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CAMBRIDGE, MASSACHUSETTS 02138

SAO Special Report 222

SATELLITE ORBITAL DATA

No. E-5

Material prepared under the supervision of
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Astrophysical Observatory
Cambridge, Massachusetts 02138

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ORBITAL INFORMATION¹

The orbital elements have been derived by the indicated staff members of the Satellite-Tracking Program, Smithsonian Astrophysical Observatory, employing the SAO Differential Orbit Improvement Program (DOI).

As opposed to osculating elements, the elements presented here are mean elements in the sense that the effects of the short-period perturbations due to the earth's oblateness have been eliminated.

SAO mean elements have been derived from observations covering several days and are given in the form of a table. The successive sets of elements are essentially independent of each other. They are dependent, however, in the sense that high-order coefficients in the secular and the long-periodic terms are generally considered as known and as constant for periods of several weeks or months, as dictated by convenience.

The times of epoch in the mean elements are reckoned in Julian Days, but for the sake of convenience the number 2400000.5 has been subtracted to provide an abbreviated notation, which we call "Modified Julian Days," or "MJD."

The units of the orbital elements are degrees for angular quantities, megameters ($\text{Mm} = 10^6$ meters) for linear quantities, and revolutions for the mean anomaly M and its derivatives.

¹ This work was supported by grant NsG 87-60 from the National Aeronautics and Space Administration.

The tabulated values of the SAO mean elements give the values of arguments of perigee ω , right ascension of the ascending node Ω , inclination i , eccentricity e , and mean anomaly M as functions of time $t = T - T_0$ (where T_0 is the reference epoch) expressed in days. The two-digit number placed at the right of each value represents the standard error for that element and refers to the last digits given.

The same tabulation also gives the mean (anomalous) motion n , the orbital acceleration $n'/2$ or $n'(dn/dt)$, and the semimajor axis a or the geocentric distance of perigee q (in megameters). Of the last three columns, the one headed N indicates the number of observations used for the computation of a set of elements; the one headed D , the number of days used; and the one headed σ , the standard error of the representation of the observations relative to their assumed accuracy.

In our computer program, the inclination and the argument of perigee are referred to the true equator of date; the right ascension of the ascending node, however, is reckoned from the mean equinox of 1950.0 along the corresponding mean equator to the intersection with the moving true equator of date, and then along the true equator of date. To transform from right ascension of the node as determined by the DOI to right ascension of the node referred to the mean equinox of date, one uses

$$\Omega^\circ = \Omega^\circ (\text{DOI}) + 3.508 \times 10^{-5} (\text{MJD} - 33281) \quad .$$

where MJD stands for the Modified Julian Day of the date.

Tables 1 and 2 show the station coordinates and the values of the tesseral harmonics used. The data were obtained using DOI 3.6 and include the use of lunisolar perturbations and tesseral harmonics.

Table 1. Station coordinates

Station No.	X(Mm)	Y(Mm)	Z(Mm)	Stations
9001	-1.535757	-5.167003	3.401057	Organ Pass, New Mexico
9002	5.056134	2.716486	-2.775825	Olifantsfontein, South Africa
9003	-3.983753	3.743116	-3.275607	Woomera, Australia
9004	5.105603	-0.555230	3.769685	San Fernando, Spain
9005	-3.946699	3.366295	3.698854	Tokyo, Japan
9006	1.018201	5.471105	3.109619	Naini Tal, India
9007	1.942769	-5.804088	-1.796967	Arequipa, Peru
9008	3.376887	4.403996	3.136257	Shiraz, Iran
9009	2.251825	-5.816922	1.327165	Curaçao, Netherlands Antilles
9010	0.976290	-5.601394	2.880244	Jupiter, Florida
9011	2.280568	-4.914580	-3.355468	Villa Dolores, Argentina
9012	-5.466064	-2.404279	2.242179	Maui, Hawaii
9114	-1.264893	-3.466758	5.185426	Cold Lake, Canada
9115	3.121306	0.592617	5.512686	Oslo, Norway
9117	-6.007397	-1.111886	1.825718	Johnston Island
9023	-3.977741	3.725130	-3.303074	Island Lagoon

Table 2. Tesseral harmonics

C 2 2	0.24600E-5	C 6 4	-0.10000E-7
S 2 2	-0.13000E-5	S 6 4	-0.46000E-6
C 3 1	0.19100E-5	C 6 5	-0.28000E-6
S 3 1	0.24000E-6	S 6 5	-0.45000E-6
C 3 2	0.77000E-6	S 6 6	-0.39000E-6
S 3 2	-0.59000E-6	C 7 1	0.18000E-6
C 3 3	0.39000E-6	S 7 1	0.14000E-6
S 3 3	0.15400E-5	C 7 2	0.33000E-6
C 4 1	-0.54000E-6	S 7 2	0.14000E-6
S 4 1	-0.43000E-6	C 8 1	-0.20000E-7
C 4 2	0.37000E-6	S 8 1	0.10000E-6
S 4 2	0.65000E-6	C 8 2	0.10000E-6
C 4 3	0.84000E-6	S 8 2	0.60000E-7
S 4 3	-0.20000E-6	C 8 4	-0.15000E-6
C 4 4	-0.40000E-7	S 8 4	0.40000E-7
S 4 4	0.33000E-6	C 9 1	0.11000E-6
C 5 1	-0.10000E-6	S 9 1	0.50000E-7
S 5 1	-0.10000E-6	C 10 1	0.70000E-7
C 5 2	0.61000E-6	S 10 1	-0.12000E-6
S 5 2	-0.25000E-6	C 11 1	-0.90000E-7
C 5 3	-0.55000E-6	S 11 1	0.20000E-7
S 5 3	-0.90000E-7	C 12 1	-0.10000E-6
C 5 4	-0.22000E-6	S 12 1	-0.10000E-7
S 5 4	0.60000E-7	C 13 12	0.10000E-7
C 5 5	0.90000E-7	S 13 12	-0.10000E-7
S 5 5	-0.57000E-6	C 13 13	-0.50000E-7
C 6 1	-0.40000E-7	S 13 13	0.80000E-7
S 6 1	-0.60000E-7	C 15 12	-0.30000E-7
C 6 2	0.90000E-7	S 15 12	0.30000E-7
S 6 2	-0.33000E-6	C 15 13	-0.60000E-7
C 6 3	-0.30000E-7	S 15 13	-0.60000E-7
S 6 3	0.20000E-7	C 15 14	0.10000E-7
		S 15 14	-0.20000E-7

T (MJD)	ω	Ω	i	e	M	n	n'/2	q	N	D	σ
38030.C	42.1710 6	255.8931 2	22.8729 1	.164442 2	.838903 2	11.4784713 5	.344E-5 4	6.934974	73	8	1.50
38032.C	52.7315 5	248.8528 2	22.8718 1	.164504 2	.795857 2	11.4784846 6	.321E-5 3	6.934411	64	8	1.25
38034.0	63.2830 5	241.8110 2	22.8700 1	.164568 2	.752844 2	11.4785008 7	.293E-5 4	6.933897	48	8	.96
38036.C											
38046.C											
38048.C	137.168 1	192.5282 4	22.8709 3	.164472 2	.452290 4	11.478562 1	.31E-5 1	6.934673	39	8	1.34
38050.C	147.7232 9	185.4875 3	22.8709 3	.164397 2	.409440 3	11.478569 1	.243E-5 7	6.935307	45	8	1.10
38052.C	158.2970 7	178.4444 2	22.8728 2	.164285 2	.366630 2	11.478578 1	.243E-5 6	6.936226	59	8	1.19
38054.C	168.8796 6	171.4049 2	22.8751 1	.164209 1	.323799 2	11.4785864 7	.249E-5 4	6.936842	65	8	1.07
38056.C	179.4692 4	164.3661 1	22.8776 0	.164130 1	.280991 1	11.4785995 4	.267E-5 3	6.937477	65	8	.63
38058.C	190.067 1	157.3279 2	22.8795 1	.164055 2	.238194 5	11.478616 1	.39E-5 6	6.938089	89	8	1.72
38062.C	211.2633 7	143.2508 2	22.8819 1	.163902 1	.152740 2	11.4786601 6	.477E-5 4	6.939338	109	8	1.31
38064.C	221.8607 5	136.2119 2	22.8827 1	.163847 1	.110073 2	11.4786814 3	.358E-5 3	6.939747	100	8	1.01
38066.C	232.4622 4	129.1732 2	22.8841 0	.163798 1	.067446 2	11.4786964 3	.339E-5 3	6.940157	86	8	.82
38068.C	243.0744 4	122.1375 2	22.8861 0	.163792 1	.024836 2	11.4787135 3	.369E-5 3	6.940212	64	8	.71
38070.C	253.6859 4	115.1001 3	22.8845 1	.163793 2	.982255 2	11.4787307 4	.457E-5 4	6.940228	57	8	.96
38072.0	264.2943 3	108.0616 3	22.8856 1	.163779 1	.939736 1	11.4787488 5	.487E-5 4	6.940301	52	8	.72
38074.C	274.9042 7	101.0234 3	22.8858 1	.163796 1	.897249 2	11.478766 1	.443E-5 4	6.940185	49	8	.65
38076.C	285.514 3	93.9842 4	22.8860 1	.163816 2	.854793 9	11.478780 4	.387E-5 3	6.940046	60	8	.53
38078.C	296.130 2	86.9446 3	22.8864 1	.163830 3	.812337 9	11.478812 5	.392E-5 3	6.939901	61	8	.55
38080.C	306.7320 6	79.9067 2	22.8843 1	.163858 2	.769978 2	11.478840 7	.410E-5 3	6.939649	62	8	.57
38082.0	317.3293 6	72.8672 2	22.8841 1	.163903 2	.727621 2	11.4788207 6	.416E-5 4	6.939275	62	8	.81
38084.C	327.9326 4	65.8288 1	22.8825 1	.163981 2	.685279 1	11.4788386 2	.435E-5 2	6.938633	49	8	.79
38086.C	338.5331 3	58.7893 1	22.8827 1	.164069 2	.642974 1	11.4788553 3	.445E-5 4	6.937885	38	8	.70
38088.C	349.1251 4	51.7487 2	22.8812 1	.164160 2	.600702 1	11.4788708 3	.430E-5 3	6.937096	41	8	1.11

T (MJD)	ω	Ω	i	e	M	n	n'/2	q	N	D	σ						
359.7170.C	5	44.7090	3	22.8810	2	.164237	2	.558461	1	11.4788885	5	.466E-5	3	6.936466	32	8	1.11
10.3017.C	7	37.6703	6	22.8804	2	.164319	2	.516259	1	11.4789087	5	.471E-5	4	6.935781	32	8	1.37
20.8821.C	1	30.6314	9	22.8782	2	.164412	2	.474094	2	11.4789270	7	.471E-5	3	6.934987	29	8	1.46
31.4492.C	2	23.591	1	22.8772	2	.164505	3	.431970	3	11.478943	1	.468E-5	5	6.934221	16	8	1.20
42.0101.C	1	16.5497	6	22.8764	1	.164563	3	.385887	3	11.478968	1	.52E-5	1	6.933754	14	8	.83
52.5691.C	1	9.5099	8	22.8765	1	.164646	4	.347872	3	11.4789985	9	.52E-5	1	6.933057	13	8	1.37
63.1265.C	4	2.4693	2	22.8760	0	.164728	1	.305886	1	11.4790247	6	.43E-5	2	6.932340	12	8	.33
73.6812.C	4	355.4287	3	22.8752	1	.164777	2	.263947	1	11.4790379	5	.417E-5	8	6.931936	19	8	1.22
84.2241.C	4	348.3877	3	22.8744	1	.164787	2	.222040	1	11.4790539	2	.413E-5	3	6.931758	30	8	.85
94.7507.C	4	341.3460	3	22.8743	1	.164782	2	.180164	1	11.4790713	4	.376E-5	6	6.931812	41	8	.99
105.3293.C	3	334.3066	3	22.8751	1	.164760	2	.138321	0	11.4790858	2	.364E-5	4	6.931949	50	8	.85
115.8562.C	5	327.2634	4	22.8742	1	.164728	2	.096505	1	11.4790995	6	.380E-5	5	6.932326	55	8	1.21
126.4534.C	8	320.2218	3	22.8747	1	.164679	3	.054706	3	11.479111	1	.397E-5	4	6.932658	52	8	.98
137.0072.C	2	313.1796	3	22.8752	1	.164613	5	.012975	7	11.4791210	9	.399E-5	4	6.933255	51	8	.75
147.5772.C	2	306.1380	3	22.8767	1	.164585	4	.971222	6	11.4791378	8	.395E-5	3	6.933521	49	8	.64
158.1512.C	2	299.0969	3	22.8775	1	.164512	5	.925525	6	11.479151	1	.408E-5	4	6.934162	47	8	.69
189.8961.C	1	277.9767	5	22.8802	1	.164245	6	.804600	4	11.479210	1	.49E-5	3	6.936294	42	12	.74
200.4541.C	1	270.9361	8	22.8822	3	.164155	6	.763041	4	11.479215	2	.31E-5	4	6.936981	18	12	.76
211.0922.C	9	263.8984	6	22.8822	2	.164064	3	.721489	2	11.479237	1	.52E-5	1	6.937815	14	12	.74
221.6504.C	4	256.8572	2	22.8842	5	.164012	8	.675585	7	11.479258	1	.44E-5	3	6.938203	18	12	2.16
232.2872.C	2	249.8184	5	22.8845	1	.163946	3	.638524	4	11.479276	2	.44E-5	3	6.938953	33	12	1.24
264.1160.C	4	228.6980	4	22.8852	1	.163926	1	.514334	1	11.4793239	2	.37E-5	1	6.938909	46	8	.68
274.7185.C	4	221.6589	3	22.8861	1	.163915	2	.472996	1	11.479340	1	.45E-5	5	6.938953	51	8	.61
285.3323.C	3	214.6141	7	22.8825	1	.163927	6	.431671	9	11.479346	2	.31E-5	8	6.938890	39	8	.52
295.9215.C	9	207.5785	3	22.8821	0	.163936	5	.390386	3	11.479359	2	.11E-5	4	6.938807	44	8	.58
306.5352.C	5	200.5396	3	22.8821	0	.163979	3	.345108	1	11.479364	1	.27E-5	5	6.938445	48	8	.64

T (MJD)	ω	Ω	i	e	M	n	$n'/2$	q	N	D	σ							
36150.0	317.1450	9	193.4980	4	22.8800	0	.164016	2	.307847	2	11.479374	1	.21E-5	3	6.938165	44	8	.64
36152.0	327.7477	5	186.4580	3	22.8805	0	.164078	1	.266604	1	11.4793818	3	.19E-5	1	6.937637	59	8	.76
36154.0	338.3488	5	179.4161	3	22.8811	1	.164128	1	.225375	1	11.4793918	8	.21F-5	5	6.937123	52	8	.81
36156.0	348.9254	8	172.3757	5	22.8752	1	.164156	2	.184173	2	11.4794026	9	.21E-5	4	6.936553	46	8	.70
36158.0	359.541	1	165.3352	5	22.8770	1	.164276	4	.142988	3	11.479413	2	.26E-5	5	6.935930	47	8	.83
36160.0	10.121	2	158.2938	7	22.8755	2	.16437	1	.101810	9	11.479420	4	.46E-5	15	6.935182	30	8	.83
36162.0	20.707	2	151.2521	5	22.8741	2	.164467	8	.060659	6	11.479436	2	.51E-5	6	6.934396	32	8	.58
36164.0	31.276	1	144.2098	4	22.8734	2	.164558	7	.015561	6	11.479448	2	.12E-5	8	6.933674	34	8	.82
36166.0	41.8435	6	137.1684	2	22.8728	1	.164638	3	.978454	2	11.479463	1	.34E-5	6	6.932951	37	8	.70
36168.0	52.4129	6	130.1254	2	22.8715	2	.164678	1	.937394	1	11.4794716	6	.32E-5	3	6.932542	39	8	.68
36170.0	62.9700	8	123.0806	2	22.8708	1	.164750	2	.896356	2	11.4794843	5	.14E-5	4	6.932028	36	8	.92
36172.0	73.5313	5	116.0394	2	22.8702	1	.164787	1	.855328	1	11.4794967	4	.32E-5	1	6.931681	32	8	.69
36174.0	84.085	1	108.9962	4	22.8707	2	.164794	2	.814328	3	11.4795065	9	.22E-5	4	6.931535	23	8	1.33
36176.0	94.6298	7	101.9550	2	22.8721	1	.164811	2	.778352	1	11.4795160	8	.19E-5	4	6.931400	24	8	.63
36178.0	105.185	1	94.9122	4	22.8730	1	.164784	2	.732384	3	11.4795234	9	.26E-5	3	6.931735	32	8	1.56
36180.0	115.743	1	87.8682	5	22.8756	1	.164745	2	.651433	3	11.4795303	9	.34E-5	4	6.931964	38	8	1.84
36182.0	126.3003	5	80.8261	2	22.8750	1	.164714	1	.650519	1	11.4795404	5	.22E-5	2	6.932280	43	8	.74
36184.0	136.8672	6	73.7836	3	22.8757	1	.164640	1	.605611	1	11.4795484	6	.10E-5	2	6.932858	40	8	1.02
36186.0	147.4250	7	66.7443	4	22.8772	1	.164567	1	.568711	1	11.4795540	6	.14E-5	2	6.933452	33	8	1.08
36188.0	158.009	1	59.7032	7	22.8788	1	.164462	1	.527823	3	11.4795593	8	.18E-5	3	6.934323	32	8	1.87
36190.0	168.5806	9	52.6608	4	22.8806	1	.164376	1	.486952	2	11.4795690	8	.23E-5	3	6.935051	29	8	1.35
36192.0	179.1595	8	45.6198	4	22.8821	1	.164284	1	.448095	2	11.4795777	7	.19E-5	3	6.935822	33	8	1.19
36194.0	189.7383	7	38.5825	5	22.8832	1	.164200	1	.405260	2	11.4795848	6	.20E-5	3	6.936518	39	8	.93
36196.0	200.3282	6	31.5435	2	22.8851	1	.164129	1	.364439	2	11.4795904	4	.19E-5	2	6.937036	43	8	.86
36198.0	210.9297	8	24.5042	3	22.8862	1	.164062	1	.323628	2	11.4795981	5	.16E-5	3	6.937601	43	8	.88
36200.0	221.5419	7	17.4636	2	22.8868	1	.163997	1	.282831	1	11.4796063	4	.23E-5	2	6.938188	46	8	.80
36202.0	232.1601	6	10.4240	3	22.8882	2	.163957	1	.242052	2	11.4796161	4	.25E-5	2	6.938501	51	8	.80
36204.0	242.7602	6	3.3839	2	22.8885	1	.163897	2	.201297	1	11.4796258	4	.19E-5	2	6.939017	47	8	.72
36206.0	253.3692	5	356.3448	2	22.8855	1	.163874	1	.160555	1	11.4796307	6	.99E-6	23	6.939180	40	8	.76
36208.0	263.9799	6	349.3059	2	22.8851	1	.163855	1	.115817	2	11.4796348	6	.22E-5	3	6.939308	33	8	.82
36210.0	274.589	1	342.2664	3	22.8884	2	.163857	1	.075094	2	11.4796426	6	.22E-5	2	6.939290	22	8	.88

T (MJD)	ω	Ω	i	e	M	n	$n'/2$	q	N	D	σ
38034.0	260.0774 5	239.1576 3	23.3623 1	.186332 2	.804430 1	11.0884757 4	.35E-6 4	6.893823	37 10	1.16	
38036.0	269.8840 6	232.5853 3	23.3628 1	.186340 1	.981378 1	11.0884756 4	.28E-6 2	6.893706	36 10	1.36	
38038.0	279.6507 8	226.0087 3	23.3610 1	.186346 2	.158316 2	11.0884762 4	.50E-6 2	6.893657	22 10	.91	
38040.0	289.495 1	219.4351 4	23.3608 2	.186369 4	.335266 2	11.0884776 9	.71E-6 3	6.893429	18 10	.95	
38042.0	299.310 5	212.8621 6	23.3611 3	.18643 2	.512210 6	11.0884774 4	.107E-5 8	6.892951	12 10	.55	
38044.0	309.1126 7	206.2886 5	23.3610 1	.186432 2	.685171 2	11.0884816 4	.124E-5 2	6.892933	19 10	.71	
38046.0	318.916 2	199.7168 5	23.3608 1	.186463 7	.866140 3	11.088484 1	.136E-5 4	6.892634	23 10	1.17	
38048.0	328.712 1	193.1442 6	23.3555 1	.186510 2	.043119 2	11.088485 1	.155E-5 3	6.892261	23 10	1.11	
38050.0	338.514 1	186.5699 7	23.3582 1	.186563 1	.220090 3	11.088488 2	.150E-5 5	6.891783	23 10	1.27	
38052.0	348.314 2	179.9916 9	23.3558 1	.186629 2	.397082 4	11.088497 1	.116E-5 4	6.891271	31 10	2.24	
38054.0	358.115 3	173.4165 9	23.3556 2	.186724 2	.574067 7	11.088501 2	.87E-6 7	6.890396	26 10	2.97	
38056.0	07.897 2	166.8406 5	23.3558 1	.186783 2	.751101 5	11.088500 2	-.39E-6 4	6.889903	31 10	1.69	
38058.0	17.688 1	160.2668 4	23.3535 1	.186890 1	.928100 3	11.088499 1	-.27E-6 3	6.889055	43 10	1.87	
38060.0	27.472 6	153.6929 2	23.3525 1	.186964 1	.105095 1	11.0885025 6	-.70E-7 17	6.888237	42 10	1.14	
38062.0	37.256 1	147.1166 4	23.3521 1	.186935 1	.282100 2	11.0885026 9	-.44E-6 3	6.887843	41 10	2.01	
38064.0	47.000 1	140.5404 6	23.3507 1	.186952 1	.455106 2	11.0885022 7	-.56E-6 3	6.887309	43 10	1.81	
38066.0	56.783 2	133.9645 6	23.3504 1	.186967 2	.636115 3	11.0885021 9	-.47E-6 3	6.886679	38 10	2.45	
38068.0	66.554 1	127.3879 5	23.3510 1	.186913 1	.813116 2	11.0885016 7	-.18E-6 4	6.886251	28 10	1.66	
38070.0	76.314 2	120.814 1	23.3486 2	.186925 2	.990123 3	11.088502 1	.54E-6 5	6.885838	30 10	3.23	
38072.0	86.0842 7	114.2376 5	23.3500 1	.186928 1	.167129 1	11.0885061 6	.85E-6 3	6.885694	25 10	1.32	
38074.0	95.8508 6	107.6597 3	23.3457 1	.186928 1	.344147 1	11.0885111 4	.111E-5 2	6.885722	24 10	.95	
38076.0	105.6141 5	101.0834 3	23.3501 1	.186928 1	.521178 1	11.0885166 3	.94E-6 1	6.885855	20 10	.70	
38078.0	115.3838 9	94.5062 6	23.3505 3	.186918 2	.698207 2	11.0885190 5	.105E-5 2	6.886219	20 10	1.54	
38080.0	125.1366 7	87.9207 3	23.3516 2	.186918 2	.875251 1	11.0885217 6	.120E-5 3	6.886589	18 10	.78	
38082.0	134.9069 6	81.3538 2	23.3526 2	.186917 2	.052294 1	11.0885244 3	.96E-6 2	6.887066	23 10	.99	
38084.0	144.6849 4	74.7789 1	23.3537 2	.186905 2	.225357 1	11.0885262 3	.60E-6 3	6.887691	26 10	.83	
38086.0	154.4643 4	68.2020 2	23.3554 2	.186955 2	.406412 1	11.0885217 5	-.84E-6 3	6.888121	34 10	1.08	
38088.0	164.2492 6	61.6262 5	23.3565 5	.186930 4	.583456 2	11.0885223 6	-.127E-5 6	6.888672	33 10	1.43	

T (MJD)	u	Ω	i	e	M	n	n'/2	q	N	D	σ
38090.0	174.0378 8	55.0527 7	23.3600 5	.188842 3	.760482 3	11.0885058 9	-.310E-5 7	6.889486	33 10	1.36	
38092.0	183.828 6	48.4777 7	23.3605 4	.18876 3	.93749 3	11.088497 9	-.346E-5 6	6.890225	28 10	.99	
38094.0	193.597 8	41.906 1	23.3626 4	.18872 3	.11456 4	11.088502 8	-.361E-5 8	6.890495	24 10	.84	
38096.0	203.42 1	35.329 1	23.3625 4	.18845 4	.25136 6	11.08844 2	-.300E-5 8	6.892819	17 10	1.06	
38098.0	213.21 2	28.754 2	23.3628 4	.18852 6	.46834 7	11.08842 3	-.12E-5 2	6.892176	19 10	1.38	
38100.0	223.010 4	22.185 1	23.3650 3	.18844 3	.64527 1	11.088498 3	-.90E-6 1	6.892800	15 10	1.78	
38102.0	232.8009 7	15.6069 4	23.3653 1	.188473 2	.822259 1	11.0884676 6	-.38E-6 6	6.892630	31 10	.96	
38104.0	242.6065 3	9.0345 2	23.3665 1	.188438 1	.995193 1	11.0884660 3	-.22E-6 4	6.892826	35 10	.81	
38106.0	252.4158 2	2.4609 2	23.3672 1	.188421 1	.176126 0	11.0884663 1	.37E-7 16	6.893082	42 10	.77	
38108.0	262.2238 4	355.8899 3	23.3675 1	.188379 1	.353059 0	11.0884662 2	.16E-7 17	6.893401	42 10	.96	
38110.0	272.0321 4	349.3135 4	23.3668 1	.188382 1	.525990 1	11.0884683 2	-.27E-7 23	6.893386	38 10	1.09	
38112.0	281.8302 4	342.7431 4	23.3664 1	.188382 1	.706926 0	11.0884671 2	.15E-6 3	6.893382	35 10	.89	
38114.0	291.6320 4	336.1706 4	23.3663 1	.188384 1	.883861 1	11.0884674 2	.71E-7 15	6.893259	30 10	.95	
38116.0	301.4333 4	329.5962 4	23.3658 1	.188423 1	.060794 1	11.0884660 3	.40E-7 14	6.893059	23 10	.84	
38118.0	311.2359 6	323.0221 3	23.3654 1	.188458 1	.237725 1	11.0884661 3	.19E-6 2	6.892667	24 10	.87	
38120.0	321.047 4	316.450 1	23.3645 3	.188523 4	.414645 1	11.088464 2	.51E-6 2	6.892133	25 10	2.11	
38122.0	330.888 9	309.893 2	23.3586 9	.18862 1	.59149 2	11.088472 7	.73E-6 4	6.891311	18 8	.97	
38124.0	340.669 6	303.307 5	23.3611 6	.188633 6	.76848 1	11.088478 3	.66E-6 6	6.891222	18 8	1.01	
38126.0	350.455 1	296.7325 3	23.3602 5	.188689 4	.945438 2	11.088476 1	.48E-6 6	6.890663	22 8	1.09	
38128.0	0.2409 7	290.1573 4	23.3568 3	.188768 5	.122386 2	11.088471 3	-.25E-6 19	6.890138	21 8	1.05	
38130.0	10.109 2	283.5807 7	23.3556 3	.188854 9	.25935 1	11.088469 3	-.160E-5 8	6.889321	24 8	.93	
38132.0	19.806 2	277.0042 4	23.3537 1	.188936 6	.476261 7	11.088459 3	-.154E-5 8	6.888635	29 8	.79	
38134.0	29.5861 4	270.4293 3	23.3519 1	.189009 2	.653170 1	11.088463	-.105E-5 3	6.888034	42 8	.69	
38136.0	39.3586 3	263.8536 2	23.3455 1	.189051 2	.830092 1	11.0884585 2	-.68E-6 5	6.887358	52 8	.74	
38138.0	49.1282 2	257.2772 2	23.3483 1	.189138 1	.007004 1	11.0884583 2	-.17E-6 3	6.886874	59 8	.72	
38140.0	58.8962 3	250.6994 2	23.3475 0	.189182 1	.183919 1	11.0884576 5	-.75E-7 4	6.886580	61 8	.67	
38142.0	68.6609 2	244.1260 2	23.3464 1	.189198 1	.360834 0	11.0884597 2	.23E-6 2	6.886439	57 8	.57	
38144.0	78.4179 1	237.5503 1	23.3476 0	.189228 1	.537754 0	11.0884609 1	.44E-6 2	6.886178	51 8	.65	
38146.0	88.1756 2	230.5753 2	23.3475 1	.189234 2	.714675 1	11.0884618 2	.51E-6 3	6.886082	47 8	.99	
38148.0	97.9218 2	224.3994 2	23.3466 1	.189232 2	.851600 1	11.0884640 2	.97E-6 2	6.886213	44 8	.88	

T (MJD)	ω	Ω	i	e	M	n	n'/2	q	N	D	σ							
38150.C	107.7604	2	217.8224	2	33.3471	1	.185192	2	.C6E525	1	11.0884663	3	.172E-5	3	6.886467	36	8	.74
38152.C	117.4631	3	211.2458	2	23.3470	1	.185147	2	.245462	1	11.0884722	3	.172E-5	2	6.886857	39	8	1.04
38154.C	127.2337	4	204.6693	3	23.3455	1	.185068	2	.422410	1	11.0884753	4	.116E-5	3	6.887498	33	8	1.11
38156.C	137.0057	4	198.0944	3	23.3506	1	.184990	2	.555369	1	11.0884773	6	.46E-6	4	6.888175	35	8	1.00
38158.C	146.7802	7	191.5210	5	23.3512	1	.184908	3	.776324	2	11.0884757	7	-.20E-6	5	6.888919	51	8	1.83
38160.C	156.5629	7	184.9466	4	23.3514	1	.184813	3	.953276	2	11.088474	1	-.79E-6	8	6.889623	65	8	1.78
38162.C	166.3501	5	178.3718	4	23.3515	1	.184742	2	.130220	2	11.0884673	8	-.142E-5	5	6.890363	79	8	1.46
38164.C	176.1292	5	171.7961	3	23.3520	1	.184674	3	.307167	2	11.0884683	9	-.190E-5	4	6.890852	111	8	1.46
38166.C	185.9242	5	165.2216	2	23.3526	1	.184581	3	.484090	2	11.0884627	9	-.153E-5	4	6.891679	134	8	1.47
38168.C	195.7184	4	158.6497	1	23.3538	0	.184506	2	.661010	2	11.0884567	8	-.29E-6	3	6.892336	123	8	1.13
38170.C	205.5223	4	152.0744	1	23.3556	0	.184436	2	.837926	2	11.0884575	8	.53E-6	3	6.892902	138	8	1.15
38172.C	215.3293	3	145.5003	1	23.3552	3	.184378	1	.014848	1	11.0884639	5	.95E-6	2	6.893475	133	8	.71
38174.C	225.1276	2	138.9227	1	23.3562	0	.184314	1	.151783	1	11.0884717	3	.117E-5	2	6.893971	142	8	.67
38176.C	234.9252	2	132.3521	1	23.3577	0	.184264	1	.368727	1	11.0884800	3	.167E-5	2	6.894311	151	8	.86
38178.C	244.7318	1	125.7785	1	23.3595	0	.184239	1	.545695	0	11.0884883	3	.184E-5	2	6.894543	141	8	.84
38180.C	254.5392	2	119.2063	1	23.3604	0	.184227	1	.722679	1	11.0884951	3	.162E-5	2	6.894654	117	8	1.00
38182.C	264.3507	2	112.6296	1	23.3557	1	.184222	1	.895677	1	11.0885009	2	.124E-5	2	6.894732	75	8	.85
38184.C	274.1581	3	106.0584	3	23.3606	1	.184201	2	.076686	1	11.0885050	5	.86E-6	4	6.894817	55	8	1.19
38186.C	283.9656	4	99.4870	2	23.3602	1	.184207	2	.253701	1	11.0885078	5	.84E-6	4	6.894819	45	8	.77
38188.C	293.7753	5	92.9096	3	23.3618	1	.184202	3	.430706	2	11.0885086	5	.101E-5	6	6.894888	44	8	1.64
38190.C	303.5802	4	86.3348	2	23.3624	1	.184201	2	.607718	1	11.0885170	4	.88E-6	4	6.894894	41	8	.70
38192.C	313.3792	4	79.7661	2	23.3614	1	.184203	2	.784755	1	11.0885187	8	.90E-6	5	6.894436	43	8	.90
38194.C	323.1741	7	73.1963	4	23.3612	1	.184193	3	.961790	2	11.0885189	8	.65E-6	6	6.893835	48	8	2.04
38196.C	332.9745	7	66.6239	5	23.3606	1	.184170	2	.138823	2	11.0885187	7	.44E-6	5	6.893400	52	8	2.06
38198.C	342.7817	6	60.0505	4	23.3600	1	.184129	2	.315857	2	11.0885182	7	.41E-6	4	6.892905	55	8	1.51
38200.C	352.5781	7	53.4783	5	23.3593	1	.184100	2	.452900	2	11.0885193	9	-.10E-6	5	6.892312	56	8	1.95
38202.C	2.3730	5	46.9052	3	23.3576	1	.184049	2	.665924	1	11.0885119	6	-.114E-5	3	6.891917	51	8	1.39
38204.C	12.1562	5	40.3323	2	23.3567	1	.184013	1	.846950	1	11.0885090	6	-.160E-5	3	6.891365	49	8	1.06
38206.C	21.9299	4	33.7573	2	23.3550	1	.184000	1	.023966	1	11.0885062	6	-.91E-6	3	6.890843	48	8	1.02
38208.C	31.7079	4	27.1844	2	23.3527	1	.183764	1	.200972	1	11.0885041	5	-.53E-6	3	6.890244	46	8	.95
38210.C	41.4770	6	20.6100	2	23.3526	2	.183828	3	.377980	1	11.0885061	9	.18E-6	3	6.889559	37	8	1.06

T (MJD)	ω	Ω	i	e	M	n	$n'/2$	q	N	D	σ
38030.0	84.45 1	73.4595 3	47.2335 2	.C12C7C 2	.16553 3	12.197081 8	-.52E-6 5	7.875253	46	8	1.31
38032.0	90.02 1	67.2557 2	47.2336 1	.C12C69 2	.56380 3	12.197097 9	-.15E-5 3	7.875226	38	8	.79
38034.0	95.68 3	61.0534 5	47.2330 3	.C12C6C 2	.95789 8	12.197064 2	-.114E-5 6	7.875308	31	8	1.05
38036.0	101.20 6	54.8524 9	47.2340 4	.C12C56 6	.3523 2	12.19702 6	-.46E-6 5	7.875325	37	8	1.48
38038.0	106.91 1	48.6492 2	47.2345 1	.C12C18 2	.74638 3	12.19708 1	.14E-6 2	7.875619	44	8	.72
38040.0	112.591 5	42.4473 1	47.2336 1	.C12011 1	.14053 2	12.197089 5	.25E-6 2	7.875643	61	8	.61
38042.0	118.239 7	36.2428 1	47.2333 1	.C11963 1	.53477 2	12.197082 5	-.16E-6 3	7.876057	68	8	.95
38044.0	123.930 7	30.0402 1	47.2333 1	.C11935 1	.92889 2	12.197102 4	-.116E-5 3	7.876366	77	8	1.06
38046.0	129.614 4	23.8377 1	47.2330 1	.C11891 1	.32308 1	12.197098 3	-.163E-5 2	7.876652	89	8	.77
38048.0	135.253 5	17.6364 1	47.2346 1	.C11841 1	.71727 1	12.197100 3	-.164E-5 2	7.877062	92	8	.75
38050.0	140.979 6	11.4342 1	47.2332 1	.C11798 1	.11145 2	12.197094 4	-.110E-5 2	7.877383	95	8	.95
38052.0	146.804 8	5.2297 2	47.2326 1	.C11740 1	.50566 2	12.197106 5	-.47E-6 2	7.877835	100	8	1.10
38054.0	152.516 6	359.0285 2	47.2331 1	.C11677 1	.89985 2	12.197106 4	-.92E-7 14	7.878365	87	8	.68
38056.0	158.329 6	352.8263 1	47.2338 1	.C11619 1	.25405 2	12.197113 4	-.31E-6 2	7.878846	91	8	.77
38058.0	164.155 7	346.6246 2	47.2353 1	.C11539 1	.68828 2	12.197086 5	-.83E-6 3	7.879474	94	8	1.14
38060.0	170.099 5	340.4222 1	47.2355 1	.C11476 1	.08241 1	12.197081 4	-.152E-5 2	7.879984	85	8	.80
38062.0	175.978 4	334.2175 1	47.2333 0	.C11426 0	.47660 1	12.197062 2	-.171E-5 2	7.880348	97	8	.69
38064.0	181.923 6	328.0169 2	47.2348 1	.C11354 1	.87073 2	12.197052 5	-.134E-5	7.880921	83	8	1.16
38066.0	187.896 6	321.8151 1	47.2348 1	.C11283 1	.26488 2	12.197042 5	-.49E-6 3	7.881480	79	8	1.37
38068.0	193.828 5	315.6139 1	47.2337 1	.C11203 1	.65505 1	12.197047 4	.19E-7 22	7.882187	80	8	.90
38070.0	199.895 6	309.4103 1	47.2328 1	.C11139 1	.05325 2	12.197045 4	.66E-7 24	7.882620	75	8	.98
38072.0	205.937 7	303.2074 1	47.2335 1	.C11090 1	.44738 2	12.197019 5	-.38E-6 3	7.883031	89	8	1.12
38074.0	212.101 9	297.0069 2	47.2333 1	.C11023 1	.84145 3	12.197016 7	-.116E-5 3	7.883593	95	8	1.50
38076.0	218.297 7	290.8044 1	47.2335 1	.C10946 1	.23552 2	12.197000 5	-.147E-5 3	7.884210	110	8	1.34
38078.0	224.358 8	284.6024 1	47.2325 1	.C10902 1	.62559 2	12.196993 6	-.124E-5 3	7.884560	118	8	1.50
38080.0	230.648 8	278.4003 1	47.2328 1	.C10867 1	.02350 2	12.196957 7	-.45E-6 3	7.884909	116	8	1.54
38082.0	236.821 5	272.1964 1	47.2321 1	.C10835 1	.41748 2	12.197001 7	.71E-6 3	7.885056	93	8	.94
38084.0	243.147 7	265.9964 1	47.2318 1	.C10785 1	.81155 2	12.196983 9	.72E-6 3	7.885579	89	8	1.19
38086.0	249.402 5	259.7929 1	47.2300 1	.C10742 1	.20555 2	12.196981 7	.22E-6 3	7.885843	92	8	1.29
38088.0	255.758 4	253.5890 1	47.2310 0	.C10724 0	.55541 1	12.196994 5	-.73E-6 2	7.886013	85	8	.68

T (MJD)	ω	Ω	i	e	M	n	n'/2	q	N	D	σ
38090.C	262.023 4	247.2850 1	47.2304 C	.C10718 C	.59335 1	12.196978 4	-.85E-6 2	7.886031	90	8	.75
38092.C	268.286 4	241.1834 1	47.2318 C	.C10717 C	.38729 1	12.196977 4	-.84E-6 2	7.886026	81	8	.73
38094.C	274.635 5	234.9793 1	47.2258 1	.C10718 1	.78120 1	12.196985 5	-.53E-6 3	7.886004	57	8	.72
38096.C	280.943 9	228.7785 1	47.2304 1	.C10738 1	.17519 2	12.196980 7	.53E-6 4	7.885940	54	8	1.36
38098.C	287.306 6	222.5759 1	47.2314 1	.C10762 1	.56505 2	12.196978 4	.105E-5 3	7.885616	63	8	.90
38100.C	293.593 8	216.3737 2	47.2312 1	.C10768 1	.56298 2	12.196975 5	.69E-6 3	7.885704	69	8	1.26
38102.C	299.866 8	210.1719 2	47.2316 1	.C10808 1	.35694 2	12.196984 5	-.55E-7 3	7.885298	88	8	1.34
38104.C	306.124 5	203.9696 1	47.2324 1	.C10847 1	.75092 1	12.196991 4	-.62E-6 2	7.885000	88	9	.88
38106.C	312.308 5	197.7677 1	47.2311 1	.C10878 1	.14492 1	12.197000 3	-.59E-6 2	7.884758	88	8	.83
38108.C	318.429 5	191.5623 1	47.2302 1	.C10920 1	.53688 1	12.196995 3	.17E-6 3	7.884467	99	8	.98
38110.C	324.627 5	185.3607 1	47.2318 C	.C10972 1	.93284 1	12.196970 4	.101E-5 3	7.884035	87	8	.95
38112.C	330.863 4	179.1606 1	47.2316 C	.C11037 1	.32683 1	12.196989 3	.144E-5 2	7.883509	100	8	.84
38114.C	336.970 4	172.9583 1	47.2312 C	.C11103 1	.72085 1	12.197014 2	.146E-5 2	7.882973	101	8	.76
38116.C	342.971 7	166.7560 2	47.2306 1	.C11165 1	.11495 2	12.197031 4	.90E-6 3	7.882344	100	8	1.30
38118.C	349.075 5	160.5531 1	47.2300 1	.C11243 1	.50898 2	12.197026 4	-.12E-6 3	7.881815	98	8	1.04
38120.C	354.967 5	154.3500 1	47.2305 1	.C11312 1	.90306 1	12.197037 3	-.40E-6 2	7.881273	82	8	.76
38121.C	357.977 6	151.2494 1	47.2320 1	.C11358 1	.10116 2	12.197044 5	-.99E-6 4	7.880954	60	6	.73
38123.C	03.959 9	145.0463 2	47.2314 1	.C11395 1	.49522 3	12.197042 8	-.23E-7 60	7.880639	50	6	1.01
38125.C	09.84 1	138.8430 2	47.2313 1	.C11465 1	.88540 3	12.197037 8	.90E-6 5	7.880087	40	6	.81
38127.C	15.756 9	132.6418 2	47.2251 1	.C11554 1	.28351 3	12.197062 6	.125E-5 4	7.879359	41	6	.95
38129.C	21.584 7	126.4378 1	47.2304 1	.C11559 1	.67766 2	12.197068 7	.82E-6 5	7.878977	60	6	.95
38131.C	27.459 3	120.2350 1	47.2257 C	.C11678 1	.071748 9	12.197087 3	-.34E-6 3	7.878278	81	6	.65
38133.C	33.127 3	114.0324 C	47.2310 C	.C11727 1	.465896 9	12.197060 3	-.81E-6 2	7.878028	112	6	.78
38135.C	38.865 3	107.8297 1	47.2307 C	.C11752 1	.860047 8	12.197055 3	-.104E-5 2	7.877444	127	6	.87
38137.C	44.668 2	101.6270 1	47.2312 C	.C11844 1	.254144 6	12.197029 3	-.36E-6 3	7.877003	133	6	.87
38139.C	50.421 2	95.4233 1	47.2305 C	.C11883 1	.648221 6	12.197021 3	.57E-6 3	7.876702	129	6	.96
38141.C	56.021 2	89.2203 1	47.2307 1	.C11943 1	.642266 6	12.197035 3	.117E-5 4	7.876329	106	6	.93
38143.C	61.762 4	83.0160 2	47.2308 1	.C11977 2	.43636 1	12.197044 6	.84E-6 6	7.875938	72	6	1.11
38145.C	67.390 3	76.8145 1	47.2321 1	.C12006 2	.830439 7	12.197052 4	.15E-6 5	7.875826	74	6	1.02
38147.C	73.026 2	70.6127 1	47.2325 1	.C12040 1	.224530 5	12.197035 3	-.66E-6 4	7.875455	73	6	.84
38149.C	78.670 2	64.4094 1	47.2325 1	.C12042 1	.616599 4	12.197032 3	-.77E-6 4	7.875445	69	6	.72

T (MJD)	ω	Ω	i	e	M	n	$n'/2$	q	N	D	σ
38151.C	84.303 2	58.2080 1	47.2323 1	.012072 1	.012642 5	12.197016 3	-.42E-6 4	7.875269	63	6	.84
38153.C	89.948 2	52.0040 2	47.2327 0	.012069 1	.406686 5	12.197010 3	.45E-6 4	7.875239	57	6	.78
38155.C	95.518 2	45.8036 1	47.2345 0	.012055 1	.800722 4	12.197023 2	.121E-5 4	7.875355	58	6	.67
38157.C	101.157 3	39.6020 1	47.2338 0	.012071 1	.194771 7	12.197027 4	.127E-5 4	7.875229	45	6	.57
38159.C	106.908 3	33.3983 2	47.2345 1	.012050 2	.586814 8	12.197026 4	.46E-6 4	7.875454	39	6	.76
38161.C	112.540 4	27.1955 2	47.2340 2	.012037 2	.982875 9	12.197028 5	-.23E-6 5	7.875587	44	6	.81
38163.C	118.129 2	20.9956 2	47.2348 1	.012006 2	.376926 6	12.197031 4	-.61E-6 5	7.875777	46	6	.80
38165.C	123.788 3	14.7928 2	47.2348 1	.011966 2	.770970 8	12.197019 4	-.55E-6 6	7.876040	43	6	.96
38167.C	129.556 3	8.5893 2	47.2352 1	.011943 2	.165007 9	12.197025 5	.73E-6 8	7.876270	36	6	1.02
38169.C	135.174 3	2.3896 2	47.2335 1	.011893 2	.555078 9	12.197057 5	.126E-5 8	7.876592	36	6	.92
38171.C	140.888 3	356.1866 2	47.2332 1	.011831 1	.953191 8	12.197055 4	.160E-5 5	7.877139	35	6	.76
38173.C	146.686 3	349.9843 1	47.2346 1	.011765 1	.347280 9	12.197049 6	.70E-6 6	7.877615	32	6	.75
38175.C	152.426 3	343.7814 1	47.2347 1	.011714 1	.741363 9	12.197036 4	.3E-8 47	7.878084	35	6	.78
38177.C	158.264 2	337.5788 1	47.2342 1	.011664 1	.135442 7	12.197030 4	-.46E-6 4	7.878467	44	6	.72
38179.C	164.122 2	331.3769 1	47.2342 1	.011600 1	.525503 6	12.197033 3	-.45E-7 3	7.878979	54	6	.63
38181.C	170.082 2	325.1745 1	47.2345 1	.011519 1	.923553 6	12.197046 3	.55E-6 4	7.879562	54	6	.58
38183.C	175.980 3	318.9717 1	47.2341 1	.011475 1	.317640 8	12.197039 3	.137E-5 3	7.879940	50	6	.66
38185.C	181.929 4	312.7681 1	47.2328 1	.011354 1	.711715 9	12.197047 3	.153E-5 3	7.880716	33	6	.60
38187.C	187.944 5	306.5656 1	47.2331 1	.011330 2	.10581 1	12.197047 3	.96E-6 4	7.881151	29	6	.67
38189.C	193.926 7	300.3645 1	47.2336 2	.011275 3	.49588 2	12.197052 5	-.24E-6 8	7.881495	22	6	.51
38191.C	199.990 4	294.1628 1	47.2341 1	.011210 1	.89393 1	12.197033 4	-.27E-6 4	7.882082	36	6	.55
38193.C	206.106 4	287.9587 1	47.2335 1	.011165 1	.28798 1	12.197040 5	-.21E-6 6	7.882489	39	6	.62
38195.C	212.223 5	281.7560 1	47.2314 1	.011097 1	.68204 1	12.197048 4	.46E-6 4	7.883092	66	6	.88
38197.C	218.454 3	275.5551 1	47.2324 1	.011026 1	.076107 9	12.197054 4	.103E-5 3	7.883516	80	6	.73
38199.C	224.557 3	269.3505 1	47.2325 1	.011002 1	.470178 8	12.197051 2	.139E-5 3	7.883722	98	6	.71
38201.C	230.814 3	263.1512 1	47.2332 0	.010938 1	.864243	12.197061 3	.127E-5 3	7.884248	90	6	.75
38203.C	237.025 4	256.9469 1	47.2325 0	.010920 1	.25828	12.197069 3	.57E-6 4	7.884434	92	6	.95
38205.C	243.395 4	250.7467 1	47.2327 0	.010872 1	.65235 1	12.197057 4	-.36E-6 5	7.884818	88	6	.89
38207.C	249.730 5	244.5440 1	47.2316 1	.010850 1	.04639 1	12.197063 4	-.55E-6 5	7.884941	97	6	1.22
38209.C	255.966 5	238.3420 1	47.2312 1	.010825 1	.44043 1	12.197047 6	.44E-7 4	7.885203	80	6	1.00
38211.C	262.208 5	232.1379 1	47.2317 1	.010834 1	.83447 2	12.197080 6	.77E-6 4	7.885094	93	6	1.27

T (MJD)	ω	Ω	i	e	M	n	n'/2	q	N	D	σ
38029.5	131.607 1	203.2653 2	38.8584 1	.117597 3	.242917 4	12.251612 7	.640E-4 9	7.012622	19	3	1.31
38030.5	136.426 2	199.5670 4	38.8555 1	.117620 5	.454598 8	12.25177 1	.738E-4 6	7.012309	22	3	1.58
38031.5	141.247 2	195.8700 2	38.8610 1	.117638 5	.746420 6	12.251911 6	.688E-4 5	7.012121	34	3	1.33
38032.5	146.0703 9	192.1722 2	38.8618 1	.117632 2	.958395 3	12.252041 3	.703E-4 4	7.012042	48	3	1.31
38033.5	150.8891 8	188.4766 2	38.8628 1	.117657 2	.250489 3	12.252157 5	.800E-4 5	7.011928	44	3	1.16
38034.5	155.721 1	184.7794 2	38.8631 1	.117646 2	.502745 4	12.252327 5	.872E-4 6	7.011937	32	3	.78
38035.5	160.57 1	181.0790 4	38.864 2	.11764 1	.75515 4	12.25247 3	.810E-4 4	7.011831	20	3	.74
38036.5	165.359 8	177.3829 4	38.8650 8	.117615 5	.00770 3	12.25261 2	.829E-4 5	7.012043	24	3	1.13
38037.5	170.250 5	173.6860 2	38.8661 4	.117619 2	.26040 2	12.25276 2	.839E-4 3	7.011984	29	3	.72
38038.5	175.088 4	169.9881 2	38.8674 4	.117628 2	.51332 1	12.252925 7	.814E-4 5	7.011804	37	3	1.15
38039.5	179.948 4	166.2903 2	38.8692 4	.117610 4	.76634 1	12.25314 3	.833E-4 4	7.011906	37	3	1.14
38040.5	184.810 9	162.5901 6	38.8702 7	.11761 1	.01556 3	12.25330 3	.970E-4 9	7.011703	33	3	2.41
38041.5	189.677 8	158.8926 2	38.8722 2	.117613 8	.27290 3	12.25354 2	.1286E-3 6	7.011736	48	3	1.62
38042.5	194.5268 9	155.1951 2	38.8730 1	.117632 2	.526583 3	12.253780 4	.1544E-3 5	7.011452	58	3	1.25
38043.5	199.3880 7	151.5014 1	38.8732 1	.117617 1	.780517 2	12.254103 3	.1628E-3 3	7.011509	57	3	.85
38044.5	204.254 1	147.8045 1	38.8733 1	.117622 2	.034777 3	12.254425 4	.1620E-3 3	7.011320	42	3	.86
38045.5	209.123 1	144.1061 1	38.8734 0	.117626 2	.289379 3	12.254734 3	.1560E-3 2	7.011175	44	3	.62
38046.5	213.9576 8	140.4054 1	38.8741 1	.117676 1	.544263 3	12.255062 3	.1522E-3 3	7.010599	64	3	.99
38047.5	218.8625 4	136.7070 1	38.8735 0	.117690 1	.799477 1	12.255361 1	.1484E-3 2	7.010459	77	3	.81
38048.5	223.7372 5	133.0101 1	38.8732 4	.117694 1	.054984 1	12.255657 2	.1509E-3 2	7.010283	71	3	.90
38049.5	228.611 2	129.3077 2	38.8731 1	.117745 2	.310793 5	12.255960 6	.1460E-3 4	7.009729	62	3	1.40
38050.5	233.478 1	125.6109 2	38.8742 1	.117764 2	.566900 3	12.256243 3	.1351E-3 3	7.009489	52	3	1.04
38051.5	238.356 1	121.9105 2	38.8735 0	.117804 2	.823282 5	12.25650 1	.1335E-3 2	7.009046	48	3	.72
38052.5	243.2275 4	118.2104 1	38.8742 0	.117864 1	.075933 1	12.256792 1	.1375E-3 2	7.008499	43	3	.59
38053.5	248.096 2	114.5092 4	38.8756 1	.117931 2	.336860 6	12.25706 1	.1452E-3 5	7.007852	35	3	1.27
38054.5	252.9702 7	110.8085 3	38.8758 1	.118001 2	.554082 2	12.257378 3	.1533E-3 4	7.007122	35	3	1.05
38055.5	257.849 2	107.108 1	38.8755 2	.118066 7	.851616 8	12.25764 8	.1432E-3 8	7.006596	32	3	1.95
38056.5	262.7267 4	103.4062 3	38.8748 1	.118132 1	.105435 2	12.257962 1	.1380E-3 3	7.005920	42	3	.63
38057.5	267.5975 4	99.7046 3	38.8758 0	.118212 1	.367535 1	12.258240 2	.1430E-3 2	7.005183	44	3	.53
38058.5	272.471 2	96.001 1	38.8742 2	.118265 8	.625930 5	12.258546 8	.1557E-3 8	7.004603	55	3	2.76
38059.5	277.42 5	92.300 4	38.8752 8	.11836 4	.8843 2	12.2586 2	.199E-3 2	7.003863	46	3	6.04

T (MJD)	ω	Ω	i	e	M	n	n/2	q	N	D	σ
38060.5	282.20 3	88.594 2	28.8755 6	.11846 2	.1438 1	12.25945 9	.2383E-3 7	7.002830	38	3	1.87
38061.5	287.04 4	84.889 3	28.876 1	.11851 2	.4035 1	12.2596 1	.208E-3 1	7.002250	36	3	2.49
38062.5	291.97 1	81.188 1	28.8771 6	.11863 1	.66330 4	12.26034 7	.1888E-3 9	7.001061	36	3	2.12
38063.5	296.829 1	77.4828 5	28.8774 2	.118707 3	.923749 3	12.260575 2	.1737E-3 3	7.000296	44	3	.91
38064.5	301.6956 9	73.7779 3	28.8772 2	.118787 2	.184503 2	12.260921 2	.1704E-3 2	6.999632	46	3	.59
38065.5	306.5608 6	70.0717 2	28.8781 1	.118889 2	.445588 2	12.261267 2	.1735E-3 2	6.998589	46	3	.66
38066.5	311.4337 4	66.3672 1	28.8778 1	.118981 2	.707026 1	12.261606 2	.1746E-3 2	6.997750	37	3	.59
38067.5	316.3012 5	62.6626 1	28.8771 1	.119086 2	.968805 1	12.261954 2	.1742E-3 2	6.996831	32	3	.69
38068.5	321.1711 6	58.9557 1	28.8772 2	.119204 2	.230935 2	12.262301 2	.1717E-3 3	6.995811	38	3	.93
38069.5	326.030 3	55.2470 7	28.8775 7	.11934 1	.493385 8	12.26265 1	.185E-3 1	6.994481	37	3	4.94
38070.5	330.903 3	51.5407 6	28.8785 6	.11945 1	.75622 1	12.26305 1	.220E-3 2	6.993479	31	3	4.36
38071.5	335.756 2	47.8321 6	28.8772 6	.119541 7	.019543 6	12.263534 6	.233E-3 1	6.992569	19	3	3.39
38072.5	340.6211 5	44.1257 1	28.8751 1	.119650 2	.283304 1	12.263976 2	.2154E-3 3	6.991519	26	3	.75
38073.5	345.4837 3	40.4192 1	28.8752 1	.119763 1	.547493 9	12.264404 1	.2165E-3 2	6.990535	40	3	.81
38074.5	350.3585 4	36.7102 1	28.8772 1	.119885 1	.812116 9	12.264836 1	.2166E-3 3	6.989292	52	3	.96
38075.5	355.2176 5	33.0018 2	28.8772 1	.119989 1	.077163 1	12.265252 2	.2028E-3 2	6.988294	48	3	1.01
38076.5	.0790 4	29.2916 2	28.8768 1	.120119 1	.342615 1	12.2656470 8	.1970E-3 1	6.987203	54	3	.95
38077.5	4.9271 3	25.5833 2	28.8783 1	.120225 1	.608460 1	12.266040 1	.1939E-3 2	6.986254	48	3	.72
38078.5	9.7877 4	21.8717 2	28.8771 1	.120360 1	.874690 1	12.266420 1	.1910E-3 2	6.984997	44	3	.90
38079.5	14.6464 5	18.1599 3	28.8776 1	.120447 2	.141297 1	12.266801 1	.1943E-3 2	6.984088	36	3	.92
38080.5	19.502 1	14.4492 8	28.8771 2	.120561 5	.408294 3	12.267183 4	.2060E-3 6	6.983129	26	3	1.55
38081.5	24.3485 7	10.7373 4	28.8755 1	.120699 3	.675696 1	12.267618 2	.2110E-3 2	6.981876	24	3	.93
38082.5	29.207 1	7.0236 7	28.8765 2	.120812 4	.943523 2	12.268031 2	.2095E-3 3	6.980791	25	3	1.59
38083.5	34.0468 5	3.3125 3	28.8764 1	.120959 3	.211765 1	12.268452 1	.2065E-3 3	6.979486	27	3	1.01
38084.5	38.8542 4	359.5996 3	28.8760 1	.121056 4	.480424 1	12.268864 1	.2049E-3 2	6.978568	24	3	.93
38085.5	43.7461 4	355.8838 2	28.8747 1	.121185 3	.745494 1	12.269275 1	.2031E-3 3	6.977359	21	3	.60
38086.5	48.5955 6	352.1703 2	28.8757 1	.121296 2	.018972 2	12.269683 3	.2030E-3 6	6.976258	23	3	.68
38087.5	53.419 6	348.4560 3	28.8751 2	.121435 3	.28891 2	12.27011 1	.1934E-3 4	6.975122	25	3	.79
38088.5	58.274 1	344.7400 3	28.8745 1	.121554 3	.555119 4	12.270469 4	.1930E-3 5	6.973938	39	3	1.43

T (MJD)	ω	Ω	i	e	M	n	n' / 2	q	N	D	σ
38089.5	63.1267 4	341.0227 2	38.8741 1	.121658 2	.825783 1	12.270877 2	.2087E-3 4	6.973050	47	3	1.27
38090.5	67.9520 4	337.3068 2	38.8740 1	.121778 2	.100870 1	12.271296 1	.2065E-3 3	6.971868	52	3	1.55
38091.5	72.7543 3	333.5884 1	38.8726 0	.121888 1	.372369 1	12.2717002 6	.2021E-3 2	6.970853	45	3	.91
38092.5	77.6300 4	329.8708 2	38.8742 1	.121973 3	.644274 1	12.2721024 9	.1989E-3 3	6.970023	38	3	1.21
38093.5	82.4691 2	326.1532 2	38.8737 1	.122057 3	.916574 1	12.272506 1	.2017E-3 3	6.969131	29	3	.96
38094.5	87.3072 3	322.4342 2	38.8741 1	.122138 2	.185284 1	12.2729156 7	.2072E-3 2	6.968305	34	3	1.15
38095.5	92.146 1	318.7174 6	38.8745 2	.122226 6	.462413 2	12.273341 3	.2174E-3 6	6.967548	31	3	3.09
38096.5	96.980 2	315.000 1	38.8750 5	.12233 1	.735958 4	12.273789 6	.256E-3 2	6.966535	30	3	5.37
38097.5	101.816 2	311.278 1	38.8746 3	.122389 8	.010034 7	12.274339 9	.266E-3 1	6.965860	25	3	2.86
38098.5	106.621 8	307.554 1	38.8756 2	.12241 1	.28479 3	12.27500 2	.2709E-3 8	6.965508	23	3	1.30
38099.5	111.481 2	303.8323 9	38.8754 3	.122487 7	.555885 6	12.275382 9	.259E-3 2	6.964726	28	3	2.76
38100.5	116.3195 8	300.1148 4	38.8768 2	.122569 4	.835524 2	12.275919 2	.2272E-3 9	6.963896	32	3	2.19
38101.5	121.1674 5	296.3900 3	38.8771 1	.122610 2	.111663 1	12.276347 2	.2180E-3 3	6.963330	34	3	1.53
38102.5	125.9985 5	292.6708 4	38.8785 1	.122665 3	.388224 1	12.276776 2	.214E-3 4	6.962798	35	3	1.12
38103.5	130.8544 9	288.9455 3	38.8756 1	.122717 3	.665213 3	12.277203 3	.2136E-3 5	6.962187	29	3	1.02
38104.5	135.689 4	285.2256 4	38.8812 1	.122741 3	.94261 1	12.27761 1	.212E-3 1	6.961848	21	3	.87
38105.5	140.526 4	281.5020 4	38.8827 2	.122758 5	.22047 1	12.27803 2	.2164E-3 7	6.961525	18	3	.61
38106.5	145.41 1	277.780 1	38.8837 4	.12285 2	.45866 4	12.27857 4	.248E-3 1	6.960634	18	3	1.44
38107.5	150.242 2	274.0555 3	38.8835 1	.12282 3	.777524 8	12.278999 6	.2539E-3 3	6.960696	32	3	.74
38108.5	155.0975 6	270.3318 2	38.8843 1	.12283 2	.056783 2	12.279501 2	.2421E-3 4	6.960373	53	3	.96
38109.5	159.9732 4	266.6067 2	38.8845 1	.12286 2	.336528 1	12.279982 2	.2311E-3 4	6.959992	63	3	1.46
38110.5	164.8394 4	262.8824 1	38.8850 1	.12289 2	.616732 1	12.280426 2	.2202E-3 3	6.959628	64	3	1.39
38111.5	169.6995 5	259.1589 2	38.8874 1	.122915 2	.897363 1	12.280881 2	.2441E-3 4	6.959196	57	3	1.90
38112.5	174.5621 3	255.4340 1	38.8881 1	.122933 1	.178493 7	12.2813782 8	.2528E-3 2	6.958933	59	3	.96
38113.5	179.4285 3	251.7081 2	38.8881 1	.122943 1	.460123 9	12.281878 1	.2492E-3 2	6.958643	58	3	1.25
38114.5	184.3117 2	247.9798 1	38.8887 1	.122974 1	.742251 6	12.2823645 7	.2387E-3 1	6.958245	65	3	.86
38115.5	189.1811 2	244.2560 1	38.8908 1	.123009 1	.024854 5	12.2828370 8	.2370E-3 1	6.957750	61	3	.70
38116.5	194.0586 2	240.5309 1	38.8908 1	.123025 1	.307928 6	12.2833102 6	.2364E-3 1	6.957447	57	3	.67
38117.5	198.9493 4	236.8035 3	38.8914 1	.123068 2	.591472 1	12.283786 1	.2418E-3 3	6.956879	44	3	1.12
38118.5	203.8234 4	233.0742 2	38.8912 1	.123112 2	.875509 9	12.2842765 9	.2446E-3 2	6.956426	49	3	1.09
38119.5	208.7138 4	229.3497 3	38.8925 1	.123138 2	.160030 9	12.284769 1	.2431E-3 3	6.956029	43	3	1.05

T (MJD)	ω	Ω	i	e	M	n	n'/2	q	N	D	σ
38120.5	213.5995 6	225.6212 4	38.8912 2	.123186 2	.445050 1	12.285276 1	.2536E-3 3	6.955367	40	3	1.65
38121.0	216.0507 6	223.7526 4	38.8908 2	.123219 4	.587778 2	12.285541 3	.251E-3 1	6.955042	22	2	1.11
38122.0	220.9375 3	220.0260 2	38.8913 1	.123239 1	.873562 1	12.2860225 9	.2383E-3 3	6.954693	34	2	.62
38123.0	225.8268 3	216.2961 2	38.8922 1	.123295 1	.159825 1	12.2865007 8	.2360E-3 2	6.954102	32	2	.61
38124.0	230.716 1	212.5625 6	38.8911 3	.123367 6	.446561 3	12.287002 7	.287E-3 2	6.953325	26	2	1.85
38125.0	235.6020 8	208.8316 4	38.8914 2	.123416 5	.733871 2	12.287563 6	.291E-3 2	6.952805	22	2	.93
38126.0	240.497 1	205.1026 7	38.8927 3	.123466 6	.021750 3	12.288172 2	.281E-3 1	6.952128	20	2	1.45
38127.0	245.3804 4	201.3713 2	38.8925 1	.123533 2	.310205 1	12.288708 2	.243E-3 4	6.951311	13	2	.41
38128.0	250.2755 2	197.6384 1	38.8923 0	.123597 2	.559169 1	12.289214 1	.242E-3 1	6.950670	15	2	.40
38129.0	255.1556 3	193.9031 2	38.8925 4	.123689 1	.888628 1	12.2897085 8	.2440E-3 5	6.949792	28	2	.54
38130.0	260.0497 2	190.1711 2	38.8927 0	.123753 1	.178582 1	12.2901976 7	.2400E-3 4	6.949027	31	2	.56
38131.0	264.9422 5	186.4369 5	38.8925 1	.123843 3	.465020 1	12.290694 3	.256E-3 1	6.948175	24	2	.95
38132.0	269.8232 6	182.7012 4	38.8943 1	.123941 3	.755971 2	12.291208 8	.2787E-3 9	6.947274	28	2	1.00
38133.0	274.7178 5	178.9655 3	38.8947 1	.124022 5	.051471 1	12.291822 1	.3136E-3 5	6.946306	39	2	1.00
38134.0	279.6060 4	175.2286 2	38.8950 1	.124095 5	.343604 1	12.292448 2	.3193E-3 6	6.945537	41	2	.82
38135.0	284.4907 7	171.4913 4	38.8948 1	.124178 3	.636371 2	12.293065 4	.2652E-3 8	6.944653	34	2	.77
38136.0	289.3801 3	167.7535 2	38.8960 1	.124268 2	.925694 1	12.293579 1	.2538E-3 5	6.943665	52	2	1.08
38137.0	294.2672 4	164.0152 3	38.8967 1	.124351 2	.223526 1	12.294081 1	.2487E-3 4	6.942893	48	2	1.09
38138.0	299.1454 9	160.2737 6	38.8972 1	.124428 4	.517858 1	12.29457 2	.273E-3 1	6.942080	38	2	1.18
38139.0	304.0377 7	156.5379 3	38.8978 1	.124526 4	.812721 1	12.295124 1	.2671E-3 5	6.941046	42	2	1.16
38140.0	308.9163 6	152.7995 3	38.8988 1	.124622 4	.108120 1	12.295639 2	.2468E-3 7	6.940115	40	2	1.69
38141.0	313.8046 3	149.0598 2	38.8990 1	.124703 2	.404001 1	12.296107 2	.2223E-3 7	6.939300	42	2	1.26
38142.0	318.684 2	145.3194 5	38.8996 1	.124793 4	.700319 6	12.29650 2	.2337E-3 8	6.938512	46	2	1.26
38143.0	323.5706 7	141.5780 4	38.8995 2	.124884 5	.997131 2	12.29703 3	.230E-3 1	6.937525	40	2	1.73
38144.0	328.451 2	137.8351 3	38.9006 1	.124979 5	.294363 8	12.297418 9	.1869E-3 6	6.936594	32	2	.83
38145.0	333.337 1	134.0956 4	38.9014 1	.125071 4	.591973 4	12.297800 6	.1890E-3 6	6.935798	38	2	1.01
38146.0	338.2262 6	130.3503 3	38.9009 1	.125205 5	.889500 2	12.298175 3	.2045E-3 9	6.934559	47	2	1.65
38147.0	343.1175 5	126.6115 2	38.9028 1	.125298 4	.188331 2	12.298601 3	.2210E-3 8	6.933709	49	2	1.80
38148.0	348.0020 5	122.8692 2	38.9029 1	.125358 3	.487150 2	12.299021 3	.2035E-3 9	6.932653	50	2	1.59
38149.0	352.9013 6	119.1269 3	38.9037 1	.125489 3	.786355 2	12.299390 3	.1863E-3 7	6.931877	42	2	1.49

T (MJD)	ω	Ω	i	e	M	n	n'/2	q	N	D	σ
38150.C	357.787 3	115.385 1	28.903E 4	.12562 1	.05591 1	12.29993 1	.318E-3 3	6.930572	38	2	5.75
38151.C	2.6692 6	111.6388 2	28.904C 1	.12555C 3	.38616C 2	12.300582 6	.323E-3 1	6.930101	49	2	1.44
38152.C	7.56C4 5	107.8952 2	28.9051 1	.125767 2	.6810C4 2	12.301189 2	.3234E-3 8	6.928950	46	2	1.09
38153.C	12.4472 6	104.1517 2	28.9056 1	.125662 3	.988568 2	12.301837 3	.351E-3 1	6.928006	38	2	.98
38154.C	17.324C 5	100.4077 2	28.9063 1	.125934 3	.290775 2	12.302570 2	.3776E-3 5	6.927073	42	2	1.56
38155.C	22.2337 4	96.6619 2	28.9042 1	.126028 2	.593733 1	12.303313 2	.3648E-3 4	6.92611C	26	2	.64
38156.C	27.123 1	92.9165 4	28.9048 2	.126115 3	.857416 3	12.304062 2	.3763E-3 6	6.925076	23	2	1.08
38157.C	31.9923 7	89.1712 2	28.9062 1	.126159 4	.201876 3	12.304837 3	.3904E-3 9	6.924165	18	2	.58
38158.C	36.876C 5	85.4232 2	28.9057 1	.126266 2	.507106 1	12.305651 3	.4230E-3 4	6.923363	21	2	.84
38159.C	41.7707 9	81.6759 4	28.9037 1	.126376 4	.813171 3	12.306539 3	.4683E-3 8	6.922141	25	2	1.53
38160.C	46.6541 3	77.9273 2	28.9032 1	.12646C 2	.126171 1	12.307466 1	.4678E-3 4	6.921173	25	2	.66
38161.C	51.5382 2	74.1775 1	28.9032 C	.126541 1	.42811C 1	12.3084004 8	.4609E-3 2	6.920118	25	2	.49
38162.C	56.429C 1	70.4261 8	28.9025 2	.12660C 3	.736972 3	12.309335 5	.4692E-3 7	6.919311	27	2	2.26
38163.C	61.3131 9	66.6781 5	28.9023 2	.126695 3	.046771 2	12.310272 4	.470E-3 1	6.918259	20	2	1.86
38164.C	66.1995 9	62.9253 5	28.9017 2	.126765 4	.357509 2	12.311215 7	.403E-3 2	6.917302	20	2	2.33
38165.C	71.0854 3	59.1730 2	28.9025 1	.126837 1	.665088 1	12.311953 1	.3787E-3 3	6.916413	26	2	.78
38166.C	75.9587 3	55.4186 2	28.9017 1	.126903 2	.981418 1	12.312690 1	.3593E-3 6	6.915581	31	2	.97
38167.C	80.8397 2	51.6633 1	28.9016 C	.126986 1	.294472 1	12.313420 2	.3640E-3 4	6.914708	30	2	.56
38168.C	85.7232 4	47.9082 2	28.9026 1	.12704C 2	.608243 1	12.314118 1	.3333E-3 6	6.913993	32	2	1.04
38169.C	90.6025 9	44.1537 5	28.900E 1	.127108 5	.922721 2	12.314841 4	.376E-3 1	6.913219	22	2	1.51
38170.C	95.486 2	40.3962 8	28.9021 4	.127115 1	.237924 3	12.315607 5	.368E-3 2	6.912579	28	2	3.82
38171.C	100.3832 4	36.6384 2	28.9018 1	.127229 3	.553874 1	12.316276 2	.2998E-3 8	6.911761	30	2	1.17
38172.C	105.2526 5	32.8829 3	28.9025 1	.12729C 3	.876436 1	12.316859 2	.291E-3 1	6.911078	30	2	1.36
38173.C	110.146C 5	29.1237 6	28.9022 1	.127368 3	.187575 1	12.317425 2	.2840E-3 7	6.910203	27	2	.68
38174.C	115.0128 5	25.3675 4	28.9025 1	.127435 3	.505274 1	12.317975 2	.2757E-3 8	6.909456	19	2	.70
38175.C	119.889 1	21.607 1	28.902 2	.127482 5	.823553 4	12.318591 6	.319E-3 2	6.908921	20	2	1.10
38176.C	124.814 6	17.848 1	28.9015 2	.127548 8	.14234 2	12.31919 3	.315E-3 2	6.908008	16	2	.65
38177.C	129.68 1	14.086 1	28.905C 5	.127551 8	.46193 4	12.3198 1	.342E-3 2	6.907845	23	2	1.79
38178.C	134.5689 9	10.3253 5	28.9042 2	.12762C 3	.782118 2	12.32063 4	.417E-3 1	6.907048	37	2	1.13
38179.C	139.452 6	6.5640 4	28.9053 2	.127642 7	.10317 2	12.32144 2	.3970E-3 8	6.906508	40	2	1.11
38180.C	144.363 9	2.8020 5	28.9063 3	.127674 8	.42492 3	12.32221 4	.375E-3 1	6.905963	26	2	.75

T (MJD)	ω	Ω	i	e	M	n	n'/2	q	N	D	σ
38181.5	149.25 1	359.040 1	28.9072 6	.12765 1	.74750 4	12.32299 4	.399E-3 2	6.905647	24	2	1.47
38182.5	154.1412 8	355.2775 7	28.9058 3	.127706 3	.670874 1	12.32393 4	.431E-3 1	6.905086	25	2	.91
38183.5	156.606 3	353.3942 4	28.9064 3	.127701 4	.23290 1	12.32424 2	.4259E-3 4	6.905029	31	3	.91
38184.5	161.52 2	349.631 1	28.9083 8	.12776 2	.55748 6	12.32529 6	.4072E-3 9	6.904162	27	3	2.19
38185.5	166.420 6	345.8659 4	28.9077 4	.127774 7	.88288 2	12.32583 4	.3767E-3 8	6.903824	26	3	.85
38186.5	171.24 2	342.100 1	28.908 1	.12777 2	.20538 7	12.32676 8	.341E-3 2	6.904137	26	3	2.14
38187.5	176.05 2	338.338 1	28.907 1	.12754 3	.53660 5	12.32765 8	.324E-3 2	6.904930	18	3	2.23
38188.5	181.146 7	334.567 1	28.910 2	.12780 3	.86350 2	12.32826 3	.520E-3 6	6.902760	25	3	9.60
38189.5	186.053 3	330.800 1	28.910 1	.12784 2	.192249 7	12.32922 1	.497E-3 3	6.902024	29	3	9.67
38190.5	190.9474 6	327.0332 3	28.9114 2	.127831 4	.521965 1	12.330177 2	.4788E-3 7	6.901744	27	3	1.63
38191.5	195.8675 6	323.2626 3	28.9116 2	.127853 4	.852603 1	12.331084 1	.4315E-3 5	6.901287	23	3	1.71
38192.5	200.7871 4	319.4917 3	28.9120 2	.127803 3	.184120 1	12.331939 3	.4327E-3 7	6.900513	19	3	.99
38193.5	205.7217 4	315.7222 3	28.9115 2	.127824 1	.516495 1	12.332808 1	.4327E-3 2	6.900049	29	3	1.14
38194.5	210.6254 5	311.9502 3	28.9121 2	.127974 3	.845733 1	12.333666 1	.4340E-3 5	6.899398	24	3	1.06
38195.5	215.5627 3	308.1791 2	28.9122 2	.128000 2	.183851 1	12.334556 1	.4367E-3 5	6.898799	25	3	.77
38196.5	220.483 1	304.4080 4	28.9122 7	.128027 5	.518857 2	12.335390 3	.4269E-3 9	6.898267	24	3	1.25
38197.5	225.4186 7	300.6333 6	28.9114 6	.128088 5	.854685 2	12.336245 2	.3747E-3 6	6.897558	32	3	1.95
38198.5	230.344 2	296.859 1	28.9127 8	.128124 9	.151277 4	12.336980 6	.420E-3 2	6.896946	44	3	6.37
38199.5	235.2727 3	293.0834 2	28.9145 1	.128158 1	.528683 1	12.337844 1	.4445E-3 5	6.896286	41	3	.87
38200.5	240.211 1	289.2052 8	28.9136 5	.128192 5	.866937 3	12.338676 3	.4125E-3 8	6.895758	48	3	3.31
38201.5	245.140 2	285.530 2	28.912 1	.12823 1	.206077 7	12.33954 1	.347E-3 2	6.894908	48	3	5.70
38202.5	250.063 2	281.751 1	28.9140 7	.128311 6	.545893 5	12.340091 6	.284E-3 1	6.894230	55	3	3.38
38203.5	254.9854 9	277.9732 6	28.9126 4	.128354 4	.886314 3	12.340646 2	.2532E-3 7	6.893397	44	3	1.69
38204.5	259.9156 5	274.1977 4	28.9146 2	.128452 2	.227222 2	12.341151 2	.2344E-3 4	6.892815	41	3	.99
38205.5	264.849 1	270.420 1	28.9140 6	.128518 7	.568601 4	12.341624 4	.243E-3 1	6.892072	42	3	3.16
38206.5	269.775 3	266.642 2	28.914 1	.12858 1	.910471 9	12.342095 9	.289E-3 2	6.891403	48	3	7.16
38207.5	274.702 2	262.859 1	28.9127 4	.128664 7	.252914 9	12.34287 6	.327E-3 1	6.890373	42	3	2.50
38208.5	279.625 3	259.0770 8	28.9135 3	.128743 8	.55602 1	12.34347 1	.2939E-3 5	6.889637	42	3	1.51
38209.5	284.564 2	255.2975 4	28.9157 1	.128836 6	.935714 9	12.34400 1	.2806E-3 2	6.888623	50	3	.69
38210.5	289.486 2	251.5132 4	28.9160 1	.128884 5	.283992 7	12.34456 1	.2796E-3 3	6.888060	55	3	.70
38211.5	294.416 2	247.7307 5	28.9163 1	.128963 7	.628823 8	12.34511 1	.2853E-3 3	6.887292	54	3	.87

T (MJD)	ω	i	e	M	n	n/2	q	N	D	σ
38030.0	271.773 8	201.1233 1	66.8146 2	.CC771C 2	.41C65 2	13.8702562 1	.21E-6 3	7.261589	32 12	1.42
38032.0	270.352 8	196.2723 1	66.8146 2	.CC7714 2	.15117 2	13.8702570 1	.21E-6 3	7.261604	30 12	1.27
38034.0	268.843 7	191.4229 1	66.8145 2	.CC7721 2	.89168 2	13.8702578 2	.26E-6 4	7.261560	27 12	1.34
38036.0	267.448 8	186.5732 1	66.8142 2	.CC77C7 2	.6322C 2	13.8702589 1	.18E-6 3	7.261631	31 12	1.36
38038.0	266.03 1	181.7217 2	66.8148 2	.CC77C7 2	.37265 4	13.8702597 1	.10E-6 3	7.261576	26 12	1.56
38040.0	264.557 4	176.8712 1	66.814C 1	.CC77C6 1	.11328 1	13.8702603 1	.20E-6 2	7.26161C	40 12	.97
38042.0	263.176 4	172.C233 1	66.8147 1	.CC77C3 1	.85381 1	13.8702611 1	.27E-6 2	7.261632	43 12	.84
38044.0	261.851 3	167.1724 1	66.8132 1	.CC7713 1	.554324 9	13.8702622 1	.38E-6 2	7.261592	44 12	.78
38046.0	260.37C 4	162.3237 1	66.8141 1	.CC7659 1	.33485 1	13.8702636 1	.43E-6 2	7.261714	42 12	.82
38048.0	258.898 3	157.4734 1	66.8145 1	.CC7726 1	.C75377 9	13.8702654 2	.43E-6 4	7.261441	38 12	.73
38050.0	257.5C4 4	152.6236 1	66.8129 1	.CC77C3 1	.81589 1	13.8702676 0	.49E-6 1	7.261689	38 12	.82
38052.0	256.055 7	147.7739 2	66.8138 1	.CC7715 3	.55641 2	13.8702695 1	.52E-6 2	7.261561	17 12	.78
38054.0	254.7C 1	142.924C 4	66.8168 3	.CC7734 4	.26694 3	13.8702709 1	.35E-6 2	7.261495	15 12	.86
38056.0	253.02 17	138.C77 2	66.816 2	.CC778 4	.C36C 5	13.8702722 2	.44E-6 8	7.261116	13 12	.81
38058.0	251.83 9	133.226 1	66.814 1	.CC771 2	.7781 2	13.8702740 1	.47E-6 3	7.261595	17 12	.74
38060.0	250.61 5	128.3759 8	66.8126 8	.CC772 1	.5184 1	13.8702756 1	.38E-6 2	7.261533	21 12	.88
38062.0	249.0C 3	123.5239 6	66.8174 7	.CC773 1	.255C4 7	13.8702771 1	.29E-6 2	7.261517	27 12	1.08
38064.0	247.45 2	118.6748 3	66.8178 4	.CC7724 9	.99563 5	13.8702783 1	.25E-6 1	7.261520	31 12	1.00
38066.0	246.3C 2	113.8233 3	66.8178 4	.CC7733 5	.74C24 4	13.8702791 1	.24E-6 1	7.261418	29 12	1.35
38068.0	244.59 1	108.9750 2	66.8188 3	.CC7738 7	.48C79 3	13.8702800 0	.22E-6 1	7.261413	32 12	.99
38070.0	243.18 2	104.1261 4	66.8176 5	.CC772 1	.22130 5	13.8702807 1	.15E-6 2	7.261449	35 12	1.69
38072.0	241.78 2	99.2772 5	66.816C 7	.CC775 2	.96185 5	13.8702812 2	.11E-6 4	7.261315	31 12	1.64
38074.0	240.61 2	94.4254 2	66.8163 4	.CC7768 3	.7C241 6	13.870281C 1	-.26E-7 27	7.261110	32 12	2.38
38076.0	239.17 1	89.5747 1	66.8168 2	.CC7748 2	.443C3 4	13.8702811 1	-.16E-7 24	7.261357	40 12	1.77
38078.0	237.62 1	84.7253 1	66.8154 2	.CC7761 1	.18352 3	13.8702808 1	-.52E-7 22	7.261295	44 12	1.66
38080.0	236.17 1	79.8748 1	66.814C 2	.CC7761 2	.92413 4	13.8702807 1	-.3E-8 33	7.261255	44 12	1.98
38082.0	234.85 1	75.0249 1	66.8135 2	.CC7774 2	.66465 4	13.8702804 1	.74E-7 29	7.261124	50 12	2.06
38084.0	233.32 1	70.1751 1	66.812C 2	.CC7777 2	.4C522 4	13.8702806 1	.68E-7 26	7.261123	53 12	2.2C
38086.0	231.88 2	65.3243 1	66.815C 2	.CC7757 2	.14577 4	13.8702809 2	.66E-7 37	7.260911	43 12	2.13
38088.0	230.63 1	60.4738 1	66.8141 1	.CC7767 2	.89636 3	13.870281C 1	.16E-7 31	7.261168	27 12	1.41

T (MJD)	ω	Ω	i	e	M	n	n'/2	q	N	D	σ
38090.0	229.50 2	55.6249 2	66.8150 3	.CC785 3	.62685 5	13.8702819 3	.11E-6 7	7.261032	25 12	2.36	
38092.0	227.58 4	50.7724 3	66.8167 4	.CC780 5	.3674 1	13.8702829 3	.22E-6 7	7.260933	23 12	3.08	
38094.0	226.06 5	45.9225 2	66.8178 4	.CC780 4	.1082 1	13.8702839 2	.34E-6 5	7.260859	19 12	1.94	
38096.0	224.33 7	41.0732 3	66.8203 6	.CC780 5 4	.8456 2	13.8702854 1	.44E-6 2	7.260902	19 12	1.31	
38098.0	223.02 5	36.2236 3	66.8180 4	.CC790 2	.5501 1	13.8702870 1	.45E-6 2	7.261025	24 12	1.12	
38100.0											
38124.0											
38126.0	203.42 6	328.3308 6	66.8151 9	.CC789 1	.9577 2	13.8702980 4	.23E-6 2	7.260263	34 12	1.25	
38128.0	201.79 2	323.4780 2	66.8146 5	.CC787 3	.65884 6	13.8702995 2	.23E-6 1	7.260607	25 12	.76	
38130.0	200.40 2	318.6283 1	66.8129 4	.CC788 2	.43528 6	13.8702999 1	.26E-6 2	7.260300	30 12	1.36	
38132.0	199.055 9	313.7792 1	66.8152 2	.CC789 2	.17800 3	13.8703009 1	.22E-6 2	7.260330	43 12	1.28	
38134.0	197.743 9	308.9284 1	66.8145 2	.CC787 1	.92061 3	13.8703017 1	.23E-6 4	7.260381	34 12	1.24	
38136.0	196.330 9	304.0784 1	66.8160 2	.CC788 2	.66122 3	13.8703028 1	.26E-6 2	7.260397	37 12	1.28	
38138.0	194.797 8	299.2281 1	66.8147 1	.CC791 1	.40184 2	13.8703037 1	.25E-6 2	7.260030	43 12	1.18	
38140.0	193.458 5	294.3775 1	66.8122 1	.CC791 1	.14249 2	13.8703049 1	.33E-6 2	7.260106	50 12	1.07	
38142.0	192.027 5	289.5270 1	66.8122 1	.CC791 1	.88311 1	13.8703061 1	.32E-6 1	7.260051	49 12	.97	
38144.0	190.738 6	284.6760 1	66.8155 2	.CC794 1	.62375 2	13.8703075 1	.34E-6 2	7.259790	41 12	.93	
38146.0	189.351 5	279.8265 1	66.8121 2	.CC793 1	.36436 2	13.8703088 1	.39E-6 2	7.259976	45 12	.89	
38148.0	187.906 7	274.9754 1	66.8138 2	.CC792 1	.10505 2	13.8703106 0	.49E-6 1	7.260004	51 12	.94	
38150.0	186.551 8	270.1258 1	66.8136 3	.CC793 1	.84567 2	13.8703125 0	.53E-6 1	7.259985	52 12	.98	
38152.0	185.02 6	265.2760 2	66.8114 4	.CC797 3	.5865 2	13.8703147 1	.58E-6 2	7.259667	51 12	1.16	
38154.0	183.76 5	260.4253 2	66.8121 4	.CC794 1 4	.3271 1	13.8703168 1	.54E-6 1	7.259959	63 12	1.15	
38156.0	182.36 9	255.5758 4	66.8152 6	.CC794 3 7	.0676 2	13.8703188 2	.53E-6 1	7.259859	78 12	1.12	
38160.0	179.60 9	245.8765 7	66.8160 8	.CC796 1	.5469 3	13.8703232 2	.52E-6 1	7.259804	79 12	1.15	
38162.0	178.24 8	241.028 1	66.817 1	.CC796 1	.2855 2	13.8703254 2	.55E-6 1	7.259712	73 12	1.17	
38164.0	176.81 7	236.179 1	66.816 1	.CC800 1	.0301 2	13.8703264 2	.37E-6 1	7.259397	60 12	1.02	

T (MJD)	ω	Ω	i	e	M	n	n/2	q	N	D	σ
38168.0	174.07 12	226.480 1	66.817 1	.CC6C3 2	.5114 3	13.8703308 3	.32E-6 1	7.259236	33	12	.87
38170.0	172.74 8	221.6297 9	66.8162 8	.CC755 1	.2521 2	13.8703321 2	.32E-6 1	7.259535	35	12	.90
38172.0	171.44 8	216.7787 5	66.8155 8	.CC6C4 2	.5527 2	13.8703331 2	.27E-6 1	7.259181	43	12	1.26
38174.0	170.02 2	211.9295 2	66.8147 2	.CC6C37 4	.73349 4	13.8703357 2	.16E-6 2	7.259142	57	12	1.36
38176.0	168.625 9	207.0799 1	66.8148 1	.CC6C48 2	.47428 3	13.8703352 1	.21E-6 1	7.259149	66	12	.94
38178.0	167.352 8	202.2309 1	66.8145 1	.CC6C58 1	.21492 2	13.8703362 1	.18E-6 1	7.259076	65	12	.92
38180.0	165.792 8	197.3816 1	66.8142 1	.CC6C027 1	.95559 2	13.8703370 1	.21E-6 2	7.259273	61	12	.92
38182.0	164.521 7	192.5316 1	66.8144 1	.CC6C71 1	.65623 2	13.8703378 1	.25E-6 1	7.258886	53	12	.72
38184.0	163.227 8	187.6822 1	66.8155 1	.CC6C63 2	.43689 2	13.8703389 1	.26E-6 1	7.259016	50	12	.74
38186.0	161.627 7	182.8326 1	66.8139 1	.CC6C37 2	.17767 2	13.8703403 1	.28E-6 2	7.259151	34	12	.74
38188.0	160.341 8	177.9817 2	66.8124 2	.CC61C6 2	.31836 2	13.8703416 1	.35E-6 2	7.258773	23	12	.76
38190.0	158.955 9	173.1337 1	66.8134 2	.CC6C51 2	.65508 3	13.8703430 1	.35E-6 2	7.259110	25	12	.76
38192.0	157.62 1	168.2837 1	66.8126 3	.CC6C7C 2	.35577 3	13.8703442 1	.30E-6 2	7.258940	26	12	.91
38194.0	156.36 1	164.4325 1	66.8151 2	.CC61C8 1	.14045 3	13.8703455 1	.32E-6 2	7.258673	44	12	.91
38196.0	154.90 1	158.5831 1	66.8125 1	.CC6C83 1	.88123 3	13.8703467 1	.31E-6 2	7.258839	44	12	.98
38198.0	153.480 9	153.7340 1	66.8123 1	.CC61C4 1	.62193 2	13.8703479 0	.31E-6 1	7.258774	61	12	.94
38200.0	152.059 9	148.8840 1	66.8127 1	.CC6112 1	.36268 3	13.8703490 0	.30E-6 1	7.258682	65	12	.95
38202.0	150.715 8	144.0338 1	66.8121 1	.CC6122 1	.10335 2	13.8703504 0	.41E-6 1	7.258588	68	12	.68
38204.0	149.360 9	139.1836 1	66.8124 1	.CC6141 1	.84406 2	13.8703521 0	.441E-6 6	7.258472	78	12	.89
38206.0	148.025 9	134.3357 1	66.8142 1	.CC6136 1	.58485 2	13.8703537 0	.49E-6 1	7.258387	71	12	.81
38208.0	146.604 8	129.4859 1	66.8155 1	.CC6111 C	.32546 2	13.8703558 0	.504E-6 5	7.258586	71	12	.71
38210.0	145.44	124.6357 2	66.8152 2	.CC6149 1	.06636 4	13.8703578 0	.488E-6 8	7.258380	58	12	.58

T (MJD)	ω	Ω	i	e	M	n	$n'/2$	q	N	D	σ
38032.C	270.183 7	196.5426 1	66.8124 2	.CC7756 1	.48089 2	13.8689687 1	.21E-6 2	7.261728	28 12	1.08	
38034.C	268.706 6	191.6936 1	66.8125 2	.CC7754 1	.21885 2	13.8689695 1	.24E-6 2	7.261642	30 12	.96	
38036.C	267.328 6	186.8442 1	66.8112 1	.CC7763 1	.95682 2	13.8689704 1	.26E-6 3	7.261702	32 12	1.00	
38038.C	266.021 6	181.9946 1	66.8108 1	.CC7761 1	.65474 2	13.8689709 1	.10E-6 2	7.261654	37 12	.91	
38040.C	264.515 5	177.1462 1	66.8122 1	.CC7770 2	.43279 2	13.8689714 0	.11E-6 1	7.261595	42 12	1.06	
38042.C	262.912 5	172.2981 1	66.8146 1	.CC7777 1	.17076 1	13.8689718 1	.37E-7 21	7.261553	37 12	.89	
38044.C	261.705 5	167.4479 1	66.8122 1	.CC7761 1	.90870	13.8689723 1	.16E-6 1	7.261681	33 12	.86	
38046.C											
38064.C											
38066.C	245.99 3	114.1142 7	66.8168 9	.CC7785 9	.02636 7	13.8689798 1	.23E-6 2	7.261438	22 12	1.15	
38068.C	244.58 2	109.2642 6	66.8147 8	.CC7797 8	.76430 5	13.8689806 1	.23E-6 3	7.261405	20 12	1.18	
38070.C	243.14 2	104.4152 4	66.8151 7	.CC781 1	.50223 5	13.8689812 2	.19E-6 3	7.261260	15 12	1.28	
38072.C	241.74 2	99.5656 2	66.8142 5	.CC780 1	.24027 5	13.8689816 2	-.35E-7 91	7.261408	10 12	.92	
38074.C	240.25 1	94.7168 5	66.8145 7	.CC7791 5	.97820 4	13.8689830 3	.29E-6 5	7.261419	16 12	1.28	
38076.C	238.862 9	89.8688 1	66.8152 2	.CC7805 1	.71624 2	13.8689840 1	.28E-6 2	7.261283	29 12	.99	
38078.C	237.410 7	85.0200 1	66.8153 1	.CC7815 1	.45419 2	13.8689849 1	.13E-6 1	7.261307	37 12	.90	
38080.C	235.922 6	80.1711 1	66.8135 1	.CC7824 1	.19214 2	13.8689859 1	.16E-6 2	7.261226	46 12	1.03	
38082.C	234.499 6	75.3212 1	66.8133 1	.CC7822 1	.93013 2	13.8689864 1	.22E-6 2	7.261221	50 12	1.03	
38084.C	233.079 5	70.4709 1	66.8125 1	.CC7837 1	.66810 2	13.8689876 1	.15E-6 1	7.261177	54 12	1.05	
38086.C	231.526 5	65.6214 1	66.8125 1	.CC7837 1	.40608 2	13.8689881 1	.15E-6 1	7.261139	52 12	1.10	
38088.C	230.150 7	60.7715 1	66.8162 1	.CC7853 1	.14402 1	13.8689885 1	.97E-7 2	7.260953	38 12	1.17	
38090.C	228.844 8	55.9242 2	66.8161 1	.CC7843 2	.88202 2	13.8689887 1	.13E-6 2	7.261157	27 12	1.19	
38092.C	227.21 1	51.0735 2	66.8155 2	.CC7855 2	.62006 3	13.8689887 1	.12E-6 2	7.260989	19 12	1.10	
38094.C	226.06 1	46.2255 2	66.8157 2	.CC7844 2	.35601 3	13.8689892 1	.64E-7 3	7.261027	17 12	1.05	
38096.C	224.47 2	41.3746 2	66.8157 5	.CC7873 3	.09599 7	13.8689891 2	-.65E-7 3	7.260856	19 12	1.40	
38098.C	222.88 10	36.5278 9	66.818 2	.CC7844 3	.8348 3	13.8689894 4	.41E-7 53	7.261117	17 12	1.53	
38100.C	221.45 10	31.679 1	66.818 2	.CC7845 3	.5728 3	13.8689896 3	.40E-7 53	7.261136	17 12	1.54	
38102.C	220.06 11	26.830 2	66.817 2	.CC7862 3	.3107 3	13.8689898 4	.64E-7 70	7.260965	15 12	1.66	
38104.C	218.73 14	21.981 2	66.815 2	.CC7862 3	.0484 4	13.8689897 8	.16E-6 10	7.260912	13 12	1.57	
38106.C	217.36 20	17.130 2	66.817 2	.CC7859 4	.7858 5	13.8689898 3	-.28E-6 34	7.260728	10 12	1.16	
38108.C											

T (MJD)	ω	Ω	i	e	M	n	$n/2$	q	N	D	σ
38123.C											
38125.C	203.98 8	231.C726 5	66.8171 7	.CC797 2	.2567 2	13.8690585 5	.38E-6 4	7.260072	26 10	1.38	
38127.C	202.44 2	326.2241 3	66.8164 5	.CC7953 4	.C3500 6	13.8690606 4	.41E-6 3	7.260231	23 10	1.30	
38129.C	201.15 2	321.3749 3	66.8165 5	.CC7923 3	.77318 7	13.8690628 5	.52E-6 6	7.260403	17 10	1.27	
38131.C	199.63 1	316.5245 1	66.8167 3	.CC7955 2	.51119 4	13.8690647 1	.36E-6 5	7.260230	19 10	1.41	
38133.C	198.14 1	311.6763 1	66.8158 2	.CC7951 2	.24929 3	13.8690662 1	.43E-6 5	7.260231	26 10	1.42	
38135.C	196.729 8	306.8265 1	66.8145 1	.CC7954 1	.98727 2	13.8690682 1	.24E-6 3	7.260260	32 10	1.33	
38137.C	195.337 6	301.9772 1	66.8141 1	.CC7956 1	.72538 2	13.8690685 1	.17E-6 4	7.260217	40 10	1.23	
38139.C	193.939 5	297.1286 1	66.8137 1	.CC7975 1	.46338 2	13.8690700 8	.47E-6 3	7.259999	54 10	1.35	
38141.C	192.583 6	292.2794 8	66.8131 1	.CC7964 1	.20152 2	13.8690716 1	.54E-6 3	7.260124	51 10	1.22	
38143.C	191.155 4	287.4308 1	66.8145 1	.CC7971 1	.93560 1	13.8690735 8	.21E-6 3	7.260188	41 10	.70	
38145.C	189.725 4	282.5806 1	66.8137 1	.CC7970 2	.67775 1	13.8690741 2	.11E-6 5	7.260195	32 10	.65	
38147.C	188.347 5	277.7306 1	66.8152 2	.CC7976 1	.41577 2	13.8690752 1	.26E-6 3	7.260090	30 10	1.00	
38149.C	186.92 9	272.8821 1	66.8138 8	.CC8007 2	.1538 3	13.8690760 2	.18E-6 4	7.259870	16 10	.80	
38151.C	185.59 9	268.0334 2	66.8147 7	.CC7954 4	.8916 3	13.8690770 9	.20E-6 3	7.259968	18 10	.79	
38153.C	184.14 9	263.1848 4	66.8126 8	.CC8024 6	.6259 3	13.8690780 1	.48E-6 6	7.259753	19 10	.86	
38155.C	182.84 17	258.2352 6	66.815 1	.CC8000 1	.3677 5	13.8690789 2	.21E-6 2	7.259893	30 10	1.24	
38157.C	181.48 11	253.4860 8	66.812 1	.CC8016 9	.1053 3	13.8690795 3	.17E-6 4	7.259763	34 10	1.38	
38159.C	179.95 11	248.6365 9	66.814 1	.CC8006 1	.8437 3	13.8690806 3	.19E-6 3	7.259588	36 10	1.31	
38161.C	178.67 13	243.789 1	66.816 1	.CC801 2	.5817 4	13.8690818 4	.32E-6 3	7.259861	35 10	1.34	
38163.C	177.02 13	238.941 1	66.814 1	.CC810 2	.3202 4	13.8690837 5	.34E-6 3	7.259152	41 10	1.43	
38165.C	175.78 11	234.093 1	66.816 1	.CC808 2	.0584 3	13.8690855 5	.46E-6 4	7.259384	31 10	1.36	
38167.C	174.38 7	229.2424 9	66.8182 8	.CC805 1	.7564 2	13.8690864 3	.33E-6 1	7.259289	21 10	.65	
38169.C	172.72 13	224.393 2	66.813 2	.CC814 3	.5351 4	13.8690875 4	.31E-6 3	7.258861	24 10	1.21	
38171.C	171.59 12	219.547 1	66.815 1	.CC810 3	.2726 3	13.8690884 4	.31E-6 3	7.259183	25 10	1.20	
38173.C	170.56 8	214.698 1	66.8150 9	.CC802 2	.0056 2	13.8690895 5	.29E-6 4	7.259724	26 10	1.11	
38175.C	169.19 6	209.8502 8	66.8154 7	.CC808 1	.7478 2	13.8690907 4	.23E-6 3	7.259270	31 10	1.05	
38177.C	167.75 3	205.0008 2	66.8145 2	.CC8051 5	.48601 7	13.8690920 4	.28E-6 4	7.259261	32 10	1.14	
38179.C	166.25 2	200.1525 1	66.8132 2	.CC8075 2	.22418 5	13.8690934 2	.35E-6 4	7.259341	30 10	1.08	

T (MJD)	ω	Ω	i	e	M	n	$n'/2$	q	N	D	σ
38181.C	164.91 2	195.3041 2	66.8145 2	.008138 1	.96236 5	13.8690948 3	.33E-6 6	7.258926	26 10		1.14
38183.C	163.59 2	190.4567 2	66.8158 1	.008137 3	.70048 5	13.8690956 4	.28E-6 4	7.258854	18 10		.99
38185.C	162.06 5	185.6083 6	66.8147 5	.00818 3	.4389 3	13.869099 2	.56E-6 34	7.258557	11 10		.84
38187.C	160.77 1	180.7573 1	66.8110 2	.008135 2	.17637 3	13.8690973 1	.23E-6 4	7.258911	14 10		.74
38189.C	159.44 1	175.9102 4	66.8123 3	.008108 6	.91451 4	13.869096 1	.75E-6 17	7.259041	16 10		.96
38191.C	158.03 1	171.0618 2	66.8124 3	.008111 3	.65270 4	13.8690992 4	.75E-6 17	7.259083	16 10		.96
38193.C	156.61 1	166.2126 2	66.8152 3	.008112 2	.35078 3	13.8691006 3	-.16E-6 8	7.259067	21 10		1.37
38195.C	155.29 1	161.2647 2	66.8141 2	.008153 1	.12895 3	13.8691006 1	-.43E-7 4	7.258744	33 10		1.40
38197.C	153.91 2	156.5137 2	66.8120 2	.008134 1	.86702 4	13.8691015 1	.18E-6 4	7.258925	29 10		1.45
38199.C	152.61 1	151.6663 1	66.8120 2	.008142 2	.60497 4	13.8691017 2	.16E-6 6	7.258822	34 10		1.24
38201.C	151.16 1	146.8172 1	66.8117 1	.008161 1	.34316 3	13.8691024 1	.23E-6 3	7.258693	38 10		1.18
38203.C	149.78 1	141.9693 1	66.8123 1	.008156 1	.08135 3	13.8691028 7	.11E-6 2	7.258791	39 10		1.01
38205.C	148.35 1	137.1207 1	66.8126 1	.008162 1	.81565 4	13.8691030 1	.11E-6 2	7.258773	36 10		.88
38207.C	147.01 2	132.2727 2	66.8122 2	.008171 1	.55772 5	13.8691035 1	.39E-7 2	7.258667	38 10		.94
38209.C	145.70 8	127.4228 6	66.8140 6	.008152 2	.2959 2	13.8691039 1	.16E-6 1	7.258499	34 10		.87
38211.C	144.36 16	122.5739 8	66.8145 8	.008203 4	.0340 4	13.8691046 1	.15E-6 1	7.258434	34 10		.94

T (MJD)	ω	Ω	i	e	M	n	$n'/2$	q	N	D	σ
38030.0	325.826 4	28.0442 1	95.8512 1	.011602 1	.1338C 1	8.6766805 0	.93E-7 19	9.888821	66	8	.57
38032.0	323.807 4	28.4640 1	95.8525 1	.011578 1	.48716 1	8.6766807 0	.48E-7 17	9.889076	63	8	.57
38034.0	321.748 4	28.8842 1	95.8517 1	.011565 1	.84051 1	8.6766808 1	.31E-7 25	9.889209	58	8	.55
38036.0	319.696 5	29.3038 1	95.8510 1	.011541 1	.19384 1	8.6766811 0	.53E-7 22	9.889447	58	8	.57
38038.0	317.676 6	29.7235 1	95.8497 1	.011521 1	.54715 2	8.6766812 0	.14E-7 21	9.889630	48	8	.52
38040.0	315.624 6	30.1428 1	95.8487 1	.011502 1	.90048 2	8.6766811 0	.8E-8 19	9.889867	56	8	.48
38042.0	313.535 6	30.5622 1	95.8493 1	.011487 1	.25385 2	8.6766815 0	.12E-6 2	9.889982	56	8	.52
38044.0	311.491 5	30.9820 C	95.8509 1	.01146C 1	.60721 2	8.6766823 0	.24E-6 2	9.890300	64	8	.49
38046.0	309.445 6	31.4023 1	95.8508 1	.011444 1	.56054 2	8.6766828 0	.12E-6 2	9.890443	70	8	.52
38048.0	307.385 5	31.8223 C	95.8508 1	.011432 1	.31386 1	8.6766828 0	-.78E-7 18	9.890539	66	8	.51
38050.0	305.355 5	32.2421 C	95.8500 1	.011416 1	.66720 1	8.6766825 0	-.12E-6 2	9.890658	64	8	.46
38052.0	303.246 6	32.6616 1	95.8491 1	.011394 1	.02059 2	8.6766824 0	.35E-7 17	9.890934	65	8	.50
38054.0	301.172 6	33.0809 C	95.8488 1	.011384 1	.37394 2	8.6766826 0	.15E-6 2	9.891023	78	8	.54
38056.0	299.119 6	33.5004 1	95.8494 1	.011369 1	.72727 2	8.6766831 0	.69E-7 18	9.891150	77	8	.59
38058.0	297.034 5	33.9205 C	95.8504 1	.011354 1	.08061 1	8.6766833 0	-.18E-7 21	9.891326	78	8	.53
38060.0	294.971 5	34.3403 C	95.8522 1	.011346 C	.43397 1	8.6766831 0	-.59E-7 17	9.891384	72	8	.49
38062.0	292.880 4	34.7603 C	95.8516 1	.011332 C	.78734 1	8.6766830 0	.97E-7 2	9.891525	54	8	.44
38064.0	290.799 5	35.1801 1	95.8517 1	.011325 1	.14068 1	8.6766832 0	.47E-7 16	9.891617	54	8	.47
38066.0	288.708 7	35.5996 1	95.8510 1	.011312 1	.49405 2	8.6766831 1	-.98E-7 24	9.891721	45	8	.57
38068.0	286.616 7	36.0194 1	95.8508 2	.011310 1	.84741 2	8.6766828 1	-.11E-6 3	9.891734	34	8	.53
38070.0	284.517 7	36.4393 1	95.8509 2	.011299 1	.20077 2	8.6766828 0	.63E-7 3	9.891832	37	8	.57
38072.0	282.436 6	36.8592 1	95.8527 1	.011296 1	.55413 2	8.6766831 0	.87E-7 24	9.891874	39	8	.46
38074.0	280.353 5	37.2796 1	95.8531 1	.011282 1	.90749 1	8.6766833 1	-.25E-7 28	9.892053	42	8	.49
38076.0	278.274 4	37.7004 1	95.8535 1	.011280 1	.26086 1	8.6766831 0	-.96E-7 18	9.892051	58	8	.49
38078.0	276.157 7	38.1202 1	95.8541 2	.011283 3	.61425 2	8.6766816 1	-.56E-6 4	9.892037	64	8	1.05
38080.0	274.067 6	38.5399 1	95.8534 2	.011285 5	.96762 2	8.6766791 1	-.77E-6 3	9.891949	62	8	.79
38082.0	271.975 9	38.9597 1	95.8530 2	.011274 7	.32097 3	8.6766770 1	-.26E-6 4	9.892132	77	8	1.24
38084.0	269.907 4	39.3799 1	95.8541 1	.011264 3	.67428 1	8.6766764 0	-.21E-7 22	9.892225	78	8	.68
38086.0	267.792 4	39.7998 1	95.8550 1	.011265 3	.02763 1	8.6766762 1	-.14E-6 2	9.892241	73	8	.66
38088.0	265.698 4	40.2206 C	95.8566 1	.011262 3	.38098 1	8.6766759 0	-.70E-7 22	9.892240	76	8	.70

T (MJD)	ω	Ω	i	e	M	n	n/2	q	N	D	σ
38090.0	263.637 3	40.6414 0	95.8560 1	.011271 3	.734322 9	8.6766759 0	.68E-7 18	9.892118	85	8	.59
38092.0	261.513 4	41.0617 1	95.8557 1	.011277 4	.68766 1	8.6766759 1	.4E-8 22	9.892122	67	8	.62
38094.0	259.424 4	41.4818 1	95.8552 1	.011289 3	.44103 1	8.6766760 0	-.46E-7 20	9.891971	65	8	.55
38096.0	257.334 5	41.9021 1	95.8557 1	.011283 3	.79440 1	8.6766759 0	.15E-7 21	9.892022	54	8	.60
38098.0	255.258 7	42.3219 1	95.8581 1	.011299 4	.14770 2	8.6766763 1	.28E-7 26	9.891895	40	8	.58
38100.0	253.165 7	42.7428 1	95.8587 1	.011307 3	.50107 2	8.6766766 0	.15E-6 2	9.891807	44	8	.57
38102.0	251.080 7	43.1640 1	95.8595 1	.011309 3	.85444 2	8.6766767 1	-.10E-6 3	9.891769	58	8	.70
38104.0	248.969 5	43.5851 1	95.8600 1	.011311 2	.20780 1	8.6766762 0	-.30E-6 2	9.891736	68	8	.57
38106.0	246.887 5	44.0056 0	95.8600 1	.011327 2	.56113 1	8.6766753 1	.78E-7 20	9.891583	82	8	.56
38108.0	244.814 5	44.4261 0	95.8589 1	.011333 2	.91447 1	8.6766754 0	.98E-7 18	9.891520	101	8	.63
38110.0	242.716 4	44.8463 0	95.8591 1	.011349 2	.26783 1	8.6766760 0	.26E-6 17	9.891342	90	8	.52
38112.0	240.656 6	45.2676 1	95.8601 1	.011357 2	.62118 2	8.6766763 0	.29E-7 20	9.891305	99	8	.77
38114.0	238.570 7	45.6884 0	95.8617 1	.011369 2	.97454 2	8.6766761 0	-.20E-6 2	9.891182	95	8	.74
38116.0	236.480 7	46.1094 0	95.8637 1	.011382 2	.32792 2	8.6766757 0	-.46E-7 19	9.891043	94	8	.67
38118.0	234.408 7	46.5305 0	95.8635 1	.011395 2	.68128 2	8.6766755 0	-.43E-7 19	9.890932	105	8	.69
38120.0	232.326 7	46.9512 0	95.8634 1	.011413 2	.03464 2	8.6766753 0	-.82E-7 18	9.890721	103	8	.69
38122.0	230.296 7	47.3721 1	95.8626 7	.011435 2	.38772 2	8.6766557 1	-.19E-6 3	9.890514	93	8	.76
38124.0	228.24 1	47.7929 1	95.8628 1	.011450 2	.74105 3	8.6766554 1	-.95E-7 29	9.890394	68	8	.90
38126.0	226.15 1	48.2140 1	95.8641 1	.011464 3	.69443 4	8.6766552 1	.44E-7 34	9.890239	52	8	.86
38128.0	224.09 2	48.6352 1	95.8656 1	.011487 3	.44781 5	8.6766555 1	.71E-7 33	9.890989	44	8	.76
38130.0	222.07 1	49.0569 1	95.8669 1	.011507 2	.80104 3	8.6766555 1	-.81E-7 28	9.890789	60	8	.66
38132.0	220.039 9	49.4783 1	95.8670 1	.011526 2	.1542993	8.6766552 1	-.15E-6 3	9.890627	73	8	.56
38134.0	218.01 2	49.8996 1	95.8661 1	.011553 2	.50761 4	8.6766560 1	.57E-6 4	9.890344	91	8	1.08
38136.0	215.96 1	50.3204 1	95.8657 1	.011566 1	.86098 3	8.6766590 1	.97E-6 2	9.890184	101	8	.75
38138.0	213.92 1	50.7413 1	95.8667 1	.011592 2	.21435 4	8.6766622 1	.66E-6 3	9.889914	85	8	.88
38140.0	211.884 8	51.1629 1	95.8670 1	.011618 1	.56764 2	8.6766633 0	.88E-7 18	9.888718	74	8	.49
38142.0	209.822 9	51.5846 1	95.8688 1	.011641 1	.92098 3	8.6766632 0	-.65E-7 19	9.888495	75	8	.56
38144.0	207.868 9	52.0062 1	95.8696 1	.011664 1	.27427 3	8.6766631 1	.8E-8 22	9.888213	60	8	.51
38146.0	205.80 5	52.4279 6	95.8696 6	.01167 3	.6277 1	8.6766629 1	-.38E-7 22	9.888113	52	8	.52
38148.0	203.79 3	52.8490 4	95.8680 4	.01171 2	.98096 9	8.6766625 0	-.16E-6 2	9.887806	53	8	.46

T (MJD)	ω	Ω	i	e	M	n	n/2	q	N	D	σ
38150.0	201.72 4	53.2699 5	95.8675 5	.C1171 2	.3345 1	8.6766620 1	-11E-6 2	9.887746	48	8	.50
38152.0	199.66 5	53.6916 4	95.8676 5	.01172 2	.6879 1	8.6766617 1	-41E-7 25	9.887629	49	8	.50
38154.0	197.63 6	54.1134 5	95.8678 5	.01174 2	.C412 2	8.6766615 1	-69E-7 27	9.887444	52	8	.53
38156.0	195.78 7	54.5342 6	95.8707 6	.01181 2	.3942 2	8.6766612 1	-61E-7 25	9.886715	46	8	.52
38158.0	193.86 8	54.9559 5	95.8708 5	.01186 2	.7474 2	8.6766609 1	-78E-7 20	9.886262	54	8	.50
38160.0	191.81 8	55.3779 5	95.8698 6	.C1187 2	.1C09 2	8.6766605 1	-13E-6 2	9.886220	53	8	.52
38162.0	189.77 1	55.7989 2	95.8694 2	.011891 2	.45426 3	8.6766603 1	-29E-7 20	9.885955	59	8	.58
38164.0	187.79 1	56.2197 2	95.8693 2	.C11915 1	.8C76C 3	8.6766607 0	-23E-6 26	9.885712	59	8	.57
38166.0	185.83 1	56.6412 1	95.8696 1	.C11938 1	.16C91 3	8.6766621 0	-34E-6 2	9.885499	49	8	.50
38168.0	183.86 2	57.0624 2	95.8702 2	.C11967 2	.51417 5	8.6766626 1	-34E-7 39	9.885201	50	8	.91
38170.0	181.89 1	57.4842 2	95.8709 2	.C11997 1	.86752 4	8.6766625 0	-12E-6 2	9.884892	50	8	.58
38172.0	179.93 1	57.9061 2	95.8716 2	.C12016 1	.22084 3	8.6766622 1	-49E-7 22	9.884709	57	8	.56
38174.0	177.76 6	58.3277 4	95.8702 4	.C12018 9	.5747 2	8.6766623 1	-85E-7 22	9.884686	66	8	.48
38176.0	175.79 7	58.7482 4	95.8705 4	.C1205 1	.9280 2	8.6766618 0	-18E-6 2	9.884395	74	8	.51
38178.0	173.84 5	59.1693 3	95.8696 3	.C12068 8	.2814 1	8.6766611 0	-24E-6 2	9.884165	74	8	.44
38180.0	171.97 7	59.5908 4	95.8698 4	.C12107 9	.6344 2	8.6766600 0	-30E-6 2	9.883780	74	8	.50
38182.0	170.36 7	60.0127 4	95.8689 4	.C1217C 9	.9870 2	8.6766585 0	-48E-6 2	9.883167	65	8	.52
38184.0	168.42 7	60.4341 4	95.8699 5	.C12202 9	.3403 2	8.6766571 0	-36E-6 2	9.882883	58	8	.57
38186.0	166.33 4	60.8559 2	95.871C 3	.C12214 5	.6940	8.6766563 0	-20E-7 22	9.882713	76	8	.65
38188.0	164.38 2	61.2774 1	95.869C 1	.C12237 2	.C4741 6	8.6766560 0	-90E-7 16	9.882497	131	8	.55
38190.0	162.43 2	61.6985 1	95.8678 1	.C12269 1	.4C073 5	8.6766560 0	-86E-7 16	9.882186	175	8	.60
38192.0	160.54 2	62.1192 1	95.8674 1	.C12292 1	.75403 4	8.6766565 0	-23E-6 1	9.881966	243	8	.54
38194.0	158.59 2	62.5402 1	95.8672 1	.C12316 1	.1C734 4	8.6766575 0	-268E-6 9	9.881709	240	8	.50
38196.0	156.67 2	62.9615 1	95.8688 1	.C12342 1	.46C69 6	8.6766582 0	-10E-6 1	9.881440	186	8	.55
38198.0	154.76 2	63.3830 1	95.8691 2	.C12371 1	.81396 7	8.6766580 0	-98E-7 10	9.881148	157	8	.46
38200.0	152.87 4	63.8041 2	95.8699 3	.C12394 2	.1673 1	8.6766577 0	-54E-7 15	9.880949	113	8	.56
38202.0	151.01 2	64.2257 1	95.8674 1	.C12424 1	.52051 5	8.6766576 0	-23E-7 12	9.880600	205	8	.49
38204.0	149.11 1	64.6467 1	95.8658 1	.C12443 1	.87383 3	8.6766577 0	-44E-7 11	9.880455	232	8	.45
38206.0	147.18 1	65.0673 1	95.8651 1	.C12471 1	.2272C 3	8.6766572 0	-126E-6 9	9.880170	277	8	.47
38208.0	145.30 1	65.4881 C	95.8652 1	.C12497 1	.58053 3	8.6766570 0	-25E-8 91	9.879862	321	8	.47
38210.0	143.41 1	65.9094 1	95.8658 1	.C12514 1	.93384 4	8.6766571 0	-58E-7 10	9.879740	221	8	.50

T (MJD)	ω	Ω	i	e	M	n	n/2	q	N	D	σ
38030.C	151.7178 9	239.0169 3	44.7917 1	.242308 2	.706672 2	9.1261492 6	.98E-6 5	7.328433	58	8	2.16
38032.C	155.668 1	235.2988 2	44.7927 2	.242266 2	.958975 2	9.126150 1	-.16E-6 5	7.328766	46	8	2.30
38034.C	159.6611 7	231.5804 2	44.7938 1	.242233 1	.211278 1	9.1261495 7	-.145E-5 5	7.329143	44	8	1.02
38036.C	163.637 2	227.8633 3	44.7945 1	.242183 1	.463564 3	9.126141 1	-.163E-5 3	7.329594	41	8	1.41
38038.C	167.64 2	224.149 2	44.785 2	.24217 2	.71578 3	9.12616 2	-.99E-6 8	7.329766	15	8	2.04
38040.C	171.573 7	220.4301 9	44.7918 5	.242053 4	.96811 1	9.126129 3	.16E-6 7	7.330451	16	8	1.73
38042.C	175.553 5	216.7108 8	44.7914 6	.242052 4	.220368 9	9.126137 4	.16E-5 1	7.330883	16	8	2.26
38044.C	179.518 3	212.9944 9	44.7944 2	.242052 5	.472666 3	9.126145 1	.15E-5 2	7.330872	12	8	.72
38046.C	183.499 3	209.2753 4	44.7958 3	.242011 6	.724966 4	9.126150 2	.92E-6 8	7.331231	12	8	.83
38048.C											
38060.C											
38062.C	215.309 3	179.540 1	44.7984 5	.24184 1	.743306 4	9.126154 1	.86E-6 7	7.332911	20	8	2.63
38064.C	219.295 2	175.8201 5	44.8001 1	.241778 5	.995617 2	9.1261556 7	-.107E-5 5	7.333483	22	8	.61
38066.C	223.268 7	172.1040 3	44.8004 1	.241768 2	.247925 1	9.1261514 7	-.99E-6 3	7.333625	24	8	.64
38068.C	227.241 2	168.3882 4	44.8015 2	.241768 6	.500221 5	9.126150 2	-.43E-6 6	7.333602	23	8	1.17
38070.C	231.219 1	164.6720 3	44.8035 2	.241767 4	.752508 4	9.126146 1	.61E-6 6	7.333649	32	8	1.06
38072.C	235.2001 8	160.9556 1	44.8048 1	.241765 4	.004802 1	9.1261492 6	.131E-5 3	7.333607	40	8	.58
38074.C	239.1800 3	157.2398 1	44.8043 1	.241780 1	.257105 0	9.1261559 3	.143E-5 2	7.333503	59	8	.59
38076.C	243.1580 2	153.5231 1	44.8040 1	.241788 1	.509422 1	9.1261607 2	.120E-5 2	7.333393	73	8	.61
38078.C	247.1231 1	149.8055 1	44.8046 1	.241780 2	.761753 1	9.1261649 2	.57E-6 2	7.333465	81	8	.64
38080.C	251.1081 1	146.0886 1	44.8052 1	.241778 1	.014088 0	9.1261678 2	.47E-7 16	7.333483	87	8	.50
38082.C	255.0857 1	142.3734 1	44.8061 0	.241783 1	.266423 0	9.1261680 3	-.47E-7 17	7.333500	78	8	.47
38084.C	259.0612 1	138.6578 1	44.8062 1	.241804 1	.518759 1	9.1261680 2	.31E-6 2	7.333238	82	8	.60
38086.C	263.0362 1	134.9396 1	44.8052 0	.241827 1	.771097 1	9.1261704 2	.60E-6 2	7.333072	69	8	.52
38088.C	267.0197 1	131.2234 1	44.8052 0	.241843 1	.023440 1	9.1261740 1	.79E-6 2	7.332855	74	8	.50

T (MJD)	ω	Ω	i	e	M	n	n'/2	q	N	D	σ
38090.0	270.9981 1	127.5055 1	44.8045 C	.241852 1	.2759C 0	9.1261778 2	.70E-6 2	7.332751	77	8	.46
38092.0	274.9761 1	123.7884 1	44.805E C	.241858 1	.52E149 0	9.1261807 2	.53E-6 3	7.332709	64	8	.47
38094.0	278.9499 1	120.0717 1	44.8062 C	.241868 1	.78C511 0	9.1261820 2	.32E-6 2	7.332677	62	8	.47
38096.0	282.9246 2	116.3539 1	44.8061 1	.241885 1	.C32874 1	9.1261813 3	.23E-6 3	7.332475	53	8	.46
38098.0	286.9044 1	112.6376 1	44.8054 C	.241913 1	.285239 1	9.1261829 2	.33E-6 2	7.332214	71	8	.45
38100.0	290.8819 2	108.9186 1	44.8048 C	.241937 1	.5376C7 1	9.1261851 3	.53E-6 2	7.331922	79	8	.47
38102.0	294.8654 2	105.2000 1	44.804C C	.241962 1	.78E980 1	9.1261889 4	.73E-6 3	7.331712	93	8	.45
38104.0	298.8455 4	101.4818 1	44.8043 C	.241978 2	.042356 2	9.1261890 1	.43E-6 3	7.331599	110	8	.56
38106.0	302.8227 5	97.7650 1	44.8052 C	.241987 2	.294737 2	9.1261904 9	-.49E-7 4	7.331508	105	8	.69
38108.0	306.7952 5	94.0467 1	44.8042 C	.241990 2	.547121 2	9.1261905 8	-.61E-6 3	7.331470	107	8	.70
38110.0	310.7720 5	90.3294 1	44.8042 C	.242014 2	.79E496 3	9.126186 1	-.59E-6 3	7.331207	107	8	.69
38112.0	314.747C 6	86.6099 1	44.8039 C	.242043 2	.C51859 3	9.126182 1	-.34E-6 4	7.330926	93	8	.69
38114.0	318.7234 7	82.8924 2	44.8042 1	.242111 3	.3C4195 3	9.126174 2	.8E-8 45	7.330267	78	8	.85
38116.0	322.716 1	79.1742 2	44.8051 1	.242143 5	.556545 5	9.126172 3	.24E-6 6	7.329985	80	8	1.17
38118.0	326.6875 9	75.4541 2	44.8071 1	.242131 3	.8C8956 4	9.126175 2	.89E-6 6	7.330091	75	8	1.00
38120.0	330.6670 5	71.7371 2	44.8064 1	.242148 2	.C61322 2	9.126176 2	.99E-6 5	7.329946	73	8	.90
38122.0	334.6458 9	68.0195 2	44.8053 1	.242171 3	.313683 4	9.126182 3	.55E-6 6	7.329709	57	8	.93
38124.0	338.625 2	64.3023 3	44.805C 1	.242217 6	.566033 9	9.126175 3	-.26E-6 7	7.329236	43	8	.92
38126.0	342.606 4	60.5825 5	44.8048 2	.242264 8	.81E38 2	9.126169 5	-.47E-6 2	7.328809	21	8	.74
38128.0	346.57 1	56.865 1	44.807 1	.24229 9	.C7C82 8	9.126169 8	-.60E-6 34	7.328603	20	8	.73
38130.0	350.545 8	53.142 3	44.805 1	.2422 2	.32323 8	9.12621 2	-.47E-6 21	7.329533	21	8	.71
38132.0	354.525 3	49.4266 5	44.8066 1	.24234 2	.57554 2	9.126174 5	.32E-6 10	7.328033	28	8	.60
38134.0	358.497 2	45.7101 2	44.8075 1	.242357 7	.827893 8	9.126161 3	.71E-6 5	7.327907	50	8	.72
38136.0	02.474 1	41.9930 1	44.8075 1	.242406 3	.08C221 4	9.126172 2	.84E-6 5	7.327442	59	8	.77
38138.0	06.447C 7	38.2749 1	44.8076 1	.242447 1	.332579 3	9.126180 1	.64E-6 4	7.327018	73	8	.88
38140.0	10.4208 6	34.5568 1	44.807E 1	.242501 1	.584939 2	9.1261856 9	.33E-6 4	7.326508	73	8	.79
38142.0	14.3952 6	30.8392 1	44.8082 1	.242553 1	.837305 2	9.126184 1	-.99E-7 3	7.325971	69	8	.75
38144.0	18.3729 7	27.1215 1	44.8081 1	.242596 1	.08E67C 2	9.1261811 9	-.34E-6 3	7.325547	61	8	.58
38146.0	22.3482 5	23.4035 1	44.8071 1	.242624 1	.342C32 2	9.1261825 6	-.22E-6 3	7.325301	54	8	.57
38148.0	26.3183 6	19.6846 1	44.8052 1	.242658 1	.554396 2	9.126180 1	-.11E-6 4	7.325004	53	8	.63

T (MJD)	ω	Ω	i	e	M	n	$n'/2$	q	N	D	σ							
38150.0	30.2870	5	15.9662	1	44.8057	1	.242674	1	.846755	2	9.1261789	7	.8E-8	45	7.324844	46	8	.60
38152.0	34.2552	4	12.2484	2	44.8050	1	.242726	2	.095116	2	9.1261798	7	.47E-7	5	7.324328	57	8	.62
38154.0	38.2212	6	8.5300	3	44.8052	1	.242792	7	.351485	4	9.126186	2	.19E-6	5	7.323674	50	8	.61
38156.0	42.1908	4	4.8116	2	44.8043	1	.242428	3	.603841	2	9.126181	1	.65E-6	1	7.323258	46	8	.62
38158.0	46.1631	8	1.0933	2	44.8032	1	.242866	2	.856208	3	9.126184	1	.43E-6	1	7.323016	35	8	.62
38160.0	50.137	1	357.3748	2	44.8015	1	.242879	2	.108581	4	9.126186	1	.44E-6	1	7.322808	25	8	.83
38162.0	54.0598	7	353.6548	1	44.8011	1	.242891	2	.360964	3	9.1261884	9	-.11E-6	7	7.322717	46	8	.69
38164.0	58.0670	7	349.9358	1	44.8007	1	.242899	1	.613339	3	9.126191	1	-.48E-6	6	7.322647	73	8	.59
38166.0	62.0277	3	346.2170	1	44.8002	0	.242914	0	.865721	1	9.1261886	5	-.34E-6	3	7.322481	96	8	.57
38168.0	65.9521	3	342.4983	1	44.7994	0	.242952	0	.118099	1	9.1261863	5	-.17E-6	3	7.322090	106	8	.59
38170.0	69.9601	3	338.7789	1	44.7987	0	.242987	1	.370471	1	9.1261855	6	-.17E-6	3	7.321808	99	8	.63
38172.0	73.9327	3	335.0578	1	44.7975	1	.243000	1	.622837	1	9.1261830	5	-.12E-6	3	7.321688	80	8	.58
38174.0	77.9010	2	331.3371	1	44.7977	1	.242989	1	.875214	1	9.1261872	3	.33E-6	3	7.321743	82	8	.68
38176.0	81.8679	3	327.6175	1	44.7977	1	.242980	1	.127587	1	9.1261900	5	.47E-6	3	7.321921	90	8	.66
38178.0	85.8257	2	323.8997	0	44.7975	0	.242959	1	.379968	1	9.1261909	4	.43E-6	3	7.322065	94	8	.50
38180.0	89.7861	3	320.1808	1	44.7977	0	.242961	1	.632352	1	9.1261925	4	.15E-6	3	7.322025	87	8	.53
38182.0	93.7475	3	316.4615	1	44.7972	1	.242971	1	.884739	1	9.1261924	4	-.34E-6	2	7.321992	69	8	.48
38184.0	97.7157	4	312.7409	1	44.7963	1	.242967	1	.137122	1	9.1261895	4	-.82E-6	3	7.321937	47	8	.46
38186.0	101.6840	5	309.0213	1	44.7970	1	.242955	1	.389493	2	9.1261833	8	-.93E-6	4	7.322119	34	8	.57
38188.0	105.6522	6	305.3027	2	44.7970	1	.242934	1	.641851	2	9.1261796	8	-.29E-6	5	7.322340	34	8	.80
38190.0	109.6186	5	301.5839	1	44.7981	1	.242889	1	.894210	2	9.1261770	9	.49E-6	4	7.322815	39	8	.69
38192.0	113.5848	4	297.8650	1	44.7973	1	.242854	1	.146569	2	9.1261824	6	.106E-5	3	7.323073	53	8	.65
38194.0	117.5437	3	294.1476	1	44.7968	1	.242833	1	.356944	1	9.1261884	4	.86E-6	3	7.323298	89	8	.60
38196.0	121.5097	3	290.4284	1	44.7965	1	.242809	1	.651320	1	9.1261962	5	-.84E-7	28	7.323507	122	8	.63
38198.0	125.4758	2	286.7079	1	44.7984	0	.242785	1	.903709	1	9.1261879	3	-.157E-5	2	7.323760	154	8	.58
38200.0	129.4486	2	282.9887	1	44.7981	0	.242752	1	.156080	1	9.1261818	3	-.178E-5	2	7.324013	184	8	.64
38202.0	133.4168	2	279.2716	1	44.7981	1	.242701	1	.408434	1	9.1261727	3	-.172E-5	2	7.324578	183	8	.73
38204.0	137.3857	3	275.5547	1	44.7973	1	.242656	1	.660775	1	9.1261679	5	-.96E-6	3	7.325017	163	8	.93
38206.0	141.3543	4	271.8370	1	44.7975	1	.242599	1	.913105	2	9.1261673	6	.63E-6	3	7.325526	146	8	1.20
38208.0	145.3237	3	268.1185	1	44.7973	1	.242572	1	.165441	1	9.1261733	4	.161E-5	2	7.325831	131	8	.69
38210.0	149.2903	3	264.4000	1	44.7990	1	.242527	2	.417797	1	9.1261821	6	.164E-5	2	7.326217	92	8	.57

T (MJD)	ω	Ω	i	e	M	n	n/2	q	N	D	σ
38030.0	196.859 2	198.0994 5	47.5047 6	.284152 8	.551011 3	7.7809459 1	.102E-6 7	7.700478	34	34	4.02
38032.0											
38051.0											
38053.0	227.208 6	166.1171 3	47.5052 4	.28407 2	.07468 3	7.7809476 5	-.12E-6 9	7.701422	33	8	1.22
38055.0	229.629 9	163.5597 4	47.5112 3	.284405 2	.63660 4	7.780947 1	-.37E-6 27	7.701551	25	8	.79
38057.0	232.065 1	161.0018 2	47.5115 2	.284105 9	.198449 7	7.7809458 4	.37E-6 13	7.701014	25	8	.82
38059.0	234.4915 6	158.4435 2	47.5117 2	.284124 7	.760357 2	7.7809467 7	.77E-7 89	7.700787	32	8	1.27
38061.0	236.9232 3	155.8840 2	47.5123 1	.284145 4	.322248 1	7.7809476 4	.32E-6 13	7.700552	45	8	1.05
38063.0	239.3520 2	153.3250 1	47.5123 1	.284141 3	.884151 1	7.7809492 3	.21E-6 5	7.700616	58	8	.84
38065.0	241.7786 2	150.7679 1	47.5125 1	.284140 3	.446050 1	7.7809501 4	.28E-6 4	7.700602	55	8	.81
38067.0	244.2058 3	148.2093 2	47.5140 1	.284139 4	.007954 1	7.7809536 3	.33E-6 4	7.700605	49	8	1.03
38069.0	246.6319 3	145.6518 2	47.5144 1	.284171 4	.569857 1	7.7809544 3	.71E-6 4	7.700279	27	8	.82
38071.0	249.0552 3	143.0915 2	47.5155 1	.284207 4	.131778 1	7.7809565 3	.39E-6 3	7.699883	30	8	.80
38073.0	251.4869 3	140.5343 1	47.5150 1	.284228 3	.653692 1	7.7809589 3	.66E-6 4	7.699656	49	8	.95
38075.0	253.9186 3	137.9751 1	47.5148 1	.284244 3	.255613 1	7.7809613 3	.50E-6 4	7.699491	71	8	1.18
38077.0	256.3466 2	135.4164 1	47.5150 1	.284248 2	.817537 1	7.7809627 3	.42E-6 4	7.699490	89	8	1.11
38079.0	258.7734 2	132.8575 1	47.5160 1	.284260 2	.379463 1	7.7809631 3	.45E-6 3	7.699288	91	8	.96
38081.0	261.1977 3	130.2994 2	47.5163 1	.284268 4	.941403 1	7.7809674 4	.45E-6 5	7.699263	90	8	1.50
38083.0	263.6246 3	127.7407 2	47.5154 2	.284284 5	.503349 1	7.7809657 5	.73E-6 4	7.699062	77	8	1.33
38085.0	266.0547 3	125.1806 2	47.5145 2	.284306 5	.065295 1	7.7809693 4	.68E-6 5	7.698801	70	8	1.63
38087.0	268.4858 4	122.6203 2	47.5142 2	.284338 5	.627242 1	7.7809699 5	.25E-6 6	7.698477	59	8	1.56
38089.0	270.9177 3	120.0610 2	47.5152 1	.284361 5	.185105 1	7.7809719 7	.7E-8 62	7.698021	59	8	1.32
38091.0	273.3421 4	117.5005 2	47.5155 2	.284414 8	.751134 2	7.7809729 8	.41E-6 7	7.697680	53	8	1.70
38093.0											
38098.0											
38110.0	296.420 2	93.171 1	47.5167 5	.28444 2	.589811 7	7.7809775 7	-.19E-6 4	7.697311	30	19	3.57
38112.0											
38118.0											
38120.0	308.568 3	80.3769 7	47.5155 4	.2845E 2	.39959 2	7.780977 1	-.71E-6 32	7.695912	22	12	2.39

T (MJD)	ω	Ω	i	e	M	n	$n' / 2$	q	N	D	σ
38122.0	310.996 4	77.8159 3	47.5177 2	.28458 1	.96155 2	7.780978 2	.4E-7 25	7.695902	13	12	.78
38124.0	313.410 4	75.2556 4	47.5180 2	.28483 5	.52356 2	7.7809774 5	.30E-6 1	7.693177	11	12	.71
38126.0	315.869 2	72.6879 5	47.5220 3	.28463 3	.08543 1	7.780981 1	.9E-7 73	7.695396	8	12	.57
38128.0	318.291 2	70.1293 5	47.5222 2	.28478 3	.647408 9	7.7809832 9	-.26E-6 5	7.693757	8	12	.58
38130.0	320.718 2	67.5703 5	47.5228 3	.28468 2	.20937 1	7.780984 2	-.11E-5 3	7.694740	11	12	.64
38132.0	323.1470 8	65.0099 3	47.5224 2	.284659 7	.771333 5	7.7809777 4	-.37E-6 1	7.694980	24	12	1.00
38134.0	325.5725 5	62.4499 3	47.5238 2	.284654 5	.333293 2	7.7809761 3	-.14E-6 6	7.695079	43	12	1.37
38136.0	328.0015 4	59.8908 2	47.5243 1	.284635 3	.895238 1	7.7809732 3	.69E-6 5	7.695263	56	12	.97
38140.0	332.8587 7	54.7714 2	47.5251 1	.284706 2	.019121 3	7.7809761 2	-.13E-6 7	7.694528	70	8	1.11
38142.0	335.2502 6	52.2118 1	47.5264 1	.284725 1	.581072 2	7.7809760 2	-.22E-6 8	7.694311	70	8	.93
38144.0	337.7242 6	49.6531 2	47.5267 1	.284725 2	.143009 2	7.7809742 1	-.51E-6 6	7.694254	64	8	1.01
38146.0	340.1542 5	47.0945 1	47.5267 1	.284710 1	.764950 2	7.7809731 1	-.19E-6 8	7.694463	60	8	.97
38148.0	342.5780 5	44.5361 2	47.5271 1	.284700 2	.266888 2	7.7809719 2	-.29E-6 5	7.694555	50	8	.94
38150.0	345.0021 5	41.9759 1	47.5269 1	.284709 2	.828826 2	7.7809712 2	-.20E-6 7	7.694504	51	8	.87
38152.0	347.4276 5	39.4161 2	47.5265 1	.284743 3	.350764 2	7.7809700 3	-.31E-6 5	7.694095	53	8	.90
38154.0	349.8560 7	36.8567 3	47.5265 2	.28480 2	.952704 5	7.780972 2	-.45E-6 7	7.693503	39	8	.85
38156.0	352.289 1	34.296 1	47.5261 6	.28493 5	.51467 1	7.780969 2	-.25E-6 9	7.692065	30	8	.66
38158.0	354.7168 9	31.7417 2	47.5282 1	.284776 7	.076552 3	7.7809663 8	-.34E-6 18	7.693693	28	8	.83
38160.0	357.1496 6	29.1823 2	47.5274 1	.284768 3	.638459 2	7.7809637 3	.4E-7 10	7.693841	25	8	.67
38162.0	359.5712 5	26.6233 1	47.5258 1	.284759 2	.200384 2	7.7809647 5	-.76E-6 1	7.693995	41	8	.66
38164.0	1.9918 5	24.0637 1	47.5256 1	.284770 2	.762310 2	7.7809622 1	-.32E-6 7	7.693813	61	8	.69
38166.0	4.4155 4	21.5045 1	47.5258 1	.284805 2	.324230 2	7.7809606 1	-.46E-6 5	7.693412	64	8	.77
38168.0	6.8432 5	18.9462 1	47.5266 1	.284838 2	.886146 2	7.7809595 1	-.45E-6 3	7.693066	72	8	.82
38170.0	9.2742 7	16.3875 2	47.5263 1	.284851 3	.448053 2	7.7809577 2	-.23E-6 6	7.692943	66	8	1.09
38172.0	11.7041 5	13.8279 2	47.5254 1	.284843 2	.009959 2	7.7809573 2	-.90E-7 54	7.693043	55	8	1.09
38174.0	14.1294 4	11.2690 2	47.5262 1	.284839 2	.571871 1	7.7809562 2	-.37E-6 5	7.693102	46	8	.89
38176.0	16.5502 4	8.7089 2	47.5222 1	.284846 3	.133783 2	7.7809554 3	-.38E-6 5	7.693035	47	8	.99
38178.0	18.9696 4	6.1490 2	47.5215 1	.284868 4	.655690 2	7.7809540 3	-.28E-6 4	7.692787	39	8	.80
38180.0	21.3909 5	3.5901 3	47.5225 1	.284915 4	.257597 2	7.7809507 6	-.13E-6 4	7.692303	48	8	.84

T (MJD)	ω	Ω	i	e	M	n	n'/2	q	N	D	σ
38182.C	23.8173 6	1.0311 3	47.5215 1	.284928 5	.819498 2	7.7809500 7	- .28E-6 4	7.692132	51	8	.89
38184.C											
38194.C											
38196.C	40.7709 2	343.1154 1	47.5162 1	.285017 3	.752791 1	7.7809449 4	- .38E-6 3	7.691208	67	8	.80
38198.C	43.1967 3	340.5548 1	47.5145 1	.285036 2	.314680 1	7.7809445 3	- .19E-6 2	7.690980	80	8	.88
38200.C	45.6206 3	337.9940 1	47.5144 1	.285033 3	.876568 1	7.7809432 2	- .29E-6 2	7.691040	90	8	1.03
38202.C	48.0389 3	335.4339 1	47.5125 2	.284959 3	.438455 1	7.7809424 3	- .40E-6 3	7.691367	71	8	1.16
38204.C	50.4564 3	332.8740 1	47.5140 2	.284956 3	.000337 1	7.7809404 2	- .39E-6 3	7.691396	59	8	1.07
38206.C	52.8732 4	330.3154 1	47.5138 2	.285030 2	.562218 1	7.7809391 2	- .25E-6 4	7.691054	53	8	1.22
38208.C	55.2916 5	327.7562 1	47.5124 2	.285055 3	.124098 1	7.7809376 2	- .21E-6 6	7.690789	32	8	1.14
38210.C	57.7127 9	325.1968 2	47.5117 3	.285077 3	.685975 1	7.7809368 2	- .43E-6 4	7.690530	27	8	1.16

NOTICE

This series of Special Reports was instituted under the supervision of Dr. F. L. Whipple, Director of the Astrophysical Observatory of the Smithsonian Institution, shortly after the launching of the first artificial earth satellite on October 4, 1957. Contributions come from the Staff of the Observatory.

First issued to ensure the immediate dissemination of data for satellite tracking, the reports have continued to provide a rapid distribution of catalogs of satellite observations, orbital information, and preliminary results of data analyses prior to formal publication in the appropriate journals. The Reports are also used extensively for the rapid publication of preliminary or special results in other fields of astrophysics.

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