

EPHEMERIDES

7 18.9

7 19.0

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>112069</b>	2002 <i>JD</i> <sub>18</sub>		7 18.9	7 <sup>o</sup> 12	3 <sup>o</sup> 0/18.1	17							
6 10	20 18.14	-25 7.5	1.053	1.931	20.6	19.6							
6 20	20 16.46	-25 28.5	0.993	1.931	16.3	19.3							
6 30	20 11.10	-25 54.6	0.951	1.932	11.2	19.0							
7 10	20 2.86	-26 20.0	0.928	1.935	5.8	18.7							
7 20	19 53.09	-26 38.2	0.926	1.939	3.2	18.6							
7 30	19 43.62	-26 44.5	0.946	1.945	7.7	18.9							
8 9	19 36.18	-26 37.2	0.987	1.951	13.0	19.2							
8 19	19 31.90	-26 17.9	1.047	1.959	17.6	19.5							
<b>400481</b>	2008 <i>GO</i> <sub>139</sub>		7 18.9	24 <sup>o</sup> 40	3 <sup>o</sup> 9/21.1	18							
6 10	20 16.71	-8 41.9	2.212	3.006	14.1	20.9							
6 20	20 13.14	-8 30.2	2.127	3.007	11.5	20.7							
6 30	20 7.72	-8 30.5	2.064	3.009	8.6	20.6							
7 10	20 0.90	-8 42.7	2.024	3.011	5.7	20.4							
7 20	19 53.33	-9 5.7	2.010	3.013	3.9	20.3							
7 30	19 45.80	-9 37.6	2.024	3.014	5.1	20.4							
8 9	19 39.11	-10 15.4	2.063	3.017	7.9	20.5							
8 19	19 33.91	-10 56.0	2.128	3.019	10.9	20.7							
<b>50302</b>	2000 <i>CP</i> <sub>36</sub>		7 18.9	188 <sup>o</sup> 18	2 <sup>o</sup> 3/20.2	18							
6 10	20 18.98	-12 40.9	2.108	2.914	14.3	19.3							
6 20	20 15.08	-12 47.0	2.021	2.914	11.5	19.1							
6 30	20 9.12	-13 4.0	1.956	2.914	8.2	18.9							
7 10	20 1.61	-13 30.5	1.915	2.913	4.7	18.6							
7 20	19 53.24	-14 4.6	1.901	2.912	2.3	18.5							
7 30	19 44.89	-14 43.4	1.914	2.911	4.6	18.6							
8 9	19 37.45	-15 23.5	1.954	2.910	8.1	18.8							
8 19	19 31.64	-16 2.4	2.018	2.909	11.4	19.0							
<b>304666</b>	2006 <i>WW</i> <sub>72</sub>		7 18.9	342 <sup>o</sup> 28	3 <sup>o</sup> 8/20.6	18							
6 10	20 18.72	-10 30.3	2.112	2.911	14.5	21.2							
6 20	20 14.81	-10 1.9	2.026	2.910	11.8	21.0							
6 30	20 8.90	-9 43.5	1.961	2.910	8.8	20.8							
7 10	20 1.49	-9 35.6	1.920	2.909	5.7	20.6							
7 20	19 53.26	-9 37.7	1.905	2.908	3.9	20.5							
7 30	19 45.08	-9 48.5	1.917	2.908	5.3	20.6							
8 9	19 37.82	-10 5.9	1.955	2.907	8.4	20.8							
8 19	19 32.17	-10 27.3	2.017	2.907	11.4	20.9							
<b>449995</b>	2015 <i>PR</i> <sub>229</sub>		7 18.9	346 <sup>o</sup> 35	8 <sup>o</sup> 7/21.3	15							
6 10	20 16.39	-3 57.5	1.646	2.444	18.0	20.5							
6 20	20 13.61	-2 28.3	1.562	2.434	15.4	20.2							
6 30	20 8.43	-1 12.4	1.497	2.424	12.6	20.0							
7 10	20 1.39	-0 14.3	1.454	2.416	10.0	19.9							
7 20	19 53.27	+ 0 22.7	1.433	2.409	8.7	19.8							
7 30	19 45.14	+ 0 37.4	1.435	2.402	9.5	19.8							
8 9	19 38.07	+ 0 31.3	1.461	2.397	11.9	19.9							
8 19	19 32.93	+ 0 8.5	1.507	2.393	14.8	20.1							
<b>381186</b>	2007 <i>MP</i> <sub>13</sub>		7 18.9	58 <sup>o</sup> 72	2 <sup>o</sup> 1/20.1	17							
6 10	20 19.66	-12 45.6	1.577	2.403	17.5	20.6							
6 20	20 16.13	-13 9.5	1.513	2.417	13.9	20.4							
6 30	20 10.07	-13 48.2	1.468	2.432	9.8	20.2							
7 10	20 2.12	-14 39.3	1.446	2.448	5.3	20.0							
7 20	19 53.20	-15 38.5	1.449	2.463	2.1	19.8							
7 30	19 44.48	-16 40.5	1.478	2.479	5.2	20.1							
8 9	19 37.08	-17 40.4	1.533	2.494	9.4	20.3							
8 19	19 31.82	-18 34.3	1.610	2.510	13.2	20.6							
<b>512465</b>	2016 <i>QD</i> <sub>48</sub>		7 18.9	295 <sup>o</sup> 65	4 <sup>o</sup> 0/17.2	17							
6 10	20 22.31	-29 8.6	1.843	2.680	14.8	21.5							
6 20	20 18.33	-29 49.8	1.762	2.676	11.8	21.3							
6 30	20 11.68	-30 32.1	1.703	2.671	8.3	21.1							
7 10	20 2.96	-31 10.2	1.668	2.667	5.1	20.9							
7 20	19 53.10	-31 38.6	1.658	2.663	4.2	20.8							
7 30	19 43.29	-31 53.4	1.675	2.659	6.8	21.0							
8 9	19 34.75	-31 53.6	1.717	2.655	10.3	21.2							
8 19	19 28.42	-31 40.3	1.781	2.651	13.7	21.4							
<b>318028</b>	2004 <i>EB</i> <sub>16</sub>		7 18.9	65 <sup>o</sup> 66	0 <sup>o</sup> 1/19.0	17							
6 10	20 23.80	-19 25.0	1.445	2.284	18.1	20.8							
6 20	20 19.57	-19 34.9	1.388	2.303	14.2	20.6							
6 30	20 12.46	-19 53.1	1.350	2.322	9.7	20.4							
7 10	20 3.26	-20 16.3	1.334	2.341	4.7	20.2							
7 20	19 53.09	-20 40.4	1.344	2.360	0.5	19.9							
7 30	19 43.29	-21 1.5	1.379	2.379	5.5	20.3							
8 9	19 35.12	-21 17.3	1.439	2.398	10.1	20.6							
8 19	19 29.44	-21 27.0	1.520	2.417	14.1	20.9							
<b>354543</b>	2004 <i>RP</i> <sub>265</sub>		7 18.9	344 <sup>o</sup> 56	0 <sup>o</sup> 1/19.1	15							
6 10	20 16.05	-18 55.5	1.799	2.637	15.1	20.9							
6 20	20 13.28	-19 11.2	1.714	2.629	12.0	20.7							
6 30	20 8.17	-19 35.1	1.650	2.622	8.2	20.5							
7 10	20 1.25	-20 4.7	1.609	2.615	4.0	20.2							
7 20	19 53.30	-20 36.8	1.593	2.609	0.4	19.9							
7 30	19 45.35	-21 7.6	1.604	2.604	4.9	20.2							
8 9	19 38.47	-21 34.3	1.640	2.600	9.1	20.5							
8 19	19 33.47	-21 55.0	1.699	2.596	12.8	20.7							
<b>389055</b>	2008 <i>VS</i> <sub>53</sub>		7 19.0	290 <sup>o</sup> 89	8 <sup>o</sup> 6/22.1	18							
6 10	20 18.18	-1 3.4	1.809	2.582	17.5	20.3							
6 20	20 14.92	-0 3.8	1.712	2.566	15.1	20.1							
6 30	20 9.33	+ 0 39.6	1.634	2.549	12.5	19.8							
7 10	20 1.87	+ 1 3.3	1.577	2.532	10.0	19.7							
7 20	19 53.24	+ 1 4.8	1.543	2.515	8.6	19.5							
7 30	19 44.45	+ 0 44.0	1.533	2.498	9.2	19.5							
8 9	19 36.56	+ 0 3.7	1.547	2.481	11.5	19.6							
8 19	19 30.48	- 0 51.3	1.583	2.465	14.5	19.8							
<b>478533</b>	2012 <i>TX</i> <sub>7</sub>		7 19.0	183 <sup>o</sup> 05	0 <sup>o</sup> 1/19.0	18							
6 10	20 23.97	-20 38.9	2.278	3.089	13.2	22.3							
6 20	20 18.82	-20 36.0	2.190	3.090	10.4	22.1							
6 30	20 11.58	-20 37.0	2.124	3.090	7.1	21.9							
7 10	20 2.78	-20 39.9	2.084	3.089	3.5	21.7							
7 20	19 53.16	-20 42.6	2.072	3.088	0.4	21.4							
7 30	19 43.62	-20 43.2	2.089	3.087	4.2	21.7							
8 9	19 35.07	-20 40.8	2.133	3.085	7.8	21.9							
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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>242028</b>	2002 QY <sub>68</sub>		7 19.0	0°76	1°6/18.4	18	<b>338645</b>	2003 SM <sub>308</sub>		7 19.0	331°05	1°1/19.2	18
6 10	20 21.35	-24 17.2	1.716	2.555	15.7	20.4	6 10	20 23.99	-21 3.4	1.611	2.445	16.8	19.7
6 20	20 17.55	-24 26.9	1.639	2.555	12.3	20.1	6 20	20 19.76	-20 18.7	1.525	2.437	13.4	19.4
6 30	20 11.13	-24 39.8	1.582	2.554	8.4	19.9	6 30	20 12.73	-19 36.0	1.459	2.429	9.3	19.2
7 10	20 2.72	-24 52.4	1.548	2.554	4.2	19.7	7 10	20 3.54	-18 54.2	1.416	2.421	4.7	18.9
7 20	19 53.24	-25 1.0	1.540	2.555	1.8	19.5	7 20	19 53.18	-18 12.8	1.399	2.414	1.1	18.6
7 30	19 43.91	-25 2.8	1.558	2.555	5.5	19.7	7 30	19 42.94	-17 31.9	1.408	2.408	5.5	18.9
8 9	19 35.88	-24 56.8	1.602	2.556	9.7	20.0	8 9	19 34.07	-16 52.1	1.442	2.402	10.1	19.1
8 19	19 30.05	-24 43.4	1.668	2.557	13.4	20.2	8 19	19 27.54	-16 14.3	1.499	2.396	14.2	19.4
<b>148975</b>	2001 XA <sub>255</sub>		7 19.0	23°15	0°1/18.5	12 C	<b>259653</b>	2003 WS <sub>114</sub>		7 19.0	314°69	1°3/18.6	18
6 10	20 0.90	-22 51.0	16.827	17.634	2.0	23.7	6 10	20 18.52	-22 23.0	1.217	2.082	19.2	20.1
6 20	19 59.43	-22 57.6	16.763	17.663	1.6	23.7	6 20	20 16.78	-22 32.5	1.125	2.055	15.4	19.8
6 30	19 57.74	-23 4.6	16.726	17.692	1.1	23.6	6 30	20 11.58	-22 49.9	1.050	2.029	10.7	19.4
7 10	19 55.91	-23 11.6	16.716	17.721	0.5	23.6	7 10	20 3.37	-23 11.5	0.995	2.003	5.3	19.0
7 20	19 54.01	-23 18.5	16.735	17.750	0.2	23.5	7 20	19 53.17	-23 32.1	0.962	1.978	1.6	18.7
7 30	19 52.13	-23 25.0	16.783	17.779	0.7	23.6	7 30	19 42.60	-23 46.6	0.952	1.953	7.2	19.0
8 9	19 50.33	-23 31.0	16.861	17.807	1.2	23.7	8 9	19 33.48	-23 51.6	0.964	1.930	13.0	19.2
8 19	19 48.71	-23 36.1	16.966	17.836	1.7	23.7	8 19	19 27.31	-23 46.4	0.995	1.907	18.3	19.4
<b>269790</b>	1999 TV <sub>268</sub>		7 19.0	290°07	3°4/20.4	18	<b>12156</b>	Ubel		7 19.0	311°52	1°3/19.5	18
6 10	20 18.53	-11 44.8	2.246	3.046	13.7	20.4	6 10	20 18.93	-16 48.8	1.665	2.498	16.4	18.5
6 20	20 14.66	-11 15.4	2.148	3.035	11.2	20.2	6 20	20 15.79	-16 48.1	1.576	2.487	13.1	18.2
6 30	20 8.85	-10 54.4	2.072	3.023	8.2	20.0	6 30	20 10.07	-16 56.9	1.506	2.475	9.2	18.0
7 10	20 1.54	-10 42.1	2.020	3.011	5.2	19.8	7 10	20 2.30	-17 13.7	1.460	2.464	4.8	17.7
7 20	19 53.38	-10 38.3	1.994	3.000	3.4	19.6	7 20	19 53.32	-17 35.9	1.438	2.453	1.4	17.4
7 30	19 45.18	-10 41.8	1.996	2.988	5.0	19.7	7 30	19 44.28	-18 0.2	1.442	2.442	5.2	17.7
8 9	19 37.97	-10 51.1	2.024	2.977	8.1	19.9	8 9	19 36.37	-18 23.6	1.471	2.432	9.7	17.9
8 19	19 31.92	-11 4.3	2.077	2.965	11.2	20.0	8 19	19 30.55	-18 43.9	1.522	2.422	13.8	18.1
<b>53047</b>	1998 WK <sub>23</sub>		7 19.0	23°74	3°7/17.7	18	<b>235806</b>	2004 XP <sub>44</sub>		7 19.0	261°65	1°9/18.1	18
6 10	20 20.20	-25 39.9	1.243	2.107	19.0	17.6	6 10	20 22.34	-23 51.4	2.017	2.844	14.1	21.3
6 20	20 17.59	-26 25.5	1.184	2.113	14.9	17.3	6 20	20 18.21	-24 23.7	1.916	2.826	11.2	21.1
6 30	20 11.62	-27 16.4	1.143	2.121	10.3	17.1	6 30	20 11.62	-25 1.1	1.838	2.807	7.7	20.8
7 10	20 3.08	-28 5.7	1.124	2.129	5.6	16.8	7 10	20 3.04	-25 39.9	1.783	2.788	4.0	20.5
7 20	19 53.22	-28 46.2	1.127	2.138	3.9	16.8	7 20	19 53.24	-26 15.5	1.756	2.769	2.1	20.4
7 30	19 43.62	-29 12.3	1.154	2.148	7.6	17.0	7 30	19 43.27	-26 43.9	1.756	2.749	5.5	20.6
8 9	19 35.85	-29 22.0	1.204	2.158	12.2	17.3	8 9	19 34.27	-27 2.7	1.783	2.730	9.4	20.8
8 19	19 30.94	-29 16.6	1.274	2.170	16.3	17.6	8 19	19 27.18	-27 11.2	1.833	2.709	13.0	20.9
<b>38031</b>	1998 QN <sub>36</sub>		7 19.0	263°19	7°2/24.3	18	<b>476256</b>	2007 VC <sub>99</sub>		7 19.0	243°63	0°1/18.9	18
6 10	20 15.67	+ 4 35.9	2.582	3.302	14.1	18.7	6 10	20 20.34	-19 40.4	2.056	2.879	14.0	22.0
6 20	20 12.17	+ 4 47.4	2.481	3.291	12.3	18.5	6 20	20 16.35	-19 55.6	1.967	2.874	11.1	21.8
6 30	20 7.03	+ 4 41.3	2.398	3.279	10.4	18.3	6 30	20 10.14	-20 17.4	1.900	2.868	7.6	21.5
7 10	20 0.63	+ 4 15.9	2.338	3.268	8.5	18.2	7 10	20 2.22	-20 43.2	1.857	2.863	3.7	21.3
7 20	19 53.49	+ 3 30.8	2.303	3.257	7.4	18.1	7 20	19 53.34	-21 9.9	1.841	2.857	0.4	21.0
7 30	19 46.27	+ 2 27.5	2.294	3.245	7.5	18.1	7 30	19 44.46	-21 34.5	1.853	2.851	4.5	21.3
8 9	19 39.68	+ 1 9.7	2.311	3.234	8.8	18.2	8 9	19 36.55	-21 54.7	1.891	2.846	8.4	21.5
8 19	19 34.32	- 0 18.1	2.353	3.222	10.8	18.3	8 19	19 30.42	-22 9.4	1.953	2.840	11.9	21.7
<b>280105</b>	2002 GO <sub>52</sub>		7 19.0	33°64	3°6/20.5	17	<b>482263</b>	2011 QR <sub>54</sub>		7 19.0	293°07	2°6/19.9	16
6 10	20 18.10	-11 49.4	1.332	2.170	19.4	20.2	6 10	20 19.92	-14 41.5	1.947	2.762	15.0	21.8
6 20	20 15.24	-11 41.2	1.278	2.187	15.6	20.0	6 20	20 16.27	-14 20.3	1.840	2.738	12.1	21.5
6 30	20 9.61	-11 49.2	1.242	2.206	11.2	19.8	6 30	20 10.27	-14 7.1	1.754	2.714	8.7	21.3
7 10	20 1.96	-12 12.2	1.227	2.225	6.6	19.6	7 10	20 2.38	-14 1.5	1.691	2.690	5.0	21.0
7 20	19 53.35	-12 47.2	1.235	2.246	3.6	19.5	7 20	19 53.32	-14 2.8	1.654	2.666	2.6	20.8
7 30	19 45.07	-13 29.7	1.267	2.267	6.0	19.7	7 30	19 44.08	-14 9.3	1.645	2.642	5.2	20.9
8 9	19 38.32	-14 14.9	1.323	2.288	10.2	20.0	8 9	19 35.72	-14 19.2	1.661	2.618	9.2	21.1
8 19	19 33.92	-14 58.5	1.401	2.311	14.2	20.3	8 19	19 29.14	-14 30.6	1.700	2.594	13.0	21.3
<b>475228</b>	2005 VJ <sub>112</sub>		7 19.0	205°59	3°0/20.5	18	<b>98148</b>	2000 ST <sub>64</sub>		7 19.0	230°64	2°3/18.1	18
6 10	20 18.42	-11 27.6	2.506	3.299	12.7	21.3	6 10	20 24.54	-23 31.0	1.645	2.480	16.4	20.1
6 20	20 14.29	-11 9.1	2.415	3.297	10.3	21.2	6 20	20 20.43	-24 10.6	1.559	2.472	13.0	19.9
6 30	20 8.42	-10 59.0	2.346	3.295	7.5	21.0	6 30	20 13.39	-24 57.1	1.493	2.464	8.9	19.6
7 10	20 1.27	-10 57.1	2.301	3.293	4.7	20.8	7 10	20 3.98	-25 45.4	1.450	2.456	4.6	19.4
7 20	19 53.43	-11 2.8	2.284	3.290	3.0	20.7	7 20	19 53.17	-26 29.7	1.434	2.447	2.5	19.2
7 30	19 45.60	-11 14.8	2.295	3.288	4.4	20.8	7 30	19 42.27	-27 4.7	1.443	2.437	6.3	19.4
8 9	19 38.54	-11 31.1	2.333	3.285	7.2	21.0	8 9	19 32.68	-27 27.4	1.478	2.427	10.8	19.7
8 19	19 32.83	-11 50.0	2.397	3.282	10.0	21.1	8 19	19 25.49	-27 37.6	1.535	2.417	14.8	19.9
<b>126424</b>	2002 CR		7 19.0	308°74	4°5/21.2	18	<b>190537</b>	2000 RS <sub>45</sub>		7 19.0	309°27	2°7/18.1	18
6 10	20 16.70	- 8 7.9	2.058	2.855	14.9	19.9	6 10	20 20.96	-25 42.5	1.504	2.355	17.0	19.5
6 20	20 13.43	- 7 46.6	1.963	2.844	12.3	19.7	6 20	20 18.13	-26 0.3	1.404	2.326	13.6	19.3
6 30	20 8.12	- 7 37.7	1.889	2.833	9.3	19.5	6 30	20 12.16	-26 22.1	1.323	2.298	9.5	18.9
7 10	20 1.23	- 7 41.9	1.837	2.822	6.4	19.3	7 10	20 3.54	-26 43.4	1.265	2.270	5.1	18.6
7 20	19 53.43	- 7 59.0	1.812	2.812	4.6	19.1	7 20	19 53.20	-26 58.8	1.230	2.243	2.9	18.4
7 30	19 45.57	- 8 27.1	1.812	2.801	5.8	19.2	7 30	19 42.56	-27 3.7	1.220	2.215	6.9	18.6
8 9	19 38.55	- 9 3.4	1.838	2.791	8.8	19.3	8 9	19 33.19	-26 56.1	1.233	2.189	11.9	18.8
8 19	19 33.11	- 9 44.4	1.888	2.782	11.9	19.5	8 19	19 26.37	-26 36.6	1.268	2.162	16.4	19.0
<b>285208</b>	1996 XB <sub>24</sub>		7 19.0	243°36	1°7/18.2	18	<b>436240</b>	2010 AY <sub>80</sub>		7 19.0	247°65	1°1/18.4	18
6 10	20 2												

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7 19.0

7 19.0

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>234321</b>	2001 CA <sub>23</sub>		7 19.0 224°41'	0°6/18.8	18		<b>292553</b>	2006 TJ <sub>64</sub>		7 19.0 255°70'	2°0/18.4	18	
6 10	20 22.90	-21 43.7	2.120	2.940	13.8	20.8	6 10	20 25.74	-25 5.2	1.616	2.453	16.6	21.0
6 20	20 18.31	-21 52.0	2.028	2.933	10.9	20.6	6 20	20 21.38	-25 12.5	1.530	2.444	13.2	20.7
6 30	20 11.46	-22 4.8	1.957	2.925	7.4	20.3	6 30	20 14.02	-25 22.5	1.463	2.434	9.1	20.5
7 10	20 2.87	-22 19.2	1.912	2.917	3.6	20.1	7 10	20 4.28	-25 31.1	1.419	2.425	4.6	20.2
7 20	19 53.31	-22 32.5	1.893	2.909	0.8	19.8	7 20	19 53.18	-25 34.2	1.401	2.415	2.1	20.0
7 30	19 43.74	-22 42.1	1.903	2.901	4.6	20.1	7 30	19 42.11	-25 28.5	1.409	2.405	6.1	20.2
8 9	19 35.17	-22 46.5	1.940	2.892	8.4	20.3	8 9	19 32.45	-25 13.5	1.442	2.395	10.7	20.5
8 19	19 28.41	-22 45.3	2.001	2.882	11.9	20.5	8 19	19 25.27	-24 50.1	1.497	2.384	14.8	20.7
<b>319481</b>	2006 QO <sub>9</sub>		7 19.0 357°06'	0°1/19.0	17		<b>478692</b>	2012 UT <sub>19</sub>		7 19.0 354°11'	9°7/23.8	16	
6 10	20 13.02	-24 12.6	0.843	1.742	22.5	19.0	6 10	20 16.03	+ 2 7.2	1.625	2.397	19.2	21.5
6 20	20 13.10	-23 20.3	0.783	1.733	17.9	18.7	6 20	20 13.38	+ 2 57.6	1.547	2.394	16.8	21.3
6 30	20 9.19	-22 27.4	0.739	1.726	12.4	18.4	6 30	20 8.34	+ 3 25.9	1.486	2.392	14.0	21.2
7 10	20 2.13	-21 32.9	0.712	1.722	6.1	18.0	7 10	20 1.45	+ 3 28.3	1.444	2.391	11.5	21.0
7 20	19 53.38	-20 36.3	0.705	1.721	0.7	17.6	7 20	19 53.50	+ 3 3.1	1.424	2.390	9.9	20.9
7 30	19 44.95	-19 38.7	0.717	1.722	7.3	18.1	7 30	19 45.55	+ 2 11.7	1.427	2.389	10.1	20.9
8 9	19 38.71	-18 42.0	0.747	1.726	13.5	18.4	8 9	19 38.68	+ 0 59.2	1.453	2.389	12.0	21.0
8 19	19 35.88	-17 48.4	0.796	1.732	18.9	18.8	8 19	19 33.74	- 0 27.4	1.501	2.389	14.7	21.2
<b>271480</b>	2004 FX <sub>31</sub>		7 19.0 224°34'	23°8/25.7	18		<b>289215</b>	2004 XV <sub>30</sub>		7 19.0 196°62'	8°4/12.3	18	
6 10	20 40.98	+19 57.1	1.129	1.796	31.2	20.5	6 10	20 32.34	-47 23.4	2.779	3.556	11.9	22.0
6 20	20 35.66	+21 47.5	1.037	1.780	29.6	20.2	6 20	20 26.13	-48 57.7	2.706	3.553	10.4	21.9
6 30	20 25.59	+23 3.7	0.953	1.761	27.6	20.0	6 30	20 17.10	-50 24.0	2.656	3.548	9.1	21.8
7 10	20 10.87	+23 28.1	0.881	1.737	25.6	19.7	7 10	20 5.77	-51 35.1	2.631	3.543	8.4	21.7
7 20	19 52.35	+22 42.0	0.822	1.710	24.1	19.5	7 20	19 53.04	-52 24.9	2.632	3.537	8.7	21.7
7 30	19 32.07	+20 32.3	0.782	1.678	24.0	19.3	7 30	19 40.17	-52 50.0	2.659	3.530	9.8	21.8
8 9	19 12.80	+17 1.0	0.760	1.642	25.8	19.3	8 9	19 28.47	-52 50.6	2.709	3.522	11.2	21.9
8 19	18 57.03	+12 26.5	0.756	1.602	29.2	19.3	8 19	19 19.01	-52 29.6	2.780	3.514	12.8	22.0
<b>245741</b>	2006 DM <sub>138</sub>		7 19.0 322°13'	1°2/18.5	18		<b>466065</b>	2011 UH <sub>276</sub>		7 19.0 291°88'	0°1/19.0	17	
6 10	20 19.80	-21 18.7	1.680	2.519	16.0	20.6	6 10	20 23.02	-20 47.7	1.283	2.134	19.2	21.9
6 20	20 16.50	-21 50.4	1.598	2.514	12.6	20.4	6 20	20 20.04	-20 42.1	1.195	2.117	15.4	21.6
6 30	20 10.56	-22 29.9	1.536	2.509	8.6	20.1	6 30	20 13.61	-20 43.7	1.124	2.100	10.7	21.2
7 10	20 2.55	-23 13.4	1.498	2.504	4.2	19.8	7 10	20 4.30	-20 49.8	1.075	2.082	5.3	20.9
7 20	19 53.35	-23 56.0	1.485	2.500	1.4	19.6	7 20	19 53.19	-20 56.6	1.049	2.065	0.6	20.5
7 30	19 44.15	-24 33.1	1.498	2.496	5.6	19.9	7 30	19 41.88	-21 0.5	1.047	2.048	6.6	20.9
8 9	19 36.15	-25 1.4	1.536	2.492	9.9	20.2	8 9	19 32.11	-20 59.1	1.068	2.032	12.3	21.1
8 19	19 30.32	-25 19.8	1.597	2.488	13.8	20.4	8 19	19 25.22	-20 52.0	1.109	2.015	17.3	21.4
<b>380618</b>	2004 TS <sub>228</sub>		7 19.0 209°83'	3°7/17.3	18		<b>8868</b>	Hjorter		7 19.0 1°45'	1°6/20.0	18	
6 10	20 24.57	-29 21.7	2.075	2.900	13.8	21.2	6 10	20 16.27	-13 2.3	1.915	2.734	15.1	17.4
6 20	20 19.85	-30 1.4	1.990	2.896	11.0	21.0	6 20	20 13.27	-13 35.8	1.832	2.733	12.0	17.2
6 30	20 12.63	-30 41.9	1.927	2.892	7.8	20.8	6 30	20 8.11	-14 22.8	1.770	2.733	8.5	17.0
7 10	20 3.48	-31 17.9	1.889	2.887	4.8	20.6	7 10	20 1.29	-15 21.0	1.731	2.733	4.6	16.8
7 20	19 53.26	-31 44.8	1.878	2.882	3.9	20.5	7 20	19 53.53	-16 26.9	1.719	2.734	1.6	16.6
7 30	19 43.07	-31 59.1	1.894	2.876	6.3	20.7	7 30	19 45.77	-17 35.5	1.734	2.734	4.6	16.8
8 9	19 34.03	-31 59.5	1.936	2.870	9.6	20.9	8 9	19 38.96	-18 42.1	1.775	2.736	8.5	17.0
8 19	19 27.02	-31 47.4	2.002	2.864	12.7	21.0	8 19	19 33.87	-19 43.1	1.841	2.738	12.0	17.2
<b>474180</b>	1999 VA <sub>76</sub>		7 19.0 180°49'	4°3/16.2	18		<b>427872</b>	2005 ST <sub>5</sub>		7 19.0 311°87'	5°3/17.3	18	
6 10	20 21.12	-32 47.0	2.640	3.459	11.4	21.6	6 10	20 22.42	-30 29.5	1.412	2.267	17.6	20.6
6 20	20 16.66	-33 43.2	2.560	3.460	9.1	21.4	6 20	20 19.55	-31 5.6	1.325	2.247	14.2	20.4
6 30	20 10.20	-34 38.2	2.503	3.460	6.7	21.3	6 30	20 13.25	-31 42.6	1.256	2.228	10.3	20.1
7 10	20 2.22	-35 27.5	2.473	3.460	4.8	21.2	7 10	20 4.10	-32 13.3	1.210	2.209	6.5	19.8
7 20	19 53.40	-36 6.8	2.470	3.460	4.5	21.2	7 20	19 53.22	-32 30.6	1.186	2.191	5.5	19.7
7 30	19 44.60	-36 33.1	2.495	3.460	6.2	21.3	7 30	19 42.20	-32 29.4	1.187	2.173	8.6	19.8
8 9	19 36.69	-36 45.4	2.546	3.459	8.5	21.4	8 9	19 32.77	-32 8.5	1.210	2.155	13.0	20.0
8 19	19 30.36	-36 44.4	2.621	3.458	10.8	21.6	8 19	19 26.23	-31 30.7	1.253	2.139	17.2	20.2
<b>483997</b>	2006 CE <sub>36</sub>		7 19.0 282°08'	5°0/16.9	17		<b>420014</b>	2011 CS <sub>73</sub>		7 19.0 98°40'	4°6/20.9	17	
6 10	20 26.62	-36 23.8	2.433	3.245	12.4	21.6	6 10	20 24.43	- 9 19.0	1.890	2.681	16.2	21.1
6 20	20 21.26	-36 42.9	2.332	3.224	10.2	21.4	6 20	20 19.30	- 8 42.7	1.825	2.703	13.2	20.9
6 30	20 13.50	-36 57.0	2.252	3.203	7.7	21.2	6 30	20 11.95	- 8 18.4	1.780	2.724	9.8	20.8
7 10	20 3.88	-37 1.3	2.198	3.181	5.6	21.1	7 10	20 3.03	- 8 6.7	1.759	2.744	6.5	20.6
7 20	19 53.22	-36 51.8	2.171	3.159	5.2	21.0	7 20	19 53.37	- 8 7.2	1.764	2.764	4.6	20.5
7 30	19 42.59	-36 26.4	2.171	3.137	6.9	21.1	7 30	19 43.97	- 8 18.2	1.796	2.784	6.0	20.7
8 9	19 33.05	-35 45.4	2.198	3.115	9.5	21.2	8 9	19 35.78	- 8 37.0	1.854	2.803	9.0	20.9
8 19	19 25.46	-34 51.7	2.250	3.093	12.2	21.3	8 19	19 29.50	- 9 0.8	1.937	2.822	12.0	21.1
<b>136861</b>	1998 FJ <sub>39</sub>		7 19.0 77°61'	1°8/19.8	17		<b>513075</b>	2017 WA <sub>21</sub>		7 19.0 227°03'	4°6/21.6	18	
6 10	20 22.71	-14 52.9	1.429	2.261	18.6	20.1	6 10	20 19.70	- 6 3.1	2.043	2.826	15.5	21.3
6 20	20 18.85	-15 3.2	1.365	2.275	14.8	19.9	6 20	20 15.84	- 6 7.5	1.947	2.818	12.8	21.1
6 30	20 12.13	-15 26.8	1.321	2.288	10.3	19.7	6 30	20 9.83	- 6 28.0	1.871	2.810	9.8	20.8
7 10	20 3.26	-16 1.4	1.298	2.302	5.5	19.4	7 10	20 2.14	- 7 4.8	1.819	2.801	6.6	20.6
7 20	19 53.30	-16 42.7	1.301	2.315	1.8	19.2	7 20	19 53.45	- 7 56.3	1.792	2.792	4.6	20.5
7 30	19 43.59	-17 26.0	1.328	2.329	5.6	19.5	7 30	19 44.65	- 8 59.5	1.793	2.783	5.8	20.5
8 9	19 35.39	-18 7.2	1.380	2.342	10.2	19.8	8 9	19 36.71	-10 9.7	1.820	2.773	8.8	20.7
8 19	19 29.64	-18 43.1	1.454	2.355	14.3	20.1	8 19	19 30.41	-11 22.1	1.872	2.762	12.1	20.9
<b>364172</b>	2006 KU <sub>16</sub>		7 19.0 2°71'	11°2/22.9	17		<b>55509</b>	2001 UA <sub>140</sub>		7 19.0 85°39'	1°2/18.5	18	
6 10	20 6.												

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7 19.1

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>260512</b>	2005 <i>EL</i> <sub>64</sub>		7 19.0 61°15'	1.7°/19.7	17		<b>510803</b>	2013 <i>BK</i> <sub>9</sub>		7 19.1 251°77'	1.6°/18.5	18	
6 10	20 21.88	-15 27.3	1.371	2.209	18.9	20.7	6 10	20 23.34	-25 20.3	2.177	2.999	13.4	21.5
6 20	20 18.36	-15 34.1	1.307	2.220	15.1	20.4	6 20	20 18.65	-25 23.2	2.085	2.991	10.6	21.2
6 30	20 11.89	-15 54.1	1.262	2.231	10.5	20.2	6 30	20 11.70	-25 27.3	2.014	2.982	7.3	21.0
7 10	20 3.19	-16 24.7	1.238	2.242	5.5	20.0	7 10	20 3.03	-25 29.7	1.968	2.973	3.7	20.8
7 20	19 53.35	-17 2.0	1.239	2.254	1.7	19.7	7 20	19 53.41	-25 27.7	1.950	2.964	1.7	20.6
7 30	19 43.75	-17 41.4	1.264	2.265	5.7	20.0	7 30	19 43.84	-25 19.2	1.960	2.955	4.8	20.8
8 9	19 35.70	-18 18.5	1.314	2.277	10.5	20.3	8 9	19 35.30	-25 3.9	1.997	2.945	8.5	21.0
8 19	19 30.15	-18 50.6	1.385	2.289	14.7	20.6	8 19	19 28.58	-24 42.2	2.058	2.936	11.8	21.2
<b>269607</b>	2010 <i>CG</i> <sub>89</sub>		7 19.0 276°70'	4.6°/21.3	18		<b>291521</b>	2006 <i>EM</i> <sub>2</sub>		7 19.1 130°49'	3.1°/17.6	17	
6 10	20 19.04	-7 22.0	1.876	2.672	16.2	21.3	6 10	20 25.06	-28 2.7	2.111	2.934	13.7	21.4
6 20	20 15.69	-7 20.7	1.770	2.650	13.5	21.0	6 20	20 19.98	-28 39.1	2.040	2.945	10.8	21.3
6 30	20 9.98	-7 35.6	1.683	2.628	10.2	20.8	6 30	20 12.56	-29 16.3	1.991	2.956	7.5	21.1
7 10	20 2.33	-8 7.4	1.618	2.605	6.8	20.5	7 10	20 3.42	-29 49.7	1.967	2.967	4.3	20.9
7 20	19 53.43	-8 55.0	1.579	2.582	4.6	20.4	7 20	19 53.40	-30 15.0	1.970	2.977	3.3	20.9
7 30	19 44.27	-9 55.5	1.566	2.559	6.1	20.4	7 30	19 43.56	-30 29.2	2.002	2.987	5.7	21.0
8 9	19 35.93	-11 4.0	1.579	2.535	9.7	20.5	8 9	19 34.92	-30 31.4	2.059	2.996	9.0	21.3
8 19	19 29.36	-12 15.5	1.616	2.512	13.4	20.7	8 19	19 28.25	-30 22.8	2.141	3.005	11.9	21.5
<b>41677</b>	2000 <i>UD</i> <sub>7</sub>		7 19.0 214°15'	2.4°/17.9	18		<b>15047</b>	1998 <i>XG</i> <sub>49</sub>		7 19.1 260°23'	3.8°/17.2	18	
6 10	20 25.36	-24 15.3	1.742	2.573	15.8	19.1	6 10	20 23.09	-26 45.3	1.734	2.572	15.6	18.2
6 20	20 20.91	-24 54.8	1.657	2.568	12.5	18.9	6 20	20 19.32	-27 42.6	1.646	2.561	12.4	18.0
6 30	20 13.63	-25 40.1	1.592	2.562	8.6	18.6	6 30	20 12.69	-28 45.1	1.579	2.549	8.7	17.7
7 10	20 4.10	-26 26.0	1.551	2.555	4.5	18.4	7 10	20 3.73	-29 46.8	1.535	2.537	5.1	17.5
7 20	19 53.25	-27 7.0	1.536	2.548	2.6	18.2	7 20	19 53.36	-30 40.9	1.518	2.525	4.0	17.4
7 30	19 42.35	-27 38.2	1.548	2.540	6.2	18.5	7 30	19 42.84	-31 21.7	1.527	2.512	7.1	17.5
8 9	19 32.72	-27 57.2	1.585	2.532	10.4	18.7	8 9	19 33.55	-31 46.3	1.560	2.500	11.1	17.7
8 19	19 25.39	-28 3.9	1.646	2.523	14.2	18.9	8 19	19 26.56	-31 54.9	1.616	2.487	14.8	17.9
<b>477071</b>	2009 <i>BO</i> <sub>63</sub>		7 19.0 207°59'	2.4°/18.0	18		<b>162699</b>	2000 <i>US</i> <sub>30</sub>		7 19.1 189°85'	2.6°/20.1	18	
6 10	20 25.02	-27 47.0	2.401	3.217	12.5	21.9	6 10	20 23.28	-13 50.2	1.629	2.448	17.3	20.7
6 20	20 19.74	-28 0.3	2.310	3.212	9.9	21.7	6 20	20 19.16	-13 44.0	1.547	2.447	13.9	20.5
6 30	20 12.31	-28 13.5	2.241	3.206	6.9	21.5	6 30	20 12.36	-13 49.7	1.485	2.447	9.9	20.2
7 10	20 3.26	-28 23.2	2.199	3.200	3.8	21.3	7 10	20 3.47	-14 6.2	1.446	2.446	5.6	20.0
7 20	19 53.35	-28 26.5	2.184	3.194	2.5	21.2	7 20	19 53.40	-14 31.2	1.431	2.444	2.6	19.8
7 30	19 43.50	-28 21.2	2.198	3.187	5.0	21.3	7 30	19 43.36	-15 1.4	1.444	2.442	5.5	20.0
8 9	19 34.65	-28 6.9	2.239	3.179	8.2	21.5	8 9	19 34.58	-15 33.4	1.481	2.440	9.9	20.2
8 19	19 27.53	-27 44.6	2.306	3.172	11.1	21.7	8 19	19 27.99	-16 4.1	1.541	2.438	13.9	20.5
<b>190582</b>	2000 <i>SO</i> <sub>299</sub>		7 19.0 305°28'	2.1°/18.3	18		<b>478310</b>	2011 <i>WD</i> <sub>71</sub>		7 19.1 223°17'	4.1°/16.5	18	
6 10	20 21.42	-24 31.0	1.551	2.397	16.7	20.7	6 10	20 21.59	-31 13.8	2.517	3.339	11.8	21.7
6 20	20 18.42	-24 45.5	1.447	2.367	13.4	20.5	6 20	20 17.19	-32 9.0	2.430	3.332	9.4	21.6
6 30	20 12.35	-25 4.7	1.363	2.337	9.3	20.1	6 30	20 10.69	-33 4.4	2.366	3.326	6.8	21.4
7 10	20 3.68	-25 24.6	1.301	2.307	4.8	19.8	7 10	20 2.56	-33 55.2	2.327	3.319	4.6	21.2
7 20	19 53.29	-25 40.3	1.263	2.277	2.3	19.6	7 20	19 53.51	-34 36.9	2.316	3.312	4.3	21.2
7 30	19 42.56	-25 47.5	1.251	2.248	6.6	19.7	7 30	19 44.41	-35 6.0	2.334	3.304	6.1	21.3
8 9	19 33.00	-25 43.9	1.262	2.219	11.6	19.9	8 9	19 36.19	-35 21.3	2.377	3.297	8.7	21.5
8 19	19 25.92	-25 29.7	1.295	2.190	16.2	20.1	8 19	19 29.60	-35 23.2	2.445	3.289	11.3	21.6
<b>87148</b>	2000 <i>NH</i> <sub>17</sub>		7 19.0 321°34'	3.0°/17.9	18		<b>183141</b>	2002 <i>RW</i> <sub>231</sub>		7 19.1 270°06'	1.9°/19.9	18	
6 10	20 16.46	-24 21.6	1.290	2.156	18.3	19.3	6 10	20 19.62	-15 4.0	2.004	2.819	14.6	20.8
6 20	20 15.16	-24 55.0	1.190	2.122	14.7	18.9	6 20	20 15.84	-15 0.5	1.912	2.812	11.7	20.6
6 30	20 10.53	-25 37.1	1.108	2.087	10.3	18.6	6 30	20 9.87	-15 6.1	1.842	2.804	8.3	20.3
7 10	20 2.97	-26 23.2	1.046	2.053	5.5	18.2	7 10	20 2.19	-15 19.4	1.795	2.796	4.5	20.1
7 20	19 53.36	-27 6.3	1.007	2.020	3.3	18.0	7 20	19 53.55	-15 38.7	1.775	2.789	1.9	19.9
7 30	19 43.22	-27 39.4	0.991	1.988	7.8	18.1	7 30	19 44.87	-16 1.6	1.782	2.781	4.7	20.1
8 9	19 34.36	-27 57.9	0.997	1.957	13.3	18.3	8 9	19 37.15	-16 25.3	1.815	2.773	8.5	20.3
8 19	19 28.30	-28 0.5	1.021	1.927	18.5	18.5	8 19	19 31.16	-16 47.8	1.872	2.766	12.0	20.5
<b>201661</b>	2003 <i>UU</i> <sub>3</sub>		7 19.1 236°35'	2.0°/18.1	18		<b>344122</b>	1999 <i>VP</i> <sub>185</sub>		7 19.1 332°26'	8.6°/14.3	18	
6 10	20 23.02	-25 20.0	2.202	3.025	13.3	21.0	6 10	20 18.28	-34 13.5	1.401	2.262	17.4	19.8
6 20	20 18.46	-25 43.7	2.108	3.014	10.5	20.8	6 20	20 16.56	-35 57.2	1.324	2.246	14.3	19.6
6 30	20 11.62	-26 10.2	2.035	3.003	7.2	20.6	6 30	20 11.41	-37 43.1	1.267	2.230	11.1	19.3
7 10	20 3.02	-26 35.7	1.988	2.992	3.8	20.3	7 10	20 3.34	-39 20.8	1.231	2.215	8.9	19.2
7 20	19 53.40	-26 56.8	1.968	2.980	2.2	20.2	7 20	19 53.40	-40 39.2	1.219	2.201	9.1	19.2
7 30	19 43.74	-27 10.2	1.976	2.968	5.1	20.4	7 30	19 43.24	-41 29.7	1.229	2.188	11.6	19.3
8 9	19 35.05	-27 14.6	2.011	2.955	8.7	20.6	8 9	19 34.66	-41 49.6	1.260	2.176	15.1	19.4
8 19	19 28.16	-27 10.1	2.070	2.942	11.9	20.7	8 19	19 29.06	-41 41.1	1.310	2.166	18.5	19.6
<b>343909</b>	2011 <i>JW</i> <sub>25</sub>		7 19.1 356°14'	2.4°/20.1	16		<b>402378</b>	2005 <i>XS</i> <sub>84</sub>		7 19.1 206°51'	8.1°/13.9	17	
6 10	20 15.00	-13 54.8	1.342	2.190	18.7	20.8	6 10	20 28.46	-25 0.8	1.159	2.014	20.6	20.5
6 20	20 13.18	-13 59.5	1.268	2.186	15.1	20.5	6 20	20 25.38	-28 10.1	1.088	2.012	16.4	20.2
6 30	20 8.53	-14 19.4	1.212	2.182	10.7	20.3	6 30	20 18.08	-31 41.2	1.038	2.010	11.9	19.9
7 10	20 1.67	-14 53.1	1.176	2.180	5.9	20.0	7 10	20 6.91	-35 16.8	1.012	2.007	8.5	19.7
7 20	19 53.54	-15 37.3	1.164	2.178	2.4	19.8	7 20	19 53.00	-38 35.1	1.012	2.004	9.0	19.7
7 30	19 45.44	-16 27.0	1.176	2.178	5.8	20.0	7 30	19 38.41	-41 16.6	1.038	2.000	12.9	19.9
8 9	19 38.70	-17 17.0	1.211	2.179	10.6	20.3	8 9	19 25.59	-43 12.5	1.085	1.996	17.4	20.2
8 19	19 34.32	-18 2.8	1.267	2.181	15.0	20.5	8 19	19 16.51	-44 24.5	1.151	1.992	21.5	20.4
<b>73242</b>	2002 <i>JJ</i> <sub>36</sub>		7 19.1 319°29'	8.5°/14.7	18		<b>469653</b>						

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>514329</b>	2016 <i>NS</i> <sub>68</sub>		7 19.1 210°21	2°1/19.8	18		<b>482921</b>	2014 <i>HR</i> <sub>159</sub>		7 19.1	5°02	15°2/	7.3 17
6 10	20 21.99	-15 42.9	2.307	3.110	13.3	21.2	6 10	20 25.74	-53 14.6	1.619	2.428	17.8	19.7
6 20	20 17.28	-15 14.9	2.215	3.107	10.7	21.0	6 20	20 23.62	-55 55.8	1.578	2.428	16.4	19.6
6 30	20 10.60	-14 52.6	2.146	3.104	7.6	20.8	6 30	20 16.97	-58 20.3	1.557	2.429	15.4	19.5
7 10	20 2.46	-14 35.6	2.102	3.101	4.3	20.6	7 10	20 6.32	-60 15.2	1.556	2.432	15.2	19.5
7 20	19 53.53	-14 23.1	2.086	3.098	2.1	20.4	7 20	19 53.12	-61 30.4	1.574	2.435	15.8	19.6
7 30	19 44.66	-14 14.3	2.098	3.094	4.4	20.5	7 30	19 39.81	-62 1.0	1.611	2.440	17.0	19.7
8 9	19 36.68	-14 8.2	2.137	3.091	7.7	20.7	8 9	19 28.95	-61 49.8	1.665	2.445	18.4	19.8
8 19	19 30.27	-14 3.8	2.202	3.087	10.8	20.9	8 19	19 22.30	-61 4.1	1.733	2.452	19.9	19.9
<b>86884</b>	2000 <i>HJ</i> <sub>27</sub>		7 19.1 192°34	1°1/19.6	18		<b>187030</b>	2005 <i>EZ</i> <sub>265</sub>		7 19.1	60°61	4°9/20.9	17
6 10	20 22.58	-15 32.0	2.043	2.852	14.6	19.9	6 10	20 21.26	-9 43.2	1.431	2.251	19.2	19.9
6 20	20 18.11	-15 51.3	1.954	2.851	11.6	19.7	6 20	20 17.76	-9 16.6	1.362	2.258	15.7	19.7
6 30	20 11.39	-16 20.5	1.887	2.849	8.1	19.5	6 30	20 11.46	-9 5.9	1.311	2.265	11.6	19.5
7 10	20 2.93	-16 57.6	1.844	2.846	4.2	19.3	7 10	20 3.05	-9 11.7	1.281	2.273	7.5	19.3
7 20	19 53.48	-17 39.3	1.828	2.843	1.1	19.0	7 20	19 53.51	-9 32.8	1.275	2.280	5.0	19.1
7 30	19 44.00	-18 22.1	1.840	2.840	4.5	19.3	7 30	19 44.13	-10 6.2	1.293	2.288	6.8	19.3
8 9	19 35.49	-19 2.7	1.880	2.835	8.4	19.5	8 9	19 36.15	-10 47.4	1.336	2.296	10.7	19.5
8 19	19 28.77	-19 38.8	1.944	2.830	12.0	19.7	8 19	19 30.52	-11 31.6	1.400	2.304	14.6	19.8
<b>295921</b>	2008 <i>WH</i> <sub>134</sub>		7 19.1 305°71	0°4/18.9	17		<b>122301</b>	2000 <i>QQ</i> <sub>3</sub>		7 19.1	262°75	2°1/18.2	18
6 10	20 19.73	-18 57.0	1.808	2.638	15.4	20.2	6 10	20 24.21	-24 58.3	2.022	2.847	14.2	20.5
6 20	20 16.24	-19 31.2	1.725	2.636	12.1	20.0	6 20	20 19.78	-25 23.1	1.918	2.825	11.3	20.3
6 30	20 10.30	-20 14.9	1.662	2.633	8.3	19.8	6 30	20 12.81	-25 51.7	1.835	2.803	7.8	20.0
7 10	20 2.46	-21 4.5	1.624	2.630	4.0	19.5	7 10	20 3.76	-26 20.1	1.776	2.780	4.1	19.7
7 20	19 53.53	-21 55.7	1.612	2.628	0.6	19.3	7 20	19 53.43	-26 44.2	1.745	2.757	2.3	19.6
7 30	19 44.58	-22 43.8	1.627	2.626	5.0	19.6	7 30	19 42.90	-27 0.2	1.741	2.733	5.6	19.7
8 9	19 36.73	-23 25.1	1.667	2.623	9.2	19.8	8 9	19 33.34	-27 6.2	1.763	2.709	9.6	19.9
8 19	19 30.86	-23 57.7	1.731	2.621	13.0	20.0	8 19	19 25.75	-27 2.1	1.809	2.684	13.2	20.1
<b>39544</b>	1991 <i>TN</i> <sub>14</sub>		7 19.1 297°93	0°4/18.9	18		<b>33572</b>	Mandolin		7 19.1	236°78	1°5/18.4	18
6 10	20 19.54	-19 44.9	1.681	2.519	16.0	19.0	6 10	20 21.79	-21 57.2	1.812	2.644	15.3	19.0
6 20	20 16.50	-20 7.4	1.584	2.498	12.8	18.7	6 20	20 17.93	-22 34.1	1.728	2.640	12.0	18.8
6 30	20 10.77	-20 39.3	1.506	2.478	8.8	18.5	6 30	20 11.52	-23 18.2	1.664	2.635	8.2	18.6
7 10	20 2.83	-21 17.3	1.451	2.458	4.3	18.1	7 10	20 3.09	-24 5.4	1.624	2.630	4.1	18.3
7 20	19 53.49	-21 57.5	1.422	2.438	0.7	17.8	7 20	19 53.51	-24 50.6	1.611	2.626	1.7	18.1
7 30	19 43.94	-22 35.1	1.418	2.418	5.5	18.1	7 30	19 43.89	-25 29.4	1.625	2.621	5.5	18.4
8 9	19 35.45	-23 6.4	1.440	2.398	10.2	18.3	8 9	19 35.42	-25 58.8	1.664	2.615	9.6	18.6
8 19	19 29.10	-23 29.6	1.483	2.379	14.4	18.6	8 19	19 29.01	-26 17.7	1.726	2.610	13.3	18.8
<b>514332</b>	2016 <i>OQ</i> <sub>6</sub>		7 19.1 268°91	0°7/19.3	18		<b>106899</b>	2000 <i>YF</i> <sub>44</sub>		7 19.1	145°21	0°3/19.2	17
6 10	20 22.25	-19 11.6	2.049	2.867	14.2	21.3	6 10	20 25.72	-18 34.4	1.854	2.671	15.6	20.9
6 20	20 17.96	-18 59.7	1.949	2.852	11.3	21.0	6 20	20 20.68	-18 48.2	1.779	2.681	12.3	20.7
6 30	20 11.36	-18 52.8	1.871	2.837	7.9	20.8	6 30	20 13.16	-19 9.6	1.725	2.691	8.4	20.5
7 10	20 2.95	-18 49.3	1.817	2.821	4.0	20.5	7 10	20 3.79	-19 35.9	1.695	2.700	4.1	20.3
7 20	19 53.49	-18 47.5	1.790	2.805	0.8	20.2	7 20	19 53.45	-20 3.6	1.692	2.708	0.5	20.0
7 30	19 43.97	-18 45.6	1.790	2.789	4.6	20.5	7 30	19 43.26	-20 29.2	1.717	2.716	4.8	20.4
8 9	19 35.40	-18 42.3	1.817	2.773	8.6	20.7	8 9	19 34.30	-20 50.5	1.768	2.723	8.9	20.6
8 19	19 28.64	-18 36.9	1.869	2.757	12.3	20.9	8 19	19 27.42	-21 6.3	1.844	2.729	12.6	20.9
<b>364056</b>	2005 <i>WR</i> <sub>152</sub>		7 19.1 256°48	3°2/20.5	18		<b>290504</b>	2005 <i>US</i> <sub>28</sub>		7 19.1	186°92	4°1/16.6	18
6 10	20 18.92	-11 44.1	2.364	3.160	13.2	20.8	6 10	20 21.82	-32 19.3	2.569	3.388	11.7	20.9
6 20	20 14.84	-11 17.6	2.274	3.158	10.7	20.7	6 20	20 17.27	-33 6.4	2.487	3.388	9.3	20.7
6 30	20 8.93	-10 59.3	2.205	3.155	7.9	20.5	6 30	20 10.68	-33 52.2	2.429	3.387	6.8	20.6
7 10	20 1.65	-10 49.4	2.162	3.153	4.9	20.3	7 10	20 2.54	-34 32.4	2.397	3.387	4.7	20.5
7 20	19 53.64	-10 47.3	2.145	3.151	3.2	20.2	7 20	19 53.57	-35 2.8	2.392	3.386	4.3	20.4
7 30	19 45.66	-10 52.1	2.156	3.149	4.7	20.3	7 30	19 44.64	-35 20.7	2.415	3.385	6.0	20.5
8 9	19 38.49	-11 2.0	2.194	3.146	7.6	20.4	8 9	19 36.63	-35 25.2	2.464	3.383	8.5	20.7
8 19	19 32.77	-11 15.3	2.257	3.144	10.5	20.6	8 19	19 30.26	-35 17.1	2.538	3.382	10.9	20.9
<b>16890</b>	1998 <i>BJ</i> <sub>33</sub>		7 19.1 104°65	1°8/18.6	18 R		<b>93308</b>	2000 <i>SV</i> <sub>211</sub>		7 19.1	39°73	8°6/14.5	17
6 10	20 27.85	-26 32.7	1.754	2.582	15.9	17.2	6 10	20 25.02	-37 22.2	1.636	2.475	16.3	18.9
6 20	20 22.57	-26 19.6	1.676	2.585	12.5	17.0	6 20	20 21.31	-39 3.4	1.574	2.478	13.5	18.7
6 30	20 14.53	-26 5.9	1.620	2.589	8.6	16.8	6 30	20 14.27	-40 41.1	1.532	2.482	10.7	18.6
7 10	20 4.45	-25 48.4	1.587	2.592	4.4	16.6	7 10	20 4.57	-42 5.4	1.514	2.485	8.9	18.5
7 20	19 53.36	-25 24.4	1.581	2.595	1.9	16.4	7 20	19 53.36	-43 7.2	1.520	2.489	9.0	18.5
7 30	19 42.54	-24 52.8	1.602	2.598	5.5	16.6	7 30	19 42.23	-43 40.8	1.550	2.493	10.9	18.6
8 9	19 33.20	-24 14.5	1.649	2.601	9.7	16.9	8 9	19 32.77	-43 46.1	1.602	2.497	13.6	18.8
8 19	19 26.23	-23 31.4	1.720	2.604	13.4	17.1	8 19	19 26.15	-43 26.9	1.674	2.502	16.3	19.0
<b>291689</b>	2006 <i>HA</i> <sub>103</sub>		7 19.1 95°37	0°2/18.9	17		<b>371369</b>	2006 <i>QC</i> <sub>29</sub>		7 19.1	322°45	2°6/20.1	17
6 10	20 24.14	-18 49.7	1.433	2.272	18.3	21.0	6 10	20 15.75	-13 26.8	1.232	2.084	19.8	20.9
6 20	20 20.14	-19 17.0	1.368	2.283	14.4	20.8	6 20	20 14.27	-13 33.2	1.146	2.066	16.1	20.6
6 30	20 13.14	-19 54.9	1.322	2.293	9.8	20.5	6 30	20 9.68	-13 57.3	1.077	2.049	11.6	20.3
7 10	20 3.87	-20 39.2	1.298	2.304	4.8	20.3	7 10	20 2.47	-14 38.5	1.029	2.032	6.5	20.0
7 20	19 53.41	-21 24.6	1.299	2.315	0.6	20.0	7 20	19 53.57	-15 33.3	1.003	2.017	2.6	19.7
7 30	19 43.17	-22 5.7	1.325	2.325	5.7	20.4	7 30	19 44.44	-16 36.1	0.999	2.002	6.5	19.9
8 9	19 34.49	-22 39.1	1.376	2.335	10.5	20.7	8 9	19 36.64	-17 40.0	1.018	1.988	11.9	20.2
8 19	19 28.35	-23 3.3	1.450	2.345	14.7	21.0	8 19	19 31.48	-18 39.3	1.057	1.975	17.0	20.4
<b>247722</b>	2003 <i>FX</i> <sub>89</sub>		7 19.1 41°83	5°8/16.9	18		<b>160281</b>	2002 <i>WO</i>		7			

EPHEMERIDES

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>153441</b>	2001 <i>QW</i> <sub>245</sub>	7 19.1 327°72		7°8/21.9 17			<b>87573</b>	2000 <i>RH</i> <sub>14</sub>	7 19.1 335°39		6°2/21.8 18		
6 10	20 12.93	- 5 31.1	1.256	2.088	20.7	19.1	6 10	20 16.78	- 5 16.2	1.894	2.685	16.2	18.9
6 20	20 11.92	- 4 51.2	1.166	2.065	17.6	18.8	6 20	20 13.70	- 4 37.2	1.806	2.678	13.6	18.7
6 30	20 8.00	- 4 31.6	1.092	2.042	13.9	18.5	6 30	20 8.47	- 4 12.7	1.738	2.672	10.7	18.5
7 10	20 1.64	- 4 36.5	1.037	2.021	10.2	18.3	7 10	20 1.59	- 4 4.4	1.692	2.666	7.9	18.3
7 20	19 53.67	- 5 7.4	1.003	2.000	7.8	18.1	7 20	19 53.77	- 4 12.9	1.670	2.660	6.2	18.2
7 30	19 45.42	- 6 2.6	0.990	1.981	9.0	18.1	7 30	19 45.92	- 4 36.9	1.674	2.655	7.1	18.3
8 9	19 38.34	- 7 16.2	0.999	1.963	12.8	18.2	8 9	19 39.00	- 5 13.4	1.702	2.651	9.7	18.4
8 19	19 33.69	- 8 40.2	1.027	1.947	17.2	18.4	8 19	19 33.78	- 5 58.2	1.754	2.646	12.7	18.6
<b>67101</b>	2000 <i>AW</i> <sub>78</sub>	7 19.1 286°77		2°6/20.1 18			<b>502005</b>	2015 <i>AW</i> <sub>39</sub>	7 19.1 54°56		2°1/18.3 17		
6 10	20 20.70	-13 28.0	1.969	2.779	15.0	20.2	6 10	20 23.36	-23 39.3	1.429	2.276	17.8	21.2
6 20	20 17.03	-13 20.8	1.853	2.748	12.3	20.0	6 20	20 19.58	-24 7.5	1.368	2.289	14.0	21.0
6 30	20 10.97	-13 23.8	1.757	2.716	8.9	19.7	6 30	20 12.79	-24 41.2	1.327	2.301	9.5	20.8
7 10	20 2.92	-13 36.6	1.685	2.683	5.2	19.4	7 10	20 3.74	-25 15.2	1.308	2.315	4.8	20.5
7 20	19 53.55	-13 58.0	1.639	2.651	2.6	19.2	7 20	19 53.57	-25 44.2	1.314	2.328	2.3	20.4
7 30	19 43.84	-14 25.5	1.620	2.617	5.2	19.3	7 30	19 43.70	-26 3.9	1.345	2.341	6.3	20.7
8 9	19 34.89	-14 56.2	1.627	2.584	9.3	19.4	8 9	19 35.48	-26 12.7	1.400	2.355	10.7	21.0
8 19	19 27.69	-15 27.4	1.657	2.550	13.3	19.6	8 19	19 29.84	-26 10.8	1.477	2.369	14.7	21.2
<b>13658</b>	<i>Sylvester</i>	7 19.1 31°90		3°9/20.5 18			<b>347987</b>	2003 <i>SY</i> <sub>116</sub>	7 19.1 301°67		2°1/18.6 18		
6 10	20 18.79	-12 16.8	1.008	1.868	22.7	17.9	6 10	20 25.29	-26 30.3	1.715	2.549	15.9	21.0
6 20	20 16.76	-12 4.3	0.956	1.878	18.3	17.6	6 20	20 21.25	-26 24.2	1.604	2.517	12.8	20.7
6 30	20 11.24	-12 11.3	0.919	1.890	13.2	17.4	6 30	20 14.20	-26 18.1	1.514	2.485	9.0	20.4
7 10	20 3.08	-12 37.1	0.901	1.902	7.7	17.1	7 10	20 4.63	-26 8.3	1.447	2.452	4.7	20.1
7 20	19 53.58	-13 17.9	0.903	1.916	3.9	17.0	7 20	19 53.45	-25 51.0	1.406	2.420	2.2	19.8
7 30	19 44.41	-14 7.9	0.928	1.930	7.1	17.2	7 30	19 41.99	-25 23.7	1.391	2.387	6.2	20.0
8 9	19 37.17	-15 0.3	0.974	1.945	12.2	17.5	8 9	19 31.68	-24 46.3	1.401	2.355	10.9	20.2
8 19	19 32.90	-15 49.7	1.039	1.961	16.9	17.8	8 19	19 23.74	-24 0.8	1.434	2.323	15.3	20.4
<b>278974</b>	2008 <i>UF</i> <sub>160</sub>	7 19.1 319°08		4°6/17.1 18			<b>256992</b>	2008 <i>EC</i> <sub>140</sub>	7 19.1 222°34		0°2/19.2 17		
6 10	20 18.86	-27 55.1	1.450	2.307	17.1	19.6	6 10	20 23.77	-18 28.3	1.822	2.644	15.6	22.5
6 20	20 16.68	-28 44.2	1.358	2.283	13.7	19.3	6 20	20 19.48	-18 46.0	1.731	2.636	12.4	22.2
6 30	20 11.33	-29 38.3	1.286	2.260	9.8	19.1	6 30	20 12.61	-19 12.5	1.661	2.628	8.6	22.0
7 10	20 3.29	-30 31.0	1.235	2.237	5.9	18.8	7 10	20 3.69	-19 44.9	1.614	2.620	4.3	21.7
7 20	19 53.54	-31 14.8	1.208	2.215	4.9	18.7	7 20	19 53.57	-20 19.7	1.594	2.611	0.4	21.4
7 30	19 43.52	-31 43.3	1.205	2.194	8.2	18.8	7 30	19 43.36	-20 53.0	1.602	2.601	5.0	21.7
8 9	19 34.84	-31 53.4	1.225	2.173	12.7	19.0	8 9	19 34.26	-21 21.5	1.635	2.591	9.4	22.0
8 19	19 28.82	-31 45.4	1.265	2.153	16.9	19.2	8 19	19 27.20	-21 43.7	1.692	2.580	13.3	22.2
<b>195496</b>	2002 <i>GM</i> <sub>164</sub>	7 19.1 77°49		7°9/22.9 18			<b>385560</b>	2004 <i>TA</i> <sub>134</sub>	7 19.1 263°33		7°6/14.7 18		
6 10	20 18.64	- 0 20.5	1.869	2.635	17.2	20.1	6 10	20 25.66	-37 7.9	1.909	2.737	14.8	20.7
6 20	20 15.11	+ 0 20.8	1.788	2.637	14.8	19.9	6 20	20 21.53	-38 32.6	1.826	2.724	12.2	20.5
6 30	20 9.39	+ 0 43.9	1.725	2.638	12.1	19.7	6 30	20 14.36	-39 55.3	1.763	2.711	9.7	20.3
7 10	20 2.01	+ 0 46.1	1.684	2.639	9.5	19.6	7 10	20 4.68	-41 7.7	1.725	2.697	7.9	20.2
7 20	19 53.70	+ 0 26.7	1.667	2.640	8.0	19.5	7 20	19 53.46	-42 1.9	1.712	2.684	7.9	20.2
7 30	19 45.40	- 0 12.9	1.674	2.641	8.4	19.5	7 30	19 42.07	-42 32.2	1.724	2.670	9.9	20.3
8 9	19 38.08	- 1 8.6	1.706	2.642	10.5	19.6	8 9	19 31.98	-42 37.5	1.760	2.656	12.6	20.4
8 19	19 32.51	- 2 15.1	1.760	2.644	13.2	19.8	8 19	19 24.39	-42 20.3	1.816	2.642	15.4	20.6
<b>510478</b>	2011 <i>WB</i> <sub>108</sub>	7 19.1 174°31		0°4/18.8 18			<b>361042</b>	2005 <i>XK</i> <sub>48</sub>	7 19.1 139°18		0°5/18.9 17		
6 10	20 19.54	-20 47.6	2.759	3.569	11.2	23.0	6 10	20 26.52	-20 11.9	1.496	2.330	17.9	21.8
6 20	20 15.13	-21 7.8	2.672	3.571	8.8	22.8	6 20	20 21.99	-20 31.4	1.425	2.337	14.1	21.6
6 30	20 9.05	-21 32.3	2.607	3.573	6.0	22.6	6 30	20 14.45	-20 59.4	1.374	2.345	9.7	21.4
7 10	20 1.73	-21 58.7	2.569	3.574	2.9	22.4	7 10	20 4.58	-21 31.9	1.346	2.352	4.7	21.1
7 20	19 53.74	-22 24.7	2.559	3.575	0.6	22.2	7 20	19 53.49	-22 3.9	1.342	2.358	0.8	20.8
7 30	19 45.77	-22 48.1	2.579	3.576	3.6	22.5	7 30	19 42.57	-22 31.1	1.365	2.364	5.8	21.2
8 9	19 38.55	-23 7.1	2.627	3.576	6.6	22.7	8 9	19 33.20	-22 50.8	1.413	2.370	10.5	21.5
8 19	19 32.64	-23 20.9	2.700	3.576	9.4	22.8	8 19	19 26.38	-23 2.3	1.483	2.375	14.7	21.8
<b>344776</b>	2003 <i>WX</i> <sub>166</sub>	7 19.1 243°20		3°1/20.2 18			<b>522742</b>	2016 <i>LQ</i> <sub>64</sub>	7 19.1 111°52		6°7/22.5 17		
6 10	20 22.85	-13 3.0	2.318	3.111	13.6	20.8	6 10	20 20.60	- 3 12.9	1.643	2.430	18.5	21.7
6 20	20 18.07	-12 27.8	2.214	3.098	11.0	20.6	6 20	20 16.92	- 2 54.1	1.569	2.437	15.5	21.5
6 30	20 11.27	-11 59.1	2.133	3.084	8.1	20.4	6 30	20 10.76	- 2 55.4	1.512	2.444	12.2	21.3
7 10	20 2.89	-11 37.4	2.077	3.070	5.0	20.1	7 10	20 2.73	- 3 18.1	1.477	2.450	8.9	21.1
7 20	19 53.62	-11 22.4	2.048	3.055	3.1	20.0	7 20	19 53.68	- 4 1.4	1.466	2.457	6.8	21.0
7 30	19 44.27	-11 13.5	2.047	3.040	4.9	20.1	7 30	19 44.69	- 5 2.1	1.480	2.463	7.6	21.1
8 9	19 35.75	-11 9.8	2.074	3.024	8.1	20.3	8 9	19 36.87	- 6 14.4	1.519	2.470	10.4	21.2
8 19	19 28.77	-11 10.0	2.127	3.009	11.3	20.4	8 19	19 31.09	- 7 32.0	1.581	2.476	13.7	21.5
<b>198208</b>	2004 <i>TV</i> <sub>156</sub>	7 19.1 246°25		1°3/18.5 17			<b>159647</b>	2002 <i>CK</i> <sub>188</sub>	7 19.1 46°82		1°1/18.7 17		
6 10	20 22.06	-22 15.3	1.881	2.711	14.9	21.6	6 10	20 22.36	-22 24.1	1.688	2.524	16.0	20.5
6 20	20 18.07	-22 40.7	1.794	2.704	11.8	21.3	6 20	20 18.45	-22 39.4	1.613	2.527	12.6	20.3
6 30	20 11.59	-23 12.0	1.727	2.697	8.1	21.1	6 30	20 11.87	-23 0.1	1.558	2.530	8.6	20.1
7 10	20 3.16	-23 45.6	1.684	2.690	4.0	20.8	7 10	20 3.29	-23 22.5	1.526	2.533	4.2	19.8
7 20	19 53.60	-24 17.3	1.668	2.683	1.4	20.6	7 20	19 53.63	-23 42.7	1.521	2.536	1.3	19.6
7 30	19 44.01	-24 43.4	1.679	2.676	5.2	20.9	7 30	19 44.09	-23 57.4	1.541	2.539	5.4	19.9
8 9	19 35.52	-25 1.4	1.716	2.668	9.3	21.1	8 9	19 35.88	-24 4.6	1.587	2.542	9.7	20.2
8 19	19 29.04	-25 10.8	1.776	2.660	13.0	21.3	8 19	19 29.87	-24 4.3	1.655	2.546	13.5	20.4
<b>459420</b>	2012 <i>QA</i> <sub>50</sub>	7 19.1 238°31		5°1/18.6 16			<b>234597</b>	2001 <i>YB</i> <sub>104</sub>	7 19.1 177°24		0°4/18.9 18		

EPHEMERIDES

7 19.1

7 19.1

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>248100</b>	2004 <i>RC</i> <sub>91</sub>		7 19.1 312°83	5°0/21.3	18		<b>179644</b>	2002 <i>PF</i> <sub>134</sub>		7 19.1 331°91	2°2/19.8	18	
6 10	20 17.37	- 7 12.0	2.144	2.933	14.6	20.2	6 10	20 13.48	-15 48.4	1.113	1.981	20.4	19.7
6 20	20 13.91	- 6 37.9	2.051	2.924	12.2	20.0	6 20	20 12.85	-15 42.0	1.029	1.960	16.5	19.4
6 30	20 8.50	- 6 15.4	1.978	2.916	9.4	19.8	6 30	20 8.94	-15 50.2	0.962	1.939	11.8	19.1
7 10	20 1.58	- 6 5.8	1.928	2.907	6.6	19.6	7 10	20 2.25	-16 12.4	0.914	1.920	6.4	18.7
7 20	19 53.80	- 6 9.2	1.904	2.899	5.1	19.5	7 20	19 53.77	-16 45.8	0.887	1.902	2.2	18.4
7 30	19 45.99	- 6 24.6	1.907	2.891	6.0	19.6	7 30	19 45.04	-17 25.6	0.882	1.886	6.7	18.6
8 9	19 39.00	- 6 49.7	1.935	2.884	8.7	19.7	8 9	19 37.77	-18 6.0	0.898	1.871	12.5	18.9
8 19	19 33.53	- 7 21.5	1.987	2.876	11.6	19.9	8 19	19 33.33	-18 42.6	0.932	1.858	17.8	19.1
<b>505751</b>	2015 <i>BX</i> <sub>98</sub>		7 19.1 208°32	0°1/19.1	17		<b>313908</b>	2004 <i>PO</i> <sub>29</sub>		7 19.1 319°39	2°3/20.4	18	
6 10	20 23.18	-18 31.6	1.786	2.610	15.8	21.8	6 10	20 16.25	-12 3.3	2.045	2.857	14.5	20.6
6 20	20 19.04	-18 59.5	1.700	2.607	12.5	21.6	6 20	20 13.25	-12 20.4	1.951	2.846	11.7	20.4
6 30	20 12.31	-19 36.9	1.634	2.602	8.6	21.3	6 30	20 8.19	-12 50.1	1.877	2.836	8.4	20.2
7 10	20 3.55	-20 20.7	1.592	2.598	4.2	21.1	7 10	20 1.51	-13 31.3	1.828	2.826	4.8	20.0
7 20	19 53.60	-21 6.5	1.577	2.593	0.4	20.8	7 20	19 53.88	-14 21.4	1.805	2.817	2.3	19.8
7 30	19 43.61	-21 49.8	1.589	2.588	5.1	21.1	7 30	19 46.17	-15 16.9	1.809	2.808	4.6	19.9
8 9	19 34.74	-22 27.0	1.626	2.582	9.5	21.3	8 9	19 39.29	-16 13.6	1.839	2.799	8.2	20.1
8 19	19 27.96	-22 56.3	1.688	2.576	13.4	21.6	8 19	19 34.02	-17 8.0	1.893	2.790	11.7	20.3
<b>56394</b>	2000 <i>EB</i> <sub>126</sub>		7 19.1 50°06	1°7/19.9	18	R	<b>167566</b>	2004 <i>BU</i> <sub>45</sub>		7 19.1 141°89	0°0/19.1	17	
6 10	20 20.08	-14 1.8	1.480	2.312	18.1	19.0	6 10	20 21.36	-20 8.6	2.002	2.826	14.3	20.4
6 20	20 16.88	-14 24.7	1.410	2.319	14.4	18.8	6 20	20 17.22	-20 13.2	1.920	2.826	11.3	20.2
6 30	20 10.93	-15 2.5	1.359	2.326	10.1	18.6	6 30	20 10.83	-20 23.4	1.858	2.827	7.8	20.0
7 10	20 2.87	-15 52.5	1.331	2.334	5.4	18.3	7 10	20 2.76	-20 36.8	1.822	2.827	3.8	19.7
7 20	19 53.68	-16 50.4	1.327	2.342	1.7	18.1	7 20	19 53.77	-20 50.8	1.812	2.828	0.4	19.4
7 30	19 44.59	-17 50.5	1.349	2.350	5.4	18.3	7 30	19 44.85	-21 2.8	1.829	2.828	4.5	19.8
8 9	19 36.86	-18 47.5	1.395	2.358	10.0	18.6	8 9	19 37.00	-21 11.1	1.873	2.829	8.4	20.0
8 19	19 31.42	-19 37.9	1.463	2.366	14.1	18.9	8 19	19 30.97	-21 15.0	1.941	2.829	11.9	20.2
<b>505416</b>	2013 <i>RT</i> <sub>16</sub>		7 19.1 271°06	11°2/23.9	18		<b>118485</b>	2000 <i>CP</i> <sub>27</sub>		7 19.1 70°87	3°1/20.7	17	
6 10	20 20.90	+ 8 11.8	2.038	2.744	17.7	21.9	6 10	20 22.77	-10 24.8	1.505	2.321	18.6	19.5
6 20	20 17.12	+ 9 8.5	1.923	2.714	16.1	21.7	6 20	20 18.67	-10 43.8	1.449	2.345	14.9	19.3
6 30	20 11.03	+ 9 45.3	1.825	2.683	14.2	21.5	6 30	20 11.93	-11 19.9	1.412	2.370	10.7	19.1
7 10	20 3.00	+ 9 57.1	1.746	2.651	12.4	21.3	7 10	20 3.29	-12 10.8	1.397	2.394	6.2	18.9
7 20	19 53.65	+ 9 39.9	1.690	2.618	11.3	21.1	7 20	19 53.73	-13 12.3	1.407	2.418	3.2	18.8
7 30	19 43.89	+ 8 52.5	1.657	2.584	11.5	21.1	7 30	19 44.48	-14 18.7	1.444	2.443	5.5	19.0
8 9	19 34.77	+ 7 37.5	1.648	2.550	13.0	21.1	8 9	19 36.68	-15 24.4	1.505	2.467	9.6	19.3
8 19	19 27.27	+ 6 0.5	1.661	2.514	15.3	21.1	8 19	19 31.14	-16 25.3	1.590	2.490	13.4	19.6
<b>287128</b>	2002 <i>RV</i> <sub>185</sub>		7 19.1 297°44	8°0/22.2	18		<b>375700</b>	2009 <i>PY</i> <sub>1</sub>		7 19.1 247°08	3°2/17.9	18	
6 10	20 17.77	- 1 34.0	1.902	2.675	16.8	20.5	6 10	20 25.06	-26 52.6	1.700	2.536	16.0	21.2
6 20	20 14.62	- 0 40.4	1.802	2.656	14.5	20.3	6 20	20 20.85	-27 23.0	1.615	2.528	12.7	21.0
6 30	20 9.23	- 0 2.3	1.721	2.637	11.9	20.1	6 30	20 13.75	-27 56.2	1.551	2.520	8.8	20.8
7 10	20 2.06	+ 0 17.3	1.661	2.618	9.4	19.9	7 10	20 4.34	-28 27.0	1.510	2.512	4.9	20.5
7 20	19 53.78	+ 0 16.2	1.625	2.599	8.0	19.8	7 20	19 53.62	-28 50.1	1.494	2.504	3.3	20.4
7 30	19 45.32	- 0 5.5	1.613	2.581	8.6	19.8	7 30	19 42.88	-29 1.4	1.505	2.496	6.6	20.6
8 9	19 37.68	- 0 45.0	1.626	2.562	10.9	19.9	8 9	19 33.49	-28 59.4	1.541	2.487	10.7	20.8
8 19	19 31.74	- 1 38.0	1.661	2.544	13.8	20.0	8 19	19 26.48	-28 45.4	1.599	2.478	14.5	21.0
<b>325026</b>	2008 <i>CR</i> <sub>36</sub>		7 19.1 41°52	1°6/19.7	17		<b>91660</b>	1999 <i>TY</i> <sub>105</sub>		7 19.1 295°69	7°3/22.4	18	
6 10	20 21.34	-16 29.1	1.221	2.071	20.1	20.5	6 10	20 17.17	- 0 36.6	2.266	3.022	14.9	19.6
6 20	20 18.19	-16 27.9	1.168	2.088	15.9	20.3	6 20	20 13.70	+ 0 14.9	2.168	3.009	12.8	19.4
6 30	20 11.91	-16 39.2	1.133	2.105	11.0	20.1	6 30	20 8.35	+ 0 52.5	2.090	2.996	10.6	19.3
7 10	20 3.34	-17 0.6	1.118	2.123	5.7	19.8	7 10	20 1.56	+ 1 13.7	2.034	2.983	8.5	19.1
7 20	19 53.67	-17 28.1	1.127	2.142	1.6	19.6	7 20	19 53.90	+ 1 17.1	2.003	2.970	7.4	19.0
7 30	19 44.40	-17 57.1	1.160	2.162	5.9	20.0	7 30	19 46.16	+ 1 2.7	1.997	2.957	7.8	19.0
8 9	19 36.89	-18 24.0	1.216	2.182	10.8	20.3	8 9	19 39.15	+ 0 32.8	2.017	2.944	9.6	19.1
8 19	19 32.06	-18 46.3	1.292	2.202	15.1	20.6	8 19	19 33.54	- 0 9.2	2.059	2.932	12.0	19.2
<b>237083</b>	2008 <i>SN</i> <sub>299</sub>		7 19.1 220°13	1°6/19.9	17		<b>188171</b>	2002 <i>GR</i> <sub>179</sub>		7 19.1 93°15	4°2/16.4	18	
6 10	20 20.89	-14 49.8	2.105	2.914	14.2	21.5	6 10	20 20.86	-30 18.0	2.342	3.168	12.4	20.6
6 20	20 16.78	-14 58.9	2.012	2.908	11.4	21.3	6 20	20 16.75	-31 25.4	2.269	3.174	9.8	20.4
6 30	20 10.53	-15 17.6	1.941	2.902	8.0	21.1	6 30	20 10.48	-32 33.6	2.219	3.181	7.1	20.3
7 10	20 2.61	-15 44.4	1.894	2.895	4.3	20.9	7 10	20 2.60	-33 37.2	2.194	3.187	4.8	20.1
7 20	19 53.74	-16 16.8	1.874	2.888	1.6	20.7	7 20	19 53.81	-34 31.3	2.198	3.193	4.4	20.1
7 30	19 44.81	-16 51.8	1.882	2.881	4.4	20.9	7 30	19 45.05	-35 11.9	2.228	3.200	6.3	20.3
8 9	19 36.79	-17 26.6	1.916	2.873	8.2	21.1	8 9	19 37.26	-35 37.5	2.285	3.206	9.0	20.4
8 19	19 30.44	-17 58.7	1.976	2.865	11.7	21.3	8 19	19 31.19	-35 48.6	2.366	3.212	11.5	20.6
<b>47224</b>	1999 <i>VG</i> <sub>11</sub>		7 19.1 57°86	3°9/17.4	18		<b>87550</b>	2000 <i>QU</i> <sub>224</sub>		7 19.1 330°92	5°9/15.9	18	
6 10	20 23.24	-25 52.0	1.422	2.272	17.8	17.8	6 10	20 20.46	-32 41.4	1.867	2.707	14.6	18.4
6 20	20 19.77	-26 54.0	1.357	2.279	14.0	17.6	6 20	20 17.20	-33 51.4	1.787	2.699	11.7	18.2
6 30	20 13.14	-28 1.7	1.312	2.286	9.7	17.3	6 30	20 11.24	-35 1.7	1.729	2.691	8.8	18.0
7 10	20 4.03	-29 8.0	1.290	2.293	5.5	17.1	7 10	20 3.13	-36 5.4	1.695	2.684	6.4	17.9
7 20	19 53.59	-30 4.9	1.292	2.300	4.2	17.0	7 20	19 53.75	-36 55.7	1.686	2.677	6.1	17.8
7 30	19 43.31	-30 46.5	1.319	2.308	7.5	17.3	7 30	19 44.34	-37 27.7	1.703	2.670	8.3	18.0
8 9	19 34.66	-31 10.1	1.370	2.316	11.8	17.5	8 9	19 36.14	-37 39.7	1.744	2.664	11.3	18.1
8 19	19 28.67	-31 16.6	1.441	2.323	15.6	17.8	8 19	19 30.15	-37 33.1	1.806	2.659	14.3	18.3
<b>32645</b>													

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>17978</b>	1999 JS <sub>54</sub>		7 19.1 119°47'	0°2/19.2	18		<b>214127</b>	2004 XE <sub>96</sub>		7 19.1 192°82'	0°8/18.8	17	
6 10	20 27.69	-19 50.3	1.628	2.452	17.1	18.6	6 10	20 26.52	-21 25.4	1.828	2.649	15.6	22.0
6 20	20 22.54	-19 52.9	1.560	2.467	13.4	18.4	6 20	20 21.63	-21 44.2	1.742	2.648	12.3	21.8
6 30	20 14.61	-20 2.3	1.513	2.481	9.2	18.2	6 30	20 14.09	-22 9.2	1.678	2.646	8.5	21.5
7 10	20 4.63	-20 15.4	1.489	2.494	4.5	17.9	7 10	20 4.48	-22 36.7	1.638	2.643	4.1	21.3
7 20	19 53.65	-20 28.9	1.491	2.507	0.4	17.7	7 20	19 53.70	-23 2.8	1.624	2.640	1.0	21.0
7 30	19 42.94	-20 39.9	1.520	2.520	5.2	18.0	7 30	19 42.93	-23 23.7	1.638	2.635	5.2	21.3
8 9	19 33.73	-20 46.5	1.575	2.532	9.7	18.3	8 9	19 33.38	-23 37.5	1.678	2.631	9.5	21.6
8 19	19 26.90	-20 48.3	1.654	2.543	13.5	18.6	8 19	19 26.00	-23 43.5	1.742	2.625	13.3	21.8
<b>350457</b>	1997 UZ <sub>15</sub>		7 19.1 257°04'	1°0/18.7	18		<b>448661</b>	2010 VL <sub>163</sub>		7 19.1 322°29'	7°4/21.3	16	
6 10	20 20.91	-22 10.3	2.096	2.921	13.7	21.9	6 10	20 18.40	-4 17.1	1.982	2.762	15.9	20.7
6 20	20 16.91	-22 29.3	2.007	2.915	10.8	21.7	6 20	20 14.98	-3 3.2	1.885	2.747	13.6	20.5
6 30	20 10.68	-22 53.2	1.939	2.908	7.4	21.5	6 30	20 9.41	-2 0.6	1.809	2.731	11.0	20.3
7 10	20 2.74	-23 19.0	1.896	2.901	3.6	21.2	7 10	20 2.17	-1 12.5	1.755	2.717	8.6	20.1
7 20	19 53.83	-23 43.3	1.880	2.895	1.1	21.0	7 20	19 53.92	-0 41.4	1.725	2.702	7.4	20.0
7 30	19 44.90	-24 3.2	1.891	2.888	4.7	21.3	7 30	19 45.58	-0 28.2	1.721	2.688	8.2	20.0
8 9	19 36.96	-24 16.5	1.929	2.881	8.5	21.5	8 9	19 38.09	-0 31.5	1.741	2.675	10.5	20.1
8 19	19 30.78	-24 22.8	1.991	2.874	11.9	21.7	8 19	19 32.24	-0 48.6	1.784	2.662	13.2	20.3
<b>142474</b>	2002 TF <sub>17</sub>		7 19.1 341°73'	0°9/19.4	17		<b>347322</b>	2011 SB <sub>27</sub>		7 19.1 248°13'	11°4/13.5	18	
6 10	20 17.69	-18 39.5	1.196	2.058	19.7	19.5	6 10	20 40.70	-54 52.4	2.313	3.069	14.6	20.6
6 20	20 15.87	-18 32.0	1.120	2.048	15.7	19.3	6 20	20 33.66	-55 57.6	2.241	3.059	13.2	20.5
6 30	20 10.78	-18 34.5	1.062	2.039	11.0	19.0	6 30	20 22.73	-56 48.1	2.188	3.048	12.1	20.3
7 10	20 3.06	-18 45.1	1.024	2.031	5.6	18.6	7 10	20 8.78	-57 15.1	2.157	3.037	11.4	20.3
7 20	19 53.79	-19 0.5	1.008	2.024	1.0	18.3	7 20	19 53.30	-57 11.8	2.149	3.026	11.5	20.3
7 30	19 44.51	-19 16.7	1.015	2.018	6.3	18.6	7 30	19 38.23	-56 35.3	2.163	3.015	12.4	20.3
8 9	19 36.81	-19 30.5	1.044	2.013	11.8	18.9	8 9	19 25.41	-55 28.4	2.199	3.003	13.8	20.4
8 19	19 31.88	-19 39.9	1.093	2.009	16.7	19.2	8 19	19 16.02	-53 57.6	2.255	2.992	15.4	20.5
<b>477872</b>	2011 HC <sub>42</sub>		7 19.1 73°31'	5°1/16.3	17		<b>250840</b>	Motörhead		7 19.1 240°23'	1°6/20.0	18	
6 10	20 22.95	-29 7.9	1.734	2.574	15.5	21.0	6 10	20 18.83	-14 56.1	2.561	3.363	12.2	21.0
6 20	20 19.18	-30 31.1	1.665	2.579	12.3	20.8	6 20	20 14.78	-14 53.3	2.463	3.354	9.8	20.8
6 30	20 12.59	-31 57.6	1.618	2.585	8.8	20.6	6 30	20 8.98	-14 57.6	2.387	3.345	6.9	20.6
7 10	20 3.78	-33 19.6	1.595	2.590	5.8	20.4	7 10	20 1.85	-15 8.1	2.337	3.336	3.8	20.4
7 20	19 53.73	-34 29.6	1.598	2.596	5.4	20.4	7 20	19 53.96	-15 23.2	2.314	3.327	1.6	20.2
7 30	19 43.71	-35 21.5	1.626	2.601	7.9	20.6	7 30	19 46.05	-15 41.1	2.319	3.317	3.8	20.4
8 9	19 35.03	-35 53.1	1.680	2.607	11.3	20.8	8 9	19 38.84	-16 0.1	2.353	3.308	7.0	20.6
8 19	19 28.69	-36 5.4	1.755	2.612	14.4	21.0	8 19	19 32.98	-16 18.5	2.411	3.298	9.9	20.7
<b>359570</b>	2010 TU <sub>126</sub>		7 19.1 355°45'	0°7/19.5	18		<b>476079</b>	2007 TU <sub>30</sub>		7 19.1 259°72'	2°7/17.9	18	
6 10	20 18.59	-18 6.4	2.078	2.900	13.9	20.8	6 10	20 21.88	-26 5.6	2.019	2.849	14.0	21.8
6 20	20 14.98	-18 9.1	1.994	2.899	11.0	20.6	6 20	20 17.86	-26 40.4	1.932	2.843	11.0	21.6
6 30	20 9.29	-18 18.6	1.931	2.898	7.6	20.4	6 30	20 11.45	-27 18.4	1.868	2.837	7.7	21.4
7 10	20 2.03	-18 33.1	1.893	2.897	3.8	20.2	7 10	20 3.17	-27 55.1	1.827	2.830	4.2	21.1
7 20	19 53.92	-18 50.3	1.881	2.896	0.7	19.9	7 20	19 53.84	-28 26.1	1.814	2.824	2.8	21.0
7 30	19 45.85	-19 7.8	1.896	2.896	4.3	20.2	7 30	19 44.49	-28 47.8	1.827	2.817	5.7	21.2
8 9	19 38.74	-19 23.4	1.938	2.896	8.0	20.4	8 9	19 36.21	-28 58.4	1.867	2.811	9.3	21.4
8 19	19 33.30	-19 35.9	2.004	2.896	11.4	20.6	8 19	19 29.85	-28 58.1	1.929	2.804	12.6	21.6
<b>444086</b>	2004 SV <sub>46</sub>		7 19.1 310°58'	5°5/16.8	18		<b>199658</b>	2006 GD <sub>43</sub>		7 19.1 212°73'	0°7/18.8	18	
6 10	20 23.61	-35 26.7	2.133	2.959	13.5	20.6	6 10	20 23.74	-21 42.0	2.225	3.040	13.4	21.8
6 20	20 19.29	-36 0.2	2.046	2.948	11.0	20.4	6 20	20 19.00	-21 56.3	2.132	3.034	10.6	21.6
6 30	20 12.44	-36 29.8	1.982	2.937	8.3	20.2	6 30	20 12.06	-22 15.3	2.060	3.027	7.2	21.4
7 10	20 3.64	-36 50.0	1.941	2.926	6.1	20.0	7 10	20 3.43	-22 36.0	2.014	3.019	3.5	21.2
7 20	19 53.77	-36 56.4	1.926	2.915	5.6	20.0	7 20	19 53.84	-22 55.5	1.995	3.011	0.8	20.9
7 30	19 43.96	-36 46.0	1.937	2.905	7.4	20.1	7 30	19 44.23	-23 11.0	2.005	3.002	4.5	21.2
8 9	19 35.35	-36 19.1	1.974	2.895	10.2	20.2	8 9	19 35.55	-23 20.9	2.043	2.993	8.2	21.4
8 19	19 28.82	-35 37.9	2.034	2.885	13.0	20.4	8 19	19 28.61	-23 24.7	2.105	2.983	11.5	21.6
<b>189326</b>	2007 BN <sub>1</sub>		7 19.1 89°54'	0°1/19.2	16		<b>96319</b>	1997 CL <sub>5</sub>		7 19.1 58°15'	0°4/19.3	17	
6 10	20 19.09	-16 37.7	2.402	3.211	12.7	20.9	6 10	20 23.74	-17 37.7	1.569	2.399	17.3	19.3
6 20	20 15.01	-17 25.3	2.328	3.226	9.9	20.7	6 20	20 19.31	-17 59.3	1.520	2.429	13.6	19.1
6 30	20 9.11	-18 21.5	2.277	3.242	6.8	20.5	6 30	20 12.30	-18 30.4	1.491	2.459	9.2	18.9
7 10	20 1.88	-19 23.2	2.252	3.257	3.3	20.4	7 10	20 3.47	-19 7.5	1.485	2.490	4.5	18.7
7 20	19 53.95	-20 26.7	2.256	3.272	0.3	20.1	7 20	19 53.85	-19 46.2	1.504	2.521	0.5	18.5
7 30	19 46.08	-21 28.0	2.288	3.287	3.8	20.4	7 30	19 44.64	-20 22.5	1.551	2.551	5.0	18.9
8 9	19 39.05	-22 23.9	2.349	3.302	7.1	20.7	8 9	19 36.94	-20 53.2	1.622	2.581	9.2	19.2
8 19	19 33.48	-23 12.4	2.435	3.316	10.0	20.9	8 19	19 31.48	-21 17.1	1.717	2.612	12.8	19.5
<b>324942</b>	2007 XW <sub>53</sub>		7 19.1 138°01'	0°1/19.1	17		<b>355158</b>	2006 VV <sub>77</sub>		7 19.1 264°58'	0°8/19.6	18	
6 10	20 25.54	-19 50.4	1.790	2.612	15.8	21.7	6 10	20 19.10	-17 3.1	2.193	3.009	13.5	21.9
6 20	20 20.72	-20 3.2	1.716	2.621	12.5	21.5	6 20	20 15.35	-17 14.7	2.101	3.002	10.7	21.7
6 30	20 13.33	-20 23.0	1.663	2.630	8.5	21.3	6 30	20 9.56	-17 34.1	2.031	2.996	7.5	21.5
7 10	20 4.03	-20 46.5	1.634	2.639	4.2	21.0	7 10	20 2.21	-17 59.5	1.986	2.989	3.8	21.2
7 20	19 53.74	-21 10.3	1.631	2.647	0.4	20.8	7 20	19 53.97	-18 28.4	1.967	2.983	0.8	21.0
7 30	19 43.60	-21 30.9	1.656	2.655	5.0	21.1	7 30	19 45.70	-18 57.9	1.977	2.976	4.2	21.2
8 9	19 34.75	-21 46.3	1.707	2.662	9.2	21.4	8 9	19 38.29	-19 25.4	2.013	2.970	7.8	21.4
8 19	19 28.04	-21 55.7	1.781	2.668	12.8	21.6	8 19	19 32.47	-19 49.3	2.074	2.963	11.2	21.6
<b>494750</b>	2005 WZ <sub>180</sub>		7 19.1 249°99'	2°5/17.2	17		<b>347461</b>	2012 TW <sub>302</sub>		7 19.1 268°76'	3°0/20.6	18	R
6 10	20 20.26												



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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>87267</b>	2000 <i>OM</i> <sub>59</sub>		7 19.1 294°16	1°9/20.0	18		<b>439432</b>	2013 <i>GF</i> <sub>14</sub>		7 19.1 304°15	2°9/17.8	18	
6 10	20 19.25	-14 2.1	1.662	2.488	16.7	19.9	6 10	20 20.96	-28 35.1	2.325	3.151	12.5	20.4
6 20	20 16.19	-14 17.5	1.572	2.477	13.4	19.6	6 20	20 16.80	-28 58.4	2.239	3.146	9.9	20.2
6 30	20 10.55	-14 46.5	1.502	2.467	9.5	19.4	6 30	20 10.54	-29 22.0	2.175	3.141	6.9	20.0
7 10	20 2.85	-15 27.5	1.454	2.456	5.2	19.1	7 10	20 2.68	-29 42.2	2.136	3.136	4.0	19.8
7 20	19 53.90	-16 17.0	1.432	2.446	1.9	18.8	7 20	19 53.97	-29 55.4	2.124	3.131	3.0	19.7
7 30	19 44.83	-17 10.7	1.435	2.436	5.2	19.1	7 30	19 45.30	-29 59.4	2.140	3.126	5.3	19.9
8 9	19 36.83	-18 3.8	1.464	2.426	9.7	19.3	8 9	19 37.60	-29 53.2	2.182	3.122	8.4	20.0
8 19	19 30.88	-18 52.5	1.515	2.416	13.8	19.5	8 19	19 31.59	-29 37.6	2.248	3.117	11.3	20.2
<b>509578</b>	2008 <i>CR</i> <sub>191</sub>		7 19.1 163°79	0°8/19.6	18		<b>250691</b>	2005 <i>QZ</i> <sub>114</sub>		7 19.1 310°53	0°9/19.6	18	
6 10	20 20.10	-17 18.8	2.525	3.331	12.2	22.8	6 10	20 18.34	-17 17.3	2.018	2.841	14.3	20.9
6 20	20 15.74	-17 26.1	2.439	3.335	9.7	22.6	6 20	20 14.98	-17 24.3	1.926	2.831	11.4	20.7
6 30	20 9.60	-17 39.5	2.375	3.338	6.7	22.4	6 30	20 9.44	-17 39.5	1.854	2.821	7.9	20.5
7 10	20 2.14	-17 57.4	2.338	3.341	3.4	22.2	7 10	20 2.21	-18 0.9	1.807	2.811	4.1	20.2
7 20	19 53.99	-18 17.8	2.328	3.343	0.8	22.0	7 20	19 54.01	-18 26.1	1.785	2.801	0.9	19.9
7 30	19 45.87	-18 38.5	2.346	3.345	3.7	22.2	7 30	19 45.75	-18 52.3	1.791	2.791	4.4	20.2
8 9	19 38.56	-18 57.7	2.393	3.347	6.9	22.4	8 9	19 38.41	-19 16.8	1.823	2.782	8.4	20.4
8 19	19 32.66	-19 14.1	2.465	3.349	9.8	22.6	8 19	19 32.77	-19 37.8	1.879	2.773	11.9	20.6
<b>442544</b>	2011 <i>YE</i> <sub>33</sub>		7 19.1 267°38	0°8/19.7	18		<b>92195</b>	1999 <i>XP</i> <sub>230</sub>		7 19.1 204°66	2°1/17.9	18	
6 10	20 18.20	-14 47.7	2.365	3.172	12.9	21.4	6 10	20 20.64	-26 37.0	2.779	3.595	11.0	20.4
6 20	20 14.58	-15 29.1	2.263	3.159	10.3	21.2	6 20	20 16.16	-27 4.0	2.689	3.591	8.6	20.2
6 30	20 9.04	-16 21.4	2.184	3.146	7.2	21.0	6 30	20 9.91	-27 32.3	2.622	3.587	6.0	20.0
7 10	20 1.98	-17 22.5	2.130	3.132	3.7	20.8	7 10	20 2.32	-27 58.9	2.581	3.583	3.3	19.9
7 20	19 53.99	-18 28.9	2.103	3.119	0.8	20.5	7 20	19 54.01	-28 20.9	2.569	3.578	2.2	19.8
7 30	19 45.86	-19 36.6	2.106	3.105	4.0	20.7	7 30	19 45.71	-28 36.0	2.585	3.573	4.4	19.9
8 9	19 38.43	-20 41.4	2.136	3.091	7.6	20.9	8 9	19 38.17	-28 43.0	2.629	3.568	7.1	20.1
8 19	19 32.42	-21 40.4	2.192	3.078	10.8	21.1	8 19	19 32.01	-28 42.0	2.699	3.563	9.7	20.3
<b>111535</b>	2001 <i>YJ</i> <sub>117</sub>		7 19.1 172°36	0°1/19.2	18		<b>339205</b>	2004 <i>TK</i> <sub>258</sub>		7 19.2 4°05	1°9/18.4	16	
6 10	20 22.19	-20 46.7	2.442	3.253	12.4	19.9	6 10	20 21.76	-23 46.7	1.591	2.434	16.5	21.1
6 20	20 17.42	-20 37.4	2.354	3.254	9.8	19.8	6 20	20 18.27	-24 9.2	1.516	2.434	13.0	20.9
6 30	20 10.76	-20 31.3	2.290	3.255	6.7	19.6	6 30	20 11.99	-24 36.7	1.461	2.434	8.9	20.7
7 10	20 2.71	-20 26.8	2.251	3.256	3.3	19.4	7 10	20 3.54	-25 4.9	1.428	2.434	4.5	20.4
7 20	19 53.94	-20 22.3	2.241	3.257	0.3	19.1	7 20	19 53.90	-25 29.2	1.421	2.435	2.1	20.2
7 30	19 45.25	-20 16.4	2.259	3.257	3.9	19.4	7 30	19 44.37	-25 45.7	1.439	2.436	5.9	20.5
8 9	19 37.46	-20 8.3	2.304	3.257	7.2	19.6	8 9	19 36.21	-25 52.4	1.482	2.437	10.3	20.7
8 19	19 31.20	-19 57.8	2.375	3.258	10.2	19.8	8 19	19 30.39	-25 49.4	1.547	2.439	14.2	21.0
<b>97862</b>	2000 <i>QT</i> <sub>27</sub>		7 19.1 293°10	1°0/19.5	18		<b>347962</b>	2003 <i>RC</i> <sub>5</sub>		7 19.2 240°00	7°4/18.0	17	
6 10	20 20.53	-16 44.5	1.384	2.227	18.5	19.4	6 10	20 37.94	-36 45.2	1.306	2.141	19.9	20.7
6 20	20 17.99	-16 57.0	1.287	2.204	15.0	19.1	6 20	20 32.30	-37 1.9	1.228	2.134	16.4	20.5
6 30	20 12.32	-17 23.1	1.209	2.180	10.6	18.8	6 30	20 22.28	-37 10.1	1.169	2.127	12.4	20.2
7 10	20 3.95	-18 0.7	1.152	2.157	5.5	18.4	7 10	20 8.77	-37 0.2	1.130	2.119	8.7	20.0
7 20	19 53.79	-18 45.9	1.118	2.134	1.0	18.0	7 20	19 53.41	-36 24.2	1.115	2.111	7.5	19.9
7 30	19 43.24	-19 33.3	1.109	2.110	6.2	18.3	7 30	19 38.42	-35 19.7	1.125	2.103	10.1	20.0
8 9	19 33.88	-20 17.7	1.123	2.087	11.7	18.6	8 9	19 25.91	-33 51.4	1.157	2.094	14.3	20.2
8 19	19 27.06	-20 55.5	1.158	2.064	16.7	18.8	8 19	19 17.24	-32 8.1	1.211	2.085	18.4	20.5
<b>513695</b>	2012 <i>BG</i> <sub>135</sub>		7 19.1 148°64	0°3/18.9	18		<b>52335</b>	1992 <i>HO</i>		7 19.2 218°99	0°6/19.4	18	
6 10	20 18.80	-19 53.1	2.655	3.467	11.5	21.9	6 10	20 22.85	-17 26.7	1.943	2.760	15.0	20.1
6 20	20 14.68	-20 18.1	2.571	3.471	9.0	21.8	6 20	20 18.63	-17 43.9	1.851	2.753	11.9	19.9
6 30	20 8.86	-20 48.2	2.510	3.476	6.2	21.6	6 30	20 12.01	-18 10.0	1.781	2.746	8.3	19.6
7 10	20 1.79	-21 21.2	2.475	3.480	3.0	21.4	7 10	20 3.51	-18 42.7	1.735	2.739	4.2	19.4
7 20	19 54.03	-21 54.4	2.468	3.484	0.5	21.2	7 20	19 53.91	-19 18.7	1.715	2.731	0.6	19.1
7 30	19 46.31	-22 25.2	2.490	3.487	3.7	21.4	7 30	19 44.25	-19 54.3	1.723	2.723	4.7	19.4
8 9	19 39.35	-22 51.6	2.540	3.491	6.7	21.6	8 9	19 35.59	-20 26.5	1.758	2.714	8.8	19.6
8 19	19 33.72	-23 12.6	2.615	3.494	9.5	21.8	8 19	19 28.81	-20 53.3	1.816	2.705	12.6	19.8
<b>174827</b>	2003 <i>YV</i> <sub>46</sub>		7 19.1 64°82	3°3/17.7	18		<b>35047</b>	1981 <i>EF</i> <sub>44</sub>		7 19.2 17°36	1°5/18.6	18	
6 10	20 23.37	-24 29.9	1.428	2.276	17.8	19.8	6 10	20 20.04	-24 6.3	1.812	2.651	15.0	18.9
6 20	20 19.86	-25 28.8	1.363	2.284	14.0	19.6	6 20	20 16.48	-24 17.1	1.739	2.655	11.8	18.7
6 30	20 13.23	-26 34.7	1.318	2.292	9.6	19.3	6 30	20 10.50	-24 31.1	1.687	2.660	8.1	18.5
7 10	20 4.17	-27 40.7	1.295	2.300	5.2	19.1	7 10	20 2.71	-24 45.0	1.659	2.665	4.0	18.3
7 20	19 53.80	-28 39.2	1.297	2.308	3.5	19.0	7 20	19 54.00	-24 55.4	1.657	2.671	1.7	18.1
7 30	19 43.59	-29 24.1	1.324	2.316	7.1	19.3	7 30	19 45.45	-24 59.7	1.680	2.677	5.2	18.4
8 9	19 34.97	-29 52.5	1.375	2.324	11.5	19.5	8 9	19 38.12	-24 56.8	1.729	2.684	9.1	18.6
8 19	19 29.00	-30 4.7	1.448	2.333	15.4	19.8	8 19	19 32.80	-24 46.8	1.802	2.692	12.6	18.9
<b>44425</b>	1998 <i>TY</i> <sub>1</sub>		7 19.1 295°58	2°7/17.7	18		<b>423970</b>	2006 <i>UK</i> <sub>246</sub>		7 19.2 177°35	1°0/19.6	17	
6 10	20 20.68	-24 46.5	1.847	2.683	14.8	19.0	6 10	20 24.31	-16 50.4	1.940	2.753	15.1	22.5
6 20	20 17.20	-25 34.8	1.761	2.676	11.7	18.8	6 20	20 19.64	-16 57.1	1.856	2.755	12.0	22.3
6 30	20 11.17	-26 28.7	1.697	2.668	8.1	18.5	6 30	20 12.60	-17 12.3	1.793	2.756	8.4	22.0
7 10	20 3.13	-27 23.3	1.657	2.661	4.4	18.3	7 10	20 3.75	-17 33.9	1.754	2.757	4.3	21.8
7 20	19 53.90	-28 13.1	1.643	2.653	2.9	18.2	7 20	19 53.90	-17 59.2	1.742	2.757	1.1	21.6
7 30	19 44.60	-28 53.3	1.655	2.646	6.1	18.4	7 30	19 44.09	-18 25.0	1.758	2.757	4.6	21.8
8 9	19 36.41	-29 20.9	1.693	2.639	9.9	18.6	8 9	19 35.36	-18 48.8	1.800	2.756	8.7	22.1
8 19	19 30.26	-29 35.6	1.754	2.632	13.4	18.8	8 19	19 28.55	-19 9.0	1.867	2.755	12.3	22.3
<b>193439</b>	2000 <i>WS</i> <sub>124</sub>		7 19.1 154°00	9°5/19.6	18		<b>287798</b>	2003 <i>SS</i>					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>386257</b>	2008 <i>DW</i> <sub>29</sub>		7 19.2 132°80		0°5/18.9 17		<b>143489</b>	2003 <i>DS</i>		7 19.2 28°76		0°7/18.9 18	
6 10	20 24.75	-19 51.0	1.754	2.579	16.0	22.2	6 10	20 22.70	-23 14.0	1.960	2.788	14.5	19.6
6 20	20 20.22	-20 16.1	1.681	2.588	12.6	22.0	6 20	20 18.34	-23 5.8	1.882	2.791	11.4	19.4
6 30	20 13.09	-20 49.1	1.628	2.597	8.6	21.8	6 30	20 11.66	-23 0.0	1.825	2.794	7.8	19.2
7 10	20 4.00	-21 26.3	1.600	2.606	4.2	21.6	7 10	20 3.26	-22 54.3	1.792	2.798	3.8	19.0
7 20	19 53.88	-22 3.3	1.598	2.614	0.7	21.3	7 20	19 53.99	-22 46.4	1.786	2.801	0.8	18.7
7 30	19 43.89	-22 36.2	1.623	2.622	5.1	21.7	7 30	19 44.89	-22 34.6	1.807	2.805	4.7	19.0
8 9	19 35.19	-23 2.1	1.674	2.629	9.3	21.9	8 9	19 36.95	-22 18.6	1.854	2.810	8.5	19.3
8 19	19 28.64	-23 20.1	1.749	2.636	13.0	22.2	8 19	19 30.94	-21 58.6	1.926	2.814	12.0	19.5
<b>457697</b>	2009 <i>EZ</i> <sub>16</sub>		7 19.2 106°91		1°3/19.7 17		<b>187242</b>	2005 <i>SR</i> <sub>180</sub>		7 19.2 354°24		1°9/19.8 17	
6 10	20 25.92	-16 36.6	1.538	2.363	17.9	21.7	6 10	20 15.62	-16 7.7	1.166	2.029	20.1	20.2
6 20	20 21.31	-16 40.4	1.472	2.378	14.2	21.5	6 20	20 14.24	-16 3.7	1.096	2.023	16.1	19.9
6 30	20 13.90	-16 54.7	1.426	2.392	9.8	21.3	6 30	20 9.68	-16 13.4	1.042	2.018	11.3	19.6
7 10	20 4.40	-17 16.8	1.403	2.406	5.1	21.1	7 10	20 2.59	-16 35.3	1.009	2.014	6.0	19.3
7 20	19 53.86	-17 43.4	1.405	2.420	1.3	20.8	7 20	19 54.04	-17 6.0	0.997	2.012	1.9	19.0
7 30	19 43.56	-18 10.6	1.433	2.433	5.3	21.1	7 30	19 45.54	-17 40.7	1.008	2.011	6.2	19.3
8 9	19 34.75	-18 35.5	1.487	2.446	9.8	21.4	8 9	19 38.59	-18 14.6	1.040	2.011	11.6	19.6
8 19	19 28.33	-18 56.1	1.563	2.459	13.8	21.7	8 19	19 34.33	-18 44.2	1.093	2.013	16.3	19.9
<b>343842</b>	2011 <i>HV</i> <sub>33</sub>		7 19.2 327°94		1°3/19.8 18		<b>20352</b>	Pinakibose		7 19.2 110°90		3°2/18.2 17	
6 10	20 17.03	-15 3.6	1.507	2.346	17.5	20.0	6 10	20 27.24	-27 8.4	1.515	2.355	17.4	19.2
6 20	20 14.74	-15 27.0	1.421	2.335	14.0	19.7	6 20	20 22.74	-27 29.8	1.445	2.360	13.7	19.0
6 30	20 9.74	-16 5.1	1.353	2.323	9.9	19.4	6 30	20 15.11	-27 52.9	1.394	2.365	9.5	18.7
7 10	20 2.55	-16 55.7	1.308	2.313	5.2	19.1	7 10	20 5.09	-28 12.2	1.366	2.370	5.2	18.5
7 20	19 54.01	-17 54.5	1.287	2.303	1.3	18.8	7 20	19 53.83	-28 22.7	1.363	2.374	3.3	18.4
7 30	19 45.35	-18 56.0	1.291	2.293	5.5	19.1	7 30	19 42.79	-28 20.8	1.386	2.379	6.7	18.6
8 9	19 37.85	-19 54.8	1.319	2.284	10.3	19.4	8 9	19 33.42	-28 6.2	1.433	2.383	11.0	18.9
8 19	19 32.56	-20 46.6	1.370	2.276	14.6	19.6	8 19	19 26.71	-27 40.9	1.503	2.387	14.9	19.1
<b>328986</b>	2010 <i>WQ</i> <sub>29</sub>		7 19.2 291°45		0°1/19.2 18		<b>414388</b>	2008 <i>WF</i> <sub>130</sub>		7 19.2 298°38		0°5/19.0 17	
6 10	20 20.43	-17 45.2	1.454	2.296	17.9	20.8	6 10	20 22.24	-20 42.7	1.239	2.094	19.6	21.8
6 20	20 17.71	-18 12.6	1.361	2.278	14.3	20.6	6 20	20 19.64	-20 51.0	1.155	2.080	15.6	21.5
6 30	20 11.99	-18 53.3	1.288	2.260	10.0	20.3	6 30	20 13.57	-21 8.6	1.090	2.066	10.9	21.1
7 10	20 3.76	-19 44.2	1.236	2.243	5.0	19.9	7 10	20 4.61	-21 32.0	1.044	2.052	5.4	20.8
7 20	19 53.90	-20 40.4	1.209	2.225	0.5	19.5	7 20	19 53.85	-21 56.4	1.022	2.038	0.8	20.4
7 30	19 43.76	-21 35.7	1.207	2.208	5.9	19.9	7 30	19 42.91	-22 16.7	1.023	2.025	6.7	20.8
8 9	19 34.83	-22 25.0	1.228	2.190	11.2	20.1	8 9	19 33.53	-22 29.6	1.047	2.012	12.3	21.1
8 19	19 28.33	-23 4.9	1.271	2.173	15.9	20.4	8 19	19 27.07	-22 34.0	1.090	1.999	17.4	21.3
<b>329081</b>	2011 <i>BN</i> <sub>34</sub>		7 19.2 145°69		2°6/21.2 18		<b>179786</b>	2002 <i>TX</i> <sub>2</sub>		7 19.2 325°63		1°0/19.5 18	
6 10	20 16.01	- 8 58.2	2.835	3.617	11.6	20.8	6 10	20 16.84	-18 3.3	1.220	2.081	19.5	19.9
6 20	20 12.37	- 9 19.9	2.745	3.619	9.4	20.6	6 20	20 15.34	-18 1.4	1.134	2.061	15.7	19.6
6 30	20 7.25	- 9 52.3	2.676	3.621	6.9	20.4	6 30	20 10.61	-18 10.9	1.066	2.042	11.0	19.3
7 10	20 1.02	-10 34.6	2.634	3.623	4.3	20.3	7 10	20 3.16	-18 30.0	1.017	2.024	5.6	18.9
7 20	19 54.18	-11 24.8	2.618	3.625	2.6	20.2	7 20	19 53.98	-18 55.3	0.991	2.007	1.0	18.5
7 30	19 47.33	-12 20.4	2.632	3.627	3.8	20.3	7 30	19 44.59	-19 22.3	0.988	1.991	6.4	18.9
8 9	19 41.09	-13 18.2	2.674	3.629	6.3	20.4	8 9	19 36.61	-19 46.7	1.006	1.976	12.0	19.1
8 19	19 35.99	-14 15.5	2.743	3.630	8.8	20.6	8 19	19 31.36	-20 5.8	1.044	1.962	17.1	19.4
<b>146865</b>	2002 <i>AB</i> <sub>173</sub>		7 19.2 172°39		0°2/19.0 18		<b>143483</b>	2003 <i>CF</i> <sub>13</sub>		7 19.2 129°05		2°4/17.7 18	
6 10	20 20.21	-20 21.2	2.573	3.385	11.9	21.0	6 10	20 21.18	-25 18.3	2.370	3.191	12.5	20.1
6 20	20 15.85	-20 36.1	2.486	3.386	9.3	20.8	6 20	20 16.87	-26 7.1	2.293	3.199	9.8	20.0
6 30	20 9.71	-20 55.7	2.422	3.388	6.4	20.7	6 30	20 10.54	-26 59.2	2.239	3.206	6.7	19.8
7 10	20 2.25	-21 17.7	2.384	3.389	3.1	20.4	7 10	20 2.71	-27 50.5	2.211	3.214	3.7	19.6
7 20	19 54.07	-21 39.7	2.374	3.390	0.4	20.2	7 20	19 54.05	-28 36.7	2.211	3.221	2.5	19.5
7 30	19 45.93	-21 59.4	2.393	3.391	3.7	20.5	7 30	19 45.45	-29 14.4	2.240	3.228	5.0	19.7
8 9	19 38.58	-22 15.3	2.440	3.392	7.0	20.7	8 9	19 37.76	-29 41.6	2.295	3.234	8.0	19.9
8 19	19 32.65	-22 26.3	2.512	3.392	9.8	20.9	8 19	19 31.69	-29 58.2	2.375	3.241	10.8	20.1
<b>20005</b>	1991 <i>GL</i> <sub>7</sub>		7 19.2 239°20		2°1/19.9 18		<b>152709</b>	1998 <i>ST</i> <sub>86</sub>		7 19.2 305°63		1°4/18.5 18	
6 10	20 23.42	-15 45.9	1.561	2.388	17.6	18.8	6 10	20 19.70	-24 0.0	2.171	2.999	13.2	19.7
6 20	20 19.56	-15 32.9	1.479	2.384	14.1	18.5	6 20	20 16.01	-24 13.0	2.074	2.984	10.4	19.5
6 30	20 12.89	-15 30.0	1.415	2.381	10.0	18.3	6 30	20 10.15	-24 29.1	1.999	2.969	7.2	19.3
7 10	20 4.03	-15 35.9	1.375	2.377	5.4	18.0	7 10	20 2.60	-24 45.5	1.949	2.954	3.6	19.0
7 20	19 53.90	-15 48.5	1.359	2.373	2.1	17.8	7 20	19 54.07	-24 59.1	1.925	2.939	1.5	18.9
7 30	19 43.79	-16 5.1	1.368	2.368	5.6	18.0	7 30	19 45.48	-25 7.3	1.929	2.925	4.7	19.1
8 9	19 34.97	-16 22.8	1.403	2.364	10.2	18.3	8 9	19 37.81	-25 8.6	1.959	2.911	8.4	19.3
8 19	19 28.45	-16 39.4	1.460	2.360	14.3	18.5	8 19	19 31.83	-25 3.0	2.013	2.897	11.7	19.4
<b>68800</b>	2002 <i>GY</i> <sub>18</sub>		7 19.2 346°27		5°6/20.7 18		<b>131762</b>	Csonka		7 19.2 217°42		1°7/20.1 18	
6 10	20 18.68	-28 42.2	1.099	1.975	20.0	18.1	6 10	20 22.28	-14 13.4	2.241	3.041	13.7	21.7
6 20	20 17.32	-29 31.2	1.031	1.966	16.0	17.8	6 20	20 17.83	-14 22.0	2.143	3.033	11.0	21.5
6 30	20 12.18	-30 23.8	0.980	1.959	11.4	17.5	6 30	20 11.30	-14 40.1	2.066	3.023	7.8	21.2
7 10	20 3.94	-31 11.9	0.949	1.952	7.1	17.3	7 10	20 3.14	-15 6.2	2.014	3.014	4.3	21.0
7 20	19 53.90	-31 46.6	0.940	1.947	5.8	17.2	7 20	19 54.02	-15 38.2	1.990	3.003	1.7	20.8
7 30	19 43.92	-32 1.1	0.952	1.942	9.4	17.4	7 30	19 44.81	-16 13.3	1.994	2.992	4.3	21.0
8 9	19 35.88	-31 53.7	0.984	1.939	14.1	17.6	8 9	19 36.42	-16 48.5	2.025	2.980	7.9	21.2
8 19	19 31.11	-31 27.2	1.035	1.938	18.6	17.9	8 19	19 29.62	-17 21.7	2.082	2.968	11.3	21.4
<b>71224</b>	1999 <i>YW</i> <sub>12</sub>		7 19.2 355°34		5°7/20.5 17		<b>311397</b>	2005 <i>TH</i> <sub>129</sub>		7 19.2 263°2			

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>440711</b>	2005 YS <sub>195</sub>	7 19.2 249°12 0°0/19.2 18											
6 10	20 19.49	-15 55.7	2.637	3.438	11.9	22.0	<b>52347</b>	1993 FL <sub>9</sub>	7 19.2 350°87 2°2/20.1 18				
6 20	20 15.44	-16 58.7	2.532	3.426	9.4	21.8	6 10	20 16.10	-13 50.2	1.235	2.087	19.8	18.5
6 30	20 9.59	-18 12.3	2.451	3.414	6.5	21.6	6 20	20 14.48	-14 4.0	1.161	2.081	15.9	18.3
7 10	20 2.30	-19 33.5	2.398	3.402	3.2	21.4	6 30	20 9.82	-14 35.2	1.104	2.076	11.3	18.0
7 20	19 54.11	-20 58.3	2.373	3.389	0.3	21.1	7 10	20 2.69	-15 22.2	1.068	2.072	6.2	17.7
7 30	19 45.75	-22 22.1	2.378	3.376	3.8	21.4	7 20	19 54.13	-16 20.5	1.055	2.069	2.2	17.4
8 9	19 37.99	-23 40.7	2.413	3.363	7.1	21.6	7 30	19 45.53	-17 23.9	1.064	2.067	6.1	17.7
8 19	19 31.51	-24 51.1	2.475	3.350	10.1	21.7	8 9	19 38.37	-18 25.9	1.097	2.066	11.3	18.0
<b>474615</b>	2004 TX <sub>42</sub>	7 19.2 348°44 14°2/24.3 16											
6 10	20 14.08	+ 5 15.8	1.332	2.111	22.4	20.8	<b>69005</b>	2002 TZ <sub>207</sub>	7 19.2 167°30 2°3/17.8 18				
6 20	20 12.56	+ 7 5.0	1.259	2.102	20.1	20.6	6 10	20 23.35	-27 22.0	2.712	3.523	11.3	20.5
6 30	20 8.31	+ 8 30.3	1.202	2.093	17.7	20.4	6 20	20 18.30	-27 51.1	2.628	3.528	8.9	20.3
7 10	20 1.88	+ 9 24.1	1.161	2.086	15.6	20.3	6 30	20 11.39	-28 21.0	2.569	3.532	6.2	20.2
7 20	19 54.14	+ 9 40.6	1.139	2.081	14.3	20.2	7 10	20 3.11	-28 48.4	2.536	3.536	3.5	20.0
7 30	19 46.33	+ 9 18.0	1.137	2.076	14.4	20.2	7 20	19 54.11	-29 10.1	2.531	3.539	2.4	19.9
8 9	19 39.72	+ 8 20.5	1.153	2.073	15.9	20.3	7 30	19 45.17	-29 23.8	2.555	3.542	4.6	20.1
8 19	19 35.36	+ 6 55.9	1.189	2.071	18.2	20.4	8 9	19 37.09	-29 28.6	2.608	3.544	7.3	20.3
<b>327698</b>	2006 SD <sub>16</sub>	7 19.2 286°26 3°1/20.2 18											
6 10	20 21.26	-13 43.0	1.519	2.346	17.9	21.3	<b>206103</b>	2002 RD <sub>190</sub>	7 19.2 314°74 1°1/18.7 18				
6 20	20 18.08	-13 26.3	1.428	2.332	14.6	21.0	6 10	20 20.69	-22 23.8	1.788	2.624	15.3	20.6
6 30	20 12.06	-13 21.5	1.355	2.318	10.5	20.8	6 20	20 17.22	-22 38.7	1.701	2.615	12.1	20.4
7 10	20 3.73	-13 28.4	1.305	2.304	6.1	20.5	6 30	20 11.21	-22 58.8	1.635	2.607	8.3	20.1
7 20	19 53.98	-13 45.5	1.279	2.291	3.1	20.2	7 10	20 3.22	-23 21.1	1.592	2.598	4.1	19.9
7 30	19 44.07	-14 10.0	1.277	2.277	6.0	20.4	7 20	19 54.09	-23 41.7	1.575	2.590	1.2	19.6
8 9	19 35.35	-14 38.3	1.300	2.263	10.6	20.6	7 30	19 44.94	-23 57.4	1.585	2.583	5.2	19.9
8 19	19 28.91	-15 7.3	1.345	2.249	15.0	20.8	8 9	19 36.93	-24 6.0	1.619	2.576	9.5	20.1
<b>507153</b>	2009 XX <sub>8</sub>	7 19.2 196°63 2°0/18.1 17											
6 10	20 24.38	-24 21.6	2.209	3.027	13.4	22.8	<b>236470</b>	2006 FE <sub>11</sub>	7 19.2 301°62 9°2/15.1 17				
6 20	20 19.60	-24 57.7	2.120	3.024	10.5	22.6	6 10	20 28.54	-41 57.3	1.793	2.615	15.8	20.0
6 30	20 12.56	-25 37.8	2.054	3.021	7.2	22.4	6 20	20 24.10	-43 9.9	1.722	2.611	13.4	19.8
7 10	20 3.78	-26 17.9	2.014	3.017	3.8	22.2	6 30	20 16.29	-44 14.7	1.672	2.607	11.0	19.7
7 20	19 53.99	-26 53.9	2.001	3.013	2.1	22.0	7 10	20 5.81	-45 2.9	1.645	2.603	9.4	19.6
7 30	19 44.18	-27 22.2	2.016	3.008	5.1	22.2	7 20	19 53.87	-45 26.9	1.641	2.599	9.4	19.6
8 9	19 35.35	-27 40.9	2.059	3.002	8.6	22.4	7 30	19 42.06	-45 22.7	1.662	2.595	11.0	19.7
8 19	19 28.31	-27 49.7	2.126	2.996	11.8	22.6	8 9	19 31.99	-44 51.3	1.704	2.592	13.4	19.8
<b>509790</b>	2008 US <sub>238</sub>	7 19.2 125°18 4°3/20.7 18											
6 10	20 22.16	-10 51.8	1.893	2.695	15.9	21.6	<b>293313</b>	2007 DV <sub>44</sub>	7 19.2 348°91 0°6/19.5 18				
6 20	20 17.92	-10 11.9	1.811	2.696	13.0	21.4	6 10	20 16.86	-15 22.7	1.925	2.749	14.8	20.4
6 30	20 11.41	-9 42.2	1.749	2.698	9.6	21.2	6 20	20 13.95	-16 6.6	1.839	2.745	11.8	20.2
7 10	20 3.19	-9 23.5	1.711	2.700	6.3	21.0	6 30	20 8.85	-17 3.1	1.775	2.742	8.2	20.0
7 20	19 54.05	-9 15.7	1.699	2.702	4.3	20.9	7 10	20 2.03	-18 9.1	1.735	2.739	4.1	19.8
7 30	19 44.99	-9 17.9	1.713	2.704	5.8	21.0	7 20	19 54.21	-19 20.3	1.721	2.737	0.6	19.5
8 9	19 36.98	-9 28.0	1.753	2.705	9.1	21.2	7 30	19 46.34	-20 31.6	1.734	2.735	4.5	19.8
8 19	19 30.82	-9 43.5	1.816	2.707	12.4	21.4	8 9	19 39.39	-21 38.1	1.774	2.733	8.5	20.0
<b>273843</b>	2007 GE <sub>41</sub>	7 19.2 71°56 2°1/18.3 17											
6 10	20 22.91	-24 3.0	1.705	2.541	15.9	20.9	<b>447207</b>	2005 TH <sub>48</sub>	7 19.2 328°25 3°3/18.0 18				
6 20	20 19.00	-24 34.4	1.630	2.545	12.5	20.7	6 10	20 22.99	-29 28.9	1.935	2.768	14.4	20.2
6 30	20 12.41	-25 10.8	1.576	2.548	8.6	20.5	6 20	20 18.89	-29 41.0	1.849	2.760	11.5	19.9
7 10	20 3.76	-25 47.5	1.546	2.551	4.4	20.3	6 30	20 12.26	-29 52.0	1.785	2.753	8.1	19.7
7 20	19 54.00	-26 19.6	1.542	2.555	2.3	20.1	7 10	20 3.69	-29 57.9	1.745	2.746	4.7	19.5
7 30	19 44.34	-26 43.2	1.563	2.558	5.8	20.4	7 20	19 54.07	-29 54.8	1.731	2.739	3.4	19.4
8 9	19 36.00	-26 56.1	1.610	2.561	9.9	20.6	7 30	19 44.54	-29 40.5	1.744	2.733	6.0	19.6
8 19	19 29.88	-26 58.4	1.680	2.565	13.6	20.9	8 9	19 36.23	-29 14.9	1.782	2.727	9.6	19.8
<b>109002</b>	2001 PS <sub>65</sub>	7 19.2 276°84 4°4/17.2 18											
6 10	20 23.64	-28 16.5	1.655	2.496	16.1	20.3	<b>85216</b>	Schein	7 19.2 315°94 0°9/19.5 17				
6 20	20 20.06	-29 9.4	1.569	2.484	12.8	20.0	6 10	20 18.98	-17 45.6	1.130	1.993	20.6	19.5
6 30	20 13.48	-30 6.1	1.503	2.472	9.1	19.8	6 20	20 17.31	-17 48.1	1.049	1.977	16.6	19.2
7 10	20 4.45	-31 0.2	1.460	2.459	5.6	19.5	6 30	20 12.14	-18 3.6	0.985	1.962	11.6	18.8
7 20	19 53.94	-31 44.8	1.442	2.447	4.6	19.4	7 10	20 4.03	-18 30.3	0.940	1.947	6.0	18.5
7 30	19 43.30	-32 14.2	1.450	2.434	7.6	19.6	7 20	19 54.04	-19 3.7	0.917	1.933	1.0	18.1
8 9	19 33.97	-32 26.2	1.482	2.422	11.5	19.8	7 30	19 43.82	-19 38.5	0.916	1.919	6.7	18.4
8 19	19 27.08	-32 21.6	1.536	2.409	15.3	20.0	8 9	19 35.18	-20 9.8	0.937	1.907	12.7	18.7
<b>38833</b>	2000 SC	7 19.2 280°93 8°2/17.7 18											
6 10	20 41.44	-42 52.1	1.859	2.657	16.2	18.3	<b>316245</b>	2010 OS <sub>39</sub>	7 19.2 253°14 1°2/18.7 18				
6 20	20 34.14	-43 3.2	1.760	2.635	13.8	18.1	6 10	20 21.67	-24 15.8	2.477	3.294	12.1	20.9
6 30	20 23.08	-43 2.0	1.682	2.614	11.1	17.9	6 20	20 17.20	-24 20.7	2.382	3.285	9.5	20.7
7 10	20 9.09	-42 39.7	1.626	2.593	8.8	17.7	6 30	20 10.79	-24 27.5	2.309	3.276	6.5	20.5
7 20	19 53.55	-41 49.7	1.597	2.571	8.2	17.6	7 10	20 2.89	-24 33.7	2.262	3.266	3.3	20.3
7 30	19 38.31	-40 30.0	1.594	2.549	9.8	17.7	7 20	19 54.18	-24 37.0	2.243	3.257	1.3	20.1
8 9	19 25.15	-38 44.7	1.618	2.527	12.8	17.8	7 30	19 45.48	-24 35.4	2.252	3.247	4.2	20.3
8 19	19 15.25	-36 41.9	1.666	2.505	15.9	18.0	8 9	19 37.63	-24 28.3	2.289	3.238	7.5	20.5
<b>71290</b>	2000 AP <sub>54</sub>	7 19.2 244°12 0°7/18.9 18											
6 10	20 22.77	-21 51.5	2.162	2.981	13.6	19.7	<b>188512</b>	2004 RD <sub>43</sub>	7 19.2 285°92 4°5/21.9 18				
6 20	20 18.39	-22 1.9	2.066	2.970	10.7	19.5	6 10	20 16.77	- 5 51.8	2.313	3.092	14.0	20.3
6 30	20 11.78	-22 16.8	1.991	2.958	7.4	19.3	6 20	20 13.43	- 5 46.4	2.216	3.083	11.6	20.1
7 10	20 3.43	-22 33.4	1.941	2.946	3.6	19.0	6 30	20 8.26	- 5 54.6	2.140	3.074	8.9	19.9
7 20	19 54.06	-22 48.9	1.918	2.934	0.8	18.8	7 10	20 1.68	- 6 16.8	2.087	3.065	6.3	19.7
7 30	19 44.64	-23 0.6	1.924	2.921	4.5	19.0							

EPHEMERIDES

7 19.2

7 19.2

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>440584</b>	2005 <i>UH</i> <sub>501</sub>		7 19.2 226°04	1°6/18.0	18		<b>443087</b>	2013 <i>GC</i> <sub>117</sub>		7 19.2 168°96	3°6/21.5	18	
6 10	20 20.00	-23 41.9	2.920	3.731	10.6	22.1	6 10	20 17.55	-7 38.2	2.601	3.379	12.6	21.6
6 20	20 15.69	-24 25.7	2.820	3.720	8.3	21.9	6 20	20 13.75	-7 36.7	2.512	3.381	10.4	21.4
6 30	20 9.68	-25 13.5	2.744	3.709	5.7	21.7	6 30	20 8.31	-7 46.3	2.444	3.382	7.8	21.2
7 10	20 2.35	-26 2.1	2.694	3.697	3.0	21.5	7 10	20 1.67	-8 7.1	2.400	3.383	5.2	21.1
7 20	19 54.24	-26 48.5	2.673	3.685	1.7	21.4	7 20	19 54.35	-8 37.7	2.384	3.384	3.6	21.0
7 30	19 46.02	-27 29.4	2.682	3.673	4.1	21.5	7 30	19 47.05	-9 16.3	2.396	3.385	4.6	21.0
8 9	19 38.43	-28 2.8	2.719	3.660	6.9	21.7	8 9	19 40.43	-10 0.0	2.435	3.386	7.0	21.2
8 19	19 32.09	-28 27.7	2.783	3.646	9.5	21.9	8 19	19 35.06	-10 46.0	2.500	3.387	9.6	21.4
<b>9352</b>	1991 <i>UB</i> <sub>4</sub>		7 19.2 131°31	1°9/20.1	18		<b>21619</b>	Johnshopkins		7 19.2 156°33	1°1/18.9	18	
6 10	20 22.07	-14 10.7	2.061	2.866	14.6	17.8	6 10	20 27.52	-22 49.9	1.568	2.401	17.2	18.5
6 20	20 17.68	-14 14.5	1.983	2.876	11.7	17.6	6 20	20 22.83	-22 54.9	1.493	2.404	13.6	18.3
6 30	20 11.17	-14 27.9	1.926	2.885	8.2	17.4	6 30	20 15.17	-23 4.5	1.437	2.407	9.4	18.0
7 10	20 3.09	-14 49.5	1.894	2.893	4.6	17.2	7 10	20 5.21	-23 14.9	1.405	2.410	4.6	17.7
7 20	19 54.18	-15 17.1	1.888	2.901	1.9	17.0	7 20	19 54.05	-23 22.4	1.398	2.413	1.2	17.5
7 30	19 45.36	-15 47.7	1.910	2.909	4.4	17.2	7 30	19 43.04	-23 23.8	1.417	2.415	5.7	17.8
8 9	19 37.54	-16 18.6	1.960	2.917	8.0	17.4	8 9	19 33.55	-23 18.1	1.461	2.417	10.3	18.1
8 19	19 31.46	-16 47.7	2.033	2.924	11.3	17.7	8 19	19 26.56	-23 5.7	1.528	2.419	14.4	18.4
<b>413777</b>	2006 <i>HU</i> <sub>5</sub>		7 19.2 40°63	3°0/18.2	17		<b>401420</b>	2013 <i>CJ</i> <sub>81</sub>		7 19.2 39°93	4°3/21.3	15	
6 10	20 22.95	-24 2.7	1.095	1.962	20.8	20.2	6 10	20 18.18	-8 43.8	2.028	2.825	15.1	21.3
6 20	20 20.16	-24 44.2	1.046	1.977	16.3	20.0	6 20	20 14.64	-8 20.6	1.953	2.834	12.4	21.2
6 30	20 13.72	-25 32.7	1.014	1.993	11.1	19.7	6 30	20 9.10	-8 9.8	1.897	2.842	9.3	21.0
7 10	20 4.56	-26 21.1	1.002	2.009	5.8	19.5	7 10	20 2.10	-8 11.7	1.866	2.851	6.2	20.8
7 20	19 54.06	-27 1.8	1.013	2.026	3.2	19.4	7 20	19 54.33	-8 25.3	1.859	2.861	4.3	20.7
7 30	19 44.00	-27 28.9	1.047	2.044	7.5	19.7	7 30	19 46.66	-8 49.0	1.880	2.870	5.5	20.8
8 9	19 36.03	-27 40.4	1.103	2.062	12.4	20.0	8 9	19 39.94	-9 19.7	1.926	2.880	8.3	21.0
8 19	19 31.18	-27 37.5	1.178	2.081	16.8	20.3	8 19	19 34.83	-9 54.3	1.996	2.890	11.3	21.2
<b>472908</b>	2015 <i>FL</i> <sub>342</sub>		7 19.2 59°17	1°2/18.9	17		<b>263521</b>	2008 <i>EQ</i> <sub>149</sub>		7 19.2 133°87	1°7/18.4	18	
6 10	20 26.01	-23 57.8	1.610	2.444	16.8	20.5	6 10	20 23.68	-21 25.9	1.655	2.489	16.4	20.7
6 20	20 21.28	-23 53.2	1.549	2.462	13.1	20.3	6 20	20 19.74	-22 15.9	1.581	2.494	12.9	20.4
6 30	20 13.81	-23 51.3	1.509	2.480	8.9	20.1	6 30	20 13.04	-23 14.7	1.528	2.499	8.8	20.2
7 10	20 4.39	-23 48.8	1.492	2.498	4.4	19.8	7 10	20 4.19	-24 17.1	1.498	2.503	4.4	20.0
7 20	19 54.08	-23 42.7	1.501	2.516	1.3	19.7	7 20	19 54.14	-25 17.0	1.494	2.508	1.9	19.8
7 30	19 44.17	-23 31.2	1.536	2.534	5.3	20.0	7 30	19 44.14	-26 8.7	1.516	2.512	5.8	20.1
8 9	19 35.81	-23 14.0	1.597	2.553	9.6	20.3	8 9	19 35.43	-26 48.8	1.564	2.516	10.1	20.3
8 19	19 29.82	-22 52.0	1.680	2.571	13.2	20.5	8 19	19 29.00	-27 16.1	1.635	2.520	13.9	20.6
<b>483941</b>	2006 <i>BX</i> <sub>110</sub>		7 19.2 291°13	3°9/17.6	17		<b>292159</b>	Jongoldstein		7 19.2 134°78	1°8/18.5	17	
6 10	20 24.67	-32 6.4	2.313	3.133	12.8	21.3	6 10	20 26.72	-23 42.8	1.791	2.617	15.7	21.9
6 20	20 20.02	-32 24.0	2.207	3.109	10.3	21.0	6 20	20 21.80	-24 8.0	1.719	2.627	12.3	21.7
6 30	20 13.00	-32 39.3	2.123	3.084	7.5	20.8	6 30	20 14.24	-24 37.4	1.668	2.637	8.4	21.5
7 10	20 4.10	-32 48.1	2.065	3.059	4.8	20.6	7 10	20 4.69	-25 6.9	1.641	2.646	4.3	21.3
7 20	19 54.10	-32 46.6	2.033	3.034	4.0	20.5	7 20	19 54.11	-25 31.9	1.641	2.655	1.9	21.1
7 30	19 44.01	-32 32.2	2.028	3.009	6.1	20.6	7 30	19 43.71	-25 49.0	1.668	2.663	5.5	21.4
8 9	19 34.89	-32 4.6	2.051	2.983	9.2	20.7	8 9	19 34.65	-25 56.7	1.721	2.671	9.5	21.6
8 19	19 27.62	-31 25.6	2.097	2.958	12.3	20.9	8 19	19 27.81	-25 55.3	1.797	2.678	13.0	21.9
<b>201706</b>	2003 <i>UO</i> <sub>162</sub>		7 19.2 229°80	0°0/19.2	18		<b>209153</b>	2003 <i>UJ</i> <sub>7</sub>		7 19.2 220°95	3°9/16.9	18	
6 10	20 21.36	-18 50.1	2.238	3.052	13.3	20.7	6 10	20 23.94	-29 57.4	2.326	3.147	12.7	20.8
6 20	20 17.21	-19 13.9	2.142	3.043	10.6	20.5	6 20	20 19.36	-30 49.2	2.236	3.139	10.1	20.6
6 30	20 10.95	-19 44.9	2.068	3.034	7.3	20.3	6 30	20 12.51	-31 42.1	2.169	3.131	7.3	20.4
7 10	20 3.06	-20 20.8	2.019	3.024	3.6	20.1	7 10	20 3.86	-32 31.2	2.128	3.123	4.7	20.2
7 20	19 54.20	-20 58.2	1.998	3.014	0.3	19.8	7 20	19 54.17	-33 11.4	2.114	3.114	4.1	20.2
7 30	19 45.25	-21 34.0	2.005	3.003	4.3	20.1	7 30	19 44.42	-33 39.1	2.128	3.104	6.2	20.3
8 9	19 37.14	-22 5.3	2.039	2.993	8.0	20.3	8 9	19 35.60	-33 52.7	2.168	3.094	9.1	20.4
8 19	19 30.65	-22 30.7	2.098	2.981	11.3	20.5	8 19	19 28.57	-33 52.8	2.232	3.084	11.9	20.6
<b>100592</b>	1997 <i>NN</i> <sub>5</sub>		7 19.2 328°72	2°6/17.9	18		<b>438103</b>	2005 <i>EU</i> <sub>193</sub>		7 19.2 265°84	3°1/20.7	17	
6 10	20 13.57	-20 33.0	1.165	2.038	19.4	18.5	6 10	20 19.53	-11 22.9	1.964	2.770	15.2	21.6
6 20	20 13.13	-21 35.9	1.077	2.013	15.5	18.1	6 20	20 15.91	-11 18.7	1.878	2.768	12.3	21.4
6 30	20 9.40	-22 56.3	1.008	1.989	10.7	17.8	6 30	20 10.12	-11 26.4	1.812	2.766	9.0	21.2
7 10	20 2.78	-24 28.8	0.959	1.967	5.5	17.4	7 10	20 2.68	-11 45.5	1.770	2.765	5.5	21.0
7 20	19 54.20	-26 4.6	0.931	1.945	2.9	17.2	7 20	19 54.29	-12 14.2	1.754	2.763	3.1	20.8
7 30	19 45.20	-27 33.0	0.927	1.925	7.9	17.4	7 30	19 45.91	-12 49.9	1.765	2.761	5.0	21.0
8 9	19 37.57	-28 45.5	0.943	1.906	13.5	17.7	8 9	19 38.47	-13 29.1	1.801	2.760	8.5	21.2
8 19	19 32.81	-29 37.6	0.978	1.889	18.7	17.9	8 19	19 32.74	-14 8.8	1.862	2.758	11.9	21.4
<b>373233</b>	2012 <i>FL</i> <sub>73</sub>		7 19.2 20°41	1°9/18.6	17		<b>44645</b>	1999 <i>RC</i> <sub>118</sub>		7 19.2 217°04	2°8/20.2	18	
6 10	20 18.82	-23 1.1	1.058	1.933	20.8	19.7	6 10	20 24.34	-14 19.1	1.666	2.483	17.1	19.0
6 20	20 17.00	-23 18.1	1.006	1.941	16.3	19.4	6 20	20 20.15	-13 58.7	1.581	2.479	13.8	18.8
6 30	20 11.63	-23 42.3	0.971	1.952	11.1	19.2	6 30	20 13.28	-13 48.5	1.515	2.475	9.9	18.5
7 10	20 3.57	-24 8.5	0.955	1.963	5.5	18.9	7 10	20 4.32	-13 47.7	1.472	2.470	5.7	18.3
7 20	19 54.18	-24 30.9	0.961	1.976	2.0	18.7	7 20	19 54.16	-13 54.9	1.454	2.466	2.8	18.1
7 30	19 45.18	-24 44.6	0.990	1.991	6.9	19.1	7 30	19 43.98	-14 8.1	1.462	2.460	5.6	18.2
8 9	19 38.15	-24 47.7	1.040	2.007	12.1	19.4	8 9	19 35.02	-14 24.5	1.496	2.455	9.8	18.5
8 19	19 34.14	-24 40.6	1.109	2.023	16.7	19.7	8 19	19 28.21	-14 41.8	1.553	2.449	13.8	18.7
<b>161053</b>	2002 <i>JO</i> <sub>32</sub>		7 19.2 348°32	8°4/14.4	17		<b>40749</b>	1999 <i>TP</i> <sub>6</sub>		7 19.2 290°11	0°5		

EPHEMERIDES

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>6229</b>	Tursachan		7 19.2 295°15	0°4/19.4	18	R	<b>179488</b>	2002 CK <sub>29</sub>		7 19.2 140°72	3°2/17.7	18	
6 10	20 18.70	-18 13.6	2.178	2.998	13.5	18.1	6 10	20 23.86	-30 6.7	2.437	3.256	12.2	20.2
6 20	20 15.24	-18 25.3	2.076	2.980	10.7	17.8	6 20	20 18.97	-30 28.9	2.359	3.261	9.7	20.1
6 30	20 9.70	-18 44.2	1.995	2.962	7.4	17.6	6 30	20 12.02	-30 49.9	2.303	3.265	6.9	19.9
7 10	20 2.51	-19 8.5	1.939	2.944	3.8	17.3	7 10	20 3.56	-31 6.1	2.273	3.270	4.2	19.7
7 20	19 54.32	-19 35.6	1.910	2.926	0.5	17.0	7 20	19 54.32	-31 14.1	2.270	3.274	3.3	19.7
7 30	19 46.00	-20 2.7	1.909	2.909	4.3	17.3	7 30	19 45.22	-31 12.0	2.295	3.278	5.3	19.8
8 9	19 38.48	-20 27.2	1.933	2.891	8.1	17.5	8 9	19 37.13	-30 59.4	2.347	3.282	8.1	20.0
8 19	19 32.55	-20 47.5	1.983	2.873	11.6	17.7	8 19	19 30.74	-30 37.6	2.424	3.286	10.8	20.2
<b>442013</b>	2010 OR <sub>68</sub>		7 19.2 234°54	0°1/19.3	18		<b>55301</b>	2001 SR <sub>46</sub>		7 19.2 191°76	0°6/18.9	18	
6 10	20 18.80	-18 21.7	2.706	3.514	11.5	21.9	6 10	20 20.61	-20 43.2	2.223	3.043	13.2	19.6
6 20	20 14.82	-18 44.6	2.607	3.504	9.1	21.7	6 20	20 16.60	-21 7.9	2.137	3.042	10.4	19.4
6 30	20 9.13	-19 13.6	2.531	3.495	6.2	21.5	6 30	20 10.53	-21 38.3	2.074	3.041	7.1	19.2
7 10	20 2.13	-19 46.9	2.481	3.485	3.1	21.3	7 10	20 2.89	-22 11.8	2.035	3.041	3.5	19.0
7 20	19 54.37	-20 22.0	2.459	3.475	0.3	21.0	7 20	19 54.38	-22 44.8	2.024	3.040	0.8	18.8
7 30	19 46.55	-20 56.1	2.465	3.464	3.6	21.3	7 30	19 45.87	-23 14.5	2.041	3.039	4.3	19.0
8 9	19 39.38	-21 27.2	2.500	3.453	6.7	21.5	8 9	19 38.28	-23 38.4	2.085	3.038	7.9	19.3
8 19	19 33.50	-21 53.6	2.561	3.443	9.6	21.7	8 19	19 32.31	-23 55.6	2.153	3.036	11.1	19.5
<b>469539</b>	2003 SD <sub>323</sub>		7 19.2 287°36	0°1/19.2	18		<b>306952</b>	2001 UL <sub>176</sub>		7 19.2 115°77	5°3/16.8	17	
6 10	20 21.98	-20 12.8	1.860	2.687	15.1	21.8	6 10	20 27.61	-32 6.6	1.842	2.671	15.2	21.3
6 20	20 18.32	-20 17.1	1.755	2.664	12.1	21.6	6 20	20 22.70	-33 5.6	1.778	2.683	12.1	21.1
6 30	20 12.11	-20 27.8	1.672	2.641	8.4	21.3	6 30	20 14.97	-34 3.4	1.735	2.695	8.9	20.9
7 10	20 3.82	-20 42.5	1.612	2.617	4.2	21.0	7 10	20 5.13	-34 53.2	1.716	2.706	6.1	20.8
7 20	19 54.21	-20 58.2	1.578	2.594	0.4	20.6	7 20	19 54.19	-35 28.7	1.723	2.718	5.5	20.8
7 30	19 44.39	-21 12.0	1.570	2.570	5.0	21.0	7 30	19 43.46	-35 46.3	1.757	2.729	7.7	21.0
8 9	19 35.53	-21 21.5	1.589	2.547	9.5	21.2	8 9	19 34.19	-35 45.4	1.815	2.739	10.7	21.2
8 19	19 28.64	-21 25.8	1.631	2.523	13.5	21.4	8 19	19 27.30	-35 28.6	1.896	2.749	13.7	21.4
<b>390104</b>	2012 VQ <sub>19</sub>		7 19.2 332°88	4°1/17.1	18		<b>356889</b>	2011 WE <sub>152</sub>		7 19.2 275°69	0°7/19.5	18	
6 10	20 20.69	-27 26.2	1.744	2.587	15.3	20.6	6 10	20 22.35	-19 26.6	2.152	2.967	13.7	21.0
6 20	20 17.51	-28 29.2	1.665	2.582	12.1	20.4	6 20	20 18.00	-19 9.5	2.059	2.960	10.9	20.8
6 30	20 11.61	-29 36.8	1.607	2.577	8.6	20.2	6 30	20 11.51	-18 56.6	1.988	2.953	7.6	20.6
7 10	20 3.56	-30 42.5	1.572	2.572	5.2	20.0	7 10	20 3.39	-18 46.6	1.942	2.946	3.9	20.3
7 20	19 54.25	-31 39.7	1.563	2.568	4.3	19.9	7 20	19 54.37	-18 38.1	1.923	2.939	0.8	20.1
7 30	19 44.89	-32 23.0	1.580	2.564	7.1	20.1	7 30	19 45.37	-18 29.6	1.932	2.932	4.3	20.3
8 9	19 36.74	-32 49.5	1.622	2.561	10.8	20.3	8 9	19 37.32	-18 20.3	1.968	2.925	8.0	20.6
8 19	19 30.79	-32 59.6	1.685	2.557	14.2	20.5	8 19	19 30.98	-18 9.7	2.029	2.918	11.4	20.8
<b>184228</b>	2004 RE <sub>90</sub>		7 19.2 286°87	4°3/21.3	18		<b>257778</b>	2000 DN <sub>6</sub>		7 19.2 257°93	0°6/19.5	18	
6 10	20 18.00	- 8 2.4	2.286	3.073	13.9	20.1	6 10	20 23.36	-17 51.2	1.770	2.593	16.0	21.5
6 20	20 14.43	- 7 37.9	2.189	3.063	11.5	19.9	6 20	20 19.49	-18 1.8	1.672	2.577	12.8	21.2
6 30	20 8.98	- 7 24.6	2.113	3.052	8.8	19.7	6 30	20 12.98	-18 21.6	1.594	2.561	8.9	21.0
7 10	20 2.10	- 7 22.9	2.060	3.042	6.0	19.6	7 10	20 4.30	-18 48.5	1.539	2.544	4.5	20.7
7 20	19 54.38	- 7 32.7	2.034	3.032	4.4	19.4	7 20	19 54.28	-19 19.0	1.511	2.527	0.7	20.3
7 30	19 46.61	- 7 52.8	2.035	3.022	5.4	19.5	7 30	19 44.06	-19 49.5	1.509	2.509	5.1	20.6
8 9	19 39.58	- 8 20.6	2.062	3.012	8.1	19.6	8 9	19 34.87	-20 16.8	1.533	2.491	9.7	20.8
8 19	19 33.97	- 8 53.6	2.113	3.002	11.0	19.8	8 19	19 27.75	-20 38.8	1.580	2.473	13.8	21.1
<b>209909</b>	2005 NH <sub>26</sub>		7 19.2 1°84	1°8/19.9	18		<b>367910</b>	2012 BQ <sub>68</sub>		7 19.2 103°95	1°1/18.8	17	
6 10	20 18.27	-15 43.5	1.731	2.561	16.0	20.2	6 10	20 27.25	-22 2.0	1.571	2.402	17.2	21.0
6 20	20 15.24	-15 39.5	1.652	2.560	12.8	20.0	6 20	20 22.48	-22 20.7	1.506	2.417	13.6	20.8
6 30	20 9.82	-15 45.4	1.593	2.560	9.0	19.8	6 30	20 14.84	-22 45.4	1.462	2.432	9.2	20.6
7 10	20 2.58	-15 59.6	1.557	2.560	4.9	19.5	7 10	20 5.07	-23 11.8	1.441	2.446	4.5	20.3
7 20	19 54.34	-16 20.0	1.546	2.561	1.8	19.3	7 20	19 54.24	-23 35.5	1.445	2.461	1.3	20.1
7 30	19 46.16	-16 43.7	1.561	2.562	4.9	19.5	7 30	19 43.68	-23 52.8	1.476	2.474	5.6	20.5
8 9	19 39.09	-17 7.6	1.601	2.564	9.0	19.8	8 9	19 34.67	-24 1.8	1.532	2.488	10.0	20.8
8 19	19 33.95	-17 29.6	1.664	2.566	12.7	20.0	8 19	19 28.12	-24 2.7	1.611	2.501	13.8	21.0
<b>340235</b>	2006 BL <sub>81</sub>		7 19.2 8°10	9°0/17.1	16		<b>388926</b>	2008 SC <sub>156</sub>		7 19.2 249°70	0°2/19.1	18	
6 10	20 26.03	-39 31.9	1.321	2.171	18.9	20.0	6 10	20 22.13	-18 53.3	2.155	2.969	13.8	21.3
6 20	20 22.75	-40 11.8	1.262	2.172	15.7	19.7	6 20	20 18.05	-19 23.0	2.051	2.953	10.9	21.1
6 30	20 15.62	-40 41.7	1.220	2.175	12.3	19.6	6 30	20 11.73	-20 1.0	1.970	2.936	7.6	20.9
7 10	20 5.57	-40 52.5	1.199	2.178	9.7	19.4	7 10	20 3.61	-20 44.6	1.914	2.918	3.7	20.6
7 20	19 54.10	-40 37.3	1.200	2.183	9.1	19.4	7 20	19 54.37	-21 30.1	1.884	2.901	0.4	20.3
7 30	19 43.14	-39 53.6	1.224	2.189	11.0	19.5	7 30	19 44.94	-22 13.7	1.884	2.882	4.5	20.6
8 9	19 34.39	-38 44.9	1.269	2.196	14.1	19.7	8 9	19 36.32	-22 52.1	1.910	2.863	8.5	20.8
8 19	19 28.95	-37 18.4	1.334	2.204	17.4	20.0	8 19	19 29.38	-23 23.4	1.961	2.844	12.0	21.0
<b>459123</b>	2012 BF <sub>142</sub>		7 19.2 37°29	9°0/26.1	16		<b>472024</b>	2013 XQ <sub>25</sub>		7 19.2 209°13	4°7/20.9	18	
6 10	20 19.15	+ 7 1.1	1.056	1.842	26.6	19.9	6 10	20 23.81	- 9 15.5	2.075	2.861	15.2	21.6
6 20	20 16.77	+ 5 58.2	1.011	1.870	22.8	19.8	6 20	20 19.16	- 8 31.5	1.983	2.856	12.5	21.4
6 30	20 11.20	+ 4 10.2	0.980	1.900	18.2	19.6	6 30	20 12.32	- 7 57.4	1.911	2.852	9.5	21.2
7 10	20 3.31	+ 1 38.0	0.966	1.931	13.5	19.4	7 10	20 3.82	- 7 34.4	1.864	2.847	6.5	21.0
7 20	19 54.33	- 1 30.0	0.974	1.962	9.8	19.3	7 20	19 54.37	- 7 22.7	1.842	2.841	4.7	20.9
7 30	19 45.76	- 4 58.1	1.006	1.995	9.3	19.4	7 30	19 44.90	- 7 21.9	1.849	2.835	6.0	21.0
8 9	19 39.00	- 8 27.4	1.063	2.028	12.1	19.7	8 9	19 36.36	- 7 30.3	1.881	2.829	9.0	21.1
8 19	19 34.96	-11 42.0	1.143	2.062	15.9	20.0	8 19	19 29.52	- 7 45.4	1.938	2.822	12.1	21.3
<b>444996</b>	2008 GV <sub>61</sub>		7 19.2 250°55	2°0/20.5	18		<b>45856</b>	2000 TO <sub>38</sub>		7 19.2 198°46	4°7/16.4	18	
6 10	20 18.17</												

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>216274</b>	2006 <i>WV</i> <sub>140</sub>		7 19.2 356°71	1°5/18.6	18		<b>515068</b>	2010 <i>NO</i> <sub>113</sub>		7 19.3 225°38	3°2/17.3	18	
6 10	20 19.81	-23 5.2	1.838	2.674	14.9	20.5	6 10	20 22.72	-30 58.3	2.897	3.708	10.7	22.3
6 20	20 16.47	-23 29.6	1.758	2.672	11.7	20.3	6 20	20 17.93	-31 28.3	2.801	3.698	8.5	22.2
6 30	20 10.70	-23 59.0	1.699	2.671	8.0	20.0	6 30	20 11.30	-31 57.5	2.730	3.688	6.1	22.0
7 10	20 3.08	-24 29.9	1.665	2.670	4.0	19.8	7 10	20 3.28	-32 22.2	2.684	3.678	3.9	21.8
7 20	19 54.44	-24 58.1	1.655	2.670	1.7	19.6	7 20	19 54.48	-32 39.4	2.667	3.667	3.3	21.8
7 30	19 45.84	-25 20.2	1.673	2.670	5.2	19.9	7 30	19 45.65	-32 46.9	2.678	3.656	5.0	21.9
8 9	19 38.36	-25 34.0	1.716	2.670	9.2	20.1	8 9	19 37.60	-32 43.9	2.718	3.644	7.5	22.0
8 19	19 32.85	-25 39.0	1.782	2.671	12.7	20.3	8 19	19 30.95	-32 30.9	2.782	3.632	9.9	22.2
<b>478617</b>	2012 <i>TB</i> <sub>160</sub>		7 19.2 318°52	2°1/20.1	16		<b>476536</b>	2008 <i>HE</i> <sub>5</sub>		7 19.3 183°06	5°2/16.1	18	
6 10	20 18.14	-14 22.7	1.572	2.405	17.2	21.2	6 10	20 24.71	-36 20.8	2.626	3.437	11.7	21.6
6 20	20 15.60	-14 27.3	1.482	2.391	13.9	20.9	6 20	20 19.78	-37 11.3	2.547	3.438	9.5	21.4
6 30	20 10.41	-14 45.0	1.411	2.378	9.9	20.7	6 30	20 12.70	-37 58.3	2.491	3.438	7.3	21.3
7 10	20 3.08	-15 14.5	1.363	2.365	5.5	20.4	7 10	20 4.00	-38 36.9	2.461	3.437	5.6	21.2
7 20	19 54.44	-15 53.0	1.338	2.352	2.1	20.1	7 20	19 54.42	-39 2.8	2.457	3.437	5.4	21.2
7 30	19 45.65	-16 36.6	1.339	2.340	5.4	20.3	7 30	19 44.88	-39 13.4	2.481	3.436	6.8	21.3
8 9	19 37.96	-17 20.8	1.364	2.328	10.0	20.6	8 9	19 36.33	-39 8.2	2.532	3.434	9.0	21.4
8 19	19 32.40	-18 2.0	1.411	2.317	14.3	20.8	8 19	19 29.51	-38 49.0	2.605	3.433	11.2	21.6
<b>164802</b>	1999 <i>JU</i> <sub>48</sub>		7 19.2 82°94	4°6/17.5	17		<b>316336</b>	2010 <i>RZ</i> <sub>125</sub>		7 19.3 84°17	0°2/19.3	17	
6 10	20 26.88	-27 50.8	1.392	2.239	18.2	19.8	6 10	20 23.42	-17 46.4	1.448	2.285	18.2	20.7
6 20	20 22.84	-28 49.1	1.332	2.251	14.4	19.6	6 20	20 19.80	-18 13.1	1.380	2.293	14.4	20.5
6 30	20 15.46	-29 50.5	1.292	2.263	10.1	19.4	6 30	20 13.24	-18 51.5	1.330	2.301	9.9	20.3
7 10	20 5.52	-30 47.2	1.274	2.275	6.1	19.2	7 10	20 4.43	-19 37.9	1.303	2.309	4.9	20.0
7 20	19 54.25	-31 31.7	1.280	2.286	4.8	19.1	7 20	19 54.38	-20 27.1	1.300	2.317	0.4	19.7
7 30	19 43.24	-31 58.3	1.312	2.298	7.9	19.4	7 30	19 44.47	-21 13.7	1.324	2.324	5.5	20.1
8 9	19 34.04	-32 6.0	1.366	2.310	12.0	19.6	8 9	19 36.02	-21 53.5	1.371	2.332	10.3	20.4
8 19	19 27.70	-31 56.8	1.442	2.321	15.8	19.9	8 19	19 30.03	-22 24.4	1.441	2.340	14.5	20.7
<b>429471</b>	2010 <i>XE</i> <sub>56</sub>		7 19.2 280°59	0°9/18.9	18		<b>95717</b>	2003 <i>BK</i> <sub>25</sub>		7 19.3 36°83	8°8/24.2	17	
6 10	20 23.80	-21 6.6	1.582	2.418	16.9	21.7	6 10	20 18.13	-0 6.9	1.226	2.030	22.6	18.7
6 20	20 20.39	-21 25.8	1.480	2.393	13.6	21.4	6 20	20 15.61	+0 17.6	1.180	2.054	19.2	18.5
6 30	20 13.97	-21 53.5	1.397	2.369	9.5	21.1	6 30	20 10.27	+0 13.4	1.149	2.078	15.3	18.3
7 10	20 4.97	-22 26.2	1.337	2.343	4.7	20.8	7 10	20 2.87	-0 21.2	1.136	2.104	11.6	18.2
7 20	19 54.27	-22 59.3	1.302	2.318	1.1	20.5	7 20	19 54.52	-1 24.2	1.144	2.130	9.1	18.1
7 30	19 43.20	-23 27.9	1.293	2.292	6.0	20.7	7 30	19 46.51	-2 49.7	1.176	2.157	9.3	18.2
8 9	19 33.24	-23 48.5	1.308	2.265	11.1	20.9	8 9	19 40.06	-4 28.5	1.229	2.185	11.8	18.5
8 19	19 25.65	-23 59.8	1.345	2.239	15.7	21.2	8 19	19 35.98	-6 11.4	1.304	2.214	15.0	18.7
<b>152117</b>	2004 <i>RK</i> <sub>242</sub>		7 19.2 4°79	0°1/19.3	18		<b>355609</b>	2008 <i>DC</i> <sub>27</sub>		7 19.3 52°41	7°2/25.2	16	
6 10	20 17.54	-19 19.2	1.745	2.583	15.5	20.0	6 10	20 17.79	+4 44.9	2.159	2.888	16.3	20.3
6 20	20 14.72	-19 31.5	1.668	2.583	12.3	19.8	6 20	20 14.29	+4 29.4	2.079	2.897	14.1	20.1
6 30	20 9.52	-19 51.6	1.612	2.584	8.4	19.6	6 30	20 8.92	+3 51.3	2.016	2.907	11.6	20.0
7 10	20 2.51	-20 16.7	1.579	2.585	4.2	19.3	7 10	20 2.14	+2 49.8	1.975	2.916	9.2	19.8
7 20	19 54.51	-20 43.7	1.572	2.588	0.3	19.0	7 20	19 54.60	+1 26.0	1.960	2.926	7.5	19.7
7 30	19 46.58	-21 9.1	1.590	2.591	4.8	19.4	7 30	19 47.09	-0 16.1	1.970	2.936	7.5	19.8
8 9	19 39.77	-21 30.2	1.634	2.595	9.0	19.6	8 9	19 40.42	-2 10.4	2.008	2.946	9.1	19.9
8 19	19 34.90	-21 45.5	1.700	2.600	12.7	19.9	8 19	19 35.25	-4 10.0	2.072	2.956	11.4	20.0
<b>106187</b>	2000 <i>UY</i> <sub>9</sub>		7 19.2 280°12	2°8/20.2	18		<b>133948</b>	2004 <i>TD</i> <sub>72</sub>		7 19.3 198°01	0°8/19.7	18	
6 10	20 22.11	-14 12.2	1.484	2.313	18.2	20.1	6 10	20 22.83	-17 7.5	2.254	3.061	13.5	21.7
6 20	20 18.96	-14 0.8	1.391	2.297	14.8	19.8	6 20	20 18.32	-17 19.1	2.162	3.058	10.7	21.5
6 30	20 12.88	-14 1.8	1.317	2.281	10.7	19.6	6 30	20 11.73	-17 38.2	2.092	3.054	7.5	21.3
7 10	20 4.38	-14 14.6	1.265	2.265	6.1	19.3	7 10	20 3.56	-18 2.9	2.048	3.051	3.8	21.0
7 20	19 54.34	-14 37.1	1.236	2.249	2.8	19.0	7 20	19 54.49	-18 30.5	2.030	3.046	0.8	20.8
7 30	19 44.09	-15 6.3	1.233	2.233	6.0	19.2	7 30	19 45.39	-18 58.3	2.042	3.041	4.1	21.0
8 9	19 35.02	-15 38.2	1.253	2.217	10.9	19.4	8 9	19 37.16	-19 23.9	2.080	3.036	7.8	21.3
8 19	19 28.30	-16 9.6	1.296	2.201	15.4	19.6	8 19	19 30.54	-19 45.8	2.144	3.030	11.0	21.5
<b>293290</b>	2007 <i>DG</i> <sub>7</sub>		7 19.2 275°97	4°7/21.9	18		<b>511280</b>	2014 <i>DO</i> <sub>30</sub>		7 19.3 246°85	5°8/22.6	18	
6 10	20 17.32	-5 40.9	2.367	3.143	13.8	20.8	6 10	20 19.32	-2 52.0	2.079	2.848	15.7	21.5
6 20	20 13.87	-5 26.6	2.270	3.134	11.5	20.7	6 20	20 15.75	-2 44.9	1.981	2.838	13.3	21.3
6 30	20 8.61	-5 25.2	2.193	3.125	8.9	20.5	6 30	20 10.11	-2 54.9	1.903	2.827	10.5	21.1
7 10	20 1.99	-5 37.2	2.140	3.116	6.3	20.3	7 10	20 2.83	-3 23.3	1.847	2.817	7.7	20.9
7 20	19 54.56	-6 2.3	2.113	3.107	4.7	20.2	7 20	19 54.56	-4 9.4	1.817	2.806	5.9	20.8
7 30	19 47.06	-6 38.6	2.113	3.098	5.5	20.2	7 30	19 46.16	-5 10.8	1.813	2.795	6.6	20.8
8 9	19 40.27	-7 23.4	2.140	3.089	8.0	20.4	8 9	19 38.55	-6 23.1	1.835	2.783	9.1	21.0
8 19	19 34.83	-8 13.1	2.192	3.080	10.7	20.5	8 19	19 32.50	-7 41.1	1.882	2.772	12.1	21.1
<b>385166</b>	2013 <i>VA</i> <sub>1</sub>		7 19.3 339°65	0°9/18.9	18		<b>215035</b>	2009 <i>CD</i> <sub>28</sub>		7 19.3 217°07	0°5/19.6	18	
6 10	20 11.56	-19 33.2	1.030	1.913	20.6	19.8	6 10	20 20.95	-17 11.7	2.291	3.100	13.2	21.2
6 20	20 11.77	-19 59.6	0.952	1.893	16.5	19.5	6 20	20 16.86	-17 33.2	2.197	3.095	10.5	21.0
6 30	20 8.57	-20 40.9	0.891	1.875	11.4	19.1	6 30	20 10.76	-18 2.7	2.125	3.089	7.3	20.8
7 10	20 2.47	-21 33.2	0.849	1.858	5.7	18.7	7 10	20 3.10	-18 38.1	2.079	3.082	3.7	20.6
7 20	19 54.50	-22 30.3	0.827	1.843	1.1	18.4	7 20	19 54.54	-19 16.5	2.060	3.076	0.5	20.3
7 30	19 46.32	-23 24.3	0.827	1.830	7.1	18.7	7 30	19 45.92	-19 54.7	2.069	3.069	4.0	20.6
8 9	19 39.72	-24 8.4	0.846	1.819	13.1	19.0	8 9	19 38.12	-20 29.8	2.106	3.061	7.7	20.8
8 19	19 36.12	-24 39.0	0.883	1.810	18.5	19.3	8 19	19 31.86	-21 0.2	2.168	3.053	10.9	21.0
<b>68128</b>	2001 <i>AC</i> <sub>17</sub>		7 19.3 278°98	2°1/20.5	18		<b>332047</b>	2005 <i>QU</i> <sub>147</sub>		7 19.			

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>154167</b>	2002 <i>GD</i> <sub>66</sub>		7 19.3 235°52	1°6/20.3	18		<b>45216</b>	1999 <i>XP</i> <sub>183</sub>		7 19.3 37°82	1°0/19.1	18	
6 10	20 19.03	-13 55.4	2.811	3.603	11.4	20.9	6 10	20 26.51	-24 52.0	1.539	2.377	17.2	17.8
6 20	20 14.96	-14 3.3	2.706	3.591	9.2	20.8	6 20	20 21.92	-24 27.7	1.474	2.389	13.6	17.6
6 30	20 9.26	-14 18.9	2.623	3.578	6.5	20.6	6 30	20 14.46	-24 4.3	1.430	2.402	9.3	17.4
7 10	20 2.31	-14 41.0	2.566	3.564	3.7	20.4	7 10	20 4.93	-23 39.1	1.409	2.415	4.6	17.2
7 20	19 54.62	-15 8.2	2.538	3.551	1.6	20.2	7 20	19 54.46	-23 10.1	1.413	2.429	1.1	16.9
7 30	19 46.86	-15 38.4	2.538	3.537	3.6	20.3	7 30	19 44.38	-22 36.5	1.443	2.443	5.4	17.3
8 9	19 39.69	-16 9.4	2.567	3.522	6.5	20.5	8 9	19 35.94	-21 59.2	1.499	2.458	9.8	17.6
8 19	19 33.71	-16 39.3	2.622	3.507	9.3	20.6	8 19	19 29.96	-21 19.6	1.577	2.473	13.7	17.8
<b>357779</b>	2005 <i>SS</i> <sub>230</sub>		7 19.3 217°74	4°6/21.9	18		<b>53866</b>	2000 <i>FK</i> <sub>30</sub>		7 19.3 191°14	2°7/18.2	17	
6 10	20 18.24	-5 23.6	2.505	3.274	13.3	21.1	6 10	20 27.43	-24 20.5	1.567	2.401	17.1	19.6
6 20	20 14.45	-5 6.8	2.411	3.270	11.1	21.0	6 20	20 23.07	-25 2.1	1.488	2.401	13.6	19.3
6 30	20 8.95	-5 2.1	2.338	3.266	8.6	20.8	6 30	20 15.63	-25 49.9	1.429	2.400	9.4	19.1
7 10	20 2.16	-5 10.2	2.288	3.262	6.2	20.6	7 10	20 5.72	-26 38.3	1.394	2.398	5.0	18.8
7 20	19 54.64	-5 30.6	2.265	3.257	4.7	20.5	7 20	19 54.38	-27 20.9	1.384	2.396	2.9	18.7
7 30	19 47.09	-6 1.8	2.270	3.252	5.4	20.6	7 30	19 43.04	-27 52.3	1.400	2.393	6.6	18.9
8 9	19 40.22	-6 41.3	2.301	3.247	7.6	20.7	8 9	19 33.15	-28 10.0	1.441	2.390	11.0	19.2
8 19	19 34.65	-7 25.8	2.358	3.242	10.2	20.9	8 19	19 25.82	-28 14.4	1.504	2.386	15.0	19.4
<b>355516</b>	2008 <i>AV</i> <sub>21</sub>		7 19.3 204°32	1°8/18.3	18		<b>159085</b>	2004 <i>TO</i> <sub>256</sub>		7 19.3 204°13	4°1/21.9	18	
6 10	20 23.57	-26 12.3	2.756	3.565	11.2	23.0	6 10	20 17.80	-4 57.8	3.147	3.901	11.1	21.6
6 20	20 18.58	-26 29.3	2.661	3.560	8.8	22.8	6 20	20 13.72	-4 40.1	3.047	3.896	9.3	21.5
6 30	20 11.74	-26 47.3	2.590	3.554	6.1	22.6	6 30	20 8.26	-4 32.1	2.970	3.891	7.3	21.3
7 10	20 3.52	-27 3.6	2.546	3.548	3.3	22.4	7 10	20 1.78	-4 34.4	2.917	3.885	5.3	21.2
7 20	19 54.54	-27 15.4	2.530	3.542	1.9	22.3	7 20	19 54.71	-4 46.7	2.892	3.879	4.1	21.1
7 30	19 45.57	-27 20.7	2.544	3.534	4.2	22.4	7 30	19 47.62	-5 7.9	2.895	3.873	4.7	21.2
8 9	19 37.39	-27 18.7	2.585	3.527	7.1	22.6	8 9	19 41.06	-5 36.3	2.926	3.866	6.5	21.3
8 19	19 30.64	-27 9.6	2.652	3.519	9.8	22.8	8 19	19 35.52	-6 9.7	2.983	3.859	8.6	21.4
<b>484644</b>	2008 <i>SW</i> <sub>307</sub>		7 19.3 265°42	2°5/17.9	18		<b>228647</b>	2002 <i>EJ</i> <sub>64</sub>		7 19.3 20°83	3°9/18.2	16	
6 10	20 23.84	-24 40.0	2.120	2.942	13.7	22.2	6 10	20 24.99	-29 33.8	1.486	2.333	17.3	19.7
6 20	20 19.69	-25 27.0	2.011	2.917	10.9	21.9	6 20	20 21.16	-29 47.8	1.419	2.337	13.8	19.5
6 30	20 13.08	-26 20.0	1.925	2.892	7.6	21.7	6 30	20 14.22	-30 0.6	1.371	2.342	9.7	19.3
7 10	20 4.43	-27 14.6	1.864	2.867	4.1	21.4	7 10	20 4.93	-30 6.9	1.346	2.347	5.7	19.1
7 20	19 54.45	-28 5.7	1.830	2.841	2.7	21.3	7 20	19 54.46	-30 2.0	1.345	2.353	4.0	19.0
7 30	19 44.16	-28 48.4	1.824	2.814	5.7	21.4	7 30	19 44.29	-29 43.4	1.369	2.360	7.0	19.2
8 9	19 34.69	-29 19.6	1.844	2.786	9.5	21.6	8 9	19 35.80	-29 11.8	1.417	2.367	11.1	19.4
8 19	19 27.03	-29 38.4	1.889	2.759	13.0	21.7	8 19	19 29.95	-28 29.9	1.487	2.375	14.8	19.7
<b>444191</b>	2005 <i>SF</i> <sub>64</sub>		7 19.3 307°49	4°7/21.6	18		<b>229423</b>	2005 <i>TG</i> <sub>41</sub>		7 19.3 226°67	5°3/15.9	18	
6 10	20 17.52	-7 18.9	2.080	2.871	15.0	21.2	6 10	20 25.35	-30 29.7	2.031	2.857	14.1	20.8
6 20	20 14.33	-6 59.7	1.985	2.861	12.4	21.0	6 20	20 21.09	-31 59.1	1.944	2.849	11.3	20.6
6 30	20 9.12	-6 53.7	1.910	2.850	9.5	20.8	6 30	20 14.14	-33 32.0	1.880	2.840	8.3	20.4
7 10	20 2.34	-7 1.5	1.858	2.840	6.6	20.6	7 10	20 4.99	-35 1.2	1.842	2.831	5.8	20.2
7 20	19 54.64	-7 22.7	1.831	2.830	4.7	20.5	7 20	19 54.45	-36 19.0	1.830	2.822	5.6	20.2
7 30	19 46.85	-7 55.6	1.831	2.820	5.8	20.5	7 30	19 43.68	-37 19.4	1.846	2.812	7.8	20.3
8 9	19 39.87	-8 36.9	1.857	2.810	8.6	20.7	8 9	19 33.95	-37 59.5	1.887	2.802	10.9	20.5
8 19	19 34.43	-9 23.1	1.906	2.801	11.8	20.9	8 19	19 26.31	-38 19.7	1.952	2.792	13.9	20.7
<b>189552</b>	2000 <i>RL</i> <sub>77</sub>		7 19.3 290°11	14°9/23.4	16		<b>488360</b>	2016 <i>WG</i> <sub>28</sub>		7 19.3 189°06	3°5/16.7	18	
6 10	20 23.95	+20 19.6	2.351	2.948	18.0	21.9	6 10	20 21.05	-29 28.4	2.739	3.557	11.1	21.6
6 20	20 19.74	+21 45.1	2.221	2.899	17.2	21.8	6 20	20 16.79	-30 29.5	2.655	3.556	8.8	21.5
6 30	20 13.19	+22 51.1	2.105	2.850	16.3	21.6	6 30	20 10.64	-31 31.8	2.594	3.555	6.3	21.3
7 10	20 4.58	+23 30.6	2.006	2.798	15.4	21.4	7 10	20 3.04	-32 31.0	2.560	3.554	4.1	21.2
7 20	19 54.44	+23 37.3	1.925	2.746	15.0	21.2	7 20	19 54.62	-33 23.0	2.554	3.552	3.6	21.1
7 30	19 43.62	+23 6.6	1.865	2.692	15.1	21.1	7 30	19 46.14	-34 4.2	2.577	3.551	5.4	21.2
8 9	19 33.16	+21 58.2	1.825	2.637	15.9	21.1	8 9	19 38.41	-34 33.0	2.627	3.549	7.9	21.4
8 19	19 24.10	+20 15.6	1.806	2.581	17.3	21.1	8 19	19 32.12	-34 49.3	2.701	3.547	10.3	21.6
<b>336047</b>	2008 <i>AO</i> <sub>136</sub>		7 19.3 206°31	9°0/18.3	15		<b>255031</b>	2005 <i>TE</i> <sub>75</sub>		7 19.3 272°87	3°2/17.8	18	
6 10	20 43.12	-40 1.1	1.254	2.083	20.9	20.6	6 10	20 23.72	-29 30.8	2.336	3.156	12.6	21.0
6 20	20 36.77	-40 21.4	1.183	2.081	17.4	20.4	6 20	20 19.23	-29 51.3	2.236	3.139	10.1	20.8
6 30	20 25.63	-40 29.7	1.129	2.079	13.6	20.1	6 30	20 12.50	-30 11.4	2.159	3.122	7.2	20.6
7 10	20 10.74	-40 14.5	1.096	2.076	10.2	19.9	7 10	20 4.03	-30 27.3	2.107	3.105	4.3	20.4
7 20	19 53.99	-39 27.2	1.086	2.074	9.1	19.9	7 20	19 54.54	-30 35.5	2.082	3.088	3.3	20.3
7 30	19 37.91	-38 5.8	1.099	2.070	11.3	20.0	7 30	19 45.00	-30 33.2	2.085	3.070	5.5	20.4
8 9	19 24.77	-36 17.3	1.136	2.067	15.1	20.2	8 9	19 36.38	-30 19.8	2.115	3.053	8.7	20.5
8 19	19 15.87	-34 13.1	1.194	2.063	19.0	20.4	8 19	19 29.51	-29 56.3	2.169	3.035	11.7	20.7
<b>315974</b>	2009 <i>BR</i> <sub>156</sub>		7 19.3 14°83	4°2/18.3	17		<b>507835</b>	2014 <i>EG</i> <sub>42</sub>		7 19.3 107°74	0°8/19.8	17	
6 10	20 26.31	-29 7.4	1.191	2.050	19.9	20.2	6 10	20 20.88	-15 25.7	2.242	3.049	13.5	21.9
6 20	20 22.97	-29 18.9	1.127	2.052	15.9	20.0	6 20	20 16.68	-15 57.6	2.168	3.063	10.7	21.7
6 30	20 15.87	-29 29.8	1.080	2.055	11.2	19.7	6 30	20 10.54	-16 38.9	2.115	3.077	7.4	21.5
7 10	20 5.87	-29 33.6	1.054	2.058	6.4	19.5	7 10	20 2.97	-17 27.0	2.087	3.090	3.8	21.3
7 20	19 54.37	-29 24.6	1.051	2.061	4.3	19.4	7 20	19 54.64	-18 18.6	2.088	3.103	0.8	21.1
7 30	19 43.21	-28 59.9	1.071	2.066	7.9	19.6	7 30	19 46.38	-19 10.0	2.116	3.116	3.9	21.4
8 9	19 34.12	-28 20.6	1.114	2.070	12.7	19.9	8 9	19 39.03	-19 58.0	2.172	3.129	7.4	21.6
8 19	19 28.24	-27 30.7	1.176	2.076	17.1	20.1	8 19	19 33.24	-20 40.5	2.254	3.141	10.5	21.8
<b>436245</b>	2010 <i>BE</i> <sub>6</sub>		7 19.3 178°82	4°0/21.2	18		<b>40395</b>	1999 <i>NP</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>471128</b>	2010 <i>DN</i> <sub>13</sub>		7 19.3 284°06	5°6/19.9	18		<b>498396</b>	2007 <i>XW</i> <sub>40</sub>		7 19.3 230°70	0°6/19.5	17	
6 10	20 30.23	-11 40.8	1.967	2.751	15.9	20.4	6 10	20 25.88	-18 20.2	1.802	2.620	15.9	22.4
6 20	20 24.36	-10 2.5	1.869	2.742	13.2	20.2	6 20	20 21.42	-18 24.6	1.707	2.609	12.7	22.2
6 30	20 16.01	-8 27.9	1.793	2.732	10.1	20.0	6 30	20 14.30	-18 36.9	1.632	2.598	8.9	21.9
7 10	20 5.76	-6 59.7	1.742	2.723	7.0	19.8	7 10	20 5.05	-18 55.0	1.581	2.585	4.5	21.7
7 20	19 54.42	-5 41.1	1.719	2.713	5.6	19.7	7 20	19 54.50	-19 15.7	1.557	2.573	0.6	21.3
7 30	19 43.07	-4 35.0	1.725	2.704	7.1	19.8	7 30	19 43.81	-19 35.9	1.559	2.559	5.0	21.6
8 9	19 32.81	-3 42.6	1.758	2.694	10.2	19.9	8 9	19 34.22	-19 53.0	1.588	2.545	9.5	21.9
8 19	19 24.51	-3 3.6	1.815	2.685	13.5	20.1	8 19	19 26.72	-20 5.6	1.640	2.530	13.6	22.1
<b>261013</b>	2005 <i>SY</i> <sub>107</sub>		7 19.3 11°50	5°5/16.8	18		<b>116268</b>	2003 <i>YU</i> <sub>34</sub>		7 19.3 11°50	5°2/17.1	17	
6 10	20 23.73	-34 25.6	2.010	2.840	14.1	20.8	6 10	20 21.43	-27 15.5	1.247	2.110	19.0	19.3
6 20	20 19.60	-35 9.9	1.937	2.841	11.4	20.6	6 20	20 19.11	-28 26.9	1.183	2.111	15.1	19.0
6 30	20 12.89	-35 51.2	1.885	2.842	8.5	20.4	6 30	20 13.30	-29 44.3	1.138	2.113	10.6	18.8
7 10	20 4.23	-36 23.5	1.857	2.843	6.1	20.3	7 10	20 4.70	-30 59.1	1.114	2.115	6.5	18.6
7 20	19 54.54	-36 42.0	1.854	2.845	5.7	20.3	7 20	19 54.52	-32 1.9	1.113	2.118	5.4	18.5
7 30	19 44.98	-36 43.6	1.878	2.847	7.5	20.4	7 30	19 44.43	-32 45.3	1.135	2.122	8.8	18.7
8 9	19 36.69	-36 28.1	1.927	2.849	10.3	20.6	8 9	19 36.10	-33 6.5	1.180	2.127	13.1	19.0
8 19	19 30.53	-35 57.8	1.998	2.851	13.1	20.7	8 19	19 30.75	-33 7.0	1.244	2.132	17.1	19.2
<b>511145</b>	2013 <i>YY</i> <sub>6</sub>		7 19.3 117°51	5°1/15.6	17		<b>386592</b>	2009 <i>FS</i> <sub>54</sub>		7 19.3 143°24	11°1/12.3	17	
6 10	20 28.55	-34 2.4	2.603	3.409	11.9	22.0	6 10	20 32.29	-31 37.2	1.156	2.009	20.8	20.5
6 20	20 22.74	-35 30.8	2.544	3.433	9.6	21.8	6 20	20 29.01	-35 6.2	1.098	2.015	16.9	20.2
6 30	20 14.73	-36 57.1	2.510	3.457	7.2	21.7	6 30	20 21.14	-38 45.5	1.062	2.020	13.3	20.0
7 10	20 5.05	-38 15.1	2.502	3.479	5.4	21.6	7 10	20 9.09	-42 14.7	1.049	2.025	11.2	19.9
7 20	19 54.48	-39 19.4	2.523	3.501	5.3	21.7	7 20	19 54.15	-45 11.6	1.061	2.030	12.0	20.0
7 30	19 43.98	-40 6.5	2.573	3.522	6.9	21.8	7 30	19 38.66	-47 20.8	1.097	2.034	15.0	20.2
8 9	19 34.50	-40 35.5	2.650	3.543	9.0	22.0	8 9	19 25.30	-48 38.8	1.153	2.038	18.6	20.4
8 19	19 26.80	-40 47.7	2.751	3.562	11.1	22.1	8 19	19 16.10	-49 12.2	1.226	2.041	21.9	20.6
<b>204233</b>	2004 <i>DA</i> <sub>7</sub>		7 19.3 117°94	0°5/19.5	17		<b>470763</b>	2008 <i>UZ</i> <sub>202</sub>		7 19.3 308°65	7°5/21.2	16	
6 10	20 21.71	-18 18.0	2.208	3.021	13.5	20.9	6 10	20 19.61	-6 26.1	1.591	2.395	18.3	21.3
6 20	20 17.38	-18 26.9	2.130	3.030	10.7	20.7	6 20	20 16.80	-5 18.5	1.491	2.371	15.5	21.1
6 30	20 11.05	-18 42.3	2.074	3.039	7.4	20.5	6 30	20 11.34	-4 23.2	1.410	2.348	12.4	20.8
7 10	20 3.22	-19 2.1	2.043	3.047	3.7	20.3	7 10	20 3.69	-3 43.8	1.349	2.325	9.3	20.6
7 20	19 54.63	-19 23.7	2.039	3.055	0.5	20.1	7 20	19 54.62	-3 22.9	1.312	2.302	7.5	20.4
7 30	19 46.12	-19 44.6	2.063	3.063	4.0	20.4	7 30	19 45.27	-3 21.6	1.299	2.280	8.7	20.5
8 9	19 38.57	-20 2.9	2.115	3.071	7.6	20.6	8 9	19 36.89	-3 37.9	1.309	2.258	11.9	20.6
8 19	19 32.65	-20 17.2	2.191	3.078	10.7	20.8	8 19	19 30.55	-4 8.0	1.340	2.237	15.6	20.7
<b>430109</b>	2013 <i>TO</i> <sub>2</sub>		7 19.3 204°52	2°9/20.6	17		<b>180351</b>	2003 <i>YV</i> <sub>73</sub>		7 19.3 153°66	1°2/18.8	17	
6 10	20 21.73	-11 55.9	1.745	2.556	16.6	21.7	6 10	20 26.31	-22 2.0	1.796	2.620	15.7	21.4
6 20	20 18.04	-12 0.5	1.661	2.555	13.5	21.5	6 20	20 21.61	-22 26.8	1.720	2.627	12.4	21.2
6 30	20 11.88	-12 18.7	1.596	2.553	9.7	21.3	6 30	20 14.29	-22 57.5	1.664	2.632	8.5	21.0
7 10	20 3.79	-12 49.6	1.554	2.551	5.7	21.0	7 10	20 4.96	-23 30.1	1.632	2.638	4.2	20.7
7 20	19 54.58	-13 30.6	1.538	2.549	2.9	20.9	7 20	19 54.54	-24 0.3	1.627	2.642	1.3	20.6
7 30	19 45.34	-14 17.9	1.548	2.547	5.2	21.0	7 30	19 44.22	-24 24.3	1.649	2.647	5.2	20.8
8 9	19 37.17	-15 7.3	1.584	2.545	9.3	21.2	8 9	19 35.17	-24 40.0	1.698	2.650	9.4	21.1
8 19	19 30.98	-15 55.0	1.644	2.542	13.1	21.5	8 19	19 28.28	-24 47.1	1.770	2.654	13.1	21.3
<b>198355</b>	2004 <i>VZ</i> <sub>9</sub>		7 19.3 192°67	5°2/22.1	18		<b>198173</b>	2004 <i>TV</i> <sub>97</sub>		7 19.3 301°31	1°7/20.0	18	
6 10	20 20.91	-4 30.7	2.306	3.071	14.4	20.9	6 10	20 20.61	-15 31.2	1.696	2.522	16.4	20.4
6 20	20 16.70	-4 13.1	2.214	3.070	12.1	20.7	6 20	20 17.33	-15 31.6	1.609	2.514	13.2	20.2
6 30	20 10.59	-4 9.2	2.142	3.067	9.4	20.5	6 30	20 11.50	-15 42.6	1.541	2.506	9.3	20.0
7 10	20 3.03	-4 19.8	2.094	3.065	6.8	20.3	7 10	20 3.66	-16 2.8	1.496	2.499	5.0	19.7
7 20	19 54.65	-4 44.5	2.072	3.062	5.2	20.2	7 20	19 54.64	-16 29.6	1.477	2.491	1.7	19.4
7 30	19 46.22	-5 21.6	2.077	3.058	5.9	20.3	7 30	19 45.55	-16 59.7	1.483	2.484	5.1	19.7
8 9	19 38.57	-6 8.0	2.110	3.054	8.3	20.4	8 9	19 37.56	-17 29.8	1.514	2.477	9.5	19.9
8 19	19 32.38	-6 59.9	2.167	3.050	11.0	20.6	8 19	19 31.60	-17 57.2	1.569	2.470	13.5	20.1
<b>297070</b>	2010 <i>JE</i> <sub>73</sub>		7 19.3 353°15	1°9/20.1	18		<b>162109</b>	1998 <i>RE</i> <sub>39</sub>		7 19.3 261°06	3°8/17.4	18	
6 10	20 19.54	-15 17.3	1.762	2.586	16.0	20.6	6 10	20 25.33	-29 58.8	2.227	3.047	13.2	20.7
6 20	20 16.28	-15 11.4	1.680	2.584	12.8	20.3	6 20	20 20.76	-30 36.4	2.124	3.027	10.6	20.5
6 30	20 10.63	-15 15.3	1.618	2.583	9.0	20.1	6 30	20 13.75	-31 14.7	2.044	3.006	7.6	20.3
7 10	20 3.14	-15 27.8	1.580	2.581	5.0	19.9	7 10	20 4.76	-31 49.1	1.988	2.984	4.8	20.1
7 20	19 54.63	-15 46.9	1.566	2.580	1.9	19.7	7 20	19 54.55	-32 14.7	1.960	2.962	4.0	20.0
7 30	19 46.15	-16 9.8	1.579	2.579	4.9	19.9	7 30	19 44.18	-32 27.8	1.959	2.940	6.3	20.1
8 9	19 38.75	-16 33.6	1.617	2.579	9.0	20.1	8 9	19 34.75	-32 27.1	1.984	2.917	9.5	20.2
8 19	19 33.28	-16 55.9	1.678	2.579	12.7	20.3	8 19	19 27.18	-32 13.3	2.034	2.893	12.6	20.4
<b>484565</b>	2008 <i>KR</i> <sub>37</sub>		7 19.3 76°16	2°5/20.9	18		<b>346682</b>	2008 <i>YR</i> <sub>63</sub>		7 19.3 192°66	1°6/20.1	16	
6 10	20 17.94	-10 56.8	2.320	3.117	13.4	21.6	6 10	20 20.83	-14 52.9	2.108	2.917	14.2	22.3
6 20	20 14.35	-11 9.8	2.237	3.122	10.8	21.4	6 20	20 16.90	-15 0.8	2.021	2.917	11.4	22.1
6 30	20 8.95	-11 34.0	2.175	3.127	7.9	21.2	6 30	20 10.86	-15 18.1	1.956	2.916	8.0	21.8
7 10	20 2.20	-12 8.5	2.138	3.132	4.7	21.0	7 10	20 3.23	-15 43.2	1.914	2.915	4.4	21.6
7 20	19 54.72	-12 51.0	2.128	3.138	2.5	20.9	7 20	19 54.70	-16 13.8	1.899	2.914	1.6	21.4
7 30	19 47.26	-13 38.6	2.146	3.143	4.2	21.0	7 30	19 46.16	-16 47.0	1.913	2.912	4.3	21.6
8 9	19 40.58	-14 28.0	2.190	3.148	7.3	21.2	8 9	19 38.53	-17 19.9	1.952	2.911	8.0	21.8
8 19	19 35.33	-15 16.3	2.261	3.154	10.2	21.4	8 19	19 32.55	-17 50.2	2.017	2.909	11.3	22.0
<b>181875</b>	1999 <i>JC</i> <sub>131</sub>		7 19.3 100°49	3°3/17.9	18		<b>395101</b>	2009 <i>OT</i> <sub>21</sub>					



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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>509674</b>	2008 JA <sub>28</sub>		7 19.3 27°28'	1.7°/20.4	18		<b>476213</b>	2007 UN <sub>102</sub>		7 19.3 309°16'	1.6°/19.9	18	
6 10	20 17.77	-12 55.0	2.230	3.036	13.6	21.4	6 10	20 20.00	-16 6.5	1.812	2.636	15.6	21.6
6 20	20 14.38	-13 22.6	2.145	3.037	10.9	21.3	6 20	20 16.71	-16 2.1	1.721	2.626	12.5	21.3
6 30	20 9.08	-14 1.5	2.081	3.040	7.7	21.1	6 30	20 11.01	-16 6.8	1.651	2.616	8.8	21.1
7 10	20 2.34	-14 50.0	2.042	3.042	4.3	20.8	7 10	20 3.43	-16 19.3	1.603	2.606	4.8	20.8
7 20	19 54.78	-15 45.0	2.030	3.044	1.7	20.7	7 20	19 54.74	-16 37.4	1.581	2.596	1.6	20.6
7 30	19 47.22	-16 43.0	2.046	3.046	4.0	20.8	7 30	19 45.98	-16 58.6	1.586	2.586	4.8	20.8
8 9	19 40.46	-17 40.1	2.090	3.049	7.5	21.1	8 9	19 38.23	-17 19.9	1.615	2.577	9.0	21.0
8 19	19 35.18	-18 33.2	2.158	3.052	10.6	21.3	8 19	19 32.37	-17 39.4	1.669	2.568	12.9	21.2
<b>404938</b>	2014 MT <sub>7</sub>		7 19.3 30°30'	2.5°/21.3	17		<b>386356</b>	2008 TS <sub>23</sub>		7 19.3 213°00'	1.7°/20.2	18	
6 10	20 18.56	- 7 18.9	1.914	2.710	15.9	19.9	6 10	20 22.47	-14 25.7	2.286	3.085	13.5	21.8
6 20	20 15.28	- 8 29.4	1.836	2.719	12.9	19.8	6 20	20 18.07	-14 30.6	2.189	3.078	10.9	21.6
6 30	20 9.85	-10 0.0	1.778	2.729	9.4	19.6	6 30	20 11.64	-14 44.4	2.114	3.071	7.7	21.4
7 10	20 2.77	-11 47.6	1.745	2.740	5.5	19.3	7 10	20 3.65	-15 5.8	2.064	3.063	4.3	21.2
7 20	19 54.76	-13 46.8	1.740	2.751	2.6	19.2	7 20	19 54.73	-15 32.7	2.041	3.054	1.7	21.0
7 30	19 46.73	-15 50.2	1.763	2.763	4.5	19.3	7 30	19 45.74	-16 2.7	2.047	3.045	4.2	21.1
8 9	19 39.65	-17 50.3	1.814	2.775	8.3	19.6	8 9	19 37.57	-16 33.0	2.080	3.036	7.7	21.4
8 19	19 34.27	-19 41.1	1.891	2.787	11.8	19.8	8 19	19 30.93	-17 1.7	2.138	3.026	11.0	21.5
<b>167700</b>	2004 SQ <sub>57</sub>		7 19.3 116°51'	16.4°/13.2	18		<b>36871</b>	2000 SV <sub>150</sub>		7 19.3 106°23'	0.7°/19.1	18	
6 10	20 49.59	-57 45.7	1.561	2.330	20.0	19.6	6 10	20 27.43	-20 55.4	1.557	2.387	17.4	18.6
6 20	20 43.42	-59 41.2	1.521	2.339	18.4	19.5	6 20	20 22.73	-21 13.0	1.492	2.402	13.7	18.4
6 30	20 31.12	-61 15.5	1.499	2.348	17.1	19.4	6 30	20 15.14	-21 37.7	1.447	2.416	9.4	18.1
7 10	20 13.78	-62 13.9	1.494	2.357	16.5	19.4	7 10	20 5.41	-22 5.4	1.425	2.431	4.6	17.9
7 20	19 53.92	-62 25.6	1.509	2.366	16.6	19.5	7 20	19 54.60	-22 31.7	1.429	2.445	0.8	17.7
7 30	19 35.09	-61 47.6	1.542	2.374	17.5	19.5	7 30	19 44.05	-22 52.8	1.459	2.458	5.4	18.0
8 9	19 20.35	-60 26.9	1.593	2.382	18.8	19.7	8 9	19 35.03	-23 6.5	1.514	2.471	9.9	18.3
8 19	19 11.18	-58 35.1	1.660	2.389	20.3	19.8	8 19	19 28.45	-23 12.5	1.593	2.484	13.8	18.6
<b>274760</b>	2008 UN <sub>290</sub>		7 19.3 321°73'	1.4°/18.7	18		<b>23043</b>	1999 XN <sub>25</sub>		7 19.3 228°33'	0.1°/19.4	18	
6 10	20 17.12	-20 41.0	1.413	2.267	17.6	19.8	6 10	20 19.62	-19 3.0	2.892	3.696	10.9	20.3
6 20	20 15.44	-21 17.0	1.318	2.243	14.1	19.5	6 20	20 15.43	-19 18.5	2.791	3.686	8.6	20.2
6 30	20 10.77	-22 4.7	1.243	2.219	9.8	19.1	6 30	20 9.62	-19 39.1	2.712	3.675	5.9	20.0
7 10	20 3.56	-23 0.3	1.189	2.196	4.9	18.8	7 10	20 2.58	-20 2.9	2.660	3.664	3.0	19.7
7 20	19 54.68	-23 57.8	1.159	2.174	1.6	18.5	7 20	19 54.82	-20 27.9	2.637	3.653	0.2	19.5
7 30	19 45.47	-24 50.7	1.153	2.153	6.4	18.8	7 30	19 47.00	-20 51.8	2.642	3.641	3.4	19.7
8 9	19 37.43	-25 33.8	1.170	2.132	11.6	19.0	8 9	19 39.80	-21 13.0	2.676	3.629	6.4	19.9
8 19	19 31.83	-26 4.1	1.207	2.113	16.3	19.2	8 19	19 33.80	-21 30.3	2.737	3.617	9.1	20.1
<b>160217</b>	2002 EZ <sub>39</sub>		7 19.3 201°44'	3.5°/21.5	18		<b>15628</b>	Gonzales		7 19.3 355°99'	0.8°/19.6	18	
6 10	20 18.29	- 7 56.2	2.598	3.376	12.7	21.2	6 10	20 17.95	-18 7.2	1.042	1.912	21.3	17.7
6 20	20 14.46	- 7 55.0	2.504	3.373	10.4	21.0	6 20	20 16.65	-18 9.2	0.976	1.908	17.1	17.5
6 30	20 8.98	- 8 5.0	2.432	3.371	7.8	20.8	6 30	20 11.79	-18 24.4	0.926	1.905	11.9	17.2
7 10	20 2.25	- 8 25.9	2.384	3.368	5.2	20.7	7 10	20 4.08	-18 50.1	0.895	1.903	6.1	16.8
7 20	19 54.81	- 8 56.7	2.364	3.365	3.5	20.5	7 20	19 54.71	-19 21.6	0.886	1.902	0.8	16.5
7 30	19 47.34	- 9 35.4	2.371	3.362	4.5	20.6	7 30	19 45.40	-19 53.4	0.898	1.902	6.6	16.9
8 9	19 40.54	-10 19.1	2.406	3.358	7.0	20.8	8 9	19 37.87	-20 20.8	0.931	1.903	12.4	17.2
8 19	19 35.00	-11 5.1	2.467	3.354	9.7	20.9	8 19	19 33.37	-20 40.9	0.983	1.906	17.5	17.5
<b>518622</b>	2008 CO <sub>218</sub>		7 19.3 145°79'	0.7°/19.0	17		<b>399006</b>	2013 GX <sub>9</sub>		7 19.3 185°70'	6.3°/23.7	18	
6 10	20 26.50	-21 21.4	1.752	2.576	16.0	22.1	6 10	20 17.60	+ 1 31.7	2.661	3.392	13.5	21.1
6 20	20 21.79	-21 35.2	1.676	2.583	12.7	21.9	6 20	20 13.87	+ 1 47.7	2.569	3.392	11.6	20.9
6 30	20 14.42	-21 54.9	1.621	2.590	8.7	21.7	6 30	20 8.56	+ 1 48.5	2.497	3.391	9.5	20.8
7 10	20 5.05	-22 17.0	1.590	2.596	4.3	21.5	7 10	20 2.05	+ 1 33.0	2.448	3.391	7.6	20.6
7 20	19 54.60	-22 37.8	1.585	2.601	0.8	21.2	7 20	19 54.88	+ 1 1.0	2.425	3.390	6.4	20.6
7 30	19 44.27	-22 53.9	1.608	2.606	5.1	21.5	7 30	19 47.69	+ 0 14.0	2.428	3.389	6.6	20.6
8 9	19 35.26	-23 3.4	1.656	2.611	9.4	21.8	8 9	19 41.13	- 0 44.8	2.458	3.387	8.0	20.7
8 19	19 28.44	-23 6.0	1.728	2.615	13.1	22.0	8 19	19 35.78	- 1 51.6	2.513	3.386	10.1	20.8
<b>149137</b>	2002 ER <sub>86</sub>		7 19.3 67°21'	6.0°/16.3	18		<b>16313</b>	1199 T <sub>-1</sub>		7 19.3 345°82'	0.6°/19.6	18	
6 10	20 25.36	-36 58.5	2.188	3.008	13.4	19.5	6 10	20 20.22	-18 9.7	1.837	2.664	15.3	18.6
6 20	20 20.63	-37 51.9	2.129	3.024	10.9	19.3	6 20	20 16.79	-18 14.6	1.754	2.661	12.1	18.4
6 30	20 13.45	-38 40.3	2.092	3.039	8.4	19.2	6 30	20 11.00	-18 27.4	1.691	2.659	8.4	18.1
7 10	20 4.49	-39 17.9	2.079	3.055	6.5	19.1	7 10	20 3.40	-18 46.0	1.652	2.657	4.3	17.9
7 20	19 54.65	-39 39.9	2.092	3.071	6.2	19.1	7 20	19 54.78	-19 7.6	1.639	2.655	0.7	17.6
7 30	19 45.06	-39 43.9	2.132	3.086	7.7	19.2	7 30	19 46.18	-19 29.3	1.653	2.654	4.6	17.9
8 9	19 36.76	-39 30.2	2.196	3.102	10.0	19.4	8 9	19 38.64	-19 48.4	1.692	2.652	8.8	18.2
8 19	19 30.52	-39 1.4	2.283	3.118	12.3	19.6	8 19	19 33.00	-20 3.4	1.754	2.652	12.5	18.4
<b>198332</b>	2004 TZ <sub>367</sub>		7 19.3 324°34'	0.5°/19.1	18		<b>371525</b>	2006 UR <sub>198</sub>		7 19.3 285°63'	0.7°/19.6	17	
6 10	20 18.46	-20 3.1	1.435	2.285	17.6	20.1	6 10	20 22.46	-17 53.5	1.558	2.392	17.3	22.5
6 20	20 16.31	-20 21.2	1.347	2.269	14.1	19.8	6 20	20 19.32	-17 59.3	1.459	2.370	13.9	22.2
6 30	20 11.22	-20 49.1	1.278	2.253	9.8	19.5	6 30	20 13.26	-18 15.3	1.379	2.349	9.8	21.9
7 10	20 3.71	-21 23.6	1.230	2.237	4.8	19.2	7 10	20 4.76	-18 39.3	1.322	2.327	5.0	21.6
7 20	19 54.69	-22 0.2	1.206	2.222	0.7	18.9	7 20	19 54.66	-19 8.1	1.289	2.305	0.8	21.2
7 30	19 45.51	-22 34.0	1.207	2.208	5.9	19.2	7 30	19 44.26	-19 37.5	1.281	2.282	5.6	21.5
8 9	19 37.57	-23 0.8	1.231	2.195	10.9	19.4	8 9	19 34.95	-20 4.0	1.298	2.260	10.7	21.7
8 19	19 32.04	-23 18.9	1.276	2.183	15.5	19.7	8 19	19 27.94	-20 25.1	1.337	2.238	15.3	21.9
<b>75191</b>	1999 VE <sub>170</sub>		7 19.3 160°38'	0.8°/18.9	18		<b>102283</b>	1999 TG <sub>63</sub>		7 19.3 219°64'	5.5°/22.3	18	
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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>116013</b>	2003 <i>WU</i> <sub>82</sub>		7 19.3 188°85	6°1/23.2	18		<b>19851</b>	2000 <i>TD</i> <sub>42</sub>		7 19.3 281°91	1°7/20.4	18	
6 10	20 19.54	- 0 27.3	2.405	3.150	14.4	20.4	6 10	20 18.48	-13 8.6	2.180	2.986	13.9	18.4
6 20	20 15.58	- 0 12.0	2.313	3.149	12.3	20.2	6 20	20 15.11	-13 32.2	2.084	2.977	11.2	18.2
6 30	20 9.83	- 0 12.4	2.241	3.148	9.9	20.1	6 30	20 9.73	-14 7.5	2.009	2.968	7.9	17.9
7 10	20 2.72	- 0 29.7	2.192	3.147	7.7	19.9	7 10	20 2.77	-14 52.9	1.959	2.959	4.4	17.7
7 20	19 54.84	- 1 3.7	2.169	3.145	6.2	19.9	7 20	19 54.88	-15 45.5	1.936	2.949	1.7	17.5
7 30	19 46.92	- 1 52.6	2.173	3.143	6.6	19.9	7 30	19 46.89	-16 41.7	1.940	2.940	4.2	17.7
8 9	19 39.73	- 2 53.1	2.203	3.140	8.4	20.0	8 9	19 39.67	-17 37.6	1.972	2.931	7.8	17.9
8 19	19 33.89	- 4 0.8	2.258	3.137	10.8	20.1	8 19	19 33.97	-18 30.2	2.028	2.922	11.2	18.1
<b>10332</b>	Défi		7 19.3 22°87	10°8/25.6	18		<b>263383</b>	2008 <i>CR</i> <sub>194</sub>		7 19.3 175°48	1°2/19.9	17	
6 10	20 16.44	+ 4 32.9	1.420	2.192	21.5	16.6	6 10	20 25.10	-16 12.0	1.873	2.685	15.6	21.9
6 20	20 14.25	+ 5 15.6	1.354	2.198	18.9	16.4	6 20	20 20.55	-16 20.2	1.790	2.687	12.5	21.7
6 30	20 9.47	+ 5 30.2	1.304	2.205	15.9	16.3	6 30	20 13.56	-16 37.8	1.727	2.689	8.7	21.4
7 10	20 2.70	+ 5 12.6	1.272	2.213	13.1	16.1	7 10	20 4.68	-17 2.9	1.688	2.690	4.6	21.2
7 20	19 54.84	+ 4 21.9	1.260	2.222	11.2	16.0	7 20	19 54.75	-17 32.4	1.676	2.691	1.2	20.9
7 30	19 47.06	+ 3 1.0	1.270	2.232	11.0	16.0	7 30	19 44.83	-18 3.1	1.691	2.691	4.7	21.2
8 9	19 40.51	+ 1 17.6	1.302	2.242	12.7	16.2	8 9	19 36.02	-18 31.8	1.733	2.691	8.8	21.4
8 19	19 36.08	- 0 38.7	1.356	2.253	15.4	16.4	8 19	19 29.17	-18 56.8	1.799	2.690	12.5	21.7
<b>35638</b>	1998 <i>KU</i> <sub>37</sub>		7 19.3 359°28	2°7/17.9	18		<b>443378</b>	2014 <i>HQ</i> <sub>6</sub>		7 19.3 7°04	3°8/17.4	18	
6 10	20 20.54	-23 3.2	1.627	2.470	16.2	18.2	6 10	20 18.94	-26 51.4	1.694	2.541	15.5	19.7
6 20	20 17.56	-24 6.3	1.551	2.469	12.8	18.0	6 20	20 16.20	-27 48.1	1.623	2.542	12.2	19.5
6 30	20 11.83	-25 18.1	1.495	2.468	8.8	17.7	6 30	20 10.83	-28 48.8	1.572	2.544	8.6	19.3
7 10	20 3.92	-26 32.6	1.463	2.468	4.7	17.5	7 10	20 3.41	-29 47.7	1.545	2.546	5.1	19.1
7 20	19 54.75	-27 43.1	1.457	2.468	2.9	17.4	7 20	19 54.85	-30 38.6	1.542	2.549	4.0	19.0
7 30	19 45.53	-28 43.0	1.476	2.469	6.4	17.6	7 30	19 46.33	-31 16.6	1.566	2.553	6.8	19.2
8 9	19 37.55	-29 28.5	1.520	2.469	10.5	17.8	8 9	19 39.06	-31 39.2	1.614	2.558	10.4	19.4
8 19	19 31.80	-29 58.4	1.586	2.470	14.3	18.1	8 19	19 33.96	-31 46.6	1.683	2.563	13.8	19.7
<b>479300</b>	2013 <i>HC</i> <sub>140</sub>		7 19.3 214°12	4°4/22.2	18		<b>101590</b>	1999 <i>BU</i> <sub>20</sub>		7 19.3 168°01	1°7/18.7	18	
6 10	20 18.76	- 4 13.7	2.952	3.704	11.8	22.1	6 10	20 26.53	-24 17.2	1.869	2.693	15.2	19.8
6 20	20 14.64	- 3 57.5	2.850	3.696	9.9	22.0	6 20	20 21.76	-24 31.6	1.789	2.696	12.0	19.6
6 30	20 9.02	- 3 52.1	2.769	3.688	7.8	21.8	6 30	20 14.41	-24 49.2	1.730	2.698	8.2	19.4
7 10	20 2.28	- 3 58.2	2.713	3.679	5.7	21.7	7 10	20 5.10	-25 6.3	1.695	2.700	4.2	19.2
7 20	19 54.88	- 4 15.5	2.684	3.670	4.5	21.6	7 20	19 54.73	-25 19.1	1.687	2.701	1.8	19.0
7 30	19 47.42	- 4 42.9	2.683	3.660	5.0	21.6	7 30	19 44.46	-25 24.7	1.707	2.702	5.3	19.3
8 9	19 40.53	- 5 18.3	2.710	3.650	6.9	21.7	8 9	19 35.43	-25 22.0	1.752	2.703	9.2	19.5
8 19	19 34.72	- 5 59.1	2.763	3.639	9.2	21.8	8 19	19 28.52	-25 11.4	1.821	2.704	12.8	19.7
<b>383911</b>	2008 <i>SN</i> <sub>101</sub>		7 19.3 204°65	0°5/19.6	17		<b>396100</b>	2013 <i>CQ</i> <sub>137</sub>		7 19.3 14°94	4°2/21.9	18	
6 10	20 22.45	-17 14.9	2.310	3.116	13.2	22.2	6 10	20 16.66	- 6 54.5	1.989	2.784	15.4	20.0
6 20	20 18.07	-17 33.7	2.216	3.111	10.5	22.0	6 20	20 13.72	- 6 59.1	1.908	2.787	12.7	19.8
6 30	20 11.66	-18 0.4	2.144	3.106	7.3	21.7	6 30	20 8.76	- 7 19.4	1.847	2.790	9.6	19.6
7 10	20 3.68	-18 32.6	2.098	3.101	3.7	21.5	7 10	20 2.28	- 7 55.1	1.809	2.794	6.4	19.4
7 20	19 54.79	-19 7.6	2.079	3.095	0.6	21.3	7 20	19 54.96	- 8 44.3	1.795	2.798	4.3	19.3
7 30	19 45.85	-19 42.4	2.089	3.088	4.0	21.5	7 30	19 47.64	- 9 43.7	1.809	2.802	5.4	19.4
8 9	19 37.72	-20 14.3	2.126	3.081	7.6	21.7	8 9	19 41.21	-10 48.9	1.848	2.807	8.3	19.6
8 19	19 31.16	-20 41.6	2.189	3.074	10.9	21.9	8 19	19 36.37	-11 55.2	1.912	2.812	11.5	19.8
<b>373839</b>	2003 <i>BO</i> <sub>45</sub>		7 19.3 256°21	0°1/19.4	18		<b>444937</b>	2008 <i>CD</i> <sub>17</sub>		7 19.3 99°29	1°8/18.5	15	
6 10	20 23.58	-18 30.8	1.874	2.694	15.3	22.0	6 10	20 24.79	-26 14.6	2.381	3.196	12.6	21.8
6 20	20 19.65	-18 51.4	1.773	2.677	12.2	21.7	6 20	20 19.67	-26 24.4	2.311	3.213	9.9	21.6
6 30	20 13.18	-19 21.2	1.692	2.659	8.5	21.5	6 30	20 12.56	-26 34.7	2.264	3.229	6.8	21.4
7 10	20 4.61	-19 57.5	1.636	2.641	4.3	21.2	7 10	20 4.03	-26 42.8	2.242	3.245	3.6	21.2
7 20	19 54.73	-20 36.7	1.605	2.622	0.3	20.8	7 20	19 54.84	-26 45.9	2.248	3.261	1.9	21.2
7 30	19 44.60	-21 14.5	1.602	2.602	4.9	21.1	7 30	19 45.86	-26 42.3	2.283	3.276	4.4	21.4
8 9	19 35.43	-21 47.6	1.626	2.582	9.4	21.3	8 9	19 37.92	-26 31.7	2.346	3.291	7.5	21.6
8 19	19 28.20	-22 14.0	1.672	2.562	13.4	21.5	8 19	19 31.66	-26 14.7	2.433	3.306	10.3	21.8
<b>227084</b>	2005 <i>LA</i> <sub>53</sub>		7 19.3 337°04	0°2/19.4	17		<b>281942</b>	2011 <i>FD</i> <sub>150</sub>		7 19.3 79°69	3°6/17.6	18	
6 10	20 17.46	-19 30.7	1.207	2.070	19.5	20.6	6 10	20 24.72	-26 22.7	1.705	2.541	15.9	20.4
6 20	20 15.98	-19 31.8	1.128	2.056	15.6	20.3	6 20	20 20.59	-27 22.5	1.643	2.556	12.5	20.3
6 30	20 11.24	-19 42.9	1.066	2.043	10.9	20.0	6 30	20 13.72	-28 26.2	1.601	2.571	8.7	20.1
7 10	20 3.82	-20 1.6	1.024	2.032	5.5	19.6	7 10	20 4.79	-29 27.3	1.584	2.585	5.0	19.9
7 20	19 54.78	-20 23.8	1.005	2.021	0.4	19.2	7 20	19 54.78	-30 19.6	1.593	2.600	3.8	19.8
7 30	19 45.63	-20 45.0	1.008	2.011	6.2	19.6	7 30	19 44.95	-30 58.1	1.627	2.614	6.6	20.0
8 9	19 37.98	-21 1.5	1.033	2.003	11.8	19.9	8 9	19 36.52	-31 21.0	1.687	2.629	10.2	20.3
8 19	19 33.06	-21 11.4	1.078	1.996	16.7	20.2	8 19	19 30.37	-31 29.0	1.770	2.643	13.6	20.5
<b>58787</b>	1998 <i>FW</i> <sub>78</sub>		7 19.3 295°19	5°8/15.9	18		<b>316947</b>	2001 <i>DN</i> <sub>15</sub>		7 19.3 129°80	1°0/18.9	17	
6 10	20 22.58	-33 50.5	2.081	2.911	13.7	18.8	6 10	20 27.62	-20 48.9	1.943	2.758	15.1	21.9
6 20	20 18.93	-34 57.0	1.992	2.896	11.1	18.6	6 20	20 22.36	-21 24.9	1.874	2.775	11.8	21.7
6 30	20 12.69	-36 3.3	1.925	2.881	8.4	18.4	6 30	20 14.68	-22 7.5	1.826	2.792	8.1	21.5
7 10	20 4.36	-37 2.9	1.882	2.866	6.3	18.2	7 10	20 5.19	-22 52.5	1.803	2.807	4.0	21.3
7 20	19 54.75	-37 49.6	1.865	2.852	6.0	18.2	7 20	19 54.77	-23 35.5	1.807	2.822	1.1	21.1
7 30	19 45.00	-38 18.7	1.874	2.837	8.0	18.3	7 30	19 44.51	-24 12.5	1.840	2.837	4.8	21.4
8 9	19 36.30	-38 28.6	1.908	2.823	10.8	18.4	8 9	19 35.47	-24 41.1	1.900	2.850	8.7	21.7
8 19	19 29.63	-38 20.4	1.964	2.808	13.6	18.6	8 19	19 28.44	-25 0.6	1.984	2.863	12.1	21.9
<b>354753</b>	2005 <i>TO</i> <sub>157</sub>		7 19.3 167°58	3°7/17.4	18		<b>383246</b>	2006 <i>BO</i> <sub>228&lt;/</sub>					

EPHEMERIDES

7 19.3

7 19.4

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>282285</b>	2002 <i>PS</i> <sub>69</sub>		7 19.3 286°13	0°7/19.6	18		<b>139124</b>	2001 <i>FY</i> <sub>64</sub>		7 19.3 169°99	1°6/18.6	17	
6 10	20 24.66	-20 8.0	1.979	2.797	14.7	20.3	6 10	20 26.31	-22 21.8	1.854	2.676	15.4	20.2
6 20	20 20.33	-19 44.5	1.872	2.774	11.8	20.1	6 20	20 21.68	-22 57.0	1.774	2.680	12.1	20.0
6 30	20 13.54	-19 24.3	1.786	2.752	8.3	19.8	6 30	20 14.44	-23 38.4	1.715	2.683	8.3	19.8
7 10	20 4.77	-19 6.1	1.725	2.729	4.2	19.5	7 10	20 5.19	-24 21.9	1.681	2.685	4.2	19.5
7 20	19 54.79	-18 48.4	1.690	2.706	0.8	19.2	7 20	19 54.82	-25 2.4	1.673	2.687	1.7	19.4
7 30	19 44.65	-18 30.0	1.683	2.683	4.7	19.5	7 30	19 44.47	-25 35.8	1.693	2.689	5.3	19.6
8 9	19 35.47	-18 10.4	1.702	2.660	9.0	19.7	8 9	19 35.32	-25 59.5	1.739	2.689	9.4	19.9
8 19	19 28.17	-17 49.5	1.746	2.637	12.8	19.9	8 19	19 28.26	-26 13.0	1.809	2.689	13.0	20.1
<b>326897</b>	2003 <i>WX</i> <sub>48</sub>		7 19.3 198°85	2°1/18.4	17		<b>423781</b>	2006 <i>EU</i> <sub>44</sub>		7 19.3 80°82	1°7/20.3	17	
6 10	20 26.84	-24 1.1	1.906	2.728	15.0	22.3	6 10	20 21.46	-12 35.2	1.820	2.631	16.0	20.3
6 20	20 22.12	-24 37.1	1.819	2.725	11.9	22.1	6 20	20 17.65	-13 12.3	1.750	2.645	12.8	20.1
6 30	20 14.78	-25 18.2	1.754	2.721	8.2	21.9	6 30	20 11.54	-14 3.4	1.700	2.660	9.0	19.9
7 10	20 5.37	-25 59.9	1.713	2.717	4.3	21.6	7 10	20 3.70	-15 5.9	1.675	2.675	4.9	19.7
7 20	19 54.75	-26 37.2	1.699	2.712	2.2	21.5	7 20	19 54.93	-16 15.3	1.676	2.690	1.7	19.5
7 30	19 44.09	-27 5.9	1.713	2.707	5.6	21.7	7 30	19 46.27	-17 26.4	1.704	2.705	4.6	19.7
8 9	19 34.58	-27 23.7	1.753	2.700	9.5	21.9	8 9	19 38.71	-18 34.3	1.759	2.719	8.5	20.0
8 19	19 27.16	-27 30.5	1.817	2.694	13.1	22.1	8 19	19 33.03	-19 35.4	1.838	2.733	12.1	20.2
<b>379234</b>	2009 <i>SP</i> <sub>274</sub>		7 19.3 251°18	4°5/21.4	17		<b>148389</b>	2000 <i>TN</i> <sub>35</sub>		7 19.3 222°49	0°2/19.5	18	
6 10	20 21.09	- 8 32.5	1.742	2.544	17.0	21.9	6 10	20 20.65	-18 48.8	3.087	3.885	10.4	22.4
6 20	20 17.63	- 8 20.2	1.653	2.537	14.1	21.7	6 20	20 16.17	-19 2.3	2.981	3.873	8.2	22.2
6 30	20 11.72	- 8 23.0	1.584	2.531	10.6	21.5	6 30	20 10.13	-19 20.6	2.900	3.860	5.7	22.0
7 10	20 3.87	- 8 41.5	1.536	2.524	7.0	21.3	7 10	20 2.92	-19 41.9	2.844	3.848	2.9	21.8
7 20	19 54.86	- 9 14.5	1.514	2.518	4.6	21.1	7 20	19 55.01	-20 4.4	2.818	3.834	0.3	21.5
7 30	19 45.76	- 9 59.1	1.517	2.511	6.1	21.2	7 30	19 47.03	-20 26.0	2.822	3.820	3.2	21.8
8 9	19 37.68	-10 50.9	1.545	2.504	9.7	21.4	8 9	19 39.62	-20 45.3	2.854	3.806	6.1	22.0
8 19	19 31.52	-11 45.6	1.597	2.497	13.4	21.6	8 19	19 33.34	-21 1.1	2.913	3.791	8.7	22.1
<b>472093</b>	2013 <i>YU</i> <sub>148</sub>		7 19.3 149°48	2°6/20.4	17		<b>114281</b>	2002 <i>XX</i> <sub>21</sub>		7 19.3 317°52	4°1/17.5	18	
6 10	20 24.46	-13 36.4	2.122	2.919	14.5	21.8	6 10	20 19.99	-25 19.6	1.367	2.225	17.9	18.7
6 20	20 19.63	-13 17.8	2.040	2.927	11.7	21.6	6 20	20 17.95	-26 21.8	1.283	2.209	14.3	18.5
6 30	20 12.69	-13 7.6	1.980	2.934	8.4	21.4	6 30	20 12.67	-27 33.0	1.218	2.193	10.0	18.2
7 10	20 4.19	-13 5.3	1.944	2.940	4.9	21.2	7 10	20 4.64	-28 46.5	1.174	2.178	5.8	17.9
7 20	19 54.86	-13 9.7	1.936	2.946	2.6	21.1	7 20	19 54.86	-29 53.9	1.154	2.164	4.3	17.8
7 30	19 45.62	-13 19.2	1.955	2.952	4.6	21.2	7 30	19 44.82	-30 47.1	1.158	2.150	8.0	17.9
8 9	19 37.37	-13 31.8	2.002	2.957	8.0	21.4	8 9	19 36.17	-31 21.7	1.185	2.136	12.7	18.2
8 19	19 30.82	-13 45.6	2.074	2.962	11.2	21.6	8 19	19 30.23	-31 36.8	1.232	2.124	17.0	18.4
<b>49081</b>	1998 <i>RA</i> <sub>64</sub>		7 19.3 153°32	0°1/19.4	18		<b>311423</b>	2005 <i>UG</i> <sub>119</sub>		7 19.4 324°78	6°8/15.7	18	
6 10	20 24.60	-18 14.0	1.848	2.666	15.6	18.5	6 10	20 23.19	-36 40.1	1.974	2.805	14.3	20.7
6 20	20 20.21	-18 37.3	1.769	2.672	12.3	18.3	6 20	20 19.58	-37 44.7	1.895	2.796	11.7	20.5
6 30	20 13.36	-19 9.4	1.712	2.678	8.5	18.1	6 30	20 13.21	-38 46.1	1.837	2.788	9.1	20.4
7 10	20 4.61	-19 47.3	1.678	2.682	4.2	17.8	7 10	20 4.68	-39 37.6	1.803	2.779	7.2	20.2
7 20	19 54.83	-20 27.1	1.671	2.687	0.3	17.5	7 20	19 54.88	-40 12.6	1.793	2.772	7.0	20.2
7 30	19 45.09	-21 4.8	1.691	2.691	4.7	17.9	7 30	19 45.05	-40 27.1	1.809	2.764	8.8	20.3
8 9	19 36.49	-21 37.2	1.738	2.695	8.9	18.2	8 9	19 36.48	-40 20.3	1.849	2.757	11.4	20.4
8 19	19 29.90	-22 2.8	1.809	2.698	12.6	18.4	8 19	19 30.13	-39 54.7	1.910	2.751	14.1	20.6
<b>204874</b>	2007 <i>SR</i> <sub>4</sub>		7 19.3 352°95	2°3/20.2	18		<b>361501</b>	2007 <i>EF</i> <sub>78</sub>		7 19.4 3°14	4°6/22.2	18	
6 10	20 21.17	-15 2.3	1.783	2.603	16.0	20.5	6 10	20 17.00	- 5 39.5	2.266	3.046	14.2	20.9
6 20	20 17.57	-14 47.0	1.701	2.602	12.8	20.3	6 20	20 13.75	- 5 30.7	2.179	3.046	11.8	20.7
6 30	20 11.57	-14 41.0	1.639	2.601	9.1	20.1	6 30	20 8.68	- 5 35.7	2.112	3.046	9.1	20.6
7 10	20 3.74	-14 43.4	1.600	2.600	5.1	19.8	7 10	20 2.25	- 5 54.8	2.069	3.046	6.4	20.4
7 20	19 54.89	-14 52.6	1.587	2.599	2.3	19.6	7 20	19 55.06	- 6 27.2	2.051	3.046	4.7	20.3
7 30	19 46.07	-15 6.4	1.599	2.599	5.0	19.8	7 30	19 47.86	- 7 10.7	2.060	3.047	5.5	20.3
8 9	19 38.35	-15 22.3	1.638	2.599	9.0	20.0	8 9	19 41.42	- 8 1.9	2.096	3.048	7.9	20.5
8 19	19 32.56	-15 38.3	1.700	2.599	12.7	20.3	8 19	19 36.37	- 8 57.0	2.156	3.049	10.7	20.7
<b>187074</b>	2005 <i>NH</i> <sub>28</sub>		7 19.3 326°94	3°3/20.6	16		<b>479745</b>	2014 <i>EZ</i> <sub>9</sub>		7 19.4 261°00	0°9/19.9	18	
6 10	20 15.62	-12 36.3	1.250	2.100	19.8	20.5	6 10	20 20.26	-15 45.3	1.972	2.788	14.8	21.3
6 20	20 14.42	-12 31.9	1.163	2.080	16.2	20.2	6 20	20 16.71	-16 8.9	1.886	2.787	11.8	21.1
6 30	20 10.17	-12 44.8	1.092	2.061	11.8	19.9	6 30	20 10.94	-16 43.0	1.821	2.785	8.2	20.9
7 10	20 3.37	-13 15.0	1.041	2.043	7.0	19.6	7 10	20 3.45	-17 25.3	1.781	2.784	4.3	20.7
7 20	19 54.90	-14 0.3	1.013	2.025	3.4	19.3	7 20	19 54.97	-18 12.5	1.766	2.782	0.9	20.4
7 30	19 46.15	-14 56.0	1.007	2.009	6.4	19.4	7 30	19 46.46	-19 0.5	1.780	2.780	4.4	20.7
8 9	19 38.66	-15 55.7	1.023	1.994	11.7	19.7	8 9	19 38.89	-19 45.8	1.819	2.779	8.4	20.9
8 19	19 33.69	-16 53.7	1.059	1.980	16.6	19.9	8 19	19 33.07	-20 25.8	1.883	2.777	11.9	21.1
<b>187847</b>	1999 <i>XM</i> <sub>138</sub>		7 19.3 95°91	10°1/26.2	18		<b>251849</b>	1999 <i>TA</i> <sub>312</sub>		7 19.4 317°39	3°0/20.8	18	
6 10	20 19.98	+12 15.7	2.641	3.298	15.1	20.2	6 10	20 17.44	-11 50.7	1.972	2.783	15.0	20.6
6 20	20 15.70	+13 30.9	2.573	3.314	13.7	20.1	6 20	20 14.55	-11 46.0	1.874	2.768	12.2	20.4
6 30	20 9.79	+14 27.9	2.523	3.330	12.2	20.1	6 30	20 9.51	-11 52.9	1.797	2.753	8.9	20.2
7 10	20 2.70	+15 3.4	2.492	3.345	11.0	20.0	7 10	20 2.78	-12 11.1	1.744	2.739	5.4	19.9
7 20	19 54.98	+15 15.4	2.485	3.361	10.2	20.0	7 20	19 55.02	-12 39.2	1.715	2.725	3.0	19.8
7 30	19 47.32	+15 3.9	2.500	3.376	10.1	20.0	7 30	19 47.13	-13 14.5	1.713	2.711	4.9	19.9
8 9	19 40.39	+14 31.3	2.539	3.391	10.7	20.1	8 9	19 40.08	-13 53.7	1.737	2.698	8.5	20.0
8 19	19 34.76	+13 41.3	2.599	3.406	11.8	20.2	8 19	19 34.68	-14 33.7	1.785	2.685	12.1	20.2
<b>128551</b>	2004 <i>PW</i> <sub>75</sub>		7 19.3 82°42	0°4/19.2	18		<b>166449</b>	200					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>283858</b>	2003 VY <sub>10</sub>		7 19.4 260°91	2°6/20.4	18		<b>188551</b>	2004 TN <sub>2</sub>		7 19.4 40°42	4°1/21.8	18	
6 10	20 21.89	-13 44.2	2.071	2.875	14.6	21.1	6 10	20 17.82	-7 19.1	2.253	3.038	14.1	20.2
6 20	20 17.92	-13 28.3	1.971	2.862	11.8	20.9	6 20	20 14.38	-7 10.9	2.169	3.041	11.6	20.0
6 30	20 11.77	-13 21.2	1.892	2.848	8.5	20.6	6 30	20 9.12	-7 15.5	2.106	3.045	8.8	19.8
7 10	20 3.88	-13 22.3	1.837	2.834	5.0	20.4	7 10	20 2.48	-7 32.9	2.066	3.048	6.0	19.7
7 20	19 54.95	-13 30.7	1.809	2.820	2.6	20.2	7 20	19 55.10	-8 2.2	2.052	3.052	4.2	19.6
7 30	19 45.91	-13 44.5	1.808	2.806	4.8	20.3	7 30	19 47.73	-8 41.1	2.066	3.056	5.1	19.6
8 9	19 37.73	-14 1.5	1.834	2.791	8.4	20.5	8 9	19 41.16	-9 26.3	2.106	3.060	7.8	19.8
8 19	19 31.22	-14 19.7	1.883	2.776	12.0	20.7	8 19	19 36.01	-10 14.4	2.171	3.064	10.6	20.0
<b>338600</b>	2003 ST <sub>170</sub>		7 19.4 255°22	1°9/18.4	18		<b>383296</b>	2006 EL <sub>49</sub>		7 19.4 269°41	2°1/18.4	18	
6 10	20 23.67	-24 8.7	2.198	3.017	13.4	21.5	6 10	20 23.20	-24 1.6	1.850	2.681	15.0	21.6
6 20	20 19.42	-24 39.0	2.095	2.999	10.6	21.3	6 20	20 19.46	-24 33.4	1.758	2.669	11.9	21.4
6 30	20 12.87	-25 13.7	2.014	2.981	7.3	21.0	6 30	20 13.10	-25 10.7	1.686	2.656	8.3	21.1
7 10	20 4.46	-25 49.2	1.958	2.962	3.8	20.8	7 10	20 4.66	-25 49.1	1.639	2.643	4.3	20.9
7 20	19 54.92	-26 21.6	1.930	2.943	2.0	20.6	7 20	19 54.94	-26 24.0	1.617	2.630	2.2	20.7
7 30	19 45.20	-26 47.1	1.930	2.923	5.0	20.8	7 30	19 45.10	-26 50.9	1.622	2.617	5.6	20.9
8 9	19 36.33	-27 3.6	1.956	2.903	8.7	21.0	8 9	19 36.32	-27 7.6	1.653	2.603	9.7	21.1
8 19	19 29.20	-27 10.6	2.007	2.883	12.1	21.1	8 19	19 29.60	-27 13.4	1.707	2.590	13.5	21.3
<b>140125</b>	2001 SD <sub>141</sub>		7 19.4 244°56	1°2/18.8	18		<b>166015</b>	2002 AD <sub>143</sub>		7 19.4 328°30	3°3/20.3	18	
6 10	20 21.64	-22 37.2	2.183	3.005	13.4	20.7	6 10	20 19.40	-14 48.4	1.165	2.019	20.7	19.8
6 20	20 17.65	-22 59.3	2.095	3.001	10.5	20.5	6 20	20 17.57	-14 21.3	1.087	2.007	16.8	19.5
6 30	20 11.50	-23 25.9	2.028	2.996	7.2	20.2	6 30	20 12.42	-14 7.1	1.025	1.995	12.2	19.2
7 10	20 3.71	-23 54.1	1.986	2.991	3.6	20.0	7 10	20 4.53	-14 5.9	0.982	1.984	7.0	18.9
7 20	19 54.98	-24 20.4	1.971	2.986	1.3	19.8	7 20	19 54.95	-14 16.3	0.961	1.974	3.3	18.6
7 30	19 46.23	-24 41.7	1.984	2.981	4.5	20.1	7 30	19 45.23	-14 35.3	0.963	1.965	6.8	18.8
8 9	19 38.40	-24 56.3	2.024	2.976	8.2	20.3	8 9	19 37.03	-14 59.0	0.986	1.957	12.1	19.1
8 19	19 32.25	-25 3.4	2.088	2.970	11.4	20.5	8 19	19 31.61	-15 23.5	1.029	1.949	17.1	19.3
<b>173364</b>	2000 AT <sub>49</sub>		7 19.4 78°41	5°8/19.6	17		<b>344162</b>	2000 YL <sub>30</sub>		7 19.4 289°83	2°1/18.8	18	
6 10	20 35.98	-16 50.9	1.098	1.933	22.9	19.2	6 10	20 27.84	-26 29.2	1.833	2.659	15.4	20.8
6 20	20 30.50	-14 52.2	1.031	1.938	18.7	19.0	6 20	20 23.39	-26 27.5	1.720	2.627	12.4	20.5
6 30	20 21.08	-12 55.5	0.981	1.943	13.7	18.7	6 30	20 16.03	-26 26.3	1.628	2.595	8.7	20.2
7 10	20 8.63	-11 5.0	0.952	1.948	8.5	18.4	7 10	20 6.22	-26 21.8	1.559	2.563	4.7	19.9
7 20	19 54.64	-9 25.8	0.946	1.953	5.8	18.3	7 20	19 54.83	-26 10.2	1.516	2.530	2.2	19.7
7 30	19 41.06	-8 3.3	0.966	1.958	8.9	18.5	7 30	19 43.12	-25 48.6	1.501	2.497	5.9	19.8
8 9	19 29.71	-6 59.9	1.008	1.964	13.8	18.8	8 9	19 32.47	-25 16.8	1.512	2.463	10.4	20.0
8 19	19 21.79	-6 15.2	1.070	1.969	18.4	19.1	8 19	19 24.05	-24 36.4	1.546	2.430	14.6	20.2
<b>238587</b>	2004 YX <sub>3</sub>		7 19.4 112°39	0°5/19.6	18		<b>98133</b>	2000 SL <sub>38</sub>		7 19.4 317°50	2°5/18.5	18	
6 10	20 24.91	-19 12.1	2.112	2.923	14.1	21.3	6 10	20 17.95	-22 35.1	1.145	2.015	19.8	18.8
6 20	20 19.99	-19 9.2	2.039	2.937	11.1	21.1	6 20	20 16.96	-23 8.7	1.056	1.989	15.9	18.5
6 30	20 12.93	-19 11.6	1.988	2.951	7.7	20.9	6 30	20 12.42	-23 53.8	0.984	1.964	11.2	18.1
7 10	20 4.32	-19 17.4	1.961	2.965	3.8	20.7	7 10	20 4.74	-24 45.6	0.931	1.939	5.8	17.7
7 20	19 54.95	-19 24.5	1.962	2.978	0.5	20.4	7 20	19 54.92	-25 36.9	0.900	1.915	2.7	17.5
7 30	19 45.76	-19 30.7	1.992	2.991	4.1	20.8	7 30	19 44.62	-26 19.7	0.892	1.892	7.7	17.7
8 9	19 37.64	-19 34.7	2.048	3.004	7.8	21.0	8 9	19 35.76	-26 48.5	0.904	1.870	13.6	17.9
8 19	19 31.31	-19 35.8	2.130	3.016	11.0	21.2	8 19	19 29.95	-27 1.3	0.935	1.849	19.0	18.2
<b>357158</b>	2002 CR <sub>98</sub>		7 19.4 215°35	2°6/17.9	18		<b>6769</b>	Brokoff		7 19.4 179°78	2°0/18.5	18	
6 10	20 23.35	-28 39.0	2.720	3.532	11.3	21.4	6 10	20 25.93	-23 34.7	1.888	2.712	15.1	18.1
6 20	20 18.60	-29 3.0	2.627	3.526	8.9	21.2	6 20	20 21.39	-24 10.0	1.807	2.713	11.9	17.9
6 30	20 11.95	-29 27.2	2.557	3.519	6.3	21.1	6 30	20 14.27	-24 50.6	1.746	2.714	8.2	17.6
7 10	20 3.86	-29 48.1	2.513	3.512	3.7	20.9	7 10	20 5.16	-25 32.0	1.710	2.714	4.2	17.4
7 20	19 54.98	-30 2.8	2.498	3.504	2.7	20.8	7 20	19 54.92	-26 9.5	1.701	2.714	2.1	17.3
7 30	19 46.10	-30 9.1	2.511	3.496	4.7	20.9	7 30	19 44.69	-26 38.8	1.719	2.714	5.4	17.5
8 9	19 38.03	-30 6.0	2.552	3.488	7.5	21.1	8 9	19 35.62	-26 57.9	1.764	2.712	9.4	17.7
8 19	19 31.42	-29 54.1	2.618	3.479	10.1	21.2	8 19	19 28.63	-27 6.3	1.832	2.711	12.9	17.9
<b>429875</b>	2012 SY <sub>40</sub>		7 19.4 355°57	0°5/19.5	16		<b>120931</b>	1998 SU <sub>123</sub>		7 19.4 301°50	3°8/18.1	18	
6 10	20 19.30	-19 37.5	1.338	2.191	18.5	20.8	6 10	20 23.12	-25 57.8	1.225	2.086	19.4	19.7
6 20	20 16.99	-19 29.9	1.265	2.187	14.7	20.5	6 20	20 20.92	-26 33.5	1.138	2.065	15.6	19.4
6 30	20 11.67	-19 30.3	1.209	2.184	10.2	20.3	6 30	20 15.05	-27 16.1	1.069	2.045	11.0	19.1
7 10	20 3.98	-19 36.6	1.175	2.181	5.2	20.0	7 10	20 5.99	-27 59.1	1.020	2.025	6.2	18.8
7 20	19 54.97	-19 45.6	1.164	2.180	0.5	19.6	7 20	19 54.84	-28 34.8	0.994	2.005	4.0	18.6
7 30	19 46.03	-19 54.1	1.177	2.179	5.7	20.0	7 30	19 43.35	-28 56.0	0.991	1.986	8.2	18.7
8 9	19 38.55	-19 59.6	1.213	2.180	10.7	20.3	8 9	19 33.43	-28 59.5	1.009	1.967	13.6	19.0
8 19	19 33.57	-20 1.0	1.270	2.182	15.2	20.6	8 19	19 26.63	-28 46.2	1.047	1.948	18.5	19.2
<b>471129</b>	2010 DQ <sub>40</sub>		7 19.4 94°81	5°3/17.0	17		<b>15584</b>	2000 GO <sub>74</sub>		7 19.4 120°35	6°8/15.8	18	
6 10	20 27.85	-33 37.7	1.988	2.811	14.4	21.1	6 10	20 26.65	-37 35.4	2.106	2.926	13.9	18.5
6 20	20 22.77	-34 26.4	1.927	2.827	11.6	20.9	6 20	20 22.03	-38 42.7	2.038	2.931	11.4	18.4
6 30	20 15.07	-35 12.0	1.887	2.844	8.5	20.7	6 30	20 14.73	-39 45.5	1.991	2.936	8.9	18.2
7 10	20 5.45	-35 48.5	1.872	2.860	6.0	20.6	7 10	20 5.38	-40 37.1	1.969	2.941	7.1	18.1
7 20	19 54.89	-36 10.9	1.883	2.875	5.4	20.6	7 20	19 54.91	-41 11.6	1.973	2.946	7.0	18.1
7 30	19 44.59	-36 16.2	1.921	2.891	7.3	20.8	7 30	19 44.54	-41 25.5	2.002	2.950	8.5	18.2
8 9	19 35.69	-36 4.7	1.984	2.906	10.1	21.0	8 9	19 35.47	-41 18.7	2.056	2.955	10.9	18.4
8 19	19 29.02	-35 38.9	2.070	2.921	12.8	21.2	8 19	19 28.62	-40 53.9	2.132	2.959	13.3	18.6
<b>395617</b>	2011 UV <sub>379</sub>		7 19.4 8°72	4°2/17.0	18		<b>242765</b>	2005 WN <sub>156</sub>		7 19.4 189°31	2°3/20.7	18	
6 10	20 21.00	-2											

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>120910</b>	1998 <i>SR</i> <sub>59</sub>		7 19.4 303°62	1°9/20.1	18		<b>315022</b>	2007 <i>BE</i> <sub>58</sub>		7 19.4 177°29	2°5/21.3	18	
6 10	20 20.37	-14 29.0	1.248	2.094	20.0	19.5	6 10	20 18.91	-9 10.2	2.877	3.652	11.6	21.4
6 20	20 18.24	-14 41.3	1.165	2.082	16.2	19.2	6 20	20 14.86	-9 31.1	2.784	3.654	9.4	21.3
6 30	20 12.86	-15 10.5	1.099	2.070	11.6	18.9	6 30	20 9.28	-10 2.5	2.712	3.655	6.9	21.1
7 10	20 4.76	-15 55.2	1.054	2.058	6.3	18.6	7 10	20 2.56	-10 43.6	2.667	3.656	4.3	20.9
7 20	19 54.94	-16 51.0	1.031	2.046	1.9	18.3	7 20	19 55.19	-11 32.3	2.649	3.656	2.5	20.8
7 30	19 44.88	-17 51.8	1.032	2.035	6.2	18.5	7 30	19 47.79	-12 26.3	2.661	3.656	3.7	20.9
8 9	19 36.21	-18 51.0	1.055	2.024	11.8	18.8	8 9	19 41.00	-13 22.4	2.702	3.656	6.3	21.1
8 19	19 30.21	-19 43.8	1.099	2.013	16.8	19.0	8 19	19 35.33	-14 18.0	2.769	3.655	8.8	21.2
<b>32312</b>	2000 <i>QT</i> <sub>38</sub>		7 19.4 181°03	1°8/18.6	18		<b>386808</b>	2010 <i>FU</i> <sub>20</sub>		7 19.4 123°69	1°0/18.9	17	
6 10	20 24.25	-26 5.5	2.428	3.242	12.4	19.3	6 10	20 22.36	-21 15.9	1.911	2.737	14.8	21.4
6 20	20 19.41	-26 15.1	2.342	3.243	9.8	19.1	6 20	20 18.50	-21 44.0	1.831	2.739	11.7	21.2
6 30	20 12.55	-26 25.6	2.278	3.243	6.7	18.9	6 30	20 12.25	-22 18.6	1.772	2.741	8.0	21.0
7 10	20 4.18	-26 34.1	2.240	3.243	3.6	18.7	7 10	20 4.18	-22 56.2	1.738	2.743	4.0	20.8
7 20	19 55.02	-26 38.0	2.231	3.243	1.9	18.6	7 20	19 55.08	-23 32.8	1.729	2.745	1.1	20.5
7 30	19 45.94	-26 35.2	2.249	3.242	4.5	18.8	7 30	19 46.02	-24 4.5	1.749	2.747	4.9	20.8
8 9	19 37.79	-26 25.2	2.295	3.242	7.6	19.0	8 9	19 38.03	-24 28.7	1.794	2.748	8.8	21.1
8 19	19 31.27	-26 8.4	2.367	3.241	10.6	19.2	8 19	19 31.96	-24 44.6	1.863	2.750	12.3	21.3
<b>175708</b>	1996 <i>RF</i> <sub>1</sub>		7 19.4 282°70	2°6/20.4	18		<b>115926</b>	2003 <i>WJ</i> <sub>17</sub>		7 19.4 274°06	6°3/16.9	18	
6 10	20 21.56	-13 19.1	1.500	2.327	18.1	21.1	6 10	20 28.14	-36 17.0	1.935	2.758	14.8	20.0
6 20	20 18.69	-13 21.8	1.404	2.309	14.8	20.8	6 20	20 23.48	-36 56.4	1.851	2.749	12.1	19.8
6 30	20 12.92	-13 39.0	1.327	2.291	10.7	20.5	6 30	20 15.91	-37 31.3	1.788	2.740	9.2	19.6
7 10	20 4.73	-14 10.3	1.272	2.272	6.1	20.2	7 10	20 6.07	-37 55.4	1.749	2.731	6.9	19.4
7 20	19 54.97	-14 52.9	1.241	2.254	2.6	19.9	7 20	19 54.96	-38 2.8	1.735	2.721	6.4	19.4
7 30	19 44.91	-15 42.5	1.235	2.236	5.8	20.1	7 30	19 43.90	-37 50.4	1.747	2.712	8.3	19.5
8 9	19 35.95	-16 34.0	1.253	2.217	10.7	20.3	8 9	19 34.24	-37 18.5	1.783	2.703	11.2	19.6
8 19	19 29.27	-17 23.0	1.293	2.199	15.4	20.5	8 19	19 26.97	-36 30.3	1.843	2.693	14.1	19.8
<b>175987</b>	2000 <i>QF</i> <sub>74</sub>		7 19.4 298°52	4°8/21.9	18		<b>366116</b>	2012 <i>DM</i> <sub>30</sub>		7 19.4 279°76	3°1/21.2	18	
6 10	20 17.68	-6 12.4	2.071	2.858	15.2	20.1	6 10	20 18.06	-9 39.7	2.379	3.169	13.3	21.1
6 20	20 14.63	-6 5.6	1.971	2.844	12.6	19.9	6 20	20 14.67	-9 46.1	2.274	3.153	10.9	20.9
6 30	20 9.54	-6 13.7	1.892	2.829	9.7	19.7	6 30	20 9.43	-10 4.4	2.190	3.137	8.1	20.7
7 10	20 2.83	-6 37.5	1.835	2.815	6.8	19.5	7 10	20 2.75	-10 34.2	2.131	3.121	5.1	20.4
7 20	19 55.14	-7 16.1	1.803	2.801	4.8	19.3	7 20	19 55.18	-11 14.0	2.098	3.105	3.1	20.3
7 30	19 47.30	-8 7.1	1.798	2.787	5.8	19.4	7 30	19 47.47	-12 1.1	2.093	3.088	4.5	20.3
8 9	19 40.22	-9 6.5	1.819	2.774	8.7	19.5	8 9	19 40.42	-12 52.5	2.115	3.072	7.5	20.5
8 19	19 34.68	-10 10.1	1.864	2.760	11.9	19.7	8 19	19 34.72	-13 44.7	2.162	3.056	10.6	20.7
<b>390218</b>	2012 <i>XD</i> <sub>33</sub>		7 19.4 199°75	0°6/19.7	18		<b>346743</b>	2009 <i>BJ</i> <sub>12</sub>		7 19.4 251°72	0°5/19.6	18	
6 10	20 22.28	-18 12.2	2.182	2.994	13.7	22.0	6 10	20 21.04	-17 12.3	2.018	2.835	14.5	21.4
6 20	20 18.06	-18 14.9	2.094	2.993	10.9	21.8	6 20	20 17.38	-17 34.9	1.926	2.828	11.5	21.2
6 30	20 11.75	-18 23.9	2.027	2.991	7.5	21.6	6 30	20 11.47	-18 6.9	1.856	2.821	8.0	21.0
7 10	20 3.85	-18 37.5	1.985	2.989	3.9	21.3	7 10	20 3.81	-18 45.8	1.810	2.814	4.1	20.7
7 20	19 55.07	-18 53.3	1.971	2.987	0.7	21.1	7 20	19 55.11	-19 28.3	1.791	2.807	0.5	20.4
7 30	19 46.30	-19 9.2	1.984	2.984	4.1	21.3	7 30	19 46.33	-20 10.5	1.799	2.799	4.4	20.7
8 9	19 38.45	-19 23.0	2.025	2.982	7.8	21.6	8 9	19 38.45	-20 49.2	1.833	2.792	8.4	20.9
8 19	19 32.23	-19 33.7	2.090	2.979	11.1	21.8	8 19	19 32.31	-21 22.2	1.892	2.784	12.0	21.1
<b>394764</b>	2008 <i>GG</i> <sub>27</sub>		7 19.4 21°35	0°6/19.6	18		<b>243622</b>	1999 <i>RF</i> <sub>16</sub>		7 19.4 334°95	4°1/17.9	18	
6 10	20 19.50	-18 25.5	1.827	2.657	15.3	20.9	6 10	20 23.83	-31 18.4	1.930	2.762	14.5	19.6
6 20	20 16.21	-18 29.3	1.753	2.662	12.1	20.7	6 20	20 19.85	-31 36.7	1.846	2.755	11.6	19.4
6 30	20 10.63	-18 40.6	1.700	2.668	8.3	20.5	6 30	20 13.27	-31 53.0	1.784	2.748	8.3	19.2
7 10	20 3.32	-18 57.3	1.670	2.675	4.2	20.2	7 10	20 4.72	-32 2.7	1.745	2.741	5.3	19.0
7 20	19 55.12	-19 16.7	1.666	2.682	0.6	20.0	7 20	19 55.08	-32 1.7	1.732	2.735	4.2	19.0
7 30	19 47.01	-19 35.9	1.688	2.689	4.5	20.3	7 30	19 45.53	-31 47.3	1.745	2.730	6.5	19.1
8 9	19 40.01	-19 52.5	1.736	2.697	8.5	20.5	8 9	19 37.20	-31 19.8	1.784	2.724	9.8	19.3
8 19	19 34.87	-20 5.1	1.807	2.706	12.1	20.8	8 19	19 31.00	-30 41.0	1.845	2.720	13.1	19.5
<b>366105</b>	2012 <i>DE</i> <sub>13</sub>		7 19.4 197°68	7°3/12.5	18		<b>249296</b>	2008 <i>TA</i> <sub>132</sub>		7 19.4 102°89	9°5/24.4	17	
6 10	20 28.29	-46 37.9	3.193	3.972	10.5	22.2	6 10	20 21.79	+ 4 41.8	2.020	2.746	17.3	20.6
6 20	20 22.90	-48 4.7	3.120	3.968	9.1	22.1	6 20	20 17.64	+ 5 46.7	1.949	2.759	15.2	20.5
6 30	20 15.20	-49 24.7	3.070	3.964	7.9	22.0	6 30	20 11.44	+ 6 32.3	1.896	2.771	13.0	20.4
7 10	20 5.65	-50 32.2	3.045	3.960	7.3	21.9	7 10	20 3.70	+ 6 55.2	1.864	2.784	10.9	20.3
7 20	19 54.95	-51 22.4	3.047	3.955	7.5	21.9	7 20	19 55.16	+ 6 53.8	1.855	2.796	9.7	20.2
7 30	19 44.09	-51 52.3	3.075	3.950	8.5	22.0	7 30	19 46.69	+ 6 28.5	1.870	2.807	9.8	20.2
8 9	19 34.10	-52 1.6	3.127	3.944	9.8	22.1	8 9	19 39.18	+ 5 43.0	1.909	2.819	11.1	20.3
8 19	19 25.85	-51 52.4	3.200	3.938	11.2	22.2	8 19	19 33.32	+ 4 42.3	1.971	2.830	13.0	20.5
<b>95537</b>	2002 <i>EV</i> <sub>83</sub>		7 19.4 54°88	5°6/23.2	18		<b>315759</b>	2008 <i>FK</i> <sub>55</sub>		7 19.4 241°23	4°6/21.9	18	
6 10	20 17.50	-1 50.2	2.326	3.085	14.5	20.1	6 10	20 18.47	-6 2.5	2.381	3.156	13.7	21.2
6 20	20 14.11	-1 45.8	2.239	3.087	12.2	19.9	6 20	20 14.87	-5 46.9	2.289	3.153	11.4	21.0
6 30	20 8.95	-1 57.4	2.171	3.088	9.7	19.8	6 30	20 9.48	-5 43.9	2.217	3.149	8.8	20.8
7 10	20 2.44	-2 25.9	2.126	3.090	7.3	19.6	7 10	20 2.73	-5 53.8	2.169	3.145	6.2	20.7
7 20	19 55.19	-3 10.3	2.107	3.091	5.7	19.5	7 20	19 55.22	-6 16.2	2.147	3.141	4.6	20.5
7 30	19 47.92	-4 8.2	2.115	3.093	6.1	19.6	7 30	19 47.67	-6 49.4	2.152	3.138	5.4	20.6
8 9	19 41.39	-5 15.9	2.149	3.094	8.1	19.7	8 9	19 40.84	-7 30.5	2.184	3.134	7.8	20.7
8 19	19 36.22	-6 28.7	2.208	3.096	10.7	19.8	8 19	19 35.36	-8 16.4	2.241	3.130	10.5	20.9
<b>393791</b>	2005 <i>LJ</i> <sub>53</sub>		7 19.4 335°44	5°5/22.2	18		<b>255171</b>	2005 <i>UQ</i> <sub>217</sub>		7 1			

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>211375</b>	Jessestead		7 19.4 231°46	2°4/18.3	18		<b>324970</b>	2008 AF <sub>27</sub>		7 19.4 114°23	0°2/19.4	17	
6 10	20 23.30	-25 47.4	2.073	2.898	13.8	21.2	6 10	20 27.91	-20 53.9	1.661	2.485	16.8	21.0
6 20	20 19.16	-26 16.7	1.987	2.895	10.9	21.0	6 20	20 23.03	-20 52.3	1.590	2.497	13.3	20.8
6 30	20 12.69	-26 48.9	1.924	2.892	7.6	20.8	6 30	20 15.41	-20 56.3	1.541	2.508	9.1	20.5
7 10	20 4.41	-27 19.9	1.885	2.888	4.1	20.6	7 10	20 5.75	-21 2.9	1.514	2.519	4.5	20.3
7 20	19 55.12	-27 45.7	1.873	2.884	2.5	20.4	7 20	19 55.06	-21 9.1	1.514	2.530	0.3	20.0
7 30	19 45.83	-28 3.0	1.889	2.881	5.3	20.6	7 30	19 44.59	-21 12.2	1.540	2.540	5.1	20.4
8 9	19 37.57	-28 10.1	1.930	2.877	8.8	20.8	8 9	19 35.55	-21 10.9	1.592	2.550	9.5	20.7
8 19	19 31.18	-28 7.3	1.996	2.873	12.1	21.0	8 19	19 28.82	-21 5.1	1.668	2.560	13.3	20.9
<b>436216</b>	2009 YD		7 19.4 193°66	0°4/19.6	18		<b>379305</b>	2009 VH <sub>83</sub>		7 19.4 162°40	2°0/18.5	18	
6 10	20 23.20	-17 28.6	2.151	2.961	13.9	22.0	6 10	20 26.31	-24 55.0	2.039	2.859	14.2	21.9
6 20	20 18.88	-17 49.8	2.062	2.959	11.1	21.8	6 20	20 21.46	-25 19.7	1.959	2.863	11.2	21.7
6 30	20 12.40	-18 19.4	1.994	2.957	7.7	21.6	6 30	20 14.21	-25 47.5	1.901	2.867	7.7	21.5
7 10	20 4.24	-18 54.8	1.951	2.954	3.9	21.4	7 10	20 5.15	-26 14.4	1.868	2.871	4.1	21.3
7 20	19 55.13	-19 32.8	1.935	2.951	0.5	21.1	7 20	19 55.10	-26 36.4	1.861	2.874	2.1	21.2
7 30	19 45.97	-20 10.2	1.948	2.948	4.2	21.4	7 30	19 45.13	-26 50.4	1.883	2.877	5.1	21.4
8 9	19 37.72	-20 44.0	1.988	2.944	8.0	21.6	8 9	19 36.29	-26 55.0	1.932	2.879	8.8	21.6
8 19	19 31.14	-21 12.4	2.053	2.939	11.4	21.8	8 19	19 29.40	-26 50.7	2.004	2.881	12.1	21.8
<b>289506</b>	2005 EA <sub>143</sub>		7 19.4 100°55	0°5/19.2	17		<b>233440</b>	2006 HZ <sub>73</sub>		7 19.4 64°39	3°0/20.8	18	
6 10	20 25.13	-19 21.6	1.543	2.375	17.5	20.7	6 10	20 20.75	-11 50.9	1.834	2.644	16.0	20.9
6 20	20 21.12	-19 52.1	1.475	2.386	13.8	20.5	6 20	20 17.18	-11 48.3	1.756	2.649	12.9	20.7
6 30	20 14.27	-20 32.4	1.427	2.397	9.5	20.3	6 30	20 11.32	-11 58.1	1.698	2.654	9.4	20.5
7 10	20 5.25	-21 18.1	1.401	2.407	4.7	20.0	7 10	20 3.73	-12 19.5	1.664	2.659	5.6	20.3
7 20	19 55.06	-22 4.1	1.401	2.417	0.7	19.8	7 20	19 55.20	-12 50.5	1.654	2.665	3.0	20.1
7 30	19 45.02	-22 45.5	1.427	2.427	5.4	20.1	7 30	19 46.72	-13 27.9	1.672	2.670	5.0	20.3
8 9	19 36.39	-23 18.7	1.479	2.437	10.0	20.4	8 9	19 39.28	-14 8.1	1.715	2.676	8.7	20.5
8 19	19 30.14	-23 42.4	1.552	2.447	14.0	20.7	8 19	19 33.67	-14 47.8	1.782	2.681	12.2	20.7
<b>239638</b>	2008 WT <sub>25</sub>		7 19.4 325°59	0°3/19.3	18		<b>336416</b>	2008 UG <sub>200</sub>		7 19.4 272°14	3°1/18.0	18	
6 10	20 16.16	-18 12.2	1.025	1.899	21.3	19.5	6 10	20 23.81	-26 27.5	1.827	2.660	15.1	21.0
6 20	20 15.67	-18 39.4	0.946	1.881	17.1	19.2	6 20	20 20.00	-27 3.6	1.741	2.652	12.0	20.7
6 30	20 11.58	-19 23.6	0.884	1.864	12.0	18.8	6 30	20 13.52	-27 43.1	1.675	2.644	8.4	20.5
7 10	20 4.37	-20 21.0	0.840	1.848	6.0	18.4	7 10	20 4.94	-28 21.2	1.634	2.636	4.7	20.3
7 20	19 55.10	-21 27.7	0.816	1.833	0.6	18.0	7 20	19 55.12	-28 52.8	1.618	2.628	3.2	20.2
7 30	19 45.49	-22 31.0	0.815	1.818	7.1	18.4	7 30	19 45.24	-29 13.6	1.629	2.620	6.1	20.3
8 9	19 37.47	-23 25.9	0.833	1.805	13.4	18.7	8 9	19 36.52	-29 21.8	1.666	2.612	10.0	20.5
8 19	19 32.58	-24 7.4	0.869	1.794	19.0	18.9	8 19	19 29.94	-29 17.8	1.725	2.604	13.6	20.7
<b>290670</b>	2005 UN <sub>317</sub>		7 19.4 354°50	0°5/19.6	18		<b>439059</b>	2011 HB <sub>41</sub>		7 19.4 287°20	8°2/13.7	18	
6 10	20 18.53	-19 1.3	1.669	2.508	16.1	20.2	6 10	20 25.91	-34 54.0	1.766	2.600	15.5	20.9
6 20	20 15.81	-19 1.5	1.589	2.503	12.8	20.0	6 20	20 22.34	-37 4.8	1.694	2.597	12.8	20.7
6 30	20 10.58	-19 9.3	1.529	2.500	8.9	19.7	6 30	20 15.60	-39 17.2	1.644	2.595	10.1	20.5
7 10	20 3.43	-19 22.7	1.492	2.497	4.5	19.4	7 10	20 6.18	-41 20.8	1.620	2.592	8.3	20.4
7 20	19 55.19	-19 38.7	1.479	2.495	0.5	19.1	7 20	19 55.03	-43 4.9	1.621	2.589	8.6	20.4
7 30	19 46.98	-19 54.4	1.492	2.494	4.9	19.5	7 30	19 43.57	-44 21.7	1.647	2.586	10.7	20.5
8 9	19 39.92	-20 7.4	1.530	2.494	9.2	19.7	8 9	19 33.40	-45 8.5	1.697	2.584	13.5	20.7
8 19	19 34.88	-20 16.2	1.590	2.494	13.1	20.0	8 19	19 25.80	-45 27.5	1.767	2.581	16.2	20.9
<b>278314</b>	2007 HP <sub>25</sub>		7 19.4 14°99	3°7/17.9	17		<b>371393</b>	2006 RW <sub>19</sub>		7 19.4 320°08	2°1/18.8	17	
6 10	20 21.20	-26 32.4	1.351	2.209	18.1	20.3	6 10	20 21.46	-24 12.9	1.249	2.109	19.1	20.7
6 20	20 18.63	-27 12.7	1.287	2.212	14.3	20.1	6 20	20 19.36	-24 22.1	1.164	2.091	15.3	20.4
6 30	20 12.87	-27 56.9	1.242	2.217	10.0	19.8	6 30	20 13.80	-24 36.7	1.097	2.074	10.7	20.1
7 10	20 4.65	-28 38.9	1.218	2.222	5.6	19.6	7 10	20 5.35	-24 52.2	1.051	2.058	5.5	19.7
7 20	19 55.11	-29 12.2	1.218	2.228	3.9	19.5	7 20	19 55.08	-25 3.4	1.027	2.042	2.2	19.5
7 30	19 45.74	-29 31.6	1.242	2.235	7.3	19.7	7 30	19 44.63	-25 5.7	1.026	2.027	6.9	19.7
8 9	19 38.00	-29 35.6	1.289	2.243	11.6	20.0	8 9	19 35.73	-24 57.0	1.048	2.012	12.4	20.0
8 19	19 32.92	-29 25.3	1.357	2.252	15.5	20.3	8 19	19 29.72	-24 38.1	1.089	1.999	17.3	20.2
<b>34216</b>	2000 QK <sub>75</sub>		7 19.4 331°03	2°1/18.6	18		<b>36381</b>	2000 OW <sub>27</sub>		7 19.4 330°03	1°7/20.1	18	
6 10	20 21.71	-25 29.1	1.867	2.702	14.8	18.1	6 10	20 15.59	-13 53.8	1.117	1.978	20.9	18.1
6 20	20 18.18	-25 43.5	1.782	2.695	11.7	17.9	6 20	20 14.81	-14 19.7	1.037	1.962	16.9	17.8
6 30	20 12.15	-26 0.5	1.717	2.687	8.1	17.7	6 30	20 10.75	-15 6.6	0.973	1.948	12.1	17.5
7 10	20 4.19	-26 16.4	1.676	2.680	4.3	17.4	7 10	20 3.88	-16 13.0	0.929	1.934	6.5	17.2
7 20	19 55.15	-26 27.5	1.661	2.674	2.2	17.3	7 20	19 55.18	-17 33.4	0.906	1.921	1.7	16.8
7 30	19 46.11	-26 30.8	1.672	2.668	5.4	17.5	7 30	19 46.20	-18 59.4	0.905	1.909	6.4	17.1
8 9	19 38.20	-26 25.2	1.709	2.662	9.3	17.7	8 9	19 38.64	-20 22.1	0.926	1.899	12.3	17.4
8 19	19 32.29	-26 11.0	1.769	2.657	12.9	17.9	8 19	19 33.88	-21 34.6	0.966	1.890	17.6	17.6
<b>158945</b>	2004 RO <sub>105</sub>		7 19.4 275°32	7°3/23.6	18		<b>104335</b>	2000 FF <sub>11</sub>		7 19.4 202°38	6°6/15.5	18	
6 10	20 17.64	+ 2 23.9	2.537	3.267	14.1	20.6	6 10	20 29.74	-40 23.2	2.550	3.351	12.3	20.2
6 20	20 14.21	+ 2 58.1	2.430	3.249	12.3	20.4	6 20	20 24.18	-41 22.0	2.469	3.346	10.2	20.0
6 30	20 9.07	+ 3 17.2	2.343	3.231	10.3	20.3	6 30	20 16.12	-42 15.5	2.410	3.341	8.3	19.9
7 10	20 2.57	+ 3 19.1	2.278	3.212	8.5	20.1	7 10	20 6.13	-42 57.4	2.376	3.335	6.9	19.8
7 20	19 55.26	+ 3 2.6	2.237	3.194	7.4	20.0	7 20	19 55.06	-43 22.7	2.368	3.329	6.8	19.8
7 30	19 47.80	+ 2 28.2	2.222	3.175	7.6	20.0	7 30	19 43.99	-43 28.4	2.388	3.322	8.1	19.9
8 9	19 40.92	+ 1 38.4	2.233	3.156	9.1	20.0	8 9	19 34.04	-43 14.6	2.433	3.315	10.1	20.0
8 19	19 35.27	+ 0 37.0	2.268	3.137	11.2	20.2	8 19	19 26.09	-42 43.6	2.501	3.307	12.2	20.1
<b>117229</b>	2004 RP <sub>329</sub>		7 19.4 204°17	4°9/22.2	18		<b>523051</b>	2016 QP <sub>90</sub>		7 19.4 282°63	0°0/19.4	18	
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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>206426</b>	2003 <i>SP</i> <sub>166</sub>	7 19.4 209°94		2°8/18.3 18			<b>210937</b>	2001 <i>TH</i> <sub>184</sub>	7 19.4 140°06		5°1/22.1 18		
6 10	20 26.82	-28 18.5	2.253	3.069	13.2	20.7	6 10	20 19.84	-5 36.1	2.227	3.002	14.6	20.8
6 20	20 21.74	-28 35.0	2.164	3.065	10.5	20.5	6 20	20 16.03	-5 9.6	2.142	3.004	12.2	20.7
6 30	20 14.36	-28 51.5	2.096	3.059	7.4	20.3	6 30	20 10.32	-4 56.2	2.077	3.007	9.5	20.5
7 10	20 5.23	-29 4.2	2.054	3.054	4.2	20.1	7 10	20 3.20	-4 56.5	2.036	3.009	6.8	20.3
7 20	19 55.12	-29 9.6	2.039	3.048	2.8	20.0	7 20	19 55.28	-5 10.6	2.020	3.011	5.2	20.2
7 30	19 45.06	-29 5.4	2.053	3.041	5.3	20.1	7 30	19 47.38	-5 36.7	2.031	3.013	5.9	20.3
8 9	19 36.03	-28 50.9	2.093	3.035	8.6	20.3	8 9	19 40.29	-6 12.2	2.068	3.015	8.3	20.5
8 19	19 28.85	-28 27.5	2.158	3.027	11.6	20.5	8 19	19 34.67	-6 53.7	2.130	3.017	11.0	20.6
<b>161832</b>	2006 <i>XV</i> <sub>36</sub>	7 19.4 250°71		0°3/19.2 18			<b>164148</b>	2003 <i>YZ</i> <sub>110</sub>	7 19.4 14°67		0°2/19.5 18		
6 10	20 21.10	-20 36.0	2.363	3.178	12.7	21.4	6 10	20 17.58	-17 50.1	1.103	1.969	20.7	19.1
6 20	20 17.09	-20 48.7	2.268	3.170	10.0	21.2	6 20	20 16.15	-18 13.0	1.044	1.973	16.4	18.9
6 30	20 11.11	-21 6.3	2.195	3.161	6.9	21.0	6 30	20 11.39	-18 50.2	1.001	1.979	11.4	18.6
7 10	20 3.60	-21 26.8	2.148	3.153	3.4	20.8	7 10	20 4.02	-19 37.8	0.978	1.986	5.7	18.3
7 20	19 55.23	-21 47.3	2.128	3.144	0.4	20.5	7 20	19 55.23	-20 29.7	0.977	1.994	0.4	17.9
7 30	19 46.81	-22 5.5	2.136	3.135	4.0	20.8	7 30	19 46.60	-21 19.2	0.999	2.003	6.2	18.4
8 9	19 39.19	-22 19.6	2.171	3.126	7.5	21.0	8 9	19 39.68	-22 0.8	1.043	2.013	11.6	18.7
8 19	19 33.09	-22 28.5	2.232	3.117	10.7	21.2	8 19	19 35.57	-22 32.0	1.106	2.025	16.3	19.0
<b>330287</b>	2006 <i>SP</i> <sub>394</sub>	7 19.4 115°75		1°2/18.9 17			<b>260790</b>	2005 <i>NQ</i> <sub>43</sub>	7 19.4 264°73		0°7/19.8 18		
6 10	20 26.55	-21 57.4	1.700	2.528	16.3	21.4	6 10	20 19.92	-16 25.4	2.204	3.016	13.6	21.0
6 20	20 22.00	-22 23.2	1.631	2.540	12.9	21.2	6 20	20 16.34	-16 47.7	2.108	3.007	10.8	20.8
6 30	20 14.74	-22 55.1	1.582	2.551	8.8	21.0	6 30	20 10.71	-17 19.2	2.034	2.997	7.6	20.6
7 10	20 5.46	-23 29.0	1.557	2.562	4.4	20.8	7 10	20 3.48	-17 57.6	1.985	2.988	3.9	20.3
7 20	19 55.12	-24 0.4	1.558	2.573	1.3	20.6	7 20	19 55.29	-18 40.2	1.962	2.978	0.7	20.1
7 30	19 44.94	-24 25.2	1.586	2.584	5.3	20.9	7 30	19 47.00	-19 23.5	1.968	2.968	4.1	20.3
8 9	19 36.12	-24 41.4	1.640	2.594	9.5	21.2	8 9	19 39.51	-20 4.4	2.000	2.959	7.8	20.5
8 19	19 29.55	-24 48.7	1.716	2.604	13.2	21.4	8 19	19 33.57	-20 40.4	2.058	2.949	11.2	20.7
<b>277327</b>	2005 <i>SQ</i> <sub>254</sub>	7 19.4 338°60		1°4/20.4 18			<b>283823</b>	2003 <i>SX</i> <sub>401</sub>	7 19.4 86°99		4°8/22.3 18		
6 10	20 15.47	-14 3.8	2.782	3.583	11.3	20.4	6 10	20 19.53	-5 9.3	1.943	2.727	16.1	20.5
6 20	20 12.32	-14 20.2	2.688	3.578	9.0	20.2	6 20	20 16.12	-5 18.1	1.861	2.730	13.4	20.3
6 30	20 7.64	-14 44.6	2.616	3.574	6.4	20.0	6 30	20 10.58	-5 44.5	1.797	2.733	10.2	20.1
7 10	20 1.82	-15 15.8	2.570	3.569	3.5	19.9	7 10	20 3.41	-6 28.4	1.756	2.737	7.0	19.9
7 20	19 55.35	-15 51.9	2.551	3.565	1.4	19.7	7 20	19 55.30	-7 28.0	1.741	2.740	4.9	19.8
7 30	19 48.85	-16 30.6	2.561	3.561	3.3	19.8	7 30	19 47.18	-8 39.4	1.752	2.743	5.8	19.9
8 9	19 42.94	-17 9.3	2.598	3.557	6.2	20.0	8 9	19 39.98	-9 57.3	1.790	2.747	8.7	20.1
8 19	19 38.18	-17 46.2	2.662	3.553	8.9	20.2	8 19	19 34.44	-11 16.5	1.852	2.750	11.9	20.3
<b>509858</b>	2008 <i>YU</i> <sub>139</sub>	7 19.4 228°46		1°5/20.1 18			<b>62214</b>	2000 <i>SU</i> <sub>63</sub>	7 19.4 139°52		3°4/21.0 18		
6 10	20 22.04	-15 41.8	2.122	2.931	14.2	22.6	6 10	20 22.12	-10 56.0	1.865	2.667	16.0	19.5
6 20	20 18.00	-15 41.5	2.030	2.925	11.3	22.4	6 20	20 18.24	-10 47.3	1.784	2.671	13.0	19.3
6 30	20 11.82	-15 49.4	1.958	2.919	8.0	22.1	6 30	20 12.07	-10 51.3	1.722	2.674	9.6	19.0
7 10	20 3.99	-16 4.3	1.912	2.912	4.3	21.9	7 10	20 4.15	-11 7.3	1.685	2.677	5.9	18.8
7 20	19 55.21	-16 24.1	1.892	2.906	1.5	21.7	7 20	19 55.26	-11 33.9	1.672	2.681	3.4	18.7
7 30	19 46.39	-16 46.3	1.899	2.899	4.3	21.9	7 30	19 46.39	-12 8.2	1.687	2.684	5.2	18.8
8 9	19 38.44	-17 8.6	1.934	2.892	8.0	22.1	8 9	19 38.56	-12 46.6	1.727	2.686	8.8	19.0
8 19	19 32.15	-17 29.1	1.993	2.885	11.4	22.3	8 19	19 32.55	-13 26.0	1.792	2.689	12.3	19.2
<b>472136</b>	2014 <i>BG</i> <sub>54</sub>	7 19.4 305°35		2°6/20.9 17			<b>514269</b>	2015 <i>RG</i> <sub>64</sub>	7 19.4 10°28		5°6/17.0 18		
6 10	20 18.62	-9 45.3	1.659	2.474	17.2	20.9	6 10	20 23.63	-34 50.6	1.990	2.820	14.2	20.2
6 20	20 16.07	-10 25.2	1.563	2.458	14.1	20.6	6 20	20 19.68	-35 29.5	1.918	2.821	11.5	20.1
6 30	20 10.97	-11 25.3	1.485	2.443	10.3	20.4	6 30	20 13.16	-36 4.7	1.867	2.824	8.6	19.9
7 10	20 3.77	-12 44.4	1.431	2.428	6.0	20.1	7 10	20 4.70	-36 30.6	1.840	2.826	6.2	19.8
7 20	19 55.21	-14 18.3	1.401	2.413	2.7	19.8	7 20	19 55.23	-36 42.4	1.838	2.829	5.7	19.7
7 30	19 46.38	-16 0.5	1.398	2.399	5.3	20.0	7 30	19 45.91	-36 37.4	1.863	2.832	7.5	19.9
8 9	19 38.47	-17 43.2	1.420	2.385	9.7	20.2	8 9	19 37.88	-36 15.7	1.912	2.836	10.3	20.0
8 19	19 32.52	-19 19.9	1.467	2.371	14.0	20.4	8 19	19 31.97	-35 39.7	1.984	2.841	13.0	20.2
<b>324893</b>	2007 <i>VJ</i> <sub>52</sub>	7 19.4 193°33		0°3/19.5 17			<b>442961</b>	2013 <i>CS</i> <sub>124</sub>	7 19.4 348°71		1°0/20.0 18		
6 10	20 26.62	-19 2.1	1.737	2.557	16.3	21.6	6 10	20 18.97	-15 3.6	2.167	2.978	13.8	20.6
6 20	20 22.12	-19 8.6	1.652	2.556	13.0	21.4	6 20	20 15.55	-15 32.1	2.080	2.977	11.0	20.4
6 30	20 14.92	-19 22.7	1.588	2.554	9.0	21.1	6 30	20 10.13	-16 10.9	2.015	2.977	7.7	20.2
7 10	20 5.62	-19 41.9	1.548	2.552	4.5	20.9	7 10	20 3.17	-16 58.0	1.974	2.976	4.0	20.0
7 20	19 55.11	-20 2.8	1.533	2.549	0.4	20.5	7 20	19 55.33	-17 50.0	1.960	2.976	1.0	19.8
7 30	19 44.59	-20 22.1	1.546	2.546	5.0	20.9	7 30	19 47.45	-18 43.2	1.975	2.975	4.0	20.0
8 9	19 35.30	-20 37.3	1.584	2.542	9.5	21.2	8 9	19 40.41	-19 34.0	2.016	2.975	7.7	20.2
8 19	19 28.17	-20 47.2	1.646	2.538	13.4	21.4	8 19	19 34.91	-20 19.7	2.082	2.975	11.0	20.4
<b>235316</b>	2003 <i>UV</i> <sub>144</sub>	7 19.4 345°78		3°0/19.9 18			<b>246602</b>	2008 <i>UF</i> <sub>335</sub>	7 19.4 93°67		5°0/21.4 17		
6 10	20 16.72	-18 10.0	1.185	2.048	19.8	18.8	6 10	20 22.93	-8 24.9	1.939	2.729	16.0	20.7
6 20	20 15.43	-17 12.5	1.105	2.031	16.0	18.5	6 20	20 18.66	-7 44.0	1.864	2.738	13.2	20.5
6 30	20 10.93	-16 19.9	1.042	2.016	11.5	18.2	6 30	20 12.22	-7 15.2	1.808	2.748	10.0	20.3
7 10	20 3.85	-15 33.2	0.999	2.003	6.5	17.9	7 10	20 4.17	-6 59.4	1.776	2.757	6.9	20.2
7 20	19 55.22	-14 53.0	0.978	1.992	3.0	17.7	7 20	19 55.28	-6 56.6	1.769	2.767	5.0	20.1
7 30	19 46.53	-14 19.5	0.980	1.982	6.6	17.8	7 30	19 46.50	-7 5.7	1.789	2.776	6.1	20.2
8 9	19 39.35	-13 52.5	1.003	1.974	11.8	18.1	8 9	19 38.75	-7 24.1	1.835	2.786	8.9	20.3
8 19	19 34.82	-13 31.3	1.045	1.969	16.6	18.4	8 19	19 32.77	-7 48.8	1.905	2.795	12.0	20.6
<b>60502</b>	2000 <i>DT</i> <sub>96</sub>	7 19.4 261°67		2°1/18.7 18			<b>371470</b>	2006 <i>TL</i> <sub>9</sub>	7 19.4 315°23		0°9/19.7 18		
6 10	20												

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7 19.4

7 19.4

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>31994</b>	2000 <i>HR</i> <sub>40</sub>		7 19.4 63°76	3:7/20.6	18		<b>250019</b>	2002 <i>AF</i> <sub>141</sub>		7 19.4 92°54	0:6/19.8	18	
6 10	20 26.29	-13 36.5	1.208	2.044	21.1	18.3	6 10	20 19.79	-16 43.5	2.215	3.028	13.5	20.7
6 20	20 22.44	-13 6.3	1.153	2.061	17.0	18.1	6 20	20 16.15	-17 8.5	2.130	3.030	10.7	20.5
6 30	20 15.35	-12 50.4	1.115	2.079	12.2	17.9	6 30	20 10.53	-17 42.1	2.067	3.031	7.4	20.3
7 10	20 5.85	-12 48.2	1.097	2.096	7.1	17.6	7 10	20 3.40	-18 22.0	2.029	3.032	3.8	20.1
7 20	19 55.19	-12 57.8	1.103	2.114	3.7	17.5	7 20	19 55.41	-19 5.3	2.018	3.034	0.6	19.8
7 30	19 44.89	-13 16.0	1.132	2.132	6.5	17.7	7 30	19 47.42	-19 48.4	2.035	3.035	4.0	20.1
8 9	19 36.40	-13 38.9	1.185	2.150	11.1	18.0	8 9	19 40.27	-20 28.4	2.079	3.037	7.6	20.3
8 19	19 30.68	-14 2.9	1.258	2.168	15.4	18.3	8 19	19 34.67	-21 3.2	2.147	3.038	10.8	20.6
<b>174598</b>	2003 <i>QR</i> <sub>67</sub>		7 19.4 343°43	1:6/19.1	18		<b>235275</b>	2003 <i>TO</i> <sub>57</sub>		7 19.4 276°71	1:1/18.9	18	
6 10	20 23.76	-24 56.3	1.150	2.013	20.2	19.4	6 10	20 22.75	-22 12.8	1.883	2.712	14.9	21.1
6 20	20 21.27	-24 40.8	1.077	2.005	16.2	19.1	6 20	20 19.04	-22 31.9	1.793	2.702	11.8	20.8
6 30	20 15.09	-24 27.4	1.021	1.999	11.2	18.8	6 30	20 12.83	-22 56.6	1.723	2.692	8.2	20.6
7 10	20 5.97	-24 12.2	0.986	1.993	5.7	18.5	7 10	20 4.66	-23 23.7	1.677	2.682	4.1	20.3
7 20	19 55.18	-23 51.5	0.972	1.987	1.7	18.2	7 20	19 55.33	-23 49.4	1.657	2.672	1.2	20.1
7 30	19 44.49	-23 23.1	0.982	1.983	6.8	18.6	7 30	19 45.92	-24 10.0	1.664	2.662	5.0	20.4
8 9	19 35.66	-22 47.3	1.013	1.980	12.3	18.8	8 9	19 37.55	-24 23.4	1.697	2.652	9.2	20.6
8 19	19 29.94	-22 6.2	1.064	1.978	17.3	19.1	8 19	19 31.14	-24 28.8	1.753	2.642	12.9	20.8
<b>335089</b>	2004 <i>TY</i> <sub>46</sub>		7 19.4 278°31	3:0/18.1	18		<b>472593</b>	2015 <i>DC</i> <sub>134</sub>		7 19.4 131°68	1:9/18.3	17	
6 10	20 24.00	-26 22.8	1.778	2.613	15.4	20.8	6 10	20 24.43	-21 43.4	1.945	2.767	14.8	21.3
6 20	20 20.27	-26 56.9	1.691	2.604	12.3	20.6	6 20	20 20.17	-22 44.9	1.870	2.776	11.6	21.1
6 30	20 13.80	-27 34.6	1.626	2.595	8.6	20.3	6 30	20 13.49	-23 54.3	1.817	2.785	7.9	20.9
7 10	20 5.16	-28 10.9	1.584	2.586	4.8	20.1	7 10	20 4.93	-25 6.3	1.789	2.793	4.0	20.7
7 20	19 55.24	-28 40.7	1.567	2.577	3.2	19.9	7 20	19 55.33	-26 15.2	1.788	2.801	2.0	20.5
7 30	19 45.25	-28 59.7	1.577	2.568	6.2	20.1	7 30	19 45.73	-27 15.8	1.815	2.809	5.3	20.8
8 9	19 36.46	-29 6.0	1.612	2.559	10.2	20.3	8 9	19 37.22	-28 4.4	1.869	2.816	9.1	21.0
8 19	19 29.85	-29 0.0	1.669	2.551	13.8	20.5	8 19	19 30.64	-28 40.1	1.947	2.823	12.4	21.2
<b>91618</b>	1999 <i>TB</i> <sub>38</sub>		7 19.4 245°77	0:9/18.9	18		<b>70328</b>	1999 <i>RH</i> <sub>161</sub>		7 19.4 38°05	2:2/20.1	18	
6 10	20 20.78	-21 59.4	2.635	3.447	11.6	20.1	6 10	20 23.38	-16 40.4	1.075	1.932	21.8	18.2
6 20	20 16.71	-22 23.0	2.534	3.434	9.2	19.9	6 20	20 20.50	-16 20.0	1.027	1.950	17.3	18.0
6 30	20 10.81	-22 51.0	2.457	3.422	6.3	19.7	6 30	20 14.17	-16 12.4	0.996	1.969	12.1	17.8
7 10	20 3.50	-23 20.8	2.405	3.409	3.1	19.5	7 10	20 5.33	-16 15.7	0.984	1.988	6.5	17.6
7 20	19 55.35	-23 49.6	2.381	3.396	1.0	19.3	7 20	19 55.31	-16 26.9	0.994	2.009	2.2	17.4
7 30	19 47.12	-24 14.8	2.386	3.383	3.9	19.5	7 30	19 45.76	-16 42.1	1.027	2.030	6.2	17.7
8 9	19 39.58	-24 34.5	2.419	3.369	7.1	19.7	8 9	19 38.16	-16 57.8	1.083	2.053	11.4	18.0
8 19	19 33.40	-24 47.8	2.477	3.355	10.0	19.8	8 19	19 33.47	-17 11.5	1.158	2.075	15.9	18.4
<b>126244</b>	2002 <i>AQ</i> <sub>66</sub>		7 19.4 200°32	1:9/20.5	18		<b>190599</b>	2000 <i>UR</i> <sub>50</sub>		7 19.4 276°36	4:4/21.2	18	
6 10	20 23.55	-13 24.5	2.507	3.295	12.8	21.2	6 10	20 21.63	-9 35.5	1.886	2.684	16.0	19.8
6 20	20 18.83	-13 30.7	2.409	3.290	10.3	21.1	6 20	20 18.10	-9 10.1	1.782	2.665	13.3	19.6
6 30	20 12.24	-13 45.7	2.332	3.285	7.4	20.9	6 30	20 12.21	-8 56.6	1.699	2.645	10.0	19.3
7 10	20 4.20	-14 8.2	2.282	3.278	4.2	20.6	7 10	20 4.39	-8 56.0	1.638	2.626	6.6	19.1
7 20	19 55.31	-14 36.5	2.259	3.271	1.9	20.5	7 20	19 55.36	-9 8.1	1.602	2.606	4.5	18.9
7 30	19 46.36	-15 8.1	2.266	3.264	3.9	20.6	7 30	19 46.09	-9 31.3	1.592	2.585	6.0	18.9
8 9	19 38.13	-15 40.7	2.301	3.255	7.2	20.8	8 9	19 37.68	-10 2.7	1.609	2.565	9.5	19.1
8 19	19 31.32	-16 12.1	2.362	3.246	10.2	21.0	8 19	19 31.03	-10 39.0	1.648	2.545	13.2	19.3
<b>60258</b>	1999 <i>XL</i> <sub>4</sub>		7 19.4 295°85	1:8/18.4	18		<b>179619</b>	2002 <i>PC</i> <sub>33</sub>		7 19.4 314°72	2:1/20.1	18	
6 10	20 19.97	-23 26.4	2.205	3.031	13.1	18.8	6 10	20 19.13	-15 49.6	1.306	2.154	19.2	20.1
6 20	20 16.55	-24 2.4	2.107	3.015	10.4	18.6	6 20	20 17.28	-15 42.1	1.215	2.133	15.6	19.8
6 30	20 10.97	-24 43.7	2.030	2.999	7.2	18.3	6 30	20 12.30	-15 47.2	1.141	2.112	11.2	19.5
7 10	20 3.69	-25 26.8	1.979	2.983	3.7	18.1	7 10	20 4.68	-16 4.2	1.087	2.091	6.1	19.2
7 20	19 55.36	-26 7.8	1.954	2.967	1.9	17.9	7 20	19 55.33	-16 30.5	1.057	2.071	2.1	18.8
7 30	19 46.88	-26 42.7	1.957	2.951	4.9	18.1	7 30	19 45.65	-17 2.1	1.049	2.052	6.1	19.0
8 9	19 39.23	-27 9.1	1.986	2.936	8.4	18.3	8 9	19 37.22	-17 34.6	1.064	2.034	11.6	19.3
8 19	19 33.20	-27 25.9	2.039	2.920	11.7	18.5	8 19	19 31.33	-18 4.4	1.100	2.016	16.6	19.5
<b>191296</b>	2003 <i>FQ</i> <sub>128</sub>		7 19.4 36°26	0:8/19.2	17		<b>95741</b>	2003 <i>EC</i> <sub>17</sub>		7 19.4 266°12	17:4/29.6	17	
6 10	20 23.54	-21 58.0	1.409	2.255	18.1	20.2	6 10	20 20.46	+15 37.3	1.301	2.013	25.9	19.5
6 20	20 20.11	-22 2.2	1.346	2.265	14.3	20.0	6 20	20 18.24	+16 48.1	1.222	2.002	24.0	19.3
6 30	20 13.71	-22 12.5	1.302	2.276	9.8	19.8	6 30	20 12.92	+17 23.5	1.153	1.991	21.9	19.1
7 10	20 5.07	-22 25.3	1.281	2.287	4.8	19.5	7 10	20 4.99	+17 13.4	1.098	1.980	19.7	18.9
7 20	19 55.30	-22 36.6	1.283	2.299	0.9	19.3	7 20	19 55.33	+16 10.5	1.059	1.969	18.0	18.7
7 30	19 45.79	-22 43.1	1.311	2.311	5.6	19.7	7 30	19 45.32	+14 13.2	1.038	1.958	17.4	18.7
8 9	19 37.86	-22 43.3	1.362	2.324	10.3	20.0	8 9	19 36.52	+11 28.4	1.037	1.946	18.2	18.7
8 19	19 32.43	-22 37.1	1.435	2.338	14.4	20.2	8 19	19 30.22	+8 10.0	1.056	1.934	20.2	18.8
<b>126505</b>	2002 <i>CA</i> <sub>64</sub>		7 19.4 0°03	11:4/15.4	18 R		<b>509558</b>	2008 <i>BT</i> <sub>53</sub>		7 19.4 156°38	1:7/18.6	18	
6 10	20 23.76	-41 33.2	1.259	2.113	19.4	18.1	6 10	20 23.45	-25 14.4	2.460	3.275	12.2	22.3
6 20	20 21.79	-42 54.5	1.201	2.110	16.4	17.9	6 20	20 18.83	-25 31.4	2.378	3.279	9.6	22.1
6 30	20 15.72	-44 6.2	1.161	2.108	13.6	17.7	6 30	20 12.25	-25 50.3	2.317	3.283	6.6	21.9
7 10	20 6.36	-44 56.8	1.141	2.107	11.7	17.6	7 10	20 4.21	-26 8.0	2.283	3.286	3.5	21.7
7 20	19 55.21	-45 16.5	1.141	2.108	11.6	17.6	7 20	19 55.41	-26 21.6	2.277	3.289	1.8	21.6
7 30	19 44.34	-45 0.5	1.162	2.110	13.4	17.7	7 30	19 46.67	-26 29.1	2.299	3.292	4.3	21.8
8 9	19 35.72	-44 11.3	1.204	2.113	16.1	17.9	8 9	19 38.84	-26 29.3	2.348	3.295	7.5	22.0
8 19	19 30.62	-42 55.8	1.263	2.118	19.1	18.1	8 19	19 32.57	-26 22.5	2.423	3.297	10.3	22.2
<b>478720</b>	2012 <i>US</i> <sub>53</sub>		7 19.4 282°23	2:3/20.4	18		<b>59572</b>	19					



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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>508158</b>	2015 <i>FS</i> <sub>166</sub>		7 19.4 55°50	0°1/19.4 17			<b>385855</b>	2006 <i>QE</i> <sub>64</sub>		7 19.5 358°91	7°1/17.6 18		
6 10	20 22.21	-18 47.8	1.693	2.523	16.3	21.5	6 10	20 26.19	-36 51.5	1.515	2.357	17.2	19.8
6 20	20 18.67	-19 10.0	1.619	2.529	12.9	21.3	6 20	20 22.62	-37 18.5	1.445	2.354	14.1	19.6
6 30	20 12.57	-19 41.3	1.566	2.535	8.9	21.1	6 30	20 15.68	-37 38.5	1.394	2.352	10.8	19.4
7 10	20 4.52	-20 18.3	1.535	2.541	4.4	20.8	7 10	20 6.16	-37 44.3	1.366	2.351	8.0	19.2
7 20	19 55.39	-20 57.1	1.530	2.547	0.3	20.5	7 20	19 55.33	-37 30.0	1.360	2.351	7.2	19.2
7 30	19 46.33	-21 33.4	1.552	2.553	4.9	20.9	7 30	19 44.78	-36 53.3	1.379	2.352	9.2	19.3
8 9	19 38.49	-22 4.0	1.599	2.559	9.2	21.2	8 9	19 36.04	-35 56.1	1.421	2.354	12.4	19.5
8 19	19 32.72	-22 27.2	1.669	2.565	13.0	21.4	8 19	19 30.14	-34 43.6	1.484	2.357	15.7	19.7
<b>438255</b>	2005 <i>WY</i> <sub>114</sub>		7 19.4 291°26	3°3/20.6 18			<b>418212</b>	2008 <i>CG</i> <sub>158</sub>		7 19.5 102°84	1°8/18.7 17		
6 10	20 21.56	-12 45.8	2.275	3.071	13.7	20.9	6 10	20 27.08	-23 1.1	1.653	2.483	16.6	22.0
6 20	20 17.49	-12 7.1	2.175	3.059	11.2	20.7	6 20	20 22.53	-23 33.2	1.587	2.497	13.1	21.8
6 30	20 11.45	-11 35.3	2.096	3.046	8.2	20.5	6 30	20 15.22	-24 10.9	1.542	2.512	8.9	21.5
7 10	20 3.88	-11 10.9	2.042	3.034	5.2	20.3	7 10	20 5.82	-24 49.5	1.521	2.526	4.5	21.3
7 20	19 55.43	-10 53.7	2.015	3.022	3.3	20.1	7 20	19 55.35	-25 23.8	1.526	2.540	1.9	21.2
7 30	19 46.91	-10 43.5	2.016	3.009	4.9	20.2	7 30	19 45.09	-25 49.8	1.557	2.553	5.6	21.4
8 9	19 39.19	-10 39.1	2.043	2.997	8.0	20.4	8 9	19 36.26	-26 5.4	1.613	2.566	9.8	21.7
8 19	19 32.96	-10 39.0	2.095	2.985	11.1	20.6	8 19	19 29.76	-26 10.8	1.693	2.579	13.4	22.0
<b>444046</b>	2004 <i>QX</i> <sub>28</sub>		7 19.4 308°31	2°8/18.3 18			<b>308567</b>	2005 <i>UQ</i> <sub>388</sub>		7 19.5 131°25	0°4/19.2 18		
6 10	20 23.55	-28 25.9	2.199	3.023	13.2	21.4	6 10	20 21.78	-20 58.1	2.562	3.372	12.0	21.9
6 20	20 19.29	-28 38.9	2.111	3.017	10.5	21.2	6 20	20 17.37	-21 14.3	2.482	3.381	9.4	21.7
6 30	20 12.77	-28 51.6	2.045	3.011	7.4	21.0	6 30	20 11.18	-21 34.7	2.425	3.390	6.4	21.6
7 10	20 4.55	-29 0.6	2.004	3.005	4.2	20.8	7 10	20 3.68	-21 57.0	2.394	3.398	3.2	21.4
7 20	19 55.40	-29 2.6	1.990	2.999	2.8	20.7	7 20	19 55.49	-22 18.8	2.390	3.406	0.5	21.2
7 30	19 46.29	-28 55.4	2.003	2.993	5.3	20.8	7 30	19 47.37	-22 37.7	2.416	3.414	3.7	21.4
8 9	19 38.20	-28 38.5	2.043	2.988	8.5	21.0	8 9	19 40.06	-22 52.1	2.469	3.422	6.8	21.6
8 19	19 31.91	-28 13.0	2.107	2.982	11.6	21.2	8 19	19 34.17	-23 1.5	2.548	3.429	9.7	21.8
<b>508157</b>	2015 <i>FZ</i> <sub>164</sub>		7 19.4 149°83	11°8/13.1 18			<b>191300</b>	2003 <i>GS</i> <sub>9</sub>		7 19.5 37°21	4°3/21.4 17		
6 10	20 37.97	-51 17.2	2.010	2.791	15.7	21.5	6 10	20 20.26	-9 51.0	1.269	2.102	20.5	19.5
6 20	20 32.23	-52 54.0	1.955	2.796	14.0	21.4	6 20	20 17.53	-9 43.6	1.218	2.122	16.6	19.4
6 30	20 22.54	-54 17.4	1.920	2.801	12.6	21.3	6 30	20 11.92	-9 55.2	1.184	2.143	12.2	19.2
7 10	20 9.68	-55 17.3	1.907	2.805	11.8	21.3	7 10	20 4.20	-10 24.9	1.171	2.166	7.5	19.0
7 20	19 55.09	-55 45.9	1.917	2.809	12.0	21.3	7 20	19 55.46	-11 9.4	1.180	2.189	4.4	18.8
7 30	19 40.74	-55 39.8	1.948	2.813	13.0	21.4	7 30	19 47.04	-12 3.6	1.213	2.212	6.3	19.0
8 9	19 28.54	-55 1.5	2.001	2.817	14.6	21.5	8 9	19 40.16	-13 1.3	1.270	2.237	10.4	19.3
8 19	19 19.76	-53 57.4	2.072	2.820	16.2	21.6	8 19	19 35.70	-13 57.4	1.348	2.262	14.3	19.6
<b>288774</b>	2004 <i>RJ</i> <sub>99</sub>		7 19.4 302°16	2°8/20.8 16			<b>432838</b>	2011 <i>HG</i> <sub>37</sub>		7 19.5 31°28	4°8/21.9 17		
6 10	20 18.50	-12 10.9	2.156	2.961	14.1	20.8	6 10	20 19.88	-7 30.3	1.652	2.457	17.7	21.6
6 20	20 15.30	-12 4.9	2.054	2.944	11.5	20.6	6 20	20 16.82	-7 22.1	1.575	2.460	14.6	21.4
6 30	20 10.08	-12 9.2	1.973	2.927	8.4	20.4	6 30	20 11.31	-7 31.0	1.517	2.464	11.0	21.2
7 10	20 3.26	-12 23.4	1.915	2.910	5.1	20.2	7 10	20 3.93	-7 57.4	1.481	2.467	7.4	20.9
7 20	19 55.48	-12 46.2	1.884	2.894	2.8	20.0	7 20	19 55.49	-8 39.5	1.468	2.471	4.9	20.8
7 30	19 47.55	-13 15.6	1.880	2.878	4.6	20.1	7 30	19 47.06	-9 33.9	1.482	2.476	6.2	20.9
8 9	19 40.37	-13 48.5	1.902	2.861	8.0	20.2	8 9	19 39.73	-10 35.3	1.520	2.480	9.6	21.1
8 19	19 34.70	-14 22.4	1.948	2.846	11.4	20.4	8 19	19 34.36	-11 38.6	1.581	2.485	13.2	21.3
<b>492299</b>	2014 <i>AU</i> <sub>10</sub>		7 19.4 239°71	2°3/20.6 18			<b>94606</b>	2001 <i>VT</i> <sub>104</sub>		7 19.5 279°61	5°7/17.2 17		
6 10	20 23.37	-12 57.2	2.241	3.035	13.9	22.6	6 10	20 26.21	-29 25.8	1.370	2.220	18.3	20.3
6 20	20 19.08	-12 59.6	2.134	3.018	11.3	22.3	6 20	20 23.11	-30 28.2	1.291	2.210	14.7	20.0
6 30	20 12.67	-13 11.9	2.049	3.002	8.2	22.1	6 30	20 16.45	-31 34.9	1.230	2.200	10.7	19.7
7 10	20 4.57	-13 33.5	1.988	2.984	4.8	21.9	7 10	20 6.81	-32 37.5	1.192	2.189	6.9	19.5
7 20	19 55.41	-14 2.4	1.954	2.966	2.3	21.7	7 20	19 55.31	-33 26.9	1.176	2.179	5.9	19.4
7 30	19 46.06	-14 36.2	1.949	2.947	4.4	21.8	7 30	19 43.64	-33 56.0	1.185	2.169	9.0	19.6
8 9	19 37.45	-15 12.0	1.971	2.927	8.0	22.0	8 9	19 33.60	-34 2.4	1.217	2.158	13.3	19.8
8 19	19 30.38	-15 47.1	2.018	2.907	11.5	22.1	8 19	19 26.54	-33 48.1	1.268	2.148	17.4	20.0
<b>346983</b>	2010 <i>CD</i> <sub>93</sub>		7 19.4 296°19	0°0/19.4 18			<b>360054</b>	2013 <i>AX</i> <sub>79</sub>		7 19.5 37°16	0°3/19.6 18		
6 10	20 21.19	-18 48.3	1.766	2.595	15.7	21.0	6 10	20 19.48	-16 49.8	1.957	2.778	14.7	20.7
6 20	20 17.96	-19 8.4	1.676	2.585	12.5	20.7	6 20	20 16.19	-17 26.7	1.880	2.784	11.6	20.5
6 30	20 12.19	-19 37.5	1.606	2.575	8.7	20.5	6 30	20 10.71	-18 13.8	1.824	2.790	8.0	20.3
7 10	20 4.41	-20 13.0	1.560	2.565	4.4	20.2	7 10	20 3.57	-19 8.2	1.792	2.796	4.0	20.1
7 20	19 55.42	-20 51.1	1.539	2.555	0.3	19.8	7 20	19 55.51	-20 5.6	1.787	2.803	0.3	19.8
7 30	19 46.30	-21 27.6	1.545	2.545	4.9	20.2	7 30	19 47.46	-21 1.7	1.809	2.809	4.3	20.1
8 9	19 38.23	-21 59.0	1.576	2.536	9.3	20.4	8 9	19 40.39	-21 52.6	1.857	2.816	8.2	20.4
8 19	19 32.15	-22 23.5	1.630	2.527	13.3	20.6	8 19	19 35.05	-22 35.8	1.930	2.824	11.7	20.6
<b>167341</b>	Börzsöny		7 19.4 306°85	2°1/18.6 18			<b>496921</b>	2001 <i>TP</i> <sub>207</sub>		7 19.5 342°87	7°6/17.5 17		
6 10	20 24.00	-25 13.9	1.892	2.721	14.8	20.4	6 10	20 18.30	-32 4.5	0.930	1.818	21.8	20.6
6 20	20 19.96	-25 30.7	1.809	2.719	11.7	20.2	6 20	20 18.16	-32 48.9	0.864	1.804	17.7	20.3
6 30	20 13.41	-25 50.2	1.748	2.717	8.1	20.0	6 30	20 13.72	-33 32.5	0.814	1.792	13.2	20.0
7 10	20 4.93	-26 8.8	1.711	2.715	4.3	19.7	7 10	20 5.65	-34 5.4	0.781	1.781	9.0	19.7
7 20	19 55.39	-26 22.5	1.700	2.713	2.1	19.6	7 20	19 55.37	-34 17.6	0.768	1.772	7.8	19.6
7 30	19 45.90	-26 28.3	1.715	2.711	5.3	19.8	7 30	19 45.11	-34 2.2	0.774	1.764	11.0	19.8
8 9	19 37.56	-26 25.2	1.757	2.709	9.2	20.0	8 9	19 37.09	-33 19.7	0.799	1.759	15.9	20.0
8 19	19 31.25	-26 13.5	1.822	2.707	12.7	20.2	8 19	19 32.85	-32 15.6	0.841	1.755	20.6	20.3
<b>148117</b>	1999 <i>TX</i> <sub>52</sub>		7 19.5 345°90	1°1/19.9 18			<b>338694</b>	2003 <i>UF</i>					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>505907</b>	2015 <i>DC</i> <sub>224</sub>	7 19.5 266°40		5°4/17.0 18			<b>388324</b>	2006 <i>SL</i> <sub>348</sub>	7 19.5 326°22		7°0/15.9 18		R
6 10	20 26.32	-29 57.2	1.604	2.443	16.6	21.3	6 10	20 25.15	-37 2.0	1.951	2.778	14.5	21.1
6 20	20 22.72	-30 59.2	1.518	2.431	13.4	21.0	6 20	20 21.26	-38 7.1	1.875	2.774	11.9	20.9
6 30	20 15.92	-32 4.5	1.452	2.418	9.7	20.8	6 30	20 14.56	-39 8.5	1.821	2.770	9.3	20.7
7 10	20 6.46	-33 5.6	1.409	2.405	6.4	20.5	7 10	20 5.63	-39 59.3	1.790	2.765	7.4	20.6
7 20	19 55.34	-33 54.7	1.391	2.391	5.6	20.5	7 20	19 55.44	-40 32.8	1.784	2.762	7.2	20.6
7 30	19 44.01	-34 25.5	1.398	2.378	8.4	20.6	7 30	19 45.26	-40 45.1	1.804	2.758	8.9	20.7
8 9	19 34.05	-34 35.5	1.429	2.364	12.2	20.8	8 9	19 36.39	-40 35.7	1.847	2.755	11.5	20.8
8 19	19 26.69	-34 26.3	1.481	2.351	16.0	21.0	8 19	19 29.82	-40 7.3	1.912	2.751	14.2	21.0
<b>216968</b>	2000 <i>EO</i> <sub>80</sub>	7 19.5 208°07		0°3/19.3 18			<b>34673</b>	2000 <i>YM</i> <sub>70</sub>	7 19.5 358°21		3°3/17.5 18		
6 10	20 25.56	-19 23.3	2.073	2.884	14.3	21.4	6 10	20 18.99	-24 57.9	1.798	2.640	15.0	17.9
6 20	20 21.00	-19 49.7	1.979	2.878	11.4	21.2	6 20	20 16.28	-26 5.9	1.721	2.638	11.8	17.7
6 30	20 14.08	-20 23.8	1.907	2.872	7.9	21.0	6 30	20 11.07	-27 20.5	1.665	2.636	8.2	17.5
7 10	20 5.30	-21 2.5	1.860	2.864	3.9	20.7	7 10	20 3.89	-28 35.9	1.633	2.635	4.7	17.3
7 20	19 55.42	-21 42.2	1.840	2.856	0.4	20.4	7 20	19 55.54	-29 45.6	1.627	2.635	3.5	17.2
7 30	19 45.43	-22 19.0	1.849	2.848	4.5	20.7	7 30	19 47.13	-30 43.8	1.647	2.635	6.4	17.4
8 9	19 36.38	-22 49.9	1.885	2.838	8.5	20.9	8 9	19 39.81	-31 27.1	1.692	2.636	10.0	17.6
8 19	19 29.13	-23 13.7	1.945	2.828	12.1	21.1	8 19	19 34.48	-31 54.6	1.760	2.638	13.4	17.8
<b>150007</b>	2005 <i>UD</i> <sub>204</sub>	7 19.5 211°11		0°4/19.7 18			<b>30256</b>	2000 <i>HC</i> <sub>30</sub>	7 19.5 300°07		5°6/17.7 18		
6 10	20 20.28	-18 8.1	2.341	3.153	12.9	20.4	6 10	20 25.44	-29 38.7	1.264	2.121	19.1	18.7
6 20	20 16.44	-18 19.5	2.254	3.153	10.2	20.2	6 20	20 22.88	-30 21.8	1.180	2.103	15.5	18.4
6 30	20 10.70	-18 37.4	2.188	3.152	7.1	20.0	6 30	20 16.55	-31 8.1	1.114	2.086	11.2	18.1
7 10	20 3.52	-18 59.9	2.148	3.151	3.6	19.8	7 10	20 7.00	-31 49.5	1.068	2.068	7.1	17.8
7 20	19 55.53	-19 24.5	2.134	3.150	0.5	19.5	7 20	19 55.37	-32 17.4	1.045	2.050	5.7	17.7
7 30	19 47.54	-19 48.9	2.149	3.149	3.8	19.8	7 30	19 43.49	-32 25.1	1.045	2.033	9.1	17.8
8 9	19 40.37	-20 10.7	2.191	3.149	7.3	20.0	8 9	19 33.29	-32 10.8	1.067	2.017	13.9	18.1
8 19	19 34.68	-20 28.7	2.258	3.148	10.4	20.2	8 19	19 26.28	-31 37.3	1.108	2.000	18.4	18.3
<b>143547</b>	2003 <i>ES</i> <sub>31</sub>	7 19.5 74°96		0°7/19.8 18			<b>304277</b>	2006 <i>SL</i> <sub>20</sub>	7 19.5 326°27		0°6/19.7 18		
6 10	20 23.07	-18 38.6	2.110	2.924	14.0	20.1	6 10	20 20.78	-18 14.5	1.936	2.758	14.8	21.1
6 20	20 18.66	-18 31.9	2.039	2.938	11.1	19.9	6 20	20 17.31	-18 20.0	1.849	2.754	11.8	20.9
6 30	20 12.19	-18 30.8	1.988	2.952	7.7	19.7	6 30	20 11.57	-18 33.2	1.783	2.750	8.2	20.6
7 10	20 4.21	-18 33.6	1.963	2.966	3.9	19.5	7 10	20 4.06	-18 51.8	1.741	2.745	4.2	20.4
7 20	19 55.50	-18 38.5	1.965	2.980	0.7	19.3	7 20	19 55.56	-19 13.2	1.726	2.741	0.6	20.1
7 30	19 46.94	-18 43.6	1.994	2.995	4.0	19.5	7 30	19 47.03	-19 34.7	1.737	2.738	4.4	20.4
8 9	19 39.43	-18 47.3	2.051	3.009	7.6	19.8	8 9	19 39.49	-19 53.6	1.774	2.734	8.4	20.6
8 19	19 33.62	-18 48.9	2.132	3.023	10.8	20.0	8 19	19 33.74	-20 8.5	1.835	2.731	12.1	20.8
<b>498462</b>	2008 <i>CC</i> <sub>17</sub>	7 19.5 139°04		1°8/20.3 17			<b>506058</b>	2015 <i>LQ</i> <sub>8</sub>	7 19.5 138°38		4°7/21.4 17		
6 10	20 24.45	-13 55.1	1.760	2.571	16.5	22.2	6 10	20 24.03	- 8 31.1	2.092	2.874	15.2	21.6
6 20	20 20.29	-14 11.0	1.683	2.579	13.2	22.0	6 20	20 19.45	- 7 52.3	2.011	2.881	12.5	21.5
6 30	20 13.63	-14 39.4	1.627	2.587	9.4	21.7	6 30	20 12.79	- 7 24.5	1.951	2.888	9.5	21.3
7 10	20 5.07	-15 18.1	1.593	2.594	5.1	21.5	7 10	20 4.58	- 7 8.7	1.914	2.895	6.5	21.1
7 20	19 55.44	-16 3.8	1.586	2.600	1.8	21.3	7 20	19 55.54	- 7 4.8	1.904	2.902	4.7	21.0
7 30	19 45.86	-16 52.1	1.606	2.606	4.8	21.5	7 30	19 46.57	- 7 11.8	1.921	2.908	5.8	21.1
8 9	19 37.44	-17 39.1	1.652	2.612	9.0	21.8	8 9	19 38.55	- 7 27.6	1.965	2.914	8.6	21.3
8 19	19 31.02	-18 21.6	1.722	2.617	12.7	22.0	8 19	19 32.20	- 7 49.4	2.033	2.919	11.5	21.5
<b>340385</b>	2006 <i>DB</i> <sub>209</sub>	7 19.5 170°05		3°0/21.1 17			<b>523180</b>	2016 <i>TR</i> <sub>99</sub>	7 19.5 235°05		2°2/21.0 18		
6 10	20 21.41	-10 44.3	1.955	2.755	15.5	21.2	6 10	20 19.33	-10 25.1	2.568	3.354	12.6	22.2
6 20	20 17.68	-10 50.3	1.870	2.757	12.6	21.0	6 20	20 15.59	-10 55.3	2.467	3.345	10.2	22.0
6 30	20 11.74	-11 9.4	1.806	2.758	9.2	20.8	6 30	20 10.11	-11 37.5	2.388	3.337	7.4	21.8
7 10	20 4.11	-11 41.0	1.765	2.759	5.6	20.6	7 10	20 3.27	-12 30.4	2.334	3.328	4.4	21.6
7 20	19 55.51	-12 22.6	1.750	2.759	3.1	20.4	7 20	19 55.61	-13 31.5	2.308	3.319	2.2	21.5
7 30	19 46.89	-13 10.9	1.762	2.760	4.9	20.5	7 30	19 47.84	-14 37.5	2.312	3.310	3.8	21.6
8 9	19 39.20	-14 2.0	1.801	2.760	8.4	20.8	8 9	19 40.70	-15 44.6	2.343	3.300	6.9	21.8
8 19	19 33.25	-14 52.3	1.864	2.760	11.9	21.0	8 19	19 34.82	-16 49.5	2.401	3.291	9.8	21.9
<b>475407</b>	2006 <i>JX</i> <sub>21</sub>	7 19.5 60°45		7°9/23.6 17			<b>119985</b>	2002 <i>XO</i> <sub>47</sub>	7 19.5 141°85		1°1/19.0 17		
6 10	20 19.96	- 0 12.0	1.835	2.600	17.6	21.4	6 10	20 27.45	-22 39.5	1.889	2.708	15.2	20.5
6 20	20 16.55	+ 0 28.5	1.761	2.608	15.1	21.2	6 20	20 22.54	-22 53.6	1.813	2.717	12.0	20.3
6 30	20 10.94	+ 0 50.0	1.705	2.616	12.3	21.1	6 30	20 15.11	-23 12.0	1.758	2.725	8.3	20.1
7 10	20 3.69	+ 0 50.3	1.671	2.624	9.7	20.9	7 10	20 5.79	-23 31.4	1.728	2.733	4.1	19.8
7 20	19 55.54	+ 0 28.7	1.659	2.633	8.0	20.9	7 20	19 55.48	-23 48.1	1.725	2.740	1.2	19.6
7 30	19 47.44	- 0 12.9	1.673	2.641	8.3	20.9	7 30	19 45.30	-23 59.1	1.749	2.747	4.9	19.9
8 9	19 40.33	- 1 10.3	1.711	2.650	10.3	21.0	8 9	19 36.35	-24 3.1	1.800	2.753	8.9	20.2
8 19	19 34.98	- 2 17.9	1.772	2.658	12.9	21.2	8 19	19 29.46	-24 0.0	1.874	2.759	12.4	20.4
<b>338806</b>	2003 <i>WE</i> <sub>9</sub>	7 19.5 305°76		2°9/18.3 18			<b>28771</b>	2000 <i>HF</i> <sub>32</sub>	7 19.5 289°81		0°8/19.7 18		
6 10	20 23.82	-26 56.0	1.779	2.615	15.4	20.7	6 10	20 23.62	-18 23.4	1.333	2.177	19.1	18.7
6 20	20 20.14	-27 18.9	1.693	2.606	12.2	20.5	6 20	20 20.85	-18 21.4	1.244	2.161	15.4	18.4
6 30	20 13.74	-27 43.9	1.628	2.597	8.6	20.2	6 30	20 14.80	-18 29.6	1.173	2.144	10.9	18.1
7 10	20 5.22	-28 6.6	1.585	2.588	4.8	20.0	7 10	20 6.01	-18 45.9	1.123	2.128	5.6	17.7
7 20	19 55.45	-28 22.4	1.569	2.579	3.0	19.8	7 20	19 55.46	-19 6.8	1.096	2.112	0.8	17.4
7 30	19 45.66	-28 27.7	1.578	2.571	6.1	20.0	7 30	19 44.64	-19 28.1	1.094	2.096	6.0	17.7
8 9	19 37.08	-28 21.5	1.613	2.563	10.0	20.2	8 9	19 35.18	-19 46.3	1.115	2.081	11.6	17.9
8 19	19 30.68	-28 4.3	1.671	2.555	13.7	20.4	8 19	19 28.37	-19 59.3	1.156	2.065	16.5	18.2
<b>475458</b>	2006 <i>RT</i> <sub>85</sub>	7 19.5 324°72		9°3/15.6 18			<b>342566</b>	2008 <i>UM</i> <sub>254</sub>	7 19.5 316°89		2°4/20.3 18		</

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>178678</b>	2000 QW <sub>231</sub>		7 19.5 275°35	3°1/21.4	18		<b>328180</b>	2008 DB <sub>33</sub>		7 19.5 250°89	0°7/19.2	18	
6 10	20 18.89	-9 27.4	2.235	3.027	14.0	20.2	6 10	20 25.33	-20 7.6	1.773	2.597	15.9	21.4
6 20	20 15.54	-9 37.3	2.135	3.015	11.5	19.9	6 20	20 21.41	-20 34.4	1.675	2.581	12.7	21.1
6 30	20 10.23	-10 0.1	2.056	3.003	8.5	19.7	6 30	20 14.76	-21 10.1	1.597	2.565	8.8	20.9
7 10	20 3.40	-10 35.4	2.000	2.991	5.4	19.5	7 10	20 5.85	-21 51.3	1.543	2.548	4.4	20.6
7 20	19 55.63	-11 21.4	1.971	2.979	3.2	19.4	7 20	19 55.51	-22 33.5	1.515	2.531	0.8	20.3
7 30	19 47.73	-12 15.1	1.970	2.966	4.6	19.4	7 30	19 44.91	-23 11.9	1.514	2.513	5.3	20.5
8 9	19 40.54	-13 12.7	1.996	2.954	7.8	19.6	8 9	19 35.34	-23 43.0	1.538	2.494	9.9	20.8
8 19	19 34.80	-14 10.6	2.046	2.942	11.0	19.8	8 19	19 27.86	-24 5.2	1.586	2.476	14.0	21.0
<b>137417</b>	1999 TW <sub>194</sub>		7 19.5 317°44	4°3/18.0	18		<b>476172</b>	2007 TZ <sub>424</sub>		7 19.5 260°98	2°4/20.6	18	
6 10	20 21.39	-27 11.5	1.247	2.110	19.0	19.5	6 10	20 21.30	-13 23.6	2.078	2.883	14.5	22.1
6 20	20 19.61	-27 46.9	1.160	2.088	15.3	19.2	6 20	20 17.57	-13 16.2	1.983	2.874	11.8	21.9
6 30	20 14.27	-28 27.5	1.091	2.067	10.9	18.8	6 30	20 11.70	-13 18.4	1.908	2.864	8.5	21.7
7 10	20 5.87	-29 6.8	1.043	2.047	6.3	18.5	7 10	20 4.15	-13 29.6	1.858	2.854	5.0	21.4
7 20	19 55.48	-29 37.1	1.017	2.027	4.5	18.4	7 20	19 55.61	-13 48.2	1.833	2.845	2.5	21.3
7 30	19 44.78	-29 51.9	1.014	2.008	8.3	18.5	7 30	19 46.99	-14 12.1	1.836	2.835	4.6	21.4
8 9	19 35.62	-29 48.4	1.032	1.990	13.3	18.7	8 9	19 39.21	-14 38.6	1.866	2.825	8.2	21.6
8 19	19 29.46	-29 27.8	1.070	1.973	18.1	19.0	8 19	19 33.06	-15 5.3	1.919	2.815	11.7	21.8
<b>289823</b>	2005 KX <sub>7</sub>		7 19.5 18°83	1°9/20.2	17		<b>199685</b>	2006 HJ <sub>17</sub>		7 19.5 157°44	7°3/23.4	18	
6 10	20 18.31	-15 35.2	1.095	1.956	21.2	19.9	6 10	20 21.98	+0 31.7	2.220	2.961	15.6	21.1
6 20	20 16.72	-15 35.8	1.038	1.963	16.9	19.6	6 20	20 17.77	+1 11.6	2.137	2.967	13.4	21.0
6 30	20 11.83	-15 51.8	0.997	1.971	11.9	19.4	6 30	20 11.63	+1 35.5	2.073	2.972	11.0	20.8
7 10	20 4.38	-16 21.1	0.975	1.980	6.4	19.1	7 10	20 4.03	+1 41.2	2.031	2.976	8.8	20.7
7 20	19 55.58	-16 59.1	0.975	1.991	1.9	18.9	7 20	19 55.63	+1 28.0	2.014	2.980	7.4	20.6
7 30	19 46.97	-17 40.4	0.998	2.002	6.1	19.2	7 30	19 47.22	+0 57.0	2.023	2.984	7.7	20.7
8 9	19 40.09	-18 19.7	1.043	2.015	11.4	19.5	8 9	19 39.64	+0 11.3	2.058	2.987	9.4	20.8
8 19	19 35.96	-18 53.3	1.107	2.029	16.0	19.8	8 19	19 33.56	-0 44.7	2.117	2.990	11.7	20.9
<b>198296</b>	2004 TK <sub>309</sub>		7 19.5 300°19	1°5/18.9	18		<b>475947</b>	2007 ER <sub>218</sub>		7 19.5 148°74	6°0/15.8	18	
6 10	20 24.29	-24 0.7	1.660	2.496	16.3	20.8	6 10	20 27.74	-41 16.1	2.893	3.689	11.1	22.0
6 20	20 20.68	-24 5.8	1.571	2.484	13.0	20.5	6 20	20 22.25	-42 4.2	2.823	3.696	9.2	21.9
6 30	20 14.24	-24 14.6	1.501	2.472	9.0	20.3	6 30	20 14.65	-42 46.0	2.776	3.703	7.5	21.8
7 10	20 5.54	-24 23.5	1.455	2.460	4.6	20.0	7 10	20 5.50	-43 16.8	2.754	3.710	6.2	21.7
7 20	19 55.51	-24 28.8	1.434	2.448	1.6	19.7	7 20	19 55.55	-43 32.8	2.759	3.717	6.1	21.7
7 30	19 45.40	-24 27.4	1.438	2.437	5.6	20.0	7 30	19 45.72	-43 31.9	2.791	3.723	7.2	21.8
8 9	19 36.54	-24 18.0	1.468	2.426	10.1	20.2	8 9	19 36.92	-43 14.5	2.849	3.728	8.9	21.9
8 19	19 29.95	-24 1.1	1.520	2.415	14.2	20.4	8 19	19 29.85	-42 42.8	2.930	3.734	10.7	22.1
<b>261901</b>	2006 HW <sub>82</sub>		7 19.5 353°87	3°3/20.6	17		<b>386460</b>	2008 XK <sub>30</sub>		7 19.5 315°00	4°2/20.5	18	
6 10	20 21.79	-13 58.2	1.262	2.103	20.1	20.7	6 10	20 24.14	-13 18.7	1.722	2.534	16.8	20.6
6 20	20 19.21	-13 37.7	1.189	2.101	16.3	20.5	6 20	20 20.19	-12 22.1	1.633	2.526	13.7	20.4
6 30	20 13.47	-13 31.0	1.133	2.099	11.8	20.2	6 30	20 13.69	-11 32.8	1.564	2.518	10.1	20.1
7 10	20 5.22	-13 37.6	1.097	2.098	6.8	19.9	7 10	20 5.20	-10 52.3	1.518	2.511	6.4	19.9
7 20	19 55.53	-13 55.8	1.084	2.097	3.3	19.7	7 20	19 55.56	-10 21.1	1.498	2.504	4.2	19.7
7 30	19 45.84	-14 21.9	1.095	2.097	6.3	19.9	7 30	19 45.90	-9 59.6	1.503	2.497	6.1	19.8
8 9	19 37.65	-14 51.7	1.129	2.097	11.2	20.2	8 9	19 37.35	-9 46.7	1.534	2.491	9.8	20.1
8 19	19 32.06	-15 21.5	1.183	2.098	15.8	20.4	8 19	19 30.83	-9 41.0	1.588	2.484	13.6	20.3
<b>294806</b>	2008 CX <sub>88</sub>		7 19.5 311°90	4°2/17.5	18		<b>164318</b>	2005 AJ <sub>37</sub>		7 19.5 224°14	2°5/20.7	18	
6 10	20 21.92	-29 23.8	1.903	2.739	14.5	20.4	6 10	20 21.08	-12 38.1	1.914	2.722	15.5	20.7
6 20	20 18.64	-30 7.5	1.812	2.723	11.6	20.2	6 20	20 17.52	-12 42.0	1.829	2.722	12.5	20.5
6 30	20 12.76	-30 53.1	1.742	2.708	8.3	19.9	6 30	20 11.71	-12 57.8	1.764	2.721	9.0	20.3
7 10	20 4.79	-31 35.1	1.696	2.693	5.3	19.7	7 10	20 4.16	-13 24.4	1.723	2.720	5.2	20.1
7 20	19 55.55	-32 8.2	1.675	2.679	4.3	19.6	7 20	19 55.62	-13 59.5	1.708	2.720	2.5	19.9
7 30	19 46.19	-32 28.1	1.681	2.664	6.8	19.8	7 30	19 47.06	-14 39.9	1.719	2.719	4.7	20.1
8 9	19 37.90	-32 32.8	1.711	2.651	10.3	19.9	8 9	19 39.46	-15 21.9	1.757	2.718	8.5	20.3
8 19	19 31.67	-32 23.0	1.764	2.637	13.6	20.1	8 19	19 33.62	-16 2.5	1.819	2.717	12.0	20.5
<b>244226</b>	2002 BB <sub>3</sub>		7 19.5 163°44	6°6/16.8	18		<b>56658</b>	2000 KJ <sub>55</sub>		7 19.5 63°68	1°7/18.8	18	
6 10	20 32.12	-38 3.3	2.079	2.890	14.3	20.7	6 10	20 25.09	-21 2.3	1.251	2.101	19.7	18.8
6 20	20 26.43	-38 49.4	2.006	2.894	11.8	20.5	6 20	20 21.87	-21 45.2	1.191	2.112	15.5	18.6
6 30	20 17.90	-39 29.8	1.954	2.898	9.1	20.4	6 30	20 15.30	-22 38.6	1.148	2.123	10.7	18.3
7 10	20 7.22	-39 57.9	1.927	2.901	7.1	20.3	7 10	20 6.11	-23 36.8	1.127	2.134	5.3	18.0
7 20	19 55.43	-40 8.0	1.926	2.904	6.7	20.2	7 20	19 55.52	-24 32.3	1.130	2.145	1.9	17.8
7 30	19 43.83	-39 57.6	1.951	2.906	8.3	20.3	7 30	19 45.12	-25 18.6	1.157	2.156	6.5	18.2
8 9	19 33.69	-39 27.4	2.002	2.908	10.8	20.5	8 9	19 36.47	-25 51.8	1.207	2.168	11.5	18.5
8 19	19 25.94	-38 40.9	2.075	2.910	13.4	20.7	8 19	19 30.65	-26 11.2	1.279	2.179	15.9	18.8
<b>119558</b>	2001 VS <sub>42</sub>		7 19.5 216°79	0°1/19.4	18		<b>386409</b>	2008 UQ <sub>244</sub>		7 19.5 243°45	0°9/19.8	18	
6 10	20 24.85	-19 54.3	1.993	2.809	14.7	19.9	6 10	20 26.04	-19 12.5	2.060	2.870	14.5	20.8
6 20	20 20.51	-20 4.9	1.902	2.803	11.7	19.6	6 20	20 21.35	-18 52.9	1.962	2.859	11.6	20.6
6 30	20 13.79	-20 21.8	1.832	2.797	8.1	19.4	6 30	20 14.32	-18 37.6	1.886	2.849	8.1	20.3
7 10	20 5.21	-20 42.6	1.787	2.791	4.0	19.2	7 10	20 5.47	-18 25.3	1.835	2.837	4.2	20.1
7 20	19 55.55	-21 4.1	1.768	2.784	0.3	18.8	7 20	19 55.56	-18 14.6	1.810	2.826	0.9	19.8
7 30	19 45.83	-21 23.3	1.777	2.777	4.5	19.2	7 30	19 45.60	-18 4.0	1.814	2.814	4.4	20.0
8 9	19 37.12	-21 38.0	1.813	2.770	8.6	19.4	8 9	19 36.62	-17 52.6	1.845	2.802	8.4	20.2
8 19	19 30.27	-21 47.2	1.873	2.762	12.2	19.6	8 19	19 29.45	-17 40.2	1.900	2.790	12.0	20.4
<b>99512</b>	2002 EL <sub>20</sub>		7 19.5 35°92	2°8/18.6	17		<b>8340</b>	Mumma		7 19.5 6°96	1°4/20.1	18	
6 10	20 23.35												

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>49716</b>	1999 VZ <sub>35</sub>	7 19.5 128°82		2°8/18.2 18			<b>176486</b>	2001 XR <sub>225</sub>	7 19.5 89°94		4°0/17.2 18		
6 10	20 28.00	-25 18.2	1.826	2.651	15.5	19.3	6 10	20 23.37	-29 34.7	2.178	3.004	13.3	20.1
6 20	20 23.15	-26 4.0	1.757	2.663	12.2	19.1	6 20	20 19.24	-30 32.1	2.107	3.012	10.5	19.9
6 30	20 15.65	-26 53.9	1.709	2.676	8.4	18.9	6 30	20 12.84	-31 30.4	2.058	3.021	7.5	19.7
7 10	20 6.12	-27 42.4	1.685	2.688	4.6	18.7	7 10	20 4.71	-32 24.4	2.034	3.029	4.8	19.6
7 20	19 55.53	-28 24.0	1.688	2.699	2.9	18.6	7 20	19 55.64	-33 9.1	2.037	3.037	4.2	19.5
7 30	19 45.07	-28 54.5	1.719	2.710	5.9	18.8	7 30	19 46.63	-33 40.7	2.068	3.046	6.2	19.7
8 9	19 35.92	-29 12.1	1.775	2.720	9.6	19.1	8 9	19 38.67	-33 57.8	2.124	3.054	9.1	19.9
8 19	19 28.97	-29 17.2	1.855	2.729	13.0	19.3	8 19	19 32.53	-34 1.0	2.204	3.062	11.9	20.1
<b>34221</b>	2000 QW <sub>84</sub>	7 19.5 240°02		0°1/19.5 18			<b>287180</b>	2002 RF <sub>269</sub>	7 19.5 81°96		2°4/18.7 17		
6 10	20 23.16	-20 43.1	2.189	3.004	13.5	18.6	6 10	20 27.68	-25 9.0	1.498	2.336	17.6	21.0
6 20	20 18.87	-20 37.3	2.102	3.003	10.7	18.4	6 20	20 23.39	-25 28.8	1.433	2.347	13.9	20.8
6 30	20 12.46	-20 35.6	2.036	3.001	7.4	18.2	6 30	20 16.05	-25 52.3	1.386	2.357	9.6	20.6
7 10	20 4.48	-20 36.1	1.995	3.000	3.7	17.9	7 10	20 6.39	-26 14.2	1.363	2.367	5.0	20.4
7 20	19 55.62	-20 36.7	1.982	2.998	0.2	17.6	7 20	19 55.55	-26 29.8	1.365	2.378	2.5	20.2
7 30	19 46.80	-20 35.7	1.996	2.996	4.1	18.0	7 30	19 44.96	-26 35.5	1.392	2.388	6.1	20.5
8 9	19 38.93	-20 31.9	2.037	2.994	7.8	18.2	8 9	19 35.97	-26 30.3	1.444	2.398	10.5	20.8
8 19	19 32.73	-20 24.9	2.104	2.993	11.1	18.4	8 19	19 29.56	-26 15.3	1.518	2.409	14.4	21.0
<b>253656</b>	2003 UK <sub>159</sub>	7 19.5 341°17		3°6/20.7 17			<b>242343</b>	2003 YU <sub>164</sub>	7 19.5 208°04		1°8/20.3 18		
6 10	20 19.00	-13 29.3	1.203	2.052	20.4	20.5	6 10	20 22.66	-15 7.7	2.164	2.968	14.0	21.1
6 20	20 17.22	-13 6.9	1.127	2.043	16.7	20.2	6 20	20 18.50	-14 59.9	2.074	2.965	11.3	20.9
6 30	20 12.26	-12 59.1	1.068	2.036	12.1	19.9	6 30	20 12.25	-15 0.2	2.004	2.962	8.0	20.7
7 10	20 4.71	-13 6.2	1.029	2.029	7.2	19.6	7 10	20 4.40	-15 7.3	1.960	2.959	4.5	20.5
7 20	19 55.60	-13 26.5	1.011	2.023	3.6	19.4	7 20	19 55.66	-15 19.8	1.942	2.956	1.8	20.3
7 30	19 46.42	-13 56.4	1.017	2.018	6.6	19.6	7 30	19 46.90	-15 35.6	1.953	2.952	4.3	20.5
8 9	19 38.69	-14 31.3	1.044	2.014	11.6	19.8	8 9	19 39.02	-15 52.6	1.990	2.948	7.8	20.7
8 19	19 33.59	-15 6.7	1.091	2.011	16.4	20.1	8 19	19 32.75	-16 8.9	2.052	2.944	11.2	20.9
<b>377463</b>	2004 XE <sub>45</sub>	7 19.5 123°84		2°6/17.8 14 C			<b>254356</b>	2004 TZ <sub>60</sub>	7 19.5 240°50		2°3/18.1 18		
6 10	20 27.12	-27 11.7	2.787	3.590	11.3	22.2	6 10	20 21.44	-26 12.0	2.563	3.381	11.7	20.7
6 20	20 21.45	-28 2.5	2.720	3.614	8.9	22.1	6 20	20 17.40	-26 46.6	2.471	3.374	9.3	20.5
6 30	20 13.95	-28 54.3	2.677	3.637	6.2	21.9	6 30	20 11.43	-27 23.5	2.401	3.366	6.4	20.3
7 10	20 5.12	-29 43.1	2.662	3.660	3.6	21.8	7 10	20 3.99	-27 59.5	2.358	3.359	3.6	20.1
7 20	19 55.61	-30 25.3	2.676	3.681	2.7	21.8	7 20	19 55.69	-28 30.9	2.342	3.351	2.4	20.0
7 30	19 46.21	-30 58.1	2.719	3.702	4.6	21.9	7 30	19 47.34	-28 54.9	2.354	3.344	4.7	20.2
8 9	19 37.69	-31 20.2	2.791	3.721	7.2	22.1	8 9	19 39.77	-29 9.9	2.394	3.336	7.6	20.4
8 19	19 30.67	-31 31.9	2.889	3.740	9.5	22.3	8 19	19 33.65	-29 15.6	2.459	3.328	10.4	20.5
<b>349425</b>	2008 AD <sub>46</sub>	7 19.5 274°94		1°0/18.9 18			<b>428230</b>	2006 WD <sub>153</sub>	7 19.5 212°39		0°9/19.1 18		
6 10	20 21.71	-21 31.9	2.035	2.859	14.1	21.2	6 10	20 26.20	-21 44.0	1.978	2.795	14.7	22.1
6 20	20 18.07	-21 58.5	1.945	2.851	11.2	21.0	6 20	20 21.66	-22 2.5	1.887	2.790	11.7	21.9
6 30	20 12.14	-22 31.4	1.875	2.844	7.7	20.8	6 30	20 14.65	-22 26.5	1.817	2.783	8.1	21.7
7 10	20 4.42	-23 7.3	1.831	2.836	3.9	20.5	7 10	20 5.69	-22 52.9	1.772	2.776	4.0	21.4
7 20	19 55.64	-23 42.4	1.813	2.828	1.1	20.3	7 20	19 55.60	-23 17.9	1.754	2.769	1.0	21.2
7 30	19 46.79	-24 13.1	1.822	2.820	4.7	20.6	7 30	19 45.44	-23 38.2	1.763	2.761	4.8	21.4
8 9	19 38.87	-24 36.8	1.857	2.812	8.6	20.8	8 9	19 36.32	-23 51.6	1.799	2.753	8.9	21.7
8 19	19 32.73	-24 52.3	1.917	2.804	12.1	21.0	8 19	19 29.13	-23 57.6	1.860	2.744	12.5	21.9
<b>28164</b>	1998 VY <sub>21</sub>	7 19.5 218°49		1°7/19.9 18			<b>424043</b>	2007 BA <sub>4</sub>	7 19.5 219°69		0°6/19.7 17		
6 10	20 27.14	-17 22.6	1.454	2.283	18.5	19.3	6 10	20 26.26	-18 44.5	1.948	2.761	15.1	22.0
6 20	20 23.11	-17 2.9	1.373	2.280	14.9	19.0	6 20	20 21.68	-18 41.7	1.855	2.754	12.1	21.8
6 30	20 16.01	-16 51.9	1.311	2.277	10.5	18.7	6 30	20 14.65	-18 45.3	1.782	2.746	8.4	21.5
7 10	20 6.47	-16 48.1	1.271	2.274	5.6	18.5	7 10	20 5.69	-18 53.4	1.734	2.738	4.3	21.3
7 20	19 55.53	-16 49.3	1.256	2.271	1.7	18.2	7 20	19 55.60	-19 3.5	1.713	2.729	0.6	21.0
7 30	19 44.59	-16 53.2	1.266	2.267	5.7	18.4	7 30	19 45.45	-19 13.1	1.720	2.720	4.6	21.2
8 9	19 35.08	-16 57.5	1.300	2.263	10.6	18.7	8 9	19 36.32	-19 20.4	1.753	2.710	8.8	21.5
8 19	19 28.08	-17 0.8	1.357	2.259	15.0	19.0	8 19	19 29.11	-19 24.4	1.810	2.700	12.5	21.7
<b>443532</b>	2014 JW <sub>73</sub>	7 19.5 37°91		0°4/19.7 18			<b>438931</b>	2010 EB <sub>139</sub>	7 19.5 64°61		4°1/17.5 17		
6 10	20 20.23	-18 7.3	1.988	2.810	14.5	21.2	6 10	20 24.52	-27 53.4	1.774	2.609	15.4	20.8
6 20	20 16.73	-18 20.2	1.912	2.817	11.5	21.0	6 20	20 20.54	-28 54.4	1.714	2.625	12.2	20.6
6 30	20 11.07	-18 40.8	1.858	2.824	7.9	20.8	6 30	20 13.90	-29 57.8	1.674	2.641	8.6	20.4
7 10	20 3.80	-19 6.7	1.828	2.832	4.0	20.5	7 10	20 5.28	-30 57.2	1.659	2.658	5.2	20.3
7 20	19 55.68	-19 35.0	1.824	2.840	0.4	20.3	7 20	19 55.63	-31 46.5	1.670	2.675	4.2	20.2
7 30	19 47.64	-20 2.6	1.847	2.848	4.2	20.6	7 30	19 46.15	-32 21.3	1.707	2.691	6.7	20.4
8 9	19 40.59	-20 27.0	1.897	2.857	8.0	20.8	8 9	19 38.01	-32 39.9	1.770	2.708	10.1	20.7
8 19	19 35.27	-20 46.7	1.971	2.866	11.4	21.1	8 19	19 32.07	-32 43.5	1.855	2.724	13.2	20.9
<b>33995</b>	2000 OV <sub>1</sub>	7 19.5 334°87		2°2/20.2 18			<b>292070</b>	2006 RH <sub>18</sub>	7 19.5 302°45		2°8/20.5 18		
6 10	20 17.78	-15 55.7	1.101	1.963	21.0	19.2	6 10	20 20.42	-13 55.5	1.399	2.235	18.8	20.9
6 20	20 16.65	-15 46.4	1.024	1.951	17.0	18.9	6 20	20 18.26	-13 48.9	1.298	2.207	15.4	20.6
6 30	20 12.12	-15 51.3	0.964	1.939	12.1	18.6	6 30	20 13.07	-13 56.3	1.214	2.180	11.2	20.3
7 10	20 4.75	-16 9.6	0.923	1.928	6.6	18.3	7 10	20 5.25	-14 17.8	1.152	2.153	6.5	20.0
7 20	19 55.62	-16 38.3	0.903	1.918	2.2	17.9	7 20	19 55.61	-14 51.2	1.112	2.125	2.8	19.7
7 30	19 46.31	-17 12.5	0.905	1.909	6.5	18.2	7 30	19 45.49	-15 32.8	1.097	2.099	6.2	19.8
8 9	19 38.55	-17 47.1	0.928	1.901	12.2	18.5	8 9	19 36.42	-16 17.7	1.104	2.072	11.5	20.0
8 19	19 33.66	-18 18.0	0.970	1.895	17.4	18.7	8 19	19 29.73	-17 1.5	1.133	2.046	16.5	20.2
<b>203938</b>	2003 QN <sub>69</sub>	7 19.5 320°35		5°4/20.7 18			<b>417381</b>	2006 HR <sub>57</sub>	7 19.5 27°22		5°8/17.5 17		
6 10	20 21.15	-11 31.9	1.546	2.367	18.0	19.5							

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7 19.5

7 19.5

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>326938</b>	2004 <i>CR</i> <sub>56</sub>		7 19.5 168°40	1°1/18.9	17		<b>9616</b>	1993 <i>FR</i> <sub>3</sub>		7 19.5 10°25	5°1/21.4	18	R
6 10	20 26.18	-20 50.6	1.966	2.782	14.8	21.7	6 10	20 19.83	-10 8.8	1.301	2.133	20.1	17.5
6 20	20 21.59	-21 30.3	1.884	2.786	11.7	21.5	6 20	20 17.48	-9 36.8	1.231	2.134	16.5	17.3
6 30	20 14.55	-22 17.4	1.824	2.790	8.0	21.3	6 30	20 12.19	-9 21.2	1.178	2.136	12.4	17.0
7 10	20 5.62	-23 8.0	1.789	2.793	4.0	21.1	7 10	20 4.60	-9 23.1	1.146	2.138	8.0	16.8
7 20	19 55.62	-23 57.3	1.780	2.796	1.2	20.9	7 20	19 55.73	-9 41.9	1.135	2.142	5.2	16.7
7 30	19 45.60	-24 40.9	1.800	2.797	4.9	21.1	7 30	19 46.90	-10 14.3	1.149	2.146	6.9	16.8
8 9	19 36.64	-25 15.7	1.847	2.799	8.8	21.4	8 9	19 39.48	-10 55.6	1.185	2.151	11.1	17.0
8 19	19 29.63	-25 40.7	1.918	2.799	12.3	21.6	8 19	19 34.47	-11 40.6	1.242	2.156	15.2	17.3
<b>385789</b>	2006 <i>BT</i> <sub>100</sub>		7 19.5 268°51	1°3/18.9	18		<b>204445</b>	2004 <i>XA</i> <sub>119</sub>		7 19.5 259°96	1°1/18.9	18	
6 10	20 23.96	-21 59.2	1.859	2.685	15.2	21.8	6 10	20 22.74	-21 16.6	1.921	2.747	14.8	20.7
6 20	20 20.23	-22 24.8	1.760	2.668	12.1	21.6	6 20	20 19.07	-21 46.3	1.831	2.738	11.7	20.5
6 30	20 13.89	-22 57.2	1.682	2.650	8.4	21.3	6 30	20 12.95	-22 23.0	1.762	2.730	8.1	20.3
7 10	20 5.43	-23 32.9	1.627	2.632	4.3	21.0	7 10	20 4.91	-23 3.4	1.716	2.721	4.1	20.0
7 20	19 55.62	-24 7.6	1.599	2.614	1.4	20.8	7 20	19 55.71	-23 43.2	1.697	2.713	1.2	19.8
7 30	19 45.60	-24 37.0	1.598	2.596	5.3	21.0	7 30	19 46.41	-24 18.3	1.706	2.704	4.9	20.0
8 9	19 36.56	-24 58.2	1.622	2.577	9.6	21.2	8 9	19 38.09	-24 45.7	1.740	2.695	9.0	20.3
8 19	19 29.52	-25 10.2	1.670	2.558	13.5	21.4	8 19	19 31.68	-25 4.2	1.798	2.686	12.7	20.5
<b>163122</b>	2002 <i>BL</i> <sub>11</sub>		7 19.5 225°14	2°1/20.5	17		<b>102019</b>	1999 <i>RH</i> <sub>90</sub>		7 19.5 304°62	2°6/20.7	18	
6 10	20 23.40	-13 13.1	1.521	2.343	18.2	20.4	6 10	20 20.58	-12 24.2	1.425	2.255	18.8	19.4
6 20	20 20.06	-13 31.5	1.438	2.340	14.7	20.2	6 20	20 18.09	-12 38.8	1.340	2.246	15.3	19.1
6 30	20 13.90	-14 5.6	1.374	2.337	10.5	19.9	6 30	20 12.71	-13 10.7	1.273	2.236	11.0	18.9
7 10	20 5.45	-14 53.5	1.333	2.333	5.8	19.6	7 10	20 4.95	-13 58.7	1.227	2.227	6.3	18.6
7 20	19 55.63	-15 51.3	1.315	2.329	2.1	19.4	7 20	19 55.71	-14 59.2	1.205	2.218	2.6	18.3
7 30	19 45.70	-16 53.5	1.324	2.326	5.4	19.6	7 30	19 46.28	-16 6.6	1.208	2.210	5.7	18.5
8 9	19 36.97	-17 54.6	1.358	2.321	10.2	19.8	8 9	19 38.04	-17 14.5	1.234	2.201	10.6	18.7
8 19	19 30.52	-18 50.1	1.414	2.317	14.5	20.1	8 19	19 32.13	-18 17.6	1.283	2.193	15.2	19.0
<b>218059</b>	2002 <i>EW</i> <sub>46</sub>		7 19.5 45°45	4°8/22.9	17		<b>39812</b>	1997 <i>WE</i> <sub>44</sub>		7 19.5 231°29	1°8/18.7	18	
6 10	20 18.15	-3 42.9	2.057	2.832	15.6	19.7	6 10	20 25.93	-21 55.8	1.629	2.461	16.7	19.7
6 20	20 14.92	-3 59.6	1.982	2.845	13.0	19.5	6 20	20 22.12	-22 37.6	1.542	2.453	13.3	19.5
6 30	20 9.76	-4 34.2	1.926	2.857	10.0	19.4	6 30	20 15.39	-23 28.4	1.475	2.445	9.2	19.2
7 10	20 3.15	-5 26.2	1.894	2.870	7.0	19.2	7 10	20 6.26	-24 23.3	1.432	2.437	4.7	18.9
7 20	19 55.76	-6 33.5	1.887	2.884	4.9	19.1	7 20	19 55.66	-25 16.2	1.414	2.428	1.9	18.7
7 30	19 48.43	-7 51.9	1.908	2.897	5.5	19.2	7 30	19 44.89	-26 1.5	1.422	2.419	6.0	19.0
8 9	19 41.96	-9 16.3	1.955	2.911	8.1	19.3	8 9	19 35.34	-26 35.4	1.456	2.409	10.5	19.2
8 19	19 37.04	-10 41.3	2.027	2.925	11.0	19.6	8 19	19 28.12	-26 56.6	1.512	2.399	14.7	19.4
<b>201072</b>	2002 <i>EM</i> <sub>129</sub>		7 19.5 153°48	6°6/23.1	18		<b>318227</b>	2004 <i>RE</i> <sub>218</sub>		7 19.5 293°25	2°6/18.5	17	
6 10	20 21.80	-1 30.5	2.127	2.882	15.8	21.0	6 10	20 25.30	-28 43.5	2.271	3.090	13.0	20.8
6 20	20 17.75	-1 2.0	2.044	2.888	13.4	20.8	6 20	20 20.79	-28 46.9	2.167	3.070	10.4	20.6
6 30	20 11.69	-0 49.6	1.981	2.893	10.8	20.7	6 30	20 13.99	-28 49.4	2.085	3.049	7.4	20.4
7 10	20 4.12	-0 55.0	1.939	2.897	8.2	20.5	7 10	20 5.38	-28 47.6	2.028	3.029	4.2	20.1
7 20	19 55.71	-1 18.2	1.923	2.901	6.7	20.4	7 20	19 55.72	-28 38.4	1.998	3.008	2.7	20.0
7 30	19 47.30	-1 57.6	1.933	2.905	7.1	20.5	7 30	19 45.98	-28 19.8	1.996	2.988	5.2	20.1
8 9	19 39.75	-2 49.6	1.969	2.909	9.1	20.6	8 9	19 37.18	-27 51.7	2.021	2.967	8.6	20.3
8 19	19 33.76	-3 49.6	2.030	2.912	11.7	20.8	8 19	19 30.16	-27 15.3	2.071	2.947	11.8	20.4
<b>68779</b>	Schoninger		7 19.5 63°67	2°6/20.8	17		<b>369902</b>	2012 <i>UE</i> <sub>132</sub>		7 19.5 130°28	0°2/19.4	18	
6 10	20 22.24	-12 35.1	1.668	2.484	17.1	19.4	6 10	20 25.58	-21 20.7	2.108	2.922	14.0	20.7
6 20	20 18.59	-12 38.6	1.602	2.499	13.7	19.2	6 20	20 20.80	-21 17.8	2.028	2.929	11.1	20.6
6 30	20 12.48	-12 55.2	1.555	2.514	9.8	19.0	6 30	20 13.82	-21 18.8	1.971	2.936	7.6	20.4
7 10	20 4.56	-13 23.6	1.531	2.529	5.7	18.8	7 10	20 5.20	-21 21.5	1.938	2.943	3.8	20.1
7 20	19 55.69	-14 0.9	1.532	2.544	2.7	18.6	7 20	19 55.74	-21 23.5	1.933	2.949	0.3	19.9
7 30	19 46.98	-14 43.1	1.559	2.559	5.0	18.8	7 30	19 46.40	-21 22.9	1.956	2.956	4.2	20.2
8 9	19 39.48	-15 26.3	1.612	2.575	8.9	19.1	8 9	19 38.12	-21 18.7	2.006	2.962	8.0	20.4
8 19	19 34.00	-16 7.2	1.689	2.590	12.6	19.4	8 19	19 31.63	-21 10.6	2.081	2.968	11.3	20.6
<b>317247</b>	2002 <i>CA</i> <sub>273</sub>		7 19.5 130°55	3°4/20.9	18		<b>31541</b>	1999 <i>DC</i> <sub>3</sub>		7 19.5 63°86	5°3/17.4	18	
6 10	20 22.16	-11 32.5	2.344	3.133	13.5	20.1	6 10	20 27.23	-27 48.8	1.267	2.120	19.3	18.0
6 20	20 17.83	-10 56.6	2.257	3.135	11.0	19.9	6 20	20 23.73	-29 2.2	1.214	2.135	15.3	17.8
6 30	20 11.64	-10 28.7	2.192	3.137	8.2	19.8	6 30	20 16.68	-30 19.7	1.180	2.151	10.8	17.6
7 10	20 4.06	-10 9.1	2.151	3.139	5.2	19.6	7 10	20 6.88	-31 32.1	1.167	2.166	6.7	17.4
7 20	19 55.73	-9 57.7	2.137	3.141	3.4	19.5	7 20	19 55.66	-32 30.2	1.178	2.182	5.5	17.4
7 30	19 47.44	-9 53.8	2.151	3.143	4.8	19.6	7 30	19 44.73	-33 7.5	1.213	2.198	8.6	17.6
8 9	19 39.98	-9 56.0	2.193	3.145	7.6	19.7	8 9	19 35.73	-33 22.5	1.271	2.214	12.7	17.9
8 19	19 33.98	-10 2.5	2.259	3.147	10.5	19.9	8 19	19 29.75	-33 17.9	1.349	2.230	16.5	18.2
<b>312448</b>	2008 <i>JH</i> <sub>25</sub>		7 19.5 46°08	4°3/17.1	18		<b>122177</b>	2000 <i>KU</i> <sub>35</sub>		7 19.5 11°74	3°1/20.8	17	
6 10	20 22.56	-31 7.6	2.244	3.070	12.9	20.3	6 10	20 15.59	-12 12.4	0.959	1.827	22.9	19.1
6 20	20 18.62	-31 59.2	2.168	3.073	10.3	20.2	6 20	20 15.05	-12 21.6	0.901	1.829	18.6	18.8
6 30	20 12.43	-32 50.6	2.115	3.076	7.5	20.0	6 30	20 11.01	-12 53.3	0.859	1.833	13.4	18.6
7 10	20 4.54	-33 36.7	2.087	3.079	5.0	19.9	7 10	20 4.19	-13 46.1	0.835	1.838	7.6	18.3
7 20	19 55.70	-34 13.0	2.086	3.083	4.4	19.8	7 20	19 55.80	-14 54.7	0.831	1.845	3.2	18.0
7 30	19 46.91	-34 35.9	2.111	3.086	6.3	20.0	7 30	19 47.51	-16 10.8	0.849	1.853	6.6	18.3
8 9	19 39.12	-34 44.4	2.162	3.090	9.1	20.1	8 9	19 40.99	-17 25.6	0.886	1.863	12.2	18.6
8 19	19 33.12	-34 39.3	2.237	3.093	11.8	20.3	8 19	19 37.42	-18 32.1	0.943	1.874	17.2	18.9
<b>312514</b>	2009 <i>DB</i> <sub>9</sub>		7 19.5 25°97	1°0/19.3	17		<b>251766</b>	1999 <i>JC</i> <sub>5</sub>		7 19.5			

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>91303</b>	1999 <i>FG</i> <sub>41</sub>		7 19.5 240°10	2°1/20.4	18		<b>71242</b>	2000 <i>AQ</i> <sub>8</sub>		7 19.5 248°18	2°4/18.3	18	
6 10	20 25.17	-14 25.9	1.621	2.439	17.4	20.0	6 10	20 25.12	-25 41.4	2.259	3.076	13.1	21.0
6 20	20 21.41	-14 27.6	1.529	2.428	14.1	19.8	6 20	20 20.71	-26 13.5	2.157	3.059	10.4	20.8
6 30	20 14.85	-14 41.6	1.456	2.417	10.1	19.5	6 30	20 14.00	-26 48.9	2.077	3.042	7.3	20.5
7 10	20 5.99	-15 6.8	1.405	2.405	5.6	19.2	7 10	20 5.46	-27 23.7	2.023	3.024	4.0	20.3
7 20	19 55.71	-15 40.3	1.379	2.393	2.1	18.9	7 20	19 55.78	-27 54.0	1.995	3.006	2.4	20.2
7 30	19 45.22	-16 18.3	1.380	2.381	5.4	19.1	7 30	19 45.93	-28 16.0	1.996	2.988	5.2	20.3
8 9	19 35.85	-16 56.8	1.406	2.368	10.1	19.4	8 9	19 36.93	-28 28.0	2.024	2.968	8.6	20.5
8 19	19 28.67	-17 32.6	1.454	2.354	14.4	19.6	8 19	19 29.65	-28 29.6	2.077	2.949	11.9	20.7
<b>6831</b>	1991 <i>UM</i> <sub>1</sub>		7 19.5 335°24	3°8/18.7	18		<b>1650</b>	Heckmann		7 19.5 27°15	2°5/20.5	18	
6 10	20 18.60	-27 7.3	0.976	1.860	21.4	16.1	6 10	20 20.72	-14 45.2	1.222	2.070	20.2	14.6
6 20	20 18.13	-27 16.6	0.901	1.841	17.2	15.8	6 20	20 18.31	-14 35.9	1.162	2.078	16.2	14.4
6 30	20 13.65	-27 28.4	0.843	1.825	12.2	15.5	6 30	20 12.81	-14 40.8	1.119	2.088	11.5	14.1
7 10	20 5.75	-27 36.6	0.802	1.809	6.8	15.1	7 10	20 4.93	-14 58.5	1.097	2.099	6.4	13.9
7 20	19 55.72	-27 34.5	0.782	1.795	3.9	14.9	7 20	19 55.81	-15 25.8	1.096	2.110	2.5	13.7
7 30	19 45.52	-27 17.2	0.782	1.782	8.4	15.1	7 30	19 46.89	-15 58.4	1.120	2.123	5.9	13.9
8 9	19 37.28	-26 43.9	0.802	1.772	14.2	15.4	8 9	19 39.56	-16 31.6	1.166	2.136	10.8	14.2
8 19	19 32.50	-25 57.5	0.839	1.762	19.6	15.6	8 19	19 34.82	-17 2.0	1.234	2.150	15.2	14.5
<b>508655</b>	2017 <i>TL</i> <sub>13</sub>		7 19.5 211°61	0°6/19.7	17		<b>166467</b>	2002 <i>PR</i> <sub>100</sub>		7 19.5 249°98	0°3/19.4	18	
6 10	20 26.79	-19 23.0	1.695	2.517	16.6	21.8	6 10	20 22.96	-20 26.1	2.030	2.850	14.3	20.7
6 20	20 22.45	-19 15.4	1.610	2.514	13.2	21.6	6 20	20 19.04	-20 38.5	1.940	2.844	11.3	20.5
6 30	20 15.37	-19 14.3	1.545	2.511	9.2	21.4	6 30	20 12.82	-20 57.0	1.871	2.838	7.8	20.3
7 10	20 6.15	-19 17.6	1.504	2.508	4.7	21.1	7 10	20 4.83	-21 18.9	1.827	2.832	3.9	20.0
7 20	19 55.71	-19 22.5	1.488	2.504	0.6	20.8	7 20	19 55.81	-21 41.2	1.809	2.825	0.4	19.7
7 30	19 45.27	-19 26.6	1.499	2.500	5.0	21.1	7 30	19 46.75	-22 0.8	1.819	2.819	4.4	20.0
8 9	19 36.07	-19 28.2	1.535	2.495	9.5	21.3	8 9	19 38.64	-22 15.5	1.855	2.812	8.4	20.3
8 19	19 29.08	-19 26.4	1.595	2.491	13.6	21.6	8 19	19 32.31	-22 24.6	1.915	2.805	11.9	20.5
<b>62774</b>	2000 <i>UE</i> <sub>20</sub>		7 19.5 1°57	0°1/19.6	18		<b>16321</b>	4225 <i>T</i> <sub>-1</sub>		7 19.5 309°72	6°1/17.0	18	
6 10	20 19.80	-19 2.5	1.858	2.687	15.1	19.2	6 10	20 26.75	-31 44.9	1.517	2.360	17.2	18.7
6 20	20 16.68	-19 16.0	1.777	2.686	11.9	19.0	6 20	20 23.20	-32 46.1	1.444	2.357	13.9	18.5
6 30	20 11.24	-19 37.2	1.717	2.686	8.3	18.8	6 30	20 16.33	-33 48.0	1.390	2.354	10.2	18.2
7 10	20 4.03	-20 3.6	1.681	2.686	4.1	18.5	7 10	20 6.80	-34 42.4	1.359	2.352	7.0	18.0
7 20	19 55.82	-20 31.9	1.670	2.686	0.2	18.2	7 20	19 55.72	-35 21.6	1.352	2.349	6.3	18.0
7 30	19 47.63	-20 58.8	1.686	2.687	4.5	18.6	7 30	19 44.65	-35 39.8	1.370	2.347	8.8	18.1
8 9	19 40.47	-21 21.7	1.728	2.689	8.6	18.8	8 9	19 35.17	-35 36.2	1.411	2.344	12.5	18.3
8 19	19 35.16	-21 38.9	1.793	2.691	12.2	19.0	8 19	19 28.45	-35 13.3	1.472	2.342	16.0	18.6
<b>416734</b>	2005 <i>EA</i> <sub>31</sub>		7 19.5 53°19	4°5/18.1	17		<b>43772</b>	1988 <i>TV</i> <sub>1</sub>		7 19.5 283°16	1°7/20.1	18	
6 10	20 27.50	-28 13.0	1.272	2.125	19.3	20.5	6 10	20 24.08	-16 11.9	1.611	2.435	17.2	19.6
6 20	20 23.80	-28 54.8	1.219	2.140	15.3	20.3	6 20	20 20.81	-16 6.4	1.505	2.409	14.0	19.3
6 30	20 16.61	-29 38.5	1.185	2.156	10.7	20.1	6 30	20 14.65	-16 11.1	1.418	2.383	10.0	19.0
7 10	20 6.79	-30 16.5	1.171	2.173	6.3	19.9	7 10	20 6.03	-16 25.0	1.354	2.356	5.5	18.7
7 20	19 55.69	-30 41.8	1.182	2.189	4.6	19.9	7 20	19 55.76	-16 45.6	1.314	2.329	1.7	18.3
7 30	19 44.98	-30 50.2	1.216	2.206	7.8	20.1	7 30	19 45.07	-17 9.9	1.300	2.302	5.5	18.5
8 9	19 36.24	-30 41.3	1.273	2.224	12.0	20.4	8 9	19 35.36	-17 34.4	1.311	2.274	10.5	18.7
8 19	19 30.47	-30 18.0	1.351	2.241	15.9	20.7	8 19	19 27.83	-17 56.6	1.344	2.246	15.2	18.9
<b>265623</b>	2005 <i>SA</i> <sub>143</sub>		7 19.5 134°81	3°0/21.0	17		<b>318420</b>	2005 <i>BM</i> <sub>10</sub>		7 19.5 132°93	0°6/19.8	17	
6 10	20 22.83	-11 2.2	1.795	2.599	16.5	20.9	6 10	20 28.08	-17 53.2	1.768	2.582	16.3	22.3
6 20	20 19.04	-11 10.5	1.715	2.604	13.4	20.7	6 20	20 23.16	-18 3.8	1.696	2.595	13.0	22.1
6 30	20 12.86	-11 33.0	1.656	2.609	9.7	20.5	6 30	20 15.67	-18 23.0	1.644	2.607	9.0	21.9
7 10	20 4.84	-12 8.5	1.619	2.614	5.8	20.3	7 10	20 6.23	-18 47.9	1.616	2.619	4.6	21.6
7 20	19 55.79	-12 54.3	1.609	2.619	3.0	20.1	7 20	19 55.78	-19 15.1	1.614	2.630	0.6	21.4
7 30	19 46.75	-13 46.6	1.625	2.623	5.0	20.3	7 30	19 45.46	-19 41.1	1.640	2.641	4.7	21.7
8 9	19 38.77	-14 40.9	1.667	2.628	8.9	20.5	8 9	19 36.41	-20 3.3	1.693	2.651	9.0	22.0
8 19	19 32.68	-15 33.2	1.733	2.632	12.5	20.7	8 19	19 29.50	-20 20.4	1.769	2.660	12.7	22.2
<b>231902</b>	2000 <i>XO</i> <sub>26</sub>		7 19.5 247°74	2°4/18.8	18		<b>353164</b>	2009 <i>HE</i> <sub>104</sub>		7 19.5 105°54	0°2/19.6	17	
6 10	20 29.16	-27 44.2	1.959	2.779	14.7	20.0	6 10	20 22.68	-18 35.9	2.356	3.164	12.9	21.4
6 20	20 24.09	-27 42.3	1.867	2.770	11.8	19.8	6 20	20 18.26	-18 53.2	2.283	3.179	10.2	21.3
6 30	20 16.38	-27 39.8	1.796	2.760	8.3	19.5	6 30	20 11.95	-19 16.6	2.232	3.195	7.0	21.1
7 10	20 6.61	-27 32.8	1.749	2.751	4.5	19.3	7 10	20 4.27	-19 43.8	2.207	3.210	3.5	20.9
7 20	19 55.70	-27 18.3	1.729	2.741	2.5	19.1	7 20	19 55.88	-20 12.2	2.209	3.225	0.2	20.6
7 30	19 44.82	-26 54.2	1.737	2.731	5.4	19.3	7 30	19 47.59	-20 39.0	2.240	3.240	3.7	21.0
8 9	19 35.15	-26 20.8	1.772	2.721	9.3	19.5	8 9	19 40.21	-21 2.2	2.299	3.254	7.1	21.2
8 19	19 27.61	-25 40.1	1.830	2.710	12.9	19.7	8 19	19 34.34	-21 20.7	2.383	3.269	10.1	21.4
<b>123735</b>	2001 <i>AH</i> <sub>10</sub>		7 19.5 225°72	1°9/20.5	18		<b>373584</b>	2002 <i>AN</i> <sub>174</sub>		7 19.5 189°26	1°0/19.1	18	
6 10	20 21.31	-14 33.5	2.706	3.498	11.9	20.8	6 10	20 25.38	-21 46.3	2.177	2.990	13.7	21.9
6 20	20 17.04	-14 20.9	2.606	3.490	9.5	20.6	6 20	20 20.77	-22 10.7	2.089	2.990	10.8	21.7
6 30	20 11.07	-14 14.6	2.529	3.482	6.8	20.4	6 30	20 13.93	-22 40.3	2.023	2.988	7.4	21.4
7 10	20 3.83	-14 13.9	2.477	3.474	3.9	20.2	7 10	20 5.37	-23 12.0	1.982	2.987	3.7	21.2
7 20	19 55.87	-14 18.0	2.453	3.465	1.9	20.1	7 20	19 55.83	-23 42.2	1.969	2.984	1.0	21.0
7 30	19 47.85	-14 25.4	2.459	3.456	3.7	20.2	7 30	19 46.26	-24 7.6	1.984	2.981	4.5	21.3
8 9	19 40.51	-14 34.7	2.492	3.447	6.6	20.4	8 9	19 37.64	-24 26.2	2.026	2.978	8.2	21.5
8 19	19 34.42	-14 44.6	2.551	3.438	9.4	20.5	8 19	19 30.75	-24 37.3	2.093	2.974	11.5	21.7
<b>11402</b>	1999 <i>BD</i>		7 19.5 333°77	3°1/18.7	18		<b>373785</b>	2002 <i>TL</i> <sub>356</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>366340</b>	2013 <i>FP</i> <sub>12</sub>		7 19.5	28°70	5°9/17.8	17	<b>206054</b>	2002 <i>QF</i> <sub>90</sub>		7 19.5	199°05	2°4/20.6	18	
6 10	20 23.90	-29 12.0	0.983	1.860	21.8	19.7	6 10	20 23.26	-13 43.3	2.297	3.092	13.6	20.7	
6 20	20 21.94	-30 2.6	0.935	1.870	17.4	19.4	6 20	20 18.86	-13 26.6	2.205	3.090	11.0	20.6	
6 30	20 15.86	-30 54.8	0.905	1.882	12.4	19.2	6 30	20 12.49	-13 17.8	2.135	3.087	7.9	20.4	
7 10	20 6.61	-31 39.2	0.893	1.894	7.7	19.0	7 10	20 4.62	-13 16.2	2.089	3.084	4.7	20.1	
7 20	19 55.77	-32 6.8	0.901	1.908	6.1	19.0	7 20	19 55.91	-13 21.0	2.070	3.081	2.4	20.0	
7 30	19 45.39	-32 12.1	0.932	1.923	9.4	19.2	7 30	19 47.18	-13 30.4	2.080	3.077	4.3	20.1	
8 9	19 37.35	-31 55.6	0.983	1.939	14.0	19.5	8 9	19 39.27	-13 42.8	2.117	3.073	7.6	20.3	
8 19	19 32.80	-31 21.2	1.052	1.955	18.3	19.8	8 19	19 32.89	-13 56.4	2.179	3.069	10.7	20.5	
<b>482743</b>	2013 <i>ED</i> <sub>123</sub>		7 19.5	76°25	1°2/20.3	18	<b>518942</b>	2010 <i>GV</i> <sub>153</sub>		7 19.5	45°97	10°5/23.9	17	
6 10	20 19.76	-15 20.2	2.359	3.165	13.0	21.1	6 10	20 21.72	+ 2 50.0	1.715	2.467	19.1	21.3	
6 20	20 16.02	-15 33.4	2.280	3.174	10.3	21.0	6 20	20 18.18	+ 4 15.8	1.645	2.474	16.7	21.1	
6 30	20 10.46	-15 54.8	2.223	3.183	7.2	20.8	6 30	20 12.27	+ 5 22.0	1.592	2.482	14.2	21.0	
7 10	20 3.55	-16 22.8	2.191	3.192	3.9	20.6	7 10	20 4.58	+ 6 4.0	1.560	2.490	12.0	20.9	
7 20	19 55.93	-16 55.0	2.186	3.201	1.2	20.4	7 20	19 55.91	+ 6 18.8	1.549	2.498	10.6	20.8	
7 30	19 48.36	-17 28.7	2.210	3.210	3.7	20.6	7 30	19 47.28	+ 6 6.4	1.562	2.506	10.8	20.8	
8 9	19 41.59	-18 1.3	2.260	3.219	7.0	20.8	8 9	19 39.74	+ 5 30.1	1.598	2.515	12.3	21.0	
8 19	19 36.26	-18 31.0	2.336	3.229	10.0	21.0	8 19	19 34.08	+ 4 35.7	1.654	2.524	14.6	21.1	
<b>147674</b>	2004 <i>LY</i> <sub>18</sub>		7 19.5	154°46	0°8/19.2	18	<b>107579</b>	2001 <i>DF</i> <sub>96</sub>		7 19.5	6°30	10°7/18.9	18	R
6 10	20 25.91	-20 21.0	1.957	2.773	14.9	20.7	6 10	20 23.15	-40 48.8	0.862	1.745	23.6	17.3	
6 20	20 21.37	-20 52.5	1.878	2.780	11.8	20.5	6 20	20 22.41	-41 3.0	0.814	1.745	19.7	17.1	
6 30	20 14.43	-21 31.2	1.820	2.786	8.1	20.3	6 30	20 16.66	-40 59.8	0.781	1.747	15.6	16.8	
7 10	20 5.64	-22 13.5	1.787	2.791	4.0	20.1	7 10	20 7.11	-40 28.4	0.764	1.751	12.0	16.7	
7 20	19 55.83	-22 55.2	1.781	2.797	0.8	19.8	7 20	19 55.81	-39 22.1	0.765	1.758	10.7	16.6	
7 30	19 46.05	-23 32.2	1.803	2.801	4.7	20.1	7 30	19 45.33	-37 41.4	0.786	1.768	12.6	16.8	
8 9	19 37.35	-24 1.9	1.851	2.805	8.6	20.4	8 9	19 37.83	-35 35.4	0.826	1.780	16.3	17.0	
8 19	19 30.58	-24 23.0	1.924	2.809	12.1	20.6	8 19	19 34.39	-33 16.2	0.883	1.794	20.2	17.3	
<b>269487</b>	2009 <i>UW</i> <sub>17</sub>		7 19.5	195°17	1°3/20.2	18	<b>341207</b>	2007 <i>RX</i> <sub>110</sub>		7 19.5	250°10	2°8/18.3	18	
6 10	20 23.37	-14 55.7	1.983	2.791	15.0	21.0	6 10	20 24.90	-27 1.4	1.976	2.803	14.4	21.1	
6 20	20 19.36	-15 16.8	1.895	2.790	12.0	20.8	6 20	20 20.74	-27 26.8	1.892	2.799	11.4	20.9	
6 30	20 13.07	-15 48.9	1.828	2.788	8.5	20.6	6 30	20 14.09	-27 54.1	1.829	2.796	8.0	20.7	
7 10	20 4.99	-16 29.9	1.784	2.786	4.5	20.4	7 10	20 5.53	-28 18.9	1.791	2.792	4.5	20.5	
7 20	19 55.86	-17 16.4	1.768	2.783	1.3	20.1	7 20	19 55.88	-28 37.1	1.779	2.789	2.9	20.4	
7 30	19 46.67	-18 4.7	1.779	2.780	4.4	20.4	7 30	19 46.25	-28 45.5	1.794	2.785	5.6	20.5	
8 9	19 38.41	-18 51.0	1.817	2.776	8.4	20.6	8 9	19 37.73	-28 42.9	1.835	2.781	9.2	20.8	
8 19	19 31.92	-19 32.6	1.880	2.773	12.0	20.8	8 19	19 31.20	-28 30.0	1.899	2.778	12.6	21.0	
<b>471689</b>	2012 <i>TR</i> <sub>225</sub>		7 19.5	177°15	1°9/20.4	17	<b>266278</b>	2007 <i>BO</i> <sub>2</sub>		7 19.5	204°89	0°6/19.3	17	
6 10	20 22.18	-14 31.3	1.957	2.767	15.1	22.2	6 10	20 25.54	-20 9.7	1.996	2.811	14.7	21.7	
6 20	20 18.39	-14 34.2	1.872	2.767	12.1	22.0	6 20	20 21.16	-20 34.6	1.906	2.807	11.7	21.5	
6 30	20 12.36	-14 47.2	1.808	2.767	8.6	21.8	6 30	20 14.37	-21 6.8	1.837	2.802	8.1	21.2	
7 10	20 4.61	-15 9.0	1.768	2.768	4.8	21.6	7 10	20 5.68	-21 43.1	1.793	2.797	4.0	21.0	
7 20	19 55.89	-15 37.0	1.754	2.768	1.9	21.4	7 20	19 55.88	-22 19.5	1.776	2.791	0.6	20.7	
7 30	19 47.15	-16 8.5	1.767	2.768	4.5	21.5	7 30	19 46.00	-22 52.3	1.786	2.785	4.6	21.0	
8 9	19 39.38	-16 40.3	1.807	2.768	8.3	21.8	8 9	19 37.11	-23 18.7	1.824	2.779	8.7	21.2	
8 19	19 33.38	-17 10.1	1.871	2.767	11.8	22.0	8 19	19 30.08	-23 37.6	1.886	2.771	12.3	21.4	
<b>443032</b>	2013 <i>EY</i> <sub>36</sub>		7 19.5	111°97	6°0/16.4	18	<b>281606</b>	2008 <i>UQ</i> <sub>200</sub>		7 19.6	290°48	5°6/21.6	17	
6 10	20 27.90	-39 19.0	2.532	3.337	12.2	21.6	6 10	20 21.58	- 7 54.7	1.791	2.587	16.8	19.9	
6 20	20 22.64	-40 4.3	2.465	3.347	10.1	21.4	6 20	20 18.20	- 7 13.2	1.698	2.576	14.0	19.7	
6 30	20 15.09	-40 43.5	2.421	3.358	7.9	21.3	6 30	20 12.42	- 6 44.5	1.625	2.566	10.8	19.5	
7 10	20 5.88	-41 11.7	2.402	3.368	6.4	21.2	7 10	20 4.75	- 6 30.1	1.574	2.555	7.6	19.3	
7 20	19 55.83	-41 24.6	2.409	3.378	6.1	21.2	7 20	19 55.94	- 6 30.8	1.547	2.545	5.6	19.1	
7 30	19 45.97	-41 20.2	2.443	3.388	7.4	21.3	7 30	19 46.99	- 6 45.5	1.546	2.534	6.7	19.2	
8 9	19 37.26	-40 59.0	2.503	3.398	9.3	21.5	8 9	19 39.00	- 7 11.6	1.570	2.524	9.9	19.3	
8 19	19 30.45	-40 23.5	2.586	3.408	11.4	21.6	8 19	19 32.84	- 7 45.3	1.617	2.514	13.3	19.5	
<b>122997</b>	2000 <i>SZ</i> <sub>251</sub>		7 19.5	195°98	1°8/18.6	18	<b>397709</b>	2008 <i>CW</i> <sub>206</sub>		7 19.6	106°99	0°5/19.8	18	
6 10	20 24.92	-23 14.5	2.114	2.932	13.9	21.0	6 10	20 22.12	-18 17.2	2.272	3.082	13.3	21.7	
6 20	20 20.56	-23 52.0	2.026	2.930	11.0	20.8	6 20	20 17.97	-18 21.9	2.191	3.089	10.5	21.5	
6 30	20 13.88	-24 34.9	1.961	2.927	7.6	20.5	6 30	20 11.86	-18 32.7	2.133	3.096	7.3	21.3	
7 10	20 5.39	-25 19.0	1.921	2.924	3.9	20.3	7 10	20 4.30	-18 47.8	2.100	3.103	3.7	21.1	
7 20	19 55.86	-26 0.1	1.908	2.921	1.9	20.2	7 20	19 55.97	-19 4.9	2.094	3.110	0.5	20.9	
7 30	19 46.26	-26 34.3	1.923	2.917	4.9	20.4	7 30	19 47.71	-19 21.8	2.117	3.117	3.8	21.2	
8 9	19 37.64	-26 59.0	1.965	2.913	8.6	20.6	8 9	19 40.33	-19 36.5	2.166	3.124	7.3	21.4	
8 19	19 30.81	-27 13.8	2.031	2.909	11.9	20.8	8 19	19 34.52	-19 47.9	2.240	3.131	10.4	21.6	
<b>267041</b>	1998 <i>FL</i> <sub>143</sub>		7 19.5	56°36	9°1/24.6	17	<b>514034</b>	2014 <i>KN</i> <sub>104</sub>		7 19.6	359°64	0°5/19.2	18	
6 10	20 21.25	+ 1 53.0	1.612	2.376	19.7	20.1	6 10	20 16.38	-14 47.9	1.590	2.427	16.9	19.4	
6 20	20 17.81	+ 2 38.9	1.553	2.395	17.0	20.0	6 20	20 14.52	-16 13.8	1.510	2.424	13.4	19.2	
6 30	20 11.97	+ 3 1.7	1.511	2.415	14.0	19.8	6 30	20 10.12	-17 58.6	1.451	2.422	9.2	18.9	
7 10	20 4.38	+ 2 58.7	1.489	2.436	11.2	19.7	7 10	20 3.69	-19 57.2	1.415	2.421	4.6	18.7	
7 20	19 55.91	+ 2 29.5	1.489	2.456	9.4	19.6	7 20	19 56.00	-22 1.6	1.405	2.421	0.6	18.4	
7 30	19 47.61	+ 1 36.8	1.513	2.477	9.4	19.7	7 30	19 48.17	-24 2.4	1.422	2.423	5.3	18.7	
8 9	19 40.52	+ 0 26.2	1.560	2.497	11.2	19.8	8 9	19 41.37	-25 51.6	1.465	2.425	9.9	19.0	
8 19	19 35.40	- 0 55.2	1.630	2.518	13.8	20.1	8 19	19 36.61	-27 24.0	1.531	2.429	13.9	19.2	
<b>94307</b>	2001 <i>FJ</i> <sub>13</sub>		7 19.5	171°36	1°6/18.6									

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>471132</b>	2010 <i>DD</i> <sub>79</sub>	7 19.6 275°30		8°8/15.1 18			<b>96452</b>	1998 <i>GF</i> <sub>9</sub>	7 19.6 294°36		5°5/16.2 18		
6 10	20 29.90	-41 6.7	1.912	2.729	15.2	21.0	6 10	20 23.16	-28 29.4	1.708	2.548	15.7	17.9
6 20	20 25.59	-42 19.3	1.828	2.713	12.8	20.8	6 20	20 20.23	-30 2.6	1.619	2.533	12.6	17.6
6 30	20 18.01	-43 26.5	1.764	2.698	10.6	20.7	6 30	20 14.35	-31 43.1	1.552	2.518	9.2	17.4
7 10	20 7.74	-44 19.5	1.723	2.682	9.0	20.5	7 10	20 5.98	-33 22.9	1.508	2.503	6.2	17.2
7 20	19 55.82	-44 50.7	1.706	2.666	9.0	20.5	7 20	19 55.96	-34 53.1	1.491	2.488	5.8	17.1
7 30	19 43.77	-44 55.0	1.714	2.650	10.6	20.6	7 30	19 45.59	-36 5.6	1.499	2.474	8.5	17.2
8 9	19 33.16	-44 32.4	1.745	2.634	13.1	20.7	8 9	19 36.31	-36 56.0	1.531	2.459	12.1	17.4
8 19	19 25.22	-43 46.6	1.797	2.617	15.7	20.8	8 19	19 29.35	-37 23.9	1.585	2.445	15.6	17.6
<b>514650</b>	2005 <i>RK</i> <sub>15</sub>	7 19.6 274°12		4°9/17.3 18			<b>371555</b>	2006 <i>VX</i> <sub>29</sub>	7 19.6 132°75		1°2/19.1 17		
6 10	20 26.48	-34 8.8	2.245	3.064	13.2	22.1	6 10	20 27.35	-22 12.2	1.846	2.667	15.5	21.2
6 20	20 21.91	-34 40.3	2.154	3.051	10.7	21.9	6 20	20 22.63	-22 34.9	1.773	2.677	12.2	21.0
6 30	20 14.88	-35 8.9	2.084	3.038	8.0	21.7	6 30	20 15.37	-23 3.0	1.720	2.687	8.4	20.8
7 10	20 5.95	-35 29.7	2.038	3.025	5.6	21.5	7 10	20 6.18	-23 32.7	1.692	2.697	4.2	20.6
7 20	19 55.91	-35 38.1	2.019	3.012	5.0	21.4	7 20	19 55.97	-23 59.9	1.690	2.706	1.3	20.4
7 30	19 45.86	-35 31.4	2.027	2.999	6.8	21.5	7 30	19 45.88	-24 21.0	1.716	2.714	5.0	20.7
8 9	19 36.88	-35 9.3	2.061	2.986	9.6	21.7	8 9	19 37.03	-24 34.2	1.768	2.722	9.0	20.9
8 19	19 29.83	-34 33.7	2.119	2.973	12.4	21.8	8 19	19 30.25	-24 39.2	1.844	2.730	12.5	21.2
<b>12755</b>	Balmer	7 19.6 331°64		1°0/19.9 18 R			<b>162490</b>	2000 <i>PA</i> <sub>21</sub>	7 19.6 262°66		0°4/19.5 18		
6 10	20 22.98	-17 53.1	1.851	2.672	15.4	18.0	6 10	20 27.71	-21 51.8	1.460	2.295	18.1	19.8
6 20	20 19.20	-17 47.2	1.767	2.670	12.3	17.8	6 20	20 23.81	-21 44.2	1.375	2.288	14.5	19.5
6 30	20 13.03	-17 48.7	1.704	2.669	8.6	17.6	6 30	20 16.73	-21 41.7	1.310	2.280	10.1	19.2
7 10	20 5.01	-17 55.7	1.664	2.667	4.5	17.3	7 10	20 7.09	-21 41.4	1.267	2.272	5.1	18.9
7 20	19 55.97	-18 6.2	1.651	2.666	1.0	17.1	7 20	19 55.93	-21 39.8	1.248	2.264	0.5	18.6
7 30	19 46.93	-18 17.6	1.664	2.665	4.6	17.3	7 30	19 44.73	-21 34.2	1.254	2.256	5.7	18.9
8 9	19 38.96	-18 27.8	1.703	2.664	8.7	17.6	8 9	19 34.97	-21 23.2	1.285	2.247	10.8	19.2
8 19	19 32.90	-18 35.5	1.765	2.663	12.4	17.8	8 19	19 27.80	-21 7.2	1.338	2.239	15.3	19.4
<b>301774</b>	2010 <i>JD</i> <sub>121</sub>	7 19.6 0°54		5°1/16.4 18			<b>19013</b>	2000 <i>RN</i> <sub>76</sub>	7 19.6 3°29		6°2/17.7 18		
6 10	20 20.66	-26 57.9	1.637	2.483	16.0	19.2	6 10	20 21.73	-31 29.0	1.220	2.086	19.1	16.6
6 20	20 18.11	-28 38.0	1.563	2.482	12.7	19.0	6 20	20 19.80	-32 10.8	1.157	2.084	15.4	16.4
6 30	20 12.74	-30 25.5	1.511	2.481	9.1	18.8	6 30	20 14.27	-32 51.7	1.112	2.084	11.2	16.1
7 10	20 5.05	-32 12.2	1.483	2.481	5.9	18.6	7 10	20 5.90	-33 23.8	1.088	2.085	7.4	15.9
7 20	19 55.96	-33 48.9	1.481	2.481	5.4	18.6	7 20	19 55.99	-33 39.7	1.085	2.088	6.3	15.9
7 30	19 46.73	-35 7.9	1.504	2.482	8.1	18.7	7 30	19 46.27	-33 34.6	1.105	2.091	9.1	16.0
8 9	19 38.71	-36 4.9	1.552	2.484	11.6	18.9	8 9	19 38.42	-33 8.8	1.146	2.096	13.1	16.3
8 19	19 32.98	-36 39.7	1.621	2.486	15.0	19.2	8 19	19 33.59	-32 25.8	1.207	2.102	17.1	16.5
<b>350417</b>	2012 <i>VH</i> <sub>62</sub>	7 19.6 295°06		1°3/18.9 18			<b>316069</b>	2009 <i>HG</i> <sub>98</sub>	7 19.6 70°84		4°0/21.5 17		
6 10	20 21.45	-20 30.2	1.759	2.591	15.7	20.8	6 10	20 23.57	-9 27.8	1.404	2.221	19.6	21.4
6 20	20 18.54	-21 11.2	1.657	2.568	12.5	20.6	6 20	20 20.16	-9 30.9	1.341	2.236	16.0	21.2
6 30	20 12.99	-22 2.6	1.575	2.545	8.7	20.3	6 30	20 13.92	-9 52.6	1.296	2.250	11.7	20.9
7 10	20 5.21	-23 0.7	1.517	2.522	4.4	20.0	7 10	20 5.53	-10 31.9	1.272	2.265	7.3	20.7
7 20	19 55.97	-24 0.2	1.484	2.500	1.4	19.7	7 20	19 56.02	-11 25.6	1.271	2.280	4.1	20.6
7 30	19 46.38	-24 55.4	1.478	2.477	5.5	20.0	7 30	19 46.65	-12 28.3	1.296	2.295	6.0	20.7
8 9	19 37.71	-25 41.9	1.498	2.454	10.0	20.2	8 9	19 38.70	-13 33.8	1.345	2.310	10.1	21.0
8 19	19 31.06	-26 17.1	1.540	2.432	14.2	20.4	8 19	19 33.10	-14 36.9	1.417	2.325	14.2	21.3
<b>187733</b>	2008 <i>FW</i> <sub>80</sub>	7 19.6 182°95		2°0/20.7 18			<b>152693</b>	1998 <i>RM</i> <sub>4</sub>	7 19.6 264°16		22°1/31.9 18		
6 10	20 20.78	-13 12.0	2.606	3.397	12.3	21.4	6 10	20 20.98	+20 46.3	1.209	1.896	28.6	20.3
6 20	20 16.70	-13 13.0	2.514	3.397	9.9	21.2	6 20	20 19.15	+22 42.7	1.137	1.885	27.2	20.1
6 30	20 10.91	-13 22.1	2.445	3.397	7.1	21.0	6 30	20 13.99	+24 2.7	1.075	1.874	25.6	19.9
7 10	20 3.84	-13 38.5	2.401	3.397	4.1	20.8	7 10	20 5.95	+24 33.9	1.023	1.862	24.0	19.7
7 20	19 56.06	-14 0.6	2.385	3.396	2.0	20.7	7 20	19 55.98	+24 5.9	0.984	1.850	22.8	19.6
7 30	19 48.26	-14 26.5	2.397	3.395	3.7	20.8	7 30	19 45.56	+22 33.0	0.960	1.838	22.1	19.5
8 9	19 41.15	-14 53.9	2.437	3.394	6.7	21.0	8 9	19 36.41	+19 59.0	0.951	1.826	22.4	19.5
8 19	19 35.34	-15 21.0	2.503	3.392	9.5	21.2	8 19	19 29.96	+16 36.0	0.958	1.813	23.7	19.5
<b>143204</b>	2002 <i>XF</i> <sub>90</sub>	7 19.6 236°33		0°5/19.3 18			<b>345904</b>	2007 <i>RK</i> <sub>126</sub>	7 19.6 283°09		2°6/18.5 18		
6 10	20 24.97	-18 15.8	2.033	2.844	14.6	20.1	6 10	20 24.14	-25 59.5	1.911	2.740	14.7	20.9
6 20	20 20.85	-19 0.8	1.931	2.830	11.6	19.9	6 20	20 20.28	-26 25.3	1.824	2.734	11.7	20.7
6 30	20 14.30	-19 56.4	1.851	2.815	8.1	19.7	6 30	20 13.90	-26 54.1	1.759	2.727	8.1	20.5
7 10	20 5.78	-20 59.3	1.796	2.800	4.1	19.4	7 10	20 5.53	-27 21.5	1.718	2.720	4.5	20.2
7 20	19 55.98	-22 4.8	1.768	2.784	0.5	19.1	7 20	19 56.02	-27 43.4	1.703	2.714	2.6	20.1
7 30	19 45.91	-23 7.8	1.769	2.767	4.7	19.4	7 30	19 46.47	-27 56.2	1.714	2.707	5.6	20.3
8 9	19 36.67	-24 3.9	1.796	2.750	8.9	19.6	8 9	19 38.02	-27 58.3	1.752	2.701	9.4	20.5
8 19	19 29.21	-24 50.5	1.849	2.732	12.6	19.8	8 19	19 31.58	-27 50.1	1.812	2.695	12.9	20.7
<b>137565</b>	1999 <i>VW</i> <sub>101</sub>	7 19.6 0°52		9°5/15.2 18			<b>505410</b>	2013 <i>QC</i> <sub>92</sub>	7 19.6 5°40		0°7/19.4 17		
6 10	20 20.88	-33 48.0	1.127	1.999	20.0	19.1	6 10	20 24.89	-22 22.2	1.295	2.145	19.2	21.1
6 20	20 19.76	-35 36.8	1.069	1.996	16.3	18.8	6 20	20 21.79	-22 16.2	1.224	2.145	15.3	20.8
6 30	20 14.68	-37 26.6	1.028	1.995	12.6	18.6	6 30	20 15.39	-22 15.8	1.171	2.145	10.6	20.6
7 10	20 6.30	-39 5.0	1.008	1.995	9.9	18.5	7 10	20 6.40	-22 17.6	1.139	2.146	5.3	20.3
7 20	19 55.94	-40 19.0	1.009	1.995	9.9	18.5	7 20	19 55.98	-22 17.7	1.131	2.147	0.8	20.0
7 30	19 45.59	-41 0.1	1.031	1.997	12.5	18.6	7 30	19 45.68	-22 13.2	1.147	2.149	6.0	20.3
8 9	19 37.27	-41 6.8	1.073	2.000	16.1	18.8	8 9	19 37.03	-22 2.8	1.186	2.151	11.1	20.6
8 19	19 32.39	-40 43.5	1.132	2.005	19.6	19.1	8 19	19 31.14	-21 46.7	1.246	2.154	15.7	20.9
<b>245559</b>	2005 <i>UJ</i> <sub>75</sub>	7 19.6 252°04		2°7/20.6 18			<b>467648</b>	2008 <i>SC</i> <sub>211</sub>	7 19.6 354°66		10°3/22.8 16		
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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>296355</b>	2009 <i>FO</i> <sub>22</sub>		7 19.6 70°61'	1.9°/20.3	17		<b>404801</b>	2014 <i>JC</i> <sub>61</sub>		7 19.6 36°79'	4.7°/21.5	18	
6 10	20 25.49	-15 22.1	1.363	2.195	19.4	21.2	6 10	20 21.24	-9 2.0	2.015	2.807	15.3	20.1
6 20	20 21.80	-15 23.2	1.302	2.210	15.5	20.9	6 20	20 17.47	-8 19.1	1.937	2.814	12.6	19.9
6 30	20 15.10	-15 37.2	1.258	2.224	10.9	20.7	6 30	20 11.64	-7 47.2	1.880	2.821	9.6	19.8
7 10	20 6.13	-16 1.8	1.236	2.239	5.9	20.5	7 10	20 4.29	-7 27.2	1.846	2.829	6.6	19.6
7 20	19 56.00	-16 33.4	1.239	2.253	1.9	20.3	7 20	19 56.13	-7 19.4	1.838	2.836	4.7	19.5
7 30	19 46.09	-17 7.6	1.266	2.268	5.5	20.5	7 30	19 48.04	-7 22.8	1.856	2.844	5.8	19.6
8 9	19 37.74	-17 40.4	1.317	2.283	10.2	20.8	8 9	19 40.89	-7 35.2	1.900	2.853	8.5	19.8
8 19	19 31.90	-18 8.9	1.391	2.297	14.5	21.1	8 19	19 35.39	-7 54.1	1.968	2.861	11.5	20.0
<b>164076</b>	2003 <i>WE</i> <sub>89</sub>		7 19.6 227°32'	3°1'/17.9	18		<b>440990</b>	2007 <i>DZ</i> <sub>10</sub>		7 19.6 215°15'	2°8'/18.0	18	
6 10	20 24.14	-26 46.5	1.985	2.812	14.3	20.1	6 10	20 23.88	-29 6.1	2.742	3.554	11.2	22.0
6 20	20 20.21	-27 30.1	1.902	2.810	11.3	19.9	6 20	20 19.26	-29 32.4	2.650	3.548	8.9	21.9
6 30	20 13.80	-28 16.8	1.841	2.808	7.9	19.7	6 30	20 12.76	-29 58.6	2.581	3.542	6.3	21.7
7 10	20 5.47	-29 1.9	1.805	2.805	4.6	19.5	7 10	20 4.84	-30 21.6	2.538	3.535	3.8	21.5
7 20	19 56.03	-29 40.3	1.795	2.803	3.3	19.4	7 20	19 56.11	-30 38.0	2.523	3.528	2.9	21.4
7 30	19 46.56	-30 7.9	1.812	2.800	5.9	19.6	7 30	19 47.37	-30 45.7	2.537	3.521	4.8	21.6
8 9	19 38.16	-30 22.8	1.855	2.798	9.4	19.8	8 9	19 39.41	-30 43.8	2.578	3.514	7.4	21.7
8 19	19 31.71	-30 25.2	1.921	2.795	12.6	20.0	8 19	19 32.89	-30 32.7	2.645	3.506	10.0	21.9
<b>360879</b>	2005 <i>SS</i> <sub>48</sub>		7 19.6 239°04'	6°6'/23.7	18		<b>472639</b>	2015 <i>DV</i> <sub>210</sub>		7 19.6 60°60'	1°8'/18.6	17	
6 10	20 19.32	+ 2 10.2	2.807	3.527	13.1	21.6	6 10	20 22.70	-21 25.7	1.766	2.598	15.6	20.6
6 20	20 15.50	+ 2 42.3	2.702	3.514	11.4	21.5	6 20	20 19.26	-22 19.7	1.690	2.601	12.3	20.4
6 30	20 10.10	+ 3 0.7	2.616	3.500	9.5	21.3	6 30	20 13.26	-23 22.3	1.634	2.604	8.5	20.1
7 10	20 3.48	+ 3 3.8	2.554	3.486	7.8	21.2	7 10	20 5.26	-24 28.8	1.602	2.607	4.3	19.9
7 20	19 56.13	+ 2 50.5	2.517	3.472	6.7	21.1	7 20	19 56.09	-25 33.2	1.597	2.611	1.9	19.7
7 30	19 48.66	+ 2 21.5	2.506	3.458	6.9	21.1	7 30	19 46.90	-26 30.0	1.618	2.614	5.5	20.0
8 9	19 41.73	+ 1 39.0	2.522	3.443	8.3	21.2	8 9	19 38.83	-27 15.4	1.665	2.618	9.5	20.2
8 19	19 35.92	+ 0 46.1	2.563	3.427	10.2	21.3	8 19	19 32.81	-27 47.9	1.735	2.621	13.2	20.5
<b>188273</b>	2003 <i>AK</i> <sub>43</sub>		7 19.6 253°91'	4°0'/17.6	18		<b>206422</b>	2003 <i>SQ</i> <sub>146</sub>		7 19.6 266°20'	7°0'/15.5	18	
6 10	20 25.56	-27 10.4	1.720	2.554	15.9	20.5	6 10	20 29.53	-38 9.6	2.210	3.022	13.6	20.3
6 20	20 21.89	-28 7.8	1.634	2.545	12.7	20.2	6 20	20 24.85	-39 16.0	2.111	2.998	11.3	20.1
6 30	20 15.33	-29 10.2	1.569	2.536	9.0	20.0	6 30	20 17.32	-40 19.7	2.033	2.973	9.0	19.9
7 10	20 6.39	-30 11.4	1.527	2.527	5.4	19.8	7 10	20 7.42	-41 13.8	1.980	2.948	7.3	19.8
7 20	19 56.00	-31 4.5	1.511	2.517	4.2	19.7	7 20	19 55.99	-41 51.3	1.952	2.923	7.2	19.7
7 30	19 45.44	-31 43.6	1.521	2.508	7.1	19.8	7 30	19 44.28	-42 7.5	1.951	2.897	8.9	19.8
8 9	19 36.09	-32 6.0	1.557	2.498	11.0	20.0	8 9	19 33.61	-42 1.2	1.975	2.870	11.4	19.9
8 19	19 29.04	-32 12.0	1.614	2.488	14.6	20.2	8 19	19 25.12	-41 34.5	2.020	2.843	14.1	20.0
<b>499022</b>	2009 <i>DK</i> <sub>8</sub>		7 19.6 259°76'	0°1'/19.6	17		<b>465274</b>	2007 <i>TR</i> <sub>127</sub>		7 19.6 350°85'	5°3'/17.7	17	
6 10	20 28.18	-20 6.0	1.634	2.458	17.0	22.3	6 10	20 20.61	-27 13.1	1.090	1.964	20.4	20.7
6 20	20 24.10	-20 9.6	1.531	2.437	13.7	22.0	6 20	20 19.33	-28 10.9	1.024	1.958	16.3	20.4
6 30	20 16.99	-20 20.5	1.448	2.415	9.7	21.8	6 30	20 14.28	-29 15.2	0.975	1.953	11.6	20.1
7 10	20 7.32	-20 36.2	1.387	2.392	4.9	21.4	7 10	20 6.11	-30 17.5	0.946	1.949	7.0	19.8
7 20	19 55.96	-20 53.0	1.352	2.369	0.2	21.0	7 20	19 56.07	-31 8.3	0.938	1.946	5.5	19.8
7 30	19 44.24	-21 7.1	1.344	2.345	5.5	21.3	7 30	19 46.01	-31 39.7	0.953	1.945	9.1	19.9
8 9	19 33.61	-21 15.9	1.361	2.320	10.6	21.6	8 9	19 37.83	-31 48.8	0.987	1.944	13.9	20.2
8 19	19 25.31	-21 18.6	1.400	2.295	15.2	21.8	8 19	19 32.87	-31 37.3	1.041	1.944	18.4	20.5
<b>434704</b>	2006 <i>CD</i> <sub>28</sub>		7 19.6 25°45'	2°7'/18.9	16		<b>65745</b>	1993 <i>TT</i> <sub>31</sub>		7 19.6 326°93'	1°6'/20.2	18	
6 10	20 28.57	-28 0.2	1.609	2.443	16.8	20.7	6 10	20 16.69	-16 10.1	1.114	1.977	20.7	19.0
6 20	20 24.06	-27 53.9	1.535	2.446	13.3	20.4	6 20	20 15.99	-16 12.6	1.030	1.957	16.8	18.7
6 30	20 16.58	-27 46.5	1.481	2.449	9.3	20.2	6 30	20 11.94	-16 30.6	0.962	1.938	12.0	18.4
7 10	20 6.86	-27 34.1	1.450	2.452	5.1	20.0	7 10	20 4.99	-17 2.9	0.914	1.920	6.5	18.0
7 20	19 55.99	-27 13.4	1.444	2.456	2.7	19.8	7 20	19 56.13	-17 45.8	0.887	1.903	1.6	17.6
7 30	19 45.36	-26 42.6	1.465	2.460	6.0	20.1	7 30	19 46.92	-18 33.6	0.882	1.887	6.4	17.9
8 9	19 36.29	-26 2.7	1.510	2.465	10.2	20.3	8 9	19 39.11	-19 19.9	0.897	1.872	12.4	18.2
8 19	19 29.69	-25 16.1	1.579	2.470	14.0	20.6	8 19	19 34.14	-20 0.1	0.932	1.858	17.8	18.4
<b>482136</b>	2010 <i>RB</i> <sub>172</sub>		7 19.6 216°86'	4°8'/22.9	18		<b>402801</b>	2007 <i>DD</i> <sub>68</sub>		7 19.6 357°14'	3°7'/18.5	17	
6 10	20 18.96	- 2 20.4	3.011	3.752	11.9	22.6	6 10	20 16.31	-24 58.2	0.858	1.752	22.6	20.2
6 20	20 15.07	- 2 7.3	2.908	3.744	10.1	22.4	6 20	20 16.52	-25 28.1	0.800	1.746	18.1	19.9
6 30	20 9.72	- 2 6.0	2.826	3.735	8.0	22.3	6 30	20 12.63	-26 5.8	0.757	1.742	12.6	19.6
7 10	20 3.26	- 2 17.1	2.768	3.726	6.1	22.1	7 10	20 5.37	-26 44.3	0.732	1.740	6.8	19.2
7 20	19 56.16	- 2 40.4	2.738	3.717	4.8	22.1	7 20	19 56.13	-27 15.2	0.726	1.739	3.9	19.1
7 30	19 48.98	- 3 14.8	2.735	3.708	5.2	22.1	7 30	19 46.98	-27 31.3	0.739	1.740	8.5	19.3
8 9	19 42.32	- 3 57.9	2.759	3.698	6.9	22.2	8 9	19 39.97	-27 29.8	0.771	1.743	14.3	19.7
8 19	19 36.71	- 4 47.1	2.810	3.687	9.0	22.3	8 19	19 36.49	-27 11.9	0.820	1.747	19.5	20.0
<b>214712</b>	2006 <i>SW</i> <sub>394</sub>		7 19.6 342°07'	0°4'/19.8	17		<b>142125</b>	2002 <i>RR</i> <sub>9</sub>		7 19.6 248°98'	3°5'/18.3	18	
6 10	20 21.31	-18 43.9	1.891	2.715	15.0	21.2	6 10	20 28.30	-27 53.8	1.680	2.512	16.3	20.2
6 20	20 17.90	-18 50.1	1.806	2.712	12.0	21.0	6 20	20 24.08	-28 20.6	1.593	2.503	13.0	20.0
6 30	20 12.17	-19 3.7	1.743	2.709	8.3	20.7	6 30	20 16.84	-28 49.3	1.527	2.494	9.2	19.7
7 10	20 4.65	-19 22.4	1.702	2.707	4.2	20.5	7 10	20 7.17	-29 14.5	1.483	2.484	5.3	19.5
7 20	19 56.10	-19 43.5	1.688	2.704	0.4	20.2	7 20	19 56.06	-29 30.8	1.465	2.474	3.6	19.3
7 30	19 47.54	-20 4.0	1.701	2.702	4.5	20.5	7 30	19 44.88	-29 34.2	1.473	2.464	6.7	19.5
8 9	19 40.00	-20 21.6	1.739	2.701	8.5	20.7	8 9	19 35.04	-29 23.4	1.506	2.453	10.8	19.7
8 19	19 34.29	-20 34.6	1.802	2.699	12.2	21.0	8 19	19 27.63	-29 0.2	1.561	2.443	14.6	19.9
<b>476300</b>	2007 <i>VQ</i> <sub>328</sub>		7 19.6 241°70'	4°1'/17.4	18		<b>179364</b>	2001 <i>XZ</i>					

EPHEMERIDES

7 19.6

7 19.6

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>167327</b>	2003 <i>UU</i> <sub>268</sub>		7 19.6 288°89	4.7/21.4	18		<b>55023</b>	2001 <i>QV</i> <sub>38</sub>		7 19.6 287°66	1.3/18.9	18	
6 10	20 21.59	- 9 19.7	1.892	2.689	16.0	20.0	6 10	20 22.47	-20 5.6	1.599	2.435	16.8	19.0
6 20	20 18.12	- 8 45.9	1.798	2.679	13.3	19.8	6 20	20 19.60	-20 48.8	1.506	2.420	13.4	18.8
6 30	20 12.37	- 8 23.7	1.724	2.669	10.1	19.6	6 30	20 13.88	-21 43.5	1.433	2.404	9.3	18.5
7 10	20 4.81	- 8 14.2	1.673	2.658	6.8	19.3	7 10	20 5.79	-22 45.5	1.383	2.389	4.7	18.2
7 20	19 56.18	- 8 17.3	1.647	2.648	4.7	19.2	7 20	19 56.16	-23 49.1	1.358	2.373	1.4	17.9
7 30	19 47.43	- 8 32.0	1.647	2.638	6.0	19.3	7 30	19 46.25	-24 47.7	1.359	2.358	5.8	18.2
8 9	19 39.58	- 8 55.5	1.672	2.628	9.2	19.4	8 9	19 37.42	-25 36.5	1.384	2.343	10.5	18.4
8 19	19 33.47	- 9 24.7	1.721	2.618	12.7	19.6	8 19	19 30.82	-26 13.1	1.432	2.327	14.8	18.6
<b>306405</b>	1996 <i>VY</i> <sub>9</sub>		7 19.6 284°63	3.7/17.3	18		<b>437238</b>	2012 <i>XV</i> <sub>21</sub>		7 19.6 323°66	3.4/17.9	18	
6 10	20 22.36	-27 5.0	2.105	2.933	13.6	20.9	6 10	20 21.82	-25 33.1	1.701	2.541	15.7	21.1
6 20	20 18.92	-28 9.8	2.008	2.916	10.8	20.7	6 20	20 18.89	-26 26.3	1.617	2.533	12.5	20.9
6 30	20 13.06	-29 19.7	1.933	2.898	7.7	20.5	6 30	20 13.23	-27 25.4	1.555	2.525	8.8	20.7
7 10	20 5.24	-30 29.5	1.883	2.881	4.7	20.3	7 10	20 5.38	-28 24.9	1.515	2.518	5.0	20.4
7 20	19 56.16	-31 33.2	1.860	2.864	3.8	20.2	7 20	19 56.19	-29 18.6	1.501	2.511	3.5	20.3
7 30	19 46.82	-32 25.6	1.864	2.847	6.3	20.3	7 30	19 46.87	-30 0.8	1.513	2.504	6.5	20.5
8 9	19 38.33	-33 3.3	1.894	2.829	9.7	20.5	8 9	19 38.72	-30 28.5	1.549	2.497	10.5	20.7
8 19	19 31.65	-33 25.8	1.947	2.812	12.9	20.7	8 19	19 32.73	-30 41.1	1.608	2.491	14.2	20.9
<b>438391</b>	2006 <i>UH</i> <sub>38</sub>		7 19.6 324°95	0.2/19.7	18		<b>253894</b>	2004 <i>BC</i> <sub>93</sub>		7 19.6 88°44	5.7/22.0	17	
6 10	20 20.40	-19 0.8	1.824	2.653	15.3	21.3	6 10	20 25.45	- 7 2.7	1.627	2.419	18.4	20.7
6 20	20 17.39	-19 10.3	1.734	2.643	12.2	21.0	6 20	20 21.20	- 6 27.1	1.562	2.437	15.2	20.5
6 30	20 11.96	-19 27.6	1.665	2.633	8.5	20.8	6 30	20 14.42	- 6 7.5	1.515	2.454	11.6	20.4
7 10	20 4.64	-19 50.4	1.619	2.623	4.3	20.5	7 10	20 5.78	- 6 4.9	1.491	2.471	8.0	20.2
7 20	19 56.19	-20 15.6	1.598	2.615	0.2	20.2	7 20	19 56.19	- 6 18.9	1.491	2.488	5.8	20.1
7 30	19 47.64	-20 40.0	1.604	2.606	4.6	20.5	7 30	19 46.78	- 6 47.1	1.516	2.504	6.8	20.2
8 9	19 40.10	-21 0.6	1.636	2.598	8.9	20.7	8 9	19 38.64	- 7 25.3	1.567	2.521	9.9	20.4
8 19	19 34.43	-21 16.1	1.691	2.590	12.7	21.0	8 19	19 32.58	- 8 9.2	1.640	2.537	13.2	20.7
<b>319542</b>	2006 <i>RA</i> <sub>87</sub>		7 19.6 120°34	2.9/18.5	17		<b>203292</b>	2001 <i>SR</i> <sub>75</sub>		7 19.6 268°40	0.0/19.6	17	
6 10	20 29.01	-25 57.7	1.712	2.540	16.2	21.5	6 10	20 26.94	-20 22.6	1.437	2.273	18.4	20.6
6 20	20 24.24	-26 31.3	1.644	2.552	12.8	21.3	6 20	20 23.41	-20 18.9	1.347	2.259	14.8	20.3
6 30	20 16.65	-27 8.1	1.596	2.563	8.9	21.1	6 30	20 16.65	-20 22.6	1.275	2.245	10.4	20.0
7 10	20 6.93	-27 42.7	1.572	2.574	4.9	20.8	7 10	20 7.22	-20 30.8	1.226	2.231	5.3	19.7
7 20	19 56.10	-28 10.0	1.574	2.585	2.9	20.7	7 20	19 56.12	-20 39.9	1.200	2.217	0.2	19.3
7 30	19 45.44	-28 26.0	1.603	2.595	6.0	21.0	7 30	19 44.81	-20 46.6	1.200	2.202	5.8	19.7
8 9	19 36.20	-28 29.7	1.657	2.605	9.9	21.2	8 9	19 34.85	-20 48.4	1.224	2.187	11.1	19.9
8 19	19 29.31	-28 21.9	1.735	2.615	13.5	21.5	8 19	19 27.47	-20 44.8	1.270	2.173	15.8	20.2
<b>10199</b>	Chariklo		7 19.6 93°77	0.1/19.3	18		<b>106102</b>	2000 <i>TE</i> <sub>13</sub>		7 19.6 204°25	1.8/20.6	18	
6 10	20 4.10	-22 19.0	15.635	16.434	2.2	19.0	6 10	20 20.98	-13 55.6	2.541	3.335	12.5	20.5
6 20	20 2.47	-22 20.8	15.547	16.441	1.7	19.0	6 20	20 16.98	-13 56.2	2.447	3.332	10.0	20.3
6 30	20 0.61	-22 22.9	15.485	16.448	1.2	18.9	6 30	20 11.21	-14 4.7	2.376	3.329	7.2	20.1
7 10	19 58.58	-22 25.2	15.451	16.455	0.6	18.8	7 10	20 4.12	-14 20.2	2.329	3.326	4.1	19.9
7 20	19 56.47	-22 27.4	15.446	16.461	0.1	18.8	7 20	19 56.27	-14 41.1	2.310	3.322	1.8	19.8
7 30	19 54.36	-22 29.4	15.470	16.468	0.7	18.9	7 30	19 48.38	-15 5.4	2.320	3.319	3.7	19.9
8 9	19 52.35	-22 30.8	15.524	16.475	1.3	18.9	8 9	19 41.19	-15 30.9	2.357	3.314	6.8	20.1
8 19	19 50.50	-22 31.5	15.605	16.482	1.8	19.0	8 19	19 35.32	-15 55.8	2.420	3.310	9.8	20.3
<b>361072</b>	2006 <i>AX</i> <sub>46</sub>		7 19.6 265°27	0.6/20.0	18		<b>491923</b>	2013 <i>CB</i> <sub>82</sub>		7 19.6 288°83	1.4/20.1	18	
6 10	20 19.52	-16 12.3	2.432	3.239	12.6	20.8	6 10	20 23.14	-17 37.2	2.134	2.944	14.0	21.3
6 20	20 16.01	-16 40.3	2.337	3.232	10.0	20.6	6 20	20 19.06	-17 17.4	2.041	2.938	11.2	21.1
6 30	20 10.65	-17 17.1	2.264	3.226	7.0	20.4	6 30	20 12.85	-17 3.0	1.970	2.931	7.9	20.9
7 10	20 3.87	-18 0.5	2.217	3.219	3.7	20.2	7 10	20 5.01	-16 53.1	1.923	2.924	4.3	20.6
7 20	19 56.24	-18 47.6	2.196	3.212	0.6	20.0	7 20	19 56.24	-16 46.5	1.903	2.917	1.4	20.4
7 30	19 48.52	-19 35.3	2.205	3.205	3.7	20.2	7 30	19 47.44	-16 41.9	1.910	2.911	4.2	20.6
8 9	19 41.50	-20 20.4	2.240	3.199	7.1	20.4	8 9	19 39.55	-16 37.9	1.945	2.904	7.9	20.8
8 19	19 35.85	-21 0.7	2.302	3.192	10.2	20.6	8 19	19 33.31	-16 33.7	2.004	2.898	11.3	21.0
<b>347081</b>	2010 <i>GW</i> <sub>35</sub>		7 19.6 315°60	2.8/18.3	18		<b>159828</b>	2003 <i>TS</i> <sub>12</sub>		7 19.6 349°18	3.8/18.1	18	
6 10	20 21.57	-24 33.0	1.688	2.529	15.8	20.6	6 10	20 17.21	-25 38.8	1.252	2.121	18.6	19.0
6 20	20 18.72	-25 17.2	1.601	2.517	12.6	20.4	6 20	20 16.12	-26 20.9	1.179	2.110	14.8	18.7
6 30	20 13.14	-26 7.9	1.534	2.505	8.8	20.1	6 30	20 11.79	-27 9.5	1.123	2.101	10.4	18.4
7 10	20 5.34	-27 0.1	1.490	2.494	4.8	19.9	7 10	20 4.81	-27 58.4	1.088	2.093	5.8	18.2
7 20	19 56.17	-27 48.0	1.471	2.483	2.9	19.7	7 20	19 56.24	-28 40.5	1.076	2.087	3.9	18.0
7 30	19 46.85	-28 26.3	1.478	2.472	6.2	19.9	7 30	19 47.60	-29 9.5	1.086	2.082	7.5	18.2
8 9	19 38.65	-28 51.7	1.510	2.462	10.4	20.1	8 9	19 40.48	-29 22.2	1.118	2.078	12.3	18.5
8 19	19 32.62	-29 3.6	1.563	2.452	14.2	20.3	8 19	19 36.06	-29 18.6	1.170	2.076	16.6	18.7
<b>238642</b>	2005 <i>EL</i> <sub>12</sub>		7 19.6 40°08	5.1/17.7	17		<b>501329</b>	2013 <i>XR</i> <sub>8</sub>		7 19.6 135°62	3.9/17.2	17	
6 10	20 25.82	-31 27.4	1.599	2.440	16.6	19.5	6 10	20 27.09	-28 37.0	2.234	3.051	13.3	21.5
6 20	20 22.01	-32 9.0	1.540	2.453	13.2	19.4	6 20	20 22.24	-29 45.0	2.163	3.063	10.5	21.4
6 30	20 15.23	-32 49.1	1.502	2.466	9.6	19.2	6 30	20 15.07	-30 55.0	2.115	3.075	7.5	21.2
7 10	20 6.24	-33 21.1	1.486	2.480	6.3	19.0	7 10	20 6.13	-32 1.2	2.092	3.087	4.7	21.1
7 20	19 56.15	-33 39.5	1.494	2.495	5.3	19.0	7 20	19 56.20	-32 58.2	2.097	3.098	4.0	21.0
7 30	19 46.34	-33 41.0	1.528	2.510	7.6	19.2	7 30	19 46.29	-33 41.7	2.131	3.108	6.1	21.2
8 9	19 38.11	-33 25.5	1.586	2.525	10.9	19.4	8 9	19 37.43	-34 10.0	2.191	3.118	9.0	21.4
8 19	19 32.38	-32 55.9	1.666	2.541	14.2	19.6	8 19	19 30.40	-34 23.5	2.275	3.127	11.7	21.6
<b>387538</b>	2000 <i>SP</i> <sub>208</sub>		7 19.6 278°38	3.4/18.1	18		<b>262981</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>168658</b>	2000 <i>EK</i> <sub>18</sub>		7 19.6 125°96	3°7/17.9	18		<b>103623</b>	2000 <i>CN</i> <sub>26</sub>		7 19.6 181°48	0°7/20.0	17	
6 10	20 27.60	-30 30.1	2.198	3.016	13.4	20.8	6 10	20 22.95	-17 10.5	2.152	2.961	13.9	19.9
6 20	20 22.59	-31 1.7	2.126	3.026	10.7	20.6	6 20	20 18.90	-17 21.3	2.066	2.962	11.1	19.7
6 30	20 15.24	-31 32.2	2.075	3.035	7.6	20.4	6 30	20 12.75	-17 39.9	2.000	2.962	7.8	19.5
7 10	20 6.18	-31 57.2	2.050	3.045	4.8	20.3	7 10	20 4.99	-18 4.4	1.960	2.962	4.0	19.3
7 20	19 56.22	-32 12.5	2.052	3.054	3.8	20.2	7 20	19 56.32	-18 32.0	1.946	2.962	0.7	19.0
7 30	19 46.41	-32 15.6	2.081	3.063	5.9	20.4	7 30	19 47.63	-18 59.9	1.960	2.961	4.0	19.3
8 9	19 37.75	-32 6.1	2.137	3.072	8.8	20.6	8 9	19 39.83	-19 25.6	2.002	2.960	7.8	19.5
8 19	19 31.00	-31 45.5	2.217	3.080	11.6	20.8	8 19	19 33.67	-19 47.4	2.068	2.960	11.1	19.7
<b>173232</b>	1998 <i>XC</i> <sub>9</sub>		7 19.6 262°40	1°4/18.9	16		<b>12187</b>	Lenagorynova		7 19.6 295°01	8°4/23.2	18	
6 10	20 28.05	-24 30.3	2.858	3.654	11.2	23.9	6 10	20 19.78	-0 12.4	1.851	2.615	17.5	18.1
6 20	20 22.67	-24 47.2	2.730	3.621	8.9	23.7	6 20	20 16.96	+0 32.7	1.743	2.589	15.2	17.9
6 30	20 15.29	-25 6.6	2.626	3.586	6.2	23.5	6 30	20 11.81	+1 0.4	1.653	2.563	12.6	17.7
7 10	20 6.29	-25 25.7	2.549	3.551	3.3	23.2	7 10	20 4.72	+1 7.1	1.584	2.538	10.1	17.5
7 20	19 56.23	-25 41.6	2.501	3.515	1.5	23.0	7 20	19 56.33	+0 50.7	1.538	2.512	8.5	17.3
7 30	19 45.88	-25 51.8	2.484	3.477	4.1	23.2	7 30	19 47.60	+0 11.2	1.517	2.486	8.9	17.3
8 9	19 36.11	-25 54.9	2.495	3.439	7.3	23.3	8 9	19 39.60	-0 48.1	1.519	2.460	11.2	17.4
8 19	19 27.67	-25 50.7	2.534	3.399	10.2	23.4	8 19	19 33.28	-2 1.9	1.544	2.434	14.3	17.5
<b>313351</b>	2002 <i>GY</i> <sub>124</sub>		7 19.6 348°15	4°8/17.2	18		<b>445236</b>	2009 <i>JH</i> <sub>14</sub>		7 19.6 349°99	0°5/19.8	15	
6 10	20 22.57	-31 47.5	2.018	2.850	13.9	20.2	6 10	20 17.67	-18 40.2	1.580	2.423	16.6	21.2
6 20	20 19.07	-32 33.3	1.939	2.846	11.2	20.0	6 20	20 15.60	-18 43.6	1.498	2.414	13.3	21.0
6 30	20 13.11	-33 18.5	1.881	2.843	8.2	19.8	6 30	20 10.94	-18 55.9	1.435	2.407	9.3	20.7
7 10	20 5.23	-33 57.7	1.848	2.840	5.6	19.6	7 10	20 4.24	-19 14.7	1.395	2.400	4.8	20.4
7 20	19 56.27	-34 25.9	1.840	2.837	4.9	19.6	7 20	19 56.36	-19 37.0	1.378	2.394	0.5	20.1
7 30	19 47.31	-34 39.4	1.858	2.835	6.9	19.7	7 30	19 48.43	-19 59.4	1.387	2.390	4.9	20.4
8 9	19 39.47	-34 37.3	1.902	2.833	9.9	19.9	8 9	19 41.63	-20 18.9	1.420	2.387	9.5	20.7
8 19	19 33.60	-34 20.8	1.968	2.832	12.8	20.1	8 19	19 36.90	-20 33.4	1.475	2.385	13.6	20.9
<b>503217</b>	2015 <i>HD</i> <sub>41</sub>		7 19.6 139°97	1°8/20.6	17		<b>512415</b>	2016 <i>PK</i> <sub>83</sub>		7 19.6 334°11	7°1/16.9	18	
6 10	20 24.59	-13 57.9	2.160	2.957	14.3	22.4	6 10	20 22.51	-33 57.7	1.433	2.286	17.5	20.5
6 20	20 20.04	-14 7.5	2.081	2.968	11.5	22.3	6 20	20 20.33	-34 50.0	1.352	2.270	14.3	20.2
6 30	20 13.43	-14 26.8	2.023	2.978	8.1	22.1	6 30	20 14.75	-35 40.9	1.291	2.255	10.8	20.0
7 10	20 5.27	-14 54.3	1.990	2.988	4.5	21.9	7 10	20 6.37	-36 22.3	1.251	2.241	7.9	19.8
7 20	19 56.28	-15 27.4	1.984	2.998	1.8	21.7	7 20	19 56.29	-36 46.2	1.234	2.228	7.3	19.7
7 30	19 47.33	-16 3.1	2.007	3.006	4.1	21.9	7 30	19 46.10	-36 47.1	1.240	2.216	9.7	19.8
8 9	19 39.31	-16 38.7	2.056	3.015	7.6	22.1	8 9	19 37.48	-36 24.2	1.268	2.204	13.3	20.0
8 19	19 32.94	-17 11.7	2.131	3.022	10.9	22.3	8 19	19 31.69	-35 40.8	1.315	2.194	17.0	20.2
<b>103377</b>	2000 <i>AG</i> <sub>119</sub>		7 19.6 164°22	2°0/20.9	18		<b>420106</b>	2011 <i>FP</i> <sub>2</sub>		7 19.6 85°96	0°6/19.2	16	
6 10	20 22.43	-12 19.5	2.402	3.192	13.2	20.5	6 10	20 27.75	-14 14.3	1.775	2.580	16.6	20.4
6 20	20 18.19	-12 34.2	2.315	3.196	10.7	20.3	6 20	20 23.10	-16 2.1	1.708	2.603	13.1	20.2
6 30	20 12.10	-12 59.1	2.249	3.200	7.7	20.1	6 30	20 15.87	-18 6.6	1.663	2.626	9.0	20.0
7 10	20 4.60	-13 32.8	2.209	3.204	4.4	19.9	7 10	20 6.64	-20 21.0	1.644	2.648	4.4	19.8
7 20	19 56.31	-14 13.2	2.195	3.207	2.0	19.8	7 20	19 56.29	-22 36.3	1.655	2.670	0.8	19.6
7 30	19 48.00	-14 57.3	2.211	3.210	3.9	19.9	7 30	19 45.95	-24 43.3	1.695	2.692	5.1	19.9
8 9	19 40.46	-15 42.1	2.255	3.212	7.1	20.1	8 9	19 36.79	-26 34.9	1.763	2.714	9.2	20.2
8 19	19 34.34	-16 25.0	2.324	3.214	10.1	20.3	8 19	19 29.70	-28 7.8	1.857	2.735	12.8	20.5
<b>300722</b>	2007 <i>VC</i> <sub>125</sub>		7 19.6 87°54	0°8/19.3	16		<b>289582</b>	2005 <i>FO</i> <sub>1</sub>		7 19.6 175°00	2°7/20.9	17	
6 10	20 23.22	-21 25.2	2.043	2.864	14.2	20.9	6 10	20 26.15	-11 55.6	1.915	2.710	15.9	22.1
6 20	20 19.22	-21 42.9	1.965	2.870	11.2	20.8	6 20	20 21.66	-11 59.8	1.829	2.713	12.9	21.9
6 30	20 13.00	-22 5.9	1.909	2.876	7.7	20.5	6 30	20 14.80	-12 16.5	1.764	2.716	9.4	21.7
7 10	20 5.10	-22 31.2	1.877	2.882	3.8	20.3	7 10	20 6.09	-12 44.5	1.722	2.717	5.5	21.5
7 20	19 56.30	-22 55.5	1.872	2.888	0.8	20.1	7 20	19 56.32	-13 21.4	1.707	2.718	2.7	21.3
7 30	19 47.56	-23 15.8	1.894	2.894	4.4	20.4	7 30	19 46.50	-14 3.9	1.720	2.718	4.8	21.5
8 9	19 39.85	-23 30.2	1.943	2.900	8.1	20.6	8 9	19 37.70	-14 48.2	1.759	2.718	8.6	21.7
8 19	19 33.90	-23 38.0	2.017	2.906	11.5	20.8	8 19	19 30.75	-15 31.1	1.823	2.717	12.3	21.9
<b>310099</b>	2010 <i>RF</i> <sub>22</sub>		7 19.6 280°83	4°1/21.6	18		<b>17452</b>	Amurreka		7 19.6 294°74	2°6/18.5	18	R
6 10	20 20.30	-8 43.8	2.206	2.993	14.3	20.4	6 10	20 23.62	-26 45.7	2.079	2.904	13.8	18.7
6 20	20 16.73	-8 22.2	2.114	2.988	11.8	20.2	6 20	20 19.73	-27 9.3	1.990	2.897	11.0	18.5
6 30	20 11.22	-8 11.8	2.042	2.983	9.0	20.0	6 30	20 13.49	-27 34.9	1.924	2.890	7.7	18.3
7 10	20 4.22	-8 13.1	1.994	2.977	6.0	19.8	7 10	20 5.44	-27 58.6	1.882	2.883	4.3	18.1
7 20	19 56.34	-8 25.7	1.971	2.972	4.2	19.7	7 20	19 56.34	-28 16.4	1.866	2.877	2.7	17.9
7 30	19 48.41	-8 48.0	1.976	2.967	5.2	19.8	7 30	19 47.22	-28 25.4	1.878	2.870	5.3	18.1
8 9	19 41.26	-9 17.3	2.007	2.962	8.0	19.9	8 9	19 39.10	-28 24.2	1.915	2.863	8.8	18.3
8 19	19 35.57	-9 50.9	2.063	2.956	11.0	20.1	8 19	19 32.81	-28 13.2	1.977	2.856	12.1	18.5
<b>395545</b>	2011 <i>UX</i> <sub>172</sub>		7 19.6 252°10	4°0/17.6	18		<b>270391</b>	2002 <i>AH</i> <sub>143</sub>		7 19.6 121°67	0°9/20.0	17	
6 10	20 25.01	-30 21.8	2.167	2.990	13.4	21.4	6 10	20 24.77	-17 7.3	1.889	2.703	15.4	21.4
6 20	20 20.83	-31 2.0	2.080	2.983	10.7	21.2	6 20	20 20.56	-17 15.9	1.813	2.711	12.3	21.2
6 30	20 14.26	-31 42.5	2.014	2.976	7.7	21.0	6 30	20 14.00	-17 33.1	1.757	2.720	8.6	21.0
7 10	20 5.81	-32 18.4	1.974	2.968	5.0	20.9	7 10	20 5.65	-17 56.7	1.725	2.727	4.5	20.8
7 20	19 56.28	-32 45.0	1.960	2.961	4.1	20.8	7 20	19 56.34	-18 23.7	1.720	2.735	0.9	20.5
7 30	19 46.71	-32 58.9	1.973	2.953	6.2	20.9	7 30	19 47.10	-18 51.0	1.741	2.743	4.4	20.8
8 9	19 38.15	-32 58.8	2.012	2.946	9.3	21.1	8 9	19 38.96	-19 15.7	1.790	2.750	8.4	21.0
8 19	19 31.46	-32 45.8	2.075	2.938	12.3	21.3	8 19	19 32.70	-19 36.2	1.862	2.757	12.0	21.3
<b>69617</b>	1998 <i>FD</i> <sub>52</sub>		7 19.6										

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>84938</b>	2003 WQ <sub>127</sub>	7 19.6 281°72		5°0/16.9 18			<b>85093</b>	5071 T-2	7 19.7 280°89		1°4/19.3 18		
6 10	20 24.46	-30 30.7	1.932	2.763	14.5	19.4	6 10	20 27.01	-23 41.1	1.562	2.397	17.2	19.5
6 20	20 20.89	-31 32.3	1.842	2.749	11.7	19.1	6 20	20 23.29	-23 42.2	1.470	2.382	13.8	19.2
6 30	20 14.62	-32 36.2	1.773	2.735	8.5	18.9	6 30	20 16.50	-23 47.2	1.398	2.367	9.6	18.9
7 10	20 6.16	-33 36.1	1.728	2.721	5.8	18.7	7 10	20 7.20	-23 52.6	1.347	2.352	4.9	18.6
7 20	19 56.32	-34 25.6	1.709	2.707	5.1	18.7	7 20	19 56.36	-23 54.5	1.322	2.337	1.4	18.3
7 30	19 46.29	-34 59.5	1.716	2.693	7.4	18.8	7 30	19 45.35	-23 49.6	1.323	2.322	5.8	18.6
8 9	19 37.31	-35 15.5	1.749	2.678	10.7	18.9	8 9	19 35.64	-23 36.6	1.348	2.307	10.6	18.8
8 19	19 30.43	-35 14.2	1.803	2.664	13.9	19.1	8 19	19 28.37	-23 16.3	1.395	2.292	15.0	19.1
<b>478892</b>	2012 WM <sub>13</sub>	7 19.6 33°65		7°3/22.7 16			<b>398515</b>	2011 UM <sub>259</sub>	7 19.7 276°25		4°9/17.1 18		
6 10	20 21.46	-2 56.6	1.874	2.647	17.0	20.9	6 10	20 24.89	-32 29.3	2.157	2.981	13.4	21.1
6 20	20 17.92	-2 0.5	1.795	2.650	14.5	20.7	6 20	20 20.89	-33 17.8	2.069	2.970	10.8	20.9
6 30	20 12.17	-1 19.7	1.734	2.653	11.7	20.5	6 30	20 14.42	-34 5.7	2.002	2.960	8.0	20.7
7 10	20 4.75	-0 56.9	1.696	2.656	9.0	20.4	7 10	20 5.99	-34 47.6	1.960	2.949	5.6	20.6
7 20	19 56.39	-0 53.3	1.681	2.659	7.4	20.3	7 20	19 56.41	-35 18.4	1.944	2.938	5.0	20.5
7 30	19 48.03	-1 8.2	1.691	2.663	7.9	20.3	7 30	19 46.74	-35 34.1	1.955	2.927	7.0	20.6
8 9	19 40.63	-1 38.8	1.726	2.667	10.1	20.5	8 9	19 38.09	-35 33.6	1.991	2.917	9.8	20.8
8 19	19 34.96	-2 20.6	1.784	2.670	12.8	20.6	8 19	19 31.36	-35 18.1	2.050	2.906	12.7	20.9
<b>473988</b>	2016 EY <sub>201</sub>	7 19.6 87°02		1°5/20.2 17			<b>137745</b>	1999 XY <sub>141</sub>	7 19.7 135°12		5°6/21.6 18		
6 10	20 25.35	-15 40.7	1.333	2.168	19.6	21.6	6 10	20 30.86	-6 47.8	2.167	2.924	15.4	20.2
6 20	20 22.02	-15 51.0	1.264	2.174	15.7	21.4	6 20	20 24.80	-5 47.6	2.090	2.941	12.9	20.0
6 30	20 15.56	-16 15.2	1.212	2.180	11.1	21.1	6 30	20 16.62	-4 58.0	2.034	2.957	10.0	19.8
7 10	20 6.63	-16 50.7	1.182	2.186	5.9	20.8	7 10	20 6.90	-4 20.8	2.003	2.972	7.2	19.7
7 20	19 56.32	-17 33.1	1.176	2.191	1.5	20.6	7 20	19 56.39	-3 57.1	1.999	2.987	5.6	19.6
7 30	19 46.07	-18 17.2	1.194	2.197	5.6	20.8	7 30	19 46.02	-3 46.5	2.024	3.001	6.5	19.7
8 9	19 37.33	-18 58.1	1.237	2.203	10.7	21.2	8 9	19 36.69	-3 47.6	2.076	3.013	8.9	19.9
8 19	19 31.17	-19 32.9	1.301	2.209	15.2	21.4	8 19	19 29.11	-3 57.8	2.153	3.025	11.6	20.1
<b>206098</b>	2002 RU <sub>171</sub>	7 19.6 230°56		3°0/18.1 18			<b>491770</b>	2012 WP <sub>9</sub>	7 19.7 310°22		3°4/18.0 16		
6 10	20 26.06	-28 30.5	2.459	3.272	12.3	21.0	6 10	20 22.35	-24 32.4	1.565	2.409	16.7	21.1
6 20	20 21.35	-29 0.5	2.362	3.260	9.8	20.8	6 20	20 20.11	-25 22.9	1.449	2.367	13.5	20.8
6 30	20 14.48	-29 31.4	2.287	3.249	7.0	20.6	6 30	20 14.78	-26 23.7	1.354	2.326	9.6	20.4
7 10	20 5.93	-29 59.2	2.239	3.236	4.1	20.4	7 10	20 6.62	-27 29.9	1.280	2.284	5.4	20.1
7 20	19 56.38	-30 20.3	2.217	3.224	3.0	20.3	7 20	19 56.38	-28 34.4	1.231	2.242	3.6	19.8
7 30	19 46.75	-30 31.6	2.225	3.211	5.2	20.4	7 30	19 45.34	-29 29.4	1.207	2.200	7.4	20.0
8 9	19 37.97	-30 32.1	2.259	3.197	8.2	20.6	8 9	19 35.14	-30 9.2	1.206	2.158	12.4	20.1
8 19	19 30.82	-30 22.1	2.319	3.183	11.1	20.7	8 19	19 27.28	-30 31.6	1.227	2.117	17.2	20.3
<b>438273</b>	2005 YC <sub>25</sub>	7 19.6 116°07		1°2/20.1 17			<b>214826</b>	2006 VQ <sub>51</sub>	7 19.7 329°07		1°1/20.1 18		
6 10	20 29.00	-17 50.2	2.145	2.944	14.3	21.6	6 10	20 20.74	-17 45.0	1.805	2.632	15.6	20.1
6 20	20 23.39	-17 30.5	2.073	2.963	11.4	21.4	6 20	20 17.70	-17 36.3	1.715	2.621	12.5	19.9
6 30	20 15.65	-17 16.2	2.023	2.981	8.0	21.3	6 30	20 12.26	-17 35.0	1.644	2.610	8.8	19.7
7 10	20 6.38	-17 6.0	1.998	2.998	4.2	21.1	7 10	20 4.93	-17 39.8	1.597	2.600	4.7	19.4
7 20	19 56.38	-16 58.5	2.001	3.015	1.3	20.9	7 20	19 56.47	-17 48.7	1.575	2.591	1.1	19.1
7 30	19 46.57	-16 52.4	2.032	3.032	4.1	21.1	7 30	19 47.93	-17 59.2	1.580	2.582	4.6	19.4
8 9	19 37.88	-16 46.5	2.092	3.048	7.6	21.4	8 9	19 40.39	-18 9.1	1.609	2.573	8.9	19.6
8 19	19 30.97	-16 40.5	2.177	3.063	10.8	21.6	8 19	19 34.73	-18 16.9	1.662	2.565	12.7	19.8
<b>159628</b>	2002 BP <sub>30</sub>	7 19.6 40°38		10°2/14.8 17			<b>150295</b>	1999 TJ <sub>187</sub>	7 19.7 311°86		4°8/17.5 18		
6 10	20 28.20	-40 11.1	1.485	2.323	17.8	19.2	6 10	20 25.01	-33 5.4	2.113	2.938	13.6	19.9
6 20	20 24.87	-41 57.0	1.435	2.334	14.9	19.1	6 20	20 20.97	-33 37.1	2.026	2.928	11.0	19.7
6 30	20 17.84	-43 35.8	1.404	2.345	12.2	18.9	6 30	20 14.44	-34 6.7	1.961	2.919	8.1	19.5
7 10	20 7.88	-44 56.2	1.395	2.357	10.5	18.9	7 10	20 5.99	-34 29.0	1.920	2.910	5.6	19.3
7 20	19 56.31	-45 48.9	1.409	2.369	10.5	18.9	7 20	19 56.44	-34 39.7	1.904	2.901	4.9	19.2
7 30	19 44.94	-46 8.8	1.446	2.381	12.2	19.0	7 30	19 46.89	-34 35.7	1.916	2.892	6.8	19.3
8 9	19 35.54	-45 57.1	1.503	2.394	14.7	19.2	8 9	19 38.44	-34 16.6	1.952	2.883	9.7	19.5
8 19	19 29.28	-45 19.4	1.580	2.408	17.2	19.4	8 19	19 31.96	-33 44.2	2.013	2.875	12.6	19.7
<b>469693</b>	2005 BY <sub>13</sub>	7 19.6 180°82		1°0/19.3 18			<b>393119</b>	2013 BU <sub>30</sub>	7 19.7 11°78		2°1/18.5 18		
6 10	20 27.92	-24 2.8	2.291	3.100	13.2	21.2	6 10	20 21.90	-23 36.4	2.001	2.829	14.2	20.8
6 20	20 22.69	-24 0.6	2.203	3.101	10.5	21.0	6 20	20 18.42	-24 18.6	1.921	2.830	11.2	20.6
6 30	20 15.30	-24 0.2	2.138	3.101	7.2	20.8	6 30	20 12.64	-25 6.2	1.862	2.830	7.7	20.4
7 10	20 6.28	-23 58.9	2.098	3.101	3.7	20.6	7 10	20 5.07	-25 55.1	1.828	2.831	4.1	20.1
7 20	19 56.38	-23 54.4	2.086	3.101	1.1	20.4	7 20	19 56.48	-26 40.5	1.820	2.832	2.2	20.0
7 30	19 46.55	-23 45.0	2.102	3.100	4.2	20.6	7 30	19 47.86	-27 18.4	1.839	2.833	5.1	20.2
8 9	19 37.71	-23 30.1	2.147	3.099	7.8	20.9	8 9	19 40.24	-27 46.1	1.884	2.835	8.8	20.4
8 19	19 30.61	-23 10.4	2.217	3.097	10.9	21.1	8 19	19 34.43	-28 2.9	1.953	2.836	12.1	20.6
<b>508905</b>	2003 WX <sub>87</sub>	7 19.7 286°82		2°8/18.1 18			<b>253855</b>	2003 YM <sub>169</sub>	7 19.7 300°47		4°6/17.7 18		
6 10	20 30.07	-22 27.4	1.845	2.660	15.7	22.5	6 10	20 24.15	-27 3.9	1.402	2.252	17.9	20.0
6 20	20 25.98	-23 32.7	1.712	2.614	12.7	22.2	6 20	20 21.60	-27 59.5	1.317	2.238	14.4	19.8
6 30	20 18.78	-24 51.6	1.601	2.566	9.0	21.9	6 30	20 15.69	-29 1.6	1.251	2.223	10.3	19.5
7 10	20 8.67	-26 19.2	1.514	2.517	4.9	21.5	7 10	20 6.96	-30 3.3	1.207	2.208	6.2	19.2
7 20	19 56.27	-27 48.3	1.454	2.466	2.9	21.3	7 20	19 56.41	-30 56.4	1.186	2.194	4.7	19.1
7 30	19 42.77	-29 10.5	1.423	2.414	6.8	21.4	7 30	19 45.58	-31 33.5	1.190	2.180	8.1	19.2
8 9	19 29.71	-30 18.8	1.418	2.360	11.8	21.5	8 9	19 36.15	-31 51.3	1.217	2.166	12.6	19.5
8 19	19 18.62	-31 9.7	1.437	2.305	16.4	21.7	8 19	19 29.47	-31 50.2	1.264	2.153	16.9	19.7
<b>443001</b>	2013 CV <sub>191</sub>	7 19.7 260°80		1°7/18.9 18			<b>400466</b>	2008 GJ <sub>4</sub>	7 19.7 70°58		12°5/30.3 18		
6 10	20 23.85	-25 31.											

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>9202</b>	1993 <i>PB</i>		7 19.7	40°06'	33°0'	15.9	17						
6 10	5 25.53	-34 11.8	0.589	0.855	87.3	17.5							
6 20	5 23.17	-45 25.7	0.529	0.965	79.9	17.2							
6 30	5 18.83	-58 47.7	0.477	1.073	70.3	16.9							
7 10	5 1.60	-75 12.4	0.445	1.177	58.3	16.6							
7 20	19 39.91	-85 15.3	0.450	1.276	46.0	16.4							
7 30	18 11.16	-67 56.6	0.503	1.370	37.1	16.6							
8 9	18 8.30	-53 46.9	0.599	1.458	33.5	17.0							
8 19	18 13.05	-43 28.7	0.728	1.541	33.1	17.5							
<b>474498</b>	2003 <i>UJ</i> <sub>42</sub>		7 19.7	262°93'	2°8'	18.3	18						
6 10	20 25.39	-26 18.8	2.083	2.905	13.9	21.7							
6 20	20 21.33	-26 52.6	1.983	2.887	11.1	21.5							
6 30	20 14.79	-27 29.8	1.904	2.869	7.8	21.2							
7 10	20 6.26	-28 6.1	1.850	2.851	4.4	21.0							
7 20	19 56.48	-28 37.1	1.823	2.833	2.8	20.9							
7 30	19 46.50	-28 58.6	1.823	2.814	5.6	21.0							
8 9	19 37.44	-29 8.7	1.849	2.795	9.3	21.2							
8 19	19 30.24	-29 7.3	1.900	2.775	12.7	21.4							
<b>130015</b>	1999 <i>VF</i> <sub>57</sub>		7 19.7	287°95'	0°8'	20.0	18						
6 10	20 22.67	-17 40.3	1.818	2.640	15.6	20.5							
6 20	20 19.27	-17 44.9	1.726	2.630	12.5	20.2							
6 30	20 13.40	-17 58.1	1.654	2.620	8.8	20.0							
7 10	20 5.56	-18 17.9	1.606	2.609	4.6	19.7							
7 20	19 56.53	-18 41.7	1.583	2.599	0.8	19.4							
7 30	19 47.38	-19 6.0	1.587	2.589	4.6	19.7							
8 9	19 39.23	-19 28.2	1.617	2.579	9.0	19.9							
8 19	19 32.98	-19 46.3	1.670	2.569	12.9	20.1							
<b>85185</b>	Lederman		7 19.7	358°93'	8°7'	21.6	18						
6 10	20 3.74	-11 47.3	0.666	1.575	25.5	17.7							
6 20	20 6.74	-10 6.2	0.616	1.565	21.4	17.4							
6 30	20 5.98	-8 41.6	0.579	1.559	16.5	17.1							
7 10	20 2.20	-7 41.1	0.557	1.556	11.7	16.8							
7 20	19 56.65	-7 9.6	0.550	1.556	8.8	16.7							
7 30	19 51.18	-7 7.9	0.559	1.560	10.4	16.8							
8 9	19 47.63	-7 30.3	0.584	1.568	14.8	17.0							
8 19	19 47.23	-8 8.2	0.624	1.578	19.5	17.4							
<b>3993</b>	Šorm		7 19.7	205°14'	1°8'	20.5	18						
6 10	20 23.97	-14 53.4	1.942	2.750	15.3	17.3							
6 20	20 20.01	-14 53.7	1.855	2.748	12.3	17.1							
6 30	20 13.74	-15 3.7	1.787	2.746	8.8	16.9							
7 10	20 5.66	-15 22.2	1.743	2.743	4.9	16.6							
7 20	19 56.55	-15 46.8	1.726	2.740	1.8	16.4							
7 30	19 47.37	-16 14.6	1.736	2.737	4.5	16.6							
8 9	19 39.17	-16 42.8	1.772	2.733	8.4	16.8							
8 19	19 32.76	-17 9.1	1.833	2.729	12.1	17.0							
<b>436277</b>	2010 <i>CD</i> <sub>145</sub>		7 19.7	176°97'	4°0'	17.2	18						
6 10	20 26.68	-28 48.1	2.222	3.039	13.3	21.3							
6 20	20 22.12	-29 53.9	2.141	3.041	10.6	21.1							
6 30	20 15.19	-31 2.2	2.082	3.043	7.6	21.0							
7 10	20 6.41	-32 7.4	2.049	3.043	4.8	20.8							
7 20	19 56.52	-33 3.7	2.044	3.044	4.1	20.7							
7 30	19 46.56	-33 46.9	2.066	3.044	6.3	20.9							
8 9	19 37.57	-34 14.6	2.115	3.043	9.2	21.1							
8 19	19 30.41	-34 27.3	2.188	3.042	12.1	21.2							
<b>490590</b>	2009 <i>WT</i> <sub>145</sub>		7 19.7	281°10'	7°0'	21.8	15						
6 10	20 23.47	-5 52.9	1.742	2.529	17.6	21.8							
6 20	20 20.08	-4 57.3	1.637	2.506	15.0	21.6							
6 30	20 14.12	-4 14.6	1.552	2.484	11.9	21.4							
7 10	20 6.03	-3 47.6	1.488	2.461	8.8	21.1							
7 20	19 56.54	-3 38.3	1.448	2.438	7.0	21.0							
7 30	19 46.70	-3 47.0	1.433	2.414	8.0	21.0							
8 9	19 37.72	-4 11.5	1.442	2.391	11.0	21.1							
8 19	19 30.63	-4 47.8	1.474	2.367	14.6	21.2							
<b>382600</b>	2002 <i>EG</i> <sub>122</sub>		7 19.7	221°61'	3°6'	18.1	14	C					
6 10	20 28.41	-29 28.7	2.132	2.949	13.8	22.4							
6 20	20 23.59	-30 0.6	2.041	2.941	11.0	22.2							
6 30	20 16.27	-30 33.0	1.971	2.933	7.9	22.0							
7 10	20 6.97	-31 1.0	1.927	2.924	4.8	21.8							
7 20	19 56.52	-31 20.2	1.910	2.914	3.7	21.7							
7 30	19 46.01	-31 27.1	1.920	2.905	6.0	21.8							
8 9	19 36.56	-31 20.8	1.957	2.894	9.3	22.0							
8 19	19 29.07	-31 2.4	2.018	2.884	12.5	22.2							
<b>423358</b>	2005 <i>JO</i> <sub>12</sub>		7 19.7	211°71'	2°0'	18.8	17						
6 10	20 28.57	-23 41.9	1.930	2.748	15.0	23.0							
6 20	20 23.91	-24 14.6	1.838	2.741	12.0	22.7							
6 30	20 16.61	-24 52.6	1.768	2.733	8.3	22.5							
7 10	20 7.20	-25 31.8	1.722	2.725	4.4	22.2							
7 20	19 56.51	-26 7.2	1.703	2.717	2.0	22.1							
7 30	19 45.69	-26 34.6	1.712	2.707	5.4	22.3							
8 9	19 35.94	-26 51.7	1.747	2.697	9.4	22.5							
8 19	19 28.23	-26 58.1	1.806	2.686	13.1	22.7							
<b>432890</b>	2011 <i>LM</i> <sub>15</sub>		7 19.7	118°90'	0°1'	19.6	17						
6 10	20 26.50	-20 17.1	1.960	2.774	14.9	21.3							
6 20	20 21.87	-20 23.0	1.885	2.785	11.8	21.1							
6 30	20 14.90	-20 34.5	1.832	2.796	8.1	20.9							
7 10	20 6.18	-20 49.0	1.803	2.807	4.1	20.7							
7 20	19 56.55	-21 3.5	1.801	2.817	0.2	20.4							
7 30	19 47.05	-21 15.6	1.826	2.827	4.4	20.7							
8 9	19 38.67	-21 23.4	1.878	2.836	8.3	21.0							
8 19	19 32.19	-21 26.4	1.955	2.845	11.7	21.2							
<b>185062</b>	2006 <i>RL</i> <sub>30</sub>		7 19.7	158°09'	1°0'	20.0	17						
6 10	20 29.70	-18 25.0	1.864	2.672	15.8	21.0							
6 20	20 24.52	-18 10.3	1.784	2.679	12.6	20.8							
6 30	20 16.81	-18 1.7	1.723	2.684	8.9	20.6							
7 10	20 7.18	-17 57.5	1.688	2.690	4.6	20.4							
7 20	19 56.52	-17 55.6	1.679	2.694	1.0	20.1							
7 30	19 45.96	-17 54.3	1.697	2.698	4.6	20.4							
8 9	19 36.59	-17 52.1	1.743	2.701	8.7	20.7							
8 19	19 29.28	-17 48.3	1.813	2.704	12.4	20.9				</			

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>172799</b>	2004 <i>FE</i> <sub>112</sub>	7 19.7 244°13		1°0/19.2 18			<b>3046</b>	Molière	7 19.7 211°18		6°6/24.4 18		
6 10	20 23.18	-22 7.3	2.158	2.977	13.6	20.9	6 10	20 19.07	+ 3 14.7	2.848	3.561	13.0	18.3
6 20	20 19.27	-22 27.4	2.069	2.972	10.8	20.7	6 20	20 15.36	+ 3 39.4	2.750	3.556	11.4	18.2
6 30	20 13.17	-22 52.4	2.001	2.967	7.4	20.5	6 30	20 10.13	+ 3 49.7	2.672	3.551	9.5	18.0
7 10	20 5.38	-23 19.4	1.958	2.962	3.8	20.3	7 10	20 3.75	+ 3 43.9	2.617	3.545	7.8	17.9
7 20	19 56.62	-23 45.1	1.942	2.957	1.1	20.1	7 20	19 56.70	+ 3 21.6	2.587	3.539	6.7	17.8
7 30	19 47.81	-24 6.3	1.954	2.952	4.4	20.3	7 30	19 49.58	+ 2 43.6	2.583	3.533	6.8	17.8
8 9	19 39.90	-24 21.1	1.992	2.947	8.1	20.5	8 9	19 43.01	+ 1 52.5	2.606	3.527	8.0	17.9
8 19	19 33.67	-24 28.8	2.055	2.942	11.4	20.7	8 19	19 37.53	+ 0 51.6	2.654	3.520	9.8	18.0
<b>334006</b>	2000 <i>UZ</i> <sub>51</sub>	7 19.7 258°44		6°2/22.2 18			<b>221483</b>	2006 <i>BD</i> <sub>264</sub>	7 19.7 276°51		0°6/19.3 18		
6 10	20 23.99	- 3 56.4	2.237	2.995	15.0	21.8	6 10	20 20.85	-21 2.5	2.503	3.316	12.1	21.0
6 20	20 19.86	- 3 15.8	2.123	2.971	12.8	21.6	6 20	20 17.19	-21 24.1	2.401	3.301	9.6	20.8
6 30	20 13.63	- 2 47.5	2.030	2.948	10.3	21.3	6 30	20 11.63	-21 50.9	2.321	3.286	6.6	20.6
7 10	20 5.68	- 2 33.5	1.959	2.923	7.8	21.1	7 10	20 4.60	-22 20.5	2.267	3.271	3.4	20.4
7 20	19 56.61	- 2 35.1	1.915	2.898	6.2	21.0	7 20	19 56.67	-22 50.1	2.240	3.256	0.7	20.1
7 30	19 47.26	- 2 51.9	1.897	2.872	6.9	21.0	7 30	19 48.62	-23 16.9	2.242	3.241	3.9	20.4
8 9	19 38.56	- 3 21.9	1.905	2.846	9.3	21.1	8 9	19 41.25	-23 38.8	2.271	3.225	7.2	20.6
8 19	19 31.30	- 4 1.7	1.938	2.819	12.3	21.2	8 19	19 35.26	-23 54.7	2.325	3.210	10.3	20.7
<b>126178</b>	2002 <i>AW</i> <sub>13</sub>	7 19.7 234°34		0°1/19.7 18			<b>93768</b>	2000 <i>WN</i> <sub>22</sub>	7 19.7 68°13		14°1/13.1 18		
6 10	20 24.95	-19 8.6	2.048	2.861	14.4	20.5	6 10	20 43.16	-46 7.7	1.354	2.170	20.3	17.5
6 20	20 20.84	-19 27.3	1.951	2.850	11.5	20.2	6 20	20 37.81	-49 6.5	1.336	2.207	17.5	17.5
6 30	20 14.39	-19 53.5	1.876	2.839	8.0	20.0	6 30	20 27.44	-51 47.6	1.338	2.244	15.3	17.4
7 10	20 6.07	-20 24.8	1.824	2.828	4.1	19.7	7 10	20 12.99	-53 54.8	1.362	2.280	14.2	17.5
7 20	19 56.61	-20 57.6	1.800	2.816	0.2	19.4	7 20	19 56.41	-55 16.4	1.407	2.316	14.4	17.6
7 30	19 47.00	-21 28.6	1.803	2.804	4.4	19.7	7 30	19 40.39	-55 49.1	1.473	2.352	15.7	17.8
8 9	19 38.27	-21 54.9	1.834	2.791	8.5	19.9	8 9	19 27.43	-55 38.7	1.559	2.387	17.4	18.0
8 19	19 31.31	-22 15.1	1.889	2.778	12.1	20.1	8 19	19 18.97	-54 55.9	1.661	2.421	19.2	18.2
<b>187989</b>	2001 <i>RF</i> <sub>101</sub>	7 19.7 317°24		1°1/19.2 15			<b>120810</b>	1998 <i>HA</i> <sub>12</sub>	7 19.7 83°78		0°9/19.3 18		
6 10	20 20.05	-20 21.5	1.364	2.216	18.3	20.5	6 10	20 25.59	-21 52.7	1.773	2.599	15.8	19.5
6 20	20 18.28	-20 50.4	1.273	2.195	14.7	20.3	6 20	20 21.48	-22 6.6	1.700	2.608	12.5	19.3
6 30	20 13.40	-21 30.7	1.201	2.175	10.3	19.9	6 30	20 14.82	-22 26.0	1.649	2.616	8.6	19.1
7 10	20 5.88	-22 19.0	1.149	2.156	5.2	19.6	7 10	20 6.24	-22 47.4	1.621	2.625	4.3	18.8
7 20	19 56.61	-23 9.4	1.121	2.137	1.2	19.3	7 20	19 56.63	-23 7.2	1.618	2.634	1.0	18.6
7 30	19 47.00	-23 55.8	1.117	2.119	6.2	19.6	7 30	19 47.14	-23 22.1	1.643	2.643	4.9	18.9
8 9	19 38.60	-24 33.0	1.136	2.101	11.5	19.8	8 9	19 38.88	-23 30.4	1.694	2.651	9.0	19.2
8 19	19 32.71	-24 58.6	1.176	2.085	16.3	20.0	8 19	19 32.70	-23 31.7	1.767	2.660	12.6	19.4
<b>459845</b>	2013 <i>TT</i> <sub>28</sub>	7 19.7 263°91		3°3/21.1 17			<b>311542</b>	2005 <i>YF</i> <sub>214</sub>	7 19.7 160°11		3°8/16.9 18		
6 10	20 23.45	-11 51.4	1.761	2.568	16.6	21.8	6 10	20 24.21	-33 4.8	3.078	3.884	10.3	21.9
6 20	20 19.99	-11 40.4	1.665	2.555	13.6	21.5	6 20	20 19.47	-33 51.3	2.999	3.889	8.2	21.8
6 30	20 14.00	-11 41.7	1.587	2.541	10.1	21.3	6 30	20 12.98	-34 36.2	2.944	3.895	6.1	21.7
7 10	20 5.95	-11 55.5	1.533	2.527	6.2	21.0	7 10	20 5.19	-35 15.8	2.915	3.900	4.3	21.6
7 20	19 56.62	-12 20.1	1.503	2.513	3.4	20.8	7 20	19 56.68	-35 46.6	2.914	3.904	3.9	21.5
7 30	19 47.06	-12 53.0	1.500	2.498	5.4	20.9	7 30	19 48.17	-36 6.3	2.942	3.909	5.3	21.6
8 9	19 38.45	-13 30.5	1.522	2.483	9.5	21.1	8 9	19 40.40	-36 14.1	2.998	3.912	7.3	21.8
8 19	19 31.77	-14 9.1	1.567	2.469	13.4	21.3	8 19	19 33.97	-36 10.6	3.078	3.916	9.4	21.9
<b>76476</b>	2000 <i>FU</i> <sub>58</sub>	7 19.7 240°63		5°3/16.9 18			<b>111067</b>	2001 <i>VH</i> <sub>48</sub>	7 19.7 39°25		4°7/16.9 18		
6 10	20 26.37	-33 12.0	2.095	2.918	13.8	19.6	6 10	20 23.50	-30 24.7	2.004	2.834	14.1	18.9
6 20	20 22.18	-34 8.3	2.012	2.912	11.2	19.4	6 20	20 19.88	-31 30.6	1.932	2.839	11.2	18.7
6 30	20 15.41	-35 3.8	1.951	2.906	8.4	19.2	6 30	20 13.78	-32 37.6	1.881	2.843	8.2	18.5
7 10	20 6.60	-35 52.4	1.914	2.900	6.0	19.1	7 10	20 5.76	-33 39.7	1.856	2.848	5.5	18.4
7 20	19 56.60	-36 28.4	1.903	2.894	5.5	19.1	7 20	19 56.66	-34 31.1	1.856	2.853	4.9	18.3
7 30	19 46.53	-36 47.7	1.919	2.888	7.4	19.2	7 30	19 47.55	-35 7.2	1.883	2.858	7.0	18.5
8 9	19 37.56	-36 49.3	1.961	2.882	10.2	19.3	8 9	19 39.55	-35 26.4	1.935	2.864	9.9	18.7
8 19	19 30.62	-36 34.7	2.025	2.876	13.0	19.5	8 19	19 33.52	-35 29.4	2.010	2.869	12.8	18.9
<b>397717</b>	2008 <i>DA</i> <sub>42</sub>	7 19.7 76°32		1°6/20.7 16			<b>65718</b>	1993 <i>FL</i>	7 19.7 29°48		0°1/19.7 17		
6 10	20 21.00	-12 58.5	2.142	2.944	14.2	21.7	6 10	20 21.99	-19 22.5	0.955	1.828	22.7	18.8
6 20	20 17.35	-13 25.3	2.066	2.956	11.4	21.5	6 20	20 20.27	-19 27.7	0.908	1.841	18.0	18.5
6 30	20 11.71	-14 3.6	2.012	2.969	8.1	21.3	6 30	20 14.78	-19 45.1	0.876	1.855	12.4	18.3
7 10	20 4.59	-14 51.2	1.983	2.981	4.5	21.2	7 10	20 6.43	-20 10.6	0.863	1.870	6.2	18.0
7 20	19 56.67	-15 45.0	1.980	2.994	1.7	21.0	7 20	19 56.64	-20 38.6	0.871	1.887	0.2	17.6
7 30	19 48.78	-16 41.2	2.005	3.006	4.0	21.2	7 30	19 47.25	-21 3.5	0.900	1.905	6.4	18.2
8 9	19 41.78	-17 36.1	2.058	3.019	7.4	21.4	8 9	19 39.92	-21 21.7	0.951	1.924	12.1	18.5
8 19	19 36.33	-18 26.6	2.135	3.031	10.6	21.6	8 19	19 35.74	-21 31.6	1.020	1.944	16.9	18.9
<b>122303</b>	2000 <i>QA</i> <sub>5</sub>	7 19.7 313°07		2°7/18.8 18			<b>177185</b>	2003 <i>TT</i> <sub>8</sub>	7 19.7 241°92		1°5/19.3 17		
6 10	20 24.59	-25 58.0	1.532	2.375	17.1	19.0	6 10	20 28.68	-23 50.4	1.605	2.435	17.0	20.8
6 20	20 21.51	-26 12.3	1.444	2.361	13.7	18.7	6 20	20 24.46	-23 54.3	1.519	2.429	13.6	20.5
6 30	20 15.37	-26 29.6	1.376	2.347	9.6	18.5	6 30	20 17.24	-24 2.1	1.454	2.422	9.5	20.3
7 10	20 6.74	-26 45.5	1.330	2.334	5.2	18.2	7 10	20 7.63	-24 9.9	1.411	2.415	4.9	20.0
7 20	19 56.59	-26 55.0	1.308	2.320	2.7	18.0	7 20	19 56.61	-24 13.8	1.393	2.408	1.5	19.7
7 30	19 46.32	-26 54.5	1.311	2.308	6.3	18.2	7 30	19 45.54	-24 10.7	1.402	2.401	5.6	20.0
8 9	19 37.37	-26 42.4	1.338	2.296	10.9	18.4	8 9	19 35.83	-23 59.4	1.435	2.393	10.3	20.2
8 19	19 30.89	-26 19.8	1.387	2.284	15.1	18.6	8 19	19 28.54	-23 40.7	1.492	2.386	14.5	20.5
<b>126377</b>	2002 <i>AU</i> <sub>193</sub>	7 19.7 124°99		0°1/19.7 18			<b>176752</b>	2002 <i>RX</i> <sub>115</sub>	7 19.7 23°55		0°3/19.8 17		
6 10	2												

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>107426</b>	2001 <i>DL</i> <sub>13</sub>		7 19.7	8°28	8°7/16.8	17	<b>511287</b>	2014 <i>DP</i> <sub>46</sub>		7 19.7	163°48	3°1/18.2	18
6 10	20 19.65	-33 20.3	1.002	1.884	21.1	17.6	6 10	20 27.82	-29 27.8	2.482	3.291	12.3	22.0
6 20	20 19.09	-34 36.5	0.951	1.885	17.2	17.4	6 20	20 22.61	-29 53.2	2.400	3.296	9.8	21.8
6 30	20 14.42	-35 51.0	0.915	1.888	13.0	17.1	6 30	20 15.30	-30 18.1	2.341	3.301	6.9	21.7
7 10	20 6.44	-36 52.6	0.899	1.892	9.6	17.0	7 10	20 6.42	-30 38.6	2.309	3.305	4.2	21.5
7 20	19 56.65	-37 30.6	0.903	1.898	8.9	17.0	7 20	19 56.70	-30 51.4	2.304	3.309	3.1	21.4
7 30	19 47.10	-37 38.4	0.927	1.906	11.6	17.1	7 30	19 47.06	-30 54.1	2.327	3.312	5.1	21.6
8 9	19 39.76	-37 16.4	0.970	1.916	15.4	17.4	8 9	19 38.38	-30 46.2	2.378	3.314	7.9	21.7
8 19	19 35.90	-36 30.2	1.031	1.927	19.3	17.7	8 19	19 31.39	-30 28.6	2.454	3.317	10.7	21.9
<b>167989</b>	2005 <i>GZ</i> <sub>85</sub>		7 19.7	107°02	1°7/20.6	16	<b>472850</b>	2015 <i>FD</i> <sub>287</sub>		7 19.7	106°02	0°2/19.6	16
6 10	20 22.23	-14 22.2	2.005	2.813	14.9	20.7	6 10	20 25.01	-17 13.7	2.042	2.851	14.6	21.9
6 20	20 18.53	-14 30.3	1.923	2.817	11.9	20.5	6 20	20 20.65	-18 4.7	1.972	2.869	11.5	21.8
6 30	20 12.67	-14 48.8	1.862	2.821	8.5	20.3	6 30	20 14.08	-19 5.5	1.923	2.886	7.9	21.6
7 10	20 5.15	-15 15.9	1.825	2.824	4.7	20.1	7 10	20 5.85	-20 12.4	1.900	2.903	4.0	21.4
7 20	19 56.70	-15 49.2	1.814	2.828	1.7	19.9	7 20	19 56.73	-21 20.4	1.904	2.920	0.3	21.1
7 30	19 48.25	-16 25.5	1.831	2.832	4.3	20.1	7 30	19 47.67	-22 24.7	1.937	2.936	4.2	21.5
8 9	19 40.74	-17 1.7	1.874	2.835	8.0	20.3	8 9	19 39.61	-23 21.6	1.997	2.952	8.0	21.7
8 19	19 34.92	-17 35.2	1.941	2.839	11.4	20.5	8 19	19 33.32	-24 8.9	2.082	2.968	11.3	22.0
<b>361028</b>	2005 <i>WA</i> <sub>95</sub>		7 19.7	6°44	0°2/19.6	18	<b>321842</b>	2010 <i>RT</i> <sub>105</sub>		7 19.7	7°21	0°1/19.7	17
6 10	20 20.42	-19 27.6	2.051	2.874	14.1	20.7	6 10	20 17.74	-19 52.7	1.423	2.275	17.7	20.0
6 20	20 17.15	-19 48.4	1.969	2.874	11.1	20.5	6 20	20 15.90	-19 57.8	1.356	2.277	14.0	19.7
6 30	20 11.73	-20 16.2	1.908	2.875	7.7	20.2	6 30	20 11.31	-20 11.2	1.307	2.281	9.7	19.5
7 10	20 4.69	-20 48.5	1.871	2.876	3.9	20.0	7 10	20 4.61	-20 30.2	1.280	2.286	4.9	19.2
7 20	19 56.72	-21 22.1	1.861	2.877	0.3	19.7	7 20	19 56.76	-20 51.1	1.276	2.292	0.2	18.9
7 30	19 48.74	-21 53.4	1.878	2.878	4.2	20.0	7 30	19 49.01	-21 10.2	1.297	2.300	5.2	19.3
8 9	19 41.68	-22 20.1	1.921	2.880	8.0	20.3	8 9	19 42.58	-21 24.7	1.341	2.309	9.8	19.6
8 19	19 36.28	-22 40.5	1.988	2.883	11.4	20.5	8 19	19 38.38	-21 33.1	1.407	2.319	13.9	19.9
<b>4354</b>	<i>Euclides</i>		7 19.7	237°88	3°3/21.5	18	<b>184628</b>	2005 <i>RU</i> <sub>45</sub>		7 19.7	112°50	2°7/18.2	18
6 10	20 22.11	-9 30.8	2.441	3.220	13.3	18.8	6 10	20 23.53	-26 40.0	2.350	3.169	12.6	20.8
6 20	20 18.12	-9 23.5	2.337	3.208	11.0	18.6	6 20	20 19.37	-27 20.7	2.274	3.176	10.0	20.6
6 30	20 12.26	-9 26.8	2.253	3.194	8.2	18.4	6 30	20 13.15	-28 3.7	2.220	3.184	7.0	20.5
7 10	20 4.94	-9 40.7	2.194	3.180	5.3	18.2	7 10	20 5.38	-28 44.9	2.191	3.191	4.0	20.3
7 20	19 56.72	-10 4.2	2.162	3.166	3.4	18.0	7 20	19 56.77	-29 20.2	2.190	3.198	2.7	20.2
7 30	19 48.35	-10 35.5	2.158	3.151	4.6	18.1	7 30	19 48.18	-29 46.6	2.217	3.205	5.0	20.4
8 9	19 40.64	-11 11.8	2.181	3.136	7.5	18.2	8 9	19 40.51	-30 2.5	2.270	3.212	8.0	20.6
8 19	19 34.27	-11 50.6	2.230	3.121	10.5	18.4	8 19	19 34.46	-30 7.9	2.349	3.219	10.8	20.8
<b>262598</b>	2006 <i>VH</i> <sub>116</sub>		7 19.7	257°19	2°7/18.4	18	<b>445406</b>	2010 <i>TZ</i> <sub>44</sub>		7 19.7	344°82	0°7/19.5	15
6 10	20 25.58	-23 49.4	1.678	2.511	16.3	20.8	6 10	20 18.80	-21 9.2	1.617	2.460	16.3	20.9
6 20	20 22.08	-24 38.8	1.588	2.500	13.0	20.6	6 20	20 16.61	-21 19.4	1.532	2.449	13.0	20.6
6 30	20 15.70	-25 36.1	1.519	2.488	9.1	20.3	6 30	20 11.79	-21 36.4	1.467	2.439	9.0	20.4
7 10	20 6.94	-26 35.9	1.473	2.476	4.9	20.0	7 10	20 4.90	-21 57.5	1.424	2.430	4.6	20.1
7 20	19 56.66	-27 31.9	1.452	2.464	2.8	19.9	7 20	19 56.78	-22 19.0	1.405	2.421	0.7	19.8
7 30	19 46.15	-28 18.0	1.458	2.452	6.3	20.1	7 30	19 48.58	-22 37.3	1.412	2.414	5.1	20.1
8 9	19 36.77	-28 50.6	1.488	2.439	10.6	20.3	8 9	19 41.50	-22 49.7	1.444	2.408	9.6	20.3
8 19	19 29.65	-29 8.7	1.542	2.426	14.6	20.5	8 19	19 36.49	-22 55.2	1.497	2.403	13.7	20.6
<b>82821</b>	2001 <i>QH</i> <sub>39</sub>		7 19.7	358°85	0°4/19.5	18	<b>371380</b>	2006 <i>QU</i> <sub>122</sub>		7 19.7	295°77	1°7/19.2	18
6 10	20 17.33	-18 34.4	1.144	2.009	20.2	18.6	6 10	20 25.85	-23 31.7	1.473	2.314	17.7	20.8
6 20	20 16.34	-19 2.8	1.076	2.005	16.1	18.3	6 20	20 22.92	-23 41.8	1.369	2.285	14.3	20.5
6 30	20 12.09	-19 45.2	1.025	2.003	11.2	18.1	6 30	20 16.72	-23 57.6	1.284	2.256	10.1	20.2
7 10	20 5.18	-20 37.8	0.994	2.002	5.6	17.7	7 10	20 7.68	-24 15.4	1.221	2.226	5.3	19.8
7 20	19 56.72	-21 34.3	0.985	2.002	0.5	17.4	7 20	19 56.70	-24 30.2	1.182	2.197	1.8	19.5
7 30	19 48.22	-22 27.5	0.999	2.003	6.2	17.8	7 30	19 45.21	-24 37.5	1.168	2.167	6.3	19.7
8 9	19 41.27	-23 11.8	1.035	2.006	11.6	18.1	8 9	19 34.86	-24 34.5	1.177	2.138	11.7	19.9
8 19	19 37.04	-23 44.2	1.090	2.010	16.4	18.4	8 19	19 27.06	-24 21.4	1.207	2.109	16.6	20.1
<b>331348</b>	2012 <i>CO</i> <sub>12</sub>		7 19.7	77°32	0°8/19.4	17	<b>489276</b>	2006 <i>SL</i> <sub>100</sub>		7 19.7	256°67	0°8/20.1	18
6 10	20 26.64	-20 5.0	1.440	2.275	18.3	21.3	6 10	20 22.20	-17 14.5	2.158	2.969	13.9	22.3
6 20	20 22.84	-20 31.9	1.377	2.289	14.5	21.1	6 20	20 18.48	-17 22.7	2.066	2.963	11.1	22.1
6 30	20 16.04	-21 8.2	1.333	2.303	10.0	20.9	6 30	20 12.66	-17 38.6	1.994	2.956	7.8	21.9
7 10	20 6.96	-21 49.3	1.312	2.317	5.0	20.6	7 10	20 5.20	-18 0.4	1.947	2.949	4.1	21.7
7 20	19 56.68	-22 29.9	1.315	2.331	0.8	20.4	7 20	19 56.79	-18 25.7	1.927	2.943	0.8	21.4
7 30	19 46.57	-23 5.0	1.344	2.345	5.5	20.7	7 30	19 48.29	-18 51.6	1.934	2.936	4.0	21.6
8 9	19 38.00	-23 31.5	1.397	2.358	10.2	21.0	8 9	19 40.63	-19 15.7	1.969	2.929	7.8	21.9
8 19	19 31.91	-23 48.3	1.473	2.372	14.3	21.3	8 19	19 34.57	-19 36.3	2.028	2.922	11.2	22.1
<b>91847</b>	1999 <i>UW</i> <sub>5</sub>		7 19.7	220°58	4°7/17.1	18	<b>153678</b>	2001 <i>TM</i> <sub>200</sub>		7 19.7	294°59	4°1/21.7	18
6 10	20 25.70	-34 27.1	2.510	3.323	12.1	19.5	6 10	20 20.63	-8 45.5	1.610	2.419	17.9	20.5
6 20	20 21.14	-35 6.8	2.426	3.320	9.8	19.4	6 20	20 18.07	-8 49.9	1.514	2.403	14.8	20.2
6 30	20 14.41	-35 43.9	2.365	3.317	7.3	19.2	6 30	20 12.89	-9 12.3	1.436	2.387	11.1	20.0
7 10	20 6.02	-36 13.7	2.329	3.313	5.3	19.1	7 10	20 5.53	-9 53.1	1.380	2.371	7.1	19.7
7 20	19 56.71	-36 32.3	2.320	3.309	4.8	19.0	7 20	19 56.77	-10 50.5	1.347	2.355	4.2	19.5
7 30	19 47.41	-36 36.8	2.338	3.305	6.4	19.1	7 30	19 47.71	-12 0.1	1.340	2.339	5.9	19.5
8 9	19 39.06	-36 26.9	2.383	3.301	8.8	19.3	8 9	19 39.60	-13 15.9	1.358	2.324	10.0	19.7
8 19	19 32.42	-36 4.0	2.452	3.297	11.2	19.4	8 19	19 33.48	-14 32.1	1.399	2.308	14.2	20.0
<b>509153</b>	2006 <i>BJ</i> <sub>274</sub>		7 19.7	216°21	1°4/19.1	17	<b>18845</b>	<i>Cichocki</i>					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>253870</b>	2004 <i>BF</i> <sub>4</sub>		7 19.7 128°58	0°6/19.5	17		<b>73474</b>	2002 <i>OK</i> <sub>19</sub>		7 19.7 210°99	3°1/21.0	18	
6 10	20 29.15	-21 8.9	1.850	2.665	15.7	21.7	6 10	20 24.50	-12 7.5	2.323	3.109	13.7	19.6
6 20	20 24.14	-21 20.2	1.777	2.678	12.4	21.5	6 20	20 20.03	-11 40.6	2.227	3.105	11.2	19.4
6 30	20 16.60	-21 37.1	1.726	2.690	8.5	21.3	6 30	20 13.60	-11 21.7	2.153	3.099	8.2	19.2
7 10	20 7.17	-21 56.3	1.699	2.703	4.3	21.1	7 10	20 5.65	-11 11.0	2.104	3.094	5.2	19.0
7 20	19 56.74	-22 14.2	1.698	2.714	0.6	20.8	7 20	19 56.83	-11 7.9	2.081	3.088	3.1	18.9
7 30	19 46.46	-22 28.0	1.726	2.725	4.7	21.2	7 30	19 47.95	-11 11.4	2.087	3.082	4.6	18.9
8 9	19 37.43	-22 35.9	1.779	2.736	8.7	21.4	8 9	19 39.87	-11 19.8	2.120	3.075	7.7	19.1
8 19	19 30.49	-22 37.5	1.857	2.746	12.3	21.7	8 19	19 33.27	-11 31.4	2.179	3.068	10.7	19.3
<b>207735</b>	2007 <i>RH</i> <sub>193</sub>		7 19.7 284°63	0°5/19.5	18		<b>470628</b>	2008 <i>SH</i> <sub>32</sub>		7 19.7 254°95	0°8/20.1	18	
6 10	20 23.28	-20 43.3	1.903	2.727	15.0	21.3	6 10	20 25.44	-18 1.6	2.097	2.905	14.3	22.1
6 20	20 19.74	-20 56.8	1.810	2.716	11.9	21.1	6 20	20 21.24	-17 59.9	1.992	2.887	11.5	21.9
6 30	20 13.77	-21 16.8	1.737	2.705	8.3	20.8	6 30	20 14.73	-18 5.0	1.908	2.869	8.1	21.7
7 10	20 5.86	-21 40.4	1.689	2.693	4.2	20.6	7 10	20 6.35	-18 15.0	1.849	2.851	4.3	21.4
7 20	19 56.78	-22 4.5	1.666	2.682	0.5	20.3	7 20	19 56.81	-18 27.9	1.816	2.832	0.8	21.1
7 30	19 47.57	-22 25.5	1.670	2.671	4.7	20.6	7 30	19 47.06	-18 41.2	1.812	2.813	4.3	21.3
8 9	19 39.33	-22 41.0	1.701	2.660	8.9	20.8	8 9	19 38.15	-18 52.9	1.834	2.793	8.3	21.5
8 19	19 32.97	-22 50.0	1.754	2.649	12.6	21.0	8 19	19 30.95	-19 1.6	1.881	2.773	12.0	21.7
<b>382974</b>	2005 <i>AN</i> <sub>40</sub>		7 19.7 169°80	1°9/18.9	18		<b>43119</b>	1999 <i>XV</i> <sub>44</sub>		7 19.7 207°55	1°3/20.5	18	
6 10	20 28.39	-26 4.7	2.324	3.133	13.1	21.6	6 10	20 21.36	-15 46.1	2.701	3.497	11.8	19.7
6 20	20 23.15	-26 13.8	2.239	3.136	10.3	21.4	6 20	20 17.30	-15 45.7	2.606	3.493	9.4	19.5
6 30	20 15.73	-26 24.0	2.177	3.139	7.2	21.2	6 30	20 11.57	-15 51.6	2.534	3.490	6.7	19.3
7 10	20 6.69	-26 31.9	2.140	3.142	3.8	21.0	7 10	20 4.58	-16 2.9	2.487	3.486	3.7	19.1
7 20	19 56.78	-26 34.7	2.131	3.144	1.9	20.9	7 20	19 56.86	-16 17.8	2.467	3.482	1.3	18.9
7 30	19 46.94	-26 30.4	2.151	3.145	4.5	21.0	7 30	19 49.11	-16 34.8	2.477	3.477	3.4	19.1
8 9	19 38.10	-26 18.4	2.199	3.146	7.9	21.3	8 9	19 42.02	-16 51.9	2.515	3.473	6.4	19.3
8 19	19 31.01	-25 59.4	2.271	3.147	10.9	21.5	8 19	19 36.18	-17 7.9	2.578	3.468	9.3	19.5
<b>221747</b>	2007 <i>EU</i> <sub>187</sub>		7 19.7 336°96	8°8/15.8	18		<b>690</b>	Wratislavia		7 19.7 308°35	4°5/21.4	18	
6 10	20 25.40	-41 7.4	1.807	2.635	15.5	19.4	6 10	20 20.94	-9 44.5	2.135	2.927	14.6	12.8
6 20	20 22.24	-42 7.1	1.728	2.621	13.1	19.2	6 20	20 17.52	-9 2.9	2.033	2.910	12.1	12.6
6 30	20 15.93	-42 59.9	1.669	2.608	10.7	19.1	6 30	20 12.04	-8 30.4	1.951	2.893	9.2	12.4
7 10	20 7.08	-43 37.9	1.632	2.595	9.1	18.9	7 10	20 4.94	-8 8.3	1.893	2.877	6.3	12.2
7 20	19 56.76	-43 54.1	1.618	2.583	8.9	18.9	7 20	19 56.85	-7 57.0	1.860	2.860	4.5	12.0
7 30	19 46.43	-43 44.4	1.628	2.572	10.5	19.0	7 30	19 48.61	-7 56.0	1.854	2.844	5.6	12.1
8 9	19 37.57	-43 9.3	1.661	2.562	12.9	19.1	8 9	19 41.13	-8 3.8	1.874	2.828	8.5	12.2
8 19	19 31.30	-42 12.5	1.714	2.553	15.6	19.3	8 19	19 35.15	-8 18.2	1.919	2.813	11.7	12.4
<b>149061</b>	2002 <i>CA</i> <sub>57</sub>		7 19.7 48°21	0°9/19.4	18		<b>514438</b>	2016 <i>UX</i> <sub>24</sub>		7 19.7 333°86	6°5/22.7	18	
6 10	20 23.08	-22 25.2	2.071	2.893	14.0	19.8	6 10	20 20.27	-3 54.9	1.983	2.758	16.1	21.6
6 20	20 19.15	-22 34.0	1.997	2.902	11.0	19.6	6 20	20 17.04	-3 13.2	1.896	2.754	13.7	21.4
6 30	20 13.06	-22 46.7	1.944	2.911	7.6	19.4	6 30	20 11.71	-2 46.1	1.827	2.751	10.9	21.2
7 10	20 5.36	-23 0.7	1.915	2.920	3.8	19.2	7 10	20 4.76	-2 35.5	1.781	2.747	8.2	21.0
7 20	19 56.82	-23 13.0	1.913	2.929	0.9	19.0	7 20	19 56.86	-2 42.3	1.759	2.744	6.6	20.9
7 30	19 48.38	-23 21.4	1.939	2.938	4.3	19.3	7 30	19 48.90	-3 5.2	1.763	2.741	7.1	20.9
8 9	19 40.97	-23 24.3	1.991	2.948	7.9	19.5	8 9	19 41.78	-3 41.5	1.792	2.739	9.4	21.1
8 19	19 35.30	-23 21.5	2.068	2.958	11.2	19.7	8 19	19 36.26	-4 26.9	1.845	2.736	12.2	21.2
<b>35654</b>	1998 <i>MR</i> <sub>33</sub>		7 19.7 9°36	1°4/19.0	18		<b>290344</b>	2005 <i>SO</i> <sub>246</sub>		7 19.7 212°02	4°3/22.1	18	
6 10	20 18.57	-21 11.3	1.624	2.468	16.2	17.1	6 10	20 20.54	-7 2.4	2.397	3.171	13.7	21.1
6 20	20 16.31	-21 50.6	1.553	2.471	12.8	16.9	6 20	20 16.84	-6 41.6	2.306	3.170	11.4	20.9
6 30	20 11.50	-22 38.2	1.502	2.474	8.8	16.6	6 30	20 11.35	-6 32.2	2.235	3.168	8.7	20.7
7 10	20 4.72	-23 30.0	1.473	2.479	4.4	16.4	7 10	20 4.50	-6 34.9	2.189	3.166	6.1	20.6
7 20	19 56.83	-24 20.8	1.470	2.485	1.5	16.2	7 20	19 56.88	-6 49.1	2.168	3.164	4.4	20.5
7 30	19 48.97	-25 5.4	1.492	2.491	5.3	16.5	7 30	19 49.21	-7 13.5	2.175	3.162	5.2	20.5
8 9	19 42.27	-25 40.5	1.539	2.499	9.5	16.8	8 9	19 42.26	-7 45.5	2.209	3.160	7.6	20.7
8 19	19 37.61	-26 4.4	1.608	2.507	13.2	17.0	8 19	19 36.65	-8 22.2	2.268	3.158	10.3	20.8
<b>283008</b>	2007 <i>UR</i> <sub>46</sub>		7 19.7 298°18	5°1/21.8	18		<b>436602</b>	2011 <i>KY</i> <sub>11</sub>		7 19.7 59°48	9°8/23.1	17	
6 10	20 20.65	-7 54.2	1.859	2.654	16.3	20.7	6 10	20 24.70	+0 28.0	1.757	2.513	18.6	20.6
6 20	20 17.70	-7 26.0	1.755	2.633	13.7	20.5	6 20	20 20.66	+2 2.1	1.686	2.521	16.1	20.4
6 30	20 12.42	-7 11.1	1.671	2.612	10.5	20.3	6 30	20 14.25	+3 19.4	1.633	2.530	13.5	20.3
7 10	20 5.23	-7 10.8	1.608	2.591	7.3	20.0	7 10	20 6.04	+4 15.3	1.601	2.538	11.2	20.1
7 20	19 56.82	-7 25.3	1.570	2.570	5.2	19.9	7 20	19 56.84	+4 46.6	1.592	2.547	9.9	20.1
7 30	19 48.14	-7 53.4	1.558	2.549	6.3	19.9	7 30	19 47.69	+4 52.7	1.606	2.556	10.2	20.1
8 9	19 40.26	-8 31.7	1.570	2.528	9.6	20.0	8 9	19 39.62	+4 36.1	1.645	2.565	11.9	20.2
8 19	19 34.09	-9 16.5	1.607	2.507	13.2	20.2	8 19	19 33.44	+4 1.5	1.705	2.574	14.2	20.4
<b>248560</b>	2005 <i>YB</i> <sub>175</sub>		7 19.7 260°54	2°0/21.2	18		<b>83726</b>	2001 <i>TR</i> <sub>104</sub>		7 19.7 339°44	3°7/18.0	18	
6 10	20 20.41	-10 41.1	2.667	3.449	12.3	20.7	6 10	20 23.50	-28 28.0	1.866	2.700	14.8	18.8
6 20	20 16.73	-11 12.3	2.555	3.431	10.0	20.5	6 20	20 20.07	-29 5.1	1.785	2.696	11.8	18.6
6 30	20 11.31	-11 55.3	2.465	3.413	7.3	20.3	6 30	20 14.06	-29 43.8	1.725	2.692	8.4	18.4
7 10	20 4.52	-12 48.9	2.401	3.394	4.3	20.0	7 10	20 6.03	-30 19.2	1.689	2.688	5.1	18.2
7 20	19 56.85	-13 50.9	2.364	3.375	2.0	19.9	7 20	19 56.84	-30 46.3	1.678	2.684	3.8	18.1
7 30	19 48.98	-14 57.9	2.357	3.356	3.7	19.9	7 30	19 47.63	-31 1.3	1.693	2.681	6.3	18.3
8 9	19 41.65	-16 6.3	2.379	3.337	6.7	20.1	8 9	19 39.56	-31 2.6	1.734	2.678	9.8	18.5
8 19	19 35.50	-17 12.6	2.427	3.317	9.7	20.3	8 19	19 33.55	-30 51.1	1.797	2.676	13.1	18.7
<b>98996</b>	2001 <i>DF</i> <sub>44</sub>		7 19.7 25°46	3°1/21.3	18		<b>255461</b>	2005 <i>YO</i> <sub>78</sub>		7 19.7 309°52	0°8/19.4	15	



EPHEMERIDES

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>482319</b>	2011 <i>UQ</i> <sub>239</sub>		7 19.7 320°83	5°8/16.8	16		<b>192413</b>	1997 <i>HN</i> <sub>9</sub>		7 19.8 196°46	7°6/23.6	18	
6 10	20 22.57	-31 50.5	1.724	2.566	15.5	21.3	6 10	20 22.98	+ 1 35.2	2.370	3.097	15.0	20.6
6 20	20 19.90	-32 51.4	1.635	2.548	12.6	21.0	6 20	20 18.80	+ 2 24.6	2.277	3.095	13.1	20.4
6 30	20 14.31	-33 53.9	1.567	2.530	9.4	20.8	6 30	20 12.75	+ 2 59.0	2.205	3.092	10.9	20.3
7 10	20 6.33	-34 51.0	1.522	2.514	6.6	20.6	7 10	20 5.26	+ 3 16.1	2.154	3.089	8.9	20.1
7 20	19 56.83	-35 35.6	1.502	2.497	6.0	20.5	7 20	19 56.93	+ 3 14.4	2.128	3.085	7.7	20.0
7 30	19 47.11	-36 2.2	1.506	2.481	8.3	20.6	7 30	19 48.51	+ 2 54.4	2.129	3.081	7.9	20.0
8 9	19 38.57	-36 8.4	1.534	2.466	11.8	20.8	8 9	19 40.80	+ 2 18.4	2.155	3.076	9.4	20.1
8 19	19 32.34	-35 55.5	1.583	2.452	15.2	21.0	8 19	19 34.48	+ 1 30.2	2.205	3.071	11.5	20.3
<b>471978</b>	2013 <i>TU</i> <sub>111</sub>		7 19.7 324°57	0°4/19.9	16		<b>520418</b>	2014 <i>JO</i> <sub>89</sub>		7 19.8 165°74	1°8/18.5	18	
6 10	20 19.94	-19 27.7	1.248	2.105	19.4	21.0	6 10	20 22.61	-23 28.9	2.530	3.343	12.0	21.7
6 20	20 18.44	-19 23.0	1.160	2.084	15.6	20.7	6 20	20 18.55	-24 15.8	2.445	3.346	9.5	21.5
6 30	20 13.68	-19 27.6	1.090	2.065	11.0	20.3	6 30	20 12.59	-25 7.2	2.383	3.348	6.5	21.3
7 10	20 6.15	-19 39.5	1.040	2.046	5.7	20.0	7 10	20 5.18	-25 59.6	2.348	3.350	3.5	21.1
7 20	19 56.83	-19 55.1	1.012	2.028	0.4	19.5	7 20	19 56.93	-26 49.0	2.340	3.352	1.9	21.0
7 30	19 47.20	-20 10.6	1.007	2.011	6.0	19.9	7 30	19 48.63	-27 32.0	2.361	3.353	4.3	21.2
8 9	19 38.91	-20 22.3	1.024	1.995	11.7	20.2	8 9	19 41.08	-28 6.3	2.409	3.355	7.4	21.4
8 19	19 33.28	-20 28.5	1.061	1.980	16.8	20.4	8 19	19 34.97	-28 31.0	2.483	3.356	10.2	21.6
<b>142006</b>	2002 <i>PG</i> <sub>162</sub>		7 19.7 26°26	0°9/20.1	17		<b>238976</b>	2006 <i>BX</i> <sub>164</sub>		7 19.8 189°60	1°0/20.2	17	
6 10	20 21.67	-17 21.5	1.153	2.009	20.7	20.3	6 10	20 23.85	-16 26.3	1.938	2.750	15.2	21.4
6 20	20 19.56	-17 29.2	1.095	2.017	16.5	20.1	6 20	20 20.02	-16 39.1	1.852	2.750	12.1	21.2
6 30	20 14.15	-17 50.1	1.053	2.027	11.5	19.9	6 30	20 13.87	-17 1.3	1.788	2.749	8.5	20.9
7 10	20 6.19	-18 21.2	1.031	2.037	6.0	19.6	7 10	20 5.92	-17 30.9	1.747	2.749	4.5	20.7
7 20	19 56.84	-18 57.5	1.032	2.048	0.9	19.3	7 20	19 56.92	-18 4.9	1.732	2.748	1.0	20.4
7 30	19 47.68	-19 33.9	1.056	2.060	5.8	19.6	7 30	19 47.88	-18 39.7	1.745	2.747	4.3	20.7
8 9	19 40.20	-20 5.6	1.102	2.073	11.1	20.0	8 9	19 39.81	-19 12.3	1.784	2.745	8.4	20.9
8 19	19 35.47	-20 30.1	1.169	2.086	15.7	20.3	8 19	19 33.54	-19 40.5	1.848	2.744	12.0	21.1
<b>259949</b>	2004 <i>EO</i> <sub>68</sub>		7 19.7 78°46	0°2/19.8	17		<b>267745</b>	2003 <i>GR</i> <sub>35</sub>		7 19.8 31°56	4°6/17.3	17	
6 10	20 26.62	-18 27.4	1.543	2.371	17.7	20.6	6 10	20 21.57	-23 38.6	1.215	2.076	19.5	19.1
6 20	20 22.57	-18 43.8	1.481	2.388	14.0	20.4	6 20	20 19.58	-25 21.7	1.165	2.092	15.3	18.9
6 30	20 15.73	-19 9.7	1.438	2.405	9.7	20.2	6 30	20 14.24	-27 15.0	1.133	2.109	10.6	18.7
7 10	20 6.82	-19 41.7	1.417	2.421	4.9	20.0	7 10	20 6.29	-29 8.6	1.124	2.127	6.1	18.5
7 20	19 56.83	-20 15.5	1.422	2.438	0.2	19.7	7 20	19 56.91	-30 51.1	1.138	2.146	4.8	18.4
7 30	19 47.05	-20 46.9	1.453	2.455	5.0	20.1	7 30	19 47.69	-32 13.4	1.177	2.166	8.2	18.7
8 9	19 38.68	-21 12.7	1.509	2.471	9.5	20.4	8 9	19 40.18	-33 11.0	1.238	2.187	12.5	19.0
8 19	19 32.63	-21 31.7	1.588	2.488	13.4	20.7	8 19	19 35.46	-33 44.3	1.319	2.208	16.3	19.3
<b>127891</b>	2003 <i>GG</i> <sub>9</sub>		7 19.7 22°24	0°6/19.5	17		<b>133647</b>	2003 <i>UK</i> <sub>152</sub>		7 19.8 264°80	0°4/19.9	18	
6 10	20 22.89	-19 41.7	1.129	1.988	20.8	19.5	6 10	20 26.56	-19 11.3	1.612	2.438	17.1	20.8
6 20	20 20.77	-20 2.3	1.066	1.992	16.5	19.2	6 20	20 22.91	-19 11.3	1.517	2.423	13.8	20.5
6 30	20 15.16	-20 34.9	1.021	1.997	11.5	19.0	6 30	20 16.35	-19 19.3	1.441	2.407	9.7	20.2
7 10	20 6.77	-21 15.0	0.996	2.002	5.8	18.7	7 10	20 7.38	-19 33.0	1.388	2.392	5.0	19.9
7 20	19 56.84	-21 56.5	0.993	2.009	0.7	18.3	7 20	19 56.89	-19 49.1	1.359	2.376	0.4	19.5
7 30	19 47.01	-22 33.2	1.012	2.016	6.3	18.7	7 30	19 46.15	-20 4.2	1.357	2.359	5.2	19.9
8 9	19 38.93	-23 0.9	1.055	2.023	11.7	19.1	8 9	19 36.55	-20 15.6	1.380	2.343	10.2	20.1
8 19	19 33.76	-23 18.0	1.117	2.031	16.5	19.4	8 19	19 29.20	-20 22.0	1.426	2.326	14.6	20.3
<b>387915</b>	2004 <i>XS</i> <sub>162</sub>		7 19.7 242°60	1°9/18.9	18		<b>51631</b>	2001 <i>HN</i> <sub>46</sub>		7 19.8 74°05	0°9/19.4	18	
6 10	20 28.69	-25 59.0	2.356	3.164	12.9	21.6	6 10	20 27.81	-21 29.2	1.462	2.297	18.1	19.6
6 20	20 23.62	-26 10.4	2.250	3.146	10.3	21.4	6 20	20 23.74	-21 43.6	1.400	2.312	14.3	19.4
6 30	20 16.26	-26 23.2	2.166	3.128	7.2	21.2	6 30	20 16.67	-22 4.9	1.357	2.327	9.9	19.1
7 10	20 7.10	-26 34.1	2.108	3.109	3.9	20.9	7 10	20 7.35	-22 29.0	1.337	2.342	5.0	18.9
7 20	19 56.83	-26 40.1	2.077	3.090	2.0	20.8	7 20	19 56.90	-22 51.5	1.341	2.357	1.0	18.6
7 30	19 46.42	-26 38.4	2.076	3.070	4.7	20.9	7 30	19 46.68	-23 8.4	1.372	2.372	5.4	19.0
8 9	19 36.87	-26 28.3	2.102	3.049	8.2	21.1	8 9	19 38.01	-23 17.6	1.426	2.387	10.0	19.3
8 19	19 29.01	-26 10.3	2.153	3.027	11.5	21.3	8 19	19 31.85	-23 19.1	1.503	2.402	14.1	19.6
<b>488426</b>	2016 <i>XL</i> <sub>13</sub>		7 19.7 248°25	2°5/21.3	18		<b>74700</b>	1999 <i>RH</i> <sub>145</sub>		7 19.8 339°34	4°5/20.9	18	
6 10	20 19.65	-10 56.1	2.493	3.282	12.8	21.5	6 10	20 16.05	-14 3.2	1.044	1.910	21.7	18.1
6 20	20 16.15	-11 6.6	2.397	3.276	10.4	21.3	6 20	20 15.69	-13 18.0	0.967	1.893	17.8	17.7
6 30	20 10.90	-11 27.8	2.323	3.271	7.6	21.2	6 30	20 11.94	-12 45.6	0.905	1.877	13.2	17.4
7 10	20 4.30	-11 58.7	2.273	3.265	4.7	21.0	7 10	20 5.35	-12 27.7	0.862	1.863	8.1	17.1
7 20	19 56.91	-12 37.7	2.250	3.259	2.5	20.8	7 20	19 56.94	-12 24.6	0.838	1.850	4.5	16.8
7 30	19 49.44	-13 22.2	2.255	3.253	3.9	20.9	7 30	19 48.29	-12 34.6	0.836	1.839	7.3	17.0
8 9	19 42.63	-14 9.1	2.288	3.248	6.9	21.1	8 9	19 41.14	-12 53.9	0.853	1.829	12.6	17.2
8 19	19 37.10	-14 55.6	2.347	3.242	9.8	21.2	8 19	19 36.82	-13 17.9	0.889	1.822	17.8	17.5
<b>257179</b>	2008 <i>JA</i> <sub>30</sub>		7 19.7 150°02	4°1/22.1	18		<b>512793</b>	2016 <i>UK</i> <sub>81</sub>		7 19.8 111°16	0°2/19.9	18	
6 10	20 20.28	- 7 12.1	2.467	3.240	13.4	20.9	6 10	20 22.14	-18 28.5	2.265	3.076	13.3	21.5
6 20	20 16.56	- 6 53.6	2.379	3.242	11.1	20.7	6 20	20 18.28	-18 43.3	2.182	3.080	10.5	21.3
6 30	20 11.12	- 6 46.3	2.311	3.244	8.5	20.6	6 30	20 12.44	-19 4.8	2.121	3.084	7.3	21.1
7 10	20 4.38	- 6 50.6	2.267	3.245	5.9	20.4	7 10	20 5.11	-19 30.8	2.085	3.088	3.7	20.9
7 20	19 56.92	- 7 5.9	2.250	3.247	4.2	20.3	7 20	19 56.96	-19 58.7	2.075	3.092	0.2	20.6
7 30	19 49.43	- 7 30.7	2.261	3.248	5.0	20.3	7 30	19 48.81	-20 25.5	2.094	3.095	3.8	20.9
8 9	19 42.65	- 8 2.6	2.298	3.250	7.3	20.5	8 9	19 41.51	-20 49.1	2.141	3.099	7.3	21.1
8 19	19 37.17	- 8 38.8	2.361	3.251	10.0	20.7	8 19	19 35.75	-21 8.0	2.212	3.103	10.5	21.3
<b>330642</b>	2008 <i>FQ</i> <sub>28</sub>		7 19.7 126°19	0°3/19.9	18		<b>113995</b>						

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>74154</b>	1998 <i>QM</i> <sub>91</sub>		7 19.8 307°76	7°0/17.2	18		<b>255437</b>	2005 <i>XK</i> <sub>84</sub>		7 19.8 232°24	0°9/20.4	18	
6 10	20 28.81	-36 48.0	1.757	2.586	15.8	18.8	6 10	20 21.08	-15 40.9	2.843	3.635	11.3	21.7
6 20	20 24.86	-37 28.7	1.672	2.572	13.1	18.6	6 20	20 17.11	-15 56.5	2.738	3.624	9.1	21.5
6 30	20 17.74	-38 4.9	1.607	2.558	10.1	18.4	6 30	20 11.51	-16 19.2	2.656	3.612	6.4	21.3
7 10	20 8.06	-38 29.2	1.564	2.545	7.7	18.2	7 10	20 4.65	-16 47.6	2.600	3.600	3.5	21.1
7 20	19 56.90	-38 35.2	1.546	2.532	7.1	18.2	7 20	19 57.02	-17 19.8	2.573	3.588	0.9	20.9
7 30	19 45.70	-38 18.9	1.552	2.519	9.0	18.3	7 30	19 49.28	-17 53.3	2.574	3.575	3.2	21.0
8 9	19 35.96	-37 40.8	1.583	2.506	12.0	18.4	8 9	19 42.12	-18 26.0	2.604	3.562	6.3	21.2
8 19	19 28.80	-36 44.5	1.635	2.494	15.2	18.6	8 19	19 36.11	-18 56.1	2.661	3.548	9.1	21.4
<b>261429</b>	2005 <i>UY</i> <sub>515</sub>		7 19.8 212°41	2°0/21.1	18		<b>87647</b>	2000 <i>RR</i> <sub>79</sub>		7 19.8 268°95	1°8/19.5	18	
6 10	20 20.11	-11 37.3	2.361	3.155	13.3	21.0	6 10	20 35.26	-27 59.6	1.754	2.570	16.4	18.9
6 20	20 16.62	-12 0.2	2.270	3.154	10.8	20.9	6 20	20 29.36	-27 25.2	1.666	2.566	13.1	18.6
6 30	20 11.30	-12 34.6	2.201	3.153	7.8	20.7	6 30	20 20.46	-26 47.2	1.598	2.561	9.2	18.4
7 10	20 4.56	-13 19.2	2.156	3.152	4.6	20.5	7 10	20 9.29	-26 2.4	1.554	2.557	4.9	18.1
7 20	19 56.99	-14 11.3	2.139	3.151	2.1	20.3	7 20	19 56.92	-25 8.9	1.538	2.552	1.8	17.9
7 30	19 49.35	-15 7.7	2.150	3.150	3.9	20.4	7 30	19 44.73	-24 6.7	1.549	2.547	5.4	18.1
8 9	19 42.43	-16 4.7	2.188	3.149	7.1	20.6	8 9	19 34.04	-22 58.3	1.588	2.543	9.7	18.4
8 19	19 36.88	-16 59.3	2.252	3.147	10.2	20.8	8 19	19 25.84	-21 47.2	1.651	2.538	13.7	18.6
<b>136428</b>	2005 <i>EK</i> <sub>12</sub>		7 19.8 23°73	2°9/18.7	17		<b>154817</b>	2004 <i>QX</i> <sub>8</sub>		7 19.8 191°12	6°9/15.5	18	
6 10	20 21.19	-23 17.1	1.045	1.917	21.2	19.0	6 10	20 27.49	-40 56.1	2.529	3.333	12.3	20.2
6 20	20 19.67	-23 59.3	0.993	1.926	16.7	18.8	6 20	20 22.86	-41 59.4	2.455	3.333	10.3	20.0
6 30	20 14.48	-24 50.4	0.958	1.937	11.5	18.5	6 30	20 15.82	-42 57.2	2.403	3.332	8.4	19.9
7 10	20 6.46	-25 43.5	0.943	1.949	6.1	18.3	7 10	20 6.92	-43 43.4	2.376	3.331	7.1	19.8
7 20	19 56.94	-26 30.6	0.949	1.962	3.0	18.2	7 20	19 56.98	-44 13.2	2.374	3.331	7.0	19.8
7 30	19 47.67	-27 4.9	0.977	1.977	7.3	18.5	7 30	19 47.03	-44 23.5	2.399	3.330	8.2	19.9
8 9	19 40.34	-27 23.3	1.027	1.992	12.4	18.8	8 9	19 38.15	-44 14.2	2.448	3.329	10.1	20.0
8 19	19 36.06	-27 26.2	1.096	2.009	16.9	19.1	8 19	19 31.17	-43 47.6	2.520	3.327	12.1	20.1
<b>328256</b>	2008 <i>FP</i> <sub>126</sub>		7 19.8 27°63	4°7/17.8	17		<b>216760</b>	2005 <i>SC</i> <sub>74</sub>		7 19.8 46°39	1°0/20.2	17	
6 10	20 24.29	-27 4.8	1.342	2.196	18.4	20.2	6 10	20 21.82	-16 50.7	1.963	2.780	14.8	20.7
6 20	20 21.61	-28 7.6	1.279	2.201	14.6	20.0	6 20	20 18.28	-16 57.5	1.889	2.789	11.8	20.5
6 30	20 15.62	-29 15.5	1.235	2.207	10.4	19.7	6 30	20 12.57	-17 12.8	1.836	2.799	8.3	20.3
7 10	20 7.01	-30 20.8	1.212	2.213	6.2	19.5	7 10	20 5.24	-17 34.5	1.806	2.808	4.4	20.1
7 20	19 56.93	-31 15.3	1.213	2.220	4.8	19.5	7 20	19 57.04	-17 59.9	1.803	2.818	1.0	19.9
7 30	19 46.92	-31 52.5	1.239	2.228	7.9	19.7	7 30	19 48.90	-18 26.3	1.827	2.828	4.1	20.1
8 9	19 38.55	-32 10.0	1.287	2.236	12.1	19.9	8 9	19 41.76	-18 50.8	1.877	2.839	7.9	20.4
8 19	19 32.93	-32 9.1	1.355	2.244	16.0	20.2	8 19	19 36.35	-19 11.8	1.951	2.849	11.3	20.6
<b>126967</b>	2002 <i>FR</i> <sub>20</sub>		7 19.8 170°68	1°2/20.6	18		<b>288719</b>	2004 <i>RR</i> <sub>27</sub>		7 19.8 253°58	4°7/18.2	18	
6 10	20 20.39	-13 42.4	2.390	3.189	13.0	20.0	6 10	20 30.08	-31 51.3	1.757	2.584	15.9	20.4
6 20	20 16.84	-14 15.9	2.301	3.189	10.4	19.8	6 20	20 25.51	-32 15.0	1.678	2.582	12.8	20.2
6 30	20 11.44	-15 0.0	2.233	3.189	7.4	19.6	6 30	20 17.95	-32 36.6	1.619	2.580	9.3	20.0
7 10	20 4.63	-15 52.7	2.190	3.190	4.0	19.4	7 10	20 8.10	-32 50.3	1.583	2.578	6.0	19.8
7 20	19 56.99	-16 50.9	2.175	3.190	1.2	19.2	7 20	19 56.97	-32 51.1	1.573	2.575	4.8	19.7
7 30	19 49.28	-17 51.0	2.189	3.190	3.6	19.4	7 30	19 45.94	-32 35.9	1.589	2.573	7.1	19.9
8 9	19 42.29	-18 49.4	2.231	3.191	7.0	19.6	8 9	19 36.34	-32 5.1	1.630	2.570	10.6	20.1
8 19	19 36.67	-19 43.1	2.298	3.191	10.1	19.8	8 19	19 29.18	-31 21.5	1.694	2.568	14.1	20.3
<b>366708</b>	2003 <i>WL</i> <sub>135</sub>		7 19.8 294°12	1°8/19.0	18		<b>308369</b>	2005 <i>QJ</i> <sub>178</sub>		7 19.8 349°51	6°3/16.9	18	
6 10	20 23.99	-21 43.0	1.441	2.284	17.9	21.1	6 10	20 24.51	-34 28.4	1.796	2.632	15.3	19.6
6 20	20 21.53	-22 16.2	1.341	2.258	14.5	20.8	6 20	20 21.21	-35 21.2	1.721	2.627	12.4	19.4
6 30	20 15.85	-23 0.2	1.259	2.231	10.2	20.5	6 30	20 15.06	-36 11.6	1.666	2.623	9.4	19.2
7 10	20 7.36	-23 50.7	1.199	2.205	5.3	20.1	7 10	20 6.67	-36 53.0	1.635	2.620	6.9	19.1
7 20	19 56.92	-24 41.7	1.163	2.178	1.9	19.8	7 20	19 57.00	-37 19.2	1.628	2.618	6.4	19.0
7 30	19 45.94	-25 26.5	1.151	2.151	6.5	20.1	7 30	19 47.35	-37 26.1	1.646	2.615	8.3	19.1
8 9	19 36.05	-26 0.1	1.164	2.124	11.8	20.3	8 9	19 39.02	-37 13.2	1.688	2.614	11.3	19.3
8 19	19 28.67	-26 20.5	1.197	2.098	16.7	20.5	8 19	19 33.00	-36 42.9	1.751	2.613	14.3	19.5
<b>282418</b>	2003 <i>UF</i> <sub>213</sub>		7 19.8 325°85	0°7/19.5	18		<b>71921</b>	2000 <i>WY</i> <sub>54</sub>		7 19.8 214°09	2°5/18.6	18	
6 10	20 17.17	-20 4.3	1.332	2.190	18.3	20.4	6 10	20 27.76	-23 47.4	1.787	2.611	15.8	19.7
6 20	20 16.26	-20 23.0	1.230	2.155	14.8	20.0	6 20	20 23.63	-24 35.5	1.699	2.605	12.6	19.5
6 30	20 12.28	-20 53.3	1.146	2.122	10.5	19.7	6 30	20 16.72	-25 30.6	1.632	2.599	8.8	19.2
7 10	20 5.58	-21 32.4	1.082	2.089	5.4	19.3	7 10	20 7.54	-26 27.5	1.590	2.593	4.7	19.0
7 20	19 56.97	-22 15.7	1.041	2.057	0.8	18.9	7 20	19 56.98	-27 20.3	1.573	2.585	2.6	18.8
7 30	19 47.79	-22 57.3	1.024	2.027	6.2	19.2	7 30	19 46.25	-28 3.4	1.584	2.578	5.9	19.0
8 9	19 39.68	-23 31.9	1.028	1.997	11.9	19.4	8 9	19 36.64	-28 33.7	1.621	2.569	10.0	19.2
8 19	19 34.04	-23 56.3	1.052	1.970	17.1	19.6	8 19	19 29.20	-28 50.5	1.680	2.561	13.8	19.5
<b>442966</b>	2013 <i>CC</i> <sub>131</sub>		7 19.8 311°90	2°7/18.7	18		<b>209315</b>	2004 <i>BL</i> <sub>6</sub>		7 19.8 274°48	1°4/20.4	18	
6 10	20 25.70	-28 3.6	2.088	2.911	13.9	20.8	6 10	20 22.80	-16 14.9	2.015	2.826	14.7	20.9
6 20	20 21.46	-28 12.4	2.001	2.905	11.0	20.6	6 20	20 19.20	-16 13.5	1.919	2.816	11.8	20.7
6 30	20 14.84	-28 21.2	1.935	2.899	7.8	20.4	6 30	20 13.35	-16 20.5	1.844	2.805	8.4	20.4
7 10	20 6.41	-28 26.3	1.893	2.894	4.4	20.2	7 10	20 5.72	-16 34.4	1.793	2.794	4.6	20.2
7 20	19 56.96	-28 24.4	1.878	2.888	2.7	20.1	7 20	19 57.03	-16 53.3	1.769	2.784	1.4	19.9
7 30	19 47.54	-28 13.4	1.891	2.883	5.2	20.2	7 30	19 48.21	-17 14.5	1.771	2.773	4.3	20.1
8 9	19 39.19	-27 52.8	1.929	2.878	8.7	20.4	8 9	19 40.27	-17 35.5	1.800	2.762	8.3	20.4
8 19	19 32.71	-27 23.9	1.992	2.873	12.0	20.6	8 19	19 34.02	-17 54.4	1.854	2.751	11.9	20.6
<b>423963</b>	2006 <i>UM</i> <sub>148</sub>		7 19.8 283°57	5°9/17.5	17		<b>35</b>						

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>29661</b>	1998 <i>WT</i> <sub>20</sub>		7 19.8	45°09	4.2/21.3	18	<b>398923</b>	2013 <i>CY</i> <sub>174</sub>		7 19.8	11°99	1.8/19.0	18
6 10	20 24.18	-11 54.5	1.134	1.975	21.9	16.8	6 10	20 22.56	-24 35.4	1.964	2.794	14.4	20.4
6 20	20 21.49	-11 31.5	1.077	1.987	17.8	16.6	6 20	20 19.05	-24 50.9	1.886	2.795	11.4	20.2
6 30	20 15.47	-11 26.1	1.036	1.999	13.0	16.3	6 30	20 13.21	-25 9.5	1.829	2.798	7.9	20.0
7 10	20 6.92	-11 38.0	1.015	2.012	7.9	16.1	7 10	20 5.62	-25 27.8	1.797	2.800	4.1	19.8
7 20	19 57.01	-12 4.9	1.015	2.026	4.3	15.9	7 20	19 57.08	-25 42.4	1.790	2.803	1.8	19.6
7 30	19 47.32	-12 42.4	1.039	2.040	6.6	16.1	7 30	19 48.58	-25 50.4	1.810	2.807	4.8	19.8
8 9	19 39.35	-13 24.7	1.085	2.055	11.4	16.4	8 9	19 41.14	-25 50.6	1.856	2.811	8.5	20.1
8 19	19 34.13	-14 7.0	1.151	2.070	15.8	16.7	8 19	19 35.55	-25 43.0	1.925	2.815	11.9	20.3
<b>401148</b>	2011 <i>VO</i> <sub>11</sub>		7 19.8	254°97	4.5/21.8	18	<b>91720</b>	1999 <i>TJ</i> <sub>156</sub>		7 19.8	185°80	1.3/18.9	18
6 10	20 21.98	- 8 12.9	2.304	3.082	14.1	21.4	6 10	20 22.12	-23 0.1	2.732	3.541	11.3	19.3
6 20	20 18.13	- 7 38.8	2.208	3.076	11.7	21.2	6 20	20 18.03	-23 32.3	2.643	3.540	8.9	19.2
6 30	20 12.37	- 7 15.0	2.134	3.069	8.9	21.0	6 30	20 12.19	-24 8.3	2.576	3.540	6.1	19.0
7 10	20 5.14	- 7 2.2	2.083	3.062	6.2	20.8	7 10	20 5.02	-24 45.3	2.536	3.539	3.2	18.8
7 20	19 57.06	- 7 0.7	2.058	3.055	4.5	20.7	7 20	19 57.10	-25 20.3	2.524	3.538	1.3	18.6
7 30	19 48.90	- 7 9.5	2.061	3.048	5.4	20.7	7 30	19 49.13	-25 50.5	2.542	3.537	3.8	18.8
8 9	19 41.47	- 7 26.7	2.090	3.041	8.0	20.9	8 9	19 41.85	-26 14.1	2.587	3.535	6.8	19.0
8 19	19 35.47	- 7 49.8	2.144	3.034	10.8	21.0	8 19	19 35.89	-26 30.4	2.657	3.534	9.5	19.2
<b>438584</b>	2007 <i>UD</i> <sub>110</sub>		7 19.8	322°98	0°0/19.8	18	<b>507223</b>	2010 <i>WJ</i> <sub>72</sub>		7 19.8	276°23	0.6/19.6	17
6 10	20 22.34	-19 24.7	1.785	2.612	15.7	21.4	6 10	20 26.44	-21 0.2	1.589	2.419	17.1	22.2
6 20	20 19.15	-19 36.2	1.698	2.606	12.5	21.2	6 20	20 23.00	-21 8.6	1.490	2.400	13.8	22.0
6 30	20 13.48	-19 55.6	1.632	2.600	8.7	20.9	6 30	20 16.57	-21 24.5	1.411	2.380	9.7	21.7
7 10	20 5.84	-20 20.1	1.589	2.594	4.4	20.7	7 10	20 7.62	-21 44.6	1.355	2.360	5.0	21.3
7 20	19 57.05	-20 46.5	1.572	2.588	0.1	20.3	7 20	19 57.03	-22 5.0	1.324	2.340	0.6	21.0
7 30	19 48.18	-21 11.3	1.581	2.582	4.7	20.7	7 30	19 46.12	-22 21.6	1.318	2.319	5.5	21.3
8 9	19 40.35	-21 31.6	1.615	2.577	9.0	20.9	8 9	19 36.33	-22 31.7	1.337	2.298	10.5	21.5
8 19	19 34.46	-21 46.0	1.673	2.572	12.8	21.1	8 19	19 28.85	-22 34.3	1.378	2.277	15.1	21.7
<b>58784</b>	1998 <i>FJ</i> <sub>75</sub>		7 19.8	195°68	4°8/17.1	18	<b>391580</b>	2007 <i>TF</i> <sub>329</sub>		7 19.8	262°76	1.3/20.3	18
6 10	20 26.29	-33 47.2	2.385	3.200	12.6	19.1	6 10	20 23.56	-16 49.1	2.015	2.827	14.7	21.5
6 20	20 21.81	-34 34.5	2.304	3.199	10.2	18.9	6 20	20 19.74	-16 42.7	1.925	2.822	11.8	21.3
6 30	20 15.05	-35 20.0	2.245	3.198	7.6	18.7	6 30	20 13.68	-16 43.9	1.856	2.817	8.3	21.1
7 10	20 6.54	-35 58.4	2.211	3.196	5.4	18.6	7 10	20 5.88	-16 51.2	1.811	2.812	4.5	20.8
7 20	19 57.04	-36 25.4	2.205	3.194	5.0	18.6	7 20	19 57.08	-17 2.6	1.793	2.808	1.3	20.6
7 30	19 47.54	-36 37.7	2.225	3.193	6.6	18.7	7 30	19 48.23	-17 16.1	1.802	2.803	4.3	20.8
8 9	19 39.02	-36 34.7	2.271	3.191	9.1	18.8	8 9	19 40.31	-17 29.3	1.837	2.798	8.1	21.0
8 19	19 32.29	-36 17.7	2.342	3.188	11.6	19.0	8 19	19 34.11	-17 40.8	1.896	2.793	11.7	21.2
<b>219541</b>	2001 <i>QZ</i> <sub>249</sub>		7 19.8	310°66	3°2/21.6	18	<b>514515</b>	2016 <i>WR</i> <sub>44</sub>		7 19.8	124°08	2°8/21.2	18
6 10	20 18.72	- 9 0.5	1.432	2.255	19.0	19.6	6 10	20 21.46	-11 58.7	2.462	3.251	13.0	21.6
6 20	20 17.12	- 9 33.7	1.330	2.229	15.8	19.3	6 20	20 17.53	-11 42.0	2.375	3.254	10.5	21.4
6 30	20 12.67	-10 30.9	1.245	2.204	11.7	19.0	6 30	20 11.84	-11 33.7	2.309	3.257	7.7	21.2
7 10	20 5.73	-11 52.3	1.182	2.179	7.1	18.7	7 10	20 4.84	-11 33.5	2.269	3.260	4.8	21.1
7 20	19 57.05	-13 34.5	1.142	2.154	3.3	18.4	7 20	19 57.11	-11 40.6	2.255	3.262	2.8	20.9
7 30	19 47.82	-15 30.1	1.127	2.130	5.8	18.5	7 30	19 49.38	-11 53.6	2.269	3.265	4.1	21.0
8 9	19 39.49	-17 29.5	1.136	2.106	10.9	18.7	8 9	19 42.40	-12 10.4	2.311	3.268	7.0	21.2
8 19	19 33.35	-19 23.5	1.168	2.083	15.9	18.9	8 19	19 36.76	-12 29.2	2.378	3.271	9.8	21.4
<b>140758</b>	2001 <i>UA</i> <sub>119</sub>		7 19.8	257°55	0°8/19.3	18	<b>143210</b>	2002 <i>XE</i> <sub>107</sub>		7 19.8	250°27	2°1/20.5	18
6 10	20 22.58	-21 7.5	2.216	3.033	13.4	20.7	6 10	20 25.87	-15 34.6	1.764	2.577	16.4	20.3
6 20	20 18.86	-21 32.4	2.124	3.026	10.6	20.5	6 20	20 21.97	-15 18.3	1.671	2.567	13.3	20.0
6 30	20 13.02	-22 3.1	2.053	3.019	7.3	20.3	6 30	20 15.47	-15 10.7	1.598	2.557	9.5	19.8
7 10	20 5.53	-22 36.9	2.008	3.012	3.7	20.1	7 10	20 6.89	-15 11.1	1.548	2.547	5.4	19.5
7 20	19 57.06	-23 10.3	1.989	3.004	0.9	19.8	7 20	19 57.06	-15 17.8	1.523	2.537	2.2	19.3
7 30	19 48.51	-23 40.2	1.998	2.997	4.2	20.1	7 30	19 47.08	-15 28.7	1.526	2.526	5.0	19.4
8 9	19 40.78	-24 3.9	2.034	2.990	7.9	20.3	8 9	19 38.15	-15 41.3	1.553	2.516	9.3	19.7
8 19	19 34.65	-24 20.6	2.095	2.982	11.2	20.5	8 19	19 31.21	-15 53.8	1.605	2.505	13.3	19.9
<b>227288</b>	2005 <i>SS</i> <sub>179</sub>		7 19.8	298°50	0°5/19.9	18	<b>24160</b>	1999 <i>VS</i> <sub>207</sub>		7 19.8	29°47	2°4/19.0	17
6 10	20 22.60	-17 51.4	1.538	2.372	17.4	21.2	6 10	20 24.87	-24 7.3	1.236	2.092	19.6	18.4
6 20	20 20.00	-18 2.5	1.440	2.350	14.1	20.9	6 20	20 22.13	-24 29.5	1.176	2.099	15.5	18.2
6 30	20 14.51	-18 24.5	1.361	2.329	10.0	20.7	6 30	20 15.99	-24 57.7	1.133	2.107	10.7	18.0
7 10	20 6.58	-18 55.3	1.304	2.308	5.2	20.3	7 10	20 7.22	-25 26.3	1.111	2.116	5.6	17.7
7 20	19 57.04	-19 31.4	1.271	2.287	0.5	19.9	7 20	19 57.05	-25 49.6	1.112	2.126	2.5	17.5
7 30	19 47.14	-20 8.0	1.263	2.266	5.4	20.2	7 30	19 47.09	-26 2.9	1.136	2.136	6.6	17.8
8 9	19 38.28	-20 41.1	1.280	2.246	10.5	20.5	8 9	19 38.87	-26 4.2	1.184	2.146	11.4	18.1
8 19	19 31.67	-21 7.9	1.319	2.225	15.1	20.7	8 19	19 33.48	-25 54.4	1.252	2.158	15.8	18.4
<b>521047</b>	2015 <i>DG</i> <sub>236</sub>		7 19.8	49°51	0°8/20.1	17	<b>99734</b>	2002 <i>JN</i> <sub>61</sub>		7 19.8	15°43	1°7/20.4	18
6 10	20 25.53	-18 45.6	1.529	2.360	17.7	21.3	6 10	20 20.64	-15 17.7	1.163	2.016	20.7	19.0
6 20	20 21.81	-18 36.1	1.462	2.370	14.1	21.1	6 20	20 18.85	-15 26.9	1.099	2.019	16.7	18.7
6 30	20 15.32	-18 34.5	1.414	2.381	9.8	20.9	6 30	20 13.80	-15 52.1	1.051	2.023	11.8	18.5
7 10	20 6.73	-18 38.6	1.388	2.392	5.1	20.6	7 10	20 6.17	-16 30.9	1.023	2.027	6.4	18.2
7 20	19 57.04	-18 45.6	1.387	2.403	0.8	20.3	7 20	19 57.07	-17 18.6	1.018	2.033	1.7	17.9
7 30	19 47.53	-18 52.8	1.412	2.415	5.0	20.7	7 30	19 48.02	-18 9.1	1.035	2.040	5.8	18.2
8 9	19 39.41	-18 58.2	1.462	2.426	9.5	21.0	8 9	19 40.55	-18 56.6	1.075	2.047	11.2	18.5
8 19	19 33.58	-19 0.6	1.534	2.438	13.5	21.2	8 19	19 35.76	-19 37.2	1.135	2.055	15.9	18.8
<b>439349</b>	2012 <i>XR</i> <sub>57</sub>		7 19.8	280°62	5°4/21.8	18	<b>390125</b>						

EPHEMERIDES

7 19.8

7 19.8

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>478326</b>	2011 <i>WS</i> <sub>97</sub>	7 19.8 166°05		1°2/20.4 18			<b>324875</b>	2007 <i>TW</i> <sub>293</sub>	7 19.8 235°96		3°4/21.1 17		
6 10	20 22.30	-16 3.2	2.576	3.372	12.3	22.0	6 10	20 25.77	-12 26.6	1.624	2.435	17.7	21.7
6 20	20 18.15	-16 5.3	2.487	3.375	9.8	21.9	6 20	20 22.10	-12 10.8	1.535	2.428	14.5	21.5
6 30	20 12.25	-16 14.1	2.421	3.377	6.9	21.7	6 30	20 15.70	-12 7.6	1.465	2.420	10.6	21.2
7 10	20 5.05	-16 28.1	2.380	3.380	3.8	21.5	7 10	20 7.09	-12 16.7	1.417	2.412	6.4	21.0
7 20	19 57.12	-16 45.8	2.367	3.381	1.2	21.3	7 20	19 57.13	-12 36.6	1.394	2.404	3.4	20.8
7 30	19 49.18	-17 5.1	2.383	3.383	3.5	21.5	7 30	19 47.01	-13 4.5	1.397	2.396	5.6	20.9
8 9	19 41.97	-17 24.0	2.426	3.384	6.6	21.7	8 9	19 37.99	-13 36.9	1.425	2.387	9.9	21.1
8 19	19 36.08	-17 41.2	2.495	3.386	9.5	21.9	8 19	19 31.10	-14 10.3	1.475	2.378	14.0	21.3
<b>392560</b>	2011 <i>SD</i> <sub>74</sub>	7 19.8 35°24		1°9/20.5 18			<b>48295</b>	2002 <i>KW</i> <sub>6</sub>	7 19.8 44°04		3°5/22.3 18		
6 10	20 24.20	-16 36.6	1.826	2.642	15.8	20.3	6 10	20 23.69	-2 49.6	1.160	1.971	23.3	18.1
6 20	20 20.33	-16 12.2	1.748	2.647	12.7	20.1	6 20	20 21.05	-4 35.3	1.104	1.993	19.1	17.9
6 30	20 14.09	-15 54.9	1.691	2.652	9.0	19.9	6 30	20 15.19	-6 57.6	1.065	2.016	14.0	17.7
7 10	20 6.07	-15 44.2	1.658	2.658	5.0	19.6	7 10	20 6.85	-9 50.9	1.047	2.040	8.4	17.4
7 20	19 57.09	-15 38.5	1.650	2.664	1.9	19.4	7 20	19 57.14	-13 3.1	1.053	2.065	3.7	17.2
7 30	19 48.20	-15 36.5	1.669	2.670	4.6	19.6	7 30	19 47.56	-16 17.4	1.087	2.090	5.9	17.4
8 9	19 40.41	-15 36.4	1.714	2.677	8.5	19.9	8 9	19 39.59	-19 18.1	1.146	2.116	10.9	17.8
8 19	19 34.53	-15 36.9	1.783	2.683	12.1	20.1	8 19	19 34.31	-21 54.7	1.229	2.142	15.5	18.2
<b>479862</b>	2014 <i>GA</i> <sub>36</sub>	7 19.8 280°11		0°7/19.4 18			<b>206523</b>	2003 <i>UT</i> <sub>145</sub>	7 19.8 236°49		4°2/21.9 18		
6 10	20 22.48	-20 5.4	1.998	2.819	14.5	21.1	6 10	20 22.92	-7 44.9	2.322	3.096	14.1	20.9
6 20	20 19.08	-20 33.9	1.904	2.809	11.5	20.8	6 20	20 18.95	-7 25.9	2.220	3.085	11.7	20.7
6 30	20 13.36	-21 10.3	1.832	2.798	8.0	20.6	6 30	20 13.03	-7 18.2	2.138	3.073	9.0	20.5
7 10	20 5.79	-21 51.5	1.783	2.788	4.0	20.4	7 10	20 5.57	-7 22.5	2.080	3.060	6.1	20.3
7 20	19 57.10	-22 33.6	1.761	2.777	0.7	20.1	7 20	19 57.17	-7 38.5	2.048	3.047	4.3	20.2
7 30	19 48.25	-23 12.5	1.767	2.767	4.5	20.3	7 30	19 48.63	-8 4.5	2.044	3.034	5.2	20.2
8 9	19 40.28	-23 45.2	1.798	2.756	8.6	20.6	8 9	19 40.77	-8 38.2	2.067	3.020	8.0	20.3
8 19	19 34.07	-24 9.9	1.854	2.746	12.2	20.8	8 19	19 34.33	-9 16.4	2.116	3.006	11.0	20.5
<b>34116</b>	2000 <i>PW</i> <sub>26</sub>	7 19.8 305°66		2°4/20.7 18			<b>192800</b>	1999 <i>VZ</i> <sub>3</sub>	7 19.8 238°08		3°2/17.9 18		
6 10	20 23.52	-14 39.4	2.187	2.987	14.0	17.9	6 10	20 26.86	-27 50.3	2.337	3.151	12.9	21.1
6 20	20 19.43	-14 11.1	2.097	2.985	11.3	17.7	6 20	20 22.38	-28 35.2	2.237	3.136	10.3	20.9
6 30	20 13.31	-13 49.7	2.029	2.983	8.2	17.5	6 30	20 15.58	-29 22.8	2.159	3.121	7.3	20.7
7 10	20 5.64	-13 34.9	1.985	2.981	4.8	17.3	7 10	20 6.94	-30 8.6	2.107	3.105	4.4	20.5
7 20	19 57.10	-13 26.1	1.968	2.979	2.5	17.1	7 20	19 57.14	-30 47.8	2.083	3.088	3.3	20.4
7 30	19 48.57	-13 22.3	1.979	2.978	4.4	17.2	7 30	19 47.14	-31 16.6	2.086	3.071	5.6	20.5
8 9	19 40.89	-13 22.0	2.017	2.976	7.7	17.4	8 9	19 37.96	-31 32.9	2.117	3.053	8.8	20.6
8 19	19 34.79	-13 23.8	2.079	2.974	10.9	17.6	8 19	19 30.48	-31 36.7	2.172	3.035	11.8	20.8
<b>382108</b>	2011 <i>HO</i> <sub>3</sub>	7 19.8 130°29		6°4/16.1 17			<b>431021</b>	2005 <i>YH</i> <sub>148</sub>	7 19.8 63°76		1°6/19.3 16		
6 10	20 28.99	-33 36.7	1.914	2.737	14.9	21.6	6 10	20 29.95	-24 12.9	1.608	2.436	17.1	21.0
6 20	20 24.60	-35 3.5	1.846	2.745	12.1	21.5	6 20	20 25.01	-24 20.0	1.555	2.463	13.4	20.8
6 30	20 17.36	-36 29.8	1.800	2.753	9.1	21.3	6 30	20 17.32	-24 30.2	1.522	2.490	9.2	20.6
7 10	20 7.86	-37 47.6	1.779	2.761	6.9	21.2	7 10	20 7.66	-24 39.5	1.513	2.517	4.7	20.4
7 20	19 57.06	-38 49.7	1.784	2.768	6.6	21.2	7 20	19 57.13	-24 44.3	1.529	2.543	1.6	20.3
7 30	19 46.24	-39 30.7	1.815	2.775	8.5	21.3	7 30	19 47.02	-24 42.2	1.571	2.570	5.2	20.6
8 9	19 36.70	-39 49.4	1.871	2.781	11.2	21.5	8 9	19 38.47	-24 32.5	1.640	2.596	9.3	20.9
8 19	19 29.46	-39 47.7	1.949	2.788	14.0	21.7	8 19	19 32.28	-24 16.3	1.731	2.623	12.9	21.1
<b>37134</b>	2000 <i>VA</i> <sub>32</sub>	7 19.8 288°94		4°5/21.9 18			<b>253842</b>	2003 <i>YZ</i> <sub>119</sub>	7 19.8 213°76		1°9/19.0 17		
6 10	20 20.70	-8 3.6	2.222	3.005	14.4	18.7	6 10	20 28.60	-23 46.1	1.847	2.667	15.5	22.2
6 20	20 17.26	-7 36.4	2.124	2.994	11.9	18.5	6 20	20 24.16	-24 11.4	1.758	2.662	12.3	22.0
6 30	20 11.87	-7 20.5	2.047	2.984	9.2	18.3	6 30	20 17.02	-24 41.7	1.690	2.655	8.6	21.7
7 10	20 4.96	-7 16.5	1.992	2.973	6.3	18.1	7 10	20 7.72	-25 12.8	1.645	2.649	4.5	21.5
7 20	19 57.13	-7 24.4	1.964	2.962	4.5	18.0	7 20	19 57.13	-25 40.1	1.628	2.641	1.9	21.3
7 30	19 49.19	-7 43.0	1.962	2.952	5.4	18.1	7 30	19 46.44	-25 59.8	1.637	2.634	5.4	21.5
8 9	19 41.98	-8 9.9	1.987	2.941	8.1	18.2	8 9	19 36.87	-26 9.6	1.673	2.625	9.5	21.7
8 19	19 36.21	-8 42.2	2.037	2.931	11.1	18.4	8 19	19 29.41	-26 9.5	1.732	2.616	13.3	22.0
<b>390364</b>	2013 <i>EF</i> <sub>46</sub>	7 19.8 335°66		4°4/18.0 18			<b>151692</b>	2003 <i>AU</i> <sub>53</sub>	7 19.8 277°72		2°9/18.8 18		
6 10	20 25.24	-31 54.5	1.981	2.809	14.3	20.5	6 10	20 27.57	-26 26.7	1.657	2.489	16.4	20.4
6 20	20 21.39	-32 18.6	1.897	2.802	11.5	20.3	6 20	20 23.81	-26 45.6	1.565	2.475	13.2	20.1
6 30	20 14.98	-32 40.7	1.835	2.796	8.4	20.1	6 30	20 17.05	-27 7.3	1.492	2.460	9.3	19.8
7 10	20 6.59	-32 56.1	1.796	2.790	5.5	19.9	7 10	20 7.85	-27 27.2	1.443	2.446	5.2	19.6
7 20	19 57.10	-33 0.5	1.783	2.784	4.5	19.9	7 20	19 57.13	-27 40.3	1.419	2.431	2.9	19.4
7 30	19 47.63	-32 51.0	1.796	2.779	6.6	20.0	7 30	19 46.24	-27 42.6	1.421	2.416	6.2	19.6
8 9	19 39.34	-32 27.4	1.835	2.774	9.7	20.2	8 9	19 36.60	-27 32.6	1.448	2.402	10.6	19.8
8 19	19 33.08	-31 51.7	1.897	2.770	12.8	20.4	8 19	19 29.32	-27 11.4	1.497	2.387	14.7	20.0
<b>145321</b>	2005 <i>LU</i> <sub>18</sub>	7 19.8 341°32		2°3/21.0 18			<b>38092</b>	1999 <i>JF</i> <sub>5</sub>	7 19.8 10°53		9°1/16.7 18		
6 10	20 20.65	-12 37.6	1.913	2.722	15.4	20.2	6 10	20 25.53	-34 56.1	1.121	1.987	20.5	18.8
6 20	20 17.56	-12 48.3	1.826	2.719	12.5	20.0	6 20	20 23.68	-36 15.3	1.065	1.988	16.8	18.5
6 30	20 12.25	-13 11.5	1.760	2.717	9.0	19.8	6 30	20 17.69	-37 32.1	1.026	1.990	12.9	18.3
7 10	20 5.20	-13 46.0	1.718	2.715	5.2	19.6	7 10	20 8.36	-38 34.8	1.006	1.993	9.9	18.2
7 20	19 57.14	-14 29.1	1.701	2.713	2.3	19.4	7 20	19 57.13	-39 12.7	1.007	1.997	9.3	18.1
7 30	19 49.01	-15 17.2	1.710	2.711	4.5	19.5	7 30	19 46.08	-39 19.4	1.030	2.002	11.7	18.3
8 9	19 41.78	-16 6.4	1.746	2.710	8.3	19.8	8 9	19 37.22	-38 55.4	1.073	2.008	15.4	18.5
8 19	19 36.25	-16 53.2	1.806	2.709	11.9	20.0	8 19	19 31.87	-38 6.6	1.134	2.015	19.0	18.8
<b>81565</b>	2000 <i>HS</i> <sub>32</sub>	7 19.8 333°78		1°1/19.3 18			<b>96647</b>	1999 <i>GX</i> <sub>35</sub>	7 19.8 54°61		3°8/21.2 17		
6 10	20 22.73												

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>375782</b>	2009 <i>SE</i> <sub>285</sub>		7 19.8 237°07	5°2/17.8	18		<b>185238</b>	2006 <i>UK</i> <sub>3</sub>		7 19.8 281°17	0°9/20.2	18	
6 10	20 30.00	-32 1.7	1.756	2.584	15.9	21.0	6 10	20 24.43	-16 47.9	1.615	2.440	17.1	21.3
6 20	20 25.63	-32 42.3	1.674	2.578	12.8	20.8	6 20	20 21.39	-16 59.7	1.513	2.417	13.9	21.0
6 30	20 18.22	-33 22.2	1.612	2.572	9.4	20.6	6 30	20 15.50	-17 23.1	1.429	2.394	9.9	20.7
7 10	20 8.39	-33 54.7	1.573	2.566	6.3	20.4	7 10	20 7.18	-17 56.3	1.368	2.371	5.3	20.4
7 20	19 57.15	-34 13.7	1.560	2.559	5.3	20.3	7 20	19 57.23	-18 35.8	1.332	2.348	0.9	20.0
7 30	19 45.87	-34 15.1	1.573	2.552	7.6	20.5	7 30	19 46.86	-19 17.1	1.322	2.324	5.2	20.3
8 9	19 35.98	-33 58.4	1.610	2.545	11.1	20.7	8 9	19 37.46	-19 55.8	1.336	2.300	10.2	20.5
8 19	19 28.53	-33 25.9	1.670	2.538	14.5	20.9	8 19	19 30.20	-20 29.0	1.373	2.276	14.8	20.7
<b>340559</b>	2006 <i>KN</i> <sub>66</sub>		7 19.8 226°38	5°4/16.5	18		<b>496418</b>	2014 <i>CY</i> <sub>13</sub>		7 19.8 189°84	13°6/28.2	18	
6 10	20 26.58	-31 45.1	2.065	2.889	14.0	21.2	6 10	20 27.70	+12 36.1	1.514	2.211	23.3	22.0
6 20	20 22.58	-33 2.6	1.982	2.883	11.3	21.0	6 20	20 23.85	+13 14.1	1.432	2.211	21.1	21.8
6 30	20 15.96	-34 21.7	1.921	2.878	8.4	20.8	6 30	20 17.08	+13 19.8	1.363	2.210	18.6	21.6
7 10	20 7.22	-35 35.8	1.885	2.872	6.0	20.6	7 10	20 7.90	+12 46.1	1.310	2.208	16.1	21.5
7 20	19 57.18	-36 37.9	1.875	2.866	5.6	20.6	7 20	19 57.22	+11 29.3	1.277	2.205	14.2	21.4
7 30	19 46.96	-37 23.0	1.893	2.860	7.6	20.7	7 30	19 46.30	+9 30.9	1.266	2.201	13.6	21.3
8 9	19 37.76	-37 48.6	1.935	2.853	10.5	20.9	8 9	19 36.54	+6 59.3	1.279	2.196	14.8	21.4
8 19	19 30.58	-37 55.7	2.000	2.847	13.4	21.1	8 19	19 29.05	+4 6.9	1.314	2.190	17.2	21.5
<b>445428</b>	2010 <i>UV</i> <sub>21</sub>		7 19.8 226°25	9°6/25.8	18		<b>370374</b>	2002 <i>TB</i> <sub>49</sub>		7 19.8 281°87	3°7/18.3	18	
6 10	20 20.63	+12 23.7	2.913	3.558	14.0	21.2	6 10	20 27.38	-26 55.7	1.653	2.486	16.4	21.1
6 20	20 16.74	+13 31.4	2.818	3.551	12.8	21.1	6 20	20 23.95	-27 33.9	1.551	2.461	13.3	20.8
6 30	20 11.29	+14 23.2	2.742	3.543	11.5	20.9	6 30	20 17.41	-28 17.0	1.469	2.436	9.5	20.5
7 10	20 4.64	+14 56.0	2.685	3.535	10.4	20.8	7 10	20 8.21	-28 59.5	1.410	2.410	5.5	20.2
7 20	19 57.26	+15 7.4	2.651	3.526	9.7	20.8	7 20	19 57.21	-29 35.0	1.375	2.385	3.8	20.0
7 30	19 49.76	+14 56.8	2.641	3.517	9.6	20.8	7 30	19 45.79	-29 57.6	1.367	2.358	7.0	20.2
8 9	19 42.79	+14 25.6	2.654	3.508	10.3	20.8	8 9	19 35.47	-30 4.6	1.383	2.332	11.4	20.3
8 19	19 36.91	+13 37.0	2.690	3.499	11.4	20.9	8 19	19 27.53	-29 56.3	1.421	2.305	15.6	20.5
<b>53445</b>	1999 <i>XB</i> <sub>103</sub>		7 19.8 76°41	4°1/17.6	18		<b>141890</b>	2002 <i>PD</i> <sub>55</sub>		7 19.8 315°52	2°2/20.6	17	
6 10	20 28.14	-24 41.1	1.512	2.348	17.6	18.4	6 10	20 20.10	-15 27.6	1.292	2.138	19.5	19.7
6 20	20 24.19	-26 13.3	1.457	2.369	13.8	18.2	6 20	20 18.56	-15 19.1	1.198	2.114	15.9	19.4
6 30	20 17.19	-27 52.7	1.422	2.390	9.6	18.0	6 30	20 13.87	-15 23.7	1.122	2.091	11.5	19.1
7 10	20 7.83	-29 30.8	1.411	2.411	5.6	17.8	7 10	20 6.48	-15 40.9	1.066	2.069	6.5	18.7
7 20	19 57.19	-30 58.6	1.425	2.432	4.3	17.8	7 20	19 57.25	-16 8.5	1.032	2.047	2.2	18.4
7 30	19 46.70	-32 8.6	1.466	2.452	7.3	18.0	7 30	19 47.60	-16 42.3	1.022	2.026	6.0	18.6
8 9	19 37.72	-32 57.8	1.532	2.473	11.1	18.3	8 9	19 39.12	-17 17.8	1.034	2.006	11.5	18.8
8 19	19 31.28	-33 26.6	1.619	2.493	14.6	18.6	8 19	19 33.15	-17 50.8	1.066	1.986	16.7	19.0
<b>93516</b>	2000 <i>TA</i> <sub>63</sub>		7 19.8 229°73	1°1/19.3	18		<b>461851</b>	2006 <i>FT</i> <sub>29</sub>		7 19.8 36°84	3°3/18.7	17	
6 10	20 25.58	-21 42.7	2.089	2.904	14.1	20.6	6 10	20 25.69	-24 55.5	1.158	2.018	20.4	21.1
6 20	20 21.46	-22 10.8	1.994	2.895	11.2	20.4	6 20	20 23.07	-25 33.5	1.101	2.027	16.1	20.8
6 30	20 15.00	-22 45.1	1.921	2.886	7.8	20.2	6 30	20 16.84	-26 17.8	1.061	2.037	11.2	20.6
7 10	20 6.68	-23 22.2	1.872	2.876	4.0	19.9	7 10	20 7.79	-27 1.7	1.042	2.047	6.1	20.3
7 20	19 57.22	-23 58.4	1.851	2.866	1.2	19.7	7 20	19 57.23	-27 37.6	1.046	2.058	3.4	20.2
7 30	19 47.62	-24 29.6	1.857	2.855	4.6	19.9	7 30	19 46.91	-27 59.8	1.073	2.070	7.3	20.5
8 9	19 38.91	-24 53.4	1.890	2.844	8.5	20.1	8 9	19 38.48	-28 6.2	1.122	2.082	12.2	20.8
8 19	19 31.96	-25 8.8	1.948	2.833	12.0	20.3	8 19	19 33.06	-27 58.2	1.191	2.095	16.5	21.1
<b>477891</b>	2011 <i>JH</i> <sub>22</sub>		7 19.8 3°42	8°3/24.1	16		<b>440954</b>	2007 <i>BF</i> <sub>15</sub>		7 19.8 294°10	2°3/18.8	18	
6 10	20 16.24	-1 43.5	1.340	2.146	21.0	20.8	6 10	20 25.26	-27 14.2	2.229	3.048	13.2	20.7
6 20	20 14.89	-1 12.3	1.268	2.145	17.9	20.6	6 20	20 21.00	-27 25.0	2.141	3.043	10.5	20.5
6 30	20 10.85	-1 5.7	1.213	2.145	14.5	20.4	6 30	20 14.53	-27 36.5	2.075	3.039	7.4	20.3
7 10	20 4.68	-1 26.5	1.176	2.146	11.0	20.2	7 10	20 6.37	-27 45.2	2.034	3.035	4.1	20.1
7 20	19 57.26	-2 15.1	1.160	2.148	8.6	20.1	7 20	19 57.28	-27 48.2	2.019	3.030	2.4	20.0
7 30	19 49.79	-3 27.8	1.167	2.152	8.9	20.1	7 30	19 48.19	-27 43.1	2.033	3.026	4.9	20.2
8 9	19 43.51	-4 57.3	1.196	2.157	11.6	20.3	8 9	19 40.08	-27 29.3	2.073	3.022	8.2	20.4
8 19	19 39.39	-6 34.9	1.246	2.163	15.0	20.5	8 19	19 33.70	-27 7.6	2.138	3.018	11.3	20.5
<b>355914</b>	2008 <i>XR</i> <sub>48</sub>		7 19.8 239°78	1°2/19.2	18		<b>132164</b>	2002 <i>ED</i> <sub>10</sub>		7 19.8 10°36	19°8/19.7	17	
6 10	20 25.51	-22 14.6	2.343	3.152	13.0	22.2	6 10	20 44.18	-57 58.4	1.008	1.825	25.7	18.3
6 20	20 21.19	-22 43.7	2.240	3.137	10.3	22.0	6 20	20 41.32	-59 9.4	0.970	1.827	23.6	18.2
6 30	20 14.72	-23 18.3	2.158	3.121	7.2	21.8	6 30	20 31.10	-59 50.3	0.943	1.831	21.7	18.0
7 10	20 6.52	-23 55.2	2.102	3.105	3.7	21.5	7 10	20 15.21	-59 44.0	0.931	1.837	20.3	18.0
7 20	19 57.23	-24 30.7	2.074	3.088	1.3	21.3	7 20	19 57.12	-58 38.4	0.934	1.845	19.8	18.0
7 30	19 47.75	-25 1.4	2.074	3.071	4.4	21.5	7 30	19 41.02	-56 32.9	0.954	1.854	20.4	18.1
8 9	19 39.02	-25 25.0	2.102	3.053	7.9	21.7	8 9	19 29.90	-53 40.1	0.991	1.865	21.8	18.2
8 19	19 31.86	-25 40.4	2.154	3.034	11.2	21.9	8 19	19 24.66	-50 17.9	1.044	1.877	23.7	18.4
<b>137471</b>	1999 <i>UN</i> <sub>16</sub>		7 19.8 311°84	3°7/18.5	18		<b>6135</b>	Billowen		7 19.8 77°77	0°9/20.1	18	
6 10	20 23.38	-26 0.4	1.304	2.160	18.7	19.5	6 10	20 30.99	-20 18.3	1.539	2.362	17.9	16.7
6 20	20 21.42	-26 34.2	1.215	2.139	15.1	19.2	6 20	20 26.06	-19 46.6	1.472	2.376	14.3	16.5
6 30	20 15.99	-27 14.2	1.144	2.118	10.7	18.9	6 30	20 18.24	-19 19.7	1.425	2.390	10.0	16.3
7 10	20 7.58	-27 54.7	1.094	2.098	6.1	18.6	7 10	20 8.28	-18 55.9	1.401	2.404	5.2	16.1
7 20	19 57.21	-28 28.4	1.067	2.078	3.8	18.4	7 20	19 57.26	-18 33.8	1.402	2.418	0.9	15.8
7 30	19 46.47	-28 48.9	1.063	2.059	7.6	18.5	7 30	19 46.53	-18 12.1	1.430	2.432	5.0	16.1
8 9	19 37.13	-28 52.9	1.082	2.041	12.7	18.8	8 9	19 37.35	-17 50.6	1.483	2.446	9.6	16.4
8 19	19 30.63	-28 40.9	1.120	2.023	17.5	19.0	8 19	19 30.61	-17 29.2	1.560	2.460	13.6	16.7
<b>408550</b>	2013 <i>KW</i> <sub>5</sub>		7 19.8 13°66	4°5/17.9	17		<b>214687</b>	2006					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>61973</b>	2000 RY <sub>26</sub>		7 19.8 260°34	1.5°/20.5	18		<b>124981</b>	2001 TX <sub>126</sub>		7 19.8 115°97	4.3°/21.5	17	
6 10	20 23.58	-16 29.4	2.286	3.088	13.4	19.1	6 10	20 27.09	-10 31.3	1.477	2.287	19.2	20.9
6 20	20 19.52	-16 13.6	2.189	3.080	10.8	18.9	6 20	20 23.19	-10 10.7	1.406	2.296	15.7	20.7
6 30	20 13.45	-16 3.9	2.114	3.072	7.7	18.7	6 30	20 16.44	-10 5.2	1.353	2.305	11.6	20.5
7 10	20 5.83	-15 59.5	2.064	3.063	4.3	18.5	7 10	20 7.49	-10 15.0	1.322	2.313	7.3	20.3
7 20	19 57.31	-15 59.0	2.041	3.055	1.6	18.3	7 20	19 57.31	-10 38.5	1.314	2.321	4.4	20.1
7 30	19 48.72	-16 1.1	2.046	3.046	4.0	18.4	7 30	19 47.20	-11 12.4	1.332	2.329	6.1	20.2
8 9	19 40.93	-16 4.2	2.078	3.038	7.5	18.6	8 9	19 38.43	-11 52.3	1.374	2.337	10.2	20.5
8 19	19 34.66	-16 7.2	2.135	3.029	10.7	18.8	8 19	19 31.97	-12 34.1	1.439	2.344	14.2	20.7
<b>234359</b>	2001 KS <sub>64</sub>		7 19.8 113°02	2.9°/21.8	18		<b>133579</b>	2003 UC <sub>53</sub>		7 19.8 356°83	5.2°/21.2	18	
6 10	20 22.86	- 8 34.3	2.105	2.889	15.0	20.1	6 10	20 24.57	-11 4.3	1.664	2.470	17.5	19.1
6 20	20 19.00	- 9 5.7	2.025	2.900	12.3	19.9	6 20	20 20.94	-10 1.0	1.582	2.469	14.4	18.9
6 30	20 13.10	- 9 52.3	1.966	2.910	9.0	19.7	6 30	20 14.75	- 9 7.3	1.520	2.467	10.9	18.7
7 10	20 5.65	-10 52.5	1.930	2.921	5.6	19.5	7 10	20 6.60	- 8 25.1	1.480	2.467	7.4	18.4
7 20	19 57.32	-12 3.1	1.922	2.931	3.0	19.4	7 20	19 57.33	- 7 55.6	1.465	2.466	5.2	18.3
7 30	19 48.98	-13 19.7	1.942	2.941	4.4	19.5	7 30	19 48.06	- 7 39.0	1.475	2.466	6.6	18.4
8 9	19 41.50	-14 37.2	1.990	2.950	7.7	19.7	8 9	19 39.92	- 7 33.8	1.510	2.467	10.0	18.6
8 19	19 35.59	-15 51.5	2.063	2.960	10.9	19.9	8 19	19 33.80	- 7 37.6	1.568	2.468	13.5	18.8
<b>183736</b>	2003 YT <sub>112</sub>		7 19.8 282°56	2.3°/19.0	18		<b>396825</b>	2004 RD <sub>91</sub>		7 19.8 326°04	5.0°/21.6	17	
6 10	20 26.59	-24 10.7	1.515	2.353	17.4	20.9	6 10	20 19.30	- 9 32.1	1.806	2.613	16.3	20.5
6 20	20 23.37	-24 33.3	1.423	2.337	14.0	20.6	6 20	20 16.79	- 8 50.3	1.706	2.592	13.6	20.3
6 30	20 17.00	-25 1.8	1.350	2.320	9.8	20.3	6 30	20 11.96	- 8 19.7	1.625	2.571	10.4	20.1
7 10	20 7.99	-25 31.8	1.299	2.303	5.2	20.0	7 10	20 5.25	- 8 1.6	1.566	2.551	7.2	19.8
7 20	19 57.28	-25 57.7	1.272	2.286	2.4	19.8	7 20	19 57.35	- 7 56.8	1.531	2.532	5.1	19.7
7 30	19 46.29	-26 14.6	1.271	2.269	6.3	20.0	7 30	19 49.24	- 8 4.7	1.521	2.514	6.3	19.7
8 9	19 36.56	-26 19.8	1.293	2.252	11.1	20.2	8 9	19 41.96	- 8 23.0	1.536	2.496	9.6	19.8
8 19	19 29.31	-26 13.4	1.338	2.235	15.6	20.4	8 19	19 36.41	- 8 48.6	1.574	2.479	13.2	20.0
<b>167318</b>	2003 UO <sub>252</sub>		7 19.8 181°44	3.2°/18.2	18		<b>397081</b>	2005 UG <sub>260</sub>		7 19.8 3°07	5.1°/16.9	18	
6 10	20 25.40	-27 7.3	1.992	2.818	14.3	20.1	6 10	20 23.62	-31 41.1	2.026	2.856	14.0	20.7
6 20	20 21.47	-27 50.2	1.912	2.818	11.4	19.9	6 20	20 20.17	-32 42.5	1.950	2.856	11.2	20.5
6 30	20 15.06	-28 35.9	1.853	2.818	8.0	19.7	6 30	20 14.23	-33 44.3	1.896	2.856	8.3	20.3
7 10	20 6.74	-29 19.6	1.818	2.818	4.7	19.5	7 10	20 6.34	-34 40.3	1.866	2.856	5.8	20.2
7 20	19 57.32	-29 56.3	1.810	2.818	3.3	19.4	7 20	19 57.34	-35 25.0	1.862	2.857	5.2	20.2
7 30	19 47.86	-30 22.0	1.829	2.818	5.8	19.5	7 30	19 48.30	-35 54.0	1.885	2.858	7.2	20.3
8 9	19 39.47	-30 34.8	1.874	2.817	9.3	19.7	8 9	19 40.33	-36 5.9	1.932	2.859	10.0	20.5
8 19	19 33.02	-30 35.1	1.942	2.817	12.5	19.9	8 19	19 34.33	-36 1.5	2.002	2.860	12.9	20.6
<b>452504</b>	2004 RF <sub>91</sub>		7 19.8 340°56	13.2°/28.2	16		<b>206991</b>	2004 TZ <sub>165</sub>		7 19.8 125°55	2.9°/18.8	17	
6 10	20 11.35	+ 9 36.9	1.485	2.235	21.7	21.0	6 10	20 32.87	-26 9.0	1.632	2.456	17.0	20.7
6 20	20 11.02	+10 22.5	1.389	2.208	19.8	20.7	6 20	20 27.67	-26 38.7	1.565	2.470	13.5	20.5
6 30	20 8.28	+10 38.4	1.308	2.182	17.6	20.5	6 30	20 19.47	-27 11.3	1.519	2.484	9.4	20.3
7 10	20 3.50	+10 17.4	1.242	2.159	15.4	20.3	7 10	20 8.98	-27 41.1	1.496	2.497	5.2	20.1
7 20	19 57.37	+ 9 14.9	1.195	2.136	13.7	20.1	7 20	19 57.30	-28 3.0	1.499	2.510	3.0	20.0
7 30	19 50.91	+ 7 30.2	1.167	2.116	13.2	20.0	7 30	19 45.84	-28 13.0	1.529	2.522	6.1	20.2
8 9	19 45.30	+ 5 9.5	1.161	2.097	14.3	20.0	8 9	19 35.93	-28 10.3	1.584	2.534	10.2	20.5
8 19	19 41.61	+ 2 23.4	1.176	2.081	16.7	20.1	8 19	19 28.53	-27 56.4	1.662	2.544	13.9	20.7
<b>443696</b>	2015 KD <sub>107</sub>		7 19.8 343°38	1.3°/19.2	18		<b>198034</b>	2004 RW <sub>244</sub>		7 19.8 7°58	1.6°/19.2	17	
6 10	20 22.75	-20 41.1	1.850	2.677	15.2	21.0	6 10	20 22.48	-22 23.6	1.378	2.227	18.3	20.2
6 20	20 19.48	-21 23.8	1.768	2.676	12.1	20.8	6 20	20 20.04	-22 46.0	1.307	2.228	14.5	19.9
6 30	20 13.76	-22 15.1	1.706	2.675	8.3	20.6	6 30	20 14.54	-23 15.9	1.256	2.229	10.0	19.7
7 10	20 6.12	-23 11.0	1.669	2.674	4.2	20.3	7 10	20 6.63	-23 48.9	1.225	2.231	5.2	19.4
7 20	19 57.33	-24 6.4	1.658	2.673	1.3	20.1	7 20	19 57.35	-24 19.6	1.219	2.234	1.7	19.2
7 30	19 48.46	-24 56.4	1.673	2.672	4.9	20.4	7 30	19 48.10	-24 43.4	1.237	2.238	5.9	19.5
8 9	19 40.60	-25 37.5	1.715	2.671	9.0	20.6	8 9	19 40.31	-24 57.4	1.278	2.242	10.7	19.8
8 19	19 34.64	-26 7.9	1.780	2.671	12.6	20.8	8 19	19 35.00	-25 1.1	1.341	2.247	14.9	20.0
<b>41859</b>	2000 WD <sub>95</sub>		7 19.8 238°63	6.2°/16.3	18		<b>179542</b>	2002 CC <sub>263</sub>		7 19.8 123°47	2.3°/18.1	18	
6 10	20 26.59	-32 4.0	1.819	2.650	15.3	19.3	6 10	20 23.81	-24 53.0	2.618	3.428	11.7	20.1
6 20	20 22.96	-33 29.5	1.744	2.649	12.3	19.1	6 20	20 19.51	-25 53.1	2.542	3.441	9.2	19.9
6 30	20 16.44	-34 56.8	1.690	2.648	9.2	18.9	6 30	20 13.33	-26 56.9	2.490	3.452	6.4	19.8
7 10	20 7.58	-36 17.9	1.660	2.647	6.7	18.7	7 10	20 5.75	-28 0.3	2.464	3.464	3.6	19.6
7 20	19 57.30	-37 25.0	1.656	2.645	6.4	18.7	7 20	19 57.37	-28 59.0	2.466	3.475	2.4	19.5
7 30	19 46.89	-38 12.0	1.678	2.644	8.5	18.8	7 30	19 48.97	-29 49.4	2.498	3.486	4.6	19.7
8 9	19 37.69	-38 36.7	1.724	2.643	11.5	19.0	8 9	19 41.33	-30 29.2	2.558	3.496	7.3	19.9
8 19	19 30.78	-38 40.6	1.792	2.642	14.5	19.2	8 19	19 35.12	-30 57.9	2.642	3.506	9.9	20.1
<b>339407</b>	2005 CX <sub>49</sub>		7 19.8 345°98	1.8°/19.3	17		<b>308325</b>	2005 NS <sub>4</sub>		7 19.8 284°74	0.6°/20.2	18	
6 10	20 27.84	-25 49.6	1.851	2.675	15.3	19.9	6 10	20 21.07	-15 37.0	2.116	2.927	14.1	20.8
6 20	20 23.43	-25 47.3	1.768	2.674	12.2	19.7	6 20	20 17.86	-16 11.1	2.018	2.915	11.3	20.5
6 30	20 16.41	-25 46.2	1.707	2.673	8.5	19.5	6 30	20 12.52	-16 56.4	1.942	2.903	8.0	20.3
7 10	20 7.41	-25 42.8	1.670	2.673	4.5	19.2	7 10	20 5.48	-17 50.6	1.889	2.891	4.2	20.1
7 20	19 57.31	-25 34.1	1.658	2.672	1.9	19.1	7 20	19 57.37	-18 50.1	1.864	2.880	0.6	19.8
7 30	19 47.29	-25 18.1	1.674	2.672	5.1	19.3	7 30	19 49.08	-19 50.7	1.866	2.868	4.1	20.0
8 9	19 38.50	-24 54.5	1.716	2.671	9.1	19.5	8 9	19 41.54	-20 48.1	1.895	2.856	8.0	20.2
8 19	19 31.81	-24 24.6	1.781	2.671	12.7	19.7	8 19	19 35.56	-21 39.3	1.950	2.845	11.5	20.4
<b>334335</b>	2001 XY <sub>145</sub>		7 19.8 202°66	1.2°/20.4	18		<b>509443</b>	2007 FO <sub>24</sub>		7 19.8 122°70	1.9°/18.7		

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>328152</b>	2008 <i>CE</i> <sub>65</sub>		7 19.8 148°79	2°0/20.8	17		<b>121834</b>	2000 <i>BZ</i> <sub>24</sub>		7 19.9 142°37	0°2/19.8	18	
6 10	20 27.25	-13 36.5	1.926	2.724	15.7	22.0	6 10	20 24.35	-21 47.4	2.583	3.388	12.0	19.9
6 20	20 22.70	-13 46.4	1.846	2.733	12.7	21.8	6 20	20 19.83	-21 40.9	2.496	3.391	9.5	19.8
6 30	20 15.79	-14 7.6	1.787	2.742	9.1	21.6	6 30	20 13.50	-21 37.1	2.431	3.393	6.6	19.6
7 10	20 7.09	-14 38.4	1.752	2.750	5.1	21.3	7 10	20 5.83	-21 34.3	2.393	3.396	3.3	19.4
7 20	19 57.38	-15 15.9	1.744	2.757	2.0	21.1	7 20	19 57.44	-21 30.8	2.383	3.399	0.3	19.1
7 30	19 47.69	-15 56.7	1.764	2.764	4.5	21.3	7 30	19 49.10	-21 25.1	2.401	3.401	3.5	19.4
8 9	19 39.04	-16 37.1	1.810	2.770	8.3	21.6	8 9	19 41.56	-21 16.5	2.448	3.404	6.7	19.6
8 19	19 32.24	-17 14.6	1.881	2.776	11.9	21.8	8 19	19 35.44	-21 4.8	2.520	3.406	9.6	19.8
<b>115117</b>	2003 <i>SQ</i> <sub>41</sub>		7 19.8 305°12	2°3/20.6	18		<b>400902</b>	2010 <i>RG</i> <sub>162</sub>		7 19.9 268°98	0°7/20.2	18	
6 10	20 23.92	-15 52.2	2.249	3.050	13.7	19.0	6 10	20 22.08	-17 24.0	2.303	3.110	13.2	21.7
6 20	20 19.85	-15 14.7	2.149	3.037	11.1	18.8	6 20	20 18.42	-17 30.5	2.205	3.100	10.6	21.5
6 30	20 13.73	-14 42.2	2.069	3.024	8.0	18.5	6 30	20 12.77	-17 44.0	2.130	3.091	7.4	21.3
7 10	20 6.03	-14 14.5	2.015	3.011	4.7	18.3	7 10	20 5.57	-18 2.9	2.079	3.081	3.9	21.1
7 20	19 57.40	-13 51.5	1.987	2.998	2.3	18.1	7 20	19 57.46	-18 25.1	2.056	3.071	0.7	20.8
7 30	19 48.68	-13 32.7	1.987	2.986	4.3	18.2	7 30	19 49.24	-18 47.9	2.060	3.061	3.8	21.1
8 9	19 40.77	-13 17.4	2.015	2.973	7.7	18.4	8 9	19 41.77	-19 9.2	2.091	3.052	7.4	21.3
8 19	19 34.38	-13 4.9	2.067	2.961	11.0	18.6	8 19	19 35.77	-19 27.3	2.148	3.042	10.7	21.4
<b>4499</b>	Davidallen		7 19.9 265°28	1°0/19.3	18		<b>179500</b>	2002 <i>CV</i> <sub>84</sub>		7 19.9 38°36	3°6/17.7	18	
6 10	20 23.53	-23 25.1	2.533	3.344	12.1	17.9	6 10	20 23.02	-27 27.5	2.081	2.909	13.7	19.7
6 20	20 19.42	-23 34.1	2.432	3.330	9.6	17.7	6 20	20 19.51	-28 25.9	2.006	2.913	10.9	19.5
6 30	20 13.38	-23 46.0	2.353	3.316	6.6	17.5	6 30	20 13.68	-29 27.4	1.953	2.918	7.7	19.3
7 10	20 5.84	-23 58.2	2.299	3.303	3.4	17.2	7 10	20 6.07	-30 26.7	1.925	2.923	4.7	19.2
7 20	19 57.41	-24 8.4	2.274	3.289	1.1	17.0	7 20	19 57.45	-31 18.6	1.923	2.928	3.7	19.1
7 30	19 48.89	-24 14.4	2.276	3.274	3.9	17.2	7 30	19 48.80	-31 58.8	1.949	2.933	5.9	19.3
8 9	19 41.10	-24 14.9	2.307	3.260	7.2	17.4	8 9	19 41.14	-32 25.0	2.000	2.938	9.1	19.5
8 19	19 34.74	-24 9.7	2.362	3.246	10.2	17.6	8 19	19 35.28	-32 37.4	2.075	2.944	12.0	19.7
<b>113051</b>	2002 <i>RQ</i> <sub>53</sub>		7 19.9 12°72	1°1/20.4	17		<b>92125</b>	1999 <i>XP</i> <sub>105</sub>		7 19.9 292°47	1°2/19.3	18	
6 10	20 20.35	-15 28.3	1.572	2.404	17.2	19.4	6 10	20 23.35	-23 37.9	2.257	3.075	13.1	19.8
6 20	20 17.86	-15 49.9	1.498	2.406	13.8	19.2	6 20	20 19.59	-23 47.6	2.156	3.059	10.4	19.6
6 30	20 12.78	-16 24.6	1.443	2.409	9.7	18.9	6 30	20 13.68	-24 0.6	2.077	3.042	7.3	19.3
7 10	20 5.67	-17 9.7	1.410	2.413	5.2	18.7	7 10	20 6.08	-24 14.0	2.023	3.026	3.8	19.1
7 20	19 57.41	-18 1.1	1.401	2.417	1.1	18.4	7 20	19 57.46	-24 25.2	1.996	3.010	1.3	18.9
7 30	19 49.13	-18 54.0	1.419	2.422	4.8	18.7	7 30	19 48.72	-24 31.5	1.996	2.994	4.3	19.1
8 9	19 41.99	-19 43.4	1.461	2.427	9.3	19.0	8 9	19 40.79	-24 31.6	2.023	2.978	7.9	19.3
8 19	19 36.92	-20 26.3	1.525	2.434	13.3	19.2	8 19	19 34.45	-24 25.0	2.075	2.962	11.3	19.4
<b>330351</b>	2006 <i>VL</i> <sub>39</sub>		7 19.9 93°85	0°1/19.9	17		<b>243406</b>	2009 <i>BK</i> <sub>36</sub>		7 19.9 255°28	1°1/19.3	18	
6 10	20 27.54	-19 1.0	1.624	2.448	17.1	21.9	6 10	20 23.20	-20 45.2	1.988	2.810	14.5	20.9
6 20	20 23.34	-19 13.0	1.557	2.461	13.6	21.7	6 20	20 19.67	-21 23.0	1.904	2.809	11.5	20.6
6 30	20 16.42	-19 33.5	1.509	2.475	9.4	21.5	6 30	20 13.83	-22 8.5	1.841	2.807	7.9	20.4
7 10	20 7.44	-19 59.3	1.485	2.488	4.8	21.2	7 10	20 6.18	-22 57.9	1.802	2.806	4.0	20.2
7 20	19 57.39	-20 26.5	1.485	2.502	0.1	20.9	7 20	19 57.46	-23 47.0	1.790	2.805	1.1	20.0
7 30	19 47.48	-20 51.2	1.513	2.515	4.8	21.3	7 30	19 48.67	-24 31.3	1.805	2.804	4.6	20.2
8 9	19 38.91	-21 11.0	1.566	2.528	9.3	21.6	8 9	19 40.81	-25 7.6	1.847	2.803	8.5	20.5
8 19	19 32.57	-21 24.5	1.642	2.540	13.1	21.9	8 19	19 34.74	-25 34.6	1.912	2.801	12.0	20.7
<b>18803</b>	Hillaryoas		7 19.9 45°48	0°7/19.6	18		<b>249591</b>	1997 <i>BO</i> <sub>5</sub>		7 19.9 106°85	0°8/19.5	18	
6 10	20 24.01	-18 8.5	1.208	2.058	20.3	17.4	6 10	20 25.67	-23 11.5	2.320	3.131	13.0	20.3
6 20	20 21.48	-18 53.5	1.150	2.070	16.1	17.2	6 20	20 21.08	-23 12.1	2.240	3.139	10.3	20.1
6 30	20 15.65	-19 52.9	1.108	2.082	11.1	16.9	6 30	20 14.46	-23 15.2	2.183	3.146	7.1	19.9
7 10	20 7.23	-21 1.3	1.088	2.094	5.6	16.6	7 10	20 6.35	-23 18.5	2.151	3.154	3.6	19.7
7 20	19 57.39	-22 11.3	1.091	2.107	0.7	16.3	7 20	19 57.47	-23 19.6	2.146	3.162	0.9	19.5
7 30	19 47.68	-23 15.2	1.118	2.121	6.0	16.7	7 30	19 48.68	-23 16.9	2.170	3.169	3.9	19.8
8 9	19 39.63	-24 7.5	1.169	2.135	11.2	17.1	8 9	19 40.83	-23 9.4	2.222	3.177	7.3	20.0
8 19	19 34.31	-24 45.8	1.240	2.149	15.7	17.4	8 19	19 34.59	-22 57.2	2.298	3.184	10.4	20.2
<b>52227</b>	1975 <i>SM</i> <sub>1</sub>		7 19.9 304°08	1°6/20.5	18		<b>275164</b>	2009 <i>WM</i> <sub>9</sub>		7 19.9 177°10	1°4/20.5	18	
6 10	20 21.77	-15 46.5	1.463	2.297	18.1	19.6	6 10	20 25.19	-15 22.6	2.006	2.810	15.0	21.0
6 20	20 19.60	-15 50.5	1.362	2.272	14.8	19.3	6 20	20 21.09	-15 32.3	1.920	2.812	12.0	20.8
6 30	20 14.47	-16 7.5	1.280	2.247	10.6	19.0	6 30	20 14.72	-15 51.7	1.854	2.813	8.5	20.6
7 10	20 6.80	-16 36.3	1.219	2.222	5.8	18.6	7 10	20 6.60	-16 19.0	1.813	2.813	4.6	20.3
7 20	19 57.40	-17 13.9	1.182	2.197	1.6	18.3	7 20	19 57.47	-16 51.5	1.799	2.813	1.4	20.1
7 30	19 47.55	-17 56.0	1.170	2.173	5.5	18.5	7 30	19 48.28	-17 25.9	1.812	2.813	4.2	20.3
8 9	19 38.70	-18 37.7	1.181	2.149	10.8	18.7	8 9	19 40.03	-17 59.2	1.852	2.813	8.1	20.6
8 19	19 32.12	-19 15.2	1.213	2.125	15.7	18.9	8 19	19 33.53	-18 29.2	1.917	2.812	11.7	20.8
<b>94243</b>	2001 <i>CB</i> <sub>10</sub>		7 19.9 195°23	1°4/18.8	18		<b>191132</b>	2002 <i>GK</i> <sub>23</sub>		7 19.9 134°16	0°7/19.5	18	
6 10	20 22.32	-22 55.3	2.852	3.658	11.0	20.1	6 10	20 26.14	-20 26.7	2.080	2.892	14.3	20.7
6 20	20 18.22	-23 36.7	2.759	3.656	8.6	19.9	6 20	20 21.74	-20 54.2	2.003	2.902	11.3	20.5
6 30	20 12.42	-24 22.4	2.690	3.653	6.0	19.7	6 30	20 15.09	-21 28.1	1.947	2.911	7.8	20.3
7 10	20 5.31	-25 9.3	2.648	3.650	3.1	19.5	7 10	20 6.75	-22 5.2	1.917	2.920	3.9	20.1
7 20	19 57.44	-25 54.2	2.634	3.647	1.5	19.4	7 20	19 57.48	-22 41.6	1.913	2.929	0.7	19.9
7 30	19 49.48	-26 34.2	2.649	3.644	3.8	19.6	7 30	19 48.24	-23 14.0	1.938	2.937	4.3	20.2
8 9	19 42.15	-27 7.1	2.693	3.640	6.6	19.8	8 9	19 40.00	-23 39.9	1.989	2.945	8.0	20.4
8 19	19 36.06	-27 32.0	2.763	3.636	9.3	19.9	8 19	19 33.53	-23 58.2	2.065	2.952	11.3	20.6
<b>98499</b>	2000 <i>VW</i> <sub>11</sub>		7 19.9 186°47	7°4/15.4	18		<b>85776</b>	1998 <i>UM</i> <sub>37</sub>		7 19.9 233°81	0		

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>437611</b>	2014 <i>BS</i> <sub>13</sub>		7 19.9 123°30	1°0/19.4 18			<b>218997</b>	2008 <i>HC</i> <sub>60</sub>		7 19.9 28°17	6°3/23.8 18		
6 10	20 24.32	-21 9.4	1.942	2.763	14.8	21.3	6 10	20 18.90	-1 37.6	2.046	2.811	16.0	19.7
6 20	20 20.56	-21 37.1	1.861	2.766	11.7	21.1	6 20	20 15.97	-1 20.3	1.968	2.818	13.6	19.5
6 30	20 14.44	-22 11.5	1.801	2.768	8.1	20.9	6 30	20 11.10	-1 20.3	1.908	2.824	10.9	19.3
7 10	20 6.49	-22 49.0	1.766	2.770	4.1	20.6	7 10	20 4.75	-1 39.0	1.870	2.832	8.2	19.2
7 20	19 57.50	-23 25.7	1.756	2.772	1.0	20.4	7 20	19 57.57	-2 15.9	1.857	2.839	6.5	19.1
7 30	19 48.48	-23 57.8	1.774	2.774	4.6	20.7	7 30	19 50.39	-3 8.5	1.869	2.847	6.7	19.1
8 9	19 40.48	-24 22.6	1.819	2.776	8.5	20.9	8 9	19 44.04	-4 12.7	1.906	2.855	8.8	19.3
8 19	19 34.33	-24 39.0	1.887	2.777	12.0	21.1	8 19	19 39.18	-5 23.5	1.968	2.864	11.4	19.5
<b>122273</b>	2000 <i>PT</i> <sub>1</sub>		7 19.9 299°41	2°6/21.1 18			<b>187644</b>	2007 <i>DA</i> <sub>1</sub>		7 19.9 349°32	0°5/20.1 18		
6 10	20 21.47	-12 27.2	1.627	2.446	17.3	20.1	6 10	20 21.54	-19 12.3	1.903	2.727	14.9	19.8
6 20	20 19.06	-12 36.4	1.520	2.418	14.2	19.8	6 20	20 18.40	-19 5.3	1.817	2.722	11.9	19.6
6 30	20 13.95	-13 1.1	1.431	2.390	10.4	19.5	6 30	20 12.97	-19 4.5	1.752	2.718	8.3	19.4
7 10	20 6.53	-13 41.0	1.364	2.363	6.1	19.2	7 10	20 5.77	-19 8.0	1.711	2.714	4.3	19.1
7 20	19 57.51	-14 33.5	1.322	2.335	2.7	18.9	7 20	19 57.56	-19 13.8	1.695	2.711	0.5	18.8
7 30	19 48.00	-15 34.4	1.305	2.307	5.3	19.0	7 30	19 49.33	-19 19.6	1.706	2.709	4.3	19.1
8 9	19 39.32	-16 38.3	1.313	2.280	10.1	19.2	8 9	19 42.08	-19 23.7	1.743	2.706	8.3	19.3
8 19	19 32.63	-17 39.9	1.343	2.253	14.7	19.4	8 19	19 36.61	-19 24.8	1.803	2.705	11.9	19.6
<b>335153</b>	2004 <i>XL</i> <sub>50</sub>		7 19.9 254°22	0°4/20.0 18			<b>111139</b>	2001 <i>VS</i> <sub>95</sub>		7 19.9 45°33	0°3/20.1 18 R		
6 10	20 25.96	-18 51.4	2.115	2.923	14.2	21.9	6 10	20 21.52	-16 20.3	2.010	2.825	14.6	19.5
6 20	20 21.81	-18 56.1	2.010	2.905	11.4	21.6	6 20	20 18.23	-16 59.4	1.930	2.829	11.6	19.3
6 30	20 15.35	-19 7.4	1.925	2.887	8.0	21.4	6 30	20 12.78	-17 49.2	1.871	2.834	8.1	19.1
7 10	20 7.01	-19 23.3	1.866	2.869	4.2	21.1	7 10	20 5.65	-18 46.7	1.836	2.839	4.2	18.9
7 20	19 57.50	-19 41.3	1.833	2.849	0.4	20.8	7 20	19 57.57	-19 47.9	1.828	2.844	0.3	18.6
7 30	19 47.77	-19 58.6	1.829	2.830	4.2	21.0	7 30	19 49.44	-20 48.1	1.848	2.850	4.1	18.9
8 9	19 38.86	-20 13.0	1.851	2.810	8.3	21.3	8 9	19 42.21	-21 43.3	1.894	2.855	8.0	19.1
8 19	19 31.63	-20 23.2	1.898	2.790	12.0	21.4	8 19	19 36.64	-22 30.9	1.965	2.861	11.4	19.4
<b>170691</b>	2004 <i>BN</i> <sub>4</sub>		7 19.9 196°57	0°6/19.6 18			<b>72741</b>	2001 <i>FN</i> <sub>106</sub>		7 19.9 309°11	4°3/22.3 18		
6 10	20 24.11	-20 25.7	2.254	3.065	13.3	21.3	6 10	20 19.63	-7 13.1	1.705	2.506	17.3	18.8
6 20	20 20.07	-20 49.3	2.165	3.063	10.6	21.1	6 20	20 17.29	-7 26.9	1.606	2.489	14.4	18.5
6 30	20 13.94	-21 19.1	2.098	3.062	7.3	20.9	6 30	20 12.50	-8 0.1	1.526	2.473	11.0	18.3
7 10	20 6.20	-21 52.1	2.056	3.060	3.7	20.6	7 10	20 5.69	-8 53.1	1.468	2.456	7.2	18.0
7 20	19 57.52	-22 25.2	2.041	3.057	0.6	20.4	7 20	19 57.57	-10 3.7	1.434	2.440	4.4	17.8
7 30	19 48.78	-22 55.1	2.055	3.055	4.0	20.7	7 30	19 49.14	-11 27.4	1.426	2.425	5.7	17.8
8 9	19 40.88	-23 19.6	2.096	3.052	7.6	20.9	8 9	19 41.56	-12 57.8	1.444	2.409	9.5	18.0
8 19	19 34.56	-23 37.3	2.161	3.049	10.9	21.1	8 19	19 35.81	-14 28.2	1.485	2.395	13.5	18.2
<b>59886</b>	1999 <i>RY</i> <sub>126</sub>		7 19.9 335°41	4°2/20.7 18			<b>180273</b>	2003 <i>WH</i> <sub>60</sub>		7 19.9 222°47	3°9/18.1 18		
6 10	20 17.18	-15 58.2	1.032	1.900	21.7	17.9	6 10	20 27.82	-26 19.8	1.650	2.482	16.5	20.4
6 20	20 16.87	-15 0.6	0.950	1.878	17.8	17.6	6 20	20 24.10	-27 17.9	1.568	2.478	13.2	20.2
6 30	20 13.06	-14 11.2	0.884	1.858	13.1	17.2	6 30	20 17.38	-28 21.9	1.506	2.473	9.3	20.0
7 10	20 6.27	-13 31.8	0.837	1.839	7.9	16.9	7 10	20 8.21	-29 25.4	1.468	2.468	5.5	19.7
7 20	19 57.52	-13 3.6	0.809	1.822	4.2	16.6	7 20	19 57.54	-30 21.1	1.456	2.463	4.0	19.6
7 30	19 48.44	-12 46.4	0.803	1.806	7.4	16.7	7 30	19 46.70	-31 3.0	1.469	2.458	6.9	19.8
8 9	19 40.84	-12 38.8	0.816	1.792	12.9	17.0	8 9	19 37.13	-31 28.1	1.507	2.452	11.0	20.0
8 19	19 36.14	-12 38.0	0.847	1.781	18.3	17.2	8 19	19 29.93	-31 36.5	1.568	2.446	14.7	20.2
<b>444099</b>	2004 <i>TG</i> <sub>36</sub>		7 19.9 304°00	0°1/19.9 17			<b>177274</b>	2003 <i>WM</i> <sub>129</sub>		7 19.9 134°84	2°8/21.1 17		
6 10	20 21.39	-19 15.3	2.140	2.958	13.7	21.9	6 10	20 26.85	-12 58.9	1.690	2.497	17.3	21.0
6 20	20 18.18	-19 24.6	2.036	2.937	11.0	21.7	6 20	20 22.74	-12 52.0	1.614	2.505	14.0	20.8
6 30	20 12.82	-19 40.6	1.953	2.918	7.7	21.4	6 30	20 16.04	-12 57.3	1.557	2.512	10.1	20.6
7 10	20 5.72	-20 1.3	1.894	2.898	4.0	21.2	7 10	20 7.36	-13 13.8	1.522	2.518	5.9	20.4
7 20	19 57.54	-20 24.0	1.862	2.878	0.1	20.8	7 20	19 57.55	-13 39.4	1.513	2.525	2.8	20.2
7 30	19 49.16	-20 46.0	1.857	2.859	4.1	21.1	7 30	19 47.78	-14 10.7	1.531	2.531	5.1	20.4
8 9	19 41.54	-21 4.8	1.878	2.839	8.0	21.3	8 9	19 39.17	-14 44.2	1.574	2.537	9.1	20.6
8 19	19 35.50	-21 18.9	1.924	2.820	11.6	21.5	8 19	19 32.63	-15 16.9	1.641	2.542	13.0	20.9
<b>364475</b>	2007 <i>DS</i> <sub>30</sub>		7 19.9 210°47	0°8/20.4 18			<b>150145</b>	<i>Uvic</i>		7 19.9 171°22	1°9/21.0 18		
6 10	20 21.84	-16 18.0	2.817	3.610	11.4	22.2	6 10	20 22.38	-13 29.8	2.841	3.624	11.6	21.7
6 20	20 17.81	-16 31.0	2.719	3.605	9.1	22.1	6 20	20 18.12	-13 24.8	2.750	3.627	9.3	21.5
6 30	20 12.13	-16 50.5	2.643	3.599	6.4	21.9	6 30	20 12.28	-13 26.9	2.681	3.630	6.7	21.3
7 10	20 5.21	-17 15.2	2.593	3.593	3.4	21.7	7 10	20 5.26	-13 35.3	2.638	3.632	3.9	21.2
7 20	19 57.55	-17 43.0	2.571	3.586	0.8	21.5	7 20	19 57.58	-13 48.6	2.622	3.633	1.9	21.0
7 30	19 49.82	-18 11.8	2.579	3.579	3.2	21.6	7 30	19 49.89	-14 5.5	2.636	3.635	3.4	21.1
8 9	19 42.68	-18 39.4	2.614	3.572	6.2	21.8	8 9	19 42.84	-14 24.2	2.678	3.636	6.1	21.3
8 19	19 36.74	-19 4.4	2.676	3.565	9.0	22.0	8 19	19 36.97	-14 43.0	2.747	3.636	8.8	21.5
<b>248944</b>	2006 <i>WN</i> <sub>137</sub>		7 19.9 280°63	0°5/20.2 18			<b>337143</b>	1999 <i>TR</i> <sub>228</sub>		7 19.9 294°68	3°6/21.5 18		
6 10	20 22.46	-17 57.8	2.147	2.959	13.9	20.9	6 10	20 22.63	-10 14.7	1.857	2.656	16.2	20.9
6 20	20 18.92	-18 5.8	2.050	2.948	11.1	20.7	6 20	20 19.68	-10 11.5	1.737	2.622	13.5	20.7
6 30	20 13.25	-18 21.1	1.975	2.938	7.8	20.5	6 30	20 14.24	-10 22.4	1.637	2.587	10.1	20.4
7 10	20 5.90	-18 41.8	1.924	2.927	4.1	20.2	7 10	20 6.66	-10 47.9	1.560	2.552	6.4	20.1
7 20	19 57.54	-19 5.5	1.900	2.916	0.6	19.9	7 20	19 57.57	-11 27.1	1.508	2.516	3.7	19.8
7 30	19 49.06	-19 29.4	1.903	2.905	4.0	20.2	7 30	19 47.97	-12 17.2	1.482	2.480	5.5	19.9
8 9	19 41.38	-19 51.0	1.933	2.894	7.8	20.4	8 9	19 39.00	-13 13.9	1.482	2.444	9.6	20.0
8 19	19 35.29	-20 8.8	1.987	2.883	11.3	20.6	8 19	19 31.74	-14 12.9	1.505	2.408	13.8	20.2
<b>365980</b>	2012 <i>BY</i> <sub>70</sub>		7 19.9 199°92	0°6/20.3 18			<b>204727</b>	2006 <i>HT</i> <sub>26</sub>					



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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>25685</b>	Katlinhornig		7 19.9 335°04	4°3/21.1	18		<b>262101</b>	2006 RP <sub>97</sub>		7 19.9	1°87	3°5/20.9	17
6 10	20 20.69	-13 28.6	1.241	2.085	20.2	17.4	6 10	20 15.89	-14 44.3	0.967	1.840	22.4	19.8
6 20	20 18.96	-12 45.8	1.160	2.072	16.6	17.1	6 20	20 15.74	-14 14.0	0.906	1.837	18.2	19.5
6 30	20 14.10	-12 14.8	1.096	2.060	12.3	16.8	6 30	20 12.10	-13 59.0	0.860	1.835	13.2	19.3
7 10	20 6.64	-11 57.1	1.052	2.049	7.6	16.5	7 10	20 5.66	-13 59.7	0.832	1.835	7.7	19.0
7 20	19 57.58	-11 52.6	1.029	2.039	4.4	16.3	7 20	19 57.61	-14 14.3	0.824	1.838	3.6	18.7
7 30	19 48.32	-11 59.7	1.029	2.030	6.7	16.4	7 30	19 49.59	-14 38.7	0.837	1.842	6.7	18.9
8 9	19 40.41	-12 15.3	1.052	2.022	11.5	16.6	8 9	19 43.27	-15 7.9	0.869	1.848	12.1	19.3
8 19	19 35.03	-12 35.8	1.094	2.015	16.2	16.9	8 19	19 39.82	-15 36.9	0.921	1.855	17.1	19.6
<b>506595</b>	2005 YF <sub>83</sub>		7 19.9 207°15	1°2/20.5	17		<b>152810</b>	1999 TJ <sub>241</sub>		7 19.9 272°33	4°4/22.6	18	
6 10	20 27.50	-16 37.0	2.442	3.232	13.0	24.1	6 10	20 19.86	-5 33.4	2.414	3.183	13.7	20.1
6 20	20 22.54	-16 30.6	2.341	3.225	10.5	24.0	6 20	20 16.56	-5 27.2	2.313	3.172	11.5	19.9
6 30	20 15.56	-16 30.4	2.263	3.217	7.4	23.7	6 30	20 11.47	-5 34.4	2.232	3.161	8.9	19.7
7 10	20 7.03	-16 35.1	2.210	3.209	4.1	23.5	7 10	20 4.98	-5 55.3	2.175	3.150	6.3	19.6
7 20	19 57.59	-16 43.1	2.186	3.200	1.3	23.3	7 20	19 57.63	-6 29.2	2.143	3.139	4.5	19.4
7 30	19 48.04	-16 52.5	2.190	3.190	3.8	23.5	7 30	19 50.16	-7 14.2	2.140	3.127	5.2	19.5
8 9	19 39.26	-17 1.7	2.223	3.180	7.2	23.7	8 9	19 43.30	-8 7.0	2.163	3.116	7.6	19.6
8 19	19 31.97	-17 9.5	2.282	3.169	10.4	23.9	8 19	19 37.74	-9 4.1	2.211	3.105	10.4	19.7
<b>39875</b>	1998 DS <sub>35</sub>		7 19.9 200°66	2°6/21.1	18		<b>175137</b>	2005 EP <sub>6</sub>		7 19.9 131°38	0°5/19.7	17	
6 10	20 25.73	-11 57.6	1.706	2.512	17.2	18.8	6 10	20 29.06	-20 16.2	1.690	2.510	16.7	20.7
6 20	20 22.01	-12 9.5	1.620	2.510	14.0	18.5	6 20	20 24.59	-20 35.8	1.617	2.520	13.3	20.5
6 30	20 15.69	-12 36.1	1.552	2.507	10.2	18.3	6 30	20 17.37	-21 3.1	1.564	2.529	9.2	20.3
7 10	20 7.27	-13 16.1	1.508	2.504	6.0	18.1	7 10	20 8.06	-21 34.4	1.535	2.539	4.7	20.1
7 20	19 57.58	-14 6.5	1.488	2.500	2.7	17.8	7 20	19 57.60	-22 5.3	1.531	2.547	0.6	19.8
7 30	19 47.75	-15 2.9	1.496	2.497	5.0	18.0	7 30	19 47.22	-22 31.9	1.555	2.556	4.9	20.1
8 9	19 38.96	-16 0.3	1.529	2.492	9.3	18.2	8 9	19 38.13	-22 51.6	1.605	2.564	9.3	20.4
8 19	19 32.19	-16 54.6	1.586	2.488	13.3	18.5	8 19	19 31.25	-23 3.5	1.678	2.571	13.2	20.6
<b>494713</b>	2005 OU <sub>2</sub>		7 19.9 243°80	14°9/27.1	17		<b>342503</b>	2008 UE <sub>181</sub>		7 19.9 86°67	6°8/23.2	17	
6 10	20 58.83	+20 45.6	0.976	1.629	35.9	21.6	6 10	20 22.91	-3 2.4	1.871	2.641	17.1	21.1
6 20	20 53.90	+19 53.1	0.848	1.605	33.8	21.2	6 20	20 19.34	-2 22.8	1.793	2.647	14.5	20.9
6 30	20 42.81	+17 40.3	0.725	1.576	30.2	20.7	6 30	20 13.55	-1 59.6	1.734	2.653	11.6	20.7
7 10	20 24.21	+13 20.9	0.616	1.544	24.6	20.1	7 10	20 6.07	-1 54.8	1.696	2.659	8.8	20.6
7 20	19 57.36	+5 59.8	0.529	1.508	17.6	19.5	7 20	19 57.63	-2 9.0	1.682	2.665	7.0	20.5
7 30	19 23.56	-4 41.9	0.478	1.468	15.5	19.2	7 30	19 49.19	-2 40.4	1.694	2.671	7.4	20.5
8 9	18 47.06	-17 9.9	0.472	1.424	24.6	19.4	8 9	19 41.70	-3 25.5	1.731	2.677	9.7	20.7
8 19	18 13.51	-28 36.3	0.507	1.376	36.2	19.8	8 19	19 35.94	-4 19.4	1.791	2.683	12.5	20.9
<b>131029</b>	2000 XV <sub>42</sub>		7 19.9 248°77	4°3/18.5	18 R		<b>188943</b>	2007 DN <sub>43</sub>		7 19.9 127°88	5°4/23.8	18	
6 10	20 33.06	-32 36.8	2.057	2.869	14.4	19.6	6 10	20 19.85	-1 15.5	2.535	3.280	13.7	20.8
6 20	20 27.67	-32 49.3	1.961	2.855	11.7	19.4	6 20	20 16.34	-1 10.0	2.448	3.284	11.7	20.6
6 30	20 19.51	-32 58.7	1.886	2.842	8.6	19.1	6 30	20 11.18	-1 19.6	2.380	3.289	9.3	20.5
7 10	20 9.17	-32 59.9	1.836	2.828	5.6	18.9	7 10	20 4.77	-1 44.9	2.335	3.293	7.1	20.4
7 20	19 57.57	-32 48.6	1.812	2.814	4.4	18.8	7 20	19 57.65	-2 25.1	2.316	3.297	5.5	20.3
7 30	19 45.93	-32 22.1	1.816	2.799	6.5	18.9	7 30	19 50.50	-3 18.3	2.324	3.301	5.8	20.3
8 9	19 35.51	-31 41.1	1.847	2.784	9.8	19.1	8 9	19 44.00	-4 21.0	2.360	3.304	7.6	20.4
8 19	19 27.29	-30 48.3	1.902	2.768	13.1	19.3	8 19	19 38.73	-5 29.2	2.421	3.308	9.9	20.6
<b>86030</b>	1999 NS <sub>1</sub>		7 19.9 150°11	9°3/20.8	18		<b>469663</b>	2004 TT <sub>299</sub>		7 19.9 273°15	3°1/18.6	18	
6 10	20 34.84	-9 43.3	1.128	1.945	23.5	18.6	6 10	20 26.71	-26 47.1	1.833	2.661	15.3	22.0
6 20	20 30.29	-7 34.6	1.058	1.947	19.8	18.4	6 20	20 22.95	-27 16.7	1.740	2.647	12.2	21.8
6 30	20 21.97	-5 34.9	1.005	1.949	15.5	18.1	6 30	20 16.44	-27 49.5	1.668	2.634	8.7	21.5
7 10	20 10.63	-3 50.9	0.971	1.950	11.5	17.9	7 10	20 7.71	-28 20.7	1.619	2.620	4.9	21.3
7 20	19 57.55	-2 29.1	0.960	1.952	9.3	17.8	7 20	19 57.62	-28 45.3	1.596	2.606	3.1	21.1
7 30	19 44.52	-1 34.2	0.972	1.953	10.9	17.9	7 30	19 47.35	-28 59.1	1.600	2.592	6.0	21.3
8 9	19 33.33	-1 5.9	1.006	1.954	14.7	18.1	8 9	19 38.17	-29 0.3	1.629	2.578	10.0	21.5
8 19	19 25.27	-1 0.5	1.059	1.955	18.8	18.3	8 19	19 31.10	-28 49.5	1.681	2.564	13.7	21.7
<b>374902</b>	2006 WK <sub>163</sub>		7 19.9 358°08	4°7/17.7	17		<b>440944</b>	2007 AH		7 19.9 132°16	3°6/21.6	18	
6 10	20 21.40	-25 31.4	1.220	2.083	19.3	20.5	6 10	20 23.94	-9 57.4	2.559	3.333	12.9	20.9
6 20	20 19.88	-26 44.1	1.152	2.080	15.4	20.2	6 20	20 19.46	-9 21.8	2.473	3.340	10.6	20.8
6 30	20 14.91	-28 5.8	1.103	2.078	10.9	20.0	6 30	20 13.26	-8 54.5	2.410	3.346	8.0	20.6
7 10	20 7.11	-29 28.5	1.074	2.077	6.4	19.7	7 10	20 5.79	-8 35.8	2.371	3.353	5.3	20.4
7 20	19 57.58	-30 42.4	1.069	2.077	4.9	19.6	7 20	19 57.65	-8 25.9	2.360	3.360	3.7	20.3
7 30	19 47.96	-31 38.9	1.086	2.078	8.3	19.8	7 30	19 49.53	-8 23.9	2.376	3.366	4.6	20.4
8 9	19 39.94	-32 13.6	1.126	2.079	12.9	20.1	8 9	19 42.15	-8 28.5	2.421	3.372	7.1	20.6
8 19	19 34.78	-32 26.8	1.185	2.082	17.2	20.4	8 19	19 36.09	-8 37.8	2.491	3.378	9.7	20.8
<b>127321</b>	2002 JW <sub>99</sub>		7 19.9 73°28	2°3/21.3	18		<b>17686</b>	1997 BC <sub>2</sub>		7 19.9 289°08	0°2/20.0	18	
6 10	20 23.03	-10 43.8	1.791	2.595	16.6	19.5	6 10	20 21.15	-16 42.5	2.147	2.959	13.9	17.2
6 20	20 19.57	-11 20.3	1.719	2.608	13.4	19.3	6 20	20 17.97	-17 20.3	2.049	2.948	11.1	17.0
6 30	20 13.77	-12 12.9	1.667	2.621	9.6	19.1	6 30	20 12.68	-18 8.6	1.973	2.936	7.8	16.8
7 10	20 6.18	-13 19.1	1.638	2.634	5.6	18.9	7 10	20 5.69	-19 4.9	1.921	2.924	4.0	16.5
7 20	19 57.61	-14 34.6	1.635	2.648	2.3	18.7	7 20	19 57.65	-20 5.3	1.896	2.913	0.2	16.2
7 30	19 49.05	-15 54.0	1.659	2.661	4.5	18.9	7 30	19 49.42	-21 5.5	1.899	2.901	4.0	16.5
8 9	19 41.53	-17 11.6	1.710	2.674	8.4	19.2	8 9	19 41.93	-22 1.6	1.930	2.890	7.9	16.7
8 19	19 35.86	-18 22.9	1.786	2.688	12.0	19.4	8 19	19 35.98	-22 50.5	1.984	2.878	11.4	16.9
<b>125986</b>	2001 YF <sub>27</sub>		7 19.9 83°71	0°7/20.2	17		<b>97198</b>	1999 XJ <sub>3</sub>		7 19.9 124°06	1°0/19.3	18	
6 10	20 26.00	-18 17.2	1.697	2.518	16.								

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>127466</b>	2002 RA <sub>40</sub>		7 19.9 321°29	3°5/21.5	18		<b>267724</b>	2003 EY <sub>11</sub>		7 19.9 96°84	2°2/19.1	17	
6 10	20 19.77	-10 49.1	1.337	2.169	19.7	19.4	6 10	20 30.04	-25 35.9	1.758	2.581	16.0	20.6
6 20	20 18.09	-10 56.0	1.251	2.156	16.2	19.1	6 20	20 25.24	-25 49.8	1.690	2.595	12.7	20.4
6 30	20 13.46	-11 22.2	1.182	2.143	12.0	18.8	6 30	20 17.73	-26 5.9	1.643	2.609	8.8	20.2
7 10	20 6.35	-12 7.6	1.134	2.131	7.3	18.5	7 10	20 8.22	-26 20.1	1.620	2.622	4.7	19.9
7 20	19 57.64	-13 9.5	1.107	2.119	3.6	18.3	7 20	19 57.68	-26 28.3	1.622	2.635	2.2	19.8
7 30	19 48.64	-14 22.2	1.105	2.108	6.0	18.4	7 30	19 47.34	-26 27.9	1.652	2.648	5.3	20.0
8 9	19 40.79	-15 38.5	1.126	2.098	10.9	18.6	8 9	19 38.39	-26 18.2	1.708	2.661	9.3	20.3
8 19	19 35.28	-16 51.9	1.169	2.088	15.6	18.9	8 19	19 31.67	-26 0.1	1.787	2.674	12.8	20.6
<b>376361</b>	2011 JG <sub>27</sub>		7 19.9 107°57	6°1/22.9	18		<b>483141</b>	2015 OO <sub>43</sub>		7 19.9 346°73	3°5/18.8	18	
6 10	20 25.72	-4 13.4	1.996	2.760	16.4	20.5	6 10	20 22.91	-28 10.3	1.560	2.406	16.6	20.3
6 20	20 21.28	-3 35.1	1.924	2.777	13.8	20.3	6 20	20 20.30	-28 25.1	1.479	2.397	13.3	20.0
6 30	20 14.72	-3 11.7	1.872	2.793	10.8	20.2	6 30	20 14.76	-28 40.9	1.418	2.388	9.5	19.8
7 10	20 6.60	-3 4.6	1.843	2.809	8.0	20.0	7 10	20 6.89	-28 52.7	1.379	2.381	5.5	19.5
7 20	19 57.65	-3 13.8	1.839	2.825	6.2	20.0	7 20	19 57.69	-28 56.0	1.365	2.375	3.5	19.4
7 30	19 48.79	-3 37.9	1.861	2.840	6.7	20.0	7 30	19 48.48	-28 47.4	1.375	2.369	6.5	19.6
8 9	19 40.92	-4 13.4	1.909	2.854	9.0	20.2	8 9	19 40.59	-28 26.3	1.409	2.365	10.6	19.8
8 19	19 34.74	-4 56.4	1.982	2.869	11.7	20.4	8 19	19 35.06	-27 54.2	1.464	2.361	14.5	20.0
<b>307111</b>	2002 CD <sub>62</sub>		7 19.9 57°80	3°5/18.4	17		<b>322581</b>	2012 AT <sub>9</sub>		7 19.9 104°74	2°7/21.1	17	
6 10	20 29.86	-23 17.1	1.177	2.027	20.7	19.6	6 10	20 26.14	-12 19.4	1.530	2.344	18.4	21.1
6 20	20 26.09	-24 30.5	1.136	2.056	16.2	19.4	6 20	20 22.47	-12 27.0	1.459	2.354	14.9	20.9
6 30	20 18.77	-25 52.1	1.114	2.086	11.1	19.2	6 30	20 16.03	-12 49.7	1.406	2.364	10.8	20.7
7 10	20 8.82	-27 12.8	1.113	2.116	6.0	19.0	7 10	20 7.46	-13 26.0	1.376	2.373	6.3	20.5
7 20	19 57.63	-28 23.1	1.135	2.147	3.6	19.0	7 20	19 57.69	-14 12.5	1.370	2.383	2.7	20.3
7 30	19 46.91	-29 16.1	1.182	2.177	7.3	19.3	7 30	19 47.96	-15 4.3	1.390	2.392	5.2	20.4
8 9	19 38.21	-29 49.2	1.253	2.207	11.8	19.6	8 9	19 39.50	-15 56.6	1.435	2.401	9.6	20.7
8 19	19 32.51	-30 3.8	1.344	2.237	15.8	19.9	8 19	19 33.27	-16 45.3	1.504	2.409	13.6	21.0
<b>342103</b>	2008 SQ <sub>65</sub>		7 19.9 317°11	1°4/19.3	18		<b>514507</b>	2016 WK <sub>30</sub>		7 19.9 233°58	2°6/21.5	18	
6 10	20 24.35	-22 27.0	1.683	2.516	16.2	21.1	6 10	20 20.90	-10 51.2	2.464	3.250	13.0	21.5
6 20	20 21.11	-22 46.7	1.599	2.510	12.9	20.9	6 20	20 17.32	-10 54.9	2.369	3.246	10.6	21.3
6 30	20 15.16	-23 12.6	1.534	2.504	9.0	20.6	6 30	20 11.97	-11 9.1	2.295	3.241	7.8	21.1
7 10	20 7.05	-23 41.1	1.493	2.498	4.6	20.4	7 10	20 5.25	-11 32.9	2.245	3.236	4.8	20.9
7 20	19 57.66	-24 7.8	1.477	2.492	1.4	20.1	7 20	19 57.72	-12 5.0	2.223	3.231	2.7	20.8
7 30	19 48.17	-24 28.8	1.487	2.487	5.3	20.4	7 30	19 50.10	-12 43.0	2.228	3.226	4.0	20.8
8 9	19 39.84	-24 41.4	1.522	2.482	9.6	20.6	8 9	19 43.15	-13 24.1	2.261	3.221	7.0	21.0
8 19	19 33.65	-24 45.1	1.580	2.477	13.6	20.8	8 19	19 37.51	-14 5.4	2.320	3.215	9.9	21.2
<b>188797</b>	2005 VY <sub>119</sub>		7 19.9 268°34	0°5/20.3	18		<b>32647</b>	3109 P-L		7 19.9 332°85	0°9/20.2	18	
6 10	20 22.22	-14 36.3	2.620	3.412	12.2	20.1	6 10	20 25.32	-19 21.1	2.002	2.816	14.7	18.9
6 20	20 18.48	-15 26.3	2.504	3.390	9.8	19.9	6 20	20 21.24	-18 58.7	1.914	2.813	11.7	18.7
6 30	20 12.88	-16 27.6	2.411	3.368	6.9	19.7	6 30	20 14.89	-18 40.8	1.848	2.810	8.3	18.5
7 10	20 5.78	-17 38.0	2.345	3.346	3.7	19.4	7 10	20 6.79	-18 26.1	1.805	2.807	4.4	18.2
7 20	19 57.68	-18 54.1	2.307	3.323	0.5	19.1	7 20	19 57.71	-18 13.3	1.789	2.804	0.9	17.9
7 30	19 49.29	-20 11.6	2.299	3.300	3.5	19.3	7 30	19 48.63	-18 1.0	1.800	2.802	4.2	18.2
8 9	19 41.41	-21 26.4	2.320	3.277	7.0	19.5	8 9	19 40.55	-17 48.5	1.838	2.800	8.1	18.4
8 19	19 34.76	-22 35.1	2.367	3.253	10.1	19.7	8 19	19 34.25	-17 35.2	1.900	2.797	11.7	18.6
<b>186706</b>	2004 BF <sub>72</sub>		7 19.9 55°12	4°0/21.8	18		<b>96047</b>	2004 QW <sub>6</sub>		7 19.9 342°46	0°4/19.6	18	
6 10	20 23.33	-9 39.3	1.486	2.299	18.9	19.8	6 10	20 20.76	-17 59.8	2.081	2.899	14.1	19.6
6 20	20 20.33	-9 38.3	1.413	2.305	15.5	19.6	6 20	20 17.69	-18 47.5	1.994	2.896	11.2	19.4
6 30	20 14.60	-9 54.7	1.359	2.312	11.5	19.4	6 30	20 12.49	-19 45.3	1.928	2.893	7.7	19.2
7 10	20 6.75	-10 28.2	1.326	2.318	7.2	19.2	7 10	20 5.61	-20 49.9	1.887	2.891	3.9	18.9
7 20	19 57.68	-11 16.1	1.316	2.325	4.1	19.0	7 20	19 57.72	-21 56.9	1.872	2.888	0.5	18.7
7 30	19 48.60	-12 13.9	1.332	2.332	5.8	19.1	7 30	19 49.70	-23 1.3	1.886	2.886	4.2	19.0
8 9	19 40.75	-13 15.8	1.372	2.338	9.8	19.4	8 9	19 42.51	-23 59.1	1.926	2.884	8.0	19.2
8 19	19 35.08	-14 16.6	1.435	2.346	13.9	19.6	8 19	19 36.92	-24 47.7	1.991	2.883	11.4	19.4
<b>121424</b>	1999 TP <sub>151</sub>		7 19.9 234°16	2°0/21.2	18		<b>89911</b>	2002 ER <sub>8</sub>		7 19.9 297°38	4°8/17.1	18	
6 10	20 21.48	-12 10.3	3.124	3.899	10.8	21.9	6 10	20 23.94	-31 7.7	2.143	2.969	13.4	19.4
6 20	20 17.40	-12 13.8	3.012	3.884	8.8	21.7	6 20	20 20.48	-32 6.6	2.052	2.956	10.8	19.2
6 30	20 11.84	-12 24.9	2.924	3.869	6.4	21.6	6 30	20 14.60	-33 6.9	1.983	2.943	8.0	19.0
7 10	20 5.12	-12 42.8	2.861	3.853	3.9	21.4	7 10	20 6.76	-34 3.0	1.939	2.930	5.5	18.8
7 20	19 57.70	-13 6.5	2.827	3.836	2.0	21.2	7 20	19 57.71	-34 49.4	1.921	2.917	4.9	18.8
7 30	19 50.16	-13 34.2	2.822	3.819	3.3	21.3	7 30	19 48.48	-35 21.4	1.930	2.905	6.9	18.9
8 9	19 43.10	-14 4.0	2.846	3.802	5.9	21.4	8 9	19 40.17	-35 37.0	1.964	2.892	9.8	19.0
8 19	19 37.06	-14 34.1	2.896	3.784	8.4	21.6	8 19	19 33.69	-35 36.8	2.022	2.880	12.7	19.2
<b>183873</b>	2004 CN <sub>42</sub>		7 19.9 16°79	3°8/18.8	17		<b>125925</b>	2001 XE <sub>237</sub>		7 19.9 280°26	0°7/19.6	18	
6 10	20 26.17	-27 35.8	1.286	2.140	19.1	19.9	6 10	20 25.44	-21 9.5	1.700	2.528	16.3	20.1
6 20	20 23.34	-27 58.7	1.221	2.143	15.2	19.6	6 20	20 21.96	-21 22.5	1.612	2.520	13.0	19.9
6 30	20 17.06	-28 23.7	1.174	2.146	10.7	19.4	6 30	20 15.77	-21 42.3	1.544	2.512	9.1	19.7
7 10	20 8.10	-28 44.8	1.148	2.151	6.1	19.1	7 10	20 7.40	-22 5.8	1.499	2.504	4.6	19.4
7 20	19 57.67	-28 55.9	1.146	2.156	3.9	19.0	7 20	19 57.71	-22 29.1	1.480	2.495	0.7	19.1
7 30	19 47.40	-28 53.1	1.167	2.162	7.2	19.2	7 30	19 47.89	-22 48.5	1.486	2.487	5.0	19.4
8 9	19 38.87	-28 35.7	1.211	2.169	11.7	19.5	8 9	19 39.19	-23 1.3	1.518	2.479	9.5	19.6
8 19	19 33.19	-28 5.9	1.275	2.176	15.9	19.8	8 19	19 32.61	-23 6.7	1.573	2.471	13.6	19.8
<b>93003</b>	2000 RY <sub>85</sub>		7 19.9 149°56	4°7/17.8	18		<b>331724</b>	2002 TB <sub>73</sub>		7 19.9 265°75	0°1/19.9	18	
6 10	20 29.30	-31 16.											

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>482141</b>	2010 <i>RR</i> <sub>183</sub>		7 19.9 221°27'	6°0'/23.8 18			<b>21883</b>	1999 <i>UC</i> <sub>25</sub>		7 19.9 50°77'	4°5'/18.5 18		
6 10	20 20.61	+ 0 46.2	2.896	3.619	12.7	22.4	6 10	20 29.59	-29 12.2	1.403	2.246	18.4	17.9
6 20	20 16.79	+ 1 17.5	2.795	3.611	10.9	22.2	6 20	20 25.84	-29 43.4	1.337	2.252	14.7	17.7
6 30	20 11.45	+ 1 36.1	2.713	3.602	9.0	22.1	6 30	20 18.70	-30 15.4	1.290	2.258	10.5	17.5
7 10	20 4.94	+ 1 40.5	2.655	3.594	7.3	21.9	7 10	20 8.93	-30 41.5	1.265	2.264	6.3	17.3
7 20	19 57.74	+ 1 30.2	2.623	3.585	6.1	21.8	7 20	19 57.74	-30 55.5	1.264	2.271	4.6	17.2
7 30	19 50.44	+ 1 5.8	2.618	3.575	6.3	21.8	7 30	19 46.73	-30 53.2	1.287	2.277	7.4	17.4
8 9	19 43.67	+ 0 29.3	2.639	3.566	7.7	21.9	8 9	19 37.45	-30 34.6	1.334	2.284	11.6	17.6
8 19	19 37.97	- 0 16.4	2.686	3.556	9.6	22.0	8 19	19 30.97	-30 2.4	1.402	2.292	15.5	17.9
<b>92597</b>	2000 <i>PE</i> <sub>19</sub>		7 19.9 118°88'	3°3'/18.7 18 R			<b>522882</b>	2016 <i>OP</i> <sub>7</sub>		7 19.9 235°72'	3°7'/21.8 18		
6 10	20 30.03	-25 52.8	1.466	2.303	18.0	18.9	6 10	20 22.40	- 9 25.6	2.414	3.193	13.5	21.7
6 20	20 25.99	-26 28.2	1.397	2.309	14.3	18.7	6 20	20 18.53	- 9 1.7	2.318	3.187	11.1	21.5
6 30	20 18.73	-27 8.1	1.347	2.315	10.1	18.4	6 30	20 12.83	- 8 47.4	2.242	3.181	8.4	21.3
7 10	20 8.92	-27 46.4	1.319	2.321	5.6	18.2	7 10	20 5.72	- 8 43.2	2.191	3.175	5.6	21.2
7 20	19 57.71	-28 16.7	1.316	2.327	3.3	18.1	7 20	19 57.78	- 8 48.7	2.167	3.168	3.8	21.0
7 30	19 46.57	-28 34.3	1.338	2.332	6.6	18.3	7 30	19 49.77	- 9 2.6	2.170	3.162	4.8	21.1
8 9	19 37.02	-28 37.4	1.385	2.338	11.0	18.5	8 9	19 42.45	- 9 22.9	2.201	3.155	7.4	21.2
8 19	19 30.12	-28 27.4	1.453	2.343	15.0	18.8	8 19	19 36.47	- 9 47.4	2.256	3.148	10.3	21.4
<b>275241</b>	2009 <i>XZ</i> <sub>2</sub>		7 19.9 238°76'	0°2'/19.8 18			<b>185154</b>	2006 <i>SJ</i> <sub>195</sub>		7 19.9 95°56'	0°5'/19.7 17		
6 10	20 24.45	-17 38.3	1.860	2.677	15.5	20.7	6 10	20 29.60	-20 37.4	1.624	2.447	17.2	20.4
6 20	20 20.95	-18 18.5	1.769	2.670	12.4	20.5	6 20	20 25.01	-20 51.0	1.560	2.464	13.6	20.2
6 30	20 14.97	-19 10.0	1.699	2.663	8.7	20.3	6 30	20 17.66	-21 11.6	1.516	2.482	9.4	20.0
7 10	20 6.98	-20 9.6	1.652	2.656	4.4	20.0	7 10	20 8.24	-21 35.5	1.495	2.499	4.7	19.8
7 20	19 57.74	-21 12.5	1.632	2.648	0.2	19.6	7 20	19 57.77	-21 58.6	1.500	2.516	0.5	19.5
7 30	19 48.30	-22 13.5	1.639	2.640	4.6	20.0	7 30	19 47.50	-22 17.4	1.531	2.532	4.9	19.9
8 9	19 39.79	-23 7.9	1.673	2.632	8.9	20.2	8 9	19 38.64	-22 29.8	1.588	2.548	9.3	20.2
8 19	19 33.16	-23 53.2	1.731	2.624	12.8	20.4	8 19	19 32.07	-22 35.3	1.669	2.564	13.1	20.4
<b>33442</b>	1999 <i>FW</i> <sub>18</sub>		7 19.9 50°29'	2°1'/20.8 18			<b>445832</b>	2012 <i>CU</i> <sub>40</sub>		7 19.9 229°91'	2°0'/18.8 18		
6 10	20 24.48	-14 48.1	1.481	2.307	18.4	18.3	6 10	20 24.09	-26 19.6	2.641	3.452	11.6	21.7
6 20	20 21.17	-14 45.0	1.417	2.321	14.7	18.1	6 20	20 19.84	-26 38.8	2.548	3.446	9.2	21.5
6 30	20 15.11	-14 54.3	1.371	2.334	10.5	17.9	6 30	20 13.72	-26 59.3	2.478	3.441	6.4	21.3
7 10	20 6.97	-15 14.2	1.348	2.348	5.8	17.7	7 10	20 6.16	-27 18.4	2.434	3.435	3.6	21.2
7 20	19 57.74	-15 41.8	1.349	2.363	2.1	17.5	7 20	19 57.79	-27 33.1	2.418	3.429	2.0	21.0
7 30	19 48.65	-16 13.0	1.375	2.378	5.1	17.7	7 30	19 49.38	-27 41.3	2.430	3.422	4.2	21.2
8 9	19 40.91	-16 44.3	1.426	2.392	9.5	18.0	8 9	19 41.72	-27 41.7	2.469	3.416	7.2	21.4
8 19	19 35.41	-17 12.8	1.499	2.408	13.5	18.3	8 19	19 35.48	-27 34.4	2.534	3.410	9.9	21.5
<b>466056</b>	2011 <i>SL</i> <sub>57</sub>		7 19.9 256°00'	3°5'/18.6 17			<b>66663</b>	1999 <i>TV</i> <sub>8</sub>		7 19.9 157°28'	3°3'/21.9 18		
6 10	20 28.07	-25 10.1	1.396	2.239	18.4	21.9	6 10	20 24.43	- 8 54.1	2.540	3.309	13.1	19.6
6 20	20 24.85	-25 54.9	1.317	2.233	14.8	21.7	6 20	20 19.94	- 8 49.8	2.453	3.317	10.8	19.4
6 30	20 18.25	-26 46.8	1.256	2.226	10.4	21.4	6 30	20 13.68	- 8 56.1	2.387	3.324	8.1	19.3
7 10	20 8.86	-27 39.6	1.217	2.220	5.8	21.1	7 10	20 6.10	- 9 12.8	2.347	3.331	5.3	19.1
7 20	19 57.73	-28 25.6	1.202	2.213	3.6	21.0	7 20	19 57.79	- 9 38.5	2.334	3.337	3.3	19.0
7 30	19 46.42	-28 58.4	1.212	2.206	7.1	21.2	7 30	19 49.47	-10 11.2	2.349	3.342	4.3	19.1
8 9	19 36.58	-29 14.9	1.245	2.200	11.9	21.4	8 9	19 41.87	-10 48.3	2.393	3.347	6.9	19.2
8 19	19 29.49	-29 15.5	1.300	2.193	16.2	21.7	8 19	19 35.60	-11 27.2	2.463	3.352	9.7	19.4
<b>178609</b>	2000 <i>DH</i> <sub>80</sub>		7 19.9 106°64'	5°5'/18.1 18			<b>118907</b>	2000 <i>UJ</i> <sub>95</sub>		7 19.9 233°73'	1°8'/18.9 18		
6 10	20 34.76	-33 25.6	1.764	2.582	16.2	20.2	6 10	20 24.49	-25 16.2	2.555	3.366	12.0	21.3
6 20	20 29.16	-34 3.8	1.703	2.600	13.0	20.0	6 20	20 20.26	-25 39.1	2.459	3.357	9.5	21.1
6 30	20 20.53	-34 38.7	1.662	2.617	9.6	19.8	6 30	20 14.07	-26 4.3	2.386	3.348	6.6	20.9
7 10	20 9.67	-35 3.6	1.645	2.634	6.5	19.7	7 10	20 6.38	-26 29.0	2.338	3.339	3.6	20.7
7 20	19 57.72	-35 13.0	1.654	2.650	5.5	19.7	7 20	19 57.79	-26 50.0	2.318	3.330	1.9	20.6
7 30	19 46.10	-35 4.0	1.690	2.666	7.5	19.8	7 30	19 49.12	-27 4.8	2.326	3.320	4.3	20.7
8 9	19 36.11	-34 37.7	1.751	2.682	10.6	20.0	8 9	19 41.20	-27 11.8	2.362	3.310	7.4	20.9
8 19	19 28.69	-33 57.4	1.835	2.696	13.7	20.3	8 19	19 34.73	-27 10.8	2.423	3.300	10.3	21.1
<b>497899</b>	2006 <i>UM</i> <sub>340</sub>		7 19.9 153°62'	3°5'/18.3 17			<b>296917</b>	2010 <i>CD</i> <sub>95</sub>		7 19.9 261°89'	0°4'/20.1 17		
6 10	20 29.90	-27 34.8	1.899	2.719	15.1	22.1	6 10	20 23.96	-17 52.2	1.897	2.714	15.3	21.3
6 20	20 25.20	-28 19.7	1.823	2.726	12.0	21.9	6 20	20 20.46	-18 7.6	1.807	2.708	12.2	21.1
6 30	20 17.82	-29 7.1	1.769	2.732	8.5	21.7	6 30	20 14.55	-18 32.0	1.737	2.701	8.6	20.8
7 10	20 8.37	-29 51.5	1.739	2.737	5.0	21.5	7 10	20 6.75	-19 2.9	1.692	2.695	4.5	20.6
7 20	19 57.74	-30 27.3	1.736	2.742	3.6	21.4	7 20	19 57.80	-19 37.1	1.672	2.688	0.4	20.2
7 30	19 47.14	-30 50.5	1.759	2.747	6.1	21.6	7 30	19 48.73	-20 10.9	1.679	2.681	4.4	20.6
8 9	19 37.76	-30 59.5	1.809	2.751	9.7	21.8	8 9	19 40.61	-20 41.1	1.713	2.675	8.6	20.8
8 19	19 30.53	-30 55.3	1.883	2.755	13.0	22.0	8 19	19 34.31	-21 5.8	1.770	2.668	12.3	21.0
<b>74882</b>	1999 <i>TV</i> <sub>105</sub>		7 19.9 206°57'	4°7'/21.9 18			<b>170909</b>	Bobmasterson		7 19.9 250°57'	0°6'/20.1 18		
6 10	20 25.13	- 8 37.4	1.720	2.515	17.5	19.4	6 10	20 28.54	-19 27.7	1.513	2.341	18.0	20.5
6 20	20 21.49	- 8 18.6	1.634	2.512	14.5	19.2	6 20	20 24.72	-19 15.2	1.428	2.335	14.5	20.2
6 30	20 15.31	- 8 14.7	1.566	2.510	11.0	19.0	6 30	20 17.86	-19 9.8	1.362	2.329	10.2	20.0
7 10	20 7.14	- 8 26.3	1.521	2.507	7.3	18.7	7 10	20 8.56	-19 9.1	1.319	2.322	5.3	19.7
7 20	19 57.76	- 8 52.3	1.500	2.504	4.8	18.6	7 20	19 57.81	-19 10.7	1.300	2.316	0.7	19.3
7 30	19 48.26	- 9 30.2	1.506	2.500	6.0	18.7	7 30	19 46.96	-19 11.6	1.307	2.309	5.2	19.6
8 9	19 39.79	-10 15.9	1.537	2.496	9.5	18.8	8 9	19 37.42	-19 10.2	1.338	2.303	10.2	19.9
8 19	19 33.26	-11 5.0	1.591	2.492	13.3	19.1	8 19	19 30.30	-19 5.6	1.392	2.296	14.6	20.1
<b>502225</b>	2015 <i>BN</i> <sub>88</sub>		7 19.9 255°65'	1°5'/20.6 17			<b>120082</b>	2003 <i>EN</i> <sub>12</sub>					

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>350734</b>	2001 XZ <sub>252</sub>		7 19.9 163°10	0°7/20.3	18		<b>349594</b>	2008 TX <sub>69</sub>		7 19.9 252°15	1°8/19.0	18	
6 10	20 25.34	-18 20.9	2.878	3.667	11.3	21.5	6 10	20 25.62	-23 9.7	1.999	2.819	14.5	21.8
6 20	20 20.45	-18 10.8	2.788	3.673	9.0	21.4	6 20	20 21.82	-23 44.3	1.904	2.808	11.5	21.5
6 30	20 13.93	-18 4.6	2.722	3.677	6.3	21.2	6 30	20 15.57	-24 24.8	1.830	2.796	8.1	21.3
7 10	20 6.21	-18 1.2	2.682	3.682	3.3	21.0	7 10	20 7.34	-25 7.5	1.780	2.783	4.3	21.1
7 20	19 57.85	-17 59.5	2.670	3.686	0.7	20.8	7 20	19 57.87	-25 47.8	1.757	2.770	1.9	20.9
7 30	19 49.51	-17 58.0	2.688	3.689	3.1	21.0	7 30	19 48.20	-26 21.4	1.761	2.758	5.1	21.1
8 9	19 41.88	-17 56.0	2.736	3.692	6.1	21.2	8 9	19 39.45	-26 45.5	1.792	2.744	9.0	21.3
8 19	19 35.49	-17 52.7	2.810	3.695	8.7	21.4	8 19	19 32.54	-26 59.3	1.846	2.731	12.6	21.5
<b>415986</b>	2002 AT <sub>5</sub>		7 19.9 78°92	7°7/17.9	15		<b>114752</b>	2003 HW <sub>41</sub>		7 19.9 29°81	1°2/19.6	18	R
6 10	20 50.59	-44 17.2	2.219	2.986	14.8	23.0	6 10	20 24.86	-22 50.4	1.217	2.072	19.8	18.6
6 20	20 40.73	-45 1.9	2.185	3.036	12.4	22.9	6 20	20 22.10	-22 51.6	1.165	2.088	15.7	18.4
6 30	20 27.90	-45 34.2	2.173	3.084	10.0	22.9	6 30	20 16.04	-22 58.6	1.130	2.105	10.8	18.2
7 10	20 13.14	-45 47.0	2.185	3.131	8.2	22.8	7 10	20 7.55	-23 7.5	1.117	2.123	5.5	17.9
7 20	19 57.81	-45 36.1	2.226	3.176	7.8	22.9	7 20	19 57.87	-23 13.9	1.126	2.142	1.2	17.7
7 30	19 43.40	-45 1.0	2.294	3.221	8.7	23.0	7 30	19 48.54	-23 14.5	1.159	2.162	5.8	18.1
8 9	19 31.16	-44 5.6	2.388	3.264	10.5	23.2	8 9	19 40.98	-23 8.1	1.215	2.182	10.7	18.4
8 19	19 21.82	-42 55.9	2.507	3.306	12.4	23.4	8 19	19 36.12	-22 55.0	1.292	2.204	15.0	18.7
<b>233625</b>	2007 TR <sub>274</sub>		7 19.9 4°40	2°6/18.8	17		<b>103669</b>	2000 CW <sub>51</sub>		7 19.9 148°21	1°0/19.5	17	
6 10	20 24.89	-25 22.2	1.698	2.533	16.0	20.6	6 10	20 29.60	-22 21.4	1.885	2.700	15.4	20.5
6 20	20 21.54	-25 51.0	1.621	2.532	12.7	20.4	6 20	20 24.82	-22 34.9	1.807	2.707	12.2	20.3
6 30	20 15.46	-26 23.8	1.564	2.533	8.9	20.2	6 30	20 17.49	-22 53.1	1.750	2.714	8.5	20.1
7 10	20 7.26	-26 56.1	1.530	2.533	4.9	20.0	7 10	20 8.21	-23 12.7	1.718	2.721	4.3	19.8
7 20	19 57.84	-27 22.8	1.522	2.534	2.7	19.8	7 20	19 57.87	-23 30.0	1.712	2.727	1.1	19.6
7 30	19 48.42	-27 40.0	1.539	2.535	5.8	20.0	7 30	19 47.59	-23 41.9	1.733	2.733	4.7	19.9
8 9	19 40.23	-27 45.8	1.582	2.536	9.8	20.3	8 9	19 38.48	-23 46.9	1.782	2.738	8.8	20.1
8 19	19 34.21	-27 40.5	1.647	2.538	13.5	20.5	8 19	19 31.42	-23 44.8	1.854	2.742	12.3	20.4
<b>355167</b>	2006 VR <sub>170</sub>		7 19.9 121°26	2°2/20.9	18		<b>35954</b>	1999 KY <sub>15</sub>		7 19.9 45°56	3°6/21.2	18	
6 10	20 23.96	-14 35.6	2.293	3.089	13.6	20.8	6 10	20 25.31	-13 13.0	1.228	2.063	20.9	17.7
6 20	20 19.81	-14 16.0	2.207	3.093	11.0	20.7	6 20	20 22.38	-12 49.3	1.168	2.075	16.9	17.5
6 30	20 13.73	-14 3.6	2.143	3.096	7.9	20.5	6 30	20 16.26	-12 40.5	1.125	2.087	12.3	17.3
7 10	20 6.19	-13 57.9	2.104	3.099	4.6	20.3	7 10	20 7.71	-12 46.2	1.102	2.100	7.3	17.1
7 20	19 57.85	-13 57.7	2.091	3.103	2.2	20.1	7 20	19 57.88	-13 4.2	1.101	2.113	3.6	16.9
7 30	19 49.53	-14 1.8	2.107	3.106	4.0	20.2	7 30	19 48.21	-13 30.7	1.125	2.127	6.1	17.1
8 9	19 42.04	-14 8.5	2.150	3.109	7.3	20.5	8 9	19 40.15	-14 1.4	1.171	2.141	10.8	17.4
8 19	19 36.04	-14 16.3	2.218	3.112	10.3	20.7	8 19	19 34.71	-14 32.3	1.239	2.155	15.1	17.7
<b>301403</b>	2009 DE <sub>35</sub>		7 19.9 247°13	0°9/20.4	18		<b>317898</b>	2003 UQ <sub>211</sub>		7 19.9 257°22	3°1/18.4	18	
6 10	20 23.23	-16 51.3	2.144	2.952	14.0	21.3	6 10	20 26.16	-27 2.3	2.021	2.844	14.2	21.1
6 20	20 19.54	-16 59.2	2.052	2.947	11.2	21.1	6 20	20 22.25	-27 38.8	1.930	2.834	11.4	20.9
6 30	20 13.73	-17 15.2	1.982	2.942	7.9	20.9	6 30	20 15.86	-28 18.2	1.860	2.824	8.1	20.7
7 10	20 6.28	-17 37.4	1.936	2.937	4.2	20.7	7 10	20 7.47	-28 55.9	1.815	2.814	4.7	20.4
7 20	19 57.87	-18 3.5	1.916	2.932	0.9	20.4	7 20	19 57.88	-29 27.3	1.796	2.804	3.2	20.3
7 30	19 49.36	-18 30.5	1.925	2.927	3.9	20.6	7 30	19 48.15	-29 48.2	1.804	2.794	5.7	20.5
8 9	19 41.68	-18 56.0	1.960	2.921	7.7	20.8	8 9	19 39.41	-29 56.9	1.838	2.784	9.3	20.7
8 19	19 35.60	-19 18.1	2.020	2.916	11.1	21.0	8 19	19 32.57	-29 53.4	1.896	2.773	12.6	20.9
<b>331654</b>	2002 PK <sub>16</sub>		7 19.9 352°70	2°0/21.1	16		<b>387946</b>	2005 EU <sub>175</sub>		7 19.9 188°13	5°5/23.6	18	
6 10	20 19.03	-11 38.1	1.533	2.358	17.9	20.4	6 10	20 22.97	-1 29.1	2.580	3.317	13.7	22.2
6 20	20 17.07	-12 15.7	1.451	2.354	14.5	20.2	6 20	20 18.85	-1 17.3	2.484	3.316	11.7	22.1
6 30	20 12.50	-13 12.1	1.388	2.350	10.5	19.9	6 30	20 13.00	-1 19.7	2.409	3.315	9.4	21.9
7 10	20 5.83	-14 25.0	1.347	2.347	5.9	19.7	7 10	20 5.83	-1 37.4	2.357	3.313	7.1	21.8
7 20	19 57.87	-15 49.9	1.331	2.345	2.1	19.4	7 20	19 57.89	-2 9.9	2.331	3.311	5.6	21.7
7 30	19 49.75	-17 19.8	1.340	2.344	4.9	19.6	7 30	19 49.86	-2 55.6	2.333	3.308	5.9	21.7
8 9	19 42.69	-18 47.5	1.374	2.343	9.5	19.9	8 9	19 42.47	-3 51.4	2.363	3.304	7.7	21.8
8 19	19 37.66	-20 7.4	1.431	2.343	13.7	20.1	8 19	19 36.32	-4 53.5	2.418	3.300	10.1	22.0
<b>45210</b>	1999 XW <sub>178</sub>		7 19.9 290°46	4°4/16.7	18		<b>445796</b>	2012 BN <sub>5</sub>		7 19.9 220°15	0°7/19.6	18	
6 10	20 23.20	-29 48.9	2.340	3.162	12.6	18.9	6 10	20 24.50	-22 39.2	2.518	3.326	12.2	21.7
6 20	20 19.74	-31 6.1	2.249	3.151	10.1	18.7	6 20	20 20.19	-22 41.8	2.426	3.322	9.7	21.6
6 30	20 14.04	-32 26.4	2.180	3.139	7.4	18.5	6 30	20 13.99	-22 47.2	2.356	3.319	6.7	21.4
7 10	20 6.53	-33 44.4	2.137	3.128	5.1	18.3	7 10	20 6.35	-22 53.3	2.312	3.315	3.4	21.2
7 20	19 57.87	-34 54.2	2.122	3.117	4.6	18.3	7 20	19 57.90	-22 57.9	2.296	3.312	0.7	20.9
7 30	19 48.97	-35 50.8	2.134	3.106	6.5	18.4	7 30	19 49.44	-22 59.2	2.309	3.308	3.7	21.2
8 9	19 40.84	-36 31.3	2.172	3.095	9.3	18.6	8 9	19 41.76	-22 56.0	2.349	3.304	7.0	21.4
8 19	19 34.33	-36 55.4	2.234	3.084	12.0	18.7	8 19	19 35.52	-22 48.3	2.414	3.300	10.0	21.6
<b>499593</b>	2010 TL <sub>75</sub>		7 19.9 197°01	5°4/17.5	17		<b>6145</b>	Riemenschneider		7 19.9 269°89	2°1/19.1	18	
6 10	20 32.49	-32 25.0	1.926	2.743	15.1	22.7	6 10	20 27.09	-23 41.2	1.744	2.571	16.0	18.6
6 20	20 27.54	-33 20.4	1.843	2.740	12.2	22.4	6 20	20 23.50	-24 10.6	1.645	2.552	12.8	18.4
6 30	20 19.67	-34 15.6	1.782	2.737	9.1	22.2	6 30	20 17.07	-24 46.4	1.566	2.533	9.0	18.1
7 10	20 9.45	-35 3.7	1.745	2.733	6.3	22.1	7 10	20 8.26	-25 24.3	1.510	2.513	4.8	17.8
7 20	19 57.85	-35 38.3	1.734	2.729	5.5	22.0	7 20	19 57.89	-25 59.3	1.480	2.493	2.2	17.6
7 30	19 46.17	-35 54.8	1.750	2.723	7.6	22.1	7 30	19 47.20	-26 26.4	1.476	2.473	5.7	17.8
8 9	19 35.75	-35 52.1	1.792	2.717	10.8	22.3	8 9	19 37.53	-26 42.6	1.498	2.453	10.2	18.0
8 19	19 27.65	-35 32.5	1.856	2.711	13.9	22.5	8 19	19 30.02	-26 47.4	1.542	2.432	14.3	18.2
<b>184945</b>	2005 WK <sub>12</sub>		7 19.9 344°74	0°3/19.8	18		<b>240678</b>	2005 EU <sub>125</sub>		7 19.9 106°44	7°0/23.8	18	
6 10	20 22.21												

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>206550</b>	2003 <i>UH</i> <sub>223</sub>		7 19.9 271°08	5°6/17.0	18		<b>472616</b>	2015 <i>DC</i> <sub>167</sub>		7 19.9 83°24	3°1/21.7	17	
6 10	20 27.32	-32 50.8	1.989	2.813	14.4	20.2	6 10	20 23.88	-10 9.5	1.729	2.531	17.1	20.8
6 20	20 23.49	-33 49.6	1.899	2.800	11.7	19.9	6 20	20 20.39	-10 22.1	1.656	2.542	13.9	20.6
6 30	20 16.91	-34 48.6	1.830	2.786	8.8	19.7	6 30	20 14.48	-10 50.2	1.602	2.553	10.2	20.4
7 10	20 8.10	-35 41.4	1.786	2.773	6.3	19.6	7 10	20 6.73	-11 32.8	1.571	2.564	6.2	20.2
7 20	19 57.90	-36 21.8	1.767	2.759	5.7	19.5	7 20	19 57.95	-12 26.5	1.565	2.575	3.2	20.0
7 30	19 47.50	-36 44.7	1.774	2.745	7.7	19.6	7 30	19 49.18	-13 27.2	1.585	2.585	5.0	20.2
8 9	19 38.17	-36 48.7	1.807	2.731	10.8	19.7	8 9	19 41.50	-14 29.5	1.632	2.596	8.7	20.4
8 19	19 30.95	-36 35.0	1.861	2.717	13.8	19.9	8 19	19 35.72	-15 29.3	1.702	2.607	12.4	20.7
<b>80742</b>	2000 <i>CH</i> <sub>37</sub>		7 19.9 189°67	0°9/20.4	18		<b>228584</b>	2001 <i>YA</i> <sub>127</sub>		7 19.9 282°01	2°2/19.1	18	
6 10	20 27.53	-16 50.2	2.026	2.829	14.9	20.4	6 10	20 26.72	-24 40.6	1.709	2.539	16.1	20.0
6 20	20 23.06	-16 59.8	1.936	2.828	12.0	20.2	6 20	20 23.19	-24 59.7	1.615	2.524	12.9	19.7
6 30	20 16.25	-17 18.1	1.868	2.826	8.4	20.0	6 30	20 16.81	-25 23.3	1.541	2.509	9.1	19.4
7 10	20 7.62	-17 42.8	1.823	2.824	4.5	19.8	7 10	20 8.10	-25 47.2	1.491	2.494	4.9	19.2
7 20	19 57.91	-18 11.2	1.806	2.822	0.9	19.5	7 20	19 57.94	-26 6.7	1.466	2.479	2.2	19.0
7 30	19 48.12	-18 40.1	1.817	2.819	4.2	19.7	7 30	19 47.57	-26 17.9	1.467	2.465	5.7	19.1
8 9	19 39.26	-19 6.7	1.855	2.815	8.2	20.0	8 9	19 38.32	-26 18.7	1.493	2.450	10.1	19.4
8 19	19 32.19	-19 29.2	1.918	2.810	11.8	20.2	8 19	19 31.28	-26 9.2	1.542	2.435	14.1	19.6
<b>53006</b>	1998 <i>VD</i> <sub>4</sub>		7 19.9 226°47	1°0/20.4	18		<b>442718</b>	2012 <i>VJ</i> <sub>17</sub>		7 19.9 240°88	5°5/22.1	17	
6 10	20 26.62	-16 30.1	2.001	2.805	15.0	20.3	6 10	20 24.45	-7 14.1	2.017	2.796	15.8	20.7
6 20	20 22.48	-16 39.2	1.903	2.796	12.1	20.1	6 20	20 20.53	-6 25.2	1.928	2.793	13.2	20.5
6 30	20 15.96	-16 57.3	1.827	2.786	8.6	19.8	6 30	20 14.45	-5 47.7	1.859	2.791	10.3	20.3
7 10	20 7.53	-17 22.6	1.774	2.775	4.6	19.6	7 10	20 6.69	-5 23.2	1.813	2.788	7.4	20.2
7 20	19 57.91	-17 52.4	1.748	2.764	1.0	19.3	7 20	19 57.95	-5 12.7	1.793	2.785	5.6	20.0
7 30	19 48.12	-18 23.4	1.750	2.752	4.3	19.5	7 30	19 49.15	-5 15.5	1.798	2.782	6.4	20.1
8 9	19 39.20	-18 52.7	1.779	2.740	8.4	19.7	8 9	19 41.22	-5 29.6	1.830	2.780	9.0	20.2
8 19	19 32.05	-19 18.0	1.832	2.727	12.2	19.9	8 19	19 34.93	-5 52.1	1.886	2.777	12.0	20.4
<b>309995</b>	2009 <i>HD</i> <sub>100</sub>		7 19.9 318°27	0°3/20.1	18		<b>480639</b>	2015 <i>NW</i> <sub>11</sub>		7 19.9 69°97	3°0/18.1	18	
6 10	20 21.73	-17 35.9	2.047	2.863	14.3	21.2	6 10	20 24.42	-23 46.5	1.887	2.714	15.0	20.9
6 20	20 18.51	-17 58.7	1.958	2.858	11.4	20.9	6 20	20 20.97	-25 0.7	1.810	2.718	11.8	20.7
6 30	20 13.12	-18 30.5	1.890	2.854	8.0	20.7	6 30	20 15.01	-26 22.6	1.755	2.722	8.2	20.5
7 10	20 6.02	-19 8.8	1.846	2.849	4.2	20.5	7 10	20 7.07	-27 46.1	1.725	2.727	4.6	20.3
7 20	19 57.92	-19 50.3	1.829	2.845	0.3	20.2	7 20	19 57.95	-29 4.6	1.722	2.731	3.1	20.2
7 30	19 49.72	-20 31.4	1.838	2.841	4.1	20.5	7 30	19 48.72	-30 11.9	1.746	2.736	5.9	20.4
8 9	19 42.36	-21 8.7	1.875	2.837	8.0	20.7	8 9	19 40.52	-31 4.5	1.796	2.740	9.5	20.6
8 19	19 36.64	-21 40.2	1.935	2.833	11.5	20.9	8 19	19 34.26	-31 41.0	1.869	2.745	12.9	20.8
<b>513811</b>	2013 <i>CE</i> <sub>225</sub>		7 19.9 182°83	3°0/21.9	18		<b>185562</b>	2008 <i>AU</i> <sub>32</sub>		7 19.9 136°44	0°8/20.3	17	
6 10	20 21.68	-9 14.9	2.710	3.483	12.3	22.4	6 10	20 25.93	-16 0.9	1.590	2.411	17.5	20.8
6 20	20 17.75	-9 13.9	2.617	3.483	10.1	22.2	6 20	20 22.42	-16 27.1	1.513	2.415	14.1	20.6
6 30	20 12.20	-9 23.0	2.545	3.483	7.5	22.1	6 30	20 16.15	-17 6.2	1.455	2.419	9.9	20.4
7 10	20 5.42	-9 41.7	2.498	3.483	4.9	21.9	7 10	20 7.69	-17 55.2	1.419	2.422	5.2	20.1
7 20	19 57.93	-10 8.9	2.478	3.482	3.1	21.8	7 20	19 57.95	-18 49.4	1.409	2.425	0.8	19.8
7 30	19 50.38	-10 42.6	2.487	3.481	4.0	21.9	7 30	19 48.15	-19 43.6	1.426	2.428	4.9	20.1
8 9	19 43.46	-11 20.4	2.524	3.480	6.5	22.0	8 9	19 39.55	-20 33.0	1.467	2.431	9.5	20.4
8 19	19 37.72	-11 59.7	2.587	3.478	9.2	22.2	8 19	19 33.14	-21 14.7	1.532	2.434	13.7	20.6
<b>215232</b>	2001 <i>AK</i> <sub>12</sub>		7 19.9 54°36	1°2/20.3	18		<b>390548</b>	2000 <i>FZ</i> <sub>5</sub>		7 19.9 133°22	1°3/19.4	17	
6 10	20 28.84	-19 33.2	1.683	2.503	16.8	19.4	6 10	20 29.23	-22 26.2	1.895	2.710	15.3	21.8
6 20	20 24.32	-18 58.2	1.612	2.513	13.4	19.2	6 20	20 24.51	-22 50.4	1.821	2.722	12.1	21.6
6 30	20 17.16	-18 28.0	1.560	2.523	9.4	19.0	6 30	20 17.28	-23 19.9	1.768	2.732	8.4	21.4
7 10	20 8.05	-18 1.3	1.531	2.533	5.0	18.8	7 10	20 8.14	-23 50.7	1.739	2.743	4.3	21.2
7 20	19 57.93	-17 37.1	1.529	2.544	1.2	18.5	7 20	19 57.96	-24 18.9	1.737	2.752	1.3	21.0
7 30	19 48.00	-17 14.6	1.553	2.555	4.7	18.8	7 30	19 47.85	-24 40.7	1.763	2.762	4.8	21.2
8 9	19 39.39	-16 53.1	1.603	2.566	9.0	19.1	8 9	19 38.93	-24 54.4	1.816	2.770	8.7	21.5
8 19	19 32.96	-16 32.7	1.676	2.577	12.8	19.3	8 19	19 32.02	-24 59.6	1.892	2.779	12.2	21.7
<b>56930</b>	2000 <i>RY</i> <sub>28</sub>		7 19.9 339°43	0°7/19.7	18		<b>474023</b>	2016 <i>GW</i> <sub>110</sub>		7 19.9 101°45	5°0/17.9	17	
6 10	20 25.26	-23 13.1	1.861	2.686	15.2	17.8	6 10	20 29.53	-28 35.2	1.443	2.283	18.1	20.9
6 20	20 21.53	-23 0.7	1.774	2.680	12.1	17.6	6 20	20 25.87	-29 34.4	1.375	2.289	14.4	20.7
6 30	20 15.31	-22 50.8	1.708	2.675	8.4	17.4	6 30	20 18.86	-30 37.1	1.327	2.294	10.4	20.5
7 10	20 7.16	-22 41.2	1.666	2.670	4.3	17.1	7 10	20 9.17	-31 35.4	1.301	2.299	6.5	20.3
7 20	19 57.93	-22 29.5	1.649	2.665	0.7	16.8	7 20	19 57.95	-32 21.4	1.300	2.304	5.1	20.2
7 30	19 48.70	-22 14.0	1.659	2.661	4.6	17.1	7 30	19 46.77	-32 49.1	1.323	2.309	7.9	20.4
8 9	19 40.57	-21 54.0	1.695	2.657	8.7	17.4	8 9	19 37.20	-32 56.9	1.370	2.314	11.9	20.6
8 19	19 34.38	-21 30.1	1.755	2.653	12.4	17.6	8 19	19 30.39	-32 46.6	1.438	2.319	15.7	20.9
<b>118985</b>	2000 <i>XW</i> <sub>26</sub>		7 19.9 125°26	5°8/16.3	18		<b>185026</b>	2006 <i>QV</i> <sub>63</sub>		7 19.9 285°76	2°1/20.8	18	
6 10	20 27.59	-37 25.2	2.565	3.371	12.0	19.9	6 10	20 24.34	-14 41.0	1.544	2.367	17.9	20.9
6 20	20 22.92	-38 27.3	2.496	3.380	9.9	19.8	6 20	20 21.56	-14 40.2	1.443	2.345	14.6	20.7
6 30	20 16.03	-39 25.7	2.449	3.389	7.7	19.6	6 30	20 15.89	-14 52.2	1.361	2.323	10.6	20.4
7 10	20 7.45	-40 14.7	2.428	3.397	6.1	19.6	7 10	20 7.75	-15 16.1	1.301	2.301	6.0	20.1
7 20	19 57.93	-40 49.9	2.433	3.405	5.9	19.6	7 20	19 57.96	-15 49.5	1.265	2.279	2.2	19.7
7 30	19 48.44	-41 8.2	2.466	3.413	7.2	19.7	7 30	19 47.74	-16 28.4	1.254	2.257	5.4	19.9
8 9	19 39.93	-41 9.2	2.524	3.421	9.2	19.8	8 9	19 38.49	-17 8.5	1.268	2.234	10.4	20.1
8 19	19 33.17	-40 54.5	2.605	3.429	11.3	20.0	8 19	19 31.43	-17 46.0	1.303	2.212	15.1	20.3
<b>347968</b>	2003 <i>SD</i> <sub>31</sub>		7 19.9 275°91	4°4/21.6	17		<b>521690</b>	2015 <i>RM</i>					

EPHEMERIDES

7 19.9

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>285124</b>	1995 <i>SK</i> <sub>44</sub>		7 19.9 341°97	5°8/22.8	18		<b>340265</b>	2006 <i>BO</i> <sub>161</sub>		7 19.9 121°12	1°1/20.3	18	
6 10	20 19.97	— 5 15.1	1.912	2.696	16.3	20.6	6 10	20 29.60	—19 32.7	1.851	2.662	15.8	19.9
6 20	20 17.17	— 4 46.3	1.824	2.691	13.7	20.4	6 20	20 24.81	—18 59.6	1.768	2.664	12.7	19.7
6 30	20 12.22	— 4 32.6	1.756	2.687	10.8	20.2	6 30	20 17.50	—18 30.5	1.706	2.667	8.9	19.5
7 10	20 5.60	— 4 35.4	1.709	2.682	7.8	20.1	7 10	20 8.28	—18 4.4	1.668	2.669	4.8	19.3
7 20	19 57.99	— 4 54.9	1.686	2.679	5.9	19.9	7 20	19 58.03	—17 40.0	1.656	2.672	1.1	19.0
7 30	19 50.28	— 5 29.3	1.689	2.675	6.5	20.0	7 30	19 47.85	—17 16.7	1.673	2.674	4.5	19.2
8 9	19 43.41	— 6 14.9	1.717	2.672	9.1	20.1	8 9	19 38.84	—16 54.0	1.715	2.676	8.6	19.5
8 19	19 38.16	— 7 7.6	1.769	2.670	12.2	20.3	8 19	19 31.86	—16 31.9	1.782	2.679	12.4	19.7
<b>117300</b>	2004 <i>VG</i> <sub>2</sub>		7 19.9 224°81	3°3/21.8	18		<b>342637</b>	2008 <i>UR</i> <sub>354</sub>		7 19.9 353°89	2°6/20.9	16	
6 10	20 21.75	— 9 37.8	2.785	3.557	12.0	20.3	6 10	20 17.86	—14 36.4	1.262	2.112	19.6	19.8
6 20	20 17.80	— 9 17.3	2.685	3.550	9.9	20.1	6 20	20 16.70	—14 26.3	1.187	2.105	15.9	19.6
6 30	20 12.24	— 9 5.2	2.607	3.544	7.5	20.0	6 30	20 12.55	—14 30.3	1.130	2.099	11.5	19.3
7 10	20 5.48	— 9 1.6	2.554	3.537	5.0	19.8	7 10	20 6.01	—14 47.7	1.093	2.095	6.6	19.0
7 20	19 58.00	— 9 6.2	2.528	3.530	3.3	19.7	7 20	19 58.03	—15 15.9	1.078	2.092	2.6	18.7
7 30	19 50.45	— 9 18.0	2.531	3.523	4.2	19.7	7 30	19 49.96	—15 50.8	1.086	2.090	5.7	18.9
8 9	19 43.49	— 9 35.1	2.562	3.515	6.6	19.9	8 9	19 43.20	—16 27.6	1.116	2.090	10.6	19.2
8 19	19 37.68	— 9 55.7	2.618	3.507	9.2	20.0	8 19	19 38.84	—17 2.2	1.167	2.091	15.2	19.5
<b>35939</b>	1999 <i>JO</i> <sub>127</sub>		7 19.9 290°30	5°3/16.7	18		<b>187014</b>	2004 <i>TA</i> <sub>297</sub>		7 19.9 18°06	2°8/21.4	18	R
6 10	20 25.03	—27 59.5	1.708	2.545	15.9	18.1	6 10	20 20.44	—12 27.9	1.933	2.742	15.3	19.6
6 20	20 22.21	—29 28.8	1.615	2.526	12.8	17.8	6 20	20 17.46	—12 17.5	1.856	2.747	12.4	19.4
6 30	20 16.42	—31 6.2	1.542	2.507	9.3	17.6	6 30	20 12.35	—12 18.1	1.798	2.752	9.1	19.2
7 10	20 8.08	—32 44.2	1.494	2.489	6.2	17.3	7 10	20 5.63	—12 29.0	1.763	2.758	5.5	19.0
7 20	19 57.99	—34 13.8	1.470	2.470	5.5	17.2	7 20	19 58.03	—12 48.7	1.754	2.764	2.9	18.8
7 30	19 47.43	—35 26.8	1.473	2.451	8.2	17.4	7 30	19 50.44	—13 14.8	1.771	2.771	4.6	19.0
8 9	19 37.86	—36 18.3	1.501	2.433	12.0	17.5	8 9	19 43.77	—13 44.2	1.814	2.779	8.0	19.2
8 19	19 30.57	—36 47.4	1.549	2.414	15.6	17.7	8 19	19 38.75	—14 14.1	1.882	2.787	11.4	19.4
<b>337136</b>	1999 <i>TO</i> <sub>185</sub>		7 19.9 282°26	4°5/21.3	18		<b>11702</b>	Mifischer		7 19.9 254°20	1°3/19.5	18	
6 10	20 26.05	—10 36.4	1.996	2.785	15.6	20.6	6 10	20 28.73	—22 40.7	1.623	2.451	17.0	18.7
6 20	20 22.16	— 9 53.0	1.881	2.756	13.0	20.3	6 20	20 24.88	—22 51.1	1.532	2.440	13.6	18.4
6 30	20 15.88	— 9 18.2	1.785	2.728	9.9	20.1	6 30	20 18.06	—23 7.3	1.461	2.428	9.5	18.2
7 10	20 7.61	— 8 53.1	1.713	2.699	6.7	19.8	7 10	20 8.80	—23 25.4	1.412	2.416	4.9	17.9
7 20	19 58.00	— 8 38.4	1.667	2.669	4.5	19.6	7 20	19 58.03	—23 41.3	1.389	2.404	1.3	17.6
7 30	19 48.02	— 8 34.0	1.647	2.639	5.9	19.7	7 30	19 47.07	—23 51.2	1.392	2.392	5.5	17.9
8 9	19 38.74	— 8 38.6	1.654	2.609	9.4	19.8	8 9	19 37.31	—23 52.8	1.420	2.380	10.2	18.1
8 19	19 31.13	— 8 49.9	1.685	2.579	13.1	20.0	8 19	19 29.88	—23 46.2	1.471	2.367	14.5	18.3
<b>185267</b>	2006 <i>UZ</i> <sub>134</sub>		7 19.9 316°65	1°2/19.4	18		<b>358395</b>	2007 <i>AP</i> <sub>25</sub>		7 19.9 164°35	1°2/20.9	18	
6 10	20 23.19	—21 58.8	2.012	2.834	14.3	21.1	6 10	20 22.12	—14 5.7	2.902	3.687	11.3	21.8
6 20	20 19.77	—22 24.9	1.925	2.830	11.4	20.9	6 20	20 18.01	—14 25.0	2.812	3.691	9.1	21.7
6 30	20 14.06	—22 56.9	1.859	2.826	7.9	20.7	6 30	20 12.36	—14 52.1	2.744	3.696	6.4	21.5
7 10	20 6.56	—23 31.6	1.818	2.822	4.1	20.4	7 10	20 5.53	—15 25.4	2.702	3.700	3.6	21.3
7 20	19 58.00	—24 5.1	1.803	2.818	1.2	20.2	7 20	19 58.04	—16 3.0	2.689	3.703	1.3	21.2
7 30	19 49.36	—24 33.7	1.815	2.814	4.6	20.4	7 30	19 50.52	—16 42.5	2.705	3.706	3.1	21.3
8 9	19 41.65	—24 55.0	1.854	2.811	8.4	20.7	8 9	19 43.59	—17 21.5	2.750	3.709	5.9	21.5
8 19	19 35.70	—25 8.0	1.916	2.807	11.9	20.9	8 19	19 37.80	—17 58.0	2.822	3.711	8.6	21.7
<b>20127</b>	1995 <i>YV</i> <sub>22</sub>		7 19.9 151°27	0°4/20.2	18		<b>473174</b>	2015 <i>KR</i> <sub>49</sub>		7 19.9 17°38	5°5/22.2	16	
6 10	20 22.92	—18 3.7	2.623	3.423	12.0	20.2	6 10	20 21.40	— 8 12.3	1.594	2.401	18.1	20.6
6 20	20 18.83	—18 17.4	2.537	3.428	9.5	20.0	6 20	20 18.65	— 7 32.5	1.521	2.405	15.0	20.4
6 30	20 13.00	—18 37.0	2.473	3.433	6.6	19.8	6 30	20 13.41	— 7 7.5	1.466	2.410	11.5	20.1
7 10	20 5.87	—19 0.7	2.436	3.437	3.4	19.6	7 10	20 6.26	— 6 58.7	1.432	2.416	8.0	20.0
7 20	19 58.01	—19 26.2	2.425	3.441	0.4	19.4	7 20	19 58.04	— 7 6.1	1.422	2.422	5.6	19.8
7 30	19 50.15	—19 51.2	2.444	3.446	3.3	19.7	7 30	19 49.84	— 7 27.9	1.437	2.429	6.6	19.9
8 9	19 42.99	—20 13.7	2.491	3.449	6.5	19.9	8 9	19 42.75	— 8 0.4	1.475	2.436	9.8	20.1
8 19	19 37.15	—20 32.4	2.564	3.453	9.3	20.1	8 19	19 37.62	— 8 39.3	1.537	2.444	13.3	20.3
<b>510785</b>	2013 <i>AZ</i> <sub>93</sub>		7 19.9 115°66	1°3/20.9	17		<b>424214</b>	2007 <i>RF</i> <sub>36</sub>		7 19.9 311°46	3°2/19.1	18	
6 10	20 23.02	—12 58.4	2.712	3.494	12.1	22.0	6 10	20 24.12	—25 37.7	1.174	2.036	20.0	20.6
6 20	20 18.75	—13 31.6	2.634	3.512	9.6	21.9	6 20	20 22.74	—25 51.4	1.078	2.005	16.3	20.2
6 30	20 12.86	—14 14.0	2.579	3.529	6.8	21.7	6 30	20 17.59	—26 10.5	0.998	1.974	11.7	19.9
7 10	20 5.76	—15 3.7	2.549	3.546	3.8	21.5	7 10	20 9.03	—26 29.7	0.938	1.943	6.5	19.5
7 20	19 58.02	—15 58.0	2.549	3.563	1.3	21.4	7 20	19 58.03	—26 42.5	0.900	1.913	3.2	19.2
7 30	19 50.28	—16 53.7	2.578	3.579	3.2	21.5	7 30	19 46.33	—26 42.6	0.884	1.884	7.7	19.4
8 9	19 43.24	—17 47.9	2.636	3.594	6.1	21.8	8 9	19 36.00	—26 27.1	0.889	1.855	13.6	19.6
8 19	19 37.43	—18 38.1	2.720	3.609	8.8	22.0	8 19	19 28.76	—25 57.2	0.912	1.828	19.2	19.8
<b>236991</b>	2008 <i>RM</i> <sub>4</sub>		7 19.9 229°24	0°7/20.3	18		<b>418976</b>	2009 <i>HA</i> <sub>100</sub>		7 19.9 57°38	5°9/17.7	17	
6 10	20 25.96	—17 30.5	2.204	3.006	13.9	22.2	6 10	20 28.99	—30 3.0	1.341	2.188	18.8	21.5
6 20	20 21.74	—17 38.1	2.104	2.996	11.1	22.0	6 20	20 25.67	—31 7.7	1.280	2.197	15.1	21.3
6 30	20 15.33	—17 53.2	2.026	2.985	7.9	21.8	6 30	20 18.83	—32 14.4	1.239	2.206	10.9	21.1
7 10	20 7.20	—18 13.8	1.972	2.974	4.2	21.5	7 10	20 9.20	—33 14.4	1.219	2.215	7.2	20.9
7 20	19 58.01	—18 37.4	1.946	2.962	0.7	21.2	7 20	19 58.03	—33 59.0	1.223	2.224	6.0	20.8
7 30	19 48.66	—19 1.4	1.948	2.949	4.0	21.5	7 30	19 47.00	—34 22.3	1.251	2.234	8.7	21.0
8 9	19 40.11	—19 23.3	1.977	2.936	7.8	21.7	8 9	19 37.76	—34 23.4	1.302	2.244	12.6	21.3
8 19	19 33.15	—19 41.5	2.031	2.923	11.3	21.9	8 19	19 31.45	—34 5.0	1.373	2.254	16.3	21.5

EPHEMERIDES

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2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>208549</b>	2002 <i>AH</i> <sub>111</sub>		7 19.9 203°43	1°5/19.5	17		<b>505575</b>	2014 <i>BB</i> <sub>24</sub>		7 19.9 134°60	4°9/23.5	17	
6 10	20 30.43	-23 17.4	1.602	2.428	17.2	20.9	6 10	20 23.37	-2 30.4	2.425	3.171	14.3	22.3
6 20	20 26.16	-23 30.5	1.520	2.426	13.7	20.6	6 20	20 19.24	-2 35.2	2.342	3.183	12.0	22.2
6 30	20 18.87	-23 48.9	1.456	2.423	9.6	20.4	6 30	20 13.33	-2 55.6	2.279	3.194	9.4	22.0
7 10	20 9.17	-24 8.3	1.416	2.420	5.0	20.1	7 10	20 6.10	-3 31.5	2.240	3.205	6.8	21.9
7 20	19 58.05	-24 24.3	1.402	2.417	1.6	19.9	7 20	19 58.12	-4 21.7	2.228	3.216	5.1	21.8
7 30	19 46.87	-24 33.1	1.413	2.413	5.5	20.1	7 30	19 50.14	-5 23.5	2.243	3.226	5.4	21.8
8 9	19 37.03	-24 32.8	1.450	2.409	10.2	20.4	8 9	19 42.88	-6 32.9	2.287	3.236	7.5	22.0
8 19	19 29.60	-24 23.9	1.510	2.404	14.3	20.6	8 19	19 36.98	-7 45.7	2.356	3.245	10.0	22.2
<b>184713</b>	2005 <i>SR</i> <sub>147</sub>		7 19.9 12°66	1°2/19.4	18		<b>34720</b>	2001 <i>PH</i> <sub>54</sub>		7 19.9 234°36	1°0/20.5	18	
6 10	20 22.38	-21 58.3	1.882	2.711	14.9	20.3	6 10	20 23.47	-16 31.4	2.159	2.966	14.0	19.9
6 20	20 19.23	-22 21.2	1.804	2.713	11.8	20.1	6 20	20 19.77	-16 40.3	2.068	2.962	11.2	19.7
6 30	20 13.72	-22 49.9	1.747	2.715	8.2	19.9	6 30	20 13.96	-16 57.5	1.998	2.957	7.9	19.5
7 10	20 6.40	-23 21.1	1.713	2.718	4.2	19.6	7 10	20 6.52	-17 21.2	1.952	2.953	4.3	19.3
7 20	19 58.06	-23 51.0	1.706	2.721	1.2	19.4	7 20	19 58.12	-17 49.0	1.933	2.949	1.0	19.0
7 30	19 49.71	-24 16.0	1.725	2.725	4.6	19.7	7 30	19 49.63	-18 18.0	1.942	2.944	3.9	19.2
8 9	19 42.39	-24 33.8	1.769	2.729	8.6	19.9	8 9	19 41.96	-18 45.6	1.978	2.940	7.6	19.5
8 19	19 36.92	-24 43.5	1.838	2.733	12.1	20.1	8 19	19 35.87	-19 9.8	2.039	2.935	11.0	19.7
<b>349257</b>	2007 <i>TY</i> <sub>152</sub>		7 19.9 307°82	8°0/23.5	18		<b>96642</b>	1999 <i>GN</i> <sub>25</sub>		7 19.9 37°44	5°7/18.0	18	
6 10	20 21.11	-1 20.1	1.831	2.599	17.5	20.9	6 10	20 27.27	-28 50.7	1.155	2.015	20.4	18.6
6 20	20 18.26	-0 27.9	1.738	2.588	15.1	20.7	6 20	20 24.72	-29 49.4	1.100	2.025	16.3	18.4
6 30	20 13.13	+ 0 7.8	1.664	2.576	12.4	20.5	6 30	20 18.37	-30 51.1	1.063	2.035	11.7	18.2
7 10	20 6.16	+ 0 23.7	1.610	2.565	9.8	20.3	7 10	20 9.05	-31 46.9	1.047	2.046	7.3	18.0
7 20	19 58.06	+ 0 18.1	1.579	2.554	8.2	20.2	7 20	19 58.12	-32 27.7	1.053	2.058	5.8	17.9
7 30	19 49.77	-0 8.7	1.573	2.544	8.5	20.2	7 30	19 47.42	-32 47.3	1.081	2.070	8.8	18.1
8 9	19 42.30	-0 53.5	1.591	2.533	10.7	20.3	8 9	19 38.71	-32 44.9	1.132	2.083	13.1	18.4
8 19	19 36.54	-1 51.4	1.631	2.523	13.5	20.5	8 19	19 33.16	-32 23.6	1.202	2.096	17.1	18.7
<b>342562</b>	2008 <i>UB</i> <sub>251</sub>		7 19.9 139°85	0°2/19.9	17		<b>344476</b>	2002 <i>PX</i> <sub>143</sub>		7 20.0 207°42	0°2/20.1	18	
6 10	20 26.08	-19 52.9	2.057	2.869	14.4	21.5	6 20	20 21.28	-19 7.0	1.991	2.888	11.4	21.6
6 20	20 21.85	-20 7.5	1.977	2.875	11.4	21.3	6 30	20 15.05	-19 20.4	1.924	2.886	8.0	21.4
6 30	20 15.38	-20 28.4	1.917	2.880	7.9	21.1	7 10	20 7.09	-19 38.2	1.881	2.884	4.1	21.1
7 10	20 7.20	-20 52.9	1.883	2.886	4.1	20.8	7 20	19 58.14	-19 57.7	1.865	2.881	0.2	20.8
7 20	19 58.07	-21 18.0	1.875	2.891	0.2	20.5	7 30	19 49.13	-20 16.2	1.877	2.879	4.1	21.1
7 30	19 48.94	-21 40.5	1.895	2.896	4.1	20.9	8 9	19 41.03	-20 31.5	1.916	2.876	7.9	21.4
8 9	19 40.80	-21 58.2	1.942	2.901	8.0	21.1	8 19	19 34.63	-20 42.4	1.979	2.873	11.4	21.6
8 19	19 34.41	-22 10.2	2.013	2.905	11.4	21.3	8 29	19 30.52	-20 48.4	2.063	2.870	14.3	21.8
<b>424540</b>	2008 <i>ET</i> <sub>135</sub>		7 19.9 121°31	0°9/20.4	17		<b>477032</b>	2009 <i>AT</i> <sub>15</sub>		7 20.0 49°66	3°6/17.9	18	
6 10	20 27.79	-16 2.9	1.808	2.616	16.2	22.5	6 20	20 21.09	-26 38.4	1.757	2.666	12.0	20.5
6 20	20 23.42	-16 23.9	1.736	2.630	13.0	22.3	6 30	20 15.20	-27 57.5	1.705	2.672	8.4	20.3
6 30	20 16.56	-16 55.4	1.684	2.644	9.1	22.1	7 10	20 7.27	-29 16.4	1.677	2.677	5.0	20.1
7 10	20 7.83	-17 34.9	1.655	2.657	4.8	21.8	7 20	19 58.14	-30 28.5	1.676	2.683	3.7	20.0
7 20	19 58.06	-18 18.3	1.653	2.669	0.9	21.6	7 30	19 48.94	-31 27.8	1.701	2.689	6.3	20.2
7 30	19 48.36	-19 1.6	1.679	2.681	4.4	21.9	8 9	19 40.82	-32 11.1	1.752	2.694	9.9	20.4
8 9	19 39.79	-19 41.2	1.731	2.693	8.5	22.1	8 19	19 34.73	-32 37.9	1.826	2.701	13.2	20.6
8 19	19 33.21	-20 14.9	1.808	2.704	12.2	22.4	8 29	19 31.29	-32 49.6	1.919	2.707	15.9	20.8
<b>308649</b>	2006 <i>BL</i> <sub>25</sub>		7 19.9 146°56	0°9/20.4	17		<b>515232</b>	2012 <i>BH</i> <sub>106</sub>		7 20.0 171°97	1°0/19.2	18	
6 10	20 28.83	-16 42.7	1.545	2.365	18.0	21.3	6 20	20 18.50	-21 50.2	2.894	3.786	8.4	22.5
6 20	20 24.78	-16 53.9	1.470	2.371	14.5	21.0	6 30	20 12.77	-22 42.3	2.828	3.789	5.8	22.3
6 30	20 17.83	-17 16.4	1.414	2.377	10.2	20.8	7 10	20 5.82	-23 36.6	2.789	3.791	3.0	22.1
7 10	20 8.60	-17 47.5	1.380	2.382	5.4	20.5	7 20	19 58.15	-24 30.2	2.778	3.793	1.0	22.0
7 20	19 58.06	-18 23.3	1.371	2.387	1.0	20.2	7 30	19 50.40	-25 19.7	2.798	3.795	3.4	22.2
7 30	19 47.53	-18 59.3	1.389	2.392	5.0	20.5	8 9	19 43.23	-26 2.9	2.847	3.796	6.2	22.3
8 9	19 38.30	-19 31.7	1.432	2.396	9.7	20.8	8 19	19 37.22	-26 38.5	2.922	3.797	8.8	22.5
8 19	19 31.40	-19 58.4	1.498	2.399	13.9	21.1	8 29	19 32.83	-27 6.0	3.020	3.797	10.9	22.7
<b>393563</b>	2003 <i>HR</i> <sub>19</sub>		7 19.9 275°09	4°8/17.2	18		<b>288890</b>	2004 <i>RR</i> <sub>274</sub>		7 20.0 8°18	0°5/20.1	18	
6 10	20 25.66	-32 31.1	2.239	3.059	13.1	20.8	6 20	20 21.28	-20 34.0	1.752	2.656	12.3	19.8
6 20	20 21.70	-33 24.5	2.159	3.058	10.6	20.7	6 30	20 15.12	-20 9.9	1.692	2.658	8.6	19.6
6 30	20 15.40	-34 17.2	2.101	3.057	7.9	20.5	7 10	20 7.13	-19 47.8	1.656	2.660	4.5	19.3
7 10	20 7.26	-35 4.0	2.068	3.055	5.5	20.3	7 20	19 58.16	-19 26.5	1.646	2.662	0.5	19.0
7 20	19 58.07	-35 39.7	2.061	3.054	4.9	20.3	7 30	19 49.25	-19 4.7	1.663	2.665	4.3	19.3
7 30	19 48.83	-36 0.8	2.081	3.053	6.7	20.4	8 9	19 41.47	-18 42.2	1.705	2.669	8.5	19.6
8 9	19 40.58	-36 6.0	2.127	3.052	9.4	20.6	8 19	19 35.62	-18 18.9	1.772	2.674	12.1	19.8
8 19	19 34.14	-35 56.4	2.196	3.050	12.0	20.8	8 29	19 32.23	-17 54.9	1.859	2.678	15.2	20.0
<b>225325</b>	1998 <i>HP</i> <sub>73</sub>		7 19.9 109°71	1°9/19.0	17		<b>384965</b>	2012 <i>TE</i> <sub>154</sub>		7 20.0 15°69	1°0/20.4	17	
6 10	20 27.90	-23 11.3	1.995	2.810	14.7	21.2	6 20	20 20.70	-16 55.5	1.699	2.599	12.9	21.3
6 20	20 23.35	-23 51.3	1.926	2.827	11.6	21.0	6 30	20 14.83	-17 12.2	1.637	2.600	9.1	21.1
6 30	20 16.43	-24 36.3	1.879	2.843	8.0	20.8	7 10	20 7.05	-17 36.5	1.598	2.600	4.8	20.8
7 10	20 7.74	-25 21.9	1.856	2.859	4.2	20.6	7 20	19 58.16	-18 5.2	1.585	2.601	1.0	20.5
7 20	19 58.09	-26 3.6	1.861	2.874	1.9	20.5	7 30	19 49.21	-18 35.0	1.599	2.602	4.5	20.8
7 30	19 48.53	-26 37.4	1.893	2.889	4.9	20.7	8 9	19 41.32	-19 2.8	1.638	2.603	8.7	21.0
8 9	19 40.09	-27 1.2	1.953	2.904	8.5	21.0	8 19	19 35.34	-19 26.4	1.701	2.604	12.5	21.3
8 19	19 33.54	-27 14.7	2.036	2.918	11.7	21.2	8 29	19 31.88	-19 44.5	1.785	2.605	15.7	21.5
<b>355034</b>	2006 <i>RT</i> <sub>45</sub>		7 19.9 257°11	1°4/19.3	18		<b>58663</b>	1997 <i>XZ</i>					