

EPHEMERIDES

6 3.9

6 4.0

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>245677</b>	2006 BA <sub>41</sub>		6 3.9 172°10	3°5/ 3.2 18			<b>233820</b>	2008 UG <sub>201</sub>		6 3.9 137°41	2°5/ 4.8 18		
5 1	17 18.02	-14 50.0	1.620	2.480	15.0	21.5	5 1	17 15.91	-29 51.3	1.969	2.816	13.3	20.5
5 11	17 11.85	-14 27.7	1.550	2.483	11.3	21.2	5 11	17 10.14	-29 56.7	1.896	2.819	10.1	20.3
5 21	17 3.21	-14 8.3	1.503	2.486	7.3	21.0	5 21	17 2.12	-29 53.3	1.845	2.823	6.6	20.1
5 31	16 52.95	-13 53.8	1.482	2.487	3.8	20.8	5 31	16 52.65	-29 40.0	1.820	2.826	3.2	19.9
6 10	16 42.25	-13 46.2	1.486	2.489	4.8	20.9	6 10	16 42.81	-29 17.0	1.823	2.829	3.3	19.9
6 20	16 32.31	-13 46.9	1.517	2.489	8.7	21.1	6 20	16 33.69	-28 46.6	1.852	2.832	6.7	20.1
6 30	16 24.20	-13 57.0	1.572	2.489	12.7	21.3	6 30	16 26.25	-28 12.4	1.907	2.835	10.2	20.3
7 10	16 18.65	-14 16.6	1.648	2.489	16.2	21.5	7 10	16 21.15	-27 38.6	1.984	2.838	13.4	20.5
<b>355654</b>	2008 EN <sub>78</sub>		6 3.9 30°74	11°7/ 7.1 18			<b>111723</b>	2002 CV <sub>45</sub>		6 3.9 147°81	4°9/ 1.8 18		
5 1	17 25.94	-55 25.1	2.232	2.960	15.6	20.5	5 1	17 10.57	-9 16.5	2.409	3.256	11.2	19.9
5 11	17 18.92	-56 59.8	2.168	2.963	14.1	20.3	5 11	17 5.61	-8 18.0	2.340	3.259	8.7	19.7
5 21	17 8.11	-58 13.9	2.124	2.967	12.8	20.3	5 21	16 59.15	-7 24.0	2.296	3.262	6.3	19.6
5 31	16 54.50	-58 59.8	2.101	2.972	11.9	20.2	5 31	16 51.77	-6 37.6	2.278	3.265	4.9	19.5
6 10	16 39.82	-59 13.4	2.100	2.976	11.8	20.2	6 10	16 44.17	-6 1.8	2.288	3.267	5.6	19.5
6 20	16 26.06	-58 55.2	2.120	2.981	12.3	20.2	6 20	16 37.06	-5 38.3	2.325	3.270	7.8	19.7
6 30	16 15.03	-58 10.1	2.162	2.985	13.5	20.3	6 30	16 31.06	-5 27.9	2.387	3.272	10.3	19.8
7 10	16 7.80	-57 6.5	2.222	2.990	14.8	20.4	7 10	16 26.67	-5 30.2	2.471	3.274	12.6	20.0
<b>416565</b>	2004 DG <sub>3</sub>		6 3.9 167°92	1°9/ 3.4 17			<b>153854</b>	2001 XS <sub>52</sub>		6 3.9 186°30	1°0/ 3.7 18		
5 1	17 16.77	-17 58.0	2.027	2.879	12.8	22.2	5 1	17 15.47	-20 35.8	2.002	2.857	12.8	20.5
5 11	17 10.50	-17 38.6	1.954	2.884	9.5	22.0	5 11	17 9.66	-20 20.5	1.925	2.857	9.5	20.3
5 21	17 2.22	-17 18.9	1.905	2.889	5.8	21.8	5 21	17 1.79	-20 3.2	1.872	2.857	5.7	20.1
5 31	16 52.65	-17 0.1	1.883	2.892	2.4	21.5	5 31	16 52.56	-19 44.3	1.845	2.856	1.8	19.8
6 10	16 42.75	-16 43.8	1.889	2.895	3.3	21.6	6 10	16 42.97	-19 25.4	1.846	2.855	2.8	19.9
6 20	16 33.49	-16 31.6	1.923	2.897	7.0	21.8	6 20	16 33.98	-19 8.2	1.874	2.853	6.8	20.1
6 30	16 25.73	-16 25.3	1.982	2.899	10.5	22.1	6 30	16 26.49	-18 55.0	1.928	2.851	10.5	20.4
7 10	16 20.09	-16 25.8	2.064	2.899	13.6	22.3	7 10	16 21.14	-18 47.5	2.005	2.848	13.6	20.6
<b>198437</b>	2004 WV <sub>3</sub>		6 3.9 111°03	1°1/ 3.7 18			<b>163343</b>	2002 LC <sub>53</sub>		6 3.9 0°61	2°0/ 3.7 17		
5 1	17 14.77	-20 15.3	1.957	2.815	12.9	20.7	5 1	17 12.43	-16 51.4	1.453	2.330	15.5	18.8
5 11	17 9.06	-20 2.0	1.892	2.825	9.6	20.5	5 11	17 8.06	-17 3.1	1.385	2.328	11.6	18.6
5 21	17 1.35	-19 47.0	1.850	2.835	5.8	20.3	5 21	17 1.11	-17 18.5	1.339	2.327	7.2	18.3
5 31	16 52.39	-19 31.3	1.834	2.845	1.9	20.0	5 31	16 52.41	-17 37.8	1.316	2.327	2.8	18.0
6 10	16 43.16	-19 16.0	1.846	2.855	2.8	20.1	6 10	16 43.17	-18 1.1	1.319	2.327	3.8	18.1
6 20	16 34.63	-19 2.9	1.885	2.864	6.7	20.4	6 20	16 34.65	-18 28.4	1.346	2.329	8.3	18.4
6 30	16 27.63	-18 53.8	1.950	2.874	10.3	20.6	6 30	16 27.98	-18 59.7	1.396	2.331	12.7	18.6
7 10	16 22.77	-18 50.3	2.037	2.883	13.4	20.8	7 10	16 23.96	-19 35.3	1.466	2.334	16.4	18.9
<b>224505</b>	2005 WQ <sub>29</sub>		6 3.9 119°87	1°0/ 4.3 17			<b>142419</b>	2002 SC <sub>34</sub>		6 4.0 202°84	3°8/ 2.9 18		
5 1	17 17.01	-25 27.5	1.962	2.813	13.2	21.5	5 1	17 15.35	-14 3.8	1.844	2.702	13.6	20.5
5 11	17 10.78	-25 30.9	1.897	2.826	9.8	21.3	5 11	17 9.67	-13 27.4	1.768	2.699	10.3	20.3
5 21	17 2.40	-25 29.1	1.855	2.838	6.0	21.1	5 21	17 1.84	-12 53.2	1.715	2.695	6.8	20.0
5 31	16 52.70	-25 21.2	1.840	2.850	2.1	20.8	5 31	16 52.59	-12 23.9	1.689	2.691	4.0	19.9
6 10	16 42.71	-25 8.0	1.852	2.862	2.6	20.9	6 10	16 42.93	-12 2.2	1.689	2.687	4.9	19.9
6 20	16 33.47	-24 51.1	1.892	2.874	6.5	21.2	6 20	16 33.88	-11 50.0	1.715	2.682	8.3	20.1
6 30	16 25.91	-24 33.4	1.958	2.885	10.1	21.4	6 30	16 26.38	-11 48.7	1.766	2.677	11.9	20.3
7 10	16 20.61	-24 17.8	2.046	2.895	13.2	21.6	7 10	16 21.09	-11 58.4	1.839	2.672	15.1	20.5
<b>60091</b>	1999 TG <sub>156</sub>		6 3.9 282°55	2°1/ 3.5 18			<b>346014</b>	2007 TG <sub>266</sub>		6 4.0 221°11	0°3/ 3.9 18		
5 1	17 13.37	-17 36.4	1.837	2.701	13.4	18.6	5 1	17 14.05	-22 16.0	2.534	3.381	10.7	22.6
5 11	17 8.36	-17 23.4	1.753	2.689	10.0	18.3	5 11	17 8.33	-22 6.2	2.443	3.371	8.0	22.4
5 21	17 1.13	-17 11.0	1.691	2.677	6.2	18.1	5 21	17 0.89	-21 53.5	2.377	3.361	4.8	22.2
5 31	16 52.38	-17 0.3	1.655	2.664	2.6	17.8	5 31	16 52.31	-21 38.1	2.339	3.350	1.4	22.0
6 10	16 43.10	-16 52.8	1.645	2.652	3.6	17.8	6 10	16 43.36	-21 20.9	2.329	3.339	2.2	22.0
6 20	16 34.32	-16 49.8	1.662	2.640	7.6	18.1	6 20	16 34.82	-21 3.4	2.348	3.327	5.6	22.2
6 30	16 27.05	-16 53.0	1.704	2.628	11.5	18.3	6 30	16 27.44	-20 47.4	2.394	3.314	8.8	22.4
7 10	16 22.00	-17 3.2	1.767	2.616	14.9	18.5	7 10	16 21.79	-20 34.9	2.464	3.301	11.6	22.6
<b>436837</b>	2012 SL <sub>12</sub>		6 3.9 115°96	6°5/ 1.4 17			<b>308584</b>	2005 UN <sub>490</sub>		6 4.0 291°60	2°0/ 4.8 18		
5 1	17 12.17	-4 7.8	2.317	3.151	12.0	21.6	5 1	17 12.85	-29 33.3	2.224	3.070	12.0	20.5
5 11	17 6.73	-3 6.7	2.262	3.166	9.6	21.5	5 11	17 7.72	-29 23.2	2.137	3.062	9.1	20.3
5 21	16 59.77	-2 14.3	2.231	3.181	7.6	21.4	5 21	17 0.62	-29 4.8	2.074	3.053	5.9	20.1
5 31	16 51.92	-1 34.3	2.227	3.195	6.5	21.4	5 31	16 52.24	-28 37.4	2.038	3.045	2.7	19.8
6 10	16 43.92	-1 9.3	2.249	3.209	7.1	21.4	6 10	16 43.48	-28 2.0	2.028	3.036	2.8	19.8
6 20	16 36.49	-1 0.3	2.298	3.222	8.9	21.5	6 20	16 35.26	-27 20.8	2.047	3.028	6.1	20.0
6 30	16 30.26	-1 7.2	2.370	3.235	11.1	21.7	6 30	16 28.45	-26 37.5	2.091	3.020	9.4	20.2
7 10	16 25.70	-1 28.2	2.464	3.247	13.2	21.9	7 10	16 23.67	-25 55.7	2.159	3.012	12.5	20.4
<b>47592</b>	2000 AO <sub>203</sub>		6 3.9 223°98	0°6/ 3.8 18			<b>510472</b>	2011 WW <sub>89</sub>		6 4.0 223°48	3°3/ 2.8 18		
5 1	17 16.25	-23 15.6	1.865	2.722	13.5	17.5	5 1	17 11.18	-11 35.1	2.779	3.623	10.0	21.8
5 11	17 10.43	-22 39.5	1.781	2.714	10.1	17.3	5 11	17 6.00	-11 12.9	2.692	3.613	7.6	21.6
5 21	17 2.33	-21 57.3	1.721	2.707	6.1	17.0	5 21	16 59.40	-10 54.1	2.630	3.604	5.2	21.4
5 31	16 52.72	-21 10.0	1.687	2.699	1.8	16.7	5 31	16 51.87	-10 40.3	2.596	3.594	3.4	21.3
6 10	16 42.68	-20 20.3	1.681	2.690	2.9	16.8	6 10	16 44.04	-10 32.8	2.591	3.583	4.0	21.3
6 20	16 33.30	-19 31.7	1.702	2.682	7.2	17.0	6 20	16 36.55	-10 32.7	2.613	3.572	6.3	21.4
6 30	16 25.56	-18 48.1	1.748	2.672	11.2	17.2	6 30	16 30.01	-10 40.4	2.662	3.561	8.9	21.6
7 10	16 20.16	-18 12.7	1.816	2.663	14.7	17.4	7 10	16 24.92	-10 55.9	2.735	3.549	11.2	21.7
<b>470349</b>	2007 RA <sub>188</sub>		6 3.9 275°74	0°0/ 3.7 16			<b>386349</b>	2008 SD <sub>296</sub>		6 4.0 281°82	6°0/ 2.4 18		
5 1	17 13.81	-23 38.8	1.982	2.8									

EPHEMERIDES

6 4.0

6 4.0

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>374534</b>	2006 <i>AR</i> <sub>84</sub>		6 4.0 158°57	3°4/ 5.0	17		<b>89542</b>	2001 <i>XH</i> <sub>89</sub>		6 4.0 26°75	5°5/ 4.2	18	
5 1	17 18.24	-32 25.3	2.224	3.055	12.5	21.5	5 1	17 18.42	-29 3.7	1.216	2.088	18.2	18.4
5 11	17 11.71	-32 45.3	2.149	3.062	9.7	21.3	5 11	17 13.27	-30 42.8	1.165	2.100	14.0	18.1
5 21	17 3.02	-32 56.1	2.098	3.068	6.6	21.1	5 21	17 4.61	-32 15.4	1.134	2.113	9.5	17.9
5 31	16 52.93	-32 55.5	2.074	3.073	3.9	21.0	5 31	16 53.52	-33 33.8	1.126	2.127	5.9	17.8
6 10	16 42.48	-32 43.1	2.077	3.077	3.9	21.0	6 10	16 41.69	-34 32.3	1.142	2.143	6.3	17.8
6 20	16 32.69	-32 20.4	2.108	3.082	6.5	21.2	6 20	16 30.96	-35 9.8	1.182	2.159	10.0	18.1
6 30	16 24.51	-31 50.9	2.165	3.085	9.6	21.4	6 30	16 22.89	-35 29.6	1.243	2.176	14.1	18.4
7 10	16 18.56	-31 18.8	2.246	3.088	12.4	21.5	7 10	16 18.43	-35 37.9	1.323	2.194	17.7	18.6
<b>387084</b>	2012 <i>TJ</i> <sub>98</sub>		6 4.0 254°93	2°0/ 3.3	17		<b>349453</b>	2008 <i>CD</i> <sub>76</sub>		6 4.0 121°84	6°8/ 1.6	18	
5 1	17 12.92	-18 41.9	1.989	2.849	12.6	21.3	5 1	17 10.93	-0 4.8	2.625	3.444	11.2	21.2
5 11	17 7.80	-18 10.1	1.909	2.844	9.4	21.1	5 11	17 5.71	+0 40.0	2.569	3.457	9.3	21.1
5 21	17 0.69	-17 36.8	1.853	2.838	5.8	20.9	5 21	16 59.16	+1 14.3	2.537	3.469	7.6	21.0
5 31	16 52.27	-17 3.8	1.823	2.832	2.4	20.6	5 31	16 51.80	+1 35.0	2.530	3.481	6.8	20.9
6 10	16 43.47	-16 33.3	1.820	2.827	3.4	20.7	6 10	16 44.29	+1 40.6	2.551	3.493	7.2	21.0
6 20	16 35.23	-16 7.6	1.845	2.821	7.1	20.9	6 20	16 37.26	+1 30.4	2.597	3.505	8.7	21.1
6 30	16 28.41	-15 49.1	1.894	2.815	10.7	21.1	6 30	16 31.27	+1 5.5	2.667	3.516	10.5	21.2
7 10	16 23.65	-15 39.0	1.966	2.809	13.9	21.3	7 10	16 26.74	+0 27.9	2.759	3.527	12.3	21.4
<b>162926</b>	2001 <i>OB</i> <sub>36</sub>		6 4.0 236°76	8°8/29.8	07 C		<b>432724</b>	2011 <i>CN</i> <sub>105</sub>		6 4.0 10°66	0°7/ 3.8	17	
5 1	17 14.24	+18 10.7	3.785	4.480	10.2	23.7	5 1	17 13.59	-22 5.4	1.493	2.366	15.4	21.3
5 11	17 7.92	+18 48.9	3.702	4.458	9.4	23.6	5 11	17 8.86	-21 46.4	1.426	2.367	11.4	21.0
5 21	17 0.43	+19 12.6	3.639	4.435	8.9	23.5	5 21	17 1.56	-21 23.4	1.380	2.369	6.9	20.8
5 31	16 52.16	+19 18.8	3.601	4.412	8.8	23.5	5 31	16 52.57	-20 57.4	1.358	2.370	2.1	20.5
6 10	16 43.63	+19 5.7	3.587	4.387	9.0	23.5	6 10	16 43.15	-20 30.4	1.362	2.372	3.2	20.6
6 20	16 35.36	+18 33.2	3.596	4.361	9.7	23.5	6 20	16 34.55	-20 5.3	1.391	2.375	8.0	20.9
6 30	16 27.83	+17 42.3	3.629	4.335	10.6	23.6	6 30	16 27.87	-19 45.3	1.443	2.378	12.4	21.1
7 10	16 21.45	+16 35.7	3.682	4.307	11.6	23.6	7 10	16 23.84	-19 32.7	1.515	2.381	16.1	21.4
<b>208336</b>	2001 <i>QE</i> <sub>209</sub>		6 4.0 254°03	0°7/ 4.2	17		<b>277696</b>	2006 <i>CP</i> <sub>40</sub>		6 4.0 80°43	2°3/ 3.5	17	
5 1	17 13.54	-24 58.2	2.155	3.008	12.1	20.6	5 1	17 14.02	-16 53.3	1.808	2.671	13.6	21.1
5 11	17 8.25	-24 55.2	2.070	3.000	9.0	20.4	5 11	17 8.74	-16 41.8	1.739	2.674	10.2	20.9
5 21	17 0.97	-24 47.5	2.009	2.993	5.5	20.1	5 21	17 1.30	-16 31.8	1.692	2.677	6.3	20.7
5 31	16 52.36	-24 34.8	1.975	2.986	1.8	19.9	5 31	16 52.48	-16 24.3	1.671	2.680	2.7	20.4
6 10	16 43.33	-24 17.7	1.968	2.978	2.4	19.9	6 10	16 43.28	-16 20.9	1.677	2.683	3.7	20.5
6 20	16 34.82	-23 57.9	1.988	2.970	6.2	20.1	6 20	16 34.74	-16 22.5	1.709	2.686	7.5	20.7
6 30	16 27.70	-23 37.9	2.035	2.962	9.7	20.3	6 30	16 27.77	-16 30.2	1.765	2.689	11.2	21.0
7 10	16 22.60	-23 20.4	2.104	2.955	12.8	20.5	7 10	16 23.02	-16 44.8	1.844	2.692	14.5	21.2
<b>383190</b>	2005 <i>XN</i> <sub>66</sub>		6 4.0 133°73	8°1/ 4.9	18		<b>112856</b>	2002 <i>QS</i> <sub>29</sub>		6 4.0 4°88	2°5/ 4.4	17	
5 1	17 28.02	-1 17.6	1.180	2.021	20.7	20.3	5 1	17 15.17	-26 44.1	1.260	2.137	17.4	19.9
5 11	17 20.06	-2 4.1	1.118	2.029	16.6	20.1	5 11	17 10.66	-27 10.1	1.195	2.137	13.2	19.6
5 21	17 8.58	-3 17.3	1.075	2.037	12.2	19.8	5 21	17 2.95	-27 29.4	1.151	2.137	8.3	19.3
5 31	16 54.65	-4 58.5	1.055	2.044	8.7	19.7	5 31	16 53.03	-27 39.3	1.128	2.138	3.5	19.0
6 10	16 39.97	-7 3.8	1.060	2.050	8.7	19.7	6 10	16 42.45	-27 38.8	1.130	2.139	4.0	19.1
6 20	16 26.36	-9 25.0	1.092	2.057	12.2	19.9	6 20	16 32.81	-27 29.8	1.155	2.142	8.9	19.4
6 30	16 15.39	-11 53.1	1.148	2.062	16.6	20.2	6 30	16 25.56	-27 16.2	1.202	2.144	13.6	19.6
7 10	16 8.02	-14 20.4	1.224	2.068	20.5	20.4	7 10	16 21.57	-27 2.7	1.268	2.148	17.8	19.9
<b>267326</b>	2001 <i>UP</i> <sub>77</sub>		6 4.0 145°38	2°8/ 3.1	17		<b>175368</b>	2005 <i>RD</i> <sub>16</sub>		6 4.0 40°76	0°5/ 3.9	17	
5 1	17 15.38	-15 33.2	2.108	2.960	12.4	21.3	5 1	17 12.29	-21 38.0	1.949	2.811	12.8	20.5
5 11	17 9.35	-15 3.2	2.041	2.970	9.2	21.1	5 11	17 7.32	-21 27.0	1.882	2.818	9.5	20.3
5 21	17 1.48	-14 34.6	1.999	2.980	5.9	20.9	5 21	17 0.38	-21 13.4	1.839	2.826	5.7	20.1
5 31	16 52.48	-14 9.1	1.983	2.988	3.1	20.8	5 31	16 52.20	-20 58.0	1.822	2.834	1.7	19.9
6 10	16 43.24	-13 48.9	1.995	2.997	3.9	20.8	6 10	16 43.73	-20 41.9	1.832	2.842	2.6	20.0
6 20	16 34.63	-13 35.4	2.035	3.004	7.1	21.1	6 20	16 35.92	-20 26.9	1.869	2.851	6.5	20.2
6 30	16 27.44	-13 30.0	2.101	3.011	10.3	21.3	6 30	16 29.61	-20 15.1	1.931	2.860	10.1	20.5
7 10	16 22.22	-13 33.1	2.189	3.018	13.2	21.5	7 10	16 25.37	-20 8.1	2.015	2.869	13.2	20.7
<b>497364</b>	2005 <i>UH</i> <sub>260</sub>		6 4.0 183°69	3°3/ 2.6	17		<b>419378</b>	2009 <i>YP</i> <sub>5</sub>		6 4.0 284°94	5°3/ 3.2	18	
5 1	17 14.82	-14 31.2	2.356	3.203	11.4	22.8	5 1	17 14.43	-8 33.3	1.768	2.623	14.2	20.2
5 11	17 8.81	-13 43.2	2.279	3.204	8.6	22.6	5 11	17 9.21	-8 25.6	1.685	2.609	11.1	20.0
5 21	17 1.13	-12 56.1	2.227	3.204	5.6	22.4	5 21	17 1.73	-8 27.2	1.624	2.596	7.9	19.8
5 31	16 52.39	-12 12.2	2.202	3.203	3.4	22.3	5 31	16 52.65	-8 40.5	1.588	2.583	5.5	19.6
6 10	16 43.38	-11 34.2	2.206	3.202	4.2	22.3	6 10	16 42.97	-9 6.8	1.577	2.570	6.1	19.6
6 20	16 34.89	-11 4.3	2.238	3.200	7.0	22.5	6 20	16 33.77	-9 46.1	1.593	2.556	9.2	19.8
6 30	16 27.65	-10 44.2	2.297	3.197	10.0	22.7	6 30	16 26.06	-10 37.2	1.633	2.543	12.8	19.9
7 10	16 22.18	-10 34.4	2.378	3.193	12.7	22.9	7 10	16 20.60	-11 38.0	1.694	2.530	16.1	20.1
<b>59072</b>	1998 <i>VV</i> <sub>9</sub>		6 4.0 301°97	3°3/ 4.7	18		<b>295304</b>	2008 <i>GA</i> <sub>117</sub>		6 4.0 328°72	1°9/ 3.5	18	
5 1	17 15.85	-29 14.1	1.215	2.090	18.0	19.1	5 1	17 11.44	-16 42.8	2.299	3.155	11.3	20.8
5 11	17 11.81	-29 24.7	1.123	2.062	14.0	18.7	5 11	17 6.48	-16 38.8	2.222	3.154	8.4	20.6
5 21	17 4.09	-29 24.3	1.050	2.035	9.2	18.4	5 21	16 59.82	-16 36.3	2.169	3.152	5.2	20.4
5 31	16 53.49	-29 9.4	0.999	2.007	4.4	18.0	5 31	16 52.05	-16 36.2	2.142	3.151	2.3	20.2
6 10	16 41.55	-28 38.6	0.971	1.980	4.7	17.9	6 10	16 43.95	-16 39.0	2.144	3.150	3.0	20.3
6 20	16 30.16	-27 54.6	0.965	1.953	10.1	18.1	6 20	16 36.31	-16 45.6	2.173	3.148	6.2	20.5
6 30	16 21.20	-27 4.0	0.981	1.926	15.7	18.3	6 30	16 29.86	-16 56.7	2.227	3.147	9.4	20.7
7 10	16 15.95	-26 14.8	1.014	1.900	20.7	18.5	7 10	16 25.17	-17 12.8	2.305	3.146	12.2	20.8
<b>410279</b>	2007 <i>TV</i> <sub>182</sub>		6 4.0 98°13	3°9/ 2.9	17		<b>246328</b>	2007 <i>TE</i> <sub>226</sub>		6 4.0 160°64	1°		

EPHEMERIDES

6 4.0

6 4.0

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>373615</b>	2002 <i>EW</i> <sub>93</sub>		6 4.0 175°94	2.6/ 3.2	17		<b>284400</b>	2006 <i>UC</i> <sub>17</sub>		6 4.0 166°40	5.8/ 7.7	18	
5 1	17 14.86	-14 55.4	2.421	3.267	11.2	21.9	5 1	17 20.86	-47 54.6	3.414	4.162	10.3	21.2
5 11	17 8.84	-14 33.6	2.344	3.270	8.4	21.7	5 11	17 13.14	-48 0.2	3.333	4.167	8.8	21.1
5 21	17 1.16	-14 13.5	2.293	3.272	5.4	21.5	5 21	17 3.66	-47 51.6	3.274	4.173	7.2	21.0
5 31	16 52.43	-13 56.5	2.269	3.274	2.9	21.4	5 31	16 53.16	-47 26.3	3.242	4.177	6.1	20.9
6 10	16 43.41	-13 44.1	2.274	3.274	3.6	21.4	6 10	16 42.52	-46 44.3	3.236	4.181	5.8	20.9
6 20	16 34.89	-13 37.5	2.307	3.275	6.5	21.6	6 20	16 32.61	-45 47.2	3.260	4.185	6.5	21.0
6 30	16 27.58	-13 37.6	2.367	3.274	9.5	21.8	6 30	16 24.16	-44 38.7	3.310	4.188	7.9	21.1
7 10	16 22.01	-13 44.8	2.450	3.273	12.1	21.9	7 10	16 17.67	-43 23.5	3.385	4.190	9.5	21.2
<b>146271</b>	2001 <i>DQ</i> <sub>75</sub>		6 4.0 145°39	1.2/ 4.5	18		<b>228344</b>	2000 <i>SN</i> <sub>145</sub>		6 4.0 289°66	3.5/ 4.7	18	
5 1	17 12.63	-27 16.1	2.681	3.523	10.3	20.7	5 1	17 16.80	-30 19.6	1.734	2.585	14.6	20.2
5 11	17 7.17	-27 12.9	2.605	3.528	7.7	20.6	5 11	17 11.59	-30 46.1	1.635	2.560	11.4	19.9
5 21	17 0.13	-27 4.3	2.554	3.534	4.8	20.4	5 21	17 3.52	-31 4.7	1.557	2.534	7.6	19.6
5 31	16 52.12	-26 50.1	2.530	3.539	1.9	20.2	5 31	16 53.31	-31 12.2	1.504	2.508	4.2	19.4
6 10	16 43.88	-26 30.8	2.535	3.544	2.2	20.2	6 10	16 42.15	-31 6.7	1.477	2.482	4.3	19.3
6 20	16 36.12	-26 8.0	2.569	3.549	5.1	20.4	6 20	16 31.41	-30 49.1	1.476	2.456	8.1	19.5
6 30	16 29.54	-25 43.8	2.629	3.553	8.0	20.6	6 30	16 22.45	-30 23.0	1.499	2.430	12.3	19.6
7 10	16 24.61	-25 20.6	2.714	3.557	10.5	20.8	7 10	16 16.28	-29 53.6	1.543	2.403	16.2	19.8
<b>341565</b>	2007 <i>UR</i> <sub>43</sub>		6 4.0 159°63	1.3/ 3.6	17		<b>391050</b>	2005 <i>TO</i> <sub>164</sub>		6 4.0 36°57	10.4/ 5.5	16	
5 1	17 13.23	-19 13.2	2.067	2.925	12.3	21.3	5 1	17 24.11	-47 35.6	2.004	2.782	15.6	19.8
5 11	17 7.96	-19 2.2	1.993	2.926	9.2	21.1	5 11	17 17.36	-49 27.1	1.945	2.792	13.6	19.7
5 21	17 0.77	-18 50.6	1.942	2.927	5.6	20.9	5 21	17 7.16	-51 1.1	1.907	2.803	11.7	19.6
5 31	16 52.34	-18 39.0	1.918	2.928	2.0	20.7	5 31	16 54.39	-52 9.7	1.893	2.814	10.6	19.5
6 10	16 43.56	-18 28.7	1.921	2.929	2.9	20.7	6 10	16 40.60	-52 48.1	1.902	2.825	10.5	19.5
6 20	16 35.34	-18 21.1	1.951	2.930	6.6	21.0	6 20	16 27.57	-52 56.2	1.936	2.837	11.5	19.6
6 30	16 28.52	-18 17.7	2.007	2.930	10.1	21.2	6 30	16 16.93	-52 38.9	1.991	2.849	13.2	19.7
7 10	16 23.69	-18 19.8	2.085	2.931	13.1	21.4	7 10	16 9.76	-52 3.9	2.066	2.861	15.0	19.9
<b>471338</b>	2011 <i>OY</i> <sub>33</sub>		6 4.0 301°59	7.7/ 2.9	17		<b>465103</b>	2006 <i>UJ</i> <sub>276</sub>		6 4.0 272°74	0.4/ 3.9	17	
5 1	17 13.47	-1 28.1	1.892	2.728	14.2	20.8	5 1	17 15.67	-22 27.1	1.556	2.424	15.2	21.5
5 11	17 8.27	-1 11.1	1.817	2.720	11.7	20.6	5 11	17 10.50	-22 13.4	1.478	2.416	11.3	21.3
5 21	17 1.04	-1 8.3	1.763	2.712	9.2	20.4	5 21	17 2.66	-21 55.4	1.421	2.408	6.9	21.0
5 31	16 52.44	-1 23.0	1.734	2.704	7.8	20.3	5 31	16 53.00	-21 33.5	1.388	2.400	2.0	20.7
6 10	16 43.39	-1 56.9	1.730	2.697	8.2	20.3	6 10	16 42.73	-21 9.4	1.382	2.392	3.1	20.7
6 20	16 34.84	-2 49.3	1.751	2.689	10.3	20.4	6 20	16 33.17	-20 45.5	1.401	2.384	8.0	21.0
6 30	16 27.68	-3 58.0	1.796	2.682	13.1	20.6	6 30	16 25.50	-20 25.2	1.444	2.376	12.5	21.2
7 10	16 22.57	-5 19.4	1.862	2.674	15.7	20.7	7 10	16 20.53	-20 11.6	1.507	2.368	16.4	21.4
<b>144995</b>	2005 <i>EA</i> <sub>187</sub>		6 4.0 309°32	5.2/ 4.9	17		<b>144032</b>	2004 <i>BN</i> <sub>22</sub>		6 4.0 301°12	1.7/ 4.4	18	
5 1	17 17.25	-32 19.5	1.406	2.265	16.9	20.1	5 1	17 15.58	-26 37.7	1.406	2.276	16.3	19.6
5 11	17 12.34	-33 2.3	1.328	2.255	13.3	19.9	5 11	17 11.17	-26 39.9	1.307	2.245	12.5	19.3
5 21	17 4.10	-33 34.6	1.270	2.245	9.3	19.6	5 21	17 3.53	-26 34.2	1.228	2.214	8.0	18.9
5 31	16 53.44	-33 51.5	1.235	2.235	5.8	19.4	5 31	16 53.37	-26 18.6	1.172	2.183	3.0	18.5
6 10	16 41.87	-33 50.3	1.224	2.225	5.8	19.3	6 10	16 42.04	-25 52.9	1.141	2.152	3.6	18.5
6 20	16 31.07	-33 32.1	1.237	2.216	9.4	19.5	6 20	16 31.12	-25 19.5	1.134	2.120	9.1	18.7
6 30	16 22.61	-33 1.8	1.273	2.207	13.7	19.7	6 30	16 22.23	-24 43.3	1.150	2.090	14.4	18.9
7 10	16 17.50	-32 26.5	1.328	2.199	17.7	19.9	7 10	16 16.53	-24 10.1	1.184	2.059	19.1	19.1
<b>307146</b>	2002 <i>CF</i> <sub>242</sub>		6 4.0 52°11	1.7/ 4.5	17		<b>275427</b>	2011 <i>CD</i> <sub>19</sub>		6 4.0 116°31	7.9/ 6.6	18	
5 1	17 17.12	-27 2.0	1.280	2.153	17.4	20.2	5 1	17 22.36	-43 10.5	1.895	2.698	15.5	19.9
5 11	17 11.85	-26 58.0	1.223	2.162	13.1	20.0	5 11	17 15.49	-43 54.9	1.829	2.707	12.9	19.7
5 21	17 3.50	-26 44.8	1.186	2.172	8.1	19.7	5 21	17 5.64	-44 21.5	1.785	2.717	10.3	19.6
5 31	16 53.18	-26 21.5	1.172	2.182	3.0	19.4	5 31	16 53.84	-44 25.0	1.763	2.726	8.3	19.5
6 10	16 42.46	-25 49.6	1.182	2.192	3.5	19.5	6 10	16 41.58	-44 3.7	1.767	2.735	8.0	19.5
6 20	16 32.89	-25 12.8	1.216	2.203	8.5	19.8	6 20	16 30.34	-43 19.9	1.796	2.743	9.5	19.6
6 30	16 25.74	-24 36.6	1.273	2.214	13.2	20.1	6 30	16 21.42	-42 19.7	1.849	2.752	11.9	19.8
7 10	16 21.75	-24 5.6	1.350	2.225	17.2	20.4	7 10	16 15.58	-41 10.9	1.923	2.760	14.4	19.9
<b>498123</b>	2007 <i>SD</i> <sub>23</sub>		6 4.0 232°56	3.6/ 4.8	17		<b>420212</b>	2011 <i>HS</i> <sub>1</sub>		6 4.0 95°59	4.9/ 4.2	17	
5 1	17 20.15	-30 50.6	1.738	2.583	14.9	22.7	5 1	17 22.54	-30 40.6	1.806	2.645	14.7	20.6
5 11	17 13.90	-31 14.6	1.651	2.573	11.5	22.4	5 11	17 15.68	-32 12.6	1.734	2.650	11.4	20.4
5 21	17 4.78	-31 29.4	1.587	2.562	7.7	22.2	5 21	17 5.89	-33 39.2	1.685	2.654	7.9	20.2
5 31	16 53.61	-31 31.8	1.547	2.550	4.2	22.0	5 31	16 53.98	-34 54.2	1.663	2.658	5.2	20.1
6 10	16 41.69	-31 20.3	1.533	2.537	4.3	21.9	6 10	16 41.24	-35 52.9	1.668	2.663	5.5	20.1
6 20	16 30.42	-30 56.6	1.546	2.525	8.0	22.1	6 20	16 29.09	-36 33.7	1.701	2.667	8.4	20.3
6 30	16 21.10	-30 24.9	1.584	2.511	12.0	22.3	6 30	16 18.89	-36 58.4	1.758	2.672	11.8	20.5
7 10	16 14.64	-29 50.7	1.644	2.497	15.7	22.5	7 10	16 11.57	-37 11.9	1.838	2.676	14.9	20.7
<b>263660</b>	2008 <i>GJ</i> <sub>103</sub>		6 4.0 102°18	0.9/ 3.7	17		<b>459253</b>	2012 <i>FG</i> <sub>39</sub>		6 4.0 148°15	6.4/ 5.7	17	
5 1	17 12.12	-20 26.1	2.385	3.238	11.1	21.2	5 1	17 21.90	-37 38.0	1.709	2.537	15.8	21.4
5 11	17 6.86	-20 11.7	2.316	3.248	8.2	21.1	5 11	17 15.26	-38 18.2	1.640	2.542	12.7	21.3
5 21	16 59.99	-19 55.7	2.272	3.257	4.9	20.9	5 21	17 5.57	-38 43.6	1.591	2.547	9.5	21.1
5 31	16 52.11	-19 38.9	2.255	3.266	1.6	20.6	5 31	16 53.84	-38 49.3	1.567	2.552	6.9	20.9
6 10	16 44.01	-19 22.4	2.266	3.275	2.4	20.7	6 10	16 41.55	-38 33.4	1.568	2.556	6.7	20.9
6 20	16 36.45	-19 7.8	2.305	3.284	5.7	21.0	6 20	16 30.23	-37 58.2	1.595	2.560	9.0	21.1
6 30	16 30.12	-18 56.6	2.371	3.293	8.8	21.2	6 30	16 21.20	-37 9.5	1.646	2.564	12.2	21.3
7 10	16 25.52	-18 50.2	2.460	3.301	11.5	21.4	7 10	16 15.29	-36 14.7	1.718	2.567	15.3	21.5
<b>396954</b>	2005 <i>LO</i> <sub>29</sub>		6 4.0 332°36	0.1/ 3.9	17		<b>466723</b>	2014 <i>WA</i> <sub>501</sub>					

EPHEMERIDES

6 4.0

6 4.1

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>324503</b>	2006 <i>UY</i> <sub>328</sub>		6 4.0 326°34	0°6/ 4.1	17		<b>497008</b>	2003 <i>BG</i> <sub>3</sub>		6 4.0 107°02	4°7/ 2.9	18	
5 1	17 15.33	-21 59.4	1.349	2.225	16.5	20.2	5 1	17 16.47	-10 33.0	1.906	2.755	13.6	21.9
5 11	17 10.74	-22 32.4	1.273	2.215	12.4	19.9	5 11	17 10.22	-10 1.3	1.853	2.776	10.4	21.7
5 21	17 3.08	-23 5.6	1.217	2.206	7.6	19.6	5 21	17 2.05	-9 35.6	1.824	2.797	7.1	21.6
5 31	16 53.19	-23 36.8	1.185	2.197	2.4	19.2	5 31	16 52.76	-9 18.6	1.821	2.816	4.8	21.5
6 10	16 42.44	-24 4.3	1.177	2.188	3.3	19.3	6 10	16 43.30	-9 12.1	1.845	2.836	5.5	21.5
6 20	16 32.36	-24 27.9	1.194	2.180	8.7	19.6	6 20	16 34.62	-9 16.8	1.895	2.854	8.3	21.7
6 30	16 24.39	-24 48.9	1.233	2.173	13.6	19.8	6 30	16 27.50	-9 32.7	1.971	2.873	11.3	22.0
7 10	16 19.51	-25 9.5	1.291	2.166	17.8	20.1	7 10	16 22.48	-9 58.6	2.068	2.890	14.1	22.2
<b>219692</b>	2001 <i>WT</i> <sub>92</sub>		6 4.0 185°88	0°4/ 3.9	17		<b>233871</b>	2008 <i>WQ</i> <sub>23</sub>		6 4.0 287°28	1°3/ 4.5	18	
5 1	17 16.11	-22 14.8	2.138	2.989	12.3	21.7	5 1	17 14.56	-26 48.0	1.832	2.689	13.7	20.2
5 11	17 10.08	-21 58.0	2.059	2.989	9.1	21.5	5 11	17 9.38	-26 41.1	1.750	2.682	10.3	20.0
5 21	17 2.07	-21 37.8	2.004	2.988	5.5	21.2	5 21	17 1.87	-26 26.9	1.692	2.675	6.4	19.8
5 31	16 52.78	-21 14.5	1.976	2.987	1.6	21.0	5 31	16 52.78	-26 5.1	1.658	2.668	2.4	19.5
6 10	16 43.14	-20 49.6	1.976	2.986	2.5	21.0	6 10	16 43.20	-25 36.4	1.652	2.662	2.8	19.5
6 20	16 34.08	-20 25.0	2.004	2.983	6.4	21.3	6 20	16 34.27	-25 3.4	1.671	2.655	7.0	19.8
6 30	16 26.47	-20 3.3	2.059	2.981	9.9	21.5	6 30	16 27.00	-24 29.8	1.716	2.648	10.9	20.0
7 10	16 20.91	-19 46.6	2.136	2.977	13.0	21.7	7 10	16 22.13	-23 59.3	1.783	2.642	14.4	20.2
<b>350402</b>	2012 <i>VL</i> <sub>31</sub>		6 4.0 185°52	0°6/ 3.9	17		<b>179577</b>	2002 <i>GO</i> <sub>12</sub>		6 4.0 319°85	2°3/ 4.6	18	
5 1	17 13.67	-20 46.9	2.159	3.014	12.0	21.5	5 1	17 12.60	-28 20.7	2.055	2.908	12.6	19.2
5 11	17 8.28	-20 43.7	2.082	3.014	8.9	21.3	5 11	17 7.84	-28 39.1	1.968	2.896	9.6	19.0
5 21	17 0.99	-20 39.1	2.029	3.014	5.4	21.1	5 21	17 0.92	-28 51.5	1.904	2.884	6.2	18.8
5 31	16 52.47	-20 33.1	2.002	3.014	1.6	20.8	5 31	16 52.51	-28 56.2	1.865	2.872	2.9	18.5
6 10	16 43.59	-20 26.7	2.004	3.013	2.5	20.9	6 10	16 43.57	-28 52.9	1.853	2.861	3.2	18.5
6 20	16 35.24	-20 21.0	2.033	3.013	6.2	21.1	6 20	16 35.10	-28 42.4	1.868	2.850	6.6	18.7
6 30	16 28.24	-20 17.6	2.088	3.012	9.7	21.3	6 30	16 28.09	-28 27.4	1.908	2.839	10.1	18.9
7 10	16 23.20	-20 18.0	2.165	3.011	12.7	21.5	7 10	16 23.24	-28 11.1	1.971	2.829	13.3	19.1
<b>506599</b>	2006 <i>AL</i> <sub>35</sub>		6 4.0 130°54	5°7/ 3.0	17		<b>248684</b>	2006 <i>KU</i> <sub>45</sub>		6 4.0 268°76	0°1/ 4.0	18	
5 1	17 15.07	-6 42.2	1.950	2.794	13.5	21.8	5 1	17 18.30	-21 14.5	1.596	2.459	15.1	20.7
5 11	17 9.29	-6 25.8	1.885	2.801	10.6	21.6	5 11	17 12.71	-21 30.3	1.502	2.438	11.4	20.4
5 21	17 1.57	-6 19.0	1.844	2.808	7.7	21.4	5 21	17 4.22	-21 45.7	1.430	2.417	7.0	20.1
5 31	16 52.63	-6 24.1	1.828	2.815	5.8	21.3	5 31	16 53.57	-21 59.5	1.383	2.395	2.1	19.7
6 10	16 43.39	-6 42.4	1.838	2.822	6.3	21.4	6 10	16 41.95	-22 11.1	1.362	2.373	3.1	19.8
6 20	16 34.76	-7 13.6	1.875	2.828	8.8	21.5	6 20	16 30.76	-22 21.0	1.367	2.350	8.3	20.0
6 30	16 27.57	-7 56.6	1.937	2.834	11.7	21.7	6 30	16 21.35	-22 31.0	1.396	2.327	13.0	20.2
7 10	16 22.42	-8 49.3	2.020	2.840	14.4	21.9	7 10	16 14.75	-22 43.4	1.446	2.304	17.2	20.4
<b>69726</b>	1998 <i>HR</i> <sub>144</sub>		6 4.0 135°11	2°0/ 3.4	18		<b>340514</b>	2006 <i>JG</i> <sub>19</sub>		6 4.1 260°54	0°9/ 3.8	18	
5 1	17 16.80	-19 23.3	1.616	2.481	14.9	19.1	5 1	17 14.07	-20 13.3	1.986	2.844	12.7	20.8
5 11	17 10.99	-18 48.6	1.551	2.487	11.1	18.9	5 11	17 8.82	-20 9.9	1.902	2.836	9.5	20.6
5 21	17 2.76	-18 11.7	1.507	2.493	6.8	18.7	5 21	17 1.47	-20 5.4	1.842	2.827	5.8	20.3
5 31	16 52.99	-17 34.8	1.489	2.499	2.6	18.4	5 31	16 52.68	-20 0.0	1.807	2.818	1.8	20.1
6 10	16 42.88	-17 0.5	1.497	2.505	3.8	18.5	6 10	16 43.41	-19 54.7	1.800	2.810	2.8	20.1
6 20	16 33.61	-16 31.8	1.532	2.510	8.1	18.8	6 20	16 34.65	-19 50.6	1.820	2.801	6.8	20.3
6 30	16 26.20	-16 11.5	1.591	2.515	12.2	19.0	6 30	16 27.32	-19 49.3	1.866	2.792	10.6	20.6
7 10	16 21.32	-16 1.1	1.670	2.519	15.7	19.3	7 10	16 22.11	-19 52.6	1.933	2.783	13.8	20.7
<b>143950</b>	2003 <i>YR</i> <sub>120</sub>		6 4.0 219°75	3°3/ 4.7	17	R	<b>62993</b>	2000 <i>WL</i> <sub>12</sub>		6 4.1 268°00	5°2/ 3.1	18	
5 1	17 19.48	-30 0.4	1.804	2.650	14.4	20.4	5 1	17 14.73	-8 26.1	1.868	2.719	13.8	18.5
5 11	17 13.27	-30 31.2	1.722	2.644	11.1	20.2	5 11	17 9.38	-8 14.4	1.784	2.706	10.8	18.3
5 21	17 4.35	-30 54.3	1.661	2.637	7.4	19.9	5 21	17 1.85	-8 11.4	1.722	2.692	7.7	18.1
5 31	16 53.52	-31 6.5	1.626	2.630	4.0	19.7	5 31	16 52.81	-8 19.5	1.685	2.679	5.4	17.9
6 10	16 42.02	-31 6.2	1.618	2.622	4.1	19.7	6 10	16 43.21	-8 40.1	1.675	2.665	6.1	17.9
6 20	16 31.15	-30 54.7	1.636	2.614	7.7	19.9	6 20	16 34.05	-9 13.4	1.690	2.651	9.0	18.1
6 30	16 22.14	-30 35.2	1.680	2.606	11.5	20.1	6 30	16 26.31	-9 58.6	1.731	2.637	12.4	18.2
7 10	16 15.84	-30 12.7	1.745	2.597	15.0	20.3	7 10	16 20.72	-10 53.9	1.793	2.623	15.5	18.4
<b>59000</b>	Beiguan		6 4.0 150°94	3°3/ 4.8	18		<b>470482</b>	2008 <i>BZ</i> <sub>7</sub>		6 4.1 117°38	3°6/ 3.2	18	
5 1	17 21.52	-29 55.4	1.575	2.426	15.9	20.2	5 1	17 12.78	-10 40.9	2.449	3.293	11.1	21.4
5 11	17 14.88	-30 16.4	1.508	2.433	12.2	20.0	5 11	17 7.27	-10 31.2	2.384	3.305	8.5	21.3
5 21	17 5.30	-30 27.8	1.461	2.439	8.0	19.7	5 21	17 0.24	-10 26.8	2.343	3.316	5.7	21.1
5 31	16 53.77	-30 26.5	1.439	2.445	4.0	19.5	5 31	16 52.27	-10 28.8	2.329	3.327	3.7	21.0
6 10	16 41.73	-30 12.0	1.444	2.450	4.2	19.5	6 10	16 44.08	-10 38.3	2.344	3.338	4.3	21.0
6 20	16 30.64	-29 46.5	1.474	2.455	8.1	19.8	6 20	16 36.39	-10 55.4	2.386	3.348	6.7	21.2
6 30	16 21.79	-29 14.9	1.529	2.459	12.2	20.0	6 30	16 29.84	-11 20.0	2.455	3.358	9.3	21.4
7 10	16 15.95	-28 42.8	1.605	2.462	15.8	20.2	7 10	16 24.93	-11 51.3	2.547	3.368	11.7	21.6
<b>440747</b>	2006 <i>BP</i> <sub>269</sub>		6 4.0 108°69	17°2/ 8.2	18		<b>437316</b>	2013 <i>OS</i> <sub>3</sub>		6 4.1 36°79	25°8/ 6.6	18	
5 1	17 36.33	-53 55.3	1.198	1.979	23.9	20.6	5 1	1 58.68	-78 40.8	0.597	1.206	56.5	19.7
5 11	17 29.22	-56 4.7	1.151	1.989	21.5	20.4	5 11	1 19.48	-82 24.6	0.597	1.269	51.3	19.7
5 21	17 15.62	-57 42.8	1.118	1.998	19.2	20.3	5 21	22 31.13	-86 12.9	0.596	1.335	45.6	19.6
5 31	16 57.05	-58 33.6	1.102	2.007	17.7	20.2	5 31	17 27.23	-83 16.7	0.599	1.402	39.5	19.6
6 10	16 36.90	-58 27.8	1.105	2.016	17.2	20.2	6 10	16 23.11	-75 41.5	0.614	1.469	33.5	19.6
6 20	16 19.13	-57 28.2	1.126	2.025	18.1	20.3	6 20	16 8.97	-67 5.8	0.649	1.536	28.8	19.7
6 30	16 6.72	-55 48.5	1.165	2.033	19.8	20.5	6 30	16 8.35	-58 36.7	0.707	1.602	26.2	19.9
7 10	16 0.76	-53 47.0	1.220	2.041	21.9	20.6	7 10	16 13.49	-50 59.1	0.789	1.667	25.9	20.2
<b>34215</b>	Stutigarg		6 4.0 7°68	1°8/ 4.5	18		<b>427358</b>	2014 <i>WY</i> <sub>412</sub>		6 4.1 281°39	5°7/ 2.8	17</	

EPHEMERIDES

6 4.1

6 4.1

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>499961</b>	2011 <i>JN</i> <sub>21</sub>		6 4.1 48°80	1.7/ 4.3	17		<b>458856</b>	2011 <i>UH</i> <sub>85</sub>		6 4.1 243°57	3.7/ 4.6	17	
5 1	17 17.31	-24 44.1	1.475	2.342	15.9	21.2	5 1	17 21.08	-29 37.4	1.576	2.428	15.8	21.9
5 11	17 11.68	-25 21.8	1.422	2.358	11.9	20.9	5 11	17 14.97	-30 17.5	1.490	2.416	12.3	21.6
5 21	17 3.33	-25 55.5	1.390	2.375	7.3	20.7	5 21	17 5.69	-30 50.5	1.426	2.403	8.2	21.3
5 31	16 53.23	-26 22.7	1.382	2.392	2.8	20.5	5 31	16 54.06	-31 12.0	1.385	2.390	4.4	21.1
6 10	16 42.74	-26 41.9	1.399	2.409	3.3	20.6	6 10	16 41.47	-31 19.5	1.371	2.376	4.7	21.1
6 20	16 33.22	-26 54.0	1.443	2.427	7.8	20.9	6 20	16 29.49	-31 13.4	1.383	2.361	8.7	21.3
6 30	16 25.81	-27 1.2	1.510	2.445	11.9	21.2	6 30	16 19.62	-30 57.5	1.418	2.347	13.0	21.5
7 10	16 21.24	-27 6.7	1.597	2.463	15.4	21.4	7 10	16 12.88	-30 37.4	1.474	2.332	16.9	21.7
<b>358784</b>	2008 <i>DX</i> <sub>83</sub>		6 4.1 280°54	4.1/ 5.0	18		<b>308457</b>	2005 <i>SB</i> <sub>273</sub>		6 4.1 250°88	1.0/ 4.4	18	
5 1	17 15.29	-33 34.2	2.305	3.137	12.1	21.1	5 1	17 13.16	-26 23.3	2.497	3.343	10.9	21.6
5 11	17 9.76	-34 12.8	2.219	3.129	9.5	20.9	5 11	17 7.85	-26 18.8	2.405	3.330	8.2	21.4
5 21	17 2.07	-34 43.2	2.156	3.121	6.8	20.7	5 21	17 0.77	-26 9.0	2.336	3.318	5.1	21.2
5 31	16 52.89	-35 2.5	2.120	3.113	4.5	20.6	5 31	16 52.50	-25 53.6	2.295	3.305	1.9	20.9
6 10	16 43.17	-35 9.3	2.110	3.106	4.5	20.6	6 10	16 43.85	-25 33.1	2.283	3.292	2.2	20.9
6 20	16 33.91	-35 4.2	2.128	3.098	6.8	20.7	6 20	16 35.61	-25 9.1	2.298	3.279	5.5	21.1
6 30	16 26.08	-34 49.5	2.172	3.090	9.7	20.9	6 30	16 28.56	-24 43.9	2.340	3.266	8.7	21.3
7 10	16 20.39	-34 29.2	2.238	3.082	12.4	21.0	7 10	16 23.29	-24 20.2	2.406	3.252	11.6	21.5
<b>497039</b>	2003 <i>SP</i> <sub>161</sub>		6 4.1 276°26	4.3/ 4.8	17		<b>327737</b>	2006 <i>SC</i> <sub>336</sub>		6 4.1 208°68	1.2/ 3.8	17	
5 1	17 19.23	-30 57.8	1.556	2.409	15.9	21.9	5 1	17 17.12	-19 26.6	1.874	2.731	13.5	22.0
5 11	17 13.75	-31 34.2	1.463	2.388	12.5	21.7	5 11	17 11.17	-19 20.7	1.794	2.726	10.1	21.8
5 21	17 5.04	-32 2.2	1.391	2.367	8.5	21.4	5 21	17 2.94	-19 14.0	1.736	2.721	6.2	21.5
5 31	16 53.88	-32 17.3	1.343	2.345	4.9	21.1	5 31	16 53.17	-19 7.0	1.704	2.715	2.1	21.3
6 10	16 41.63	-32 16.9	1.320	2.323	5.1	21.1	6 10	16 42.89	-19 0.6	1.700	2.709	3.1	21.3
6 20	16 29.89	-32 1.5	1.322	2.301	9.0	21.2	6 20	16 33.19	-18 56.1	1.723	2.702	7.2	21.6
6 30	16 20.22	-31 35.3	1.347	2.278	13.4	21.4	6 30	16 25.08	-18 55.3	1.772	2.695	11.2	21.8
7 10	16 13.73	-31 4.5	1.393	2.256	17.5	21.6	7 10	16 19.27	-18 59.9	1.842	2.688	14.6	22.0
<b>322598</b>	2012 <i>BP</i> <sub>24</sub>		6 4.1 77°59	0°6/ 4.2	16		<b>395441</b>	2011 <i>SG</i> <sub>229</sub>		6 4.1 125°40	1°1/ 3.6	17	
5 1	17 17.77	-24 57.6	1.453	2.320	16.1	20.8	5 1	17 12.15	-20 51.2	2.335	3.189	11.2	21.2
5 11	17 11.98	-24 47.6	1.396	2.333	12.0	20.6	5 11	17 6.99	-20 18.4	2.261	3.193	8.3	21.0
5 21	17 3.46	-24 31.1	1.360	2.347	7.3	20.4	5 21	17 0.16	-19 42.8	2.212	3.197	5.0	20.8
5 31	16 53.26	-24 7.9	1.349	2.360	2.3	20.1	5 31	16 52.30	-19 5.9	2.189	3.200	1.7	20.5
6 10	16 42.76	-23 39.7	1.363	2.374	3.0	20.2	6 10	16 44.20	-18 29.6	2.195	3.203	2.6	20.6
6 20	16 33.29	-23 9.6	1.402	2.387	7.9	20.5	6 20	16 36.65	-17 56.3	2.229	3.207	6.0	20.8
6 30	16 25.99	-22 41.7	1.466	2.400	12.2	20.8	6 30	16 30.34	-17 28.0	2.290	3.210	9.1	21.0
7 10	16 21.52	-22 19.5	1.549	2.414	15.9	21.0	7 10	16 25.80	-17 6.6	2.373	3.213	11.9	21.2
<b>469337</b>	2000 <i>SE</i> <sub>60</sub>		6 4.1 315°43	5°5/ 2.3	16		<b>463812</b>	2014 <i>TM</i> <sub>3</sub>		6 4.1 197°74	3°5/ 3.1	17	
5 1	17 11.04	-13 31.3	1.401	2.280	15.8	20.7	5 1	17 16.70	-15 51.6	1.630	2.493	14.8	21.6
5 11	17 7.40	-12 33.3	1.311	2.252	12.3	20.4	5 11	17 11.01	-15 10.9	1.558	2.492	11.2	21.3
5 21	17 1.04	-11 36.0	1.242	2.224	8.4	20.1	5 21	17 2.90	-14 30.9	1.507	2.490	7.2	21.1
5 31	16 52.67	-10 44.2	1.195	2.197	5.6	19.8	5 31	16 53.18	-13 54.4	1.482	2.487	3.8	20.9
6 10	16 43.45	-10 3.3	1.172	2.170	6.9	19.8	6 10	16 43.00	-13 24.5	1.483	2.485	4.9	20.9
6 20	16 34.68	-9 37.5	1.173	2.143	11.0	20.0	6 20	16 33.54	-13 3.9	1.509	2.481	8.8	21.2
6 30	16 27.67	-9 29.9	1.195	2.118	15.4	20.2	6 30	16 25.86	-12 54.7	1.560	2.478	12.8	21.4
7 10	16 23.36	-9 40.6	1.235	2.093	19.6	20.3	7 10	16 20.66	-12 57.4	1.631	2.474	16.3	21.6
<b>77068</b>	2001 <i>DK</i> <sub>21</sub>		6 4.1 346°89	4°3/ 4.4	17		<b>431704</b>	2008 <i>EF</i> <sub>69</sub>		6 4.1 121°84	20°1/ 6.2	16	
5 1	17 12.09	-28 38.7	1.305	2.183	16.9	18.0	5 1	17 53.41	-55 23.9	1.150	1.910	25.8	22.5
5 11	17 8.63	-29 40.3	1.231	2.170	13.0	17.7	5 11	17 44.48	-58 52.9	1.113	1.929	23.5	22.4
5 21	17 1.98	-30 36.8	1.177	2.159	8.7	17.4	5 21	17 26.71	-61 49.7	1.093	1.946	21.5	22.3
5 31	16 52.97	-31 23.4	1.144	2.149	5.0	17.2	5 31	17 0.91	-63 50.3	1.090	1.963	20.3	22.3
6 10	16 43.02	-31 56.4	1.136	2.141	5.3	17.2	6 10	16 31.44	-64 38.7	1.105	1.979	20.2	22.3
6 20	16 33.74	-32 15.0	1.150	2.134	9.4	17.4	6 20	16 4.67	-64 16.3	1.138	1.993	21.0	22.4
6 30	16 26.68	-32 21.6	1.186	2.128	13.8	17.6	6 30	15 45.65	-63 1.9	1.186	2.007	22.5	22.6
7 10	16 22.89	-32 21.2	1.241	2.124	17.9	17.8	7 10	15 35.93	-61 19.7	1.249	2.019	24.1	22.7
<b>350800</b>	2002 <i>CJ</i> <sub>201</sub>		6 4.1 170°45	1°5/ 3.5	18		<b>478213</b>	2011 <i>UK</i> <sub>299</sub>		6 4.1 223°47	1°8/ 4.5	18	
5 1	17 12.03	-17 49.6	2.738	3.586	10.0	21.9	5 1	17 15.02	-27 21.8	2.581	3.420	10.8	21.5
5 11	17 6.69	-17 37.8	2.661	3.589	7.4	21.7	5 11	17 9.24	-27 49.4	2.493	3.413	8.2	21.3
5 21	16 59.91	-17 26.1	2.609	3.591	4.5	21.6	5 21	17 1.64	-28 12.8	2.428	3.406	5.2	21.1
5 31	16 52.21	-17 15.3	2.584	3.593	1.9	21.4	5 31	16 52.81	-28 30.4	2.392	3.399	2.4	20.9
6 10	16 44.27	-17 6.4	2.589	3.595	2.5	21.4	6 10	16 43.52	-28 41.6	2.384	3.391	2.6	20.9
6 20	16 36.74	-17 0.4	2.622	3.596	5.4	21.6	6 20	16 34.62	-28 46.6	2.405	3.383	5.6	21.1
6 30	16 30.25	-16 58.2	2.682	3.597	8.2	21.8	6 30	16 26.89	-28 47.1	2.452	3.374	8.6	21.3
7 10	16 25.27	-17 0.8	2.767	3.598	10.6	22.0	7 10	16 20.96	-28 45.1	2.524	3.365	11.2	21.4
<b>94236</b>	2001 <i>BU</i> <sub>75</sub>		6 4.1 279°20	4°0/ 5.9	18		<b>395821</b>	2012 <i>XB</i> <sub>50</sub>		6 4.1 133°60	1°0/ 3.7	17	
5 1	17 15.48	-36 39.6	2.435	3.256	11.9	19.0	5 1	17 13.29	-21 3.3	2.336	3.188	11.3	21.6
5 11	17 9.77	-36 31.1	2.335	3.237	9.5	18.8	5 11	17 7.81	-20 31.9	2.265	3.196	8.4	21.4
5 21	17 2.00	-36 9.9	2.257	3.217	6.8	18.6	5 21	17 0.65	-19 57.8	2.218	3.203	5.0	21.2
5 31	16 52.86	-35 34.2	2.206	3.198	4.5	18.4	5 31	16 52.48	-19 22.1	2.199	3.210	1.7	21.0
6 10	16 43.29	-34 44.3	2.182	3.178	4.3	18.4	6 10	16 44.08	-18 46.9	2.208	3.217	2.5	21.0
6 20	16 34.25	-33 42.6	2.186	3.158	6.5	18.5	6 20	16 36.26	-18 14.3	2.246	3.223	5.9	21.3
6 30	16 26.66	-32 33.5	2.217	3.138	9.3	18.6	6 30	16 29.71	-17 46.5	2.309	3.229	9.1	21.5
7 10	16 21.16	-31 22.2	2.272	3.118	12.1	18.8	7 10	16 24.95	-17 25.4	2.396	3.235	11.8	21.7
<b>396374</b>	2014 <i>DD</i> <sub>109</sub>		6 4.1 23°55	8°3/ 5.5	16		<b>218609</b>	2005 <i>OZ</i> <sub>3</sub>		6 4			

EPHEMERIDES

6 4.1

6 4.1

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>219574</b>	2001 <i>SH</i> <sub>159</sub>	6 4.1 179°29	6°6/ 1.5 18				<b>374986</b>	2007 <i>EV</i> <sub>79</sub>	6 4.1 219°00	2°9/ 3.1 18			
5 1	17 14.02	- 8 16.2	1.827	2.680	13.9	20.4	5 1	17 15.14	-15 37.8	2.198	3.048	12.0	21.7
5 11	17 8.69	- 6 58.8	1.761	2.681	11.0	20.3	5 11	17 9.40	-15 4.1	2.111	3.039	9.0	21.4
5 21	17 1.34	- 5 47.2	1.717	2.681	8.2	20.1	5 21	17 1.77	-14 30.9	2.049	3.030	5.8	21.2
5 31	16 52.70	- 4 46.6	1.698	2.682	6.6	20.0	5 31	16 52.88	-14 0.2	2.014	3.019	3.1	21.0
6 10	16 43.75	- 4 1.3	1.706	2.681	7.5	20.0	6 10	16 43.59	-13 34.1	2.008	3.009	4.0	21.1
6 20	16 35.44	- 3 34.1	1.739	2.681	10.1	20.2	6 20	16 34.77	-13 14.7	2.029	2.997	7.2	21.2
6 30	16 28.63	- 3 25.9	1.796	2.681	13.1	20.4	6 30	16 27.23	-13 3.6	2.076	2.985	10.5	21.4
7 10	16 23.92	- 3 35.3	1.872	2.680	15.8	20.6	7 10	16 21.60	-13 1.7	2.145	2.972	13.4	21.6
<b>354083</b>	2001 <i>WB</i> <sub>16</sub>	6 4.1 174°08	1°4/ 3.4 17				<b>250878</b>	2005 <i>UF</i> <sub>480</sub>	6 4.1 210°28	8°7/ 1.7 18			
5 1	17 12.20	-18 35.4	3.005	3.849	9.3	22.7	5 1	17 12.07	+ 7 53.1	2.657	3.439	12.1	20.3
5 11	17 6.69	-18 5.6	2.926	3.852	6.9	22.6	5 11	17 6.74	+ 8 23.4	2.588	3.436	10.6	20.2
5 21	16 59.87	-17 34.8	2.872	3.854	4.2	22.4	5 21	16 59.99	+ 8 38.6	2.542	3.433	9.3	20.1
5 31	16 52.25	-17 4.2	2.848	3.856	1.8	22.2	5 31	16 52.33	+ 8 35.5	2.519	3.429	8.7	20.1
6 10	16 44.43	-16 35.1	2.853	3.858	2.5	22.3	6 10	16 44.42	+ 8 12.4	2.522	3.425	9.0	20.1
6 20	16 37.02	-16 9.2	2.887	3.859	5.1	22.5	6 20	16 36.91	+ 7 29.6	2.549	3.421	10.1	20.2
6 30	16 30.57	-15 47.9	2.949	3.859	7.7	22.6	6 30	16 30.41	+ 6 29.0	2.600	3.417	11.7	20.3
7 10	16 25.52	-15 32.4	3.035	3.859	10.0	22.8	7 10	16 25.39	+ 5 13.7	2.672	3.412	13.3	20.4
<b>308432</b>	2005 <i>SS</i> <sub>155</sub>	6 4.1 191°78	4°9/ 6.4 18				<b>393221</b>	2013 <i>EJ</i> <sub>71</sub>	6 4.1 226°83	5°7/ 1.9 16			
5 1	17 17.00	-41 31.2	3.081	3.869	10.4	21.8	5 1	17 10.21	- 5 39.5	2.404	3.245	11.4	21.1
5 11	17 10.55	-41 47.5	2.994	3.867	8.6	21.7	5 11	17 5.51	- 4 56.7	2.334	3.244	9.1	20.9
5 21	17 2.34	-41 52.0	2.931	3.865	6.7	21.6	5 21	16 59.30	- 4 21.4	2.287	3.244	6.9	20.8
5 31	16 52.99	-41 42.6	2.895	3.862	5.2	21.5	5 31	16 52.13	- 3 56.5	2.266	3.244	5.7	20.7
6 10	16 43.34	-41 18.9	2.886	3.859	5.0	21.5	6 10	16 44.71	- 3 44.3	2.273	3.243	6.3	20.7
6 20	16 34.22	-40 42.1	2.905	3.855	6.2	21.5	6 20	16 37.72	- 3 45.6	2.305	3.243	8.2	20.8
6 30	16 26.38	-39 55.2	2.952	3.851	8.1	21.6	6 30	16 31.82	- 4 0.5	2.362	3.242	10.5	21.0
7 10	16 20.39	-39 2.5	3.022	3.846	10.0	21.8	7 10	16 27.48	- 4 27.6	2.440	3.242	12.8	21.1
<b>101736</b>	1999 <i>FH</i> <sub>3</sub>	6 4.1 113°74	1°4/ 3.7 17				<b>80033</b>	1999 <i>JY</i> <sub>20</sub>	6 4.1 48°80	0°9/ 3.8 17			
5 1	17 16.47	-19 41.3	1.860	2.718	13.5	20.2	5 1	17 13.88	-20 58.2	1.737	2.602	13.9	19.0
5 11	17 10.48	-19 23.9	1.798	2.731	10.0	20.0	5 11	17 8.64	-20 42.7	1.685	2.622	10.3	18.8
5 21	17 2.40	-19 5.3	1.759	2.744	6.1	19.8	5 21	17 1.30	-20 25.1	1.656	2.643	6.2	18.6
5 31	16 53.01	-18 46.4	1.746	2.757	2.1	19.6	5 31	16 52.71	-20 6.5	1.653	2.664	1.9	18.4
6 10	16 43.37	-18 28.6	1.761	2.769	3.1	19.6	6 10	16 43.94	-19 48.3	1.676	2.686	2.9	18.5
6 20	16 34.49	-18 14.0	1.802	2.781	7.0	19.9	6 20	16 36.01	-19 32.5	1.725	2.707	6.9	18.8
6 30	16 27.25	-18 4.4	1.869	2.793	10.7	20.2	6 30	16 29.78	-19 21.3	1.799	2.729	10.6	19.0
7 10	16 22.25	-18 1.2	1.958	2.804	13.8	20.4	7 10	16 25.80	-19 16.2	1.895	2.751	13.8	19.3
<b>398558</b>	2011 <i>UK</i> <sub>400</sub>	6 4.1 179°81	3°8/ 2.1 16				<b>162415</b>	2000 <i>EY</i> <sub>2</sub>	6 4.1 254°40	3°9/ 2.7 18			
5 1	17 11.05	-10 34.7	2.912	3.752	9.6	21.9	5 1	17 13.12	-12 8.7	2.267	3.116	11.7	20.1
5 11	17 5.86	- 9 44.0	2.836	3.753	7.4	21.8	5 11	17 7.90	-11 33.0	2.175	3.099	9.0	19.8
5 21	16 59.39	- 8 56.3	2.786	3.754	5.2	21.6	5 21	17 0.88	-11 0.1	2.107	3.082	6.1	19.6
5 31	16 52.12	- 8 13.9	2.764	3.754	3.9	21.5	5 31	16 52.64	-10 32.6	2.065	3.064	4.1	19.5
6 10	16 44.67	- 7 39.0	2.771	3.754	4.5	21.6	6 10	16 43.95	-10 12.6	2.052	3.045	4.8	19.5
6 20	16 37.60	- 7 13.3	2.806	3.754	6.5	21.7	6 20	16 35.63	-10 2.0	2.065	3.026	7.6	19.6
6 30	16 31.46	- 6 57.8	2.868	3.753	8.7	21.9	6 30	16 28.47	-10 1.9	2.105	3.007	10.7	19.8
7 10	16 26.68	- 6 52.4	2.952	3.751	10.8	22.0	7 10	16 23.09	-10 12.3	2.166	2.987	13.5	19.9
<b>249660</b>	1999 <i>VK</i> <sub>16</sub>	6 4.1 314°39	1°9/ 3.3 16 R				<b>499003</b>	2009 <i>CK</i> <sub>29</sub>	6 4.1 25°16	0°3/ 4.0 17			
5 1	17 11.15	-18 57.9	2.163	3.023	11.8	21.1	5 1	17 15.73	-21 38.9	1.207	2.089	17.6	21.0
5 11	17 6.45	-18 20.0	2.083	3.017	8.8	20.9	5 11	17 11.06	-21 43.3	1.148	2.093	13.2	20.8
5 21	16 59.97	-17 40.3	2.026	3.011	5.4	20.7	5 21	17 3.27	-21 45.4	1.108	2.098	8.0	20.5
5 31	16 52.33	-17 0.5	1.996	3.005	2.3	20.4	5 31	16 53.38	-21 44.9	1.091	2.103	2.4	20.2
6 10	16 44.36	-16 23.1	1.993	2.999	3.2	20.5	6 10	16 42.95	-21 42.5	1.098	2.109	3.4	20.3
6 20	16 36.89	-15 50.5	2.018	2.994	6.6	20.7	6 20	16 33.52	-21 39.9	1.128	2.115	8.9	20.6
6 30	16 30.71	-15 25.0	2.068	2.988	10.0	20.9	6 30	16 26.45	-21 39.8	1.180	2.122	13.9	20.9
7 10	16 26.36	-15 8.1	2.141	2.983	12.9	21.1	7 10	16 22.56	-21 44.7	1.251	2.130	18.0	21.2
<b>480616</b>	2015 <i>MP</i> <sub>112</sub>	6 4.1 307°55	2°7/ 3.6 16				<b>227571</b>	2005 <i>YW</i> <sub>214</sub>	6 4.1 120°23	1°4/ 4.3 18			
5 1	17 12.40	-14 29.2	1.996	2.856	12.6	21.3	5 1	17 18.96	-24 7.3	1.905	2.755	13.5	20.3
5 11	17 7.69	-14 31.1	1.903	2.836	9.6	21.1	5 11	17 12.59	-24 51.3	1.835	2.764	10.1	20.1
5 21	17 0.91	-14 37.1	1.834	2.816	6.2	20.8	5 21	17 3.85	-25 33.0	1.789	2.772	6.3	19.9
5 31	16 52.66	-14 48.2	1.789	2.796	3.1	20.6	5 31	16 53.52	-26 10.0	1.770	2.779	2.3	19.6
6 10	16 43.82	-15 5.2	1.772	2.776	3.8	20.6	6 10	16 42.71	-26 40.5	1.778	2.787	2.9	19.7
6 20	16 35.33	-15 28.3	1.782	2.757	7.4	20.8	6 20	16 32.54	-27 4.3	1.814	2.794	6.8	19.9
6 30	16 28.13	-15 57.7	1.816	2.738	11.0	21.0	6 30	16 24.06	-27 22.8	1.875	2.801	10.5	20.2
7 10	16 22.95	-16 33.2	1.873	2.719	14.3	21.1	7 10	16 17.97	-27 38.3	1.960	2.808	13.7	20.4
<b>507035</b>	2008 <i>US</i> <sub>149</sub>	6 4.1 259°69	2°1/ 4.5 17				<b>204938</b>	2008 <i>UW</i> <sub>159</sub>	6 4.1 216°29	0°7/ 4.3 17			
5 1	17 16.41	-26 48.3	1.879	2.732	13.6	21.7	5 1	17 14.97	-25 28.3	2.059	2.911	12.6	21.1
5 11	17 10.85	-27 15.6	1.798	2.726	10.3	21.5	5 11	17 9.46	-25 17.0	1.978	2.908	9.4	20.9
5 21	17 2.88	-27 38.1	1.740	2.721	6.5	21.3	5 21	17 1.88	-25 0.0	1.921	2.904	5.8	20.7
5 31	16 53.24	-27 53.5	1.708	2.716	2.8	21.0	5 31	16 52.93	-24 37.0	1.890	2.901	1.9	20.4
6 10	16 43.01	-28 1.0	1.702	2.711	3.2	21.0	6 10	16 43.59	-24 9.3	1.886	2.897	2.4	20.5
6 20	16 33.36	-28 1.2	1.724	2.705	7.0	21.3	6 20	16 34.83	-23 39.0	1.910	2.893	6.4	20.7
6 30	16 25.35	-27 56.5	1.771	2.700	10.8	21.5	6 30	16 27.57	-23 9.3	1.960	2.888	10.0	20.9
7 10	16 19.77	-27 50.2	1.839	2.695	14.2	21.7	7 10	16 22.44	-22 43.0	2.033	2.884	13.2	21.1
<b>98576</b>	2000 <i>WA</i> <sub>38</sub>	6 4.1 227°53	2°4/ 3.6 17				<b>493383</b>	2014 <i>WV</i> <sub>123</sub>	6 4.				

EPHEMERIDES

6 4.1

6 4.1

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>60026</b>	1999 <i>TC</i> <sub>72</sub>		6 4.1 352°51	2°0/ 3.4 17			<b>300946</b>	2008 <i>CC</i> <sub>179</sub>		6 4.1 69°22	4°8/ 5.3 17		
5 1	17 10.49	-18 44.1	1.848	2.717	13.1	18.8	5 1	17 16.83	-35 12.0	2.181	3.009	12.9	20.3
5 11	17 6.24	-18 14.9	1.774	2.713	9.8	18.5	5 11	17 10.97	-35 56.8	2.111	3.016	10.2	20.2
5 21	16 59.97	-17 44.6	1.723	2.709	6.0	18.3	5 21	17 2.86	-36 31.5	2.064	3.024	7.4	20.0
5 31	16 52.37	-17 15.0	1.697	2.707	2.5	18.1	5 31	16 53.26	-36 52.9	2.043	3.032	5.2	19.9
6 10	16 44.41	-16 48.4	1.697	2.704	3.4	18.1	6 10	16 43.21	-36 59.5	2.049	3.040	5.1	19.9
6 20	16 37.02	-16 27.1	1.724	2.703	7.2	18.4	6 20	16 33.80	-36 52.4	2.082	3.048	7.2	20.0
6 30	16 31.10	-16 13.1	1.775	2.702	10.9	18.6	6 30	16 26.01	-36 34.4	2.140	3.056	9.9	20.2
7 10	16 27.26	-16 7.6	1.847	2.701	14.2	18.8	7 10	16 20.52	-36 10.0	2.220	3.064	12.5	20.4
<b>190998</b>	2001 <i>YC</i> <sub>18</sub>		6 4.1 355°38	5°1/ 3.8 18			<b>172850</b>	Coppens		6 4.1 164°86	0°7/ 4.3 18		
5 1	17 15.94	- 8 33.7	1.567	2.425	15.6	19.5	5 1	17 14.95	-24 47.1	2.106	2.958	12.4	21.3
5 11	17 10.59	- 8 46.6	1.497	2.424	12.1	19.2	5 11	17 9.39	-24 48.5	2.030	2.960	9.2	21.1
5 21	17 2.75	- 9 11.4	1.448	2.422	8.4	19.0	5 21	17 1.82	-24 45.5	1.978	2.961	5.7	20.9
5 31	16 53.23	- 9 49.4	1.423	2.422	5.4	18.8	5 31	16 52.94	-24 37.6	1.952	2.963	1.9	20.6
6 10	16 43.15	-10 40.6	1.424	2.421	5.9	18.9	6 10	16 43.69	-24 25.4	1.954	2.964	2.4	20.7
6 20	16 33.72	-11 43.0	1.451	2.421	9.3	19.0	6 20	16 35.02	-24 10.3	1.983	2.965	6.2	20.9
6 30	16 26.02	-12 54.3	1.502	2.421	13.1	19.3	6 30	16 27.81	-23 54.8	2.038	2.966	9.7	21.1
7 10	16 20.83	-14 11.7	1.574	2.422	16.5	19.5	7 10	16 22.67	-23 41.4	2.116	2.967	12.8	21.3
<b>208315</b>	2001 <i>KR</i> <sub>22</sub>		6 4.1 290°32	0°8/ 4.2 18			<b>284112</b>	2005 <i>TJ</i> <sub>41</sub>		6 4.1 115°87	4°7/ 2.4 17		
5 1	17 15.25	-23 24.8	1.917	2.774	13.2	19.8	5 1	17 15.17	-12 33.9	1.872	2.728	13.5	21.2
5 11	17 9.93	-23 50.2	1.834	2.766	9.9	19.6	5 11	17 9.43	-11 31.9	1.813	2.740	10.3	21.0
5 21	17 2.31	-24 13.8	1.774	2.758	6.1	19.3	5 21	17 1.75	-10 33.1	1.777	2.752	7.0	20.9
5 31	16 53.10	-24 33.9	1.740	2.751	2.0	19.0	5 31	16 52.89	- 9 41.4	1.767	2.764	4.8	20.8
6 10	16 43.31	-24 49.9	1.733	2.743	2.6	19.1	6 10	16 43.83	- 9 0.2	1.785	2.776	5.7	20.8
6 20	16 34.02	-25 2.0	1.753	2.735	6.8	19.3	6 20	16 35.49	- 8 32.0	1.828	2.787	8.6	21.0
6 30	16 26.25	-25 11.6	1.798	2.728	10.6	19.5	6 30	16 28.71	- 8 18.1	1.897	2.797	11.7	21.2
7 10	16 20.77	-25 20.9	1.865	2.721	14.0	19.7	7 10	16 24.01	- 8 18.0	1.986	2.808	14.6	21.4
<b>97325</b>	1999 <i>XM</i> <sub>241</sub>		6 4.1 234°47	2°1/ 3.7 18			<b>77287</b>	2001 <i>FA</i> <sub>66</sub>		6 4.1 276°10	2°6/ 4.6 18		
5 1	17 15.11	-16 4.1	2.051	2.905	12.6	19.8	5 1	17 17.72	-27 30.2	1.561	2.421	15.5	19.4
5 11	17 9.55	-16 9.2	1.968	2.898	9.4	19.6	5 11	17 12.39	-27 56.1	1.477	2.409	11.9	19.2
5 21	17 1.96	-16 17.0	1.909	2.892	5.9	19.4	5 21	17 4.12	-28 15.9	1.415	2.397	7.6	18.9
5 31	16 52.98	-16 28.0	1.877	2.885	2.6	19.1	5 31	16 53.72	-28 26.7	1.376	2.384	3.4	18.6
6 10	16 43.52	-16 42.5	1.872	2.878	3.3	19.2	6 10	16 42.50	-28 27.2	1.364	2.372	3.8	18.6
6 20	16 34.53	-17 0.9	1.895	2.871	6.9	19.4	6 20	16 31.89	-28 18.4	1.377	2.360	8.2	18.8
6 30	16 26.90	-17 23.6	1.943	2.863	10.5	19.6	6 30	16 23.28	-28 3.8	1.413	2.348	12.6	19.1
7 10	16 21.31	-17 50.8	2.014	2.856	13.6	19.8	7 10	16 17.59	-27 47.9	1.471	2.335	16.6	19.3
<b>187438</b>	2005 <i>WO</i> <sub>65</sub>		6 4.1 9°51	4°2/ 4.8 18			<b>249137</b>	2008 <i>AC</i> <sub>4</sub>		6 4.1 125°08	0°6/ 3.9 18		
5 1	17 15.41	-31 26.4	1.893	2.740	13.8	19.4	5 1	17 13.65	-20 29.1	2.286	3.138	11.5	20.7
5 11	17 10.20	-32 21.6	1.821	2.741	10.7	19.2	5 11	17 8.22	-20 30.5	2.213	3.144	8.5	20.5
5 21	17 2.54	-33 9.5	1.772	2.743	7.4	19.0	5 21	17 1.02	-20 30.9	2.165	3.150	5.1	20.3
5 31	16 53.18	-33 46.3	1.748	2.746	4.7	18.8	5 31	16 52.70	-20 30.3	2.144	3.155	1.6	20.1
6 10	16 43.25	-34 9.9	1.750	2.749	4.8	18.8	6 10	16 44.07	-20 29.4	2.151	3.161	2.3	20.1
6 20	16 33.92	-34 20.3	1.778	2.752	7.5	19.0	6 20	16 35.97	-20 29.0	2.186	3.166	5.9	20.4
6 30	16 26.30	-34 20.1	1.831	2.756	10.8	19.2	6 30	16 29.15	-20 30.4	2.247	3.171	9.1	20.6
7 10	16 21.16	-34 13.2	1.906	2.761	13.8	19.4	7 10	16 24.16	-20 34.9	2.332	3.176	11.9	20.8
<b>35977</b>	Lexington		6 4.1 233°82	1°8/ 3.8 18			<b>431081</b>	2006 <i>DE</i> <sub>29</sub>		6 4.1 68°36	8°6/ 6.9 17		
5 1	17 16.37	-16 24.5	2.138	2.988	12.3	18.3	5 1	17 21.43	-43 59.5	1.784	2.589	16.2	20.5
5 11	17 10.48	-16 33.5	2.049	2.977	9.2	18.0	5 11	17 15.11	-44 49.1	1.720	2.598	13.6	20.3
5 21	17 2.54	-16 45.1	1.983	2.966	5.8	17.8	5 21	17 5.66	-45 19.9	1.677	2.606	11.0	20.2
5 31	16 53.17	-16 59.5	1.945	2.954	2.4	17.6	5 31	16 54.12	-45 26.0	1.656	2.615	9.1	20.1
6 10	16 43.26	-17 16.9	1.935	2.941	3.1	17.6	6 10	16 42.06	-45 5.4	1.659	2.624	8.7	20.1
6 20	16 33.76	-17 37.3	1.952	2.928	6.8	17.8	6 20	16 31.08	-44 20.5	1.687	2.633	10.1	20.2
6 30	16 25.57	-18 1.2	1.996	2.915	10.4	18.0	6 30	16 22.52	-43 17.8	1.738	2.641	12.5	20.4
7 10	16 19.38	-18 29.0	2.063	2.901	13.5	18.2	7 10	16 17.17	-42 5.6	1.810	2.650	15.0	20.5
<b>181340</b>	2006 <i>QX</i> <sub>182</sub>		6 4.1 180°48	1°1/ 4.4 17			<b>230080</b>	2000 <i>WE</i> <sub>11</sub>		6 4.1 225°64	0°9/ 3.8 18		
5 1	17 18.70	-25 55.1	1.966	2.813	13.3	21.9	5 1	17 15.61	-20 45.1	2.252	3.102	11.8	21.7
5 11	17 12.31	-25 54.4	1.888	2.815	10.0	21.7	5 11	17 9.80	-20 26.5	2.162	3.091	8.8	21.5
5 21	17 3.64	-25 47.8	1.834	2.816	6.2	21.4	5 21	17 2.07	-20 5.4	2.096	3.080	5.4	21.3
5 31	16 53.48	-25 34.4	1.805	2.816	2.2	21.2	5 31	16 53.04	-19 42.5	2.057	3.068	1.8	21.0
6 10	16 42.88	-25 14.9	1.805	2.815	2.6	21.2	6 10	16 43.57	-19 19.1	2.046	3.055	2.6	21.1
6 20	16 32.96	-24 51.2	1.833	2.814	6.7	21.5	6 20	16 34.55	-18 57.0	2.064	3.042	6.3	21.3
6 30	16 24.70	-24 26.4	1.886	2.812	10.4	21.7	6 30	16 26.84	-18 38.5	2.108	3.028	9.8	21.5
7 10	16 18.78	-24 4.0	1.963	2.810	13.7	21.9	7 10	16 21.05	-18 25.6	2.175	3.013	12.9	21.6
<b>393931</b>	2005 <i>UQ</i> <sub>110</sub>		6 4.1 250°35	2°5/ 4.6 18			<b>240387</b>	2003 <i>TV</i> <sub>58</sub>		6 4.1 186°58	4°8/ 5.4 18		
5 1	17 15.03	-28 48.4	2.425	3.264	11.4	20.3	5 1	17 19.19	-36 50.8	2.506	3.318	11.9	21.6
5 11	17 9.42	-29 25.1	2.340	3.260	8.7	20.1	5 11	17 12.58	-37 31.2	2.424	3.318	9.5	21.5
5 21	17 1.86	-29 56.9	2.279	3.255	5.7	19.9	5 21	17 3.80	-38 1.7	2.365	3.317	7.0	21.3
5 31	16 52.96	-30 21.7	2.246	3.250	3.0	19.7	5 31	16 53.56	-38 18.8	2.333	3.316	5.1	21.2
6 10	16 43.58	-30 38.3	2.241	3.245	3.2	19.7	6 10	16 42.83	-38 21.2	2.329	3.314	5.0	21.2
6 20	16 34.62	-30 47.0	2.263	3.240	6.0	19.9	6 20	16 32.62	-38 9.5	2.352	3.312	6.9	21.3
6 30	16 26.93	-30 49.3	2.313	3.235	9.0	20.1	6 30	16 23.87	-37 46.7	2.402	3.309	9.3	21.4
7 10	16 21.16	-30 47.9	2.385	3.230	11.7	20.2	7 10	16 17.30	-37 17.0	2.475	3.306	11.8	21.6
<b>379261</b>	2009 <i>UU</i> <sub>30</sub>		6 4.1 140°69	0°8/ 3.8 17			<b>357793</b>	2005 <i>TY</i> <sub>29</sub>		6 4.1 217°19	9°6/ 29.8		

EPHEMERIDES

6 4.1

6 4.1

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>512732</b>	2016 <i>UL</i> <sub>26</sub>		6 4.1 262°31	4.5/ 5.2	18		<b>445535</b>	2011 <i>EL</i> <sub>24</sub>		6 4.1 205°79	17°8/28.7	18	
5 1	17 16.01	-35 12.5	2.391	3.216	12.0	21.4	5 1	17 17.95	+15 16.0	1.450	2.229	20.5	21.4
5 11	17 10.34	-35 50.6	2.303	3.207	9.5	21.2	5 11	17 12.20	+17 18.9	1.401	2.225	19.0	21.2
5 21	17 2.52	-36 19.5	2.238	3.198	6.9	21.0	5 21	17 3.78	+18 52.7	1.370	2.221	18.1	21.2
5 31	16 53.20	-36 36.5	2.199	3.188	4.8	20.8	5 31	16 53.60	+19 47.1	1.357	2.217	17.8	21.1
6 10	16 43.34	-36 40.0	2.188	3.179	4.8	20.8	6 10	16 42.90	+19 55.9	1.362	2.211	18.5	21.1
6 20	16 33.93	-36 30.6	2.203	3.169	6.8	20.9	6 20	16 33.00	+19 18.9	1.385	2.205	19.8	21.2
6 30	16 25.93	-36 10.8	2.245	3.160	9.5	21.1	6 30	16 25.03	+18 0.7	1.424	2.199	21.4	21.3
7 10	16 20.05	-35 44.8	2.309	3.150	12.2	21.2	7 10	16 19.78	+16 9.9	1.477	2.191	23.2	21.4
<b>57880</b>	2002 <i>AN</i> <sub>3</sub>		6 4.1 202°17	3.9/ 3.2	18		<b>365429</b>	2010 <i>LF</i> <sub>32</sub>		6 4.1 2°52	6°6/ 6.1	16	
5 1	17 12.88	-9 28.3	2.499	3.340	11.0	19.7	5 1	17 14.86	-38 36.8	1.747	2.581	15.3	19.7
5 11	17 7.50	-9 21.2	2.420	3.338	8.5	19.5	5 11	17 10.12	-39 12.9	1.676	2.580	12.4	19.5
5 21	17 0.55	-9 20.0	2.365	3.335	5.9	19.4	5 21	17 2.63	-39 34.0	1.625	2.580	9.4	19.3
5 31	16 52.58	-9 26.3	2.338	3.332	4.0	19.2	5 31	16 53.27	-39 35.9	1.598	2.581	7.1	19.2
6 10	16 44.29	-9 40.8	2.338	3.329	4.5	19.3	6 10	16 43.38	-39 17.5	1.596	2.582	6.8	19.2
6 20	16 36.39	-10 3.8	2.367	3.326	6.9	19.4	6 20	16 34.30	-38 40.6	1.618	2.584	8.8	19.3
6 30	16 29.58	-10 34.9	2.421	3.322	9.5	19.6	6 30	16 27.26	-37 50.5	1.664	2.587	11.8	19.5
7 10	16 24.36	-11 13.2	2.499	3.318	12.0	19.7	7 10	16 23.02	-36 53.8	1.730	2.590	14.7	19.7
<b>17468</b>	1990 <i>WT</i> <sub>6</sub>		6 4.1 202°83	2.9/ 3.3	18		<b>139158</b>	2001 <i>FE</i> <sub>108</sub>		6 4.1 4°56	0°8/ 4.3	17	
5 1	17 17.60	-16 22.2	1.770	2.628	14.1	19.4	5 1	17 13.49	-23 50.5	1.169	2.055	17.8	19.3
5 11	17 11.62	-15 52.6	1.692	2.624	10.6	19.2	5 11	17 9.62	-24 2.3	1.107	2.054	13.4	19.1
5 21	17 3.30	-15 23.6	1.637	2.620	6.7	19.0	5 21	17 2.55	-24 9.6	1.064	2.054	8.2	18.8
5 31	16 53.43	-14 57.1	1.608	2.615	3.3	18.7	5 31	16 53.28	-24 11.3	1.044	2.055	2.6	18.4
6 10	16 43.07	-14 35.6	1.606	2.610	4.3	18.8	6 10	16 43.37	-24 7.7	1.046	2.058	3.4	18.5
6 20	16 33.35	-14 21.2	1.630	2.603	8.2	19.0	6 20	16 34.42	-24 0.7	1.072	2.061	9.0	18.8
6 30	16 25.28	-14 15.7	1.680	2.597	12.1	19.2	6 30	16 27.85	-23 53.6	1.118	2.065	14.0	19.1
7 10	16 19.58	-14 19.9	1.750	2.589	15.5	19.4	7 10	16 24.53	-23 50.0	1.184	2.070	18.3	19.4
<b>440444</b>	2005 <i>SU</i> <sub>48</sub>		6 4.1 332°61	2°3/ 3.4	16		<b>291792</b>	2006 <i>KU</i> <sub>57</sub>		6 4.1 96°53	2°7/ 3.4	17	
5 1	17 9.24	-18 40.1	1.541	2.421	14.6	20.7	5 1	17 13.67	-15 54.1	1.919	2.779	13.1	21.3
5 11	17 5.90	-18 11.0	1.453	2.397	11.0	20.4	5 11	17 8.50	-15 34.5	1.848	2.781	9.8	21.1
5 21	17 0.10	-17 40.2	1.386	2.374	6.9	20.1	5 21	17 1.32	-15 16.7	1.800	2.783	6.2	20.9
5 31	16 52.54	-17 9.8	1.342	2.352	2.9	19.8	5 31	16 52.84	-15 2.3	1.778	2.785	3.1	20.7
6 10	16 44.29	-16 42.6	1.324	2.331	4.0	19.8	6 10	16 44.01	-14 52.9	1.783	2.787	3.9	20.7
6 20	16 36.53	-16 21.5	1.329	2.311	8.5	20.0	6 20	16 35.78	-14 49.9	1.815	2.790	7.4	21.0
6 30	16 30.41	-16 9.2	1.358	2.293	13.0	20.2	6 30	16 29.01	-14 54.3	1.872	2.792	10.9	21.2
7 10	16 26.76	-16 7.4	1.406	2.275	16.9	20.4	7 10	16 24.32	-15 6.5	1.950	2.794	14.0	21.4
<b>386301</b>	2008 <i>SS</i> <sub>28</sub>		6 4.1 221°55	3°1/ 5.0	18		<b>418078</b>	2007 <i>VB</i> <sub>280</sub>		6 4.1 47°46	2°4/ 4.4	16	
5 1	17 17.56	-31 35.7	2.236	3.070	12.4	21.7	5 1	17 18.79	-25 51.8	1.347	2.216	17.0	21.2
5 11	17 11.47	-31 50.7	2.148	3.062	9.6	21.5	5 11	17 13.32	-26 34.0	1.284	2.221	12.8	20.9
5 21	17 3.18	-31 57.2	2.082	3.054	6.5	21.3	5 21	17 4.69	-27 11.6	1.242	2.227	8.1	20.7
5 31	16 53.40	-31 53.1	2.043	3.044	3.7	21.1	5 31	16 53.91	-27 41.1	1.224	2.233	3.4	20.4
6 10	16 43.12	-31 37.9	2.032	3.035	3.6	21.1	6 10	16 42.49	-28 0.4	1.230	2.239	3.9	20.5
6 20	16 33.36	-31 13.0	2.048	3.025	6.5	21.3	6 20	16 32.00	-28 10.0	1.261	2.246	8.6	20.7
6 30	16 25.10	-30 41.8	2.091	3.014	9.7	21.4	6 30	16 23.84	-28 13.0	1.315	2.252	13.1	21.0
7 10	16 19.03	-30 8.2	2.157	3.003	12.7	21.6	7 10	16 18.88	-28 13.4	1.388	2.259	17.0	21.3
<b>115346</b>	2003 <i>SY</i> <sub>230</sub>		6 4.1 121°81	4°8/ 3.1	18		<b>87592</b>	2000 <i>RD</i> <sub>28</sub>		6 4.1 322°08	0°8/ 3.8	17	
5 1	17 16.75	-12 9.1	1.559	2.422	15.4	19.8	5 1	17 12.25	-22 44.8	1.961	2.823	12.8	19.0
5 11	17 11.06	-11 36.7	1.498	2.429	11.8	19.6	5 11	17 7.53	-22 7.3	1.880	2.816	9.5	18.7
5 21	17 2.96	-11 9.9	1.458	2.437	7.9	19.4	5 21	17 0.78	-21 24.7	1.822	2.808	5.8	18.5
5 31	16 53.31	-10 51.6	1.443	2.444	5.0	19.3	5 31	16 52.71	-20 38.3	1.790	2.802	1.8	18.2
6 10	16 43.31	-10 44.3	1.454	2.450	5.8	19.3	6 10	16 44.26	-19 50.7	1.785	2.795	2.7	18.3
6 20	16 34.11	-10 49.1	1.489	2.457	9.3	19.5	6 20	16 36.39	-19 5.2	1.807	2.789	6.7	18.5
6 30	16 26.73	-11 6.5	1.549	2.463	13.1	19.8	6 30	16 29.97	-18 25.0	1.855	2.783	10.5	18.7
7 10	16 21.86	-11 35.1	1.628	2.469	16.4	20.0	7 10	16 25.64	-17 52.9	1.924	2.777	13.8	18.9
<b>14040</b>	<i>Andrejka</i>		6 4.1 226°18	1°7/ 4.6	18 R		<b>507757</b>	2013 <i>YC</i> <sub>55</sub>		6 4.1 211°08	2°8/ 3.4	17	
5 1	17 19.74	-27 15.9	1.523	2.381	15.9	19.1	5 1	17 14.18	-15 9.0	2.025	2.881	12.6	22.0
5 11	17 13.82	-27 10.8	1.443	2.374	12.1	18.8	5 11	17 8.84	-14 53.2	1.948	2.878	9.5	21.8
5 21	17 4.92	-26 57.0	1.384	2.367	7.6	18.5	5 21	17 1.53	-14 39.8	1.894	2.876	6.1	21.6
5 31	16 53.97	-26 32.9	1.349	2.359	2.9	18.2	5 31	16 52.93	-14 30.1	1.867	2.873	3.1	21.4
6 10	16 42.34	-25 59.3	1.341	2.351	3.3	18.2	6 10	16 43.93	-14 25.7	1.867	2.870	3.9	21.4
6 20	16 31.50	-25 19.5	1.358	2.342	8.2	18.5	6 20	16 35.46	-14 27.6	1.894	2.866	7.2	21.6
6 30	16 22.78	-24 38.4	1.399	2.333	12.8	18.7	6 30	16 28.37	-14 36.7	1.946	2.863	10.7	21.8
7 10	16 17.04	-24 1.4	1.461	2.323	16.8	19.0	7 10	16 23.28	-14 53.2	2.020	2.859	13.7	22.0
<b>377894</b>	2006 <i>DZ</i> <sub>78</sub>		6 4.1 130°61	3°9/ 5.5	17		<b>336882</b>	2011 <i>GN</i> <sub>53</sub>		6 4.1 295°69	7°1/ 3.1	18	
5 1	17 19.50	-34 28.1	2.252	3.076	12.7	21.6	5 1	17 14.71	-4 34.0	1.705	2.552	15.0	19.9
5 11	17 12.71	-34 44.9	2.185	3.091	9.9	21.4	5 11	17 9.67	-4 19.1	1.620	2.535	12.1	19.7
5 21	17 3.79	-34 51.0	2.141	3.104	6.9	21.2	5 21	17 2.29	-4 17.1	1.556	2.517	9.2	19.5
5 31	16 53.54	-34 44.1	2.123	3.118	4.4	21.1	5 31	16 53.22	-4 31.5	1.516	2.500	7.2	19.3
6 10	16 43.02	-34 24.0	2.133	3.130	4.2	21.1	6 10	16 43.48	-5 4.3	1.502	2.482	7.8	19.3
6 20	16 33.25	-33 52.9	2.171	3.143	6.6	21.3	6 20	16 34.17	-5 55.4	1.512	2.465	10.5	19.4
6 30	16 25.14	-33 14.4	2.236	3.154	9.4	21.5	6 30	16 26.36	-7 2.7	1.546	2.448	13.8	19.6
7 10	16 19.30	-32 33.2	2.323	3.165	12.1	21.7	7 10	16 20.85	-8 22.8	1.601	2.431	17.1	19.8
<b>502246</b>	2015 <i>BH</i> <sub>100</sub>		6 4.1 189°44	1°4/ 3.7	17		<b>203248</b>	2001 <i>QP</i> <sub>15</sub>		6 4.1 287°06	0°6/ 4.		

EPHEMERIDES

6 4.1

6 4.1

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>34360</b>	2000 <i>RS</i> <sub>28</sub>	6 4.1 66°39'	3°5'	5.6	18		<b>509296</b>	2006 <i>VQ</i> <sub>105</sub>	6 4.1 223°82'	0°6'	3.9	17	
5 1	17 15.24	-34 0.7	2.165	2.999	12.7	18.6	5 1	17 12.95	-22 7.6	2.415	3.266	11.0	21.7
5 11	17 9.69	-33 59.5	2.090	3.003	9.9	18.4	5 11	17 7.70	-21 40.6	2.331	3.261	8.2	21.5
5 21	17 2.04	-33 47.0	2.038	3.007	6.8	18.2	5 21	17 0.76	-21 10.1	2.271	3.255	5.0	21.3
5 31	16 53.08	-33 21.9	2.012	3.010	4.1	18.1	5 31	16 52.73	-20 36.9	2.238	3.249	1.5	21.0
6 10	16 43.80	-32 44.7	2.013	3.014	3.9	18.1	6 10	16 44.38	-20 2.8	2.234	3.243	2.3	21.1
6 20	16 35.23	-31 58.0	2.041	3.018	6.5	18.2	6 20	16 36.51	-19 29.9	2.258	3.237	5.8	21.3
6 30	16 28.24	-31 6.0	2.096	3.022	9.5	18.4	6 30	16 29.83	-19 0.5	2.309	3.231	9.0	21.5
7 10	16 23.44	-30 13.4	2.173	3.026	12.4	18.6	7 10	16 24.91	-18 36.7	2.383	3.224	11.8	21.6
<b>218223</b>	2002 <i>VB</i> <sub>34</sub>	6 4.1 247°28'	0°5'	4.3	17		<b>225934</b>	2002 <i>AT</i> <sub>175</sub>	6 4.1 194°24'	1°9'	4.7	18	
5 1	17 17.68	-23 50.2	1.868	2.722	13.6	21.0	5 1	17 17.69	-28 16.5	2.234	3.074	12.2	21.5
5 11	17 11.89	-23 56.5	1.777	2.707	10.3	20.8	5 11	17 11.46	-28 22.6	2.151	3.072	9.2	21.3
5 21	17 3.63	-23 59.0	1.708	2.692	6.3	20.5	5 21	17 3.15	-28 21.9	2.091	3.069	5.9	21.1
5 31	16 53.62	-23 56.9	1.666	2.677	2.0	20.2	5 31	16 53.46	-28 13.3	2.059	3.066	2.6	20.9
6 10	16 42.94	-23 50.2	1.650	2.661	2.7	20.2	6 10	16 43.35	-27 56.9	2.054	3.062	2.8	20.9
6 20	16 32.73	-23 40.2	1.662	2.644	7.1	20.4	6 20	16 33.79	-27 34.2	2.078	3.058	6.1	21.1
6 30	16 24.13	-23 29.4	1.699	2.627	11.3	20.6	6 30	16 25.70	-27 8.2	2.128	3.053	9.5	21.3
7 10	16 17.95	-23 20.8	1.758	2.610	14.9	20.8	7 10	16 19.73	-26 42.4	2.202	3.047	12.5	21.5
<b>54556</b>	2000 <i>QX</i> <sub>116</sub>	6 4.1 278°73'	1°9'	4.5	18		<b>375785</b>	2009 <i>SF</i> <sub>295</sub>	6 4.1 155°52'	0°9'	3.9	17	
5 1	17 15.08	-26 34.1	2.203	3.051	12.1	18.0	5 1	17 16.81	-19 58.1	1.964	2.818	13.0	21.5
5 11	17 9.66	-27 5.9	2.115	3.040	9.1	17.8	5 11	17 10.85	-19 58.0	1.892	2.823	9.7	21.3
5 21	17 2.15	-27 33.9	2.049	3.030	5.8	17.5	5 21	17 2.79	-19 57.0	1.843	2.828	5.9	21.1
5 31	16 53.16	-27 56.4	2.011	3.019	2.6	17.3	5 31	16 53.35	-19 55.4	1.821	2.832	1.9	20.8
6 10	16 43.61	-28 12.2	2.000	3.008	2.9	17.3	6 10	16 43.53	-19 53.7	1.827	2.836	2.7	20.9
6 20	16 34.46	-28 21.4	2.017	2.997	6.3	17.5	6 20	16 34.33	-19 53.0	1.860	2.840	6.7	21.1
6 30	16 26.66	-28 25.7	2.060	2.987	9.7	17.7	6 30	16 26.67	-19 54.8	1.918	2.843	10.4	21.3
7 10	16 20.92	-28 27.6	2.126	2.976	12.7	17.9	7 10	16 21.20	-20 0.6	2.000	2.845	13.6	21.6
<b>338742</b>	2003 <i>UG</i> <sub>158</sub>	6 4.1 194°35'	2°5'	4.8	17		<b>166725</b>	2002 <i>TY</i> <sub>244</sub>	6 4.1 130°10'	1°3'	3.7	18	
5 1	17 16.59	-29 18.4	2.162	3.003	12.5	21.3	5 1	17 14.04	-19 2.6	2.380	3.231	11.2	20.4
5 11	17 10.75	-29 39.9	2.082	3.002	9.5	21.1	5 11	17 8.40	-18 46.7	2.312	3.241	8.3	20.2
5 21	17 2.76	-29 54.8	2.025	3.001	6.2	20.9	5 21	17 1.12	-18 30.2	2.269	3.252	5.0	20.1
5 31	16 53.33	-30 1.0	1.994	2.999	3.2	20.7	5 31	16 52.82	-18 13.8	2.252	3.262	1.9	19.9
6 10	16 43.44	-29 58.1	1.992	2.997	3.3	20.7	6 10	16 44.30	-17 58.8	2.265	3.272	2.6	19.9
6 20	16 34.11	-29 47.1	2.017	2.995	6.4	20.9	6 20	16 36.32	-17 46.6	2.305	3.282	5.9	20.2
6 30	16 26.27	-29 30.7	2.068	2.993	9.7	21.1	6 30	16 29.60	-17 38.5	2.372	3.291	8.9	20.4
7 10	16 20.60	-29 12.3	2.141	2.990	12.7	21.3	7 10	16 24.62	-17 35.7	2.463	3.300	11.6	20.6
<b>260292</b>	2004 <i>TB</i> <sub>78</sub>	6 4.1 300°40'	0°8'	3.9	16		<b>488884</b>	2005 <i>SU</i> <sub>231</sub>	6 4.1 285°85'	3°3'	2.7	16	
5 1	17 11.94	-20 25.3	2.173	3.031	11.8	21.1	5 1	17 11.23	-14 40.6	2.227	3.084	11.6	22.5
5 11	17 7.27	-20 19.0	2.080	3.013	8.8	20.9	5 11	17 6.55	-13 55.0	2.143	3.073	8.8	22.3
5 21	17 0.66	-20 11.4	2.010	2.995	5.4	20.6	5 21	17 0.13	-13 10.1	2.082	3.061	5.8	22.1
5 31	16 52.72	-20 2.8	1.966	2.977	1.7	20.4	5 31	16 52.56	-12 28.6	2.047	3.049	3.5	21.9
6 10	16 44.28	-19 54.2	1.950	2.959	2.6	20.4	6 10	16 44.63	-11 53.0	2.040	3.038	4.3	21.9
6 20	16 36.22	-19 46.9	1.961	2.941	6.3	20.6	6 20	16 37.13	-11 25.8	2.060	3.026	7.2	22.1
6 30	16 29.40	-19 42.5	1.997	2.924	9.9	20.8	6 30	16 30.82	-11 8.7	2.106	3.015	10.4	22.3
7 10	16 24.47	-19 42.4	2.056	2.906	13.1	20.9	7 10	16 26.27	-11 2.4	2.173	3.003	13.2	22.4
<b>54558</b>	2000 <i>QR</i> <sub>125</sub>	6 4.1 289°52'	4°3'	2.5	18		<b>430160</b>	2013 <i>TQ</i> <sub>74</sub>	6 4.1 72°76'	6°6'	1.8	17	
5 1	17 11.33	-12 4.0	2.125	2.981	12.1	18.8	5 1	17 13.76	- 8 48.9	1.677	2.536	14.7	20.9
5 11	17 6.64	-11 15.9	2.047	2.974	9.3	18.6	5 11	17 8.62	- 7 34.1	1.622	2.547	11.5	20.7
5 21	17 0.17	-10 30.7	1.992	2.968	6.4	18.4	5 21	17 1.40	- 6 26.2	1.590	2.558	8.4	20.5
5 31	16 52.55	- 9 51.6	1.964	2.961	4.4	18.3	5 31	16 52.92	- 5 30.3	1.582	2.568	6.7	20.4
6 10	16 44.58	- 9 21.3	1.962	2.954	5.2	18.3	6 10	16 44.20	- 4 50.7	1.600	2.579	7.5	20.5
6 20	16 37.09	- 9 1.9	1.987	2.947	7.9	18.5	6 20	16 36.24	- 4 29.7	1.642	2.590	10.2	20.7
6 30	16 30.84	- 8 54.7	2.037	2.940	10.9	18.7	6 30	16 29.91	- 4 27.6	1.708	2.601	13.2	20.9
7 10	16 26.40	- 8 59.6	2.108	2.933	13.7	18.8	7 10	16 25.78	- 4 42.7	1.793	2.612	16.0	21.1
<b>171077</b>	2005 <i>EL</i> <sub>178</sub>	6 4.1 148°79'	2°1'	4.7	17		<b>381509</b>	2008 <i>SL</i> <sub>155</sub>	6 4.1 192°67'	3°3'	3.1	17	
5 1	17 19.51	-28 18.3	1.640	2.493	15.2	21.1	5 1	17 14.29	-13 33.8	2.260	3.109	11.7	21.3
5 11	17 13.32	-28 17.4	1.570	2.498	11.5	20.9	5 11	17 8.72	-13 6.8	2.182	3.108	8.9	21.2
5 21	17 4.46	-28 7.4	1.522	2.504	7.3	20.6	5 21	17 1.40	-12 42.5	2.128	3.106	5.9	21.0
5 31	16 53.85	-27 47.1	1.500	2.508	3.1	20.4	5 31	16 52.93	-12 22.7	2.101	3.103	3.5	20.8
6 10	16 42.80	-27 17.3	1.503	2.513	3.3	20.4	6 10	16 44.13	-12 9.2	2.102	3.100	4.2	20.8
6 20	16 32.64	-26 40.8	1.533	2.516	7.5	20.7	6 20	16 35.82	-12 3.4	2.131	3.097	7.1	21.0
6 30	16 24.52	-26 2.4	1.588	2.520	11.7	20.9	6 30	16 28.74	-12 6.0	2.186	3.093	10.1	21.2
7 10	16 19.16	-25 26.7	1.664	2.523	15.3	21.2	7 10	16 23.47	-12 17.3	2.263	3.089	12.9	21.4
<b>62454</b>	2000 <i>SQ</i> <sub>209</sub>	6 4.1 225°72'	1°8'	4.6	18		<b>32983</b>	1996 <i>WU</i> <sub>2</sub>	6 4.1 283°04'	8°4'	31.9	18	
5 1	17 15.06	-27 11.8	2.444	3.286	11.2	19.4	5 1	17 12.97	- 3 59.5	1.763	2.611	14.6	17.8
5 11	17 9.42	-27 38.4	2.359	3.281	8.5	19.2	5 11	17 8.28	- 2 45.4	1.680	2.591	12.0	17.6
5 21	17 1.89	-28 0.6	2.297	3.276	5.4	19.0	5 21	17 1.40	- 1 39.9	1.618	2.571	9.6	17.4
5 31	16 53.08	-28 17.0	2.263	3.270	2.4	18.8	5 31	16 52.99	- 0 49.1	1.581	2.551	8.4	17.3
6 10	16 43.82	-28 26.9	2.257	3.264	2.7	18.8	6 10	16 44.00	- 0 17.7	1.568	2.530	9.3	17.3
6 20	16 34.98	-28 30.6	2.279	3.258	5.7	19.0	6 20	16 35.44	- 0 8.8	1.579	2.510	11.8	17.4
6 30	16 27.37	-28 29.8	2.328	3.252	8.8	19.2	6 30	16 28.31	- 0 22.7	1.613	2.489	14.8	17.5
7 10	16 21.65	-28 26.8	2.401	3.246	11.6	19.4	7 10	16 23.34	- 0 57.2	1.665	2.469	17.6	17.7
<b>310276</b>	2011 <i>US</i> <sub>56</sub>	6 4.1 2°10'	1°0'	3.7	17		<b>301575</b>	2009 <i>KP</i> <sub>3</sub>	6 4.1 234°73'	4°6'	2.7		

EPHEMERIDES

6 4.1

6 4.2

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>423888</b>	2006 <i>SV</i> <sub>33</sub>		6 4.1 205°32	1.2°/ 3.7	17		<b>172421</b>	2003 <i>HF</i>		6 4.1 341°27	4.3°/ 2.6	18	
5 1	17 17.47	-20 25.1	2.095	2.945	12.5	21.8	5 1	17 51.69	-10 51.9	0.975	1.809	24.6	18.8
5 11	17 11.30	-19 59.6	2.010	2.939	9.3	21.6	5 11	17 41.58	-15 38.3	0.882	1.801	19.1	18.4
5 21	17 3.06	-19 31.2	1.949	2.933	5.7	21.3	5 21	17 24.64	-21 26.8	0.815	1.795	12.0	18.0
5 31	16 53.45	-19 1.2	1.915	2.926	2.0	21.1	5 31	17 0.83	-27 51.8	0.780	1.789	5.0	17.5
6 10	16 43.42	-18 31.1	1.910	2.918	2.9	21.1	6 10	16 32.03	-34 3.3	0.783	1.784	8.1	17.7
6 20	16 33.93	-18 3.3	1.932	2.909	6.8	21.4	6 20	16 2.15	-39 12.9	0.821	1.781	15.9	18.1
6 30	16 25.89	-17 40.4	1.981	2.900	10.4	21.6	6 30	15 35.86	-43 3.5	0.887	1.778	22.5	18.5
7 10	16 19.94	-17 24.3	2.053	2.890	13.6	21.7	7 10	15 16.40	-45 49.1	0.974	1.776	27.5	18.8
<b>141340</b>	2002 <i>AE</i> <sub>5</sub>		6 4.1 177°98	0°1/ 4.2	18		<b>432395</b>	2009 <i>XN</i> <sub>6</sub>		6 4.1 279°22	1°9/ 4.0	18	
5 1	17 13.17	-23 34.7	2.973	3.814	9.5	21.8	5 1	17 17.84	-15 33.9	1.743	2.600	14.3	20.6
5 11	17 7.58	-23 28.3	2.891	3.816	7.0	21.6	5 11	17 12.19	-16 2.3	1.650	2.582	10.8	20.3
5 21	17 0.57	-23 18.8	2.835	3.817	4.3	21.5	5 21	17 3.96	-16 36.8	1.581	2.564	6.8	20.0
5 31	16 52.68	-23 6.4	2.806	3.818	1.3	21.2	5 31	16 53.84	-17 16.8	1.537	2.546	2.7	19.8
6 10	16 44.53	-22 51.7	2.808	3.818	1.8	21.3	6 10	16 42.86	-18 1.3	1.520	2.528	3.5	19.8
6 20	16 36.79	-22 35.9	2.838	3.818	4.7	21.5	6 20	16 32.25	-18 49.1	1.530	2.510	7.9	20.0
6 30	16 30.05	-22 20.4	2.897	3.817	7.4	21.7	6 30	16 23.20	-19 39.4	1.565	2.491	12.2	20.2
7 10	16 24.78	-22 7.1	2.980	3.816	9.8	21.8	7 10	16 16.60	-20 32.0	1.622	2.473	16.0	20.4
<b>506246</b>	2016 <i>NX</i> <sub>47</sub>		6 4.1 132°93	1°0/ 3.8	17		<b>117360</b>	2004 <i>XC</i> <sub>103</sub>		6 4.1 160°54	1°3/ 4.5	18	
5 1	17 14.42	-20 53.3	2.021	2.878	12.6	21.4	5 1	17 17.38	-26 20.4	2.582	3.418	10.9	20.8
5 11	17 9.02	-20 32.9	1.949	2.882	9.4	21.2	5 11	17 10.93	-26 38.4	2.506	3.426	8.2	20.6
5 21	17 1.64	-20 10.0	1.901	2.886	5.7	21.0	5 21	17 2.71	-26 52.0	2.454	3.433	5.1	20.5
5 31	16 53.02	-19 45.6	1.879	2.890	1.9	20.7	5 31	16 53.35	-27 0.1	2.430	3.439	2.1	20.3
6 10	16 44.08	-19 21.4	1.884	2.894	2.7	20.8	6 10	16 43.67	-27 2.4	2.436	3.444	2.3	20.3
6 20	16 35.75	-18 59.4	1.917	2.897	6.6	21.0	6 20	16 34.48	-26 59.8	2.471	3.449	5.4	20.5
6 30	16 28.89	-18 41.8	1.976	2.901	10.1	21.2	6 30	16 26.56	-26 53.9	2.533	3.454	8.4	20.7
7 10	16 24.09	-18 30.4	2.057	2.904	13.2	21.5	7 10	16 20.45	-26 47.1	2.619	3.457	11.0	20.9
<b>384809</b>	2012 <i>QA</i> <sub>41</sub>		6 4.1 275°25	5°8/ 2.9	16		<b>370464</b>	2003 <i>BC</i> <sub>66</sub>		6 4.1 155°42	3°4/ 3.2	17	
5 1	17 14.68	-7 20.1	1.920	2.767	13.6	20.6	5 1	17 16.45	-13 10.6	2.142	2.989	12.4	22.0
5 11	17 9.47	-6 59.4	1.829	2.748	10.8	20.4	5 11	17 10.33	-12 48.9	2.073	2.998	9.4	21.8
5 21	17 2.10	-6 47.5	1.761	2.728	7.9	20.2	5 21	17 2.37	-12 30.8	2.028	3.005	6.2	21.6
5 31	16 53.21	-6 47.2	1.718	2.707	5.9	20.0	5 31	16 53.25	-12 17.8	2.010	3.012	3.6	21.5
6 10	16 43.71	-7 0.6	1.701	2.687	6.5	20.0	6 10	16 43.84	-12 11.5	2.020	3.018	4.3	21.5
6 20	16 34.58	-7 28.4	1.710	2.666	9.3	20.1	6 20	16 35.02	-12 12.9	2.058	3.024	7.2	21.7
6 30	16 26.77	-8 10.0	1.744	2.645	12.6	20.3	6 30	16 27.57	-12 22.6	2.122	3.029	10.4	21.9
7 10	16 21.05	-9 3.5	1.799	2.624	15.7	20.4	7 10	16 22.05	-12 40.4	2.208	3.033	13.2	22.1
<b>99095</b>	2001 <i>FF</i> <sub>39</sub>		6 4.1 308°55	2°7/ 4.8	17		<b>71231</b>	1999 <i>YY</i> <sub>22</sub>		6 4.2 204°46	2°3/ 5.0	18	
5 1	17 15.32	-29 7.1	1.791	2.645	14.1	19.1	5 1	17 16.58	-30 37.9	2.317	3.153	11.9	20.4
5 11	17 10.24	-29 22.0	1.710	2.637	10.8	18.8	5 11	17 10.61	-30 34.2	2.232	3.149	9.1	20.2
5 21	17 2.67	-29 29.1	1.651	2.630	7.0	18.6	5 21	17 2.63	-30 21.7	2.170	3.145	6.0	20.0
5 31	16 53.39	-29 26.4	1.617	2.623	3.4	18.4	5 31	16 53.36	-29 59.6	2.135	3.140	3.0	19.8
6 10	16 43.52	-29 13.5	1.609	2.616	3.5	18.4	6 10	16 43.71	-29 28.3	2.129	3.135	3.0	19.8
6 20	16 34.28	-28 52.3	1.627	2.609	7.2	18.6	6 20	16 34.62	-28 50.0	2.150	3.129	6.0	20.0
6 30	16 26.78	-28 26.1	1.670	2.603	11.1	18.8	6 30	16 26.97	-28 8.0	2.198	3.123	9.2	20.2
7 10	16 21.79	-27 59.4	1.734	2.597	14.6	19.0	7 10	16 21.36	-27 26.3	2.270	3.117	12.1	20.4
<b>93914</b>	2000 <i>WV</i> <sub>157</sub>		6 4.1 125°12	2°0/ 4.6	18		<b>507698</b>	2013 <i>TE</i> <sub>50</sub>		6 4.2 278°87	0°2/ 4.1	17	
5 1	17 18.58	-27 33.5	2.221	3.061	12.3	19.2	5 1	17 16.22	-22 37.7	1.681	2.543	14.5	22.4
5 11	17 12.02	-27 59.7	2.155	3.076	9.2	19.0	5 11	17 11.10	-22 29.2	1.587	2.523	10.9	22.1
5 21	17 3.43	-28 20.3	2.112	3.090	5.9	18.8	5 21	17 3.34	-22 16.8	1.515	2.501	6.7	21.8
5 31	16 53.55	-28 33.7	2.097	3.104	2.7	18.7	5 31	16 53.66	-22 0.3	1.468	2.480	2.0	21.4
6 10	16 43.35	-28 39.1	2.110	3.117	2.9	18.7	6 10	16 43.20	-21 40.7	1.448	2.459	2.9	21.5
6 20	16 33.79	-28 37.5	2.152	3.130	6.0	18.9	6 20	16 33.21	-21 20.1	1.453	2.437	7.8	21.7
6 30	16 25.76	-28 31.3	2.220	3.143	9.3	19.1	6 30	16 24.91	-21 1.7	1.483	2.415	12.3	21.9
7 10	16 19.85	-28 23.2	2.311	3.154	12.1	19.3	7 10	16 19.20	-20 48.6	1.534	2.393	16.3	22.1
<b>36964</b>	2000 <i>SK</i> <sub>287</sub>		6 4.1 343°92	10°6/ 6.5	18		<b>508049</b>	2015 <i>BD</i> <sub>536</sub>		6 4.2 334°42	5°3/ 2.0	18	
5 1	17 20.10	-45 9.1	1.555	2.368	17.9	18.2	5 1	17 11.99	-15 5.3	1.433	2.310	15.6	19.8
5 11	17 14.95	-46 22.7	1.484	2.363	15.3	18.0	5 11	17 7.89	-13 38.8	1.361	2.302	11.9	19.5
5 21	17 6.07	-47 16.5	1.432	2.358	12.8	17.8	5 21	17 1.28	-12 10.9	1.311	2.293	8.0	19.3
5 31	16 54.48	-47 42.5	1.401	2.354	11.0	17.7	5 31	16 52.99	-10 47.3	1.284	2.285	5.4	19.1
6 10	16 41.94	-47 36.3	1.392	2.350	10.7	17.6	6 10	16 44.22	-9 34.7	1.283	2.278	6.7	19.1
6 20	16 30.38	-46 59.0	1.406	2.347	12.1	17.7	6 20	16 36.18	-8 38.5	1.305	2.272	10.5	19.3
6 30	16 21.55	-45 57.2	1.441	2.345	14.6	17.9	6 30	16 29.95	-8 2.1	1.350	2.266	14.5	19.5
7 10	16 16.49	-44 41.1	1.496	2.343	17.3	18.0	7 10	16 26.27	-7 45.9	1.413	2.261	18.1	19.8
<b>26956</b>	1997 <i>MT</i> <sub>3</sub>		6 4.1 309°05	2°1/ 3.7	18		<b>164469</b>	2006 <i>DC</i> <sub>199</sub>		6 4.2 355°59	4°0/ 4.6	18	
5 1	17 14.57	-18 7.6	1.485	2.358	15.5	19.0	5 1	17 15.25	-27 37.8	1.078	1.964	19.0	19.3
5 11	17 9.91	-17 54.7	1.408	2.348	11.6	18.7	5 11	17 11.51	-28 31.9	1.015	1.959	14.6	19.0
5 21	17 2.58	-17 42.4	1.352	2.339	7.2	18.4	5 21	17 4.06	-29 20.0	0.970	1.956	9.6	18.7
5 31	16 53.38	-17 31.8	1.319	2.330	2.9	18.1	5 31	16 53.93	-29 57.0	0.947	1.954	4.9	18.4
6 10	16 43.54	-17 24.5	1.312	2.321	3.9	18.2	6 10	16 42.85	-30 19.4	0.945	1.953	5.2	18.5
6 20	16 34.33	-17 22.3	1.330	2.312	8.6	18.4	6 20	16 32.73	-30 27.4	0.966	1.953	10.1	18.7
6 30	16 26.97	-17 27.0	1.371	2.304	13.1	18.7	6 30	16 25.32	-30 24.9	1.007	1.954	15.1	19.0
7 10	16 22.30	-17 39.6	1.432	2.296	17.0	18.9	7 10	16 21.68	-30 17.8	1.065	1.956	19.5	19.3
<b>179709</b>	2002 <i>RK</i> <sub>48</sub>		6 4.1 295°16	1°3/ 4.4	18		<b>98415</b>	2000 <i>UH</i> <sub>18</sub>		6 4.2 228			

EPHEMERIDES

6 4.2

6 4.2

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>507727</b>	2013 <i>WF</i> <sub>22</sub>		6 4.2 96°39	2°2/ 3.9	17		<b>202731</b>	2007 <i>JU</i> <sub>13</sub>		6 4.2 39°62	1°6/ 4.4	17	
5 1	17 17.40	-14 58.8	1.957	2.808	13.2	21.1	5 1	17 18.84	-24 40.2	1.224	2.099	17.9	20.2
5 11	17 11.19	-15 16.5	1.895	2.824	9.9	20.9	5 11	17 13.63	-25 6.7	1.161	2.102	13.5	19.9
5 21	17 2.96	-15 38.3	1.857	2.839	6.2	20.7	5 21	17 5.07	-25 28.8	1.118	2.105	8.4	19.6
5 31	16 53.45	-16 4.0	1.846	2.854	2.7	20.5	5 31	16 54.20	-25 43.9	1.097	2.108	3.0	19.3
6 10	16 43.63	-16 33.2	1.863	2.869	3.4	20.6	6 10	16 42.63	-25 50.9	1.101	2.112	3.6	19.4
6 20	16 34.48	-17 5.5	1.908	2.884	6.9	20.8	6 20	16 32.07	-25 50.9	1.129	2.116	9.0	19.7
6 30	16 26.86	-17 40.7	1.978	2.898	10.4	21.1	6 30	16 23.99	-25 47.6	1.178	2.120	14.0	20.0
7 10	16 21.38	-18 18.7	2.071	2.913	13.3	21.3	7 10	16 19.30	-25 44.9	1.247	2.124	18.2	20.3
<b>23434</b>	1981 <i>UB</i> <sub>23</sub>		6 4.2 233°42	1°3/ 3.8	18		<b>23242</b>	2000 <i>WY</i> <sub>140</sub>		6 4.2 352°10	6°4/ 4.0	18	
5 1	17 14.97	-19 14.1	2.260	3.111	11.7	18.5	5 1	17 14.57	-5 56.5	1.443	2.304	16.5	17.6
5 11	17 9.40	-19 2.7	2.170	3.100	8.7	18.3	5 11	17 9.85	-6 9.4	1.374	2.299	13.1	17.4
5 21	17 1.93	-18 50.4	2.104	3.088	5.4	18.1	5 21	17 2.53	-6 38.0	1.324	2.295	9.4	17.1
5 31	16 53.17	-18 37.9	2.065	3.075	1.9	17.8	5 31	16 53.42	-7 24.5	1.298	2.291	6.7	17.0
6 10	16 43.96	-18 26.2	2.054	3.063	2.7	17.9	6 10	16 43.69	-8 28.8	1.296	2.289	7.1	17.0
6 20	16 35.17	-18 16.7	2.072	3.049	6.3	18.1	6 20	16 34.59	-9 48.2	1.319	2.287	10.2	17.2
6 30	16 27.63	-18 11.0	2.116	3.036	9.8	18.3	6 30	16 27.29	-11 19.1	1.365	2.286	14.0	17.4
7 10	16 21.97	-18 10.4	2.182	3.022	12.8	18.5	7 10	16 22.60	-12 57.0	1.431	2.286	17.5	17.6
<b>83177</b>	2001 <i>QN</i> <sub>287</sub>		6 4.2 226°55	3°4/ 2.9	18		<b>35969</b>	1999 <i>LY</i> <sub>14</sub>		6 4.2 1°66	6°2/ 3.1	17	
5 1	17 12.40	-14 19.4	2.167	3.023	11.9	19.2	5 1	17 13.63	-10 59.1	1.194	2.075	17.9	18.5
5 11	17 7.41	-13 40.7	2.091	3.020	9.0	19.0	5 11	17 9.48	-10 24.1	1.134	2.074	13.8	18.2
5 21	17 0.66	-13 3.7	2.039	3.018	5.9	18.8	5 21	17 2.42	-9 57.7	1.093	2.073	9.5	18.0
5 31	16 52.77	-12 30.8	2.013	3.015	3.5	18.7	5 31	16 53.39	-9 44.1	1.073	2.073	6.4	17.8
6 10	16 44.57	-12 4.4	2.014	3.012	4.3	18.7	6 10	16 43.79	-9 46.5	1.077	2.074	7.3	17.9
6 20	16 36.86	-11 46.3	2.043	3.010	7.2	18.9	6 20	16 35.05	-10 6.0	1.103	2.076	11.2	18.1
6 30	16 30.41	-11 37.9	2.097	3.007	10.4	19.1	6 30	16 28.45	-10 41.9	1.150	2.078	15.4	18.3
7 10	16 25.78	-11 39.5	2.173	3.004	13.2	19.2	7 10	16 24.81	-11 31.3	1.215	2.081	19.3	18.6
<b>309643</b>	2008 <i>CS</i> <sub>195</sub>		6 4.2 172°58	1°8/ 3.5	16		<b>39250</b>	2000 <i>YR</i> <sub>95</sub>		6 4.2 348°37	1°2/ 4.6	17	
5 1	17 12.46	-17 20.5	2.616	3.465	10.3	22.2	5 1	17 12.12	-26 30.8	1.948	2.807	12.9	18.5
5 11	17 7.19	-16 58.3	2.539	3.467	7.7	22.1	5 11	17 7.59	-26 27.9	1.870	2.802	9.7	18.3
5 21	17 0.41	-16 36.1	2.487	3.469	4.8	21.9	5 21	17 0.95	-26 18.9	1.815	2.798	6.1	18.1
5 31	16 52.69	-16 15.2	2.462	3.470	2.2	21.7	5 31	16 52.91	-26 3.3	1.785	2.795	2.3	17.8
6 10	16 44.72	-15 56.9	2.467	3.471	2.8	21.8	6 10	16 44.45	-25 42.0	1.782	2.792	2.6	17.9
6 20	16 37.18	-15 42.6	2.499	3.472	5.7	21.9	6 20	16 36.57	-25 16.9	1.805	2.789	6.4	18.1
6 30	16 30.73	-15 33.7	2.559	3.473	8.6	22.1	6 30	16 30.20	-24 51.1	1.853	2.787	10.1	18.3
7 10	16 25.84	-15 30.7	2.642	3.473	11.1	22.3	7 10	16 25.98	-24 27.5	1.924	2.786	13.4	18.5
<b>510776</b>	2013 <i>AS</i> <sub>57</sub>		6 4.2 164°39	3°2/ 3.2	18		<b>45793</b>	2000 <i>OL</i> <sub>48</sub>		6 4.2 308°10	2°0/ 3.8	18	
5 1	17 12.71	-11 7.5	2.802	3.641	10.0	22.3	5 1	17 14.37	-18 48.7	1.244	2.127	17.2	18.5
5 11	17 7.24	-10 55.7	2.727	3.646	7.6	22.1	5 11	17 10.44	-18 38.5	1.159	2.105	13.0	18.2
5 21	17 0.40	-10 48.1	2.678	3.650	5.2	22.0	5 21	17 3.31	-18 28.3	1.094	2.083	8.1	17.9
5 31	16 52.68	-10 45.8	2.657	3.654	3.4	21.9	5 31	16 53.76	-18 19.3	1.051	2.062	3.0	17.5
6 10	16 44.73	-10 49.8	2.664	3.658	3.8	21.9	6 10	16 43.15	-18 13.2	1.032	2.041	4.2	17.5
6 20	16 37.18	-11 0.6	2.700	3.661	6.0	22.0	6 20	16 33.08	-18 11.9	1.035	2.021	9.8	17.7
6 30	16 30.61	-11 18.2	2.763	3.663	8.5	22.2	6 30	16 25.11	-18 18.0	1.060	2.001	15.2	18.0
7 10	16 25.47	-11 42.4	2.850	3.666	10.8	22.4	7 10	16 20.34	-18 33.1	1.103	1.982	19.9	18.2
<b>307511</b>	2003 <i>AG</i> <sub>6</sub>		6 4.2 116°82	3°2/ 3.3	17		<b>413922</b>	2006 <i>WC</i> <sub>152</sub>		6 4.2 296°48	0°3/ 4.0	16	
5 1	17 16.71	-14 54.5	1.887	2.742	13.5	21.0	5 1	17 9.29	-21 51.0	3.008	3.857	9.1	21.7
5 11	17 10.67	-14 26.0	1.828	2.757	10.1	20.9	5 11	17 4.85	-21 41.0	2.908	3.837	6.8	21.5
5 21	17 2.62	-14 0.0	1.792	2.772	6.5	20.7	5 21	16 59.05	-21 28.9	2.834	3.818	4.1	21.3
5 31	16 53.35	-13 38.4	1.782	2.786	3.5	20.5	5 31	16 52.32	-21 15.0	2.788	3.799	1.3	21.1
6 10	16 43.85	-13 23.2	1.799	2.800	4.3	20.6	6 10	16 45.27	-21 0.3	2.770	3.780	1.8	21.1
6 20	16 35.08	-13 15.8	1.843	2.814	7.6	20.8	6 20	16 38.50	-20 45.7	2.780	3.760	4.8	21.3
6 30	16 27.90	-13 17.3	1.913	2.827	11.0	21.1	6 30	16 32.59	-20 32.7	2.818	3.741	7.5	21.5
7 10	16 22.86	-13 27.6	2.004	2.839	14.0	21.3	7 10	16 28.04	-20 22.7	2.880	3.722	10.0	21.6
<b>384110</b>	2008 <i>WF</i> <sub>94</sub>		6 4.2 152°99	0°7/ 3.9	17		<b>372834</b>	2010 <i>UU</i> <sub>76</sub>		6 4.2 161°75	1°8/ 4.8	17	
5 1	17 14.76	-20 59.6	1.971	2.828	12.9	21.6	5 1	17 18.69	-28 22.2	1.826	2.675	14.1	21.3
5 11	17 9.39	-20 52.3	1.897	2.830	9.6	21.4	5 11	17 12.53	-28 15.0	1.753	2.679	10.7	21.1
5 21	17 1.96	-20 43.1	1.846	2.831	5.8	21.2	5 21	17 3.95	-27 59.0	1.702	2.682	6.8	20.9
5 31	16 53.19	-20 32.4	1.821	2.833	1.8	20.9	5 31	16 53.81	-27 33.4	1.677	2.685	2.8	20.7
6 10	16 44.03	-20 21.1	1.824	2.834	2.6	20.9	6 10	16 43.27	-26 59.3	1.679	2.688	3.0	20.7
6 20	16 35.47	-20 10.9	1.854	2.835	6.6	21.2	6 20	16 33.52	-26 19.5	1.708	2.690	7.0	20.9
6 30	16 28.39	-20 3.5	1.909	2.836	10.3	21.4	6 30	16 25.58	-25 38.2	1.763	2.692	10.8	21.2
7 10	16 23.44	-20 0.7	1.987	2.837	13.5	21.6	7 10	16 20.15	-24 59.9	1.839	2.694	14.2	21.4
<b>236812</b>	2007 <i>RS</i> <sub>19</sub>		6 4.2 191°88	1°2/ 3.8	18		<b>287763</b>	2003 <i>SY</i> <sub>63</sub>		6 4.2 210°38	3°0/ 2.9	18	
5 1	17 14.25	-20 21.5	2.076	2.932	12.4	21.0	5 1	17 13.97	-13 34.2	2.725	3.566	10.2	22.1
5 11	17 8.91	-19 59.7	1.999	2.932	9.2	20.8	5 11	17 8.28	-13 0.3	2.636	3.558	7.8	21.9
5 21	17 1.62	-19 35.7	1.946	2.931	5.6	20.5	5 21	17 1.10	-12 27.9	2.573	3.549	5.1	21.7
5 31	16 53.08	-19 10.6	1.919	2.930	1.9	20.3	5 31	16 52.94	-11 58.9	2.539	3.539	3.2	21.6
6 10	16 44.19	-18 46.0	1.920	2.929	2.8	20.3	6 10	16 44.46	-11 35.2	2.533	3.528	3.8	21.6
6 20	16 35.86	-18 24.0	1.948	2.927	6.5	20.6	6 20	16 36.36	-11 18.2	2.556	3.517	6.3	21.8
6 30	16 28.93	-18 6.8	2.002	2.926	10.1	20.8	6 30	16 29.27	-11 9.1	2.606	3.505	9.0	21.9
7 10	16 24.00	-17 55.9	2.079	2.924	13.1	21.0	7 10	16 23.69	-11 8.3	2.679	3.493	11.4	22.1
<b>513669</b>	2011 <i>UN</i> <sub>359</sub>		6 4.2 239°81	0°8/ 4.4	18		<b>121255</b>	1999 <i>RM</i> <sub>83</sub>		6 4.2 250°92			

EPHEMERIDES

6 4.2

6 4.2

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>254109</b>	2004 <i>MR</i> <sub>3</sub>		6 4.2 224°64	0°6/ 3.9 18			<b>253485</b>	2003 <i>SB</i> <sub>83</sub>		6 4.2 316°63	3°0/ 3.5 17		
5 1	17 24.04	-28 39.6	1.169	2.036	19.2	19.5	5 1	17 12.05	-18 14.7	1.158	2.048	17.6	21.0
5 11	17 17.52	-26 52.2	1.094	2.031	14.5	19.1	5 11	17 8.95	-17 46.1	1.070	2.019	13.5	20.7
5 21	17 7.37	-24 41.5	1.039	2.026	8.9	18.8	5 21	17 2.55	-17 15.9	1.001	1.991	8.5	20.3
5 31	16 54.87	-22 11.3	1.008	2.020	2.6	18.4	5 31	16 53.60	-16 46.5	0.953	1.963	3.7	19.9
6 10	16 41.87	-19 31.9	1.004	2.014	4.1	18.5	6 10	16 43.47	-16 21.6	0.928	1.936	5.1	19.9
6 20	16 30.21	-16 57.3	1.025	2.007	10.4	18.8	6 20	16 33.79	-16 4.7	0.924	1.910	10.7	20.1
6 30	16 21.38	-14 40.9	1.070	2.001	16.1	19.1	6 30	16 26.24	-15 59.6	0.941	1.884	16.3	20.3
7 10	16 16.19	-12 50.8	1.134	1.993	20.8	19.4	7 10	16 22.00	-16 8.1	0.975	1.860	21.4	20.5
<b>105584</b>	2000 <i>RV</i> <sub>82</sub>		6 4.2 239°96	0°9/ 4.5 18			<b>177589</b>	2004 <i>GT</i> <sub>21</sub>		6 4.2 323°60	6°7/ 3.2 18		
5 1	17 13.81	-26 48.0	2.400	3.246	11.3	19.9	5 1	17 12.40	-4 49.9	1.772	2.622	14.4	19.1
5 11	17 8.48	-26 30.2	2.313	3.238	8.5	19.7	5 11	17 7.96	-4 39.9	1.686	2.603	11.6	18.9
5 21	17 1.34	-26 5.9	2.249	3.230	5.3	19.4	5 21	17 1.31	-4 42.5	1.621	2.584	8.8	18.7
5 31	16 53.03	-25 35.3	2.212	3.223	1.9	19.2	5 31	16 53.10	-5 0.8	1.581	2.565	6.9	18.6
6 10	16 44.37	-24 59.5	2.204	3.214	2.2	19.2	6 10	16 44.27	-5 36.7	1.565	2.548	7.4	18.5
6 20	16 36.20	-24 20.8	2.224	3.206	5.6	19.4	6 20	16 35.84	-6 29.7	1.575	2.530	9.9	18.6
6 30	16 29.30	-23 42.0	2.271	3.198	8.9	19.6	6 30	16 28.79	-7 37.9	1.608	2.514	13.2	18.8
7 10	16 24.24	-23 6.3	2.341	3.189	11.8	19.8	7 10	16 23.89	-8 58.0	1.662	2.498	16.3	19.0
<b>31547</b>	1999 <i>DT</i> <sub>6</sub>		6 4.2 76°32	0°8/ 4.2 18			<b>88111</b>	2000 <i>WJ</i> <sub>101</sub>		6 4.2 40°71	5°9/ 3.9 18		
5 1	17 22.44	-15 56.1	1.699	2.550	14.9	17.3	5 1	17 15.35	-4 1.3	1.954	2.792	13.8	18.0
5 11	17 15.52	-17 7.4	1.627	2.555	11.2	17.1	5 11	17 9.66	-4 16.0	1.893	2.803	10.9	17.8
5 21	17 5.93	-18 25.9	1.577	2.561	6.9	16.8	5 21	17 2.06	-4 43.7	1.855	2.814	8.1	17.7
5 31	16 54.47	-19 48.5	1.555	2.566	2.2	16.6	5 31	16 53.26	-5 25.7	1.841	2.826	6.1	17.6
6 10	16 42.32	-21 11.3	1.561	2.572	2.9	16.6	6 10	16 44.15	-6 21.6	1.855	2.838	6.4	17.6
6 20	16 30.78	-22 31.0	1.596	2.577	7.5	16.9	6 20	16 35.66	-7 29.6	1.896	2.850	8.6	17.8
6 30	16 21.04	-23 45.6	1.657	2.582	11.7	17.2	6 30	16 28.59	-8 46.8	1.962	2.863	11.4	17.9
7 10	16 13.95	-24 55.2	1.741	2.588	15.2	17.4	7 10	16 23.52	-10 10.2	2.051	2.876	14.0	18.2
<b>94878</b>	2001 <i>XU</i> <sub>238</sub>		6 4.2 200°04	1°0/ 3.9 17			<b>57019</b>	2000 <i>TQ</i> <sub>57</sub>		6 4.2 54°13	4°2/ 4.6 18		
5 1	17 19.55	-19 38.7	1.687	2.544	14.7	20.5	5 1	17 20.29	-29 9.6	1.568	2.422	15.8	17.9
5 11	17 13.36	-19 42.5	1.609	2.542	11.0	20.2	5 11	17 14.27	-30 20.0	1.507	2.432	12.1	17.7
5 21	17 4.60	-19 46.0	1.554	2.538	6.7	20.0	5 21	17 5.30	-31 24.3	1.467	2.443	8.1	17.4
5 31	16 54.06	-19 49.1	1.524	2.535	2.2	19.7	5 31	16 54.31	-32 17.1	1.452	2.454	4.7	17.3
6 10	16 42.92	-19 52.1	1.521	2.530	3.1	19.7	6 10	16 42.67	-32 55.3	1.463	2.465	4.9	17.3
6 20	16 32.43	-19 56.1	1.544	2.525	7.7	20.0	6 20	16 31.87	-33 18.2	1.500	2.477	8.4	17.5
6 30	16 23.73	-20 2.7	1.593	2.519	12.0	20.2	6 30	16 23.20	-33 28.8	1.561	2.488	12.1	17.8
7 10	16 17.62	-20 13.5	1.663	2.513	15.7	20.5	7 10	16 17.53	-33 31.7	1.642	2.500	15.5	18.0
<b>425087</b>	2009 <i>SJ</i> <sub>23</sub>		6 4.2 169°27	1°1/ 3.8 17			<b>383883</b>	2008 <i>RU</i> <sub>136</sub>		6 4.2 157°29	4°1/ 2.9 17		
5 1	17 16.53	-21 31.8	1.784	2.643	13.9	21.1	5 1	17 14.47	-10 56.1	2.266	3.111	11.9	21.4
5 11	17 10.86	-21 0.0	1.711	2.645	10.4	20.8	5 11	17 8.83	-10 25.9	2.196	3.117	9.1	21.2
5 21	17 2.92	-20 24.2	1.661	2.647	6.3	20.6	5 21	17 1.49	-10 0.4	2.151	3.123	6.2	21.0
5 31	16 53.51	-19 45.8	1.637	2.648	2.1	20.3	5 31	16 53.09	-9 41.6	2.132	3.128	4.2	20.9
6 10	16 43.73	-19 7.2	1.640	2.649	3.0	20.4	6 10	16 44.43	-9 31.5	2.142	3.133	4.9	20.9
6 20	16 34.67	-18 31.4	1.669	2.650	7.3	20.7	6 20	16 36.29	-9 31.0	2.178	3.137	7.4	21.1
6 30	16 27.30	-18 1.7	1.724	2.650	11.3	20.9	6 30	16 29.39	-9 40.6	2.240	3.141	10.2	21.3
7 10	16 22.28	-17 40.3	1.801	2.650	14.7	21.1	7 10	16 24.26	-9 59.6	2.325	3.144	12.8	21.5
<b>7670</b>	Kabeláč		6 4.2 198°94	1°6/ 3.7 17			<b>307404</b>	2002 <i>TY</i> <sub>145</sub>		6 4.2 314°37	6°0/ 5.3 16		
5 1	17 17.72	-19 2.7	1.936	2.789	13.2	20.0	5 1	17 16.28	-33 9.4	1.086	1.961	19.7	20.8
5 11	17 11.66	-18 47.2	1.856	2.786	9.9	19.8	5 11	17 12.71	-33 41.8	1.008	1.944	15.6	20.5
5 21	17 3.40	-18 30.7	1.799	2.783	6.1	19.6	5 21	17 5.10	-33 59.7	0.949	1.927	11.0	20.2
5 31	16 53.67	-18 14.1	1.768	2.778	2.3	19.3	5 31	16 54.41	-33 56.9	0.909	1.911	6.8	19.9
6 10	16 43.48	-17 58.7	1.766	2.774	3.1	19.4	6 10	16 42.46	-33 30.6	0.891	1.895	6.7	19.8
6 20	16 33.87	-17 46.4	1.790	2.768	7.1	19.6	6 20	16 31.37	-32 43.3	0.895	1.880	11.0	20.0
6 30	16 25.80	-17 38.9	1.841	2.762	10.9	19.8	6 30	16 23.13	-31 42.9	0.918	1.866	16.1	20.2
7 10	16 19.96	-17 38.0	1.913	2.755	14.3	20.0	7 10	16 19.00	-30 39.6	0.959	1.853	20.9	20.5
<b>507329</b>	2011 <i>SN</i> <sub>198</sub>		6 4.2 182°10	5°7/ 1.9 18			<b>95938</b>	2003 <i>KJ</i> <sub>20</sub>		6 4.2 346°35	1°6/ 4.9 18		
5 1	17 11.79	-4 56.2	2.512	3.345	11.2	21.7	5 1	17 11.28	-31 54.8	1.188	2.067	18.1	17.6
5 11	17 6.71	-4 12.2	2.440	3.346	9.0	21.6	5 11	17 8.13	-30 34.6	1.111	2.053	13.9	17.3
5 21	17 0.15	-3 35.8	2.393	3.346	6.9	21.4	5 21	17 1.77	-28 50.2	1.054	2.041	8.9	17.0
5 31	16 52.66	-3 9.8	2.372	3.346	5.8	21.4	5 31	16 53.27	-26 43.7	1.020	2.030	3.4	16.6
6 10	16 44.92	-2 56.5	2.378	3.345	6.3	21.4	6 10	16 44.22	-24 22.5	1.009	2.021	3.4	16.6
6 20	16 37.59	-2 56.7	2.411	3.344	8.1	21.5	6 20	16 36.22	-21 58.1	1.022	2.013	9.1	16.9
6 30	16 31.33	-3 10.5	2.469	3.343	10.4	21.6	6 30	16 30.62	-19 43.1	1.059	2.007	14.4	17.1
7 10	16 26.59	-3 36.6	2.549	3.342	12.5	21.8	7 10	16 28.20	-17 47.0	1.114	2.003	19.0	17.4
<b>477684</b>	2010 <i>RP</i> <sub>37</sub>		6 4.2 251°12	3°6/ 2.6 18			<b>476825</b>	2008 <i>UL</i> <sub>254</sub>		6 4.2 332°18	5°0/ 4.3 16		
5 1	17 11.36	-11 38.7	2.722	3.566	10.1	21.8	5 1	17 16.79	-29 19.2	1.434	2.299	16.4	20.2
5 11	17 6.42	-11 3.0	2.629	3.550	7.8	21.6	5 11	17 12.28	-30 41.2	1.353	2.284	12.8	19.9
5 21	17 0.02	-10 29.9	2.561	3.533	5.4	21.4	5 21	17 4.50	-31 59.9	1.293	2.270	8.8	19.6
5 31	16 52.64	-10 1.7	2.521	3.517	3.7	21.3	5 31	16 54.20	-33 9.2	1.256	2.257	5.5	19.4
6 10	16 44.93	-9 40.1	2.509	3.499	4.3	21.3	6 10	16 42.75	-34 3.8	1.244	2.245	5.8	19.4
6 20	16 37.52	-9 26.8	2.525	3.482	6.6	21.4	6 20	16 31.78	-34 41.2	1.256	2.234	9.5	19.6
6 30	16 31.06	-9 22.6	2.567	3.464	9.2	21.6	6 30	16 22.92	-35 3.1	1.291	2.223	13.8	19.8
7 10	16 26.04	-9 27.7	2.632	3.445	11.6	21.7	7 10	16 17.33	-35 14.2	1.345	2.214	17.6	20.0
<b>316392</b>	2010 <i>TL</i> <sub>46</sub>		6 4.2 48°79	1°3/ 3.9 17			<b>444954</b>	2008 <i>CJ</i> <sub>202</sub>		6 4.2 27°25	10°6/ 1.6 15		

EPHEMERIDES

6 4.2

6 4.2

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>26087</b>	Zhuravleva	6 4.2 302°89	1.1°/ 3.8 18				<b>510721</b>	2012 VL <sub>48</sub>	6 4.2 294°92	2.5°/ 3.4 17			
5 1	17 14.77	-23 7.3	1.471	2.343	15.6	17.9	5 1	17 13.34	-17 13.6	1.860	2.723	13.3	21.6
5 11	17 10.44	-22 22.7	1.372	2.313	11.9	17.6	5 11	17 8.51	-16 45.8	1.781	2.716	10.0	21.4
5 21	17 3.19	-21 29.0	1.294	2.282	7.3	17.3	5 21	17 1.56	-16 18.0	1.725	2.709	6.3	21.1
5 31	16 53.78	-20 27.5	1.240	2.252	2.3	16.9	5 31	16 53.20	-15 52.2	1.694	2.702	2.9	20.9
6 10	16 43.42	-19 21.6	1.211	2.221	3.6	16.9	6 10	16 44.38	-15 30.4	1.690	2.695	3.8	20.9
6 20	16 33.53	-18 16.6	1.207	2.191	9.0	17.1	6 20	16 36.11	-15 14.9	1.712	2.688	7.5	21.2
6 30	16 25.49	-17 18.7	1.226	2.161	14.1	17.3	6 30	16 29.32	-15 7.3	1.759	2.681	11.3	21.4
7 10	16 20.30	-16 32.7	1.265	2.131	18.6	17.5	7 10	16 24.66	-15 8.6	1.827	2.675	14.6	21.6
<b>207987</b>	1997 WT <sub>25</sub>	6 4.2 135°41	0.4°/ 4.1 17				<b>203737</b>	2002 QA <sub>78</sub>	6 4.2 354°90	0.0°/ 3.9 17			
5 1	17 20.15	-20 54.8	1.629	2.487	15.1	20.9	5 1	17 14.78	-22 2.2	1.824	2.685	13.6	20.7
5 11	17 13.76	-21 5.2	1.564	2.497	11.2	20.7	5 11	17 9.67	-22 9.6	1.750	2.684	10.1	20.5
5 21	17 4.80	-21 14.4	1.521	2.506	6.8	20.4	5 21	17 2.30	-22 15.1	1.698	2.684	6.2	20.3
5 31	16 54.15	-21 21.7	1.503	2.514	2.1	20.1	5 31	16 53.42	-22 18.1	1.672	2.683	1.9	20.0
6 10	16 43.05	-21 27.0	1.512	2.523	2.9	20.2	6 10	16 44.08	-22 19.1	1.672	2.683	2.6	20.0
6 20	16 32.77	-21 31.5	1.548	2.530	7.5	20.5	6 20	16 35.33	-22 18.9	1.699	2.683	6.9	20.3
6 30	16 24.42	-21 37.0	1.609	2.537	11.7	20.8	6 30	16 28.18	-22 19.4	1.751	2.683	10.8	20.5
7 10	16 18.73	-21 45.4	1.690	2.544	15.3	21.0	7 10	16 23.32	-22 22.6	1.825	2.683	14.2	20.8
<b>143278</b>	2003 AK <sub>21</sub>	6 4.2 118°76	0.3°/ 4.1 18				<b>211104</b>	2002 EP <sub>145</sub>	6 4.2 103°17	2.1°/ 4.7 17			
5 1	17 14.56	-21 26.8	2.312	3.162	11.5	20.3	5 1	17 20.10	-27 23.3	1.499	2.358	16.1	20.4
5 11	17 8.97	-21 29.8	2.242	3.172	8.5	20.1	5 11	17 14.00	-27 36.7	1.438	2.369	12.2	20.2
5 21	17 1.62	-21 31.2	2.197	3.181	5.1	19.9	5 21	17 5.05	-27 42.4	1.397	2.379	7.7	20.0
5 31	16 53.16	-21 30.8	2.179	3.190	1.5	19.7	5 31	16 54.25	-27 38.3	1.381	2.390	3.2	19.7
6 10	16 44.42	-21 29.2	2.189	3.199	2.2	19.8	6 10	16 43.01	-27 24.7	1.391	2.400	3.4	19.8
6 20	16 36.22	-21 27.3	2.227	3.208	5.7	20.0	6 20	16 32.75	-27 3.7	1.426	2.410	7.9	20.0
6 30	16 29.31	-21 26.4	2.292	3.216	8.9	20.2	6 30	16 24.69	-26 39.6	1.485	2.420	12.1	20.3
7 10	16 24.24	-21 28.1	2.380	3.224	11.7	20.4	7 10	16 19.56	-26 16.9	1.565	2.429	15.8	20.6
<b>409943</b>	2006 UZ <sub>123</sub>	6 4.2 287°03	0.9°/ 3.8 16				<b>73453</b>	Ninomanfredi	6 4.2 175°72	1.8°/ 3.6 18			
5 1	17 9.44	-19 43.7	3.120	3.968	8.9	21.8	5 1	17 14.21	-18 43.9	2.026	2.883	12.6	20.0
5 11	17 4.95	-19 30.7	3.017	3.946	6.6	21.6	5 11	17 8.94	-18 18.7	1.951	2.884	9.4	19.8
5 21	16 59.13	-19 16.5	2.940	3.924	4.0	21.4	5 21	17 1.71	-17 52.5	1.900	2.884	5.8	19.6
5 31	16 52.43	-19 2.0	2.891	3.902	1.4	21.2	5 31	16 53.23	-17 26.7	1.875	2.885	2.3	19.3
6 10	16 45.40	-18 47.8	2.871	3.880	2.0	21.2	6 10	16 44.40	-17 3.2	1.878	2.885	3.2	19.4
6 20	16 38.61	-18 35.2	2.880	3.857	4.8	21.3	6 20	16 36.14	-16 44.0	1.908	2.885	6.8	19.6
6 30	16 32.65	-18 25.3	2.916	3.835	7.5	21.5	6 30	16 29.30	-16 30.9	1.963	2.885	10.3	19.8
7 10	16 27.97	-18 19.2	2.976	3.812	9.8	21.6	7 10	16 24.47	-16 25.3	2.040	2.885	13.4	20.0
<b>95505</b>	2002 EM <sub>45</sub>	6 4.2 328°79	3.7°/ 5.1 18				<b>121943</b>	2000 EV <sub>27</sub>	6 4.2 35°41	7.1°/ 2.8 18			
5 1	17 15.06	-32 19.9	2.168	3.006	12.6	19.6	5 1	17 11.44	-0 48.7	2.193	3.022	12.8	19.5
5 11	17 9.80	-32 53.0	2.087	3.002	9.8	19.4	5 11	17 6.62	-0 26.9	2.134	3.031	10.5	19.3
5 21	17 2.36	-33 18.0	2.029	2.999	6.8	19.2	5 21	17 0.18	-0 17.7	2.097	3.039	8.4	19.2
5 31	16 53.43	-33 32.4	1.997	2.995	4.2	19.1	5 31	16 52.75	-0 23.9	2.085	3.049	7.2	19.1
6 10	16 44.00	-33 35.0	1.992	2.992	4.2	19.1	6 10	16 45.08	-0 46.6	2.099	3.058	7.5	19.2
6 20	16 35.08	-33 26.6	2.014	2.989	6.7	19.2	6 20	16 37.93	-1 25.5	2.138	3.068	9.2	19.3
6 30	16 27.65	-33 9.9	2.061	2.985	9.8	19.4	6 30	16 31.98	-2 18.8	2.202	3.078	11.4	19.5
7 10	16 22.41	-32 48.7	2.131	2.983	12.6	19.6	7 10	16 27.73	-3 23.4	2.287	3.088	13.5	19.6
<b>88499</b>	2001 QV <sub>138</sub>	6 4.2 253°80	5.1°/ 5.9 18				<b>112073</b>	2002 JP <sub>21</sub>	6 4.2 320°41	4.8°/ 3.2 18			
5 1	17 17.72	-38 14.3	2.433	3.245	12.2	19.4	5 1	17 11.36	-14 22.9	1.153	2.042	17.7	18.3
5 11	17 11.75	-38 38.2	2.337	3.230	9.9	19.2	5 11	17 8.40	-13 52.9	1.066	2.014	13.7	17.9
5 21	17 3.54	-38 50.5	2.264	3.214	7.4	19.0	5 21	17 2.24	-13 26.4	0.998	1.985	9.1	17.6
5 31	16 53.80	-38 48.2	2.217	3.199	5.5	18.9	5 31	16 53.58	-13 7.3	0.952	1.958	5.2	17.3
6 10	16 43.49	-38 30.0	2.197	3.182	5.3	18.9	6 10	16 43.75	-12 59.6	0.927	1.931	6.4	17.3
6 20	16 33.67	-37 57.1	2.204	3.166	7.1	18.9	6 20	16 34.36	-13 6.2	0.924	1.905	11.4	17.4
6 30	16 25.32	-37 13.0	2.237	3.149	9.7	19.1	6 30	16 27.00	-13 28.8	0.941	1.881	16.7	17.6
7 10	16 19.19	-36 22.7	2.293	3.132	12.3	19.2	7 10	16 22.89	-14 6.9	0.974	1.858	21.5	17.8
<b>147687</b>	2004 PZ <sub>66</sub>	6 4.2 26°45	5.2°/ 6.9 18				<b>318486</b>	2005 ED <sub>104</sub>	6 4.2 335°24	1.1°/ 4.4 17			
5 1	17 17.61	-40 31.8	2.207	3.016	13.3	19.3	5 1	17 12.33	-24 29.5	1.138	2.027	18.0	20.0
5 11	17 11.56	-40 18.4	2.128	3.018	10.8	19.1	5 11	17 9.18	-24 39.7	1.064	2.012	13.6	19.6
5 21	17 3.29	-39 48.5	2.072	3.020	8.1	19.0	5 21	17 2.66	-24 44.7	1.009	1.999	8.5	19.3
5 31	16 53.66	-39 0.2	2.041	3.023	5.9	18.8	5 31	16 53.67	-24 43.2	0.975	1.986	2.9	18.9
6 10	16 43.79	-37 54.6	2.037	3.025	5.4	18.8	6 10	16 43.73	-24 35.2	0.963	1.974	3.6	18.9
6 20	16 34.77	-36 35.0	2.060	3.028	7.1	18.9	6 20	16 34.54	-24 22.7	0.973	1.964	9.4	19.2
6 30	16 27.53	-35 7.5	2.110	3.030	9.8	19.1	6 30	16 27.72	-24 9.8	1.005	1.955	14.8	19.5
7 10	16 22.64	-33 38.3	2.183	3.033	12.4	19.2	7 10	16 24.30	-24 0.4	1.054	1.947	19.5	19.7
<b>521265</b>	2015 HV <sub>192</sub>	6 4.2 95°16	0.9°/ 3.9 17				<b>181980</b>	1999 VZ <sub>69</sub>	6 4.2 249°61	0.3°/ 4.1 17			
5 1	17 14.27	-21 17.0	1.926	2.785	13.0	21.7	5 1	17 17.96	-22 37.7	1.801	2.657	14.0	21.6
5 11	17 9.10	-20 56.0	1.852	2.786	9.7	21.5	5 11	17 12.24	-22 24.9	1.709	2.641	10.5	21.3
5 21	17 1.85	-20 32.2	1.801	2.787	5.9	21.3	5 21	17 4.02	-22 7.7	1.640	2.624	6.5	21.1
5 31	16 53.26	-20 6.4	1.777	2.788	1.9	21.0	5 31	16 54.02	-21 46.4	1.596	2.607	2.0	20.7
6 10	16 44.31	-19 40.5	1.779	2.789	2.7	21.1	6 10	16 43.33	-21 22.1	1.579	2.589	2.8	20.8
6 20	16 35.98	-19 16.6	1.809	2.790	6.8	21.3	6 20	16 33.14	-20 57.1	1.589	2.571	7.4	21.0
6 30	16 29.16	-18 57.1	1.864	2.791	10.5	21.5	6 30	16 24.59	-20 34.5	1.624	2.552	11.7	21.2
7 10	16 24.48	-18 44.1	1.940	2.792	13.7	21.8	7 10	16 18.50	-20 17.3	1.681	2.532	15.5	21.4
<b>157495</b>	2005 SE <sub>3</sub>	6 4.2 255°89	1.4°/ 4.5 16				<b>122755</b>	2000 SO <sub>62</sub>	6 4.2 242°22	0.7°/ 3.9 18			
5 1	17 19.61	-25 51.6	1.395										

EPHEMERIDES

6 4.2

6 4.2

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>380598</b>	2004 SE <sub>22</sub>	6	4.2	262 <sup>°</sup> 14	8 <sup>°</sup> 1/ 1.6	18	<b>209929</b>	2005 YD <sub>288</sub>	6	4.2	87 <sup>°</sup> 39	17 <sup>°</sup> 0/ 10.5	18
5 1	17 14.04	- 2 26.2	1.927	2.763	14.0	21.1	5 1	17 34.15	-54 50.4	1.127	1.913	24.8	20.1
5 11	17 8.97	- 1 30.9	1.845	2.747	11.5	20.9	5 11	17 27.66	-56 18.0	1.075	1.919	22.3	19.9
5 21	17 1.86	- 0 46.1	1.784	2.731	9.3	20.8	5 21	17 14.81	-57 10.2	1.037	1.925	19.8	19.8
5 31	16 53.34	- 0 16.7	1.749	2.714	8.1	20.7	5 31	16 57.42	-57 12.3	1.015	1.931	17.8	19.7
6 10	16 44.30	- 0 6.4	1.738	2.697	8.8	20.7	6 10	16 39.01	-56 16.8	1.010	1.938	17.0	19.7
6 20	16 35.68	- 0 16.7	1.752	2.680	11.0	20.7	6 20	16 23.29	-54 28.6	1.025	1.944	17.6	19.7
6 30	16 28.39	- 0 47.2	1.789	2.663	13.7	20.9	6 30	16 12.82	-52 3.4	1.057	1.950	19.5	19.9
7 10	16 23.11	- 1 35.3	1.847	2.645	16.4	21.0	7 10	16 8.41	-49 21.1	1.107	1.956	21.9	20.0
<b>354508</b>	2004 PE <sub>57</sub>	6	4.2	322 <sup>°</sup> 11	5 <sup>°</sup> 8/ 2.2	16	<b>462610</b>	2009 KC <sub>9</sub>	6	4.2	42 <sup>°</sup> 11	0 <sup>°</sup> 9/ 3.9	17
5 1	17 10.88	- 6 44.3	2.178	3.024	12.2	20.4	5 1	17 16.05	-22 49.0	1.178	2.061	17.9	20.2
5 11	17 6.33	- 6 0.8	2.105	3.020	9.7	20.3	5 11	17 11.26	-22 15.0	1.130	2.075	13.3	19.9
5 21	17 0.10	- 5 24.5	2.055	3.016	7.3	20.1	5 21	17 3.46	-21 35.2	1.101	2.090	8.0	19.7
5 31	16 52.77	- 4 58.8	2.031	3.013	5.9	20.0	5 31	16 53.82	-20 51.7	1.094	2.106	2.5	19.4
6 10	16 45.13	- 4 46.1	2.033	3.009	6.5	20.0	6 10	16 43.90	-20 8.2	1.112	2.123	3.6	19.5
6 20	16 37.94	- 4 47.7	2.061	3.005	8.6	20.1	6 20	16 35.19	-19 29.1	1.153	2.140	8.9	19.9
6 30	16 31.92	- 5 3.5	2.113	3.002	11.2	20.3	6 30	16 28.88	-18 58.5	1.216	2.157	13.6	20.2
7 10	16 27.63	- 5 32.2	2.186	2.999	13.7	20.5	7 10	16 25.63	-18 38.9	1.298	2.175	17.6	20.5
<b>122226</b>	2000 NX <sub>26</sub>	6	4.2	269 <sup>°</sup> 33	7 <sup>°</sup> 2/ 2.5	18	<b>65095</b>	2002 CN <sub>3</sub>	6	4.2	324 <sup>°</sup> 89	9 <sup>°</sup> 9/ 2.0	18
5 1	17 15.39	- 4 7.5	1.911	2.750	14.0	19.6	5 1	17 12.31	+ 6 56.5	2.172	2.970	13.9	18.6
5 11	17 10.08	- 3 35.2	1.821	2.729	11.4	19.4	5 11	17 7.39	+ 7 32.1	2.104	2.965	12.1	18.5
5 21	17 2.61	- 3 13.3	1.753	2.708	8.8	19.2	5 21	17 0.76	+ 7 50.2	2.058	2.960	10.7	18.4
5 31	16 53.60	- 3 6.0	1.709	2.686	7.2	19.0	5 31	16 53.01	+ 7 46.7	2.034	2.955	9.9	18.3
6 10	16 43.95	- 3 15.9	1.691	2.664	7.8	19.0	6 10	16 44.93	+ 7 19.5	2.035	2.951	10.2	18.3
6 20	16 34.67	- 3 44.0	1.699	2.642	10.3	19.1	6 20	16 37.31	+ 6 29.1	2.059	2.946	11.5	18.4
6 30	16 26.71	- 4 29.5	1.731	2.619	13.3	19.3	6 30	16 30.89	+ 5 18.0	2.106	2.942	13.3	18.5
7 10	16 20.83	- 5 29.7	1.783	2.596	16.3	19.4	7 10	16 26.24	+ 3 50.3	2.173	2.938	15.2	18.7
<b>106674</b>	2000 WA <sub>152</sub>	6	4.2	205 <sup>°</sup> 42	3 <sup>°</sup> 0/ 3.4	18	<b>39708</b>	1996 TH <sub>46</sub>	6	4.2	28 <sup>°</sup> 20	3 <sup>°</sup> 9/ 5.4	17
5 1	17 12.68	-12 50.5	2.510	3.357	10.8	19.5	5 1	17 18.14	-32 1.1	1.316	2.179	17.7	18.7
5 11	17 7.50	-12 40.7	2.430	3.354	8.2	19.3	5 11	17 13.06	-32 3.0	1.252	2.182	13.7	18.5
5 21	17 0.75	-12 34.4	2.375	3.351	5.4	19.1	5 21	17 4.74	-31 50.6	1.207	2.185	9.1	18.2
5 31	16 52.97	-12 33.0	2.346	3.348	3.2	19.0	5 31	16 54.27	-31 21.3	1.185	2.189	4.9	18.0
6 10	16 44.88	-12 37.5	2.346	3.345	3.7	19.0	6 10	16 43.26	-30 36.1	1.187	2.193	4.7	18.0
6 20	16 37.18	-12 48.3	2.374	3.342	6.3	19.2	6 20	16 33.35	-29 39.5	1.212	2.198	8.8	18.2
6 30	16 30.55	-13 5.7	2.429	3.338	9.2	19.4	6 30	16 25.92	-28 38.4	1.261	2.202	13.3	18.5
7 10	16 25.51	-13 29.6	2.506	3.334	11.7	19.5	7 10	16 21.77	-27 40.2	1.330	2.207	17.2	18.7
<b>110256</b>	2001 SM <sub>240</sub>	6	4.2	221 <sup>°</sup> 41	2 <sup>°</sup> 7/ 3.4	18	<b>178761</b>	2000 WW <sub>3</sub>	6	4.2	250 <sup>°</sup> 90	4 <sup>°</sup> 3/ 5.8	18
5 1	17 16.33	-15 19.2	2.218	3.066	12.0	21.0	5 1	17 16.12	-36 17.9	2.431	3.252	11.9	20.3
5 11	17 10.47	-15 0.0	2.129	3.055	9.1	20.8	5 11	17 10.46	-36 33.3	2.342	3.243	9.5	20.1
5 21	17 2.68	-14 42.5	2.065	3.044	5.8	20.6	5 21	17 2.74	-36 37.9	2.276	3.234	6.9	19.9
5 31	16 53.59	-14 27.9	2.027	3.033	3.0	20.3	5 31	16 53.63	-36 29.3	2.236	3.225	4.8	19.8
6 10	16 44.03	-14 17.7	2.018	3.020	3.7	20.4	6 10	16 44.07	-36 7.1	2.223	3.216	4.6	19.8
6 20	16 34.90	-14 13.4	2.036	3.007	7.0	20.6	6 20	16 35.03	-35 32.7	2.237	3.206	6.6	19.9
6 30	16 27.03	-14 15.9	2.081	2.993	10.3	20.7	6 30	16 27.41	-34 49.6	2.278	3.196	9.3	20.0
7 10	16 21.06	-14 26.0	2.149	2.979	13.3	20.9	7 10	16 21.88	-34 2.2	2.342	3.187	11.9	20.2
<b>153191</b>	2000 US <sub>101</sub>	6	4.2	316 <sup>°</sup> 49	4 <sup>°</sup> 4/ 5.1	18	<b>519031</b>	2010 JR <sub>146</sub>	6	4.2	209 <sup>°</sup> 31	1 <sup>°</sup> 2/ 4.7	17
5 1	17 14.63	-31 31.1	1.429	2.293	16.5	19.5	5 1	17 16.06	-27 12.6	2.017	2.867	12.9	21.6
5 11	17 10.71	-31 55.0	1.336	2.267	12.9	19.2	5 11	17 10.49	-26 59.4	1.937	2.864	9.8	21.4
5 21	17 3.59	-32 8.4	1.263	2.241	8.9	18.9	5 21	17 2.77	-26 38.8	1.880	2.862	6.1	21.1
5 31	16 54.01	-32 7.4	1.212	2.215	5.1	18.6	5 31	16 53.64	-26 10.6	1.849	2.859	2.3	20.9
6 10	16 43.34	-31 50.0	1.185	2.190	5.1	18.5	6 10	16 44.11	-25 35.8	1.846	2.856	2.5	20.9
6 20	16 33.19	-31 17.8	1.182	2.166	9.1	18.7	6 20	16 35.20	-24 57.2	1.870	2.853	6.4	21.1
6 30	16 25.13	-30 35.7	1.202	2.143	13.8	18.8	6 30	16 27.86	-24 18.3	1.920	2.850	10.1	21.3
7 10	16 20.28	-29 50.5	1.240	2.120	18.1	19.0	7 10	16 22.71	-23 42.7	1.993	2.846	13.3	21.5
<b>27583</b>	2000 UF <sub>72</sub>	6	4.2	146 <sup>°</sup> 95	0 <sup>°</sup> 8/ 3.9	18	<b>371612</b>	2006 XL <sub>26</sub>	6	4.2	232 <sup>°</sup> 10	2 <sup>°</sup> 2/ 3.7	17
5 1	17 16.30	-21 45.5	2.199	3.048	12.0	18.6	5 1	17 17.26	-17 7.6	1.926	2.780	13.3	21.8
5 11	17 10.30	-21 15.8	2.128	3.057	8.9	18.4	5 11	17 11.48	-16 55.3	1.838	2.769	10.0	21.6
5 21	17 2.45	-20 42.6	2.081	3.065	5.4	18.2	5 21	17 3.46	-16 43.8	1.774	2.757	6.3	21.3
5 31	16 53.48	-20 7.1	2.062	3.073	1.7	17.9	5 31	16 53.88	-16 34.2	1.736	2.745	2.7	21.1
6 10	16 44.26	-19 31.3	2.071	3.081	2.5	18.0	6 10	16 43.73	-16 27.6	1.725	2.732	3.5	21.1
6 20	16 35.67	-18 57.4	2.109	3.087	6.2	18.2	6 20	16 34.06	-16 25.6	1.742	2.718	7.4	21.3
6 30	16 28.49	-18 28.0	2.173	3.094	9.5	18.5	6 30	16 25.85	-16 29.4	1.784	2.704	11.3	21.5
7 10	16 23.27	-18 5.2	2.260	3.100	12.4	18.7	7 10	16 19.86	-16 40.1	1.848	2.690	14.7	21.7
<b>345588</b>	2006 SA <sub>58</sub>	6	4.2	146 <sup>°</sup> 11	0 <sup>°</sup> 5/ 4.0	18	<b>270367</b>	2001 YQ <sub>127</sub>	6	4.2	211 <sup>°</sup> 73	0 <sup>°</sup> 6/ 4.4	17
5 1	17 14.29	-22 56.9	2.320	3.170	11.5	20.5	5 1	17 18.03	-23 51.6	2.329	3.171	11.7	22.0
5 11	17 8.77	-22 26.5	2.246	3.176	8.5	20.4	5 11	17 11.78	-24 2.0	2.239	3.163	8.8	21.7
5 21	17 1.52	-21 52.0	2.196	3.181	5.1	20.1	5 21	17 3.51	-24 9.3	2.173	3.155	5.4	21.5
5 31	16 53.20	-21 14.3	2.174	3.185	1.6	19.9	5 31	16 53.88	-24 12.6	2.135	3.146	1.8	21.3
6 10	16 44.64	-20 35.3	2.180	3.190	2.3	20.0	6 10	16 43.75	-24 11.9	2.125	3.136	2.2	21.3
6 20	16 36.64	-19 57.5	2.214	3.194	5.8	20.2	6 20	16 34.06	-24 8.0	2.145	3.125	5.9	21.5
6 30	16 29.95	-19 23.5	2.275	3.198	9.1	20.4	6 30	16 25.66	-24 2.7	2.191	3.114	9.4	21.7
7 10	16 25.08	-18 55.3	2.359	3.202	11.9	20.6	7 10	16 19.24	-23 58.2	2.261	3.102	12.4	21.9
<b>183798</b>													

## EPHEMERIDES

6 4.2

6 4.2

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>367100</b>	2006 <i>RC</i> <sub>10</sub>	6 4.2 249°84	3°8/ 5.0	17			<b>127772</b>	2003 <i>FO</i> <sub>52</sub>	6 4.2 58°10	2°4/ 4.6	17		
5 1	17 20.36	-31 28.7	1.822	2.663	14.5	21.3	5 1	17 19.09	-26 19.2	1.517	2.378	15.8	19.8
5 11	17 14.32	-31 54.3	1.729	2.647	11.3	21.1	5 11	17 13.29	-27 1.9	1.460	2.392	11.9	19.6
5 21	17 5.46	-32 11.1	1.658	2.630	7.7	20.8	5 21	17 4.71	-27 39.5	1.424	2.407	7.6	19.4
5 31	16 54.55	-32 15.4	1.611	2.613	4.4	20.6	5 31	16 54.30	-28 8.7	1.414	2.422	3.3	19.2
6 10	16 42.80	-32 5.7	1.592	2.595	4.4	20.6	6 10	16 43.43	-28 28.0	1.428	2.437	3.6	19.3
6 20	16 31.58	-31 43.1	1.599	2.577	7.8	20.7	6 20	16 33.48	-28 37.9	1.469	2.452	7.8	19.5
6 30	16 22.18	-31 11.5	1.631	2.558	11.7	20.9	6 30	16 25.64	-28 41.2	1.534	2.468	11.8	19.8
7 10	16 15.52	-30 36.6	1.685	2.539	15.3	21.1	7 10	16 20.66	-28 41.7	1.619	2.483	15.3	20.1
<b>115527</b>	2003 <i>UF</i> <sub>48</sub>	6 4.2 199°56	4°3/ 2.9	17			<b>113463</b>	2002 <i>SR</i> <sub>51</sub>	6 4.2 314°47	5°2/ 3.3	18		
5 1	17 16.76	-13 25.1	1.741	2.599	14.3	20.1	5 1	17 13.92	-11 56.9	1.339	2.215	16.7	19.4
5 11	17 11.13	-12 44.1	1.667	2.597	10.9	19.9	5 11	17 9.81	-11 34.3	1.260	2.198	12.9	19.1
5 21	17 3.22	-12 6.0	1.616	2.594	7.3	19.6	5 21	17 2.86	-11 18.6	1.201	2.182	8.8	18.8
5 31	16 53.80	-11 33.8	1.590	2.591	4.5	19.5	5 31	16 53.84	-11 13.2	1.164	2.167	5.5	18.6
6 10	16 43.93	-11 10.5	1.590	2.588	5.4	19.5	6 10	16 43.99	-11 20.9	1.152	2.152	6.4	18.6
6 20	16 34.70	-10 58.1	1.617	2.584	8.8	19.7	6 20	16 34.70	-11 42.8	1.162	2.137	10.4	18.7
6 30	16 27.09	-10 58.1	1.668	2.579	12.4	19.9	6 30	16 27.30	-12 18.8	1.195	2.123	14.9	19.0
7 10	16 21.79	-11 10.2	1.739	2.575	15.7	20.1	7 10	16 22.73	-13 7.2	1.246	2.110	19.0	19.2
<b>502227</b>	2015 <i>BU</i> <sub>88</sub>	6 4.2 193°35	3°5/ 5.4	17			<b>189050</b>	2000 <i>RE</i> <sub>32</sub>	6 4.2 296°93	9°0/ 6.3	18		
5 1	17 20.26	-32 52.4	2.031	2.863	13.5	22.1	5 1	17 20.49	-43 0.6	1.684	2.498	16.6	19.7
5 11	17 13.75	-32 58.2	1.948	2.861	10.5	21.9	5 11	17 15.16	-43 54.5	1.595	2.479	14.1	19.5
5 21	17 4.82	-32 53.1	1.889	2.859	7.2	21.7	5 21	17 6.35	-44 31.3	1.525	2.461	11.4	19.3
5 31	16 54.29	-32 34.8	1.856	2.856	4.1	21.5	5 31	16 54.95	-44 43.8	1.478	2.443	9.4	19.1
6 10	16 43.29	-32 3.3	1.850	2.852	4.0	21.5	6 10	16 42.48	-44 28.0	1.455	2.424	9.2	19.1
6 20	16 32.99	-31 21.1	1.871	2.848	6.9	21.6	6 20	16 30.72	-43 44.5	1.455	2.406	10.9	19.1
6 30	16 24.44	-30 32.6	1.919	2.844	10.4	21.8	6 30	16 21.34	-42 39.1	1.478	2.389	13.8	19.2
7 10	16 18.35	-29 43.0	1.989	2.838	13.5	22.0	7 10	16 15.41	-41 21.2	1.520	2.371	16.9	19.4
<b>366243</b>	2012 <i>VE</i> <sub>69</sub>	6 4.2 170°91	1°3/ 3.8	17			<b>92636</b>	2000 <i>QS</i> <sub>20</sub>	6 4.2 170°95	1°6/ 4.7	18		
5 1	17 14.11	-19 30.5	2.114	2.970	12.2	21.7	5 1	17 17.92	-27 20.2	2.159	3.001	12.5	19.3
5 11	17 8.86	-19 16.5	2.039	2.970	9.1	21.5	5 11	17 11.78	-27 24.7	2.081	3.004	9.4	19.1
5 21	17 1.71	-19 1.6	1.987	2.971	5.6	21.3	5 21	17 3.55	-27 22.9	2.028	3.007	5.9	18.9
5 31	16 53.34	-18 46.4	1.961	2.972	2.0	21.1	5 31	16 53.96	-27 13.8	2.001	3.009	2.4	18.7
6 10	16 44.61	-18 32.3	1.964	2.972	2.8	21.1	6 10	16 43.99	-26 57.8	2.002	3.011	2.6	18.7
6 20	16 36.42	-18 20.8	1.993	2.973	6.4	21.4	6 20	16 34.62	-26 36.5	2.031	3.012	6.1	18.9
6 30	16 29.59	-18 13.6	2.049	2.973	9.9	21.6	6 30	16 26.75	-26 12.8	2.086	3.013	9.6	19.1
7 10	16 24.70	-18 11.9	2.127	2.973	12.9	21.8	7 10	16 21.02	-25 49.8	2.165	3.013	12.6	19.3
<b>429616</b>	2011 <i>FD</i> <sub>23</sub>	6 4.2 48°98	10°5/ 5.5	17			<b>470379</b>	2007 <i>TJ</i> <sub>238</sub>	6 4.2 231°34	1°9/ 4.7	18		
5 1	17 25.50	-43 42.8	1.601	2.409	17.6	20.6	5 1	17 16.78	-27 48.6	2.482	3.319	11.2	22.5
5 11	17 19.06	-45 36.2	1.544	2.419	15.0	20.4	5 11	17 10.87	-28 9.7	2.388	3.307	8.5	22.3
5 21	17 8.77	-47 12.0	1.507	2.430	12.5	20.3	5 21	17 3.02	-28 26.0	2.318	3.295	5.5	22.1
5 31	16 55.64	-48 20.7	1.493	2.441	10.8	20.2	5 31	16 53.83	-28 35.8	2.276	3.282	2.5	21.8
6 10	16 41.45	-48 56.7	1.503	2.452	10.7	20.2	6 10	16 44.11	-28 38.6	2.262	3.269	2.7	21.8
6 20	16 28.23	-49 0.0	1.535	2.464	12.2	20.3	6 20	16 34.77	-28 34.9	2.277	3.256	5.8	22.0
6 30	16 17.79	-48 36.6	1.590	2.476	14.4	20.5	6 30	16 26.66	-28 26.6	2.319	3.242	8.9	22.2
7 10	16 11.23	-47 55.9	1.663	2.488	16.8	20.7	7 10	16 20.44	-28 16.4	2.385	3.228	11.8	22.3
<b>332164</b>	2005 <i>YP</i> <sub>192</sub>	6 4.2 272°05	17°3/ 4.6	18			<b>64581</b>	2001 <i>WN</i> <sub>64</sub>	6 4.2 359°56	2°0/ 4.3	18		
5 1	17 22.30	+12 25.9	1.149	1.956	23.2	20.2	5 1	17 17.74	-23 5.2	1.380	2.251	16.5	18.1
5 11	17 16.32	+13 5.3	1.087	1.947	20.9	20.0	5 11	17 12.79	-24 13.1	1.311	2.249	12.5	17.9
5 21	17 6.91	+13 8.2	1.039	1.939	18.8	19.8	5 21	17 4.73	-25 22.2	1.262	2.248	7.8	17.6
5 31	16 55.05	+12 24.2	1.008	1.930	17.4	19.7	5 31	16 54.43	-26 27.9	1.238	2.248	3.1	17.3
6 10	16 42.29	+10 48.6	0.997	1.921	17.5	19.6	6 10	16 43.28	-27 26.3	1.238	2.248	3.7	17.4
6 20	16 30.35	+ 8 24.8	1.006	1.912	19.1	19.7	6 20	16 32.81	-28 15.2	1.264	2.249	8.5	17.7
6 30	16 20.79	+ 5 23.0	1.034	1.903	21.7	19.8	6 30	16 24.47	-28 55.0	1.312	2.250	13.1	17.9
7 10	16 14.27	+ 1 57.7	1.080	1.895	24.6	20.0	7 10	16 19.23	-29 28.5	1.381	2.253	17.1	18.2
<b>68870</b>	2002 <i>JU</i> <sub>26</sub>	6 4.2 308°27	7°8/ 31.9	18			<b>431099</b>	2006 <i>DH</i> <sub>212</sub>	6 4.2 58°69	9°8/ 1.2	17		
5 1	17 11.72	- 7 35.6	1.641	2.502	14.8	18.7	5 1	17 13.79	- 0 34.0	1.644	2.485	15.8	21.2
5 11	17 7.64	- 6 8.8	1.556	2.480	11.9	18.5	5 11	17 8.69	+ 0 54.9	1.605	2.505	13.1	21.1
5 21	17 1.27	- 4 46.6	1.493	2.458	9.2	18.2	5 21	17 1.59	+ 2 8.3	1.588	2.526	10.9	21.0
5 31	16 53.29	- 3 35.4	1.454	2.436	7.8	18.1	5 31	16 53.33	+ 3 0.0	1.594	2.547	9.8	21.0
6 10	16 44.68	- 2 41.3	1.440	2.414	8.9	18.1	6 10	16 44.94	+ 3 26.3	1.623	2.568	10.5	21.1
6 20	16 36.54	- 2 8.7	1.450	2.393	11.7	18.2	6 20	16 37.36	+ 3 26.7	1.676	2.589	12.3	21.2
6 30	16 29.88	- 1 59.2	1.481	2.372	15.1	18.4	6 30	16 31.41	+ 3 3.1	1.750	2.610	14.6	21.4
7 10	16 25.49	- 2 11.8	1.531	2.351	18.2	18.5	7 10	16 27.60	+ 2 19.8	1.842	2.631	16.7	21.6
<b>259867</b>	2004 <i>CU</i> <sub>113</sub>	6 4.2 147°63	2°4/ 3.5	17			<b>182186</b>	2000 <i>SU</i> <sub>349</sub>	6 4.2 204°80	4°9/ 5.7	18		
5 1	17 17.21	-18 5.3	1.779	2.637	14.0	21.2	5 1	17 19.14	-40 13.4	3.205	3.993	10.1	21.3
5 11	17 11.36	-17 29.4	1.711	2.643	10.5	20.9	5 11	17 12.45	-40 55.7	3.114	3.987	8.3	21.1
5 21	17 3.30	-16 52.6	1.666	2.649	6.5	20.7	5 21	17 3.91	-41 28.4	3.047	3.980	6.4	21.0
5 31	16 53.84	-16 17.0	1.646	2.655	2.9	20.5	5 31	16 54.09	-41 48.7	3.007	3.973	5.1	20.9
6 10	16 44.04	-15 45.1	1.654	2.660	3.8	20.6	6 10	16 43.80	-41 55.1	2.995	3.965	5.0	20.9
6 20	16 34.96	-15 19.5	1.689	2.665	7.7	20.8	6 20	16 33.85	-41 47.8	3.011	3.956	6.2	21.0
6 30	16 27.56	-15 2.5	1.749	2.669	11.5	21.0	6 30	16 25.06	-41 29.1	3.055	3.947	8.1	21.1
7 10	16 22.47	-14 55.2	1.830	2.673	14.7	21.3	7 10	16 18.06	-41 2.4	3.123	3.937	10.0	21.2
<b>390217</b>	2012 <i>XY</i> <sub>29</sub>	6 4.2 169°23	0°5/ 4.4	17			<b>396563</b>	1999 <i>UV</i> <sub>34</sub>	6 4.2 289°84	2°5/ 3.3	18		
5 1	17 14.85	-24 38.3	2.369	3.215	11.4	21.6	5 1	17 12.10	-16 58.4	2.251	3.106	11.5	21.5
5 11	17 9.29	-24 34.7	2.291	3.217	8.5	21.4	5 11	17 7.43	-16 22.2	2.154	3.086	8.7	21.3
5 21	17 1.93	-24 27.0	2.237	3.219	5.2	21.2	5 21	17 0.94	-15 45.2	2.082	3.065	5.5	21.1
5 31	16 53.42	-24 14.9	2.210	3.221	1.7	21.0	5 31	16 53.21	-15 9.4	2.037	3.043	2.8	20.9
6 10	16 44.59	-23 59.2	2.212	3.223	2.1	21.0	6 10	16 45.02	-14 37.0	2.019	3.022	3.6	20.9
6 20	16 36.27	-23 41.4	2.242	3.224	5.6	21.2	6 20	16 37.19	-14 10.3	2.028	3.001	6.8	21.0
6 30	16 29.23	-23 23.4	2.299	3.225	8.8	21.4	6 30	16					

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>392645</b>	2011 $UT_{136}$		6 4.3 312 <sup>o</sup> 91	3 <sup>o</sup> 5/ 4.8	18 R		<b>162897</b>	2001 $HB_{15}$		6 4.3 318 <sup>o</sup> 96	1 <sup>o</sup> 7/ 4.6	17	
5 1	17 15.98	-30 7.6	1.967	2.813	13.3	20.9	5 1	17 14.46	-26 15.8	1.651	2.515	14.6	19.7
5 11	17 10.85	-30 52.6	1.880	2.802	10.3	20.7	5 11	17 9.99	-26 30.7	1.566	2.501	11.1	19.5
5 21	17 3.29	-31 31.6	1.817	2.791	7.0	20.4	5 21	17 2.89	-26 40.4	1.503	2.487	7.0	19.2
5 31	16 53.98	-32 1.5	1.778	2.780	4.1	20.2	5 31	16 53.92	-26 43.0	1.463	2.473	2.8	18.9
6 10	16 43.96	-32 20.3	1.766	2.769	4.2	20.2	6 10	16 44.24	-26 38.2	1.450	2.460	3.1	18.9
6 20	16 34.40	-32 27.9	1.781	2.758	7.2	20.4	6 20	16 35.09	-26 27.3	1.462	2.447	7.5	19.1
6 30	16 26.39	-32 26.5	1.821	2.748	10.7	20.6	6 30	16 27.69	-26 13.3	1.497	2.435	11.8	19.3
7 10	16 20.77	-32 19.7	1.883	2.738	13.9	20.8	7 10	16 22.89	-25 59.7	1.554	2.423	15.6	19.5
<b>212932</b>	2008 $CS_{204}$		6 4.3 271 <sup>o</sup> 94	3 <sup>o</sup> 3/ 4.9	18		<b>318330</b>	2004 $TR_{198}$		6 4.3 224 <sup>o</sup> 63	0 <sup>o</sup> 8/ 4.0	18	
5 1	17 18.17	-31 34.6	2.377	3.207	11.9	20.6	5 1	17 16.01	-20 54.9	2.113	2.965	12.3	21.6
5 11	17 12.25	-32 4.4	2.267	3.179	9.3	20.4	5 11	17 10.43	-20 41.3	2.027	2.957	9.2	21.4
5 21	17 4.08	-32 27.5	2.181	3.150	6.4	20.2	5 21	17 2.82	-20 25.4	1.965	2.949	5.6	21.2
5 31	16 54.23	-32 41.2	2.122	3.121	3.8	20.0	5 31	16 53.84	-20 7.8	1.929	2.940	1.8	20.9
6 10	16 43.61	-32 43.9	2.091	3.091	3.8	19.9	6 10	16 44.40	-19 49.5	1.921	2.931	2.6	20.9
6 20	16 33.26	-32 35.8	2.087	3.061	6.6	20.0	6 20	16 35.45	-19 32.4	1.941	2.921	6.5	21.2
6 30	16 24.18	-32 19.2	2.111	3.031	9.8	20.2	6 30	16 27.87	-19 18.6	1.987	2.911	10.1	21.4
7 10	16 17.20	-31 57.9	2.157	2.999	12.9	20.3	7 10	16 22.32	-19 9.9	2.056	2.901	13.3	21.6
<b>294083</b>	2007 $TC_{193}$		6 4.3 240 <sup>o</sup> 14	0 <sup>o</sup> 6/ 4.4	18		<b>413821</b>	2006 $QY_{104}$		6 4.3 185 <sup>o</sup> 37	8 <sup>o</sup> 2/ 7.4	17	
5 1	17 15.21	-24 18.3	2.156	3.007	12.2	21.4	5 1	17 29.47	-49 10.6	2.560	3.306	13.4	22.5
5 11	17 9.83	-24 22.0	2.071	3.000	9.1	21.2	5 11	17 20.81	-49 54.7	2.478	3.306	11.6	22.4
5 21	17 2.44	-24 21.9	2.010	2.993	5.6	20.9	5 21	17 9.28	-50 21.2	2.417	3.306	9.8	22.3
5 31	16 53.67	-24 17.5	1.976	2.986	1.9	20.7	5 31	16 55.82	-50 25.0	2.380	3.304	8.5	22.2
6 10	16 44.45	-24 9.1	1.969	2.979	2.3	20.7	6 10	16 41.79	-50 3.5	2.369	3.302	8.2	22.1
6 20	16 35.70	-23 58.0	1.989	2.972	6.1	20.9	6 20	16 28.61	-49 18.2	2.385	3.298	9.1	22.2
6 30	16 28.33	-23 46.2	2.036	2.964	9.7	21.1	6 30	16 17.55	-48 13.9	2.426	3.293	10.8	22.3
7 10	16 22.97	-23 36.3	2.106	2.957	12.8	21.3	7 10	16 9.39	-46 57.9	2.490	3.288	12.6	22.4
<b>206679</b>	2003 $YJ_{131}$		6 4.3 244 <sup>o</sup> 12	2 <sup>o</sup> 7/ 4.7	18		<b>293762</b>	2007 $RP_{92}$		6 4.3 53 <sup>o</sup> 45	2 <sup>o</sup> 6/ 4.8	17	
5 1	17 18.64	-28 47.2	2.270	3.106	12.1	20.6	5 1	17 19.05	-27 44.1	1.259	2.129	17.8	20.7
5 11	17 12.54	-29 29.1	2.175	3.093	9.3	20.4	5 11	17 13.76	-28 1.7	1.203	2.140	13.5	20.4
5 21	17 4.21	-30 6.4	2.105	3.079	6.2	20.1	5 21	17 5.23	-28 10.6	1.166	2.150	8.6	20.2
5 31	16 54.26	-30 36.4	2.062	3.065	3.3	19.9	5 31	16 54.60	-28 8.3	1.153	2.161	3.8	19.9
6 10	16 43.63	-30 57.3	2.047	3.051	3.4	19.9	6 10	16 43.47	-27 54.6	1.163	2.173	3.9	20.0
6 20	16 33.34	-31 8.8	2.060	3.036	6.5	20.1	6 20	16 33.46	-27 32.5	1.198	2.185	8.6	20.3
6 30	16 24.42	-31 12.7	2.100	3.021	9.8	20.2	6 30	16 25.95	-27 6.7	1.255	2.196	13.3	20.6
7 10	16 17.63	-31 11.9	2.162	3.005	12.8	20.4	7 10	16 21.71	-26 42.6	1.332	2.209	17.2	20.9
<b>294751</b>	2008 $CQ_{13}$		6 4.3 139 <sup>o</sup> 20	0 <sup>o</sup> 9/ 4.5	17		<b>279416</b>	2010 $GR_6$		6 4.3 333 <sup>o</sup> 63	0 <sup>o</sup> 4/ 4.2	17	
5 1	17 19.57	-24 54.9	1.786	2.638	14.2	21.9	5 1	17 11.74	-23 15.2	1.058	1.953	18.6	20.0
5 11	17 13.29	-25 0.7	1.718	2.647	10.7	21.7	5 11	17 8.94	-22 55.5	0.985	1.937	14.1	19.7
5 21	17 4.59	-25 1.6	1.672	2.655	6.6	21.4	5 21	17 2.70	-22 28.8	0.931	1.923	8.7	19.4
5 31	16 54.33	-24 56.4	1.653	2.663	2.2	21.2	5 31	16 53.94	-21 55.9	0.897	1.909	2.7	19.0
6 10	16 43.66	-24 45.6	1.660	2.671	2.7	21.2	6 10	16 44.23	-21 19.5	0.885	1.897	3.7	19.0
6 20	16 33.76	-24 31.0	1.695	2.678	6.9	21.5	6 20	16 35.33	-20 44.0	0.895	1.886	9.9	19.3
6 30	16 25.67	-24 15.4	1.755	2.685	10.9	21.7	6 30	16 28.86	-20 14.7	0.924	1.876	15.6	19.5
7 10	16 20.08	-24 2.1	1.837	2.691	14.3	22.0	7 10	16 25.88	-19 55.6	0.971	1.868	20.5	19.8
<b>431098</b>	2006 $DL_{205}$		6 4.3 106 <sup>o</sup> 66	1 <sup>o</sup> 5/ 4.7	17		<b>472014</b>	2013 $XT$		6 4.3 149 <sup>o</sup> 89	0 <sup>o</sup> 5/ 4.3	17	
5 1	17 16.78	-26 29.9	1.844	2.697	13.8	21.9	5 1	17 20.73	-17 37.1	1.866	2.715	13.8	20.7
5 11	17 11.24	-26 36.3	1.772	2.702	10.4	21.7	5 11	17 14.22	-18 32.3	1.789	2.717	10.4	20.5
5 21	17 3.37	-26 36.8	1.724	2.706	6.5	21.4	5 21	17 5.28	-19 32.0	1.735	2.718	6.3	20.3
5 31	16 53.98	-26 30.1	1.700	2.710	2.5	21.2	5 31	16 54.63	-20 34.0	1.708	2.720	2.0	20.0
6 10	16 44.16	-26 16.7	1.704	2.714	2.8	21.2	6 10	16 43.34	-21 35.7	1.711	2.721	2.6	20.0
6 20	16 35.04	-25 58.3	1.734	2.718	6.8	21.5	6 20	16 32.56	-22 34.9	1.741	2.722	7.0	20.3
6 30	16 27.61	-25 38.0	1.790	2.721	10.6	21.7	6 30	16 23.39	-23 31.0	1.798	2.723	10.9	20.5
7 10	16 22.56	-25 19.2	1.867	2.725	13.9	21.9	7 10	16 16.60	-24 24.2	1.878	2.724	14.3	20.8
<b>320575</b>	2008 $AM_{110}$		6 4.3 122 <sup>o</sup> 80	2 <sup>o</sup> 1/ 3.8	17		<b>330339</b>	2006 $UG_{280}$		6 4.3 128 <sup>o</sup> 84	0 <sup>o</sup> 9/ 4.5	17	
5 1	17 17.79	-17 47.4	1.625	2.487	14.9	20.8	5 1	17 19.39	-24 25.8	1.802	2.655	14.1	22.1
5 11	17 12.05	-17 35.2	1.560	2.494	11.1	20.5	5 11	17 13.16	-24 38.5	1.736	2.665	10.6	21.9
5 21	17 3.88	-17 23.9	1.517	2.501	6.9	20.3	5 21	17 4.53	-24 47.0	1.692	2.675	6.5	21.7
5 31	16 54.13	-17 14.4	1.499	2.508	2.8	20.1	5 31	16 54.36	-24 50.1	1.673	2.684	2.2	21.4
6 10	16 43.97	-17 8.0	1.507	2.514	3.7	20.1	6 10	16 43.78	-24 47.9	1.683	2.693	2.6	21.5
6 20	16 34.58	-17 6.4	1.541	2.521	7.9	20.4	6 20	16 33.95	-24 41.7	1.719	2.702	6.9	21.7
6 30	16 26.99	-17 10.7	1.600	2.527	11.9	20.7	6 30	16 25.90	-24 33.9	1.780	2.710	10.8	22.0
7 10	16 21.92	-17 22.1	1.680	2.532	15.4	20.9	7 10	16 20.32	-24 27.4	1.864	2.718	14.1	22.2
<b>13742</b>	1998 $SX_{22}$		6 4.3 281 <sup>o</sup> 57	3 <sup>o</sup> 0/ 3.4	18		<b>44528</b>	1998 $YZ_6$		6 4.3 266 <sup>o</sup> 00	2 <sup>o</sup> 2/ 3.8	18	
5 1	17 14.05	-15 17.0	1.934	2.792	13.0	18.9	5 1	17 15.26	-15 52.7	2.099	2.951	12.4	18.5
5 11	17 9.16	-14 54.8	1.843	2.775	9.9	18.7	5 11	17 9.95	-15 53.5	2.006	2.936	9.4	18.3
5 21	17 2.15	-14 34.5	1.776	2.757	6.4	18.4	5 21	17 2.60	-15 56.9	1.937	2.919	5.9	18.0
5 31	16 53.64	-14 17.7	1.734	2.739	3.4	18.2	5 31	16 53.80	-16 3.6	1.895	2.903	2.7	17.8
6 10	16 44.56	-14 6.6	1.718	2.721	4.2	18.2	6 10	16 44.44	-16 14.3	1.880	2.886	3.4	17.8
6 20	16 35.88	-14 2.5	1.730	2.703	7.7	18.4	6 20	16 35.43	-16 29.4	1.893	2.869	6.9	18.0
6 30	16 28.57	-14 6.9	1.766	2.685	11.4	18.6	6 30	16 27.70	-16 49.6	1.931	2.852	10.5	18.2
7 10	16 23.34	-14 20.2	1.823	2.667	14.8	18.8	7 10	16 21.94	-17 15.1	1.992	2.835	13.8	18.3
<b>181446</b>	2006 $TY_{18}$		6 4.3 140 <sup>o</sup> 39	4 <sup>o</sup> 0/ 5.6	18		<b>302237</b>	2001 $WF_{33}$		6 4.3 131 <sup>o</sup> 79	2 <sup>o</sup> 3/ 3.6	17	
5 1	17 17.94	-36 0.7	2.811	3.622	10.8	21.0	5 1	17 19.17	-18 59.2	1.542	2.405	15.5	20.8
5 11	17 11.53	-36 34.3	2.738	3.633	8.5	20.9	5 11	17 13.14	-18 24.5	1.479	2.414	11.6	20.6
5 21	17 3.32	-36 58.7	2.689	3.643	6.2	20.7	5 21	17 4.56	-17 48.2	1.438	2.423	7.2	20.3
5 31	16 53.94	-37 11.8	2.668	3.653	4.4	20.6	5 31	16 54.36	-17 12.3	1.422	2.432	2.9	20.1
6 10	16 44.22	-37 12.7	2.674	3.663	4.3	20.6	6 10	16 43.80	-16 39.6	1.432	2.440	3.9	20.2
6 20	16 35.01	-37 2.1	2.709	3.672	5.9	20.8	6 20	16 34.13	-16 13.1	1.468	2.447	8.3	20.5
6 30	16 27.09	-36 42.7	2.7										

EPHEMERIDES

6 4.3

6 4.3

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>209533</b>	2004 <i>TR</i> <sub>287</sub>		6 4.3 168°66'	8°3'/	4.7 18		<b>346726</b>	2009 <i>AN</i> <sub>22</sub>		6 4.3 256°61'	1°2'/	3.9 18	
5 1	17 31.65	-39 56.2	1.889	2.688	15.6	20.8	5 1	17 14.63	-20 5.7	2.041	2.898	12.5	21.5
<b>438967</b>	2010 <i>MT</i> <sub>14</sub>		6 4.3 282°57'	1°0'/	3.9 18		<b>412189</b>	2013 <i>GR</i> <sub>100</sub>		6 4.3 331°45'	4°7'/	4.7 17	
5 1	17 13.72	-19 46.8	2.358	3.209	11.2	21.9	5 1	17 17.47	-28 59.1	1.172	2.048	18.5	20.2
<b>501806</b>	2014 <i>WV</i> <sub>49</sub>		6 4.3 340°78'	1°8'/	4.2 17		<b>438509</b>	2007 <i>RO</i> <sub>72</sub>		6 4.3 238°33'	3°1'/	5.2 17	
5 1	17 15.61	-16 45.7	1.177	2.061	17.9	20.4	5 1	17 17.11	-31 12.7	2.081	2.920	13.0	21.7
<b>379527</b>	2010 <i>US</i> <sub>106</sub>		6 4.3 124°08'	14°5'/	12.2 17		<b>334980</b>	2004 <i>FV</i> <sub>8</sub>		6 4.3 63°08'	3°5'/	5.0 17	
5 1	17 41.14	-63 31.1	2.009	2.681	18.6	20.6	5 1	17 17.69	-30 47.3	1.957	2.800	13.6	20.3
<b>270318</b>	2001 <i>XD</i> <sub>29</sub>		6 4.3 207°42'	5°2'/	2.9 18		<b>380260</b>	2001 <i>XB</i> <sub>229</sub>		6 4.3 286°47'	1°3'/	4.6 18	
5 1	17 15.94	-7 29.9	2.252	3.088	12.2	20.4	5 1	17 16.77	-26 26.7	1.687	2.545	14.6	20.4
<b>478027</b>	2011 <i>SY</i> <sub>225</sub>		6 4.3 237°54'	4°1'/	5.6 18		<b>501251</b>	2013 <i>VX</i> <sub>20</sub>		6 4.3 193°08'	2°0'/	4.9 17	
5 1	17 17.33	-35 50.9	2.588	3.404	11.4	22.3	5 1	17 18.74	-29 7.7	2.680	3.508	10.8	22.8
<b>497941</b>	2006 <i>WB</i> <sub>110</sub>		6 4.3 201°14'	0°9'/	4.0 17		<b>146954</b>	2002 <i>EQ</i> <sub>90</sub>		6 4.3 28°33'	0°2'/	4.4 18	
5 1	17 17.86	-20 53.5	2.036	2.886	12.8	23.0	5 1	17 13.24	-23 15.7	1.986	2.845	12.7	19.5
<b>176739</b>	2002 <i>RW</i> <sub>73</sub>		6 4.3 126°19'	4°0'/	5.4 17		<b>336672</b>	2010 <i>AW</i> <sub>7</sub>		6 4.3 351°19'	2°6'/	5.1 17	
5 1	17 20.35	-32 27.1	1.662	2.506	15.5	20.4	5 1	17 16.37	-29 57.0	1.736	2.589	14.5	20.5
<b>379252</b>	2009 <i>TA</i> <sub>38</sub>		6 4.3 266°17'	0°7'/	4.0 17		<b>394781</b>	2008 <i>GU</i> <sub>131</sub>		6 4.3 260°42'	3°9'/	4.7 18	
5 1	17 17.62	-22 29.7	1.933	2.786	13.3	22.1	5 1	17 18.79	-31 31.6	2.386	3.215	11.9	20.7

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>466543</b>	2014 <i>SO</i> <sub>226</sub>	6 4.3 155°30	4.6/ 3.2 17				<b>267342</b>	2001 <i>VF</i> <sub>103</sub>	6 4.3 207°20	1.9/ 4.8 17			
5 1	17 17.57	-13 30.8	1.495	2.360	15.8	21.6	5 1	17 18.70	-27 34.1	2.090	2.933	12.8	22.0
5 11	17 12.07	-12 49.6	1.429	2.362	12.1	21.4	5 11	17 12.61	-27 46.9	2.006	2.928	9.7	21.8
5 21	17 4.02	-12 12.1	1.385	2.365	8.0	21.1	5 21	17 4.27	-27 53.7	1.944	2.923	6.2	21.6
5 31	16 54.29	-11 41.6	1.365	2.367	4.9	21.0	5 31	16 54.40	-27 52.9	1.909	2.917	2.7	21.3
6 10	16 44.11	-11 21.5	1.371	2.369	5.8	21.0	6 10	16 44.01	-27 44.2	1.902	2.911	2.8	21.3
6 20	16 34.70	-11 13.7	1.401	2.371	9.5	21.2	6 20	16 34.15	-27 29.0	1.923	2.904	6.4	21.5
6 30	16 27.18	-11 19.4	1.455	2.373	13.5	21.5	6 30	16 25.82	-27 10.0	1.970	2.897	10.0	21.7
7 10	16 22.26	-11 38.0	1.528	2.374	17.0	21.7	7 10	16 19.73	-26 50.5	2.040	2.889	13.2	21.9
<b>105306</b>	2000 <i>QS</i> <sub>60</sub>	6 4.3 202°98	3.8/ 3.0 18				<b>216761</b>	2005 <i>SD</i> <sub>124</sub>	6 4.3 37°56	5.2/ 2.4 18			
5 1	17 12.67	-10 24.6	2.636	3.478	10.5	20.3	5 1	17 11.68	- 9 5.3	2.175	3.025	12.1	20.1
5 11	17 7.52	-10 0.9	2.556	3.474	8.1	20.1	5 11	17 7.01	- 8 15.2	2.107	3.027	9.5	19.9
5 21	17 0.89	- 9 41.6	2.500	3.470	5.6	19.9	5 21	17 0.66	- 7 30.6	2.062	3.029	6.9	19.8
5 31	16 53.30	- 9 28.5	2.472	3.466	3.9	19.8	5 31	16 53.25	- 6 54.6	2.043	3.031	5.2	19.7
6 10	16 45.41	- 9 23.0	2.471	3.461	4.4	19.8	6 10	16 45.57	- 6 30.1	2.050	3.033	5.9	19.7
6 20	16 37.90	- 9 26.0	2.499	3.457	6.6	20.0	6 20	16 38.39	- 6 18.5	2.084	3.035	8.2	19.9
6 30	16 31.39	- 9 37.8	2.553	3.451	9.2	20.1	6 30	16 32.40	- 6 20.4	2.143	3.037	10.9	20.0
7 10	16 26.38	- 9 58.0	2.630	3.446	11.6	20.3	7 10	16 28.15	- 6 35.0	2.223	3.040	13.4	20.2
<b>501276</b>	2013 <i>WH</i> <sub>41</sub>	6 4.3 126°78	0.6/ 4.5 17				<b>501772</b>	2014 <i>UT</i> <sub>206</sub>	6 4.3 227°14	4.4/ 5.4 17			
5 1	17 17.45	-24 5.9	2.226	3.071	12.0	22.3	5 1	17 21.73	-33 4.7	1.726	2.564	15.3	22.0
5 11	17 11.31	-24 12.6	2.158	3.084	9.0	22.1	5 11	17 15.51	-33 28.9	1.641	2.556	12.0	21.7
5 21	17 3.26	-24 15.6	2.115	3.097	5.5	21.9	5 21	17 6.35	-33 42.0	1.577	2.547	8.3	21.5
5 31	16 54.02	-24 14.5	2.099	3.110	1.8	21.7	5 31	16 55.09	-33 40.1	1.539	2.537	5.1	21.3
6 10	16 44.49	-24 9.4	2.111	3.122	2.2	21.7	6 10	16 43.08	-33 21.9	1.526	2.527	4.9	21.2
6 20	16 35.58	-24 1.7	2.152	3.133	5.8	22.0	6 20	16 31.75	-32 49.2	1.540	2.517	8.2	21.4
6 30	16 28.09	-23 53.2	2.219	3.145	9.1	22.2	6 30	16 22.44	-32 6.7	1.578	2.505	12.0	21.6
7 10	16 22.60	-23 46.2	2.310	3.155	12.0	22.4	7 10	16 16.06	-31 20.8	1.638	2.494	15.6	21.8
<b>221128</b>	2005 <i>SK</i> <sub>253</sub>	6 4.3 318°88	9.7/31.4 17				<b>468587</b>	2007 <i>RS</i> <sub>132</sub>	6 4.3 302°53	5.2/ 5.8 17			
5 1	17 10.95	- 6 42.8	1.294	2.169	17.2	19.8	5 1	17 16.98	-35 41.8	1.771	2.610	14.9	20.7
5 11	17 7.69	- 5 1.4	1.215	2.145	14.0	19.6	5 11	17 12.03	-36 1.1	1.679	2.591	11.9	20.4
5 21	17 1.68	- 3 25.4	1.155	2.121	11.1	19.3	5 21	17 4.25	-36 7.2	1.609	2.573	8.7	20.2
5 31	16 53.67	- 2 3.9	1.118	2.098	9.8	19.2	5 31	16 54.46	-35 56.5	1.562	2.555	5.8	20.0
6 10	16 44.85	- 1 5.3	1.102	2.075	11.0	19.2	6 10	16 43.90	-35 27.7	1.541	2.538	5.6	19.9
6 20	16 36.54	- 0 35.3	1.108	2.053	14.2	19.3	6 20	16 33.94	-34 42.6	1.545	2.520	8.3	20.0
6 30	16 30.03	- 0 35.8	1.133	2.033	18.0	19.4	6 30	16 25.87	-33 46.4	1.573	2.503	11.9	20.2
7 10	16 26.25	- 1 4.4	1.175	2.013	21.6	19.6	7 10	16 20.59	-32 45.8	1.622	2.486	15.4	20.4
<b>107219</b>	2001 <i>BP</i> <sub>47</sub>	6 4.3 34°18	3.2/ 5.1 17				<b>435700</b>	2008 <i>TW</i> <sub>146</sub>	6 4.3 169°80	0.9/ 4.5 17			
5 1	17 16.82	-29 44.9	1.158	2.034	18.7	19.2	5 1	17 16.91	-24 49.2	1.989	2.840	13.0	21.6
5 11	17 12.26	-29 49.1	1.108	2.047	14.2	19.0	5 11	17 11.25	-24 57.1	1.913	2.842	9.8	21.4
5 21	17 4.39	-29 40.7	1.077	2.061	9.2	18.7	5 21	17 3.42	-25 0.8	1.860	2.843	6.0	21.2
5 31	16 54.41	-29 18.0	1.067	2.075	4.3	18.5	5 31	16 54.13	-24 59.4	1.834	2.844	2.1	20.9
6 10	16 44.04	-28 42.4	1.081	2.090	4.2	18.5	6 10	16 44.41	-24 53.0	1.835	2.845	2.5	21.0
6 20	16 34.94	-27 58.4	1.118	2.106	8.8	18.9	6 20	16 35.28	-24 43.0	1.863	2.846	6.4	21.2
6 30	16 28.45	-27 12.3	1.177	2.123	13.5	19.2	6 30	16 27.69	-24 31.7	1.917	2.846	10.1	21.4
7 10	16 25.28	-26 30.3	1.254	2.140	17.5	19.5	7 10	16 22.31	-24 21.9	1.993	2.846	13.3	21.6
<b>427148</b>	2014 <i>UY</i> <sub>157</sub>	6 4.3 13°36	2.1/ 4.0 17				<b>386170</b>	2007 <i>UE</i> <sub>64</sub>	6 4.3 3°96	1.2/ 4.6 17			
5 1	17 17.56	-17 8.0	1.355	2.227	16.7	20.5	5 1	17 15.33	-25 22.3	1.846	2.703	13.6	21.0
5 11	17 12.46	-17 15.6	1.288	2.228	12.6	20.2	5 11	17 10.26	-25 35.5	1.772	2.703	10.2	20.8
5 21	17 4.47	-17 26.5	1.242	2.228	7.8	20.0	5 21	17 2.89	-25 44.2	1.720	2.703	6.4	20.5
5 31	16 54.48	-17 40.9	1.219	2.229	3.0	19.7	5 31	16 53.99	-25 47.2	1.694	2.704	2.4	20.3
6 10	16 43.85	-17 59.1	1.221	2.230	3.9	19.7	6 10	16 44.60	-25 44.5	1.694	2.704	2.7	20.3
6 20	16 34.02	-18 21.3	1.248	2.232	8.8	20.0	6 20	16 35.83	-25 37.3	1.721	2.705	6.7	20.5
6 30	16 26.25	-18 48.0	1.298	2.233	13.4	20.3	6 30	16 28.67	-25 28.1	1.772	2.706	10.5	20.8
7 10	16 21.41	-19 19.6	1.367	2.235	17.4	20.5	7 10	16 23.83	-25 19.6	1.846	2.707	13.9	21.0
<b>374430</b>	2005 <i>WK</i> <sub>142</sub>	6 4.3 233°93	0.4/ 4.4 17				<b>514371</b>	2016 <i>QH</i> <sub>88</sub>	6 4.3 236°25	3.7/ 3.2 18			
5 1	17 17.29	-22 53.2	1.773	2.631	14.1	21.1	5 1	17 13.06	- 9 50.8	2.694	3.532	10.4	21.4
5 11	17 11.80	-23 9.1	1.696	2.629	10.5	20.9	5 11	17 7.85	- 9 39.8	2.605	3.521	8.0	21.2
5 21	17 3.87	-23 22.7	1.642	2.626	6.5	20.7	5 21	17 1.14	- 9 33.9	2.541	3.510	5.6	21.0
5 31	16 54.28	-23 32.9	1.612	2.624	2.1	20.4	5 31	16 53.43	- 9 34.5	2.504	3.498	3.8	20.9
6 10	16 44.11	-23 39.4	1.610	2.621	2.6	20.4	6 10	16 45.35	- 9 42.8	2.495	3.486	4.3	20.9
6 20	16 34.55	-23 43.0	1.635	2.618	7.0	20.7	6 20	16 37.59	- 9 59.2	2.515	3.474	6.5	21.0
6 30	16 26.66	-23 45.6	1.684	2.616	11.1	20.9	6 30	16 30.78	-10 23.7	2.561	3.461	9.1	21.1
7 10	16 21.22	-23 49.5	1.755	2.613	14.6	21.1	7 10	16 25.44	-10 55.5	2.630	3.448	11.5	21.3
<b>101260</b>	1998 <i>SU</i> <sub>98</sub>	6 4.3 263°61	1.4/ 4.7 18				<b>166331</b>	2002 <i>JF</i> <sub>94</sub>	6 4.3 71°17	2.5/ 4.7 17			
5 1	17 15.97	-26 15.3	1.988	2.840	13.0	19.9	5 1	17 20.21	-26 27.1	1.410	2.273	16.7	19.9
5 11	17 10.67	-26 23.6	1.903	2.831	9.8	19.7	5 11	17 14.51	-27 5.7	1.347	2.281	12.6	19.7
5 21	17 3.13	-26 26.6	1.841	2.823	6.2	19.5	5 21	17 5.75	-27 38.9	1.305	2.288	8.0	19.4
5 31	16 54.04	-26 23.3	1.804	2.814	2.4	19.2	5 31	16 54.91	-28 3.4	1.287	2.296	3.5	19.2
6 10	16 44.42	-26 13.5	1.795	2.805	2.7	19.2	6 10	16 43.44	-28 17.4	1.295	2.304	3.8	19.2
6 20	16 35.30	-25 58.8	1.813	2.796	6.5	19.4	6 20	16 32.90	-28 21.8	1.327	2.311	8.3	19.5
6 30	16 27.70	-25 41.8	1.856	2.787	10.3	19.6	6 30	16 24.61	-28 19.6	1.383	2.319	12.7	19.8
7 10	16 22.32	-25 25.5	1.922	2.778	13.6	19.8	7 10	16 19.42	-28 15.3	1.459	2.327	16.5	20.0
<b>478110</b>	2011 <i>UW</i> <sub>81</sub>	6 4.3 204°45	1.5/ 4.7 18				<b>426415</b>	2013 <i>QX</i> <sub>3</sub>	6 4.3 220°25	3.2/ 5.2 17			
5 1	17 15.36	-27 10.4	2.812	3.647	10.1	21.9	5 1	17 19.73	-31 18.5	1.877	2.718	14.1	21.6
5 11	17 9.62	-27 29.5	2.724	3.642	7.6	21.7	5 11	17 13.69	-31 27.8	1.793	2.711	10.9	21.4
5 21	17 2.23	-27 44.5	2.660	3.637	4.9	21.5	5 21	17 5.07	-31 27.1	1.731	2.704	7.3	21.2
5 31	16 53.74	-27 54.1	2.625	3.632	2.1	21.3	5 31	16 54.68	-31 14.1	1.694	2.697	4.0	21.0
6 10	16 44.87	-27 58.1	2.618	3.626	2.3	21.3	6 10	16 43.71	-30 48.7	1.684	2.690	3.8	20.9
6 20	16 36.35	-27 57.0	2.641	3.620	5.0	21.5	6 20	16 33.39	-30 12.8	1.702	2.681	7.2	21.1
6 30	16 28.90	-27 52.3	2.691	3.614	7.9	21.7	6 30	16 24.87	-29 30.9	1.744	2.673	11.0	21.3
7 10	16												

## EPHEMERIDES

6 4.3

6 4.3

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>329764</b>	2004 <i>FC</i> <sub>106</sub>	6 4.3 59°91'	2.1°/ 4.0	17			<b>267492</b>	2002 <i>HA</i> <sub>4</sub>	6 4.3 48°60'	3.7°/ 3.8	17		
5 1	17 17.79	-17 18.0	1.421	2.290	16.2	20.9	5 1	17 16.28	-13 11.8	1.506	2.372	15.7	20.1
5 11	17 12.31	-17 21.6	1.367	2.305	12.1	20.7	5 11	17 10.97	-13 10.5	1.456	2.390	11.8	19.9
5 21	17 4.18	-17 27.8	1.334	2.320	7.5	20.5	5 21	17 3.28	-13 15.6	1.427	2.409	7.6	19.7
5 31	16 54.38	-17 36.8	1.325	2.335	2.9	20.3	5 31	16 54.12	-13 28.1	1.423	2.428	4.1	19.6
6 10	16 44.20	-17 49.1	1.341	2.350	3.7	20.3	6 10	16 44.68	-13 48.6	1.444	2.447	4.7	19.6
6 20	16 34.95	-18 5.1	1.383	2.365	8.2	20.6	6 20	16 36.10	-14 16.9	1.490	2.467	8.4	19.9
6 30	16 27.74	-18 25.6	1.448	2.381	12.5	20.9	6 30	16 29.39	-14 52.2	1.561	2.487	12.2	20.2
7 10	16 23.25	-18 51.0	1.533	2.397	16.1	21.2	7 10	16 25.15	-15 33.7	1.651	2.507	15.5	20.4
<b>290996</b>	2005 <i>XQ</i> <sub>76</sub>	6 4.3 264°92'	1.6°/ 4.7	17			<b>177946</b>	2005 <i>WG</i> <sub>68</sub>	6 4.3 350°12'	6.0°/ 1.8	17		
5 1	17 17.08	-26 54.9	1.715	2.572	14.5	20.9	5 1	17 8.08	-13 30.9	1.417	2.300	15.4	18.7
5 11	17 11.77	-26 55.6	1.638	2.568	11.0	20.7	5 11	17 5.23	-12 1.3	1.347	2.289	11.9	18.5
5 21	17 3.91	-26 49.3	1.582	2.565	6.9	20.5	5 21	17 0.00	-10 31.9	1.297	2.278	8.3	18.2
5 31	16 54.34	-26 34.8	1.552	2.561	2.7	20.2	5 31	16 53.17	-9 9.3	1.271	2.269	6.1	18.1
6 10	16 44.22	-26 12.7	1.548	2.558	2.9	20.2	6 10	16 45.87	-8 0.1	1.270	2.262	7.3	18.1
6 20	16 34.79	-25 45.3	1.570	2.554	7.2	20.4	6 20	16 39.21	-7 9.4	1.291	2.256	10.7	18.3
6 30	16 27.15	-25 16.2	1.616	2.551	11.3	20.7	6 30	16 34.23	-6 40.1	1.334	2.251	14.5	18.5
7 10	16 22.07	-24 49.5	1.685	2.547	14.9	20.9	7 10	16 31.64	-6 32.0	1.395	2.248	18.0	18.7
<b>179402</b>	2001 <i>YR</i> <sub>135</sub>	6 4.3 139°73'	2.7°/ 3.6	18			<b>15577</b>	Gywilliams	6 4.3 21°05'	2.0°/ 3.9	18		
5 1	17 13.98	-12 56.3	2.677	3.518	10.4	21.4	5 1	17 15.19	-19 56.0	1.073	1.963	18.7	18.9
5 11	17 8.43	-12 51.9	2.607	3.528	7.8	21.3	5 11	17 11.16	-19 31.0	1.018	1.967	14.0	18.6
5 21	17 1.43	-12 51.0	2.561	3.537	5.1	21.1	5 21	17 3.85	-19 4.1	0.981	1.972	8.6	18.3
5 31	16 53.52	-12 54.5	2.544	3.546	2.9	21.0	5 31	16 54.37	-18 37.2	0.966	1.978	3.1	18.0
6 10	16 45.37	-13 3.0	2.555	3.554	3.4	21.0	6 10	16 44.34	-18 13.5	0.974	1.984	4.2	18.1
6 20	16 37.65	-13 16.9	2.595	3.562	5.9	21.2	6 20	16 35.41	-17 56.1	1.004	1.992	9.8	18.4
6 30	16 30.97	-13 36.3	2.661	3.570	8.5	21.4	6 30	16 28.94	-17 48.1	1.055	2.000	14.9	18.7
7 10	16 25.81	-14 1.0	2.752	3.577	10.9	21.5	7 10	16 25.77	-17 50.9	1.124	2.008	19.2	19.0
<b>325796</b>	2010 <i>RY</i> <sub>68</sub>	6 4.3 231°15'	2.4°/ 5.0	18			<b>267356</b>	2001 <i>XW</i> <sub>5</sub>	6 4.3 141°63'	6.1°/ 2.6	17	R	
5 1	17 19.64	-29 28.7	1.675	2.525	15.1	21.1	5 1	17 15.72	-6 43.6	1.996	2.838	13.4	21.1
5 11	17 13.82	-29 22.4	1.592	2.518	11.6	20.8	5 11	17 10.09	-6 1.2	1.933	2.846	10.6	21.0
5 21	17 5.25	-29 5.7	1.531	2.511	7.5	20.6	5 21	17 2.59	-5 27.0	1.893	2.854	7.8	20.8
5 31	16 54.77	-28 37.2	1.495	2.503	3.4	20.3	5 31	16 53.91	-5 4.5	1.878	2.861	6.2	20.7
6 10	16 43.69	-27 57.4	1.486	2.495	3.4	20.3	6 10	16 44.94	-4 56.1	1.890	2.868	6.7	20.8
6 20	16 33.33	-27 9.6	1.502	2.486	7.6	20.5	6 20	16 36.58	-5 2.5	1.928	2.874	9.0	20.9
6 30	16 24.93	-26 19.1	1.544	2.477	11.8	20.7	6 30	16 29.60	-5 23.4	1.991	2.880	11.8	21.1
7 10	16 19.30	-25 31.1	1.607	2.468	15.6	20.9	7 10	16 24.58	-5 57.1	2.074	2.886	14.4	21.3
<b>24290</b>	1999 <i>XS</i> <sub>190</sub>	6 4.3 241°00'	3.2°/ 5.4	18	R		<b>510694</b>	2012 <i>UX</i> <sub>131</sub>	6 4.3 217°94'	0.9°/ 3.9	18		
5 1	17 17.15	-32 5.4	1.962	2.803	13.6	18.6	5 1	17 15.69	-21 22.3	2.808	3.647	10.0	23.0
5 11	17 11.61	-32 7.5	1.883	2.801	10.5	18.4	5 11	17 9.77	-20 50.2	2.712	3.636	7.5	22.8
5 21	17 3.72	-31 59.2	1.825	2.798	7.1	18.2	5 21	17 2.31	-20 14.8	2.642	3.624	4.6	22.6
5 31	16 54.27	-31 38.6	1.793	2.795	3.9	18.0	5 31	16 53.83	-19 36.9	2.601	3.611	1.5	22.4
6 10	16 44.37	-31 6.0	1.788	2.792	3.7	17.9	6 10	16 45.02	-18 58.3	2.589	3.598	2.2	22.4
6 20	16 35.14	-30 24.0	1.809	2.789	6.8	18.1	6 20	16 36.59	-18 21.0	2.607	3.584	5.3	22.6
6 30	16 27.60	-29 36.9	1.856	2.786	10.3	18.3	6 30	16 29.21	-17 47.2	2.653	3.569	8.3	22.8
7 10	16 22.44	-28 49.4	1.926	2.783	13.5	18.5	7 10	16 23.38	-17 18.8	2.724	3.553	10.9	22.9
<b>294577</b>	2007 <i>YS</i> <sub>55</sub>	6 4.3 131°27'	0.8°/ 4.1	17			<b>440881</b>	2006 <i>TL</i> <sub>91</sub>	6 4.3 280°10'	3.0°/ 2.9	16		
5 1	17 19.07	-21 4.8	1.795	2.650	14.1	21.8	5 1	17 13.13	-16 59.5	2.140	2.996	12.0	21.3
5 11	17 12.86	-20 53.1	1.730	2.661	10.5	21.6	5 11	17 8.25	-15 59.7	2.055	2.986	9.1	21.0
5 21	17 4.38	-20 39.0	1.688	2.672	6.4	21.4	5 21	17 1.53	-14 58.2	1.995	2.976	5.8	20.8
5 31	16 54.45	-20 22.9	1.672	2.683	2.0	21.1	5 31	16 53.62	-13 57.7	1.961	2.966	3.2	20.6
6 10	16 44.19	-20 6.3	1.683	2.693	2.8	21.2	6 10	16 45.33	-13 1.7	1.955	2.956	4.1	20.7
6 20	16 34.70	-19 50.9	1.721	2.702	7.0	21.5	6 20	16 37.53	-12 13.6	1.977	2.946	7.3	20.9
6 30	16 26.94	-19 39.2	1.785	2.711	10.9	21.7	6 30	16 31.01	-11 36.1	2.024	2.935	10.6	21.0
7 10	16 21.55	-19 33.0	1.870	2.720	14.2	21.9	7 10	16 26.33	-11 10.4	2.093	2.925	13.5	21.2
<b>158415</b>	2002 <i>AO</i> <sub>87</sub>	6 4.3 142°54'	1.0°/ 3.9	17			<b>137696</b>	1999 <i>XA</i> <sub>69</sub>	6 4.3 117°43'	0.1°/ 4.3	18		
5 1	17 17.22	-20 49.0	2.154	3.003	12.3	21.3	5 1	17 19.34	-23 6.4	1.740	2.595	14.4	20.8
5 11	17 11.15	-20 27.2	2.085	3.014	9.1	21.1	5 11	17 13.13	-22 53.7	1.678	2.609	10.7	20.6
5 21	17 3.20	-20 3.0	2.040	3.024	5.5	20.9	5 21	17 4.57	-22 36.7	1.638	2.622	6.5	20.4
5 31	16 54.07	-19 37.3	2.023	3.033	1.9	20.7	5 31	16 54.54	-22 15.7	1.624	2.635	2.0	20.1
6 10	16 44.68	-19 11.7	2.033	3.042	2.6	20.7	6 10	16 44.20	-21 52.1	1.637	2.648	2.6	20.2
6 20	16 35.93	-18 48.1	2.072	3.051	6.2	21.0	6 20	16 34.71	-21 28.3	1.677	2.660	7.0	20.5
6 30	16 28.60	-18 28.8	2.137	3.058	9.6	21.2	6 30	16 27.03	-21 7.2	1.742	2.671	11.0	20.7
7 10	16 23.26	-18 15.4	2.225	3.066	12.6	21.4	7 10	16 21.81	-20 51.5	1.829	2.682	14.3	21.0
<b>259674</b>	2003 <i>WG</i> <sub>182</sub>	6 4.3 25°93'	1.5°/ 4.6	17			<b>312422</b>	2008 <i>GR</i> <sub>48</sub>	6 4.3 273°00'	0.5°/ 4.2	18		
5 1	17 16.38	-25 51.2	1.215	2.093	17.8	20.4	5 1	17 13.84	-21 3.4	2.280	3.133	11.5	21.1
5 11	17 11.90	-25 55.2	1.157	2.099	13.4	20.1	5 11	17 8.83	-21 2.2	2.190	3.120	8.6	20.9
5 21	17 4.24	-25 51.8	1.118	2.105	8.4	19.8	5 21	17 1.94	-20 59.6	2.123	3.107	5.3	20.6
5 31	16 54.47	-25 39.9	1.102	2.112	3.0	19.5	5 31	16 53.77	-20 55.6	2.083	3.094	1.7	20.4
6 10	16 44.16	-25 20.3	1.109	2.120	3.4	19.6	6 10	16 45.13	-20 50.8	2.070	3.081	2.3	20.4
6 20	16 34.90	-24 56.0	1.139	2.128	8.6	19.9	6 20	16 36.87	-20 46.3	2.086	3.067	6.0	20.6
6 30	16 28.04	-24 31.7	1.192	2.137	13.5	20.2	6 30	16 29.81	-20 43.5	2.127	3.054	9.4	20.8
7 10	16 24.39	-24 11.5	1.264	2.147	17.6	20.5	7 10	16 24.59	-20 44.0	2.192	3.041	12.5	21.0
<b>425811</b>	2011 <i>DL</i> <sub>15</sub>	6 4.3 340°31'	2.3°/ 3.8	17			<b>210273</b>	2007 <i>TD</i> <sub>8</sub>	6 4.3 290°36'	1.6°/ 4.1	18		
5 1	17 12.34	-18 55.0	1.320	2.203	16.4	20.5	5 1	17 17.36	-18 49.4	1.367	2.239	16.5	20.1
5 11	17 8.72	-18 29.2	1.247	2.193	12.3	20.2	5 11	17 12.68	-18 52.6	1.281	2.221	12.6	19.8
5 21	17 2.29	-18 2.2	1.195	2.183	7.7	19.9	5 21	17 4.90	-18 57.0	1.215	2.202	7.8	19.5
5 31	16 53.90	-17 36.0	1.164	2.175	3.1	19.6	5 31	16 54.81	-19 3.0	1.173	2.183	2.8	19.1
6 10	16 44.85	-17 13.5	1.158	2.167	4.1	19.7	6 10	16 43.69	-19 10.9	1.155	2.165	3.7	19.1
6 20	16 36.49	-16 57.4	1.176	2.160	9.0	19.9	6 20	16 33.08	-19 21.8	1.161	2.146	9.1	19.4
6 30	16 30.10	-16 50.5	1.215	2.155	13.8	20.2	6 30	16 24.43	-19 37.0	1.191	2.128	14.2	19.6
7 10	16 26.53	-16 53.9	1.273	2.150									

## EPHEMERIDES

6 4.3

6 4.3

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>93197</b>	2000 <i>SO</i> <sub>114</sub>		6 4.3 209°08'		7°0/ 1.6 18		<b>114060</b>	2002 <i>VP</i> <sub>24</sub>		6 4.3 104°50'		1°0/ 4.1 18	
5 1	17 14.34	-5 48.5	1.990	2.833	13.4	20.0	5 1	17 19.83	-22 4.7	1.325	2.195	17.1	19.9
5 11	17 9.17	-4 39.9	1.919	2.830	10.7	19.9	5 11	17 14.12	-21 38.3	1.265	2.204	12.8	19.7
5 21	17 2.10	-3 38.6	1.870	2.826	8.3	19.7	5 21	17 5.45	-21 7.3	1.225	2.212	7.8	19.4
5 31	16 53.80	-2 49.5	1.847	2.822	7.0	19.6	5 31	16 54.87	-20 32.8	1.209	2.220	2.5	19.1
6 10	16 45.14	-2 16.2	1.850	2.818	7.7	19.6	6 10	16 43.85	-19 57.4	1.218	2.229	3.4	19.2
6 20	16 37.00	-2 1.0	1.879	2.814	9.9	19.8	6 20	16 33.87	-19 25.0	1.252	2.236	8.6	19.5
6 30	16 30.19	-2 4.2	1.931	2.809	12.6	19.9	6 30	16 26.17	-18 59.2	1.309	2.244	13.3	19.8
7 10	16 25.32	-2 24.0	2.004	2.804	15.2	20.1	7 10	16 21.49	-18 43.0	1.385	2.252	17.3	20.1
<b>163136</b>	2002 <i>CX</i> <sub>27</sub>		6 4.3 239°75'		4°1/ 5.2 17		<b>510496</b>	2011 <i>YX</i> <sub>27</sub>		6 4.3 207°35'		4°6/ 6.2 18	
5 1	17 22.35	-32 8.4	1.732	2.571	15.2	20.9	5 1	17 16.55	-38 16.4	2.645	3.454	11.4	21.5
5 11	17 16.09	-32 33.4	1.640	2.557	11.9	20.6	5 11	17 10.79	-38 34.3	2.561	3.452	9.2	21.3
5 21	17 6.82	-32 48.3	1.571	2.542	8.2	20.4	5 21	17 3.09	-38 41.0	2.500	3.449	6.9	21.2
5 31	16 55.36	-32 49.3	1.526	2.527	4.8	20.1	5 31	16 54.13	-38 34.4	2.465	3.447	5.0	21.1
6 10	16 43.02	-32 34.7	1.508	2.510	4.7	20.1	6 10	16 44.78	-38 13.9	2.458	3.444	4.8	21.0
6 20	16 31.26	-32 5.7	1.516	2.494	8.2	20.3	6 20	16 35.97	-37 40.8	2.478	3.441	6.4	21.1
6 30	16 21.47	-31 27.1	1.548	2.476	12.2	20.5	6 30	16 28.51	-36 58.4	2.524	3.437	8.7	21.3
7 10	16 14.61	-30 45.1	1.603	2.458	15.9	20.6	7 10	16 23.02	-36 11.0	2.594	3.434	11.0	21.4
<b>43422</b>	2000 <i>XA</i> <sub>30</sub>		6 4.3 182°53'		2°9/ 4.8 18		<b>468247</b>	2015 <i>BG</i> <sub>256</sub>		6 4.3 247°97'		4°2/ 3.2 18	
5 1	17 21.18	-28 8.6	1.668	2.518	15.2	19.6	5 1	17 16.41	-13 9.0	1.768	2.625	14.1	21.4
5 11	17 15.02	-28 43.5	1.593	2.518	11.6	19.3	5 11	17 11.12	-12 35.7	1.684	2.613	10.8	21.2
5 21	17 6.03	-29 12.0	1.540	2.519	7.6	19.1	5 21	17 3.52	-12 5.6	1.624	2.602	7.3	21.0
5 31	16 55.08	-29 31.1	1.512	2.518	3.7	18.9	5 31	16 54.32	-11 41.5	1.588	2.589	4.5	20.8
6 10	16 43.45	-29 39.0	1.511	2.518	3.8	18.9	6 10	16 44.54	-11 26.0	1.579	2.577	5.3	20.8
6 20	16 32.53	-29 36.5	1.536	2.517	7.7	19.1	6 20	16 35.26	-11 21.1	1.595	2.564	8.7	21.0
6 30	16 23.57	-29 26.8	1.585	2.516	11.8	19.3	6 30	16 27.51	-11 28.0	1.636	2.551	12.5	21.1
7 10	16 17.45	-29 14.3	1.656	2.514	15.4	19.5	7 10	16 22.04	-11 46.3	1.698	2.537	15.9	21.3
<b>93068</b>	2000 <i>SR</i> <sub>24</sub>		6 4.3 122°67'		6°4/ 6.3 17		<b>43833</b>	1993 <i>FF</i> <sub>34</sub>		6 4.3 240°47'		1°7/ 4.6 17	
5 1	17 21.22	-39 10.9	1.901	2.719	14.9	19.0	5 1	17 21.17	-25 44.8	1.614	2.468	15.4	19.4
5 11	17 14.93	-39 46.3	1.831	2.725	12.1	18.8	5 11	17 15.22	-26 7.3	1.527	2.456	11.7	19.2
5 21	17 5.88	-40 7.0	1.782	2.731	9.2	18.6	5 21	17 6.32	-26 25.3	1.461	2.444	7.4	18.9
5 31	16 55.00	-40 8.5	1.757	2.736	6.9	18.5	5 31	16 55.25	-26 36.3	1.421	2.430	2.9	18.6
6 10	16 43.61	-39 49.6	1.758	2.742	6.6	18.5	6 10	16 43.30	-26 39.0	1.407	2.417	3.2	18.6
6 20	16 33.07	-39 12.3	1.785	2.747	8.5	18.6	6 20	16 31.90	-26 34.3	1.419	2.403	7.9	18.8
6 30	16 24.59	-38 21.6	1.837	2.753	11.3	18.8	6 30	16 22.41	-26 25.1	1.456	2.388	12.5	19.0
7 10	16 18.91	-37 24.5	1.910	2.758	14.1	19.0	7 10	16 15.82	-26 15.6	1.513	2.373	16.5	19.3
<b>150954</b>	2001 <i>TH</i> <sub>126</sub>		6 4.3 139°05'		1°7/ 3.8 17		<b>233810</b>	2008 <i>UR</i> <sub>151</sub>		6 4.3 241°28'		0°7/ 4.5 17	
5 1	17 17.02	-19 20.0	1.847	2.704	13.6	21.2	5 1	17 16.43	-24 23.0	2.015	2.866	12.9	21.0
5 11	17 11.32	-18 56.2	1.778	2.711	10.2	21.0	5 11	17 11.00	-24 27.9	1.930	2.859	9.7	20.7
5 21	17 3.47	-18 31.0	1.733	2.717	6.2	20.7	5 21	17 3.39	-24 28.8	1.869	2.852	6.0	20.5
5 31	16 54.23	-18 5.7	1.713	2.723	2.4	20.5	5 31	16 54.27	-24 25.1	1.834	2.845	2.0	20.2
6 10	16 44.64	-17 42.2	1.720	2.728	3.2	20.6	6 10	16 44.63	-24 17.0	1.826	2.837	2.4	20.2
6 20	16 35.74	-17 22.7	1.755	2.734	7.1	20.8	6 20	16 35.50	-24 5.8	1.846	2.829	6.4	20.5
6 30	16 28.44	-17 9.3	1.814	2.739	10.9	21.1	6 30	16 27.84	-23 53.8	1.891	2.821	10.2	20.7
7 10	16 23.38	-17 3.4	1.896	2.743	14.1	21.3	7 10	16 22.35	-23 43.6	1.959	2.813	13.5	20.9
<b>460837</b>	2014 <i>WM</i> <sub>81</sub>		6 4.3 357°57'		1°6/ 4.2 17		<b>106165</b>	2000 <i>TC</i> <sub>65</sub>		6 4.3 223°09'		0°5/ 4.2 18	
5 1	17 16.38	-17 36.1	1.207	2.088	17.7	20.3	5 1	17 13.76	-21 25.3	2.664	3.510	10.3	21.2
5 11	17 11.98	-17 57.7	1.142	2.086	13.3	20.1	5 11	17 8.48	-21 16.5	2.575	3.502	7.7	21.0
5 21	17 4.42	-18 23.8	1.096	2.084	8.3	19.8	5 21	17 1.61	-21 5.6	2.511	3.493	4.7	20.8
5 31	16 54.63	-18 53.7	1.072	2.083	2.9	19.4	5 31	16 53.69	-20 53.1	2.474	3.485	1.5	20.6
6 10	16 44.06	-19 26.6	1.073	2.083	3.8	19.5	6 10	16 45.41	-20 39.6	2.466	3.476	2.0	20.6
6 20	16 34.30	-20 1.8	1.096	2.084	9.2	19.8	6 20	16 37.51	-20 26.5	2.487	3.466	5.3	20.8
6 30	16 26.77	-20 39.3	1.142	2.085	14.2	20.1	6 30	16 30.65	-20 15.3	2.534	3.457	8.3	21.0
7 10	16 22.43	-21 19.5	1.207	2.087	18.5	20.4	7 10	16 25.38	-20 7.4	2.606	3.447	11.0	21.2
<b>6071</b>	<i>Sakitama</i>		6 4.3 182°31'		5°8/ 2.6 18		<b>441396</b>	2008 <i>FT</i> <sub>59</sub>		6 4.3 39°62'		0°5/ 4.5 15	
5 1	17 14.52	-6 37.6	2.167	3.007	12.5	16.9	5 1	17 14.34	-23 36.4	1.890	2.749	13.3	21.5
5 11	17 9.16	-5 58.5	2.095	3.007	9.9	16.7	5 11	17 9.34	-23 46.5	1.830	2.763	9.9	21.4
5 21	17 2.04	-5 27.0	2.047	3.007	7.4	16.6	5 21	17 2.26	-23 53.4	1.794	2.778	6.0	21.2
5 31	16 53.79	-5 6.2	2.025	3.007	5.8	16.5	5 31	16 53.88	-23 56.4	1.783	2.794	1.9	20.9
6 10	16 45.20	-4 58.4	2.029	3.006	6.4	16.5	6 10	16 45.21	-23 56.0	1.799	2.810	2.4	21.0
6 20	16 37.11	-5 4.5	2.060	3.006	8.6	16.6	6 20	16 37.22	-23 53.3	1.841	2.826	6.3	21.3
6 30	16 30.25	-5 24.4	2.116	3.004	11.3	16.8	6 30	16 30.79	-23 50.1	1.909	2.843	9.9	21.5
7 10	16 25.20	-5 56.6	2.193	3.003	13.8	17.0	7 10	16 26.52	-23 48.5	1.999	2.860	13.0	21.7
<b>473767</b>	2016 <i>EN</i> <sub>59</sub>		6 4.3 219°54'		1°8/ 3.9 16		<b>35282</b>	1996 <i>SC</i> <sub>7</sub>		6 4.3 222°98'		4°7/ 5.3 18	
5 1	17 19.16	-19 50.9	1.563	2.425	15.4	22.0	5 1	17 21.21	-34 36.8	2.201	3.023	13.0	19.3
5 11	17 13.45	-19 24.6	1.485	2.420	11.6	21.8	5 11	17 14.75	-35 23.5	2.111	3.014	10.3	19.1
5 21	17 5.04	-18 55.8	1.428	2.413	7.2	21.5	5 21	17 5.80	-36 1.5	2.045	3.004	7.5	18.9
5 31	16 54.77	-18 25.7	1.396	2.406	2.7	21.2	5 31	16 55.06	-36 26.7	2.005	2.994	5.1	18.7
6 10	16 43.89	-17 56.7	1.391	2.399	3.6	21.3	6 10	16 43.60	-36 36.9	1.992	2.984	5.1	18.7
6 20	16 33.70	-17 31.7	1.411	2.391	8.3	21.5	6 20	16 32.59	-36 32.2	2.007	2.973	7.4	18.8
6 30	16 25.39	-17 13.7	1.455	2.383	12.8	21.8	6 30	16 23.17	-36 15.5	2.047	2.961	10.4	19.0
7 10	16 19.77	-17 5.0	1.520	2.375	16.7	22.0	7 10	16 16.15	-35 51.5	2.110	2.949	13.2	19.1
<b>106199</b>	2000 <i>UR</i> <sub>18</sub>		6 4.3 227°11'		3°6/ 5.6 18		<b>478118</b>	2011 <i>UG</i> <sub>98</sub>		6 4.3 203°83'		2°2/ 5.2 18	

EPHEMERIDES

6 4.3

6 4.4

6 4.3							6 4.4						
2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>314518</b> 2005 YO <sub>1</sub> 6 4.3 230°35 4 <sup>2</sup> / 6.0 18							<b>328207</b> 2008 EU <sub>69</sub> 6 4.3 64°96 1°4/ 4.2 17						
5 1	17 17.19	-38 40.7	3.159	3.957	10.0	22.0	5 1	17 18.61	-17 52.1	1.510	2.375	15.7	20.4
5 11	17 11.08	-39 1.1	3.060	3.943	8.1	21.9	5 11	17 13.06	-18 13.1	1.444	2.379	11.8	20.2
5 21	17 3.23	-39 11.9	2.985	3.929	6.1	21.7	5 21	17 4.82	-18 37.0	1.399	2.384	7.2	19.9
5 31	16 54.21	-39 10.9	2.937	3.914	4.6	21.6	5 31	16 54.77	-19 3.2	1.379	2.389	2.5	19.7
6 10	16 44.77	-38 57.3	2.917	3.899	4.4	21.6	6 10	16 44.16	-19 30.9	1.384	2.394	3.2	19.7
6 20	16 35.69	-38 32.0	2.926	3.883	5.8	21.6	6 20	16 34.28	-19 59.7	1.416	2.400	7.9	20.0
6 30	16 27.73	-37 57.3	2.961	3.867	7.8	21.7	6 30	16 26.33	-20 30.1	1.472	2.405	12.3	20.3
7 10	16 21.47	-37 16.9	3.022	3.850	9.9	21.9	7 10	16 21.09	-21 2.7	1.548	2.410	16.0	20.5
<b>171734</b> 2000 WY <sub>76</sub> 6 4.3 147°07 0°3/ 4.5 17							<b>306299</b> 2011 SN <sub>53</sub> 6 4.4 149°29 3°9/ 2.7 18						
5 1	17 19.82	-25 13.5	1.665	2.520	14.9	20.5	5 1	17 12.62	-10 27.9	2.683	3.524	10.4	21.5
5 11	17 13.70	-24 50.1	1.596	2.527	11.2	20.3	5 11	17 7.45	-9 47.8	2.614	3.531	8.0	21.4
5 21	17 5.05	-24 19.6	1.549	2.533	6.9	20.1	5 21	17 0.90	-9 11.6	2.569	3.538	5.6	21.2
5 31	16 54.77	-23 42.2	1.527	2.538	2.2	19.8	5 31	16 53.50	-8 41.5	2.552	3.544	4.0	21.1
6 10	16 44.11	-23 0.0	1.532	2.543	2.7	19.8	6 10	16 45.89	-8 19.4	2.564	3.550	4.5	21.2
6 20	16 34.30	-22 16.5	1.564	2.548	7.3	20.1	6 20	16 38.70	-8 6.7	2.603	3.556	6.6	21.3
6 30	16 26.41	-21 36.0	1.621	2.552	11.5	20.4	6 30	16 32.53	-8 3.8	2.668	3.561	9.0	21.5
7 10	16 21.13	-21 2.2	1.700	2.556	15.1	20.6	7 10	16 27.82	-8 10.5	2.756	3.566	11.2	21.7
<b>7009</b> Hume 6 4.3 255°05 0°6/ 4.2 18							<b>346725</b> 2009 AU <sub>21</sub> 6 4.4 267°12 2°8/ 5.4 18						
5 1	17 19.20	-21 54.9	1.585	2.446	15.3	18.7	5 1	17 17.12	-31 41.6	2.028	2.868	13.3	20.8
5 11	17 13.68	-21 43.9	1.496	2.430	11.5	18.4	5 11	17 11.65	-31 31.8	1.937	2.855	10.3	20.6
5 21	17 5.34	-21 29.3	1.428	2.414	7.1	18.1	5 21	17 3.85	-31 11.1	1.868	2.842	6.8	20.3
5 31	16 54.96	-21 11.2	1.385	2.397	2.2	17.8	5 31	16 54.48	-30 38.3	1.825	2.829	3.6	20.1
6 10	16 43.75	-20 50.6	1.368	2.379	3.1	17.8	6 10	16 44.59	-29 53.9	1.810	2.816	3.4	20.1
6 20	16 33.08	-20 29.9	1.378	2.361	8.1	18.0	6 20	16 35.28	-29 0.8	1.821	2.803	6.7	20.2
6 30	16 24.23	-20 12.4	1.411	2.343	12.8	18.3	6 30	16 27.57	-28 3.5	1.859	2.789	10.3	20.4
7 10	16 18.15	-20 1.2	1.465	2.324	16.9	18.5	7 10	16 22.18	-27 7.2	1.919	2.776	13.6	20.6
<b>278412</b> 2007 RQ <sub>46</sub> 6 4.3 257°61 0°8/ 4.6 17							<b>120165</b> 2003 HE <sub>46</sub> 6 4.4 6°83 6°4/ 1.3 18						
5 1	17 15.63	-25 36.5	2.038	2.889	12.7	20.8	5 1	17 11.25	-10 16.4	1.759	2.622	13.9	18.7
5 11	17 10.38	-25 28.4	1.952	2.881	9.6	20.6	5 11	17 7.08	-8 41.3	1.696	2.623	10.9	18.5
5 21	17 2.99	-25 14.6	1.890	2.873	6.0	20.3	5 21	17 0.93	-7 10.0	1.655	2.624	8.0	18.4
5 31	16 54.16	-24 54.8	1.854	2.864	2.1	20.1	5 31	16 53.54	-5 48.3	1.640	2.627	6.4	18.3
6 10	16 44.85	-24 29.9	1.845	2.855	2.4	20.1	6 10	16 45.86	-4 41.7	1.650	2.629	7.4	18.3
6 20	16 36.06	-24 1.9	1.863	2.847	6.4	20.3	6 20	16 38.80	-3 53.9	1.686	2.633	10.0	18.5
6 30	16 28.73	-23 33.8	1.907	2.838	10.1	20.5	6 30	16 33.19	-3 26.4	1.744	2.637	13.0	18.7
7 10	16 23.55	-23 8.7	1.974	2.829	13.4	20.7	7 10	16 29.62	-3 18.5	1.822	2.642	15.8	18.9
<b>512715</b> 2016 UC <sub>14</sub> 6 4.3 192°90 3°9/ 5.7 18							<b>372682</b> 2009 WK <sub>155</sub> 6 4.4 339°60 4°6/ 2.8 17						
5 1	17 15.76	-34 50.0	2.497	3.321	11.6	21.8	5 1	17 14.51	-13 52.3	1.642	2.507	14.6	20.3
5 11	17 10.25	-35 10.6	2.416	3.320	9.1	21.6	5 11	17 9.71	-12 54.0	1.572	2.505	11.2	20.1
5 21	17 2.80	-35 21.7	2.359	3.320	6.5	21.5	5 21	17 2.65	-11 57.5	1.525	2.504	7.5	19.9
5 31	16 54.08	-35 21.4	2.327	3.319	4.3	21.3	5 31	16 54.10	-11 7.0	1.502	2.503	4.8	19.7
6 10	16 44.97	-35 9.2	2.324	3.319	4.1	21.3	6 10	16 45.13	-10 26.4	1.505	2.502	5.7	19.7
6 20	16 36.36	-34 46.2	2.347	3.318	6.2	21.4	6 20	16 36.83	-9 58.9	1.533	2.501	9.1	19.9
6 30	16 29.11	-34 15.4	2.397	3.318	8.8	21.6	6 30	16 30.16	-9 46.1	1.585	2.500	12.8	20.1
7 10	16 23.81	-33 40.6	2.471	3.317	11.3	21.8	7 10	16 25.81	-9 48.1	1.657	2.499	16.1	20.4
<b>148440</b> 2000 XY <sub>26</sub> 6 4.3 196°44 2°4/ 4.8 18							<b>14018</b> 1994 PM <sub>14</sub> 6 4.4 305°81 1°7/ 3.9 18						
5 1	17 17.15	-28 16.8	2.543	3.378	11.1	19.7	5 1	17 14.93	-19 52.9	1.400	2.275	16.1	18.9
5 11	17 11.23	-28 59.7	2.460	3.376	8.4	19.5	5 11	17 10.87	-19 35.5	1.308	2.250	12.2	18.6
5 21	17 3.41	-29 38.5	2.401	3.375	5.5	19.3	5 21	17 3.85	-19 15.9	1.237	2.224	7.6	18.2
5 31	16 54.29	-30 11.0	2.370	3.373	2.9	19.1	5 31	16 54.60	-18 55.2	1.188	2.199	2.8	17.9
6 10	16 44.68	-30 35.6	2.367	3.372	3.0	19.1	6 10	16 44.36	-18 35.5	1.165	2.175	3.8	17.9
6 20	16 35.45	-30 52.3	2.393	3.370	5.7	19.3	6 20	16 34.55	-18 19.3	1.165	2.150	9.1	18.1
6 30	16 27.43	-31 2.4	2.446	3.368	8.6	19.5	6 30	16 26.60	-18 9.7	1.188	2.126	14.1	18.3
7 10	16 21.25	-31 8.2	2.524	3.365	11.2	19.6	7 10	16 21.55	-18 9.3	1.230	2.103	18.6	18.5
<b>440759</b> 2006 ED <sub>20</sub> 6 4.3 200°81 15°4/ 8.2 18							<b>501875</b> 2014 WM <sub>350</sub> 6 4.4 294°50 2°6/ 4.2 17						
5 1	17 36.79	-53 12.5	1.355	2.126	22.0	21.3	5 1	17 18.80	-15 29.5	1.316	2.188	17.1	21.1
5 11	17 29.43	-54 47.7	1.288	2.124	19.7	21.1	5 11	17 14.09	-15 48.1	1.222	2.161	13.2	20.8
5 21	17 16.22	-55 55.2	1.237	2.121	17.5	20.9	5 21	17 6.05	-16 14.1	1.148	2.134	8.5	20.4
5 31	16 58.50	-56 20.6	1.204	2.117	15.9	20.8	5 31	16 55.36	-16 48.1	1.097	2.107	3.6	20.1
6 10	16 39.21	-55 55.0	1.191	2.113	15.4	20.8	6 10	16 43.30	-17 29.7	1.070	2.079	4.4	20.0
6 20	16 21.77	-54 39.9	1.198	2.108	16.4	20.8	6 20	16 31.48	-18 17.5	1.068	2.052	9.8	20.2
6 30	16 8.92	-52 47.0	1.225	2.103	18.4	20.9	6 30	16 21.58	-19 11.0	1.088	2.025	15.3	20.5
7 10	16 1.88	-50 33.6	1.269	2.097	20.9	21.1	7 10	16 14.86	-20 9.4	1.127	1.998	20.1	20.7
<b>308482</b> 2005 TC <sub>75</sub> 6 4.3 260°77 4°1/ 5.0 18							<b>426277</b> 2012 SD <sub>31</sub> 6 4.4 274°69 2°8/ 4.9 16						
5 1	17 18.33	-33 30.8	2.535	3.357	11.5	20.8	5 1	17 17.12	-29 13.7	1.946	2.792	13.5	21.4
5 11	17 12.37	-34 21.8	2.438	3.341	9.1	20.6	5 11	17 11.74	-29 39.4	1.863	2.786	10.3	21.1
5 21	17 4.27	-35 6.3	2.365	3.326	6.5	20.4	5 21	17 3.98	-29 58.5	1.803	2.780	6.8	20.9
5 31	16 54.61	-35 41.0	2.318	3.309	4.4	20.2	5 31	16 54.55	-30 8.5	1.769	2.774	3.5	20.7
6 10	16 44.25	-36 3.6	2.300	3.293	4.4	20.2	6 10	16 44.53	-30 8.6	1.761	2.768	3.5	20.7
6 20	16 34.18	-36 14.0	2.310	3.276	6.6	20.3	6 20	16 35.04	-29 59.6	1.781	2.761	6.9	20.9
6 30	16 25.36	-36 13.6	2.347	3.259	9.3	20.4	6 30	16 27.16	-29 44.3	1.825	2.755	10.5	21.1
7 10	16 18.54	-36 6.0	2.406	3.242	11.9	20.6	7 10	16 21.65	-29 26.6	1.892	2.749	13.8	21.3
<b>183182</b> Weinheim 6 4.3 216°57 2°8/ 5.3 18							<b>435814</b> 2008 WN <sub>16</sub> 6 4.4 211°47 0°4/ 4.5 17						
5 1	17 21.07	-31 32.0	2.326	3.152	12.2	21.4	5 1	17 16.45	-24 6.6	2.064	2.915	12.6	22.0
5 11	17 14.34	-31 38.5	2.231	3.142	9.5	21.2	5 11	17 10.94	-24 2.1	1.983	2.912	9.5	21.8
5 21	17 5.39	-31 36.2	2.160	3.130	6.4	20.9	5 21	17 3.33	-23 53.4	1.925	2.908	5.8	21.6
5 31	16 54.93	-31 23.0	2.116	3.118	3.5	20.7	5 31	16 54.32	-23 40.2	1.893	2.904	1.9	21.3
6 10	16 43.93	-30 58.7	2.100	3.104	3.4	20.7	6 10	16 44.86	-23 23.3	1.889	2.900	2.3	21.4
6 20	16 33.42	-30 25.0	2.113	3.090	6.3	20.9	6 20	16 35.94	-23 4.3	1.913	2.896	6.3	21.6
6 30	16 24.39	-29 45.3	2.153	3.075	9.6	21.0	6 30	16 28.48	-22 45.8	1.962	2.891	9.9	21.8
7 10	16 17.54	-29 4.1	2.217	3.059	12.6	21.2	7 10	16 23.11	-22 30.2	2.034	2.886	13.1	22.0

EPHEMERIDES

6 4.4

6 4.4

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
59634	1999 JS <sub>79</sub>	6 4.4 347°88	4°2/ 3.1 18				456946	2008 AF <sub>32</sub>	6 4.4 49°17 43°4/ 8.6 16				
5 1	17 13.66	-14 57.5	1.514	2.386	15.3	18.6	5 1	18 23.76	+66 15.1	0.458	1.095	66.9	22.1
5 11	17 9.30	-14 9.2	1.444	2.382	11.6	18.4	5 11	18 1.63	+64 38.2	0.425	1.105	66.0	21.9
5 21	17 2.50	-13 22.6	1.397	2.379	7.6	18.2	5 21	17 33.77	+61 38.9	0.385	1.118	64.3	21.6
5 31	16 54.08	-12 41.2	1.373	2.377	4.5	18.0	5 31	17 3.21	+56 19.1	0.341	1.132	61.3	21.3
6 10	16 45.18	-12 8.8	1.374	2.375	5.4	18.0	6 10	16 34.55	+47 23.9	0.299	1.148	56.7	20.9
6 20	16 36.97	-11 48.2	1.399	2.373	9.2	18.2	6 20	16 11.48	+33 44.3	0.267	1.165	50.6	20.5
6 30	16 30.50	-11 41.4	1.448	2.372	13.2	18.4	6 30	15 56.19	+15 47.1	0.256	1.182	45.0	20.3
7 10	16 26.50	-11 48.2	1.516	2.371	16.7	18.7	7 10	15 49.04	- 2 53.6	0.275	1.199	43.4	20.5
68101	2000 YK <sub>121</sub>	6 4.4 271°38	15°9/29.4 18				478339	2011 WU <sub>129</sub>	6 4.4 71°34 4°6/ 5.9 16				
5 1	17 16.34	+13 33.1	1.618	2.399	18.6	19.1	5 1	17 16.93	-36 9.5	2.292	3.115	12.5	21.0
5 11	17 11.31	+15 8.5	1.550	2.381	17.2	18.9	5 11	17 11.27	-36 37.2	2.223	3.124	9.9	20.9
5 21	17 3.79	+16 19.4	1.500	2.362	16.2	18.8	5 21	17 3.51	-36 54.2	2.176	3.133	7.2	20.7
5 31	16 54.52	+16 56.8	1.469	2.344	15.9	18.7	5 31	16 54.38	-36 57.7	2.154	3.142	5.0	20.6
6 10	16 44.58	+16 54.5	1.457	2.324	16.5	18.7	6 10	16 44.89	-36 47.3	2.160	3.151	4.8	20.6
6 20	16 35.13	+16 11.2	1.465	2.305	17.9	18.8	6 20	16 36.03	-36 24.2	2.192	3.160	6.7	20.7
6 30	16 27.28	+14 49.9	1.490	2.285	19.8	18.9	6 30	16 28.70	-35 51.9	2.251	3.170	9.3	20.9
7 10	16 21.86	+12 57.5	1.531	2.266	21.7	19.0	7 10	16 23.54	-35 14.7	2.332	3.179	11.9	21.1
255009	2005 TV <sub>25</sub>	6 4.4 252°33	0°1/ 4.4 18				433460	2013 VG <sub>1</sub>	6 4.4 211°27 7°7/ 6.7 17				
5 1	17 13.89	-23 16.5	2.425	3.273	11.1	21.1	5 1	17 23.87	-43 24.2	2.062	2.855	14.7	21.3
5 11	17 8.79	-23 15.9	2.337	3.265	8.3	20.9	5 11	17 17.12	-44 7.4	1.979	2.851	12.3	21.1
5 21	17 1.93	-23 12.3	2.274	3.257	5.1	20.7	5 21	17 7.42	-44 34.4	1.917	2.845	9.9	20.9
5 31	16 53.89	-23 5.7	2.237	3.249	1.6	20.4	5 31	16 55.66	-44 39.9	1.880	2.840	8.1	20.8
6 10	16 45.44	-22 56.6	2.229	3.240	2.0	20.4	6 10	16 43.21	-44 21.4	1.868	2.833	7.8	20.8
6 20	16 37.39	-22 46.0	2.249	3.232	5.5	20.7	6 20	16 31.52	-43 40.2	1.881	2.827	9.2	20.8
6 30	16 30.50	-22 35.8	2.296	3.223	8.8	20.8	6 30	16 21.91	-42 41.4	1.919	2.820	11.6	21.0
7 10	16 25.38	-22 27.8	2.366	3.214	11.7	21.0	7 10	16 15.23	-41 32.7	1.979	2.812	14.2	21.1
249180	2008 CE <sub>117</sub>	6 4.4 298°42	5°9/31.5 18				19170	1991 FH	6 4.4 54°06 7°0/ 1.1 18				
5 1	17 5.41	+ 7 27.9	4.344	5.118	7.8	20.1	5 1	17 12.08	- 5 19.2	2.097	2.940	12.8	17.8
5 11	17 1.78	+ 8 3.1	4.275	5.113	6.9	20.0	5 11	17 7.33	- 3 53.0	2.042	2.951	10.3	17.7
5 21	16 57.35	+ 8 29.3	4.229	5.108	6.2	20.0	5 21	17 0.95	- 2 34.6	2.011	2.963	8.1	17.5
5 31	16 52.42	+ 8 44.7	4.208	5.103	5.9	19.9	5 31	16 53.56	- 1 29.2	2.006	2.974	7.0	17.5
6 10	16 47.35	+ 8 48.0	4.213	5.098	6.1	19.9	6 10	16 45.99	- 0 40.5	2.026	2.986	7.7	17.6
6 20	16 42.48	+ 8 38.9	4.242	5.094	6.8	20.0	6 20	16 38.99	- 0 10.7	2.073	2.998	9.7	17.7
6 30	16 38.14	+ 8 17.9	4.295	5.089	7.8	20.1	6 30	16 33.25	+ 0 0.1	2.142	3.010	12.0	17.9
7 10	16 34.63	+ 7 46.1	4.370	5.084	8.8	20.1	7 10	16 29.25	- 0 6.6	2.232	3.022	14.1	18.0
46106	2001 FA <sub>16</sub>	6 4.4 247°84	5°3/ 2.8 18				421175	2013 RK <sub>54</sub>	6 4.4 279°48 1°2/ 4.7 18				
5 1	17 16.10	-12 3.9	1.634	2.495	14.9	19.5	5 1	17 17.53	-26 47.5	1.615	2.474	15.1	20.8
5 11	17 11.00	-11 11.6	1.558	2.487	11.5	19.2	5 11	17 12.47	-26 35.1	1.526	2.458	11.5	20.6
5 21	17 3.52	-10 22.7	1.504	2.480	8.0	19.0	5 21	17 4.64	-26 14.2	1.458	2.442	7.3	20.3
5 31	16 54.42	- 9 41.5	1.474	2.472	5.4	18.9	5 31	16 54.83	-25 43.9	1.415	2.425	2.7	20.0
6 10	16 44.78	- 9 11.7	1.471	2.464	6.3	18.9	6 10	16 44.27	-25 5.5	1.398	2.408	2.9	19.9
6 20	16 35.74	- 8 56.0	1.492	2.456	9.6	19.1	6 20	16 34.31	-24 22.0	1.406	2.392	7.7	20.2
6 30	16 28.35	- 8 55.7	1.537	2.448	13.4	19.3	6 30	16 26.20	-23 38.1	1.439	2.375	12.3	20.4
7 10	16 23.34	- 9 10.3	1.602	2.439	16.8	19.5	7 10	16 20.82	-22 58.8	1.492	2.358	16.3	20.6
394236	2006 SS <sub>397</sub>	6 4.4 265°79	3°7/ 2.8 16				372967	2011 BV <sub>124</sub>	6 4.4 148°31 2°1/ 3.8 17				
5 1	17 12.83	-13 51.4	2.180	3.033	11.9	21.4	5 1	17 17.24	-18 5.0	1.911	2.766	13.3	21.7
5 11	17 8.02	-13 1.7	2.100	3.028	9.1	21.2	5 11	17 11.48	-17 41.3	1.841	2.772	10.0	21.5
5 21	17 1.46	-12 13.3	2.045	3.022	6.1	21.0	5 21	17 3.62	-17 17.2	1.795	2.778	6.2	21.3
5 31	16 53.74	-11 29.2	2.016	3.016	3.9	20.9	5 31	16 54.43	-16 54.2	1.775	2.783	2.6	21.0
6 10	16 45.68	-10 52.2	2.014	3.010	4.6	20.9	6 10	16 44.88	-16 34.2	1.782	2.788	3.4	21.1
6 20	16 38.09	-10 24.7	2.040	3.004	7.4	21.1	6 20	16 35.99	-16 19.0	1.816	2.793	7.1	21.3
6 30	16 31.71	-10 8.3	2.090	2.998	10.5	21.3	6 30	16 28.63	-16 10.3	1.876	2.798	10.7	21.6
7 10	16 27.12	-10 3.3	2.163	2.992	13.3	21.4	7 10	16 23.43	-16 9.3	1.957	2.801	13.9	21.8
504747	2009 WU <sub>31</sub>	6 4.4 260°18	1°7/ 3.6 17				19712	1999 TL <sub>220</sub>	6 4.4 355°66 1°9/ 5.0 18				
5 1	17 16.77	-21 40.9	1.822	2.680	13.7	21.6	5 1	17 13.93	-28 36.0	2.020	2.871	12.9	17.4
5 11	17 11.38	-20 40.7	1.734	2.667	10.3	21.4	5 11	17 9.16	-28 32.3	1.943	2.869	9.8	17.2
5 21	17 3.70	-19 33.8	1.670	2.655	6.4	21.1	5 21	17 2.28	-28 20.9	1.888	2.868	6.3	17.0
5 31	16 54.47	-18 22.5	1.632	2.642	2.4	20.8	5 31	16 54.03	-28 1.2	1.859	2.867	2.8	16.7
6 10	16 44.74	-17 11.1	1.621	2.629	3.4	20.9	6 10	16 45.38	-27 33.9	1.857	2.867	2.8	16.7
6 20	16 35.62	-16 4.0	1.638	2.616	7.7	21.1	6 20	16 37.32	-27 1.3	1.882	2.866	6.3	16.9
6 30	16 28.09	-15 6.1	1.680	2.602	11.7	21.3	6 30	16 30.76	-26 26.6	1.932	2.866	9.8	17.2
7 10	16 22.87	-14 20.3	1.743	2.589	15.3	21.5	7 10	16 26.33	-25 53.5	2.005	2.867	12.9	17.4
69426	1996 BW <sub>6</sub>	6 4.4 123°59	0°0/ 4.1 18				176574	2002 BU <sub>15</sub>	6 4.4 25°34 5°4/ 2.9 17				
5 1	17 16.14	-22 24.3	1.912	2.769	13.3	19.8	5 1	17 11.86	- 8 57.6	1.870	2.727	13.5	19.3
5 11	17 10.80	-22 26.8	1.838	2.770	9.9	19.6	5 11	17 7.44	- 8 22.1	1.809	2.734	10.5	19.1
5 21	17 3.29	-22 26.7	1.787	2.772	6.1	19.3	5 21	17 1.15	- 7 54.0	1.771	2.741	7.5	19.0
5 31	16 54.33	-22 23.9	1.762	2.773	1.9	19.1	5 31	16 53.66	- 7 36.4	1.758	2.749	5.5	18.9
6 10	16 44.93	-22 18.7	1.764	2.775	2.4	19.1	6 10	16 45.88	- 7 31.4	1.770	2.758	6.1	18.9
6 20	16 36.13	-22 12.5	1.793	2.776	6.6	19.4	6 20	16 38.69	- 7 39.9	1.808	2.767	8.6	19.1
6 30	16 28.86	-22 7.2	1.847	2.778	10.4	19.6	6 30	16 32.89	- 8 1.5	1.870	2.776	11.6	19.3
7 10	16 23.81	-22 4.8	1.923	2.779	13.6	19.8	7 10	16 29.03	- 8 34.7	1.952	2.786	14.3	19.5
443120	2014 AU <sub>32</sub>	6 4.4 356°03	17°1/11.6 17				299061	2005 CE <sub>31</sub>	6 4.4 155°46 0°9/ 4.9 18				
5 1	17 29.48	-54 47.8	1.021	1.821	25.9	20.1	5 1	17 7.18	-27 34.8	4.586	5.419	6.5	21.4
5 11	17 24.61	-55 49.3	0.963	1.820	23.3	19.9	5 11	17 3.13	-27 37.3	4.502	5.420	4.9	21.3
5 21	17 13.38	-56 11.8	0.917	1.818	20.6	19.7	5 21	16 58.20	-27 36.6	4.444	5.421	3.1	21.1
5 31	16 57.63	-55 40.3	0.887	1.818	18.2	19.6	5 31	16 52.72	-27 32.8	4.415	5.422	1.4	21.0
6 10	16 40.88	-54 7.5	0.873	1.817	17.1	19.5	6 10	16 47.09	-27 25.9	4.415	5.423	1.4	21.0
6 20	16 26.77	-51 39.2	0.878	1.817	17.7	19.5	6 20	16 41.67	-27 16.6	4.444	5.424	3.1	21.1
6 30	16 17.82	-48 33.3	0.902	1.818	19.8	19.7	6 30	16 36.85	-27 5.8	4.502	5.425	4.9	21.3
7 10	16 14.74	-45 12.8	0.943	1.819	22.7	19.9	7 10	16 32.92	-26 54.6	4.585	5.426	6.6	21.4

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>292552</b>	2006 $TF_{63}$	6 4.4 231°50		4.8/ 2.5		17	<b>309006</b>	2006 $UC_{77}$	6 4.4 180°21		2.8/ 5.4		18
5 1	17 12.88	- 9 8.0	2.379	3.222	11.4	21.1	5 1	17 16.69	-32 29.7	2.930	3.750	10.1	22.4
5 11	17 7.94	- 8 25.1	2.298	3.215	8.9	20.9	5 11	17 10.69	-32 46.4	2.846	3.751	7.9	22.2
5 21	17 1.38	- 7 47.0	2.242	3.208	6.5	20.8	5 21	17 3.03	-32 55.9	2.786	3.752	5.4	22.0
5 31	16 53.75	- 7 16.6	2.212	3.200	4.9	20.7	5 31	16 54.30	-32 56.7	2.755	3.752	3.2	21.9
6 10	16 45.79	- 6 56.2	2.209	3.192	5.5	20.7	6 10	16 45.23	-32 48.6	2.752	3.752	3.1	21.9
6 20	16 38.22	- 6 47.3	2.233	3.184	7.7	20.8	6 20	16 36.58	-32 32.4	2.778	3.751	5.2	22.0
6 30	16 31.74	- 6 50.5	2.283	3.176	10.4	21.0	6 30	16 29.05	-32 10.3	2.831	3.750	7.7	22.2
7 10	16 26.90	- 7 5.3	2.355	3.168	12.8	21.1	7 10	16 23.20	-31 45.1	2.909	3.748	10.0	22.3
<b>208406</b>	2001 $SD_{228}$	6 4.4 229°72		2°2/ 3.7		18	<b>254908</b>	2005 $SP_{88}$	6 4.4 242°84		3°1/ 3.1		17
5 1	17 13.74	-17 10.2	2.237	3.091	11.7	20.8	5 1	17 12.58	-14 45.2	2.386	3.237	11.1	20.4
5 11	17 8.71	-16 45.8	2.157	3.087	8.8	20.6	5 11	17 7.74	-14 3.7	2.305	3.231	8.4	20.2
5 21	17 1.90	-16 21.7	2.101	3.083	5.5	20.4	5 21	17 1.27	-13 23.2	2.248	3.226	5.5	20.1
5 31	16 53.93	-15 59.2	2.071	3.079	2.6	20.2	5 31	16 53.76	-12 46.0	2.218	3.220	3.3	19.9
6 10	16 45.59	-15 40.1	2.069	3.074	3.2	20.2	6 10	16 45.92	-12 14.3	2.216	3.215	4.0	19.9
6 20	16 37.71	-15 25.9	2.095	3.070	6.5	20.4	6 20	16 38.51	-11 50.1	2.242	3.209	6.7	20.1
6 30	16 31.06	-15 18.0	2.146	3.066	9.7	20.6	6 30	16 32.22	-11 35.0	2.294	3.203	9.6	20.3
7 10	16 26.20	-15 17.5	2.221	3.061	12.6	20.8	7 10	16 27.58	-11 29.4	2.368	3.197	12.3	20.4
<b>140548</b>	2001 $TB_{197}$	6 4.4 187°35		7°5/ 1.6		17	<b>171489</b>	1996 $TB_{27}$	6 4.4 138°86		2°9/ 4.9		18
5 1	17 15.33	- 3 10.3	2.086	2.918	13.2	20.3	5 1	17 21.54	-28 51.4	1.653	2.502	15.3	20.8
5 11	17 9.87	- 2 3.9	2.018	2.918	10.8	20.1	5 11	17 15.28	-29 16.1	1.585	2.509	11.7	20.6
5 21	17 2.59	- 1 6.8	1.972	2.917	8.7	20.0	5 21	17 6.24	-29 33.0	1.538	2.516	7.6	20.4
5 31	16 54.14	- 0 23.7	1.951	2.916	7.5	19.9	5 31	16 55.35	-29 39.3	1.516	2.522	3.7	20.2
6 10	16 45.35	+ 0 2.0	1.957	2.914	8.2	20.0	6 10	16 43.91	-29 34.1	1.521	2.528	3.7	20.2
6 20	16 37.07	+ 0 8.8	1.988	2.912	10.1	20.1	6 20	16 33.30	-29 19.0	1.552	2.534	7.6	20.4
6 30	16 30.08	- 0 3.2	2.043	2.909	12.6	20.2	6 30	16 24.71	-28 58.0	1.608	2.539	11.6	20.7
7 10	16 24.95	- 0 31.9	2.118	2.906	14.9	20.4	7 10	16 18.95	-28 35.7	1.685	2.544	15.1	20.9
<b>137649</b>	1999 $WJ_{20}$	6 4.4 208°53		1°6/ 4.8		18	<b>228321</b>	2000 $QQ_{130}$	6 4.4 300°66		1°2/ 4.7		17
5 1	17 20.25	-27 3.5	1.976	2.819	13.4	21.7	5 1	17 16.12	-25 45.1	1.605	2.469	15.0	20.7
5 11	17 13.99	-27 8.6	1.890	2.813	10.2	21.5	5 11	17 11.43	-25 44.9	1.520	2.454	11.4	20.5
5 21	17 5.33	-27 7.3	1.828	2.807	6.5	21.2	5 21	17 4.03	-25 38.4	1.456	2.440	7.2	20.2
5 31	16 55.04	-26 58.2	1.791	2.800	2.6	21.0	5 31	16 54.71	-25 24.7	1.416	2.427	2.6	19.9
6 10	16 44.18	-26 41.4	1.783	2.792	2.8	21.0	6 10	16 44.65	-25 4.2	1.402	2.413	2.9	19.8
6 20	16 33.89	-26 18.5	1.802	2.784	6.7	21.2	6 20	16 35.17	-24 39.0	1.413	2.399	7.6	20.1
6 30	16 25.22	-25 52.9	1.847	2.775	10.5	21.4	6 30	16 27.49	-24 13.0	1.448	2.386	12.1	20.3
7 10	16 18.92	-25 28.2	1.915	2.765	13.9	21.6	7 10	16 22.49	-23 50.0	1.504	2.373	16.0	20.5
<b>467059</b>	2016 $DR_{12}$	6 4.4 96°02		3°4/ 3.6		17	<b>160198</b>	2001 $YH_{151}$	6 4.4 281°54		5°5/ 5.7		18
5 1	17 19.10	-16 9.6	1.441	2.307	16.2	21.7	5 1	17 20.55	-34 21.9	1.421	2.271	17.3	20.0
5 11	17 13.31	-15 38.5	1.385	2.320	12.2	21.5	5 11	17 15.47	-34 45.4	1.334	2.254	13.8	19.7
5 21	17 4.91	-15 9.3	1.350	2.334	7.7	21.2	5 21	17 6.88	-34 54.8	1.266	2.236	9.8	19.4
5 31	16 54.87	-14 44.6	1.340	2.347	3.9	21.0	5 31	16 55.67	-34 45.3	1.221	2.218	6.3	19.1
6 10	16 44.51	-14 26.7	1.355	2.360	4.7	21.1	6 10	16 43.40	-34 14.6	1.199	2.200	6.0	19.1
6 20	16 35.08	-14 17.8	1.396	2.373	8.8	21.4	6 20	16 31.83	-33 25.1	1.202	2.183	9.5	19.2
6 30	16 27.67	-14 19.1	1.459	2.385	12.9	21.7	6 30	16 22.62	-32 23.2	1.228	2.165	13.9	19.4
7 10	16 22.96	-14 30.8	1.543	2.397	16.5	21.9	7 10	16 16.88	-31 17.9	1.274	2.147	18.1	19.6
<b>276562</b>	2003 $SP_{194}$	6 4.4 341°37		4°4/ 5.4		17	<b>119468</b>	2001 $UH_8$	6 4.4 54°82		0°4/ 4.3		18
5 1	17 12.89	-30 50.7	1.070	1.954	19.2	19.5	5 1	17 19.20	-21 5.1	1.201	2.078	18.0	19.0
5 11	17 10.17	-31 8.1	0.999	1.941	15.0	19.2	5 11	17 14.00	-21 14.4	1.147	2.089	13.5	18.8
5 21	17 3.78	-31 12.1	0.946	1.930	10.1	18.9	5 21	17 5.63	-21 22.5	1.112	2.100	8.2	18.5
5 31	16 54.70	-30 59.0	0.913	1.920	5.5	18.6	5 31	16 55.17	-21 28.6	1.100	2.112	2.6	18.2
6 10	16 44.61	-30 28.2	0.902	1.911	5.2	18.5	6 10	16 44.20	-21 32.9	1.113	2.124	3.3	18.3
6 20	16 35.44	-29 43.1	0.913	1.903	9.9	18.7	6 20	16 34.31	-21 36.7	1.149	2.136	8.8	18.6
6 30	16 28.91	-28 50.8	0.943	1.897	15.1	19.0	6 30	16 26.83	-21 42.4	1.207	2.149	13.7	19.0
7 10	16 26.08	-27 59.5	0.991	1.892	19.8	19.3	7 10	16 22.57	-21 52.2	1.284	2.161	17.8	19.2
<b>297706</b>	2001 $VJ_{91}$	6 4.4 187°73		3°4/ 3.4		18	<b>512557</b>	2016 $ST_{19}$	6 4.4 211°79		4°5/ 2.6		17
5 1	17 13.85	-10 40.6	2.750	3.587	10.2	21.4	5 1	17 12.80	-10 19.1	2.372	3.218	11.4	21.5
5 11	17 8.45	-10 28.2	2.670	3.586	7.9	21.3	5 11	17 7.87	- 9 31.9	2.295	3.215	8.8	21.3
5 21	17 1.61	-10 20.1	2.615	3.585	5.4	21.1	5 21	17 1.34	- 8 48.6	2.243	3.211	6.3	21.2
5 31	16 53.84	-10 17.9	2.588	3.584	3.6	21.0	5 31	16 53.78	- 8 12.1	2.217	3.208	4.6	21.1
6 10	16 45.78	-10 22.5	2.589	3.582	4.0	21.0	6 10	16 45.92	- 7 45.0	2.218	3.204	5.2	21.1
6 20	16 38.07	-10 34.4	2.619	3.579	6.2	21.1	6 20	16 38.48	- 7 28.8	2.247	3.200	7.5	21.2
6 30	16 31.34	-10 53.6	2.675	3.576	8.7	21.3	6 30	16 32.16	- 7 24.5	2.301	3.196	10.2	21.4
7 10	16 26.07	-11 19.8	2.755	3.573	11.0	21.5	7 10	16 27.46	- 7 31.8	2.377	3.192	12.7	21.6
<b>342844</b>	2008 $YA_4$	6 4.4 222°06		3°0/ 5.2		17	<b>295240</b>	2008 $GO_{24}$	6 4.4 279°24		8°1/31.2		18
5 1	17 17.56	-30 55.3	2.154	2.991	12.7	21.6	5 1	17 11.66	+ 0 37.3	2.409	3.228	12.1	20.7
5 11	17 11.89	-31 14.1	2.070	2.987	9.8	21.4	5 11	17 7.10	+ 1 50.9	2.324	3.208	10.3	20.5
5 21	17 4.01	-31 25.1	2.010	2.982	6.6	21.2	5 21	17 0.94	+ 2 55.1	2.262	3.187	8.8	20.4
5 31	16 54.64	-31 26.1	1.975	2.978	3.6	21.0	5 31	16 53.68	+ 3 45.2	2.225	3.167	8.1	20.3
6 10	16 44.75	-31 16.5	1.968	2.973	3.5	21.0	6 10	16 46.02	+ 4 17.4	2.213	3.146	8.7	20.3
6 20	16 35.40	-30 57.7	1.989	2.967	6.5	21.1	6 20	16 38.66	+ 4 29.8	2.227	3.124	10.4	20.4
6 30	16 27.54	-30 32.6	2.035	2.962	9.8	21.3	6 30	16 32.30	+ 4 22.2	2.263	3.103	12.4	20.5
7 10	16 21.89	-30 5.0	2.104	2.956	12.8	21.5	7 10	16 27.51	+ 3 56.3	2.319	3.082	14.4	20.6
<b>441697</b>	2008 $YF_{148}$	6 4.4 19°41		10°7/ 9.8		18	<b>16533</b>	1991 $LA_1$	6 4.4 13°32		10°0/ 3.2		18
5 1	17 28.19	-47 56.2	0.955	1.789	25.0	20.3	5 1	17 14.03	- 0 25.8	1.401	2.251	17.5	17.3
5 11	17 22.39	-47 23.7	0.893	1.790	21.1	20.1	5 11	17 9.63	+ 0 13.0	1.345	2.254	14.5	17.1
5 21	17 11.29	-46 7.4	0.846	1.792	16.7	19.8	5 21	17 2.76	+ 0 33.2	1.308	2.257	11.8	17.0
5 31	16 56.89	-43 58.5	0.816	1.795	12.6	19.6	5 31	16 54.27	+ 0 29.5	1.292	2.261	10.1	16.9
6 10	16 42.20	-40 59.3	0.808	1.798	10.7	19.5	6 10	16 45.33	- 0 0.7	1.300	2.265	10.5	16.9
6 20	16 29.98	-37 25.4	0.821	1.801	12.7	19.6	6 20	16 37.13	- 0 56.2	1.329	2.270	12.7	17.0
6 30	16 22.05	-33 4											

EPHEMERIDES

6 4.4

6 4.4

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>237466</b>	2000 AZ <sub>135</sub>		6 4.4 145°02	2.1/ 4.9	18		<b>244909</b>	2003 WN <sub>131</sub>		6 4.4 112°16	1.3/ 4.8	17	
5 1	17 23.20	-27 57.5	1.573	2.423	15.9	21.1	5 1	17 17.43	-26 12.5	2.157	3.002	12.4	21.2
5 11	17 16.52	-28 2.3	1.506	2.432	12.1	20.8	5 11	17 11.55	-26 23.9	2.089	3.014	9.3	21.0
5 21	17 6.98	-27 58.5	1.461	2.441	7.7	20.6	5 21	17 3.68	-26 30.2	2.046	3.026	5.8	20.8
5 31	16 55.58	-27 44.2	1.441	2.449	3.2	20.4	5 31	16 54.54	-26 30.6	2.028	3.037	2.3	20.6
6 10	16 43.70	-27 19.8	1.447	2.457	3.3	20.4	6 10	16 45.07	-26 25.1	2.039	3.049	2.4	20.6
6 20	16 32.77	-26 48.3	1.480	2.464	7.7	20.7	6 20	16 36.23	-26 15.0	2.078	3.060	5.9	20.9
6 30	16 24.01	-26 14.1	1.538	2.470	11.9	20.9	6 30	16 28.86	-26 2.6	2.142	3.071	9.3	21.1
7 10	16 18.17	-25 42.2	1.616	2.475	15.6	21.2	7 10	16 23.56	-25 50.5	2.230	3.081	12.2	21.3
<b>290151</b>	2005 QW <sub>178</sub>		6 4.4 258°60	4.2/ 5.9	18		<b>95345</b>	2002 CZ <sub>133</sub>		6 4.4 90°63	6.9/ 6.4	18	
5 1	17 16.96	-36 14.6	2.423	3.243	12.0	20.7	5 1	17 22.05	-40 3.3	1.852	2.667	15.3	19.1
5 11	17 11.35	-36 25.7	2.331	3.231	9.6	20.5	5 11	17 15.73	-40 48.3	1.787	2.678	12.5	18.9
5 21	17 3.66	-36 25.8	2.261	3.219	6.9	20.3	5 21	17 6.56	-41 17.8	1.743	2.688	9.6	18.8
5 31	16 54.55	-36 12.6	2.217	3.207	4.7	20.2	5 31	16 55.48	-41 27.1	1.723	2.698	7.4	18.7
6 10	16 44.96	-35 45.7	2.201	3.195	4.5	20.1	6 10	16 43.89	-41 14.4	1.729	2.708	7.1	18.7
6 20	16 35.87	-35 6.6	2.212	3.182	6.5	20.2	6 20	16 33.21	-40 41.6	1.760	2.718	8.9	18.8
6 30	16 28.19	-34 19.0	2.249	3.170	9.3	20.4	6 30	16 24.67	-39 54.2	1.815	2.728	11.5	19.0
7 10	16 22.60	-33 27.5	2.310	3.157	11.9	20.5	7 10	16 19.04	-38 59.0	1.892	2.738	14.2	19.2
<b>106282</b>	2000 UP <sub>74</sub>		6 4.4 178°73	0.7/ 4.2	18		<b>474756</b>	2005 QR <sub>36</sub>		6 4.4 262°72	3.0/ 3.1	17	
5 1	17 14.14	-20 4.6	2.714	3.558	10.2	20.2	5 1	17 13.88	-13 5.1	2.893	3.731	9.8	22.4
5 11	17 8.76	-20 4.1	2.633	3.559	7.6	20.0	5 11	17 8.59	-12 35.6	2.784	3.703	7.5	22.2
5 21	17 1.85	-20 2.9	2.578	3.560	4.6	19.8	5 21	17 1.81	-12 7.7	2.701	3.674	5.0	22.0
5 31	16 53.95	-20 1.1	2.550	3.560	1.5	19.6	5 31	16 53.99	-11 43.1	2.645	3.645	3.2	21.8
6 10	16 45.74	-19 59.3	2.551	3.560	2.0	19.6	6 10	16 45.73	-11 23.4	2.619	3.614	3.7	21.8
6 20	16 37.93	-19 58.1	2.581	3.560	5.1	19.8	6 20	16 37.68	-11 10.2	2.622	3.584	6.1	21.9
6 30	16 31.15	-19 58.7	2.638	3.560	8.0	20.0	6 30	16 30.49	-11 4.4	2.651	3.552	8.8	22.1
7 10	16 25.92	-20 2.2	2.719	3.559	10.6	20.2	7 10	16 24.69	-11 6.7	2.705	3.520	11.3	22.2
<b>282353</b>	2003 FS <sub>91</sub>		6 4.4 103°64	2.3/ 3.9	18		<b>137623</b>	1999 VB <sub>211</sub>		6 4.4 186°01	3.4/ 3.4	17	
5 1	17 18.73	-16 21.3	1.884	2.736	13.6	20.6	5 1	17 18.31	-13 46.9	2.154	2.998	12.4	21.4
5 11	17 12.51	-16 12.7	1.827	2.756	10.2	20.5	5 11	17 12.14	-13 19.4	2.076	2.998	9.5	21.2
5 21	17 4.22	-16 6.1	1.793	2.775	6.4	20.3	5 21	17 4.03	-12 54.4	2.021	2.998	6.2	21.0
5 31	16 54.68	-16 2.3	1.786	2.794	2.9	20.1	5 31	16 54.67	-12 33.8	1.994	2.996	3.6	20.8
6 10	16 44.89	-16 2.4	1.806	2.812	3.5	20.2	6 10	16 44.92	-12 19.5	1.995	2.994	4.3	20.9
6 20	16 35.85	-16 7.2	1.854	2.830	7.0	20.4	6 20	16 35.68	-12 12.8	2.024	2.991	7.3	21.0
6 30	16 28.42	-16 17.4	1.927	2.848	10.6	20.7	6 30	16 27.78	-12 14.8	2.079	2.987	10.5	21.2
7 10	16 23.18	-16 33.5	2.022	2.865	13.6	20.9	7 10	16 21.83	-12 25.7	2.156	2.982	13.4	21.4
<b>30056</b>	2000 EP <sub>47</sub>		6 4.4 318°02	5.9/ 2.8	18		<b>510795</b>	2013 AO <sub>144</sub>		6 4.4 156°18	5.4/ 2.2	18	
5 1	17 12.18	-14 16.2	1.086	1.978	18.4	17.7	5 1	17 12.70	-3 10.1	2.951	3.770	10.1	23.1
5 11	17 9.36	-13 18.3	1.005	1.953	14.3	17.4	5 11	17 7.45	-2 32.2	2.885	3.778	8.2	23.0
5 21	17 3.24	-12 21.0	0.942	1.928	9.8	17.0	5 21	17 0.94	-2 1.9	2.843	3.786	6.4	22.9
5 31	16 54.59	-11 30.0	0.901	1.905	6.2	16.8	5 31	16 53.67	-1 41.6	2.828	3.793	5.5	22.8
6 10	16 44.83	-10 51.6	0.880	1.882	7.5	16.7	6 10	16 46.20	-1 33.0	2.841	3.799	5.9	22.8
6 20	16 35.59	-10 31.1	0.881	1.860	12.3	16.9	6 20	16 39.11	-1 36.8	2.881	3.805	7.3	22.9
6 30	16 28.51	-10 31.7	0.901	1.839	17.5	17.1	6 30	16 32.93	-1 52.5	2.947	3.810	9.2	23.1
7 10	16 24.74	-10 53.1	0.937	1.819	22.3	17.3	7 10	16 28.06	-2 19.0	3.035	3.815	11.0	23.2
<b>394273</b>	2006 US <sub>135</sub>		6 4.4 153°29	1.8/ 4.9	17		<b>304599</b>	2006 VA <sub>70</sub>		6 4.4 252°96	0.1/ 4.4	18	
5 1	17 16.31	-27 54.2	2.625	3.460	10.7	22.4	5 1	17 14.85	-22 7.5	2.407	3.254	11.2	21.5
5 11	17 10.50	-28 13.0	2.548	3.466	8.1	22.2	5 11	17 9.61	-22 9.1	2.314	3.241	8.4	21.3
5 21	17 2.96	-28 26.9	2.495	3.471	5.2	22.0	5 21	17 2.54	-22 8.6	2.245	3.228	5.1	21.0
5 31	16 54.31	-28 34.6	2.470	3.477	2.4	21.8	5 31	16 54.23	-22 5.9	2.204	3.215	1.6	20.8
6 10	16 45.32	-28 35.8	2.474	3.482	2.5	21.8	6 10	16 45.45	-22 1.5	2.190	3.201	2.1	20.8
6 20	16 36.78	-28 31.2	2.507	3.486	5.2	22.0	6 20	16 37.02	-21 56.1	2.205	3.187	5.7	21.0
6 30	16 29.44	-28 22.8	2.566	3.490	8.1	22.2	6 30	16 29.75	-21 51.5	2.247	3.173	9.0	21.2
7 10	16 23.84	-28 12.7	2.650	3.494	10.7	22.4	7 10	16 24.25	-21 49.2	2.312	3.159	12.0	21.3
<b>292377</b>	2006 ST <sub>257</sub>		6 4.4 310°38	2.3/ 4.8	17		<b>181564</b>	2006 UJ <sub>331</sub>		6 4.4 120°66	6.3/ 1.8	18	
5 1	17 16.03	-26 50.9	1.318	2.191	17.0	20.6	5 1	17 12.52	-2 53.3	2.571	3.397	11.2	20.9
5 11	17 12.09	-27 6.9	1.230	2.169	13.1	20.3	5 11	17 7.44	-1 58.2	2.513	3.409	9.1	20.8
5 21	17 4.85	-27 16.2	1.161	2.147	8.4	20.0	5 21	17 0.98	-1 11.8	2.479	3.421	7.3	20.7
5 31	16 55.09	-27 16.3	1.115	2.125	3.5	19.6	5 31	16 53.68	-0 37.3	2.471	3.432	6.3	20.6
6 10	16 44.20	-27 6.2	1.093	2.104	3.8	19.6	6 10	16 46.20	-0 17.0	2.490	3.444	6.8	20.7
6 20	16 33.83	-26 47.4	1.095	2.083	9.0	19.8	6 20	16 39.18	-0 11.8	2.535	3.455	8.4	20.8
6 30	16 25.60	-26 24.1	1.118	2.063	14.2	20.0	6 30	16 33.20	-0 21.3	2.604	3.465	10.3	20.9
7 10	16 20.64	-26 1.7	1.160	2.044	18.8	20.2	7 10	16 28.70	-0 44.0	2.695	3.476	12.2	21.1
<b>198503</b>	2004 XC <sub>77</sub>		6 4.4 166°60	0.0/ 4.2	18		<b>472916</b>	2015 GT <sub>3</sub>		6 4.4 12°74	0.5/ 4.5	17	
5 1	17 17.04	-23 26.0	2.298	3.143	11.7	21.5	5 1	17 16.11	-24 21.4	1.796	2.654	13.9	21.6
5 11	17 11.14	-23 16.1	2.221	3.147	8.8	21.3	5 11	17 10.98	-24 17.7	1.722	2.655	10.4	21.4
5 21	17 3.39	-23 2.6	2.168	3.151	5.3	21.1	5 21	17 3.53	-24 9.3	1.671	2.655	6.4	21.1
5 31	16 54.44	-22 45.3	2.143	3.154	1.7	20.9	5 31	16 54.54	-23 55.9	1.645	2.656	2.1	20.8
6 10	16 45.17	-22 25.4	2.146	3.157	2.1	20.9	6 10	16 45.09	-23 38.4	1.645	2.656	2.5	20.9
6 20	16 36.44	-22 4.5	2.178	3.159	5.8	21.1	6 20	16 36.29	-23 18.6	1.672	2.657	6.8	21.1
6 30	16 29.04	-21 44.8	2.236	3.161	9.1	21.4	6 30	16 29.14	-22 59.5	1.724	2.658	10.8	21.4
7 10	16 23.55	-21 28.6	2.317	3.162	12.0	21.5	7 10	16 24.33	-22 44.0	1.797	2.658	14.2	21.6
<b>443099</b>	2013 HR <sub>150</sub>		6 4.4 45°92	2.7/ 5.1	18		<b>181884</b>	1999 RS <sub>28</sub>		6 4.4 248°19	6.0/ 1.3	18	
5 1	17 14.99	-30 9.4	2.515	3.350	11.								

EPHEMERIDES

6 4.4

6 4.4

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>250334</b>	2003 <i>SP</i> <sub>111</sub>		6 4.4 224°92	0°4/ 4.3 18			<b>390787</b>	2003 <i>YH</i> <sub>10</sub>		6 4.4 189°81	2°8/ 5.5 18		
5 1	17 20.13	-21 3.3	1.941	2.790	13.4	21.3	5 1	17 18.27	-32 47.3	2.767	3.586	10.7	22.9
5 11	17 13.96	-21 8.8	1.851	2.779	10.1	21.1	5 11	17 11.97	-32 54.7	2.680	3.585	8.3	22.7
5 21	17 5.41	-21 13.0	1.784	2.767	6.2	20.8	5 21	17 3.89	-32 53.8	2.617	3.583	5.7	22.5
5 31	16 55.17	-21 15.4	1.744	2.755	2.0	20.5	5 31	16 54.65	-32 43.3	2.582	3.580	3.3	22.4
6 10	16 44.26	-21 16.1	1.731	2.742	2.6	20.6	6 10	16 45.06	-32 23.0	2.576	3.577	3.2	22.3
6 20	16 33.81	-21 16.0	1.746	2.728	6.9	20.8	6 20	16 35.94	-31 54.4	2.598	3.573	5.4	22.5
6 30	16 24.87	-21 16.9	1.787	2.713	11.0	21.0	6 30	16 28.06	-31 20.1	2.649	3.568	8.1	22.6
7 10	16 18.24	-21 20.8	1.851	2.698	14.5	21.2	7 10	16 21.97	-30 43.6	2.723	3.563	10.6	22.8
<b>345906</b>	2007 <i>RS</i> <sub>140</sub>		6 4.4 294°52	5°6/ 5.7 16			<b>467838</b>	2010 <i>TG</i> <sub>23</sub>		6 4.4 7°21	5°0/ 5.2 17		
5 1	17 18.33	-35 56.9	1.856	2.689	14.6	20.8	5 1	17 19.43	-31 20.3	1.325	2.187	17.6	21.0
5 11	17 13.12	-36 34.3	1.767	2.674	11.7	20.6	5 11	17 14.52	-32 10.3	1.259	2.187	13.8	20.8
5 21	17 5.12	-37 0.2	1.699	2.660	8.6	20.4	5 21	17 6.22	-32 50.5	1.212	2.188	9.5	20.5
5 31	16 55.12	-37 10.4	1.656	2.645	6.1	20.2	5 31	16 55.50	-33 15.7	1.187	2.188	5.7	20.3
6 10	16 44.31	-37 2.8	1.638	2.630	5.9	20.1	6 10	16 43.96	-33 23.3	1.187	2.190	5.6	20.3
6 20	16 34.04	-36 38.1	1.645	2.616	8.3	20.2	6 20	16 33.30	-33 14.1	1.210	2.192	9.3	20.5
6 30	16 25.59	-36 0.5	1.677	2.601	11.6	20.4	6 30	16 25.09	-32 52.9	1.256	2.194	13.6	20.8
7 10	16 19.87	-35 16.0	1.730	2.587	14.9	20.6	7 10	16 20.28	-32 26.5	1.321	2.197	17.5	21.0
<b>140331</b>	2001 <i>SG</i> <sub>349</sub>		6 4.4 119°27	8°3/ 1.3 18			<b>53341</b>	1999 <i>JP</i> <sub>49</sub>		6 4.4 168°18	1°2/ 4.7 18		
5 1	17 15.64	- 3 3.9	1.869	2.705	14.3	20.4	5 1	17 16.78	-24 59.2	2.395	3.237	11.4	19.0
5 11	17 10.19	- 1 39.1	1.814	2.716	11.7	20.3	5 11	17 11.03	-25 24.9	2.316	3.239	8.6	18.9
5 21	17 2.82	- 0 25.1	1.782	2.727	9.5	20.2	5 21	17 3.41	-25 47.7	2.261	3.241	5.4	18.7
5 31	16 54.28	+ 0 32.7	1.775	2.737	8.4	20.1	5 31	16 54.53	-26 6.1	2.234	3.243	2.1	18.4
6 10	16 45.49	+ 1 10.0	1.793	2.746	9.0	20.2	6 10	16 45.23	-26 19.6	2.234	3.244	2.3	18.5
6 20	16 37.36	+ 1 25.3	1.836	2.756	11.0	20.3	6 20	16 36.36	-26 28.5	2.264	3.245	5.6	18.7
6 30	16 30.70	+ 1 18.9	1.902	2.765	13.4	20.5	6 30	16 28.76	-26 34.1	2.320	3.246	8.8	18.9
7 10	16 26.05	+ 0 53.7	1.987	2.774	15.7	20.7	7 10	16 23.02	-26 38.3	2.400	3.247	11.6	19.1
<b>151730</b>	2003 <i>BJ</i> <sub>84</sub>		6 4.4 1°93	4°4/ 5.3 17			<b>490288</b>	2008 <i>YC</i> <sub>124</sub>		6 4.4 187°06	0°9/ 4.1 17		
5 1	17 16.60	-31 4.1	1.351	2.216	17.2	19.2	5 1	17 15.76	-20 10.1	2.478	3.323	11.0	22.9
5 11	17 12.27	-31 39.3	1.284	2.215	13.3	18.9	5 11	17 10.10	-19 57.4	2.397	3.323	8.2	22.7
5 21	17 4.75	-32 4.3	1.237	2.214	9.1	18.7	5 21	17 2.76	-19 43.2	2.340	3.322	5.0	22.5
5 31	16 55.00	-32 15.0	1.212	2.215	5.2	18.5	5 31	16 54.31	-19 28.1	2.310	3.320	1.7	22.2
6 10	16 44.53	-32 9.9	1.211	2.216	5.1	18.5	6 10	16 45.53	-19 13.1	2.309	3.319	2.3	22.3
6 20	16 34.92	-31 50.7	1.233	2.217	8.8	18.7	6 20	16 37.19	-18 59.6	2.337	3.316	5.6	22.5
6 30	16 27.61	-31 22.3	1.279	2.220	13.1	18.9	6 30	16 30.02	-18 49.1	2.392	3.313	8.8	22.7
7 10	16 23.49	-30 50.8	1.343	2.223	17.0	19.2	7 10	16 24.56	-18 43.1	2.471	3.310	11.5	22.9
<b>118442</b>	1999 <i>UM</i> <sub>54</sub>		6 4.4 126°03	3°7/ 2.9 18			<b>102291</b>	1999 <i>TT</i> <sub>74</sub>		6 4.4 46°44	0°3/ 4.4 17		
5 1	17 12.52	-12 0.7	2.485	3.332	10.9	20.9	5 1	17 17.89	-21 43.5	1.288	2.163	17.2	19.9
5 11	17 7.57	-11 21.8	2.416	3.338	8.3	20.7	5 11	17 12.88	-21 46.4	1.232	2.173	12.9	19.7
5 21	17 1.13	-10 46.0	2.372	3.344	5.7	20.6	5 21	17 4.92	-21 47.1	1.197	2.184	7.8	19.4
5 31	16 53.76	-10 15.8	2.354	3.350	3.8	20.4	5 31	16 55.03	-21 45.1	1.184	2.196	2.4	19.1
6 10	16 46.17	- 9 53.0	2.364	3.356	4.4	20.5	6 10	16 44.67	-21 41.1	1.197	2.208	3.1	19.2
6 20	16 39.02	- 9 39.2	2.402	3.362	6.7	20.6	6 20	16 35.32	-21 37.0	1.233	2.220	8.3	19.6
6 30	16 32.96	- 9 35.1	2.466	3.368	9.3	20.8	6 30	16 28.20	-21 35.3	1.292	2.233	13.0	19.9
7 10	16 28.46	- 9 40.5	2.552	3.373	11.7	21.0	7 10	16 24.09	-21 38.3	1.371	2.246	17.0	20.1
<b>326178</b>	2012 <i>BK</i> <sub>126</sub>		6 4.4 80°14	2°2/ 4.9 17			<b>258313</b>	2001 <i>UC</i> <sub>192</sub>		6 4.4 114°89	2°4/ 5.4 17		
5 1	17 21.26	-27 11.0	1.487	2.345	16.3	20.9	5 1	17 19.56	-31 22.2	1.725	2.571	15.0	19.8
5 11	17 15.09	-27 29.7	1.433	2.363	12.3	20.7	5 11	17 13.61	-30 50.2	1.653	2.575	11.4	19.5
5 21	17 6.11	-27 41.0	1.400	2.381	7.8	20.5	5 21	17 5.14	-30 4.9	1.603	2.580	7.4	19.3
5 31	16 55.34	-27 42.8	1.391	2.399	3.3	20.2	5 31	16 55.07	-29 6.2	1.577	2.584	3.5	19.1
6 10	16 44.22	-27 35.0	1.408	2.417	3.4	20.2	6 10	16 44.66	-27 56.5	1.579	2.588	3.2	19.1
6 20	16 34.12	-27 19.7	1.451	2.435	7.7	20.6	6 20	16 35.17	-26 40.7	1.608	2.592	7.1	19.3
6 30	16 26.24	-27 0.9	1.517	2.453	11.8	20.9	6 30	16 27.63	-25 25.0	1.662	2.596	11.1	19.6
7 10	16 21.26	-26 42.8	1.605	2.470	15.4	21.1	7 10	16 22.71	-24 15.2	1.738	2.600	14.6	19.8
<b>70139</b>	1999 <i>NK</i> <sub>11</sub>		6 4.4 328°94	2°5/ 3.9 18			<b>433890</b>	2015 <i>BO</i> <sub>404</sub>		6 4.4 11°98	1°7/ 4.8 17		
5 1	17 14.33	-17 49.0	1.209	2.093	17.5	17.6	5 1	17 14.46	-26 50.3	1.336	2.211	16.7	20.4
5 11	17 10.64	-17 38.2	1.135	2.080	13.2	17.3	5 11	17 10.42	-26 50.4	1.274	2.213	12.7	20.2
5 21	17 3.84	-17 28.9	1.080	2.069	8.3	17.0	5 21	17 3.48	-26 42.4	1.231	2.217	8.0	19.9
5 31	16 54.76	-17 22.7	1.047	2.057	3.4	16.7	5 31	16 54.61	-26 25.3	1.211	2.222	3.1	19.7
6 10	16 44.82	-17 21.2	1.038	2.047	4.3	16.7	6 10	16 45.20	-26 0.2	1.216	2.227	3.2	19.7
6 20	16 35.56	-17 26.3	1.051	2.037	9.6	17.0	6 20	16 36.71	-25 30.2	1.244	2.233	8.0	20.0
6 30	16 28.42	-17 39.4	1.086	2.029	14.7	17.2	6 30	16 30.35	-24 59.7	1.296	2.241	12.6	20.3
7 10	16 24.40	-18 1.5	1.139	2.021	19.2	17.5	7 10	16 26.92	-24 33.1	1.367	2.249	16.6	20.5
<b>299819</b>	2006 <i>SJ</i> <sub>157</sub>		6 4.4 254°24	3°6/ 5.4 17			<b>412322</b>	2013 <i>KK</i> <sub>4</sub>		6 4.4 54°47	0°6/ 4.5 17		
5 1	17 17.17	-32 33.2	2.228	3.061	12.5	21.6	5 1	17 19.78	-22 46.2	1.237	2.111	17.8	20.9
5 11	17 11.65	-32 57.2	2.141	3.053	9.7	21.4	5 11	17 14.49	-23 9.5	1.181	2.121	13.4	20.7
5 21	17 3.93	-33 12.8	2.076	3.044	6.7	21.2	5 21	17 6.02	-23 30.4	1.144	2.131	8.2	20.4
5 31	16 54.71	-33 17.5	2.038	3.036	4.1	21.0	5 31	16 55.41	-23 46.8	1.131	2.142	2.7	20.1
6 10	16 44.93	-33 10.5	2.027	3.027	4.0	21.0	6 10	16 44.24	-23 58.1	1.142	2.153	3.2	20.2
6 20	16 35.63	-32 52.8	2.043	3.018	6.6	21.1	6 20	16 34.10	-24 5.2	1.177	2.165	8.6	20.5
6 30	16 27.79	-32 27.3	2.085	3.010	9.7	21.3	6 30	16 26.36	-24 10.6	1.234	2.176	13.4	20.8
7 10	16 22.11	-31 58.0	2.150	3.001	12.6	21.5	7 10	16 21.86	-24 17.5	1.311	2.188	17.5	21.1
<b>138899</b>	2000 <i>YD</i> <sub>95&lt;/</sub>												

EPHEMERIDES

6 4.4

6 4.4

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>75716</b>	2000 AS <sub>120</sub>		6 4.4 139°78	2°0/ 3.9 17			<b>490235</b>	2008 WX <sub>34</sub>		6 4.4 223°51	1°2/ 4.1 17		
5 1	17 18.53	-18 43.2	1.832	2.687	13.8	19.9	5 1	17 15.94	-20 8.6	1.991	2.846	12.9	22.1
5 11	17 12.56	-18 16.0	1.765	2.696	10.3	19.6	5 11	17 10.66	-19 53.5	1.911	2.843	9.6	21.9
5 21	17 4.40	-17 47.8	1.721	2.704	6.4	19.4	5 21	17 3.31	-19 36.8	1.855	2.839	5.9	21.7
5 31	16 54.85	-17 20.1	1.703	2.713	2.6	19.2	5 31	16 54.57	-19 19.2	1.824	2.835	2.1	21.4
6 10	16 44.97	-16 55.0	1.713	2.720	3.4	19.3	6 10	16 45.38	-19 2.1	1.821	2.831	2.7	21.5
6 20	16 35.80	-16 34.6	1.750	2.728	7.3	19.5	6 20	16 36.72	-18 47.2	1.845	2.826	6.7	21.7
6 30	16 28.28	-16 21.1	1.812	2.734	11.0	19.8	6 30	16 29.49	-18 36.4	1.895	2.822	10.4	21.9
7 10	16 23.01	-16 15.7	1.895	2.741	14.2	20.0	7 10	16 24.34	-18 31.5	1.967	2.817	13.6	22.1
<b>336376</b>	2008 UE <sub>60</sub>		6 4.4 261°79	0°4/ 4.6 17			<b>41799</b>	2000 WL <sub>19</sub>		6 4.4 112°80	5°4/ 1.5 18		
5 1	17 16.27	-24 48.4	1.906	2.760	13.4	21.0	5 1	17 13.16	- 5 13.5	2.837	3.663	10.3	19.4
5 11	17 11.08	-24 34.1	1.822	2.752	10.1	20.8	5 11	17 7.78	- 4 4.3	2.783	3.682	8.2	19.3
5 21	17 3.63	-24 14.1	1.761	2.745	6.2	20.5	5 21	17 1.16	- 3 1.4	2.754	3.701	6.4	19.2
5 31	16 54.65	-23 48.5	1.726	2.737	2.0	20.2	5 31	16 53.83	- 2 8.2	2.753	3.720	5.5	19.2
6 10	16 45.17	-23 18.4	1.718	2.729	2.4	20.2	6 10	16 46.37	- 1 27.2	2.780	3.738	6.0	19.3
6 20	16 36.25	-22 46.4	1.737	2.721	6.7	20.5	6 20	16 39.37	- 0 59.7	2.834	3.755	7.5	19.4
6 30	16 28.88	-22 15.6	1.781	2.713	10.6	20.7	6 30	16 33.35	- 0 46.2	2.914	3.772	9.4	19.5
7 10	16 23.77	-21 49.3	1.847	2.705	14.0	20.9	7 10	16 28.70	- 0 45.6	3.015	3.789	11.2	19.7
<b>215001</b>	2008 CO <sub>149</sub>		6 4.4 226°32	5°0/ 2.5 18			<b>422880</b>	2002 QH <sub>39</sub>		6 4.4 284°70	1°0/ 4.7 17		
5 1	17 12.75	- 7 35.6	2.544	3.381	11.0	21.0	5 1	17 18.13	-24 56.7	1.571	2.433	15.4	21.8
5 11	17 7.81	- 6 53.8	2.463	3.374	8.7	20.8	5 11	17 13.20	-25 1.9	1.477	2.411	11.7	21.5
5 21	17 1.35	- 6 17.5	2.405	3.366	6.4	20.6	5 21	17 5.35	-25 2.1	1.404	2.389	7.4	21.2
5 31	16 53.90	- 5 49.4	2.375	3.358	5.0	20.5	5 31	16 55.33	-24 55.8	1.356	2.366	2.6	20.8
6 10	16 46.13	- 5 31.9	2.372	3.349	5.6	20.5	6 10	16 44.34	-24 42.9	1.332	2.344	3.0	20.8
6 20	16 38.72	- 5 26.1	2.396	3.340	7.6	20.7	6 20	16 33.80	-24 25.1	1.335	2.321	8.0	21.0
6 30	16 32.31	- 5 32.4	2.445	3.331	10.0	20.8	6 30	16 25.07	-24 5.8	1.361	2.298	12.8	21.2
7 10	16 27.43	- 5 50.2	2.517	3.322	12.3	20.9	7 10	16 19.16	-23 49.0	1.408	2.276	17.0	21.4
<b>455658</b>	2005 AS <sub>82</sub>		6 4.4 48°46	0°1/ 4.5 17			<b>178379</b>	1997 HP <sub>14</sub>		6 4.4 111°96	0°5/ 4.6 18		
5 1	17 19.56	-21 29.8	1.190	2.067	18.2	20.6	5 1	17 14.82	-24 26.3	2.437	3.283	11.1	20.9
5 11	17 14.27	-21 56.3	1.142	2.084	13.6	20.4	5 11	17 9.46	-24 27.2	2.365	3.291	8.3	20.7
5 21	17 5.82	-22 21.7	1.114	2.101	8.3	20.1	5 21	17 2.39	-24 24.5	2.318	3.300	5.1	20.5
5 31	16 55.34	-22 44.1	1.108	2.119	2.6	19.8	5 31	16 54.25	-24 18.0	2.298	3.308	1.7	20.3
6 10	16 44.41	-23 2.7	1.126	2.138	3.2	19.9	6 10	16 45.82	-24 8.1	2.306	3.317	2.0	20.4
6 20	16 34.63	-23 18.0	1.169	2.157	8.6	20.3	6 20	16 37.90	-23 56.1	2.342	3.325	5.3	20.6
6 30	16 27.31	-23 32.1	1.233	2.176	13.3	20.6	6 30	16 31.21	-23 43.7	2.405	3.333	8.4	20.8
7 10	16 23.20	-23 47.2	1.317	2.195	17.3	20.9	7 10	16 26.27	-23 33.0	2.492	3.340	11.1	21.0
<b>281877</b>	2010 FA <sub>83</sub>		6 4.4 175°19	1°8/ 3.9 18			<b>219701</b>	2001 XA <sub>30</sub>		6 4.4 232°71	2°2/ 3.8 18		
5 1	17 15.77	-17 35.1	2.051	2.905	12.6	20.7	5 1	17 17.22	-17 5.4	2.188	3.036	12.1	20.6
5 11	17 10.42	-17 27.4	1.976	2.906	9.4	20.5	5 11	17 11.51	-16 44.9	2.096	3.023	9.2	20.4
5 21	17 3.10	-17 20.6	1.924	2.906	5.9	20.3	5 21	17 3.82	-16 24.6	2.028	3.008	5.8	20.2
5 31	16 54.47	-17 15.4	1.898	2.907	2.4	20.1	5 31	16 54.75	-16 5.6	1.986	2.994	2.7	20.0
6 10	16 45.44	-17 12.8	1.900	2.907	3.0	20.1	6 10	16 45.16	-15 49.5	1.973	2.978	3.3	20.0
6 20	16 36.93	-17 13.9	1.929	2.907	6.6	20.3	6 20	16 35.96	-15 37.9	1.987	2.962	6.8	20.2
6 30	16 29.80	-17 19.7	1.983	2.907	10.1	20.6	6 30	16 28.04	-15 32.4	2.028	2.945	10.3	20.3
7 10	16 24.66	-17 30.9	2.061	2.907	13.2	20.8	7 10	16 22.03	-15 34.1	2.092	2.928	13.4	20.5
<b>191786</b>	2004 TZ <sub>125</sub>		6 4.4 267°95	2°0/ 3.9 17			<b>213010</b>	1995 OW <sub>4</sub>		6 4.4 319°46	5°2/ 3.5 17		
5 1	17 15.71	-18 34.4	1.808	2.668	13.7	20.9	5 1	17 13.53	-12 57.7	1.231	2.113	17.4	20.1
5 11	17 10.69	-18 10.4	1.726	2.659	10.3	20.7	5 11	17 10.07	-12 29.8	1.150	2.092	13.5	19.8
5 21	17 3.42	-17 45.4	1.666	2.651	6.4	20.4	5 21	17 3.57	-12 7.5	1.088	2.072	9.2	19.5
5 31	16 54.60	-17 21.0	1.633	2.642	2.7	20.2	5 31	16 54.79	-11 54.8	1.048	2.052	5.6	19.2
6 10	16 45.26	-16 59.0	1.625	2.633	3.4	20.2	6 10	16 45.04	-11 55.0	1.031	2.033	6.4	19.2
6 20	16 36.44	-16 41.7	1.644	2.624	7.5	20.4	6 20	16 35.79	-12 9.9	1.036	2.015	10.9	19.4
6 30	16 29.15	-16 31.2	1.688	2.615	11.4	20.6	6 30	16 28.50	-12 40.3	1.062	1.998	15.7	19.6
7 10	16 24.11	-16 28.9	1.754	2.606	14.9	20.8	7 10	16 24.23	-13 24.7	1.106	1.982	20.1	19.8
<b>408292</b>	2013 GT <sub>14</sub>		6 4.4 53°13	2°2/ 4.9 17			<b>306819</b>	2001 QM <sub>237</sub>		6 4.4 249°57	2°9/ 5.0 17		
5 1	17 19.87	-26 53.4	1.208	2.081	18.3	21.2	5 1	17 23.30	-29 18.4	1.786	2.627	14.7	21.9
5 11	17 14.71	-27 9.4	1.152	2.090	13.8	21.0	5 11	17 16.93	-29 36.4	1.685	2.605	11.4	21.6
5 21	17 6.21	-27 17.4	1.115	2.100	8.8	20.7	5 21	17 7.59	-29 46.7	1.606	2.582	7.6	21.3
5 31	16 55.50	-27 15.1	1.101	2.111	3.6	20.5	5 31	16 56.03	-29 46.1	1.553	2.559	3.7	21.0
6 10	16 44.24	-27 2.4	1.111	2.121	3.7	20.5	6 10	16 43.47	-29 33.2	1.527	2.534	3.7	21.0
6 20	16 34.11	-26 42.0	1.144	2.132	8.7	20.8	6 20	16 31.32	-29 9.1	1.528	2.509	7.8	21.2
6 30	16 26.52	-26 18.8	1.200	2.144	13.6	21.1	6 30	16 20.96	-28 37.7	1.554	2.482	12.1	21.4
7 10	16 22.29	-25 57.8	1.275	2.155	17.7	21.4	7 10	16 13.40	-28 4.5	1.602	2.455	16.0	21.5
<b>510120</b>	2010 TT <sub>61</sub>		6 4.4 239°93	4°3/ 2.9 18			<b>336343</b>	2008 TK <sub>116</sub>		6 4.4 213°16	0°0/ 4.2 18		
5 1	17 12.28	- 9 16.9	2.545	3.387	10.8	21.1	5 1	17 16.46	-23 57.7	1.982	2.835	13.0	20.9
5 11	17 7.49	- 8 46.8	2.464	3.380	8.4	20.9	5 11	17 11.08	-23 37.9	1.902	2.832	9.7	20.7
5 21	17 1.17	- 8 21.7	2.406	3.373	6.0	20.7	5 21	17 3.57	-23 12.9	1.846	2.830	6.0	20.5
5 31	16 53.87	- 8 3.8	2.375	3.366	4.4	20.6	5 31	16 54.66	-22 43.3	1.816	2.827	1.9	20.2
6 10	16 46.24	- 7 54.8	2.372	3.358	4.9	20.6	6 10	16 45.33	-22 10.6	1.813	2.824	2.3	20.2
6 20	16 38.97	- 7 55.9	2.396	3.351	7.1	20.7	6 20	16 36.58	-21 37.3	1.837	2.821	6.5	20.5
6 30	16 32.70	- 8 7.2	2.446	3.343	9.6	20.9	6 30	16 29.34	-21 6.4	1.887	2.817	10.2	20.7
7 10	16 27.94	- 8 28.3	2.518	3.335	12.0	21.0	7 10	16 24.25	-20 40.8	1.960	2.814	13.5	20.9
<b>383322</b>	2006 HB <sub>151</sub>		6 4.4 129°99	3°0/ 5.1 18			<b>431905</b>	2008 TQ <sub>9</sub>		6 4.4 331°37	2°7/ 4.9 16		
5 1	17 19.46	-29 36											

EPHEMERIDES

6 4.4

6 4.4

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>87932</b>	2000 SW <sub>343</sub>		6 4.4 123°00	2.5/ 5.5	18		<b>140164</b>	2001 SX <sub>177</sub>		6 4.4 252°84	6.4/ 2.0	18	
5 1	17 20.16	-31 45.8	1.944	2.781	13.9	18.8	5 1	17 12.78	-5 16.5	2.232	3.071	12.3	19.8
5 11	17 13.79	-31 22.1	1.874	2.791	10.6	18.6	5 11	17 8.03	-4 22.9	2.156	3.064	9.9	19.6
5 21	17 5.15	-30 46.6	1.827	2.801	7.0	18.4	5 21	17 1.59	-3 36.7	2.103	3.057	7.7	19.5
5 31	16 55.12	-29 58.8	1.806	2.811	3.4	18.2	5 31	16 54.05	-3 1.9	2.075	3.050	6.4	19.4
6 10	16 44.83	-29 0.6	1.813	2.821	3.2	18.2	6 10	16 46.15	-2 41.3	2.074	3.042	7.0	19.4
6 20	16 35.40	-27 55.9	1.848	2.830	6.5	18.4	6 20	16 38.66	-2 36.3	2.099	3.035	9.0	19.5
6 30	16 27.77	-26 49.8	1.908	2.839	10.1	18.6	6 30	16 32.31	-2 47.2	2.148	3.028	11.5	19.7
7 10	16 22.54	-25 47.5	1.992	2.847	13.3	18.8	7 10	16 27.65	-3 12.5	2.218	3.020	13.9	19.8
<b>339449</b>	2005 ER <sub>189</sub>		6 4.4 188°25	3.7/ 3.3	18 R		<b>147884</b>	2006 RH <sub>6</sub>		6 4.4 321°64	4.2/ 3.3	18	
5 1	17 14.76	-12 20.6	2.256	3.103	11.8	20.9	5 1	17 11.89	-16 58.6	1.164	2.053	17.6	19.5
5 11	17 9.47	-11 50.8	2.180	3.103	9.1	20.8	5 11	17 9.07	-16 9.6	1.079	2.027	13.5	19.2
5 21	17 2.45	-11 24.5	2.128	3.102	6.1	20.6	5 21	17 3.08	-15 18.3	1.013	2.001	8.8	18.8
5 31	16 54.29	-11 3.9	2.102	3.101	3.9	20.4	5 31	16 54.69	-14 28.8	0.969	1.976	4.7	18.5
6 10	16 45.80	-10 50.7	2.104	3.099	4.5	20.5	6 10	16 45.24	-13 46.5	0.947	1.952	5.9	18.5
6 20	16 37.76	-10 46.3	2.133	3.098	7.2	20.6	6 20	16 36.29	-13 16.2	0.947	1.930	11.0	18.7
6 30	16 30.93	-10 51.4	2.188	3.095	10.1	20.8	6 30	16 29.39	-13 2.1	0.967	1.908	16.3	18.9
7 10	16 25.86	-11 5.7	2.266	3.093	12.8	21.0	7 10	16 25.65	-13 5.5	1.004	1.887	21.1	19.1
<b>333850</b>	1995 CH <sub>5</sub>		6 4.4 127°55	3.0/ 3.7	17		<b>347318</b>	2011 QV <sub>76</sub>		6 4.4 292°75	2.2/ 5.7	18	
5 1	17 17.70	-15 16.0	1.867	2.721	13.6	21.4	5 1	17 8.76	-33 46.1	4.321	5.138	7.2	21.4
5 11	17 11.89	-14 53.8	1.803	2.731	10.3	21.2	5 11	17 4.49	-33 53.1	4.233	5.135	5.6	21.2
5 21	17 3.99	-14 33.9	1.761	2.741	6.6	21.0	5 21	16 59.20	-33 54.7	4.170	5.131	3.9	21.1
5 31	16 54.77	-14 18.1	1.745	2.751	3.4	20.8	5 31	16 53.27	-33 50.1	4.134	5.128	2.5	21.0
6 10	16 45.23	-14 8.0	1.757	2.760	4.1	20.9	6 10	16 47.13	-33 39.6	4.128	5.125	2.4	21.0
6 20	16 36.35	-14 5.0	1.795	2.769	7.5	21.1	6 20	16 41.25	-33 23.8	4.150	5.122	3.7	21.1
6 30	16 29.03	-14 10.0	1.859	2.778	11.0	21.4	6 30	16 36.04	-33 3.8	4.200	5.119	5.4	21.2
7 10	16 23.88	-14 23.2	1.945	2.786	14.1	21.6	7 10	16 31.87	-32 41.5	4.276	5.116	7.0	21.3
<b>285606</b>	2000 QD <sub>178</sub>		6 4.4 313°83	9.7/31.5	18		<b>489472</b>	2007 DH <sub>83</sub>		6 4.4 189°29	4.0/ 6.3	18	
5 1	17 11.49	-0 24.7	1.807	2.646	14.7	20.0	5 1	17 17.64	-38 25.3	3.155	3.953	10.0	22.8
5 11	17 7.59	+0 51.8	1.721	2.620	12.5	19.8	5 11	17 11.42	-38 34.3	3.067	3.951	8.0	22.7
5 21	17 1.59	+1 57.4	1.656	2.594	10.5	19.6	5 21	17 3.56	-38 33.2	3.004	3.950	6.0	22.5
5 31	16 54.09	+2 45.4	1.614	2.568	9.7	19.5	5 31	16 54.65	-38 20.3	2.967	3.947	4.3	22.4
6 10	16 45.98	+3 10.9	1.596	2.543	10.5	19.5	6 10	16 45.43	-37 55.4	2.959	3.944	4.1	22.4
6 20	16 38.21	+3 11.0	1.601	2.518	12.5	19.6	6 20	16 36.68	-37 19.9	2.979	3.941	5.5	22.5
6 30	16 31.73	+2 45.7	1.627	2.493	15.2	19.7	6 30	16 29.10	-36 36.4	3.027	3.937	7.5	22.6
7 10	16 27.28	+1 57.8	1.671	2.469	17.8	19.8	7 10	16 23.20	-35 48.5	3.100	3.933	9.6	22.8
<b>189536</b>	2000 QF <sub>95</sub>		6 4.4 298°15	0.8/ 4.6	18		<b>410727</b>	2009 BT <sub>109</sub>		6 4.4 108°45	1.2/ 4.2	16	
5 1	17 17.29	-25 11.4	1.652	2.512	14.8	20.5	5 1	17 19.78	-21 6.3	1.470	2.335	16.1	21.9
5 11	17 12.58	-25 5.5	1.545	2.478	11.3	20.2	5 11	17 14.00	-20 45.6	1.409	2.345	12.0	21.7
5 21	17 5.02	-24 53.2	1.459	2.443	7.2	19.9	5 21	17 5.52	-20 21.8	1.369	2.354	7.3	21.5
5 31	16 55.27	-24 33.5	1.398	2.408	2.5	19.5	5 31	16 55.30	-19 56.1	1.353	2.364	2.4	21.2
6 10	16 44.44	-24 6.8	1.362	2.373	2.9	19.4	6 10	16 44.67	-19 30.4	1.363	2.373	3.2	21.3
6 20	16 33.89	-23 35.2	1.352	2.338	8.0	19.7	6 20	16 34.96	-19 7.5	1.398	2.382	8.0	21.6
6 30	16 24.99	-23 2.8	1.366	2.303	12.8	19.8	6 30	16 27.30	-18 50.4	1.458	2.391	12.4	21.9
7 10	16 18.78	-22 34.0	1.401	2.267	17.2	20.0	7 10	16 22.40	-18 41.3	1.538	2.399	16.2	22.1
<b>505400</b>	2013 QE <sub>54</sub>		6 4.4 289°11	11.1/ 1.8	17		<b>499809</b>	2011 CE <sub>105</sub>		6 4.4 121°10	3.7/ 3.5	17	
5 1	17 15.27	+2 2.4	1.566	2.399	16.8	21.6	5 1	17 16.10	-14 38.4	1.725	2.586	14.3	22.1
5 11	17 10.53	+3 7.0	1.498	2.391	14.4	21.4	5 11	17 10.92	-14 4.6	1.657	2.588	10.8	21.8
5 21	17 3.40	+3 54.5	1.450	2.382	12.2	21.2	5 21	17 3.53	-13 33.3	1.610	2.591	7.1	21.6
5 31	16 54.65	+4 18.0	1.424	2.374	11.1	21.1	5 31	16 54.68	-13 7.1	1.589	2.593	4.0	21.4
6 10	16 45.34	+4 13.3	1.421	2.366	11.7	21.1	6 10	16 45.42	-12 48.4	1.594	2.595	4.7	21.5
6 20	16 36.61	+3 39.6	1.440	2.357	13.6	21.2	6 20	16 36.81	-12 39.1	1.625	2.598	8.2	21.7
6 30	16 29.49	+2 39.3	1.480	2.349	16.3	21.4	6 30	16 29.80	-12 40.4	1.680	2.600	11.9	21.9
7 10	16 24.74	+1 17.6	1.538	2.341	18.9	21.5	7 10	16 25.06	-12 52.3	1.757	2.602	15.2	22.1
<b>211069</b>	2002 CT <sub>210</sub>		6 4.4 180°80	3.2/ 5.2	18		<b>14009</b>	1993 TQ <sub>36</sub>		6 4.4 229°12	0.7/ 4.6	18	
5 1	17 22.44	-30 8.0	1.713	2.557	15.1	20.9	5 1	17 17.55	-23 39.7	2.262	3.106	11.9	18.1
5 11	17 16.06	-30 30.2	1.638	2.558	11.7	20.7	5 11	17 11.82	-24 1.4	2.173	3.098	9.0	17.8
5 21	17 6.87	-30 43.6	1.584	2.559	7.7	20.5	5 21	17 4.05	-24 21.0	2.108	3.090	5.6	17.6
5 31	16 55.74	-30 45.2	1.555	2.559	4.1	20.3	5 31	16 54.87	-24 37.3	2.070	3.081	1.9	17.4
6 10	16 44.00	-30 34.1	1.552	2.558	4.0	20.3	6 10	16 45.14	-24 49.6	2.061	3.072	2.2	17.4
6 20	16 33.00	-30 11.9	1.577	2.557	7.6	20.5	6 20	16 35.80	-24 58.2	2.080	3.062	5.9	17.6
6 30	16 23.99	-29 42.9	1.626	2.556	11.6	20.7	6 30	16 27.75	-25 4.6	2.125	3.052	9.4	17.8
7 10	16 17.79	-29 12.2	1.697	2.554	15.1	20.9	7 10	16 21.66	-25 10.5	2.194	3.042	12.5	18.0
<b>502402</b>	2015 BF <sub>252</sub>		6 4.4 196°45	0.5/ 4.3	17		<b>412048</b>	2013 EB <sub>3</sub>		6 4.4 89°07	3.6/ 4.0	16	
5 1	17 18.33	-22 9.8	1.947	2.799	13.3	22.3	5 1	17 20.32	-14 14.1	1.323	2.191	17.3	20.9
5 11	17 12.51	-21 53.7	1.867	2.797	9.9	22.0	5 11	17 14.57	-14 10.2	1.266	2.202	13.1	20.7
5 21	17 4.47	-21 34.1	1.811	2.794	6.1	21.8	5 21	17 5.96	-14 12.2	1.230	2.213	8.4	20.5
5 31	16 54.96	-21 11.3	1.780	2.791	1.9	21.5	5 31	16 55.46	-14 21.3	1.217	2.224	4.2	20.2
6 10	16 44.99	-20 46.8	1.777	2.788	2.5	21.6	6 10	16 44.48	-14 38.3	1.229	2.234	4.9	20.3
6 20	16 35.61	-20 22.7	1.802	2.784	6.7	21.8	6 20	16 34.44	-15 3.3	1.265	2.245	9.2	20.6
6 30	16 27.77	-20 1.7	1.852	2.779	10.6	22.0	6 30	16 26.56	-15 36.0	1.325	2.255	13.6	20.9
7 10	16 22.15	-19 46.1	1.925	2.774	13.9	22.2	7 10	16 21.61	-16 15.6	1.404	2.265	17.4	21.1
<b>498231</b>	2007 UZ <sub>27</sub>		6 4.4 274°01	1.5/ 4.7	17		<b>169551</b>	2002 EB <sub>108</sub>		6 4.4 2°40	0.0/ 4.2	17	
5 1	17 19.60	-25 3.0	1.463	2									

EPHEMERIDES

6 4.5

6 4.5

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>152233</b>	Van Till		6 4.5 215°48	0°3/ 4.3 18			<b>415069</b>	2012 BZ <sub>56</sub>		6 4.5 99°98	0°3/ 4.6 17		
5 1	17 13.93	-22 2.6	2.880	3.722	9.7	21.8	5 1	17 20.02	-24 14.8	1.553	2.413	15.6	20.8
5 11	17 8.66	-21 54.5	2.790	3.715	7.2	21.6	5 11	17 14.12	-24 6.5	1.492	2.425	11.7	20.6
5 21	17 1.90	-21 44.3	2.725	3.707	4.4	21.4	5 21	17 5.59	-23 52.8	1.453	2.437	7.2	20.4
5 31	16 54.16	-21 31.9	2.688	3.699	1.4	21.2	5 31	16 55.38	-23 33.4	1.438	2.449	2.3	20.1
6 10	16 46.10	-21 18.3	2.680	3.690	1.8	21.2	6 10	16 44.79	-23 9.8	1.449	2.460	2.7	20.1
6 20	16 38.37	-21 4.5	2.701	3.681	4.9	21.4	6 20	16 35.11	-22 44.5	1.487	2.472	7.4	20.5
6 30	16 31.62	-20 52.0	2.749	3.672	7.7	21.6	6 30	16 27.44	-22 21.1	1.548	2.483	11.7	20.7
7 10	16 26.34	-20 42.3	2.823	3.662	10.2	21.7	7 10	16 22.48	-22 2.7	1.631	2.494	15.3	21.0
<b>311387</b>	2005 TK <sub>11</sub>		6 4.5 277°82	0°7/ 4.7 18			<b>64506</b>	2001 VJ <sub>76</sub>		6 4.5 240°08	6°6/ 2.4 18		
5 1	17 14.68	-25 6.4	2.256	3.105	11.8	21.4	5 1	17 16.27	-4 53.4	2.121	2.955	13.0	18.5
5 11	17 9.69	-25 5.1	2.164	3.091	8.9	21.2	5 11	17 10.82	-4 9.0	2.035	2.940	10.5	18.4
5 21	17 2.75	-24 59.3	2.096	3.078	5.5	21.0	5 21	17 3.44	-3 32.8	1.971	2.924	8.1	18.2
5 31	16 54.47	-24 48.6	2.054	3.065	1.9	20.7	5 31	16 54.73	-3 8.7	1.933	2.908	6.7	18.1
6 10	16 45.71	-24 33.6	2.041	3.051	2.2	20.7	6 10	16 45.51	-2 59.6	1.921	2.892	7.3	18.1
6 20	16 37.34	-24 15.6	2.054	3.038	5.9	20.9	6 20	16 36.66	-3 6.8	1.936	2.874	9.5	18.2
6 30	16 30.24	-23 56.9	2.094	3.025	9.3	21.1	6 30	16 29.02	-3 30.2	1.975	2.856	12.2	18.3
7 10	16 25.04	-23 40.1	2.157	3.011	12.4	21.3	7 10	16 23.26	-4 8.3	2.035	2.838	14.9	18.4
<b>271386</b>	2004 BU <sub>40</sub>		6 4.5 91°14	0°6/ 4.6 17			<b>106416</b>	2000 VC <sub>34</sub>		6 4.5 192°35	0°8/ 4.2 18		
5 1	17 20.14	-24 35.8	1.600	2.457	15.3	21.2	5 1	17 13.76	-20 51.0	2.729	3.574	10.1	20.3
5 11	17 14.08	-24 30.9	1.542	2.474	11.5	21.0	5 11	17 8.56	-20 32.6	2.646	3.572	7.5	20.1
5 21	17 5.48	-24 20.5	1.507	2.491	7.0	20.8	5 21	17 1.85	-20 12.2	2.588	3.571	4.6	19.9
5 31	16 55.29	-24 4.4	1.496	2.507	2.3	20.5	5 31	16 54.18	-19 50.5	2.558	3.569	1.6	19.7
6 10	16 44.80	-23 43.5	1.512	2.523	2.7	20.6	6 10	16 46.23	-19 28.8	2.557	3.566	2.1	19.7
6 20	16 35.23	-23 20.5	1.554	2.539	7.2	20.9	6 20	16 38.67	-19 8.3	2.584	3.564	5.1	19.9
6 30	16 27.65	-22 58.6	1.621	2.555	11.3	21.2	6 30	16 32.15	-18 50.8	2.639	3.560	8.0	20.1
7 10	16 22.70	-22 40.9	1.709	2.570	14.8	21.4	7 10	16 27.14	-18 37.8	2.718	3.557	10.6	20.3
<b>242732</b>	2005 UL <sub>310</sub>		6 4.5 350°48	0°0/ 4.2 16			<b>91455</b>	1999 RV <sub>49</sub>		6 4.5 173°77	5°5/ 6.5 18		
5 1	17 12.70	-22 10.5	1.656	2.525	14.3	19.7	5 1	17 21.80	-39 19.9	2.261	3.067	13.2	19.4
5 11	17 8.73	-22 15.4	1.580	2.519	10.7	19.5	5 11	17 15.16	-39 39.8	2.182	3.069	10.7	19.2
5 21	17 2.38	-22 18.3	1.526	2.513	6.6	19.2	5 21	17 6.14	-39 46.1	2.125	3.071	8.1	19.0
5 31	16 54.39	-22 18.7	1.497	2.508	2.1	18.9	5 31	16 55.56	-39 35.5	2.094	3.073	6.0	18.9
6 10	16 45.84	-22 17.3	1.493	2.504	2.6	18.9	6 10	16 44.55	-39 7.3	2.090	3.074	5.6	18.9
6 20	16 37.86	-22 15.3	1.514	2.501	7.1	19.2	6 20	16 34.25	-38 23.5	2.112	3.075	7.4	19.0
6 30	16 31.51	-22 14.5	1.559	2.498	11.3	19.5	6 30	16 25.68	-37 28.5	2.161	3.075	9.9	19.2
7 10	16 27.55	-22 16.9	1.625	2.497	14.9	19.7	7 10	16 19.54	-36 28.1	2.233	3.074	12.5	19.3
<b>309684</b>	2008 ET <sub>148</sub>		6 4.5 40°65	2°2/ 5.1 16			<b>126986</b>	2002 FZ <sub>28</sub>		6 4.5 324°72	1°1/ 4.7 18		
5 1	17 15.23	-28 50.3	2.035	2.883	12.9	20.8	5 1	17 15.28	-24 52.2	2.248	3.096	11.8	19.6
5 11	17 10.17	-29 0.6	1.967	2.891	9.8	20.6	5 11	17 10.13	-25 15.9	2.167	3.094	8.9	19.4
5 21	17 3.03	-29 3.8	1.922	2.900	6.3	20.4	5 21	17 3.03	-25 36.7	2.110	3.091	5.6	19.2
5 31	16 54.55	-28 58.7	1.903	2.909	3.0	20.2	5 31	16 54.60	-25 53.3	2.079	3.089	2.1	19.0
6 10	16 45.71	-28 45.6	1.911	2.919	2.9	20.2	6 10	16 45.71	-26 5.2	2.076	3.086	2.3	19.0
6 20	16 37.52	-28 26.0	1.945	2.928	6.2	20.5	6 20	16 37.25	-26 12.7	2.101	3.084	5.8	19.2
6 30	16 30.84	-28 3.0	2.006	2.938	9.6	20.7	6 30	16 30.08	-26 17.2	2.152	3.082	9.1	19.4
7 10	16 26.31	-27 39.7	2.088	2.949	12.5	20.9	7 10	16 24.83	-26 20.8	2.226	3.080	12.1	19.6
<b>271862</b>	2004 TE <sub>286</sub>		6 4.5 330°79	5°2/ 2.5 17			<b>394713</b>	2008 EA <sub>34</sub>		6 4.5 174°51	0°7/ 4.6 18		
5 1	17 12.54	-14 47.6	1.439	2.315	15.7	20.0	5 1	17 15.94	-23 42.5	2.569	3.411	10.7	21.5
5 11	17 8.78	-13 30.9	1.363	2.302	12.0	19.7	5 11	17 10.35	-24 3.8	2.488	3.412	8.0	21.3
5 21	17 2.48	-12 13.3	1.309	2.290	8.2	19.5	5 21	17 3.04	-24 23.0	2.432	3.413	5.0	21.1
5 31	16 54.44	-11 0.3	1.278	2.279	5.4	19.3	5 31	16 54.58	-24 39.0	2.403	3.414	1.7	20.9
6 10	16 45.82	-9 57.8	1.271	2.268	6.5	19.3	6 10	16 45.74	-24 51.6	2.404	3.414	2.0	20.9
6 20	16 37.83	-9 10.7	1.289	2.258	10.3	19.5	6 20	16 37.30	-25 0.9	2.433	3.415	5.2	21.1
6 30	16 31.59	-8 42.3	1.329	2.249	14.3	19.7	6 30	16 29.99	-25 8.2	2.489	3.415	8.3	21.3
7 10	16 27.87	-8 33.1	1.387	2.241	18.0	19.9	7 10	16 24.38	-25 15.0	2.569	3.415	10.9	21.5
<b>417527</b>	2006 TD <sub>31</sub>		6 4.5 309°83	0°8/ 4.7 16			<b>17383</b>	1981 EE <sub>12</sub>		6 4.5 185°63	1°6/ 4.9 18		
5 1	17 11.95	-25 14.6	2.672	3.518	10.2	21.4	5 1	17 20.87	-27 46.2	1.678	2.528	15.1	19.0
5 11	17 7.49	-25 20.1	2.567	3.493	7.7	21.2	5 11	17 14.82	-27 36.6	1.602	2.529	11.5	18.7
5 21	17 1.35	-25 22.2	2.486	3.467	4.8	21.0	5 21	17 6.10	-27 18.3	1.548	2.528	7.3	18.5
5 31	16 54.05	-25 20.4	2.432	3.442	1.8	20.7	5 31	16 55.58	-26 50.1	1.519	2.528	2.9	18.2
6 10	16 46.27	-25 14.7	2.406	3.417	2.0	20.7	6 10	16 44.54	-26 13.2	1.516	2.527	2.9	18.2
6 20	16 38.73	-25 6.0	2.408	3.392	5.2	20.9	6 20	16 34.28	-25 30.7	1.540	2.525	7.3	18.5
6 30	16 32.18	-24 55.9	2.437	3.367	8.3	21.0	6 30	16 25.95	-24 47.3	1.590	2.523	11.6	18.7
7 10	16 27.20	-24 46.2	2.490	3.342	11.0	21.2	7 10	16 20.33	-24 7.7	1.660	2.520	15.2	18.9
<b>36636</b>	2000 QP <sub>176</sub>		6 4.5 122°25	1°1/ 4.1 18			<b>336187</b>	2008 RX <sub>113</sub>		6 4.5 146°57	2°9/ 5.3 17		
5 1	17 19.32	-21 43.8	1.489	2.354	15.9	19.5	5 1	17 18.89	-30 14.9	1.937	2.779	13.7	21.3
5 11	17 13.69	-21 13.7	1.424	2.360	11.9	19.3	5 11	17 13.10	-30 30.2	1.863	2.783	10.5	21.1
5 21	17 5.37	-20 39.3	1.380	2.366	7.3	19.0	5 21	17 4.94	-30 37.1	1.811	2.786	7.0	20.9
5 31	16 55.31	-20 2.0	1.361	2.372	2.4	18.7	5 31	16 55.21	-30 33.6	1.785	2.789	3.6	20.7
6 10	16 44.81	-19 24.4	1.367	2.377	3.2	18.8	6 10	16 45.00	-30 19.4	1.786	2.792	3.5	20.7
6 20	16 35.19	-18 50.0	1.399	2.383	8.0	19.1	6 20	16 35.47	-29 56.3	1.814	2.795	6.8	20.9
6 30	16 27.58	-18 22.3	1.455	2.388	12.5	19.3	6 30	16 27.63	-29 27.7	1.867	2.797	10.3	21.1
7 10	16 22.71	-18 3.9	1.532	2.393	16.2	19.6	7 10	16 22.18	-28 58.0	1.943	2.800	13.5	21.4
<b>18259</b>	4311 T-2		6 4.5 357°13	3°1/ 3.9 18			<b>289628</b>	2005 GV <sub>57</sub>		6 4.5 42°41	2°1/ 4.0 17		
5 1	17 15.48	-16 59.7	1.161	2.045	18.0	18.							

EPHEMERIDES

6 4.5

6 4.5

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>55212</b>	Yukitoayatsuji		6 4.5 343°46	1.7°/ 4.0	18		<b>162603</b>	2000 SJ <sub>74</sub>		6 4.5 200°22	2°9/ 3.8	17	
5 1	17 13.93	-18 40.4	1.855	2.718	13.3	18.5	5 1	17 19.65	-15 38.0	1.907	2.757	13.6	20.9
5 11	17 9.33	-18 26.3	1.780	2.714	10.0	18.3	5 11	17 13.54	-15 18.0	1.827	2.753	10.3	20.7
5 21	17 2.62	-18 12.1	1.726	2.711	6.2	18.0	5 21	17 5.19	-14 59.7	1.769	2.749	6.6	20.4
5 31	16 54.48	-17 58.7	1.698	2.708	2.4	17.8	5 31	16 55.32	-14 44.7	1.737	2.743	3.3	20.2
6 10	16 45.90	-17 47.6	1.697	2.705	3.1	17.8	6 10	16 44.94	-14 34.5	1.734	2.737	4.0	20.2
6 20	16 37.85	-17 40.3	1.722	2.703	7.0	18.1	6 20	16 35.09	-14 30.7	1.757	2.731	7.6	20.5
6 30	16 31.26	-17 38.4	1.771	2.701	10.8	18.3	6 30	16 26.76	-14 34.5	1.806	2.723	11.3	20.7
7 10	16 26.80	-17 43.1	1.843	2.700	14.1	18.5	7 10	16 20.64	-14 46.4	1.877	2.715	14.6	20.9
<b>364641</b>	2007 TD <sub>112</sub>		6 4.5 251°14	0°8/ 4.7	17		<b>333069</b>	2011 US <sub>46</sub>		6 4.5 133°56	1°4/ 4.9	17	
5 1	17 19.62	-26 5.0	1.562	2.420	15.6	21.1	5 1	17 20.79	-26 54.9	1.446	2.306	16.5	20.7
5 11	17 14.17	-25 46.2	1.477	2.409	11.8	20.9	5 11	17 15.05	-26 46.3	1.378	2.311	12.5	20.5
5 21	17 5.87	-25 19.0	1.415	2.398	7.4	20.6	5 21	17 6.36	-26 29.1	1.332	2.315	7.9	20.2
5 31	16 55.56	-24 42.9	1.376	2.387	2.6	20.3	5 31	16 55.70	-26 2.3	1.309	2.319	2.9	19.9
6 10	16 44.55	-23 59.4	1.364	2.375	2.9	20.2	6 10	16 44.52	-25 27.3	1.312	2.323	3.1	19.9
6 20	16 34.21	-23 12.3	1.377	2.363	7.9	20.5	6 20	16 34.27	-24 47.5	1.340	2.327	7.9	20.2
6 30	16 25.82	-22 26.4	1.415	2.351	12.5	20.8	6 30	16 26.22	-24 7.9	1.393	2.330	12.5	20.5
7 10	16 20.26	-21 46.7	1.473	2.338	16.6	21.0	7 10	16 21.15	-23 33.3	1.465	2.333	16.4	20.8
<b>494823</b>	2007 TC <sub>110</sub>		6 4.5 236°77	13°4/ 3.3	18		<b>234388</b>	2001 QV <sub>161</sub>		6 4.5 296°51	0°8/ 4.6	17	
5 1	17 34.85	-41 39.5	1.236	2.058	21.0	20.9	5 1	17 18.25	-23 40.7	1.258	2.133	17.5	20.3
5 11	17 28.35	-44 32.0	1.166	2.052	18.0	20.6	5 11	17 13.88	-23 53.9	1.175	2.116	13.4	20.0
5 21	17 16.29	-47 14.0	1.115	2.045	15.2	20.4	5 21	17 6.11	-24 3.7	1.113	2.100	8.4	19.6
5 31	16 59.31	-49 27.6	1.087	2.038	13.5	20.3	5 31	16 55.77	-24 8.4	1.072	2.084	2.8	19.2
6 10	16 39.51	-50 57.7	1.081	2.031	13.9	20.3	6 10	16 44.31	-24 7.3	1.056	2.067	3.3	19.2
6 20	16 20.08	-51 38.5	1.097	2.023	16.1	20.4	6 20	16 33.44	-24 1.7	1.063	2.052	9.1	19.5
6 30	16 4.29	-51 36.3	1.132	2.015	19.2	20.6	6 30	16 24.80	-23 55.1	1.092	2.036	14.5	19.8
7 10	15 54.21	-51 5.7	1.184	2.006	22.3	20.8	7 10	16 19.51	-23 51.3	1.139	2.021	19.2	20.0
<b>234650</b>	2002 CH <sub>304</sub>		6 4.5 180°99	3°1/ 2.8	18		<b>470384</b>	2007 TF <sub>318</sub>		6 4.5 265°95	1°0/ 4.2	18	
5 1	17 8.86	-8 44.5	3.900	4.731	7.6	21.8	5 1	17 15.21	-20 35.7	2.075	2.929	12.4	21.6
5 11	17 4.51	-8 20.6	3.822	4.731	5.9	21.7	5 11	17 10.18	-20 22.4	1.988	2.919	9.3	21.3
5 21	16 59.22	-8 0.4	3.769	4.731	4.3	21.5	5 21	17 3.13	-20 7.3	1.925	2.909	5.7	21.1
5 31	16 53.36	-7 45.1	3.745	4.731	3.2	21.5	5 31	16 54.69	-19 50.8	1.887	2.898	2.0	20.8
6 10	16 47.32	-7 35.9	3.749	4.731	3.5	21.5	6 10	16 45.76	-19 34.3	1.878	2.887	2.6	20.8
6 20	16 41.52	-7 33.2	3.782	4.730	5.0	21.6	6 20	16 37.28	-19 19.3	1.895	2.877	6.4	21.1
6 30	16 36.36	-7 37.5	3.843	4.730	6.7	21.7	6 30	16 30.13	-19 7.9	1.938	2.866	10.1	21.3
7 10	16 32.16	-7 48.5	3.927	4.729	8.3	21.8	7 10	16 24.98	-19 1.7	2.004	2.855	13.3	21.5
<b>418228</b>	2008 CM <sub>207</sub>		6 4.5 93°73	4°8/ 5.7	17		<b>356714</b>	2011 UZ <sub>162</sub>		6 4.5 278°45	1°9/ 5.0	18	
5 1	17 22.18	-33 52.9	1.615	2.456	16.0	21.5	5 1	17 15.70	-28 5.0	2.204	3.049	12.2	20.7
5 11	17 15.97	-34 22.2	1.554	2.468	12.6	21.3	5 11	17 10.60	-28 12.6	2.112	3.035	9.3	20.5
5 21	17 6.85	-34 38.9	1.513	2.481	8.8	21.1	5 21	17 3.42	-28 14.1	2.043	3.021	6.0	20.2
5 31	16 55.82	-34 39.3	1.497	2.493	5.5	20.9	5 31	16 54.80	-28 8.2	2.000	3.007	2.7	20.0
6 10	16 44.33	-34 22.6	1.506	2.506	5.2	20.9	6 10	16 45.63	-27 54.9	1.984	2.993	2.7	20.0
6 20	16 33.82	-33 51.2	1.541	2.518	8.2	21.1	6 20	16 36.87	-27 35.5	1.996	2.979	6.1	20.1
6 30	16 25.51	-33 10.3	1.600	2.529	11.7	21.4	6 30	16 29.46	-27 12.5	2.034	2.965	9.6	20.3
7 10	16 20.18	-32 26.5	1.680	2.541	15.0	21.6	7 10	16 24.08	-26 49.3	2.095	2.951	12.7	20.5
<b>103201</b>	1999 XB <sub>250</sub>		6 4.5 108°19	0°3/ 4.4	18		<b>162586</b>	2000 SE <sub>31</sub>		6 4.5 190°79	3°8/ 3.4	17	
5 1	17 17.16	-23 7.9	2.145	2.993	12.3	20.0	5 1	17 19.17	-14 2.9	1.828	2.680	14.0	20.3
5 11	17 11.30	-22 43.0	2.082	3.009	9.2	19.8	5 11	17 13.20	-13 28.2	1.753	2.679	10.7	20.1
5 21	17 3.58	-22 14.1	2.042	3.025	5.6	19.6	5 21	17 4.98	-12 55.9	1.699	2.677	7.1	19.9
5 31	16 54.74	-21 41.9	2.029	3.040	1.7	19.4	5 31	16 55.27	-12 28.6	1.672	2.675	4.1	19.7
6 10	16 45.68	-21 8.2	2.044	3.055	2.2	19.4	6 10	16 45.09	-12 8.8	1.672	2.672	4.8	19.8
6 20	16 37.30	-20 35.4	2.088	3.069	5.9	19.7	6 20	16 35.50	-11 58.2	1.699	2.668	8.2	20.0
6 30	16 30.36	-20 6.1	2.157	3.084	9.3	19.9	6 30	16 27.48	-11 58.3	1.751	2.664	11.9	20.2
7 10	16 25.40	-19 42.4	2.250	3.097	12.2	20.1	7 10	16 21.71	-12 9.2	1.824	2.659	15.1	20.4
<b>474806</b>	2005 SV <sub>11</sub>		6 4.5 207°70	2°1/ 3.6	18		<b>235848</b>	2005 AC <sub>8</sub>		6 4.5 106°65	1°4/ 4.8	17	
5 1	17 13.18	-16 2.3	2.822	3.665	9.8	22.3	5 1	17 17.89	-26 13.9	2.006	2.853	13.1	20.7
5 11	17 8.08	-15 39.7	2.736	3.660	7.4	22.1	5 11	17 12.18	-26 27.2	1.937	2.863	9.8	20.5
5 21	17 1.56	-15 17.8	2.676	3.655	4.7	22.0	5 21	17 4.31	-26 35.4	1.891	2.872	6.2	20.3
5 31	16 54.12	-14 57.8	2.643	3.649	2.4	21.8	5 31	16 55.04	-26 37.3	1.871	2.880	2.5	20.0
6 10	16 46.38	-14 41.2	2.640	3.643	2.9	21.8	6 10	16 45.39	-26 32.8	1.879	2.889	2.6	20.1
6 20	16 38.99	-14 29.0	2.665	3.636	5.5	22.0	6 20	16 36.37	-26 23.2	1.914	2.898	6.2	20.3
6 30	16 32.55	-14 22.3	2.717	3.629	8.2	22.1	6 30	16 28.91	-26 11.1	1.975	2.906	9.8	20.5
7 10	16 27.53	-14 21.9	2.793	3.622	10.6	22.3	7 10	16 23.65	-25 59.2	2.059	2.914	12.9	20.7
<b>281577</b>	2008 UL <sub>117</sub>		6 4.5 277°58	1°2/ 4.9	17		<b>83817</b>	2001 TM <sub>239</sub>		6 4.5 147°97	2°8/ 3.8	18	
5 1	17 16.68	-26 56.2	1.851	2.704	13.8	20.6	5 1	17 14.94	-13 50.0	2.286	3.133	11.7	19.8
5 11	17 11.53	-26 45.3	1.770	2.699	10.4	20.4	5 11	17 9.66	-13 44.0	2.212	3.136	8.8	19.6
5 21	17 4.03	-26 27.0	1.711	2.693	6.6	20.1	5 21	17 2.64	-13 41.6	2.162	3.140	5.8	19.4
5 31	16 54.95	-26 0.9	1.677	2.687	2.5	19.8	5 31	16 54.51	-13 43.8	2.138	3.142	3.1	19.3
6 10	16 45.37	-25 28.1	1.671	2.681	2.6	19.8	6 10	16 46.03	-13 51.3	2.143	3.145	3.6	19.3
6 20	16 36.39	-24 51.0	1.691	2.676	6.7	20.1	6 20	16 38.01	-14 4.7	2.176	3.148	6.5	19.5
6 30	16 29.05	-24 13.6	1.736	2.670	10.7	20.3	6 30	16 31.19	-14 24.1	2.234	3.150	9.5	19.7
7 10	16 24.06	-23 39.7	1.803	2.664	14.2	20.5	7 10	16 26.11	-14 49.5	2.316	3.153	12.3	19.9
<b>291687</b>	2006 HT <sub>99</sub>		6 4.5 156°16	0°9/ 4.7	18		<b>20921</b>	6680 P-L		6 4.5 171°76	4°0/ 3.4	17	
5 1	17 17.31	-24 37.8	1.994										

EPHEMERIDES

6 4.5

6 4.5

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>218240</b>	2002 <i>XN</i> <sub>25</sub>	6 4.5 284.00	0.7/ 4.7 18				<b>497505</b>	2006 <i>BR</i> <sub>21</sub>	6 4.5 176.23	4.4/ 6.2 17			
5 1	17 17.59	-25 57.6	1.588	2.449	15.3	20.1	5 1	17 21.81	-37 9.7	2.391	3.200	12.5	22.2
5 11	17 12.68	-25 38.3	1.499	2.433	11.6	19.8	5 11	17 15.00	-37 19.7	2.310	3.203	9.9	22.0
5 21	17 5.00	-25 10.7	1.432	2.417	7.3	19.5	5 21	17 6.01	-37 17.4	2.251	3.205	7.2	21.8
5 31	16 55.35	-24 34.5	1.390	2.401	2.5	19.2	5 31	16 55.61	-37 0.6	2.219	3.206	5.0	21.7
6 10	16 44.95	-23 51.3	1.373	2.384	2.8	19.2	6 10	16 44.82	-36 28.8	2.215	3.207	4.6	21.7
6 20	16 35.14	-23 4.6	1.382	2.368	7.8	19.4	6 20	16 34.69	-35 44.1	2.239	3.207	6.6	21.8
6 30	16 27.18	-22 19.1	1.415	2.352	12.4	19.7	6 30	16 26.16	-34 50.6	2.290	3.207	9.3	21.9
7 10	16 21.94	-21 39.6	1.468	2.336	16.5	19.9	7 10	16 19.87	-33 53.6	2.364	3.205	11.9	22.1
<b>144904</b>	2004 <i>XD</i> <sub>26</sub>	6 4.5 162.23	0.8/ 4.7 18				<b>338575</b>	2003 <i>SV</i> <sub>107</sub>	6 4.5 286.59	0.4/ 4.6 18			
5 1	17 17.91	-24 26.5	2.098	2.945	12.6	20.5	5 1	17 16.09	-24 46.7	1.848	2.704	13.6	20.7
5 11	17 12.15	-24 39.9	2.022	2.948	9.5	20.3	5 11	17 11.20	-24 32.3	1.757	2.688	10.3	20.4
5 21	17 4.30	-24 49.8	1.970	2.951	5.9	20.1	5 21	17 3.94	-24 12.0	1.688	2.672	6.4	20.2
5 31	16 55.05	-24 55.2	1.943	2.954	2.1	19.8	5 31	16 55.02	-23 45.7	1.644	2.655	2.1	19.8
6 10	16 45.37	-24 56.0	1.945	2.956	2.3	19.9	6 10	16 45.47	-23 14.6	1.628	2.639	2.5	19.8
6 20	16 36.22	-24 53.0	1.975	2.958	6.1	20.1	6 20	16 36.40	-22 41.2	1.638	2.623	6.9	20.1
6 30	16 28.53	-24 48.3	2.030	2.959	9.7	20.3	6 30	16 28.88	-22 9.0	1.673	2.606	11.0	20.3
7 10	16 22.93	-24 44.2	2.109	2.961	12.7	20.5	7 10	16 23.68	-21 41.4	1.729	2.590	14.7	20.5
<b>375004</b>	2007 <i>FP</i> <sub>37</sub>	6 4.5 121.86	9.1/31.5 17				<b>326120</b>	2011 <i>WP</i> <sub>119</sub>	6 4.5 164.02	1.3/ 5.0 18			
5 1	17 15.96	- 0 46.2	1.963	2.790	14.1	21.0	5 1	17 15.22	-28 6.3	2.417	3.258	11.4	20.6
5 11	17 10.45	+ 0 53.2	1.911	2.802	11.8	20.9	5 11	17 11.20	-27 49.8	2.338	3.259	8.6	20.4
5 21	17 3.10	+ 2 20.9	1.882	2.813	9.9	20.8	5 21	17 2.81	-27 26.5	2.282	3.260	5.4	20.2
5 31	16 54.64	+ 3 30.7	1.877	2.824	9.1	20.7	5 31	16 54.59	-26 56.1	2.253	3.261	2.2	20.0
6 10	16 45.95	+ 4 18.3	1.898	2.834	9.7	20.8	6 10	16 46.07	-26 19.8	2.253	3.262	2.2	20.0
6 20	16 37.88	+ 4 41.9	1.944	2.844	11.5	20.9	6 20	16 38.07	-25 39.9	2.280	3.263	5.4	20.2
6 30	16 31.22	+ 4 42.0	2.011	2.854	13.6	21.1	6 30	16 31.35	-24 59.3	2.335	3.264	8.6	20.4
7 10	16 26.48	+ 4 21.6	2.098	2.864	15.7	21.3	7 10	16 26.46	-24 21.1	2.413	3.265	11.4	20.6
<b>57811</b>	2001 <i>WE</i> <sub>17</sub>	6 4.5 130.69	0.8/ 4.8 18				<b>105865</b>	2000 <i>SE</i> <sub>171</sub>	6 4.5 286.88	0.5/ 4.3 18			
5 1	17 16.01	-25 25.2	2.550	3.390	10.9	20.4	5 1	17 14.18	-22 15.5	2.174	3.028	12.0	19.5
5 11	17 10.32	-25 24.8	2.478	3.401	8.1	20.2	5 11	17 9.39	-21 56.9	2.082	3.013	9.0	19.3
5 21	17 2.98	-25 20.2	2.431	3.412	5.0	20.0	5 21	17 2.66	-21 34.7	2.013	2.997	5.5	19.1
5 31	16 54.61	-25 11.0	2.412	3.422	1.8	19.8	5 31	16 54.59	-21 9.6	1.971	2.982	1.8	18.8
6 10	16 45.97	-24 57.8	2.421	3.432	1.9	19.8	6 10	16 46.03	-20 43.0	1.956	2.967	2.3	18.8
6 20	16 37.83	-24 41.8	2.459	3.441	5.1	20.1	6 20	16 37.88	-20 16.9	1.969	2.951	6.2	19.0
6 30	16 30.91	-24 25.1	2.524	3.451	8.1	20.3	6 30	16 30.99	-19 53.6	2.007	2.936	9.8	19.2
7 10	16 25.71	-24 9.7	2.614	3.460	10.8	20.5	7 10	16 26.00	-19 35.4	2.068	2.921	12.9	19.4
<b>158407</b>	2001 <i>YQ</i> <sub>161</sub>	6 4.5 64.25	0.3/ 4.6 17				<b>80561</b>	2000 <i>AZ</i> <sub>104</sub>	6 4.5 206.91	3.8/ 3.6 18			
5 1	17 15.54	-22 49.8	2.128	2.980	12.3	20.1	5 1	17 17.84	-13 53.5	1.738	2.594	14.4	19.4
5 11	17 10.28	-23 2.1	2.060	2.989	9.2	20.0	5 11	17 12.36	-13 27.4	1.662	2.591	11.0	19.2
5 21	17 3.09	-23 12.2	2.016	2.999	5.6	19.8	5 21	17 4.56	-13 4.8	1.609	2.588	7.2	18.9
5 31	16 54.66	-23 19.5	1.998	3.009	1.8	19.5	5 31	16 55.19	-12 47.7	1.581	2.585	4.1	18.7
6 10	16 45.89	-23 23.9	2.008	3.019	2.1	19.6	6 10	16 45.31	-12 38.5	1.580	2.581	4.8	18.8
6 20	16 37.68	-23 26.4	2.045	3.029	5.9	19.8	6 20	16 36.01	-12 38.5	1.604	2.577	8.4	19.0
6 30	16 30.84	-23 28.3	2.109	3.039	9.3	20.1	6 30	16 28.31	-12 48.6	1.654	2.572	12.1	19.2
7 10	16 25.98	-23 31.4	2.195	3.050	12.2	20.3	7 10	16 22.92	-13 8.8	1.724	2.567	15.5	19.4
<b>459499</b>	2013 <i>CS</i> <sub>191</sub>	6 4.5 69.21	2.5/ 4.9 17				<b>333942</b>	1999 <i>VK</i> <sub>143</sub>	6 4.5 189.27	3.2/ 2.8 18			
5 1	17 21.59	-26 45.0	1.243	2.111	18.1	21.4	5 1	17 17.73	-18 4.6	2.136	2.984	12.4	21.1
5 11	17 16.06	-27 14.1	1.186	2.121	13.8	21.2	5 11	17 11.77	-16 37.3	2.057	2.984	9.3	20.9
5 21	17 7.17	-27 36.3	1.148	2.131	8.8	20.9	5 21	17 3.95	-15 6.0	2.003	2.983	6.0	20.7
5 31	16 56.02	-27 48.4	1.133	2.142	3.8	20.7	5 31	16 54.96	-13 34.7	1.978	2.982	3.4	20.5
6 10	16 44.26	-27 49.3	1.142	2.152	3.8	20.7	6 10	16 45.70	-12 8.2	1.982	2.980	4.3	20.5
6 20	16 33.58	-27 40.8	1.176	2.163	8.7	21.0	6 20	16 37.04	-10 51.0	2.014	2.979	7.5	20.7
6 30	16 25.43	-27 27.2	1.232	2.173	13.5	21.3	6 30	16 29.77	- 9 46.9	2.073	2.976	10.8	20.9
7 10	16 20.66	-27 13.4	1.307	2.184	17.5	21.6	7 10	16 24.45	- 8 57.7	2.154	2.974	13.6	21.1
<b>64220</b>	2001 <i>TF</i> <sub>107</sub>	6 4.5 243.31	0.7/ 4.8 18				<b>86335</b>	1999 <i>XP</i> <sub>29</sub>	6 4.5 286.46	2.0/ 3.6 18			
5 1	17 19.18	-26 41.8	2.144	2.985	12.6	19.2	5 1	17 13.59	-18 51.6	2.333	3.185	11.3	19.4
5 11	17 13.19	-26 15.4	2.045	2.968	9.5	18.9	5 11	17 8.83	-18 10.6	2.233	3.162	8.5	19.1
5 21	17 5.01	-25 41.0	1.970	2.950	6.0	18.7	5 21	17 2.27	-17 27.0	2.157	3.140	5.4	18.9
5 31	16 55.31	-24 58.6	1.922	2.932	2.1	18.4	5 31	16 54.48	-16 42.6	2.109	3.117	2.4	18.7
6 10	16 45.07	-24 9.5	1.902	2.913	2.3	18.4	6 10	16 46.21	-15 59.7	2.088	3.094	3.1	18.7
6 20	16 35.30	-23 16.9	1.911	2.894	6.3	18.6	6 20	16 38.29	-15 21.1	2.095	3.071	6.4	18.8
6 30	16 26.96	-22 24.7	1.947	2.873	10.1	18.8	6 30	16 31.48	-14 49.1	2.129	3.048	9.8	19.0
7 10	16 20.78	-21 37.0	2.005	2.853	13.5	19.0	7 10	16 26.41	-14 25.7	2.185	3.024	12.8	19.2
<b>67765</b>	2000 <i>UM</i> <sub>62</sub>	6 4.5 76.70	1.2/ 4.9 17				<b>381435</b>	2008 <i>QG</i> <sub>4</sub>	6 4.5 261.12	1.3/ 4.0 18			
5 1	17 20.40	-26 57.9	1.389	2.252	16.9	19.1	5 1	17 16.69	-22 3.6	1.825	2.682	13.7	20.5
5 11	17 14.68	-26 40.9	1.332	2.266	12.7	18.9	5 11	17 11.50	-21 17.2	1.741	2.674	10.3	20.3
5 21	17 6.05	-26 14.7	1.296	2.280	7.9	18.6	5 21	17 4.03	-20 25.2	1.680	2.665	6.3	20.0
5 31	16 55.61	-25 39.2	1.283	2.293	2.9	18.3	5 31	16 55.04	-19 29.2	1.645	2.655	2.2	19.8
6 10	16 44.82	-24 56.4	1.296	2.307	3.0	18.4	6 10	16 45.56	-18 32.5	1.637	2.646	3.0	19.8
6 20	16 35.11	-24 10.6	1.334	2.321	7.9	18.7	6 20	16 36.67	-17 39.0	1.656	2.637	7.3	20.0
6 30	16 27.67	-23 26.8	1.395	2.334	12.4	19.0	6 30	16 29.37	-16 52.6	1.700	2.627	11.3	20.2
7 10	16 23.20	-22 49.7	1.477	2.348	16.2	19.3	7 10	16 24.34	-16 16.3	1.766	2.618	14.8	20.5
<b>48961</b>	1998 <i>QS</i> <sub>26</sub>	6 4.5 269.14	1.2/ 4.2 18				<b>303967</b>	2006 <i>AY</i> <sub>47</sub>					

EPHEMERIDES

6 4.5

6 4.5

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>178214</b>	2006 VR <sub>64</sub>		6 4.5	0°26	0°8/ 4.3	16	<b>499646</b>	2010 VW <sub>61</sub>		6 4.5	178°90	3°5/ 5.4	17
5 1	17 13.51	-21 29.3	1.844	2.707	13.4	20.1	5 1	17 21.18	-31 21.7	1.751	2.593	14.9	21.7
5 11	17 9.08	-21 13.5	1.771	2.706	10.0	19.8	5 11	17 15.16	-31 40.3	1.676	2.594	11.6	21.5
5 21	17 2.52	-20 54.9	1.720	2.705	6.1	19.6	5 21	17 6.43	-31 49.0	1.622	2.595	7.8	21.3
5 31	16 54.56	-20 34.5	1.694	2.705	2.0	19.3	5 31	16 55.85	-31 45.1	1.593	2.595	4.3	21.1
6 10	16 46.18	-20 13.7	1.695	2.706	2.6	19.4	6 10	16 44.68	-31 27.7	1.590	2.595	4.1	21.1
6 20	16 38.38	-19 54.6	1.722	2.706	6.7	19.6	6 20	16 34.25	-30 59.0	1.614	2.595	7.5	21.3
6 30	16 32.08	-19 39.5	1.774	2.708	10.5	19.9	6 30	16 25.75	-30 23.3	1.663	2.594	11.3	21.5
7 10	16 27.92	-19 30.2	1.847	2.709	13.8	20.1	7 10	16 19.98	-29 45.9	1.734	2.593	14.7	21.7
<b>35309</b>	1996 YF <sub>3</sub>		6 4.5	259°13	4°2/ 6.1	18	<b>147883</b>	2006 RF <sub>6</sub>		6 4.5	306°38	1°4/ 4.2	18
5 1	17 20.19	-35 19.6	1.924	2.754	14.3	18.6	5 1	17 15.72	-20 26.6	1.344	2.220	16.6	20.4
5 11	17 14.34	-35 11.7	1.832	2.741	11.3	18.4	5 11	17 11.77	-20 11.3	1.255	2.197	12.6	20.0
5 21	17 5.89	-34 49.5	1.762	2.727	8.0	18.2	5 21	17 4.76	-19 53.4	1.186	2.174	7.9	19.7
5 31	16 55.65	-34 10.6	1.717	2.714	4.9	18.0	5 31	16 55.43	-19 33.9	1.140	2.151	2.8	19.3
6 10	16 44.83	-33 15.3	1.699	2.700	4.5	17.9	6 10	16 45.08	-19 14.6	1.118	2.128	3.6	19.3
6 20	16 34.68	-32 6.9	1.708	2.686	7.3	18.0	6 20	16 35.18	-18 58.0	1.120	2.106	9.1	19.6
6 30	16 26.35	-30 51.2	1.742	2.672	10.9	18.2	6 30	16 27.22	-18 47.6	1.144	2.085	14.3	19.8
7 10	16 20.62	-29 34.9	1.799	2.658	14.3	18.4	7 10	16 22.27	-18 45.9	1.186	2.064	18.9	20.0
<b>131138</b>	2001 BV <sub>50</sub>		6 4.5	69°05	3°6/ 5.3	18	<b>250507</b>	2004 HE <sub>2</sub>		6 4.5	135°53	16°6/28.9	18
5 1	17 19.77	-30 50.3	1.774	2.619	14.6	19.6	5 1	17 20.91	+ 5 56.8	1.208	2.037	21.0	20.2
5 11	17 13.91	-31 23.8	1.714	2.634	11.3	19.4	5 11	17 15.08	+ 8 49.5	1.170	2.046	18.7	20.1
5 21	17 5.53	-31 48.5	1.677	2.650	7.6	19.2	5 21	17 6.35	+11 17.7	1.151	2.055	17.0	20.0
5 31	16 55.50	-32 1.5	1.664	2.665	4.3	19.0	5 31	16 55.79	+13 8.1	1.152	2.063	16.6	20.0
6 10	16 45.06	-32 1.8	1.677	2.681	4.1	19.0	6 10	16 44.84	+14 12.1	1.173	2.071	17.5	20.0
6 20	16 35.44	-31 50.8	1.717	2.696	7.2	19.3	6 20	16 34.94	+14 28.3	1.213	2.078	19.4	20.2
6 30	16 27.71	-31 32.2	1.782	2.712	10.7	19.5	6 30	16 27.27	+14 0.8	1.269	2.084	21.5	20.4
7 10	16 22.56	-31 10.4	1.868	2.727	13.8	19.7	7 10	16 22.56	+12 58.5	1.339	2.090	23.6	20.5
<b>55618</b>	2002 TB <sub>81</sub>		6 4.5	277°55	3°8/ 3.7	18	<b>259033</b>	2002 TW <sub>227</sub>		6 4.5	266°83	1°8/ 4.1	18
5 1	17 17.88	-13 46.3	1.680	2.538	14.7	19.4	5 1	17 18.20	-18 46.9	1.736	2.594	14.3	20.9
5 11	17 12.77	-13 31.0	1.585	2.515	11.3	19.1	5 11	17 12.95	-18 34.7	1.642	2.574	10.8	20.6
5 21	17 5.08	-13 19.8	1.511	2.491	7.5	18.8	5 21	17 5.15	-18 22.0	1.571	2.555	6.8	20.3
5 31	16 55.47	-13 14.8	1.462	2.466	4.2	18.6	5 31	16 55.49	-18 9.6	1.525	2.534	2.6	20.0
6 10	16 44.98	-13 17.7	1.439	2.441	4.9	18.5	6 10	16 45.05	-17 58.8	1.505	2.514	3.4	20.0
6 20	16 34.81	-13 29.8	1.442	2.416	8.8	18.7	6 20	16 35.01	-17 51.3	1.512	2.493	7.8	20.2
6 30	16 26.17	-13 51.9	1.469	2.391	13.1	18.9	6 30	16 26.53	-17 49.2	1.543	2.472	12.2	20.4
7 10	16 19.96	-14 23.8	1.516	2.365	17.0	19.1	7 10	16 20.49	-17 54.0	1.596	2.450	16.0	20.6
<b>97933</b>	2000 QW <sub>113</sub>		6 4.5	182°79	2°2/ 5.1	18	<b>3683</b>	Baumann		6 4.5	359°38	4°5/ 4.0	18
5 1	17 22.59	-28 17.4	1.913	2.753	13.9	20.3	5 1	17 14.62	- 9 4.6	1.914	2.765	13.5	15.4
5 11	17 15.95	-28 31.1	1.834	2.754	10.6	20.1	5 11	17 9.78	- 9 11.5	1.841	2.763	10.5	15.2
5 21	17 6.80	-28 37.7	1.778	2.754	6.9	19.9	5 21	17 2.93	- 9 27.5	1.791	2.763	7.3	15.0
5 31	16 55.94	-28 35.1	1.747	2.754	3.1	19.6	5 31	16 54.72	- 9 53.9	1.765	2.762	4.8	14.8
6 10	16 44.52	-28 22.9	1.745	2.753	3.1	19.6	6 10	16 46.06	-10 31.0	1.766	2.762	5.1	14.9
6 20	16 33.76	-28 2.7	1.770	2.751	6.9	19.8	6 20	16 37.88	-11 18.0	1.794	2.763	7.9	15.0
6 30	16 24.75	-27 38.0	1.820	2.748	10.7	20.1	6 30	16 31.06	-12 13.3	1.847	2.764	11.2	15.2
7 10	16 18.25	-27 12.9	1.894	2.745	14.0	20.3	7 10	16 26.24	-13 15.2	1.922	2.765	14.1	15.4
<b>15206</b>	1978 VJ <sub>6</sub>		6 4.5	248°79	1°2/ 4.8	18	<b>366621</b>	2003 QP <sub>44</sub>		6 4.5	314°64	0°7/ 4.6	17
5 1	17 17.64	-25 42.5	1.926	2.777	13.4	19.0	5 1	17 15.53	-23 20.7	1.194	2.076	17.8	20.6
5 11	17 12.26	-25 51.1	1.842	2.770	10.2	18.8	5 11	17 12.12	-23 36.2	1.107	2.051	13.6	20.3
5 21	17 4.56	-25 54.9	1.781	2.762	6.4	18.5	5 21	17 5.25	-23 49.0	1.038	2.027	8.6	19.9
5 31	16 55.24	-25 52.6	1.745	2.755	2.4	18.3	5 31	16 55.66	-23 57.8	0.992	2.003	2.9	19.5
6 10	16 45.35	-25 44.2	1.737	2.747	2.6	18.3	6 10	16 44.77	-24 1.5	0.968	1.980	3.4	19.4
6 20	16 35.98	-25 31.2	1.755	2.740	6.6	18.5	6 20	16 34.31	-24 1.2	0.966	1.957	9.5	19.7
6 30	16 28.16	-25 16.0	1.800	2.732	10.5	18.7	6 30	16 26.03	-23 59.8	0.986	1.935	15.2	19.9
7 10	16 22.63	-25 1.8	1.866	2.724	13.9	18.9	7 10	16 21.19	-24 1.2	1.024	1.915	20.2	20.2
<b>389887</b>	2012 SX <sub>64</sub>		6 4.5	223°18	7°4/ 6.7	18	<b>66392</b>	1999 KF <sub>10</sub>		6 4.5	53°87	0°0/ 4.4	18
5 1	17 24.26	-45 19.2	2.518	3.291	12.9	22.3	5 1	17 17.23	-23 19.2	1.555	2.420	15.3	19.2
5 11	17 17.30	-46 6.2	2.427	3.281	11.0	22.1	5 11	17 12.11	-23 4.8	1.494	2.430	11.4	19.0
5 21	17 7.72	-46 38.7	2.358	3.270	9.1	21.9	5 21	17 4.46	-22 45.7	1.454	2.440	7.0	18.8
5 31	16 56.27	-46 52.1	2.313	3.258	7.7	21.8	5 31	16 55.20	-22 22.5	1.439	2.450	2.2	18.5
6 10	16 44.11	-46 43.9	2.295	3.246	7.4	21.8	6 10	16 45.56	-21 56.7	1.449	2.461	2.7	18.5
6 20	16 32.48	-46 14.5	2.302	3.234	8.5	21.8	6 20	16 36.76	-21 31.1	1.486	2.472	7.4	18.9
6 30	16 22.58	-45 27.7	2.335	3.220	10.5	21.9	6 30	16 29.85	-21 8.9	1.546	2.482	11.6	19.1
7 10	16 15.23	-44 29.5	2.391	3.207	12.6	22.1	7 10	16 25.52	-20 52.7	1.627	2.494	15.2	19.4
<b>436185</b>	2009 WW <sub>44</sub>		6 4.5	140°76	1°5/ 4.8	15	<b>186363</b>	2002 GE <sub>77</sub>		6 4.5	359°10	7°7/ 5.6	18
5 1	17 21.13	-25 24.9	2.243	3.080	12.3	22.2	5 1	17 21.66	-42 12.5	2.210	3.007	13.7	19.5
5 11	17 14.44	-25 57.9	2.172	3.092	9.2	22.1	5 11	17 15.64	-43 34.4	2.134	3.006	11.5	19.3
5 21	17 5.68	-26 27.4	2.125	3.103	5.8	21.9	5 21	17 6.85	-44 44.0	2.081	3.006	9.4	19.2
5 31	16 55.56	-26 51.5	2.106	3.114	2.4	21.6	5 31	16 56.05	-45 35.3	2.052	3.006	7.9	19.1
6 10	16 45.03	-27 9.1	2.115	3.124	2.5	21.7	6 10	16 44.40	-46 4.9	2.049	3.006	7.8	19.1
6 20	16 35.05	-27 20.5	2.153	3.134	5.9	21.9	6 20	16 33.23	-46 12.3	2.071	3.006	9.2	19.2
6 30	16 26.52	-27 27.2	2.218	3.143	9.2	22.1	6 30	16 23.81	-46 0.5	2.118	3.006	11.2	19.3
7 10	16 20.09	-27 31.7	2.307	3.151	12.1	22.3	7 10	16 17.06	-45 35.2	2.185	3.007	13.4	19.5
<b>214066</b>	2004 FU <sub>109</sub>		6 4.5	36°58	2°0/ 5.0	17	<b>503909</b>	2002 CH <sub>293</sub>		6 4.5	73°28	6°2/ 7.1	17
5 1	17 16.14	-27 21.7											

EPHEMERIDES

6 4.5

6 4.5

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>119844</b>	2002 CC <sub>40</sub>		6 4.5 93°14	5°8/ 2.1 18			<b>281505</b>	2008 SZ <sub>306</sub>		6 4.5 254°64	0°4/ 4.5 18		
5 1	17 12.82	- 5 52.4	2.389	3.225	11.6	19.4	5 1	17 17.36	-20 48.8	1.861	2.717	13.6	20.5
5 11	17 7.91	- 4 54.3	2.330	3.237	9.3	19.3	5 11	17 12.04	-21 0.9	1.782	2.714	10.2	20.3
5 21	17 1.52	- 4 3.5	2.296	3.250	7.1	19.2	5 21	17 4.44	-21 12.4	1.726	2.710	6.3	20.0
5 31	16 54.23	- 3 23.3	2.288	3.262	5.9	19.1	5 31	16 55.25	-21 22.8	1.696	2.707	2.0	19.7
6 10	16 46.74	- 2 56.3	2.306	3.274	6.4	19.2	6 10	16 45.51	-21 32.1	1.693	2.704	2.5	19.8
6 20	16 39.75	- 2 43.8	2.351	3.286	8.2	19.3	6 20	16 36.29	-21 40.8	1.717	2.700	6.8	20.0
6 30	16 33.86	- 2 45.8	2.421	3.298	10.4	19.5	6 30	16 28.61	-21 50.1	1.765	2.697	10.7	20.3
7 10	16 29.55	- 3 1.0	2.512	3.310	12.6	19.6	7 10	16 23.19	-22 1.8	1.837	2.694	14.1	20.5
<b>66298</b>	1999 JJ <sub>30</sub>		6 4.5 29°65	3°4/ 3.4 18			<b>302070</b>	2000 WC <sub>73</sub>		6 4.5 218°84	1°1/ 3.9 18		
5 1	17 16.53	-19 37.0	1.218	2.099	17.6	18.1	5 1	17 14.76	-21 51.3	2.474	3.321	10.9	20.5
5 11	17 12.02	-18 23.0	1.160	2.104	13.2	17.8	5 11	17 9.48	-21 4.0	2.390	3.317	8.2	20.3
5 21	17 4.58	-17 4.3	1.122	2.109	8.3	17.5	5 21	17 2.56	-20 12.3	2.330	3.313	5.0	20.1
5 31	16 55.27	-15 45.8	1.107	2.115	3.9	17.3	5 31	16 54.60	-19 18.0	2.298	3.308	1.8	19.8
6 10	16 45.53	-14 34.0	1.116	2.122	5.1	17.4	6 10	16 46.35	-18 23.5	2.295	3.304	2.4	19.9
6 20	16 36.81	-13 34.7	1.148	2.129	9.8	17.7	6 20	16 38.57	-17 31.7	2.321	3.299	5.7	20.1
6 30	16 30.32	-12 52.2	1.203	2.136	14.5	18.0	6 30	16 31.96	-16 45.4	2.374	3.294	8.9	20.3
7 10	16 26.77	-12 28.1	1.276	2.144	18.4	18.2	7 10	16 27.03	-16 6.7	2.450	3.289	11.6	20.4
<b>325007</b>	2008 BQ <sub>43</sub>		6 4.5 77°75	0°3/ 4.5 17			<b>151130</b>	2001 XH <sub>12</sub>		6 4.5 59°61	3°9/ 5.4 18		
5 1	17 20.76	-21 36.3	1.483	2.346	16.1	21.2	5 1	17 22.35	-30 51.3	1.504	2.354	16.5	18.9
5 11	17 14.71	-21 40.4	1.431	2.366	12.0	21.0	5 11	17 16.02	-31 24.7	1.459	2.382	12.6	18.8
5 21	17 6.02	-21 42.3	1.401	2.386	7.3	20.8	5 21	17 6.86	-31 47.4	1.436	2.410	8.4	18.6
5 31	16 55.69	-21 41.6	1.395	2.406	2.3	20.5	5 31	16 55.96	-31 56.2	1.436	2.439	4.7	18.4
6 10	16 45.03	-21 38.9	1.415	2.426	2.8	20.6	6 10	16 44.81	-31 50.7	1.462	2.467	4.5	18.5
6 20	16 35.37	-21 35.6	1.461	2.446	7.6	20.9	6 20	16 34.81	-31 33.1	1.514	2.495	7.8	18.7
6 30	16 27.78	-21 34.0	1.531	2.465	11.8	21.2	6 30	16 27.10	-31 8.3	1.590	2.523	11.5	19.0
7 10	16 22.92	-21 36.3	1.621	2.485	15.4	21.5	7 10	16 22.32	-30 41.4	1.687	2.551	14.8	19.3
<b>409378</b>	2005 CW <sub>20</sub>		6 4.5 93°16	4°1/ 3.7 17			<b>430448</b>	2000 SE <sub>97</sub>		6 4.5 276°59	7°5/ 6.1 15		
5 1	17 19.48	-13 40.5	1.500	2.362	16.0	20.8	5 1	17 22.34	-40 37.1	1.861	2.674	15.3	21.2
5 11	17 13.65	-13 13.5	1.446	2.377	12.1	20.6	5 11	17 16.60	-41 26.5	1.766	2.654	12.8	21.0
5 21	17 5.34	-12 51.2	1.413	2.393	7.9	20.4	5 21	17 7.69	-42 1.8	1.692	2.634	10.1	20.8
5 31	16 55.47	-12 36.0	1.405	2.408	4.5	20.2	5 31	16 56.41	-42 16.9	1.642	2.614	8.0	20.6
6 10	16 45.28	-12 30.1	1.422	2.423	5.2	20.3	6 10	16 44.08	-42 8.4	1.616	2.593	7.7	20.6
6 20	16 35.98	-12 34.5	1.464	2.438	8.9	20.6	6 20	16 32.28	-41 36.4	1.616	2.573	9.6	20.6
6 30	16 28.60	-12 49.6	1.530	2.452	12.7	20.8	6 30	16 22.49	-40 45.7	1.639	2.552	12.6	20.8
7 10	16 23.78	-13 14.6	1.617	2.466	16.1	21.1	7 10	16 15.77	-39 43.9	1.684	2.531	15.6	20.9
<b>265573</b>	2005 QP <sub>101</sub>		6 4.5 156°53	2°0/ 5.2 17			<b>395576</b>	2011 UV <sub>251</sub>		6 4.5 246°59	2°6/ 3.5 17		
5 1	17 20.44	-28 56.4	2.133	2.969	12.8	22.0	5 1	17 13.46	-16 25.0	2.391	3.241	11.1	21.3
5 11	17 14.03	-28 57.4	2.059	2.977	9.8	21.8	5 11	17 8.60	-15 46.7	2.307	3.234	8.4	21.1
5 21	17 5.46	-28 50.7	2.008	2.984	6.3	21.6	5 21	17 2.08	-15 8.4	2.248	3.227	5.4	20.9
5 31	16 55.51	-28 35.1	1.983	2.990	2.9	21.4	5 31	16 54.48	-14 31.9	2.215	3.220	2.8	20.8
6 10	16 45.20	-28 11.2	1.987	2.996	2.8	21.4	6 10	16 46.54	-13 59.4	2.211	3.213	3.5	20.8
6 20	16 35.55	-27 40.9	2.019	3.001	6.1	21.6	6 20	16 39.00	-13 33.1	2.234	3.206	6.4	21.0
6 30	16 27.46	-27 7.6	2.078	3.005	9.6	21.8	6 30	16 32.59	-13 14.5	2.284	3.198	9.4	21.1
7 10	16 21.59	-26 35.1	2.159	3.009	12.6	22.0	7 10	16 27.83	-13 4.6	2.356	3.191	12.1	21.3
<b>121308</b>	1999 RD <sub>208</sub>		6 4.5 220°99	0°8/ 4.9 18			<b>211578</b>	2003 SV <sub>175</sub>		6 4.5 346°91	3°2/ 3.6 17		
5 1	17 14.82	-26 54.7	2.981	3.815	9.6	20.3	5 1	17 12.77	-19 16.8	1.090	1.982	18.3	19.6
5 11	17 9.38	-26 38.2	2.886	3.805	7.3	20.1	5 11	17 9.74	-18 24.2	1.024	1.974	13.9	19.3
5 21	17 2.45	-26 16.4	2.817	3.795	4.6	19.9	5 21	17 3.50	-17 27.7	0.977	1.967	8.7	19.0
5 31	16 54.56	-25 49.2	2.776	3.785	1.7	19.7	5 31	16 55.04	-16 31.3	0.951	1.961	3.9	18.7
6 10	16 46.35	-25 17.5	2.764	3.775	1.8	19.7	6 10	16 45.86	-15 40.3	0.948	1.956	5.1	18.8
6 20	16 38.51	-24 43.0	2.782	3.764	4.7	19.9	6 20	16 37.53	-15 0.1	0.967	1.952	10.3	19.0
6 30	16 31.66	-24 7.8	2.828	3.752	7.4	20.1	6 30	16 31.48	-14 34.8	1.006	1.950	15.5	19.3
7 10	16 26.31	-23 34.5	2.898	3.740	9.9	20.2	7 10	16 28.61	-14 26.0	1.062	1.949	19.9	19.6
<b>237921</b>	2002 PF <sub>173</sub>		6 4.5 231°65	1°3/ 4.1 18 R			<b>431844</b>	2008 SJ <sub>53</sub>		6 4.5 321°78	0°0/ 4.4 17		
5 1	17 15.60	-20 1.5	2.113	2.966	12.3	20.6	5 1	17 15.42	-22 38.9	1.560	2.428	15.1	21.2
5 11	17 10.42	-19 39.8	2.031	2.961	9.2	20.4	5 11	17 11.06	-22 35.3	1.480	2.417	11.4	21.0
5 21	17 3.29	-19 16.3	1.972	2.955	5.7	20.2	5 21	17 4.05	-22 28.3	1.421	2.407	7.0	20.7
5 31	16 54.85	-18 51.8	1.940	2.950	2.1	19.9	5 31	16 55.19	-22 17.8	1.386	2.397	2.2	20.4
6 10	16 45.99	-18 28.1	1.935	2.944	2.7	20.0	6 10	16 45.65	-22 4.6	1.376	2.387	2.8	20.4
6 20	16 37.61	-18 7.0	1.958	2.938	6.4	20.2	6 20	16 36.68	-21 50.8	1.391	2.378	7.6	20.6
6 30	16 30.56	-17 50.7	2.006	2.931	10.0	20.4	6 30	16 29.48	-21 39.0	1.431	2.370	12.1	20.9
7 10	16 25.47	-17 40.7	2.077	2.925	13.1	20.6	7 10	16 24.89	-21 32.0	1.490	2.361	16.0	21.1
<b>203317</b>	2001 TM <sub>65</sub>		6 4.5 174°50	3°5/ 3.5 16			<b>48438</b>	1989 WJ <sub>2</sub>		6 4.5 223°62	3°2/ 3.3 18		
5 1	17 20.09	-15 43.0	1.717	2.571	14.6	20.9	5 1	17 8.56	- 5 0.2	4.438	5.255	7.0	18.3
5 11	17 14.01	-15 1.7	1.646	2.574	11.1	20.7	5 11	17 4.27	- 5 1.7	4.357	5.254	5.6	18.1
5 21	17 5.57	-14 21.2	1.597	2.576	7.2	20.5	5 21	16 59.16	- 5 8.4	4.302	5.253	4.2	18.0
5 31	16 55.57	-13 44.2	1.573	2.578	3.9	20.3	5 31	16 53.53	- 5 21.2	4.275	5.251	3.3	18.0
6 10	16 45.14	-13 13.7	1.577	2.579	4.6	20.3	6 10	16 47.73	- 5 40.4	4.277	5.250	3.5	18.0
6 20	16 35.40	-12 52.0	1.607	2.579	8.3	20.6	6 20	16 42.12	- 6 5.9	4.307	5.248	4.6	18.1
6 30	16 27.37	-12 41.3	1.662	2.579	12.2	20.8	6 30	16 37.05	- 6 37.6	4.366	5.247	6.1	18.2
7 10	16 21.73	-12 42.1	1.738	2.578	15.6	21.0	7 10	16 32.80	- 7 14.6	4.449	5.245	7.5	18.3
<b>75547</b>	1999 XV <sub>257</sub>		6 4.5 249°84	0°7/ 4.7 18			<b>131688</b>	2001 XW <sub>207</sub>		6 4.5 104°63	2°8/ 3.8 18		
5 1	17 19.60	-23 52.2											

EPHEMERIDES

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>404692</b>	2014 <i>HC</i> <sub>184</sub>	6 4.5 353°34	2°0	3.9	16		<b>252153</b>	2001 <i>BT</i> <sub>17</sub>	6 4.5 104°09	1°7	4.9	17	
5 1	17 12.81	-18 5.4	2.058	2.917	12.3	20.9	5 1	17 21.36	-26 41.9	1.569	2.424	15.7	21.2
5 11	17 8.36	-17 41.6	1.982	2.915	9.2	20.7	5 11	17 15.29	-26 49.6	1.507	2.436	11.9	20.9
5 21	17 2.04	-17 17.5	1.930	2.913	5.8	20.5	5 21	17 6.49	-26 50.4	1.467	2.448	7.5	20.7
5 31	16 54.49	-16 54.7	1.903	2.912	2.5	20.3	5 31	16 55.93	-26 42.7	1.451	2.460	3.0	20.5
6 10	16 46.57	-16 34.9	1.903	2.910	3.1	20.3	6 10	16 44.94	-26 26.8	1.462	2.472	3.0	20.5
6 20	16 39.14	-16 19.8	1.931	2.910	6.6	20.5	6 20	16 34.86	-26 5.0	1.498	2.484	7.4	20.8
6 30	16 33.01	-16 11.1	1.983	2.909	10.0	20.8	6 30	16 26.85	-25 41.3	1.560	2.495	11.6	21.1
7 10	16 28.76	-16 9.7	2.058	2.909	13.0	20.9	7 10	16 21.61	-25 19.6	1.642	2.506	15.2	21.3
<b>410259</b>	2007 <i>TQ</i> <sub>120</sub>	6 4.5 195°10	2°5	3.9	17		<b>34303</b>	2000 <i>QN</i> <sub>173</sub>	6 4.5 15°30	0°4	4.4	18	
5 1	17 19.36	-17 50.9	1.727	2.583	14.4	22.0	5 1	17 13.14	-24 22.7	0.946	1.844	19.9	18.1
5 11	17 13.57	-17 21.7	1.651	2.582	10.9	21.7	5 11	17 10.27	-23 45.5	0.895	1.848	14.9	17.8
5 21	17 5.38	-16 52.0	1.597	2.580	6.9	21.5	5 21	17 3.87	-22 58.9	0.863	1.854	9.2	17.5
5 31	16 55.58	-16 23.5	1.569	2.577	3.1	21.2	5 31	16 55.16	-22 5.4	0.850	1.862	2.9	17.2
6 10	16 45.26	-15 58.4	1.568	2.574	3.8	21.3	6 10	16 45.91	-21 9.7	0.859	1.871	3.6	17.3
6 20	16 35.58	-15 39.1	1.593	2.570	7.9	21.5	6 20	16 37.89	-20 18.0	0.889	1.881	9.7	17.7
6 30	16 27.58	-15 27.8	1.643	2.566	11.9	21.7	6 30	16 32.51	-19 36.2	0.939	1.893	15.1	18.0
7 10	16 21.98	-15 25.9	1.714	2.562	15.4	22.0	7 10	16 30.57	-19 7.8	1.006	1.906	19.7	18.3
<b>440507</b>	2005 <i>UF</i> <sub>25</sub>	6 4.5 288°27	1°2	4.1	18		<b>500790</b>	2013 <i>EG</i> <sub>123</sub>	6 4.5 69°95	0°0	4.3	17	
5 1	17 13.72	-20 29.7	2.215	3.069	11.8	21.5	5 1	17 23.62	-21 16.6	1.227	2.096	18.3	21.1
5 11	17 9.01	-20 2.9	2.127	3.057	8.8	21.3	5 11	17 17.25	-21 37.8	1.183	2.121	13.6	20.9
5 21	17 2.45	-19 33.7	2.062	3.045	5.5	21.0	5 21	17 7.74	-21 57.7	1.160	2.146	8.3	20.7
5 31	16 54.63	-19 3.0	2.023	3.033	2.0	20.8	5 31	16 56.31	-22 14.5	1.160	2.171	2.6	20.4
6 10	16 46.39	-18 32.7	2.012	3.021	2.6	20.8	6 10	16 44.58	-22 27.7	1.184	2.196	3.1	20.5
6 20	16 38.56	-18 4.9	2.029	3.009	6.2	21.0	6 20	16 34.10	-22 38.1	1.234	2.221	8.4	20.9
6 30	16 31.95	-17 41.9	2.071	2.997	9.7	21.2	6 30	16 26.14	-22 48.1	1.306	2.245	13.1	21.2
7 10	16 27.17	-17 25.5	2.136	2.985	12.7	21.4	7 10	16 21.40	-23 0.1	1.399	2.270	16.9	21.5
<b>55510</b>	2001 <i>UU</i> <sub>160</sub>	6 4.5 344°13	0°6	4.6	18		<b>14247</b>	2000 <i>AV</i> <sub>55</sub>	6 4.5 289°42	1°1	4.3	18	
5 1	17 16.43	-22 48.9	2.006	2.859	12.9	18.9	5 1	17 17.73	-20 2.7	1.536	2.401	15.4	18.1
5 11	17 11.27	-23 17.6	1.927	2.857	9.7	18.7	5 11	17 13.02	-19 59.6	1.442	2.378	11.7	17.8
5 21	17 3.94	-23 45.0	1.872	2.855	6.0	18.5	5 21	17 5.45	-19 55.8	1.369	2.355	7.3	17.5
5 31	16 55.13	-24 9.8	1.843	2.853	2.0	18.2	5 31	16 55.74	-19 51.4	1.321	2.332	2.5	17.1
6 10	16 45.79	-24 31.2	1.841	2.852	2.3	18.3	6 10	16 45.04	-19 47.2	1.297	2.308	3.2	17.1
6 20	16 36.91	-24 49.0	1.866	2.850	6.3	18.5	6 20	16 34.72	-19 44.6	1.300	2.284	8.3	17.3
6 30	16 29.45	-25 4.4	1.917	2.849	10.0	18.7	6 30	16 26.13	-19 45.8	1.325	2.261	13.2	17.6
7 10	16 24.12	-25 19.0	1.991	2.848	13.2	18.9	7 10	16 20.28	-19 53.0	1.371	2.237	17.5	17.8
<b>429161</b>	2009 <i>US</i> <sub>154</sub>	6 4.5 209°71	1°2	4.2	17		<b>460732</b>	2014 <i>VS</i> <sub>14</sub>	6 4.5 124°24	0°8	4.7	17	
5 1	17 18.22	-19 26.3	1.979	2.831	13.1	21.9	5 1	17 20.79	-23 17.2	1.579	2.437	15.5	21.0
5 11	17 12.54	-19 21.6	1.897	2.826	9.8	21.7	5 11	17 14.96	-23 42.0	1.511	2.442	11.6	20.7
5 21	17 4.69	-19 16.5	1.839	2.822	6.1	21.4	5 21	17 6.39	-24 4.5	1.464	2.447	7.2	20.5
5 31	16 55.36	-19 11.1	1.806	2.816	2.2	21.2	5 31	16 55.95	-24 22.7	1.441	2.452	2.5	20.2
6 10	16 45.52	-19 6.3	1.801	2.811	2.7	21.2	6 10	16 44.90	-24 35.7	1.446	2.457	2.8	20.2
6 20	16 36.18	-19 3.3	1.824	2.805	6.7	21.5	6 20	16 34.59	-24 44.0	1.476	2.461	7.5	20.5
6 30	16 28.28	-19 3.7	1.872	2.798	10.5	21.7	6 30	16 26.22	-24 49.8	1.531	2.465	11.8	20.8
7 10	16 22.53	-19 8.8	1.943	2.791	13.8	21.9	7 10	16 20.60	-24 55.7	1.607	2.470	15.5	21.0
<b>397671</b>	2008 <i>AM</i> <sub>71</sub>	6 4.5 150°98	0°8	4.3	18		<b>206803</b>	2004 <i>DO</i> <sub>49</sub>	6 4.5 288°18	4°2	5.8	17	
5 1	17 15.36	-20 14.3	2.686	3.529	10.3	22.2	5 1	17 17.92	-34 21.6	2.042	2.874	13.5	20.5
5 11	17 9.80	-20 5.2	2.612	3.537	7.7	22.1	5 11	17 12.53	-34 39.6	1.960	2.870	10.6	20.3
5 21	17 2.72	-19 55.0	2.563	3.544	4.7	21.9	5 21	17 4.78	-34 46.9	1.901	2.866	7.5	20.1
5 31	16 54.68	-19 43.9	2.541	3.551	1.6	21.7	5 31	16 55.42	-34 40.7	1.867	2.862	4.8	20.0
6 10	16 46.39	-19 33.0	2.548	3.558	2.0	21.7	6 10	16 45.54	-34 20.5	1.860	2.859	4.5	19.9
6 20	16 38.53	-19 23.2	2.585	3.564	5.1	21.9	6 20	16 36.26	-33 48.0	1.879	2.855	7.0	20.1
6 30	16 31.75	-19 15.8	2.649	3.570	8.0	22.1	6 30	16 28.61	-33 7.0	1.924	2.851	10.2	20.3
7 10	16 26.54	-19 12.1	2.736	3.575	10.5	22.3	7 10	16 23.33	-32 22.6	1.991	2.848	13.2	20.4
<b>111592</b>	2002 <i>AY</i> <sub>63</sub>	6 4.5 141°17	6°5	2.3	18		<b>365495</b>	2010 <i>RB</i> <sub>3</sub>	6 4.5 323°57	3°8	5.1	17	
5 1	17 13.09	+ 0 13.5	2.721	3.534	11.0	20.4	5 1	17 15.33	-28 45.8	1.140	2.020	18.6	20.1
5 11	17 8.00	+ 0 25.1	2.658	3.542	9.1	20.3	5 11	17 12.21	-29 16.8	1.059	2.000	14.5	19.7
5 21	17 1.57	+ 0 53.6	2.619	3.550	7.5	20.2	5 21	17 5.44	-29 39.7	0.997	1.981	9.7	19.4
5 31	16 54.31	+ 1 9.2	2.606	3.558	6.6	20.1	5 31	16 55.83	-29 50.4	0.956	1.963	4.9	19.1
6 10	16 46.84	+ 1 10.4	2.619	3.565	6.9	20.2	6 10	16 44.94	-29 46.4	0.937	1.946	4.8	19.0
6 20	16 39.77	+ 0 56.7	2.659	3.572	8.3	20.3	6 20	16 34.68	-29 28.8	0.939	1.929	9.8	19.2
6 30	16 33.67	+ 0 28.9	2.723	3.579	10.1	20.4	6 30	16 26.85	-29 2.6	0.963	1.914	15.2	19.5
7 10	16 28.97	- 0 11.1	2.810	3.585	11.9	20.5	7 10	16 22.72	-28 34.4	1.004	1.900	20.0	19.7
<b>423129</b>	2004 <i>CR</i> <sub>29</sub>	6 4.5 213°27	2°7	5.3	17		<b>331912</b>	2004 <i>RY</i> <sub>123</sub>	6 4.5 330°10	4°0	6.2	18	
5 1	17 21.05	-30 8.9	1.859	2.700	14.2	22.0	5 1	17 17.87	-34 42.0	1.508	2.357	16.5	19.6
5 11	17 14.98	-30 13.9	1.775	2.695	11.0	21.8	5 11	17 13.13	-34 17.1	1.427	2.348	13.0	19.4
5 21	17 6.33	-30 9.7	1.714	2.689	7.2	21.5	5 21	17 5.40	-33 34.3	1.367	2.340	9.0	19.1
5 31	16 55.91	-29 54.2	1.677	2.682	3.6	21.3	5 31	16 55.65	-32 31.9	1.330	2.332	5.1	18.9
6 10	16 44.88	-29 27.4	1.668	2.675	3.4	21.3	6 10	16 45.32	-31 11.8	1.318	2.324	4.5	18.8
6 20	16 34.49	-28 51.5	1.686	2.668	7.1	21.5	6 20	16 35.88	-29 39.4	1.332	2.317	8.1	19.0
6 30	16 25.87	-28 10.7	1.729	2.660	10.9	21.7	6 30	16 28.62	-28 3.2	1.369	2.311	12.4	19.2
7 10	16 19.82	-27 30.0	1.795	2.651	14.4	21.9	7 10	16 24.33	-26 31.4	1.428	2.305	16.3	19.5
<b>299842</b>	2006 <i>SL</i> <sub>204</sub>	6 4.5 194°10	4°0	3.1	16		<b>497757</b>	2006 <i>SU</i> <sub>284</sub>	6 4.5 254°4				

EPHEMERIDES

6 4.5

6 4.6

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	
<b>479116</b>	2013 BU <sub>9</sub>	6 4.5 239°30		1.4°/ 4.2 17				<b>503848</b>	4702 P-L	6 4.6 318°94		0°0/ 4.3 17		
5 1	17 15.35	-17 43.0	2.286	3.135	11.6	21.3	5 1	17 13.41	-22 36.1	1.076	1.967	18.6	20.8	
5 11	17 10.16	-17 46.7	2.202	3.130	8.7	21.1	5 11	17 10.94	-22 37.3	0.985	1.934	14.3	20.4	
5 21	17 3.14	-17 51.7	2.143	3.125	5.4	20.9	5 21	17 4.83	-22 35.0	0.912	1.902	9.0	20.0	
5 31	16 54.89	-17 58.2	2.111	3.120	2.1	20.6	5 31	16 55.73	-22 28.4	0.859	1.871	3.0	19.5	
6 10	16 46.21	-18 6.6	2.106	3.115	2.6	20.7	6 10	16 45.08	-22 18.1	0.828	1.840	3.6	19.5	
6 20	16 37.92	-18 17.5	2.130	3.109	6.0	20.9	6 20	16 34.71	-22 6.1	0.818	1.810	10.3	19.7	
6 30	16 30.82	-18 31.4	2.180	3.104	9.3	21.1	6 30	16 26.58	-21 56.5	0.827	1.782	16.6	19.9	
7 10	16 25.52	-18 49.1	2.253	3.098	12.3	21.3	7 10	16 22.15	-21 53.4	0.853	1.755	22.1	20.1	
<b>480406</b>	2015 KZ <sub>80</sub>	6 4.5 307°23		6°5/ 2.3 16				<b>121659</b>	Blairrussell	6 4.6 258°13		0°1/ 4.5 18		
5 1	17 13.15	-7 37.7	1.880	2.731	13.6	21.0	5 1	17 15.09	-24 17.9	2.694	3.535	10.3	19.9	
5 11	17 8.77	-6 39.4	1.802	2.721	10.9	20.8	5 11	17 9.78	-23 44.4	2.593	3.516	7.8	19.7	
5 21	17 2.39	-5 47.7	1.748	2.711	8.2	20.6	5 21	17 2.85	-23 5.4	2.516	3.497	4.8	19.4	
5 31	16 54.67	-5 6.9	1.718	2.701	6.5	20.5	5 31	16 54.82	-22 21.9	2.467	3.478	1.5	19.2	
6 10	16 46.48	-4 40.7	1.713	2.692	7.2	20.5	6 10	16 46.41	-21 35.3	2.448	3.458	1.9	19.2	
6 20	16 38.76	-4 31.3	1.734	2.682	9.7	20.7	6 20	16 38.34	-20 48.0	2.457	3.439	5.2	19.4	
6 30	16 32.37	-4 39.2	1.777	2.673	12.7	20.8	6 30	16 31.34	-20 2.9	2.495	3.418	8.3	19.5	
7 10	16 27.96	-5 3.0	1.842	2.664	15.5	21.0	7 10	16 25.93	-19 22.5	2.556	3.398	11.1	19.7	
<b>307200</b>	2002 FT <sub>9</sub>	6 4.5 63°02		11°5/ 7.9 16				<b>429341</b>	2010 FN <sub>18</sub>	6 4.6 5°63		4°2/ 3.6 17		
5 1	17 30.58	-55 35.6	2.293	3.011	15.4	20.1	5 1	17 14.78	-12 22.0	1.729	2.590	14.2	21.0	
5 11	17 23.15	-57 14.6	2.238	3.025	14.0	20.0	5 11	17 10.12	-12 0.4	1.660	2.590	10.9	20.8	
5 21	17 11.90	-58 33.0	2.202	3.039	12.6	20.0	5 21	17 3.27	-11 44.1	1.613	2.590	7.4	20.5	
5 31	16 57.82	-59 23.3	2.188	3.054	11.7	19.9	5 31	16 54.98	-11 35.4	1.590	2.591	4.5	20.4	
6 10	16 42.66	-59 41.4	2.196	3.068	11.5	19.9	6 10	16 46.23	-11 36.2	1.593	2.592	5.1	20.4	
6 20	16 28.40	-59 28.0	2.226	3.082	12.0	20.0	6 20	16 38.07	-11 47.4	1.621	2.593	8.3	20.6	
6 30	16 16.82	-58 48.0	2.278	3.096	13.0	20.1	6 30	16 31.42	-12 9.1	1.674	2.595	11.9	20.8	
7 10	16 9.01	-57 49.7	2.348	3.111	14.3	20.2	7 10	16 26.96	-12 40.4	1.748	2.596	15.1	21.0	
<b>161295</b>	2003 JF <sub>16</sub>	6 4.5 193°34		3°9/ 3.6 17				<b>427040</b>	2014 TZ <sub>29</sub>	6 4.6 267°80		0°4/ 4.5 17		
5 1	17 18.26	-15 34.6	1.423	2.291	16.3	19.7	5 1	17 20.38	-20 54.4	1.497	2.360	15.9	21.2	
5 11	17 13.14	-14 55.6	1.355	2.291	12.4	19.5	5 11	17 15.10	-21 5.3	1.407	2.342	12.1	20.9	
5 21	17 5.29	-14 18.2	1.308	2.291	8.1	19.2	5 21	17 6.81	-21 15.8	1.338	2.324	7.6	20.6	
5 31	16 55.62	-13 45.7	1.285	2.290	4.3	19.0	5 31	16 56.23	-21 25.1	1.294	2.305	2.5	20.2	
6 10	16 45.39	-13 21.1	1.286	2.290	5.2	19.1	6 10	16 44.63	-21 32.8	1.275	2.286	3.0	20.2	
6 20	16 35.92	-13 7.2	1.313	2.289	9.3	19.3	6 20	16 33.47	-21 39.7	1.281	2.267	8.3	20.5	
6 30	16 28.38	-13 5.6	1.362	2.289	13.6	19.6	6 30	16 24.17	-21 47.5	1.312	2.247	13.3	20.7	
7 10	16 23.57	-13 16.6	1.431	2.288	17.4	19.8	7 10	16 17.77	-21 58.7	1.362	2.228	17.6	20.9	
<b>359982</b>	2012 UQ <sub>109</sub>	6 4.5 111°38		7°7/ 3.2 18				<b>106373</b>	2000 VP <sub>11</sub>	6 4.6 265°30		0°0/ 4.4 18		
5 1	17 15.13	+ 4 31.1	2.588	3.381	12.1	20.5	5 1	17 15.20	-22 36.5	2.426	3.273	11.1	20.1	
5 11	17 9.56	+ 4 49.3	2.529	3.392	10.3	20.4	5 11	17 10.10	-22 33.5	2.329	3.255	8.4	19.9	
5 21	17 2.55	+ 4 53.5	2.493	3.404	8.7	20.3	5 21	17 3.16	-22 28.0	2.256	3.238	5.2	19.6	
5 31	16 54.66	+ 4 41.1	2.481	3.415	7.8	20.3	5 31	16 54.95	-22 19.8	2.209	3.220	1.7	19.4	
6 10	16 46.57	+ 4 11.2	2.496	3.426	8.0	20.3	6 10	16 46.24	-22 9.4	2.191	3.202	2.0	19.4	
6 20	16 38.93	+ 3 24.4	2.536	3.436	9.2	20.4	6 20	16 37.86	-21 58.1	2.201	3.184	5.6	19.6	
6 30	16 32.35	+ 2 22.7	2.602	3.447	10.8	20.5	6 30	16 30.60	-21 47.6	2.238	3.165	9.0	19.8	
7 10	16 27.29	+ 1 9.4	2.690	3.457	12.6	20.7	7 10	16 25.09	-21 39.6	2.298	3.147	12.0	19.9	
<b>54433</b>	2000 LH <sub>32</sub>	6 4.5 357°14		3°9/ 3.1 18				<b>261986</b>	2006 QU <sub>25</sub>	6 4.6 229°14		2°7/ 3.8 17		
5 1	17 13.48	-14 15.7	1.951	2.810	12.9	18.6	5 1	17 19.00	-16 10.6	2.000	2.848	13.1	21.7	
5 11	17 8.89	-13 23.7	1.879	2.809	9.9	18.4	5 11	17 13.17	-15 48.2	1.910	2.836	9.9	21.5	
5 21	17 2.40	-12 33.2	1.830	2.808	6.6	18.2	5 21	17 5.15	-15 26.6	1.843	2.823	6.4	21.3	
5 31	16 54.66	-11 47.3	1.807	2.808	4.1	18.0	5 31	16 55.60	-15 7.5	1.803	2.809	3.1	21.0	
6 10	16 46.57	-11 9.4	1.810	2.807	4.8	18.0	6 10	16 45.47	-14 52.4	1.790	2.794	3.8	21.0	
6 20	16 39.02	-10 41.9	1.840	2.807	7.8	18.2	6 20	16 35.76	-14 43.2	1.805	2.779	7.4	21.2	
6 30	16 32.82	-10 26.4	1.894	2.808	11.1	18.4	6 30	16 27.44	-14 41.3	1.845	2.763	11.1	21.4	
7 10	16 28.57	-10 23.3	1.970	2.808	14.1	18.6	7 10	16 21.23	-14 47.7	1.908	2.746	14.4	21.6	
<b>97254</b>	1999 XK <sub>112</sub>	6 4.5 95°96		3°4/ 5.6 18				<b>396112</b>	2013 CN <sub>160</sub>	6 4.6 223°62		4°1/ 3.1 18		
5 1	17 19.51	-32 0.3	2.019	2.854	13.5	19.8	5 1	17 12.99	- 9 46.2	2.556	3.396	10.8	21.7	
5 11	17 13.52	-32 19.2	1.953	2.868	10.4	19.6	5 11	17 8.16	- 9 16.3	2.475	3.392	8.4	21.5	
5 21	17 5.27	-32 28.6	1.911	2.881	7.1	19.4	5 21	17 1.82	- 8 51.2	2.419	3.387	6.0	21.3	
5 31	16 55.57	-32 26.5	1.894	2.894	4.1	19.3	5 31	16 54.49	- 8 32.9	2.390	3.381	4.3	21.2	
6 10	16 45.51	-32 12.6	1.904	2.907	3.9	19.3	6 10	16 46.84	- 8 23.1	2.388	3.376	4.7	21.2	
6 20	16 36.17	-31 48.7	1.941	2.920	6.6	19.5	6 20	16 39.55	- 8 22.9	2.414	3.370	6.9	21.4	
6 30	16 28.53	-31 18.3	2.004	2.932	9.8	19.7	6 30	16 33.26	- 8 32.7	2.466	3.365	9.5	21.5	
7 10	16 23.22	-30 45.9	2.090	2.945	12.7	19.9	7 10	16 28.48	- 8 51.9	2.540	3.359	11.8	21.7	
<b>215581</b>	2003 FP <sub>127</sub>	6 4.5 358°31		6°6/ 2.2 18				<b>300138</b>	2006 VS <sub>58</sub>	6 4.6 159°06		1°0/ 4.3 18		
5 1	17 12.11	- 6 46.9	1.919	2.769	13.4	19.5	5 1	17 14.95	-19 23.2	2.405	3.253	11.2	21.2	
5 11	17 7.88	- 5 47.8	1.851	2.768	10.7	19.3	5 11	17 9.74	-19 19.1	2.328	3.255	8.3	21.0	
5 21	17 1.78	- 4 56.3	1.806	2.767	8.2	19.2	5 21	17 2.83	-19 14.7	2.275	3.258	5.1	20.8	
5 31	16 54.47	- 4 16.7	1.786	2.766	6.7	19.1	5 31	16 54.82	-19 10.3	2.250	3.260	1.8	20.6	
6 10	16 46.81	- 3 52.5	1.791	2.766	7.3	19.1	6 10	16 46.47	-19 6.5	2.252	3.262	2.3	20.6	
6 20	16 39.65	- 3 45.3	1.821	2.767	9.5	19.2	6 20	16 38.56	-19 4.5	2.283	3.263	5.6	20.8	
6 30	16 33.81	- 3 55.3	1.875	2.767	12.3	19.4	6 30	16 31.81	-19 5.1	2.340	3.265	8.8	21.0	
7 10	16 29.85	- 4 20.6	1.949	2.768	14.9	19.6	7 10	16 26.77	-19 9.6	2.421	3.266	11.5	21.2	
<b>86049</b>	1999 PH <sub>4</sub>	6 4.6 269°44		2°1/ 3.9 18				<b>128566</b>	2004 PZ <sub>92</sub>	6 4.6 277°14		2°9/ 3.9 18		
5 1	17 14.10	-16 24.1	2.448	3.296	11.0	19.9	5 1	17 14.52	-13 15.3	2.349	3.195	11.4	19.6	
5 11	17 9.18	-16 10.4	2.352	3.279	8.3	19.7	5 11	17 9.55	-13 14.3	2.258	3.182	8.7	19.4	
5 21	17 2.55	-15 57.8	2.280	3.261	5.3	19.5	5 21	17 2.81	-13 17.4	2.191	3.168	5.8	19.2	
5 31	16 54.73	-15 47.2	2.235	3.242	2.5	19.3	5 31	16 54.85	-13 25.7	2.151	3.154	3.2	19.0	
6 10	16 46.45	-15 39.9	2.219	3.224	3.0	19.3	6 10	16 46.41	-13 39.8	2.138	3.140	3.6	19.0	
6 20	16 38.46	-15 37.0	2.230	3.205	6.1	19.4	6 20	16 38.28	-14 0.1	2.154	3.126	6.5	19.1	
6 30	16 31.52	-15 39.5	2.268	3.186	9.3	19.6	6 30	16 31.23	-14 26.6	2.195	3.112	9.6	19.3	

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>405879</b>	2006 EF <sub>7</sub>		6 4.6 114°37'	6°4'	5.9	16	<b>168868</b>	2000 VV <sub>52</sub>		6 4.6 138°60'	2°7'	5.4	17
5 1	17 24.50	-35 55.3	1.459	2.298	17.5	20.8	5 1	17 21.50	-30 0.3	1.569	2.419	15.9	20.2
5 11	17 18.34	-36 41.5	1.395	2.305	14.0	20.6	5 11	17 15.58	-29 59.2	1.499	2.424	12.2	19.9
5 21	17 8.75	-37 13.3	1.350	2.312	10.2	20.4	5 21	17 6.82	-29 47.4	1.451	2.429	8.0	19.7
5 31	16 56.80	-37 24.9	1.329	2.319	7.1	20.3	5 31	16 56.16	-29 23.0	1.427	2.433	3.8	19.5
6 10	16 44.13	-37 14.0	1.332	2.326	6.7	20.3	6 10	16 44.99	-28 46.7	1.429	2.437	3.6	19.5
6 20	16 32.50	-36 42.8	1.359	2.332	9.5	20.4	6 20	16 34.71	-28 1.9	1.456	2.441	7.6	19.7
6 30	16 23.41	-35 57.4	1.410	2.338	13.1	20.7	6 30	16 26.55	-27 13.9	1.509	2.445	11.9	20.0
7 10	16 17.74	-35 6.1	1.481	2.344	16.6	20.9	7 10	16 21.27	-26 28.4	1.582	2.448	15.6	20.2
<b>332126</b>	2005 WE <sub>19</sub>		6 4.6 253°13'	4°1'	3.9	18	<b>354190</b>	2002 EZ <sub>43</sub>		6 4.6 89°03'	7°7'	1.7	18
5 1	17 19.49	-10 22.1	2.016	2.857	13.3	21.6	5 1	17 12.74	+ 0 18.8	2.381	3.199	12.2	20.5
5 11	17 13.60	-10 25.6	1.920	2.838	10.3	21.3	5 11	17 7.93	+ 1 19.7	2.326	3.211	10.2	20.4
5 21	17 5.48	-10 36.7	1.848	2.820	7.1	21.1	5 21	17 1.64	+ 2 9.2	2.295	3.223	8.5	20.3
5 31	16 55.75	-10 56.6	1.801	2.800	4.4	20.9	5 31	16 54.45	+ 2 43.5	2.288	3.235	7.7	20.3
6 10	16 45.30	-11 26.2	1.783	2.780	4.8	20.9	6 10	16 47.05	+ 3 0.2	2.308	3.246	8.1	20.3
6 20	16 35.15	-12 5.1	1.792	2.760	8.0	21.0	6 20	16 40.13	+ 2 58.5	2.352	3.258	9.5	20.4
6 30	16 26.28	-12 52.5	1.827	2.739	11.5	21.2	6 30	16 34.31	+ 2 39.3	2.419	3.269	11.4	20.6
7 10	16 19.49	-13 47.2	1.884	2.717	14.8	21.4	7 10	16 30.04	+ 2 4.9	2.508	3.281	13.2	20.7
<b>360216</b>	1999 RA <sub>27</sub>		6 4.6 264°90'	11°1'	27.5	18	<b>131824</b>	2002 AQ <sub>98</sub>		6 4.6 358°35'	3°3'	4.4	17
5 1	17 13.05	+15 25.1	2.795	3.530	12.6	21.1	5 1	17 17.19	-14 22.4	1.157	2.038	18.3	18.9
5 11	17 8.22	+16 49.6	2.718	3.506	11.7	21.0	5 11	17 12.97	-14 36.8	1.093	2.035	14.0	18.6
5 21	17 1.89	+17 58.3	2.662	3.483	11.2	20.9	5 21	17 5.55	-14 59.6	1.048	2.034	9.0	18.3
5 31	16 54.54	+18 46.1	2.629	3.458	11.1	20.9	5 31	16 55.85	-15 31.3	1.025	2.033	4.2	18.1
6 10	16 46.78	+19 9.6	2.618	3.434	11.6	20.9	6 10	16 45.33	-16 11.5	1.025	2.033	4.7	18.1
6 20	16 39.28	+19 7.6	2.627	3.409	12.5	20.9	6 20	16 35.59	-16 58.9	1.048	2.034	9.7	18.4
6 30	16 32.66	+18 40.8	2.657	3.383	13.6	21.0	6 30	16 28.10	-17 52.2	1.093	2.035	14.7	18.7
7 10	16 27.45	+17 52.0	2.704	3.357	14.8	21.0	7 10	16 23.81	-18 49.9	1.156	2.037	19.0	18.9
<b>507105</b>	2009 JU <sub>16</sub>		6 4.6 30°75'	1°4'	4.7	17	<b>512575</b>	2016 SC <sub>34</sub>		6 4.6 214°99'	5°3'	6.2	18
5 1	17 18.40	-23 11.1	1.807	2.662	14.0	20.3	5 1	17 19.50	-38 57.0	2.516	3.320	12.0	21.7
5 11	17 12.93	-24 7.6	1.741	2.671	10.5	20.1	5 11	17 13.52	-39 33.3	2.430	3.316	9.8	21.6
5 21	17 5.08	-25 3.4	1.698	2.680	6.5	19.9	5 21	17 5.36	-39 58.5	2.368	3.311	7.5	21.4
5 31	16 55.59	-25 55.7	1.681	2.690	2.5	19.7	5 31	16 55.71	-40 9.4	2.331	3.307	5.7	21.3
6 10	16 45.55	-26 42.0	1.691	2.701	2.7	19.7	6 10	16 45.52	-40 4.5	2.321	3.302	5.5	21.3
6 20	16 36.11	-27 21.3	1.728	2.712	6.7	20.0	6 20	16 35.81	-39 44.6	2.339	3.296	7.0	21.4
6 30	16 28.31	-27 54.1	1.790	2.723	10.5	20.2	6 30	16 27.54	-39 12.7	2.382	3.291	9.3	21.5
7 10	16 22.90	-28 22.5	1.875	2.735	13.8	20.4	7 10	16 21.40	-38 33.4	2.448	3.285	11.7	21.6
<b>437526</b>	2013 YG <sub>106</sub>		6 4.6 269°71'	0°9'	4.8	17	<b>88449</b>	2001 QD <sub>84</sub>		6 4.6 254°40'	2°9'	5.3	17
5 1	17 16.97	-25 46.2	1.879	2.732	13.6	21.2	5 1	17 21.90	-30 2.1	1.553	2.403	16.1	19.5
5 11	17 11.84	-25 37.1	1.796	2.725	10.3	21.0	5 11	17 16.27	-30 4.4	1.464	2.388	12.5	19.3
5 21	17 4.40	-25 21.8	1.735	2.718	6.4	20.8	5 21	17 7.52	-29 56.1	1.395	2.373	8.3	19.0
5 31	16 55.37	-25 0.0	1.700	2.710	2.3	20.5	5 31	16 56.49	-29 34.3	1.351	2.357	4.0	18.7
6 10	16 45.81	-24 32.6	1.691	2.703	2.4	20.5	6 10	16 44.56	-28 58.8	1.332	2.340	3.8	18.6
6 20	16 36.81	-24 1.9	1.710	2.695	6.7	20.7	6 20	16 33.25	-28 12.4	1.339	2.323	8.2	18.8
6 30	16 29.38	-23 31.2	1.753	2.687	10.6	20.9	6 30	16 24.01	-27 20.8	1.370	2.306	12.8	19.1
7 10	16 24.25	-23 4.0	1.819	2.680	14.1	21.1	7 10	16 17.81	-26 30.3	1.421	2.288	16.9	19.3
<b>107293</b>	2001 CF <sub>1</sub>		6 4.6 221°83'	2°6'	5.2	18	<b>269960</b>	2000 SK <sub>243</sub>		6 4.6 280°54'	5°6'	5.8	17
5 1	17 22.18	-29 12.3	1.934	2.773	13.9	20.1	5 1	17 20.52	-35 47.0	1.790	2.622	15.1	20.7
5 11	17 15.86	-29 27.8	1.844	2.763	10.7	19.9	5 11	17 15.14	-36 22.0	1.696	2.603	12.1	20.5
5 21	17 6.96	-29 35.9	1.777	2.752	7.0	19.7	5 21	17 6.81	-36 45.2	1.624	2.585	8.9	20.2
5 31	16 56.22	-29 34.1	1.736	2.741	3.4	19.4	5 31	16 56.27	-36 52.1	1.575	2.566	6.2	20.0
6 10	16 44.77	-29 21.6	1.722	2.729	3.4	19.4	6 10	16 44.80	-36 40.2	1.552	2.547	5.9	20.0
6 20	16 33.85	-28 59.9	1.735	2.716	7.0	19.6	6 20	16 33.83	-36 10.5	1.555	2.527	8.5	20.1
6 30	16 24.60	-28 32.3	1.774	2.703	10.9	19.8	6 30	16 24.75	-35 27.2	1.582	2.508	12.1	20.2
7 10	16 17.86	-28 3.4	1.836	2.689	14.3	20.0	7 10	16 18.54	-34 37.1	1.630	2.489	15.5	20.4
<b>209452</b>	2004 FT <sub>161</sub>		6 4.6 341°41'	1°2'	4.2	18	<b>128038</b>	2003 KK <sub>23</sub>		6 4.6 352°73'	1°3'	4.1	18
5 1	17 14.66	-20 5.8	1.929	2.788	13.0	20.6	5 1	17 13.35	-20 23.9	1.930	2.791	12.9	19.8
5 11	17 9.93	-19 50.5	1.853	2.786	9.8	20.4	5 11	17 8.96	-19 59.1	1.854	2.789	9.7	19.6
5 21	17 3.13	-19 33.8	1.799	2.784	6.0	20.2	5 21	17 2.54	-19 32.0	1.801	2.786	6.0	19.4
5 31	16 54.95	-19 16.4	1.771	2.782	2.2	19.9	5 31	16 54.79	-19 3.9	1.774	2.784	2.2	19.1
6 10	16 46.34	-18 59.8	1.770	2.780	2.7	19.9	6 10	16 46.65	-18 36.9	1.773	2.783	2.8	19.2
6 20	16 38.25	-18 45.8	1.795	2.778	6.7	20.2	6 20	16 39.03	-18 13.1	1.799	2.782	6.7	19.4
6 30	16 31.60	-18 36.3	1.846	2.776	10.4	20.4	6 30	16 32.82	-17 54.8	1.850	2.781	10.3	19.6
7 10	16 27.02	-18 32.8	1.919	2.775	13.6	20.6	7 10	16 28.65	-17 43.6	1.923	2.781	13.5	19.8
<b>382883</b>	2004 ML <sub>8</sub>		6 4.6 308°39'	9°1'	2.6	18	<b>220402</b>	2003 SJ <sub>38</sub>		6 4.6 216°80'	0°4'	4.8	18
5 1	17 14.75	- 2 25.1	1.566	2.413	16.1	20.2	5 1	17 13.61	-25 20.9	2.990	3.828	9.5	20.5
5 11	17 10.41	- 1 37.4	1.489	2.398	13.3	19.9	5 11	17 8.52	-25 3.2	2.900	3.822	7.1	20.3
5 21	17 3.64	- 1 3.3	1.432	2.384	10.7	19.7	5 21	17 2.02	-24 41.1	2.836	3.816	4.4	20.2
5 31	16 55.17	- 0 48.5	1.398	2.370	9.2	19.6	5 31	16 54.59	-24 14.9	2.799	3.810	1.5	19.9
6 10	16 46.04	- 0 56.8	1.388	2.356	9.7	19.6	6 10	16 46.89	-23 45.5	2.792	3.803	1.6	19.9
6 20	16 37.39	- 1 29.1	1.401	2.343	12.1	19.7	6 20	16 39.54	-23 14.5	2.814	3.796	4.6	20.1
6 30	16 30.29	- 2 24.0	1.436	2.330	15.2	19.9	6 30	16 33.15	-22 43.9	2.864	3.789	7.3	20.3
7 10	16 25.56	- 3 37.3	1.489	2.317	18.3	20.0	7 10	16 28.20	-22 15.8	2.938	3.782	9.8	20.5
<b>469985</b>	2006 HV <sub>100</sub>		6 4.6 281°50'	0°5'	4.5	16	<b>385019</b>	2012 TG <sub>272</sub>		6 4.6 180°48'	0°4'	4.4	17
5 1	17 16.85	-20 30.8											

## EPHEMERIDES

6 4.6

6 4.6

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>294296</b>	Efeso		6 4.6 345°43	0°5/ 4.4	17		<b>194944</b>	2002 AB <sub>153</sub>		6 4.6 104°86	4°2/ 5.9	18	
5 1	17 17.43	-23 48.8	1.316	2.190	17.0	20.7	5 1	17 21.16	-34 5.1	1.890	2.722	14.4	20.4
5 11	17 12.87	-23 12.9	1.247	2.187	12.8	20.4	5 11	17 14.96	-34 19.2	1.824	2.734	11.3	20.2
5 21	17 5.32	-22 29.4	1.197	2.185	7.9	20.1	5 21	17 6.28	-34 21.3	1.781	2.747	7.8	20.0
5 31	16 55.74	-21 39.5	1.171	2.183	2.5	19.8	5 31	16 56.01	-34 9.1	1.762	2.759	4.9	19.8
6 10	16 45.55	-20 46.8	1.170	2.181	3.2	19.9	6 10	16 45.37	-33 42.4	1.770	2.770	4.5	19.8
6 20	16 36.24	-19 56.0	1.192	2.180	8.6	20.2	6 20	16 35.56	-33 3.8	1.805	2.782	7.2	20.0
6 30	16 29.08	-19 12.2	1.238	2.179	13.5	20.4	6 30	16 27.63	-32 17.9	1.865	2.793	10.4	20.2
7 10	16 24.91	-18 39.3	1.303	2.178	17.6	20.7	7 10	16 22.26	-31 30.2	1.948	2.804	13.5	20.5
<b>293346</b>	2007 DG <sub>105</sub>		6 4.6 72°54	2°9/ 5.4	18		<b>212639</b>	2006 UB <sub>5</sub>		6 4.6 274°86	0°3/ 4.7	16	
5 1	17 16.17	-31 6.8	2.442	3.276	11.5	20.3	5 1	17 15.74	-23 31.8	2.126	2.977	12.3	21.4
5 11	17 10.82	-31 32.6	2.368	3.282	8.9	20.2	5 11	17 10.68	-23 34.7	2.044	2.973	9.2	21.2
5 21	17 3.59	-31 51.5	2.318	3.288	6.0	20.0	5 21	17 3.61	-23 34.4	1.986	2.969	5.7	21.0
5 31	16 55.13	-32 1.6	2.294	3.294	3.5	19.8	5 31	16 55.18	-23 30.7	1.954	2.965	1.9	20.7
6 10	16 46.29	-32 2.4	2.298	3.301	3.3	19.8	6 10	16 46.30	-23 23.8	1.949	2.961	2.1	20.8
6 20	16 37.93	-31 54.8	2.330	3.307	5.7	20.0	6 20	16 37.88	-23 15.0	1.972	2.957	6.0	21.0
6 30	16 30.87	-31 40.8	2.387	3.313	8.6	20.2	6 30	16 30.81	-23 6.2	2.021	2.953	9.6	21.2
7 10	16 25.70	-31 23.7	2.469	3.320	11.2	20.4	7 10	16 25.73	-22 59.5	2.093	2.949	12.7	21.4
<b>30915</b>	1993 GF <sub>1</sub>		6 4.6 339°36	4°2/ 5.2	18		<b>340457</b>	2006 HY <sub>1</sub>		6 4.6 9°60	6°6/ 2.7	17	
5 1	17 18.03	-31 54.0	1.984	2.823	13.5	17.6	5 1	17 13.27	- 8 57.8	1.541	2.405	15.4	19.6
5 11	17 12.80	-32 44.6	1.904	2.819	10.6	17.4	5 11	17 9.17	- 8 0.7	1.479	2.407	12.2	19.4
5 21	17 5.11	-33 28.1	1.847	2.816	7.4	17.2	5 21	17 2.79	- 7 11.2	1.438	2.408	8.9	19.2
5 31	16 55.69	-34 0.9	1.815	2.812	4.7	17.0	5 31	16 54.93	- 6 34.2	1.421	2.411	6.8	19.1
6 10	16 45.59	-34 20.6	1.810	2.809	4.6	17.0	6 10	16 46.64	- 6 13.4	1.428	2.414	7.5	19.1
6 20	16 35.97	-34 27.3	1.832	2.806	7.3	17.2	6 20	16 39.02	- 6 10.7	1.459	2.418	10.3	19.3
6 30	16 27.95	-34 23.4	1.878	2.804	10.5	17.4	6 30	16 33.03	- 6 26.1	1.513	2.422	13.6	19.5
7 10	16 22.33	-34 12.9	1.946	2.802	13.5	17.6	7 10	16 29.33	- 6 57.4	1.585	2.427	16.7	19.7
<b>338838</b>	2003 WD <sub>152</sub>		6 4.6 256°71	2°3/ 3.8	18		<b>180791</b>	2004 SO <sub>18</sub>		6 4.6 306°37	7°2/ 1.8	18	
5 1	17 16.89	-16 33.6	2.425	3.269	11.2	22.4	5 1	17 12.15	- 4 3.1	2.093	2.932	12.9	19.7
5 11	17 11.36	-16 9.5	2.321	3.244	8.5	22.2	5 11	17 7.94	- 3 4.9	2.010	2.916	10.6	19.5
5 21	17 3.98	-15 45.4	2.240	3.219	5.5	21.9	5 21	17 1.91	- 2 15.1	1.950	2.900	8.4	19.3
5 31	16 55.29	-15 22.6	2.187	3.193	2.7	21.7	5 31	16 54.66	- 1 38.1	1.915	2.884	7.2	19.2
6 10	16 46.05	-15 2.7	2.162	3.166	3.3	21.7	6 10	16 46.95	- 1 17.3	1.905	2.869	7.8	19.2
6 20	16 37.07	-14 47.4	2.166	3.139	6.5	21.9	6 20	16 39.60	- 1 14.6	1.920	2.853	9.9	19.3
6 30	16 29.16	-14 38.3	2.197	3.111	9.8	22.0	6 30	16 33.39	- 1 30.0	1.958	2.838	12.4	19.5
7 10	16 22.97	-14 36.5	2.251	3.083	12.7	22.2	7 10	16 28.95	- 2 2.0	2.017	2.823	14.9	19.6
<b>8873</b>	1992 UM <sub>2</sub>		6 4.6 268°37	0°2/ 4.6	18		<b>370917</b>	2005 LP <sub>9</sub>		6 4.6 336°49	4°6/ 3.9	18	
5 1	17 19.83	-22 33.4	1.619	2.478	15.1	18.6	5 1	17 15.97	-12 41.8	1.349	2.221	16.7	20.0
5 11	17 14.54	-22 45.9	1.528	2.460	11.5	18.3	5 11	17 11.69	-12 25.5	1.278	2.215	12.9	19.7
5 21	17 6.40	-22 56.5	1.458	2.442	7.2	18.0	5 21	17 4.62	-12 15.9	1.228	2.209	8.7	19.5
5 31	16 56.16	-23 4.0	1.413	2.424	2.4	17.6	5 31	16 55.59	-12 15.9	1.200	2.203	5.1	19.2
6 10	16 44.99	-23 7.9	1.394	2.406	2.8	17.6	6 10	16 45.85	-12 27.2	1.196	2.199	5.7	19.3
6 20	16 34.25	-23 9.0	1.401	2.387	7.8	17.9	6 20	16 36.76	-12 50.6	1.216	2.194	9.7	19.5
6 30	16 25.24	-23 9.4	1.433	2.368	12.4	18.1	6 30	16 29.58	-13 25.6	1.259	2.190	14.1	19.7
7 10	16 18.96	-23 12.1	1.485	2.348	16.5	18.3	7 10	16 25.16	-14 10.9	1.320	2.187	18.0	19.9
<b>23231</b>	2000 WT <sub>59</sub>		6 4.6 22°07	3°5/ 4.2	18		<b>345035</b>	2005 EA <sub>168</sub>		6 4.6 230°13	2°0/ 3.9	17	
5 1	17 18.00	-14 25.4	1.319	2.191	17.1	16.5	5 1	17 15.64	-17 54.4	2.121	2.974	12.3	21.5
5 11	17 13.18	-14 24.3	1.256	2.194	13.0	16.3	5 11	17 10.52	-17 30.4	2.039	2.969	9.2	21.3
5 21	17 5.48	-14 29.3	1.212	2.196	8.4	16.0	5 21	17 3.48	-17 6.1	1.981	2.963	5.8	21.1
5 31	16 55.81	-14 41.7	1.192	2.199	4.2	15.8	5 31	16 55.15	-16 42.9	1.949	2.958	2.6	20.9
6 10	16 45.52	-15 2.1	1.196	2.202	4.7	15.8	6 10	16 46.40	-16 22.3	1.945	2.952	3.2	20.9
6 20	16 36.00	-15 30.5	1.224	2.206	9.2	16.1	6 20	16 38.11	-16 6.3	1.968	2.946	6.6	21.1
6 30	16 28.53	-16 6.6	1.275	2.210	13.7	16.3	6 30	16 31.12	-15 56.5	2.017	2.940	10.1	21.3
7 10	16 23.93	-16 49.5	1.345	2.214	17.6	16.6	7 10	16 26.04	-15 54.0	2.089	2.934	13.1	21.5
<b>425807</b>	2011 DD <sub>10</sub>		6 4.6 113°48	2°9/ 5.3	17		<b>478041</b>	2011 SY <sub>258</sub>		6 4.6 227°30	2°3/ 3.6	17	
5 1	17 19.61	-29 41.9	1.782	2.629	14.5	21.2	5 1	17 13.95	-16 49.8	2.492	3.340	10.8	21.5
5 11	17 13.96	-30 0.2	1.711	2.633	11.1	21.0	5 11	17 8.98	-16 12.4	2.408	3.334	8.2	21.3
5 21	17 5.77	-30 10.3	1.661	2.637	7.3	20.7	5 21	17 2.41	-15 34.7	2.348	3.327	5.2	21.1
5 31	16 55.87	-30 9.8	1.637	2.641	3.7	20.5	5 31	16 54.79	-14 58.5	2.315	3.321	2.7	20.9
6 10	16 45.46	-29 58.5	1.638	2.645	3.6	20.5	6 10	16 46.85	-14 25.8	2.311	3.314	3.2	20.9
6 20	16 35.75	-29 37.9	1.667	2.649	7.1	20.7	6 20	16 39.30	-13 58.5	2.335	3.307	6.1	21.1
6 30	16 27.86	-29 11.7	1.720	2.653	10.8	21.0	6 30	16 32.83	-13 38.4	2.386	3.300	9.1	21.3
7 10	16 22.52	-28 44.4	1.795	2.657	14.2	21.2	7 10	16 27.96	-13 26.5	2.459	3.293	11.7	21.5
<b>247101</b>	2000 SL <sub>314</sub>		6 4.6 231°64	4°8/ 6.6	18		<b>511840</b>	2015 FZ <sub>319</sub>		6 4.6 272°06	8°4/ 1.9	18	
5 1	17 19.44	-39 42.6	2.711	3.509	11.4	21.1	5 1	17 14.80	- 1 33.0	1.916	2.748	14.2	21.2
5 11	17 13.31	-39 54.0	2.616	3.498	9.3	20.9	5 11	17 10.04	- 0 36.0	1.838	2.736	11.8	21.0
5 21	17 5.16	-39 53.3	2.544	3.487	7.1	20.8	5 21	17 3.27	+ 0 9.5	1.782	2.724	9.7	20.9
5 31	16 55.66	-39 38.2	2.498	3.475	5.3	20.6	5 31	16 55.11	+ 0 38.7	1.750	2.711	8.5	20.8
6 10	16 45.72	-39 7.9	2.480	3.463	5.0	20.6	6 10	16 46.46	+ 0 47.9	1.743	2.698	9.0	20.8
6 20	16 36.28	-38 23.9	2.490	3.451	6.5	20.7	6 20	16 38.22	+ 0 35.6	1.760	2.686	11.0	20.9
6 30	16 28.20	-37 29.7	2.526	3.438	8.8	20.8	6 30	16 31.29	+ 0 2.6	1.800	2.673	13.6	21.0
7 10	16 22.12	-36 30.1	2.587	3.425	11.1	20.9	7 10	16 26.33	- 0 48.3	1.859	2.660	16.2	21.1
<b>492274</b>	2013 XZ <sub>12</sub>		6 4.6 91°35	8°5/ 8.5	18		<b>472744</b>	2015 FB <sub>97</sub>		6 4.6 326°90	1°3/ 5.0	17	
5 1	17 31.73	-44 17.4	1.103	1.932	22.7	20.5							

EPHEMERIDES

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>389762</b>	2011 SY <sub>202</sub>		6 4.6	25°94	7.6/ 6.4	17	<b>52738</b>	1998 HW <sub>108</sub>		6 4.6	122°32	4.2/ 3.3	18
5 1	17 19.88	-39 48.1	1.689	2.514	16.1	19.9	5 1	17 14.76	- 8 45.0	2.623	3.458	10.8	19.6
5 11	17 14.70	-40 46.3	1.626	2.521	13.2	19.7	5 11	17 9.35	- 8 20.4	2.561	3.473	8.4	19.4
5 21	17 6.48	-41 29.1	1.583	2.529	10.3	19.6	5 21	17 2.53	- 8 1.4	2.523	3.487	6.0	19.3
5 31	16 56.18	-41 51.1	1.563	2.537	8.1	19.5	5 31	16 54.84	- 7 50.0	2.512	3.501	4.3	19.2
6 10	16 45.24	-41 49.7	1.567	2.546	7.7	19.5	6 10	16 46.94	- 7 47.3	2.530	3.515	4.7	19.3
6 20	16 35.15	-41 26.4	1.595	2.555	9.5	19.6	6 20	16 39.50	- 7 54.0	2.575	3.529	6.7	19.4
6 30	16 27.25	-40 46.3	1.647	2.565	12.2	19.8	6 30	16 33.11	- 8 9.9	2.647	3.542	9.0	19.6
7 10	16 22.39	-39 56.7	1.719	2.575	15.0	20.0	7 10	16 28.21	- 8 34.3	2.741	3.554	11.2	19.7
<b>345408</b>	2006 BY <sub>262</sub>		6 4.6	202°65	0°9/ 4.4	17	<b>35931</b>	1999 JW <sub>112</sub>		6 4.6	36°26	2°1/ 4.9	18
5 1	17 17.60	-20 26.6	2.091	2.941	12.5	21.6	5 1	17 19.48	-26 15.7	1.240	2.112	17.9	18.7
5 11	17 12.04	-20 19.0	2.010	2.938	9.4	21.4	5 11	17 14.67	-26 37.0	1.180	2.118	13.6	18.5
5 21	17 4.45	-20 10.0	1.952	2.935	5.8	21.2	5 21	17 6.58	-26 51.8	1.140	2.125	8.6	18.2
5 31	16 55.48	-19 59.9	1.920	2.931	2.0	20.9	5 31	16 56.27	-26 57.5	1.122	2.132	3.5	17.9
6 10	16 46.06	-19 49.6	1.917	2.927	2.5	20.9	6 10	16 45.30	-26 53.7	1.129	2.139	3.5	18.0
6 20	16 37.12	-19 40.4	1.941	2.923	6.3	21.2	6 20	16 35.33	-26 42.2	1.159	2.147	8.6	18.3
6 30	16 29.55	-19 34.1	1.991	2.918	9.9	21.4	6 30	16 27.76	-26 27.1	1.211	2.155	13.4	18.6
7 10	16 24.01	-19 32.3	2.064	2.913	13.1	21.6	7 10	16 23.45	-26 13.0	1.282	2.164	17.5	18.8
<b>522687</b>	2016 JR <sub>41</sub>		6 4.6	268°83	7°1/ 3.5	18	<b>21751</b>	Jennytaylor		6 4.6	106°58	0°0/ 4.3	18
5 1	17 17.91	- 4 50.1	1.736	2.577	15.1	21.4	5 1	17 20.96	-23 25.8	1.614	2.470	15.3	19.2
5 11	17 12.66	- 4 29.6	1.652	2.563	12.2	21.2	5 11	17 14.90	-23 14.2	1.553	2.485	11.4	19.0
5 21	17 5.04	- 4 21.1	1.589	2.548	9.2	21.0	5 21	17 6.30	-22 58.1	1.515	2.498	7.0	18.8
5 31	16 55.73	- 4 28.3	1.551	2.533	7.2	20.8	5 31	16 56.10	-22 37.4	1.501	2.512	2.2	18.5
6 10	16 45.74	- 4 53.3	1.538	2.518	7.7	20.8	6 10	16 45.54	-22 13.6	1.514	2.525	2.6	18.6
6 20	16 36.15	- 5 36.1	1.550	2.503	10.3	20.9	6 20	16 35.86	-21 49.2	1.553	2.538	7.2	18.9
6 30	16 28.03	- 6 35.3	1.586	2.488	13.6	21.1	6 30	16 28.12	-21 27.5	1.617	2.551	11.4	19.2
7 10	16 22.18	- 7 47.5	1.643	2.472	16.8	21.2	7 10	16 22.99	-21 11.2	1.703	2.563	14.9	19.4
<b>271765</b>	2004 SX <sub>32</sub>		6 4.6	278°47	6°5/ 2.4	18	<b>74806</b>	1999 TT		6 4.6	296°46	4°7/ 5.2	18
5 1	17 15.19	- 8 14.1	1.809	2.660	14.1	20.6	5 1	17 20.21	-30 54.6	1.436	2.292	16.8	19.0
5 11	17 10.51	- 7 16.9	1.725	2.644	11.2	20.4	5 11	17 15.43	-31 41.5	1.352	2.277	13.2	18.7
5 21	17 3.65	- 6 25.5	1.662	2.628	8.4	20.2	5 21	17 7.29	-32 20.6	1.287	2.262	9.1	18.4
5 31	16 55.27	- 5 44.5	1.625	2.611	6.6	20.0	5 31	16 56.60	-32 46.9	1.246	2.247	5.4	18.2
6 10	16 46.31	- 5 17.9	1.613	2.595	7.3	20.0	6 10	16 44.78	-32 57.1	1.229	2.233	5.3	18.1
6 20	16 37.76	- 5 8.2	1.627	2.578	10.0	20.2	6 20	16 33.51	-32 51.2	1.237	2.218	9.1	18.3
6 30	16 30.61	- 5 16.1	1.663	2.562	13.2	20.3	6 30	16 24.39	-32 33.1	1.267	2.204	13.6	18.5
7 10	16 25.57	- 5 40.4	1.720	2.545	16.3	20.5	7 10	16 18.56	-32 8.9	1.317	2.190	17.6	18.7
<b>475089</b>	2005 UE <sub>188</sub>		6 4.6	152°05	3°1/ 5.5	16	<b>391679</b>	2008 AF <sub>28</sub>		6 4.6	357°95	10°0/ 2.3	15
5 1	17 17.50	-32 4.4	2.622	3.448	11.0	21.6	5 1	17 9.68	- 0 45.7	1.496	2.350	16.4	19.7
5 11	17 11.76	-32 34.1	2.544	3.452	8.6	21.4	5 11	17 6.61	+ 0 12.2	1.435	2.345	13.7	19.5
5 21	17 4.19	-32 56.9	2.490	3.456	5.9	21.2	5 21	17 1.32	+ 0 54.1	1.394	2.341	11.4	19.4
5 31	16 55.39	-33 10.6	2.462	3.459	3.6	21.1	5 31	16 54.55	+ 1 14.0	1.375	2.339	10.1	19.3
6 10	16 46.19	-33 14.5	2.463	3.463	3.5	21.1	6 10	16 47.32	+ 1 8.2	1.378	2.338	10.6	19.3
6 20	16 37.43	-33 9.2	2.492	3.466	5.6	21.2	6 20	16 40.67	+ 0 36.1	1.403	2.338	12.6	19.4
6 30	16 29.91	-32 56.9	2.548	3.469	8.3	21.4	6 30	16 35.56	- 0 19.8	1.448	2.340	15.2	19.6
7 10	16 24.21	-32 40.5	2.628	3.472	10.8	21.6	7 10	16 32.67	- 1 34.8	1.513	2.344	17.9	19.8
<b>178158</b>	2006 UN <sub>6</sub>		6 4.6	170°71	3°9/ 3.1	18	<b>480252</b>	2015 HS <sub>56</sub>		6 4.6	316°58	7°9/ 5.3	16
5 1	17 13.91	-12 6.6	2.391	3.237	11.3	20.5	5 1	17 20.76	-38 49.7	1.767	2.591	15.6	20.7
5 11	17 8.94	-11 23.5	2.317	3.238	8.7	20.4	5 11	17 15.68	-40 12.0	1.681	2.576	12.9	20.4
5 21	17 2.38	-10 43.4	2.267	3.240	6.0	20.2	5 21	17 7.40	-41 23.6	1.616	2.561	10.2	20.2
5 31	16 54.81	-10 8.7	2.244	3.241	4.0	20.1	5 31	16 56.65	-42 17.4	1.575	2.547	8.2	20.1
6 10	16 46.94	- 9 41.8	2.249	3.241	4.6	20.1	6 10	16 44.73	-42 48.6	1.558	2.533	8.1	20.1
6 20	16 39.52	- 9 24.4	2.282	3.242	7.0	20.3	6 20	16 33.21	-42 55.7	1.566	2.520	10.1	20.1
6 30	16 33.20	- 9 17.4	2.340	3.243	9.7	20.4	6 30	16 23.68	-42 42.1	1.596	2.507	13.0	20.3
7 10	16 28.51	- 9 20.7	2.420	3.243	12.2	20.6	7 10	16 17.25	-42 14.3	1.648	2.494	16.0	20.4
<b>131546</b>	2001 VJ <sub>3</sub>		6 4.6	330°24	0°9/ 5.0	18	<b>473247</b>	2015 MF <sub>1</sub>		6 4.6	358°59	4°7/ 6.2	18
5 1	17 8.49	-26 51.0	4.243	5.076	7.0	20.7	5 1	17 17.80	-36 6.9	2.102	2.928	13.4	20.8
5 11	17 4.45	-26 53.9	4.157	5.075	5.3	20.6	5 11	17 12.49	-36 26.7	2.024	2.927	10.6	20.6
5 21	16 59.45	-26 53.8	4.097	5.074	3.3	20.4	5 21	17 4.86	-36 34.8	1.968	2.927	7.7	20.5
5 31	16 53.85	-26 50.5	4.065	5.072	1.4	20.3	5 31	16 55.68	-36 28.4	1.937	2.927	5.3	20.3
6 10	16 48.06	-26 44.4	4.062	5.071	1.4	20.3	6 10	16 46.03	-36 7.0	1.933	2.927	4.9	20.3
6 20	16 42.49	-26 35.9	4.088	5.070	3.3	20.4	6 20	16 36.99	-35 32.3	1.955	2.927	7.1	20.4
6 30	16 37.54	-26 26.1	4.143	5.069	5.3	20.5	6 30	16 29.59	-34 48.2	2.002	2.927	10.0	20.6
7 10	16 33.55	-26 16.0	4.223	5.068	7.0	20.7	7 10	16 24.50	-34 0.0	2.072	2.928	12.8	20.8
<b>502642</b>	2015 CM <sub>39</sub>		6 4.6	137°78	11°8/ 31.5	18	<b>504616</b>	2008 UB <sub>277</sub>		6 4.6	187°44	0°8/ 4.4	17
5 1	17 15.39	+ 8 14.5	1.948	2.742	15.4	20.9	5 1	17 17.06	-21 10.8	2.099	2.950	12.5	22.2
5 11	17 10.29	+ 9 39.3	1.896	2.746	13.7	20.8	5 11	17 11.62	-20 54.3	2.021	2.949	9.3	22.0
5 21	17 3.30	+10 45.2	1.864	2.751	12.4	20.7	5 21	17 4.20	-20 35.3	1.966	2.949	5.7	21.8
5 31	16 55.11	+11 26.2	1.854	2.755	11.8	20.7	5 31	16 55.46	-20 14.4	1.937	2.948	1.9	21.5
6 10	16 46.61	+11 38.6	1.867	2.759	12.3	20.7	6 10	16 46.32	-19 53.1	1.937	2.947	2.4	21.5
6 20	16 38.68	+11 22.0	1.902	2.763	13.5	20.8	6 20	16 37.70	-19 33.1	1.963	2.945	6.2	21.8
6 30	16 32.11	+10 38.6	1.957	2.767	15.2	20.9	6 30	16 30.46	-19 16.6	2.016	2.944	9.8	22.0
7 10	16 27.47	+ 9 33.3	2.031	2.770	16.9	21.0	7 10	16 25.21	-19 5.5	2.092	2.942	12.9	22.2
<b>1655</b>	Comas Solá		6 4.6	176°49	2°5/ 3.9	18	<b>79219</b>	1994 LN		6 4.6	208°84	18°9/ 28.3	18

EPHEMERIDES

6 4.6

6 4.6

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>405080</b>	2001 <i>UL</i> <sub>142</sub>		6 4.6 186°54	1.5°/ 4.9	16		<b>26657</b>	2000 <i>SX</i> <sub>293</sub>		6 4.6 345°73	10°5'/ 5.4	18	
5 1	17 23.58	-25 22.7	1.787	2.631	14.6	22.4	5 1	17 13.48	-38 31.3	1.128	1.992	19.9	16.6
5 11	17 17.01	-25 45.2	1.708	2.632	11.0	22.2	5 11	17 11.44	-40 11.2	1.056	1.976	16.6	16.3
5 21	17 7.77	-26 3.5	1.651	2.631	7.0	21.9	5 21	17 5.41	-41 37.4	1.002	1.960	13.3	16.0
5 31	16 56.67	-26 15.4	1.621	2.630	2.7	21.6	5 31	16 56.17	-42 39.9	0.967	1.947	10.9	15.9
6 10	16 44.91	-26 19.9	1.617	2.628	2.8	21.6	6 10	16 45.47	-43 11.1	0.953	1.935	10.8	15.8
6 20	16 33.76	-26 17.8	1.642	2.625	7.1	21.9	6 20	16 35.46	-43 9.2	0.959	1.926	13.2	15.9
6 30	16 24.41	-26 11.8	1.692	2.621	11.2	22.1	6 30	16 28.25	-42 39.1	0.984	1.918	16.7	16.1
7 10	16 17.69	-26 5.3	1.763	2.617	14.8	22.3	7 10	16 25.23	-41 50.8	1.025	1.913	20.4	16.3
<b>383308</b>	2006 <i>HR</i> <sub>20</sub>		6 4.6 46°05	4°7'/ 2.8	17		<b>192715</b>	1999 <i>TP</i> <sub>127</sub>		6 4.6 146°62	3°0'/ 3.5	18	
5 1	17 15.21	-14 14.2	1.685	2.548	14.4	20.2	5 1	17 16.66	-13 23.4	2.681	3.517	10.5	21.6
5 11	17 10.41	-13 0.6	1.625	2.557	11.0	20.0	5 11	17 10.78	-12 52.1	2.613	3.530	8.0	21.5
5 21	17 3.48	-11 48.6	1.588	2.566	7.4	19.8	5 21	17 3.45	-12 23.2	2.569	3.542	5.3	21.3
5 31	16 55.22	-10 42.6	1.575	2.575	4.9	19.7	5 31	16 55.22	-11 58.2	2.554	3.554	3.2	21.2
6 10	16 46.67	-9 47.2	1.589	2.584	5.7	19.7	6 10	16 46.78	-11 38.8	2.568	3.565	3.7	21.3
6 20	16 38.85	-9 6.0	1.629	2.594	8.9	19.9	6 20	16 38.81	-11 26.3	2.611	3.575	6.0	21.4
6 30	16 32.62	-8 40.7	1.692	2.604	12.3	20.2	6 30	16 31.90	-11 21.4	2.680	3.584	8.6	21.6
7 10	16 28.59	-8 31.3	1.775	2.614	15.3	20.4	7 10	16 26.53	-11 24.3	2.774	3.592	11.0	21.8
<b>406608</b>	2008 <i>CJ</i> <sub>58</sub>		6 4.6 151°84	3°9'/ 3.7	17		<b>347134</b>	2010 <i>MC</i> <sub>113</sub>		6 4.6 246°51	5°5'/31.7	18	
5 1	17 19.52	-12 39.4	1.908	2.755	13.7	21.6	5 1	17 6.39	+ 6 18.9	4.553	5.329	7.5	21.1
5 11	17 13.46	-12 16.1	1.841	2.763	10.5	21.4	5 11	17 2.80	+ 6 55.9	4.482	5.325	6.5	21.0
5 21	17 5.32	-11 57.3	1.796	2.771	7.0	21.2	5 21	16 58.45	+ 7 24.8	4.436	5.320	5.8	20.9
5 31	16 55.82	-11 44.8	1.777	2.778	4.2	21.0	5 31	16 53.61	+ 7 43.7	4.414	5.316	5.5	20.9
6 10	16 45.96	-11 40.4	1.786	2.784	4.7	21.1	6 10	16 48.63	+ 7 51.5	4.419	5.311	5.7	20.9
6 20	16 36.71	-11 45.1	1.822	2.790	7.8	21.3	6 20	16 43.82	+ 7 47.9	4.449	5.307	6.4	21.0
6 30	16 28.96	-11 59.2	1.883	2.795	11.2	21.5	6 30	16 39.52	+ 7 32.9	4.503	5.302	7.4	21.0
7 10	16 23.36	-12 22.3	1.965	2.800	14.2	21.7	7 10	16 36.00	+ 7 7.7	4.578	5.298	8.4	21.1
<b>16169</b>	2000 <i>AO</i> <sub>95</sub>		6 4.6 265°64	0°5'/ 4.5	18		<b>342855</b>	2008 <i>YL</i> <sub>15</sub>		6 4.6 254°23	2°1'/ 4.0	17	
5 1	17 19.99	-21 36.2	1.347	2.216	17.0	17.9	5 1	17 16.37	-17 7.0	2.135	2.986	12.3	21.6
5 11	17 14.98	-21 33.8	1.271	2.209	12.8	17.6	5 11	17 11.20	-16 52.1	2.045	2.972	9.3	21.3
5 21	17 6.83	-21 28.9	1.215	2.201	8.0	17.3	5 21	17 4.04	-16 37.9	1.977	2.958	5.9	21.1
5 31	16 56.44	-21 21.3	1.182	2.193	2.6	16.9	5 31	16 55.49	-16 25.4	1.936	2.944	2.7	20.9
6 10	16 45.19	-21 11.7	1.174	2.185	3.2	17.0	6 10	16 46.41	-16 16.0	1.923	2.929	3.2	20.9
6 20	16 34.64	-21 2.0	1.190	2.177	8.6	17.3	6 20	16 37.70	-16 11.0	1.937	2.914	6.7	21.1
6 30	16 26.19	-20 55.3	1.229	2.169	13.7	17.5	6 30	16 30.24	-16 11.7	1.977	2.899	10.2	21.2
7 10	16 20.83	-20 54.3	1.288	2.161	18.0	17.8	7 10	16 24.70	-16 18.9	2.039	2.884	13.4	21.4
<b>57834</b>	2001 <i>XE</i> <sub>28</sub>		6 4.6 8°21	7°2'/ 4.2	18		<b>342231</b>	2008 <i>SP</i> <sub>268</sub>		6 4.6 313°38	3°6'/ 4.7	17	
5 1	17 16.31	-1 1.4	1.967	2.794	14.1	18.2	5 1	17 19.29	-27 6.8	1.561	2.419	15.6	20.1
5 11	17 11.06	-1 4.8	1.897	2.795	11.6	18.0	5 11	17 14.59	-28 14.4	1.469	2.398	12.1	19.9
5 21	17 3.87	-1 23.2	1.849	2.796	9.0	17.9	5 21	17 6.78	-29 21.0	1.398	2.377	8.1	19.6
5 31	16 55.38	-1 58.9	1.826	2.797	7.4	17.8	5 31	16 56.54	-30 21.7	1.352	2.357	4.3	19.3
6 10	16 46.48	-2 52.5	1.829	2.800	7.5	17.8	6 10	16 45.07	-31 12.3	1.332	2.337	4.5	19.3
6 20	16 38.07	-4 2.2	1.858	2.802	9.4	17.9	6 20	16 33.87	-31 50.2	1.336	2.318	8.5	19.4
6 30	16 30.99	-5 25.1	1.911	2.805	12.0	18.1	6 30	16 24.48	-32 16.5	1.365	2.299	13.0	19.6
7 10	16 25.86	-6 57.3	1.987	2.808	14.6	18.3	7 10	16 18.05	-32 34.5	1.413	2.281	17.0	19.8
<b>4679</b>	<i>Sybil</i>		6 4.6 172°88	7°5'/ 1.5	18		<b>249817</b>	2001 <i>FL</i> <sub>105</sub>		6 4.6 84°87	1°1'/ 4.9	17	
5 1	17 13.16	-0 56.5	2.347	3.170	12.2	17.2	5 1	17 21.10	-25 16.2	1.498	2.357	16.1	20.8
5 11	17 8.41	+ 0 7.5	2.281	3.171	10.2	17.1	5 11	17 15.27	-25 21.2	1.439	2.371	12.1	20.6
5 21	17 2.10	+ 1 1.4	2.238	3.172	8.4	16.9	5 21	17 6.68	-25 20.4	1.402	2.385	7.5	20.4
5 31	16 54.79	+ 1 41.2	2.220	3.172	7.5	16.9	5 31	16 56.32	-25 12.7	1.389	2.399	2.7	20.1
6 10	16 47.19	+ 2 3.9	2.228	3.173	8.0	16.9	6 10	16 45.55	-24 58.6	1.402	2.413	2.8	20.1
6 20	16 40.02	+ 2 8.2	2.261	3.173	9.6	17.0	6 20	16 35.71	-24 40.4	1.441	2.427	7.5	20.5
6 30	16 33.93	+ 1 54.6	2.318	3.173	11.6	17.1	6 30	16 27.96	-24 21.6	1.504	2.441	11.8	20.7
7 10	16 29.43	+ 1 25.1	2.395	3.173	13.6	17.3	7 10	16 23.02	-24 5.7	1.587	2.454	15.5	21.0
<b>512078</b>	2015 <i>NT</i> <sub>6</sub>		6 4.6 233°85	4°0'/ 3.3	18		<b>182175</b>	2000 <i>SH</i> <sub>250</sub>		6 4.6 231°89	3°5'/ 5.5	18	
5 1	17 13.53	-10 2.4	2.535	3.376	10.9	21.7	5 1	17 18.38	-32 40.9	2.498	3.323	11.5	20.8
5 11	17 8.68	-9 38.6	2.453	3.370	8.5	21.6	5 11	17 12.67	-33 14.9	2.409	3.316	9.0	20.6
5 21	17 2.28	-9 19.7	2.395	3.363	6.0	21.4	5 21	17 4.94	-33 41.8	2.344	3.308	6.3	20.4
5 31	16 54.87	-9 7.5	2.364	3.357	4.2	21.3	5 31	16 55.78	-33 58.9	2.305	3.300	4.0	20.3
6 10	16 47.11	-9 3.5	2.360	3.350	4.6	21.3	6 10	16 46.08	-34 5.1	2.294	3.292	3.9	20.2
6 20	16 39.70	-9 8.7	2.384	3.343	6.8	21.4	6 20	16 36.76	-34 0.7	2.311	3.284	6.1	20.4
6 30	16 33.29	-9 23.3	2.434	3.336	9.4	21.6	6 30	16 28.70	-33 47.9	2.354	3.275	8.9	20.5
7 10	16 28.40	-9 46.7	2.507	3.329	11.9	21.7	7 10	16 22.60	-33 30.0	2.421	3.266	11.5	20.7
<b>344788</b>	2003 <i>XG</i> <sub>34</sub>		6 4.6 232°45	0°0'/ 4.5	17		<b>338841</b>	2003 <i>WV</i> <sub>164</sub>		6 4.6 175°04	0°4'/ 4.5	17	
5 1	17 17.30	-22 37.4	2.144	2.992	12.3	21.9	5 1	17 16.75	-22 23.8	2.158	3.007	12.2	21.3
5 11	17 11.91	-22 42.8	2.058	2.986	9.3	21.7	5 11	17 11.37	-22 8.7	2.080	3.008	9.1	21.1
5 21	17 4.46	-22 45.9	1.996	2.979	5.7	21.4	5 21	17 4.05	-21 50.5	2.026	3.009	5.6	20.9
5 31	16 55.61	-22 46.2	1.961	2.972	1.9	21.2	5 31	16 55.47	-21 29.4	1.999	3.010	1.8	20.6
6 10	16 46.25	-22 43.9	1.953	2.964	2.1	21.2	6 10	16 46.51	-21 6.8	1.999	3.010	2.2	20.6
6 20	16 37.32	-22 40.1	1.973	2.957	6.1	21.4	6 20	16 38.07	-20 44.5	2.028	3.011	6.0	20.9
6 30	16 29.72	-22 36.3	2.019	2.949	9.7	21.6	6 30	16 30.98	-20 24.7	2.082	3.011	9.5	21.1
7 10	16 24.12	-22 34.6	2.088	2.941	12.8	21.8	7 10	16 25.84	-20 9.6	2.160	3.010	12.5	21.3
<b>315421</b>	2007 <i>VY</i> <sub>247</sub>		6 4.6 211°46	4°7'/ 3.4	17		<b>479246</b>	2013 <i>EX</i> <sub>7</sub>		6 4.6 252°10	7°6'/ 7.3		

EPHEMERIDES

6 4.6

6 4.6

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>168896</b>	2000 <i>WC</i> <sub>134</sub>	6 4.6 198°42 2°6/ 5.4 17					<b>117821</b>	2005 <i>JD</i> <sub>5</sub>	6 4.6 348°46 8°2/ 4.4 17				
5 1	17 22.99	-29 51.4	1.944	2.779	13.9	20.7	5 1	17 15.56	-4 45.8	1.189	2.057	18.8	18.8
5 11	17 16.47	-30 1.1	1.860	2.776	10.7	20.4	5 11	17 11.72	-4 39.7	1.123	2.050	15.2	18.5
5 21	17 7.41	-30 2.3	1.798	2.772	7.1	20.2	5 21	17 4.88	-4 52.1	1.075	2.043	11.4	18.3
5 31	16 56.61	-29 52.9	1.763	2.767	3.5	20.0	5 31	16 55.89	-5 27.4	1.048	2.038	8.6	18.1
6 10	16 45.20	-29 32.4	1.755	2.762	3.3	20.0	6 10	16 46.10	-6 26.8	1.043	2.034	8.8	18.1
6 20	16 34.41	-29 2.8	1.774	2.756	6.9	20.2	6 20	16 36.96	-7 47.9	1.061	2.030	11.9	18.3
6 30	16 25.35	-28 27.9	1.820	2.748	10.6	20.4	6 30	16 29.86	-9 25.9	1.100	2.028	16.0	18.5
7 10	16 18.79	-27 52.4	1.888	2.741	14.0	20.6	7 10	16 25.72	-11 14.8	1.157	2.027	19.8	18.7
<b>502351</b>	2015 <i>BH</i> <sub>204</sub>	6 4.6 121°41 2°3/ 3.9 17					<b>302307</b>	2001 <i>YO</i> <sub>132</sub>	6 4.6 231°03 2°7/ 5.8 18				
5 1	17 18.17	-18 5.1	1.777	2.634	14.1	21.8	5 1	17 18.00	-32 52.8	2.808	3.627	10.5	21.3
5 11	17 12.65	-17 35.6	1.711	2.642	10.6	21.5	5 11	17 12.13	-32 52.9	2.709	3.614	8.2	21.1
5 21	17 4.92	-17 5.7	1.667	2.650	6.6	21.3	5 21	17 4.49	-32 44.6	2.634	3.600	5.7	20.9
5 31	16 55.76	-16 37.1	1.649	2.657	2.9	21.1	5 31	16 55.66	-32 26.6	2.587	3.586	3.3	20.8
6 10	16 46.24	-16 12.2	1.657	2.664	3.5	21.2	6 10	16 46.41	-31 58.9	2.569	3.571	3.1	20.7
6 20	16 37.40	-15 53.0	1.692	2.671	7.4	21.4	6 20	16 37.54	-31 23.1	2.579	3.556	5.3	20.8
6 30	16 30.18	-15 41.4	1.752	2.678	11.2	21.6	6 30	16 29.82	-30 41.8	2.617	3.540	8.0	21.0
7 10	16 25.22	-15 38.6	1.834	2.684	14.4	21.9	7 10	16 23.84	-29 58.6	2.680	3.524	10.6	21.1
<b>507124</b>	2009 <i>SG</i> <sub>370</sub>	6 4.6 188°66 4°7/ 5.2 17					<b>84001</b>	2002 <i>NE</i> <sub>29</sub>	6 4.6 274°37 0°7/ 4.8 18				
5 1	17 23.81	-32 42.6	1.965	2.793	14.1	21.8	5 1	17 19.63	-24 32.3	1.645	2.502	15.0	20.0
5 11	17 17.30	-33 45.2	1.885	2.793	11.1	21.6	5 11	17 14.48	-24 33.8	1.550	2.481	11.5	19.7
5 21	17 8.07	-34 40.3	1.829	2.792	7.9	21.4	5 21	17 6.51	-24 30.4	1.476	2.460	7.2	19.4
5 31	16 56.87	-35 23.2	1.798	2.791	5.2	21.2	5 31	16 56.43	-24 21.0	1.427	2.438	2.5	19.1
6 10	16 44.87	-35 50.7	1.794	2.789	5.1	21.2	6 10	16 45.43	-24 5.8	1.404	2.416	2.7	19.0
6 20	16 33.38	-36 2.3	1.818	2.787	7.7	21.4	6 20	16 34.84	-23 46.4	1.408	2.394	7.7	19.3
6 30	16 23.65	-36 0.8	1.867	2.785	11.0	21.6	6 30	16 25.97	-23 26.1	1.435	2.371	12.3	19.5
7 10	16 16.54	-35 50.8	1.938	2.782	14.0	21.8	7 10	16 19.81	-23 8.9	1.483	2.348	16.5	19.7
<b>436243</b>	2010 <i>AJ</i> <sub>93</sub>	6 4.6 99°72 1°1/ 4.9 17					<b>232796</b>	2004 <i>RB</i> <sub>112</sub>	6 4.6 343°00 12°8/ 6.4 17				
5 1	17 19.51	-24 46.2	2.064	2.908	12.9	21.3	5 1	17 13.39	-43 24.1	1.111	1.963	21.0	18.7
5 11	17 13.48	-25 8.5	2.000	2.924	9.7	21.2	5 11	17 11.75	-44 59.8	1.038	1.944	18.1	18.5
5 21	17 5.36	-25 27.2	1.959	2.940	6.0	21.0	5 21	17 5.80	-46 15.7	0.982	1.926	15.3	18.2
5 31	16 55.90	-25 40.9	1.945	2.955	2.3	20.8	5 31	16 56.39	-47 0.6	0.945	1.910	13.2	18.1
6 10	16 46.08	-25 49.2	1.960	2.970	2.3	20.8	6 10	16 45.41	-47 6.7	0.926	1.896	13.0	18.0
6 20	16 36.89	-25 52.7	2.001	2.985	6.0	21.1	6 20	16 35.26	-46 32.9	0.926	1.884	14.7	18.0
6 30	16 29.22	-25 53.4	2.069	2.999	9.5	21.3	6 30	16 28.21	-45 26.2	0.944	1.874	17.8	18.2
7 10	16 23.70	-25 53.5	2.160	3.013	12.4	21.5	7 10	16 25.67	-43 58.9	0.978	1.866	21.1	18.3
<b>359936</b>	2011 <i>YW</i> <sub>20</sub>	6 4.6 235°90 5°5/ 3.1 18					<b>144813</b>	2004 <i>JU</i> <sub>1</sub>	6 4.6 32°06 4°0/ 5.9 18				
5 1	17 14.09	-3 6.9	2.760	3.580	10.7	20.9	5 1	17 17.63	-33 53.6	2.012	2.847	13.5	19.6
5 11	17 9.00	-2 48.9	2.675	3.570	8.7	20.8	5 11	17 12.40	-34 9.3	1.939	2.850	10.6	19.4
5 21	17 2.46	-2 39.5	2.614	3.559	6.8	20.7	5 21	17 4.86	-34 14.3	1.887	2.854	7.4	19.2
5 31	16 54.97	-2 41.0	2.579	3.549	5.6	20.6	5 31	16 55.80	-34 6.2	1.861	2.857	4.7	19.0
6 10	16 47.12	-2 54.8	2.571	3.538	5.9	20.6	6 10	16 46.28	-33 44.9	1.861	2.861	4.3	19.0
6 20	16 39.57	-3 21.0	2.591	3.526	7.5	20.6	6 20	16 37.43	-33 12.2	1.888	2.865	6.8	19.2
6 30	16 32.92	-3 59.0	2.637	3.515	9.7	20.8	6 30	16 30.21	-32 32.0	1.940	2.870	10.0	19.4
7 10	16 27.66	-4 47.2	2.706	3.503	11.8	20.9	7 10	16 25.33	-31 49.2	2.014	2.874	12.9	19.6
<b>507915</b>	2014 <i>WB</i> <sub>429</sub>	6 4.6 75°67 2°0/ 4.3 17					<b>397722</b>	2008 <i>DH</i> <sub>87</sub>	6 4.6 254°48 6°8/ 1.9 16				
5 1	17 18.74	-16 25.9	1.759	2.615	14.2	20.7	5 1	17 12.90	-3 13.1	2.335	3.165	12.1	21.4
5 11	17 13.07	-16 34.7	1.700	2.630	10.7	20.5	5 11	17 8.30	-2 18.0	2.262	3.161	9.9	21.2
5 21	17 5.17	-16 46.5	1.663	2.645	6.7	20.3	5 21	17 2.11	-1 31.7	2.213	3.158	7.9	21.1
5 31	16 55.85	-17 1.5	1.652	2.660	2.8	20.1	5 31	16 54.88	-0 57.8	2.189	3.154	6.8	21.0
6 10	16 46.16	-17 19.6	1.667	2.675	3.2	20.2	6 10	16 47.33	-0 39.1	2.192	3.150	7.3	21.0
6 20	16 37.17	-17 41.0	1.710	2.691	7.1	20.4	6 20	16 40.18	-0 36.9	2.219	3.146	9.1	21.1
6 30	16 29.83	-18 5.9	1.777	2.706	10.8	20.7	6 30	16 34.10	-0 51.0	2.271	3.142	11.3	21.3
7 10	16 24.77	-18 34.5	1.867	2.720	14.1	20.9	7 10	16 29.61	-1 19.8	2.344	3.138	13.4	21.4
<b>153941</b>	2001 <i>YM</i> <sub>121</sub>	6 4.6 101°98 3°3/ 5.0 17					<b>382369</b>	2013 <i>TZ</i> <sub>98</sub>	6 4.6 319°83 0°2/ 4.7 17				
5 1	17 23.33	-28 34.5	1.816	2.657	14.5	20.0	5 1	17 16.31	-21 46.1	1.329	2.205	16.7	20.7
5 11	17 16.82	-29 33.4	1.751	2.670	11.1	19.8	5 11	17 12.48	-22 9.6	1.244	2.185	12.8	20.4
5 21	17 7.67	-30 26.8	1.709	2.682	7.4	19.6	5 21	17 5.52	-22 33.3	1.179	2.167	8.0	20.1
5 31	16 56.71	-31 10.7	1.692	2.695	4.0	19.5	5 31	16 56.17	-22 55.7	1.137	2.149	2.6	19.7
6 10	16 45.15	-31 42.3	1.703	2.707	4.0	19.5	6 10	16 45.73	-23 15.8	1.119	2.131	3.0	19.7
6 20	16 34.29	-32 1.5	1.741	2.719	7.3	19.7	6 20	16 35.74	-23 33.4	1.125	2.115	8.6	20.0
6 30	16 25.27	-32 10.6	1.804	2.730	10.8	19.9	6 30	16 27.73	-23 50.0	1.153	2.099	13.8	20.2
7 10	16 18.89	-32 13.5	1.890	2.742	14.0	20.2	7 10	16 22.79	-24 8.0	1.201	2.084	18.3	20.4
<b>336468</b>	2008 <i>VO</i> <sub>7</sub>	6 4.6 288°52 4°0/ 5.9 18					<b>308499</b>	2005 <i>TQ</i> <sub>132</sub>	6 4.6 164°68 3°8/ 3.1 16				
5 1	17 18.92	-33 24.5	1.771	2.612	14.8	20.2	5 1	17 13.44	-12 33.7	2.374	3.221	11.3	21.5
5 11	17 13.80	-33 30.5	1.683	2.599	11.7	19.9	5 11	17 8.67	-11 48.2	2.300	3.222	8.7	21.3
5 21	17 5.95	-33 24.4	1.617	2.587	8.1	19.7	5 21	17 2.32	-11 5.4	2.250	3.223	5.9	21.2
5 31	16 56.19	-33 3.4	1.574	2.574	4.8	19.4	5 31	16 54.94	-10 27.7	2.227	3.223	4.0	21.0
6 10	16 45.73	-32 27.3	1.558	2.561	4.4	19.4	6 10	16 47.28	-9 57.6	2.231	3.224	4.5	21.1
6 20	16 35.88	-31 38.4	1.567	2.548	7.6	19.6	6 20	16 40.05	-9 36.9	2.263	3.224	7.0	21.2
6 30	16 27.87	-30 41.9	1.601	2.536	11.4	19.7	6 30	16 33.92	-9 26.7	2.320	3.225	9.7	21.4
7 10	16 22.54	-29 44.0	1.657	2.523	15.0	19.9	7 10	16 29.41	-9 27.0	2.400	3.225	12.2	21.6
<b>424049</b>	2007 <i>BW</i> <sub>40</sub>	6 4.6 212°05 1°1/ 4.3 17					<b>393035</b>	2013 <i>AC</i> <sub>10</sub>	6 4.6 267°38 0°6/				

EPHEMERIDES

6 4.6

6 4.7

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	
<b>302302</b>	2001 YH <sub>100</sub>	6 4.6 230°89 2°7/ 3.9 18						<b>55919</b>	1998 FA <sub>39</sub>	6 4.7 182°66 4°5/ 6.2 18				
5 1	17 15.51	-13 26.4	2.478	3.321	11.1	21.1	5 1	17 19.06	-36 40.7	2.436	3.250	12.1	19.2	
5 11	17 10.27	-13 23.1	2.391	3.313	8.4	20.9	5 11	17 13.22	-37 2.0	2.354	3.250	9.7	19.1	
5 21	17 3.35	-13 23.5	2.329	3.305	5.5	20.7	5 21	17 5.29	-37 12.7	2.296	3.250	7.1	18.9	
5 31	16 55.31	-13 28.4	2.293	3.297	3.1	20.5	5 31	16 55.97	-37 10.1	2.264	3.250	5.0	18.8	
6 10	16 46.84	-13 38.6	2.286	3.288	3.5	20.5	6 10	16 46.21	-36 53.5	2.259	3.250	4.7	18.7	
6 20	16 38.71	-13 54.5	2.307	3.279	6.2	20.7	6 20	16 36.98	-36 24.4	2.281	3.249	6.5	18.8	
6 30	16 31.63	-14 16.3	2.355	3.270	9.2	20.8	6 30	16 29.20	-35 46.0	2.329	3.248	9.1	19.0	
7 10	16 26.17	-14 43.8	2.426	3.261	11.9	21.0	7 10	16 23.51	-35 2.7	2.401	3.247	11.6	19.2	
<b>469873</b>	2005 UL <sub>94</sub>	6 4.6 291°07 4°9/ 5.5 16						<b>443000</b>	2013 CA <sub>187</sub>	6 4.7 61°14 6°6/ 3.2 16				
5 1	17 18.99	-34 54.7	2.212	3.037	12.8	21.4	5 1	17 14.09	- 2 3.6	2.326	3.151	12.3	21.3	
5 11	17 13.62	-35 45.0	2.115	3.018	10.3	21.2	5 11	17 9.18	- 1 39.8	2.257	3.152	10.0	21.1	
5 21	17 5.81	-36 27.3	2.041	2.999	7.6	21.0	5 21	17 2.66	- 1 27.0	2.210	3.154	7.9	21.0	
5 31	16 56.19	-36 57.7	1.992	2.980	5.4	20.8	5 31	16 55.10	- 1 27.8	2.189	3.156	6.7	20.9	
6 10	16 45.76	-37 13.6	1.970	2.961	5.2	20.8	6 10	16 47.23	- 1 43.7	2.194	3.157	7.0	20.9	
6 20	16 35.62	-37 14.7	1.975	2.942	7.4	20.9	6 20	16 39.77	- 2 14.7	2.225	3.159	8.7	21.0	
6 30	16 26.91	-37 3.3	2.005	2.923	10.3	21.0	6 30	16 33.42	- 2 59.6	2.281	3.161	10.9	21.2	
7 10	16 20.49	-36 43.6	2.058	2.904	13.2	21.2	7 10	16 28.69	- 3 56.0	2.359	3.162	13.1	21.3	
<b>39561</b>	1992 QA	6 4.6 42°82 13°7/ 1.3 18						<b>410694</b>	2008 YE <sub>17</sub>	6 4.7 58°36 2°5/ 4.3 17				
5 1	17 41.38	-30 33.6	0.833	1.698	25.1	17.1	5 1	17 19.54	-17 9.8	1.321	2.191	17.1	20.7	
5 11	17 34.77	-35 26.3	0.785	1.708	20.4	16.8	5 11	17 14.44	-17 5.1	1.258	2.196	12.9	20.5	
5 21	17 21.47	-40 24.8	0.757	1.718	16.0	16.6	5 21	17 6.41	-17 3.0	1.216	2.201	8.1	20.2	
5 31	17 1.93	-44 55.6	0.752	1.729	13.7	16.6	5 31	16 56.39	-17 4.4	1.197	2.207	3.4	19.9	
6 10	16 38.72	-48 27.1	0.771	1.740	15.0	16.7	6 10	16 45.77	-17 10.3	1.203	2.212	4.0	20.0	
6 20	16 16.07	-50 45.2	0.812	1.752	18.6	16.9	6 20	16 35.99	-17 21.5	1.233	2.217	8.8	20.3	
6 30	15 58.28	-51 59.0	0.871	1.765	22.5	17.2	6 30	16 28.32	-17 39.1	1.286	2.223	13.4	20.6	
7 10	15 47.81	-52 29.9	0.945	1.778	26.0	17.5	7 10	16 23.58	-18 3.4	1.359	2.229	17.4	20.8	
<b>95030</b>	2002 AP <sub>25</sub>	6 4.6 114°30 6°5/ 3.2 18						<b>293789</b>	2007 RK <sub>136</sub>	6 4.7 233°93 1°5/ 5.1 17				
5 1	17 17.41	- 5 11.1	1.945	2.781	13.9	20.0	5 1	17 17.96	-26 54.7	2.150	2.993	12.5	21.8	
5 11	17 11.80	- 4 35.0	1.886	2.794	11.1	19.8	5 11	17 12.51	-27 3.7	2.063	2.986	9.5	21.6	
5 21	17 4.29	- 4 9.0	1.851	2.806	8.4	19.7	5 21	17 4.93	-27 7.3	2.000	2.979	6.1	21.3	
5 31	16 55.58	- 3 56.4	1.840	2.818	6.7	19.6	5 31	16 55.88	-27 4.4	1.963	2.972	2.5	21.1	
6 10	16 46.60	- 3 59.1	1.855	2.830	7.1	19.6	6 10	16 46.31	-26 54.8	1.954	2.964	2.5	21.1	
6 20	16 38.22	- 4 17.6	1.897	2.842	9.2	19.8	6 20	16 37.19	-26 39.9	1.973	2.956	6.1	21.3	
6 30	16 31.26	- 4 50.7	1.962	2.853	11.9	20.0	6 30	16 29.47	-26 22.0	2.017	2.948	9.6	21.5	
7 10	16 26.28	- 5 36.0	2.049	2.864	14.4	20.2	7 10	16 23.83	-26 4.3	2.085	2.940	12.8	21.7	
<b>119817</b>	2002 AY <sub>170</sub>	6 4.7 336°91 0°8/ 4.5 18						<b>272768</b>	2005 YZ <sub>174</sub>	6 4.7 261°44 2°7/ 3.9 18				
5 1	17 13.94	-20 47.4	1.855	2.717	13.3	19.4	5 1	17 17.78	-16 14.1	1.915	2.768	13.4	20.5	
5 11	17 9.68	-20 42.3	1.774	2.708	10.0	19.2	5 11	17 12.55	-15 53.9	1.821	2.750	10.2	20.3	
5 21	17 3.25	-20 35.7	1.715	2.700	6.2	18.9	5 21	17 5.07	-15 34.9	1.751	2.731	6.6	20.0	
5 31	16 55.32	-20 28.1	1.682	2.693	2.1	18.6	5 31	16 55.96	-15 18.4	1.706	2.712	3.2	19.7	
6 10	16 46.86	-20 20.4	1.675	2.686	2.5	18.6	6 10	16 46.19	-15 6.3	1.688	2.693	3.8	19.7	
6 20	16 38.89	-20 13.9	1.694	2.679	6.7	18.9	6 20	16 36.78	-15 0.2	1.697	2.673	7.6	19.9	
6 30	16 32.34	-20 10.5	1.738	2.673	10.6	19.1	6 30	16 28.75	-15 1.6	1.731	2.653	11.4	20.1	
7 10	16 27.94	-20 11.7	1.804	2.668	14.0	19.3	7 10	16 22.87	-15 11.5	1.787	2.633	14.9	20.3	
<b>63194</b>	2000 YB <sub>120</sub>	6 4.7 224°39 4°9/ 3.4 18						<b>93496</b>	2000 TT <sub>41</sub>	6 4.7 113°80 4°7/ 3.7 17				
5 1	17 14.16	- 7 49.1	2.298	3.137	11.9	19.2	5 1	17 17.69	-10 16.9	1.880	2.728	13.8	19.5	
5 11	17 9.28	- 7 27.4	2.223	3.137	9.4	19.0	5 11	17 12.16	- 9 53.7	1.817	2.738	10.7	19.4	
5 21	17 2.74	- 7 12.9	2.172	3.136	6.8	18.9	5 21	17 4.60	- 9 37.2	1.776	2.747	7.4	19.2	
5 31	16 55.11	- 7 7.7	2.147	3.135	5.0	18.8	5 31	16 55.74	- 9 29.7	1.761	2.757	5.0	19.1	
6 10	16 47.14	- 7 13.3	2.149	3.134	5.4	18.8	6 10	16 46.55	- 9 32.7	1.773	2.766	5.4	19.1	
6 20	16 39.57	- 7 30.3	2.178	3.133	7.6	18.9	6 20	16 37.96	- 9 46.8	1.811	2.776	8.2	19.3	
6 30	16 33.13	- 7 58.1	2.232	3.132	10.3	19.1	6 30	16 30.85	-10 11.8	1.874	2.784	11.4	19.5	
7 10	16 28.34	- 8 35.6	2.309	3.131	12.8	19.2	7 10	16 25.81	-10 46.3	1.959	2.793	14.3	19.7	
<b>384974</b>	2012 TE <sub>163</sub>	6 4.7 34°68 1°6/ 4.3 17						<b>361558</b>	2007 RM <sub>4</sub>	6 4.7 307°42 0°6/ 4.5 17				
5 1	17 16.34	-18 15.7	1.858	2.716	13.5	20.6	5 1	17 16.61	-22 47.3	1.222	2.101	17.6	20.5	
5 11	17 11.35	-18 11.3	1.786	2.717	10.1	20.4	5 11	17 12.93	-22 27.9	1.137	2.080	13.5	20.1	
5 21	17 4.19	-18 7.6	1.736	2.720	6.3	20.2	5 21	17 5.91	-22 2.5	1.071	2.059	8.4	19.8	
5 31	16 55.61	-18 5.3	1.712	2.722	2.5	19.9	5 31	16 56.37	-21 31.4	1.027	2.039	2.8	19.4	
6 10	16 46.58	-18 5.3	1.715	2.724	3.0	20.0	6 10	16 45.72	-20 56.9	1.007	2.019	3.4	19.4	
6 20	16 38.10	-18 8.4	1.745	2.727	6.9	20.2	6 20	16 35.62	-20 22.5	1.010	1.999	9.4	19.6	
6 30	16 31.11	-18 15.8	1.799	2.729	10.6	20.4	6 30	16 27.68	-19 53.3	1.034	1.980	14.9	19.9	
7 10	16 26.28	-18 28.4	1.876	2.732	13.9	20.6	7 10	16 23.02	-19 33.4	1.076	1.962	19.8	20.1	
<b>305975</b>	2009 HZ <sub>85</sub>	6 4.7 85°86 0°3/ 4.7 17						<b>325066</b>	2008 CN <sub>209</sub>	6 4.7 161°62 3°8/ 5.5 17				
5 1	17 16.57	-23 25.1	2.116	2.966	12.4	21.2	5 1	17 22.58	-31 19.5	1.705	2.546	15.3	21.2	
5 11	17 11.31	-23 30.2	2.045	2.973	9.3	21.0	5 11	17 16.53	-31 49.4	1.632	2.549	11.9	21.0	
5 21	17 4.08	-23 32.3	1.997	2.979	5.7	20.8	5 21	17 7.64	-32 10.1	1.580	2.552	8.1	20.8	
5 31	16 55.56	-23 31.1	1.975	2.986	1.9	20.6	5 31	16 56.80	-32 17.9	1.553	2.554	4.6	20.6	
6 10	16 46.67	-23 26.8	1.981	2.993	2.1	20.6	6 10	16 45.33	-32 11.6	1.553	2.556	4.4	20.6	
6 20	16 38.32	-23 20.5	2.015	2.999	5.9	20.9	6 20	16 34.59	-31 52.7	1.578	2.558	7.7	20.8	
6 30	16 31.35	-23 14.2	2.074	3.006	9.4	21.1	6 30	16 25.83	-31 25.2	1.629	2.560	11.5	21.0	
7 10	16 26.38	-23 9.7	2.157	3.012	12.4	21.3	7 10	16 19.89	-30 54.6	1.700	2.561	14.9	21.2	
<b>294642</b>	2008 AZ <sub>58</sub>	6 4.7 220°86 1°7/ 4.3 17						<b>58087</b>	2156 T-3	6 4.7 148°85 4°3/ 3.0 18				
5 1	17 19.17	-19 15.0	1.645	2.504	14.9	21.7	5 1	17 18.10	-13 4.5	2.030	2.877	13.0	19.5	
5 11	17 13.79	-19 0.1	1.568	2.500	11.2	21.5	5 11	17 12.31	-12 5.3	1.963	2.885	9.9	19.3	
5 21	17 5.87	-18 44.3	1.512	2.496	7.0	21.2	5 21	17 4.62	-11 8.3	1.920	2.893	6.8	19.1	
5 31	16 56.20	-18 28.5	1.482	2.492	2.7	20.9	5 31	16 55.75	-10 16.8	1.903	2.900	4.5	19.0	
6 10	16 45.92	-18 14.2	1.478	2.487	3.3	20.9	6 10	16 46.58	- 9 34.4	1.914	2.907	5.2	19.1	
6 20	16 36.26	-18 3.3	1.500	2.483	7.7	21.2	6 20	16 38.02	- 9 3.4	1.952	2.913	8.0	19.2	
6 30	16 28.32	-17 58.0	1.547	2.478	12.0	21.4	6 30	1						

## EPHEMERIDES

6 4.7

6 4.7

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>432872</b>	2011 <i>JR</i> <sub>20</sub>	6	4.7 333°65	0°9/ 4.9 17			<b>309946</b>	2009 <i>FL</i> <sub>76</sub>	6	4.7 2°63	8°0/31.3 17		
5 1	17 17.89	-24 34.4	1.765	2.621	14.2	21.3	5 1	17 12.18	-10 29.2	1.501	2.371	15.5	19.0
5 11	17 12.78	-24 45.6	1.689	2.620	10.7	21.1	5 11	17 8.48	- 8 10.3	1.440	2.369	12.3	18.8
5 21	17 5.24	-24 52.7	1.635	2.618	6.7	20.9	5 21	17 2.52	- 5 53.6	1.402	2.369	9.3	18.6
5 31	16 56.02	-24 54.8	1.607	2.617	2.4	20.6	5 31	16 55.14	- 3 48.0	1.388	2.370	8.0	18.5
6 10	16 46.24	-24 51.8	1.605	2.616	2.5	20.6	6 10	16 47.39	- 2 2.3	1.400	2.373	9.2	18.6
6 20	16 37.05	-24 44.9	1.629	2.615	6.8	20.9	6 20	16 40.35	- 0 42.6	1.436	2.376	12.0	18.8
6 30	16 29.51	-24 36.5	1.678	2.614	10.9	21.1	6 30	16 34.94	+ 0 8.6	1.493	2.381	15.1	19.0
7 10	16 24.39	-24 29.5	1.749	2.613	14.4	21.3	7 10	16 31.78	+ 0 32.8	1.569	2.386	18.0	19.2
<b>154758</b>	2004 <i>PL</i> <sub>10</sub>	6	4.7 348°74	1°7/ 5.0 17			<b>508355</b>	2016 <i>EF</i> <sub>66</sub>	6	4.7 31°97	1°3/ 4.5 17		
5 1	17 15.15	-26 20.7	1.311	2.187	17.0	19.8	5 1	17 18.93	-18 20.7	1.387	2.256	16.6	20.2
5 11	17 11.49	-26 28.0	1.240	2.180	12.9	19.5	5 11	17 13.96	-18 37.8	1.323	2.261	12.5	19.9
5 21	17 4.79	-26 28.3	1.188	2.174	8.2	19.2	5 21	17 6.14	-18 57.5	1.280	2.265	7.7	19.7
5 31	16 55.94	-26 20.0	1.159	2.169	3.3	18.9	5 31	16 56.37	-19 19.2	1.260	2.270	2.8	19.4
6 10	16 46.33	-26 3.6	1.153	2.165	3.2	18.9	6 10	16 45.97	-19 42.4	1.265	2.276	3.2	19.4
6 20	16 37.46	-25 41.2	1.172	2.162	8.2	19.2	6 20	16 36.33	-20 7.0	1.295	2.282	8.1	19.7
6 30	16 30.71	-25 17.2	1.212	2.159	13.1	19.5	6 30	16 28.70	-20 33.6	1.349	2.288	12.7	20.0
7 10	16 26.98	-24 55.9	1.272	2.158	17.3	19.7	7 10	16 23.91	-21 3.1	1.422	2.294	16.6	20.3
<b>468078</b>	2013 <i>TB</i> <sub>20</sub>	6	4.7 316°97	1°3/ 4.4 17			<b>432589</b>	2010 <i>RC</i> <sub>103</sub>	6	4.7 190°02	0°6/ 4.9 15		
5 1	17 15.33	-20 32.5	1.316	2.194	16.7	21.0	5 1	17 21.53	-24 50.7	2.359	3.193	11.8	23.9
5 11	17 11.70	-20 20.1	1.231	2.174	12.7	20.7	5 11	17 14.91	-24 47.3	2.273	3.192	8.9	23.7
5 21	17 5.01	-20 5.5	1.167	2.154	8.0	20.4	5 21	17 6.30	-24 39.4	2.211	3.190	5.6	23.5
5 31	16 56.06	-19 49.6	1.124	2.136	2.8	20.0	5 31	16 56.36	-24 26.4	2.177	3.187	1.9	23.2
6 10	16 46.13	-19 34.0	1.106	2.117	3.5	20.0	6 10	16 45.98	-24 8.7	2.172	3.183	2.0	23.2
6 20	16 36.70	-19 21.1	1.111	2.099	8.9	20.2	6 20	16 36.08	-23 47.9	2.196	3.178	5.7	23.5
6 30	16 29.22	-19 13.9	1.139	2.083	14.1	20.5	6 30	16 27.52	-23 26.5	2.247	3.172	9.1	23.7
7 10	16 24.73	-19 14.9	1.185	2.066	18.6	20.7	7 10	16 20.93	-23 7.0	2.323	3.165	12.1	23.9
<b>217549</b>	2007 <i>FP</i> <sub>31</sub>	6	4.7 129°57	7°1/ 6.0 18			<b>314118</b>	2005 <i>EW</i> <sub>119</sub>	6	4.7 157°82	0°6/ 4.5 17		
5 1	17 24.11	-39 0.4	1.846	2.661	15.3	20.1	5 1	17 21.50	-21 53.9	1.836	2.685	14.0	21.8
5 11	17 17.86	-40 5.6	1.774	2.665	12.6	19.9	5 11	17 15.23	-21 40.9	1.764	2.692	10.5	21.6
5 21	17 8.58	-40 57.7	1.724	2.669	9.7	19.8	5 21	17 6.61	-21 24.8	1.716	2.698	6.5	21.3
5 31	16 57.15	-41 30.8	1.699	2.673	7.6	19.6	5 31	16 56.47	-21 5.7	1.693	2.704	2.1	21.1
6 10	16 44.94	-41 41.7	1.698	2.676	7.3	19.6	6 10	16 45.90	-20 45.0	1.698	2.709	2.5	21.1
6 20	16 33.44	-41 30.7	1.723	2.680	9.2	19.7	6 20	16 36.02	-20 24.8	1.731	2.714	6.8	21.4
6 30	16 24.02	-41 2.4	1.773	2.683	11.9	19.9	6 30	16 27.83	-20 7.5	1.789	2.717	10.8	21.6
7 10	16 17.58	-40 23.5	1.843	2.686	14.7	20.1	7 10	16 22.00	-19 55.7	1.869	2.720	14.2	21.8
<b>120869</b>	1998 <i>RZ</i> <sub>15</sub>	6	4.7 310°12	0°0/ 4.4 18			<b>471774</b>	2012 <i>UL</i> <sub>144</sub>	6	4.7 217°00	2°2/ 4.0 18		
5 1	17 17.13	-21 46.2	1.142	2.025	18.4	19.0	5 1	17 16.27	-16 39.4	2.230	3.078	11.9	21.9
5 11	17 13.64	-22 0.5	1.057	2.003	14.1	18.6	5 11	17 11.03	-16 22.9	2.147	3.073	9.0	21.7
5 21	17 6.57	-22 14.2	0.992	1.980	8.9	18.3	5 21	17 3.94	-16 7.3	2.088	3.068	5.7	21.5
5 31	16 56.67	-22 26.1	0.947	1.959	2.9	17.8	5 31	16 55.61	-15 53.8	2.055	3.062	2.7	21.3
6 10	16 45.41	-22 35.6	0.925	1.937	3.4	17.8	6 10	16 46.85	-15 43.8	2.051	3.057	3.2	21.3
6 20	16 34.58	-22 43.3	0.926	1.917	9.7	18.1	6 20	16 38.52	-15 38.5	2.074	3.051	6.4	21.5
6 30	16 26.01	-22 51.6	0.947	1.897	15.5	18.3	6 30	16 31.40	-15 39.0	2.124	3.044	9.7	21.7
7 10	16 20.97	-23 3.6	0.986	1.878	20.6	18.6	7 10	16 26.10	-15 46.0	2.196	3.038	12.7	21.9
<b>413422</b>	2004 <i>VF</i> <sub>40</sub>	6	4.7 284°07	0°0/ 4.4 17			<b>167324</b>	2003 <i>UG</i> <sub>263</sub>	6	4.7 326°41	1°8/ 4.8 17		
5 1	17 19.69	-22 33.5	1.401	2.268	16.6	21.3	5 1	17 19.01	-23 51.8	1.633	2.492	15.0	19.3
5 11	17 14.98	-22 38.4	1.311	2.247	12.6	21.0	5 11	17 14.05	-24 47.0	1.551	2.483	11.4	19.0
5 21	17 7.09	-22 40.6	1.241	2.226	7.9	20.7	5 21	17 6.30	-25 42.3	1.491	2.473	7.3	18.8
5 31	16 56.77	-22 39.1	1.194	2.205	2.6	20.3	5 31	16 56.49	-26 34.4	1.456	2.465	3.0	18.5
6 10	16 45.34	-22 33.9	1.172	2.184	3.0	20.2	6 10	16 45.78	-27 20.4	1.446	2.456	3.1	18.5
6 20	16 34.34	-22 26.4	1.175	2.163	8.6	20.5	6 20	16 35.51	-27 58.6	1.463	2.449	7.5	18.7
6 30	16 25.30	-22 19.6	1.201	2.142	13.8	20.7	6 30	16 26.96	-28 29.6	1.505	2.441	11.9	18.9
7 10	16 19.31	-22 16.9	1.246	2.120	18.4	21.0	7 10	16 21.10	-28 55.9	1.567	2.434	15.6	19.2
<b>509354</b>	2007 <i>AU</i> <sub>5</sub>	6	4.7 188°34	1°5/ 4.1 18			<b>132816</b>	2002 <i>QL</i> <sub>49</sub>	6	4.7 12°89	0°7/ 4.5 17		
5 1	17 14.69	-16 35.1	3.295	4.130	8.8	23.3	5 1	17 15.98	-20 54.5	1.630	2.495	14.7	19.7
5 11	17 9.28	-16 28.2	3.209	4.128	6.6	23.1	5 11	17 11.42	-20 54.4	1.561	2.497	11.0	19.4
5 21	17 2.60	-16 22.2	3.149	4.127	4.2	22.9	5 21	17 4.42	-20 53.1	1.514	2.499	6.8	19.2
5 31	16 55.12	-16 17.5	3.117	4.124	1.9	22.8	5 31	16 55.80	-20 50.5	1.491	2.502	2.3	18.9
6 10	16 47.36	-16 14.9	3.116	4.121	2.2	22.8	6 10	16 46.66	-20 47.4	1.494	2.505	2.7	18.9
6 20	16 39.89	-16 15.0	3.144	4.118	4.6	23.0	6 20	16 38.17	-20 45.2	1.522	2.509	7.2	19.2
6 30	16 33.24	-16 18.4	3.200	4.114	7.0	23.1	6 30	16 31.37	-20 45.6	1.575	2.513	11.3	19.5
7 10	16 27.83	-16 25.6	3.281	4.109	9.2	23.3	7 10	16 27.00	-20 50.4	1.649	2.517	14.9	19.7
<b>413316</b>	2003 <i>UV</i> <sub>375</sub>	6	4.7 353°02	4°7/ 3.4 17			<b>359495</b>	2010 <i>OY</i> <sub>107</sub>	6	4.7 310°25	2°7/ 4.2 18		
5 1	17 15.68	-15 39.4	1.236	2.116	17.4	20.6	5 1	17 14.65	-14 4.0	2.152	3.003	12.2	20.0
5 11	17 11.70	-14 41.6	1.171	2.113	13.3	20.3	5 11	17 9.95	-14 6.4	2.065	2.992	9.3	19.8
5 21	17 4.80	-13 44.4	1.127	2.111	8.8	20.1	5 21	17 3.36	-14 12.9	2.002	2.980	6.0	19.6
5 31	16 55.93	-12 52.6	1.104	2.109	5.1	19.9	5 31	16 55.45	-14 24.5	1.964	2.969	3.2	19.3
6 10	16 46.44	-12 11.3	1.105	2.108	6.0	19.9	6 10	16 47.03	-14 41.8	1.954	2.959	3.6	19.4
6 20	16 37.76	-11 44.3	1.130	2.107	10.3	20.1	6 20	16 38.95	-15 4.8	1.972	2.948	6.7	19.5
6 30	16 31.15	-11 34.0	1.175	2.107	14.8	20.4	6 30	16 32.06	-15 33.7	2.015	2.938	10.0	19.7
7 10	16 27.43	-11 40.4	1.239	2.108	18.8	20.6	7 10	16 26.99	-16 8.0	2.080	2.928	13.1	19.9
<b>3809</b>	Amici	6	4.7 180°47	2°6/ 4.0 18			<b>82660</b>	2001 <i>PG</i> <sub>16</sub>	6	4.7 317°19	3°6/ 5.1		

EPHEMERIDES

6 4.7

6 4.7

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$		
<b>251645</b>	2010 <i>NZ</i> <sub>4</sub>		6 4.7 226°13		6°2/ 2.8 18			<b>234196</b>	2000 <i>QT</i> <sub>156</sub>		6 4.7 260°73			3°4/ 3.5 18	
5 1	17 14.06	- 2 26.3	2.582	3.403	11.3	20.4	5 1	17 17.05	-15 57.9	1.907	2.761	13.4	20.7		
<b>41447</b>	2000 <i>LK</i> <sub>4</sub>		6 4.7 321°66		8°6/ 2.6 18			<b>420835</b>	2013 <i>JX</i> <sub>12</sub>		6 4.7 316°76			0°4/ 4.7 17	
5 1	17 12.93	- 6 33.9	1.310	2.181	17.3	17.6	5 1	17 17.17	-22 13.4	1.212	2.091	17.8	21.1		
<b>292818</b>	2006 <i>UR</i> <sub>257</sub>		6 4.7 20°28		4°4/ 5.4 17			<b>78192</b>	2002 <i>NU</i> <sub>41</sub>		6 4.7 272°64			1°1/ 4.5 18	
5 1	17 19.03	-30 1.1	1.243	2.111	18.2	20.1	5 1	17 16.85	-19 30.6	1.980	2.834	13.0	19.7		
<b>437820</b>	2015 <i>DM</i> <sub>156</sub>		6 4.7 339°43		2°5/ 4.4 17			<b>474269</b>	2001 <i>TT</i> <sub>160</sub>		6 4.7 124°33			2°6/ 3.6 18	
5 1	17 14.79	-16 28.9	1.370	2.246	16.3	20.1	5 1	17 15.29	-16 0.6	2.536	3.380	10.8	21.7		
<b>303704</b>	2005 <i>OS</i> <sub>28</sub>		6 4.7 240°26		4°3/ 3.1 18			<b>393950</b>	2005 <i>UB</i> <sub>204</sub>		6 4.7 276°47			2°2/ 3.8 17	
5 1	17 13.92	-10 12.6	2.427	3.269	11.3	21.2	5 1	17 13.99	-17 39.6	2.309	3.161	11.4	21.2		
<b>199205</b>	2006 <i>AB</i> <sub>19</sub>		6 4.7 144°07		1°3/ 4.3 17			<b>399122</b>	2014 <i>DY</i> <sub>131</sub>		6 4.7 253°86			1°4/ 4.3 18	
5 1	17 17.62	-20 5.2	1.847	2.703	13.7	21.0	5 1	17 15.80	-19 6.2	2.148	3.000	12.2	21.1		
<b>268014</b>	2004 <i>NR</i>		6 4.7 303°69		1°7/ 4.3 17			<b>472960</b>	2015 <i>GP</i> <sub>37</sub>		6 4.7 273°01			1°3/ 4.4 17	
5 1	17 16.37	-19 28.8	1.563	2.430	15.1	20.1	5 1	17 17.07	-19 22.0	1.868	2.725	13.5	21.2		
<b>338606</b>	2003 <i>SM</i> <sub>189</sub>		6 4.7 213°44		3°3/ 5.7 18			<b>501075</b>	2013 <i>SU</i> <sub>49</sub>		6 4.7 176°63			1°3/ 4.3 17	
5 1	17 20.43	-33 33.3	2.701	3.516	11.0	22.1	5 1	17 18.63	-19 18.4	2.131	2.977	12.4	22.5		
<b>438092</b>	2004 <i>XT</i>		6 4.7 229°11		2°2/ 5.9 18			<b>102847</b>	1999 <i>VV</i> <sub>202</sub>		6 4.7 225°52			2°3/ 5.7 18	
5 1	17 17.16	-32 40.2	3.044	3.862	9.9	21.2	5 1	17 16.70	-32 0.4	3.046	3.866	9.8	19.9		

EPHEMERIDES

6 4.7

6 4.7

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>446040</b>	2013 <i>CS</i> <sub>103</sub>		6 4.7 325°81	7.0/ 3.0 16			<b>263341</b>	2008 <i>CH</i> <sub>89</sub>		6 4.7 327°49	4.7/ 6.0 17		
5 1	17 13.80	-1 38.0	2.223	3.050	12.7	21.2	5 1	17 17.62	-35 23.3	2.073	2.902	13.4	20.5
5 11	17 9.11	-1 8.7	2.151	3.046	10.5	21.0	5 11	17 12.58	-35 50.3	1.991	2.896	10.7	20.3
5 21	17 2.74	-0 50.7	2.101	3.043	8.4	20.9	5 21	17 5.16	-36 6.5	1.930	2.891	7.7	20.1
5 31	16 55.25	-0 47.4	2.075	3.040	7.1	20.8	5 31	16 56.11	-36 8.9	1.895	2.886	5.3	19.9
6 10	16 47.40	-1 0.4	2.076	3.037	7.5	20.8	6 10	16 46.48	-35 56.5	1.886	2.881	5.0	19.9
6 20	16 39.95	-1 30.1	2.102	3.034	9.2	20.9	6 20	16 37.40	-35 30.5	1.903	2.876	7.2	20.0
6 30	16 33.63	-2 15.2	2.152	3.031	11.5	21.1	6 30	16 29.90	-34 54.6	1.946	2.872	10.2	20.2
7 10	16 28.98	-3 13.1	2.224	3.029	13.7	21.2	7 10	16 24.74	-34 13.5	2.010	2.868	13.1	20.4
<b>60999</b>	2000 <i>KC</i> <sub>30</sub>		6 4.7 337°78	0°5/ 4.7 17			<b>206703</b>	2004 <i>BP</i> <sub>19</sub>		6 4.7 176°88	5°9/ 6.9 18		
5 1	17 14.90	-18 56.7	1.007	1.901	19.3	18.7	5 1	17 22.45	-41 54.1	2.550	3.338	12.3	21.1
5 11	17 12.13	-19 35.4	0.936	1.886	14.8	18.4	5 11	17 15.86	-42 24.1	2.469	3.340	10.2	20.9
5 21	17 5.71	-20 20.3	0.882	1.873	9.3	18.0	5 21	17 7.02	-42 40.8	2.410	3.341	8.0	20.8
5 31	16 56.45	-21 9.8	0.849	1.860	3.1	17.6	5 31	16 56.68	-42 40.9	2.377	3.342	6.4	20.7
6 10	16 45.91	-22 1.2	0.837	1.849	3.5	17.6	6 10	16 45.86	-42 23.1	2.371	3.342	6.0	20.7
6 20	16 35.97	-22 52.2	0.847	1.840	9.9	17.9	6 20	16 35.65	-41 48.8	2.392	3.342	7.3	20.7
6 30	16 28.47	-23 42.0	0.876	1.832	15.8	18.2	6 30	16 27.01	-41 1.6	2.439	3.342	9.4	20.9
7 10	16 24.66	-24 31.2	0.923	1.825	20.8	18.5	7 10	16 20.63	-40 6.7	2.510	3.341	11.6	21.0
<b>357755</b>	2005 <i>SZ</i> <sub>90</sub>		6 4.7 185°73	4°0/ 5.9 18			<b>205216</b>	2000 <i>MU</i> <sub>2</sub>		6 4.7 28°46	3°2/ 4.1 17		
5 1	17 18.76	-35 40.1	2.805	3.616	10.8	21.6	5 1	17 14.90	-15 18.3	1.543	2.412	15.2	19.6
5 11	17 12.83	-36 13.0	2.721	3.616	8.6	21.5	5 11	17 10.52	-15 3.4	1.487	2.423	11.5	19.4
5 21	17 5.05	-36 37.5	2.661	3.615	6.3	21.3	5 21	17 3.82	-14 52.3	1.453	2.436	7.4	19.2
5 31	16 56.02	-36 51.1	2.628	3.614	4.4	21.2	5 31	16 55.63	-14 46.5	1.443	2.449	3.7	19.0
6 10	16 46.53	-36 52.8	2.623	3.613	4.2	21.2	6 10	16 47.08	-14 47.5	1.458	2.463	4.2	19.1
6 20	16 37.45	-36 43.2	2.646	3.611	5.9	21.3	6 20	16 39.27	-14 56.2	1.498	2.478	8.0	19.3
6 30	16 29.57	-36 24.6	2.696	3.609	8.2	21.4	6 30	16 33.18	-15 13.1	1.561	2.493	11.8	19.6
7 10	16 23.49	-36 0.2	2.769	3.607	10.5	21.6	7 10	16 29.43	-15 37.6	1.645	2.509	15.2	19.8
<b>293758</b>	2007 <i>RY</i> <sub>89</sub>		6 4.7 210°85	1°5/ 4.3 17			<b>367106</b>	2006 <i>RR</i> <sub>30</sub>		6 4.7 263°58	1°9/ 5.1 17		
5 1	17 20.77	-19 44.9	1.761	2.614	14.4	22.0	5 1	17 21.60	-27 19.1	1.794	2.640	14.5	21.3
5 11	17 14.92	-19 25.9	1.679	2.608	10.8	21.8	5 11	17 15.95	-27 30.1	1.693	2.617	11.1	21.0
5 21	17 6.60	-19 5.1	1.619	2.602	6.8	21.5	5 21	17 7.51	-27 34.8	1.615	2.594	7.2	20.7
5 31	16 56.56	-18 43.4	1.586	2.595	2.5	21.2	5 31	16 56.98	-27 31.1	1.561	2.569	3.1	20.4
6 10	16 45.93	-18 22.3	1.579	2.588	3.1	21.3	6 10	16 45.49	-27 18.1	1.535	2.545	3.0	20.4
6 20	16 35.86	-18 4.1	1.599	2.580	7.5	21.5	6 20	16 34.36	-26 57.1	1.535	2.520	7.4	20.6
6 30	16 27.44	-17 51.3	1.644	2.572	11.6	21.7	6 30	16 24.88	-26 31.5	1.561	2.494	11.8	20.8
7 10	16 21.45	-17 45.6	1.711	2.563	15.2	22.0	7 10	16 18.01	-26 5.9	1.608	2.468	15.7	20.9
<b>119480</b>	2001 <i>UE</i> <sub>34</sub>		6 4.7 162°68	1°4/ 4.3 17			<b>156334</b>	2001 <i>XH</i> <sub>132</sub>		6 4.7 109°79	0°0/ 4.5 17		
5 1	17 19.54	-18 11.0	2.505	3.342	11.1	21.7	5 1	17 19.76	-23 22.9	1.887	2.737	13.7	21.4
5 11	17 13.21	-18 7.0	2.429	3.350	8.3	21.5	5 11	17 13.83	-23 9.8	1.824	2.751	10.2	21.2
5 21	17 5.17	-18 3.1	2.378	3.357	5.2	21.3	5 21	17 5.73	-22 52.4	1.783	2.766	6.3	20.9
5 31	16 56.03	-17 59.9	2.355	3.363	2.0	21.1	5 31	16 56.25	-22 31.2	1.768	2.779	2.0	20.7
6 10	16 46.57	-17 57.8	2.361	3.369	2.4	21.2	6 10	16 46.47	-22 7.4	1.781	2.793	2.3	20.7
6 20	16 37.57	-17 57.6	2.396	3.374	5.6	21.4	6 20	16 37.41	-21 43.1	1.822	2.806	6.4	21.0
6 30	16 29.76	-18 0.5	2.459	3.378	8.7	21.6	6 30	16 29.99	-21 21.2	1.888	2.819	10.2	21.3
7 10	16 23.68	-18 7.3	2.546	3.381	11.4	21.8	7 10	16 24.83	-21 4.0	1.976	2.831	13.4	21.5
<b>377451</b>	2004 <i>VK</i> <sub>29</sub>		6 4.7 108°57	1°4/ 4.9 15			<b>497026</b>	2003 <i>QP</i> <sub>49</sub>		6 4.7 257°54	3°6/ 3.7 17		
5 1	17 21.21	-25 28.2	2.114	2.953	12.8	21.5	5 1	17 21.02	-14 15.9	1.966	2.810	13.5	23.1
5 11	17 14.79	-25 55.6	2.051	2.972	9.6	21.4	5 11	17 15.10	-13 48.4	1.861	2.783	10.4	22.8
5 21	17 6.27	-26 19.1	2.011	2.990	6.1	21.2	5 21	17 6.80	-13 22.6	1.778	2.754	6.9	22.6
5 31	16 56.41	-26 36.8	1.999	3.007	2.4	21.0	5 31	16 56.72	-13 0.6	1.722	2.725	3.9	22.3
6 10	16 46.19	-26 48.1	2.015	3.024	2.4	21.0	6 10	16 45.81	-12 44.6	1.694	2.695	4.6	22.3
6 20	16 36.61	-26 53.6	2.059	3.041	5.9	21.3	6 20	16 35.14	-12 36.4	1.693	2.663	8.2	22.4
6 30	16 28.56	-26 55.2	2.129	3.057	9.3	21.5	6 30	16 25.77	-12 37.8	1.718	2.631	12.1	22.6
7 10	16 22.66	-26 55.3	2.223	3.073	12.2	21.7	7 10	16 18.57	-12 49.4	1.765	2.598	15.6	22.8
<b>266490</b>	2008 <i>DF</i> <sub>15</sub>		6 4.7 311°60	4°5/ 3.2 18			<b>302134</b>	2001 <i>RB</i> <sub>41</sub>		6 4.7 264°74	4°0/ 3.0 17		
5 1	17 13.37	-10 50.3	2.126	2.976	12.3	20.3	5 1	17 14.86	-13 26.7	2.194	3.044	12.0	21.1
5 11	17 8.94	-10 14.7	2.046	2.968	9.6	20.1	5 11	17 10.04	-12 33.1	2.107	3.031	9.3	20.9
5 21	17 2.71	-9 43.6	1.989	2.961	6.7	20.0	5 21	17 3.41	-11 40.6	2.043	3.017	6.3	20.7
5 31	16 55.27	-9 19.8	1.958	2.953	4.7	19.8	5 31	16 55.54	-10 52.2	2.006	3.004	4.1	20.6
6 10	16 47.42	-9 5.6	1.954	2.946	5.2	19.8	6 10	16 47.23	-10 11.0	1.996	2.990	4.8	20.6
6 20	16 39.98	-9 2.4	1.976	2.939	7.8	20.0	6 20	16 39.32	-9 39.7	2.013	2.977	7.6	20.7
6 30	16 33.72	-9 10.8	2.023	2.932	10.7	20.1	6 30	16 32.58	-9 20.1	2.056	2.963	10.7	20.9
7 10	16 29.23	-9 30.3	2.092	2.925	13.5	20.3	7 10	16 27.62	-9 12.7	2.121	2.949	13.5	21.1
<b>146138</b>	2000 <i>SL</i> <sub>30</sub>		6 4.7 216°26	4°4/ 3.1 18			<b>195620</b>	2002 <i>LD</i> <sub>41</sub>		6 4.7 42°01	5°1/ 3.3 18		
5 1	17 14.05	-9 59.0	2.446	3.287	11.2	20.4	5 1	17 15.64	-12 54.0	1.499	2.366	15.7	18.8
5 11	17 9.19	-9 20.2	2.367	3.283	8.7	20.2	5 11	17 11.01	-11 59.1	1.448	2.381	12.0	18.6
5 21	17 2.74	-8 45.7	2.312	3.279	6.2	20.1	5 21	17 4.08	-11 8.9	1.419	2.397	8.1	18.4
5 31	16 55.26	-8 18.1	2.284	3.275	4.5	20.0	5 31	16 55.74	-10 27.5	1.414	2.413	5.3	18.3
6 10	16 47.45	-7 59.5	2.283	3.270	5.0	20.0	6 10	16 47.11	-9 58.4	1.434	2.430	6.0	18.4
6 20	16 40.02	-7 51.3	2.310	3.265	7.2	20.1	6 20	16 39.31	-9 43.8	1.478	2.447	9.2	18.6
6 30	16 33.63	-7 54.1	2.362	3.260	9.8	20.3	6 30	16 33.26	-9 44.2	1.545	2.465	12.8	18.9
7 10	16 28.82	-8 7.5	2.436	3.255	12.3	20.4	7 10	16 29.58	-9 58.6	1.633	2.483	15.9	19.1
<b>161843</b>	2007 <i>AZ</i> <sub>7</sub>		6 4.7 197°36	3°0/ 3.6 18			<b>102287</b>	1999 <i>TB</i> <sub>66</sub>		6 4.7 319°97	5°7/ 5.4 18		
5 1	17 14.19	-11 44.5	3.120	3.953	9.3	21.7	5 1	17 16.59	-31 35.5	1.189	2.061	18.6	18.4
5 11	17 8.98	-11 24.9	3.035	3.949	7.1	21.5	5 11	17 13.56	-32 24.8	1.101	2.035	14.8	18.1
5 21	17 2.49	-11 8.4	2.975	3.945	4.8	21.4	5 21	17 6.77	-33 5.4	1.032	2.010	10.4	17.7
5 31	16 55.16	-10 56.2	2.944	3.940	3.1	21.2	5 31	16 56.93	-33 31.5	0.983	1.985	6.5	17.4
6 10	16 47.56	-10 49.6	2.941	3.935	3.5	21.3	6 10	16 45.56	-33 38.3	0.957	1.961	6.3	17.4
6 20	16 40.25	-10 49.2	2.967	3.929	5.5	21.4	6 20	16 34.60	-33 25.5	0.952	1.938	10.5	17.5
6 30	16 33.77	-10 55.6	3.021	3.923	7.8	21.5	6 30	16 26.03	-32 57.4	0.968	1.916	15.5	17.7
7 10	16 28.55	-11 8.6	3.099	3.916	1								



EPHEMERIDES

6 4.7

6 4.8

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>152456</b>	2005 VF <sub>8</sub>		6 4.7 205°28	0°2/ 4.7 17			<b>308524</b>	2005 UJ <sub>77</sub>		6 4.7 253°40	5°6/ 3.7 18		
5 1	17 15.23	-22 31.8	2.497	3.342	10.9	21.9	5 1	17 18.03	- 8 20.4	1.829	2.675	14.2	20.3
5 11	17 10.17	-22 23.1	2.414	3.340	8.2	21.7	5 11	17 12.81	- 7 59.8	1.747	2.664	11.2	20.0
5 21	17 3.44	-22 11.8	2.356	3.338	5.0	21.5	5 21	17 5.35	- 7 47.5	1.686	2.653	8.1	19.8
5 31	16 55.61	-21 58.0	2.325	3.336	1.6	21.3	5 31	16 56.32	- 7 46.5	1.651	2.642	5.8	19.7
6 10	16 47.41	-21 42.7	2.322	3.333	1.9	21.3	6 10	16 46.68	- 7 58.6	1.641	2.631	6.2	19.7
6 20	16 39.63	-21 27.0	2.348	3.331	5.3	21.5	6 20	16 37.46	- 8 24.4	1.658	2.619	9.0	19.8
6 30	16 32.96	-21 12.8	2.400	3.328	8.4	21.7	6 30	16 29.65	- 9 3.2	1.699	2.608	12.4	20.0
7 10	16 27.97	-21 1.8	2.476	3.325	11.2	21.9	7 10	16 24.00	- 9 53.2	1.761	2.596	15.6	20.2
<b>29952</b>	Varghese		6 4.7 107°59	4°8/ 3.7 18			<b>39361</b>	2002 AM <sub>179</sub>		6 4.7 219°90	1°4/ 4.4 17		
5 1	17 18.52	-10 30.8	1.839	2.687	14.1	18.8	5 1	17 21.17	-19 19.9	1.676	2.531	14.9	20.0
5 11	17 12.86	-10 1.6	1.780	2.701	10.9	18.6	5 11	17 15.44	-19 13.1	1.594	2.525	11.3	19.7
5 21	17 5.15	- 9 38.8	1.743	2.714	7.5	18.4	5 21	17 7.10	-19 5.8	1.535	2.517	7.0	19.5
5 31	16 56.16	- 9 24.9	1.732	2.727	5.1	18.3	5 31	16 56.92	-18 58.5	1.500	2.510	2.6	19.2
6 10	16 46.85	- 9 21.8	1.747	2.740	5.5	18.3	6 10	16 46.04	-18 52.0	1.492	2.502	3.1	19.2
6 20	16 38.21	- 9 30.4	1.789	2.753	8.3	18.5	6 20	16 35.71	-18 47.7	1.510	2.493	7.6	19.4
6 30	16 31.09	- 9 50.3	1.855	2.766	11.5	18.8	6 30	16 27.09	-18 47.7	1.553	2.484	12.0	19.7
7 10	16 26.08	-10 20.5	1.943	2.778	14.4	19.0	7 10	16 21.01	-18 53.5	1.618	2.474	15.8	19.9
<b>30592</b>	2001 QO <sub>10</sub>		6 4.7 188°96	0°5/ 4.9 18			<b>36523</b>	2000 QO <sub>80</sub>		6 4.7 108°76	2°3/ 4.1 18		
5 1	17 16.98	-24 46.4	2.764	3.599	10.2	20.3	5 1	17 17.56	-17 54.3	1.756	2.615	14.1	18.9
5 11	17 11.35	-24 44.4	2.678	3.598	7.7	20.2	5 11	17 12.43	-17 28.3	1.686	2.618	10.6	18.7
5 21	17 4.11	-24 38.7	2.618	3.597	4.8	20.0	5 21	17 5.06	-17 2.3	1.638	2.620	6.7	18.5
5 31	16 55.82	-24 29.1	2.585	3.595	1.7	19.8	5 31	16 56.20	-16 37.9	1.615	2.623	3.0	18.2
6 10	16 47.19	-24 16.0	2.581	3.592	1.7	19.8	6 10	16 46.89	-16 17.0	1.618	2.626	3.5	18.3
6 20	16 38.94	-24 0.5	2.606	3.589	4.9	20.0	6 20	16 38.21	-16 1.9	1.648	2.628	7.4	18.5
6 30	16 31.75	-23 44.4	2.659	3.585	7.8	20.2	6 30	16 31.12	-15 54.2	1.703	2.631	11.3	18.8
7 10	16 26.16	-23 29.6	2.737	3.581	10.4	20.3	7 10	16 26.28	-15 54.9	1.779	2.633	14.6	19.0
<b>222523</b>	2001 TP <sub>175</sub>		6 4.7 289°04	5°4/ 2.6 17			<b>390471</b>	2013 YJ <sub>124</sub>		6 4.7 280°74	0°4/ 4.7 17		
5 1	17 17.39	-13 5.4	1.683	2.540	14.7	20.5	5 1	17 17.34	-21 7.9	1.927	2.781	13.3	20.8
5 11	17 12.72	-11 55.7	1.582	2.509	11.5	20.2	5 11	17 12.31	-21 15.6	1.844	2.774	10.0	20.6
5 21	17 5.51	-10 45.1	1.503	2.478	8.1	19.9	5 21	17 5.05	-21 22.3	1.783	2.766	6.2	20.3
5 31	16 56.42	- 9 38.2	1.449	2.446	5.6	19.7	5 31	16 56.23	-21 27.7	1.748	2.758	2.0	20.1
6 10	16 46.46	- 8 40.3	1.421	2.414	6.5	19.7	6 10	16 46.82	-21 32.0	1.740	2.751	2.3	20.1
6 20	16 36.77	- 7 56.0	1.418	2.381	10.1	19.8	6 20	16 37.85	-21 35.7	1.758	2.743	6.5	20.3
6 30	16 28.55	- 7 29.0	1.439	2.348	14.2	19.9	6 30	16 30.32	-21 40.5	1.803	2.736	10.4	20.5
7 10	16 22.68	- 7 20.2	1.479	2.315	18.0	20.1	7 10	16 24.96	-21 47.9	1.869	2.728	13.8	20.7
<b>308498</b>	2005 TY <sub>129</sub>		6 4.7 135°38	0°5/ 4.9 17			<b>499903</b>	2011 GV <sub>23</sub>		6 4.7 196°42	11°0/ 6.9 18		
5 1	17 15.85	-24 24.1	2.645	3.485	10.5	22.0	5 1	17 31.20	-51 5.1	2.089	2.838	15.9	20.6
5 11	17 10.52	-24 24.1	2.570	3.492	7.9	21.8	5 11	17 23.95	-52 35.8	2.014	2.836	14.1	20.5
5 21	17 3.60	-24 20.8	2.519	3.500	4.9	21.6	5 21	17 12.89	-53 48.1	1.960	2.834	12.4	20.4
5 31	16 55.66	-24 13.8	2.496	3.507	1.7	21.4	5 31	16 58.94	-54 33.5	1.928	2.832	11.3	20.3
6 10	16 47.42	-24 3.8	2.502	3.513	1.7	21.4	6 10	16 43.75	-54 47.1	1.919	2.830	11.0	20.3
6 20	16 39.62	-23 51.8	2.537	3.520	4.9	21.7	6 20	16 29.28	-54 28.6	1.933	2.827	11.9	20.3
6 30	16 32.93	-23 39.4	2.598	3.526	7.9	21.9	6 30	16 17.35	-53 43.0	1.970	2.823	13.4	20.4
7 10	16 27.86	-23 28.4	2.684	3.532	10.4	22.0	7 10	16 9.12	-52 39.1	2.026	2.820	15.3	20.5
<b>317912</b>	2003 UP <sub>279</sub>		6 4.7 225°81	4°4/ 3.6 17			<b>504588</b>	2008 UY <sub>18</sub>		6 4.7 181°66	0°5/ 4.6 17		
5 1	17 19.10	-13 3.6	1.692	2.546	14.8	21.1	5 1	17 17.81	-22 0.4	1.999	2.850	13.0	21.9
5 11	17 13.73	-12 29.7	1.613	2.540	11.4	20.9	5 11	17 12.47	-21 47.9	1.921	2.850	9.7	21.7
5 21	17 5.95	-11 59.6	1.556	2.533	7.7	20.6	5 21	17 5.03	-21 32.4	1.867	2.850	6.0	21.5
5 31	16 56.50	-11 35.9	1.525	2.526	4.7	20.4	5 31	16 56.19	-21 14.3	1.839	2.850	2.0	21.2
6 10	16 46.46	-11 21.4	1.519	2.518	5.3	20.5	6 10	16 46.91	-20 54.9	1.839	2.850	2.3	21.3
6 20	16 36.94	-11 17.9	1.539	2.510	8.8	20.6	6 20	16 38.17	-20 35.9	1.866	2.850	6.3	21.5
6 30	16 29.03	-11 26.5	1.584	2.501	12.6	20.8	6 30	16 30.88	-20 19.6	1.918	2.849	10.0	21.7
7 10	16 23.47	-11 46.7	1.649	2.493	16.1	21.0	7 10	16 25.68	-20 8.1	1.993	2.848	13.3	21.9
<b>144033</b>	2004 BO <sub>22</sub>		6 4.7 345°32	3°8/ 5.7 18 R			<b>393075</b>	2013 AF <sub>93</sub>		6 4.8 140°41	1°1/ 5.1 18		
5 1	17 18.21	-31 21.9	1.334	2.197	17.5	19.5	5 1	17 16.88	-26 1.1	2.520	3.359	11.0	21.7
5 11	17 13.96	-31 28.4	1.262	2.192	13.6	19.2	5 11	17 11.43	-26 10.6	2.444	3.365	8.3	21.6
5 21	17 6.48	-31 22.1	1.209	2.188	9.2	18.9	5 21	17 4.24	-26 15.9	2.392	3.371	5.2	21.4
5 31	16 56.73	-31 0.3	1.179	2.184	4.9	18.7	5 31	16 55.92	-26 16.3	2.367	3.376	2.1	21.2
6 10	16 46.22	-30 23.1	1.173	2.181	4.4	18.6	6 10	16 47.26	-26 11.8	2.371	3.382	2.0	21.2
6 20	16 36.57	-29 34.1	1.191	2.178	8.5	18.9	6 20	16 39.04	-26 3.5	2.403	3.387	5.2	21.4
6 30	16 29.21	-28 39.5	1.231	2.176	13.1	19.1	6 30	16 32.01	-25 53.1	2.463	3.392	8.2	21.6
7 10	16 25.05	-27 46.2	1.291	2.175	17.2	19.4	7 10	16 26.73	-25 42.7	2.546	3.396	10.9	21.8
<b>356702</b>	2011 UH <sub>141</sub>		6 4.7 161°29	3°0/ 5.5 18			<b>408535</b>	2013 JR <sub>51</sub>		6 4.8 349°07	5°7/ 3.5 17		
5 1	17 19.37	-32 4.7	2.903	3.720	10.3	21.3	5 1	17 15.88	-12 56.2	1.209	2.088	17.8	20.6
5 11	17 13.22	-32 42.7	2.822	3.725	8.0	21.2	5 11	17 12.02	-12 7.4	1.144	2.084	13.8	20.4
5 21	17 5.32	-33 14.4	2.767	3.730	5.6	21.0	5 21	17 5.20	-11 23.4	1.099	2.080	9.4	20.1
5 31	16 56.25	-33 37.8	2.739	3.735	3.5	20.9	5 31	16 56.34	-10 49.0	1.076	2.077	6.1	19.9
6 10	16 46.77	-33 51.7	2.741	3.739	3.3	20.9	6 10	16 46.80	-10 28.6	1.076	2.075	6.8	20.0
6 20	16 37.65	-33 56.5	2.771	3.742	5.3	21.0	6 20	16 38.02	-10 24.8	1.098	2.074	10.8	20.2
6 30	16 29.64	-33 53.6	2.829	3.746	7.7	21.2	6 30	16 31.31	-10 38.5	1.141	2.073	15.2	20.4
7 10	16 23.33	-33 45.8	2.911	3.749	10.0	21.3	7 10	16 27.51	-11 8.0	1.203	2.073	19.2	20.7
<b>85819</b>	1998 XF <sub>9</sub>		6 4.7 262°88	0°4/ 4.9 17			<b>179738</b>	2002 RB <sub>118</sub>		6 4.8 300°01	1°5/ 5.1 18		
5 1	17 21.58	-											



2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>225612</b>	2000 YK <sub>82</sub>		6 4.8 136°30	2.8/ 4.1	18		<b>379612</b>	2011 CC <sub>75</sub>		6 4.8 6°10	9.7/ 7.8	17	
5 1	17 18.79	-13 58.8	2.317	3.156	11.8	20.2	5 1	17 22.78	-44 33.2	1.515	2.328	18.2	19.9
5 11	17 12.78	-13 49.5	2.250	3.169	9.0	20.1	5 11	17 17.72	-45 22.0	1.447	2.328	15.4	19.7
5 21	17 5.05	-13 43.4	2.207	3.182	5.8	19.9	5 21	17 8.99	-45 49.5	1.398	2.329	12.6	19.5
5 31	16 56.23	-13 41.5	2.191	3.195	3.2	19.7	5 31	16 57.71	-45 48.9	1.369	2.330	10.4	19.4
6 10	16 47.11	-13 44.7	2.204	3.206	3.5	19.8	6 10	16 45.63	-45 17.2	1.363	2.332	9.8	19.3
6 20	16 38.51	-13 53.4	2.245	3.217	6.3	20.0	6 20	16 34.63	-44 16.8	1.380	2.334	11.2	19.4
6 30	16 31.16	-14 8.2	2.313	3.228	9.3	20.2	6 30	16 26.30	-42 55.6	1.419	2.336	13.8	19.6
7 10	16 25.58	-14 28.8	2.405	3.238	12.0	20.4	7 10	16 21.58	-41 23.9	1.479	2.339	16.7	19.8
<b>381151</b>	2007 GZ <sub>11</sub>		6 4.8 268°90	2.4/ 4.3	18		<b>127551</b>	2002 YQ <sub>3</sub>		6 4.8 268°73	17.2/ 8.4	18	
5 1	17 18.45	-16 32.8	1.819	2.673	13.9	20.4	5 1	17 34.66	-54 2.5	1.215	1.996	23.6	19.3
5 11	17 13.33	-16 27.2	1.728	2.657	10.6	20.2	5 11	17 29.39	-55 47.2	1.144	1.984	21.4	19.1
5 21	17 5.82	-16 23.8	1.659	2.640	6.8	19.9	5 21	17 17.81	-57 4.0	1.088	1.972	19.3	18.9
5 31	16 56.59	-16 23.4	1.615	2.623	3.1	19.6	5 31	17 0.99	-57 36.6	1.048	1.960	17.7	18.8
6 10	16 46.63	-16 27.1	1.599	2.606	3.5	19.6	6 10	16 41.92	-57 13.5	1.025	1.948	17.3	18.7
6 20	16 37.03	-16 35.7	1.609	2.589	7.5	19.8	6 20	16 24.45	-55 53.7	1.021	1.935	18.2	18.7
6 30	16 28.87	-16 50.3	1.643	2.571	11.6	20.0	6 30	16 11.83	-53 48.7	1.035	1.923	20.3	18.8
7 10	16 22.98	-17 11.3	1.700	2.553	15.2	20.2	7 10	16 5.56	-51 17.4	1.066	1.910	22.9	18.9
<b>140849</b>	2001 UB <sub>212</sub>		6 4.8 66°57	1.1/ 4.3	17		<b>338692</b>	2003 US <sub>6</sub>		6 4.8 230°73	0.7/ 4.5	17	
5 1	17 15.87	-21 18.2	2.073	2.926	12.5	20.0	5 1	17 17.94	-22 40.6	2.314	3.157	11.7	20.8
5 11	17 10.89	-20 43.6	2.002	2.932	9.3	19.8	5 11	17 12.40	-22 4.3	2.222	3.147	8.8	20.6
5 21	17 4.00	-20 5.9	1.955	2.938	5.8	19.6	5 21	17 4.98	-21 23.3	2.154	3.136	5.5	20.4
5 31	16 55.91	-19 26.4	1.934	2.944	2.1	19.3	5 31	16 56.30	-20 38.4	2.114	3.124	1.9	20.1
6 10	16 47.51	-18 47.4	1.941	2.950	2.5	19.4	6 10	16 47.19	-19 51.9	2.102	3.112	2.2	20.1
6 20	16 39.69	-18 11.6	1.975	2.957	6.2	19.6	6 20	16 38.51	-19 6.3	2.119	3.100	5.9	20.4
6 30	16 33.23	-17 41.3	2.034	2.963	9.7	19.8	6 30	16 31.08	-18 24.7	2.162	3.087	9.4	20.5
7 10	16 28.72	-17 18.6	2.117	2.969	12.7	20.0	7 10	16 25.50	-17 49.7	2.230	3.074	12.4	20.7
<b>462209</b>	2007 VU <sub>159</sub>		6 4.8 52°01	2.3/ 4.4	17		<b>477058</b>	2009 BM <sub>27</sub>		6 4.8 134°54	6.1/ 7.2	17	
5 1	17 19.90	-17 30.0	1.242	2.116	17.8	21.1	5 1	17 22.43	-41 13.6	2.235	3.034	13.5	21.5
5 11	17 14.80	-17 25.6	1.193	2.132	13.4	20.9	5 11	17 16.12	-41 34.4	2.161	3.041	11.1	21.4
5 21	17 6.77	-17 23.5	1.163	2.149	8.3	20.7	5 21	17 7.39	-41 40.3	2.109	3.047	8.6	21.2
5 31	16 56.86	-17 24.8	1.157	2.167	3.4	20.4	5 31	16 57.09	-41 28.1	2.081	3.052	6.6	21.1
6 10	16 46.53	-17 30.2	1.175	2.184	3.9	20.5	6 10	16 46.37	-40 57.1	2.079	3.058	6.2	21.1
6 20	16 37.24	-17 40.6	1.217	2.202	8.7	20.8	6 20	16 36.39	-40 9.2	2.105	3.063	7.6	21.2
6 30	16 30.17	-17 57.0	1.281	2.221	13.2	21.1	6 30	16 28.19	-39 9.2	2.155	3.068	10.0	21.3
7 10	16 26.07	-18 19.7	1.365	2.239	17.1	21.4	7 10	16 22.43	-38 3.1	2.229	3.073	12.4	21.5
<b>455938</b>	2005 UY <sub>377</sub>		6 4.8 125°08	2.4/ 4.3	16		<b>118135</b>	3559 T <sub>-3</sub>		6 4.8 202°14	0.5/ 4.9	17	
5 1	17 22.98	-17 54.0	1.519	2.376	16.0	22.7	5 1	17 21.49	-24 24.1	1.913	2.758	13.7	21.5
5 11	17 16.71	-17 32.8	1.459	2.390	12.1	22.4	5 11	17 15.47	-24 22.0	1.830	2.755	10.4	21.3
5 21	17 7.80	-17 12.1	1.420	2.403	7.6	22.2	5 21	17 7.07	-24 15.2	1.770	2.751	6.5	21.0
5 31	16 57.19	-16 53.1	1.407	2.415	3.2	22.0	5 31	16 57.03	-24 3.1	1.735	2.746	2.2	20.7
6 10	16 46.18	-16 37.8	1.419	2.427	3.8	22.0	6 10	16 46.40	-23 46.3	1.729	2.740	2.3	20.7
6 20	16 36.03	-16 28.0	1.458	2.438	8.1	22.3	6 20	16 36.32	-23 26.4	1.750	2.734	6.6	21.0
6 30	16 27.87	-16 25.7	1.521	2.449	12.3	22.6	6 30	16 27.84	-23 6.3	1.796	2.727	10.6	21.2
7 10	16 22.40	-16 31.7	1.604	2.459	15.9	22.8	7 10	16 21.69	-22 49.1	1.866	2.720	14.0	21.4
<b>505864</b>	2015 DJ <sub>70</sub>		6 4.8 339°05	0.0/ 4.6	17		<b>44863</b>	1999 UV <sub>15</sub>		6 4.8 146°48	0.1/ 4.8	18	
5 1	17 18.31	-22 58.9	1.660	2.520	14.8	21.4	5 1	17 21.09	-21 41.1	1.634	2.490	15.1	19.0
5 11	17 13.33	-22 58.1	1.586	2.519	11.1	21.2	5 11	17 15.42	-21 51.7	1.563	2.493	11.4	18.8
5 21	17 5.82	-22 53.9	1.533	2.517	6.9	20.9	5 21	17 7.14	-22 0.7	1.513	2.497	7.1	18.5
5 31	16 56.59	-22 46.0	1.505	2.516	2.3	20.7	5 31	16 57.06	-22 7.4	1.489	2.500	2.3	18.2
6 10	16 46.78	-22 35.1	1.504	2.515	2.5	20.7	6 10	16 46.40	-22 11.7	1.491	2.503	2.6	18.2
6 20	16 37.59	-22 22.8	1.528	2.515	7.1	20.9	6 20	16 36.40	-22 14.4	1.520	2.506	7.3	18.5
6 30	16 30.12	-22 11.7	1.577	2.514	11.4	21.2	6 30	16 28.21	-22 17.5	1.573	2.508	11.5	18.8
7 10	16 25.16	-22 4.4	1.647	2.513	15.0	21.4	7 10	16 22.62	-22 23.2	1.648	2.511	15.2	19.0
<b>398270</b>	2010 TC <sub>109</sub>		6 4.8 270°74	3.8/ 5.6	18		<b>387344</b>	2012 WB <sub>11</sub>		6 4.8 11°25	0.3/ 4.7	17	
5 1	17 18.40	-33 3.2	2.413	3.239	11.9	21.3	5 1	17 17.01	-21 8.0	1.868	2.724	13.5	20.8
5 11	17 13.01	-33 40.6	2.322	3.228	9.3	21.1	5 11	17 12.09	-21 16.3	1.794	2.725	10.2	20.6
5 21	17 5.50	-34 10.8	2.253	3.217	6.6	20.9	5 21	17 4.96	-21 23.6	1.742	2.726	6.3	20.4
5 31	16 56.48	-34 31.1	2.211	3.205	4.3	20.7	5 31	16 56.33	-21 29.6	1.716	2.727	2.1	20.1
6 10	16 46.85	-34 39.8	2.197	3.194	4.1	20.7	6 10	16 47.19	-21 34.4	1.717	2.728	2.3	20.1
6 20	16 37.57	-34 37.2	2.210	3.183	6.3	20.8	6 20	16 38.58	-21 38.9	1.744	2.729	6.5	20.4
6 30	16 29.57	-34 25.4	2.249	3.172	9.2	21.0	6 30	16 31.47	-21 44.4	1.796	2.731	10.4	20.6
7 10	16 23.57	-34 7.8	2.312	3.160	11.9	21.1	7 10	16 26.55	-21 52.4	1.871	2.733	13.7	20.8
<b>285188</b>	1996 VC <sub>10</sub>		6 4.8 118°16	1.6/ 4.5	18		<b>11468</b>	Shantanunaidu		6 4.8 272°49	0.3/ 4.7	18	
5 1	17 17.24	-16 36.3	2.152	3.000	12.3	20.6	5 1	17 15.77	-22 19.8	2.341	3.188	11.5	19.3
5 11	17 11.95	-16 50.4	2.074	3.000	9.3	20.4	5 11	17 10.87	-22 11.3	2.246	3.172	8.6	19.1
5 21	17 4.73	-17 7.3	2.020	3.001	5.8	20.2	5 21	17 4.11	-22 0.1	2.175	3.157	5.4	18.8
5 31	16 56.20	-17 26.9	1.993	3.001	2.4	20.0	5 31	16 56.05	-21 46.2	2.130	3.141	1.8	18.5
6 10	16 47.22	-17 49.1	1.993	3.002	2.7	20.0	6 10	16 47.48	-21 30.6	2.114	3.125	2.0	18.5
6 20	16 38.65	-18 13.9	2.021	3.002	6.2	20.2	6 20	16 39.26	-21 14.7	2.125	3.109	5.7	18.8
6 30	16 31.35	-18 41.3	2.076	3.003	9.6	20.4	6 30	16 32.18	-21 0.3	2.163	3.093	9.1	18.9
7 10	16 25.95	-19 11.5	2.153	3.003	12.6	20.6	7 10	16 26.89	-20 49.3	2.224	3.077	12.2	19.1
<b>261070</b>	2005 SX <sub>204</sub>		6 4.8 337°47	3.1/ 5.4	17		<b>16343</b>	2326 T <sub>-3</sub>		6 4.8 254°55	0.7/ 4.9	18	R
5 1	17 17.99	-30 15.3	2.154	2									













EPHEMERIDES

6 4.9

6 4.9

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>368957</b>	2007 <i>BR</i> <sub>3</sub>		6 4.9 120°86	1.6/ 4.6 17			<b>36735</b>	2000 <i>RF</i> <sub>55</sub>		6 4.9 215°63	0.9/ 4.5 18		
5 1	17 20.29	-18 39.7	1.777	2.630	14.2	21.2	5 1	17 16.29	-21 23.7	2.842	3.680	9.9	18.2
5 11	17 14.68	-18 33.1	1.709	2.638	10.7	20.9	5 11	17 11.00	-20 49.7	2.751	3.672	7.5	18.1
5 21	17 6.77	-18 26.8	1.664	2.646	6.7	20.7	5 21	17 4.22	-20 12.6	2.685	3.665	4.6	17.9
5 31	16 57.34	-18 21.4	1.645	2.654	2.6	20.5	5 31	16 56.47	-19 33.5	2.646	3.656	1.7	17.6
6 10	16 47.47	-18 17.7	1.652	2.662	2.9	20.5	6 10	16 48.41	-18 53.9	2.638	3.647	2.0	17.7
6 20	16 38.24	-18 16.9	1.687	2.669	7.0	20.8	6 20	16 40.69	-18 15.9	2.659	3.638	5.0	17.8
6 30	16 30.63	-18 20.5	1.746	2.677	10.9	21.0	6 30	16 33.95	-17 41.6	2.707	3.629	7.9	18.0
7 10	16 25.33	-18 29.5	1.828	2.684	14.2	21.3	7 10	16 28.68	-17 12.8	2.780	3.619	10.4	18.2
<b>471292</b>	2011 <i>GJ</i> <sub>64</sub>		6 4.9 331°92	0.2/ 4.9 17			<b>430428</b>	1999 <i>TR</i> <sub>130</sub>		6 4.9 231°98	3.5/ 3.7 18		
5 1	17 20.77	-19 39.7	1.575	2.434	15.5	20.0	5 1	17 17.58	-14 4.4	2.190	3.035	12.2	21.6
5 11	17 15.69	-20 35.1	1.495	2.427	11.7	19.7	5 11	17 12.36	-13 25.9	2.103	3.025	9.4	21.4
5 21	17 7.80	-21 34.9	1.436	2.420	7.3	19.4	5 21	17 5.26	-12 48.8	2.040	3.014	6.3	21.2
5 31	16 57.81	-22 36.4	1.402	2.413	2.5	19.1	5 31	16 56.87	-12 15.7	2.003	3.003	3.8	21.0
6 10	16 46.90	-23 36.5	1.395	2.407	2.6	19.1	6 10	16 48.00	-11 48.8	1.993	2.992	4.3	21.1
6 20	16 36.40	-24 32.8	1.414	2.401	7.5	19.4	6 20	16 39.51	-11 30.2	2.011	2.980	7.2	21.2
6 30	16 27.64	-25 24.6	1.458	2.396	12.0	19.6	6 30	16 32.23	-11 21.3	2.055	2.968	10.4	21.4
7 10	16 21.57	-26 12.6	1.523	2.391	15.9	19.9	7 10	16 26.76	-11 22.7	2.122	2.955	13.4	21.6
<b>59580</b>	1999 <i>JC</i> <sub>54</sub>		6 4.9 346°26	0.2/ 4.9 17			<b>71265</b>	2000 <i>AW</i> <sub>27</sub>		6 4.9 207°61	0.4/ 5.0 18		
5 1	17 16.71	-22 31.5	1.386	2.258	16.4	19.1	5 1	17 19.02	-23 49.2	2.181	3.025	12.3	19.9
5 11	17 12.83	-22 44.4	1.312	2.252	12.4	18.8	5 11	17 13.56	-23 54.2	2.098	3.022	9.3	19.7
5 21	17 6.05	-22 55.2	1.259	2.246	7.8	18.5	5 21	17 6.04	-23 55.9	2.037	3.018	5.8	19.5
5 31	16 57.20	-23 3.2	1.229	2.240	2.6	18.2	5 31	16 57.14	-23 53.9	2.004	3.014	2.0	19.2
6 10	16 47.57	-23 8.2	1.224	2.236	2.7	18.2	6 10	16 47.73	-23 48.3	1.998	3.010	2.0	19.2
6 20	16 38.54	-23 10.9	1.242	2.232	7.9	18.5	6 20	16 38.75	-23 40.1	2.020	3.005	5.8	19.5
6 30	16 31.45	-23 13.8	1.284	2.229	12.6	18.7	6 30	16 31.10	-23 31.3	2.069	3.000	9.4	19.7
7 10	16 27.19	-23 19.1	1.345	2.227	16.8	19.0	7 10	16 25.44	-23 24.1	2.141	2.995	12.5	19.9
<b>448284</b>	2009 <i>AH</i> <sub>8</sub>		6 4.9 192°09	0.3/ 5.1 18			<b>13877</b>	6063 <i>P-L</i>		6 4.9 307°84	2.1/ 5.3 17		
5 1	17 12.46	-24 10.8	3.991	4.822	7.5	22.8	5 1	17 19.12	-27 4.8	1.176	2.051	18.5	18.3
5 11	17 7.81	-24 11.0	3.902	4.820	5.6	22.6	5 11	17 15.41	-27 11.1	1.096	2.035	14.3	17.9
5 21	17 2.11	-24 8.9	3.840	4.818	3.5	22.5	5 21	17 8.09	-27 9.0	1.034	2.018	9.3	17.6
5 31	16 55.74	-24 4.6	3.805	4.815	1.2	22.3	5 31	16 58.01	-26 55.9	0.993	2.002	3.9	17.3
6 10	16 49.13	-23 58.2	3.801	4.812	1.2	22.3	6 10	16 46.74	-26 31.6	0.975	1.987	3.6	17.2
6 20	16 42.75	-23 50.5	3.826	4.809	3.4	22.5	6 20	16 36.08	-25 58.6	0.980	1.972	9.2	17.4
6 30	16 37.04	-23 42.4	3.880	4.806	5.6	22.6	6 30	16 27.79	-25 22.5	1.007	1.957	14.8	17.7
7 10	16 32.35	-23 34.9	3.960	4.802	7.5	22.7	7 10	16 23.03	-24 49.6	1.051	1.943	19.6	17.9
<b>141522</b>	2002 <i>EF</i> <sub>147</sub>		6 4.9 359°70	2.4/ 5.8 17			<b>229426</b>	2005 <i>TB</i> <sub>52</sub>		6 4.9 147°05	1.2/ 4.5 17		
5 1	17 16.79	-30 25.6	2.106	2.947	12.8	19.6	5 1	17 19.75	-21 30.0	1.879	2.730	13.7	20.7
5 11	17 11.98	-30 24.3	2.028	2.946	9.8	19.4	5 11	17 14.17	-20 52.6	1.807	2.735	10.3	20.5
5 21	17 5.08	-30 14.6	1.972	2.946	6.5	19.2	5 21	17 6.41	-20 11.2	1.758	2.740	6.4	20.3
5 31	16 56.78	-29 55.3	1.941	2.946	3.3	19.0	5 31	16 57.23	-19 27.5	1.735	2.745	2.3	20.1
6 10	16 48.06	-29 27.0	1.938	2.946	3.0	19.0	6 10	16 47.68	-18 43.9	1.739	2.749	2.7	20.1
6 20	16 39.87	-28 51.7	1.962	2.946	6.0	19.2	6 20	16 38.76	-18 3.6	1.771	2.753	6.8	20.3
6 30	16 33.13	-28 12.8	2.011	2.947	9.4	19.4	6 30	16 31.41	-17 29.5	1.828	2.757	10.6	20.6
7 10	16 28.47	-27 34.1	2.084	2.948	12.4	19.6	7 10	16 26.26	-17 4.0	1.907	2.760	13.9	20.8
<b>121326</b>	1999 <i>SG</i> <sub>12</sub>		6 4.9 316°31	2.1/ 3.8 18			<b>158485</b>	2002 <i>DZ</i> <sub>16</sub>		6 4.9 48°33	2.3/ 5.1 18		
5 1	17 16.53	-22 22.8	1.854	2.711	13.6	18.8	5 1	17 22.40	-25 12.7	1.704	2.554	14.9	19.5
5 11	17 12.04	-20 59.3	1.752	2.684	10.3	18.5	5 11	17 16.71	-26 11.2	1.632	2.557	11.4	19.3
5 21	17 5.27	-19 25.6	1.674	2.658	6.5	18.2	5 21	17 8.30	-27 7.9	1.582	2.561	7.3	19.1
5 31	16 56.90	-17 44.8	1.622	2.631	2.7	17.9	5 31	16 57.96	-27 59.0	1.558	2.565	3.3	18.8
6 10	16 47.91	-16 2.0	1.598	2.605	3.6	17.9	6 10	16 46.87	-28 41.6	1.561	2.569	3.3	18.8
6 20	16 39.35	-14 23.7	1.602	2.580	7.7	18.1	6 20	16 36.32	-29 14.6	1.590	2.574	7.2	19.1
6 30	16 32.23	-12 56.0	1.630	2.555	11.9	18.3	6 30	16 27.56	-29 39.1	1.644	2.578	11.2	19.3
7 10	16 27.30	-11 43.2	1.681	2.530	15.6	18.5	7 10	16 21.43	-29 58.0	1.720	2.583	14.7	19.6
<b>329457</b>	2002 <i>PE</i> <sub>191</sub>		6 4.9 330°32	8.0/ 6.7 17			<b>198132</b>	2004 <i>TQ</i> <sub>32</sub>		6 4.9 30°17	0.5/ 5.1 17		
5 1	17 20.53	-38 19.0	1.304	2.150	18.8	20.9	5 1	17 18.72	-24 44.6	1.710	2.566	14.6	20.4
5 11	17 16.55	-39 5.9	1.228	2.140	15.4	20.6	5 11	17 13.74	-24 35.5	1.637	2.567	11.0	20.2
5 21	17 8.79	-39 36.0	1.171	2.130	11.8	20.4	5 21	17 6.32	-24 21.0	1.586	2.569	6.9	20.0
5 31	16 58.22	-39 42.3	1.135	2.121	8.8	20.2	5 31	16 57.25	-24 0.9	1.560	2.571	2.4	19.7
6 10	16 46.53	-39 21.1	1.121	2.112	8.2	20.1	6 10	16 47.66	-23 36.3	1.561	2.573	2.3	19.7
6 20	16 35.67	-38 34.3	1.130	2.104	10.7	20.3	6 20	16 38.73	-23 9.6	1.587	2.575	6.8	20.0
6 30	16 27.41	-37 29.0	1.160	2.097	14.5	20.4	6 30	16 31.49	-22 44.0	1.639	2.577	10.9	20.2
7 10	16 22.86	-36 15.2	1.209	2.091	18.3	20.7	7 10	16 26.69	-22 22.6	1.712	2.579	14.5	20.4
<b>519015</b>	2010 <i>JO</i> <sub>109</sub>		6 4.9 191°80	9.2/ 2.0 18			<b>152303</b>	2005 <i>TG</i> <sub>73</sub>		6 4.9 245°10	4.0/ 3.9 18		
5 1	17 15.49	+10 12.3	2.771	3.532	12.1	20.6	5 1	17 15.39	-10 10.4	2.390	3.230	11.5	20.1
5 11	17 10.33	+10 53.0	2.705	3.531	10.8	20.5	5 11	17 10.55	-9 53.5	2.309	3.225	8.9	20.0
5 21	17 3.78	+11 18.3	2.661	3.529	9.7	20.4	5 21	17 4.06	-9 42.0	2.252	3.220	6.3	19.8
5 31	16 56.31	+11 24.8	2.639	3.527	9.2	20.4	5 31	16 56.46	-9 37.7	2.221	3.215	4.2	19.6
6 10	16 48.57	+11 10.5	2.643	3.525	9.4	20.4	6 10	16 48.47	-9 41.9	2.218	3.210	4.6	19.7
6 20	16 41.18	+10 35.6	2.670	3.522	10.4	20.4	6 20	16 40.83	-9 55.2	2.242	3.205	6.9	19.8
6 30	16 34.73	+ 9 41.7	2.720	3.520	11.7	20.5	6 30	16 34.24	-10 17.6	2.292	3.200	9.7	20.0
7 10	16 29.67	+ 8 31.8	2.791	3.517	13.1	20.6	7 10	16 29.26	-10 48.4	2.365	3.195	12.2	20.1
<b>216717</b>	2005 <i>EJ</i> <sub>86</sub>		6 4.9 44°59	2.7/ 4.5 17			<b>308387</b>	2005 <i>SW</i> <sub>21</sub>		6 4.9 155°18	3.7/ 3.1 18		
5 1	17 19.38	-17 23.1	1.227	2.103	17.9	20.1	5 1	17 14.64	-10 31.9	2.977	3.809	9.7	21.8
5 11	17 14.68	-17 10.0	1.176	2.116	13.5	19.9	5 11	17 9.58	-9 45.5	2.905	3.816	7.5	21.7
5 21	17 7.02	-16 59.2	1.145	2.130	8.5	19.6	5 21	17 3.26	-9 2.3	2.858	3.822	5.3	21.5
5 31	16 57.46	-16 52.1	1.136	2.145	3.7	19.4	5 31	16 56.15	-8 24.5	2.839	3.829	3.8	21.4
6 10	16 47.44	-16 50.2	1.152	2.161	4.1	19.4	6 10	16 48.83	-7 54.1	2.849	3.834	4.2	21.5
6 20	16 38.40	-16 54.8	1.191	2.176	8.8	19.8	6 20	16 41.86	-7 32.4	2.887	3.840	6.1	21.6
6 30	16 31.55	-17 7.0	1.252	2.193	13.4	20.1	6 30	16 35.78	-7 20.4	2.952	3.845	8.3	21.8
7 10	16 27.63	-17 27.0	1.333	2.209	17.3	20.4	7 10	16 30.99	-7 17.8	3.041	3.849	10.3	21.9



EPHEMERIDES

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>245507</b>	2005 <i>RD</i> <sub>24</sub>	6	4.9 278°61	3°0/ 3.5	18		<b>439312</b>	2012 <i>VH</i> <sub>80</sub>	6	4.9 24°63	3°3/ 3.6	17	
5 1	17 16.35	-16 20.8	2.406	3.251	11.3	20.1	5 1	17 16.04	-17 0.6	1.881	2.738	13.4	20.4
5 11	17 11.43	-15 25.5	2.302	3.225	8.6	19.8	5 11	17 11.40	-15 59.0	1.811	2.741	10.1	20.2
5 21	17 4.74	-14 28.2	2.223	3.200	5.7	19.6	5 21	17 4.74	-14 56.3	1.764	2.744	6.6	20.0
5 31	16 56.80	-13 31.6	2.171	3.174	3.2	19.4	5 31	16 56.80	-13 55.9	1.743	2.747	3.6	19.8
6 10	16 48.36	-12 38.4	2.147	3.147	3.8	19.4	6 10	16 48.50	-13 1.5	1.749	2.751	4.3	19.9
6 20	16 40.19	-11 51.8	2.151	3.120	6.8	19.5	6 20	16 40.78	-12 16.5	1.781	2.755	7.5	20.1
6 30	16 33.06	-11 14.4	2.182	3.093	10.0	19.7	6 30	16 34.49	-11 43.4	1.839	2.759	11.0	20.3
7 10	16 27.59	-10 47.8	2.236	3.066	12.9	19.8	7 10	16 30.22	-11 23.2	1.918	2.763	14.1	20.5
<b>119924</b>	2002 <i>EB</i> <sub>125</sub>	6	4.9 127°72	0°7/ 5.2	18		<b>320514</b>	2007 <i>XM</i> <sub>58</sub>	6	4.9 153°00	2°5/ 5.6	17	
5 1	17 16.99	-24 42.2	2.352	3.195	11.6	20.5	5 1	17 24.44	-28 59.8	1.888	2.724	14.2	22.4
5 11	17 11.91	-24 48.7	2.274	3.197	8.7	20.3	5 11	17 17.96	-29 19.0	1.816	2.732	10.9	22.2
5 21	17 4.99	-24 51.8	2.219	3.198	5.5	20.1	5 21	17 8.96	-29 30.8	1.766	2.739	7.2	21.9
5 31	16 56.86	-24 50.8	2.190	3.200	2.0	19.9	5 31	16 58.25	-29 33.0	1.741	2.746	3.5	21.7
6 10	16 48.33	-24 46.0	2.190	3.201	1.9	19.9	6 10	16 47.01	-29 24.8	1.745	2.752	3.2	21.7
6 20	16 40.22	-24 38.2	2.218	3.203	5.4	20.1	6 20	16 36.45	-29 7.8	1.775	2.758	6.7	22.0
6 30	16 33.32	-24 29.3	2.272	3.204	8.6	20.3	6 30	16 27.65	-28 45.2	1.832	2.763	10.4	22.2
7 10	16 28.23	-24 21.3	2.350	3.206	11.5	20.5	7 10	16 21.36	-28 21.3	1.911	2.767	13.7	22.4
<b>11258</b>	Aoyama	6	4.9 207°29	0°4/ 4.8	18		<b>160946</b>	2002 <i>AA</i> <sub>49</sub>	6	4.9 272°79	1°7/ 5.4	18	
5 1	17 16.31	-22 21.9	2.662	3.503	10.5	19.1	5 1	17 22.09	-27 4.3	1.499	2.355	16.3	20.3
5 11	17 11.17	-22 3.6	2.576	3.499	7.8	18.9	5 11	17 17.07	-27 3.2	1.406	2.335	12.6	20.0
5 21	17 4.44	-21 42.4	2.514	3.494	4.9	18.7	5 21	17 8.91	-26 54.0	1.334	2.315	8.1	19.7
5 31	16 56.67	-21 18.8	2.479	3.490	1.7	18.5	5 31	16 58.38	-26 35.0	1.285	2.294	3.3	19.4
6 10	16 48.55	-20 53.8	2.474	3.485	1.8	18.5	6 10	16 46.79	-26 5.9	1.262	2.274	3.0	19.3
6 20	16 40.80	-20 29.2	2.497	3.480	5.0	18.7	6 20	16 35.65	-25 29.4	1.264	2.252	8.1	19.5
6 30	16 34.09	-20 6.7	2.547	3.474	8.0	18.9	6 30	16 26.46	-24 50.1	1.290	2.231	13.0	19.8
7 10	16 28.94	-19 48.2	2.622	3.469	10.7	19.1	7 10	16 20.27	-24 13.6	1.337	2.210	17.4	20.0
<b>259168</b>	2002 <i>YS</i> <sub>34</sub>	6	4.9 110°06	4°8/ 4.2	18		<b>384399</b>	2009 <i>WW</i> <sub>36</sub>	6	4.9 199°06	1°3/ 5.3	18	
5 1	17 22.20	- 8 11.5	2.073	2.903	13.4	21.7	5 1	17 21.71	-25 52.9	2.296	3.130	12.1	21.9
5 11	17 15.60	- 7 59.9	2.019	2.928	10.4	21.5	5 11	17 15.59	-26 8.5	2.208	3.126	9.2	21.7
5 21	17 7.14	- 7 56.4	1.989	2.952	7.4	21.4	5 21	17 7.38	-26 19.9	2.145	3.122	5.9	21.5
5 31	16 57.54	- 8 2.6	1.984	2.975	5.1	21.3	5 31	16 57.73	-26 25.9	2.109	3.117	2.4	21.3
6 10	16 47.72	- 8 19.3	2.008	2.997	5.3	21.3	6 10	16 47.53	-26 26.0	2.101	3.111	2.2	21.2
6 20	16 38.55	- 8 46.2	2.060	3.019	7.7	21.5	6 20	16 37.74	-26 20.9	2.122	3.105	5.7	21.5
6 30	16 30.81	- 9 22.3	2.137	3.040	10.5	21.7	6 30	16 29.26	-26 12.5	2.170	3.098	9.2	21.7
7 10	16 25.03	-10 6.2	2.237	3.060	13.1	21.9	7 10	16 22.79	-26 3.6	2.241	3.091	12.2	21.8
<b>250833</b>	2005 <i>UQ</i> <sub>131</sub>	6	4.9 251°29	4°2/ 3.4	18		<b>90729</b>	1992 <i>ED</i> <sub>21</sub>	6	4.9 159°28	3°1/ 4.4	18	
5 1	17 15.62	- 8 7.4	2.915	3.742	10.0	21.6	5 1	17 22.44	-15 12.0	1.669	2.520	15.1	19.9
5 11	17 10.57	- 7 42.0	2.815	3.721	7.9	21.5	5 11	17 16.48	-14 57.9	1.599	2.525	11.5	19.6
5 21	17 4.07	- 7 21.5	2.740	3.699	5.8	21.3	5 21	17 8.06	-14 46.9	1.551	2.530	7.5	19.4
5 31	16 56.56	- 7 7.8	2.691	3.677	4.3	21.2	5 31	16 57.96	-14 40.6	1.529	2.534	3.8	19.2
6 10	16 48.65	- 7 2.6	2.672	3.654	4.7	21.2	6 10	16 47.34	-14 40.1	1.533	2.538	4.1	19.2
6 20	16 40.93	- 7 6.8	2.680	3.631	6.6	21.2	6 20	16 37.36	-14 46.5	1.563	2.541	8.0	19.5
6 30	16 34.03	- 7 20.7	2.715	3.607	8.9	21.4	6 30	16 29.09	-15 0.7	1.619	2.544	11.9	19.7
7 10	16 28.44	- 7 43.7	2.774	3.583	11.2	21.5	7 10	16 23.27	-15 22.5	1.695	2.546	15.4	19.9
<b>355236</b>	2007 <i>CW</i> <sub>27</sub>	6	4.9 123°71	1°6/ 5.6	18		<b>448573</b>	2010 <i>SJ</i> <sub>24</sub>	6	4.9 286°45	4°2/ 5.9	18	
5 1	17 17.44	-28 33.8	2.602	3.434	10.9	21.4	5 1	17 19.14	-34 7.3	2.280	3.105	12.5	21.2
5 11	17 12.06	-28 35.1	2.527	3.442	8.3	21.3	5 11	17 13.95	-34 42.3	2.190	3.094	9.9	21.0
5 21	17 5.00	-28 30.5	2.476	3.451	5.4	21.1	5 21	17 6.51	-35 9.0	2.121	3.082	7.1	20.8
5 31	16 56.86	-28 19.3	2.453	3.459	2.5	20.9	5 31	16 57.47	-35 24.3	2.079	3.071	4.8	20.6
6 10	16 48.41	-28 1.9	2.458	3.467	2.2	20.9	6 10	16 47.78	-35 26.7	2.063	3.059	4.5	20.6
6 20	16 40.43	-27 39.7	2.491	3.474	5.0	21.1	6 20	16 38.45	-35 16.6	2.075	3.048	6.7	20.7
6 30	16 33.62	-27 14.8	2.552	3.482	7.9	21.3	6 30	16 30.49	-34 56.6	2.112	3.037	9.6	20.9
7 10	16 28.52	-26 50.0	2.636	3.489	10.5	21.5	7 10	16 24.67	-34 30.5	2.173	3.026	12.4	21.0
<b>12359</b>	Cajigal	6	4.9 226°38	0°4/ 4.8	18		<b>5929</b>	Manzano	6	4.9 223°36	9°5/ 2.6	18	R
5 1	17 15.91	-21 51.7	2.762	3.601	10.1	18.5	5 1	17 21.48	+ 4 52.2	2.208	2.996	14.0	18.4
5 11	17 10.87	-21 43.3	2.671	3.594	7.6	18.4	5 11	17 15.31	+ 5 34.6	2.124	2.983	12.1	18.2
5 21	17 4.27	-21 32.8	2.605	3.585	4.7	18.2	5 21	17 7.17	+ 6 1.9	2.063	2.969	10.4	18.1
5 31	16 56.63	-21 20.5	2.567	3.577	1.6	17.9	5 31	16 57.67	+ 6 9.4	2.025	2.955	9.5	18.0
6 10	16 48.62	-21 7.1	2.557	3.568	1.7	17.9	6 10	16 47.62	+ 5 54.3	2.013	2.939	9.8	18.0
6 20	16 40.91	-20 53.6	2.576	3.559	4.9	18.1	6 20	16 37.91	+ 5 16.1	2.026	2.922	11.3	18.1
6 30	16 34.18	-20 41.6	2.623	3.550	7.8	18.3	6 30	16 29.38	+ 4 16.6	2.064	2.905	13.4	18.2
7 10	16 28.95	-20 32.5	2.693	3.540	10.5	18.5	7 10	16 22.71	+ 2 59.6	2.122	2.887	15.6	18.3
<b>80875</b>	2000 <i>DU</i> <sub>35</sub>	6	4.9 235°98	0°4/ 4.9	18		<b>275802</b>	2001 <i>QP</i> <sub>215</sub>	6	4.9 331°87	7°4/ 2.9	16	
5 1	17 20.68	-22 9.7	1.809	2.660	14.1	19.6	5 1	17 11.72	- 8 56.2	1.376	2.250	16.4	19.5
5 11	17 15.25	-22 1.2	1.723	2.651	10.7	19.4	5 11	17 9.14	- 8 3.2	1.287	2.220	13.2	19.2
5 21	17 7.37	-21 49.5	1.659	2.642	6.7	19.1	5 21	17 3.92	- 7 17.0	1.218	2.191	9.8	19.0
5 31	16 57.75	-21 34.8	1.621	2.632	2.3	18.8	5 31	16 56.69	- 6 43.3	1.171	2.163	7.6	18.8
6 10	16 47.46	-21 17.8	1.610	2.622	2.4	18.8	6 10	16 48.53	- 6 27.4	1.146	2.136	8.3	18.7
6 20	16 37.66	-21 0.4	1.626	2.611	6.9	19.1	6 20	16 40.69	- 6 32.4	1.144	2.111	11.6	18.8
6 30	16 29.42	-20 45.2	1.667	2.600	11.1	19.3	6 30	16 34.41	- 6 59.4	1.162	2.087	15.6	19.0
7 10	16 23.55	-20 34.8	1.729	2.589	14.8	19.5	7 10	16 30.70	- 7 46.2	1.198	2.064	19.5	19.1
<b>192771</b>	1999 <i>UY</i> <sub>6</sub>	6	4.9 284°48	5°8/ 5.9	18		<b>247713</b>	2003 <i>EA</i> <sub>57</sub>	6	4.9 20°30	7°2/ 5.7	16	

## EPHEMERIDES

6 4.9

6 4.9

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>137044</b>	1998 UC <sub>50</sub>		6 4.9 62°15	3°6/ 5.9 18			<b>332369</b>	2007 ER <sub>161</sub>		6 4.9 224°14	1°9/ 4.5 17		
5 1	17 35.47	-30 46.5	1.214	2.058	20.0	19.6	5 1	17 19.65	-18 49.1	1.860	2.712	13.8	21.7
5 11	17 26.29	-31 0.2	1.191	2.111	15.1	19.4	5 11	17 14.33	-18 26.4	1.778	2.706	10.4	21.5
5 21	17 13.84	-30 59.9	1.188	2.162	9.8	19.3	5 21	17 6.73	-18 2.8	1.718	2.700	6.6	21.2
5 31	16 59.72	-30 42.9	1.209	2.213	4.9	19.2	5 31	16 57.57	-17 39.3	1.685	2.693	2.7	21.0
6 10	16 45.88	-30 10.8	1.255	2.263	4.2	19.2	6 10	16 47.83	-17 17.8	1.678	2.686	3.1	21.0
6 20	16 33.99	-29 28.8	1.327	2.311	8.3	19.6	6 20	16 38.59	-17 0.4	1.698	2.679	7.1	21.2
6 30	16 25.18	-28 44.0	1.423	2.359	12.4	20.0	6 30	16 30.84	-16 49.1	1.743	2.671	11.0	21.4
7 10	16 19.91	-28 2.6	1.539	2.405	15.9	20.3	7 10	16 25.30	-16 45.3	1.810	2.664	14.5	21.6
<b>285473</b>	2000 AR <sub>212</sub>		6 4.9 143°60	0°0/ 4.8 17			<b>425555</b>	2010 RU <sub>120</sub>		6 4.9 308°04	2°9/ 5.7 17		
5 1	17 19.69	-23 50.2	2.525	3.360	11.1	22.5	5 1	17 19.39	-29 25.6	1.310	2.175	17.6	20.7
5 11	17 13.66	-23 28.3	2.452	3.372	8.3	22.4	5 11	17 15.40	-29 27.8	1.226	2.159	13.7	20.4
5 21	17 5.95	-23 2.3	2.405	3.384	5.1	22.2	5 21	17 8.04	-29 18.9	1.162	2.142	9.1	20.1
5 31	16 57.20	-22 32.6	2.384	3.395	1.7	22.0	5 31	16 58.15	-28 56.2	1.119	2.127	4.3	19.8
6 10	16 48.19	-22 0.7	2.394	3.405	1.8	22.0	6 10	16 47.20	-28 19.8	1.101	2.111	3.8	19.7
6 20	16 39.70	-21 28.3	2.432	3.415	5.1	22.2	6 20	16 36.87	-27 32.6	1.106	2.096	8.7	19.9
6 30	16 32.44	-20 58.0	2.498	3.424	8.2	22.4	6 30	16 28.75	-26 40.8	1.133	2.081	13.7	20.2
7 10	16 26.91	-20 31.8	2.588	3.432	10.9	22.6	7 10	16 23.92	-25 51.4	1.180	2.067	18.3	20.4
<b>268258</b>	2005 NN <sub>35</sub>		6 4.9 252°55	1°1/ 5.3 18			<b>136407</b>	2005 AR <sub>39</sub>		6 4.9 6°52	0°6/ 4.9 17		
5 1	17 21.32	-25 54.2	1.875	2.721	13.9	21.7	5 1	17 15.37	-20 23.9	1.021	1.914	19.3	18.9
5 11	17 15.83	-25 53.2	1.781	2.705	10.7	21.5	5 11	17 12.52	-20 39.1	0.964	1.913	14.6	18.6
5 21	17 7.81	-25 46.5	1.709	2.689	6.8	21.2	5 21	17 6.22	-20 55.0	0.925	1.915	9.1	18.4
5 31	16 57.96	-25 32.8	1.662	2.672	2.6	20.9	5 31	16 57.50	-21 11.0	0.906	1.918	3.1	18.0
6 10	16 47.34	-25 12.5	1.643	2.654	2.4	20.9	6 10	16 47.94	-21 26.9	0.909	1.922	3.2	18.0
6 20	16 37.13	-24 47.2	1.651	2.636	6.8	21.1	6 20	16 39.27	-21 43.1	0.934	1.928	9.1	18.4
6 30	16 28.47	-24 20.2	1.684	2.618	10.9	21.3	6 30	16 33.03	-22 1.0	0.979	1.935	14.5	18.7
7 10	16 22.21	-23 55.3	1.739	2.600	14.6	21.5	7 10	16 30.16	-22 22.1	1.042	1.943	19.1	19.0
<b>326798</b>	2003 SF <sub>313</sub>		6 4.9 178°77	0°8/ 4.8 17			<b>412035</b>	2013 CX <sub>144</sub>		6 4.9 4°84	4°3/ 4.2 17		
5 1	17 22.30	-21 23.9	1.909	2.755	13.7	21.6	5 1	17 15.23	-15 56.7	0.975	1.870	19.8	20.6
5 11	17 16.21	-21 9.0	1.832	2.757	10.3	21.4	5 11	17 12.39	-15 25.0	0.919	1.869	15.1	20.3
5 21	17 7.83	-20 51.4	1.777	2.758	6.4	21.1	5 21	17 6.12	-14 56.7	0.881	1.869	9.9	20.0
5 31	16 57.90	-20 31.3	1.749	2.759	2.2	20.9	5 31	16 57.45	-14 35.6	0.863	1.870	5.1	19.8
6 10	16 47.47	-20 10.2	1.748	2.759	2.5	20.9	6 10	16 48.00	-14 25.3	0.865	1.873	5.7	19.8
6 20	16 37.62	-19 49.9	1.775	2.758	6.7	21.2	6 20	16 39.48	-14 27.9	0.889	1.877	10.6	20.1
6 30	16 29.34	-19 32.9	1.828	2.757	10.6	21.4	6 30	16 33.38	-14 44.4	0.932	1.882	15.8	20.4
7 10	16 23.32	-19 21.4	1.903	2.755	13.9	21.6	7 10	16 30.62	-15 13.9	0.993	1.888	20.3	20.7
<b>333945</b>	1999 VU <sub>196</sub>		6 4.9 259°31	2°2/ 4.6 18			<b>335048</b>	2004 RW <sub>103</sub>		6 4.9 295°44	9°6/ 7.3 18		
5 1	17 19.94	-15 43.2	2.203	3.045	12.3	21.1	5 1	17 24.82	-44 53.8	1.732	2.532	16.9	20.3
5 11	17 14.39	-15 47.4	2.102	3.023	9.4	20.8	5 11	17 19.46	-45 51.9	1.648	2.519	14.4	20.1
5 21	17 6.76	-15 54.6	2.024	3.001	6.1	20.6	5 21	17 10.56	-46 32.2	1.584	2.507	12.0	19.9
5 31	16 57.59	-16 5.2	1.972	2.979	2.8	20.3	5 31	16 59.00	-46 47.3	1.541	2.494	10.1	19.8
6 10	16 47.71	-16 19.7	1.949	2.956	3.1	20.3	6 10	16 46.36	-46 33.1	1.521	2.482	9.6	19.7
6 20	16 38.06	-16 38.3	1.954	2.933	6.6	20.5	6 20	16 34.42	-45 50.0	1.525	2.470	11.0	19.8
6 30	16 29.55	-17 1.4	1.986	2.909	10.2	20.7	6 30	16 24.83	-44 43.7	1.551	2.458	13.5	19.9
7 10	16 22.93	-17 29.3	2.041	2.884	13.4	20.8	7 10	16 18.70	-43 23.6	1.599	2.447	16.3	20.0
<b>395269</b>	2010 TE <sub>57</sub>		6 4.9 327°17	0°9/ 4.7 16			<b>11484</b>	Daudet		6 4.9 169°77	1°6/ 5.4 18		
5 1	17 14.91	-21 49.8	1.936	2.794	13.0	20.6	5 1	17 20.34	-27 13.8	2.007	2.849	13.3	18.5
5 11	17 10.75	-21 22.3	1.850	2.782	9.8	20.4	5 11	17 14.78	-27 20.2	1.930	2.851	10.1	18.3
5 21	17 4.49	-20 51.1	1.787	2.771	6.1	20.2	5 21	17 6.97	-27 20.6	1.875	2.852	6.5	18.0
5 31	16 56.79	-20 17.3	1.750	2.760	2.2	19.9	5 31	16 57.65	-27 13.8	1.846	2.854	2.8	17.8
6 10	16 48.57	-19 42.8	1.739	2.750	2.5	19.9	6 10	16 47.82	-26 59.8	1.844	2.855	2.5	17.8
6 20	16 40.79	-19 10.2	1.754	2.740	6.5	20.1	6 20	16 38.54	-26 40.2	1.870	2.855	6.2	18.0
6 30	16 34.37	-18 42.3	1.795	2.730	10.3	20.3	6 30	16 30.78	-26 17.9	1.922	2.856	9.8	18.2
7 10	16 30.00	-18 21.3	1.858	2.721	13.7	20.5	7 10	16 25.24	-25 56.1	1.996	2.856	13.0	18.4
<b>498929</b>	2009 BB <sub>33</sub>		6 4.9 62°69	3°7/ 5.9 17			<b>474884</b>	2005 SD <sub>161</sub>		6 4.9 143°22	4°9/ 2.8 18		
5 1	17 22.82	-31 16.0	1.355	2.211	17.7	21.3	5 1	17 14.68	- 6 14.4	2.922	3.746	10.1	22.5
5 11	17 17.61	-31 24.9	1.290	2.215	13.7	21.1	5 11	17 9.69	- 5 27.5	2.856	3.756	8.0	22.4
5 21	17 9.12	-31 21.5	1.244	2.220	9.2	20.8	5 21	17 3.43	- 4 46.4	2.814	3.765	6.1	22.3
5 31	16 58.39	-31 2.9	1.221	2.225	4.9	20.6	5 31	16 56.38	- 4 13.5	2.800	3.774	4.9	22.2
6 10	16 47.00	-30 29.0	1.222	2.230	4.3	20.6	6 10	16 49.13	- 3 51.0	2.813	3.783	5.3	22.3
6 20	16 36.58	-29 43.4	1.248	2.235	8.3	20.8	6 20	16 42.23	- 3 39.7	2.854	3.791	6.9	22.4
6 30	16 28.52	-28 52.3	1.297	2.240	12.8	21.1	6 30	16 36.22	- 3 39.9	2.921	3.799	8.8	22.5
7 10	16 23.69	-28 2.5	1.366	2.245	16.8	21.3	7 10	16 31.51	- 3 50.9	3.011	3.806	10.7	22.7
<b>427741</b>	2004 RQ <sub>88</sub>		6 4.9 296°49	2°9/ 3.9 17			<b>12532</b>	1998 KW <sub>54</sub>		6 4.9 319°29	8°9/ 31.8 18		
5 1	17 17.37	-18 38.6	1.625	2.488	14.9	20.3	5 1	17 13.07	- 2 30.9	1.875	2.715	14.2	17.3
5 11	17 12.98	-17 47.0	1.537	2.471	11.3	20.0	5 11	17 9.38	- 1 3.8	1.791	2.693	11.9	17.1
5 21	17 6.07	-16 51.8	1.471	2.454	7.3	19.7	5 21	17 3.68	+ 0 14.9	1.729	2.671	9.9	17.0
5 31	16 57.37	-15 56.0	1.430	2.438	3.5	19.4	5 31	16 56.57	+ 1 18.9	1.691	2.650	8.9	16.9
6 10	16 47.97	-15 3.4	1.415	2.421	4.2	19.4	6 10	16 48.88	+ 2 2.8	1.677	2.629	9.7	16.9
6 20	16 39.05	-14 18.1	1.425	2.405	8.4	19.7	6 20	16 41.52	+ 2 23.6	1.686	2.608	11.7	16.9
6 30	16 31.73	-13 43.8	1.459	2.389	12.7	19.9	6 30	16 35.37	+ 2 20.2	1.718	2.588	14.3	17.0
7 10	16 26.83	-13 22.8	1.514	2.373	16.5	20.1	7 10	16 31.13	+ 1 54.8	1.768	2.569	16.9	17.2
<b>286483</b>	2002 AL <sub>181</sub>		6 4.9 208°83	6°4/ 7.3 18			<b>106191</b>	2000 UL <sub>12</sub>		6 4.9 177°64	1°0/ 5.3 18		

EPHEMERIDES

6 4.9

6 5.0

2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$	2020	$\alpha_{2000}$	$\delta_{2000}$	$\Delta$	$r$	$\beta$	$V$
<b>97859</b>	2000 QM <sub>26</sub>		6 4.9 33°60	4.6/ 4.2	17		<b>476271</b>	2007 VG <sub>163</sub>		6 4.9 266°89	0.9/ 5.2	16	
5 1	17 19.20	-13 59.5	1.247	2.120	17.8	18.7	5 1	17 18.34	-25 19.4	2.081	2.927	12.7	22.0
5 11	17 14.69	-13 30.9	1.188	2.125	13.7	18.5	5 11	17 13.30	-25 23.9	1.994	2.919	9.7	21.8
5 21	17 7.24	-13 7.6	1.148	2.129	9.1	18.2	5 21	17 6.12	-25 24.0	1.931	2.911	6.1	21.5
5 31	16 57.79	-12 52.4	1.130	2.134	5.1	18.0	5 31	16 57.44	-25 18.9	1.893	2.902	2.3	21.3
6 10	16 47.73	-12 48.1	1.136	2.140	5.6	18.1	6 10	16 48.19	-25 8.9	1.883	2.894	2.2	21.2
6 20	16 38.49	-12 56.0	1.166	2.146	9.8	18.3	6 20	16 39.36	-24 55.0	1.900	2.886	6.0	21.5
6 30	16 31.34	-13 16.4	1.217	2.152	14.2	18.6	6 30	16 31.90	-24 39.7	1.942	2.877	9.7	21.7
7 10	16 27.09	-13 48.3	1.287	2.158	18.1	18.9	7 10	16 26.51	-24 25.6	2.008	2.869	12.9	21.9
<b>93838</b>	2000 WA <sub>84</sub>		6 4.9 246°48	1.6/ 5.3	18		<b>183535</b>	2003 GN <sub>45</sub>		6 4.9 319°69	5.9/ 3.1	17	
5 1	17 20.43	-26 29.0	1.955	2.800	13.5	20.1	5 1	17 14.41	-7 35.0	2.030	2.875	13.0	19.8
5 11	17 15.05	-26 41.9	1.868	2.790	10.3	19.8	5 11	17 10.18	-6 50.0	1.952	2.866	10.4	19.6
5 21	17 7.28	-26 49.7	1.802	2.781	6.6	19.6	5 21	17 4.09	-6 11.9	1.896	2.858	7.8	19.4
5 31	16 57.81	-26 51.0	1.763	2.771	2.8	19.3	5 31	16 56.73	-5 44.3	1.865	2.850	6.0	19.3
6 10	16 47.67	-26 45.3	1.750	2.761	2.5	19.3	6 10	16 48.91	-5 29.9	1.860	2.842	6.5	19.3
6 20	16 37.97	-26 33.7	1.765	2.750	6.5	19.5	6 20	16 41.49	-5 30.2	1.881	2.834	8.8	19.4
6 30	16 29.76	-26 18.7	1.805	2.740	10.3	19.7	6 30	16 35.25	-5 45.5	1.926	2.826	11.6	19.6
7 10	16 23.84	-26 3.5	1.868	2.729	13.8	19.9	7 10	16 30.83	-6 14.4	1.991	2.819	14.3	19.8
<b>367129</b>	2006 ST <sub>306</sub>		6 4.9 170°74	0.9/ 4.8	17		<b>432296</b>	2009 SW <sub>274</sub>		6 5.0 216°00	2.1/ 5.5	17	
5 1	17 21.74	-20 24.5	2.040	2.883	13.1	21.8	5 1	17 22.18	-27 59.1	2.011	2.849	13.4	22.7
5 11	17 15.67	-20 18.9	1.963	2.887	9.8	21.6	5 11	17 16.33	-28 16.6	1.924	2.842	10.3	22.4
5 21	17 7.46	-20 11.9	1.910	2.890	6.1	21.4	5 21	17 8.08	-28 28.3	1.860	2.836	6.7	22.2
5 31	16 57.83	-20 3.7	1.883	2.893	2.2	21.1	5 31	16 58.12	-28 32.0	1.822	2.829	3.2	22.0
6 10	16 47.73	-19 55.2	1.884	2.895	2.4	21.1	6 10	16 47.51	-28 27.0	1.812	2.821	2.9	21.9
6 20	16 38.15	-19 47.4	1.913	2.896	6.3	21.4	6 20	16 37.36	-28 14.4	1.829	2.813	6.4	22.1
6 30	16 30.03	-19 42.3	1.969	2.897	10.0	21.6	6 30	16 28.73	-27 56.8	1.872	2.804	10.2	22.4
7 10	16 24.01	-19 41.4	2.048	2.897	13.2	21.8	7 10	16 22.42	-27 37.9	1.938	2.795	13.5	22.5
<b>178693</b>	2000 SD <sub>31</sub>		6 4.9 198°64	2.0/ 4.2	18		<b>129664</b>	1998 QS <sub>80</sub>		6 5.0 232°66	1.5/ 4.3	18	
5 1	17 15.94	-16 18.0	2.924	3.760	9.7	21.2	5 1	17 18.91	-20 20.1	2.500	3.339	11.1	20.0
5 11	17 10.77	-15 58.2	2.837	3.757	7.3	21.1	5 11	17 13.29	-19 38.2	2.403	3.325	8.4	19.8
5 21	17 4.19	-15 39.1	2.776	3.753	4.7	20.9	5 21	17 5.92	-18 52.9	2.331	3.310	5.3	19.6
5 31	16 56.69	-15 21.7	2.743	3.748	2.4	20.7	5 31	16 57.35	-18 5.6	2.286	3.295	2.2	19.3
6 10	16 48.87	-15 7.1	2.739	3.743	2.6	20.7	6 10	16 48.34	-17 18.4	2.271	3.279	2.5	19.3
6 20	16 41.36	-14 56.5	2.763	3.737	5.2	20.9	6 20	16 39.69	-16 33.9	2.284	3.262	5.8	19.5
6 30	16 34.74	-14 50.9	2.816	3.731	7.8	21.1	6 30	16 32.14	-15 54.8	2.326	3.245	9.0	19.7
7 10	16 29.50	-14 50.9	2.892	3.725	10.2	21.2	7 10	16 26.29	-15 23.2	2.391	3.227	11.9	19.9
<b>58036</b>	2002 VO <sub>108</sub>		6 4.9 0°80	3.5/ 5.4	18		<b>12519</b>	Pullen		6 5.0 358°93	0.9/ 4.8	18	
5 1	17 20.65	-28 56.1	1.848	2.692	14.2	18.6	5 1	17 13.43	-22 10.2	1.015	1.910	19.1	17.3
5 11	17 15.43	-29 53.1	1.771	2.691	11.0	18.4	5 11	17 11.12	-21 52.8	0.955	1.906	14.5	17.0
5 21	17 7.62	-30 45.4	1.717	2.691	7.4	18.2	5 21	17 5.42	-21 30.8	0.912	1.903	9.1	16.7
5 31	16 57.97	-31 29.1	1.689	2.691	4.2	18.0	5 31	16 57.31	-21 5.4	0.890	1.901	3.1	16.4
6 10	16 47.56	-32 1.7	1.687	2.691	4.0	18.0	6 10	16 48.39	-20 39.5	0.889	1.902	3.3	16.4
6 20	16 37.63	-32 22.5	1.711	2.691	7.2	18.1	6 20	16 40.34	-20 16.4	0.910	1.903	9.3	16.7
6 30	16 29.33	-32 33.2	1.761	2.692	10.7	18.4	6 30	16 34.67	-20 0.1	0.950	1.907	14.7	17.0
7 10	16 23.51	-32 37.3	1.832	2.694	14.0	18.6	7 10	16 32.32	-19 53.3	1.008	1.912	19.3	17.3
<b>498069</b>	2007 RK <sub>152</sub>		6 4.9 290°40	1.9/ 4.5	17		<b>507573</b>	2013 AT <sub>109</sub>		6 5.0 90°38	1.8/ 5.7	17	
5 1	17 19.69	-20 16.3	1.371	2.240	16.7	21.8	5 1	17 18.28	-29 28.0	2.351	3.185	11.9	21.5
5 11	17 15.43	-19 48.4	1.278	2.215	12.8	21.5	5 11	17 12.87	-29 19.6	2.281	3.197	9.0	21.3
5 21	17 8.02	-19 16.7	1.205	2.191	8.2	21.2	5 21	17 5.62	-29 3.9	2.235	3.209	5.9	21.1
5 31	16 58.21	-18 42.6	1.156	2.166	3.2	20.8	5 31	16 57.22	-28 40.2	2.215	3.221	2.8	21.0
6 10	16 47.27	-18 8.5	1.130	2.141	3.7	20.8	6 10	16 48.54	-28 9.4	2.223	3.232	2.4	20.9
6 20	16 36.69	-17 38.1	1.130	2.116	9.1	21.0	6 20	16 40.42	-27 33.7	2.260	3.244	5.3	21.2
6 30	16 27.99	-17 15.4	1.151	2.091	14.4	21.2	6 30	16 33.64	-26 56.0	2.323	3.255	8.4	21.4
7 10	16 22.27	-17 3.5	1.192	2.066	19.0	21.4	7 10	16 28.74	-26 19.5	2.410	3.267	11.2	21.6
<b>110041</b>	2001 SJ <sub>82</sub>		6 4.9 143°83	2.0/ 5.7	18		<b>20976</b>	1981 EA <sub>6</sub>		6 5.0 276°16	0.2/ 5.1	18	
5 1	17 23.21	-29 13.9	2.207	3.036	12.7	20.1	5 1	17 16.76	-24 36.0	2.249	3.095	11.9	19.6
5 11	17 16.66	-29 16.4	2.136	3.049	9.7	19.9	5 11	17 11.89	-24 17.6	2.164	3.089	9.0	19.4
5 21	17 8.01	-29 11.4	2.087	3.060	6.3	19.7	5 21	17 5.12	-23 54.3	2.103	3.084	5.6	19.2
5 31	16 58.01	-28 57.6	2.066	3.071	3.0	19.5	5 31	16 57.09	-23 26.4	2.068	3.078	1.9	19.0
6 10	16 47.64	-28 35.3	2.073	3.082	2.6	19.5	6 10	16 48.64	-22 55.2	2.061	3.073	1.9	18.9
6 20	16 37.92	-28 6.5	2.108	3.091	5.8	19.7	6 20	16 40.62	-22 22.8	2.081	3.067	5.6	19.2
6 30	16 29.71	-27 34.3	2.171	3.100	9.1	20.0	6 30	16 33.85	-21 51.8	2.128	3.062	9.1	19.4
7 10	16 23.64	-27 2.4	2.257	3.108	12.0	20.2	7 10	16 28.94	-21 24.7	2.199	3.056	12.1	19.6
<b>471894</b>	2013 AZ <sub>170</sub>		6 4.9 351°10	5.4/ 3.0	18		<b>238685</b>	2005 EH <sub>237</sub>		6 5.0 203°83	2.5/ 4.3	17	
5 1	17 14.79	-8 41.0	2.166	3.009	12.4	21.0	5 1	17 17.61	-16 15.6	2.134	2.982	12.4	21.0
5 11	17 10.28	-7 49.8	2.094	3.009	9.8	20.8	5 11	17 12.52	-15 55.0	2.055	2.980	9.4	20.8
5 21	17 4.04	-7 4.3	2.045	3.008	7.2	20.7	5 21	17 5.52	-15 35.6	1.999	2.978	6.1	20.5
5 31	16 56.68	-6 27.7	2.022	3.008	5.5	20.6	5 31	16 57.23	-15 18.8	1.969	2.975	3.0	20.3
6 10	16 48.95	-6 2.9	2.025	3.007	6.0	20.6	6 10	16 48.51	-15 6.1	1.967	2.973	3.4	20.4
6 20	16 41.66	-5 51.5	2.055	3.007	8.2	20.7	6 20	16 40.23	-14 59.0	1.993	2.970	6.6	20.6
6 30	16 35.52	-5 54.1	2.109	3.007	10.9	20.9	6 30	16 33.20	-14 58.6	2.044	2.967	9.9	20.8
7 10	16 31.10	-6 9.7	2.185	3.007	13.4	21.1	7 10	16 28.03	-15 5.5	2.118	2.964	12.9	20.9
<b>393036</b>	2013 AM <sub>11</sub>		6 4.9 115°24	3.2/ 4.4	18		<b>426073</b>	2012 CL <sub>45</sub>		6 5.0 137°35	4.4/ 4.1	16	
5 1	17 17.80	-10 42.6	2.642	3.473	1								