7 141°52	2.1°/16.8	18	
6 10	20 7.04	-26 58.9	1.676	2.544	14.7	20.5	6 10	20 2.89	-13 20.1	2.459	3.291	11.7	21.4
6 20	20 2.33	-27 20.2	1.608	2.545	11.1	20.3	6 20	19 58.35	-13 28.9	2.380	3.294	9.1	21.2
6 30	19 55.08	-27 41.8	1.561	2.546	7.2	20.0	6 30	19 52.21	-13 46.0	2.325	3.298	6.1	21.0
7 10	19 46.08	-27 59.2	1.538	2.548	3.4	19.8	7 10	19 44.97	-14 10.3	2.296	3.301	3.2	20.8
7 20	19 36.39	-28 8.8	1.541	2.550	3.6	19.8	7 20	19 37.29	-14 40.0	2.294	3.304	2.4	20.8
7 30	19 27.29	-28 8.2	1.570	2.552	7.4	20.0	7 30	19 29.90	-15 12.9	2.321	3.306	5.0	20.9
8 9	19 19.90	-27 57.6	1.623	2.555	11.3	20.3	8 9	19 23.50	-15 46.5	2.374	3.309	8.0	21.1
8 19	19 15.00	-27 38.4	1.698	2.558	14.7	20.5	8 19	19 18.63	-16 19.1	2.452	3.312	10.8	21.3
<b>508412</b>	2016 <i>JR</i> <sub>4</sub>		7 15.6 334°62	1.8°/14.8	17		<b>362470</b>	2010 <i>RN</i> <sub>166</sub>		7 15.7 333°92	4.9°/13.9	18	
6 10	20 5.96	-20 54.5	1.385	2.260	16.8	20.4	6 10	20 8.55	-34 44.3	2.074	2.928	12.8	20.4
6 20	20 2.08	-22 3.1	1.314	2.256	12.7	20.1	6 20	20 3.21	-35 11.0	2.000	2.924	10.1	20.2
6 30	19 55.26	-23 22.8	1.264	2.253	8.0	19.8	6 30	19 55.52	-35 32.0	1.949	2.920	7.2	20.0
7 10	19 46.25	-24 47.3	1.237	2.250	3.2	19.5	7 10	19 46.24	-35 42.7	1.922	2.917	5.1	19.9
7 20	19 36.19	-26 8.4	1.235	2.247	3.4	19.5	7 20	19 36.34	-35 39.5	1.922	2.914	5.4	19.9
7 30	19 26.56	-27 19.0	1.258	2.244	8.3	19.8	7 30	19 26.98	-35 21.0	1.949	2.911	7.8	20.0
8 9	19 18.79	-28 14.9	1.305	2.242	13.0	20.1	8 9	19 19.18	-34 48.6	2.000	2.908	10.7	20.2
8 19	19 13.87	-28 54.8	1.371	2.240	17.0	20.3	8 19	19 13.68	-34 5.2	2.074	2.905	13.5	20.4
<b>473135</b>	2015 <i>KK</i> <sub>2</sub>		7 15.6 25°80	1.1°/15.4	18		<b>250304</b>	2003 <i>QB</i> <sub>55</sub>		7 15.7 301°08	2.2°/14.9	18	
6 10	20 10.37	-25 37.7	1.511	2.378	16.0	20.0	6 10	20 7.34	-24 21.1	1.314	2.193	17.2	20.6
6 20	20 4.90	-25 15.4	1.446	2.383	12.1	19.8	6 20	20 3.55	-24 47.2	1.227	2.171	13.2	20.3
6 30	19 56.68	-24 52.0	1.401	2.388	7.7	19.6	6 30	19 56.48	-25 18.5	1.160	2.149	8.6	20.0
7 10	19 46.64	-24 24.9	1.381	2.393	3.0	19.3	7 10	19 46.82	-25 50.0	1.116	2.128	3.6	19.6
7 20	19 36.00	-23 52.5	1.386	2.399	2.6	19.3	7 20	19 35.79	-26 15.8	1.095	2.107	3.7	19.6
7 30	19 26.14	-23 15.1	1.417	2.405	7.2	19.6	7 30	19 25.05	-26 31.4	1.098	2.086	8.9	19.8
8 9	19 18.27	-22 34.0	1.473	2.412	11.6	19.9	8 9	19 16.28	-26 34.9	1.123	2.065	14.1	20.0
8 19	19 13.13	-21 51.4	1.549	2.419	15.4	20.1	8 19	19 10.67	-26 27.2	1.167	2.045	18.8	20.2
<b>480517</b>	2015 <i>MP</i> <sub>6</sub>		7 15.6 295°41	2.3°/16.3	18		<b>397422</b>	2007 <i>AB</i> <sub>17</sub>		7 15.7 186°85	0.4°/15.4	18	
6 10	20 5.83	-16 23.0	2.007	2.853	13.5	21.0	6 10	20 4.12	-20 9.0	2.580	3.424	10.9	21.4
6 20	20 1.03	-15 53.4	1.914	2.837	10.5	20.7	6 20	19 59.32	-20 45.9	2.498	3.423	8.2	21.2
6 30	19 54.14	-15 29.1	1.843	2.821	7.0	20.5	6 30	19 52.86	-21 27.9	2.440	3.422	5.2	21.0
7 10	19 45.74	-15 9.9	1.798	2.805	3.5	20.3	7 10	19 45.25	-22 12.3	2.409	3.422	1.9	20.8
7 20	19 36.64	-14 55.3	1.779	2.790	2.8	20.2	7 20	19 37.12	-22 55.9	2.407	3.420	1.6	20.8
7 30	19 27.82	-14 44.6	1.788	2.774	6.2	20.4	7 30	19 29.25	-23 36.1	2.434	3.419	4.9	21.0
8 9	19 20.24	-14 37.0	1.822	2.759	9.9	20.6	8 9	19 22.35	-24 10.9	2.488	3.417	8.0	21.2
8 19	19 14.63	-14 31.7	1.879	2.743	13.3	20.7	8 19	19 17.00	-24 39.4	2.567	3.415	10.7	21.4
<b>191071</b>	2002 <i>CJ</i> <sub>155</sub>		7 15.6 49°27	3.4°/14.6	17		<b>257732</b>	1999 <i>YE</i> <sub>6</sub>		7 15.7 274°12	1.9°/15.5	18	
6 10	20 9.58	-28 48.0	1.626	2.492	15.1	19.9	6 10	20 18.44	-28 31.0	1.657	2.507	15.6	20.3
6 20	20 4.32	-29 11.7	1.561	2.496	11.5	19.7	6 20	20 11.34	-27 57.4	1.556	2.483	12.1	20.1
6 30	19 56.36	-29 34.0	1.517	2.500	7.6	19.4	6 30	20 1.06	-27 17.3	1.477	2.459	7.9	19.8
7 10	19 46.55	-29 49.8	1.497	2.505	4.0	19.2	7 10	19 48.42	-26 27.0	1.424	2.434	3.4	19.4
7 20	19 36.06	-29 55.0	1.503	2.509	4.2	19.3	7 20	19 34.65	-25 24.6	1.398	2.409	3.0	19.3
7 30	19 26.24	-29 47.7	1.535	2.514	7.9	19.5	7 30	19 21.37	-24 11.2	1.400	2.384	7.8	19.6
8 9	19 18.31	-29 28.6	1.590	2.518	11.7	19.7	8 9	19 10.06	-22 50.7	1.428	2.358	12.6	19.8
8 19	19 13.04	-29 0.2	1.667	2.523	15.1	20.0	8 19	19 1.76	-21 28.2	1.478	2.332	16.8	20.0
<b>325</b>	Heidelberga		7 15.6 252°79	2.8°/14.3	18		<b>107085</b>	2001 <i>AT</i> <sub>24</sub>		7 15.7 262°23	3.1°/14.3	18	
6 10	20 6.28	-30 4.1	2.623	3.471	10.6	14.1	6 10	20 8.76	-25 5.5	1.536	2.405	15.7	19.4
6 20	20 1.04	-30 27.2	2.534	3.459	8.1	13.9	6 20	20 4.16	-26 6.1	1.456	2.394	12.0	19.1
6 30	19 53.98	-30 48.6	2.469	3.447	5.5	13.7	6 30	19 56.61	-27 12.8	1.397	2.383	7.8	18.9
7 10	19 45.64	-31 4.9	2.430	3.434	3.2	13.6	7 10	19 46.81	-28 19.0	1.362	2.372	3.8	18.6
7 20	19 36.74	-31 13.4	2.420	3.422	3.4	13.6	7 20	19 35.87	-29 17.5	1.353	2.360	4.3	18.6
7 30	19 28.13	-31 12.6	2.438	3.409	5.9	13.7	7 30	19 25.26	-30 2.7	1.369	2.348	8.5	18.8
8 9	19 20.61	-31 2.3	2.483	3.396	8.7	13.9	8 9	19 16.42	-30 32.2	1.408	2.336	12.9	19.0
8 19	19 14.81	-30 43.7	2.551	3.383	11.3	14.0	8 19	19 10.41	-30 46.5	1.469	2.324	16.8	19.3
<b>554</b>	Peraga		7 15.6 243°48	0.1°/15.6	18		<b>266665</b>	2008 <i>VG</i> <sub>76</sub>		7 15.7 114°79	1.2°/15.2	17	
6 10	20 9.47	-20 53.7	1.760	2.614	14.7	13.3	6 10	20 9.80	-21 5.8	1.345	2.216	17.4	20.4
6 20	20 4.17	-21 1.1	1.672	2.603	11.2	13.1	6 20	20 4.91	-21 48.0	1.282	2.221	13.2	20.1
6 30	19 56.32	-21 13.6	1.606	2.590	7.2	12.8	6 30	19 56.98	-22 38.7	1.239	2.227	8.3	19.9
7 10	19 46.60	-21 28.4	1.565	2.577	2.7	12.5	7 10	19 46.88	-23 32.4	1.219	2.232	3.1	19.6
7 20	19 35.99	-21 42.3	1.551	2.564	2.1	12.4	7 20	19 35.88	-24 22.5	1.224	2.237	2.9	19.6
7 30	19 25.71	-21 52.8	1.563	2.551	6.8	12.7	7 30	19 25.53	-25 4.1	1.254	2.242	8.0	19.9
8 9	19 16.97	-21 58.5	1.601	2.536	11.1	12.9	8 9	19 17.25	-25 34.4	1.307	2.246	12.8	20.2
8 19	19 10.63	-21 59.4	1.660	2.522	14.9	13.1	8 19	19 11.95	-25 53.4	1.381	2.251	16.9	20.5
<b>174292</b>	2002 <i>SG</i> <sub>50</sub>		7 15.6 337°98	1.6°/15.1	18		<b>271702</b>	2004 <i>RG</i> <sub>154</sub>		7			

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>513360</b>	2008 <i>CD</i> <sub>157</sub>		7 15.7 185°91	3°5/17.9	18		<b>348013</b>	2003 <i>SO</i> <sub>299</sub>		7 15.7 298°80	2°3/15.1	17	
6 10	20 3.24	-7 12.0	2.778	3.581	11.3	22.9	6 10	20 10.80	-27 24.5	1.767	2.626	14.4	21.3
6 20	19 58.45	-7 23.3	2.690	3.581	9.1	22.7	6 20	20 5.56	-27 24.3	1.658	2.591	11.2	21.1
6 30	19 52.23	-7 45.8	2.626	3.580	6.6	22.6	6 30	19 57.47	-27 22.7	1.571	2.555	7.3	20.8
7 10	19 45.00	-8 18.9	2.588	3.579	4.3	22.4	7 10	19 47.16	-27 15.5	1.509	2.519	3.4	20.4
7 20	19 37.34	-9 1.0	2.579	3.577	3.6	22.4	7 20	19 35.63	-26 59.4	1.473	2.483	3.3	20.3
7 30	19 29.88	-9 50.0	2.598	3.575	5.2	22.5	7 30	19 24.25	-26 32.5	1.464	2.447	7.7	20.5
8 9	19 23.26	-10 42.9	2.645	3.572	7.6	22.6	8 9	19 14.40	-25 55.5	1.479	2.411	12.2	20.7
8 19	19 17.99	-11 37.0	2.717	3.569	10.1	22.8	8 19	19 7.15	-25 10.9	1.517	2.375	16.3	20.9
<b>502228</b>	2015 <i>BA</i> <sub>89</sub>		7 15.7 246°86	0°2/15.6	17		<b>443798</b>	1995 <i>CO</i> <sub>2</sub>		7 15.7 249°77	0°8/15.3	17	
6 10	20 8.76	-19 52.4	1.727	2.583	14.9	22.2	6 10	20 5.86	-23 57.4	2.709	3.553	10.4	22.7
6 20	20 3.75	-20 18.3	1.638	2.569	11.4	21.9	6 20	20 0.62	-24 2.5	2.613	3.538	7.9	22.5
6 30	19 56.14	-20 51.9	1.571	2.555	7.3	21.6	6 30	19 53.70	-24 8.6	2.540	3.523	5.0	22.3
7 10	19 46.59	-21 29.8	1.528	2.541	2.7	21.3	7 10	19 45.59	-24 13.7	2.495	3.507	1.9	22.0
7 20	19 36.06	-22 7.9	1.512	2.526	2.1	21.3	7 20	19 36.95	-24 15.9	2.479	3.491	1.8	22.0
7 30	19 25.79	-22 42.2	1.523	2.510	6.9	21.5	7 30	19 28.54	-24 14.0	2.491	3.475	4.9	22.2
8 9	19 17.02	-23 10.1	1.558	2.494	11.3	21.7	8 9	19 21.11	-24 7.6	2.531	3.458	8.0	22.4
8 19	19 10.67	-23 30.7	1.616	2.478	15.2	22.0	8 19	19 15.23	-23 56.8	2.596	3.441	10.7	22.5
<b>361016</b>	2005 <i>VQ</i> <sub>133</sub>		7 15.7 248°87	1°9/16.7	18		<b>479750</b>	2014 <i>EA</i> <sub>16</sub>		7 15.7 246°64	3°0/14.4	18	
6 10	20 2.81	-13 26.9	2.327	3.163	12.2	21.5	6 10	20 8.22	-28 14.5	2.072	2.927	12.8	21.7
6 20	19 58.47	-13 49.9	2.242	3.159	9.5	21.3	6 20	20 2.99	-28 48.1	1.987	2.917	9.8	21.5
6 30	19 52.39	-14 22.7	2.180	3.155	6.3	21.1	6 30	19 55.47	-29 21.8	1.926	2.907	6.4	21.2
7 10	19 45.10	-15 3.6	2.144	3.151	3.1	20.9	7 10	19 46.31	-29 51.1	1.890	2.897	3.5	21.0
7 20	19 37.26	-15 50.0	2.136	3.147	2.2	20.8	7 20	19 36.40	-30 12.2	1.881	2.886	3.8	21.0
7 30	19 29.66	-16 39.0	2.156	3.143	5.2	21.0	7 30	19 26.82	-30 22.3	1.900	2.875	6.9	21.2
8 9	19 23.07	-17 27.4	2.202	3.139	8.5	21.2	8 9	19 18.63	-30 21.0	1.944	2.864	10.4	21.4
8 19	19 18.10	-18 13.1	2.273	3.134	11.4	21.4	8 19	19 12.61	-30 9.6	2.010	2.852	13.5	21.6
<b>12743</b>	1992 <i>PL</i> <sub>2</sub>		7 15.7 76°72	0°4/15.6	18		<b>39384</b>	2814 <i>P-L</i>		7 15.7 5°40	3°6/14.4	18	
6 10	20 9.45	-24 25.9	2.291	3.137	12.0	17.2	6 10	20 5.43	-29 32.2	1.801	2.669	13.8	18.9
6 20	20 3.32	-23 59.4	2.217	3.143	9.1	17.0	6 20	20 1.05	-30 0.8	1.733	2.669	10.6	18.7
6 30	19 55.32	-23 32.3	2.167	3.150	5.7	16.8	6 30	19 54.27	-30 27.8	1.687	2.670	7.0	18.5
7 10	19 46.12	-23 3.0	2.144	3.156	2.1	16.6	7 10	19 45.85	-30 48.6	1.666	2.672	4.0	18.3
7 20	19 36.54	-22 30.9	2.149	3.163	1.7	16.6	7 20	19 36.80	-30 59.4	1.670	2.674	4.3	18.3
7 30	19 27.49	-21 56.1	2.184	3.169	5.3	16.8	7 30	19 28.28	-30 58.0	1.700	2.676	7.5	18.5
8 9	19 19.77	-21 19.3	2.245	3.176	8.6	17.1	8 9	19 21.37	-30 44.8	1.754	2.680	10.9	18.7
8 19	19 13.96	-20 41.8	2.331	3.182	11.5	17.3	8 19	19 16.80	-30 21.5	1.830	2.684	14.1	19.0
<b>467837</b>	2010 <i>TW</i> <sub>16</sub>		7 15.7 130°45	4°4/16.9	17		<b>147887</b>	2006 <i>RY</i> <sub>26</sub>		7 15.7 304°99	5°3/17.5	18	R
6 10	20 8.35	-11 42.7	1.542	2.387	16.9	21.1	6 10	20 4.36	-9 25.0	1.400	2.251	17.9	19.8
6 20	20 3.30	-11 14.5	1.472	2.390	13.3	20.9	6 20	20 0.75	-9 7.0	1.317	2.237	14.4	19.6
6 30	19 55.71	-10 58.7	1.423	2.394	9.3	20.7	6 30	19 54.41	-9 5.7	1.254	2.224	10.4	19.3
7 10	19 46.37	-10 55.5	1.397	2.398	5.6	20.5	7 10	19 46.02	-9 22.2	1.212	2.211	6.6	19.0
7 20	19 36.32	-11 4.0	1.395	2.401	4.6	20.4	7 20	19 36.61	-9 55.2	1.194	2.198	5.5	18.9
7 30	19 26.80	-11 21.9	1.420	2.404	7.7	20.6	7 30	19 27.49	-10 41.5	1.200	2.186	8.6	19.1
8 9	19 18.97	-11 46.1	1.468	2.407	11.7	20.9	8 9	19 19.99	-11 36.1	1.228	2.174	12.9	19.3
8 19	19 13.61	-12 13.7	1.538	2.410	15.3	21.1	8 19	19 15.11	-12 33.7	1.277	2.162	17.0	19.5
<b>29129</b>	1985 <i>RG</i> <sub>3</sub>		7 15.7 290°37	0°9/15.3	18		<b>387768</b>	2003 <i>SJ</i> <sub>386</sub>		7 15.7 232°18	0°5/15.4	18	
6 10	20 6.12	-20 53.8	1.602	2.468	15.3	18.6	6 10	20 6.66	-21 10.3	2.176	3.024	12.5	21.9
6 20	20 2.01	-21 30.6	1.511	2.448	11.7	18.4	6 20	20 1.62	-21 37.2	2.087	3.015	9.5	21.7
6 30	19 55.20	-22 16.0	1.442	2.429	7.5	18.1	6 30	19 54.53	-22 9.1	2.022	3.005	6.0	21.5
7 10	19 46.30	-23 6.0	1.396	2.409	2.8	17.7	7 10	19 45.96	-22 43.0	1.983	2.995	2.2	21.2
7 20	19 36.29	-23 55.4	1.377	2.390	2.6	17.7	7 20	19 36.69	-23 15.6	1.971	2.984	1.9	21.2
7 30	19 26.49	-24 39.3	1.383	2.370	7.5	17.9	7 30	19 27.68	-23 44.1	1.988	2.973	5.8	21.4
8 9	19 18.22	-25 14.4	1.412	2.351	12.1	18.1	8 9	19 19.86	-24 6.6	2.031	2.962	9.4	21.6
8 19	19 12.50	-25 39.5	1.463	2.331	16.2	18.3	8 19	19 13.95	-24 22.6	2.098	2.950	12.6	21.8
<b>404260</b>	2013 <i>ES</i> <sub>38</sub>		7 15.7 338°91	2°2/16.9	18		<b>117561</b>	2005 <i>EY</i> <sub>24</sub>		7 15.7 13°37	4°0/14.3	18	
6 10	20 2.49	-12 48.9	2.255	3.091	12.5	21.0	6 10	20 5.45	-26 14.9	1.126	2.018	18.5	19.0
6 20	19 58.25	-13 7.5	2.174	3.091	9.7	20.8	6 20	20 2.19	-27 10.1	1.070	2.021	14.1	18.8
6 30	19 52.26	-13 36.3	2.116	3.090	6.6	20.6	6 30	19 55.53	-28 9.3	1.034	2.024	9.2	18.5
7 10	19 45.06	-14 13.8	2.084	3.089	3.4	20.4	7 10	19 46.43	-29 4.5	1.019	2.028	4.7	18.3
7 20	19 37.33	-14 57.4	2.078	3.089	2.5	20.3	7 20	19 36.36	-29 48.0	1.026	2.034	5.2	18.3
7 30	19 29.87	-15 44.4	2.101	3.088	5.3	20.5	7 30	19 27.09	-30 14.5	1.056	2.040	9.7	18.6
8 9	19 23.46	-16 31.5	2.150	3.088	8.6	20.7	8 9	19 20.19	-30 23.2	1.107	2.047	14.4	18.9
8 19	19 18.71	-17 16.5	2.223	3.087	11.5	20.9	8 19	19 16.63	-30 16.3	1.176	2.055	18.5	19.2
<b>512142</b>	2015 <i>PQ</i> <sub>112</sub>		7 15.7 323°21	2°5/14.7	18		<b>57046</b>	2001 <i>KW</i> <sub>55</sub>		7 15.7 327°65	1°7/16.5	18	
6 10	20 6.43	-27 28.5	2.073	2.931	12.6	21.5	6 10	20 0.84	-14 27.4	1.501	2.367	16.1	17.9
6 20	20 1.49	-27 49.9	1.996	2.928	9.6	21.3	6 20	19 58.05	-14 58.7	1.411	2.346	12.6	17.6
6 30	19 54.42	-28 11.1	1.943	2.926	6.2	21.1	6 30	19 52.71	-15 45.5	1.342	2.326	8.3	17.3
7 10	19 45.87	-28 28.3	1.915	2.923	3.1	20.9	7 10	19 45.41	-16 45.7	1.296	2.306	3.7	17.0
7 20	19 36.72	-28 38.6	1.914	2.921	3.2	20.9	7 20	19 37.06	-17 54.8	1.274	2.287	2.5	16.9
7 30	19 27.99	-28 39.8	1.940	2.919	6.5	21.1	7 30	19 28.91	-19 7.1	1.277	2.269	7.2	17.1
8 9	19 20.65	-28 31.9	1.991	2.917	9.8	21.3	8 9	19 22.21	-20 16.9	1.303	2.252	12.0	17.4
8 19	19 15.37	-28 16.0	2.066	2.915	12.9	21.5	8 19	19 17.95	-21 19.7	1.351	2.236	16.2	17.6
<b>332278</b>	2006 <i>SW</i> <sub>223</sub>		7 15.7 307°62	5°7/13.0	18		<b>420351</b>	2012 <i>BC</i> <sub>71</sub>		7 15.7			

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>444349</b>	2005 <i>WN</i> <sub>145</sub>		7 15.7 251°20	0°5/15.4	18		<b>342488</b>	2008 <i>UW</i> <sub>158</sub>		7 15.7 319°88	1°2/15.9	18	
6 10	20 4.64	-21 52.6	2.532	3.378	11.0	22.5	6 10	20 6.02	-20 12.8	1.450	2.321	16.4	19.7
6 20	19 59.82	-22 9.0	2.439	3.366	8.3	22.3	6 20	20 2.06	-19 44.7	1.362	2.300	12.6	19.4
6 30	19 53.26	-22 28.6	2.370	3.353	5.3	22.1	6 30	19 55.27	-19 20.2	1.294	2.280	8.2	19.1
7 10	19 45.46	-22 49.3	2.328	3.341	2.0	21.9	7 10	19 46.36	-18 58.2	1.249	2.261	3.3	18.8
7 20	19 37.10	-23 8.5	2.315	3.328	1.7	21.8	7 20	19 36.40	-18 37.5	1.228	2.242	2.5	18.7
7 30	19 28.95	-23 24.5	2.329	3.314	5.1	22.1	7 30	19 26.79	-18 17.3	1.232	2.223	7.6	18.9
8 9	19 21.81	-23 35.9	2.371	3.301	8.3	22.2	8 9	19 18.90	-17 57.4	1.259	2.206	12.5	19.2
8 19	19 16.27	-23 42.4	2.437	3.287	11.1	22.4	8 19	19 13.73	-17 37.9	1.307	2.189	16.9	19.4
<b>174698</b>	2003 <i>UV</i> <sub>60</sub>		7 15.7 7°73	0°1/15.7	18		<b>185710</b>	1998 <i>RQ</i> <sub>25</sub>		7 15.7 294°51	3°4/14.6	17	
6 10	19 59.88	-16 53.9	0.962	1.862	20.3	18.4	6 10	20 8.70	-27 28.2	1.477	2.350	16.0	20.1
6 20	19 58.16	-17 51.6	0.908	1.862	15.5	18.1	6 20	20 4.32	-28 0.3	1.391	2.330	12.4	19.8
6 30	19 53.10	-19 8.0	0.871	1.864	9.9	17.8	6 30	19 56.84	-28 34.2	1.325	2.311	8.2	19.5
7 10	19 45.58	-20 36.8	0.854	1.868	3.6	17.5	7 10	19 46.98	-29 3.9	1.283	2.291	4.2	19.2
7 20	19 37.00	-22 8.4	0.858	1.873	2.8	17.4	7 20	19 35.91	-29 23.9	1.265	2.272	4.5	19.2
7 30	19 29.13	-23 33.1	0.884	1.880	9.0	17.8	7 30	19 25.18	-29 30.1	1.271	2.253	8.8	19.4
8 9	19 23.57	-24 43.9	0.931	1.888	14.5	18.1	8 9	19 16.33	-29 22.0	1.301	2.234	13.4	19.6
8 19	19 21.34	-25 37.4	0.995	1.897	19.2	18.5	8 19	19 10.44	-29 1.6	1.351	2.215	17.5	19.8
<b>244556</b>	2002 <i>VA</i> <sub>61</sub>		7 15.7 293°91	6°2/18.2	18		<b>120920</b>	1998 <i>SY</i> <sub>85</sub>		7 15.7 296°32	2°1/15.1	18	
6 10	20 1.99	-2 12.5	2.609	3.396	12.4	20.2	6 10	20 8.12	-23 44.2	1.243	2.124	17.9	20.1
6 20	19 57.63	-1 25.3	2.521	3.388	10.4	20.0	6 20	20 4.43	-24 10.9	1.154	2.099	13.8	19.8
6 30	19 51.77	-0 50.0	2.455	3.381	8.3	19.9	6 30	19 57.25	-24 44.5	1.084	2.073	8.9	19.5
7 10	19 44.89	-0 28.0	2.414	3.375	6.7	19.8	7 10	19 47.25	-25 19.5	1.036	2.048	3.7	19.1
7 20	19 37.55	-0 20.3	2.399	3.368	6.2	19.7	7 20	19 35.65	-25 49.7	1.011	2.023	3.7	19.0
7 30	19 30.42	-0 26.4	2.410	3.361	7.2	19.8	7 30	19 24.25	-26 9.8	1.009	1.998	9.3	19.2
8 9	19 24.16	-0 44.5	2.448	3.354	9.1	19.9	8 9	19 14.87	-26 17.4	1.029	1.973	14.9	19.5
8 19	19 19.28	-1 11.9	2.508	3.347	11.2	20.0	8 19	19 8.85	-26 13.3	1.067	1.948	19.9	19.7
<b>380229</b>	2001 <i>SQ</i> <sub>132</sub>		7 15.7 327°31	3°9/14.7	15		<b>340408</b>	2006 <i>EJ</i> <sub>66</sub>		7 15.7 12°84	22°4/30.4	17	
6 10	20 5.95	-28 34.3	1.257	2.144	17.3	20.0	6 10	20 1.30	+19 59.0	1.022	1.770	29.6	20.3
6 20	20 2.59	-28 56.2	1.179	2.125	13.4	19.7	6 20	19 59.02	+21 47.8	0.974	1.771	27.8	20.1
6 30	19 55.89	-29 17.8	1.120	2.108	8.9	19.4	6 30	19 53.56	+22 49.7	0.936	1.772	25.9	20.0
7 10	19 46.64	-29 33.0	1.082	2.091	4.7	19.1	7 10	19 45.76	+22 53.7	0.909	1.775	24.2	19.9
7 20	19 36.16	-29 36.0	1.067	2.075	5.0	19.0	7 20	19 36.90	+21 53.4	0.894	1.778	22.9	19.8
7 30	19 26.18	-29 23.8	1.076	2.061	9.5	19.3	7 30	19 28.62	+19 49.6	0.893	1.783	22.4	19.8
8 9	19 18.37	-28 56.7	1.105	2.047	14.4	19.5	8 9	19 22.48	+16 53.3	0.908	1.788	22.8	19.8
8 19	19 13.83	-28 17.9	1.154	2.034	18.8	19.7	8 19	19 19.49	+13 21.3	0.938	1.793	24.1	20.0
<b>176132</b>	2001 <i>FF</i> <sub>11</sub>		7 15.7 97°22	4°6/17.5	17		<b>296895</b>	2010 <i>BS</i> <sub>46</sub>		7 15.7 231°84	2°1/16.7	17	
6 10	20 7.17	-9 26.5	1.548	2.388	17.1	20.4	6 10	20 5.11	-13 48.9	2.078	2.917	13.4	21.2
6 20	20 2.36	-9 18.7	1.484	2.398	13.5	20.2	6 20	20 0.44	-14 1.1	1.992	2.910	10.4	21.0
6 30	19 55.10	-9 26.8	1.439	2.407	9.6	20.0	6 30	19 53.78	-14 23.3	1.928	2.904	7.0	20.8
7 10	19 46.17	-9 50.3	1.418	2.416	5.9	19.8	7 10	19 45.70	-14 54.0	1.890	2.897	3.5	20.5
7 20	19 36.59	-10 26.9	1.421	2.425	4.8	19.8	7 20	19 36.96	-15 30.8	1.878	2.889	2.5	20.4
7 30	19 27.56	-11 12.9	1.450	2.434	7.6	20.0	7 30	19 28.49	-16 10.8	1.895	2.882	5.8	20.6
8 9	19 20.17	-12 3.8	1.503	2.443	11.4	20.2	8 9	19 21.18	-16 51.1	1.937	2.874	9.4	20.9
8 19	19 15.18	-12 55.3	1.578	2.452	14.9	20.5	8 19	19 15.73	-17 29.3	2.003	2.866	12.7	21.0
<b>320498</b>	2007 <i>WX</i> <sub>48</sub>		7 15.7 275°84	1°9/16.5	18		<b>394733</b>	2008 <i>EG</i> <sub>153</sub>		7 15.7 356°24	6°5/12.8	16	
6 10	20 4.70	-15 20.7	1.995	2.840	13.6	21.4	6 10	20 3.71	-34 1.7	1.597	2.472	14.9	19.8
6 20	20 0.22	-15 22.3	1.907	2.830	10.5	21.2	6 20	20 0.30	-35 11.6	1.532	2.467	11.7	19.6
6 30	19 53.69	-15 32.5	1.841	2.819	7.0	21.0	6 30	19 54.11	-36 17.9	1.488	2.464	8.6	19.4
7 10	19 45.66	-15 49.9	1.800	2.808	3.3	20.7	7 10	19 45.90	-37 13.2	1.468	2.461	6.6	19.3
7 20	19 36.95	-16 12.6	1.786	2.798	2.4	20.7	7 20	19 36.82	-37 51.1	1.472	2.459	7.3	19.3
7 30	19 28.50	-16 38.1	1.799	2.787	6.0	20.9	7 30	19 28.26	-38 7.8	1.500	2.458	10.0	19.5
8 9	19 21.27	-17 4.1	1.838	2.776	9.7	21.1	8 9	19 21.55	-38 3.6	1.549	2.459	13.2	19.7
8 19	19 15.97	-17 28.7	1.899	2.766	13.1	21.3	8 19	19 17.55	-37 41.6	1.619	2.460	16.2	19.9
<b>339397</b>	2005 <i>BE</i> <sub>49</sub>		7 15.7 232°96	5°7/12.9	18		<b>498465</b>	2008 <i>CE</i> <sub>30</sub>		7 15.7 180°53	1°4/15.2	17	
6 10	20 12.84	-37 39.5	2.396	3.233	11.9	21.5	6 10	20 10.75	-23 33.5	1.776	2.632	14.5	22.8
6 20	20 6.45	-38 27.0	2.309	3.219	9.5	21.3	6 20	20 5.05	-23 57.2	1.701	2.633	11.0	22.5
6 30	19 57.66	-39 8.7	2.246	3.204	7.3	21.1	6 30	19 56.84	-24 24.3	1.649	2.633	7.0	22.3
7 10	19 47.14	-39 38.9	2.208	3.188	5.8	21.0	7 10	19 46.85	-24 50.7	1.622	2.633	2.8	22.0
7 20	19 35.82	-39 53.1	2.198	3.172	6.2	21.0	7 20	19 36.12	-25 12.4	1.621	2.633	2.6	22.0
7 30	19 24.84	-39 49.3	2.214	3.156	8.2	21.1	7 30	19 25.88	-25 26.7	1.648	2.632	6.8	22.3
8 9	19 15.30	-39 28.1	2.256	3.138	10.8	21.2	8 9	19 17.28	-25 32.5	1.700	2.631	10.9	22.5
8 19	19 8.02	-38 52.7	2.321	3.121	13.2	21.4	8 19	19 11.12	-25 30.7	1.774	2.629	14.4	22.8
<b>387551</b>	2001 <i>FR</i> <sub>182</sub>		7 15.7 193°01	1°3/15.2	18		<b>469958</b>	2006 <i>CC</i> <sub>9</sub>		7 15.7 95°15	2°5/14.3	17	
6 10	20 7.43	-23 37.7	2.006	2.860	13.1	22.0	6 10	20 7.32	-23 21.2	1.794	2.654	14.2	20.5
6 20	20 2.28	-23 59.6	1.929	2.860	9.9	21.8	6 20	20 2.51	-24 40.3	1.726	2.661	10.7	20.3
6 30	19 54.95	-24 24.4	1.875	2.859	6.3	21.5	6 30	19 55.27	-26 5.7	1.682	2.667	6.8	20.1
7 10	19 46.11	-24 48.6	1.846	2.858	2.5	21.3	7 10	19 46.29	-27 31.0	1.663	2.673	3.2	19.9
7 20	19 36.63	-25 9.0	1.845	2.857	2.4	21.3	7 20	19 36.53	-28 49.6	1.672	2.679	3.6	19.9
7 30	19 27.56	-25 23.1	1.871	2.855	6.2	21.5	7 30	19 27.17	-29 55.9	1.708	2.686	7.3	20.1
8 9	19 19.88	-25 30.0	1.923	2.854	9.8	21.7	8 9	19 19.33	-30 47.4	1.769	2.692	11.0	20.4
8 19	19 14.29	-25 29.9	1.998	2.852	13.1	21.9	8 19	19 13.83	-31 23.8	1.852	2.698	14.3	20.6
<b>519657</b>	2012 <i>VH</i> <sub>115</sub>		7 15.7 228°67	0°9/16.0	18		<b>57039</b>	2001 <i>DF</i>					



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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>355092</b>	2006 TX		7 15.7 254°11	1°6/16.2 18			<b>18155</b>	Jasonschuler		7 15.7 258°49	2°2/14.9 18		
6 10	20 6.74	-17 23.1	2.258	3.097	12.4	21.3	6 10	20 9.40	-26 2.1	1.915	2.771	13.6	19.1
6 20	20 1.53	-17 3.6	2.165	3.085	9.6	21.1	6 20	20 4.12	-26 25.9	1.824	2.755	10.4	18.9
6 30	19 54.40	-16 48.7	2.095	3.073	6.3	20.8	6 30	19 56.35	-26 51.3	1.755	2.738	6.7	18.6
7 10	19 45.92	-16 37.6	2.052	3.061	2.9	20.6	7 10	19 46.75	-27 14.0	1.711	2.721	3.1	18.4
7 20	19 36.84	-16 29.4	2.036	3.048	2.2	20.5	7 20	19 36.25	-27 30.3	1.694	2.704	3.2	18.3
7 30	19 28.03	-16 23.2	2.048	3.035	5.5	20.7	7 30	19 26.04	-27 37.4	1.705	2.686	7.0	18.5
8 9	19 20.35	-16 18.2	2.087	3.021	9.0	20.9	8 9	19 17.28	-27 34.5	1.740	2.668	10.9	18.7
8 19	19 14.46	-16 13.7	2.150	3.008	12.1	21.1	8 19	19 10.84	-27 22.8	1.798	2.649	14.4	18.9
<b>477619</b>	2010 LU <sub>32</sub>		7 15.7 254°40	1°2/15.3 18			<b>467944</b>	2012 DP <sub>44</sub>		7 15.7 187°63	4°5/14.0 17		
6 10	20 8.37	-25 42.5	2.259	3.108	12.1	20.7	6 10	20 11.71	-29 55.3	1.617	2.481	15.3	21.8
6 20	20 2.73	-25 33.6	2.176	3.103	9.2	20.5	6 20	20 6.22	-30 46.3	1.548	2.481	11.8	21.5
6 30	19 55.12	-25 23.8	2.116	3.099	5.8	20.2	6 30	19 57.80	-31 36.6	1.500	2.480	8.0	21.3
7 10	19 46.16	-25 11.2	2.083	3.094	2.3	20.0	7 10	19 47.29	-32 19.5	1.476	2.479	4.9	21.1
7 20	19 36.69	-24 53.9	2.078	3.090	2.1	20.0	7 20	19 35.89	-32 48.8	1.478	2.479	5.3	21.2
7 30	19 27.64	-24 31.4	2.101	3.085	5.6	20.2	7 30	19 25.06	-33 1.2	1.506	2.477	8.7	21.4
8 9	19 19.88	-24 4.1	2.151	3.080	9.0	20.4	8 9	19 16.16	-32 56.9	1.557	2.476	12.5	21.6
8 19	19 14.05	-23 33.3	2.225	3.076	12.0	20.6	8 19	19 10.10	-32 38.7	1.629	2.474	16.0	21.8
<b>309076</b>	2006 VA <sub>34</sub>		7 15.7 298°83	1°4/15.1 18			<b>468612</b>	2007 YQ <sub>70</sub>		7 15.7 145°64	0°5/15.9 17		
6 10	20 5.23	-23 43.7	1.978	2.837	13.1	20.9	6 10	20 8.63	-17 45.5	1.654	2.509	15.5	21.9
6 20	20 0.77	-24 7.1	1.892	2.826	10.0	20.7	6 20	20 3.52	-18 17.1	1.584	2.514	11.8	21.7
6 30	19 54.10	-24 33.8	1.830	2.815	6.3	20.4	6 30	19 55.92	-18 58.3	1.536	2.519	7.5	21.5
7 10	19 45.86	-25 0.5	1.792	2.804	2.5	20.2	7 10	19 46.56	-19 45.5	1.512	2.524	2.9	21.2
7 20	19 36.88	-25 23.6	1.781	2.793	2.5	20.2	7 20	19 36.46	-20 34.2	1.514	2.528	2.0	21.2
7 30	19 28.22	-25 40.4	1.797	2.782	6.3	20.4	7 30	19 26.84	-21 19.9	1.544	2.532	6.7	21.5
8 9	19 20.87	-25 49.7	1.839	2.771	10.1	20.6	8 9	19 18.84	-21 59.7	1.598	2.536	11.0	21.7
8 19	19 15.60	-25 51.5	1.903	2.761	13.4	20.8	8 19	19 13.26	-22 32.1	1.674	2.539	14.6	22.0
<b>123259</b>	2000 UV <sub>74</sub>		7 15.7 210°52	1°5/14.9 18			<b>249175</b>	2008 CR <sub>50</sub>		7 15.7 17°02	11°7/13.6 18		
6 10	20 5.64	-25 7.6	2.642	3.488	10.6	21.0	6 10	20 19.32	-51 22.7	1.701	2.519	16.7	19.3
6 20	20 0.50	-25 31.8	2.557	3.483	8.0	20.8	6 20	20 12.37	-52 3.7	1.652	2.525	14.6	19.1
6 30	19 53.65	-25 57.4	2.496	3.478	5.1	20.6	6 30	20 1.68	-52 24.0	1.621	2.532	12.8	19.0
7 10	19 45.62	-26 21.4	2.462	3.472	2.2	20.4	7 10	19 48.62	-52 15.2	1.611	2.540	11.8	19.0
7 20	19 37.08	-26 41.3	2.456	3.466	2.3	20.4	7 20	19 35.06	-51 33.0	1.624	2.548	11.9	19.0
7 30	19 28.81	-26 55.2	2.480	3.460	5.2	20.6	7 30	19 22.98	-50 18.4	1.659	2.557	13.2	19.1
8 9	19 21.56	-27 2.4	2.530	3.453	8.1	20.8	8 9	19 13.89	-48 38.0	1.716	2.567	15.1	19.3
8 19	19 15.91	-27 2.9	2.605	3.446	10.8	20.9	8 19	19 8.50	-46 40.6	1.792	2.578	17.1	19.4
<b>129475</b>	1993 TK <sub>16</sub>		7 15.7 336°77	1°7/16.2 18			<b>207415</b>	2006 DY <sub>33</sub>		7 15.7 359°90	0°4/15.8 17		
6 10	20 0.28	-17 8.3	1.016	1.912	19.7	19.7	6 10	20 5.45	-19 11.4	1.124	2.010	19.0	19.8
6 20	19 58.56	-17 9.5	0.943	1.895	15.4	19.4	6 20	20 2.10	-19 23.5	1.061	2.008	14.6	19.6
6 30	19 53.49	-17 24.4	0.888	1.879	10.1	19.1	6 30	19 55.48	-19 46.1	1.017	2.007	9.3	19.3
7 10	19 45.83	-17 51.3	0.853	1.865	4.3	18.7	7 10	19 46.50	-20 15.5	0.993	2.006	3.5	18.9
7 20	19 36.86	-18 26.1	0.838	1.852	3.0	18.6	7 20	19 36.51	-20 46.9	0.992	2.006	2.6	18.9
7 30	19 28.34	-19 3.7	0.845	1.841	9.0	18.9	7 30	19 27.19	-21 15.6	1.014	2.008	8.4	19.2
8 9	19 21.97	-19 39.2	0.871	1.831	14.8	19.1	8 9	19 20.08	-21 38.5	1.057	2.009	13.7	19.5
8 19	19 18.95	-20 9.1	0.914	1.823	19.9	19.4	8 19	19 16.16	-21 54.3	1.119	2.012	18.3	19.8
<b>221038</b>	2005 QZ <sub>67</sub>		7 15.7 303°13	2°6/14.6 18			<b>221714</b>	2007 EH <sub>13</sub>		7 15.7 293°24	0°3/15.6 17		
6 10	20 5.92	-23 39.5	1.451	2.326	16.1	20.1	6 10	20 7.16	-20 57.8	1.530	2.397	15.9	21.5
6 20	20 2.20	-24 35.8	1.367	2.309	12.3	19.8	6 20	20 2.97	-21 10.2	1.438	2.375	12.2	21.2
6 30	19 55.51	-25 40.3	1.304	2.292	7.9	19.5	6 30	19 55.93	-21 29.3	1.366	2.353	7.8	20.9
7 10	19 46.53	-26 46.9	1.264	2.276	3.6	19.2	7 10	19 46.70	-21 51.9	1.318	2.331	2.9	20.5
7 20	19 36.33	-27 48.5	1.249	2.259	3.9	19.2	7 20	19 36.31	-22 14.2	1.295	2.309	2.3	20.4
7 30	19 26.39	-28 38.9	1.259	2.243	8.6	19.4	7 30	19 26.15	-22 32.7	1.297	2.287	7.5	20.7
8 9	19 18.20	-29 14.8	1.292	2.227	13.2	19.7	8 9	19 17.61	-22 45.1	1.323	2.265	12.4	20.9
8 19	19 12.85	-29 35.8	1.345	2.212	17.4	19.9	8 19	19 11.74	-22 51.0	1.370	2.243	16.8	21.1
<b>60078</b>	1999 TS <sub>146</sub>		7 15.7 92°17	4°2/17.9 18			<b>205555</b>	2001 SV <sub>250</sub>		7 15.7 319°09	5°2/13.9 18		
6 10	20 2.48	- 7 18.6	2.308	3.123	12.9	19.0	6 10	20 4.20	-27 28.7	1.055	1.953	19.0	19.3
6 20	19 58.16	- 7 14.6	2.230	3.127	10.4	18.9	6 20	20 2.01	-28 28.5	0.976	1.929	14.7	19.0
6 30	19 52.18	- 7 23.1	2.175	3.130	7.6	18.7	6 30	19 56.03	-29 34.8	0.916	1.906	9.9	18.7
7 10	19 45.09	- 7 43.8	2.144	3.134	5.1	18.6	7 10	19 46.93	-30 38.9	0.875	1.884	5.7	18.3
7 20	19 37.52	- 8 15.6	2.140	3.137	4.3	18.5	7 20	19 36.09	-31 30.9	0.856	1.862	6.5	18.3
7 30	19 30.25	- 8 56.0	2.163	3.141	6.0	18.6	7 30	19 25.54	-32 2.6	0.858	1.841	11.5	18.5
8 9	19 24.00	- 9 42.0	2.213	3.145	8.7	18.8	8 9	19 17.36	-32 11.4	0.879	1.822	16.9	18.7
8 19	19 19.33	-10 30.6	2.287	3.148	11.4	19.0	8 19	19 13.03	-31 59.4	0.916	1.804	21.8	18.9
<b>238178</b>	2003 SP <sub>217</sub>		7 15.7 194°95	0°1/15.7 18			<b>94832</b>	2001 XG <sub>192</sub>		7 15.7 251°42	0°9/16.1 18		
6 10	20 6.67	-19 52.8	2.208	3.054	12.4	21.6	6 10	20 6.81	-17 10.3	1.905	2.753	14.0	20.4
6 20	20 1.51	-20 9.9	2.126	3.052	9.4	21.4	6 20	20 2.04	-17 28.9	1.814	2.740	10.8	20.2
6 30	19 54.40	-20 32.0	2.068	3.050	6.0	21.2	6 30	19 54.99	-17 56.3	1.745	2.727	7.0	19.9
7 10	19 45.93	-20 56.8	2.036	3.048	2.2	20.9	7 10	19 46.26	-18 30.1	1.702	2.713	2.9	19.6
7 20	19 36.87	-21 21.4	2.031	3.045	1.7	20.9	7 20	19 36.70	-19 7.2	1.685	2.699	2.0	19.5
7 30	19 28.14	-21 43.6	2.055	3.042	5.5	21.1	7 30	19 27.37	-19 44.2	1.696	2.685	6.2	19.8
8 9	19 20.61	-22 1.8	2.105	3.038	9.0	21.3	8 9	19 19.34	-20 18.2	1.732	2.670	10.3	20.0
8 19	19 14.93	-22 15.2	2.180	3.034	12.1	21.5	8 19	19 13.41	-20 47.6	1.792	2.655	13.9	20.2
<b>253820</b>	2003 YU <sub>53</sub>		7 15.7 163°13	1°8/16.3 17			<b>512402</b>	2016 PC <sub>60</sub>		7 15.7 228°30	1°8/14.7 18		
6 10	20 10.18												

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>13125</b>	Tobolsk		7 15.7 193°29	3°2/14.7	18		<b>470702</b>	2008 <i>TN</i> <sub>79</sub>		7 15.7 252°64	3°9/17.2	16	
6 10	20 10.32	-29 32.9	1.843	2.701	14.0	17.7	6 10	20 5.65	-10 35.0	1.991	2.821	14.2	22.1
6 20	20 4.71	-29 47.7	1.770	2.701	10.7	17.5	6 20	20 0.97	-10 20.2	1.900	2.810	11.3	21.8
6 30	19 56.61	-29 59.9	1.720	2.701	7.1	17.3	6 30	19 54.22	-10 16.5	1.832	2.798	8.0	21.6
7 10	19 46.81	-30 5.4	1.694	2.701	3.8	17.1	7 10	19 45.97	-10 24.1	1.787	2.786	4.9	21.4
7 20	19 36.36	-30 0.7	1.695	2.701	4.0	17.1	7 20	19 37.00	-10 41.9	1.770	2.774	4.1	21.3
7 30	19 26.48	-29 44.5	1.723	2.700	7.3	17.3	7 30	19 28.27	-11 8.1	1.779	2.761	6.6	21.5
8 9	19 18.30	-29 17.8	1.776	2.700	10.9	17.5	8 9	19 20.73	-11 39.8	1.813	2.748	10.1	21.6
8 19	19 12.56	-28 42.9	1.851	2.700	14.1	17.7	8 19	19 15.11	-12 14.3	1.871	2.735	13.4	21.8
<b>440192</b>	2004 <i>FV</i> <sub>5</sub>		7 15.7 322°15	21°0/11.0	17		<b>46510</b>	4323 <i>T</i> <sub>-3</sub>		7 15.7 238°15	0°9/16.1	18	
6 10	20 30.71	-57 14.1	0.984	1.818	25.0	20.0	6 10	20 7.34	-16 52.8	1.597	2.454	15.8	19.7
6 20	20 25.42	-59 12.7	0.942	1.813	23.1	19.9	6 20	20 2.77	-17 21.3	1.518	2.449	12.2	19.5
6 30	20 12.32	-60 40.3	0.913	1.807	21.7	19.7	6 30	19 55.61	-18 1.1	1.461	2.444	7.9	19.2
7 10	19 53.09	-61 15.9	0.898	1.803	21.0	19.7	7 10	19 46.55	-18 48.9	1.428	2.439	3.1	18.9
7 20	19 31.74	-60 45.0	0.899	1.798	21.5	19.7	7 20	19 36.60	-19 40.1	1.421	2.434	2.1	18.8
7 30	19 13.36	-59 7.2	0.916	1.794	22.9	19.8	7 30	19 27.02	-20 30.2	1.439	2.429	6.9	19.1
8 9	19 1.41	-56 37.0	0.947	1.791	24.9	19.9	8 9	19 19.02	-21 15.4	1.483	2.424	11.4	19.4
8 19	18 56.72	-53 33.8	0.991	1.788	27.1	20.1	8 19	19 13.50	-21 53.4	1.548	2.418	15.3	19.6
<b>285941</b>	2001 <i>QO</i> <sub>334</sub>		7 15.7 245°39	0°8/16.0	18		<b>62197</b>	2000 <i>SQ</i> <sub>51</sub>		7 15.7 132°42	0°1/15.7	18	
6 10	20 5.18	-18 10.9	2.139	2.986	12.7	21.5	6 10	20 7.38	-21 35.1	2.455	3.297	11.4	19.3
6 20	20 0.47	-18 19.6	2.055	2.981	9.7	21.3	6 20	20 1.75	-21 28.6	2.381	3.305	8.7	19.2
6 30	19 53.80	-18 34.5	1.994	2.975	6.3	21.1	6 30	19 54.42	-21 24.3	2.332	3.313	5.5	19.0
7 10	19 45.77	-18 53.7	1.959	2.970	2.5	20.8	7 10	19 45.97	-21 20.5	2.309	3.321	2.0	18.8
7 20	19 37.13	-19 14.8	1.951	2.965	1.8	20.7	7 20	19 37.12	-21 15.8	2.316	3.329	1.5	18.7
7 30	19 28.79	-19 35.6	1.971	2.959	5.5	21.0	7 30	19 28.68	-21 9.1	2.350	3.337	4.9	19.0
8 9	19 21.64	-19 54.2	2.017	2.953	9.1	21.2	8 9	19 21.41	-21 0.2	2.413	3.344	8.1	19.2
8 19	19 16.33	-20 9.7	2.086	2.948	12.3	21.4	8 19	19 15.84	-20 49.1	2.499	3.351	10.8	19.4
<b>506039</b>	2015 <i>KV</i> <sub>65</sub>		7 15.7 175°21	3°4/13.8	18		<b>318495</b>	2005 <i>EJ</i> <sub>136</sub>		7 15.7 173°03	3°5/17.0	17	
6 10	20 9.23	-28 12.1	2.148	3.000	12.5	21.6	6 10	20 9.45	-11 42.6	1.856	2.687	15.0	22.1
6 20	20 3.70	-29 16.3	2.075	3.002	9.5	21.4	6 20	20 3.85	-11 32.8	1.779	2.690	11.8	21.9
6 30	19 55.94	-30 21.6	2.025	3.004	6.4	21.2	6 30	19 56.02	-11 34.4	1.724	2.693	8.2	21.7
7 10	19 46.58	-31 22.5	2.001	3.005	3.8	21.0	7 10	19 46.63	-11 46.7	1.694	2.695	4.7	21.5
7 20	19 36.50	-32 14.0	2.006	3.006	4.2	21.1	7 20	19 36.59	-12 8.0	1.690	2.696	3.7	21.4
7 30	19 26.77	-32 52.4	2.038	3.006	7.1	21.3	7 30	19 26.95	-12 35.9	1.713	2.697	6.7	21.6
8 9	19 18.39	-33 16.7	2.096	3.006	10.2	21.5	8 9	19 18.73	-13 7.5	1.763	2.697	10.3	21.8
8 19	19 12.14	-33 27.8	2.177	3.005	13.1	21.6	8 19	19 12.66	-13 40.2	1.835	2.696	13.7	22.1
<b>521206</b>	2015 <i>FA</i> <sub>414</sub>		7 15.7 302°62	2°2/16.7	16		<b>282438</b>	2003 <i>XV</i> <sub>21</sub>		7 15.7 223°01	1°4/16.5	18	
6 10	20 4.43	-13 41.5	1.874	2.719	14.3	21.2	6 10	20 5.64	-14 52.0	2.542	3.371	11.5	21.3
6 20	20 0.12	-13 55.9	1.795	2.717	11.1	21.0	6 20	20 0.59	-15 15.5	2.446	3.360	8.9	21.1
6 30	19 53.68	-14 21.7	1.738	2.714	7.4	20.8	6 30	19 53.82	-15 47.2	2.374	3.349	5.9	20.9
7 10	19 45.75	-14 56.9	1.705	2.712	3.7	20.6	7 10	19 45.81	-16 25.4	2.329	3.337	2.7	20.6
7 20	19 37.14	-15 39.0	1.698	2.710	2.6	20.5	7 20	19 37.19	-17 7.7	2.312	3.324	1.9	20.6
7 30	19 28.87	-16 24.2	1.719	2.707	6.1	20.7	7 30	19 28.73	-17 51.3	2.324	3.311	5.0	20.7
8 9	19 21.88	-17 9.4	1.765	2.705	9.9	20.9	8 9	19 21.21	-18 33.6	2.365	3.297	8.2	20.9
8 19	19 16.92	-17 51.6	1.834	2.703	13.4	21.2	8 19	19 15.23	-19 12.9	2.430	3.282	11.1	21.1
<b>13563</b>	1992 <i>UW</i>		7 15.7 296°97	2°0/15.0	18		<b>397006</b>	2005 <i>TM</i> <sub>6</sub>		7 15.7 316°86	4°0/16.9	18	
6 10	20 7.50	-24 38.2	1.618	2.486	15.1	17.6	6 10	20 4.11	-11 58.0	1.938	2.777	14.2	20.2
6 20	20 3.21	-25 1.6	1.522	2.460	11.6	17.3	6 20	19 59.84	-11 21.6	1.850	2.765	11.2	19.9
6 30	19 56.09	-25 28.8	1.448	2.434	7.5	17.0	6 30	19 53.51	-10 54.0	1.784	2.752	8.0	19.7
7 10	19 46.78	-25 55.6	1.397	2.408	3.2	16.7	7 10	19 45.72	-10 36.0	1.741	2.740	4.9	19.5
7 20	19 36.29	-26 17.3	1.371	2.382	3.2	16.6	7 20	19 37.25	-10 27.5	1.725	2.729	4.2	19.4
7 30	19 25.99	-26 30.1	1.371	2.356	7.8	16.8	7 30	19 29.07	-10 27.7	1.735	2.717	6.8	19.6
8 9	19 17.27	-26 32.7	1.395	2.331	12.4	17.0	8 9	19 22.10	-10 35.1	1.770	2.706	10.2	19.8
8 19	19 11.19	-26 25.7	1.439	2.305	16.5	17.2	8 19	19 17.07	-10 47.4	1.828	2.696	13.5	19.9
<b>50962</b>	2000 <i>GB</i> <sub>84</sub>		7 15.7 201°09	4°5/13.8	18		<b>286051</b>	2001 <i>SH</i> <sub>229</sub>		7 15.7 302°39	0°8/16.0	18	
6 10	20 10.58	-29 54.0	1.748	2.609	14.5	19.7	6 10	20 4.13	-18 0.0	1.913	2.767	13.7	20.7
6 20	20 5.23	-30 52.2	1.675	2.607	11.2	19.5	6 20	20 0.00	-18 13.8	1.824	2.754	10.5	20.5
6 30	19 57.15	-31 50.2	1.625	2.605	7.6	19.3	6 30	19 53.70	-18 35.4	1.757	2.740	6.8	20.2
7 10	19 47.08	-32 41.5	1.600	2.602	4.8	19.1	7 10	19 45.82	-19 2.5	1.716	2.727	2.7	19.9
7 20	19 36.13	-33 20.1	1.601	2.600	5.3	19.1	7 20	19 37.17	-19 32.3	1.700	2.714	1.9	19.8
7 30	19 25.66	-33 42.2	1.628	2.597	8.5	19.3	7 30	19 28.79	-20 1.8	1.712	2.701	6.1	20.1
8 9	19 16.93	-33 47.5	1.679	2.594	12.0	19.5	8 9	19 21.66	-20 28.6	1.748	2.688	10.0	20.3
8 19	19 10.83	-33 38.3	1.752	2.590	15.3	19.7	8 19	19 16.56	-20 51.2	1.807	2.676	13.6	20.5
<b>209877</b>	2005 <i>JV</i> <sub>138</sub>		7 15.7 90°25	0°8/16.0	18		<b>65202</b>	2002 <i>CO</i> <sub>304</sub>		7 15.7 114°63	1°7/16.5	17	
6 10	20 5.48	-18 15.8	1.995	2.845	13.4	20.6	6 10	20 8.40	-14 9.7	1.528	2.380	16.7	19.4
6 20	20 0.76	-18 24.7	1.919	2.847	10.2	20.4	6 20	20 3.49	-14 47.9	1.462	2.389	12.8	19.2
6 30	19 54.00	-18 40.0	1.867	2.849	6.5	20.2	6 30	19 55.99	-15 40.4	1.418	2.398	8.4	18.9
7 10	19 45.84	-18 59.7	1.839	2.851	2.6	20.0	7 10	19 46.66	-16 43.5	1.397	2.407	3.7	18.7
7 20	19 37.11	-19 21.3	1.839	2.852	1.8	19.9	7 20	19 36.58	-17 52.0	1.402	2.415	2.4	18.6
7 30	19 28.76	-19 42.3	1.866	2.854	5.7	20.2	7 30	19 27.02	-19 0.1	1.433	2.423	6.9	18.9
8 9	19 21.71	-20 0.9	1.918	2.856	9.4	20.4	8 9	19 19.17	-20 3.0	1.490	2.431	11.3	19.2
8 19	19 16.64	-20 16.0	1.994	2.858	12.7	20.6	8 19	19 13.85	-20 57.9	1.568	2.439	15.1	19.5
<b>415715</b>	1999 <i>AU</i> <sub>23</sub>		7 15.7 287°23	0°1/15.7	17		<b>376286</b>	2011 <i>FD</i> <sub>80</sub>					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>274916</b>	2009 <i>SH</i> <sub>146</sub>		7 15.7 276°29	1°5/15.2	18		<b>9753</b>	1990 <i>QL</i> <sub>3</sub>		7 15.7 341°56	4°4/14.6	18	
6 10	20 8.74	-23 28.8	1.682	2.544	14.9	21.3	6 10	20 7.22	-29 30.1	1.242	2.128	17.6	17.0
6 20	20 4.00	-23 53.5	1.588	2.523	11.4	21.0	6 20	20 3.55	-29 56.1	1.174	2.119	13.6	16.8
6 30	19 56.52	-24 22.8	1.516	2.502	7.3	20.7	6 30	19 56.50	-30 20.6	1.124	2.111	9.1	16.5
7 10	19 46.95	-24 52.8	1.469	2.481	2.9	20.4	7 10	19 46.99	-30 37.1	1.096	2.104	5.1	16.2
7 20	19 36.29	-25 18.9	1.447	2.459	2.8	20.4	7 20	19 36.41	-30 39.8	1.091	2.097	5.4	16.2
7 30	19 25.84	-25 37.4	1.452	2.437	7.4	20.6	7 30	19 26.52	-30 26.0	1.109	2.092	9.6	16.5
8 9	19 16.95	-25 46.7	1.481	2.415	11.9	20.8	8 9	19 18.90	-29 56.8	1.149	2.088	14.2	16.7
8 19	19 10.60	-25 47.2	1.531	2.393	15.9	21.0	8 19	19 14.56	-29 15.8	1.207	2.084	18.3	16.9
<b>203943</b>	2003 <i>QP</i> <sub>95</sub>		7 15.7 262°65	1°7/15.2	18		<b>313282</b>	2002 <i>AB</i> <sub>192</sub>		7 15.7 271°93	0°0/15.7	16	
6 10	20 9.88	-26 0.6	2.056	2.907	13.0	20.7	6 10	20 6.73	-20 50.5	2.433	3.275	11.5	22.9
6 20	20 4.32	-26 6.4	1.961	2.890	9.9	20.5	6 20	20 1.63	-20 57.0	2.325	3.249	8.8	22.7
6 30	19 56.43	-26 12.3	1.888	2.871	6.4	20.3	6 30	19 54.62	-21 7.1	2.240	3.222	5.6	22.4
7 10	19 46.84	-26 15.0	1.842	2.852	2.8	20.0	7 10	19 46.18	-21 18.9	2.182	3.194	2.1	22.2
7 20	19 36.45	-26 11.8	1.823	2.833	2.7	19.9	7 20	19 37.00	-21 30.2	2.153	3.166	1.6	22.1
7 30	19 26.36	-26 1.0	1.831	2.814	6.4	20.2	7 30	19 27.94	-21 39.3	2.152	3.138	5.3	22.3
8 9	19 17.63	-25 42.6	1.866	2.794	10.2	20.3	8 9	19 19.88	-21 44.9	2.178	3.109	8.8	22.5
8 19	19 11.07	-25 17.9	1.924	2.774	13.6	20.5	8 19	19 13.50	-21 46.7	2.228	3.079	12.0	22.6
<b>72084</b>	2000 <i>YB</i> <sub>41</sub>		7 15.7 55°52	1°4/16.1	17		<b>100192</b>	1994 <i>CZ</i> <sub>5</sub>		7 15.7 178°58	4°7/18.6	17	
6 10	20 9.98	-19 4.8	1.341	2.208	17.6	19.0	6 10	20 9.03	-4 5.2	2.124	2.918	14.6	20.2
6 20	20 4.90	-18 43.8	1.280	2.216	13.5	18.7	6 20	20 3.35	-4 36.7	2.039	2.921	11.9	20.0
6 30	19 56.94	-18 29.5	1.239	2.224	8.7	18.5	6 30	19 55.66	-5 26.2	1.975	2.923	8.8	19.8
7 10	19 47.01	-18 20.1	1.221	2.233	3.6	18.2	7 10	19 46.54	-6 32.9	1.937	2.924	5.9	19.6
7 20	19 36.39	-18 13.6	1.228	2.241	2.6	18.2	7 20	19 36.76	-7 53.9	1.927	2.924	4.7	19.6
7 30	19 26.54	-18 8.4	1.259	2.250	7.5	18.5	7 30	19 27.23	-9 24.4	1.946	2.923	6.6	19.7
8 9	19 18.75	-18 3.4	1.314	2.259	12.2	18.8	8 9	19 18.87	-10 58.9	1.992	2.921	9.7	19.9
8 19	19 13.80	-17 58.2	1.389	2.268	16.2	19.1	8 19	19 12.37	-12 32.3	2.064	2.918	12.7	20.1
<b>477054</b>	2009 <i>BD</i> <sub>10</sub>		7 15.7 198°85	0°5/15.9	17		<b>65017</b>	2002 <i>AD</i> <sub>95</sub>		7 15.7 346°49	1°0/15.2	18	
6 10	20 7.16	-19 23.2	2.249	3.092	12.3	22.2	6 10	20 4.08	-21 5.0	2.026	2.883	12.9	19.5
6 20	20 1.87	-19 26.5	2.166	3.090	9.4	22.0	6 20	19 59.85	-21 53.8	1.949	2.882	9.8	19.3
6 30	19 54.66	-19 34.4	2.106	3.087	6.0	21.8	6 30	19 53.55	-22 49.2	1.895	2.880	6.2	19.1
7 10	19 46.13	-19 44.9	2.072	3.084	2.3	21.6	7 10	19 45.78	-23 47.2	1.866	2.878	2.3	18.8
7 20	19 37.03	-19 56.2	2.067	3.080	1.6	21.5	7 20	19 37.34	-24 43.3	1.865	2.877	2.2	18.8
7 30	19 28.27	-20 6.3	2.089	3.076	5.4	21.8	7 30	19 29.21	-25 33.5	1.891	2.876	6.0	19.1
8 9	19 20.68	-20 14.1	2.138	3.072	8.8	22.0	8 9	19 22.32	-26 15.2	1.943	2.875	9.7	19.3
8 19	19 14.92	-20 19.0	2.212	3.068	11.9	22.2	8 19	19 17.38	-26 47.3	2.018	2.875	12.8	19.5
<b>360706</b>	2004 <i>TF</i> <sub>52</sub>		7 15.7 300°21	8°9/10.4	18		<b>335057</b>	2004 <i>RR</i> <sub>156</sub>		7 15.7 340°95	0°1/15.7	17	
6 10	20 10.72	-45 42.5	2.250	3.078	12.8	20.0	6 10	20 5.64	-21 39.1	1.372	2.248	16.8	20.2
6 20	20 5.44	-47 3.3	2.179	3.066	11.0	19.8	6 20	20 1.86	-21 34.1	1.298	2.240	12.8	20.0
6 30	19 57.38	-48 13.9	2.130	3.054	9.5	19.7	6 30	19 55.21	-21 34.0	1.244	2.232	8.2	19.7
7 10	19 47.25	-49 7.2	2.105	3.043	8.9	19.6	7 10	19 46.48	-21 35.9	1.213	2.225	3.1	19.4
7 20	19 36.14	-49 37.3	2.104	3.031	9.4	19.6	7 20	19 36.84	-21 37.0	1.205	2.219	2.3	19.3
7 30	19 25.43	-49 41.9	2.127	3.020	10.9	19.7	7 30	19 27.72	-21 35.1	1.222	2.214	7.6	19.6
8 9	19 16.45	-49 22.2	2.173	3.009	12.9	19.8	8 9	19 20.49	-21 29.1	1.262	2.209	12.4	19.9
8 19	19 10.11	-48 42.3	2.238	2.998	14.8	20.0	8 19	19 16.03	-21 19.1	1.322	2.206	16.6	20.1
<b>20216</b>	1997 <i>GS</i> <sub>27</sub>		7 15.7 237°68	2°5/15.0	18		<b>24924</b>	1997 <i>EY</i> <sub>45</sub>		7 15.7 160°73	1°0/15.3	18	
6 10	20 11.99	-28 43.9	2.003	2.854	13.3	19.2	6 10	20 10.35	-22 3.2	1.867	2.719	14.1	19.1
6 20	20 5.87	-28 45.3	1.918	2.846	10.2	18.9	6 20	20 4.67	-22 34.9	1.795	2.724	10.7	18.9
6 30	19 57.35	-28 44.2	1.856	2.837	6.7	18.7	6 30	19 56.62	-23 11.4	1.746	2.730	6.7	18.7
7 10	19 47.16	-28 36.8	1.820	2.828	3.3	18.5	7 10	19 46.93	-23 48.6	1.722	2.734	2.6	18.4
7 20	19 36.27	-28 20.7	1.810	2.818	3.3	18.5	7 20	19 36.55	-24 22.5	1.726	2.738	2.3	18.4
7 30	19 25.85	-27 54.8	1.829	2.809	6.7	18.7	7 30	19 26.64	-24 50.0	1.757	2.741	6.4	18.7
8 9	19 16.99	-27 20.2	1.874	2.799	10.4	18.9	8 9	19 18.26	-25 9.3	1.813	2.744	10.3	18.9
8 19	19 10.45	-26 39.2	1.942	2.789	13.7	19.1	8 19	19 12.17	-25 20.6	1.893	2.746	13.7	19.2
<b>507218</b>	2010 <i>VT</i> <sub>180</sub>		7 15.7 287°82	3°8/14.2	17		<b>65430</b>	2002 <i>TK</i> <sub>180</sub>		7 15.7 235°77	1°4/15.4	18	
6 10	20 8.30	-26 29.4	1.448	2.322	16.2	21.5	6 10	20 13.03	-25 40.5	1.823	2.675	14.4	19.0
6 20	20 4.12	-27 27.7	1.368	2.308	12.5	21.2	6 20	20 6.88	-25 32.7	1.736	2.665	11.0	18.7
6 30	19 56.82	-28 31.0	1.307	2.293	8.2	21.0	6 30	19 58.12	-25 24.2	1.672	2.655	7.1	18.5
7 10	19 47.13	-29 32.4	1.271	2.279	4.4	20.7	7 10	19 47.51	-25 11.9	1.633	2.645	2.9	18.2
7 20	19 36.21	-30 24.3	1.259	2.265	4.9	20.7	7 20	19 36.11	-24 53.3	1.622	2.634	2.5	18.1
7 30	19 25.61	-31 1.1	1.271	2.250	9.1	20.9	7 30	19 25.17	-24 27.6	1.638	2.622	6.8	18.4
8 9	19 16.89	-31 20.7	1.307	2.236	13.6	21.1	8 9	19 15.89	-23 55.7	1.679	2.611	11.0	18.6
8 19	19 11.15	-31 24.4	1.362	2.222	17.6	21.3	8 19	19 9.10	-23 19.4	1.744	2.599	14.6	18.8
<b>214604</b>	2006 <i>RW</i> <sub>6</sub>		7 15.7 353°02	10°6/18.6	17		<b>191973</b>	2005 <i>WC</i> <sub>20</sub>		7 15.7 352°63	3°6/14.7	17	
6 10	19 53.87	-5 31.3	0.872	1.760	22.9	18.9	6 10	20 10.02	-26 45.8	1.175	2.059	18.5	19.9
6 20	19 53.73	-4 12.6	0.813	1.748	19.2	18.6	6 20	20 5.75	-27 23.3	1.112	2.057	14.2	19.6
6 30	19 50.42	-3 18.1	0.768	1.737	15.3	18.4	6 30	19 57.94	-28 3.3	1.068	2.056	9.2	19.3
7 10	19 44.77	-2 54.4	0.740	1.730	11.8	18.2	7 10	19 47.56	-28 38.7	1.045	2.055	4.6	19.1
7 20	19 38.01	-3 4.8	0.730	1.724	10.6	18.1	7 20	19 36.08	-29 2.7	1.046	2.054	4.8	19.1
7 30	19 31.80	-3 47.4	0.737	1.722	12.7	18.2	7 30	19 25.37	-29 11.0	1.069	2.054	9.6	19.3
8 9	19 27.72	-4 54.2	0.762	1.721	16.5	18.4	8 9	19 17.07	-29 3.8	1.115	2.054	14.5	19.6
8 19	19 26.80	-6 15.0	0.803	1.724	20.6	18.6	8 19	19 12.23	-28 43.8	1.179	2.055	18.7	19.9
<b>444705</b>	2007 <i>EX</i> <sub>126</sub>		7 15.7 255°40	2°7/14.7	18		<b>56019</b>	1998 <i>VS</i> <sub>4</sub> </					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>308357</b>	2005 <i>QR</i> <sub>115</sub>		7 15.7 302°86	0°1/15.8 18			<b>428220</b>	2006 <i>VR</i> <sub>120</sub>		7 15.8 134°09	1°7/16.3 17		
6 10	20 4.75	-20 8.4	2.027	2.882	13.0	21.3	6 10	20 8.78	-16 54.0	1.636	2.489	15.7	21.7
6 20	20 0.34	-20 18.8	1.943	2.873	9.9	21.1	6 20	20 3.67	-16 50.0	1.565	2.493	12.1	21.5
6 30	19 53.86	-20 34.4	1.881	2.865	6.3	20.8	6 30	19 56.09	-16 54.4	1.515	2.496	7.9	21.2
7 10	19 45.92	-20 52.9	1.844	2.856	2.4	20.6	7 10	19 46.79	-17 5.3	1.490	2.500	3.5	21.0
7 20	19 37.31	-21 11.7	1.834	2.848	1.7	20.5	7 20	19 36.79	-17 20.3	1.490	2.503	2.4	20.9
7 30	19 29.01	-21 28.4	1.851	2.840	5.8	20.8	7 30	19 27.32	-17 36.9	1.517	2.506	6.7	21.2
8 9	19 21.96	-21 41.6	1.894	2.832	9.6	21.0	8 9	19 19.47	-17 53.0	1.569	2.510	10.9	21.5
8 19	19 16.86	-21 50.4	1.960	2.824	12.9	21.2	8 19	19 14.04	-18 7.1	1.642	2.512	14.6	21.7
<b>344515</b>	2002 <i>RA</i> <sub>242</sub>		7 15.7 266°68	0°1/15.7 18			<b>476101</b>	2007 <i>TP</i> <sub>126</sub>		7 15.8 289°95	1°9/16.5 18		
6 10	20 7.16	-21 20.4	1.953	2.807	13.5	20.6	6 10	20 5.17	-15 38.6	1.887	2.736	14.1	21.9
6 20	20 2.20	-21 21.3	1.871	2.801	10.3	20.4	6 20	20 0.90	-15 38.9	1.791	2.715	11.0	21.6
6 30	19 55.04	-21 25.9	1.812	2.796	6.5	20.1	6 30	19 54.39	-15 48.1	1.716	2.695	7.3	21.4
7 10	19 46.36	-21 31.9	1.778	2.791	2.4	19.8	7 10	19 46.21	-16 4.9	1.666	2.674	3.5	21.1
7 20	19 37.01	-21 37.0	1.771	2.785	1.8	19.8	7 20	19 37.16	-16 27.4	1.642	2.654	2.5	21.0
7 30	19 28.05	-21 39.4	1.792	2.780	6.0	20.1	7 30	19 28.29	-16 52.9	1.644	2.633	6.3	21.2
8 9	19 20.46	-21 38.3	1.838	2.774	9.9	20.3	8 9	19 20.66	-17 19.0	1.672	2.613	10.4	21.4
8 19	19 14.96	-21 33.4	1.906	2.769	13.2	20.5	8 19	19 15.08	-17 43.7	1.723	2.592	14.1	21.6
<b>495631</b>	2015 <i>VF</i> <sub>125</sub>		7 15.7 352°15	16°7/ 4.8 17			<b>246587</b>	2008 <i>UP</i> <sub>93</sub>		7 15.8 301°61	9°0/19.4 18		
6 10	20 12.98	-41 10.8	0.923	1.812	21.8	20.0	6 10	20 3.19	+ 0 45.9	1.734	2.532	17.2	20.4
6 20	20 10.65	-45 21.1	0.881	1.810	18.8	19.8	6 20	19 59.42	+ 1 28.1	1.649	2.520	14.8	20.2
6 30	20 2.80	-49 23.9	0.860	1.808	17.0	19.7	6 30	19 53.45	+ 1 50.1	1.582	2.508	12.1	20.0
7 10	19 49.95	-52 52.6	0.858	1.806	17.0	19.7	7 10	19 45.85	+ 1 48.4	1.537	2.496	9.9	19.9
7 20	19 34.04	-55 24.7	0.876	1.805	18.9	19.8	7 20	19 37.44	+ 1 22.0	1.515	2.484	9.0	19.8
7 30	19 18.59	-56 50.2	0.912	1.805	21.7	19.9	7 30	19 29.27	+ 0 32.4	1.517	2.473	10.1	19.8
8 9	19 7.17	-57 14.7	0.961	1.805	24.6	20.1	8 9	19 22.36	- 0 35.7	1.542	2.462	12.6	19.9
8 19	19 1.92	-56 51.7	1.022	1.806	27.3	20.4	8 19	19 17.51	- 1 56.0	1.589	2.451	15.4	20.1
<b>214384</b>	2005 <i>LM</i> <sub>47</sub>		7 15.7 4°60	1°5/15.1 18			<b>323259</b>	2003 <i>SP</i> <sub>285</sub>		7 15.8 257°63	1°1/16.1 17		
6 10	20 5.71	-23 39.9	1.801	2.665	14.0	20.4	6 10	20 10.00	-18 52.2	1.609	2.465	15.8	21.5
6 20	20 1.28	-24 7.5	1.729	2.665	10.6	20.2	6 20	20 4.92	-18 45.0	1.521	2.451	12.2	21.2
6 30	19 54.54	-24 38.6	1.679	2.665	6.7	20.0	6 30	19 57.11	-18 44.2	1.453	2.436	7.9	20.9
7 10	19 46.18	-25 9.4	1.654	2.666	2.7	19.7	7 10	19 47.26	-18 47.8	1.410	2.421	3.2	20.6
7 20	19 37.14	-25 36.1	1.655	2.666	2.6	19.7	7 20	19 36.40	-18 53.5	1.392	2.406	2.3	20.5
7 30	19 28.55	-25 55.8	1.682	2.668	6.6	20.0	7 30	19 25.87	-18 59.0	1.401	2.390	7.1	20.7
8 9	19 21.45	-26 7.0	1.734	2.669	10.5	20.2	8 9	19 16.96	-19 2.9	1.434	2.374	11.8	21.0
8 19	19 16.58	-26 10.1	1.808	2.670	13.9	20.4	8 19	19 10.61	-19 4.5	1.489	2.358	15.9	21.2
<b>247020</b>	1999 <i>XM</i> <sub>108</sub>		7 15.7 259°45	3°4/13.8 18			<b>318467</b>	2005 <i>ES</i> <sub>41</sub>		7 15.8 116°78	2°4/14.9 17		
6 10	20 6.28	-30 24.1	2.539	3.388	10.9	20.8	6 10	20 12.69	-25 42.1	1.639	2.498	15.4	21.2
6 20	20 1.33	-31 10.2	2.448	3.373	8.4	20.6	6 20	20 6.67	-26 14.7	1.579	2.512	11.6	21.0
6 30	19 54.44	-31 55.6	2.382	3.358	5.7	20.4	6 30	19 57.97	-26 48.8	1.542	2.526	7.4	20.8
7 10	19 46.14	-32 36.3	2.342	3.343	3.7	20.2	7 10	19 47.47	-27 19.2	1.529	2.539	3.4	20.6
7 20	19 37.16	-33 8.5	2.330	3.327	4.0	20.2	7 20	19 36.34	-27 41.5	1.542	2.552	3.4	20.6
7 30	19 28.39	-33 29.5	2.346	3.311	6.5	20.3	7 30	19 25.93	-27 52.9	1.583	2.564	7.4	20.9
8 9	19 20.70	-33 38.6	2.388	3.295	9.2	20.5	8 9	19 17.41	-27 53.4	1.647	2.576	11.3	21.1
8 19	19 14.77	-33 36.6	2.453	3.279	11.8	20.6	8 19	19 11.55	-27 44.4	1.734	2.587	14.8	21.4
<b>228607</b>	2002 <i>BH</i> <sub>5</sub>		7 15.7 128°95	6°5/13.2 17			<b>400452</b>	2008 <i>EP</i> <sub>154</sub>		7 15.8 24°46	5°4/13.4 16		
6 10	20 13.84	-37 28.6	1.948	2.794	13.8	20.3	6 10	20 7.48	-34 40.2	1.974	2.832	13.2	21.1
6 20	20 7.50	-38 24.5	1.889	2.804	11.0	20.1	6 20	20 2.63	-35 29.4	1.911	2.836	10.4	20.9
6 30	19 58.49	-39 12.9	1.852	2.813	8.3	20.0	6 30	19 55.40	-36 13.7	1.870	2.841	7.5	20.8
7 10	19 47.64	-39 47.2	1.840	2.822	6.6	19.9	7 10	19 46.53	-36 47.5	1.854	2.846	5.6	20.7
7 20	19 36.13	-40 2.4	1.854	2.830	7.0	19.9	7 20	19 37.03	-37 6.3	1.864	2.851	6.0	20.7
7 30	19 25.32	-39 57.0	1.894	2.839	9.2	20.1	7 30	19 28.07	-37 8.1	1.900	2.857	8.3	20.9
8 9	19 16.38	-39 32.6	1.958	2.846	11.9	20.2	8 9	19 20.71	-36 53.7	1.960	2.863	11.1	21.0
8 19	19 10.11	-38 53.5	2.043	2.854	14.4	20.4	8 19	19 15.70	-36 25.9	2.041	2.870	13.8	21.2
<b>178344</b>	1995 <i>VZ</i> <sub>9</sub>		7 15.7 158°46	0°4/15.5 18			<b>17060</b>	Mikecombi		7 15.8 20°53	7°9/14.4 18		
6 10	20 5.57	-21 35.8	2.650	3.492	10.7	21.8	6 10	20 13.38	-38 23.0	1.309	2.178	17.9	16.7
6 20	20 0.41	-21 53.6	2.573	3.497	8.1	21.6	6 20	20 8.09	-38 49.9	1.255	2.184	14.3	16.5
6 30	19 53.64	-22 14.5	2.520	3.502	5.1	21.5	6 30	19 59.22	-39 4.6	1.221	2.190	10.7	16.3
7 10	19 45.78	-22 36.1	2.494	3.506	1.9	21.2	7 10	19 47.98	-38 59.1	1.208	2.198	8.2	16.2
7 20	19 37.50	-22 56.2	2.497	3.511	1.5	21.2	7 20	19 36.02	-38 28.8	1.218	2.206	8.4	16.2
7 30	19 29.52	-23 13.1	2.529	3.514	4.7	21.5	7 30	19 25.25	-37 33.9	1.252	2.215	11.1	16.4
8 9	19 22.56	-23 25.6	2.589	3.518	7.7	21.6	8 9	19 17.17	-36 19.8	1.307	2.224	14.5	16.6
8 19	19 17.14	-23 33.5	2.673	3.521	10.3	21.8	8 19	19 12.59	-34 53.7	1.382	2.235	17.8	16.9
<b>281872</b>	2010 <i>EU</i> <sub>92</sub>		7 15.7 247°25	2°5/16.9 18			<b>156913</b>	2003 <i>FN</i> <sub>28</sub>		7 15.8 65°88	8°4/11.8 18		
6 10	20 5.49	-13 9.5	2.014	2.852	13.8	21.3	6 10	20 12.03	-37 47.4	1.582	2.443	15.8	20.0
6 20	20 0.90	-13 17.7	1.925	2.842	10.8	21.1	6 20	20 6.86	-39 28.9	1.532	2.453	12.7	19.8
6 30	19 54.24	-13 36.5	1.858	2.832	7.3	20.8	6 30	19 58.47	-41 3.0	1.504	2.464	10.0	19.7
7 10	19 46.09	-14 4.9	1.817	2.822	3.8	20.6	7 10	19 47.76	-42 19.8	1.499	2.474	8.5	19.6
7 20	19 37.23	-14 40.4	1.802	2.812	2.8	20.5	7 20	19 36.11	-43 11.5	1.518	2.485	9.2	19.7
7 30	19 28.61	-15 20.2	1.814	2.801	6.0	20.7	7 30	19 25.17	-43 34.6	1.561	2.496	11.5	19.9
8 9	19 21.17	-16 1.2	1.852	2.791	9.7	20.9	8 9	19 16.46	-43 31.1	1.626	2.507	14.3	20.1
8 19	19 15.64	-16 40.8	1.914	2.780	13.1	21.1	8 19	19 10.92	-43 6.0	1.710	2.518	16.9	20.3
<b>58823</b>	1998 <i>HR</i> <sub>8</sub>		7 15.7 169°38	1°3/16.4 18			<b>123261</b>	2000 <i>UO</i>					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>174659</b>	2003 SV <sub>207</sub>		7 15.8 150°40	6°7/18.6 17			<b>440635</b>	2005 WM <sub>72</sub>		7 15.8 246°32	4°9/17.5 18		
6 10	20 8.02	- 3 53.5	1.772	2.581	16.5	20.6	6 10	20 4.83	- 7 15.0	2.493	3.299	12.4	20.5
6 20	20 2.85	- 3 27.5	1.701	2.587	13.6	20.4	6 20	19 59.95	- 6 31.9	2.402	3.291	10.1	20.3
6 30	19 55.47	- 3 19.2	1.649	2.594	10.4	20.2	6 30	19 53.44	- 5 58.1	2.334	3.282	7.6	20.2
7 10	19 46.56	- 3 29.6	1.621	2.600	7.7	20.1	7 10	19 45.80	- 5 35.0	2.292	3.274	5.5	20.0
7 20	19 37.02	- 3 58.3	1.618	2.605	6.7	20.0	7 20	19 37.64	- 5 22.8	2.277	3.266	4.9	20.0
7 30	19 27.90	- 4 42.4	1.640	2.610	8.4	20.1	7 30	19 29.72	- 5 21.3	2.289	3.257	6.5	20.1
8 9	19 20.19	- 5 37.7	1.688	2.614	11.3	20.3	8 9	19 22.73	- 5 28.9	2.328	3.248	8.9	20.2
8 19	19 14.62	- 6 38.9	1.758	2.618	14.3	20.5	8 19	19 17.26	- 5 43.6	2.391	3.239	11.4	20.3
<b>479183</b>	2013 CY <sub>56</sub>		7 15.8 119°92	8°3/13.4 18			<b>520239</b>	2014 DA <sub>154</sub>		7 15.8 220°02	0°4/15.6 18		
6 10	20 20.26	-48 31.6	2.424	3.226	12.8	20.8	6 10	20 5.82	-20 57.5	2.095	2.947	12.8	21.6
6 20	20 12.02	-48 59.4	2.363	3.232	10.9	20.7	6 20	20 1.09	-21 22.5	2.016	2.945	9.7	21.4
6 30	20 1.13	-49 12.6	2.323	3.238	9.3	20.6	6 30	19 54.34	-21 52.6	1.959	2.943	6.1	21.2
7 10	19 48.58	-49 5.3	2.308	3.244	8.3	20.5	7 10	19 46.16	-22 24.8	1.929	2.941	2.3	20.9
7 20	19 35.63	-48 34.5	2.318	3.249	8.5	20.6	7 20	19 37.37	-22 55.9	1.926	2.939	1.8	20.9
7 30	19 23.66	-47 40.4	2.355	3.255	9.7	20.7	7 30	19 28.90	-23 23.1	1.950	2.937	5.7	21.1
8 9	19 13.79	-46 26.9	2.416	3.260	11.5	20.8	8 9	19 21.67	-23 44.6	2.000	2.934	9.3	21.4
8 19	19 6.70	-44 59.5	2.499	3.265	13.3	20.9	8 19	19 16.37	-23 59.7	2.074	2.932	12.5	21.6
<b>185793</b>	1999 VT <sub>117</sub>		7 15.8 332°19	2°4/14.7 18			<b>471956</b>	2013 SC <sub>25</sub>		7 15.8 70°86	4°0/16.6 18 R		
6 10	20 5.06	-26 22.8	1.983	2.846	13.0	20.1	6 10	20 58.64	-13 16.4	0.853	1.666	29.6	21.3
6 20	20 0.72	-26 52.8	1.905	2.839	9.9	19.9	6 20	20 40.07	-13 5.6	0.845	1.748	22.1	21.1
6 30	19 54.19	-27 24.3	1.849	2.833	6.4	19.7	6 30	20 17.74	-13 10.2	0.857	1.826	14.1	21.0
7 10	19 46.11	-27 53.2	1.818	2.827	3.1	19.5	7 10	19 54.17	-13 24.7	0.894	1.900	6.6	20.8
7 20	19 37.35	-28 15.8	1.813	2.822	3.2	19.5	7 20	19 32.17	-13 43.8	0.959	1.969	4.8	21.0
7 30	19 28.96	-28 29.5	1.836	2.817	6.6	19.7	7 30	19 14.02	-14 4.4	1.052	2.034	10.1	21.5
8 9	19 21.92	-28 33.5	1.883	2.812	10.1	19.9	8 9	19 0.83	-14 24.7	1.169	2.095	15.1	22.0
8 19	19 16.98	-28 28.4	1.953	2.807	13.3	20.1	8 19	18 52.64	-14 43.7	1.306	2.153	19.0	22.4
<b>287860</b>	2003 SA <sub>263</sub>		7 15.8 266°48	2°0/16.5 17			<b>414086</b>	2007 TV <sub>165</sub>		7 15.8 187°82	4°0/14.4 17		
6 10	20 7.35	-14 51.3	1.541	2.395	16.4	21.0	6 10	20 13.30	-29 17.3	1.693	2.551	15.0	21.3
6 20	20 3.01	-15 6.3	1.454	2.382	12.8	20.8	6 20	20 7.38	-30 0.0	1.620	2.551	11.6	21.1
6 30	19 55.97	-15 34.3	1.388	2.369	8.5	20.5	6 30	19 58.62	-30 42.0	1.570	2.550	7.7	20.9
7 10	19 46.88	-16 13.2	1.346	2.355	3.9	20.2	7 10	19 47.83	-31 17.3	1.544	2.549	4.5	20.7
7 20	19 36.73	-16 59.4	1.328	2.341	2.7	20.1	7 20	19 36.16	-31 40.3	1.544	2.547	4.8	20.7
7 30	19 26.85	-17 48.6	1.336	2.327	7.3	20.3	7 30	19 25.05	-31 48.1	1.571	2.545	8.2	20.9
8 9	19 18.52	-18 36.5	1.369	2.312	12.0	20.5	8 9	19 15.79	-31 40.9	1.622	2.542	12.1	21.1
8 19	19 12.73	-19 19.9	1.423	2.298	16.1	20.7	8 19	19 9.30	-31 21.3	1.695	2.539	15.5	21.3
<b>137770</b>	1999 XD <sub>195</sub>		7 15.8 112°01	4°2/14.5 18			<b>390817</b>	2004 KW <sub>18</sub>		7 15.8 23°37	8°5/21.7 16		
6 10	20 12.31	-30 6.4	1.575	2.439	15.6	19.5	6 10	20 2.57	+ 5 59.8	2.107	2.862	15.9	21.0
6 20	20 6.67	-30 39.8	1.511	2.444	12.0	19.3	6 20	19 58.51	+ 5 59.9	2.028	2.864	13.8	20.8
6 30	19 58.14	-31 11.0	1.469	2.450	8.1	19.0	6 30	19 52.64	+ 5 36.9	1.968	2.866	11.5	20.7
7 10	19 47.60	-31 33.8	1.450	2.455	4.7	18.9	7 10	19 45.53	+ 4 49.2	1.929	2.867	9.6	20.5
7 20	19 36.30	-31 43.5	1.457	2.460	5.0	18.9	7 20	19 37.86	+ 3 37.8	1.915	2.869	8.5	20.5
7 30	19 25.73	-31 37.7	1.489	2.465	8.4	19.1	7 30	19 30.47	+ 2 5.8	1.926	2.871	9.1	20.5
8 9	19 17.17	-31 17.7	1.545	2.469	12.3	19.3	8 9	19 24.16	+ 0 19.3	1.963	2.873	10.8	20.6
8 19	19 11.47	-30 46.6	1.623	2.474	15.7	19.6	8 19	19 19.56	- 1 35.1	2.024	2.876	13.0	20.8
<b>288834</b>	2004 RX <sub>190</sub>		7 15.8 342°60	5°8/14.1 18			<b>400498</b>	2008 JF <sub>23</sub>		7 15.8 290°86	10°9/21.2 18		
6 10	20 4.23	-33 32.5	1.472	2.351	15.7	19.3	6 10	20 2.11	+11 22.3	2.375	3.086	15.4	20.9
6 20	20 1.04	-34 1.8	1.393	2.333	12.4	19.0	6 20	19 58.07	+12 26.9	2.291	3.077	13.9	20.7
6 30	19 54.86	-34 26.0	1.335	2.315	8.8	18.7	6 30	19 52.34	+13 11.7	2.226	3.068	12.5	20.6
7 10	19 46.47	-34 38.8	1.299	2.299	6.1	18.6	7 10	19 45.43	+13 32.9	2.181	3.060	11.4	20.5
7 20	19 37.09	-34 35.0	1.287	2.285	6.5	18.5	7 20	19 37.94	+13 28.5	2.159	3.051	10.9	20.5
7 30	19 28.22	-34 12.1	1.298	2.271	9.6	18.7	7 30	19 30.64	+12 58.5	2.158	3.042	11.2	20.5
8 9	19 21.29	-33 31.5	1.331	2.260	13.5	18.9	8 9	19 24.27	+12 5.9	2.181	3.034	12.2	20.5
8 19	19 17.26	-32 37.1	1.384	2.249	17.1	19.1	8 19	19 19.44	+10 55.4	2.224	3.025	13.7	20.6
<b>185169</b>	2006 SG <sub>264</sub>		7 15.8 158°30	5°8/13.0 18			<b>326192</b>	2012 CH <sub>8</sub>		7 15.8 202°34	0°1/15.7 18		
6 10	20 11.62	-39 31.5	2.536	3.369	11.4	21.1	6 10	20 4.77	-21 7.4	2.884	3.723	10.0	21.9
6 20	20 5.35	-40 16.2	2.470	3.374	9.2	20.9	6 20	19 59.76	-21 17.2	2.797	3.719	7.6	21.7
6 30	19 56.94	-40 53.4	2.427	3.378	7.2	20.8	6 30	19 53.25	-21 29.8	2.734	3.715	4.8	21.5
7 10	19 47.09	-41 18.2	2.410	3.383	5.9	20.7	7 10	19 45.72	-21 43.4	2.699	3.711	1.8	21.3
7 20	19 36.69	-41 27.0	2.419	3.386	6.3	20.8	7 20	19 37.76	-21 56.3	2.692	3.706	1.3	21.3
7 30	19 26.79	-41 18.6	2.456	3.390	7.9	20.9	7 30	19 30.04	-22 6.9	2.715	3.701	4.4	21.5
8 9	19 18.34	-40 54.2	2.518	3.393	10.0	21.0	8 9	19 23.20	-22 14.5	2.766	3.695	7.3	21.7
8 19	19 12.00	-40 16.9	2.602	3.396	12.1	21.2	8 19	19 17.77	-22 18.5	2.841	3.689	9.8	21.8
<b>127179</b>	2002 GB <sub>161</sub>		7 15.8 179°46	0°2/15.7 18			<b>276067</b>	2002 CT <sub>145</sub>		7 15.8 63°83	1°6/15.3 17		
6 10	20 7.79	-19 26.3	2.342	3.182	12.0	20.7	6 10	20 10.16	-25 8.8	1.624	2.487	15.3	19.5
6 20	20 2.37	-20 2.3	2.261	3.183	9.1	20.5	6 20	20 4.70	-25 15.9	1.566	2.501	11.6	19.3
6 30	19 55.05	-20 44.2	2.203	3.184	5.8	20.3	6 30	19 56.70	-25 24.0	1.529	2.514	7.3	19.1
7 10	19 46.41	-21 29.1	2.173	3.185	2.1	20.0	7 10	19 47.04	-25 29.3	1.517	2.528	3.0	18.8
7 20	19 37.18	-22 13.6	2.171	3.185	1.6	20.0	7 20	19 36.85	-25 29.0	1.531	2.542	2.7	18.8
7 30	19 28.23	-22 54.5	2.199	3.184	5.3	20.3	7 30	19 27.39	-25 21.4	1.571	2.557	6.9	19.1
8 9	19 20.41	-23 29.8	2.253	3.183	8.7	20.5	8 9	19 19.77	-25 6.9	1.635	2.571	10.9	19.4
8 19	19 14.35	-23 58.5	2.332	3.181	11.6	20.7	8 19	19 14.68	-24 46.8	1.722	2.585	14.4	19.7
<b>210835</b>	2001 PO <sub>41</sub>		7 15.8 305°15	4°4/16.9 18			<b>5624</b>	Shirley		7 15.8 285°94	3°5/17.7 18		
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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>308525</b>	2005 <i>UM</i> <sub>83</sub>		7 15.8 96°98	3°4/17.3	18		<b>393166</b>	2013 <i>CM</i> <sub>37</sub>		7 15.8 68°61	5°2/18.3	18	
6 10	20 3.83	-10 48.4	2.287	3.114	12.7	21.2	6 10	20 3.29	-5 40.8	2.198	3.008	13.7	21.3
6 20	19 59.29	-10 37.1	2.211	3.118	10.0	21.0	6 20	19 58.95	-5 20.6	2.121	3.011	11.1	21.1
6 30	19 53.05	-10 35.7	2.157	3.122	7.1	20.9	6 30	19 52.89	-5 13.7	2.065	3.014	8.4	21.0
7 10	19 45.67	-10 43.8	2.128	3.126	4.3	20.7	7 10	19 45.64	-5 20.8	2.034	3.017	6.0	20.8
7 20	19 37.83	-11 0.3	2.127	3.131	3.5	20.7	7 20	19 37.90	-5 41.2	2.029	3.020	5.2	20.8
7 30	19 30.30	-11 23.3	2.153	3.135	5.7	20.8	7 30	19 30.46	-6 13.0	2.051	3.023	6.7	20.9
8 9	19 23.84	-11 50.5	2.205	3.139	8.6	21.0	8 9	19 24.10	-6 53.2	2.098	3.026	9.3	21.0
8 19	19 19.00	-12 19.7	2.281	3.143	11.4	21.2	8 19	19 19.38	-7 38.5	2.169	3.029	11.9	21.2
<b>170440</b>	2003 <i>UC</i> <sub>136</sub>		7 15.8 138°85	8°7/19.1	18		<b>409738</b>	2006 <i>CD</i> <sub>56</sub>		7 15.8 103°93	13°0/14.6	16	
6 10	20 10.89	+ 2 18.3	2.118	2.877	15.7	20.4	6 10	20 38.07	-53 26.2	1.582	2.377	18.8	21.2
6 20	20 4.60	+ 3 25.3	2.052	2.893	13.4	20.2	6 20	20 26.93	-54 21.4	1.544	2.399	16.4	21.1
6 30	19 56.39	+ 4 14.9	2.006	2.908	11.2	20.1	6 30	20 11.05	-54 51.6	1.525	2.421	14.4	21.0
7 10	19 46.91	+ 4 44.2	1.985	2.922	9.4	20.0	7 10	19 52.30	-54 45.1	1.526	2.442	13.2	21.0
7 20	19 36.95	+ 4 51.8	1.988	2.935	8.7	20.0	7 20	19 33.32	-53 56.7	1.551	2.462	13.2	21.1
7 30	19 27.42	+ 4 38.7	2.018	2.948	9.6	20.1	7 30	19 16.78	-52 29.7	1.598	2.482	14.4	21.2
8 9	19 19.17	+ 4 7.9	2.072	2.959	11.4	20.2	8 9	19 4.44	-50 34.1	1.667	2.501	16.2	21.4
8 19	19 12.81	+ 3 24.1	2.149	2.970	13.5	20.4	8 19	18 56.89	-48 22.3	1.756	2.519	18.2	21.6
<b>330845</b>	2009 <i>PD</i> <sub>3</sub>		7 15.8 327°39	3°6/16.6	17		<b>63074</b>	2000 <i>WU</i> <sub>125</sub>		7 15.8 311°59	3°4/14.4	18	
6 10	20 5.56	-15 4.0	1.298	2.167	18.0	20.2	6 10	20 7.97	-30 39.2	2.208	3.060	12.2	18.5
6 20	20 1.96	-14 28.6	1.221	2.155	14.2	19.9	6 20	20 2.72	-31 3.8	2.133	3.060	9.3	18.3
6 30	19 55.43	-14 3.0	1.163	2.144	9.7	19.6	6 30	19 55.36	-31 26.0	2.082	3.060	6.3	18.1
7 10	19 46.73	-13 47.7	1.126	2.133	5.2	19.3	7 10	19 46.58	-31 41.7	2.057	3.060	3.8	17.9
7 20	19 37.01	-13 42.0	1.113	2.123	4.1	19.2	7 20	19 37.24	-31 47.9	2.058	3.059	4.0	18.0
7 30	19 27.72	-13 44.5	1.123	2.113	8.3	19.5	7 30	19 28.33	-31 42.8	2.087	3.059	6.7	18.1
8 9	19 20.26	-13 52.9	1.155	2.105	13.1	19.7	8 9	19 20.79	-31 26.9	2.142	3.059	9.7	18.3
8 19	19 15.63	-14 4.8	1.207	2.097	17.5	19.9	8 19	19 15.29	-31 1.8	2.220	3.059	12.5	18.5
<b>384513</b>	2010 <i>CA</i> <sub>157</sub>		7 15.8 179°41	5°7/18.9	18		<b>302135</b>	2001 <i>RS</i> <sub>56</sub>		7 15.8 269°56	5°1/14.3	17	
6 10	20 5.35	- 2 45.7	2.189	2.983	14.2	21.8	6 10	20 12.86	-30 39.0	1.370	2.241	17.1	20.5
6 20	20 0.55	- 2 44.6	2.107	2.984	11.8	21.6	6 20	20 7.87	-31 19.4	1.293	2.230	13.3	20.3
6 30	19 53.92	- 3 0.0	2.046	2.985	9.1	21.4	6 30	19 59.39	-31 58.4	1.236	2.218	9.2	20.0
7 10	19 46.03	- 3 32.3	2.009	2.985	6.7	21.3	7 10	19 48.29	-32 28.4	1.202	2.206	5.6	19.8
7 20	19 37.56	- 4 20.2	1.999	2.985	5.7	21.2	7 20	19 35.94	-32 42.6	1.192	2.194	6.0	19.8
7 30	19 29.37	- 5 20.8	2.016	2.985	7.1	21.3	7 30	19 24.14	-32 37.1	1.207	2.182	9.9	19.9
8 9	19 22.25	- 6 29.9	2.059	2.984	9.6	21.5	8 9	19 14.59	-32 13.1	1.243	2.170	14.3	20.2
8 19	19 16.84	- 7 43.0	2.126	2.982	12.3	21.6	8 19	19 8.40	-31 34.6	1.300	2.158	18.4	20.4
<b>522881</b>	2016 <i>OO</i> <sub>7</sub>		7 15.8 70°85	2°2/16.7	18		<b>131873</b>	2002 <i>AJ</i> <sub>159</sub>		7 15.8 22°38	0°2/15.8	17	
6 10	20 4.83	-14 58.8	2.220	3.058	12.6	20.9	6 10	20 8.37	-22 20.9	1.045	1.934	19.8	18.9
6 20	20 0.11	-14 46.0	2.143	3.061	9.8	20.7	6 20	20 4.42	-21 56.4	0.992	1.941	15.1	18.7
6 30	19 53.60	-14 40.3	2.088	3.063	6.5	20.5	6 30	19 57.02	-21 35.9	0.958	1.949	9.6	18.4
7 10	19 45.89	-14 40.9	2.060	3.066	3.3	20.3	7 10	19 47.29	-21 16.9	0.944	1.957	3.6	18.1
7 20	19 37.69	-14 46.6	2.058	3.068	2.5	20.3	7 20	19 36.78	-20 57.3	0.953	1.967	2.6	18.0
7 30	19 29.83	-14 55.9	2.084	3.071	5.4	20.5	7 30	19 27.26	-20 36.0	0.984	1.978	8.5	18.4
8 9	19 23.12	-15 7.3	2.137	3.073	8.7	20.7	8 9	19 20.25	-20 13.2	1.036	1.989	13.8	18.8
8 19	19 18.12	-15 19.3	2.213	3.076	11.6	20.9	8 19	19 16.58	-19 49.7	1.106	2.002	18.3	19.1
<b>509313</b>	2006 <i>WP</i> <sub>22</sub>		7 15.8 302°25	6°1/12.6	18		<b>352112</b>	2007 <i>CO</i> <sub>59</sub>		7 15.8 129°75	5°6/19.6	18	
6 10	20 7.78	-28 47.4	1.387	2.265	16.5	21.0	6 10	20 2.70	- 0 26.1	2.689	3.463	12.4	21.2
6 20	20 4.38	-30 25.1	1.292	2.233	13.0	20.7	6 20	19 58.18	- 0 20.7	2.613	3.473	10.3	21.0
6 30	19 57.54	-32 11.7	1.219	2.202	9.1	20.4	6 30	19 52.25	- 0 29.7	2.559	3.482	8.2	20.9
7 10	19 47.75	-33 57.9	1.168	2.170	6.3	20.1	7 10	19 45.38	- 0 53.7	2.529	3.491	6.4	20.8
7 20	19 36.10	-35 32.3	1.142	2.138	7.4	20.1	7 20	19 38.14	- 1 31.6	2.526	3.500	5.6	20.8
7 30	19 24.32	-36 45.2	1.140	2.107	11.5	20.2	7 30	19 31.15	- 2 21.6	2.551	3.508	6.5	20.9
8 9	19 14.33	-37 31.8	1.159	2.076	16.1	20.4	8 9	19 25.03	- 3 20.3	2.602	3.516	8.3	21.0
8 19	19 7.64	-37 52.9	1.197	2.045	20.3	20.6	8 19	19 20.26	- 4 24.1	2.678	3.524	10.4	21.1
<b>24770</b>	1993 <i>FG</i> <sub>28</sub>		7 15.8 335°70	2°1/16.3	18 R		<b>90928</b>	1997 <i>SS</i> <sub>8</sub>		7 15.8 93°54	0°8/16.1	18	
6 10	20 2.09	-17 32.5	1.136	2.024	18.7	18.0	6 10	20 11.18	-18 0.3	1.395	2.256	17.4	19.9
6 20	19 59.75	-17 15.2	1.060	2.006	14.6	17.7	6 20	20 5.77	-18 16.2	1.339	2.272	13.3	19.7
6 30	19 54.26	-17 7.8	1.001	1.990	9.7	17.3	6 30	19 57.56	-18 41.7	1.303	2.287	8.5	19.5
7 10	19 46.37	-17 9.4	0.964	1.975	4.3	17.0	7 10	19 47.44	-19 13.0	1.291	2.302	3.3	19.2
7 20	19 37.27	-17 17.8	0.947	1.961	3.1	16.9	7 20	19 36.67	-19 45.9	1.303	2.317	2.2	19.2
7 30	19 28.59	-17 30.2	0.954	1.949	8.5	17.1	7 30	19 26.65	-20 16.6	1.342	2.332	7.2	19.5
8 9	19 21.90	-17 43.7	0.980	1.937	13.9	17.4	8 9	19 18.64	-20 42.3	1.404	2.347	11.8	19.8
8 19	19 18.30	-17 55.9	1.026	1.928	18.8	17.6	8 19	19 13.41	-21 2.2	1.487	2.361	15.7	20.1
<b>418225</b>	2008 <i>CJ</i> <sub>203</sub>		7 15.8 138°62	3°7/14.7	17		<b>62947</b>	2000 <i>VV</i> <sub>31</sub>		7 15.8 235°35	3°8/13.6	18	
6 10	20 12.94	-29 32.6	1.644	2.504	15.3	21.2	6 10	20 6.98	-31 16.5	2.511	3.359	11.0	19.3
6 20	20 7.05	-29 57.3	1.577	2.509	11.7	21.0	6 20	20 1.92	-32 8.6	2.428	3.351	8.5	19.1
6 30	19 58.35	-30 19.8	1.532	2.513	7.8	20.8	6 30	19 54.88	-32 59.4	2.368	3.343	5.9	19.0
7 10	19 47.73	-30 34.7	1.512	2.518	4.3	20.6	7 10	19 46.44	-33 44.6	2.336	3.334	4.0	18.8
7 20	19 36.38	-30 37.8	1.517	2.522	4.5	20.6	7 20	19 37.34	-34 20.2	2.331	3.325	4.4	18.8
7 30	19 25.72	-30 27.2	1.548	2.525	8.0	20.8	7 30	19 28.48	-34 43.5	2.354	3.315	6.7	19.0
8 9	19 17.01	-30 4.1	1.604	2.529	11.8	21.1	8 9	19 20.75	-34 54.0	2.403	3.306	9.4	19.1
8 19	19 11.06	-29 31.3	1.681	2.532	15.3	21.3	8 19	19 14.83	-34 52.5	2.475	3.296	11.9	19.3
<b>280563</b>	2004 <i>SJ</i> <sub>14</sub>		7 15.8 276°98	5°7/13.1	18		<b>136280</b>	2003 <i>YW</i>					

EPHEMERIDES

7 15.8

7 15.8

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>4761</b>	Urrutia		7 15.8 277°66	12.4/	6.6	18	<b>36685</b>	2003 UT <sub>267</sub>		7 15.8 317°40	4°0/	16.7	18
6 10	20 16.85	-44 17.6	1.608	2.451	16.4	18.0	6 10	20 4.28	-14 22.2	1.200	2.075	18.8	20.1
6 20	20 12.03	-47 3.1	1.532	2.428	14.3	17.8	6 20	20 1.39	-13 50.3	1.115	2.053	14.9	19.8
6 30	20 2.93	-49 43.8	1.479	2.405	12.8	17.6	6 30	19 55.36	-13 29.9	1.049	2.031	10.3	19.5
7 10	19 49.98	-52 4.7	1.449	2.381	12.5	17.5	7 10	19 46.86	-13 21.9	1.002	2.009	5.7	19.2
7 20	19 34.48	-53 51.9	1.442	2.357	13.8	17.5	7 20	19 37.04	-13 25.5	0.978	1.989	4.5	19.0
7 30	19 18.70	-54 56.9	1.458	2.333	16.0	17.6	7 30	19 27.47	-13 39.0	0.977	1.969	8.9	19.2
8 9	19 5.19	-55 20.0	1.493	2.309	18.7	17.7	8 9	19 19.74	-13 59.2	0.997	1.950	14.2	19.4
8 19	18 55.90	-55 8.0	1.544	2.284	21.2	17.9	8 19	19 15.04	-14 22.8	1.035	1.932	19.1	19.7
<b>123652</b>	2000 YC <sub>73</sub>		7 15.8 290°93	0°5/	15.6	18	<b>326962</b>	2004 JC <sub>2</sub>		7 15.8 317°79	20°8/	3.6	17
6 10	20 4.66	-21 12.0	2.145	2.998	12.5	19.8	6 10	20 1.37	+23 55.1	0.887	1.631	33.4	19.9
6 20	20 0.34	-21 35.8	2.051	2.981	9.5	19.6	6 20	19 59.41	+24 16.4	0.844	1.641	31.1	19.7
6 30	19 53.99	-22 4.7	1.980	2.964	6.0	19.3	6 30	19 54.06	+23 35.5	0.807	1.653	28.3	19.6
7 10	19 46.14	-22 36.0	1.934	2.946	2.3	19.0	7 10	19 46.29	+21 41.9	0.780	1.666	25.3	19.4
7 20	19 37.56	-23 6.7	1.916	2.929	1.9	19.0	7 20	19 37.57	+18 32.5	0.767	1.680	22.6	19.3
7 30	19 29.17	-23 33.7	1.925	2.912	5.8	19.2	7 30	19 29.66	+14 16.0	0.770	1.695	21.0	19.3
8 9	19 21.91	-23 55.3	1.960	2.895	9.5	19.4	8 9	19 24.16	+9 15.1	0.792	1.712	21.1	19.4
8 19	19 16.51	-24 10.5	2.018	2.878	12.7	19.6	8 19	19 22.04	+3 59.1	0.834	1.729	22.7	19.6
<b>240412</b>	2003 UH <sub>258</sub>		7 15.8 132°24	11°4/	21.7	18	<b>310619</b>	2002 AB <sub>55</sub>		7 15.8 280°84	1°0/	16.1	17
6 10	20 5.43	+12 3.5	2.261	2.965	16.2	20.3	6 10	20 9.53	-19 13.8	1.388	2.255	17.2	20.6
6 20	20 0.54	+13 18.2	2.194	2.973	14.7	20.2	6 20	20 5.03	-19 4.8	1.304	2.239	13.3	20.3
6 30	19 53.89	+14 11.3	2.145	2.980	13.2	20.1	6 30	19 57.48	-19 2.8	1.238	2.224	8.7	20.0
7 10	19 46.04	+14 39.1	2.116	2.987	12.0	20.0	7 10	19 47.61	-19 5.6	1.196	2.208	3.5	19.6
7 20	19 37.68	+14 39.5	2.110	2.994	11.4	20.0	7 20	19 36.57	-19 10.7	1.178	2.192	2.4	19.5
7 30	19 29.63	+14 13.2	2.126	3.001	11.7	20.0	7 30	19 25.87	-19 15.5	1.185	2.176	7.8	19.8
8 9	19 22.66	+13 23.5	2.164	3.008	12.7	20.1	8 9	19 17.02	-19 18.3	1.215	2.161	13.0	20.1
8 19	19 17.37	+12 15.7	2.223	3.014	14.0	20.2	8 19	19 11.06	-19 18.6	1.265	2.145	17.5	20.3
<b>501961</b>	2014 YD <sub>13</sub>		7 15.8 116°16	0°5/	15.9	17	<b>217361</b>	2004 TJ <sub>7</sub>		7 15.8 337°79	2°2/	14.6	18
6 10	20 9.76	-19 2.2	1.733	2.585	15.0	21.4	6 10	20 2.41	-23 18.0	1.736	2.607	14.1	19.0
6 20	20 4.29	-19 15.3	1.669	2.597	11.4	21.2	6 20	19 59.14	-24 17.1	1.654	2.594	10.7	18.7
6 30	19 56.46	-19 35.2	1.626	2.608	7.3	21.0	6 30	19 53.48	-25 23.2	1.594	2.582	6.9	18.5
7 10	19 47.02	-19 58.9	1.608	2.619	2.8	20.7	7 10	19 46.04	-26 31.1	1.559	2.570	3.1	18.2
7 20	19 36.99	-20 23.1	1.616	2.630	1.9	20.7	7 20	19 37.72	-27 35.2	1.550	2.559	3.3	18.2
7 30	19 27.52	-20 45.0	1.652	2.640	6.3	21.0	7 30	19 29.66	-28 30.2	1.566	2.550	7.3	18.4
8 9	19 19.67	-21 2.8	1.712	2.650	10.4	21.2	8 9	19 23.00	-29 12.9	1.607	2.540	11.2	18.7
8 19	19 14.15	-21 15.9	1.796	2.660	13.8	21.5	8 19	19 18.60	-29 42.4	1.669	2.532	14.8	18.9
<b>201138</b>	2002 JV <sub>97</sub>		7 15.8 12°07	5°4/	13.5	17	<b>65669</b>	1988 CJ <sub>4</sub>		7 15.8 113°13	0°6/	15.7	18
6 10	20 4.27	-28 58.6	1.283	2.170	17.0	19.0	6 10	20 11.97	-23 48.2	2.001	2.848	13.5	18.9
6 20	20 1.21	-30 17.9	1.228	2.174	13.0	18.8	6 20	20 5.62	-23 35.3	1.934	2.860	10.2	18.7
6 30	19 55.02	-31 38.6	1.193	2.179	8.9	18.6	6 30	19 57.14	-23 22.9	1.890	2.873	6.4	18.5
7 10	19 46.61	-32 52.0	1.181	2.184	5.7	18.4	7 10	19 47.26	-23 9.0	1.873	2.885	2.4	18.2
7 20	19 37.26	-33 49.9	1.192	2.191	6.4	18.5	7 20	19 36.95	-22 52.1	1.883	2.897	1.9	18.2
7 30	19 28.59	-34 26.8	1.226	2.200	10.0	18.7	7 30	19 27.25	-22 31.4	1.922	2.908	5.8	18.5
8 9	19 22.04	-34 42.1	1.281	2.209	14.0	19.0	8 9	19 19.10	-22 7.5	1.987	2.919	9.5	18.7
8 19	19 18.53	-34 38.3	1.356	2.219	17.5	19.2	8 19	19 13.13	-21 41.4	2.076	2.930	12.6	19.0
<b>434363</b>	2004 TL <sub>39</sub>		7 15.8 202°00	12°3/	10.4	18	<b>380831</b>	2005 YY <sub>290</sub>		7 15.8 76°11	1°2/	15.4	17
6 10	20 22.30	-53 4.0	1.918	2.718	15.7	20.7	6 10	20 8.64	-23 29.7	1.712	2.573	14.7	21.2
6 20	20 15.19	-54 30.6	1.863	2.717	14.1	20.6	6 20	20 3.64	-23 46.6	1.643	2.577	11.2	21.0
6 30	20 4.07	-55 39.3	1.829	2.716	12.8	20.5	6 30	19 56.16	-24 6.7	1.595	2.580	7.1	20.8
7 10	19 50.01	-56 20.1	1.815	2.714	12.3	20.5	7 10	19 46.99	-24 26.3	1.572	2.584	2.8	20.5
7 20	19 34.81	-56 26.4	1.824	2.713	12.7	20.5	7 20	19 37.13	-24 41.8	1.575	2.588	2.5	20.5
7 30	19 20.65	-55 56.8	1.854	2.711	14.0	20.6	7 30	19 27.80	-24 50.8	1.605	2.591	6.7	20.8
8 9	19 9.40	-54 56.1	1.905	2.709	15.6	20.7	8 9	19 20.12	-24 52.4	1.659	2.595	10.8	21.0
8 19	19 2.12	-53 32.0	1.973	2.706	17.4	20.9	8 19	19 14.83	-24 47.3	1.735	2.599	14.3	21.3
<b>91879</b>	1999 UZ <sub>45</sub>		7 15.8 262°12	1°2/	15.3	18	<b>518267</b>	2016 WJ <sub>52</sub>		7 15.8 268°47	4°0/	13.5	18
6 10	20 6.52	-24 57.9	2.361	3.211	11.6	20.0	6 10	20 7.59	-30 54.4	2.362	3.213	11.6	21.4
6 20	20 1.46	-25 4.4	2.276	3.204	8.8	19.8	6 20	20 2.63	-31 50.2	2.268	3.193	9.0	21.2
6 30	19 54.52	-25 11.5	2.214	3.197	5.6	19.6	6 30	19 55.51	-32 45.9	2.198	3.173	6.2	21.0
7 10	19 46.29	-25 16.9	2.179	3.190	2.3	19.4	7 10	19 46.78	-33 36.5	2.154	3.152	4.2	20.8
7 20	19 37.51	-25 18.4	2.172	3.183	2.1	19.3	7 20	19 37.22	-34 17.5	2.137	3.132	4.6	20.8
7 30	19 29.06	-25 14.5	2.193	3.176	5.4	19.6	7 30	19 27.80	-34 45.4	2.148	3.111	7.2	21.0
8 9	19 21.76	-25 5.0	2.240	3.169	8.7	19.8	8 9	19 19.54	-34 59.3	2.185	3.090	10.1	21.1
8 19	19 16.25	-24 50.4	2.311	3.162	11.6	19.9	8 19	19 13.21	-35 0.0	2.245	3.068	12.9	21.2
<b>510284</b>	2011 KC <sub>49</sub>		7 15.8 333°93	2°5/	14.7	17	<b>193555</b>	2000 YL <sub>136</sub>		7 15.8 223°35	7°7/	19.5	18
6 10	20 4.11	-23 52.8	1.456	2.334	15.9	20.7	6 10	20 5.56	+2 7.8	2.333	3.097	14.3	21.4
6 20	20 0.82	-24 43.3	1.380	2.323	12.1	20.5	6 20	20 0.72	+2 40.1	2.241	3.087	12.3	21.2
6 30	19 54.73	-25 40.7	1.323	2.312	7.8	20.2	6 30	19 54.10	+2 55.6	2.168	3.077	10.1	21.1
7 10	19 46.52	-26 39.2	1.290	2.302	3.5	19.9	7 10	19 46.20	+2 52.4	2.119	3.065	8.4	20.9
7 20	19 37.29	-27 32.4	1.282	2.292	3.7	19.9	7 20	19 37.67	+2 29.8	2.096	3.054	7.7	20.9
7 30	19 28.43	-28 14.9	1.298	2.283	8.2	20.1	7 30	19 29.32	+1 48.8	2.098	3.041	8.5	20.9
8 9	19 21.29	-28 44.0	1.337	2.275	12.6	20.4	8 9	19 21.93	+0 53.0	2.126	3.028	10.4	21.0
8 19	19 16.86	-28 59.4	1.396	2.268	16.6	20.6	8 19	19 16.14	-0 13.4	2.177	3.015	12.7	21.1
<b>250836</b>	2005 UG <sub>142</sub>		7 15.8 281°46	5°9/	18.8	18	<b>393404</b>	2000 YP <sub>8</sub>		7 15.8 209°39	1°0/	16.2	18

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>174068</b>	2002 EG <sub>71</sub>		7 15.8	3°71	5°4/14.6	17	<b>170750</b>	2004 BR <sub>147</sub>		7 15.8	216°60	0°1/15.8	18
6 10	20 9.84	-31 15.0	1.146	2.032	18.7	18.8	6 10	20 6.37	-19 42.5	2.121	2.970	12.8	20.5
6 20	20 5.80	-31 43.0	1.087	2.031	14.5	18.5	6 20	20 1.55	-20 3.9	2.039	2.966	9.7	20.3
6 30	19 58.11	-32 6.9	1.046	2.031	9.9	18.3	6 30	19 54.72	-20 31.2	1.980	2.962	6.2	20.1
7 10	19 47.83	-32 19.4	1.027	2.032	6.0	18.1	7 10	19 46.47	-21 1.6	1.947	2.959	2.3	19.9
7 20	19 36.55	-32 14.3	1.029	2.033	6.2	18.1	7 20	19 37.58	-21 32.1	1.941	2.955	1.7	19.8
7 30	19 26.19	-31 49.7	1.055	2.036	10.2	18.3	7 30	19 29.00	-22 0.0	1.963	2.950	5.6	20.1
8 9	19 18.42	-31 8.3	1.101	2.039	14.8	18.6	8 9	19 21.62	-22 23.4	2.011	2.946	9.2	20.3
8 19	19 14.20	-30 15.0	1.166	2.043	18.9	18.8	8 19	19 16.13	-22 41.4	2.082	2.941	12.4	20.5
<b>130795</b>	2000 TS <sub>38</sub>		7 15.8	1°92	1°1/16.3	18	<b>374799</b>	2006 TT <sub>109</sub>		7 15.8	255°57	1°1/15.3	17
6 10	20 3.08	-15 7.9	1.081	1.966	19.7	18.7	6 10	20 8.42	-20 54.9	1.650	2.511	15.2	21.2
6 20	20 0.53	-15 54.2	1.019	1.964	15.2	18.4	6 20	20 3.83	-21 41.0	1.566	2.500	11.6	21.0
6 30	19 54.77	-16 59.9	0.975	1.963	9.9	18.2	6 30	19 56.57	-22 35.9	1.503	2.488	7.4	20.7
7 10	19 46.62	-18 20.2	0.951	1.963	4.0	17.8	7 10	19 47.28	-23 34.9	1.464	2.477	2.8	20.4
7 20	19 37.37	-19 47.4	0.950	1.965	2.6	17.7	7 20	19 36.96	-24 32.3	1.452	2.465	2.6	20.3
7 30	19 28.67	-21 12.5	0.972	1.967	8.4	18.1	7 30	19 26.90	-25 23.0	1.466	2.452	7.3	20.6
8 9	19 22.10	-22 28.3	1.015	1.970	13.8	18.4	8 9	19 18.38	-26 3.6	1.505	2.440	11.7	20.8
8 19	19 18.69	-23 30.5	1.077	1.974	18.5	18.7	8 19	19 12.38	-26 33.1	1.565	2.428	15.6	21.1
<b>317359</b>	2002 NJ <sub>9</sub>		7 15.8	14°97	7°4/10.8	17	<b>77290</b>	2001 FU <sub>69</sub>		7 15.8	342°28	5°3/13.7	18
6 10	20 6.31	-23 26.8	1.033	1.927	19.6	19.1	6 10	20 6.19	-28 30.9	1.233	2.120	17.6	18.5
6 20	20 3.69	-27 3.8	0.980	1.932	14.9	18.8	6 20	20 2.99	-29 41.9	1.167	2.113	13.6	18.2
6 30	19 57.25	-30 59.4	0.949	1.937	10.1	18.6	6 30	19 56.41	-30 56.2	1.120	2.106	9.2	18.0
7 10	19 47.72	-34 53.0	0.942	1.944	7.4	18.5	7 10	19 47.29	-32 5.0	1.095	2.100	5.7	17.8
7 20	19 36.50	-38 21.7	0.961	1.952	9.4	18.6	7 20	19 36.96	-32 59.4	1.093	2.095	6.4	17.8
7 30	19 25.68	-41 8.4	1.003	1.961	13.8	18.9	7 30	19 27.18	-33 33.3	1.114	2.091	10.4	18.0
8 9	19 17.36	-43 7.6	1.066	1.972	18.1	19.2	8 9	19 19.60	-33 45.5	1.156	2.088	14.8	18.2
8 19	19 12.97	-44 22.9	1.146	1.983	21.8	19.4	8 19	19 15.33	-33 38.3	1.217	2.085	18.8	18.5
<b>358305</b>	2006 UC <sub>172</sub>		7 15.8	205°68	7°4/19.0	18	<b>360505</b>	2003 HM <sub>55</sub>		7 15.8	0°63	6°6/13.2	17
6 10	20 4.48	+ 1 28.5	2.524	3.288	13.3	20.7	6 10	20 1.88	-28 18.3	0.924	1.833	20.0	19.5
6 20	19 59.71	+ 2 20.8	2.440	3.285	11.4	20.5	6 20	20 0.42	-29 51.7	0.871	1.829	15.5	19.3
6 30	19 53.35	+ 2 59.0	2.376	3.282	9.5	20.4	6 30	19 55.10	-31 30.0	0.837	1.827	10.6	19.0
7 10	19 45.90	+ 3 20.8	2.337	3.278	8.0	20.3	7 10	19 46.86	-33 1.2	0.821	1.827	7.0	18.8
7 20	19 37.95	+ 3 25.2	2.323	3.274	7.4	20.2	7 20	19 37.30	-34 13.4	0.826	1.828	7.9	18.9
7 30	19 30.22	+ 3 12.7	2.335	3.270	8.2	20.3	7 30	19 28.52	-34 58.1	0.851	1.831	12.2	19.1
8 9	19 23.41	+ 2 45.5	2.372	3.266	9.9	20.4	8 9	19 22.44	-35 14.2	0.895	1.835	17.0	19.4
8 19	19 18.05	+ 2 6.9	2.433	3.261	11.8	20.5	8 19	19 20.19	-35 5.2	0.954	1.841	21.2	19.7
<b>386283</b>	2008 RT <sub>4</sub>		7 15.8	239°71	0°1/15.8	18	<b>78808</b>	2003 OY <sub>14</sub>		7 15.8	325°01	2°1/15.5	18
6 10	20 8.49	-20 37.8	2.165	3.010	12.7	22.5	6 10	20 10.18	-27 59.4	1.454	2.325	16.3	18.7
6 20	20 3.21	-20 51.5	2.071	2.996	9.7	22.3	6 20	20 5.49	-27 35.9	1.368	2.307	12.6	18.4
6 30	19 55.82	-21 10.0	2.000	2.981	6.2	22.1	6 30	19 57.73	-27 8.2	1.303	2.289	8.2	18.1
7 10	19 46.90	-21 30.7	1.954	2.966	2.3	21.8	7 10	19 47.72	-26 32.9	1.261	2.272	3.6	17.8
7 20	19 37.22	-21 50.9	1.937	2.951	1.7	21.7	7 20	19 36.70	-25 47.8	1.244	2.256	3.2	17.8
7 30	19 27.76	-22 8.1	1.948	2.934	5.7	21.9	7 30	19 26.21	-24 53.2	1.252	2.241	7.9	18.0
8 9	19 19.49	-22 20.9	1.985	2.918	9.5	22.1	8 9	19 17.70	-23 51.6	1.284	2.226	12.7	18.2
8 19	19 13.14	-22 28.8	2.046	2.901	12.8	22.3	8 19	19 12.13	-22 46.8	1.337	2.212	17.0	18.5
<b>361060</b>	2005 YN <sub>120</sub>		7 15.8	275°72	0°6/16.2	18	<b>326876</b>	2003 UE <sub>317</sub>		7 15.8	219°00	2°8/14.8	17
6 10	20 3.44	-17 23.7	2.383	3.226	11.7	20.7	6 10	20 12.70	-27 0.2	1.857	2.709	14.1	22.2
6 20	19 59.10	-17 51.2	2.302	3.225	8.9	20.6	6 20	20 6.83	-27 33.5	1.772	2.701	10.8	22.0
6 30	19 53.05	-18 25.8	2.244	3.225	5.7	20.4	6 30	19 58.34	-28 8.0	1.711	2.692	7.1	21.7
7 10	19 45.81	-19 5.2	2.213	3.224	2.3	20.1	7 10	19 47.91	-28 38.7	1.674	2.682	3.5	21.5
7 20	19 38.04	-19 46.4	2.209	3.223	1.5	20.1	7 20	19 36.57	-29 0.9	1.665	2.672	3.7	21.5
7 30	19 30.52	-20 26.9	2.233	3.222	5.0	20.3	7 30	19 25.60	-29 11.7	1.682	2.661	7.4	21.7
8 9	19 24.02	-21 4.0	2.285	3.221	8.2	20.5	8 9	19 16.22	-29 10.5	1.726	2.649	11.2	21.9
8 19	19 19.12	-21 36.5	2.360	3.220	11.1	20.7	8 19	19 9.32	-28 58.8	1.791	2.636	14.7	22.1
<b>507157</b>	2009 YD <sub>5</sub>		7 15.8	208°78	1°1/15.3	18	<b>482986</b>	2014 OD <sub>52</sub>		7 15.8	244°21	1°6/15.1	18
6 10	20 8.94	-22 49.3	2.257	3.102	12.2	22.8	6 10	20 5.57	-26 31.3	2.720	3.567	10.3	21.5
6 20	20 3.46	-23 21.2	2.170	3.096	9.3	22.6	6 20	20 0.56	-26 41.1	2.635	3.561	7.8	21.3
6 30	19 55.93	-23 57.0	2.107	3.089	5.9	22.3	6 30	19 53.90	-26 50.7	2.574	3.556	5.0	21.1
7 10	19 46.93	-24 33.1	2.070	3.082	2.3	22.1	7 10	19 46.13	-26 57.7	2.541	3.550	2.3	20.9
7 20	19 37.23	-25 6.1	2.062	3.074	2.2	22.1	7 20	19 37.90	-27 0.1	2.535	3.544	2.2	20.9
7 30	19 27.80	-25 33.2	2.082	3.065	5.8	22.3	7 30	19 29.95	-26 56.6	2.558	3.539	5.0	21.1
8 9	19 19.56	-25 52.8	2.129	3.056	9.2	22.5	8 9	19 23.01	-26 47.1	2.608	3.533	7.9	21.3
8 19	19 13.22	-26 4.9	2.200	3.046	12.3	22.7	8 19	19 17.63	-26 32.1	2.683	3.527	10.4	21.4
<b>301923</b>	1999 VV <sub>187</sub>		7 15.8	192°92	6°0/11.4	18	<b>231358</b>	2006 GO <sub>35</sub>		7 15.8	104°97	2°1/16.8	17
6 10	20 9.77	-41 8.7	2.991	3.816	10.0	21.2	6 10	20 6.46	-14 20.4	1.876	2.719	14.4	20.7
6 20	20 3.98	-42 20.9	2.919	3.814	8.3	21.1	6 20	20 1.71	-14 28.4	1.805	2.725	11.1	20.6
6 30	19 56.22	-43 26.8	2.872	3.812	6.7	21.0	6 30	19 54.84	-14 46.4	1.756	2.732	7.4	20.3
7 10	19 47.03	-44 21.4	2.852	3.809	6.0	20.9	7 10	19 46.53	-15 12.8	1.731	2.739	3.6	20.1
7 20	19 37.16	-45 0.9	2.859	3.806	6.4	21.0	7 20	19 37.63	-15 45.0	1.733	2.745	2.6	20.1
7 30	19 27.53	-45 22.9	2.893	3.802	7.8	21.1	7 30	19 29.15	-16 20.0	1.763	2.751	6.0	20.3
8 9	19 19.02	-45 27.9	2.952	3.799	9.6	21.2	8 9	19 22.02	-16 54.8	1.818	2.758	9.7	20.5
8 19	19 12.34	-45 17.8	3.033	3.794	11.3	21.3	8 19	19 16.94	-17 27.3	1.895	2.764	13.1	20.8
<b>456029</b>	2005 YA <sub>114</sub>		7 15.8	220°64	2°7/15.0	17	<b>96878</b>	1999 TE <sub>16</sub>		7 15.8	213°26	5°6/13.0	18
6 10	20 12.55	-25											



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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>39810</b>	1997 WQ <sub>35</sub>		7 15.8	79°16'	12°0'/10.4	18	<b>445354</b>	2010 NX <sub>80</sub>		7 15.8	276°21'	2°2'/16.8	15
6 10	20 22.86	-43 24.2	1.420	2.264	18.1	17.5	6 10	20 4.29	-14 24.1	2.327	3.162	12.2	21.8
6 20	20 15.87	-46 1.5	1.396	2.295	15.2	17.4	6 20	19 59.84	-14 18.0	2.232	3.148	9.5	21.6
6 30	20 4.65	-48 22.0	1.393	2.326	12.9	17.3	6 30	19 53.61	-14 19.4	2.160	3.134	6.4	21.3
7 10	19 50.36	-50 11.4	1.413	2.356	12.0	17.3	7 10	19 46.10	-14 27.6	2.114	3.120	3.3	21.1
7 20	19 34.94	-51 20.5	1.457	2.386	12.7	17.5	7 20	19 37.98	-14 41.2	2.095	3.105	2.5	21.0
7 30	19 20.73	-51 47.6	1.522	2.415	14.5	17.6	7 30	19 30.06	-14 58.7	2.104	3.091	5.4	21.2
8 9	19 9.70	-51 38.6	1.608	2.443	16.7	17.9	8 9	19 23.13	-15 18.0	2.140	3.077	8.7	21.4
8 19	19 2.90	-51 2.8	1.711	2.471	18.7	18.1	8 19	19 17.84	-15 37.7	2.199	3.062	11.7	21.6
<b>70996</b>	1999 XY <sub>35</sub>		7 15.8	282°39'	4°9'/12.8	18	<b>6000</b>	United Nations		7 15.8	302°79'	8°7'/11.2	18 R
6 10	20 8.10	-29 11.1	1.854	2.715	13.7	18.4	6 10	20 9.79	-37 39.9	1.611	2.474	15.4	15.8
6 20	20 3.61	-30 47.7	1.772	2.704	10.6	18.2	6 20	20 5.65	-39 19.5	1.531	2.454	12.6	15.5
6 30	19 56.47	-32 28.0	1.714	2.692	7.4	18.0	6 30	19 58.19	-40 56.0	1.473	2.434	10.0	15.3
7 10	19 47.30	-34 4.4	1.682	2.681	5.1	17.8	7 10	19 48.07	-42 19.3	1.438	2.414	8.7	15.2
7 20	19 37.02	-35 29.1	1.676	2.669	5.8	17.8	7 20	19 36.48	-43 19.8	1.427	2.395	9.6	15.2
7 30	19 26.90	-36 35.8	1.697	2.658	8.9	18.0	7 30	19 25.12	-43 51.8	1.439	2.376	12.2	15.3
8 9	19 18.24	-37 22.1	1.742	2.646	12.3	18.2	8 9	19 15.72	-43 54.9	1.473	2.357	15.3	15.4
8 19	19 12.02	-37 48.8	1.809	2.635	15.4	18.3	8 19	19 9.51	-43 33.2	1.525	2.338	18.4	15.6
<b>512603</b>	2016 TM <sub>9</sub>		7 15.8	318°43'	0°3'/15.7	18	<b>240127</b>	2002 GX <sub>119</sub>		7 15.8	359°06'	1°8'/16.7	17
6 10	20 5.62	-21 16.1	1.780	2.641	14.2	20.9	6 10	20 2.98	-14 1.3	1.439	2.304	16.8	19.7
6 20	20 1.41	-21 25.3	1.697	2.631	10.9	20.6	6 20	19 59.77	-14 36.1	1.368	2.302	13.0	19.5
6 30	19 54.85	-21 39.5	1.636	2.621	6.9	20.4	6 30	19 53.98	-15 26.7	1.318	2.300	8.6	19.2
7 10	19 46.61	-21 55.8	1.599	2.611	2.6	20.1	7 10	19 46.33	-16 29.8	1.290	2.299	3.9	18.9
7 20	19 37.58	-22 11.5	1.588	2.602	2.0	20.0	7 20	19 37.82	-17 40.4	1.286	2.299	2.5	18.8
7 30	19 28.90	-22 23.8	1.604	2.593	6.4	20.3	7 30	19 29.72	-18 52.4	1.308	2.300	7.0	19.1
8 9	19 21.64	-22 31.3	1.644	2.585	10.5	20.5	8 9	19 23.23	-20 0.2	1.353	2.302	11.6	19.4
8 19	19 16.61	-22 33.7	1.707	2.576	14.2	20.7	8 19	19 19.22	-21 0.1	1.419	2.304	15.6	19.6
<b>156349</b>	2001 XA <sub>175</sub>		7 15.8	318°58'	0°7'/15.6	18	<b>442124</b>	2010 TQ <sub>179</sub>		7 15.8	31°32'	5°7'/13.3	18
6 10	20 4.00	-20 23.4	1.366	2.244	16.7	19.2	6 10	20 9.24	-36 57.9	2.199	3.047	12.4	20.9
6 20	20 1.01	-20 55.7	1.279	2.222	12.9	18.9	6 20	20 3.92	-37 45.3	2.131	3.048	9.9	20.7
6 30	19 55.07	-21 38.3	1.212	2.201	8.3	18.6	6 30	19 56.31	-38 26.5	2.087	3.049	7.4	20.6
7 10	19 46.83	-22 27.3	1.167	2.180	3.1	18.2	7 10	19 47.12	-38 56.3	2.067	3.051	5.9	20.5
7 20	19 37.35	-23 17.2	1.146	2.160	2.6	18.1	7 20	19 37.29	-39 10.4	2.073	3.052	6.2	20.5
7 30	19 28.07	-24 2.4	1.150	2.141	8.0	18.4	7 30	19 27.96	-39 7.2	2.106	3.054	8.2	20.6
8 9	19 20.50	-24 38.8	1.175	2.122	13.2	18.7	8 9	19 20.13	-38 47.6	2.163	3.055	10.8	20.8
8 19	19 15.76	-25 4.8	1.221	2.105	17.7	18.9	8 19	19 14.54	-38 14.4	2.242	3.057	13.2	20.9
<b>68762</b>	2002 EE <sub>64</sub>		7 15.8	343°01'	7°7'/20.3	18	<b>274615</b>	2008 TM <sub>59</sub>		7 15.8	9°70'	4°9'/14.2	16
6 10	20 0.07	+ 0 23.6	1.765	2.569	16.7	18.4	6 10	20 5.92	-29 23.7	1.287	2.173	17.1	20.0
6 20	19 57.11	+ 0 24.9	1.680	2.559	14.2	18.2	6 20	20 2.49	-30 16.0	1.230	2.174	13.2	19.8
6 30	19 52.08	+ 0 3.2	1.615	2.549	11.4	18.0	6 30	19 55.90	-31 8.0	1.192	2.177	8.9	19.6
7 10	19 45.57	- 0 43.0	1.571	2.540	8.8	17.8	7 10	19 47.07	-31 52.2	1.176	2.181	5.4	19.4
7 20	19 38.32	- 1 52.9	1.551	2.532	7.7	17.7	7 20	19 37.35	-32 22.2	1.183	2.186	5.8	19.4
7 30	19 31.31	- 3 22.4	1.556	2.525	8.7	17.8	7 30	19 28.34	-32 33.9	1.213	2.192	9.5	19.7
8 9	19 25.49	- 5 5.1	1.585	2.518	11.3	17.9	8 9	19 21.50	-32 27.7	1.266	2.199	13.7	19.9
8 19	19 21.60	- 6 53.7	1.636	2.513	14.3	18.1	8 19	19 17.72	-32 6.5	1.337	2.206	17.4	20.2
<b>389081</b>	2008 WR <sub>130</sub>		7 15.8	158°51'	0°9'/16.2	17	<b>39504</b>	1981 EZ <sub>39</sub>		7 15.8	257°16'	2°8'/14.9	18
6 10	20 8.14	-18 31.3	2.367	3.204	12.0	22.2	6 10	20 11.52	-26 22.8	1.566	2.430	15.7	19.4
6 20	20 2.56	-18 28.9	2.290	3.210	9.1	22.0	6 20	20 6.43	-26 53.1	1.482	2.417	12.1	19.1
6 30	19 55.20	-18 31.1	2.237	3.215	5.9	21.8	6 30	19 58.36	-27 25.7	1.419	2.403	7.9	18.8
7 10	19 46.64	-18 36.3	2.210	3.220	2.4	21.6	7 10	19 48.03	-27 55.2	1.380	2.390	3.8	18.5
7 20	19 37.61	-18 42.9	2.211	3.225	1.6	21.6	7 20	19 36.60	-28 16.2	1.367	2.376	3.9	18.5
7 30	19 28.94	-18 49.3	2.242	3.229	5.1	21.8	7 30	19 25.55	-28 25.2	1.379	2.362	8.1	18.7
8 9	19 21.43	-18 54.5	2.299	3.232	8.3	22.0	8 9	19 16.30	-28 21.5	1.416	2.347	12.6	19.0
8 19	19 15.65	-18 57.9	2.381	3.236	11.2	22.2	8 19	19 9.89	-28 6.9	1.473	2.333	16.6	19.2
<b>207255</b>	2005 EJ <sub>243</sub>		7 15.8	167°69'	2°3'/14.6	18	<b>37420</b>	2001 XT <sub>215</sub>		7 15.8	311°25'	5°4'/17.7	18
6 10	20 8.44	-26 0.9	2.328	3.176	11.8	21.1	6 10	20 4.16	- 7 51.2	1.961	2.785	14.6	18.7
6 20	20 3.02	-26 47.6	2.253	3.179	8.9	20.9	6 20	19 59.99	- 7 13.2	1.874	2.775	11.8	18.5
6 30	19 55.62	-27 36.0	2.202	3.183	5.8	20.7	6 30	19 53.81	- 6 47.2	1.809	2.765	8.9	18.3
7 10	19 46.84	-28 22.0	2.178	3.186	2.9	20.5	7 10	19 46.21	- 6 34.4	1.767	2.755	6.2	18.1
7 20	19 37.46	-29 1.6	2.182	3.188	3.0	20.5	7 20	19 37.94	- 6 35.1	1.751	2.746	5.5	18.1
7 30	19 28.40	-29 32.1	2.214	3.190	6.0	20.7	7 30	19 29.93	- 6 48.2	1.761	2.737	7.4	18.2
8 9	19 20.56	-29 52.3	2.273	3.192	9.1	20.9	8 9	19 23.09	- 7 11.4	1.796	2.728	10.4	18.3
8 19	19 14.59	-30 2.5	2.355	3.193	11.9	21.1	8 19	19 18.11	- 7 41.5	1.854	2.719	13.4	18.5
<b>64597</b>	2001 XF <sub>17</sub>		7 15.8	250°65'	5°3'/13.7	18	<b>28942</b>	Yennydieguez		7 15.8	176°58'	0°0'/15.8	18
6 10	20 10.67	-32 16.9	1.706	2.568	14.7	19.0	6 10	20 5.54	-20 33.1	2.639	3.480	10.8	19.9
6 20	20 5.57	-33 12.8	1.636	2.566	11.5	18.8	6 20	20 0.52	-20 45.3	2.558	3.481	8.2	19.7
6 30	19 57.64	-34 6.2	1.588	2.564	8.1	18.6	6 30	19 53.90	-21 1.0	2.501	3.482	5.2	19.5
7 10	19 47.69	-34 50.3	1.564	2.562	5.6	18.5	7 10	19 46.18	-21 18.3	2.471	3.483	1.9	19.3
7 20	19 36.85	-35 19.1	1.566	2.560	6.0	18.5	7 20	19 38.00	-21 35.1	2.470	3.483	1.4	19.3
7 30	19 26.53	-35 29.4	1.593	2.558	9.0	18.7	7 30	19 30.11	-21 49.7	2.497	3.484	4.7	19.5
8 9	19 18.04	-35 21.7	1.644	2.556	12.4	18.9	8 9	19 23.20	-22 1.1	2.552	3.483	7.7	19.7
8 19	19 12.27	-34 58.9	1.715	2.554	15.6	19.1	8 19	19 17.82	-22 8.6	2.631	3.483	10.4	19.9
<b>177010</b>	2003 BX <sub>10</sub>		7 15.8	146°83'	4°0'/14.3	18	<b>356980</b>	1996 AH <sub>7</sub>		7 15.8	139°53'	1°8'/15.2	18
6 10	20 10.91	-33 41.9											

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7 15.8

7 15.9

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>57687</b>	2001 <i>UL</i> <sub>66</sub>		7 15.8 152°87	4.5/13.4	18		<b>349798</b>	2009 <i>BQ</i> <sub>87</sub>		7 15.9 187°33	0.2/15.9	18	
6 10	20 8.27	-32 44.1	2.292	3.142	11.9	19.0	6 10	20 6.32	-18 53.8	2.116	2.963	12.8	21.1
6 20	20 3.07	-33 42.2	2.222	3.145	9.2	18.8	6 20	20 1.53	-19 17.6	2.037	2.963	9.8	20.9
6 30	19 55.75	-34 37.8	2.176	3.147	6.6	18.7	6 30	19 54.76	-19 47.9	1.980	2.962	6.2	20.7
7 10	19 46.94	-35 25.7	2.156	3.150	4.7	18.6	7 10	19 46.58	-20 22.1	1.950	2.962	2.4	20.5
7 20	19 37.48	-36 1.4	2.163	3.152	5.1	18.6	7 20	19 37.80	-20 57.0	1.947	2.961	1.6	20.4
7 30	19 28.39	-36 22.5	2.197	3.154	7.4	18.7	7 30	19 29.33	-21 29.7	1.972	2.960	5.5	20.7
8 9	19 20.62	-36 28.6	2.256	3.156	10.0	18.9	8 9	19 22.06	-21 58.1	2.023	2.959	9.1	20.9
8 19	19 14.88	-36 21.5	2.338	3.158	12.5	19.1	8 19	19 16.68	-22 21.0	2.098	2.957	12.3	21.1
<b>273887</b>	2007 <i>HD</i> <sub>26</sub>		7 15.8 355°91	9.6/11.3	16		<b>125527</b>	2001 <i>WU</i> <sub>63</sub>		7 15.9 140°16	0.7/15.6	18	
6 10	20 6.56	-37 0.8	1.307	2.187	17.2	20.3	6 10	20 8.79	-21 52.2	1.728	2.586	14.7	20.7
6 20	20 3.50	-38 52.3	1.249	2.182	14.0	20.1	6 20	20 3.80	-22 12.4	1.656	2.589	11.2	20.5
6 30	19 56.89	-40 38.8	1.212	2.179	11.1	19.9	6 30	19 56.37	-22 37.4	1.606	2.591	7.1	20.2
7 10	19 47.57	-42 8.2	1.196	2.177	9.6	19.8	7 10	19 47.22	-23 3.8	1.580	2.593	2.7	19.9
7 20	19 36.98	-43 10.6	1.203	2.175	10.5	19.9	7 20	19 37.36	-23 27.9	1.581	2.594	2.2	19.9
7 30	19 27.01	-43 40.5	1.232	2.175	13.2	20.0	7 30	19 27.97	-23 46.5	1.609	2.596	6.6	20.2
8 9	19 19.41	-43 38.8	1.280	2.176	16.4	20.2	8 9	19 20.16	-23 58.4	1.661	2.598	10.7	20.4
8 19	19 15.33	-43 11.1	1.346	2.178	19.4	20.4	8 19	19 14.72	-24 3.5	1.735	2.599	14.3	20.7
<b>216773</b>	2006 <i>BR</i> <sub>8</sub>		7 15.8 47°38	24.0/15.6	18		<b>254211</b>	2004 <i>RV</i> <sub>89</sub>		7 15.9 302°73	2.2/15.1	18	
6 10	20 10.37	+35 36.1	0.919	1.566	38.1	18.9	6 10	20 8.08	-27 47.9	2.199	3.052	12.2	20.2
6 20	20 5.67	+36 8.9	0.909	1.606	35.7	18.9	6 20	20 2.84	-27 53.2	2.119	3.047	9.3	20.0
6 30	19 57.57	+35 37.6	0.902	1.647	33.0	18.8	6 30	19 55.56	-27 57.2	2.061	3.043	6.1	19.8
7 10	19 47.52	+33 54.9	0.901	1.690	30.2	18.8	7 10	19 46.87	-27 56.9	2.030	3.039	2.9	19.6
7 20	19 37.25	+31 0.2	0.910	1.732	27.5	18.8	7 20	19 37.62	-27 49.9	2.026	3.034	2.9	19.5
7 30	19 28.54	+27 2.3	0.931	1.775	25.4	18.9	7 30	19 28.78	-27 35.1	2.049	3.030	6.0	19.7
8 9	19 22.66	+22 20.6	0.970	1.817	24.2	19.0	8 9	19 21.25	-27 12.8	2.099	3.026	9.3	19.9
8 19	19 20.20	+17 19.0	1.027	1.860	24.0	19.1	8 19	19 15.70	-26 44.3	2.172	3.022	12.3	20.1
<b>442662</b>	2012 <i>TW</i> <sub>207</sub>		7 15.8 225°38	3.4/17.1	17		<b>198574</b>	2004 <i>XK</i> <sub>182</sub>		7 15.9 212°85	4.7/13.9	18	
6 10	20 6.94	-11 50.3	2.212	3.037	13.1	21.3	6 10	20 13.49	-34 56.3	2.384	3.222	11.9	21.6
6 20	20 1.87	-11 28.8	2.122	3.030	10.4	21.1	6 20	20 7.01	-35 30.5	2.300	3.214	9.4	21.5
6 30	19 54.91	-11 16.0	2.056	3.022	7.3	20.9	6 30	19 58.27	-35 59.8	2.240	3.206	6.8	21.3
7 10	19 46.62	-11 11.9	2.014	3.013	4.4	20.7	7 10	19 47.92	-36 19.3	2.206	3.197	4.9	21.2
7 20	19 37.71	-11 15.8	2.000	3.005	3.6	20.6	7 20	19 36.87	-36 25.2	2.199	3.187	5.2	21.2
7 30	19 29.06	-11 26.5	2.014	2.996	6.0	20.8	7 30	19 26.22	-36 15.9	2.221	3.177	7.4	21.3
8 9	19 21.51	-11 42.1	2.054	2.987	9.2	21.0	8 9	19 16.98	-35 52.2	2.269	3.166	10.1	21.4
8 19	19 15.71	-12 0.7	2.118	2.977	12.2	21.1	8 19	19 9.90	-35 16.7	2.339	3.154	12.7	21.6
<b>259069</b>	2002 <i>UJ</i> <sub>41</sub>		7 15.8 246°27	3.5/17.0	18		<b>508115</b>	2015 <i>DC</i> <sub>211</sub>		7 15.9 51°97	5.7/18.9	17	
6 10	20 7.97	-12 34.7	1.727	2.568	15.5	20.6	6 10	20 4.54	-4 52.2	1.655	2.479	16.9	20.7
6 20	20 3.19	-12 19.2	1.642	2.559	12.3	20.4	6 20	20 0.43	-4 56.7	1.592	2.491	13.7	20.5
6 30	19 56.02	-12 14.7	1.578	2.550	8.5	20.1	6 30	19 54.14	-5 21.0	1.549	2.503	10.2	20.3
7 10	19 47.11	-12 20.9	1.537	2.540	4.8	19.9	7 10	19 46.36	-6 4.5	1.528	2.516	7.0	20.1
7 20	19 37.35	-12 36.7	1.523	2.531	3.8	19.8	7 20	19 38.00	-7 4.7	1.532	2.529	5.7	20.1
7 30	19 27.90	-12 59.7	1.535	2.521	7.0	20.0	7 30	19 30.10	-8 17.1	1.562	2.542	7.6	20.2
8 9	19 19.86	-13 27.0	1.571	2.511	11.0	20.2	8 9	19 23.64	-9 35.6	1.616	2.555	10.8	20.5
8 19	19 14.06	-13 56.0	1.630	2.500	14.7	20.4	8 19	19 19.30	-10 54.7	1.693	2.569	14.0	20.7
<b>365053</b>	2008 <i>WP</i> <sub>44</sub>		7 15.8 125°50	1.0/16.2	17		<b>14673</b>	1999 <i>RK</i> <sub>169</sub>		7 15.9 170°34	1.1/16.4	18	
6 10	20 10.97	-18 22.7	1.366	2.229	17.6	21.3	6 10	20 5.00	-17 3.8	2.602	3.437	11.1	19.2
6 20	20 5.92	-18 25.0	1.300	2.234	13.5	21.1	6 20	20 0.12	-17 7.6	2.521	3.439	8.5	19.1
6 30	19 57.92	-18 36.1	1.254	2.238	8.7	20.8	6 30	19 53.66	-17 16.9	2.464	3.441	5.5	18.9
7 10	19 47.83	-18 53.2	1.230	2.242	3.5	20.5	7 10	19 46.13	-17 30.1	2.433	3.443	2.4	18.7
7 20	19 36.89	-19 12.8	1.232	2.246	2.3	20.5	7 20	19 38.16	-17 45.8	2.431	3.444	1.6	18.6
7 30	19 26.59	-19 31.6	1.258	2.249	7.5	20.8	7 30	19 30.46	-18 2.1	2.458	3.445	4.6	18.8
8 9	19 18.28	-19 47.3	1.308	2.253	12.3	21.1	8 9	19 23.73	-18 17.7	2.511	3.446	7.7	19.0
8 19	19 12.83	-19 59.0	1.379	2.256	16.5	21.3	8 19	19 18.50	-18 31.6	2.590	3.446	10.4	19.2
<b>510693</b>	2012 <i>UP</i> <sub>126</sub>		7 15.8 299°65	0.6/16.0	18		<b>220954</b>	2005 <i>LD</i> <sub>30</sub>		7 15.9 339°95	0.8/16.1	18	
6 10	20 7.51	-20 20.3	1.713	2.572	14.8	21.9	6 10	20 3.14	-19 44.6	1.139	2.028	18.6	19.9
6 20	20 3.00	-20 9.5	1.623	2.555	11.4	21.7	6 20	20 0.65	-19 38.3	1.066	2.014	14.3	19.6
6 30	19 55.99	-20 3.1	1.554	2.538	7.4	21.4	6 30	19 54.96	-19 40.2	1.012	2.002	9.3	19.3
7 10	19 47.12	-19 59.3	1.510	2.521	2.9	21.1	7 10	19 46.86	-19 48.1	0.978	1.990	3.7	18.9
7 20	19 37.35	-19 56.0	1.491	2.505	2.0	21.0	7 20	19 37.61	-19 58.8	0.966	1.980	2.5	18.8
7 30	19 27.89	-19 51.6	1.498	2.488	6.7	21.3	7 30	19 28.85	-20 8.9	0.976	1.971	8.3	19.1
8 9	19 19.90	-19 45.2	1.530	2.472	11.1	21.5	8 9	19 22.13	-20 16.2	1.008	1.964	13.8	19.4
8 19	19 14.26	-19 36.7	1.584	2.456	15.0	21.7	8 19	19 18.52	-20 19.4	1.057	1.958	18.5	19.6
<b>170497</b>	2003 <i>WE</i> <sub>2</sub>		7 15.8 282°28	1.8/15.1	18		<b>176817</b>	2002 <i>TH</i> <sub>95</sub>		7 15.9 73°00	1.9/15.3	17	
6 10	20 7.29	-24 22.2	1.864	2.724	13.8	20.2	6 10	20 11.35	-24 33.8	1.440	2.308	16.6	20.0
6 20	20 2.69	-24 51.0	1.780	2.713	10.5	20.0	6 20	20 6.03	-24 57.0	1.385	2.322	12.6	19.8
6 30	19 55.71	-25 23.2	1.719	2.703	6.7	19.7	6 30	19 57.86	-25 23.0	1.351	2.337	8.0	19.6
7 10	19 46.99	-25 54.7	1.682	2.693	2.9	19.5	7 10	19 47.79	-25 46.7	1.340	2.351	3.3	19.3
7 20	19 37.46	-26 21.7	1.672	2.683	2.8	19.5	7 20	19 37.07	-26 3.7	1.354	2.365	3.1	19.3
7 30	19 28.25	-26 40.8	1.689	2.673	6.7	19.7	7 30	19 27.14	-26 11.3	1.393	2.380	7.6	19.6
8 9	19 20.46	-26 50.9	1.730	2.663	10.6	19.9	8 9	19 19.25	-26 9.3	1.457	2.394	11.9	19.9
8 19	19 14.92	-26 52.1	1.794	2.652	14.1	20.1	8 19	19 14.17	-25 59.1	1.541	2.408	15.6	20.2
<b>261034</b>	2005 <i>SG</i> <sub>140</sub>		7 15.8 259°94	4.6/18.2	18		<b>32586</b>	2001 <i></i>					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>288022</b>	2003 <i>UE</i> <sub>227</sub>		7 15.9 292°27	0°1/15.9 18			<b>12175</b>	Wimhermans		7 15.9 296°52	1°0/15.4 18		
6 10	20 7.25	-20 50.8	1.793	2.650	14.3	21.0	6 10	20 4.99	-22 43.5	2.152	3.006	12.4	18.1
6 20	20 2.75	-20 52.6	1.701	2.633	11.0	20.7	6 20	20 0.71	-23 8.3	2.058	2.988	9.4	17.9
6 30	19 55.82	-20 59.2	1.632	2.616	7.1	20.5	6 30	19 54.38	-23 37.3	1.986	2.971	6.0	17.6
7 10	19 47.09	-21 8.3	1.587	2.599	2.7	20.2	7 10	19 46.54	-24 7.3	1.941	2.953	2.4	17.4
7 20	19 37.48	-21 17.1	1.568	2.582	1.9	20.1	7 20	19 37.95	-24 35.2	1.922	2.935	2.1	17.3
7 30	19 28.14	-21 23.4	1.575	2.565	6.5	20.3	7 30	19 29.56	-24 58.2	1.931	2.917	5.9	17.5
8 9	19 20.19	-21 26.0	1.608	2.548	10.8	20.5	8 9	19 22.30	-25 14.6	1.966	2.900	9.5	17.7
8 19	19 14.51	-21 24.4	1.663	2.531	14.5	20.7	8 19	19 16.92	-25 24.0	2.024	2.882	12.8	17.9
<b>46432</b>	2002 <i>JR</i> <sub>65</sub>		7 15.9 18°21	0°5/15.7 18			<b>123585</b>	2000 <i>XD</i> <sub>41</sub>		7 15.9 205°33	6°1/13.3 18		
6 10	20 4.52	-20 10.5	1.389	2.265	16.6	18.7	6 10	20 14.15	-37 48.6	2.179	3.018	12.8	19.6
6 20	20 1.00	-20 40.1	1.329	2.271	12.6	18.4	6 20	20 7.80	-38 35.9	2.103	3.013	10.3	19.5
6 30	19 54.78	-21 18.2	1.289	2.277	8.0	18.2	6 30	19 58.92	-39 16.4	2.050	3.009	7.8	19.3
7 10	19 46.69	-22 0.4	1.271	2.284	3.0	17.9	7 10	19 48.24	-39 44.1	2.023	3.004	6.2	19.2
7 20	19 37.83	-22 41.9	1.278	2.292	2.3	17.9	7 20	19 36.80	-39 54.6	2.022	2.998	6.6	19.2
7 30	19 29.57	-23 18.1	1.310	2.301	7.2	18.2	7 30	19 25.84	-39 45.7	2.048	2.992	8.6	19.3
8 9	19 23.12	-23 46.3	1.364	2.310	11.8	18.5	8 9	19 16.52	-39 18.9	2.099	2.985	11.3	19.5
8 19	19 19.28	-24 5.7	1.439	2.321	15.6	18.8	8 19	19 9.65	-38 37.7	2.171	2.979	13.8	19.6
<b>12441</b>	1996 <i>DV</i>		7 15.9 58°28	3°6/17.9 18			<b>231880</b>	2000 <i>UU</i> <sub>112</sub>		7 15.9 270°33	1°8/16.6 17		
6 10	20 3.00	-8 34.1	2.242	3.063	13.1	18.3	6 10	20 7.02	-15 57.0	1.816	2.664	14.6	20.8
6 20	19 58.83	-8 44.3	2.166	3.068	10.4	18.2	6 20	20 2.48	-15 57.2	1.726	2.650	11.3	20.6
6 30	19 52.96	-9 7.2	2.112	3.073	7.4	18.0	6 30	19 55.62	-16 6.2	1.658	2.637	7.5	20.3
7 10	19 45.92	-9 41.9	2.082	3.078	4.7	17.8	7 10	19 47.04	-16 22.6	1.614	2.623	3.5	20.1
7 20	19 38.38	-10 26.5	2.080	3.083	3.7	17.8	7 20	19 37.61	-16 44.3	1.596	2.609	2.4	20.0
7 30	19 31.13	-11 18.1	2.105	3.088	5.7	17.9	7 30	19 28.43	-17 8.6	1.606	2.595	6.4	20.2
8 9	19 24.93	-12 13.1	2.157	3.093	8.6	18.1	8 9	19 20.58	-17 32.9	1.640	2.581	10.5	20.4
8 19	19 20.33	-13 8.3	2.232	3.098	11.4	18.3	8 19	19 14.88	-17 55.4	1.697	2.567	14.2	20.6
<b>85675</b>	1998 <i>RC</i> <sub>2</sub>		7 15.9 277°31	5°5/13.3 18			<b>237184</b>	2008 <i>UM</i> <sub>198</sub>		7 15.9 232°35	1°5/16.5 18		
6 10	20 9.53	-37 24.8	2.382	3.224	11.7	19.0	6 10	20 6.76	-16 4.4	1.934	2.779	13.9	20.9
6 20	20 4.15	-38 5.5	2.298	3.211	9.4	18.9	6 20	20 2.06	-16 13.3	1.852	2.775	10.8	20.7
6 30	19 56.53	-38 40.4	2.238	3.198	7.1	18.7	6 30	19 55.22	-16 30.7	1.791	2.770	7.1	20.5
7 10	19 47.31	-39 4.5	2.202	3.185	5.7	18.6	7 10	19 46.85	-16 55.1	1.756	2.765	3.2	20.2
7 20	19 37.38	-39 13.7	2.194	3.172	6.0	18.6	7 20	19 37.77	-17 23.7	1.747	2.760	2.1	20.2
7 30	19 27.81	-39 6.3	2.212	3.159	8.0	18.7	7 30	19 29.00	-17 53.8	1.765	2.754	5.9	20.4
8 9	19 19.59	-38 42.8	2.255	3.145	10.5	18.8	8 9	19 21.52	-18 22.8	1.809	2.749	9.8	20.6
8 19	19 13.50	-38 6.0	2.320	3.132	12.9	19.0	8 19	19 16.05	-18 48.9	1.877	2.743	13.2	20.8
<b>150586</b>	2000 <i>WQ</i> <sub>16</sub>		7 15.9 245°74	0°6/15.6 18			<b>426960</b>	2013 <i>YL</i> <sub>52</sub>		7 15.9 104°15	2°5/14.9 17		
6 10	20 5.62	-21 51.3	2.539	3.383	11.0	21.0	6 10	20 10.10	-26 17.7	1.884	2.740	13.8	21.3
6 20	20 0.81	-22 12.2	2.446	3.371	8.4	20.8	6 20	20 4.60	-26 52.8	1.821	2.752	10.5	21.1
6 30	19 54.25	-22 36.6	2.377	3.359	5.3	20.5	6 30	19 56.78	-27 28.9	1.782	2.764	6.7	20.9
7 10	19 46.43	-23 2.2	2.334	3.346	2.0	20.3	7 10	19 47.39	-28 1.5	1.768	2.777	3.2	20.7
7 20	19 38.02	-23 26.4	2.320	3.333	1.7	20.3	7 20	19 37.43	-28 26.5	1.781	2.789	3.3	20.7
7 30	19 29.81	-23 47.1	2.334	3.320	5.0	20.5	7 30	19 28.03	-28 41.3	1.820	2.800	6.7	20.9
8 9	19 22.58	-24 2.7	2.376	3.306	8.2	20.6	8 9	19 20.21	-28 45.6	1.886	2.812	10.3	21.2
8 19	19 16.94	-24 13.0	2.442	3.292	11.1	20.8	8 19	19 14.67	-28 40.4	1.973	2.823	13.4	21.4
<b>439120</b>	2011 <i>ST</i> <sub>120</sub>		7 15.9 295°67	3°4/14.1 18			<b>139579</b>	2001 <i>QB</i> <sub>96</sub>		7 15.9 279°73	0°3/15.9 18		
6 10	20 6.99	-27 52.4	2.042	2.900	12.8	20.8	6 10	20 6.16	-19 47.6	2.013	2.865	13.2	20.5
6 20	20 2.32	-28 50.2	1.967	2.899	9.8	20.6	6 20	20 1.58	-19 57.0	1.928	2.856	10.1	20.3
6 30	19 55.42	-29 49.4	1.916	2.897	6.5	20.4	6 30	19 54.91	-20 11.9	1.865	2.848	6.5	20.0
7 10	19 46.91	-30 44.8	1.891	2.896	3.7	20.2	7 10	19 46.73	-20 30.0	1.828	2.840	2.5	19.7
7 20	19 37.69	-31 31.6	1.893	2.895	4.1	20.3	7 20	19 37.86	-20 48.7	1.818	2.832	1.7	19.7
7 30	19 28.79	-32 6.0	1.922	2.894	7.1	20.4	7 30	19 29.29	-21 5.6	1.834	2.823	5.8	19.9
8 9	19 21.25	-32 26.9	1.975	2.893	10.4	20.6	8 9	19 21.97	-21 19.1	1.877	2.815	9.6	20.1
8 19	19 15.83	-32 35.1	2.052	2.892	13.3	20.8	8 19	19 16.63	-21 28.4	1.943	2.807	12.9	20.3
<b>99156</b>	2001 <i>FQ</i> <sub>131</sub>		7 15.9 187°28	1°3/15.4 18			<b>480875</b>	2001 <i>UM</i> <sub>52</sub>		7 15.9 265°11	6°9/10.9 17		
6 10	20 10.19	-24 55.9	2.114	2.963	12.8	19.9	6 10	20 14.53	-43 0.7	2.811	3.627	10.8	23.6
6 20	20 4.47	-25 0.0	2.035	2.963	9.7	19.7	6 20	20 8.11	-44 12.4	2.710	3.596	9.1	23.5
6 30	19 56.62	-25 4.8	1.980	2.962	6.2	19.5	6 30	19 59.24	-45 17.8	2.633	3.564	7.6	23.3
7 10	19 47.32	-25 7.5	1.950	2.961	2.5	19.3	7 10	19 48.45	-46 10.8	2.583	3.532	6.9	23.2
7 20	19 37.43	-25 5.5	1.948	2.960	2.2	19.3	7 20	19 36.58	-46 46.1	2.559	3.498	7.4	23.2
7 30	19 27.97	-24 57.6	1.974	2.959	5.9	19.5	7 30	19 24.76	-47 0.6	2.562	3.464	9.0	23.2
8 9	19 19.88	-24 43.8	2.027	2.957	9.4	19.7	8 9	19 14.13	-46 54.5	2.590	3.429	11.0	23.3
8 19	19 13.86	-24 24.9	2.102	2.955	12.6	19.9	8 19	19 5.63	-46 30.3	2.640	3.393	13.0	23.4
<b>28363</b>	1999 <i>GN</i> <sub>6</sub>		7 15.9 285°12	0°1/15.9 18			<b>358919</b>	2008 <i>HK</i> <sub>1</sub>		7 15.9 329°17	0°6/16.2 18		
6 10	20 5.85	-20 27.7	2.066	2.918	12.9	18.9	6 10	20 3.24	-16 53.0	2.099	2.948	12.8	20.5
6 20	20 1.30	-20 38.4	1.980	2.909	9.9	18.6	6 20	19 59.30	-17 28.7	2.016	2.942	9.8	20.3
6 30	19 54.70	-20 54.0	1.917	2.900	6.3	18.4	6 30	19 53.43	-18 13.5	1.955	2.937	6.3	20.1
7 10	19 46.64	-21 12.2	1.880	2.892	2.4	18.1	7 10	19 46.17	-19 4.7	1.920	2.931	2.6	19.8
7 20	19 37.90	-21 30.3	1.869	2.883	1.7	18.1	7 20	19 38.26	-19 58.6	1.912	2.926	1.6	19.7
7 30	19 29.45	-21 46.0	1.886	2.874	5.7	18.3	7 30	19 30.58	-20 51.7	1.932	2.921	5.5	20.0
8 9	19 22.22	-21 57.8	1.928	2.865	9.4	18.5	8 9	19 24.03	-21 40.6	1.978	2.917	9.1	20.2
8 19	19 16.91	-22 5.2	1.994	2.857	12.7	18.7	8 19	19 19.27	-22 23.3	2.047	2.913	12.3	20.4
<b>47047</b>	1998 <i>WX</i> <sub>12</sub>		7 15.9 284°74	0°9/15.5 18			<b>117006</b>	2004 <i>HD</i> <sub>61</sub>		7 15.9 79°67	2°9/16.		

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>217348</b>	2004 RA <sub>213</sub>		7 15.9 298°65	1°9/15.4	18		<b>158367</b>	2001 XH <sub>159</sub>		7 15.9 119°51	3°7/17.1	18	
6 10	20 9.66	-27 52.7	2.162	3.012	12.5	19.7	6 10	20 9.80	-12 26.4	1.910	2.740	14.7	20.0
6 20	20 4.20	-27 42.8	2.066	2.994	9.6	19.5	6 20	20 4.14	-11 53.9	1.841	2.751	11.5	19.8
6 30	19 56.56	-27 30.4	1.994	2.975	6.2	19.2	6 30	19 56.41	-11 30.8	1.795	2.762	8.0	19.6
7 10	19 47.35	-27 12.8	1.947	2.957	2.9	19.0	7 10	19 47.28	-11 16.9	1.773	2.773	4.7	19.5
7 20	19 37.44	-26 48.2	1.929	2.939	2.7	19.0	7 20	19 37.65	-11 11.9	1.779	2.784	3.9	19.4
7 30	19 27.88	-26 15.8	1.938	2.921	6.1	19.1	7 30	19 28.51	-11 14.5	1.811	2.794	6.5	19.6
8 9	19 19.64	-25 36.5	1.973	2.903	9.7	19.3	8 9	19 20.79	-11 22.9	1.870	2.803	9.9	19.8
8 19	19 13.46	-24 52.4	2.032	2.885	12.9	19.5	8 19	19 15.12	-11 34.9	1.951	2.813	13.0	20.1
<b>227908</b>	2007 EU <sub>182</sub>		7 15.9 87°64	2°9/16.9	18		<b>163993</b>	2003 UR <sub>148</sub>		7 15.9 204°00	1°4/16.4	18	
6 10	20 8.32	-13 44.1	1.712	2.555	15.5	20.6	6 10	20 6.95	-16 51.8	2.014	2.858	13.5	20.2
6 20	20 3.25	-13 32.7	1.648	2.567	12.1	20.4	6 20	20 2.11	-16 53.2	1.934	2.857	10.4	20.0
6 30	19 55.93	-13 31.8	1.605	2.579	8.2	20.2	6 30	19 55.21	-17 1.7	1.876	2.855	6.8	19.8
7 10	19 47.09	-13 40.3	1.586	2.591	4.3	20.0	7 10	19 46.87	-17 15.8	1.844	2.854	3.0	19.5
7 20	19 37.69	-13 56.3	1.593	2.603	3.2	19.9	7 20	19 37.92	-17 33.3	1.839	2.852	2.0	19.4
7 30	19 28.83	-14 17.4	1.627	2.615	6.5	20.1	7 30	19 29.30	-17 52.0	1.861	2.850	5.7	19.7
8 9	19 21.50	-14 41.0	1.686	2.626	10.3	20.4	8 9	19 21.94	-18 10.0	1.909	2.848	9.4	19.9
8 19	19 16.39	-15 4.7	1.767	2.638	13.7	20.6	8 19	19 16.54	-18 25.9	1.980	2.845	12.7	20.1
<b>475701</b>	2006 VU <sub>120</sub>		7 15.9 212°03	3°4/17.3	18		<b>256720</b>	2008 AC <sub>65</sub>		7 15.9 269°88	0°3/15.9	18	
6 10	20 5.31	-11 0.5	2.357	3.179	12.5	22.3	6 10	20 10.88	-21 4.6	1.541	2.401	16.1	20.8
6 20	20 0.53	-10 40.1	2.272	3.176	9.9	22.1	6 20	20 5.89	-20 55.7	1.455	2.388	12.4	20.5
6 30	19 54.04	-10 28.6	2.209	3.173	7.0	21.9	6 30	19 58.04	-20 51.2	1.389	2.374	8.0	20.3
7 10	19 46.37	-10 26.0	2.173	3.170	4.3	21.8	7 10	19 48.06	-20 48.5	1.347	2.359	3.1	19.9
7 20	19 38.18	-10 31.6	2.163	3.166	3.6	21.7	7 20	19 37.05	-20 45.2	1.331	2.345	2.1	19.8
7 30	19 30.25	-10 44.2	2.182	3.163	5.7	21.9	7 30	19 26.40	-20 39.3	1.340	2.330	7.3	20.1
8 9	19 23.35	-11 1.8	2.227	3.159	8.6	22.0	8 9	19 17.47	-20 30.1	1.374	2.316	12.1	20.3
8 19	19 18.05	-11 22.5	2.296	3.155	11.4	22.2	8 19	19 11.24	-20 18.0	1.429	2.301	16.3	20.6
<b>262512</b>	2006 UP <sub>269</sub>		7 15.9 157°82	3°0/16.9	17		<b>220362</b>	2003 NK <sub>6</sub>		7 15.9 330°02	12°8/17.3	18	
6 10	20 10.60	-13 33.6	1.973	2.803	14.3	21.3	6 10	20 4.25	+ 6 31.2	1.867	2.626	17.5	19.4
6 20	20 4.76	-13 13.1	1.899	2.810	11.2	21.1	6 20	20 0.35	+ 8 37.4	1.779	2.605	15.8	19.2
6 30	19 56.81	-13 1.2	1.846	2.816	7.6	20.9	6 30	19 54.30	+10 27.2	1.711	2.584	14.2	19.0
7 10	19 47.43	-12 57.4	1.819	2.822	4.2	20.7	7 10	19 46.61	+11 53.8	1.663	2.564	13.1	18.9
7 20	19 37.47	-13 0.5	1.819	2.827	3.3	20.7	7 20	19 38.05	+12 52.1	1.637	2.545	12.9	18.9
7 30	19 27.95	-13 9.1	1.847	2.831	6.2	20.9	7 30	19 29.60	+13 19.1	1.633	2.526	13.7	18.9
8 9	19 19.80	-13 21.2	1.901	2.835	9.7	21.1	8 9	19 22.28	+13 16.2	1.650	2.509	15.2	18.9
8 19	19 13.70	-13 35.3	1.979	2.838	12.9	21.3	8 19	19 16.90	+12 47.7	1.685	2.492	17.1	19.0
<b>222570</b>	2001 VJ <sub>96</sub>		7 15.9 205°14	1°1/15.3	18		<b>328960</b>	2010 VB <sub>142</sub>		7 15.9 161°81	0°4/16.0	17	
6 10	20 9.19	-20 56.4	2.225	3.067	12.4	20.8	6 10	20 9.15	-18 16.9	1.626	2.482	15.6	21.1
6 20	20 3.80	-21 52.0	2.138	3.062	9.5	20.6	6 20	20 4.26	-18 44.2	1.554	2.484	12.0	20.9
6 30	19 56.32	-22 54.4	2.074	3.056	6.0	20.4	6 30	19 56.81	-19 20.8	1.503	2.486	7.7	20.6
7 10	19 47.30	-23 59.3	2.038	3.050	2.3	20.1	7 10	19 47.54	-20 3.1	1.476	2.488	3.0	20.3
7 20	19 37.51	-25 2.2	2.030	3.042	2.2	20.1	7 20	19 37.46	-20 46.7	1.475	2.489	2.0	20.3
7 30	19 27.92	-25 58.9	2.052	3.035	5.9	20.3	7 30	19 27.82	-21 27.5	1.501	2.491	6.7	20.6
8 9	19 19.48	-26 46.6	2.100	3.026	9.4	20.5	8 9	19 19.81	-22 2.5	1.552	2.492	11.1	20.8
8 19	19 12.93	-27 24.4	2.173	3.017	12.5	20.7	8 19	19 14.24	-22 30.2	1.624	2.493	14.8	21.1
<b>13448</b>	Edbryce		7 15.9 148°33	1°2/15.4	18		<b>214749</b>	2006 TO <sub>60</sub>		7 15.9 61°02	5°9/13.2	18	
6 10	20 11.42	-23 20.4	1.871	2.722	14.1	18.1	6 10	20 9.57	-35 50.2	2.027	2.879	13.1	20.1
6 20	20 5.63	-23 43.5	1.801	2.730	10.7	17.9	6 20	20 4.40	-36 49.8	1.965	2.885	10.4	19.9
6 30	19 57.49	-24 9.7	1.754	2.737	6.8	17.7	6 30	19 56.78	-37 44.0	1.926	2.892	7.7	19.8
7 10	19 47.72	-24 35.2	1.732	2.744	2.7	17.5	7 10	19 47.49	-38 26.6	1.912	2.898	6.0	19.7
7 20	19 37.31	-24 56.5	1.738	2.750	2.4	17.5	7 20	19 37.52	-38 53.0	1.924	2.905	6.5	19.7
7 30	19 27.41	-25 10.8	1.771	2.756	6.4	17.7	7 30	19 28.07	-39 0.8	1.962	2.912	8.6	19.9
8 9	19 19.07	-25 17.5	1.830	2.761	10.2	18.0	8 9	19 20.23	-38 50.9	2.024	2.919	11.3	20.1
8 19	19 13.03	-25 16.9	1.911	2.766	13.5	18.2	8 19	19 14.76	-38 26.1	2.108	2.925	13.8	20.2
<b>272823</b>	2006 AJ <sub>73</sub>		7 15.9 302°75	0°1/15.9	18		<b>180473</b>	2004 CG <sub>51</sub>		7 15.9 146°00	2°5/16.9	17	
6 10	20 5.91	-21 26.2	2.261	3.110	12.1	20.6	6 10	20 9.26	-14 1.7	1.764	2.605	15.3	21.2
6 20	20 1.17	-21 19.6	2.175	3.102	9.2	20.4	6 20	20 4.03	-14 3.0	1.692	2.611	11.9	20.9
6 30	19 54.53	-21 15.7	2.111	3.093	5.9	20.1	6 30	19 56.50	-14 14.9	1.642	2.617	8.0	20.7
7 10	19 46.59	-21 12.8	2.073	3.085	2.2	19.9	7 10	19 47.38	-14 35.9	1.616	2.623	4.0	20.5
7 20	19 38.08	-21 9.3	2.063	3.077	1.6	19.8	7 20	19 37.59	-15 3.5	1.617	2.628	2.9	20.4
7 30	19 29.88	-21 3.9	2.081	3.069	5.3	20.1	7 30	19 28.26	-15 34.7	1.645	2.633	6.4	20.7
8 9	19 22.81	-20 56.0	2.125	3.061	8.7	20.3	8 9	19 20.41	-16 6.6	1.698	2.638	10.3	20.9
8 19	19 17.53	-20 45.7	2.193	3.054	11.8	20.4	8 19	19 14.78	-16 37.0	1.774	2.642	13.8	21.1
<b>145129</b>	2005 GH <sub>150</sub>		7 15.9 1°47	2°2/15.0	17		<b>218589</b>	2005 LO <sub>30</sub>		7 15.9 10°91	0°7/15.6	17	
6 10	19 58.70	-21 26.6	0.934	1.842	19.9	18.9	6 10	20 4.73	-20 17.5	1.177	2.062	18.4	19.9
6 20	19 57.73	-22 23.5	0.879	1.838	15.2	18.6	6 20	20 1.67	-20 51.0	1.117	2.064	14.0	19.6
6 30	19 53.31	-23 32.9	0.841	1.836	9.6	18.3	6 30	19 55.50	-21 34.7	1.076	2.066	8.9	19.3
7 10	19 46.35	-24 47.4	0.823	1.836	3.9	18.0	7 10	19 47.11	-22 23.4	1.057	2.070	3.3	19.0
7 20	19 38.24	-25 57.9	0.826	1.839	3.9	18.0	7 20	19 37.77	-23 11.2	1.061	2.075	2.6	19.0
7 30	19 30.82	-26 56.0	0.849	1.843	9.6	18.3	7 30	19 29.08	-23 52.2	1.088	2.080	8.1	19.3
8 9	19 25.75	-27 36.9	0.892	1.849	15.0	18.6	8 9	19 22.48	-24 23.3	1.136	2.087	13.2	19.6
8 19	19 24.08	-27 59.9	0.952	1.857	19.6	18.9	8 19	19 18.89	-24 43.5	1.205	2.094	17.5	19.9
<b>423087</b>	2003 YC <sub>72</sub>		7 15.9 226°52	1°6/15.3	17		<b>357886</b>	2005 UW <sub>476</sub>		7 15.9 261°89	4°5/18.1	18	
6 10	20 11.												

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>85954</b>	1999 <i>FY</i> <sub>23</sub>		7 15.9 202°26	2°4/15.1	18		<b>292938</b>	2006 <i>VW</i> <sub>78</sub>		7 15.9 108°62	7°2/20.2	18	
6 10	20 12.78	-25 32.0	1.571	2.432	15.8	18.7	6 10	20 5.33	+ 3 44.5	2.746	3.490	12.8	20.9
6 20	20 7.28	-26 1.1	1.496	2.430	12.1	18.4	6 20	20 0.18	+ 4 28.5	2.683	3.510	11.0	20.8
6 30	19 58.87	-26 32.7	1.443	2.427	7.8	18.2	6 30	19 53.65	+ 4 57.5	2.641	3.531	9.2	20.7
7 10	19 48.36	-27 1.6	1.414	2.424	3.5	17.9	7 10	19 46.23	+ 5 9.8	2.623	3.551	7.8	20.6
7 20	19 36.90	-27 22.8	1.410	2.420	3.5	17.9	7 20	19 38.50	+ 5 5.0	2.630	3.570	7.2	20.6
7 30	19 25.96	-27 33.1	1.433	2.416	7.8	18.1	7 30	19 31.08	+ 4 44.3	2.664	3.589	7.7	20.7
8 9	19 16.89	-27 31.9	1.480	2.412	12.1	18.4	8 9	19 24.58	+ 4 10.3	2.724	3.608	9.1	20.8
8 19	19 10.61	-27 20.8	1.548	2.407	15.9	18.6	8 19	19 19.44	+ 3 26.3	2.807	3.626	10.7	20.9
<b>40146</b>	1998 <i>QR</i> <sub>71</sub>		7 15.9 270°61	2°1/16.7	18 R		<b>72342</b>	2001 <i>BS</i> <sub>66</sub>		7 15.9 113°91	6°5/13.1	18	
6 10	20 5.27	-15 23.6	2.392	3.227	11.9	18.9	6 10	20 12.97	-37 32.0	2.015	2.860	13.5	18.9
6 20	20 0.54	-15 5.4	2.303	3.219	9.3	18.7	6 20	20 7.00	-38 32.1	1.956	2.870	10.8	18.7
6 30	19 54.10	-14 53.1	2.237	3.210	6.2	18.5	6 30	19 58.46	-39 25.2	1.921	2.880	8.2	18.6
7 10	19 46.44	-14 46.2	2.196	3.202	3.2	18.3	7 10	19 48.14	-40 4.7	1.910	2.890	6.6	18.5
7 20	19 38.26	-14 43.9	2.183	3.194	2.4	18.2	7 20	19 37.16	-40 25.9	1.925	2.899	7.0	18.6
7 30	19 30.32	-14 45.0	2.199	3.185	5.2	18.4	7 30	19 26.80	-40 26.6	1.966	2.909	9.0	18.7
8 9	19 23.40	-14 48.5	2.241	3.177	8.4	18.5	8 9	19 18.20	-40 8.5	2.031	2.918	11.6	18.9
8 19	19 18.09	-14 53.1	2.307	3.168	11.3	18.7	8 19	19 12.13	-39 35.3	2.117	2.926	14.0	19.1
<b>198317</b>	2004 <i>TX</i> <sub>339</sub>		7 15.9 192°25	1°6/16.6	18		<b>474182</b>	1999 <i>VK</i> <sub>118</sub>		7 15.9 251°33	7°3/19.1	16	
6 10	20 7.77	-15 37.6	2.211	3.046	12.8	21.1	6 10	20 3.79	+ 0 22.0	2.419	3.194	13.6	21.6
6 20	20 2.57	-15 45.0	2.128	3.044	9.9	20.9	6 20	19 59.36	+ 1 12.4	2.337	3.192	11.6	21.5
6 30	19 55.45	-16 0.0	2.067	3.042	6.5	20.7	6 30	19 53.32	+ 1 48.4	2.276	3.190	9.5	21.3
7 10	19 46.97	-16 21.2	2.032	3.040	3.0	20.5	7 10	19 46.17	+ 2 8.2	2.239	3.187	7.8	21.2
7 20	19 37.90	-16 46.3	2.025	3.037	2.1	20.4	7 20	19 38.52	+ 2 10.7	2.227	3.185	7.3	21.2
7 30	19 29.11	-17 13.0	2.046	3.034	5.4	20.6	7 30	19 31.10	+ 1 56.5	2.241	3.183	8.1	21.2
8 9	19 21.46	-17 39.2	2.094	3.030	8.9	20.8	8 9	19 24.62	+ 1 28.0	2.279	3.181	9.9	21.3
8 19	19 15.62	-18 3.2	2.166	3.025	12.0	21.0	8 19	19 19.64	+ 0 48.6	2.341	3.179	11.9	21.5
<b>318287</b>	2004 <i>TG</i> <sub>43</sub>		7 15.9 329°63	4°4/17.4	17		<b>395950</b>	2013 <i>AZ</i> <sub>129</sub>		7 15.9 61°67	3°2/17.6	16	
6 10	20 5.99	-11 5.2	1.634	2.477	16.2	20.4	6 10	20 4.06	-10 21.8	2.068	2.898	13.7	21.0
6 20	20 1.79	-10 38.3	1.557	2.473	12.9	20.2	6 20	19 59.79	-10 34.5	1.997	2.907	10.8	20.8
6 30	19 55.21	-10 23.7	1.500	2.469	9.1	20.0	6 30	19 53.68	-10 59.6	1.948	2.916	7.5	20.6
7 10	19 46.94	-10 21.8	1.466	2.465	5.6	19.7	7 10	19 46.32	-11 35.9	1.924	2.925	4.4	20.4
7 20	19 37.92	-10 32.0	1.457	2.462	4.6	19.7	7 20	19 38.44	-12 20.9	1.927	2.934	3.3	20.4
7 30	19 29.27	-10 52.3	1.474	2.459	7.4	19.8	7 30	19 30.92	-13 11.4	1.957	2.943	5.8	20.6
8 9	19 22.08	-11 19.4	1.514	2.456	11.2	20.0	8 9	19 24.55	-14 3.7	2.013	2.953	9.0	20.8
8 19	19 17.15	-11 50.4	1.576	2.453	14.8	20.3	8 19	19 19.95	-14 54.9	2.093	2.962	12.0	21.0
<b>285218</b>	1997 <i>GE</i> <sub>3</sub>		7 15.9 26°00	0°1/15.9	17		<b>153486</b>	2001 <i>RB</i> <sub>82</sub>		7 15.9 278°67	6°5/12.8	18	
6 10	20 4.84	-20 16.2	1.824	2.684	14.0	20.7	6 10	20 11.25	-37 57.9	2.144	2.988	12.8	20.6
6 20	20 0.66	-20 29.0	1.758	2.691	10.6	20.5	6 20	20 5.91	-38 53.0	2.056	2.968	10.4	20.4
6 30	19 54.33	-20 47.5	1.714	2.699	6.7	20.3	6 30	19 57.95	-39 42.6	1.990	2.948	8.0	20.2
7 10	19 46.56	-21 8.7	1.695	2.707	2.5	20.1	7 10	19 48.05	-40 20.2	1.949	2.928	6.6	20.1
7 20	19 38.23	-21 29.9	1.702	2.716	1.8	20.0	7 20	19 37.18	-40 40.6	1.934	2.908	7.0	20.1
7 30	19 30.36	-21 48.5	1.735	2.725	5.9	20.3	7 30	19 26.60	-40 40.7	1.945	2.887	9.2	20.2
8 9	19 23.91	-22 2.7	1.794	2.735	9.8	20.6	8 9	19 17.53	-40 21.3	1.980	2.867	11.9	20.3
8 19	19 19.53	-22 12.0	1.875	2.745	13.1	20.8	8 19	19 10.89	-39 45.3	2.037	2.846	14.5	20.4
<b>101573</b>	1999 <i>BQ</i>		7 15.9 131°24	0°1/15.9	18		<b>103112</b>	1999 <i>XA</i> <sub>178</sub>		7 15.9 178°05	1°0/15.5	18	
6 10	20 11.04	-22 4.9	1.647	2.504	15.4	18.9	6 10	20 9.69	-24 9.3	2.226	3.072	12.3	20.3
6 20	20 5.62	-21 53.5	1.574	2.506	11.7	18.7	6 20	20 4.03	-24 16.3	2.148	3.073	9.4	20.1
6 30	19 57.62	-21 45.1	1.523	2.507	7.5	18.4	6 30	19 56.37	-24 24.7	2.092	3.074	6.0	19.9
7 10	19 47.83	-21 37.1	1.496	2.508	2.8	18.2	7 10	19 47.33	-24 31.6	2.064	3.075	2.4	19.7
7 20	19 37.34	-21 27.6	1.495	2.509	2.0	18.1	7 20	19 37.75	-24 34.8	2.063	3.075	2.0	19.7
7 30	19 27.41	-21 15.1	1.521	2.510	6.7	18.4	7 30	19 28.55	-24 32.8	2.090	3.075	5.6	19.9
8 9	19 19.21	-20 59.6	1.571	2.511	11.0	18.7	8 9	19 20.65	-24 25.2	2.144	3.074	9.0	20.1
8 19	19 13.51	-20 41.7	1.644	2.512	14.7	18.9	8 19	19 14.67	-24 12.6	2.222	3.073	12.0	20.3
<b>135027</b>	2001 <i>LZ</i> <sub>13</sub>		7 15.9 342°98	5°5/17.3	18		<b>355748</b>	2008 <i>HT</i> <sub>63</sub>		7 15.9 52°14	5°8/12.5	18	
6 10	20 1.21	-11 21.1	1.337	2.202	17.8	18.2	6 10	20 8.29	-33 36.5	1.997	2.853	13.1	20.3
6 20	19 58.69	-10 33.4	1.258	2.186	14.3	17.9	6 20	20 3.48	-35 7.9	1.943	2.867	10.3	20.2
6 30	19 53.52	-9 58.3	1.197	2.171	10.4	17.6	6 30	19 56.26	-36 36.2	1.912	2.881	7.5	20.0
7 10	19 46.39	-9 37.7	1.158	2.158	6.7	17.4	7 10	19 47.35	-37 54.1	1.907	2.895	5.9	20.0
7 20	19 38.30	-9 32.3	1.142	2.146	5.7	17.3	7 20	19 37.73	-38 55.8	1.929	2.909	6.5	20.0
7 30	19 30.55	-9 41.1	1.148	2.135	8.7	17.4	7 30	19 28.56	-39 37.7	1.977	2.924	8.7	20.2
8 9	19 24.42	-10 1.0	1.176	2.126	12.9	17.6	8 9	19 20.93	-39 59.6	2.049	2.939	11.3	20.4
8 19	19 20.84	-10 28.2	1.224	2.119	16.9	17.9	8 19	19 15.62	-40 3.8	2.142	2.954	13.8	20.6
<b>140449</b>	2001 <i>TS</i> <sub>120</sub>		7 15.9 232°48	2°9/14.7	18		<b>476123</b>	2007 <i>TA</i> <sub>216</sub>		7 15.9 311°72	3°3/14.7	16	
6 10	20 10.04	-30 19.9	2.466	3.309	11.3	20.8	6 10	20 6.96	-27 25.9	1.638	2.508	14.9	21.6
6 20	20 4.28	-30 36.5	2.377	3.300	8.7	20.6	6 20	20 3.02	-27 58.4	1.548	2.486	11.5	21.3
6 30	19 56.53	-30 50.6	2.313	3.290	5.9	20.4	6 30	19 56.31	-28 32.6	1.479	2.464	7.6	21.1
7 10	19 47.39	-30 58.8	2.275	3.279	3.4	20.2	7 10	19 47.49	-29 3.6	1.434	2.442	4.0	20.8
7 20	19 37.65	-30 58.4	2.266	3.268	3.5	20.2	7 20	19 37.57	-29 26.1	1.413	2.421	4.1	20.7
7 30	19 28.23	-30 48.0	2.284	3.257	6.1	20.3	7 30	19 27.90	-29 36.4	1.418	2.400	8.1	20.9
8 9	19 20.03	-30 27.8	2.330	3.246	9.1	20.5	8 9	19 19.83	-29 33.6	1.447	2.380	12.3	21.1
8 19	19 13.71	-29 59.5	2.399	3.234	11.8	20.7	8 19	19 14.36	-29 18.9	1.496	2.360	16.2	21.3
<b>474576</b>	2004 <i>FU</i> <sub>78</sub>												

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>435158</b>	2007 <i>LM</i> <sub>14</sub>		7 15.9 80°34'	8°6'/18.9	17		<b>435158</b>	2007 <i>LM</i> <sub>14</sub>		7 15.9 80°34'	8°6'/18.9	17	
6 10	20 8.56	- 1 10.6	1.755	2.551	17.1	21.1	6 10	20 8.56	- 1 10.6	1.755	2.551	17.1	21.1
6 20	20 3.32	- 0 0.5	1.697	2.568	14.4	20.9	6 20	20 3.32	- 0 0.5	1.697	2.568	14.4	20.9
6 30	19 55.95	+ 0 51.5	1.658	2.584	11.6	20.8	6 30	19 55.95	+ 0 51.5	1.658	2.584	11.6	20.8
7 10	19 47.17	+ 1 22.4	1.641	2.600	9.4	20.7	7 10	19 47.17	+ 1 22.4	1.641	2.600	9.4	20.7
7 20	19 37.90	+ 1 31.0	1.649	2.616	8.6	20.7	7 20	19 37.90	+ 1 31.0	1.649	2.616	8.6	20.7
7 30	19 29.15	+ 1 18.4	1.681	2.632	9.7	20.8	7 30	19 29.15	+ 1 18.4	1.681	2.632	9.7	20.8
8 9	19 21.85	+ 0 48.4	1.738	2.648	12.0	20.9	8 9	19 21.85	+ 0 48.4	1.738	2.648	12.0	20.9
8 19	19 16.66	+ 0 5.8	1.815	2.663	14.4	21.1	8 19	19 16.66	+ 0 5.8	1.815	2.663	14.4	21.1
<b>65986</b>	1998 <i>HA</i> <sub>147</sub>		7 15.9 76°95'	4°9'/18.5	18		<b>65986</b>	1998 <i>HA</i> <sub>147</sub>		7 15.9 76°95'	4°9'/18.5	18	
6 10	20 6.18	- 6 22.2	1.743	2.566	16.2	19.2	6 10	20 6.18	- 6 22.2	1.743	2.566	16.2	19.2
6 20	20 1.63	- 6 30.9	1.680	2.581	13.0	19.0	6 20	20 1.63	- 6 30.9	1.680	2.581	13.0	19.0
6 30	19 54.95	- 6 57.2	1.637	2.595	9.5	18.9	6 30	19 54.95	- 6 57.2	1.637	2.595	9.5	18.9
7 10	19 46.82	- 7 40.4	1.618	2.610	6.2	18.7	7 10	19 46.82	- 7 40.4	1.618	2.610	6.2	18.7
7 20	19 38.14	- 8 37.6	1.624	2.625	5.0	18.7	7 20	19 38.14	- 8 37.6	1.624	2.625	5.0	18.7
7 30	19 29.92	- 9 44.5	1.657	2.639	7.0	18.8	7 30	19 29.92	- 9 44.5	1.657	2.639	7.0	18.8
8 9	19 23.11	-10 55.9	1.715	2.654	10.3	19.0	8 9	19 23.11	-10 55.9	1.715	2.654	10.3	19.0
8 19	19 18.38	-12 7.0	1.796	2.668	13.5	19.3	8 19	19 18.38	-12 7.0	1.796	2.668	13.5	19.3
<b>290984</b>	2005 <i>XF</i> <sub>46</sub>		7 15.9 257°49'	1°3'/16.3	18		<b>290984</b>	2005 <i>XF</i> <sub>46</sub>		7 15.9 257°49'	1°3'/16.3	18	
6 10	20 7.24	-18 28.0	2.364	3.203	11.9	20.3	6 10	20 7.24	-18 28.0	2.364	3.203	11.9	20.3
6 20	20 2.03	-18 3.4	2.279	3.199	9.2	20.1	6 20	20 2.03	-18 3.4	2.279	3.199	9.2	20.1
6 30	19 55.04	-17 42.3	2.218	3.196	6.0	19.9	6 30	19 55.04	-17 42.3	2.218	3.196	6.0	19.9
7 10	19 46.83	-17 24.0	2.183	3.192	2.7	19.7	7 10	19 46.83	-17 24.0	2.183	3.192	2.7	19.7
7 20	19 38.13	-17 7.8	2.176	3.188	1.9	19.6	7 20	19 38.13	-17 7.8	2.176	3.188	1.9	19.6
7 30	19 29.75	-16 53.1	2.197	3.184	5.1	19.9	7 30	19 29.75	-16 53.1	2.197	3.184	5.1	19.9
8 9	19 22.48	-16 39.4	2.245	3.180	8.4	20.0	8 9	19 22.48	-16 39.4	2.245	3.180	8.4	20.0
8 19	19 16.91	-16 26.5	2.318	3.176	11.3	20.2	8 19	19 16.91	-16 26.5	2.318	3.176	11.3	20.2
<b>40363</b>	1999 <i>NM</i> <sub>23</sub>		7 15.9 339°94'	0°8'/16.3	18		<b>40363</b>	1999 <i>NM</i> <sub>23</sub>		7 15.9 339°94'	0°8'/16.3	18	
6 10	20 1.06	-15 58.7	1.273	2.153	17.6	18.2	6 10	20 1.06	-15 58.7	1.273	2.153	17.6	18.2
6 20	19 58.87	-16 42.6	1.196	2.138	13.7	17.9	6 20	19 58.87	-16 42.6	1.196	2.138	13.7	17.9
6 30	19 53.82	-17 43.5	1.137	2.125	8.9	17.6	6 30	19 53.82	-17 43.5	1.137	2.125	8.9	17.6
7 10	19 46.59	-18 57.7	1.100	2.113	3.6	17.3	7 10	19 46.59	-18 57.7	1.100	2.113	3.6	17.3
7 20	19 38.22	-20 18.8	1.087	2.102	2.3	17.2	7 20	19 38.22	-20 18.8	1.087	2.102	2.3	17.2
7 30	19 30.14	-21 39.3	1.097	2.092	7.8	17.5	7 30	19 30.14	-21 39.3	1.097	2.092	7.8	17.5
8 9	19 23.79	-22 52.4	1.130	2.083	12.9	17.7	8 9	19 23.79	-22 52.4	1.130	2.083	12.9	17.7
8 19	19 20.22	-23 54.0	1.183	2.076	17.4	18.0	8 19	19 20.22	-23 54.0	1.183	2.076	17.4	18.0
<b>462605</b>	2009 <i>HM</i> <sub>61</sub>		7 15.9 23°83'	7°4'/18.3	17		<b>462605</b>	2009 <i>HM</i> <sub>61</sub>		7 15.9 23°83'	7°4'/18.3	17	
6 10	20 4.29	- 7 47.0	1.075	1.940	21.2	20.4	6 10	20 4.29	- 7 47.0	1.075	1.940	21.2	20.4
6 20	20 1.23	- 7 0.3	1.024	1.949	17.2	20.2	6 20	20 1.23	- 7 0.3	1.024	1.949	17.2	20.2
6 30	19 55.14	- 6 35.0	0.990	1.958	12.7	20.0	6 30	19 55.14	- 6 35.0	0.990	1.958	12.7	20.0
7 10	19 46.98	- 6 33.3	0.975	1.969	8.8	19.8	7 10	19 46.98	- 6 33.3	0.975	1.969	8.8	19.8
7 20	19 38.04	- 6 54.4	0.981	1.981	7.4	19.8	7 20	19 38.04	- 6 54.4	0.981	1.981	7.4	19.8
7 30	19 29.85	- 7 34.4	1.009	1.994	9.9	20.0	7 30	19 29.85	- 7 34.4	1.009	1.994	9.9	20.0
8 9	19 23.74	- 8 26.7	1.057	2.007	13.9	20.2	8 9	19 23.74	- 8 26.7	1.057	2.007	13.9	20.2
8 19	19 20.56	- 9 24.7	1.124	2.022	17.8	20.5	8 19	19 20.56	- 9 24.7	1.124	2.022	17.8	20.5
<b>502424</b>	2015 <i>BJ</i> <sub>257</sub>		7 15.9 238°53'	3°0'/17.2	17		<b>502424</b>	2015 <i>BJ</i> <sub>257</sub>		7 15.9 238°53'	3°0'/17.2	17	
6 10	20 8.33	-12 1.1	1.755	2.592	15.5	22.1	6 10	20 8.33	-12 1.1	1.755	2.592	15.5	22.1
6 20	20 3.59	-12 11.4	1.666	2.581	12.2	21.9	6 20	20 3.59	-12 11.4	1.666	2.581	12.2	21.9
6 30	19 56.44	-12 35.2	1.597	2.570	8.4	21.6	6 30	19 56.44	-12 35.2	1.597	2.570	8.4	21.6
7 10	19 47.49	-13 11.3	1.554	2.558	4.5	21.4	7 10	19 47.49	-13 11.3	1.554	2.558	4.5	21.4
7 20	19 37.62	-13 57.1	1.536	2.545	3.3	21.3	7 20	19 37.62	-13 57.1	1.536	2.545	3.3	21.3
7 30	19 27.96	-14 48.7	1.545	2.533	6.8	21.5	7 30	19 27.96	-14 48.7	1.545	2.533	6.8	21.5
8 9	19 19.66	-15 42.1	1.579	2.519	10.9	21.7	8 9	19 19.66	-15 42.1	1.579	2.519	10.9	21.7
8 19	19 13.57	-16 33.6	1.636	2.506	14.7	21.9	8 19	19 13.57	-16 33.6	1.636	2.506	14.7	21.9
<b>342926</b>	2008 <i>YX</i> <sub>169</sub>		7 15.9 192°19'	4°5'/13.8	18		<b>342926</b>	2008 <i>YX</i> <sub>169</sub>		7 15.9 192°19'	4°5'/13.8	18	
6 10	20 10.94	-33 10.7	2.258	3.104	12.2	21.2	6 10	20 10.94	-33 10.7	2.258	3.104	12.2	21.2
6 20	20 5.22	-33 55.9	2.183	3.103	9.5	21.0	6 20	20 5.22	-33 55.9	2.183	3.103	9.5	21.0
6 30	19 57.26	-34 37.8	2.131	3.102	6.7	20.8	6 30	19 57.26	-34 37.8	2.131	3.102	6.7	20.8
7 10	19 47.72	-35 11.4	2.105	3.100	4.7	20.7	7 10	19 47.72	-35 11.4	2.105	3.100	4.7	20.7
7 20	19 37.52	-35 32.5	2.106	3.097	5.0	20.7	7 20	19 37.52	-35 32.5	2.106	3.097	5.0	20.7
7 30	19 27.70	-35 38.9	2.135	3.094	7.4	20.8	7 30	19 27.70	-35 38.9	2.135	3.094	7.4	20.8
8 9	19 19.28	-35 30.8	2.189	3.091	10.2	21.0	8 9	19 19.28	-35 30.8	2.189	3.091	10.2	21.0
8 19	19 13.00	-35 10.4	2.266	3.088	12.8	21.2	8 19	19 13.00	-35 10.4	2.266	3.088	12.8	21.2
<b>285396</b>	1999 <i>TW</i> <sub>263</sub>		7 15.9 300°69'	1°1'/16.4	18		<b>285396</b>	1999 <i>TW</i> <sub>263</sub>		7 15.9 300°69'	1°1'/16.4	18	
6 10	20 4.52	-17 25.8	2.184	3.030	12.5	21.2	6 10	20 4.52	-17 25.8	2.184	3.030	12.5	21.2
6 20	20 0.21	-17 30.4	2.098	3.022	9.6	21.0	6 20	20 0.21	-17 30.4	2.098	3.022	9.6	21.0
6 30	19 54.02	-17 41.6	2.034	3.014	6.3	20.8	6 30	19 54.02	-17 41.6	2.034	3.014	6.3	20.8
7 10	19 46.50	-17 57.6	1.996	3.006	2.7	20.6	7 10	19 46.50	-17 57.6	1.996	3.006	2.7	20.6
7 20	19 38.36	-18 16.5	1.985	2.998	1.8	20.5	7 20	19 38.36	-18 16.5	1.985	2.998	1.8	20.5
7 30	19 30.49	-18 36.1	2.001	2.990	5.3	20.7	7 30	19 30.49	-18 36.1	2.001	2.990	5.3	20.7
8 9	19 23.72	-18 54.6	2.044	2.983	8.9	20.9	8 9	19 23.72	-18 54.6	2.044	2.983	8.9	20.9
8 19	19 18.71	-19 10.8	2.110	2.976	12.0	21.1	8 19	19 18.71	-19 10.8	2.110	2.976	12.0	21.1
<b>355550</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>114731</b>	2003 <i>HN</i> <sub>7</sub>		7 15.9 116°58	0°5/16.2	18		<b>143456</b>	2003 <i>BU</i> <sub>83</sub>		7 15.9 125°92	5°0/13.8	18	
6 10	20 5.52	-18 49.6	2.258	3.103	12.2	20.6	6 10	20 10.41	-34 58.2	2.201	3.049	12.4	19.6
6 20	20 0.85	-19 1.6	2.181	3.106	9.3	20.4	6 20	20 4.85	-35 37.9	2.133	3.052	9.8	19.4
6 30	19 54.37	-19 19.2	2.128	3.108	6.0	20.2	6 30	19 57.04	-36 12.4	2.087	3.055	7.1	19.2
7 10	19 46.64	-19 40.1	2.100	3.111	2.4	19.9	7 10	19 47.69	-36 36.9	2.068	3.058	5.2	19.1
7 20	19 38.39	-20 2.2	2.100	3.114	1.5	19.9	7 20	19 37.74	-36 47.6	2.074	3.062	5.5	19.2
7 30	19 30.48	-20 23.1	2.128	3.116	5.1	20.1	7 30	19 28.28	-36 42.6	2.108	3.065	7.7	19.3
8 9	19 23.68	-20 41.3	2.182	3.119	8.5	20.3	8 9	19 20.31	-36 23.0	2.166	3.068	10.3	19.5
8 19	19 18.62	-20 55.9	2.260	3.121	11.5	20.5	8 19	19 14.52	-35 51.4	2.248	3.070	12.9	19.7
<b>502400</b>	2015 <i>BP</i> <sub>251</sub>		7 15.9 247°01	0°4/15.8	17		<b>87415</b>	2000 <i>QA</i> <sub>92</sub>		7 15.9 358°70	0°6/16.1	18	
6 10	20 11.84	-21 21.9	1.815	2.665	14.5	22.9	6 10	20 6.99	-20 21.0	1.366	2.239	17.0	19.2
6 20	20 6.38	-21 35.0	1.720	2.647	11.2	22.7	6 20	20 3.05	-20 8.5	1.298	2.237	13.1	19.0
6 30	19 58.32	-21 53.1	1.646	2.629	7.2	22.4	6 30	19 56.28	-20 1.8	1.249	2.236	8.4	18.7
7 10	19 48.28	-22 13.3	1.598	2.610	2.8	22.1	7 10	19 47.50	-19 58.7	1.223	2.235	3.3	18.4
7 20	19 37.21	-22 31.9	1.576	2.590	2.0	22.0	7 20	19 37.88	-19 56.8	1.221	2.235	2.2	18.3
7 30	19 26.34	-22 46.1	1.582	2.569	6.7	22.3	7 30	19 28.84	-19 54.1	1.243	2.235	7.3	18.7
8 9	19 16.92	-22 54.4	1.613	2.548	11.1	22.5	8 9	19 21.68	-19 49.5	1.288	2.237	12.1	18.9
8 19	19 9.87	-22 56.6	1.667	2.527	15.0	22.7	8 19	19 17.25	-19 42.7	1.354	2.239	16.2	19.2
<b>386448</b>	2008 <i>WM</i> <sub>99</sub>		7 15.9 302°77	2°2/14.9	18		<b>358444</b>	2007 <i>DV</i> <sub>116</sub>		7 15.9 63°81	3°9/13.3	18	
6 10	20 7.30	-24 9.1	1.776	2.638	14.2	20.6	6 10	20 7.18	-28 22.3	2.226	3.080	12.0	20.4
6 20	20 2.88	-24 56.4	1.699	2.634	10.8	20.3	6 20	20 2.41	-29 52.9	2.161	3.089	9.2	20.2
6 30	19 56.01	-25 48.5	1.645	2.630	7.0	20.1	6 30	19 55.54	-31 25.1	2.120	3.098	6.2	20.1
7 10	19 47.36	-26 40.3	1.616	2.626	3.1	19.9	7 10	19 47.17	-32 52.8	2.107	3.107	4.1	19.9
7 20	19 37.88	-27 26.9	1.613	2.623	3.2	19.8	7 20	19 38.10	-34 10.1	2.121	3.116	4.6	20.0
7 30	19 28.75	-28 3.9	1.636	2.619	7.0	20.1	7 30	19 29.32	-35 12.8	2.164	3.126	7.2	20.2
8 9	19 21.11	-28 29.4	1.684	2.615	11.0	20.3	8 9	19 21.77	-35 59.2	2.232	3.135	10.0	20.4
8 19	19 15.79	-28 43.6	1.754	2.612	14.4	20.5	8 19	19 16.18	-36 29.7	2.323	3.144	12.6	20.6
<b>79988</b>	1999 <i>EK</i> <sub>10</sub>		7 15.9 235°27	0°2/15.8	18 R		<b>403944</b>	2012 <i>BW</i> <sub>28</sub>		7 15.9 304°44	0°1/16.0	18	
6 10	20 6.92	-20 58.8	2.174	3.022	12.5	20.0	6 10	20 4.33	-17 0.7	2.139	2.985	12.7	20.9
6 20	20 2.07	-21 11.9	2.090	3.016	9.5	19.8	6 20	20 0.24	-17 55.9	2.051	2.977	9.7	20.7
6 30	19 55.24	-21 29.3	2.029	3.011	6.1	19.6	6 30	19 54.17	-19 1.4	1.987	2.969	6.3	20.4
7 10	19 47.00	-21 48.5	1.994	3.006	2.3	19.3	7 10	19 46.67	-20 13.7	1.949	2.960	2.4	20.2
7 20	19 38.14	-22 6.9	1.986	3.000	1.6	19.3	7 20	19 38.43	-21 28.3	1.938	2.952	1.6	20.1
7 30	19 29.58	-22 22.4	2.006	2.994	5.5	19.5	7 30	19 30.37	-22 40.6	1.956	2.945	5.5	20.4
8 9	19 22.20	-22 33.6	2.053	2.988	9.1	19.7	8 9	19 23.38	-23 46.5	2.001	2.937	9.2	20.6
8 19	19 16.68	-22 40.0	2.123	2.982	12.2	19.9	8 19	19 18.18	-24 43.8	2.069	2.929	12.4	20.8
<b>254563</b>	2005 <i>EM</i> <sub>329</sub>		7 15.9 212°97	4°2/14.2	18		<b>475257</b>	2005 <i>WC</i> <sub>67</sub>		7 15.9 190°98	3°4/17.4	18	
6 10	20 11.52	-28 2.8	1.583	2.448	15.6	20.6	6 10	20 4.94	-10 40.6	2.561	3.378	11.8	21.5
6 20	20 6.49	-29 4.0	1.511	2.445	12.0	20.4	6 20	20 0.17	-10 18.3	2.477	3.378	9.3	21.3
6 30	19 58.52	-30 7.4	1.460	2.442	8.0	20.1	6 30	19 53.85	-10 4.3	2.416	3.377	6.7	21.2
7 10	19 48.36	-31 5.9	1.434	2.439	4.6	19.9	7 10	19 46.46	-9 58.6	2.381	3.376	4.2	21.0
7 20	19 37.19	-31 52.7	1.433	2.436	5.0	19.9	7 20	19 38.62	-10 0.7	2.373	3.375	3.5	21.0
7 30	19 26.46	-32 23.3	1.457	2.432	8.7	20.1	7 30	19 31.03	-10 9.6	2.394	3.373	5.4	21.1
8 9	19 17.58	-32 36.4	1.506	2.428	12.6	20.4	8 9	19 24.37	-10 23.7	2.441	3.372	8.0	21.2
8 19	19 11.52	-32 34.2	1.575	2.424	16.2	20.6	8 19	19 19.18	-10 41.0	2.513	3.370	10.6	21.4
<b>472700</b>	2015 <i>FX</i> <sub>24</sub>		7 15.9 59°64	2°8/14.4	17		<b>329229</b>	2012 <i>EJ</i> <sub>4</sub>		7 15.9 86°71	0°5/16.1	17	
6 10	20 8.50	-22 54.8	1.540	2.407	15.8	20.0	6 10	20 10.04	-18 30.1	1.508	2.367	16.5	20.9
6 20	20 3.99	-24 22.4	1.483	2.420	11.9	19.8	6 20	20 4.99	-18 49.4	1.448	2.380	12.6	20.7
6 30	19 56.79	-25 57.4	1.447	2.433	7.6	19.6	6 30	19 57.32	-19 17.3	1.409	2.393	8.0	20.5
7 10	19 47.66	-27 32.1	1.436	2.446	3.6	19.4	7 10	19 47.84	-19 50.3	1.394	2.405	3.1	20.2
7 20	19 37.71	-28 58.6	1.451	2.459	3.9	19.4	7 20	19 37.69	-20 24.4	1.404	2.418	2.0	20.2
7 30	19 28.29	-30 10.4	1.493	2.473	7.9	19.7	7 30	19 28.18	-20 55.7	1.440	2.431	6.8	20.5
8 9	19 20.64	-31 4.7	1.559	2.487	11.9	20.0	8 9	19 20.47	-21 21.8	1.501	2.443	11.2	20.8
8 19	19 15.61	-31 41.6	1.646	2.500	15.4	20.2	8 19	19 15.33	-21 41.6	1.583	2.455	15.0	21.1
<b>513238</b>	2005 <i>WV</i> <sub>191</sub>		7 15.9 241°46	5°4/11.9	18		<b>136898</b>	1998 <i>HM</i> <sub>43</sub>		7 15.9 125°13	4°3/18.3	18	
6 10	20 9.09	-35 13.5	2.565	3.407	11.0	21.5	6 10	20 4.60	-6 43.3	2.427	3.233	12.6	20.2
6 20	20 3.90	-36 43.2	2.483	3.397	8.8	21.3	6 20	19 59.95	-6 37.7	2.353	3.243	10.2	20.1
6 30	19 56.55	-38 11.0	2.427	3.387	6.7	21.2	6 30	19 53.71	-6 44.2	2.300	3.252	7.5	19.9
7 10	19 47.57	-39 30.8	2.397	3.377	5.5	21.1	7 10	19 46.41	-7 2.6	2.273	3.260	5.1	19.8
7 20	19 37.72	-40 37.2	2.395	3.366	6.0	21.1	7 20	19 38.67	-7 31.8	2.273	3.269	4.3	19.7
7 30	19 27.98	-41 26.4	2.421	3.355	8.0	21.2	7 30	19 31.23	-8 9.7	2.301	3.277	5.8	19.8
8 9	19 19.33	-41 57.4	2.472	3.344	10.3	21.3	8 9	19 24.77	-8 53.3	2.355	3.285	8.3	20.0
8 19	19 12.60	-42 11.5	2.546	3.333	12.5	21.5	8 19	19 19.83	-9 39.6	2.434	3.293	10.9	20.2
<b>203997</b>	2003 <i>TT</i> <sub>19</sub>		7 15.9 316°26	0°4/16.0	18		<b>63308</b>	2001 <i>FU</i> <sub>11</sub>		7 15.9 8°83	2°1/15.2	18	
6 10	20 6.08	-20 16.3	1.573	2.439	15.5	19.9	6 10	20 5.38	-22 56.5	1.148	2.037	18.5	18.8
6 20	20 2.25	-20 14.8	1.485	2.421	12.0	19.6	6 20	20 2.36	-23 35.3	1.089	2.038	14.1	18.5
6 30	19 55.78	-20 19.2	1.418	2.404	7.8	19.3	6 30	19 56.10	-24 21.5	1.049	2.040	9.0	18.3
7 10	19 47.34	-20 27.2	1.375	2.387	3.0	19.0	7 10	19 47.50	-25 9.1	1.030	2.043	3.7	18.0
7 20	19 37.91	-20 36.1	1.356	2.371	2.0	18.9	7 20	19 37.91	-25 51.3	1.034	2.046	3.5	18.0
7 30	19 28.77	-20 43.4	1.363	2.355	7.0	19.1	7 30	19 29.00	-26 22.9	1.061	2.051	8.6	18.3
8 9	19 21.19	-20 47.4	1.394	2.339	11.6	19.4	8 9	19 22.28	-26 41.5	1.109	2.057	13.6	18.6
8 19	19 16.08	-20 47.6	1.445	2.325	15.7	19.6	8 19	19 18.71	-26 47.7	1.176	2.064	17.9	18.9
<b>478598</b>	2012 <i>TA</i> <sub>128</sub>		7 15.9 277°39	1°4/16.5	18		<b>270406</b>	2002 <i>AC</i> <sub>205</sub>	</				

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>287308</b>	2002 TA <sub>233</sub>	7 15.9 268°90		4.1/17.2 18			<b>237685</b>	2001 TE <sub>157</sub>	7 15.9 232°26		5.8/18.7 18		
6 10	20 7.51	-11 3.0	2.135	2.959	13.6	20.8	6 10	20 4.32	-4 1.1	2.196	2.997	14.0	20.9
6 20	20 2.57	-10 24.7	2.037	2.941	10.9	20.6	6 20	19 59.99	-3 37.9	2.113	2.995	11.5	20.7
6 30	19 55.64	-9 54.5	1.960	2.923	7.8	20.3	6 30	19 53.89	-3 29.1	2.052	2.993	8.9	20.5
7 10	19 47.23	-9 33.5	1.909	2.905	5.0	20.1	7 10	19 46.54	-3 35.5	2.014	2.990	6.7	20.4
7 20	19 38.09	-9 21.8	1.885	2.886	4.3	20.1	7 20	19 38.64	-3 56.9	2.002	2.987	5.8	20.3
7 30	19 29.14	-9 18.9	1.889	2.868	6.6	20.2	7 30	19 30.98	-4 31.6	2.017	2.985	7.2	20.4
8 9	19 21.27	-9 23.4	1.918	2.849	9.9	20.3	8 9	19 24.36	-5 16.3	2.057	2.982	9.6	20.6
8 19	19 15.21	-9 33.6	1.971	2.830	13.0	20.5	8 19	19 19.39	-6 7.3	2.120	2.979	12.2	20.7
<b>248466</b>	2005 UT <sub>71</sub>	7 15.9 224°72		2.7/14.7 18			<b>337145</b>	1999 TQ <sub>256</sub>	7 15.9 271°73		2.8/17.0 18		
6 10	20 8.41	-29 40.6	2.631	3.474	10.7	21.0	6 10	20 6.77	-13 14.9	1.959	2.796	14.1	21.3
6 20	20 2.98	-30 1.9	2.544	3.467	8.2	20.8	6 20	20 2.27	-13 11.6	1.861	2.777	11.1	21.1
6 30	19 55.73	-30 21.5	2.482	3.459	5.5	20.6	6 30	19 55.59	-13 18.5	1.785	2.757	7.6	20.8
7 10	19 47.21	-30 36.2	2.447	3.451	3.1	20.4	7 10	19 47.27	-13 35.0	1.733	2.737	4.1	20.6
7 20	19 38.15	-30 43.5	2.440	3.442	3.2	20.4	7 20	19 38.09	-13 59.3	1.708	2.717	3.1	20.4
7 30	19 29.37	-30 41.6	2.461	3.434	5.7	20.6	7 30	19 29.06	-14 29.1	1.709	2.697	6.3	20.6
8 9	19 21.68	-30 30.7	2.509	3.425	8.5	20.8	8 9	19 21.18	-15 1.6	1.737	2.676	10.1	20.8
8 19	19 15.71	-30 11.7	2.581	3.415	11.1	20.9	8 19	19 15.27	-15 34.2	1.787	2.655	13.7	21.0
<b>503269</b>	2015 OB <sub>3</sub>	7 15.9 357°64		3.2/16.7 18			<b>280101</b>	2002 FS <sub>7</sub>	7 15.9 181°69		1.5/16.6 18		
6 10	20 5.15	-15 24.8	1.641	2.497	15.5	20.2	6 10	20 8.48	-16 11.1	2.122	2.959	13.2	21.8
6 20	20 1.16	-14 44.3	1.567	2.494	12.1	20.0	6 20	20 3.23	-16 16.8	2.042	2.960	10.2	21.6
6 30	19 54.85	-14 11.3	1.514	2.491	8.2	19.8	6 30	19 55.98	-16 30.0	1.984	2.960	6.7	21.3
7 10	19 46.93	-13 46.0	1.484	2.490	4.4	19.5	7 10	19 47.34	-16 49.0	1.952	2.960	3.0	21.1
7 20	19 38.35	-13 28.3	1.480	2.489	3.5	19.5	7 20	19 38.09	-17 11.5	1.947	2.960	2.0	21.0
7 30	19 30.21	-13 17.5	1.501	2.490	6.9	19.7	7 30	19 29.17	-17 35.3	1.970	2.959	5.5	21.3
8 9	19 23.56	-13 12.3	1.546	2.491	10.8	19.9	8 9	19 21.46	-17 58.3	2.020	2.957	9.1	21.5
8 19	19 19.14	-13 11.1	1.613	2.492	14.4	20.1	8 19	19 15.63	-18 19.1	2.094	2.955	12.3	21.7
<b>380730</b>	2005 RH <sub>32</sub>	7 15.9 214°39		17.0/11.7 17			<b>34099</b>	2000 PT <sub>12</sub>	7 15.9 256°58		2.7/16.9 18		
6 10	20 34.02	-53 2.7	1.189	2.014	22.1	20.8	6 10	20 6.28	-14 9.3	2.157	2.992	13.1	18.9
6 20	20 26.77	-54 48.8	1.137	2.010	19.8	20.6	6 20	20 1.50	-13 48.4	2.075	2.990	10.2	18.7
6 30	20 13.01	-56 11.5	1.101	2.006	18.0	20.5	6 30	19 54.85	-13 34.9	2.016	2.988	7.0	18.5
7 10	19 54.21	-56 52.2	1.083	2.001	17.1	20.4	7 10	19 46.90	-13 28.4	1.983	2.986	3.8	18.3
7 20	19 33.44	-56 37.8	1.084	1.996	17.5	20.4	7 20	19 38.41	-13 28.2	1.976	2.985	2.9	18.3
7 30	19 14.71	-55 26.6	1.103	1.990	19.2	20.5	7 30	19 30.23	-13 32.9	1.997	2.983	5.7	18.4
8 9	19 1.10	-53 29.9	1.140	1.984	21.6	20.6	8 9	19 23.20	-13 41.0	2.044	2.981	9.0	18.6
8 19	18 53.79	-51 4.1	1.192	1.977	24.0	20.8	8 19	19 17.95	-13 51.0	2.115	2.979	12.0	18.8
<b>232885</b>	2004 XT <sub>3</sub>	7 15.9 216°43		0.9/16.3 18			<b>503432</b>	2016 EK <sub>54</sub>	7 15.9 76°77		3.1/15.2 17		
6 10	20 8.49	-18 33.4	2.009	2.854	13.5	20.6	6 10	20 14.11	-27 51.8	1.363	2.232	17.3	21.6
6 20	20 3.39	-18 34.1	1.926	2.850	10.4	20.4	6 20	20 8.52	-28 3.8	1.304	2.240	13.2	21.4
6 30	19 56.16	-18 40.6	1.866	2.846	6.7	20.1	6 30	19 59.76	-28 14.7	1.264	2.248	8.6	21.2
7 10	19 47.42	-18 51.0	1.830	2.841	2.8	19.9	7 10	19 48.83	-28 19.0	1.247	2.256	4.2	20.9
7 20	19 38.01	-19 3.1	1.822	2.836	1.8	19.8	7 20	19 37.14	-28 12.7	1.255	2.264	4.0	20.9
7 30	19 28.93	-19 14.9	1.842	2.831	5.8	20.0	7 30	19 26.31	-27 54.1	1.288	2.272	8.3	21.2
8 9	19 21.15	-19 25.0	1.888	2.825	9.6	20.3	8 9	19 17.74	-27 24.8	1.344	2.280	12.7	21.5
8 19	19 15.37	-19 32.4	1.956	2.819	12.9	20.5	8 19	19 12.29	-26 48.0	1.421	2.288	16.6	21.7
<b>133136</b>	2003 QS <sub>2</sub>	7 15.9 275°71		2.0/16.9 18			<b>362568</b>	2010 VP <sub>78</sub>	7 15.9 264°69		4.8/13.6 18		
6 10	20 3.99	-14 31.9	2.460	3.293	11.7	20.6	6 10	20 8.69	-34 40.6	2.391	3.238	11.6	20.9
6 20	19 59.65	-14 29.3	2.367	3.282	9.1	20.4	6 20	20 3.54	-35 24.0	2.309	3.228	9.1	20.7
6 30	19 53.63	-14 33.9	2.298	3.271	6.1	20.2	6 30	19 56.27	-36 3.5	2.251	3.219	6.7	20.5
7 10	19 46.43	-14 44.9	2.254	3.260	3.1	19.9	7 10	19 47.48	-36 34.4	2.218	3.209	4.9	20.4
7 20	19 38.68	-15 0.9	2.238	3.249	2.3	19.9	7 20	19 38.00	-36 52.7	2.213	3.199	5.3	20.4
7 30	19 31.12	-15 20.1	2.250	3.238	5.0	20.0	7 30	19 28.84	-36 56.4	2.234	3.189	7.4	20.5
8 9	19 24.50	-15 40.9	2.289	3.226	8.2	20.2	8 9	19 20.95	-36 45.6	2.281	3.180	10.0	20.6
8 19	19 19.41	-16 1.6	2.352	3.215	11.0	20.4	8 19	19 15.06	-36 22.2	2.350	3.170	12.5	20.8
<b>507115</b>	2009 SL <sub>68</sub>	7 15.9 236°07		3.4/17.1 18			<b>251809</b>	1999 TS <sub>62</sub>	7 15.9 204°28		3.6/13.8 18		
6 10	20 8.27	-12 36.5	1.776	2.614	15.3	22.1	6 10	20 7.85	-33 0.6	2.951	3.790	9.8	22.0
6 20	20 3.47	-12 22.2	1.692	2.608	12.1	21.9	6 20	20 2.46	-33 41.1	2.869	3.785	7.6	21.8
6 30	19 56.35	-12 18.7	1.629	2.601	8.4	21.6	6 30	19 55.37	-34 18.9	2.811	3.780	5.4	21.7
7 10	19 47.54	-12 25.7	1.591	2.593	4.7	21.4	7 10	19 47.09	-34 50.4	2.781	3.775	3.8	21.6
7 20	19 37.93	-12 41.8	1.578	2.586	3.6	21.3	7 20	19 38.28	-35 12.7	2.779	3.769	4.0	21.6
7 30	19 28.64	-13 4.8	1.592	2.578	6.8	21.5	7 30	19 29.72	-35 23.8	2.806	3.763	6.0	21.7
8 9	19 20.72	-13 31.8	1.631	2.570	10.7	21.7	8 9	19 22.15	-35 23.6	2.859	3.757	8.2	21.8
8 19	19 14.97	-14 0.4	1.692	2.562	14.3	21.9	8 19	19 16.16	-35 13.2	2.936	3.750	10.4	22.0
<b>331525</b>	2000 RM <sub>103</sub>	7 15.9 294°36		10.3/18.5 18			<b>125658</b>	2001 XB <sub>71</sub>	7 15.9 76°48		3.5/16.9 18		
6 10	20 5.68	+ 1 4.1	1.718	2.511	17.6	20.6	6 10	20 10.77	-14 14.9	1.309	2.167	18.5	19.5
6 20	20 1.73	+ 2 18.8	1.622	2.486	15.3	20.4	6 20	20 5.82	-13 51.8	1.250	2.177	14.5	19.3
6 30	19 55.41	+ 3 16.3	1.544	2.462	12.9	20.2	6 30	19 57.99	-13 40.9	1.210	2.188	9.8	19.1
7 10	19 47.26	+ 3 51.7	1.487	2.437	10.9	20.0	7 10	19 48.17	-13 41.5	1.192	2.198	5.2	18.8
7 20	19 38.07	+ 4 1.4	1.453	2.412	10.3	19.9	7 20	19 37.62	-13 51.6	1.198	2.208	3.8	18.8
7 30	19 28.96	+ 3 44.7	1.443	2.388	11.5	19.9	7 30	19 27.78	-14 8.5	1.229	2.219	7.8	19.0
8 9	19 21.03	+ 3 4.2	1.455	2.363	14.0	20.0	8 9	19 19.94	-14 29.0	1.283	2.229	12.4	19.3
8 19	19 15.23	+ 2 5.3	1.487	2.338	16.9	20.1	8 19	19 14.93	-14 50.6	1.358	2.240	16.4	19.6
<b>429096</b>	2009 SB <sub>10</sub>	7 15.9 250°59		2.9/16.9 17			<b>147784</b>	2005 QY <sub>135</sub>	7 15.9 23°39		0.9/16.3 17		
6 10	20 8.54	-13 41.5	1.819	2.658	14.9	21.9	6 10	20 5.70					



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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>48590</b>	1994 TY <sub>2</sub>		7 15.9 225°69	5°5/13.4	18		<b>520479</b>	2014 KO <sub>110</sub>		7 15.9 2°00	4°8/18.2	18	
6 10	20 14.99	-35 17.1	2.178	3.017	12.8	19.0	6 10	20 3.66	-7 10.6	2.107	2.925	13.9	21.6
6 20	20 8.66	-36 10.7	2.091	3.005	10.2	18.8	6 20	19 59.58	-6 55.8	2.028	2.925	11.2	21.5
6 30	19 59.73	-37 0.2	2.028	2.992	7.5	18.7	6 30	19 53.68	-6 54.1	1.970	2.925	8.3	21.3
7 10	19 48.88	-37 39.3	1.990	2.978	5.7	18.5	7 10	19 46.52	-7 5.9	1.936	2.925	5.7	21.1
7 20	19 37.08	-38 3.0	1.980	2.963	6.1	18.5	7 20	19 38.80	-7 30.3	1.929	2.925	4.8	21.1
7 30	19 25.59	-38 8.2	1.996	2.947	8.4	18.6	7 30	19 31.38	-8 5.1	1.948	2.925	6.5	21.2
8 9	19 15.62	-37 55.4	2.039	2.931	11.3	18.8	8 9	19 25.03	-8 47.2	1.992	2.926	9.4	21.3
8 19	19 8.05	-37 27.5	2.103	2.914	14.1	18.9	8 19	19 20.40	-9 33.1	2.060	2.927	12.2	21.5
<b>377869</b>	2006 CQ <sub>21</sub>		7 15.9 77°86	6°6/12.7	18		<b>238602</b>	2005 AN <sub>46</sub>		7 15.9 164°12	0°3/15.8	18	
6 10	20 15.41	-35 18.6	1.843	2.692	14.4	20.2	6 10	20 8.51	-20 31.6	2.489	3.326	11.4	22.0
6 20	20 8.96	-36 55.7	1.806	2.723	11.3	20.1	6 20	20 3.01	-20 56.2	2.411	3.332	8.7	21.8
6 30	19 59.79	-38 26.2	1.792	2.755	8.4	19.9	6 30	19 55.75	-21 25.1	2.358	3.338	5.5	21.6
7 10	19 48.81	-39 41.9	1.804	2.786	6.7	19.9	7 10	19 47.28	-21 55.6	2.331	3.342	2.1	21.4
7 20	19 37.21	-40 36.6	1.842	2.817	7.2	20.0	7 20	19 38.30	-22 25.1	2.333	3.347	1.5	21.4
7 30	19 26.38	-41 7.6	1.906	2.847	9.4	20.2	7 30	19 29.63	-22 51.1	2.364	3.350	4.9	21.6
8 9	19 17.49	-41 16.6	1.994	2.876	12.0	20.4	8 9	19 22.03	-23 12.3	2.423	3.353	8.1	21.8
8 19	19 11.32	-41 7.4	2.103	2.905	14.3	20.6	8 19	19 16.10	-23 28.2	2.506	3.355	10.9	22.0
<b>358334</b>	2006 VL <sub>74</sub>		7 15.9 198°60	2°5/14.5	18		<b>134340</b>	Pluto		7 15.9 43°10	0°0/15.8	18	
6 10	20 7.02	-26 44.4	2.462	3.310	11.2	21.4	6 10	19 45.32	-22 11.3	33.219	34.056	1.0	14.7
6 20	20 2.07	-27 31.6	2.382	3.308	8.5	21.2	6 20	19 44.48	-22 14.5	33.141	34.063	0.7	14.6
6 30	19 55.25	-28 20.4	2.326	3.306	5.6	21.0	6 30	19 43.54	-22 17.8	33.089	34.070	0.5	14.6
7 10	19 47.09	-29 6.7	2.297	3.304	2.9	20.8	7 10	19 42.55	-22 21.3	33.064	34.076	0.2	14.6
7 20	19 38.33	-29 46.8	2.296	3.301	3.1	20.8	7 20	19 41.53	-22 24.7	33.069	34.083	0.1	14.5
7 30	19 29.82	-30 17.8	2.323	3.298	5.9	21.0	7 30	19 40.52	-22 28.0	33.103	34.089	0.4	14.6
8 9	19 22.39	-30 38.7	2.377	3.295	8.8	21.2	8 9	19 39.57	-22 31.1	33.165	34.096	0.7	14.6
8 19	19 16.71	-30 49.6	2.454	3.291	11.5	21.3	8 19	19 38.71	-22 33.9	33.254	34.102	0.9	14.7
<b>118440</b>	1999 UM <sub>37</sub>		7 15.9 18°89	1°0/15.5	18		<b>471560</b>	2012 PZ <sub>26</sub>		7 15.9 32°34	2°3/15.3	17	
6 10	20 5.13	-22 35.8	1.799	2.663	14.0	19.9	6 10	20 10.13	-26 13.4	1.563	2.430	15.6	21.3
6 20	20 1.06	-22 58.8	1.732	2.668	10.6	19.7	6 20	20 5.21	-26 26.8	1.497	2.433	11.9	21.0
6 30	19 54.76	-23 26.0	1.687	2.673	6.7	19.5	6 30	19 57.57	-26 40.9	1.452	2.437	7.7	20.8
7 10	19 46.93	-23 54.0	1.667	2.679	2.6	19.2	7 10	19 48.06	-26 51.4	1.431	2.441	3.4	20.5
7 20	19 38.49	-24 19.1	1.673	2.685	2.2	19.2	7 20	19 37.81	-26 54.5	1.435	2.446	3.2	20.5
7 30	19 30.51	-24 38.7	1.704	2.692	6.2	19.5	7 30	19 28.19	-26 48.3	1.465	2.450	7.4	20.8
8 9	19 23.97	-24 51.2	1.761	2.700	10.1	19.7	8 9	19 20.42	-26 33.0	1.518	2.455	11.5	21.1
8 19	19 19.58	-24 56.5	1.840	2.708	13.4	20.0	8 19	19 15.29	-26 10.3	1.593	2.460	15.2	21.3
<b>352445</b>	2008 AY <sub>41</sub>		7 15.9 79°54	0°4/16.2	18		<b>324422</b>	2006 SN <sub>320</sub>		7 15.9 137°74	3°5/17.4	17	
6 10	20 7.36	-17 3.8	2.276	3.113	12.4	21.1	6 10	20 8.70	-11 13.1	1.688	2.525	16.0	21.2
6 20	20 2.09	-17 45.0	2.221	3.141	9.4	20.9	6 20	20 3.80	-11 16.6	1.617	2.531	12.6	21.0
6 30	19 55.10	-18 33.1	2.191	3.170	6.0	20.8	6 30	19 56.55	-11 34.0	1.567	2.537	8.7	20.8
7 10	19 46.98	-19 25.1	2.187	3.197	2.3	20.6	7 10	19 47.66	-12 4.0	1.540	2.543	4.9	20.6
7 20	19 38.49	-20 17.5	2.211	3.225	1.5	20.6	7 20	19 38.06	-12 44.0	1.540	2.548	3.7	20.5
7 30	19 30.44	-21 6.9	2.264	3.252	4.9	20.9	7 30	19 28.90	-13 30.3	1.565	2.553	6.8	20.7
8 9	19 23.57	-21 51.1	2.345	3.279	8.1	21.1	8 9	19 21.23	-14 18.9	1.616	2.557	10.6	21.0
8 19	19 18.44	-22 28.7	2.450	3.305	10.9	21.3	8 19	19 15.80	-15 6.4	1.690	2.562	14.2	21.2
<b>105870</b>	2000 ST <sub>173</sub>		7 15.9 265°89	3°6/14.9	18		<b>398244</b>	2010 RO <sub>107</sub>		7 15.9 312°31	6°0/13.2	18	
6 10	20 11.53	-32 17.6	2.213	3.059	12.4	19.3	6 10	20 9.24	-36 42.4	2.097	2.947	12.8	21.0
6 20	20 5.65	-32 24.7	2.132	3.054	9.6	19.1	6 20	20 4.32	-37 33.0	2.021	2.939	10.3	20.8
6 30	19 57.57	-32 27.2	2.073	3.048	6.6	18.9	6 30	19 56.96	-38 18.2	1.967	2.931	7.7	20.7
7 10	19 47.98	-32 21.3	2.041	3.043	4.0	18.7	7 10	19 47.85	-38 52.1	1.939	2.923	6.1	20.5
7 20	19 37.80	-32 4.5	2.036	3.037	4.1	18.7	7 20	19 37.96	-39 10.0	1.936	2.916	6.5	20.6
7 30	19 28.10	-31 35.9	2.059	3.031	6.7	18.9	7 30	19 28.47	-39 9.5	1.959	2.908	8.6	20.7
8 9	19 19.83	-30 56.8	2.108	3.025	9.8	19.1	8 9	19 20.51	-38 51.3	2.006	2.901	11.3	20.8
8 19	19 13.70	-30 9.7	2.180	3.020	12.7	19.2	8 19	19 14.86	-38 18.3	2.075	2.894	13.9	21.0
<b>125594</b>	2001 XB <sub>40</sub>		7 15.9 139°06	1°9/15.3	17		<b>394288</b>	2006 VY <sub>16</sub>		7 15.9 170°91	2°9/17.3	18	
6 10	20 13.57	-26 51.1	2.098	2.942	13.0	19.7	6 10	20 6.00	-12 15.9	2.399	3.223	12.2	21.7
6 20	20 7.06	-26 58.4	2.030	2.954	9.9	19.5	6 20	20 1.12	-11 59.9	2.318	3.225	9.6	21.5
6 30	19 58.38	-27 4.8	1.984	2.965	6.4	19.3	6 30	19 54.56	-11 52.0	2.260	3.226	6.7	21.3
7 10	19 48.26	-27 7.0	1.965	2.975	2.9	19.1	7 10	19 46.85	-11 52.0	2.227	3.227	3.9	21.1
7 20	19 37.65	-27 2.4	1.975	2.984	2.7	19.1	7 20	19 38.67	-11 58.9	2.223	3.228	3.1	21.1
7 30	19 27.60	-26 50.1	2.012	2.994	6.1	19.4	7 30	19 30.77	-12 11.3	2.246	3.229	5.4	21.2
8 9	19 19.07	-26 30.4	2.076	3.002	9.5	19.6	8 9	19 23.89	-12 27.6	2.296	3.230	8.3	21.4
8 19	19 12.71	-26 5.0	2.164	3.010	12.5	19.8	8 19	19 18.60	-12 45.8	2.370	3.230	11.1	21.6
<b>106605</b>	2000 WD <sub>115</sub>		7 15.9 248°59	0°3/15.9	18		<b>170955</b>	2005 BJ <sub>24</sub>		7 15.9 245°14	1°2/15.6	18	
6 10	20 12.16	-22 9.5	1.555	2.414	16.0	19.5	6 10	20 13.05	-23 49.9	1.646	2.503	15.4	21.1
6 20	20 6.88	-22 4.3	1.474	2.406	12.3	19.3	6 20	20 7.56	-23 56.7	1.559	2.490	11.9	20.9
6 30	19 58.76	-22 2.5	1.413	2.398	7.9	19.0	6 30	19 59.23	-24 6.2	1.493	2.477	7.7	20.6
7 10	19 48.55	-22 1.3	1.377	2.389	3.0	18.7	7 10	19 48.79	-24 14.6	1.452	2.463	3.1	20.3
7 20	19 37.39	-21 57.9	1.366	2.380	2.1	18.6	7 20	19 37.32	-24 18.3	1.436	2.449	2.5	20.2
7 30	19 26.68	-21 50.4	1.381	2.370	7.2	18.9	7 30	19 26.20	-24 15.0	1.448	2.435	7.2	20.5
8 9	19 17.73	-21 38.4	1.420	2.361	11.9	19.1	8 9	19 16.79	-24 4.2	1.484	2.420	11.8	20.7
8 19	19 11.50	-21 22.6	1.481	2.351	15.9	19.4	8 19	19 10.03	-23 47.2	1.541	2.404	15.8	20.9
<b>327774</b>	2006 UT <sub>118</sub>		7 15.9 130°69	2°7/14.9	17		<b>512168</b>	2015 RD <sub>88</sub>		7 15.9 345°01	1°5/15.5	18	
6 10	20 10.83	-25 4											

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>72252</b>	2001 AQ <sub>31</sub>	7 15.9 254°52		2°0/15.3 18			<b>148703</b>	2001 SX <sub>320</sub>	7 15.9 14°72		2°4/16.9 17		
6 10	20 11.57	-24 12.7	1.647	2.506	15.3	19.8	6 10	20 6.29	-14 41.6	1.411	2.273	17.2	20.0
6 20	20 6.54	-24 43.3	1.558	2.490	11.8	19.6	6 20	20 2.45	-14 45.8	1.344	2.275	13.4	19.8
6 30	19 58.66	-25 18.5	1.490	2.475	7.6	19.3	6 30	19 55.93	-15 2.7	1.296	2.277	9.0	19.6
7 10	19 48.60	-25 53.4	1.447	2.458	3.3	19.0	7 10	19 47.52	-15 30.6	1.271	2.279	4.3	19.3
7 20	19 37.43	-26 23.1	1.430	2.442	3.1	18.9	7 20	19 38.28	-16 6.1	1.270	2.282	2.9	19.2
7 30	19 26.50	-26 43.4	1.440	2.424	7.6	19.2	7 30	19 29.55	-16 45.3	1.293	2.286	7.2	19.5
8 9	19 17.21	-26 53.0	1.473	2.407	12.1	19.4	8 9	19 22.53	-17 24.0	1.341	2.290	11.7	19.7
8 19	19 10.56	-26 52.3	1.528	2.389	16.0	19.6	8 19	19 18.07	-17 59.5	1.409	2.294	15.7	20.0
<b>523020</b>	2016 PE <sub>124</sub>	7 15.9 291°31		0°3/15.9 18			<b>185688</b>	1997 CC <sub>6</sub>	7 15.9 151°19		0°6/16.4 18		
6 10	20 6.77	-21 12.7	1.961	2.816	13.4	21.1	6 10	20 5.70	-17 31.4	3.114	3.941	9.7	22.3
6 20	20 2.26	-21 25.5	1.877	2.807	10.2	20.9	6 20	20 0.54	-17 53.3	3.037	3.951	7.3	22.1
6 30	19 55.57	-21 43.0	1.816	2.799	6.5	20.6	6 30	19 54.05	-18 20.0	2.985	3.961	4.7	22.0
7 10	19 47.32	-22 2.6	1.779	2.791	2.5	20.4	7 10	19 46.66	-18 49.8	2.961	3.971	1.9	21.8
7 20	19 38.36	-22 21.3	1.769	2.783	1.8	20.3	7 20	19 38.90	-19 20.6	2.966	3.979	1.2	21.7
7 30	19 29.69	-22 36.7	1.787	2.775	5.9	20.5	7 30	19 31.38	-19 50.5	3.001	3.988	4.0	22.0
8 9	19 22.32	-22 47.3	1.829	2.767	9.8	20.8	8 9	19 24.67	-20 18.2	3.064	3.995	6.6	22.1
8 19	19 16.99	-22 52.6	1.895	2.760	13.2	21.0	8 19	19 19.23	-20 42.6	3.154	4.002	8.9	22.3
<b>153913</b>	2001 XO <sub>246</sub>	7 15.9 206°49		2°4/14.9 18			<b>22458</b>	1996 XD <sub>31</sub>	7 15.9 290°71		0°3/16.1 18		
6 10	20 10.71	-26 10.5	1.998	2.849	13.3	20.8	6 10	20 7.47	-18 11.5	1.443	2.308	16.7	18.6
6 20	20 5.29	-26 45.9	1.917	2.846	10.2	20.6	6 20	20 3.69	-18 40.9	1.355	2.291	12.9	18.3
6 30	19 57.53	-27 23.2	1.860	2.841	6.6	20.4	6 30	19 57.00	-19 22.2	1.288	2.273	8.4	18.0
7 10	19 48.08	-27 57.8	1.828	2.836	3.2	20.2	7 10	19 48.05	-20 12.0	1.244	2.256	3.3	17.7
7 20	19 37.86	-28 25.5	1.823	2.831	3.2	20.2	7 20	19 37.87	-21 5.2	1.224	2.238	2.2	17.5
7 30	19 27.98	-28 43.4	1.846	2.826	6.7	20.4	7 30	19 27.88	-21 56.3	1.229	2.221	7.6	17.8
8 9	19 19.52	-28 50.6	1.895	2.820	10.3	20.6	8 9	19 19.53	-22 41.1	1.258	2.204	12.6	18.1
8 19	19 13.27	-28 48.0	1.966	2.813	13.5	20.8	8 19	19 13.90	-23 17.1	1.307	2.187	17.0	18.3
<b>133885</b>	2004 PU <sub>101</sub>	7 15.9 260°37		6°2/18.4 18			<b>313939</b>	2004 RH <sub>101</sub>	7 15.9 322°39		2°5/17.0 18		
6 10	20 7.27	-3 45.8	2.207	3.000	14.1	20.0	6 10	20 3.77	-14 4.5	1.989	2.834	13.6	20.2
6 20	20 2.47	-3 16.5	2.100	2.977	11.8	19.8	6 20	19 59.92	-13 59.7	1.902	2.822	10.7	20.0
6 30	19 55.68	-3 0.8	2.014	2.952	9.2	19.6	6 30	19 54.06	-14 4.3	1.836	2.811	7.3	19.8
7 10	19 47.40	-3 0.5	1.953	2.927	7.0	19.4	7 10	19 46.77	-14 17.2	1.795	2.800	3.8	19.6
7 20	19 38.29	-3 16.1	1.918	2.901	6.2	19.3	7 20	19 38.79	-14 37.1	1.779	2.790	2.8	19.5
7 30	19 29.24	-3 46.6	1.909	2.874	7.7	19.3	7 30	19 31.06	-15 1.5	1.791	2.780	5.9	19.7
8 9	19 21.13	-4 29.0	1.926	2.847	10.4	19.5	8 9	19 24.47	-15 28.1	1.828	2.770	9.5	19.8
8 19	19 14.72	-5 19.9	1.967	2.819	13.3	19.6	8 19	19 19.73	-15 54.7	1.888	2.761	12.9	20.0
<b>428756</b>	2008 SF <sub>73</sub>	7 15.9 1°97		0°6/16.1 16			<b>66507</b>	1999 RT <sub>84</sub>	7 15.9 251°91		1°4/16.5 18		
6 10	20 7.75	-22 33.7	1.215	2.096	18.1	19.8	6 10	20 7.57	-16 50.4	1.945	2.790	13.9	19.7
6 20	20 3.94	-21 51.5	1.150	2.094	13.9	19.5	6 20	20 2.87	-16 54.0	1.858	2.781	10.7	19.4
6 30	19 57.01	-21 10.6	1.105	2.093	9.0	19.2	6 30	19 55.98	-17 5.5	1.793	2.771	7.1	19.2
7 10	19 47.93	-20 30.1	1.081	2.094	3.5	18.9	7 10	19 47.52	-17 22.9	1.752	2.762	3.1	18.9
7 20	19 38.01	-19 49.4	1.081	2.095	2.3	18.8	7 20	19 38.29	-17 44.1	1.739	2.752	2.0	18.8
7 30	19 28.85	-19 9.0	1.105	2.098	7.8	19.2	7 30	19 29.34	-18 6.5	1.753	2.742	5.9	19.1
8 9	19 21.81	-18 29.8	1.150	2.103	12.8	19.5	8 9	19 21.64	-18 28.0	1.792	2.732	9.9	19.3
8 19	19 17.78	-17 53.1	1.216	2.108	17.1	19.8	8 19	19 15.97	-18 46.9	1.855	2.722	13.3	19.5
<b>519094</b>	2010 LU <sub>89</sub>	7 15.9 201°93		2°8/17.2 18			<b>360889</b>	2005 SH <sub>109</sub>	7 15.9 166°60		3°6/18.2 18		
6 10	20 5.42	-12 19.7	2.558	3.380	11.6	21.1	6 10	20 4.20	-7 20.0	3.005	3.803	10.7	22.2
6 20	20 0.63	-12 5.9	2.472	3.378	9.1	20.9	6 20	19 59.45	-7 12.1	2.922	3.807	8.6	22.0
6 30	19 54.24	-11 59.8	2.409	3.375	6.4	20.7	6 30	19 53.37	-7 13.7	2.862	3.811	6.3	21.9
7 10	19 46.75	-12 1.0	2.372	3.372	3.7	20.6	7 10	19 46.41	-7 24.5	2.828	3.815	4.3	21.7
7 20	19 38.79	-12 8.6	2.363	3.369	2.9	20.5	7 20	19 39.08	-7 43.7	2.823	3.818	3.6	21.7
7 30	19 31.06	-12 21.4	2.382	3.365	5.1	20.6	7 30	19 31.95	-8 10.0	2.846	3.821	5.0	21.8
8 9	19 24.27	-12 37.6	2.428	3.362	7.9	20.8	8 9	19 25.60	-8 41.4	2.897	3.823	7.1	21.9
8 19	19 18.96	-12 55.7	2.499	3.358	10.6	21.0	8 19	19 20.48	-9 15.8	2.974	3.825	9.3	22.1
<b>378684</b>	2008 JC <sub>17</sub>	7 15.9 319°02		3°5/17.3 17			<b>246619</b>	2008 WH <sub>16</sub>	7 15.9 276°00		0°2/16.1 18		
6 10	20 5.63	-12 19.1	1.461	2.315	17.1	21.5	6 10	20 8.42	-20 9.1	1.845	2.697	14.2	21.3
6 20	20 1.98	-12 17.9	1.382	2.307	13.5	21.2	6 20	20 3.74	-20 13.9	1.752	2.681	10.9	21.0
6 30	19 55.70	-12 31.4	1.323	2.299	9.4	20.9	6 30	19 56.68	-20 24.2	1.681	2.664	7.1	20.8
7 10	19 47.46	-12 58.9	1.286	2.291	5.1	20.7	7 10	19 47.83	-20 37.7	1.635	2.647	2.8	20.5
7 20	19 38.27	-13 37.7	1.273	2.283	3.8	20.6	7 20	19 38.08	-20 51.6	1.616	2.630	1.8	20.4
7 30	19 29.41	-14 24.0	1.285	2.276	7.4	20.8	7 30	19 28.57	-21 3.5	1.623	2.613	6.3	20.6
8 9	19 22.13	-15 13.1	1.321	2.269	11.9	21.0	8 9	19 20.41	-21 11.7	1.656	2.595	10.5	20.8
8 19	19 17.35	-16 1.0	1.378	2.263	16.0	21.2	8 19	19 14.44	-21 15.8	1.711	2.578	14.3	21.0
<b>283031</b>	2007 WV <sub>15</sub>	7 15.9 337°27		5°2/17.5 18			<b>11446</b>	Betankur	7 15.9 298°21		0°5/16.2 18		
6 10	20 3.79	-10 42.7	1.525	2.375	16.7	19.9	6 10	20 5.31	-19 7.0	2.097	2.947	12.8	17.8
6 20	20 0.44	-10 1.6	1.444	2.363	13.5	19.6	6 20	20 1.11	-19 15.6	2.001	2.928	9.9	17.6
6 30	19 54.64	-9 32.8	1.382	2.352	9.8	19.4	6 30	19 54.87	-19 30.2	1.926	2.908	6.4	17.3
7 10	19 47.03	-9 17.7	1.343	2.341	6.3	19.2	7 10	19 47.10	-19 48.7	1.878	2.889	2.6	17.0
7 20	19 38.57	-9 16.6	1.328	2.331	5.3	19.1	7 20	19 38.58	-20 8.8	1.856	2.870	1.6	16.9
7 30	19 30.43	-9 28.1	1.337	2.322	8.0	19.2	7 30	19 30.23	-20 28.1	1.861	2.851	5.6	17.2
8 9	19 23.76	-9 49.5	1.370	2.314	11.9	19.4	8 9	19 22.99	-20 44.7	1.892	2.832	9.4	17.4
8 19	19 19.41	-10 17.2	1.423	2.307	15.6	19.6	8 19	19 17.61	-20 57.6	1.947	2.813	12.8	17.5
<b>214518</b>	2006 GC <sub>33</sub>	7 15.9 240°51		0°8/16.3 17			<b>2135</b>	Aristaeus	7 15.9 162°40		14°7/22.9 18		
6 10	20 7.44	-17 47.4	1.973	2.819	13.7	20.7	6 10	20 22.56	+14 44.3	1.666	2.348	2	

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>281963</b>	2011 <i>GB</i> <sub>64</sub>		7 15.9 52°11	2°0/15.2	17		<b>352288</b>	2007 <i>TS</i> <sub>399</sub>		7 16.0 263°56	0°1/16.1	18	
6 10	20 9.05	-22 59.2	1.453	2.323	16.4	20.3	6 10	20 7.78	-20 33.7	1.989	2.840	13.4	21.1
6 20	20 4.40	-23 50.5	1.405	2.343	12.4	20.1	6 20	20 2.97	-20 37.0	1.907	2.835	10.2	20.9
6 30	19 57.05	-24 47.0	1.378	2.364	7.8	19.9	6 30	19 56.01	-20 44.8	1.847	2.830	6.6	20.7
7 10	19 47.90	-25 42.7	1.374	2.386	3.3	19.7	7 10	19 47.54	-20 54.9	1.813	2.825	2.5	20.4
7 20	19 38.13	-26 31.8	1.396	2.407	3.1	19.7	7 20	19 38.39	-21 4.8	1.805	2.820	1.7	20.3
7 30	19 29.10	-27 9.8	1.443	2.429	7.4	20.1	7 30	19 29.58	-21 12.5	1.825	2.814	5.8	20.6
8 9	19 21.98	-27 35.3	1.514	2.451	11.5	20.4	8 9	19 22.08	-21 16.9	1.871	2.809	9.6	20.8
8 19	19 17.51	-27 48.9	1.607	2.474	15.0	20.6	8 19	19 16.60	-21 17.7	1.940	2.804	13.0	21.0
<b>183169</b>	2002 <i>SX</i> <sub>35</sub>		7 15.9 294°83	1°6/16.5	18		<b>69942</b>	1998 <i>UC</i> <sub>31</sub>		7 16.0 240°42	4°2/14.1	18	
6 10	20 7.51	-16 58.5	1.478	2.340	16.6	20.6	6 10	20 11.27	-32 36.4	2.308	3.152	12.0	19.0
6 20	20 3.66	-17 0.2	1.386	2.318	13.0	20.3	6 20	20 5.64	-33 15.1	2.219	3.139	9.4	18.8
6 30	19 56.96	-17 12.2	1.313	2.296	8.6	20.0	6 30	19 57.75	-33 51.1	2.154	3.126	6.6	18.6
7 10	19 48.04	-17 32.7	1.263	2.273	3.8	19.6	7 10	19 48.22	-34 19.7	2.115	3.112	4.5	18.5
7 20	19 37.90	-17 58.8	1.237	2.251	2.5	19.5	7 20	19 37.92	-34 36.7	2.103	3.097	4.8	18.5
7 30	19 27.92	-18 26.9	1.237	2.229	7.4	19.7	7 30	19 27.90	-34 39.7	2.119	3.082	7.2	18.6
8 9	19 19.49	-18 53.9	1.260	2.207	12.4	20.0	8 9	19 19.18	-34 28.9	2.161	3.067	10.1	18.8
8 19	19 13.70	-19 17.6	1.303	2.185	16.9	20.2	8 19	19 12.54	-34 6.2	2.225	3.051	12.9	18.9
<b>91310</b>	1999 <i>GH</i> <sub>5</sub>		7 15.9 234°97	2°3/15.2	18		<b>510118</b>	2010 <i>TD</i> <sub>21</sub>		7 16.0 180°13	1°8/15.1	18	
6 10	20 12.66	-24 55.2	1.616	2.475	15.5	19.7	6 10	20 6.88	-26 21.7	2.628	3.474	10.7	22.2
6 20	20 7.38	-25 27.7	1.533	2.465	11.9	19.4	6 20	20 1.82	-26 45.9	2.549	3.474	8.1	22.0
6 30	19 59.20	-26 3.9	1.471	2.455	7.7	19.1	6 30	19 55.06	-27 10.6	2.494	3.474	5.2	21.8
7 10	19 48.84	-26 38.8	1.434	2.444	3.5	18.9	7 10	19 47.12	-27 32.8	2.466	3.475	2.5	21.6
7 20	19 37.41	-27 7.0	1.422	2.433	3.3	18.8	7 20	19 38.69	-27 50.1	2.466	3.474	2.5	21.6
7 30	19 26.33	-27 24.8	1.437	2.421	7.7	19.1	7 30	19 30.56	-28 0.5	2.495	3.474	5.2	21.8
8 9	19 16.98	-27 30.9	1.476	2.408	12.1	19.3	8 9	19 23.46	-28 3.6	2.550	3.473	8.1	22.0
8 19	19 10.35	-27 26.4	1.536	2.395	16.0	19.5	8 19	19 17.97	-27 59.6	2.630	3.473	10.6	22.2
<b>278718</b>	2008 <i>SO</i> <sub>46</sub>		7 15.9 336°62	0°5/16.2	17		<b>370653</b>	2004 <i>BK</i> <sub>136</sub>		7 16.0 272°23	3°1/15.2	18	
6 10	20 5.40	-18 54.6	1.459	2.328	16.3	20.7	6 10	20 12.52	-27 52.6	1.553	2.417	15.8	21.0
6 20	20 1.88	-19 7.9	1.383	2.320	12.6	20.5	6 20	20 7.39	-28 8.9	1.471	2.405	12.2	20.8
6 30	19 55.67	-19 30.1	1.326	2.312	8.1	20.2	6 30	19 59.25	-28 24.9	1.411	2.394	8.1	20.5
7 10	19 47.47	-19 58.4	1.293	2.305	3.2	19.9	7 10	19 48.89	-28 35.3	1.373	2.382	4.0	20.2
7 20	19 38.35	-20 28.9	1.284	2.298	2.0	19.8	7 20	19 37.48	-28 35.7	1.362	2.370	3.9	20.2
7 30	19 29.61	-20 57.9	1.300	2.292	7.1	20.1	7 30	19 26.53	-28 23.7	1.376	2.359	8.1	20.4
8 9	19 22.53	-21 22.5	1.339	2.287	11.8	20.3	8 9	19 17.46	-27 59.9	1.413	2.347	12.5	20.6
8 19	19 18.01	-21 41.2	1.399	2.283	15.9	20.6	8 19	19 11.25	-27 26.7	1.472	2.335	16.4	20.9
<b>510354</b>	2011 <i>SX</i> <sub>201</sub>		7 15.9 275°66	3°4/17.6	18		<b>501375</b>	2013 <i>YT</i> <sub>50</sub>		7 16.0 202°97	2°5/14.6	18	
6 10	20 5.00	-10 48.0	2.036	2.867	13.9	21.5	6 10	20 9.64	-25 5.7	2.151	3.000	12.6	22.0
6 20	20 0.79	-10 49.1	1.948	2.857	11.0	21.3	6 20	20 4.41	-26 7.1	2.069	2.996	9.6	21.8
6 30	19 54.61	-11 2.1	1.881	2.848	7.8	21.1	6 30	19 56.99	-27 12.5	2.011	2.992	6.2	21.6
7 10	19 46.99	-11 26.5	1.839	2.839	4.6	20.9	7 10	19 47.95	-28 16.8	1.980	2.988	3.1	21.4
7 20	19 38.68	-12 0.6	1.823	2.830	3.5	20.8	7 20	19 38.11	-29 15.0	1.976	2.983	3.3	21.4
7 30	19 30.59	-12 41.6	1.835	2.821	6.1	20.9	7 30	19 28.51	-30 3.0	2.001	2.977	6.5	21.6
8 9	19 23.62	-13 26.2	1.872	2.812	9.5	21.1	8 9	19 20.14	-30 38.7	2.052	2.971	9.9	21.8
8 19	19 18.47	-14 11.4	1.933	2.802	12.8	21.3	8 19	19 13.80	-31 2.2	2.126	2.965	13.0	22.0
<b>396992</b>	2005 <i>SO</i> <sub>183</sub>		7 15.9 220°92	4°5/18.2	18		<b>494475</b>	2016 <i>WJ</i> <sub>18</sub>		7 16.0 318°73	4°8/17.7	18	
6 10	20 4.33	-6 34.8	2.532	3.336	12.3	21.5	6 10	20 4.48	-9 16.1	1.899	2.730	14.7	21.2
6 20	19 59.85	-6 18.0	2.443	3.330	10.0	21.3	6 20	20 0.51	-8 47.2	1.813	2.720	11.9	21.0
6 30	19 53.80	-6 12.4	2.377	3.325	7.5	21.1	6 30	19 54.49	-8 30.1	1.748	2.710	8.7	20.8
7 10	19 46.64	-6 18.4	2.336	3.320	5.3	21.0	7 10	19 46.98	-8 25.7	1.707	2.700	5.8	20.6
7 20	19 38.97	-6 35.3	2.321	3.314	4.5	20.9	7 20	19 38.77	-8 33.7	1.691	2.691	4.9	20.5
7 30	19 31.51	-7 1.9	2.335	3.308	6.0	21.0	7 30	19 30.82	-8 52.7	1.701	2.682	7.0	20.6
8 9	19 24.93	-7 35.7	2.375	3.302	8.4	21.2	8 9	19 24.05	-9 19.9	1.736	2.673	10.3	20.8
8 19	19 19.80	-8 14.0	2.439	3.296	10.9	21.3	8 19	19 19.19	-9 52.3	1.793	2.665	13.5	21.0
<b>507675</b>	2013 <i>SY</i> <sub>22</sub>		7 16.0 247°23	4°0/17.5	17		<b>159600</b>	2001 <i>XK</i> <sub>252</sub>		7 16.0 131°58	1°5/16.7	17	
6 10	20 8.03	-10 41.9	1.778	2.611	15.5	21.9	6 10	20 8.74	-15 40.9	1.950	2.790	14.0	20.8
6 20	20 3.41	-10 32.6	1.689	2.600	12.4	21.7	6 20	20 3.58	-15 54.7	1.879	2.799	10.8	20.6
6 30	19 56.45	-10 36.2	1.622	2.589	8.8	21.4	6 30	19 56.33	-16 17.4	1.831	2.808	7.1	20.4
7 10	19 47.76	-10 52.6	1.578	2.577	5.3	21.2	7 10	19 47.64	-16 46.8	1.808	2.817	3.2	20.2
7 20	19 38.20	-11 20.3	1.559	2.565	4.1	21.1	7 20	19 38.37	-17 20.1	1.812	2.825	2.1	20.1
7 30	19 28.87	-11 56.6	1.568	2.553	7.0	21.2	7 30	19 29.51	-17 54.3	1.844	2.833	5.7	20.3
8 9	19 20.85	-12 38.1	1.601	2.540	10.8	21.4	8 9	19 21.99	-18 26.7	1.901	2.840	9.4	20.6
8 19	19 14.98	-13 21.4	1.657	2.528	14.5	21.6	8 19	19 16.48	-18 55.7	1.983	2.847	12.7	20.8
<b>220290</b>	2003 <i>BF</i> <sub>89</sub>		7 16.0 215°12	1°0/15.6	18		<b>166041</b>	2002 <i>CJ</i> <sub>11</sub>		7 16.0 78°47	0°9/16.2	18	
6 10	20 11.24	-23 6.0	2.055	2.901	13.2	22.0	6 10	20 13.13	-19 42.3	1.363	2.225	17.7	19.5
6 20	20 5.62	-23 22.1	1.968	2.894	10.1	21.8	6 20	20 7.55	-19 28.4	1.307	2.240	13.5	19.3
6 30	19 57.72	-23 41.2	1.904	2.886	6.5	21.6	6 30	19 59.10	-19 20.8	1.271	2.255	8.7	19.1
7 10	19 48.20	-24 0.2	1.866	2.878	2.5	21.3	7 10	19 48.72	-19 17.2	1.258	2.270	3.5	18.8
7 20	19 37.93	-24 15.9	1.856	2.869	2.1	21.3	7 20	19 37.71	-19 15.0	1.271	2.285	2.2	18.8
7 30	19 27.96	-24 25.9	1.874	2.859	6.0	21.5	7 30	19 27.52	-19 12.4	1.308	2.299	7.2	19.1
8 9	19 19.33	-24 29.4	1.918	2.849	9.8	21.7	8 9	19 19.42	-19 8.5	1.369	2.314	11.9	19.4
8 19	19 12.80	-24 26.5	1.985	2.838	13.2	21.9	8 19	19 14.17	-19 3.1	1.452	2.329	15.8	19.7
<b>433956</b>	1998 <i>SH</i> <sub>155</sub>		7 16.0 303°36	4°3/17.6	18		<b>504255</b>	2006 <i>VK</i> <sub>9</sub>					