REVOLUTION 13

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
3503398.1	-180.00	191221289.68	.08103	0.00	0.000	3476.07	0.00000
3521557.7	-160.00	145939294.76	50.44010	0.00	0.000	6939.03	0.00000
3530132.3	-140.00	82422251.50	54.63654	0.00	0.000	12328.87	0.00000
3533399.1	-120.00	44352660.40	50.17316	0.00	0.000	17638.31	0.00000
3534799.6	-100.00	24036046.05	43.20355	0.00	0.000	22500.80	0.00000
3535518.5	-80.00	12849535.29	35.20341	0.00	0.000	26720.56	0.00000
3535954.2	-60.00	6449354.22	26.69565	0.00	0.000	30152.35	0.00000
3536259.3	-40.00	2786396.08	17.91560	0.00	0.000	32684.45	0.00000
3536502.1	-20.00	881816.18	8.99014	.38	.003	34236.30	.00015
3536524.4	-18.00	767787.10	8.09296	.56	.007	34335.41	.00033
3536546.6	-16.00	666396.51	7.19523	.82	.016	34424.17	.00070
3536568.6	-14.00	577429.13	6.29702	1.22	.034	34502.56	.00153
3536590.4	-12.00	500697.05	5.39840	1.92	.083	34570.54	.00375
3536612.0	-10.00	436038.98	4.49944	3.67	.304	34628.10	.01364
3536633.6	-8.00	383319.56	3.60025	9.16	1.886	34675.22	.08456
3536655.0	-6.00	342428.78	2.70093	23.40	12.264	34711.88	.54931
3536676.4	-4.00	313281.57	1.80173	50.97	58.029	34738.08	2.59719
3536697.6	-2.00	295817.38	.90363	84.45	159.079	34753.80	7.11656
3536716.4	0.00	290000.00	.08103	100.05	223.135	34759.04	9.98071
3536735.1	2.00	295817.38	.90363	84.45	159.079	34753.80	7.11656
3536756.4	4.00	313281.57	1.80173	50.97	58.029	34738.08	2.59719
3536777.7	6.00	342428.78	2.70093	23.40	12.264	34711.88	.54931
3536799.2	8.00	383319.56	3.60025	9.16	1.886	34675.22	.08456
3536820.7	10.00	436038.98	4.49944	3.67	.304	34628.10	.01364
3536842.3	12.00	500697.05	5.39840	1.92	.083	34570.54	.00375
3536864.1	14.00	577429.13	6.29702	1.22	.034	34502.56	.00153
3536886.1	16.00	666396.51	7.19523	.82	.016	34424.17	.00070
3536908.3	18.00	767787.10	8.09296	.56	.007	34335.41	.00033
3536930.7	20.00	881816.18	8.99014	.38	.003	34236.30	.00015
3537173.4	40.00	2786396.08	17.91560	0.00	0.000	32684.45	0.00000
3537478.5	60.00	6449354.22	26.69565	0.00	0.000	30152.35	0.00000
3537914.2	80.00	12849535.29	35.20341	0.00	0.000	26720.56	0.00000
3538633.1	100.00	24036046.05	43.20355	0.00	0.000	22500.80	0.00000
3540033.6	120.00	44352660.40	50.17316	0.00	0.000	17638.31	0.00000
3543300.5	140.00	82422251.50	54.63654	0.00	0.000	12328.87	0.00000
3551875.1	160.00	145939294.76	50.44010	0.00	0.000	6939.03	0.00000
3570034.6	180.00	191221289.68	.08103	0.00	0.000	3476.07	0.00000

REVOLUTION 14

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P
3570034.6	-180.00	171065309.01	.08103	0.00	0.000	3822.80	0.00000
3585200.3	-160.00	133566682.81	47.92480	0.00	0.000	7089.44	0.00000
3592806.2	-140.00	77956665.03	53.11143	0.00	0.000	12365.26	0.00000
3595869.4	-120.00	42808511.23	49.16480	0.00	0.000	17611.15	0.00000
3597225.3	-100.00	23456555.20	42.49778	0.00	0.000	22428.81	0.00000
3597933.4	-80.00	12617887.07	34.70256	0.00	0.000	26614.48	0.00000
3598366.8	-60.00	6356955.13	26.34963	0.00	0.000	30020.49	0.00000
3598671.9	-40.00	2753892.32	17.69698	0.00	0.000	32534.33	0.00000
3598915.4	-20.00	874722.08	8.88411	.38	.003	34075.25	.00016
3598937.9	-18.00	762089.45	7.99772	.56	.007	34173.66	.00034
3598960.1	-16.00	661928.69	7.11071	.82	.016	34261.81	.00072
3598982.2	-14.00	574031.23	6.22318	1.22	.035	34339.64	.00157
3599004.1	-12.00	498215.04	5.33519	1.92	.085	34407.15	.00385
3599025.9	-10.00	434323.77	4.44683	3.70	.313	34464.31	.01414
3599047.5	-8.00	382226.21	3.55820	9.22	1.941	34511.11	.08742
3599069.0	-6.00	341815.68	2.66942	23.40	12.460	34547.51	.56076
3599090.5	-4.00	313009.68	1.78075	50.59	58.078	34573.53	2.61174
3599111.8	-2.00	295749.50	.89317	83.36	157.448	34589.14	7.07714
3599130.8	0.00	290000.00	.08103	98.56	219.978	34594.35	9.88635
3599149.8	2.00	295749.50	.89317	83.36	157.448	34589.14	7.07714
3599171.1	4.00	313009.68	1.78075	50.59	58.078	34573.53	2.61174
3599192.6	6.00	341815.68	2.66942	23.40	12.460	34547.51	.56076
3599214.1	8.00	382226.21	3.55820	9.22	1.941	34511.11	.08742
3599235.7	10.00	434323.77	4.44683	3.70	.313	34464.31	.01414
3599257.5	12.00	498215.04	5.33519	1.92	.085	34407.15	.00385
3599279.4	14.00	574031.23	6.22318	1.22	.035	34339.64	.00157
3599301.5	16.00	661928.69	7.11071	.82	.016	34261.81	.00072
3599323.7	18.00	762089.45	7.99772	.56	.007	34173.66	.00034
3599346.2	20.00	874722.08	8.88411	.38	.003	34075.25	.00016
3599589.7	40.00	2753892.32	17.69698	0.00	0.000	32534.33	0.00000
3599894.8	60.00	6356955.13	26.34963	0.00	0.000	30020.49	0.00000
3600328.2	80.00	12617887.07	34.70256	0.00	0.000	26614.48	0.00000
3601036.3	100.00	23456555.20	42.49778	0.00	0.000	22428.81	0.00000
3602392.2	120.00	42808511.23	49.16480	0.00	0.000	17611.15	0.00000
3605455.4	140.00	77956665.03	53.11143	0.00	0.000	12365.26	0.00000
3613061.4	160.00	133566682.81	47.92480	0.00	0.000	7089.44	0.00000
3628227.0	180.00	171065309.01	.08103	0.00	0.000	3822.80	0.00000

REVOLUTION 15

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
3628227.0	-180.00	153443787.39	.08103	0.00	0.000	4188.12	0.00000
3640966.4	-160.00	122272867.45	45.39321	0.00	0.000	7262.17	0.00000
3647718.7	-140.00	73611701.38	51.51588	0.00	0.000	12413.30	0.00000
3650586.8	-120.00	41244260.15	48.09966	0.00	0.000	17588.88	0.00000
3651897.7	-100.00	22856342.34	41.74958	0.00	0.000	22357.24	0.00000
3652594.7	-80.00	12374952.56	34.17072	0.00	0.000	26505.62	0.00000
3653025.6	-60.00	6259355.36	25.98188	0.00	0.000	29883.53	0.00000
3653330.7	-40.00	2719416.79	17.46452	0.00	0.000	32377.52	0.00000
3653575.0	-20.00	867181.37	8.77134	.38	.004	33906.56	.00016
3653597.6	-18.00	756032.34	7.89642	.56	.008	34004.23	.00035
3653620.0	-16.00	657178.43	7.02082	.83	.016	34091.70	.00074
3653642.1	-14.00	570418.18	6.14464	1.22	.035	34168.94	.00161
3653664.1	-12.00	495575.64	5.26796	1.93	.087	34235.94	.00397
3653686.0	-10.00	432499.67	4.39087	3.73	.324	34292.66	.01468
3653707.8	-8.00	381063.37	3.51347	9.29	2.001	34339.10	.09059
3653729.4	-6.00	341163.58	2.63590	23.41	12.674	34375.23	.57325
3653751.0	-4.00	312720.49	1.75843	50.20	58.139	34401.05	2.62756
3653772.4	-2.00	295677.29	.88205	82.23	155.754	34416.54	7.03613
3653791.6	0.00	290000.00	.08103	97.02	216.701	34421.70	9.78792
3653810.8	2.00	295677.29	.88205	82.23	155.754	34416.54	7.03613
3653832.2	4.00	312720.49	1.75843	50.20	58.139	34401.05	2.62756
3653853.8	6.00	341163.58	2.63590	23.41	12.674	34375.23	.57325
3653875.4	8.00	381063.37	3.51347	9.29	2.001	34339.10	.09059
3653897.2	10.00	432499.67	4.39087	3.73	.324	34292.66	.01468
3653919.0	12.00	495575.64	5.26796	1.93	.087	34235.94	.00397
3653941.0	14.00	570418.18	6.14464	1.22	.035	34168.94	.00161
3653963.2	16.00	657178.43	7.02082	.83	.016	34091.70	.00074
3653985.6	18.00	756032.34	7.89642	.56	.008	34004.23	.00035
3654008.2	20.00	867181.37	8.77134	.38	.004	33906.56	.00016
3654252.4	40.00	2719416.79	17.46452	0.00	0.000	32377.52	0.00000
3654557.6	60.00	6259355.36	25.98188	0.00	0.000	29883.53	0.00000
3654988.5	80.00	12374952.56	34.17072	0.00	0.000	26505.62	0.00000
3655685.4	100.00	22856342.34	41.74958	0.00	0.000	22357.24	0.00000
3656996.4	120.00	41244260.15	48.09966	0.00	0.000	17588.88	0.00000
3659864.5	140.00	73611701.38	51.51588	0.00	0.000	12413.30	0.00000
3666616.8	160.00	122272867.45	45.39321	0.00	0.000	7262.17	0.00000
3679356.2	180.00	153443787.39	.08103	0.00	0.000	4188.12	0.00000

REVOLUTION 16

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
3679356.2	-180.00	137940750.93	.08103	0.00	0.000	4572.68	0.00000
3690113.7	-160.00	111945568.45	42.86098	0.00	0.000	7458.71	0.00000
3696112.8	-140.00	69392180.89	49.85147	0.00	0.000	12474.50	0.00000
3698794.7	-120.00	39663197.94	46.97627	0.00	0.000	17572.50	0.00000
3700060.5	-100.00	22235739.30	40.95718	0.00	0.000	22286.66	0.00000
3700745.9	-80.00	12120490.44	33.60637	0.00	0.000	26394.26	0.00000
3701174.2	-60.00	6156348.60	25.59123	0.00	0.000	29741.55	0.00000
3701479.4	-40.00	2682871.74	17.21745	0.00	0.000	32213.96	0.00000
3701724.5	-20.00	859169.68	8.65146	.39	.004	33730.11	.00017
3701747.2	-18.00	749596.01	7.78872	.57	.008	33826.96	.00036
3701769.7	-16.00	652130.17	6.92525	.83	.017	33913.70	.00076
3701791.9	-14.00	566578.06	6.06114	1.23	.036	33990.30	.00165
3701814.0	-12.00	492770.10	5.19648	1.94	.090	34056.73	.00410
3701836.0	-10.00	430560.59	4.33137	3.76	.336	34112.99	.01529
3701857.9	-8.00	379827.16	3.46592	9.36	2.069	34159.03	.09416
3701879.6	-6.00	340470.31	2.60027	23.42	12.908	34194.87	.58690
3701901.3	-4.00	312413.03	1.73470	49.80	58.212	34220.47	2.64478
3701922.9	-2.00	295600.53	.87022	81.06	153.999	34235.83	6.99356
3701942.3	0.00	290000.00	.08103	95.42	213.306	34240.95	9.68540
3701961.6	2.00	295600.53	.87022	81.06	153.999	34235.83	6.99356
3701983.2	4.00	312413.03	1.73470	49.80	58.212	34220.47	2.64478
3702004.9	6.00	340470.31	2.60027	23.42	12.908	34194.87	.58690
3702026.7	8.00	379827.16	3.46592	9.36	2.069	34159.03	.09416
3702048.5	10.00	430560.59	4.33137	3.76	.336	34112.99	.01529
3702070.5	12.00	492770.10	5.19648	1.94	.090	34056.73	.00410
3702092.6	14.00	566578.06	6.06114	1.23	.036	33990.30	.00165
3702114.9	16.00	652130.17	6.92525	.83	.017	33913.70	.00076
3702137.4	18.00	749596.01	7.78872	.57	.008	33826.96	.00036
3702160.0	20.00	859169.68	8.65146	.39	.004	33730.11	.00017
3702405.2	40.00	2682871.74	17.21745	0.00	0.000	32213.96	0.00000
3702710.4	60.00	6156348.60	25.59123	0.00	0.000	29741.55	0.00000
3703138.6	80.00	12120490.44	33.60637	0.00	0.000	26394.26	0.00000
3703824.0	100.00	22235739.30	40.95718	0.00	0.000	22286.66	0.00000
3705089.8	120.00	39663197.94	46.97627	0.00	0.000	17572.50	0.00000
3707771.7	140.00	69392180.89	49.85147	0.00	0.000	12474.50	0.00000
3713770.8	160.00	111945568.45	42.86098	0.00	0.000	7458.71	0.00000
3724528.4	180.00	137940750.93	.08103	0.00	0.000	4572.68	0.00000

REVOLUTION 17

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
3724528.4	-180.00	124222847.03	.08103	0.00	0.000	4977.21	0.00000
3733655.3	-160.00	102484748.16	40.34320	0.00	0.000	7680.48	0.00000
3738989.2	-140.00	65301168.09	48.12034	0.00	0.000	12550.47	0.00000
3741493.6	-120.00	38068399.76	45.79322	0.00	0.000	17563.10	0.00000
3742714.2	-100.00	21595049.83	40.11868	0.00	0.000	22217.74	0.00000
3743387.7	-80.00	11854229.65	33.00783	0.00	0.000	26280.73	0.00000
3743813.2	-60.00	6047706.01	25.17644	0.00	0.000	29594.64	0.00000
3744118.4	-40.00	2644148.42	16.95493	0.00	0.000	32043.58	0.00000
3744364.4	-20.00	850659.80	8.52403	.39	.004	33545.72	.00018
3744387.2	-18.00	742758.46	7.67425	.57	.008	33641.68	.00037
3744409.8	-16.00	646766.52	6.82366	.83	.017	33727.63	.00079
3744432.2	-14.00	562497.55	5.97238	1.23	.037	33803.53	.00170
3744454.4	-12.00	489788.64	5.12050	1.95	.093	33869.36	.00425
3744476.5	-10.00	428499.75	4.26812	3.81	.350	33925.10	.01604
3744498.5	-8.00	378513.23	3.41537	9.46	2.153	33970.73	.09855
3744520.4	-6.00	339733.41	2.56239	23.45	13.176	34006.24	.60239
3744542.2	-4.00	312086.21	1.70947	49.39	58.301	34031.61	2.66352
3744563.9	-2.00	295518.93	.85766	79.85	152.182	34046.83	6.94942
3744583.5	0.00	290000.00	.08103	93.77	209.792	34051.91	9.57875
3744603.0	2.00	295518.93	.85766	79.85	152.182	34046.83	6.94942
3744624.7	4.00	312086.21	1.70947	49.39	58.301	34031.61	2.66352
3744646.5	6.00	339733.41	2.56239	23.45	13.176	34006.24	.60239
3744668.4	8.00	378513.23	3.41537	9.46	2.153	33970.73	.09855
3744690.4	10.00	428499.75	4.26812	3.81	.350	33925.10	.01604
3744712.5	12.00	489788.64	5.12050	1.95	.093	33869.36	.00425
3744734.7	14.00	562497.55	5.97238	1.23	.037	33803.53	.00170
3744757.1	16.00	646766.52	6.82366	.83	.017	33727.63	.00079
3744779.7	18.00	742758.46	7.67425	.57	.008	33641.68	.00037
3744802.5	20.00	850659.80	8.52403	.39	.004	33545.72	.00018
3745048.5	40.00	2644148.42	16.95493	0.00	0.000	32043.58	0.00000
3745353.7	60.00	6047706.01	25.17644	0.00	0.000	29594.64	0.00000
3745779.2	80.00	11854229.65	33.00783	0.00	0.000	26280.73	0.00000
3746452.7	100.00	21595049.83	40.11868	0.00	0.000	22217.74	0.00000
3747673.3	120.00	38068399.76	45.79322	0.00	0.000	17563.10	0.00000
3750177.7	140.00	65301168.09	48.12034	0.00	0.000	12550.47	0.00000
3755511.6	160.00	102484748.16	40.34320	0.00	0.000	7680.48	0.00000
3764638.6	180.00	124222847.03	.08103	0.00	0.000	4977.21	0.00000

REVOLUTION 18

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
3764638.6	-180.00	112020210.88	.08103	0.00	0.000	5402.53	0.00000
3772415.0	-160.00	93801406.89	37.85400	0.00	0.000	7928.86	0.00000
3777160.7	-140.00	61340211.10	46.32518	0.00	0.000	12642.91	0.00000
3779496.4	-120.00	36462715.93	44.54909	0.00	0.000	17561.88	0.00000
3780671.8	-100.00	20934544.17	39.23205	0.00	0.000	22151.20	0.00000
3781333.1	-80.00	11575865.56	32.37328	0.00	0.000	26165.41	0.00000
3781755.6	-60.00	5933173.31	24.73607	0.00	0.000	29442.90	0.00000
3782060.8	-40.00	2603125.52	16.67602	0.00	0.000	31866.30	0.00000
3782307.8	-20.00	841621.30	8.38860	.40	.004	33353.22	.00019
3782330.7	-18.00	735495.04	7.55258	.58	.008	33448.23	.00039
3782353.4	-16.00	641068.00	6.71569	.84	.018	33533.31	.00082
3782375.9	-14.00	558161.77	5.87804	1.23	.038	33608.45	.00176
3782398.2	-12.00	486620.34	5.03974	1.97	.096	33673.63	.00444
3782420.5	-10.00	426309.57	4.20089	3.86	.367	33728.81	.01690
3782442.6	-8.00	377116.75	3.36164	9.58	2.248	33773.98	.10347
3782464.6	-6.00	338950.16	2.52213	23.50	13.491	33809.14	.62042
3782486.5	-4.00	311738.82	1.68266	48.96	58.408	33834.25	2.68395
3782508.3	-2.00	295432.19	.84430	78.60	150.305	33849.32	6.90372
3782528.1	0.00	290000.00	.08103	92.07	206.162	33854.35	9.46792
3782547.9	2.00	295432.19	.84430	78.60	150.305	33849.32	6.90372
3782569.7	4.00	311738.82	1.68266	48.96	58.408	33834.25	2.68395
3782591.6	6.00	338950.16	2.52213	23.50	13.491	33809.14	.62042
3782613.7	8.00	377116.75	3.36164	9.58	2.248	33773.98	.10347
3782635.8	10.00	426309.57	4.20089	3.86	.367	33728.81	.01690
3782658.0	12.00	486620.34	5.03974	1.97	.096	33673.63	.00444
3782680.3	14.00	558161.77	5.87804	1.23	.038	33608.45	.00176
3782702.8	16.00	641068.00	6.71569	.84	.018	33533.31	.00082
3782725.5	18.00	735495.04	7.55258	.58	.008	33448.23	.00039
3782748.4	20.00	841621.30	8.38860	.40	.004	33353.22	.00019
3782995.4	40.00	2603125.52	16.67602	0.00	0.000	31866.30	0.00000
3783300.6	60.00	5933173.31	24.73607	0.00	0.000	29442.90	0.00000
3783723.1	80.00	11575865.56	32.37328	0.00	0.000	26165.41	0.00000
3784384.4	100.00	20934544.17	39.23205	0.00	0.000	22151.20	0.00000
3785559.9	120.00	36462715.93	44.54909	0.00	0.000	17561.88	0.00000
3787895.5	140.00	61340211.10	46.32518	0.00	0.000	12642.91	0.00000
3792641.2	160.00	93801406.89	37.85400	0.00	0.000	7928.86	0.00000
3800417.6	180.00	112020210.88	.08103	0.00	0.000	5402.53	0.00000

REVOLUTION 19

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
3800417.6	-180.00	101112337.29	.08103	0.00	0.000	5849.54	0.00000
3807068.7	-160.00	85816411.97	35.40619	0.00	0.000	8205.19	0.00000
3811293.7	-140.00	57509558.57	44.46928	0.00	0.000	12753.65	0.00000
3813469.1	-120.00	34848763.35	43.24258	0.00	0.000	17570.16	0.00000
3814599.6	-100.00	20254452.45	38.29511	0.00	0.000	22087.85	0.00000
3815248.2	-80.00	11285055.11	31.70071	0.00	0.000	26048.69	0.00000
3815667.7	-60.00	5812467.20	24.26858	0.00	0.000	29286.47	0.00000
3815972.8	-40.00	2559667.42	16.37967	0.00	0.000	31682.04	0.00000
3816220.8	-20.00	832020.03	8.24463	.40	.004	33152.41	.00020
3816243.8	-18.00	727778.11	7.42324	.58	.009	33246.37	.00041
3816266.6	-16.00	635012.80	6.60091	.84	.018	33330.52	.00085
3816289.3	-14.00	553554.01	5.77775	1.24	.039	33404.84	.00182
3816311.8	-12.00	483252.91	4.95388	1.99	.100	33469.29	.00465
3816334.1	-10.00	423981.52	4.12942	3.92	.385	33523.87	.01787
3816356.3	-8.00	375632.24	3.30452	9.70	2.353	33568.55	.10898
3816378.5	-6.00	338117.50	2.47933	23.56	13.838	33603.32	.64027
3816400.5	-4.00	311369.50	1.65416	48.52	58.534	33628.16	2.70623
3816422.5	-2.00	295339.97	.83010	77.30	148.366	33643.07	6.85647
3816442.5	0.00	290000.00	.08103	90.31	202.416	33648.04	9.35288
3816462.5	2.00	295339.97	.83010	77.30	148.366	33643.07	6.85647
3816484.5	4.00	311369.50	1.65416	48.52	58.534	33628.16	2.70623
3816506.5	6.00	338117.50	2.47933	23.56	13.838	33603.32	.64027
3816528.7	8.00	375632.24	3.30452	9.70	2.353	33568.55	.10898
3816550.9	10.00	423981.52	4.12942	3.92	.385	33523.87	.01787
3816573.2	12.00	483252.91	4.95388	1.99	.100	33469.29	.00465
3816595.7	14.00	553554.01	5.77775	1.24	.039	33404.84	.00182
3816618.4	16.00	635012.80	6.60091	.84	.018	33330.52	.00085
3816641.2	18.00	727778.11	7.42324	.58	.009	33246.37	.00041
3816664.2	20.00	832020.03	8.24463	.40	.004	33152.41	.00020
3816912.2	40.00	2559667.42	16.37967	0.00	0.000	31682.04	0.00000
3817217.3	60.00	5812467.20	24.26858	0.00	0.000	29286.47	0.00000
3817636.8	80.00	11285055.11	31.70071	0.00	0.000	26048.69	0.00000
3818285.4	100.00	20254452.45	38.29511	0.00	0.000	22087.85	0.00000
3819415.9	120.00	34848763.35	43.24258	0.00	0.000	17570.16	0.00000
3821591.3	140.00	57509558.57	44.46928	0.00	0.000	12753.65	0.00000
3825816.3	160.00	85816411.97	35.40619	0.00	0.000	8205.19	0.00000
3832467.3	180.00	101112337.29	.08103	0.00	0.000	5849.54	0.00000

REVOLUTION 20

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
3832467.3	-180.00	91317505.68	.08103	0.00	0.000	6319.29	0.00000
3838175.4	-160.00	78459396.55	33.01099	0.00	0.000	8510.79	0.00000
3841938.6	-140.00	53808353.18	42.55651	0.00	0.000	12884.62	0.00000
3843962.3	-120.00	33228917.01	41.87243	0.00	0.000	17589.38	0.00000
3845047.9	-100.00	19554956.69	37.30552	0.00	0.000	22028.60	0.00000
3845683.6	-80.00	10981410.89	30.98789	0.00	0.000	25931.05	0.00000
3846099.9	-60.00	5685271.05	23.77219	0.00	0.000	29125.45	0.00000
3846404.9	-40.00	2513621.90	16.06468	0.00	0.000	31490.71	0.00000
3846653.9	-20.00	821817.56	8.09153	.41	.004	32943.06	.00021
3846677.1	-18.00	719576.53	7.28569	.59	.009	33035.87	.00043
3846700.0	-16.00	628576.32	6.47884	.85	.019	33119.01	.00089
3846722.8	-14.00	548655.43	5.67109	1.25	.041	33192.43	.00190
3846745.4	-12.00	479672.53	4.86257	2.01	.105	33256.11	.00489
3846767.9	-10.00	421506.00	4.05341	3.98	.406	33310.02	.01896
3846790.3	-8.00	374053.57	3.24376	9.84	2.471	33354.17	.11518
3846812.6	-6.00	337231.96	2.43380	23.63	14.221	33388.51	.66219
3846834.8	-4.00	310976.71	1.62384	48.07	58.683	33413.05	2.73058
3846856.9	-2.00	295241.89	.81500	75.97	146.368	33427.78	6.80768
3846877.1	0.00	290000.00	.08103	88.51	198.554	33432.69	9.23355
3846897.3	2.00	295241.89	.81500	75.97	146.368	33427.78	6.80768
3846919.4	4.00	310976.71	1.62384	48.07	58.683	33413.05	2.73058
3846941.6	6.00	337231.96	2.43380	23.63	14.221	33388.51	.66219
3846963.9	8.00	374053.57	3.24376	9.84	2.471	33354.17	.11518
3846986.3	10.00	421506.00	4.05341	3.98	.406	33310.02	.01896
3847008.7	12.00	479672.53	4.86257	2.01	.105	33256.11	.00489
3847031.4	14.00	548655.43	5.67109	1.25	.041	33192.43	.00190
3847054.1	16.00	628576.32	6.47884	.85	.019	33119.01	.00089
3847077.1	18.00	719576.53	7.28569	.59	.009	33035.87	.00043
3847100.2	20.00	821817.56	8.09153	.41	.004	32943.06	.00021
3847349.2	40.00	2513621.90	16.06468	0.00	0.000	31490.71	0.00000
3847654.3	60.00	5685271.05	23.77219	0.00	0.000	29125.45	0.00000
3848070.6	80.00	10981410.89	30.98789	0.00	0.000	25931.05	0.00000
3848706.2	100.00	19554956.69	37.30552	0.00	0.000	22028.60	0.00000
3849791.9	120.00	33228917.01	41.87243	0.00	0.000	17589.38	0.00000
3851815.5	140.00	53808353.18	42.55651	0.00	0.000	12884.62	0.00000
3855578.8	160.00	78459396.55	33.01099	0.00	0.000	8510.79	0.00000
3861286.8	180.00	91317505.68	.08103	0.00	0.000	6319.29	0.00000

REVOLUTION 21

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
3861286.8	-180.00	82484765.06	.08103	0.00	0.000	6812.96	0.00000
3866200.4	-160.00	71667745.76	30.67786	0.00	0.000	8847.00	0.00000
3869553.9	-140.00	50234801.41	40.59130	0.00	0.000	13037.88	0.00000
3871433.9	-120.00	31605301.00	40.43752	0.00	0.000	17621.16	0.00000
3872475.0	-100.00	18836181.16	36.26079	0.00	0.000	21974.46	0.00000
3873097.4	-80.00	10664493.82	30.23238	0.00	0.000	25813.00	0.00000
3873510.3	-60.00	5551229.58	23.24497	0.00	0.000	28960.02	0.00000
3873815.3	-40.00	2464817.49	15.72973	0.00	0.000	31292.19	0.00000
3874065.3	-20.00	810970.45	7.92863	.41	.005	32724.89	.00022
3874088.6	-18.00	710855.12	7.13933	.59	.010	32816.47	.00045
3874111.7	-16.00	621730.74	6.34894	.86	.020	32898.49	.00093
3874134.6	-14.00	543444.75	5.55759	1.26	.042	32970.93	.00198
3874157.4	-12.00	475863.56	4.76540	2.04	.110	33033.76	.00518
3874180.0	-10.00	418872.15	3.97252	4.06	.432	33086.96	.02029
3874202.5	-8.00	372373.78	3.17911	9.98	2.604	33130.52	.12218
3874224.9	-6.00	336289.64	2.38536	23.72	14.643	33164.41	.68647
3874247.3	-4.00	310558.71	1.59158	47.61	58.857	33188.62	2.75722
3874269.6	-2.00	295137.51	.79894	74.60	144.309	33203.16	6.75734
3874290.0	0.00	290000.00	.08103	86.65	194.578	33208.00	9.10985
3874310.4	2.00	295137.51	.79894	74.60	144.309	33203.16	6.75734
3874332.7	4.00	310558.71	1.59158	47.61	58.857	33188.62	2.75722
3874355.0	6.00	336289.64	2.38536	23.72	14.643	33164.41	.68647
3874377.4	8.00	372373.78	3.17911	9.98	2.604	33130.52	.12218
3874400.0	10.00	418872.15	3.97252	4.06	.432	33086.96	.02029
3874422.6	12.00	475863.56	4.76540	2.04	.110	33033.76	.00518
3874445.4	14.00	543444.75	5.55759	1.26	.042	32970.93	.00198
3874468.3	16.00	621730.74	6.34894	.86	.020	32898.49	.00093
3874491.4	18.00	710855.12	7.13933	.59	.010	32816.47	.00045
3874514.7	20.00	810970.45	7.92863	.41	.005	32724.89	.00022
3874764.7	40.00	2464817.49	15.72973	0.00	0.000	31292.19	0.00000
3875069.7	60.00	5551229.58	23.24497	0.00	0.000	28960.02	0.00000
3875482.6	80.00	10664493.82	30.23238	0.00	0.000	25813.00	0.00000
3876105.0	100.00	18836181.16	36.26079	0.00	0.000	21974.46	0.00000
3877146.0	120.00	31605301.00	40.43752	0.00	0.000	17621.16	0.00000
3879026.1	140.00	50234801.41	40.59130	0.00	0.000	13037.88	0.00000
3882379.6	160.00	71667745.76	30.67786	0.00	0.000	8847.00	0.00000
3887293.1	180.00	82484765.06	.08103	0.00	0.000	6812.96	0.00000

REVOLUTION 22

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
3887293.1	-180.00	74487788.59	.08103	0.00	0.000	7331.86	0.00000
3891534.1	-160.00	65385676.04	28.41440	0.00	0.000	9215.21	0.00000
3894523.4	-140.00	46786319.62	38.57864	0.00	0.000	13215.63	0.00000
3896267.7	-120.00	29979778.49	38.93684	0.00	0.000	17667.25	0.00000
3897264.6	-100.00	18098180.39	35.15824	0.00	0.000	21926.57	0.00000
3897873.4	-80.00	10333803.98	29.43147	0.00	0.000	25695.14	0.00000
3898282.7	-60.00	5409942.31	22.68469	0.00	0.000	28790.32	0.00000
3898587.6	-40.00	2413060.09	15.37330	0.00	0.000	31086.36	0.00000
3898838.7	-20.00	799429.35	7.75516	.42	.005	32497.61	.00023
3898862.2	-18.00	701573.87	6.98348	.60	.010	32587.83	.00048
3898885.4	-16.00	614444.45	6.21062	.87	.020	32668.64	.00097
3898908.5	-14.00	537897.76	5.43671	1.27	.044	32740.01	.00208
3898931.4	-12.00	471808.20	4.66192	2.08	.116	32801.92	.00551
3898954.2	-10.00	416067.61	3.88638	4.16	.464	32854.34	.02194
3898976.9	-8.00	370584.96	3.11026	10.15	2.754	32897.25	.13014
3898999.4	-6.00	335286.09	2.33376	23.81	15.111	32930.65	.71344
3899022.0	-4.00	310113.53	1.55723	47.14	59.061	32954.51	2.78643
3899044.4	-2.00	295026.34	.78183	73.19	142.191	32968.83	6.70546
3899065.0	0.00	290000.00	.08103	84.73	190.486	32973.60	8.98170
3899085.6	2.00	295026.34	.78183	73.19	142.191	32968.83	6.70546
3899108.1	4.00	310113.53	1.55723	47.14	59.061	32954.51	2.78643
3899130.6	6.00	335286.09	2.33376	23.81	15.111	32930.65	.71344
3899153.2	8.00	370584.96	3.11026	10.15	2.754	32897.25	.13014
3899175.8	10.00	416067.61	3.88638	4.16	.464	32854.34	.02194
3899198.6	12.00	471808.20	4.66192	2.08	.116	32801.92	.00551
3899221.5	14.00	537897.76	5.43671	1.27	.044	32740.01	.00208
3899244.6	16.00	614444.45	6.21062	.87	.020	32668.64	.00097
3899267.9	18.00	701573.87	6.98348	.60	.010	32587.83	.00048
3899291.3	20.00	799429.35	7.75516	.42	.005	32497.61	.00023
3899542.5	40.00	2413060.09	15.37330	0.00	0.000	31086.36	0.00000
3899847.4	60.00	5409942.31	22.68469	0.00	0.000	28790.32	0.00000
3900256.7	80.00	10333803.98	29.43147	0.00	0.000	25695.14	0.00000
3900865.4	100.00	18098180.39	35.15824	0.00	0.000	21926.57	0.00000
3901862.3	120.00	29979778.49	38.93684	0.00	0.000	17667.25	0.00000
3903606.6	140.00	46786319.62	38.57864	0.00	0.000	13215.63	0.00000
3906595.9	160.00	65385676.04	28.41440	0.00	0.000	9215.21	0.00000
3910836.9	180.00	74487788.59	.08103	0.00	0.000	7331.86	0.00000

REVOLUTION 23

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
3910836.9	-180.00	67220109.86	.08103	0.00	0.000	7877.52	0.00000
3914505.9	-160.00	59563406.17	26.22638	0.00	0.000	9616.88	0.00000
3917171.0	-140.00	43459656.93	36.52394	0.00	0.000	13420.20	0.00000
3918787.3	-120.00	28353939.43	37.36955	0.00	0.000	17729.62	0.00000
3919740.4	-100.00	17340924.32	33.99499	0.00	0.000	21886.21	0.00000
3920335.1	-80.00	9988769.04	28.58214	0.00	0.000	25578.14	0.00000
3920740.7	-60.00	5260955.39	22.08889	0.00	0.000	28616.57	0.00000
3921045.4	-40.00	2358128.81	14.99368	0.00	0.000	30873.06	0.00000
3921297.8	-20.00	787137.89	7.57026	.43	.005	32260.86	.00025
3921321.4	-18.00	691687.11	6.81734	.61	.011	32349.60	.00051
3921344.8	-16.00	606681.35	6.06316	.88	.021	32429.09	.00103
3921368.0	-14.00	531986.79	5.30786	1.28	.046	32499.30	.00220
3921391.1	-12.00	467486.13	4.55159	2.12	.124	32560.19	.00591
3921414.0	-10.00	413078.27	3.79453	4.26	.500	32611.76	.02385
3921436.9	-8.00	368678.09	3.03685	10.36	2.941	32653.97	.14002
3921459.6	-6.00	334216.23	2.27875	23.93	15.632	32686.82	.74353
3921482.3	-4.00	309638.91	1.52060	46.68	59.357	32710.29	2.82131
3921504.9	-2.00	294907.82	.76360	71.74	140.012	32724.38	6.65204
3921525.8	0.00	290000.00	.08103	82.77	186.280	32729.07	8.84898
3921546.6	2.00	294907.82	.76360	71.74	140.012	32724.38	6.65204
3921569.2	4.00	309638.91	1.52060	46.68	59.357	32710.29	2.82131
3921591.9	6.00	334216.23	2.27875	23.93	15.632	32686.82	.74353
3921614.6	8.00	368678.09	3.03685	10.36	2.941	32653.97	.14002
3921637.5	10.00	413078.27	3.79453	4.26	.500	32611.76	.02385
3921660.4	12.00	467486.13	4.55159	2.12	.124	32560.19	.00591
3921683.5	14.00	531986.79	5.30786	1.28	.046	32499.30	.00220
3921706.7	16.00	606681.35	6.06316	.88	.021	32429.09	.00103
3921730.1	18.00	691687.11	6.81734	.61	.011	32349.60	.00051
3921753.7	20.00	787137.89	7.57026	.43	.005	32260.86	.00025
3922006.1	40.00	2358128.81	14.99368	0.00	0.000	30873.06	0.00000
3922310.8	60.00	5260955.39	22.08889	0.00	0.000	28616.57	0.00000
3922716.4	80.00	9988769.04	28.58214	0.00	0.000	25578.14	0.00000
3923311.1	100.00	17340924.32	33.99499	0.00	0.000	21886.21	0.00000
3924264.3	120.00	28353939.43	37.36955	0.00	0.000	17729.62	0.00000
3925880.5	140.00	43459656.93	36.52394	0.00	0.000	13420.20	0.00000
3928545.7	160.00	59563406.17	26.22638	0.00	0.000	9616.88	0.00000
3932214.6	180.00	67220109.86	.08103	0.00	0.000	7877.52	0.00000

REVOLUTION 24

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
3932214.6	-180.00	60591391.45	.08103	0.00	0.000	8451.69	0.00000
3935395.1	-160.00	54156414.09	24.11782	0.00	0.000	10053.65	0.00000
3937771.4	-140.00	40250995.01	34.43302	0.00	0.000	13654.12	0.00000
3939266.8	-120.00	26729084.87	35.73495	0.00	0.000	17810.46	0.00000
3940176.6	-100.00	16564279.46	32.76794	0.00	0.000	21854.86	0.00000
3940757.0	-80.00	9628729.56	27.68100	0.00	0.000	25462.77	0.00000
3941158.6	-60.00	5103751.17	21.45472	0.00	0.000	28438.97	0.00000
3941463.2	-40.00	2299770.67	14.58890	.01	.000	30652.12	.00000
3941716.8	-20.00	774031.27	7.37293	.44	.006	32014.24	.00027
3941740.6	-18.00	681142.31	6.64002	.62	.011	32101.36	.00054
3941764.1	-16.00	598399.89	5.90577	.89	.023	32179.40	.00109
3941787.5	-14.00	525680.03	5.17031	1.30	.048	32248.33	.00233
3941810.8	-12.00	462873.95	4.43383	2.16	.133	32308.12	.00639
3941833.9	-10.00	409887.87	3.69650	4.39	.543	32358.75	.02609
3941856.9	-8.00	366642.75	2.95849	10.61	3.164	32400.19	.15184
3941879.8	-6.00	333074.19	2.22003	24.05	16.213	32432.45	.77723
3941902.7	-4.00	309132.24	1.48150	46.22	59.716	32455.49	2.86066
3941925.5	-2.00	294781.28	.74414	70.25	137.773	32469.32	6.59706
3941946.6	0.00	290000.00	.08103	80.76	181.957	32473.93	8.71155
3941967.6	2.00	294781.28	.74414	70.25	137.773	32469.32	6.59706
3941990.4	4.00	309132.24	1.48150	46.22	59.716	32455.49	2.86066
3942013.3	6.00	333074.19	2.22003	24.05	16.213	32432.45	.77723
3942036.2	8.00	366642.75	2.95849	10.61	3.164	32400.19	.15184
3942059.2	10.00	409887.87	3.69650	4.39	.543	32358.75	.02609
3942082.3	12.00	462873.95	4.43383	2.16	.133	32308.12	.00639
3942105.6	14.00	525680.03	5.17031	1.30	.048	32248.33	.00233
3942129.0	16.00	598399.89	5.90577	.89	.023	32179.40	.00109
3942152.5	18.00	681142.31	6.64002	.62	.011	32101.36	.00054
3942176.3	20.00	774031.27	7.37293	.44	.006	32014.24	.00027
3942429.9	40.00	2299770.67	14.58890	.01	.000	30652.12	.00000
3942734.5	60.00	5103751.17	21.45472	0.00	0.000	28438.97	0.00000
3943136.1	80.00	9628729.56	27.68100	0.00	0.000	25462.77	0.00000
3943716.5	100.00	16564279.46	32.76794	0.00	0.000	21854.86	0.00000
3944626.3	120.00	26729084.87	35.73495	0.00	0.000	17810.46	0.00000
3946121.7	140.00	40250995.01	34.43302	0.00	0.000	13654.12	0.00000
3948498.0	160.00	54156414.09	24.11782	0.00	0.000	10053.65	0.00000
3951678.5	180.00	60591391.45	.08103	0.00	0.000	8451.69	0.00000

REVOLUTION 25

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
3951678.5	-180.00	54524471.50	.08103	0.00	0.000	9056.40	0.00000
3954440.0	-160.00	49124771.05	22.09107	0.00	0.000	10527.33	0.00000
3956558.5	-140.00	37156024.67	32.31192	0.00	0.000	13920.08	0.00000
3957940.0	-120.00	25106206.14	34.03251	0.00	0.000	17912.19	0.00000
3958807.1	-100.00	15767984.85	31.47373	0.00	0.000	21834.16	0.00000
3959372.8	-80.00	9252919.97	26.72427	0.00	0.000	25349.93	0.00000
3959770.3	-60.00	4937734.95	20.77897	0.00	0.000	28257.79	0.00000
3960074.7	-40.00	2237693.86	14.15669	.01	.000	30423.35	.00000
3960329.6	-20.00	760034.49	7.16199	.45	.006	31757.28	.00029
3960353.5	-18.00	669878.63	6.45048	.63	.012	31842.62	.00058
3960377.2	-16.00	589551.97	5.73751	.90	.024	31919.07	.00117
3960400.8	-14.00	518940.62	5.02327	1.32	.051	31986.60	.00249
3960424.2	-12.00	457944.58	4.30793	2.22	.144	32045.17	.00697
3960447.5	-10.00	406477.58	3.59168	4.56	.602	32094.77	.02918
3960470.7	-8.00	364466.89	2.87470	10.89	3.423	32135.37	.16563
3960493.8	-6.00	331853.21	2.15725	24.20	16.865	32166.97	.81517
3960516.9	-4.00	308590.51	1.43969	45.75	60.127	32189.55	2.90412
3960539.9	-2.00	294645.99	.72334	68.72	135.472	32203.10	6.54053
3960561.2	0.00	290000.00	.08103	78.69	177.517	32207.62	8.56925
3960582.5	2.00	294645.99	.72334	68.72	135.472	32203.10	6.54053
3960605.5	4.00	308590.51	1.43969	45.75	60.127	32189.55	2.90412
3960628.5	6.00	331853.21	2.15725	24.20	16.865	32166.97	.81517
3960651.6	8.00	364466.89	2.87470	10.89	3.423	32135.37	.16563
3960674.8	10.00	406477.58	3.59168	4.56	.602	32094.77	.02918
3960698.1	12.00	457944.58	4.30793	2.22	.144	32045.17	.00697
3960721.5	14.00	518940.62	5.02327	1.32	.051	31986.60	.00249
3960745.1	16.00	589551.97	5.73751	.90	.024	31919.07	.00117
3960768.8	18.00	669878.63	6.45048	.63	.012	31842.62	.00058
3960792.8	20.00	760034.49	7.16199	.45	.006	31757.28	.00029
3961047.7	40.00	2237693.86	14.15669	.01	.000	30423.35	.00000
3961352.1	60.00	4937734.95	20.77897	0.00	0.000	28257.79	0.00000
3961749.5	80.00	9252919.97	26.72427	0.00	0.000	25349.93	0.00000
3962315.2	100.00	15767984.85	31.47373	0.00	0.000	21834.16	0.00000
3963182.3	120.00	25106206.14	34.03251	0.00	0.000	17912.19	0.00000
3964563.8	140.00	37156024.67	32.31192	0.00	0.000	13920.08	0.00000
3966682.3	160.00	49124771.05	22.09107	0.00	0.000	10527.33	0.00000
3969443.9	180.00	54524471.50	.08103	0.00	0.000	9056.40	0.00000

REVOLUTION 26

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
3969443.9	-180.00	48953000.68	.08103	0.00	0.000	9694.03	0.00000
3971844.8	-160.00	44432542.61	20.14701	0.00	0.000	11040.01	0.00000
3973732.9	-140.00	34169998.40	30.16676	0.00	0.000	14221.08	0.00000
3975007.2	-120.00	23485956.35	32.26184	0.00	0.000	18037.55	0.00000
3975832.0	-100.00	14951620.51	30.10869	0.00	0.000	21826.03	0.00000
3976382.7	-80.00	8860443.71	25.70764	0.00	0.000	25240.64	0.00000
3976775.8	-60.00	4762217.69	20.05791	0.00	0.000	28073.33	0.00000
3977079.9	-40.00	2171558.96	13.69440	.01	.000	30186.52	.00000
3977336.2	-20.00	745059.95	6.93611	.46	.007	31489.41	.00032
3977360.3	-18.00	657825.02	6.24748	.65	.013	31572.80	.00063
3977384.2	-16.00	580081.38	5.55730	.92	.026	31647.50	.00126
3977408.0	-14.00	511725.47	4.86577	1.35	.055	31713.48	.00271
3977431.6	-12.00	452666.33	4.17307	2.29	.157	31770.72	.00769
3977455.1	-10.00	402825.39	3.47940	4.75	.673	31819.19	.03291
3977478.5	-8.00	362136.42	2.78495	11.20	3.726	31858.87	.18184
3977501.8	-6.00	330545.34	2.08999	24.38	17.601	31889.75	.85812
3977525.0	-4.00	308010.19	1.39492	45.28	60.597	31911.81	2.95228
3977548.2	-2.00	294501.05	.70106	67.15	133.109	31925.05	6.48242
3977569.8	0.00	290000.00	.08103	76.57	172.958	31929.47	8.42188
3977591.3	2.00	294501.05	.70106	67.15	133.109	31925.05	6.48242
3977614.5	4.00	308010.19	1.39492	45.28	60.597	31911.81	2.95228
3977637.8	6.00	330545.34	2.08999	24.38	17.601	31889.75	.85812
3977661.1	8.00	362136.42	2.78495	11.20	3.726	31858.87	.18184
3977684.5	10.00	402825.39	3.47940	4.75	.673	31819.19	.03291
3977708.0	12.00	452666.33	4.17307	2.29	.157	31770.72	.00769
3977731.6	14.00	511725.47	4.86577	1.35	.055	31713.48	.00271
3977755.3	16.00	580081.38	5.55730	.92	.026	31647.50	.00126
3977779.2	18.00	657825.02	6.24748	.65	.013	31572.80	.00063
3977803.3	20.00	745059.95	6.93611	.46	.007	31489.41	.00032
3978059.6	40.00	2171558.96	13.69440	.01	.000	30186.52	.00000
3978363.8	60.00	4762217.69	20.05791	0.00	0.000	28073.33	0.00000
3978756.8	80.00	8860443.71	25.70764	0.00	0.000	25240.64	0.00000
3979307.5	100.00	14951620.51	30.10869	0.00	0.000	21826.03	0.00000
3980132.3	120.00	23485956.35	32.26184	0.00	0.000	18037.55	0.00000
3981406.7	140.00	34169998.40	30.16676	0.00	0.000	14221.08	0.00000
3983294.8	160.00	44432542.61	20.14701	0.00	0.000	11040.01	0.00000
3985695.7	180.00	48953000.68	.08103	0.00	0.000	9694.03	0.00000

REVOLUTION 27

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
3985695.7	-180.00	43819528.39	.08103	0.00	0.000	10367.36	0.00000
3987785.1	-160.00	40047244.87	18.28521	0.00	0.000	11594.18	0.00000
3989467.0	-140.00	31287756.73	28.00363	0.00	0.000	14560.38	0.00000
3990640.4	-120.00	21868610.58	30.42268	0.00	0.000	18189.64	0.00000
3991423.5	-100.00	14114565.66	28.66879	0.00	0.000	21832.65	0.00000
3991958.8	-80.00	8450239.96	24.62622	0.00	0.000	25136.10	0.00000
3992347.3	-60.00	4576393.05	19.28722	0.00	0.000	27885.93	0.00000
3992651.1	-40.00	2100967.29	13.19895	.02	.000	29941.34	.00000
3992908.8	-20.00	729004.39	6.69368	.47	.007	31209.99	.00036
3992933.1	-18.00	644897.72	6.02959	.66	.014	31291.22	.00069
3992957.2	-16.00	569921.83	5.36387	.94	.027	31363.99	.00136
3992981.2	-14.00	503983.78	4.69670	1.39	.060	31428.26	.00296
3993005.0	-12.00	447001.83	4.02830	2.37	.174	31484.02	.00860
3993028.7	-10.00	398905.34	3.35886	4.98	.762	31531.24	.03756
3993052.3	-8.00	359634.69	2.68860	11.54	4.081	31569.90	.20098
3993075.8	-6.00	329141.22	2.01779	24.58	18.452	31599.98	.90784
3993099.3	-4.00	307387.12	1.34684	44.80	61.135	31621.48	3.00587
3993122.7	-2.00	294345.43	.67716	65.54	130.682	31634.38	6.42271
3993144.5	0.00	290000.00	.08103	74.39	168.275	31638.69	8.26918
3993166.3	2.00	294345.43	.67716	65.54	130.682	31634.38	6.42271
3993189.7	4.00	307387.12	1.34684	44.80	61.135	31621.48	3.00587
3993213.2	6.00	329141.22	2.01779	24.58	18.452	31599.98	.90784
3993236.7	8.00	359634.69	2.68860	11.54	4.081	31569.90	.20098
3993260.3	10.00	398905.34	3.35886	4.98	.762	31531.24	.03756
3993284.0	12.00	447001.83	4.02830	2.37	.174	31484.02	.00860
3993307.8	14.00	503983.78	4.69670	1.39	.060	31428.26	.00296
3993331.8	16.00	569921.83	5.36387	.94	.027	31363.99	.00136
3993355.9	18.00	644897.72	6.02959	.66	.014	31291.22	.00069
3993380.2	20.00	729004.39	6.69368	.47	.007	31209.99	.00036
3993637.9	40.00	2100967.29	13.19895	.02	.000	29941.34	.00000
3993941.7	60.00	4576393.05	19.28722	0.00	0.000	27885.93	0.00000
3994330.1	80.00	8450239.96	24.62622	0.00	0.000	25136.10	0.00000
3994865.5	100.00	14114565.66	28.66879	0.00	0.000	21832.65	0.00000
3995648.6	120.00	21868610.58	30.42268	0.00	0.000	18189.64	0.00000
3996822.0	140.00	31287756.73	28.00363	0.00	0.000	14560.38	0.00000
3998503.9	160.00	40047244.87	18.28521	0.00	0.000	11594.18	0.00000
4000593.3	180.00	43819528.39	.08103	0.00	0.000	10367.36	0.00000

REVOLUTION 28

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
4000593.3	-180.00	39073929.35	.08103	0.00	0.000	11079.73	0.00000
4002412.6	-160.00	35939342.09	16.50408	0.00	0.000	12192.82	0.00000
4003909.7	-140.00	28503724.09	25.82832	0.00	0.000	14941.67	0.00000
4004988.1	-120.00	20254009.43	28.51479	0.00	0.000	18372.00	0.00000
4005730.2	-100.00	13255941.88	27.14952	0.00	0.000	21856.61	0.00000
4006249.7	-80.00	8021038.63	23.47434	0.00	0.000	25037.75	0.00000
4006633.3	-60.00	4379306.52	18.46182	0.00	0.000	27696.03	0.00000
4006936.8	-40.00	2025445.30	12.66667	.02	.000	29687.49	.00000
4007196.0	-20.00	711744.69	6.43281	.49	.008	30918.21	.00040
4007220.5	-18.00	630996.79	5.79510	.68	.015	30997.05	.00076
4007244.8	-16.00	558994.24	5.15567	.96	.030	31067.68	.00149
4007269.0	-14.00	495654.91	4.51472	1.43	.066	31130.06	.00328
4007293.0	-12.00	440906.48	3.87245	2.48	.196	31184.19	.00976
4007316.9	-10.00	394686.40	3.22909	5.26	.878	31230.02	.04369
4007340.7	-8.00	356941.86	2.58487	11.92	4.488	31267.55	.22318
4007364.5	-6.00	327629.68	1.94005	24.83	19.435	31296.76	.96550
4007388.2	-4.00	306716.33	1.29509	44.31	61.754	31317.63	3.06578
4007411.8	-2.00	294177.89	.65143	63.89	128.190	31330.15	6.36138
4007433.9	0.00	290000.00	.08103	72.16	163.465	31334.33	8.11085
4007455.9	2.00	294177.89	.65143	63.89	128.190	31330.15	6.36138
4007479.6	4.00	306716.33	1.29509	44.31	61.754	31317.63	3.06578
4007503.3	6.00	327629.68	1.94005	24.83	19.435	31296.76	.96550
4007527.0	8.00	356941.86	2.58487	11.92	4.488	31267.55	.22318
4007550.8	10.00	394686.40	3.22909	5.26	.878	31230.02	.04369
4007574.7	12.00	440906.48	3.87245	2.48	.196	31184.19	.00976
4007598.8	14.00	495654.91	4.51472	1.43	.066	31130.06	.00328
4007622.9	16.00	558994.24	5.15567	.96	.030	31067.68	.00149
4007647.3	18.00	630996.79	5.79510	.68	.015	30997.05	.00076
4007671.7	20.00	711744.69	6.43281	.49	.008	30918.21	.00040
4007931.0	40.00	2025445.30	12.66667	.02	.000	29687.49	.00000
4008234.5	60.00	4379306.52	18.46182	0.00	0.000	27696.03	0.00000
4008618.0	80.00	8021038.63	23.47434	0.00	0.000	25037.75	0.00000
4009137.6	100.00	13255941.88	27.14952	0.00	0.000	21856.61	0.00000
4009879.6	120.00	20254009.43	28.51479	0.00	0.000	18372.00	0.00000
4010958.1	140.00	28503724.09	25.82832	0.00	0.000	14941.67	0.00000
4012455.2	160.00	35939342.09	16.50408	0.00	0.000	12192.82	0.00000
4014274.4	180.00	39073929.35	.08103	0.00	0.000	11079.73	0.00000

REVOLUTION 29

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
4014274.4	-180.00	34672083.51	.08103	0.00	0.000	11835.18	0.00000
4015858.7	-160.00	32081769.28	14.80102	0.00	0.000	12839.55	0.00000
4017189.9	-140.00	25811866.67	23.64613	0.00	0.000	15369.21	0.00000
4018179.0	-120.00	18641477.33	26.53790	0.00	0.000	18588.70	0.00000
4018880.5	-100.00	12374534.09	25.54578	0.00	0.000	21900.91	0.00000
4019384.0	-80.00	7571297.64	22.24538	0.00	0.000	24947.28	0.00000
4019762.3	-60.00	4169812.69	17.57568	0.00	0.000	27504.12	0.00000
4020065.4	-40.00	1944422.93	12.09314	.02	.000	29424.55	.00000
4020326.2	-20.00	693132.08	6.15118	.51	.009	30613.11	.00045
4020350.9	-18.00	616001.47	5.54194	.71	.017	30689.29	.00085
4020375.5	-16.00	547203.01	4.93087	.99	.033	30757.54	.00166
4020399.8	-14.00	486665.54	4.31820	1.49	.074	30817.83	.00371
4020424.1	-12.00	434326.33	3.70415	2.61	.225	30870.13	.01134
4020448.3	-10.00	390131.09	3.08895	5.58	1.023	30914.43	.05146
4020472.3	-8.00	354033.89	2.47284	12.34	4.977	30950.70	.25002
4020496.3	-6.00	325997.19	1.85610	25.12	20.569	30978.93	1.03233
4020520.2	-4.00	305991.81	1.23920	43.82	62.469	30999.10	3.13312
4020544.1	-2.00	293996.91	.62366	62.19	125.628	31011.20	6.29839
4020566.5	0.00	290000.00	.08103	69.87	158.522	31015.24	7.94650
4020588.8	2.00	293996.91	.62366	62.19	125.628	31011.20	6.29839
4020612.7	4.00	305991.81	1.23920	43.82	62.469	30999.10	3.13312
4020636.6	6.00	325997.19	1.85610	25.12	20.569	30978.93	1.03233
4020660.6	8.00	354033.89	2.47284	12.34	4.977	30950.70	.25002
4020684.7	10.00	390131.09	3.08895	5.58	1.023	30914.43	.05146
4020708.8	12.00	434326.33	3.70415	2.61	.225	30870.13	.01134
4020733.1	14.00	486665.54	4.31820	1.49	.074	30817.83	.00371
4020757.5	16.00	547203.01	4.93087	.99	.033	30757.54	.00166
4020782.0	18.00	616001.47	5.54194	.71	.017	30689.29	.00085
4020806.7	20.00	693132.08	6.15118	.51	.009	30613.11	.00045
4021067.5	40.00	1944422.93	12.09314	.02	.000	29424.55	.00000
4021370.6	60.00	4169812.69	17.57568	0.00	0.000	27504.12	0.00000
4021749.0	80.00	7571297.64	22.24538	0.00	0.000	24947.28	0.00000
4022252.4	100.00	12374534.09	25.54578	0.00	0.000	21900.91	0.00000
4022953.9	120.00	18641477.33	26.53790	0.00	0.000	18588.70	0.00000
4023943.0	140.00	25811866.67	23.64613	0.00	0.000	15369.21	0.00000
4025274.2	160.00	32081769.28	14.80102	0.00	0.000	12839.55	0.00000
4026858.5	180.00	34672083.51	.08103	0.00	0.000	11835.18	0.00000

REVOLUTION 30

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P
4026858.5	-180.00	30574734.16	.08103	0.00	0.000	12638.68	0.00000
4028237.7	-160.00	28449457.62	13.17253	0.00	0.000	13538.91	0.00000
4029419.7	-140.00	23205598.78	21.46159	0.00	0.000	15847.94	0.00000
4030324.7	-120.00	17029701.90	24.49145	0.00	0.000	18844.56	0.00000
4030986.3	-100.00	11468677.50	23.85163	0.00	0.000	21969.15	0.00000
4031473.1	-80.00	7099113.49	20.93149	0.00	0.000	24866.73	0.00000
4031846.0	-60.00	3946514.55	16.62151	0.00	0.000	27310.81	0.00000
4032148.6	-40.00	1857203.05	11.47298	.02	.000	29152.02	.00000
4032411.1	-20.00	672983.96	5.84599	.54	.010	30293.49	.00052
4032436.0	-18.00	599763.49	5.26755	.73	.019	30366.70	.00096
4032460.8	-16.00	534430.73	4.68720	1.03	.037	30432.29	.00187
4032485.4	-14.00	476925.62	4.10517	1.57	.085	30490.23	.00433
4032509.9	-12.00	427195.14	3.52169	2.79	.265	30540.50	.01350
4032534.3	-10.00	385193.33	2.93701	5.95	1.202	30583.08	.06112
4032558.6	-8.00	350881.27	2.35136	12.82	5.571	30617.95	.28291
4032582.9	-6.00	324227.14	1.76507	25.45	21.889	30645.08	1.11054
4032607.1	-4.00	305206.16	1.17861	43.33	63.297	30664.47	3.20930
4032631.2	-2.00	293800.66	.59357	60.44	122.994	30676.11	6.23367
4032653.9	0.00	290000.00	.08103	67.52	153.437	30679.99	7.77564
4032676.5	2.00	293800.66	.59357	60.44	122.994	30676.11	6.23367
4032700.7	4.00	305206.16	1.17861	43.33	63.297	30664.47	3.20930
4032724.9	6.00	324227.14	1.76507	25.45	21.889	30645.08	1.11054
4032749.1	8.00	350881.27	2.35136	12.82	5.571	30617.95	.28291
4032773.4	10.00	385193.33	2.93701	5.95	1.202	30583.08	.06112
4032797.8	12.00	427195.14	3.52169	2.79	.265	30540.50	.01350
4032822.3	14.00	476925.62	4.10517	1.57	.085	30490.23	.00433
4032846.9	16.00	534430.73	4.68720	1.03	.037	30432.29	.00187
4032871.7	18.00	599763.49	5.26755	.73	.019	30366.70	.00096
4032896.6	20.00	672983.96	5.84599	.54	.010	30293.49	.00052
4033159.1	40.00	1857203.05	11.47298	.02	.000	29152.02	.00000
4033461.7	60.00	3946514.55	16.62151	0.00	0.000	27310.81	0.00000
4033834.6	80.00	7099113.49	20.93149	0.00	0.000	24866.73	0.00000
4034321.5	100.00	11468677.50	23.85163	0.00	0.000	21969.15	0.00000
4034983.1	120.00	17029701.90	24.49145	0.00	0.000	18844.56	0.00000
4035888.1	140.00	23205598.78	21.46159	0.00	0.000	15847.94	0.00000
4037070.0	160.00	28449457.62	13.17253	0.00	0.000	13538.91	0.00000
4038449.2	180.00	30574734.16	.08103	0.00	0.000	12638.68	0.00000

REVOLUTION 31

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
4038449.2	-180.00	26746452.02	.08103	0.00	0.000	13496.42	0.00000
4039648.9	-160.00	25018830.50	11.61428	0.00	0.000	14296.63	0.00000
4040696.4	-140.00	20677613.50	19.27816	0.00	0.000	16383.88	0.00000
4041522.1	-120.00	15416551.16	22.37437	0.00	0.000	19145.32	0.00000
4042144.4	-100.00	10536090.70	22.06000	0.00	0.000	22065.70	0.00000
4042614.2	-80.00	6602089.55	19.52316	0.00	0.000	24798.61	0.00000
4042981.3	-60.00	3707674.80	15.59033	0.00	0.000	27116.84	0.00000
4043283.3	-40.00	1762916.73	10.79951	.03	.000	28869.27	.00000
4043547.5	-20.00	651071.94	5.51371	.56	.012	29957.85	.00060
4043572.7	-18.00	582097.35	4.96876	.77	.021	30027.71	.00111
4043597.7	-16.00	520530.49	4.42182	1.08	.042	30090.32	.00216
4043622.6	-14.00	466322.44	3.87313	1.68	.101	30145.62	.00519
4043647.4	-12.00	419429.94	3.32294	3.01	.322	30193.61	.01659
4043672.1	-10.00	379815.41	2.77148	6.37	1.435	30234.26	.07380
4043696.6	-8.00	347447.03	2.21902	13.44	6.354	30267.54	.32640
4043721.2	-6.00	322298.71	1.66589	25.85	23.442	30293.44	1.20314
4043745.6	-4.00	304350.14	1.11260	42.83	64.263	30311.96	3.29615
4043770.0	-2.00	293586.81	.56081	58.64	120.281	30323.07	6.16715
4043793.0	0.00	290000.00	.08103	65.10	148.198	30326.77	7.59763
4043816.0	2.00	293586.81	.56081	58.64	120.281	30323.07	6.16715
4043840.4	4.00	304350.14	1.11260	42.83	64.263	30311.96	3.29615
4043864.9	6.00	322298.71	1.66589	25.85	23.442	30293.44	1.20314
4043889.4	8.00	347447.03	2.21902	13.44	6.354	30267.54	.32640
4043914.0	10.00	379815.41	2.77148	6.37	1.435	30234.26	.07380
4043938.7	12.00	419429.94	3.32294	3.01	.322	30193.61	.01659
4043963.4	14.00	466322.44	3.87313	1.68	.101	30145.62	.00519
4043988.3	16.00	520530.49	4.42182	1.08	.042	30090.32	.00216
4044013.3	18.00	582097.35	4.96876	.77	.021	30027.71	.00111
4044038.5	20.00	651071.94	5.51371	.56	.012	29957.85	.00060
4044302.8	40.00	1762916.73	10.79951	.03	.000	28869.27	.00000
4044604.8	60.00	3707674.80	15.59033	0.00	0.000	27116.84	0.00000
4044971.8	80.00	6602089.55	19.52316	0.00	0.000	24798.61	0.00000
4045441.7	100.00	10536090.70	22.06000	0.00	0.000	22065.70	0.00000
4046063.9	120.00	15416551.16	22.37437	0.00	0.000	19145.32	0.00000
4046889.7	140.00	20677613.50	19.27816	0.00	0.000	16383.88	0.00000
4047937.2	160.00	25018830.50	11.61428	0.00	0.000	14296.63	0.00000
4049136.8	180.00	26746452.02	.08103	0.00	0.000	13496.42	0.00000

REVOLUTION 32

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
4049136.8	-180.00	23154622.28	.08103	0.00	0.000	14416.40	0.00000
4050178.6	-160.00	21767217.92	10.12106	0.00	0.000	15120.16	0.00000
4051104.7	-140.00	18219593.98	17.09781	0.00	0.000	16984.49	0.00000
4051855.7	-120.00	13798787.29	20.18456	0.00	0.000	19498.05	0.00000
4052439.1	-100.00	9573619.57	20.16215	0.00	0.000	22195.98	0.00000
4052891.5	-80.00	6077134.80	18.00858	0.00	0.000	24746.08	0.00000
4053252.3	-60.00	3451080.83	14.47086	0.00	0.000	26923.16	0.00000
4053553.6	-40.00	1660455.43	10.06421	.03	.000	28575.47	.00000
4053819.7	-20.00	627103.66	5.14982	.60	.014	29604.24	.00072
4053845.2	-18.00	562765.55	4.64149	.81	.025	29670.32	.00131
4053870.4	-16.00	505314.15	4.13110	1.15	.050	29729.54	.00260
4053895.6	-14.00	454711.62	3.61890	1.83	.124	29781.86	.00646
4053920.7	-12.00	410924.44	3.10514	3.34	.411	29827.27	.02141
4053945.6	-10.00	373923.42	2.59008	6.96	1.784	29865.72	.09286
4053970.5	-8.00	343683.79	2.07399	14.18	7.367	29897.21	.38313
4053995.3	-6.00	320185.22	1.55721	26.31	25.294	29921.73	1.31431
4054020.1	-4.00	303411.87	1.04027	42.34	65.397	29939.24	3.39609
4054044.8	-2.00	293352.40	.52496	56.78	117.482	29949.76	6.09872
4054068.1	0.00	290000.00	.08103	62.61	142.790	29953.26	7.41163
4054091.5	2.00	293352.40	.52496	56.78	117.482	29949.76	6.09872
4054116.2	4.00	303411.87	1.04027	42.34	65.397	29939.24	3.39609
4054141.0	6.00	320185.22	1.55721	26.31	25.294	29921.73	1.31431
4054165.8	8.00	343683.79	2.07399	14.18	7.367	29897.21	.38313
4054190.7	10.00	373923.42	2.59008	6.96	1.784	29865.72	.09286
4054215.6	12.00	410924.44	3.10514	3.34	.411	29827.27	.02141
4054240.7	14.00	454711.62	3.61890	1.83	.124	29781.86	.00646
4054265.8	16.00	505314.15	4.13110	1.15	.050	29729.54	.00260
4054291.1	18.00	562765.55	4.64149	.81	.025	29670.32	.00131
4054316.6	20.00	627103.66	5.14982	.60	.014	29604.24	.00072
4054582.7	40.00	1660455.43	10.06421	.03	.000	28575.47	.00000
4054884.0	60.00	3451080.83	14.47086	0.00	0.000	26923.16	0.00000
4055244.8	80.00	6077134.80	18.00858	0.00	0.000	24746.08	0.00000
4055697.2	100.00	9573619.57	20.16215	0.00	0.000	22195.98	0.00000
4056280.5	120.00	13798787.29	20.18456	0.00	0.000	19498.05	0.00000
4057031.6	140.00	18219593.98	17.09781	0.00	0.000	16984.49	0.00000
4057957.7	160.00	21767217.92	10.12106	0.00	0.000	15120.16	0.00000
4058999.5	180.00	23154622.28	.08103	0.00	0.000	14416.40	0.00000

REVOLUTION 33

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
4058999.5	-180.00	19768336.47	.08103	0.00	0.000	15409.11	0.00000
4059902.0	-160.00	18672095.44	8.68666	0.00	0.000	16019.44	0.00000
4060718.1	-140.00	15821721.26	14.92045	0.00	0.000	17659.41	0.00000
4061398.7	-120.00	12171599.33	17.91818	0.00	0.000	19911.68	0.00000
4061943.6	-100.00	8576825.76	18.14680	0.00	0.000	22366.89	0.00000
4062377.9	-80.00	5520141.74	16.37266	0.00	0.000	24713.19	0.00000
4062732.0	-60.00	3173829.93	13.24847	0.00	0.000	26730.96	0.00000
4063032.5	-40.00	1548363.26	9.25595	.04	.000	28269.50	.00000
4063300.6	-20.00	600693.95	4.74840	.65	.017	29230.07	.00088
4063326.3	-18.00	541455.09	4.28038	.88	.030	29291.83	.00160
4063351.9	-16.00	488533.68	3.81026	1.26	.062	29347.18	.00326
4063377.4	-14.00	441902.81	3.33829	2.03	.160	29396.10	.00847
4063402.8	-12.00	401538.50	2.86472	3.81	.560	29438.55	.02957
4063428.0	-10.00	367419.86	2.38981	7.73	2.296	29474.51	.12110
4063453.2	-8.00	339529.07	1.91386	15.07	8.698	29503.95	.45833
4063478.4	-6.00	317851.49	1.43720	26.91	27.655	29526.87	1.45621
4063503.5	-4.00	302375.71	.96042	41.84	66.743	29543.25	3.51243
4063528.5	-2.00	293093.52	.48543	54.85	114.586	29553.09	6.02821
4063552.2	0.00	290000.00	.08103	60.03	137.189	29556.36	7.21652
4063575.9	2.00	293093.52	.48543	54.85	114.586	29553.09	6.02821
4063601.0	4.00	302375.71	.96042	41.84	66.743	29543.25	3.51243
4063626.1	6.00	317851.49	1.43720	26.91	27.655	29526.87	1.45621
4063651.2	8.00	339529.07	1.91386	15.07	8.698	29503.95	.45833
4063676.4	10.00	367419.86	2.38981	7.73	2.296	29474.51	.12110
4063701.7	12.00	401538.50	2.86472	3.81	.560	29438.55	.02957
4063727.1	14.00	441902.81	3.33829	2.03	.160	29396.10	.00847
4063752.5	16.00	488533.68	3.81026	1.26	.062	29347.18	.00326
4063778.1	18.00	541455.09	4.28038	.88	.030	29291.83	.00160
4063803.8	20.00	600693.95	4.74840	.65	.017	29230.07	.00088
4064072.0	40.00	1548363.26	9.25595	.04	.000	28269.50	.00000
4064372.5	60.00	3173829.93	13.24847	0.00	0.000	26730.96	0.00000
4064726.5	80.00	5520141.74	16.37266	0.00	0.000	24713.19	0.00000
4065160.9	100.00	8576825.76	18.14680	0.00	0.000	22366.89	0.00000
4065705.8	120.00	12171599.33	17.91818	0.00	0.000	19911.68	0.00000
4066386.3	140.00	15821721.26	14.92045	0.00	0.000	17659.41	0.00000
4067202.5	160.00	18672095.44	8.68666	0.00	0.000	16019.44	0.00000
4068105.0	180.00	19768336.47	.08103	0.00	0.000	15409.11	0.00000

REVOLUTION 34

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
4068105.0	-180.00	16556984.35	.08103	0.00	0.000	16488.99	0.00000
4068884.0	-160.00	15709963.15	7.30354	0.00	0.000	17008.19	0.00000
4069600.3	-140.00	13471807.43	12.74297	0.00	0.000	18421.64	0.00000
4070214.0	-120.00	10527798.36	15.56830	0.00	0.000	20398.05	0.00000
4070720.8	-100.00	7539286.46	15.99863	0.00	0.000	22587.53	0.00000
4071136.4	-80.00	4925440.92	14.59523	0.00	0.000	24705.31	0.00000
4071483.2	-60.00	2871967.27	11.90350	0.00	0.000	26541.82	0.00000
4071782.7	-40.00	1424655.82	8.35963	.05	.000	27949.81	.00001
4072053.0	-20.00	571316.35	4.30132	.71	.021	28831.75	.00113
4072079.0	-18.00	517738.07	3.87810	.97	.038	28888.53	.00206
4072105.0	-16.00	469849.98	3.45276	1.42	.083	28939.43	.00445
4072130.8	-14.00	427635.67	3.02555	2.35	.224	28984.40	.01200
4072156.5	-12.00	391080.43	2.59673	4.49	.815	29023.44	.04365
4072182.1	-10.00	360171.34	2.16656	8.78	3.103	29056.51	.16606
4072207.6	-8.00	334897.36	1.73534	16.27	10.624	29083.59	.56796
4072233.1	-6.00	315249.37	1.30343	27.64	30.599	29104.68	1.63459
4072258.6	-4.00	301220.23	.87144	41.35	68.360	29119.74	3.64986
4072284.0	-2.00	292804.80	.44145	52.85	111.577	29128.79	5.95541
4072308.1	0.00	290000.00	.08103	57.36	131.361	29131.80	7.01069
4072332.2	2.00	292804.80	.44145	52.85	111.577	29128.79	5.95541
4072357.6	4.00	301220.23	.87144	41.35	68.360	29119.74	3.64986
4072383.1	6.00	315249.37	1.30343	27.64	30.599	29104.68	1.63459
4072408.6	8.00	334897.36	1.73534	16.27	10.624	29083.59	.56796
4072434.1	10.00	360171.34	2.16656	8.78	3.103	29056.51	.16606
4072459.8	12.00	391080.43	2.59673	4.49	.815	29023.44	.04365
4072485.5	14.00	427635.67	3.02555	2.35	.224	28984.40	.01200
4072511.3	16.00	469849.98	3.45276	1.42	.083	28939.43	.00445
4072537.2	18.00	517738.07	3.87810	.97	.038	28888.53	.00206
4072563.2	20.00	571316.35	4.30132	.71	.021	28831.75	.00113
4072833.5	40.00	1424655.82	8.35963	.05	.000	27949.81	.00001
4073133.0	60.00	2871967.27	11.90350	0.00	0.000	26541.82	0.00000
4073479.8	80.00	4925440.92	14.59523	0.00	0.000	24705.31	0.00000
4073895.4	100.00	7539286.46	15.99863	0.00	0.000	22587.53	0.00000
4074402.2	120.00	10527798.36	15.56830	0.00	0.000	20398.05	0.00000
4075015.9	140.00	13471807.43	12.74297	0.00	0.000	18421.64	0.00000
4075732.2	160.00	15709963.15	7.30354	0.00	0.000	17008.19	0.00000
4076511.3	180.00	16556984.35	.08103	0.00	0.000	16488.99	0.00000

REVOLUTION 35

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
4076511.3	-180.00	13488121.80	.08103	0.00	0.000	17676.79	0.00000
4077180.3	-160.00	12854460.74	5.96207	0.00	0.000	18106.30	0.00000
4077805.4	-140.00	11153674.51	10.55763	0.00	0.000	19289.68	0.00000
4078355.6	-120.00	8856329.32	13.12260	0.00	0.000	20973.61	0.00000
4078824.3	-100.00	6451311.80	13.69546	0.00	0.000	22870.55	0.00000
4079220.3	-80.00	4284806.75	12.64797	0.00	0.000	24729.93	0.00000
4079559.2	-60.00	2539829.28	10.40817	0.00	0.000	26357.91	0.00000
4079857.5	-40.00	1286492.41	7.35370	.06	.000	27614.12	.00001
4080130.2	-20.00	538215.33	3.79698	.81	.028	28404.11	.00156
4080156.5	-18.00	491000.27	3.42416	1.12	.054	28455.05	.00294
4080182.8	-16.00	448776.16	3.04924	1.70	.124	28500.71	.00675
4080209.0	-14.00	411536.38	2.67247	2.87	.353	28541.07	.01922
4080235.1	-12.00	379274.90	2.29411	5.40	1.240	28576.10	.06748
4080261.1	-10.00	351986.29	1.91442	10.09	4.318	28605.79	.23469
4080287.0	-8.00	329665.85	1.53370	17.76	13.343	28630.10	.72459
4080312.9	-6.00	312309.68	1.15234	28.53	34.354	28649.03	1.86435
4080338.8	-4.00	299914.66	.77098	40.86	70.337	28662.55	3.81531
4080364.6	-2.00	292478.55	.39194	50.76	108.430	28670.67	5.87994
4080389.1	0.00	290000.00	.08103	54.56	125.257	28673.38	6.79178
4080413.7	2.00	292478.55	.39194	50.76	108.430	28670.67	5.87994
4080439.5	4.00	299914.66	.77098	40.86	70.337	28662.55	3.81531
4080465.3	6.00	312309.68	1.15234	28.53	34.354	28649.03	1.86435
4080491.2	8.00	329665.85	1.53370	17.76	13.343	28630.10	.72459
4080517.2	10.00	351986.29	1.91442	10.09	4.318	28605.79	.23469
4080543.2	12.00	379274.90	2.29411	5.40	1.240	28576.10	.06748
4080569.3	14.00	411536.38	2.67247	2.87	.353	28541.07	.01922
4080595.5	16.00	448776.16	3.04924	1.70	.124	28500.71	.00675
4080621.7	18.00	491000.27	3.42416	1.12	.054	28455.05	.00294
4080648.1	20.00	538215.33	3.79698	.81	.028	28404.11	.00156
4080920.7	40.00	1286492.41	7.35370	.06	.000	27614.12	.00001
4081219.0	60.00	2539829.28	10.40817	0.00	0.000	26357.91	0.00000
4081557.9	80.00	4284806.75	12.64797	0.00	0.000	24729.93	0.00000
4081954.0	100.00	6451311.80	13.69546	0.00	0.000	22870.55	0.00000
4082422.7	120.00	8856329.32	13.12260	0.00	0.000	20973.61	0.00000
4082972.9	140.00	11153674.51	10.55763	0.00	0.000	19289.68	0.00000
4083598.0	160.00	12854460.74	5.96207	0.00	0.000	18106.30	0.00000
4084267.0	180.00	13488121.80	.08103	0.00	0.000	17676.79	0.00000

REVOLUTION 36

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
4084267.0	-180.00	10523588.79	.08103	0.00	0.000	19004.48	0.00000
4084837.2	-160.00	10072719.47	4.64895	0.00	0.000	19344.52	0.00000
4085378.3	-140.00	8843833.43	8.34879	0.00	0.000	20291.84	0.00000
4085867.7	-120.00	7139242.53	10.55856	0.00	0.000	21663.00	0.00000
4086298.1	-100.00	5297354.38	11.20249	0.00	0.000	23234.74	0.00000
4086673.5	-80.00	3585459.38	10.48798	0.00	0.000	24798.17	0.00000
4087003.7	-60.00	2168729.99	8.72042	.01	.000	26182.37	.00000
4087300.5	-40.00	1129521.66	6.20534	.09	.000	27258.82	.00002
4087575.7	-20.00	500231.25	3.21755	.98	.044	27939.07	.00246
4087602.5	-18.00	460298.78	2.90243	1.41	.091	27983.01	.00505
4087629.1	-16.00	424564.65	2.58531	2.21	.221	28022.41	.01227
4087655.7	-14.00	393030.88	2.26642	3.88	.680	28057.24	.03770
4087682.2	-12.00	365699.05	1.94601	6.92	2.156	28087.48	.11934
4087708.7	-10.00	342570.40	1.62435	12.00	6.470	28113.11	.35781
4087735.1	-8.00	323645.87	1.30173	19.75	17.472	28134.10	.96557
4087761.4	-6.00	308926.14	.97855	29.70	39.436	28150.44	2.17807
4087787.7	-4.00	298411.72	.65553	40.38	72.803	28162.12	4.01926
4087814.0	-2.00	292102.95	.33530	48.54	105.107	28169.13	5.80123
4087839.0	0.00	290000.00	.08103	51.61	118.794	28171.47	6.55609
4087864.1	2.00	292102.95	.33530	48.54	105.107	28169.13	5.80123
4087890.4	4.00	298411.72	.65553	40.38	72.803	28162.12	4.01926
4087916.7	6.00	308926.14	.97855	29.70	39.436	28150.44	2.17807
4087943.0	8.00	323645.87	1.30173	19.75	17.472	28134.10	.96557
4087969.4	10.00	342570.40	1.62435	12.00	6.470	28113.11	.35781
4087995.9	12.00	365699.05	1.94601	6.92	2.156	28087.48	.11934
4088022.4	14.00	393030.88	2.26642	3.88	.680	28057.24	.03770
4088048.9	16.00	424564.65	2.58531	2.21	.221	28022.41	.01227
4088075.6	18.00	460298.78	2.90243	1.41	.091	27983.01	.00505
4088102.4	20.00	500231.25	3.21755	.98	.044	27939.07	.00246
4088377.6	40.00	1129521.66	6.20534	.09	.000	27258.82	.00002
4088674.4	60.00	2168729.99	8.72042	.01	.000	26182.37	.00000
4089004.6	80.00	3585459.38	10.48798	0.00	0.000	24798.17	0.00000
4089380.0	100.00	5297354.38	11.20249	0.00	0.000	23234.74	0.00000
4089810.4	120.00	7139242.53	10.55856	0.00	0.000	21663.00	0.00000
4090299.8	140.00	8843833.43	8.34879	0.00	0.000	20291.84	0.00000
4090840.9	160.00	10072719.47	4.64895	0.00	0.000	19344.52	0.00000
4091411.1	180.00	10523588.79	.08103	0.00	0.000	19004.48	0.00000

REVOLUTION 37

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
4091411.1	-180.00	7610907.54	.08103	0.00	0.000	20526.49	0.00000
4091891.3	-160.00	7317037.79	3.34342	0.00	0.000	20775.41	0.00000
4092354.4	-140.00	6503704.32	6.08532	0.00	0.000	21476.05	0.00000
4092784.7	-120.00	5344629.88	7.83250	0.00	0.000	22507.21	0.00000
4093176.1	-100.00	4050003.31	8.45893	0.00	0.000	23710.96	0.00000
4093529.3	-80.00	2805454.23	8.04312	0.00	0.000	24928.20	0.00000
4093849.6	-60.00	1743942.53	6.76982	.02	.000	26020.19	.00000
4094144.5	-40.00	946381.05	4.85929	.14	.001	26877.59	.00006
4094422.6	-20.00	455399.06	2.53291	1.40	.095	27422.75	.00539
4094449.8	-18.00	424035.53	2.28568	2.09	.211	27458.05	.01197
4094476.9	-16.00	395948.29	2.03666	3.43	.569	27489.72	.03217
4094504.0	-14.00	371145.94	1.78606	5.71	1.573	27517.71	.08888
4094531.0	-12.00	349635.95	1.53411	9.46	4.300	27542.02	.24271
4094557.9	-10.00	331424.67	1.28106	15.05	10.852	27562.63	.61212
4094584.8	-8.00	316517.43	1.02722	22.52	24.268	27579.51	1.36806
4094611.7	-6.00	304918.51	.77298	31.33	46.895	27592.65	2.64239
4094638.5	-4.00	296631.23	.51918	39.92	76.015	27602.05	4.28170
4094665.4	-2.00	291657.92	.26900	46.15	101.538	27607.69	5.71821
4094691.0	0.00	290000.00	.08103	48.44	111.826	27609.57	6.29717
4094716.5	2.00	291657.92	.26900	46.15	101.538	27607.69	5.71821
4094743.4	4.00	296631.23	.51918	39.92	76.015	27602.05	4.28170
4094770.2	6.00	304918.51	.77298	31.33	46.895	27592.65	2.64239
4094797.1	8.00	316517.43	1.02722	22.52	24.268	27579.51	1.36806
4094824.0	10.00	331424.67	1.28106	15.05	10.852	27562.63	.61212
4094850.9	12.00	349635.95	1.53411	9.46	4.300	27542.02	.24271
4094877.9	14.00	371145.94	1.78606	5.71	1.573	27517.71	.08888
4094905.0	16.00	395948.29	2.03666	3.43	.569	27489.72	.03217
4094932.1	18.00	424035.53	2.28568	2.09	.211	27458.05	.01197
4094959.3	20.00	455399.06	2.53291	1.40	.095	27422.75	.00539
4095237.4	40.00	946381.05	4.85929	.14	.001	26877.59	.00006
4095532.3	60.00	1743942.53	6.76982	.02	.000	26020.19	.00000
4095852.6	80.00	2805454.23	8.04312	0.00	0.000	24928.20	0.00000
4096205.8	100.00	4050003.31	8.45893	0.00	0.000	23710.96	0.00000
4096597.2	120.00	5344629.88	7.83250	0.00	0.000	22507.21	0.00000
4097027.6	140.00	6503704.32	6.08532	0.00	0.000	21476.05	0.00000
4097490.6	160.00	7317037.79	3.34342	0.00	0.000	20775.41	0.00000
4097970.8	180.00	7610907.54	.08103	0.00	0.000	20526.49	0.00000

REVOLUTION 38

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
4097970.8	-180.00	4658969.61	.08103	0.00	0.000	22351.56	0.00000
4098367.2	-160.00	4501080.00	2.00611	0.00	0.000	22504.13	0.00000
4098755.7	-140.00	4057149.05	3.69866	0.00	0.000	22937.75	0.00000
4099127.2	-120.00	3406291.90	4.84803	0.00	0.000	23586.64	0.00000
4099477.6	-100.00	2652777.90	5.33940	0.00	0.000	24359.03	0.00000
4099806.2	-80.00	1900528.25	5.17003	.01	.000	25154.96	.00000
4100114.8	-60.00	1236116.37	4.41756	.06	.000	25880.58	.00001
4100407.3	-40.00	722437.25	3.20633	.29	.005	26457.40	.00027
4100688.7	-20.00	399809.29	1.68331	2.94	.452	26827.20	.02622
4100716.4	-18.00	379030.77	1.51988	4.46	1.040	26851.22	.06021
4100744.1	-16.00	360405.41	1.35508	6.83	2.428	26872.78	.14047
4100771.7	-14.00	343944.65	1.18910	10.09	5.293	26891.84	.30603
4100799.3	-12.00	329658.54	1.02213	14.61	11.082	26908.41	.64031
4100826.9	-10.00	317555.75	.85439	20.28	21.311	26922.45	1.23068
4100854.4	-8.00	307643.58	.68618	26.82	37.219	26933.95	2.14844
4100881.9	-6.00	299927.96	.51796	33.61	58.376	26942.91	3.36863
4100909.4	-4.00	294413.52	.35081	39.48	80.476	26949.32	4.64277
4100936.9	-2.00	291103.54	.18899	43.48	97.578	26953.16	5.62866
4100963.1	0.00	290000.00	.08103	44.91	104.053	26954.44	6.00187
4100989.4	2.00	291103.54	.18899	43.48	97.578	26953.16	5.62866
4101016.9	4.00	294413.52	.35081	39.48	80.476	26949.32	4.64277
4101044.4	6.00	299927.96	.51796	33.61	58.376	26942.91	3.36863
4101071.9	8.00	307643.58	.68618	26.82	37.219	26933.95	2.14844
4101099.4	10.00	317555.75	.85439	20.28	21.311	26922.45	1.23068
4101127.0	12.00	329658.54	1.02213	14.61	11.082	26908.41	.64031
4101154.6	14.00	343944.65	1.18910	10.09	5.293	26891.84	.30603
4101182.2	16.00	360405.41	1.35508	6.83	2.428	26872.78	.14047
4101209.9	18.00	379030.77	1.51988	4.46	1.040	26851.22	.06021
4101237.6	20.00	399809.29	1.68331	2.94	.452	26827.20	.02622
4101519.0	40.00	722437.25	3.20633	.29	.005	26457.40	.00027
4101811.5	60.00	1236116.37	4.41756	.06	.000	25880.58	.00001
4102120.1	80.00	1900528.25	5.17003	.01	.000	25154.96	.00000
4102448.6	100.00	2652777.90	5.33940	0.00	0.000	24359.03	0.00000
4102799.0	120.00	3406291.90	4.84803	0.00	0.000	23586.64	0.00000
4103170.6	140.00	4057149.05	3.69866	0.00	0.000	22937.75	0.00000
4103559.0	160.00	4501080.00	2.00611	0.00	0.000	22504.13	0.00000
4103955.5	180.00	4658969.61	.08103	0.00	0.000	22351.56	0.00000

REVOLUTION 39

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
4103955.5	-180.00	1436315.57	.08103	.03	.000	24776.20	.00000
4104268.9	-160.00	1399941.55	.53471	.04	.000	24817.63	.00001
4104581.6	-140.00	1295864.57	.99193	.05	.000	24936.51	.00001
4104890.6	-120.00	1138278.24	1.32489	.07	.000	25117.57	.00002
4105194.8	-100.00	947996.14	1.49295	.12	.001	25337.90	.00006
4105493.5	-80.00	749074.12	1.47942	.24	.003	25570.28	.00021
4105786.9	-60.00	565417.96	1.29063	.52	.016	25786.74	.00096
4106075.8	-40.00	417987.06	.95302	1.92	.215	25961.87	.01286
4106361.4	-20.00	322844.52	.50952	15.88	14.520	26075.54	.86577
4106389.8	-18.00	316647.76	.46153	18.83	20.380	26082.96	1.21480
4106418.3	-16.00	311085.92	.41320	21.98	27.767	26089.62	1.65473
4106446.7	-14.00	306164.80	.36465	25.35	36.893	26095.52	2.19805
4106475.1	-12.00	301889.49	.31606	28.73	47.345	26100.64	2.82023
4106503.4	-10.00	298264.41	.26767	31.94	58.485	26104.99	3.48321
4106531.8	-8.00	295293.32	.21990	34.83	69.530	26108.55	4.14049
4106560.2	-6.00	292979.28	.17360	37.26	79.559	26111.33	4.73721
4106588.5	-4.00	291324.70	.13062	39.11	87.605	26113.31	5.21591
4106616.9	-2.00	290331.26	.09588	40.26	92.822	26114.50	5.52627
4106644.1	0.00	290000.00	.08103	40.65	94.630	26114.90	5.63381
4106671.3	2.00	290331.26	.09588	40.26	92.822	26114.50	5.52627
4106699.6	4.00	291324.70	.13062	39.11	87.605	26113.31	5.21591
4106728.0	6.00	292979.28	.17360	37.26	79.559	26111.33	4.73721
4106756.4	8.00	295293.32	.21990	34.83	69.530	26108.55	4.14049
4106784.7	10.00	298264.41	.26767	31.94	58.485	26104.99	3.48321
4106813.1	12.00	301889.49	.31606	28.73	47.345	26100.64	2.82023
4106841.5	14.00	306164.80	.36465	25.35	36.893	26095.52	2.19805
4106869.9	16.00	311085.92	.41320	21.98	27.767	26089.62	1.65473
4106898.4	18.00	316647.76	.46153	18.83	20.380	26082.96	1.21480
4106926.8	20.00	322844.52	.50952	15.88	14.520	26075.54	.86577
4107212.4	40.00	417987.06	.95302	1.92	.215	25961.87	.01286
4107501.3	60.00	565417.96	1.29063	.52	.016	25786.74	.00096
4107794.7	80.00	749074.12	1.47942	.24	.003	25570.28	.00021
4108093.4	100.00	947996.14	1.49295	.12	.001	25337.90	.00006
4108397.5	120.00	1138278.24	1.32489	.07	.000	25117.57	.00002
4108706.5	140.00	1295864.57	.99193	.05	.000	24936.51	.00001
4109019.3	160.00	1399941.55	.53471	.04	.000	24817.63	.00001
4109332.7	180.00	1436315.57	.08103	.03	.000	24776.20	.00000

Part 2

Listing of Punched Card CMA Input

REVOLUTION 1

TIME	H_R	QDOTR	$QDOTC/H_R$	P_{TA}	I. D.
0.0000	25322.685	0.0000	.0000001	.000000	GLFC TRANS.
21.6168	25470.998	0.0000	.0000002	.000000	GLFC TRANS.
42.9970	25604.188	0.0000	.0000005	.000000	GLFC TRANS.
64.1679	25722.093	0.0000	.0000012	.000001	GLFC TRANS.
85.1550	25824.570	0.0000	.0000028	.000001	GLFC TRANS.
105.9815	25911.493	0.0000	.0000094	.000005	GLFC TRANS.
126.6665	25982.756	0.0000	.0000580	.000031	GLFC TRANS.
147.2191	26038.274	0.0000	.0004174	.000221	GLFC TRANS.
167.6155	26077.978	0.0000	.0020840	.001178	GLFC TRANS.
187.6462	26101.820	0.0000	.0036057	.003526	GLFC TRANS.
202.7007	26109.770	0.0000	.0043375	.005102	GLFC TRANS.
217.7553	26101.820	0.0000	.0036057	.003526	GLFC TRANS.
237.7860	26077.978	0.0000	.0020840	.001178	GLFC TRANS.
258.1824	26038.274	0.0000	.0004174	.000221	GLFC TRANS.
278.7349	25982.756	0.0000	.0000580	.000031	GLFC TRANS.
299.4199	25911.493	0.0000	.0000094	.000005	GLFC TRANS.
320.2465	25824.570	0.0000	.0000028	.000001	GLFC TRANS.
341.2336	25722.093	0.0000	.0000012	.000001	GLFC TRANS.
362.4044	25604.188	0.0000	.0000005	.000000	GLFC TRANS.
383.7847	25470.998	0.0000	.0000002	.000000	GLFC TRANS.
405.4015	25322.685	0.0000	.0000001	.000000	GLFC TRANS.

REVOLUTION 6

TIME	H_R	QDOTR	$QDOTC/H_R$	P_{TA}	I. D.
0.0000	24691.296	0.0000	.0000001	.000000	GLFC TRANS.
21.8668	24835.679	0.0000	.0000003	.000000	GLFC TRANS.
43.5024	24965.340	0.0000	.0000006	.000000	GLFC TRANS.
64.9343	25080.122	0.0000	.0000012	.000001	GLFC TRANS.
86.1887	25179.884	0.0000	.0000030	.000002	GLFC TRANS.
107.2905	25264.504	0.0000	.0000103	.000005	GLFC TRANS.
128.2627	25333.880	0.0000	.0000639	.000033	GLFC TRANS.
149.1238	25387.927	0.0000	.0004441	.000232	GLFC TRANS.
169.8790	25426.578	0.0000	.0020927	.001192	GLFC TRANS.
190.4559	25449.789	0.0000	.0035711	.003472	GLFC TRANS.
207.5355	25457.528	0.0000	.0042748	.004975	GLFC TRANS.
224.6151	25449.789	0.0000	.0035711	.003472	GLFC TRANS.
245.1920	25426.578	0.0000	.0020927	.001192	GLFC TRANS.
265.9472	25387.927	0.0000	.0004441	.000232	GLFC TRANS.
286.8083	25333.880	0.0000	.0000639	.000033	GLFC TRANS.
307.7805	25264.504	0.0000	.0000103	.000005	GLFC TRANS.
328.8823	25179.884	0.0000	.0000030	.000002	GLFC TRANS.
350.1367	25080.122	0.0000	.0000012	.000001	GLFC TRANS.
371.5686	24965.340	0.0000	.0000006	.000000	GLFC TRANS.
393.2042	24835.679	0.0000	.0000003	.000000	GLFC TRANS.
415.0710	24691.296	0.0000	.0000001	.000000	GLFC TRANS.

REVOLUTION 11

TIME	H_R	QDOTR	$QDOTC/H_R$	P_{TA}	I. D.
0.0000	23824.659	0.0000	.0000001	.000000	GLFC TRANS.
22.2172	23963.297	0.0000	.0000003	.000000	GLFC TRANS.
44.2096	24087.799	0.0000	.0000006	.000000	GLFC TRANS.
66.0039	24198.013	0.0000	.0000014	.000001	GLFC TRANS.
87.6261	24293.804	0.0000	.0000033	.000002	GLFC TRANS.
109.1010	24375.057	0.0000	.0000118	.000006	GLFC TRANS.
130.4521	24441.672	0.0000	.0000733	.000038	GLFC TRANS.
151.7005	24493.569	0.0000	.0004866	.000250	GLFC TRANS.
172.8597	24530.682	0.0000	.0021068	.001215	GLFC TRANS.
193.9009	24552.969	0.0000	.0035233	.003398	GLFC TRANS.
212.2291	24560.401	0.0000	.0041876	.004799	GLFC TRANS.
230.5574	24552.969	0.0000	.0035233	.003398	GLFC TRANS.
251.5986	24530.682	0.0000	.0021068	.001215	GLFC TRANS.
272.7578	24493.569	0.0000	.0004866	.000250	GLFC TRANS.
294.0062	24441.672	0.0000	.0000733	.000038	GLFC TRANS.
315.3573	24375.057	0.0000	.0000118	.000006	GLFC TRANS.
336.8322	24293.804	0.0000	.0000033	.000002	GLFC TRANS.
358.4544	24198.013	0.0000	.0000014	.000001	GLFC TRANS.
380.2487	24087.799	0.0000	.0000006	.000000	GLFC TRANS.
402.2411	23963.297	0.0000	.0000003	.000000	GLFC TRANS.
424.4583	23824.659	0.0000	.0000001	.000000	GLFC TRANS.

REVOLUTION 16

TIME	H_R	QDOTR	$QDOTC/H_R$	P_{TA}	I. D.
0.0000	22725.765	0.0000	.0000002	.000000	GLFC TRANS.
22.6861	22856.460	0.0000	.0000003	.000000	GLFC TRANS.
45.1561	22973.828	0.0000	.0000007	.000000	GLFC TRANS.
67.4359	23077.727	0.0000	.0000016	.000001	GLFC TRANS.
89.5503	23168.030	0.0000	.0000039	.000002	GLFC TRANS.
111.5235	23244.627	0.0000	.0000144	.000007	GLFC TRANS.
133.3785	23307.426	0.0000	.0000888	.000044	GLFC TRANS.
155.1370	23356.348	0.0000	.0005527	.000277	GLFC TRANS.
176.8154	23391.336	0.0000	.0021290	.001250	GLFC TRANS.
198.4041	23412.345	0.0000	.0034623	.003304	GLFC TRANS.
217.7708	23419.351	0.0000	.0040746	.004576	GLFC TRANS.
237.1374	23412.345	0.0000	.0034623	.003304	GLFC TRANS.
258.7261	23391.336	0.0000	.0021290	.001250	GLFC TRANS.
280.4046	23356.348	0.0000	.0005527	.000277	GLFC TRANS.
302.1630	23307.426	0.0000	.0000888	.000044	GLFC TRANS.
324.0180	23244.627	0.0000	.0000144	.000007	GLFC TRANS.
345.9912	23168.030	0.0000	.0000039	.000002	GLFC TRANS.
368.1056	23077.727	0.0000	.0000016	.000001	GLFC TRANS.
390.3854	22973.828	0.0000	.0000007	.000000	GLFC TRANS.
412.8555	22856.460	0.0000	.0000003	.000000	GLFC TRANS.
435.5415	22725.765	0.0000	.0000002	.000000	GLFC TRANS.

REVOLUTION 21

TIME	H_R	QDOTR	QDOTC/H_R	P_{TA}	I. D.
0.0000	21391.413	0.0000	.0000002	.000000	GLFC TRANS.
23.2989	21511.305	0.0000	.0000004	.000000	GLFC TRANS.
46.3948	21618.973	0.0000	.0000009	.000000	GLFC TRANS.
69.3115	21714.284	0.0000	.0000019	.000001	GLFC TRANS.
92.0726	21797.123	0.0000	.0000051	.000002	GLFC TRANS.
114.7007	21867.390	0.0000	.0000197	.000010	GLFC TRANS.
137.2179	21924.997	0.0000	.0001187	.000058	GLFC TRANS.
159.6450	21969.876	0.0000	.0006665	.000324	GLFC TRANS.
181.9995	22001.972	0.0000	.0021638	.001303	GLFC TRANS.
204.2812	22021.245	0.0000	.0033877	.003193	GLFC TRANS.
224.6800	22027.672	0.0000	.0039335	.004304	GLFC TRANS.
245.0788	22021.245	0.0000	.0033877	.003193	GLFC TRANS.
267.3604	22001.972	0.0000	.0021638	.001303	GLFC TRANS.
289.7150	21969.876	0.0000	.0006665	.000324	GLFC TRANS.
312.1420	21924.997	0.0000	.0001187	.000058	GLFC TRANS.
334.6592	21867.390	0.0000	.0000197	.000010	GLFC TRANS.
357.2874	21797.123	0.0000	.0000051	.000002	GLFC TRANS.
380.0484	21714.284	0.0000	.0000019	.000001	GLFC TRANS.
402.9652	21618.973	0.0000	.0000009	.000000	GLFC TRANS.
426.0610	21511.305	0.0000	.0000004	.000000	GLFC TRANS.
449.3599	21391.413	0.0000	.0000002	.000000	GLFC TRANS.

REVOLUTION 26

TIME	H_R	QDOTR	QDOTC/H_R	P_{TA}	I. D.
0.0000	19806.706	0.0000	.0000003	.000000	GLFC TRANS.
24.0998	19911.749	0.0000	.0000006	.000000	GLFC TRANS.
48.0158	20006.080	0.0000	.0000013	.000001	GLFC TRANS.
71.7698	20089.587	0.0000	.0000027	.000001	GLFC TRANS.
95.3826	20162.166	0.0000	.0000078	.000004	GLFC TRANS.
118.8749	20223.729	0.0000	.0000333	.000016	GLFC TRANS.
142.2666	20274.201	0.0000	.0001838	.000086	GLFC TRANS.
165.5769	20313.522	0.0000	.0008665	.000405	GLFC TRANS.
188.8227	20341.642	0.0000	.0022259	.001395	GLFC TRANS.
212.0083	20358.528	0.0000	.0032986	.003063	GLFC TRANS.
233.5626	20364.159	0.0000	.0037599	.003979	GLFC TRANS.
255.1170	20358.528	0.0000	.0032986	.003063	GLFC TRANS.
278.3026	20341.642	0.0000	.0022259	.001395	GLFC TRANS.
301.5484	20313.522	0.0000	.0008665	.000405	GLFC TRANS.
324.8587	20274.201	0.0000	.0001838	.000086	GLFC TRANS.
348.2504	20223.729	0.0000	.0000333	.000016	GLFC TRANS.
371.7427	20162.166	0.0000	.0000078	.000004	GLFC TRANS.
395.3555	20089.587	0.0000	.0000027	.000001	GLFC TRANS.
419.1094	20006.080	0.0000	.0000013	.000001	GLFC TRANS.
443.0255	19911.749	0.0000	.0000006	.000000	GLFC TRANS.
467.1253	19806.706	0.0000	.0000003	.000000	GLFC TRANS.
490.9895	17926.869	0.0000	.0000006	.000000	GLFC TRANS.

REVOLUTION 31

TIME	H R	QDOTR	QDOTC/H R	P T A	I. D.
0.0000	17926.869	0.0000	.0000006	.000000	GLFC TRANS.
25.1753	18010.579	0.0000	.0000012	.000001	GLFC TRANS.
50.1981	18085.754	0.0000	.0000023	.000001	GLFC TRANS.
75.0860	18152.301	0.0000	.0000055	.000002	GLFC TRANS.
99.8563	18210.141	0.0000	.0000177	.000008	GLFC TRANS.
124.5260	18259.201	0.0000	.0000786	.000035	GLFC TRANS.
149.1118	18299.424	0.0000	.0003472	.000154	GLFC TRANS.
173.6296	18330.759	0.0000	.0012789	.000568	GLFC TRANS.
198.0941	18353.168	0.0000	.0023339	.001557	GLFC TRANS.
222.5105	18366.625	0.0000	.0031926	.002914	GLFC TRANS.
245.4948	18371.112	0.0000	.0035437	.003590	GLFC TRANS.
268.4791	18366.625	0.0000	.0031926	.002914	GLFC TRANS.
292.8955	18353.168	0.0000	.0023339	.001557	GLFC TRANS.
317.3599	18330.759	0.0000	.0012789	.000568	GLFC TRANS.
341.8778	18299.424	0.0000	.0003472	.000154	GLFC TRANS.
366.4635	18259.201	0.0000	.0000786	.000035	GLFC TRANS.
391.1332	18210.141	0.0000	.0000177	.000008	GLFC TRANS.
415.9035	18152.301	0.0000	.0000055	.000002	GLFC TRANS.
440.7915	18085.754	0.0000	.0000023	.000001	GLFC TRANS.
465.8143	18010.579	0.0000	.0000012	.000001	GLFC TRANS.

REVOLUTION 36

TIME	H R	QDOTR	QDOTC/H R	P T A	I. D.
0.0000	15592.183	0.0000	.0000028	.000001	GLFC TRANS.
26.7602	15641.265	0.0000	.0000058	.000002	GLFC TRANS.
53.4259	15685.343	0.0000	.0000141	.000006	GLFC TRANS.
80.0075	15724.363	0.0000	.0000433	.000018	GLFC TRANS.
106.5157	15758.277	0.0000	.0001368	.000056	GLFC TRANS.
132.9608	15787.043	0.0000	.0004098	.000169	GLFC TRANS.
159.3531	15810.627	0.0000	.0011051	.000456	GLFC TRANS.
185.7026	15829.000	0.0000	.0018763	.001029	GLFC TRANS.
212.0181	15842.140	0.0000	.0025490	.001899	GLFC TRANS.
238.3021	15850.030	0.0000	.0030624	.002741	GLFC TRANS.
263.3270	15852.661	0.0000	.0032556	.003098	GLFC TRANS.
288.3518	15850.030	0.0000	.0030624	.002741	GLFC TRANS.
314.6359	15842.140	0.0000	.0025490	.001899	GLFC TRANS.
340.9514	15829.000	0.0000	.0018763	.001029	GLFC TRANS.
367.3009	15810.627	0.0000	.0011051	.000456	GLFC TRANS.
393.6932	15787.043	0.0000	.0004098	.000169	GLFC TRANS.
420.1383	15758.277	0.0000	.0001368	.000056	GLFC TRANS.
446.6465	15724.363	0.0000	.0000433	.000018	GLFC TRANS.
473.2281	15685.343	0.0000	.0000141	.000006	GLFC TRANS.
499.8937	15641.265	0.0000	.0000058	.000002	GLFC TRANS.
526.6540	15592.183	0.0000	.0000028	.000001	GLFC TRANS.

APPENDIX I

Trajectory and Reentry Environment
Output From Computer Code HRS017 (Version 3)
for a Perigee Altitude of 295,000 Feet
(Fifty Revolutions)

Part 1. Trajectory and Reentry Environment Tabulated Data (211)

Part 2. Listing of Punched Card CMA Input (261)

Part 1

Trajectory and Reentry Environment Tabulated Data

REVOLUTION 1

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
0.0	-180.00	1246374303.00	.08103	0.00	0.000	605.32	0.00000
384963.5	-160.00	436480146.64	74.57522	0.00	0.000	6305.62	0.00000
422279.1	-140.00	140125313.69	67.36593	0.00	0.000	12377.10	0.00000
428407.7	-120.00	59897006.26	58.33876	0.00	0.000	18082.59	0.00000
430271.8	-100.00	29241177.33	48.85683	0.00	0.000	23241.38	0.00000
431087.8	-80.00	14814866.91	39.19509	0.00	0.000	27695.22	0.00000
431543.1	-60.00	7211514.77	29.44620	0.00	0.000	31308.26	0.00000
431847.7	-40.00	3053006.66	19.65097	0.00	0.000	33970.49	0.00000
432084.1	-20.00	943391.61	9.83116	.35	.003	35600.93	.00011
432105.7	-18.00	818200.95	8.84841	.53	.006	35705.03	.00025
432127.1	-16.00	706990.62	7.86558	.79	.013	35798.26	.00055
432148.3	-14.00	609487.79	6.88267	1.19	.028	35880.59	.00123
432169.3	-12.00	525454.92	5.89972	1.84	.067	35951.99	.00290
432190.1	-10.00	454688.55	4.91673	3.32	.219	36012.45	.00945
432210.8	-8.00	397018.23	3.93375	7.89	1.230	36061.94	.05302
432231.4	-6.00	352305.65	2.95083	20.85	8.552	36100.44	.36833
432251.8	-4.00	320443.96	1.96816	47.30	43.912	36127.96	1.88972
432271.8	-2.00	301357.21	.98659	81.35	129.689	36144.47	5.57855
432286.9	0.00	295000.00	.08103	97.91	187.737	36149.97	8.07425
432301.9	2.00	301357.21	.98659	81.35	129.689	36144.47	5.57855
432322.0	4.00	320443.96	1.96816	47.30	43.912	36127.96	1.88972
432342.4	6.00	352305.65	2.95083	20.85	8.552	36100.44	.36833
432362.9	8.00	397018.23	3.93375	7.89	1.230	36061.94	.05302
432383.6	10.00	454688.55	4.91673	3.32	.219	36012.45	.00945
432404.5	12.00	525454.92	5.89972	1.84	.067	35951.99	.00290
432425.5	14.00	609487.79	6.88267	1.19	.028	35880.59	.00123
432446.6	16.00	706990.62	7.86558	.79	.013	35798.26	.00055
432468.0	18.00	818200.95	8.84841	.53	.006	35705.03	.00025
432489.6	20.00	943391.61	9.83116	.35	.003	35600.93	.00011
432726.0	40.00	3053006.66	19.65097	0.00	0.000	33970.49	0.00000
433030.6	60.00	7211514.77	29.44620	0.00	0.000	31308.26	0.00000
433485.9	80.00	14814866.91	39.19509	0.00	0.000	27695.22	0.00000
434301.9	100.00	29241177.33	48.85683	0.00	0.000	23241.38	0.00000
436166.0	120.00	59897006.26	58.33876	0.00	0.000	18082.59	0.00000
442294.6	140.00	140125313.69	67.36593	0.00	0.000	12377.10	0.00000
479610.3	160.00	436480146.64	74.57522	0.00	0.000	6305.62	0.00000
864573.7	180.00	1246374303.00	.08103	0.00	0.000	605.32	0.00000

REVOLUTION 2

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
864573.7	-180.00	1042588047.65	.08103	0.00	0.000	720.18	0.00000
1154535.9	-160.00	407728417.48	73.54382	0.00	0.000	6307.50	0.00000
1188672.7	-140.00	136735221.69	66.86213	0.00	0.000	12363.09	0.00000
1194623.6	-120.00	59162969.11	58.02067	0.00	0.000	18057.31	0.00000
1196465.3	-100.00	29018863.99	48.63784	0.00	0.000	23206.73	0.00000
1197277.1	-80.00	14735243.36	39.04086	0.00	0.000	27652.77	0.00000
1197731.7	-60.00	7181620.17	29.34008	0.00	0.000	31259.59	0.00000
1198036.3	-40.00	3042841.29	19.58406	0.00	0.000	33917.28	0.00000
1198273.0	-20.00	941211.33	9.79875	.35	.003	35544.95	.00011
1198294.6	-18.00	816451.68	8.81930	.53	.006	35648.88	.00025
1198316.0	-16.00	705620.19	7.83974	.79	.013	35741.95	.00056
1198337.3	-14.00	608446.39	6.86010	1.19	.029	35824.14	.00124
1198358.3	-12.00	524694.76	5.88040	1.83	.067	35895.42	.00292
1198379.2	-10.00	454163.55	4.90065	3.32	.220	35955.78	.00953
1198399.9	-8.00	396683.73	3.92089	7.91	1.241	36005.18	.05358
1198420.5	-6.00	352118.14	2.94120	20.84	8.586	36043.62	.37035
1198441.0	-4.00	320360.83	1.96175	47.17	43.900	36071.09	1.89218
1198461.1	-2.00	301336.46	.98339	81.00	129.233	36087.57	5.56772
1198476.6	0.00	295000.00	.08103	97.42	186.852	36093.07	8.04885
1198492.0	2.00	301336.46	.98339	81.00	129.233	36087.57	5.56772
1198512.2	4.00	320360.83	1.96175	47.17	43.900	36071.09	1.89218
1198532.6	6.00	352118.14	2.94120	20.84	8.586	36043.62	.37035
1198553.2	8.00	396683.73	3.92089	7.91	1.241	36005.18	.05358
1198574.0	10.00	454163.55	4.90065	3.32	.220	35955.78	.00953
1198594.8	12.00	524694.76	5.88040	1.83	.067	35895.42	.00292
1198615.9	14.00	608446.39	6.86010	1.19	.029	35824.14	.00124
1198637.1	16.00	705620.19	7.83974	.79	.013	35741.95	.00056
1198658.5	18.00	816451.68	8.81930	.53	.006	35648.88	.00025
1198680.2	20.00	941211.33	9.79875	.35	.003	35544.95	.00011
1198916.8	40.00	3042841.29	19.58406	0.00	0.000	33917.28	0.00000
1199221.5	60.00	7181620.17	29.34008	0.00	0.000	31259.59	0.00000
1199676.0	80.00	14735243.36	39.04086	0.00	0.000	27652.77	0.00000
1200487.8	100.00	29018863.99	48.63784	0.00	0.000	23206.73	0.00000
1202329.5	120.00	59162969.11	58.02067	0.00	0.000	18057.31	0.00000
1208280.4	140.00	136735221.69	66.86213	0.00	0.000	12363.09	0.00000
1242417.2	160.00	407728417.48	73.54382	0.00	0.000	6307.50	0.00000
1532379.4	180.00	1042588047.65	.08103	0.00	0.000	720.18	0.00000

REVOLUTION 3

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
1532379.4	-180.00	885172178.02	.08103	0.00	0.000	843.86	0.00000
1755538.8	-160.00	380469278.22	72.43424	0.00	0.000	6311.82	0.00000
1786709.8	-140.00	133229447.02	66.31837	0.00	0.000	12349.12	0.00000
1792478.0	-120.00	58384765.76	57.67714	0.00	0.000	18030.76	0.00000
1794296.0	-100.00	28780884.07	48.40130	0.00	0.000	23169.87	0.00000
1795103.4	-80.00	14649617.13	38.87426	0.00	0.000	27607.36	0.00000
1795557.1	-60.00	7149393.84	29.22543	0.00	0.000	31207.38	0.00000
1795861.8	-40.00	3031868.48	19.51178	0.00	0.000	33860.13	0.00000
1796098.7	-20.00	938856.29	9.76373	.35	.003	35484.78	.00011
1796120.4	-18.00	814562.11	8.78784	.53	.006	35588.52	.00025
1796141.9	-16.00	704139.80	7.81183	.79	.013	35681.42	.00056
1796163.1	-14.00	607321.39	6.83572	1.19	.029	35763.46	.00125
1796184.2	-12.00	523873.55	5.85952	1.83	.068	35834.61	.00294
1796205.1	-10.00	453596.37	4.88327	3.33	.222	35894.85	.00961
1796225.9	-8.00	396322.35	3.90701	7.92	1.253	35944.16	.05418
1796246.5	-6.00	351915.57	2.93080	20.82	8.622	35982.53	.37256
1796267.0	-4.00	320271.02	1.95482	47.03	43.887	36009.95	1.89485
1796287.3	-2.00	301314.04	.97993	80.62	128.745	36026.40	5.55611
1796303.1	0.00	295000.00	.08103	96.90	185.903	36031.89	8.02159
1796318.9	2.00	301314.04	.97993	80.62	128.745	36026.40	5.55611
1796339.2	4.00	320271.02	1.95482	47.03	43.887	36009.95	1.89485
1796359.7	6.00	351915.57	2.93080	20.82	8.622	35982.53	.37256
1796380.3	8.00	396322.35	3.90701	7.92	1.253	35944.16	.05418
1796401.1	10.00	453596.37	4.88327	3.33	.222	35894.85	.00961
1796422.0	12.00	523873.55	5.85952	1.83	.068	35834.61	.00294
1796443.1	14.00	607321.39	6.83572	1.19	.029	35763.46	.00125
1796464.3	16.00	704139.80	7.81183	.79	.013	35681.42	.00056
1796485.8	18.00	814562.11	8.78784	.53	.006	35588.52	.00025
1796507.5	20.00	938856.29	9.76373	.35	.003	35484.78	.00011
1796744.4	40.00	3031868.48	19.51178	0.00	0.000	33860.13	0.00000
1797049.1	60.00	7149393.84	29.22543	0.00	0.000	31207.38	0.00000
1797502.8	80.00	14649617.13	38.87426	0.00	0.000	27607.36	0.00000
1798310.1	100.00	28780884.07	48.40130	0.00	0.000	23169.87	0.00000
1800128.1	120.00	58384765.76	57.67714	0.00	0.000	18030.76	0.00000
1805896.3	140.00	133229447.02	66.31837	0.00	0.000	12349.12	0.00000
1837067.4	160.00	380469278.22	72.43424	0.00	0.000	6311.82	0.00000
2060226.8	180.00	885172178.02	.08103	0.00	0.000	843.86	0.00000

REVOLUTION 4

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
2060226.8	-180.00	760738061.36	.08103	0.00	0.000	976.42	0.00000
2235052.1	-160.00	354773626.26	71.24723	0.00	0.000	6319.10	0.00000
2263474.6	-140.00	129628903.52	65.73430	0.00	0.000	12335.42	0.00000
2269056.3	-120.00	57564505.68	57.30786	0.00	0.000	18003.09	0.00000
2270849.4	-100.00	28527452.83	48.14696	0.00	0.000	23130.88	0.00000
2271652.0	-80.00	14557983.10	38.69510	0.00	0.000	27559.04	0.00000
2272104.8	-60.00	7114816.51	29.10212	0.00	0.000	31151.67	0.00000
2272409.6	-40.00	3020078.33	19.43404	0.00	0.000	33799.04	0.00000
2272646.8	-20.00	936323.99	9.72606	.36	.003	35420.43	.00012
2272668.5	-18.00	812530.23	8.75401	.53	.006	35523.96	.00026
2272690.0	-16.00	702547.85	7.78181	.79	.013	35616.67	.00057
2272711.3	-14.00	606111.58	6.80949	1.19	.029	35698.54	.00125
2272732.4	-12.00	522990.40	5.83707	1.83	.068	35769.55	.00296
2272753.3	-10.00	452986.40	4.86459	3.33	.224	35829.67	.00971
2272774.1	-8.00	395933.69	3.89207	7.94	1.265	35878.89	.05484
2272794.8	-6.00	351697.71	2.91960	20.81	8.662	35917.18	.37495
2272815.4	-4.00	320174.43	1.94737	46.89	43.874	35944.54	1.89775
2272835.7	-2.00	301289.93	.97622	80.22	128.225	35960.96	5.54372
2272851.9	0.00	295000.00	.08103	96.35	184.892	35966.43	7.99247
2272868.0	2.00	301289.93	.97622	80.22	128.225	35960.96	5.54372
2272888.3	4.00	320174.43	1.94737	46.89	43.874	35944.54	1.89775
2272908.9	6.00	351697.71	2.91960	20.81	8.662	35917.18	.37495
2272929.6	8.00	395933.69	3.89207	7.94	1.265	35878.89	.05484
2272950.4	10.00	452986.40	4.86459	3.33	.224	35829.67	.00971
2272971.4	12.00	522990.40	5.83707	1.83	.068	35769.55	.00296
2272992.5	14.00	606111.58	6.80949	1.19	.029	35698.54	.00125
2273013.8	16.00	702547.85	7.78181	.79	.013	35616.67	.00057
2273035.3	18.00	812530.23	8.75401	.53	.006	35523.96	.00026
2273057.0	20.00	936323.99	9.72606	.36	.003	35420.43	.00012
2273294.2	40.00	3020078.33	19.43404	0.00	0.000	33799.04	0.00000
2273598.9	60.00	7114816.51	29.10212	0.00	0.000	31151.67	0.00000
2274051.8	80.00	14557983.10	38.69510	0.00	0.000	27559.04	0.00000
2274854.4	100.00	28527452.83	48.14696	0.00	0.000	23130.88	0.00000
2276647.5	120.00	57564505.68	57.30786	0.00	0.000	18003.09	0.00000
2282229.2	140.00	129628903.52	65.73430	0.00	0.000	12335.42	0.00000
2310651.7	160.00	354773626.26	71.24723	0.00	0.000	6319.10	0.00000
2485477.0	180.00	760738061.36	.08103	0.00	0.000	976.42	0.00000

REVOLUTION 5

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
2485477.0	-180.00	660480630.38	.08103	0.00	0.000	1117.91	0.00000
2624500.3	-160.00	330659873.43	69.98386	0.00	0.000	6329.87	0.00000
2650389.1	-140.00	125953406.24	65.10952	0.00	0.000	12322.26	0.00000
2655781.7	-120.00	56704310.96	56.91247	0.00	0.000	17974.44	0.00000
2657548.7	-100.00	28258782.07	47.87454	0.00	0.000	23089.84	0.00000
2658346.3	-80.00	14460330.04	38.50318	0.00	0.000	27507.86	0.00000
2658798.2	-60.00	7077865.21	28.97003	0.00	0.000	31092.48	0.00000
2659102.9	-40.00	3007459.40	19.35075	0.00	0.000	33734.04	0.00000
2659340.5	-20.00	933611.56	9.68571	.36	.003	35351.89	.00012
2659362.2	-18.00	810353.73	8.71777	.53	.006	35455.19	.00026
2659383.8	-16.00	700842.51	7.74965	.79	.013	35547.70	.00057
2659405.1	-14.00	604815.55	6.78139	1.19	.029	35629.40	.00126
2659426.2	-12.00	522044.29	5.81302	1.83	.068	35700.25	.00298
2659447.2	-10.00	452332.92	4.84457	3.33	.226	35760.24	.00981
2659468.1	-8.00	395517.31	3.87607	7.96	1.279	35809.35	.05555
2659488.8	-6.00	351464.30	2.90762	20.79	8.705	35847.56	.37753
2659509.5	-4.00	320070.94	1.93938	46.73	43.862	35874.86	1.90090
2659529.8	-2.00	301264.10	.97224	79.79	127.672	35891.24	5.53055
2659546.3	0.00	295000.00	.08103	95.76	183.818	35896.70	7.96151
2659562.7	2.00	301264.10	.97224	79.79	127.672	35891.24	5.53055
2659583.1	4.00	320070.94	1.93938	46.73	43.862	35874.86	1.90090
2659603.7	6.00	351464.30	2.90762	20.79	8.705	35847.56	.37753
2659624.5	8.00	395517.31	3.87607	7.96	1.279	35809.35	.05555
2659645.3	10.00	452332.92	4.84457	3.33	.226	35760.24	.00981
2659666.3	12.00	522044.29	5.81302	1.83	.068	35700.25	.00298
2659687.5	14.00	604815.55	6.78139	1.19	.029	35629.40	.00126
2659708.8	16.00	700842.51	7.74965	.79	.013	35547.70	.00057
2659730.3	18.00	810353.73	8.71777	.53	.006	35455.19	.00026
2659752.1	20.00	933611.56	9.68571	.36	.003	35351.89	.00012
2659989.6	40.00	3007459.40	19.35075	0.00	0.000	33734.04	0.00000
2660294.4	60.00	7077865.21	28.97003	0.00	0.000	31092.48	0.00000
2660746.3	80.00	14460330.04	38.50318	0.00	0.000	27507.86	0.00000
2661543.9	100.00	28258782.07	47.87454	0.00	0.000	23089.84	0.00000
2663310.9	120.00	56704310.96	56.91247	0.00	0.000	17974.44	0.00000
2668703.5	140.00	125953406.24	65.10952	0.00	0.000	12322.26	0.00000
2694592.3	160.00	330659873.43	69.98386	0.00	0.000	6329.87	0.00000
2833615.6	180.00	660480630.38	.08103	0.00	0.000	1117.91	0.00000

REVOLUTION 6

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
2833615.6	-180.00	578393537.65	.08103	0.00	0.000	1268.41	0.00000
2945592.2	-160.00	308107892.75	68.64554	0.00	0.000	6344.72	0.00000
2969155.5	-140.00	122221548.05	64.44362	0.00	0.000	12309.92	0.00000
2974357.3	-120.00	55806307.66	56.49057	0.00	0.000	17945.00	0.00000
2976097.2	-100.00	27975080.16	47.58374	0.00	0.000	23046.87	0.00000
2976889.5	-80.00	14356640.57	38.29827	0.00	0.000	27453.88	0.00000
2977340.4	-60.00	7038513.25	28.82898	0.00	0.000	31029.84	0.00000
2977645.2	-40.00	2993998.64	19.26181	0.00	0.000	33665.11	0.00000
2977883.0	-20.00	930715.78	9.64262	.36	.003	35279.15	.00012
2977904.8	-18.00	808029.97	8.67906	.53	.006	35382.21	.00026
2977926.4	-16.00	699021.73	7.71531	.80	.013	35474.50	.00058
2977947.8	-14.00	603431.73	6.75139	1.19	.029	35556.01	.00128
2977969.0	-12.00	521034.06	5.78734	1.83	.069	35626.69	.00301
2977990.0	-10.00	451635.13	4.82319	3.34	.228	35686.54	.00992
2978010.9	-8.00	395072.69	3.85899	7.98	1.295	35735.54	.05632
2978031.7	-6.00	351215.05	2.89481	20.78	8.751	35773.66	.38032
2978052.4	-4.00	319960.43	1.93086	46.57	43.853	35800.89	1.90444
2978072.9	-2.00	301236.51	.96799	79.33	127.088	35817.24	5.51662
2978089.6	0.00	295000.00	.08103	95.14	182.684	35822.69	7.92871
2978106.3	2.00	301236.51	.96799	79.33	127.088	35817.24	5.51662
2978126.7	4.00	319960.43	1.93086	46.57	43.853	35800.89	1.90444
2978147.4	6.00	351215.05	2.89481	20.78	8.751	35773.66	.38032
2978168.2	8.00	395072.69	3.85899	7.98	1.295	35735.54	.05632
2978189.1	10.00	451635.13	4.82319	3.34	.228	35686.54	.00992
2978210.1	12.00	521034.06	5.78734	1.83	.069	35626.69	.00301
2978231.3	14.00	603431.73	6.75139	1.19	.029	35556.01	.00128
2978252.7	16.00	699021.73	7.71531	.80	.013	35474.50	.00058
2978274.3	18.00	808029.97	8.67906	.53	.006	35382.21	.00026
2978296.1	20.00	930715.78	9.64262	.36	.003	35279.15	.00012
2978533.9	40.00	2993998.64	19.26181	0.00	0.000	33665.11	0.00000
2978838.8	60.00	7038513.25	28.82898	0.00	0.000	31029.84	0.00000
2979289.6	80.00	14356640.57	38.29827	0.00	0.000	27453.88	0.00000
2980081.9	100.00	27975080.16	47.58374	0.00	0.000	23046.87	0.00000
2981821.8	120.00	55806307.66	56.49057	0.00	0.000	17945.00	0.00000
2987023.7	140.00	122221548.05	64.44362	0.00	0.000	12309.92	0.00000
3010586.9	160.00	308107892.75	68.64554	0.00	0.000	6344.72	0.00000
3122563.5	180.00	578393537.65	.08103	0.00	0.000	1268.41	0.00000

REVOLUTION 7

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
3122563.5	-180.00	510253258.09	.08103	0.00	0.000	1427.99	0.00000
3213761.8	-160.00	287070435.37	67.23412	0.00	0.000	6364.26	0.00000
3235197.5	-140.00	118450618.34	63.73619	0.00	0.000	12298.72	0.00000
3240208.1	-120.00	54872618.77	56.04172	0.00	0.000	17914.92	0.00000
3241919.8	-100.00	27676552.29	47.27421	0.00	0.000	23002.07	0.00000
3242706.5	-80.00	14246891.34	38.08011	0.00	0.000	27397.16	0.00000
3243156.3	-60.00	6996730.16	28.67880	0.00	0.000	30963.77	0.00000
3243461.2	-40.00	2979681.40	19.16710	0.00	0.000	33592.27	0.00000
3243699.4	-20.00	927633.00	9.59674	.36	.003	35202.21	.00012
3243721.2	-18.00	805556.03	8.63784	.53	.006	35305.01	.00027
3243742.9	-16.00	697083.18	7.67873	.80	.013	35397.07	.00058
3243764.3	-14.00	601958.34	6.71944	1.19	.029	35478.36	.00129
3243785.5	-12.00	519958.40	5.75999	1.83	.069	35548.87	.00303
3243806.6	-10.00	450892.13	4.80042	3.34	.230	35608.57	.01004
3243827.5	-8.00	394599.24	3.84079	8.00	1.311	35657.44	.05716
3243848.4	-6.00	350949.64	2.88118	20.76	8.801	35695.46	.38332
3243869.1	-4.00	319842.76	1.92178	46.40	43.851	35722.63	1.90854
3243889.6	-2.00	301207.13	.96346	78.86	126.472	35738.94	5.50193
3243906.6	0.00	295000.00	.08103	94.49	181.488	35744.37	7.89408
3243923.5	2.00	301207.13	.96346	78.86	126.472	35738.94	5.50193
3243944.1	4.00	319842.76	1.92178	46.40	43.851	35722.63	1.90854
3243964.8	6.00	350949.64	2.88118	20.76	8.801	35695.46	.38332
3243985.7	8.00	394599.24	3.84079	8.00	1.311	35657.44	.05716
3244006.6	10.00	450892.13	4.80042	3.34	.230	35608.57	.01004
3244027.7	12.00	519958.40	5.75999	1.83	.069	35548.87	.00303
3244048.9	14.00	601958.34	6.71944	1.19	.029	35478.36	.00129
3244070.3	16.00	697083.18	7.67873	.80	.013	35397.07	.00058
3244091.9	18.00	805556.03	8.63784	.53	.006	35305.01	.00027
3244113.8	20.00	927633.00	9.59674	.36	.003	35202.21	.00012
3244352.0	40.00	2979681.40	19.16710	0.00	0.000	33592.27	0.00000
3244656.9	60.00	6996730.16	28.67880	0.00	0.000	30963.77	0.00000
3245106.7	80.00	14246891.34	38.08011	0.00	0.000	27397.16	0.00000
3245893.4	100.00	27676552.29	47.27421	0.00	0.000	23002.07	0.00000
3247605.1	120.00	54872618.77	56.04172	0.00	0.000	17914.92	0.00000
3252615.7	140.00	118450618.34	63.73619	0.00	0.000	12298.72	0.00000
3274051.4	160.00	287070435.37	67.23412	0.00	0.000	6364.26	0.00000
3365249.7	180.00	510253258.09	.08103	0.00	0.000	1427.99	0.00000

REVOLUTION 8

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
3365249.7	-180.00	453012702.72	.08103	0.00	0.000	1596.76	0.00000
3440251.7	-160.00	267482153.80	65.75190	0.00	0.000	6389.13	0.00000
3459746.3	-140.00	114656555.37	62.98680	0.00	0.000	12288.98	0.00000
3464565.9	-120.00	53905357.58	55.56546	0.00	0.000	17884.41	0.00000
3466248.5	-100.00	27363400.81	46.94559	0.00	0.000	22955.54	0.00000
3467029.4	-80.00	14131053.07	37.84843	0.00	0.000	27337.75	0.00000
3467478.1	-60.00	6952481.65	28.51928	0.00	0.000	30894.29	0.00000
3467783.0	-40.00	2964491.33	19.06651	0.00	0.000	33515.52	0.00000
3468021.6	-20.00	924359.21	9.54800	.36	.003	35121.05	.00012
3468043.5	-18.00	802928.65	8.59406	.53	.006	35223.57	.00027
3468065.2	-16.00	695024.29	7.63988	.80	.013	35315.38	.00059
3468086.6	-14.00	600393.42	6.68550	1.19	.030	35396.46	.00130
3468107.9	-12.00	518815.88	5.73094	1.83	.070	35466.77	.00307
3468129.0	-10.00	450102.92	4.77624	3.35	.232	35526.31	.01017
3468150.0	-8.00	394096.34	3.82147	8.02	1.329	35575.04	.05806
3468170.9	-6.00	350667.71	2.86670	20.74	8.854	35612.96	.38653
3468191.7	-4.00	319717.76	1.91213	46.22	43.851	35640.06	1.91295
3468212.3	-2.00	301175.93	.95865	78.35	125.826	35656.32	5.48647
3468229.5	0.00	295000.00	.08103	93.80	180.232	35661.74	7.85763
3468246.7	2.00	301175.93	.95865	78.35	125.826	35656.32	5.48647
3468267.3	4.00	319717.76	1.91213	46.22	43.851	35640.06	1.91295
3468288.1	6.00	350667.71	2.86670	20.74	8.854	35612.96	.38653
3468309.0	8.00	394096.34	3.82147	8.02	1.329	35575.04	.05806
3468330.0	10.00	450102.92	4.77624	3.35	.232	35526.31	.01017
3468351.1	12.00	518815.88	5.73094	1.83	.070	35466.77	.00307
3468372.4	14.00	600393.42	6.68550	1.19	.030	35396.46	.00130
3468393.8	16.00	695024.29	7.63988	.80	.013	35315.38	.00059
3468415.5	18.00	802928.65	8.59406	.53	.006	35223.57	.00027
3468437.4	20.00	924359.21	9.54800	.36	.003	35121.05	.00012
3468676.0	40.00	2964491.33	19.06651	0.00	0.000	33515.52	0.00000
3468980.9	60.00	6952481.65	28.51928	0.00	0.000	30894.29	0.00000
3469429.5	80.00	14131053.07	37.84843	0.00	0.000	27337.75	0.00000
3470210.5	100.00	27363400.81	46.94559	0.00	0.000	22955.54	0.00000
3471893.1	120.00	53905357.58	55.56546	0.00	0.000	17884.41	0.00000
3476712.7	140.00	114656555.37	62.98680	0.00	0.000	12288.98	0.00000
3496207.2	160.00	267482153.80	65.75190	0.00	0.000	6389.13	0.00000
3571209.3	180.00	453012702.72	.08103	0.00	0.000	1596.76	0.00000

REVOLUTION 9

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
3571209.3	-180.00	404424613.77	.08103	0.00	0.000	1774.82	0.00000
3633425.5	-160.00	249266531.48	64.20171	0.00	0.000	6420.00	0.00000
3651152.5	-140.00	110853926.84	62.19505	0.00	0.000	12281.06	0.00000
3655782.3	-120.00	52906621.37	55.06127	0.00	0.000	17853.67	0.00000
3657434.9	-100.00	27035825.51	46.59745	0.00	0.000	22907.40	0.00000
3658209.8	-80.00	14009090.68	37.60292	0.00	0.000	27275.72	0.00000
3658657.2	-60.00	6905729.56	28.35022	0.00	0.000	30821.43	0.00000
3658962.2	-40.00	2948410.40	18.95988	0.00	0.000	33434.86	0.00000
3659201.2	-20.00	920889.94	9.49633	.36	.003	35035.66	.00012
3659223.1	-18.00	800144.23	8.54765	.54	.006	35137.88	.00027
3659244.8	-16.00	692842.22	7.59870	.80	.014	35229.42	.00060
3659266.3	-14.00	598734.80	6.64952	1.19	.030	35310.26	.00131
3659287.7	-12.00	517604.89	5.70014	1.83	.071	35380.37	.00310
3659308.8	-10.00	449266.39	4.75061	3.35	.235	35439.73	.01032
3659329.9	-8.00	393563.27	3.80098	8.05	1.348	35488.32	.05904
3659350.8	-6.00	350368.86	2.85134	20.73	8.911	35526.13	.38998
3659371.7	-4.00	319585.26	1.90191	46.04	43.852	35553.15	1.91767
3659392.3	-2.00	301142.85	.95355	77.83	125.148	35569.36	5.47027
3659409.7	0.00	295000.00	.08103	93.08	178.917	35574.77	7.81935
3659427.1	2.00	301142.85	.95355	77.83	125.148	35569.36	5.47027
3659447.8	4.00	319585.26	1.90191	46.04	43.852	35553.15	1.91767
3659468.7	6.00	350368.86	2.85134	20.73	8.911	35526.13	.38998
3659489.6	8.00	393563.27	3.80098	8.05	1.348	35488.32	.05904
3659510.6	10.00	449266.39	4.75061	3.35	.235	35439.73	.01032
3659531.8	12.00	517604.89	5.70014	1.83	.071	35380.37	.00310
3659553.2	14.00	598734.80	6.64952	1.19	.030	35310.26	.00131
3659574.7	16.00	692842.22	7.59870	.80	.014	35229.42	.00060
3659596.4	18.00	800144.23	8.54765	.54	.006	35137.88	.00027
3659618.3	20.00	920889.94	9.49633	.36	.003	35035.66	.00012
3659857.3	40.00	2948410.40	18.95988	0.00	0.000	33434.86	0.00000
3660162.3	60.00	6905729.56	28.35022	0.00	0.000	30821.43	0.00000
3660609.7	80.00	14009090.68	37.60292	0.00	0.000	27275.72	0.00000
3661384.5	100.00	27035825.51	46.59745	0.00	0.000	22907.40	0.00000
3663037.2	120.00	52906621.37	55.06127	0.00	0.000	17853.67	0.00000
3667667.0	140.00	110853926.84	62.19505	0.00	0.000	12281.06	0.00000
3685394.0	160.00	249266531.48	64.20171	0.00	0.000	6420.00	0.00000
3747610.2	180.00	404424613.77	.08103	0.00	0.000	1774.82	0.00000

REVOLUTION 10

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
3747610.2	-180.00	362799652.96	.08103	0.00	0.000	1962.30	0.00000
3799618.7	-160.00	232341068.19	62.58694	0.00	0.000	6457.57	0.00000
3815738.8	-140.00	107055934.13	61.36057	0.00	0.000	12275.33	0.00000
3820180.5	-120.00	51878485.09	54.52863	0.00	0.000	17822.92	0.00000
3821802.5	-100.00	26694023.72	46.22937	0.00	0.000	22857.79	0.00000
3822571.0	-80.00	13880963.28	37.34324	0.00	0.000	27211.13	0.00000
3823017.1	-60.00	6856431.76	28.17136	0.00	0.000	30745.21	0.00000
3823322.1	-40.00	2931418.77	18.84706	0.00	0.000	33350.27	0.00000
3823561.6	-20.00	917220.32	9.44166	.36	.003	34946.02	.00013
3823583.5	-18.00	797198.82	8.49855	.54	.006	35047.91	.00028
3823605.3	-16.00	690533.86	7.55513	.80	.014	35139.17	.00061
3823626.9	-14.00	596980.10	6.61145	1.19	.030	35219.75	.00133
3823648.3	-12.00	516323.70	5.66755	1.83	.071	35289.64	.00314
3823669.5	-10.00	448381.33	4.72348	3.36	.238	35348.82	.01049
3823690.6	-8.00	392999.25	3.77930	8.07	1.368	35397.26	.06009
3823711.6	-6.00	350052.66	2.83510	20.71	8.972	35434.95	.39367
3823732.5	-4.00	319445.06	1.89109	45.84	43.855	35461.88	1.92274
3823753.2	-2.00	301107.85	.94816	77.28	124.440	35478.04	5.45332
3823770.8	0.00	295000.00	.08103	92.33	177.542	35483.43	7.77925
3823788.4	2.00	301107.85	.94816	77.28	124.440	35478.04	5.45332
3823809.2	4.00	319445.06	1.89109	45.84	43.855	35461.88	1.92274
3823830.1	6.00	350052.66	2.83510	20.71	8.972	35434.95	.39367
3823851.1	8.00	392999.25	3.77930	8.07	1.368	35397.26	.06009
3823872.2	10.00	448381.33	4.72348	3.36	.238	35348.82	.01049
3823893.4	12.00	516323.70	5.66755	1.83	.071	35289.64	.00314
3823914.8	14.00	596980.10	6.61145	1.19	.030	35219.75	.00133
3823936.4	16.00	690533.86	7.55513	.80	.014	35139.17	.00061
3823958.1	18.00	797198.82	8.49855	.54	.006	35047.91	.00028
3823980.1	20.00	917220.32	9.44166	.36	.003	34946.02	.00013
3824219.5	40.00	2931418.77	18.84706	0.00	0.000	33350.27	0.00000
3824524.5	60.00	6856431.76	28.17136	0.00	0.000	30745.21	0.00000
3824970.7	80.00	13880963.28	37.34324	0.00	0.000	27211.13	0.00000
3825739.1	100.00	26694023.72	46.22937	0.00	0.000	22857.79	0.00000
3827361.1	120.00	51878485.09	54.52863	0.00	0.000	17822.92	0.00000
3831802.9	140.00	107055934.13	61.36057	0.00	0.000	12275.33	0.00000
3847922.9	160.00	232341068.19	62.58694	0.00	0.000	6457.57	0.00000
3899931.5	180.00	362799652.96	.08103	0.00	0.000	1962.30	0.00000

REVOLUTION 11

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
3899931.5	-180.00	326846435.75	.08103	0.00	0.000	2159.32	0.00000
3943708.8	-160.00	216621061.82	60.91156	0.00	0.000	6502.56	0.00000
3958369.4	-140.00	103274436.59	60.48300	0.00	0.000	12272.22	0.00000
3962625.7	-120.00	50822995.23	53.96696	0.00	0.000	17792.40	0.00000
3964216.3	-100.00	26338190.33	45.84085	0.00	0.000	22806.84	0.00000
3964978.1	-80.00	13746624.08	37.06903	0.00	0.000	27144.06	0.00000
3965422.9	-60.00	6804542.00	27.98245	0.00	0.000	30665.66	0.00000
3965728.0	-40.00	2913494.75	18.72789	0.00	0.000	33261.76	0.00000
3965967.8	-20.00	913345.00	9.38391	.36	.003	34852.10	.00013
3965989.9	-18.00	794088.10	8.44667	.54	.006	34953.65	.00028
3966011.7	-16.00	688095.80	7.50910	.80	.014	35044.60	.00061
3966033.3	-14.00	595126.71	6.57123	1.19	.030	35124.91	.00134
3966054.7	-12.00	514970.40	5.63313	1.84	.072	35194.57	.00319
3966076.0	-10.00	447446.42	4.69483	3.37	.242	35253.54	.01067
3966097.2	-8.00	392403.45	3.75640	8.10	1.390	35301.82	.06122
3966118.3	-6.00	349718.63	2.81794	20.70	9.046	35339.38	.39797
3966139.2	-4.00	319296.95	1.87966	45.64	43.860	35366.22	1.92816
3966160.0	-2.00	301070.88	.94246	76.71	123.701	35382.33	5.43562
3966177.8	0.00	295000.00	.08103	91.55	176.109	35387.70	7.73733
3966195.6	2.00	301070.88	.94246	76.71	123.701	35382.33	5.43562
3966216.4	4.00	319296.95	1.87966	45.64	43.860	35366.22	1.92816
3966237.4	6.00	349718.63	2.81794	20.70	9.046	35339.38	.39797
3966258.4	8.00	392403.45	3.75640	8.10	1.390	35301.82	.06122
3966279.6	10.00	447446.42	4.69483	3.37	.242	35253.54	.01067
3966300.9	12.00	514970.40	5.63313	1.84	.072	35194.57	.00319
3966322.3	14.00	595126.71	6.57123	1.19	.030	35124.91	.00134
3966344.0	16.00	688095.80	7.50910	.80	.014	35044.60	.00061
3966365.8	18.00	794088.10	8.44667	.54	.006	34953.65	.00028
3966387.8	20.00	913345.00	9.38391	.36	.003	34852.10	.00013
3966627.7	40.00	2913494.75	18.72789	0.00	0.000	33261.76	0.00000
3966932.7	60.00	6804542.00	27.98245	0.00	0.000	30665.66	0.00000
3967377.5	80.00	13746624.08	37.06903	0.00	0.000	27144.06	0.00000
3968139.4	100.00	26338190.33	45.84085	0.00	0.000	22806.84	0.00000
3969729.9	120.00	50822995.23	53.96696	0.00	0.000	17792.40	0.00000
3973986.2	140.00	103274436.59	60.48300	0.00	0.000	12272.22	0.00000
3988646.9	160.00	216621061.82	60.91156	0.00	0.000	6502.56	0.00000
4032424.2	180.00	326846435.75	.08103	0.00	0.000	2159.32	0.00000

REVOLUTION 12

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
4032424.2	-180.00	295563046.13	.08103	0.00	0.000	2366.04	0.00000
4069503.9	-160.00	202022289.45	59.18014	0.00	0.000	6555.69	0.00000
4082840.2	-140.00	99519991.90	59.56206	0.00	0.000	12272.14	0.00000
4086914.1	-120.00	49742163.84	53.37569	0.00	0.000	17762.36	0.00000
4088472.6	-100.00	25968517.62	45.43140	0.00	0.000	22754.70	0.00000
4089227.5	-80.00	13606020.35	36.77990	0.00	0.000	27074.58	0.00000
4089670.9	-60.00	6750009.79	27.78321	0.00	0.000	30582.80	0.00000
4089976.0	-40.00	2894614.71	18.60218	0.00	0.000	33169.32	0.00000
4090216.3	-20.00	909258.17	9.32298	.36	.003	34753.88	.00013
4090238.4	-18.00	790807.37	8.39194	.54	.006	34855.06	.00029
4090260.3	-16.00	685524.33	7.46054	.80	.014	34945.68	.00062
4090282.0	-14.00	593171.79	6.52881	1.19	.031	35025.71	.00136
4090303.5	-12.00	513542.89	5.59681	1.84	.073	35095.11	.00323
4090324.8	-10.00	446460.21	4.66460	3.38	.246	35153.87	.01086
4090346.1	-8.00	391774.94	3.73224	8.13	1.414	35201.97	.06244
4090367.2	-6.00	349366.25	2.79984	20.70	9.126	35239.40	.40263
4090388.2	-4.00	319140.70	1.86760	45.43	43.867	35266.15	1.93395
4090409.1	-2.00	301031.87	.93645	76.11	122.933	35282.20	5.41718
4090427.1	0.00	295000.00	.08103	90.73	174.618	35287.55	7.69360
4090445.0	2.00	301031.87	.93645	76.11	122.933	35282.20	5.41718
4090465.9	4.00	319140.70	1.86760	45.43	43.867	35266.15	1.93395
4090486.9	6.00	349366.25	2.79984	20.70	9.126	35239.40	.40263
4090508.1	8.00	391774.94	3.73224	8.13	1.414	35201.97	.06244
4090529.3	10.00	446460.21	4.66460	3.38	.246	35153.87	.01086
4090550.6	12.00	513542.89	5.59681	1.84	.073	35095.11	.00323
4090572.1	14.00	593171.79	6.52881	1.19	.031	35025.71	.00136
4090593.8	16.00	685524.33	7.46054	.80	.014	34945.68	.00062
4090615.7	18.00	790807.37	8.39194	.54	.006	34855.06	.00029
4090637.8	20.00	909258.17	9.32298	.36	.003	34753.88	.00013
4090878.1	40.00	2894614.71	18.60218	0.00	0.000	33169.32	0.00000
4091183.2	60.00	6750009.79	27.78321	0.00	0.000	30582.80	0.00000
4091626.6	80.00	13606020.35	36.77990	0.00	0.000	27074.58	0.00000
4092381.5	100.00	25968517.62	45.43140	0.00	0.000	22754.70	0.00000
4093940.1	120.00	49742163.84	53.37569	0.00	0.000	17762.36	0.00000
4098013.9	140.00	99519991.90	59.56206	0.00	0.000	12272.14	0.00000
4111350.2	160.00	202022289.45	59.18014	0.00	0.000	6555.69	0.00000
4148430.0	180.00	295563046.13	.08103	0.00	0.000	2366.04	0.00000

REVOLUTION 13

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
4148430.0	-180.00	268161810.97	.08103	0.00	0.000	2582.63	0.00000
4180015.6	-160.00	188462844.00	57.39784	0.00	0.000	6617.72	0.00000
4192150.7	-140.00	95801909.45	58.59754	0.00	0.000	12275.56	0.00000
4196045.6	-120.00	48637962.75	52.75419	0.00	0.000	17733.08	0.00000
4197571.5	-100.00	25585195.04	45.00046	0.00	0.000	22701.52	0.00000
4198319.3	-80.00	13459093.19	36.47541	0.00	0.000	27002.76	0.00000
4198761.3	-60.00	6692780.15	27.57332	0.00	0.000	30496.66	0.00000
4199066.4	-40.00	2874752.91	18.46973	0.00	0.000	33072.93	0.00000
4199307.2	-20.00	904953.48	9.25879	.37	.003	34651.32	.00013
4199329.4	-18.00	787351.49	8.33428	.54	.007	34752.11	.00029
4199351.3	-16.00	682815.40	7.40937	.80	.014	34842.38	.00063
4199373.0	-14.00	591112.26	6.48411	1.19	.031	34922.10	.00138
4199394.6	-12.00	512038.92	5.55855	1.84	.074	34991.23	.00328
4199416.0	-10.00	445421.13	4.63275	3.39	.249	35049.77	.01107
4199437.3	-8.00	391112.71	3.70679	8.16	1.439	35097.69	.06375
4199458.5	-6.00	348994.95	2.78076	20.69	9.211	35134.97	.40761
4199479.6	-4.00	318976.07	1.85490	45.22	43.877	35161.61	1.94014
4199500.5	-2.00	300990.77	.93012	75.49	122.135	35177.60	5.39801
4199518.7	0.00	295000.00	.08103	89.89	173.070	35182.93	7.64804
4199536.8	2.00	300990.77	.93012	75.49	122.135	35177.60	5.39801
4199557.8	4.00	318976.07	1.85490	45.22	43.877	35161.61	1.94014
4199578.9	6.00	348994.95	2.78076	20.69	9.211	35134.97	.40761
4199600.0	8.00	391112.71	3.70679	8.16	1.439	35097.69	.06375
4199621.3	10.00	445421.13	4.63275	3.39	.249	35049.77	.01107
4199642.7	12.00	512038.92	5.55855	1.84	.074	34991.23	.00328
4199664.3	14.00	591112.26	6.48411	1.19	.031	34922.10	.00138
4199686.0	16.00	682815.40	7.40937	.80	.014	34842.38	.00063
4199708.0	18.00	787351.49	8.33428	.54	.007	34752.11	.00029
4199730.1	20.00	904953.48	9.25879	.37	.003	34651.32	.00013
4199970.9	40.00	2874752.91	18.46973	0.00	0.000	33072.93	0.00000
4200276.0	60.00	6692780.15	27.57332	0.00	0.000	30496.66	0.00000
4200718.0	80.00	13459093.19	36.47541	0.00	0.000	27002.76	0.00000
4201465.8	100.00	25585195.04	45.00046	0.00	0.000	22701.52	0.00000
4202991.7	120.00	48637962.75	52.75419	0.00	0.000	17733.08	0.00000
4206886.6	140.00	95801909.45	58.59754	0.00	0.000	12275.56	0.00000
4219021.8	160.00	188462844.00	57.39784	0.00	0.000	6617.72	0.00000
4250607.4	180.00	268161810.97	.08103	0.00	0.000	2582.63	0.00000

REVOLUTION 14

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
4250607.4	-180.00	244016098.34	.08103	0.00	0.000	2809.26	0.00000
4277652.5	-160.00	175864335.00	55.57034	0.00	0.000	6689.41	0.00000
4288698.4	-140.00	92128313.31	57.58928	0.00	0.000	12282.98	0.00000
4292418.4	-120.00	47512318.09	52.10182	0.00	0.000	17704.85	0.00000
4293911.1	-100.00	25188408.79	44.54745	0.00	0.000	22647.48	0.00000
4294651.5	-80.00	13305777.29	36.15511	0.00	0.000	26928.70	0.00000
4295092.0	-60.00	6632793.40	27.35245	0.00	0.000	30407.26	0.00000
4295397.1	-40.00	2853881.45	18.33033	0.00	0.000	32972.59	0.00000
4295638.4	-20.00	900424.04	9.19122	.37	.003	34544.39	.00014
4295660.6	-18.00	783714.91	8.27358	.54	.007	34644.77	.00030
4295682.6	-16.00	679964.62	7.35551	.80	.014	34734.66	.00064
4295704.4	-14.00	588944.75	6.43705	1.19	.031	34814.05	.00140
4295726.0	-12.00	510456.02	5.51827	1.84	.075	34882.90	.00333
4295747.5	-10.00	444327.46	4.59922	3.40	.254	34941.19	.01129
4295768.9	-8.00	390415.67	3.67999	8.20	1.467	34988.91	.06516
4295790.1	-6.00	348604.13	2.76068	20.69	9.303	35026.04	.41294
4295811.3	-4.00	318802.77	1.84153	44.99	43.890	35052.57	1.94675
4295832.3	-2.00	300947.50	.92346	74.85	121.307	35068.49	5.37810
4295850.6	0.00	295000.00	.08103	89.01	171.464	35073.80	7.60067
4295869.0	2.00	300947.50	.92346	74.85	121.307	35068.49	5.37810
4295890.0	4.00	318802.77	1.84153	44.99	43.890	35052.57	1.94675
4295911.2	6.00	348604.13	2.76068	20.69	9.303	35026.04	.41294
4295932.4	8.00	390415.67	3.67999	8.20	1.467	34988.91	.06516
4295953.8	10.00	444327.46	4.59922	3.40	.254	34941.19	.01129
4295975.2	12.00	510456.02	5.51827	1.84	.075	34882.90	.00333
4295996.8	14.00	588944.75	6.43705	1.19	.031	34814.05	.00140
4296018.6	16.00	679964.62	7.35551	.80	.014	34734.66	.00064
4296040.6	18.00	783714.91	8.27358	.54	.007	34644.77	.00030
4296062.9	20.00	900424.04	9.19122	.37	.003	34544.39	.00014
4296304.2	40.00	2853881.45	18.33033	0.00	0.000	32972.59	0.00000
4296609.3	60.00	6632793.40	27.35245	0.00	0.000	30407.26	0.00000
4297049.7	80.00	13305777.29	36.15511	0.00	0.000	26928.70	0.00000
4297790.1	100.00	25188408.79	44.54745	0.00	0.000	22647.48	0.00000
4299282.9	120.00	47512318.09	52.10182	0.00	0.000	17704.85	0.00000
4303002.9	140.00	92128313.31	57.58928	0.00	0.000	12282.98	0.00000
4314048.8	160.00	175864335.00	55.57034	0.00	0.000	6689.41	0.00000
4341093.9	180.00	244016098.34	.08103	0.00	0.000	2809.26	0.00000

REVOLUTION 15

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
4341093.9	-180.00	222622023.15	.08103	0.00	0.000	3046.13	0.00000
4364361.1	-160.00	164152619.16	53.70387	0.00	0.000	6771.50	0.00000
4374419.4	-140.00	88506212.34	56.53725	0.00	0.000	12294.91	0.00000
4377968.7	-120.00	46367105.14	51.41794	0.00	0.000	17678.00	0.00000
4379427.9	-100.00	24778341.36	44.07175	0.00	0.000	22592.76	0.00000
4380160.7	-80.00	13146000.63	35.81851	0.00	0.000	26852.49	0.00000
4380599.5	-60.00	6569984.83	27.12025	0.00	0.000	30314.63	0.00000
4380904.7	-40.00	2831970.04	18.18374	0.00	0.000	32868.28	0.00000
4381146.5	-20.00	895662.39	9.12015	.37	.003	34433.06	.00014
4381168.8	-18.00	779891.56	8.20975	.54	.007	34532.99	.00030
4381190.9	-16.00	676967.23	7.29886	.80	.015	34622.48	.00065
4381212.7	-14.00	586665.61	6.38756	1.19	.032	34701.52	.00142
4381234.4	-12.00	508791.50	5.47590	1.84	.076	34770.06	.00339
4381255.9	-10.00	443177.36	4.56396	3.41	.258	34828.09	.01153
4381277.4	-8.00	389682.62	3.65181	8.24	1.495	34875.60	.06666
4381298.7	-6.00	348193.11	2.73957	20.68	9.401	34912.57	.41864
4381319.9	-4.00	318620.51	1.82746	44.76	43.907	34938.98	1.95381
4381341.0	-2.00	300902.00	.91645	74.19	120.450	34954.83	5.35747
4381359.5	0.00	295000.00	.08103	88.11	169.802	34960.12	7.55148
4381378.0	2.00	300902.00	.91645	74.19	120.450	34954.83	5.35747
4381399.1	4.00	318620.51	1.82746	44.76	43.907	34938.98	1.95381
4381420.3	6.00	348193.11	2.73957	20.68	9.401	34912.57	.41864
4381441.7	8.00	389682.62	3.65181	8.24	1.495	34875.60	.06666
4381463.1	10.00	443177.36	4.56396	3.41	.258	34828.09	.01153
4381484.6	12.00	508791.50	5.47590	1.84	.076	34770.06	.00339
4381506.3	14.00	586665.61	6.38756	1.19	.032	34701.52	.00142
4381528.2	16.00	676967.23	7.29886	.80	.015	34622.48	.00065
4381550.2	18.00	779891.56	8.20975	.54	.007	34532.99	.00030
4381572.5	20.00	895662.39	9.12015	.37	.003	34433.06	.00014
4381814.4	40.00	2831970.04	18.18374	0.00	0.000	32868.28	0.00000
4382119.5	60.00	6569984.83	27.12025	0.00	0.000	30314.63	0.00000
4382558.3	80.00	13146000.63	35.81851	0.00	0.000	26852.49	0.00000
4383291.1	100.00	24778341.36	44.07175	0.00	0.000	22592.76	0.00000
4384750.3	120.00	46367105.14	51.41794	0.00	0.000	17678.00	0.00000
4388299.6	140.00	88506212.34	56.53725	0.00	0.000	12294.91	0.00000
4398358.0	160.00	164152619.16	53.70387	0.00	0.000	6771.50	0.00000
4421625.1	180.00	222622023.15	.08103	0.00	0.000	3046.13	0.00000

REVOLUTION 16

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
4421625.1	-180.00	203570442.32	.08103	0.00	0.000	3293.45	0.00000
4441729.2	-160.00	153258189.37	51.80505	0.00	0.000	6864.76	0.00000
4450892.0	-140.00	84941574.61	55.44151	0.00	0.000	12311.93	0.00000
4454275.1	-120.00	45204143.42	50.70187	0.00	0.000	17652.86	0.00000
4455700.4	-100.00	24355170.93	43.57270	0.00	0.000	22537.55	0.00000
4456425.3	-80.00	12979684.08	35.46507	0.00	0.000	26774.21	0.00000
4456862.5	-60.00	6504284.42	26.87632	0.00	0.000	30218.81	0.00000
4457167.7	-40.00	2808985.88	18.02971	0.00	0.000	32759.98	0.00000
4457410.1	-20.00	890660.40	9.04547	.37	.003	34317.27	.00014
4457432.4	-18.00	775874.90	8.14266	.55	.007	34416.72	.00031
4457454.5	-16.00	673818.03	7.23934	.80	.015	34505.79	.00067
4457476.5	-14.00	584270.89	6.33555	1.19	.032	34584.45	.00144
4457498.2	-12.00	507042.47	5.43138	1.85	.077	34652.67	.00345
4457519.8	-10.00	441968.79	4.52690	3.43	.263	34710.43	.01178
4457541.3	-8.00	388912.29	3.62219	8.27	1.526	34757.71	.06824
4457562.7	-6.00	347761.17	2.71737	20.68	9.505	34794.50	.42473
4457584.0	-4.00	318428.97	1.81268	44.52	43.927	34820.79	1.96135
4457605.2	-2.00	300854.18	.90908	73.50	119.564	34836.57	5.33611
4457623.9	0.00	295000.00	.08103	87.17	168.085	34841.83	7.50047
4457642.5	2.00	300854.18	.90908	73.50	119.564	34836.57	5.33611
4457663.7	4.00	318428.97	1.81268	44.52	43.927	34820.79	1.96135
4457685.0	6.00	347761.17	2.71737	20.68	9.505	34794.50	.42473
4457706.4	8.00	388912.29	3.62219	8.27	1.526	34757.71	.06824
4457727.9	10.00	441968.79	4.52690	3.43	.263	34710.43	.01178
4457749.5	12.00	507042.47	5.43138	1.85	.077	34652.67	.00345
4457771.3	14.00	584270.89	6.33555	1.19	.032	34584.45	.00144
4457793.2	16.00	673818.03	7.23934	.80	.015	34505.79	.00067
4457815.3	18.00	775874.90	8.14266	.55	.007	34416.72	.00031
4457837.7	20.00	890660.40	9.04547	.37	.003	34317.27	.00014
4458080.1	40.00	2808985.88	18.02971	0.00	0.000	32759.98	0.00000
4458385.3	60.00	6504284.42	26.87632	0.00	0.000	30218.81	0.00000
4458822.4	80.00	12979684.08	35.46507	0.00	0.000	26774.21	0.00000
4459547.3	100.00	24355170.93	43.57270	0.00	0.000	22537.55	0.00000
4460972.6	120.00	45204143.42	50.70187	0.00	0.000	17652.86	0.00000
4464355.7	140.00	84941574.61	55.44151	0.00	0.000	12311.93	0.00000
4473518.5	160.00	153258189.37	51.80505	0.00	0.000	6864.76	0.00000
4493622.6	180.00	203570442.32	.08103	0.00	0.000	3293.45	0.00000

REVOLUTION 17

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
4493622.6	-180.00	186526179.15	.08103	0.00	0.000	3551.47	0.00000
4511063.1	-160.00	143116320.71	49.88085	0.00	0.000	6969.92	0.00000
4519413.7	-140.00	81439404.33	54.30227	0.00	0.000	12334.61	0.00000
4522635.4	-120.00	44025192.24	49.95292	0.00	0.000	17629.80	0.00000
4524026.5	-100.00	23919070.58	43.04960	0.00	0.000	22482.08	0.00000
4524743.3	-80.00	12806740.94	35.09422	0.00	0.000	26693.99	0.00000
4525178.6	-60.00	6435616.41	26.62024	0.00	0.000	30119.81	0.00000
4525483.9	-40.00	2784893.42	17.86797	0.00	0.000	32647.67	0.00000
4525726.8	-20.00	885409.28	8.96704	.37	.003	34196.97	.00015
4525749.2	-18.00	771657.79	8.07221	.55	.007	34295.92	.00032
4525771.4	-16.00	670511.41	7.17681	.81	.015	34384.54	.00068
4525793.4	-14.00	581756.29	6.28093	1.19	.032	34462.80	.00147
4525815.3	-12.00	505205.76	5.38463	1.85	.078	34530.67	.00351
4525837.0	-10.00	440699.59	4.48798	3.44	.268	34588.14	.01206
4525858.5	-8.00	388103.27	3.59109	8.31	1.558	34635.18	.06994
4525880.0	-6.00	347307.53	2.69406	20.68	9.617	34671.79	.43124
4525901.4	-4.00	318227.80	1.79716	44.27	43.952	34697.94	1.96939
4525922.7	-2.00	300803.96	.90135	72.80	118.649	34713.64	5.31403
4525941.5	0.00	295000.00	.08103	86.21	166.311	34718.87	7.44762
4525960.3	2.00	300803.96	.90135	72.80	118.649	34713.64	5.31403
4525981.5	4.00	318227.80	1.79716	44.27	43.952	34697.94	1.96939
4526002.9	6.00	347307.53	2.69406	20.68	9.617	34671.79	.43124
4526024.4	8.00	388103.27	3.59109	8.31	1.558	34635.18	.06994
4526046.0	10.00	440699.59	4.48798	3.44	.268	34588.14	.01206
4526067.6	12.00	505205.76	5.38463	1.85	.078	34530.67	.00351
4526089.5	14.00	581756.29	6.28093	1.19	.032	34462.80	.00147
4526111.5	16.00	670511.41	7.17681	.81	.015	34384.54	.00068
4526133.7	18.00	771657.79	8.07221	.55	.007	34295.92	.00032
4526156.1	20.00	885409.28	8.96704	.37	.003	34196.97	.00015
4526399.1	40.00	2784893.42	17.86797	0.00	0.000	32647.67	0.00000
4526704.3	60.00	6435616.41	26.62024	0.00	0.000	30119.81	0.00000
4527139.7	80.00	12806740.94	35.09422	0.00	0.000	26693.99	0.00000
4527856.4	100.00	23919070.58	43.04960	0.00	0.000	22482.08	0.00000
4529247.5	120.00	44025192.24	49.95292	0.00	0.000	17629.80	0.00000
4532469.3	140.00	81439404.33	54.30227	0.00	0.000	12334.61	0.00000
4540819.8	160.00	143116320.71	49.88085	0.00	0.000	6969.92	0.00000
4558260.3	180.00	186526179.15	.08103	0.00	0.000	3551.47	0.00000

REVOLUTION 18

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
4558260.3	-180.00	171212408.25	.08103	0.00	0.000	3820.42	0.00000
4573445.9	-160.00	133667047.60	47.93847	0.00	0.000	7087.73	0.00000
4581059.5	-140.00	78003819.23	53.11987	0.00	0.000	12363.58	0.00000
4584124.8	-120.00	42831946.50	49.17041	0.00	0.000	17609.21	0.00000
4585481.4	-100.00	23470207.49	42.50171	0.00	0.000	22426.56	0.00000
4586189.8	-80.00	12627076.38	34.70536	0.00	0.000	26611.93	0.00000
4586623.4	-60.00	6363898.88	26.35156	0.00	0.000	30017.68	0.00000
4586928.6	-40.00	2759654.14	17.69820	0.00	0.000	32531.33	0.00000
4587172.2	-20.00	879899.46	8.88470	.37	.003	34072.12	.00015
4587194.7	-18.00	767232.50	7.99825	.55	.007	34170.53	.00032
4587216.9	-16.00	667041.27	7.11118	.81	.015	34258.67	.00069
4587239.0	-14.00	579117.13	6.22359	1.19	.033	34336.50	.00149
4587260.9	-12.00	503277.96	5.33554	1.85	.079	34404.01	.00358
4587282.7	-10.00	439367.36	4.44712	3.46	.274	34461.16	.01238
4587304.3	-8.00	387254.04	3.55843	8.35	1.593	34507.95	.07178
4587325.9	-6.00	346831.31	2.66959	20.69	9.736	34544.35	.43821
4587347.3	-4.00	318016.62	1.78087	44.02	43.981	34570.37	1.97797
4587368.7	-2.00	300751.23	.89323	72.07	117.705	34585.98	5.29123
4587387.7	0.00	295000.00	.08103	85.21	164.483	34591.18	7.39294
4587406.6	2.00	300751.23	.89323	72.07	117.705	34585.98	5.29123
4587428.0	4.00	318016.62	1.78087	44.02	43.981	34570.37	1.97797
4587449.5	6.00	346831.31	2.66959	20.69	9.736	34544.35	.43821
4587471.0	8.00	387254.04	3.55843	8.35	1.593	34507.95	.07178
4587492.6	10.00	439367.36	4.44712	3.46	.274	34461.16	.01238
4587514.4	12.00	503277.96	5.33554	1.85	.079	34404.01	.00358
4587536.3	14.00	579117.13	6.22359	1.19	.033	34336.50	.00149
4587558.4	16.00	667041.27	7.11118	.81	.015	34258.67	.00069
4587580.7	18.00	767232.50	7.99825	.55	.007	34170.53	.00032
4587603.2	20.00	879899.46	8.88470	.37	.003	34072.12	.00015
4587846.7	40.00	2759654.14	17.69820	0.00	0.000	32531.33	0.00000
4588152.0	60.00	6363898.88	26.35156	0.00	0.000	30017.68	0.00000
4588585.5	80.00	12627076.38	34.70536	0.00	0.000	26611.93	0.00000
4589293.9	100.00	23470207.49	42.50171	0.00	0.000	22426.56	0.00000
4590650.5	120.00	42831946.50	49.17041	0.00	0.000	17609.21	0.00000
4593715.8	140.00	78003819.23	53.11987	0.00	0.000	12363.58	0.00000
4601329.4	160.00	133667047.60	47.93847	0.00	0.000	7087.73	0.00000
4616515.0	180.00	171212408.25	.08103	0.00	0.000	3820.42	0.00000

REVOLUTION 19

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
4616515.0	-180.00	157398778.37	.08103	0.00	0.000	4100.60	0.00000
4629782.1	-160.00	124855027.39	45.98523	0.00	0.000	7218.89	0.00000
4636726.8	-140.00	74638127.06	51.89483	0.00	0.000	12399.50	0.00000
4639640.7	-120.00	41626032.88	48.35364	0.00	0.000	17591.52	0.00000
4640962.6	-100.00	23008741.95	41.92825	0.00	0.000	22371.26	0.00000
4641662.5	-80.00	12440586.79	34.29782	0.00	0.000	26528.16	0.00000
4642094.1	-60.00	6289043.22	26.06979	0.00	0.000	29912.45	0.00000
4642399.4	-40.00	2733226.31	17.52010	0.00	0.000	32410.94	0.00000
4642643.5	-20.00	874120.56	8.79831	.38	.003	33942.66	.00016
4642666.1	-18.00	762590.65	7.92064	.55	.007	34040.49	.00033
4642688.5	-16.00	663400.98	7.04231	.81	.016	34128.11	.00071
4642710.6	-14.00	576348.36	6.16342	1.19	.033	34205.49	.00152
4642732.6	-12.00	501255.34	5.28403	1.86	.081	34272.60	.00366
4642754.4	-10.00	437969.53	4.40425	3.48	.281	34329.43	.01274
4642776.2	-8.00	386362.95	3.52416	8.40	1.631	34375.94	.07376
4642797.8	-6.00	346331.61	2.64392	20.69	9.864	34412.14	.44567
4642819.3	-4.00	317795.02	1.76377	43.76	44.015	34438.00	1.98713
4642840.8	-2.00	300695.90	.88471	71.32	116.733	34453.52	5.26772
4642859.9	0.00	295000.00	.08103	84.19	162.600	34458.69	7.33642
4642879.0	2.00	300695.90	.88471	71.32	116.733	34453.52	5.26772
4642900.5	4.00	317795.02	1.76377	43.76	44.015	34438.00	1.98713
4642922.0	6.00	346331.61	2.64392	20.69	9.864	34412.14	.44567
4642943.7	8.00	386362.95	3.52416	8.40	1.631	34375.94	.07376
4642965.4	10.00	437969.53	4.40425	3.48	.281	34329.43	.01274
4642987.2	12.00	501255.34	5.28403	1.86	.081	34272.60	.00366
4643009.2	14.00	576348.36	6.16342	1.19	.033	34205.49	.00152
4643031.4	16.00	663400.98	7.04231	.81	.016	34128.11	.00071
4643053.7	18.00	762590.65	7.92064	.55	.007	34040.49	.00033
4643076.3	20.00	874120.56	8.79831	.38	.003	33942.66	.00016
4643320.5	40.00	2733226.31	17.52010	0.00	0.000	32410.94	0.00000
4643625.7	60.00	6289043.22	26.06979	0.00	0.000	29912.45	0.00000
4644057.4	80.00	12440586.79	34.29782	0.00	0.000	26528.16	0.00000
4644757.2	100.00	23008741.95	41.92825	0.00	0.000	22371.26	0.00000
4646079.1	120.00	41626032.88	48.35364	0.00	0.000	17591.52	0.00000
4648993.1	140.00	74638127.06	51.89483	0.00	0.000	12399.50	0.00000
4655937.7	160.00	124855027.39	45.98523	0.00	0.000	7218.89	0.00000
4669204.8	180.00	157398778.37	.08103	0.00	0.000	4100.60	0.00000

REVOLUTION 20

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
4669204.8	-180.00	144892279.10	.08103	0.00	0.000	4392.30	0.00000
4680832.1	-160.00	116629330.80	44.02840	0.00	0.000	7364.12	0.00000
4687169.3	-140.00	71344899.99	50.62782	0.00	0.000	12443.07	0.00000
4689937.1	-120.00	40409006.34	47.50191	0.00	0.000	17577.19	0.00000
4691224.2	-100.00	22534826.18	41.32839	0.00	0.000	22316.43	0.00000
4691915.2	-80.00	12247158.99	33.87089	0.00	0.000	26442.82	0.00000
4692344.8	-60.00	6210953.54	25.77439	0.00	0.000	29804.16	0.00000
4692650.1	-40.00	2705564.64	17.33331	0.00	0.000	32286.46	0.00000
4692894.9	-20.00	868061.32	8.70768	.38	.004	33808.51	.00016
4692917.6	-18.00	757723.09	7.83923	.55	.007	33905.73	.00034
4692940.0	-16.00	659583.33	6.97007	.81	.016	33992.81	.00072
4692962.2	-14.00	573444.45	6.10030	1.20	.034	34069.70	.00155
4692984.3	-12.00	499133.85	5.23000	1.86	.082	34136.40	.00374
4693006.2	-10.00	436503.28	4.35927	3.50	.289	34192.86	.01314
4693028.0	-8.00	385428.21	3.48822	8.45	1.672	34239.09	.07591
4693049.8	-6.00	345807.41	2.61698	20.70	10.001	34275.06	.45366
4693071.4	-4.00	317562.54	1.74583	43.49	44.056	34300.76	1.99691
4693092.9	-2.00	300637.86	.87577	70.54	115.733	34316.18	5.24349
4693112.2	0.00	295000.00	.08103	83.14	160.664	34321.32	7.27804
4693131.5	2.00	300637.86	.87577	70.54	115.733	34316.18	5.24349
4693153.0	4.00	317562.54	1.74583	43.49	44.056	34300.76	1.99691
4693174.7	6.00	345807.41	2.61698	20.70	10.001	34275.06	.45366
4693196.4	8.00	385428.21	3.48822	8.45	1.672	34239.09	.07591
4693218.2	10.00	436503.28	4.35927	3.50	.289	34192.86	.01314
4693240.1	12.00	499133.85	5.23000	1.86	.082	34136.40	.00374
4693262.2	14.00	573444.45	6.10030	1.20	.034	34069.70	.00155
4693284.4	16.00	659583.33	6.97007	.81	.016	33992.81	.00072
4693306.9	18.00	757723.09	7.83923	.55	.007	33905.73	.00034
4693329.5	20.00	868061.32	8.70768	.38	.004	33808.51	.00016
4693574.3	40.00	2705564.64	17.33331	0.00	0.000	32286.46	0.00000
4693879.6	60.00	6210953.54	25.77439	0.00	0.000	29804.16	0.00000
4694309.2	80.00	12247158.99	33.87089	0.00	0.000	26442.82	0.00000
4695000.3	100.00	22534826.18	41.32839	0.00	0.000	22316.43	0.00000
4696287.4	120.00	40409006.34	47.50191	0.00	0.000	17577.19	0.00000
4699055.1	140.00	71344899.99	50.62782	0.00	0.000	12443.07	0.00000
4705392.3	160.00	116629330.80	44.02840	0.00	0.000	7364.12	0.00000
4717019.6	180.00	144892279.10	.08103	0.00	0.000	4392.30	0.00000

REVOLUTION 21

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
4717019.6	-180.00	133530146.35	.08103	0.00	0.000	4695.85	0.00000
4727239.3	-160.00	108943188.77	42.07514	0.00	0.000	7524.08	0.00000
4733024.5	-140.00	68126045.90	49.31973	0.00	0.000	12495.01	0.00000
4735651.2	-120.00	39182346.84	46.61453	0.00	0.000	17566.70	0.00000
4736903.4	-100.00	22048603.07	40.70125	0.00	0.000	22262.38	0.00000
4737585.4	-80.00	12046669.38	33.42383	0.00	0.000	26356.04	0.00000
4738012.9	-60.00	6129526.01	25.46479	0.00	0.000	29692.85	0.00000
4738318.2	-40.00	2676619.96	17.13744	0.00	0.000	32157.88	0.00000
4738563.7	-20.00	861709.44	8.61263	.38	.004	33669.61	.00017
4738586.4	-18.00	752619.89	7.75384	.56	.008	33766.18	.00035
4738608.9	-16.00	655580.48	6.89429	.81	.016	33852.67	.00074
4738631.3	-14.00	570399.40	6.03409	1.20	.035	33929.05	.00159
4738653.4	-12.00	496909.10	5.17332	1.87	.084	33995.30	.00384
4738675.4	-10.00	434965.56	4.31209	3.53	.297	34051.39	.01357
4738697.3	-8.00	384447.85	3.45051	8.50	1.716	34097.30	.07823
4738719.1	-6.00	345257.60	2.58873	20.71	10.148	34133.03	.46223
4738740.9	-4.00	317318.70	1.72701	43.22	44.103	34158.56	2.00736
4738762.5	-2.00	300576.98	.86639	69.75	114.705	34173.88	5.21855
4738781.9	0.00	295000.00	.08103	82.06	158.673	34178.99	7.21780
4738801.4	2.00	300576.98	.86639	69.75	114.705	34173.88	5.21855
4738823.0	4.00	317318.70	1.72701	43.22	44.103	34158.56	2.00736
4738844.7	6.00	345257.60	2.58873	20.71	10.148	34133.03	.46223
4738866.5	8.00	384447.85	3.45051	8.50	1.716	34097.30	.07823
4738888.4	10.00	434965.56	4.31209	3.53	.297	34051.39	.01357
4738910.5	12.00	496909.10	5.17332	1.87	.084	33995.30	.00384
4738932.6	14.00	570399.40	6.03409	1.20	.035	33929.05	.00159
4738954.9	16.00	655580.48	6.89429	.81	.016	33852.67	.00074
4738977.4	18.00	752619.89	7.75384	.56	.008	33766.18	.00035
4739000.2	20.00	861709.44	8.61263	.38	.004	33669.61	.00017
4739245.7	40.00	2676619.96	17.13744	0.00	0.000	32157.88	0.00000
4739551.0	60.00	6129526.01	25.46479	0.00	0.000	29692.85	0.00000
4739978.5	80.00	12046669.38	33.42383	0.00	0.000	26356.04	0.00000
4740660.5	100.00	22048603.07	40.70125	0.00	0.000	22262.38	0.00000
4741912.7	120.00	39182346.84	46.61453	0.00	0.000	17566.70	0.00000
4744539.3	140.00	68126045.90	49.31973	0.00	0.000	12495.01	0.00000
4750324.6	160.00	108943188.77	42.07514	0.00	0.000	7524.08	0.00000
4760544.3	180.00	133530146.35	.08103	0.00	0.000	4695.85	0.00000

REVOLUTION 22

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
4760544.3	-180.00	123174299.76	.08103	0.00	0.000	5011.62	0.00000
4769550.7	-160.00	101753716.46	40.13232	0.00	0.000	7699.44	0.00000
4774834.2	-140.00	64982876.03	47.97162	0.00	0.000	12556.12	0.00000
4777324.9	-120.00	37947456.35	45.69084	0.00	0.000	17560.60	0.00000
4778542.2	-100.00	21550204.67	40.04592	0.00	0.000	22209.42	0.00000
4779214.9	-80.00	11838982.85	32.95582	0.00	0.000	26267.99	0.00000
4779640.3	-60.00	6044648.05	25.14037	0.00	0.000	29578.56	0.00000
4779945.6	-40.00	2646338.80	16.93209	0.00	0.000	32025.14	0.00000
4780191.8	-20.00	855051.56	8.51294	.39	.004	33525.88	.00017
4780214.6	-18.00	747270.23	7.66429	.56	.008	33621.75	.00036
4780237.2	-16.00	651383.88	6.81482	.82	.016	33707.62	.00076
4780259.6	-14.00	567206.68	5.96466	1.20	.035	33783.45	.00162
4780281.8	-12.00	494576.26	5.11388	1.88	.086	33849.22	.00394
4780304.0	-10.00	433353.04	4.26262	3.56	.306	33904.91	.01404
4780325.9	-8.00	383419.74	3.41097	8.55	1.763	33950.50	.08074
4780347.8	-6.00	344680.99	2.55910	20.72	10.305	33985.97	.47142
4780369.7	-4.00	317062.97	1.70728	42.94	44.157	34011.31	2.01853
4780391.4	-2.00	300513.13	.85656	68.93	113.649	34026.52	5.19291
4780411.0	0.00	295000.00	.08103	80.95	156.629	34031.60	7.15568
4780430.6	2.00	300513.13	.85656	68.93	113.649	34026.52	5.19291
4780452.3	4.00	317062.97	1.70728	42.94	44.157	34011.31	2.01853
4780474.1	6.00	344680.99	2.55910	20.72	10.305	33985.97	.47142
4780496.0	8.00	383419.74	3.41097	8.55	1.763	33950.50	.08074
4780518.0	10.00	433353.04	4.26262	3.56	.306	33904.91	.01404
4780540.1	12.00	494576.26	5.11388	1.88	.086	33849.22	.00394
4780562.4	14.00	567206.68	5.96466	1.20	.035	33783.45	.00162
4780584.8	16.00	651383.88	6.81482	.82	.016	33707.62	.00076
4780607.4	18.00	747270.23	7.66429	.56	.008	33621.75	.00036
4780630.2	20.00	855051.56	8.51294	.39	.004	33525.88	.00017
4780876.4	40.00	2646338.80	16.93209	0.00	0.000	32025.14	0.00000
4781191.7	60.00	6044648.05	25.14037	0.00	0.000	29578.56	0.00000
4781607.1	80.00	11838982.85	32.95582	0.00	0.000	26267.99	0.00000
4782279.8	100.00	21550204.67	40.04592	0.00	0.000	22209.42	0.00000
4783497.0	120.00	37947456.35	45.69084	0.00	0.000	17560.60	0.00000
4785987.8	140.00	64982876.03	47.97162	0.00	0.000	12556.12	0.00000
4791271.2	160.00	101753716.46	40.13232	0.00	0.000	7699.44	0.00000
4800277.7	180.00	123174299.76	.08103	0.00	0.000	5011.62	0.00000

REVOLUTION 23

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
4800277.7	-180.00	113706943.44	.08103	0.00	0.000	5339.99	0.00000
4808234.5	-160.00	95021629.24	38.20644	0.00	0.000	7890.86	0.00000
4813061.4	-140.00	61916168.27	46.58477	0.00	0.000	12627.18	0.00000
4815421.4	-120.00	36705656.05	44.73015	0.00	0.000	17559.44	0.00000
4816603.7	-100.00	21039750.47	39.36141	0.00	0.000	22157.90	0.00000
4817267.0	-80.00	11623951.59	32.46598	0.00	0.000	26178.85	0.00000
4817690.1	-60.00	5956197.46	24.80044	0.00	0.000	29461.34	0.00000
4817995.4	-40.00	2614662.98	16.71680	0.00	0.000	31888.23	0.00000
4818242.3	-20.00	848073.07	8.40840	.39	.004	33377.22	.00018
4818265.2	-18.00	741662.29	7.57037	.56	.008	33472.36	.00037
4818287.9	-16.00	646984.19	6.73148	.82	.017	33557.56	.00078
4818310.4	-14.00	563859.14	5.89184	1.20	.036	33632.80	.00166
4818332.7	-12.00	492130.11	5.05155	1.89	.088	33698.07	.00406
4818354.9	-10.00	431662.07	4.21073	3.59	.316	33753.33	.01454
4818377.0	-8.00	382341.56	3.36950	8.61	1.815	33798.56	.08347
4818399.0	-6.00	344076.28	2.52802	20.73	10.474	33833.76	.48129
4818420.9	-4.00	316794.77	1.68658	42.65	44.219	33858.91	2.03046
4818442.8	-2.00	300446.16	.84625	68.10	112.566	33874.01	5.16656
4818462.5	0.00	295000.00	.08103	79.81	154.532	33879.04	7.09167
4818482.3	2.00	300446.16	.84625	68.10	112.566	33874.01	5.16656
4818504.1	4.00	316794.77	1.68658	42.65	44.219	33858.91	2.03046
4818526.0	6.00	344076.28	2.52802	20.73	10.474	33833.76	.48129
4818548.0	8.00	382341.56	3.36950	8.61	1.815	33798.56	.08347
4818570.1	10.00	431662.07	4.21073	3.59	.316	33753.33	.01454
4818592.3	12.00	492130.11	5.05155	1.89	.088	33698.07	.00406
4818614.6	14.00	563859.14	5.89184	1.20	.036	33632.80	.00166
4818637.1	16.00	646984.19	6.73148	.82	.017	33557.56	.00078
4818659.8	18.00	741662.29	7.57037	.56	.008	33472.36	.00037
4818682.7	20.00	848073.07	8.40840	.39	.004	33377.22	.00018
4818929.7	40.00	2614662.98	16.71680	0.00	0.000	31888.23	0.00000
4819234.9	60.00	5956197.46	24.80044	0.00	0.000	29461.34	0.00000
4819658.1	80.00	11623951.59	32.46598	0.00	0.000	26178.85	0.00000
4820321.3	100.00	21039750.47	39.36141	0.00	0.000	22157.90	0.00000
4821503.6	120.00	36705656.05	44.73015	0.00	0.000	17559.44	0.00000
4823863.6	140.00	61916168.27	46.58477	0.00	0.000	12627.18	0.00000
4828690.5	160.00	95021629.24	38.20644	0.00	0.000	7890.86	0.00000
4836647.3	180.00	113706943.44	.08103	0.00	0.000	5339.99	0.00000

REVOLUTION 24

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
4836647.3	-180.00	105027058.46	.08103	0.00	0.000	5681.40	0.00000
4843692.7	-160.00	88710960.62	36.30353	0.00	0.000	8098.97	0.00000
4848104.0	-140.00	58926225.94	45.16069	0.00	0.000	12709.06	0.00000
4850338.4	-120.00	35458183.57	43.73185	0.00	0.000	17563.84	0.00000
4851485.8	-100.00	20517345.44	38.64672	0.00	0.000	22108.19	0.00000
4852139.4	-80.00	11401413.62	31.95336	0.00	0.000	26088.80	0.00000
4852560.2	-60.00	5864041.32	24.44429	0.00	0.000	29341.25	0.00000
4852865.4	-40.00	2581528.99	16.49108	0.00	0.000	31747.09	0.00000
4853113.1	-20.00	840758.02	8.29876	.39	.004	33223.55	.00019
4853136.1	-18.00	735783.14	7.47187	.57	.008	33317.89	.00039
4853158.9	-16.00	642371.21	6.64407	.82	.017	33402.39	.00080
4853181.5	-14.00	560348.97	5.81546	1.20	.037	33477.01	.00170
4853203.9	-12.00	489564.89	4.98616	1.90	.090	33541.73	.00418
4853226.2	-10.00	429888.67	4.15630	3.62	.326	33596.53	.01510
4853248.4	-8.00	381210.75	3.32599	8.68	1.870	33641.39	.08645
4853270.5	-6.00	343442.01	2.49542	20.75	10.655	33676.30	.49192
4853292.5	-4.00	316513.45	1.66488	42.36	44.290	33701.24	2.04324
4853314.5	-2.00	300375.91	.83544	67.24	111.455	33716.21	5.13951
4853334.4	0.00	295000.00	.08103	78.64	152.382	33721.20	7.02575
4853354.3	2.00	300375.91	.83544	67.24	111.455	33716.21	5.13951
4853376.2	4.00	316513.45	1.66488	42.36	44.290	33701.24	2.04324
4853398.2	6.00	343442.01	2.49542	20.75	10.655	33676.30	.49192
4853420.3	8.00	381210.75	3.32599	8.68	1.870	33641.39	.08645
4853442.5	10.00	429888.67	4.15630	3.62	.326	33596.53	.01510
4853464.8	12.00	489564.89	4.98616	1.90	.090	33541.73	.00418
4853487.3	14.00	560348.97	5.81546	1.20	.037	33477.01	.00170
4853509.9	16.00	642371.21	6.64407	.82	.017	33402.39	.00080
4853532.7	18.00	735783.14	7.47187	.57	.008	33317.89	.00039
4853555.6	20.00	840758.02	8.29876	.39	.004	33223.55	.00019
4853803.3	40.00	2581528.99	16.49108	0.00	0.000	31747.09	0.00000
4854108.6	60.00	5864041.32	24.44429	0.00	0.000	29341.25	0.00000
4854529.4	80.00	11401413.62	31.95336	0.00	0.000	26088.80	0.00000
4855182.9	100.00	20517345.44	38.64672	0.00	0.000	22108.19	0.00000
4856330.4	120.00	35458183.57	43.73185	0.00	0.000	17563.84	0.00000
4858564.7	140.00	58926225.94	45.16069	0.00	0.000	12709.06	0.00000
4862976.0	160.00	88710960.62	36.30353	0.00	0.000	8098.97	0.00000
4870021.4	180.00	105027058.46	.08103	0.00	0.000	5681.40	0.00000

REVOLUTION 25

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P T
4870021.4	-180.00	97047585.12	.08103	0.00	0.000	6036.31	0.00000
4876272.8	-160.00	82788788.66	34.42906	0.00	0.000	8324.39	0.00000
4880305.5	-140.00	56012931.75	43.70109	0.00	0.000	12802.64	0.00000
4882419.2	-120.00	34206190.36	42.69531	0.00	0.000	17574.47	0.00000
4883531.8	-100.00	19983077.74	37.90074	0.00	0.000	22060.70	0.00000
4884175.5	-80.00	11171191.15	31.41695	0.00	0.000	25998.06	0.00000
4884593.9	-60.00	5768034.81	24.07109	0.00	0.000	29218.35	0.00000
4884899.1	-40.00	2546867.42	16.25439	0.00	0.000	31601.68	0.00000
4885147.5	-20.00	833088.89	8.18375	.40	.004	33064.76	.00019
4885170.6	-18.00	729618.60	7.36854	.57	.009	33158.25	.00040
4885193.5	-16.00	637533.73	6.55237	.83	.018	33241.99	.00083
4885216.2	-14.00	556667.59	5.73533	1.21	.038	33315.95	.00175
4885238.7	-12.00	486874.32	4.91757	1.91	.093	33380.09	.00434
4885261.1	-10.00	428028.47	4.09920	3.66	.340	33434.40	.01579
4885283.4	-8.00	380024.52	3.28036	8.75	1.931	33478.86	.08968
4885305.6	-6.00	342776.64	2.46122	20.77	10.850	33513.46	.50336
4885327.8	-4.00	316218.32	1.64210	42.06	44.371	33538.18	2.05692
4885349.8	-2.00	300302.22	.82410	66.36	110.317	33553.01	5.11176
4885369.9	0.00	295000.00	.08103	77.45	150.180	33557.96	6.95789
4885390.0	2.00	300302.22	.82410	66.36	110.317	33553.01	5.11176
4885412.0	4.00	316218.32	1.64210	42.06	44.371	33538.18	2.05692
4885434.1	6.00	342776.64	2.46122	20.77	10.850	33513.46	.50336
4885456.3	8.00	380024.52	3.28036	8.75	1.931	33478.86	.08968
4885478.6	10.00	428028.47	4.09920	3.66	.340	33434.40	.01579
4885501.0	12.00	486874.32	4.91757	1.91	.093	33380.09	.00434
4885523.6	14.00	556667.59	5.73533	1.21	.038	33315.95	.00175
4885546.3	16.00	637533.73	6.55237	.83	.018	33241.99	.00083
4885569.2	18.00	729618.60	7.36854	.57	.009	33158.25	.00040
4885592.3	20.00	833088.89	8.18375	.40	.004	33064.76	.00019
4885840.7	40.00	2546867.42	16.25439	0.00	0.000	31601.68	0.00000
4886145.9	60.00	5768034.81	24.07109	0.00	0.000	29218.35	0.00000
4886564.3	80.00	11171191.15	31.41695	0.00	0.000	25998.06	0.00000
4887207.9	100.00	19983077.74	37.90074	0.00	0.000	22060.70	0.00000
4888320.6	120.00	34206190.36	42.69531	0.00	0.000	17574.47	0.00000
4890434.3	140.00	56012931.75	43.70109	0.00	0.000	12802.64	0.00000
4894467.0	160.00	82788788.66	34.42906	0.00	0.000	8324.39	0.00000
4900718.4	180.00	97047585.12	.08103	0.00	0.000	6036.31	0.00000

REVOLUTION 26

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
4900718.4	-180.00	89693143.25	.08103	0.00	0.000	6405.25	0.00000
4906275.8	-160.00	77224975.10	32.58788	0.00	0.000	8567.76	0.00000
4909963.3	-140.00	53175796.82	42.20789	0.00	0.000	12908.88	0.00000
4911961.4	-120.00	32950738.88	41.61996	0.00	0.000	17592.03	0.00000
4913039.4	-100.00	19437016.05	37.12235	0.00	0.000	22015.89	0.00000
4913672.9	-80.00	10933088.58	30.85566	0.00	0.000	25906.84	0.00000
4914088.7	-60.00	5668019.78	23.68000	0.00	0.000	29092.69	0.00000
4914393.9	-40.00	2510602.23	16.00614	0.00	0.000	31451.95	0.00000
4914643.1	-20.00	825046.48	8.06306	.40	.004	32900.72	.00020
4914666.3	-18.00	723153.11	7.26012	.58	.009	32993.31	.00042
4914689.3	-16.00	632459.47	6.45614	.83	.018	33076.25	.00086
4914712.1	-14.00	552805.59	5.65125	1.22	.039	33149.49	.00181
4914734.8	-12.00	484051.48	4.84559	1.93	.096	33213.01	.00452
4914757.3	-10.00	426076.66	4.03928	3.71	.354	33266.80	.01655
4914779.7	-8.00	378779.80	3.23247	8.85	2.007	33310.83	.09368
4914802.0	-6.00	342078.41	2.42534	20.80	11.060	33345.10	.51570
4914824.3	-4.00	315908.61	1.61821	41.75	44.462	33369.58	2.07158
4914846.4	-2.00	300224.88	.81220	65.47	109.151	33384.27	5.08330
4914866.7	0.00	295000.00	.08103	76.23	147.925	33389.17	6.88807
4914886.9	2.00	300224.88	.81220	65.47	109.151	33384.27	5.08330
4914909.0	4.00	315908.61	1.61821	41.75	44.462	33369.58	2.07158
4914931.3	6.00	342078.41	2.42534	20.80	11.060	33345.10	.51570
4914953.6	8.00	378779.80	3.23247	8.85	2.007	33310.83	.09368
4914976.0	10.00	426076.66	4.03928	3.71	.354	33266.80	.01655
4914998.5	12.00	484051.48	4.84559	1.93	.096	33213.01	.00452
4915021.2	14.00	552805.59	5.65125	1.22	.039	33149.49	.00181
4915044.0	16.00	632459.47	6.45614	.83	.018	33076.25	.00086
4915067.0	18.00	723153.11	7.26012	.58	.009	32993.31	.00042
4915090.2	20.00	825046.48	8.06306	.40	.004	32900.72	.00020
4915339.4	40.00	2510602.23	16.00614	0.00	0.000	31451.95	0.00000
4915644.6	60.00	5668019.78	23.68000	0.00	0.000	29092.69	0.00000
4916060.4	80.00	10933088.58	30.85566	0.00	0.000	25906.84	0.00000
4916693.9	100.00	19437016.05	37.12235	0.00	0.000	22015.89	0.00000
4917771.9	120.00	32950738.88	41.61996	0.00	0.000	17592.03	0.00000
4919770.0	140.00	53175796.82	42.20789	0.00	0.000	12908.88	0.00000
4923457.5	160.00	77224975.10	32.58788	0.00	0.000	8567.76	0.00000
4929014.9	180.00	89693143.25	.08103	0.00	0.000	6405.25	0.00000

REVOLUTION 27

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
4929014.9	-180.00	82898175.21	.08103	0.00	0.000	6788.79	0.00000
4933964.1	-160.00	71991919.49	30.78421	0.00	0.000	8829.72	0.00000
4937336.7	-140.00	50414004.75	40.68322	0.00	0.000	13028.74	0.00000
4939223.8	-120.00	31692799.69	40.50528	0.00	0.000	17617.31	0.00000
4940267.3	-100.00	18879206.49	36.31034	0.00	0.000	21974.24	0.00000
4940890.6	-80.00	10686890.12	30.26828	0.00	0.000	25815.41	0.00000
4941303.7	-60.00	5563823.01	23.27005	0.00	0.000	28964.35	0.00000
4941608.8	-40.00	2472649.89	15.74567	0.00	0.000	31297.84	0.00000
4941858.9	-20.00	816609.61	7.93638	.41	.004	32731.31	.00021
4941882.2	-18.00	716369.52	7.14630	.58	.009	32822.94	.00043
4941905.3	-16.00	627134.86	6.35513	.84	.019	32905.01	.00089
4941928.2	-14.00	548752.60	5.56299	1.22	.040	32977.49	.00187
4941951.0	-12.00	481088.74	4.77003	1.95	.100	33040.35	.00471
4941973.6	-10.00	424027.95	3.97637	3.76	.370	33093.58	.01739
4941996.2	-8.00	377473.19	3.18219	8.95	2.090	33137.16	.09808
4942018.6	-6.00	341345.43	2.38766	20.83	11.287	33171.07	.52905
4942040.9	-4.00	315583.47	1.59312	41.44	44.566	33195.30	2.08731
4942063.2	-2.00	300143.69	.79970	64.55	107.958	33209.84	5.05415
4942083.6	0.00	295000.00	.08103	74.98	145.618	33214.68	6.81627
4942104.0	2.00	300143.69	.79970	64.55	107.958	33209.84	5.05415
4942126.3	4.00	315583.47	1.59312	41.44	44.566	33195.30	2.08731
4942148.7	6.00	341345.43	2.38766	20.83	11.287	33171.07	.52905
4942171.1	8.00	377473.19	3.18219	8.95	2.090	33137.16	.09808
4942193.6	10.00	424027.95	3.97637	3.76	.370	33093.58	.01739
4942216.2	12.00	481088.74	4.77003	1.95	.100	33040.35	.00471
4942239.0	14.00	548752.60	5.56299	1.22	.040	32977.49	.00187
4942261.9	16.00	627134.86	6.35513	.84	.019	32905.01	.00089
4942285.0	18.00	716369.52	7.14630	.58	.009	32822.94	.00043
4942308.3	20.00	816609.61	7.93638	.41	.004	32731.31	.00021
4942558.4	40.00	2472649.89	15.74567	0.00	0.000	31297.84	0.00000
4942863.5	60.00	5563823.01	23.27005	0.00	0.000	28964.35	0.00000
4943276.7	80.00	10686890.12	30.26828	0.00	0.000	25815.41	0.00000
4943899.9	100.00	18879206.49	36.31034	0.00	0.000	21974.24	0.00000
4944943.4	120.00	31692799.69	40.50528	0.00	0.000	17617.31	0.00000
4946830.6	140.00	50414004.75	40.68322	0.00	0.000	13028.74	0.00000
4950203.2	160.00	71991919.49	30.78421	0.00	0.000	8829.72	0.00000
4955152.3	180.00	82898175.21	.08103	0.00	0.000	6788.79	0.00000

REVOLUTION 28

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
4955152.3	-180.00	76605423.70	.08103	0.00	0.000	7187.57	0.00000
4959566.7	-160.00	67064329.42	29.02160	0.00	0.000	9110.93	0.00000
4962651.7	-140.00	47726450.79	39.12940	0.00	0.000	13163.28	0.00000
4964432.8	-120.00	30433248.17	39.35078	0.00	0.000	17651.13	0.00000
4965442.0	-100.00	18309668.95	35.46343	0.00	0.000	21936.29	0.00000
4966054.7	-80.00	10432357.01	29.65355	0.00	0.000	25724.05	0.00000
4966465.1	-60.00	5455254.30	22.84019	0.00	0.000	28833.40	0.00000
4966770.2	-40.00	2432918.31	15.47228	0.00	0.000	31139.30	0.00000
4967021.1	-20.00	807754.89	7.80334	.41	.005	32556.39	.00022
4967044.5	-18.00	709248.88	7.02677	.59	.010	32646.98	.00045
4967067.7	-16.00	621544.93	6.24904	.84	.019	32728.13	.00092
4967090.8	-14.00	544497.13	5.47029	1.23	.041	32799.79	.00194
4967113.6	-12.00	477977.68	4.69066	1.97	.104	32861.95	.00493
4967136.4	-10.00	421876.50	3.91031	3.81	.388	32914.58	.01832
4967159.0	-8.00	376100.95	3.12938	9.06	2.182	32957.67	.10294
4967181.6	-6.00	340575.59	2.34809	20.87	11.533	32991.19	.54349
4967204.1	-4.00	315241.97	1.56677	41.12	44.683	33015.15	2.10420
4967226.5	-2.00	300058.41	.78658	63.61	106.737	33029.53	5.02430
4967247.0	0.00	295000.00	.08103	73.71	143.259	33034.32	6.74244
4967267.6	2.00	300058.41	.78658	63.61	106.737	33029.53	5.02430
4967290.0	4.00	315241.97	1.56677	41.12	44.683	33015.15	2.10420
4967312.5	6.00	340575.59	2.34809	20.87	11.533	32991.19	.54349
4967335.0	8.00	376100.95	3.12938	9.06	2.182	32957.67	.10294
4967357.7	10.00	421876.50	3.91031	3.81	.388	32914.58	.01832
4967380.4	12.00	477977.68	4.69066	1.97	.104	32861.95	.00493
4967403.3	14.00	544497.13	5.47029	1.23	.041	32799.79	.00194
4967426.3	16.00	621544.93	6.24904	.84	.019	32728.13	.00092
4967449.5	18.00	709248.88	7.02677	.59	.010	32646.98	.00045
4967472.9	20.00	807754.89	7.80334	.41	.005	32556.39	.00022
4967723.9	40.00	2432918.31	15.47228	0.00	0.000	31139.30	0.00000
4968028.9	60.00	5455254.30	22.84019	0.00	0.000	28833.40	0.00000
4968439.4	80.00	10432357.01	29.65355	0.00	0.000	25724.05	0.00000
4969052.0	100.00	18309668.95	35.46343	0.00	0.000	21936.29	0.00000
4970061.3	120.00	30433248.17	39.35078	0.00	0.000	17651.13	0.00000
4971842.3	140.00	47726450.79	39.12940	0.00	0.000	13163.28	0.00000
4974927.4	160.00	67064329.42	29.02160	0.00	0.000	9110.93	0.00000
4979341.7	180.00	76605423.70	.08103	0.00	0.000	7187.57	0.00000

REVOLUTION 29

TIME	THETA	ALTITUDE	GAMMA	QCONT	QEM	VELOCITY	P/T
4979341.7	-180.00	70764676.02	.08103	0.00	0.000	7602.27	0.00000
4983284.6	-160.00	62419007.00	27.30293	0.00	0.000	9412.08	0.00000
4986107.0	-140.00	45111775.91	37.54892	0.00	0.000	13313.57	0.00000
4987786.5	-120.00	29172860.72	38.15602	0.00	0.000	17694.40	0.00000
4988761.7	-100.00	17728392.71	34.58028	0.00	0.000	21902.64	0.00000
4989363.6	-80.00	10169224.18	29.01005	0.00	0.000	25633.05	0.00000
4989771.2	-60.00	5342104.01	22.38929	0.00	0.000	28699.94	0.00000
4990076.1	-40.00	2391305.73	15.18517	0.00	0.000	30976.24	0.00000
4990328.0	-20.00	798456.38	7.66355	.42	.005	32375.79	.00023
4990351.5	-18.00	701770.15	6.90116	.60	.010	32465.27	.00047
4990374.9	-16.00	615673.05	6.13755	.85	.020	32545.42	.00096
4990398.0	-14.00	540026.47	5.37287	1.24	.042	32616.21	.00201
4990421.0	-12.00	474708.94	4.60726	2.00	.109	32677.61	.00518
4990443.9	-10.00	419615.79	3.84087	3.87	.408	32729.61	.01938
4990466.6	-8.00	374658.92	3.07389	9.18	2.283	32772.17	.10832
4990489.3	-6.00	339766.56	2.30651	20.92	11.808	32805.29	.55962
4990511.9	-4.00	314883.06	1.53908	40.80	44.814	32828.96	2.12237
4990534.5	-2.00	299968.79	.77280	62.65	105.489	32843.16	4.99372
4990555.2	0.00	295000.00	.08103	72.40	140.847	32847.89	6.66656
4990575.9	2.00	299968.79	.77280	62.65	105.489	32843.16	4.99372
4990598.5	4.00	314883.06	1.53908	40.80	44.814	32828.96	2.12237
4990621.1	6.00	339766.56	2.30651	20.92	11.808	32805.29	.55962
4990643.7	8.00	374658.92	3.07389	9.18	2.283	32772.17	.10832
4990666.5	10.00	419615.79	3.84087	3.87	.408	32729.61	.01938
4990689.4	12.00	474708.94	4.60726	2.00	.109	32677.61	.00518
4990712.4	14.00	540026.47	5.37287	1.24	.042	32616.21	.00201
4990735.5	16.00	615673.05	6.13755	.85	.020	32545.42	.00096
4990758.9	18.00	701770.15	6.90116	.60	.010	32465.27	.00047
4990782.4	20.00	798456.38	7.66355	.42	.005	32375.79	.00023
4991034.2	40.00	2391305.73	15.18517	0.00	0.000	30976.24	0.00000
4991339.2	60.00	5342104.01	22.38929	0.00	0.000	28699.94	0.00000
4991746.8	80.00	10169224.18	29.01005	0.00	0.000	25633.05	0.00000
4992348.7	100.00	17728392.71	34.58028	0.00	0.000	21902.64	0.00000
4993323.9	120.00	29172860.72	38.15602	0.00	0.000	17694.40	0.00000
4995003.3	140.00	45111775.91	37.54892	0.00	0.000	13313.57	0.00000
4997825.7	160.00	62419007.00	27.30293	0.00	0.000	9412.08	0.00000
5001768.7	180.00	70764676.02	.08103	0.00	0.000	7602.27	0.00000

REVOLUTION 30

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_I
5001768.7	-180.00	65331722.10	.08103	0.00	0.000	8033.69	0.00000
5005294.9	-160.00	58034651.09	25.63043	0.00	0.000	9733.90	0.00000
5007877.1	-140.00	42568396.08	35.94441	0.00	0.000	13480.77	0.00000
5009459.5	-120.00	27912310.25	36.92064	0.00	0.000	17748.11	0.00000
5010400.9	-100.00	17135331.23	33.65946	0.00	0.000	21873.92	0.00000
5010991.8	-80.00	9897196.14	28.33627	0.00	0.000	25542.76	0.00000
5011396.5	-60.00	5224140.27	21.91608	0.00	0.000	28564.07	0.00000
5011701.3	-40.00	2347699.18	14.88346	0.00	0.000	30808.61	0.00000
5011954.1	-20.00	788685.21	7.51654	.42	.005	32189.32	.00025
5011977.7	-18.00	693909.94	6.76908	.60	.010	32277.62	.00050
5012001.2	-16.00	609500.72	6.02031	.86	.021	32356.71	.00100
5012024.4	-14.00	535326.44	5.27042	1.25	.044	32426.56	.00210
5012047.6	-12.00	471272.10	4.51954	2.02	.114	32487.15	.00546
5012070.6	-10.00	417238.59	3.76785	3.95	.433	32538.46	.02071
5012093.5	-8.00	373142.47	3.01552	9.32	2.395	32580.46	.11430
5012116.3	-6.00	338915.72	2.26277	21.00	12.132	32613.14	.57834
5012139.0	-4.00	314505.59	1.50996	40.48	44.963	32636.50	2.14195
5012161.7	-2.00	299874.52	.75830	61.66	104.213	32650.51	4.96241
5012182.6	0.00	295000.00	.08103	71.07	138.383	32655.18	6.58856
5012203.5	2.00	299874.52	.75830	61.66	104.213	32650.51	4.96241
5012226.2	4.00	314505.59	1.50996	40.48	44.963	32636.50	2.14195
5012248.9	6.00	338915.72	2.26277	21.00	12.132	32613.14	.57834
5012271.7	8.00	373142.47	3.01552	9.32	2.395	32580.46	.11430
5012294.6	10.00	417238.59	3.76785	3.95	.433	32538.46	.02071
5012317.6	12.00	471272.10	4.51954	2.02	.114	32487.15	.00546
5012340.7	14.00	535326.44	5.27042	1.25	.044	32426.56	.00210
5012364.0	16.00	609500.72	6.02031	.86	.021	32356.71	.00100
5012387.5	18.00	693909.94	6.76908	.60	.010	32277.62	.00050
5012411.1	20.00	788685.21	7.51654	.42	.005	32189.32	.00025
5012663.9	40.00	2347699.18	14.88346	0.00	0.000	30808.61	0.00000
5012968.7	60.00	5224140.27	21.91608	0.00	0.000	28564.07	0.00000
5013373.3	80.00	9897196.14	28.33627	0.00	0.000	25542.76	0.00000
5013964.3	100.00	17135331.23	33.65946	0.00	0.000	21873.92	0.00000
5014905.7	120.00	27912310.25	36.92064	0.00	0.000	17748.11	0.00000
5016488.1	140.00	42568396.08	35.94441	0.00	0.000	13480.77	0.00000
5019070.2	160.00	58034651.09	25.63043	0.00	0.000	9733.90	0.00000
5022596.5	180.00	65331722.10	.08103	0.00	0.000	8033.69	0.00000

REVOLUTION 31

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
5022596.5	-180.00	60267484.43	.08103	0.00	0.000	8482.71	0.00000
5025753.7	-160.00	53891674.51	24.00571	0.00	0.000	10077.21	0.00000
5028116.1	-140.00	40094526.45	34.31863	0.00	0.000	13666.09	0.00000
5029605.6	-120.00	26652160.56	35.64430	0.00	0.000	17813.32	0.00000
5030513.5	-100.00	16530395.85	32.69946	0.00	0.000	21850.87	0.00000
5031093.3	-80.00	9615942.09	27.63054	0.00	0.000	25453.57	0.00000
5031494.8	-60.00	5101105.50	21.41915	0.00	0.000	28425.88	0.00000
5031799.5	-40.00	2301972.80	14.56617	0.00	0.000	30636.30	0.00000
5032053.3	-20.00	778409.12	7.36184	.43	.005	31996.79	.00026
5032077.0	-18.00	685642.09	6.63006	.61	.011	32083.82	.00052
5032100.6	-16.00	603007.27	5.89692	.87	.022	32161.76	.00105
5032124.0	-14.00	530381.19	5.16258	1.26	.046	32230.61	.00220
5032147.3	-12.00	467655.51	4.42721	2.06	.120	32290.33	.00579
5032170.4	-10.00	414736.82	3.69099	4.04	.462	32340.90	.02221
5032193.5	-8.00	371546.42	2.95408	9.46	2.520	32382.29	.12097
5032216.4	-6.00	338020.16	2.21673	21.09	12.485	32414.51	.59882
5032239.3	-4.00	314108.27	1.47930	40.14	45.129	32437.53	2.16307
5032262.1	-2.00	299775.30	.74305	60.66	102.909	32451.34	4.93039
5032283.2	0.00	295000.00	.08103	69.72	135.865	32455.95	6.50841
5032304.3	2.00	299775.30	.74305	60.66	102.909	32451.34	4.93039
5032327.1	4.00	314108.27	1.47930	40.14	45.129	32437.53	2.16307
5032349.9	6.00	338020.16	2.21673	21.09	12.485	32414.51	.59882
5032372.9	8.00	371546.42	2.95408	9.46	2.520	32382.29	.12097
5032395.9	10.00	414736.82	3.69099	4.04	.462	32340.90	.02221
5032419.1	12.00	467655.51	4.42721	2.06	.120	32290.33	.00579
5032442.3	14.00	530381.19	5.16258	1.26	.046	32230.61	.00220
5032465.7	16.00	603007.27	5.89692	.87	.022	32161.76	.00105
5032489.3	18.00	685642.09	6.63006	.61	.011	32083.82	.00052
5032513.1	20.00	778409.12	7.36184	.43	.005	31996.79	.00026
5032766.8	40.00	2301972.80	14.56617	0.00	0.000	30636.30	0.00000
5033071.5	60.00	5101105.50	21.41915	0.00	0.000	28425.88	0.00000
5033473.1	80.00	9615942.09	27.63054	0.00	0.000	25453.57	0.00000
5034052.9	100.00	16530395.85	32.69946	0.00	0.000	21850.87	0.00000
5034960.7	120.00	26652160.56	35.64430	0.00	0.000	17813.32	0.00000
5036450.3	140.00	40094526.45	34.31863	0.00	0.000	13666.09	0.00000
5038812.6	160.00	53891674.51	24.00571	0.00	0.000	10077.21	0.00000
5041969.8	180.00	60267484.43	.08103	0.00	0.000	8482.71	0.00000

REVOLUTION 32

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
5041969.8	-180.00	55537287.21	.08103	0.00	0.000	8950.29	0.00000
5044799.2	-160.00	49972034.79	22.42982	0.00	0.000	10442.88	0.00000
5046960.2	-140.00	37688200.42	32.67440	0.00	0.000	13870.85	0.00000
5048361.2	-120.00	25392859.40	34.32675	0.00	0.000	17891.20	0.00000
5049235.8	-100.00	15913448.10	31.69866	0.00	0.000	21834.27	0.00000
5049804.2	-80.00	9325089.82	26.89103	0.00	0.000	25365.90	0.00000
5050202.5	-60.00	4972712.20	20.89694	0.00	0.000	28285.50	0.00000
5050507.0	-40.00	2253985.66	14.23221	.01	.000	30459.22	.00000
5050761.8	-20.00	767591.89	7.19887	.44	.006	31797.97	.00028
5050785.7	-18.00	676937.23	6.48362	.62	.011	31883.62	.00055
5050809.4	-16.00	596169.47	5.76693	.88	.023	31960.34	.00110
5050833.0	-14.00	525172.93	5.04898	1.28	.048	32028.11	.00231
5050856.4	-12.00	463846.10	4.32994	2.10	.127	32086.89	.00618
5050879.7	-10.00	412101.38	3.61000	4.14	.494	32136.66	.02392
5050902.8	-8.00	369864.95	2.88935	9.62	2.660	32177.41	.12851
5050925.9	-6.00	337076.60	2.16822	21.19	12.871	32209.12	.62129
5050948.9	-4.00	313689.63	1.44700	39.81	45.316	32231.78	2.18590
5050971.9	-2.00	299670.75	.72697	59.64	101.577	32245.38	4.89766
5050993.2	0.00	295000.00	.08103	68.33	133.294	32249.91	6.42604
5051014.4	2.00	299670.75	.72697	59.64	101.577	32245.38	4.89766
5051037.4	4.00	313689.63	1.44700	39.81	45.316	32231.78	2.18590
5051060.4	6.00	337076.60	2.16822	21.19	12.871	32209.12	.62129
5051083.5	8.00	369864.95	2.88935	9.62	2.660	32177.41	.12851
5051106.7	10.00	412101.38	3.61000	4.14	.494	32136.66	.02392
5051130.0	12.00	463846.10	4.32994	2.10	.127	32086.89	.00618
5051153.4	14.00	525172.93	5.04898	1.28	.048	32028.11	.00231
5051176.9	16.00	596169.47	5.76693	.88	.023	31960.34	.00110
5051200.6	18.00	676937.23	6.48362	.62	.011	31883.62	.00055
5051224.5	20.00	767591.89	7.19887	.44	.006	31797.97	.00028
5051479.3	40.00	2253985.66	14.23221	.01	.000	30459.22	.00000
5051783.8	60.00	4972712.20	20.89694	0.00	0.000	28285.50	0.00000
5052182.1	80.00	9325089.82	26.89103	0.00	0.000	25365.90	0.00000
5052750.6	100.00	15913448.10	31.69866	0.00	0.000	21834.27	0.00000
5053625.2	120.00	25392859.40	34.32675	0.00	0.000	17891.20	0.00000
5055026.1	140.00	37688200.42	32.67440	0.00	0.000	13870.85	0.00000
5057187.2	160.00	49972034.79	22.42982	0.00	0.000	10442.88	0.00000
5060016.5	180.00	55537287.21	.08103	0.00	0.000	8950.29	0.00000

REVOLUTION 33

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
5060016.5	-180.00	51110238.18	.08103	0.00	0.000	9437.55	0.00000
5062554.1	-160.00	46259077.04	20.90324	0.00	0.000	10831.90	0.00000
5064530.6	-140.00	35347283.31	31.01459	0.00	0.000	14096.42	0.00000
5065846.9	-120.00	24134729.56	32.96778	0.00	0.000	17983.02	0.00000
5066688.6	-100.00	15284290.09	30.65532	0.00	0.000	21825.03	0.00000
5067245.5	-80.00	9024218.25	26.11572	0.00	0.000	25280.23	0.00000
5067640.4	-60.00	4838637.79	20.34773	0.00	0.000	28143.07	0.00000
5067944.8	-40.00	2203579.13	13.88035	.01	.000	30277.26	.00000
5068200.6	-20.00	756192.62	7.02701	.45	.006	31592.59	.00030
5068224.6	-18.00	667762.20	6.32917	.63	.012	31676.76	.00059
5068248.5	-16.00	588961.07	5.62982	.89	.024	31752.16	.00116
5068272.2	-14.00	519681.55	4.92915	1.29	.050	31818.76	.00244
5068295.7	-12.00	459829.08	4.22734	2.14	.136	31876.53	.00661
5068319.2	-10.00	409322.00	3.52458	4.25	.533	31925.45	.02594
5068342.5	-8.00	368091.48	2.82107	9.82	2.837	31965.51	.13797
5068365.7	-6.00	336081.35	2.11706	21.30	13.295	31996.67	.64600
5068388.9	-4.00	313248.03	1.41294	39.46	45.526	32018.94	2.21062
5068412.0	-2.00	299560.46	.71003	58.59	100.217	32032.31	4.86421
5068433.5	0.00	295000.00	.08103	66.92	130.669	32036.77	6.34138
5068454.9	2.00	299560.46	.71003	58.59	100.217	32032.31	4.86421
5068478.0	4.00	313248.03	1.41294	39.46	45.526	32018.94	2.21062
5068501.2	6.00	336081.35	2.11706	21.30	13.295	31996.67	.64600
5068524.5	8.00	368091.48	2.82107	9.82	2.837	31965.51	.13797
5068547.8	10.00	409322.00	3.52458	4.25	.533	31925.45	.02594
5068571.2	12.00	459829.08	4.22734	2.14	.136	31876.53	.00661
5068594.7	14.00	519681.55	4.92915	1.29	.050	31818.76	.00244
5068618.4	16.00	588961.07	5.62982	.89	.024	31752.16	.00116
5068642.3	18.00	667762.20	6.32917	.63	.012	31676.76	.00059
5068666.3	20.00	756192.62	7.02701	.45	.006	31592.59	.00030
5068922.1	40.00	2203579.13	13.88035	.01	.000	30277.26	.00000
5069226.5	60.00	4838637.79	20.34773	0.00	0.000	28143.07	0.00000
5069621.4	80.00	9024218.25	26.11572	0.00	0.000	25280.23	0.00000
5070178.3	100.00	15284290.09	30.65532	0.00	0.000	21825.03	0.00000
5071020.0	120.00	24134729.56	32.96778	0.00	0.000	17983.02	0.00000
5072336.3	140.00	35347283.31	31.01459	0.00	0.000	14096.42	0.00000
5074312.8	160.00	46259077.04	20.90324	0.00	0.000	10831.90	0.00000
5076850.4	180.00	51110238.18	.08103	0.00	0.000	9437.55	0.00000

REVOLUTION 34

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
5076850.4	-180.00	46958701.87	.08103	0.00	0.000	9945.74	0.00000
5079127.8	-160.00	42737387.11	19.42598	0.00	0.000	11245.39	0.00000
5080935.0	-140.00	33069480.20	29.34205	0.00	0.000	14344.32	0.00000
5082170.5	-120.00	22877957.36	31.56721	0.00	0.000	18090.20	0.00000
5082979.6	-100.00	14642652.68	29.56759	0.00	0.000	21824.11	0.00000
5083524.7	-80.00	8712947.99	25.30238	0.00	0.000	25197.09	0.00000
5083916.1	-60.00	4698518.10	19.76955	0.00	0.000	27998.75	0.00000
5084220.3	-40.00	2150573.66	13.50919	.02	.000	30090.30	.00000
5084477.2	-20.00	744164.90	6.84553	.46	.007	31380.35	.00032
5084501.4	-18.00	658079.32	6.16607	.64	.013	31462.93	.00063
5084525.4	-16.00	581352.28	5.48503	.90	.025	31536.91	.00123
5084549.2	-14.00	513884.22	4.80260	1.32	.053	31602.25	.00261
5084572.9	-12.00	455587.65	4.11898	2.19	.146	31658.93	.00716
5084596.5	-10.00	406387.00	3.43436	4.39	.583	31706.93	.02858
5084619.9	-8.00	366218.53	2.74896	10.05	3.037	31746.23	.14874
5084643.3	-6.00	335030.19	2.06302	21.43	13.761	31776.81	.67331
5084666.7	-4.00	312781.60	1.37696	39.12	45.762	31798.66	2.23746
5084689.9	-2.00	299443.96	.69213	57.53	98.827	31811.78	4.83004
50847116	0.00	295000.00	.08103	65.48	127.988	31816.15	6.25434
5084733.3	2.00	299443.96	.69213	57.53	98.827	31811.78	4.83004
5084756.5	4.00	312781.60	1.37696	39.12	45.762	31798.66	2.23746
5084779.9	6.00	335030.19	2.06302	21.43	13.761	31776.81	.67331
5084803.3	8.00	366218.53	2.74896	10.05	3.037	31746.23	.14874
5084826.8	10.00	406387.00	3.43436	4.39	.583	31706.93	.02858
5084850.3	12.00	455587.65	4.11898	2.19	.146	31658.93	.00716
5084874.0	14.00	513884.22	4.80260	1.32	.053	31602.25	.00261
5084897.9	16.00	581352.28	5.48503	.90	.025	31536.91	.00123
5084921.9	18.00	658079.32	6.16607	.64	.013	31462.93	.00063
5084946.0	20.00	744164.90	6.84553	.46	.007	31380.35	.00032
5085202.9	40.00	2150573.66	13.50919	.02	.000	30090.30	.00000
5085507.1	60.00	4698518.10	19.76955	0.00	0.000	27998.75	0.00000
5085898.6	80.00	8712847.99	25.30238	0.00	0.000	25197.09	0.00000
5086443.6	100.00	14642652.68	29.56759	0.00	0.000	21824.11	0.00000
5087252.7	120.00	22877957.36	31.56721	0.00	0.000	18090.20	0.00000
5088488.2	140.00	33069480.20	29.34205	0.00	0.000	14344.32	0.00000
5090295.5	160.00	42737387.11	19.42598	0.00	0.000	11245.39	0.00000
5092572.8	180.00	46958701.87	.08103	0.00	0.000	9945.74	0.00000

REVOLUTION 35

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
5092572.8	-180.00	43057846.75	.08103	0.00	0.000	10476.32	0.00000
5094617.5	-160.00	39392653.01	17.99761	0.00	0.000	11684.63	0.00000
5096269.3	-140.00	30852337.16	27.65955	0.00	0.000	14616.18	0.00000
5097427.7	-120.00	21622577.64	30.12490	0.00	0.000	18214.28	0.00000
5098204.6	-100.00	13988180.36	28.43343	0.00	0.000	21832.65	0.00000
5098737.6	-80.00	8390429.45	24.44852	0.00	0.000	25117.10	0.00000
5099125.4	-60.00	4551939.26	19.16020	0.00	0.000	27852.71	0.00000
5099429.4	-40.00	2094764.62	13.11715	.02	.000	29898.18	.00000
5099687.4	-20.00	731455.66	6.65362	.47	.007	31160.92	.00035
5099711.7	-18.00	647845.56	5.99359	.65	.014	31241.78	.00067
5099735.9	-16.00	573309.03	5.33190	.92	.026	31314.21	.00131
5099759.9	-14.00	507754.80	4.66876	1.34	.057	31378.20	.00280
5099783.7	-12.00	451102.60	4.00437	2.25	.157	31433.70	.00779
5099807.5	-10.00	403283.03	3.33893	4.55	.641	31480.70	.03166
5099831.1	-8.00	364237.55	2.67267	10.30	3.266	31519.19	.16108
5099854.7	-6.00	333918.32	2.00585	21.57	14.277	31549.14	.70359
5099878.2	-4.00	312288.21	1.33890	38.77	46.027	31570.54	2.26667
5099901.6	-2.00	299320.73	.67321	56.44	97.409	31583.38	4.79513
5099923.5	0.00	295000.00	.08103	64.01	125.250	31587.66	6.16483
5099945.3	2.00	299320.73	.67321	56.44	97.409	31583.38	4.79513
5099968.8	4.00	312288.21	1.33890	38.77	46.027	31570.54	2.26667
5099992.3	6.00	333918.32	2.00585	21.57	14.277	31549.14	.70359
5100015.8	8.00	364237.55	2.67267	10.30	3.266	31519.19	.16108
5100039.5	10.00	403283.03	3.33893	4.55	.641	31480.70	.03166
5100063.2	12.00	451102.60	4.00437	2.25	.157	31433.70	.00779
5100087.1	14.00	507754.80	4.66876	1.34	.057	31378.20	.00280
5100111.1	16.00	573309.03	5.33190	.92	.026	31314.21	.00131
5100135.2	18.00	647845.56	5.99359	.65	.014	31241.78	.00067
5100159.6	20.00	731455.66	6.65362	.47	.007	31160.92	.00035
5100417.6	40.00	2094764.62	13.11715	.02	.000	29898.18	.00000
5100721.5	60.00	4551939.26	19.16020	0.00	0.000	27852.71	0.00000
5101109.3	80.00	8390429.45	24.44852	0.00	0.000	25117.10	0.00000
5101642.3	100.00	13988180.36	28.43343	0.00	0.000	21832.65	0.00000
5102419.2	120.00	21622577.64	30.12490	0.00	0.000	18214.28	0.00000
5103577.6	140.00	30852337.16	27.65955	0.00	0.000	14616.18	0.00000
5105229.4	160.00	39392653.01	17.99761	0.00	0.000	11684.63	0.00000
5107274.1	180.00	43057846.75	.08103	0.00	0.000	10476.32	0.00000

REVOLUTION 36

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
5107274.1	-180.00	39385251.29	.08103	0.00	0.000	11030.94	0.00000
5109110.5	-160.00	36211532.01	16.61727	0.00	0.000	12151.12	0.00000
5110619.5	-140.00	28693234.75	25.96976	0.00	0.000	14913.82	0.00000
5111704.3	-120.00	20368453.87	28.64071	0.00	0.000	18357.01	0.00000
5112449.3	-100.00	13320411.92	27.25063	0.00	0.000	21851.90	0.00000
5112970.1	-80.00	8056327.56	23.55136	0.00	0.000	25040.97	0.00000
5113354.0	-60.00	4398427.30	18.51716	0.00	0.000	27705.16	0.00000
5113657.7	-40.00	2035917.06	12.70241	.02	.000	29700.73	.00000
5113916.9	-20.00	718003.81	6.45034	.48	.008	30933.89	.00038
5113941.4	-18.00	637011.33	5.81086	.67	.014	31012.89	.00072
5113965.7	-16.00	564792.09	5.16966	.93	.028	31083.65	.00141
5113989.8	-14.00	501263.23	4.52695	1.37	.060	31146.16	.00302
5114013.9	-12.00	446351.80	3.88293	2.32	.172	31200.39	.00858
5114037.8	-10.00	399994.72	3.23782	4.73	.709	31246.31	.03530
5114061.6	-8.00	362138.69	2.59184	10.57	3.528	31283.92	.17532
5114085.3	-6.00	332740.18	1.94528	21.73	14.850	31313.18	.73733
5114109.0	-4.00	311765.37	1.29857	38.41	46.325	31334.09	2.29856
5114132.6	-2.00	299190.14	.65316	55.32	95.960	31346.64	4.75949
5114154.7	0.00	295000.00	.08103	62.51	122.454	31350.82	6.07273
5114176.8	2.00	299190.14	.65316	55.32	95.960	31346.64	4.75949
5114200.4	4.00	311765.37	1.29857	38.41	46.325	31334.09	2.29856
5114224.1	6.00	332740.18	1.94528	21.73	14.850	31313.18	.73733
5114247.8	8.00	362138.69	2.59184	10.57	3.528	31283.92	.17532
5114271.6	10.00	399994.72	3.23782	4.73	.709	31246.31	.03530
5114295.5	12.00	446351.80	3.88293	2.32	.172	31200.39	.00858
5114319.6	14.00	501263.23	4.52695	1.37	.060	31146.16	.00302
5114343.7	16.00	564792.09	5.16966	.93	.028	31083.65	.00141
5114368.0	18.00	637011.33	5.81086	.67	.014	31012.89	.00072
5114392.5	20.00	718003.81	6.45034	.48	.008	30933.89	.00038
5114651.7	40.00	2035917.06	12.70241	.02	.000	29700.73	.00000
5114955.4	60.00	4398427.30	18.51716	0.00	0.000	27705.16	0.00000
5115339.4	80.00	8056327.56	23.55136	0.00	0.000	25040.97	0.00000
5115860.1	100.00	13320411.92	27.25063	0.00	0.000	21851.90	0.00000
5116605.1	120.00	20368453.87	28.64071	0.00	0.000	18357.01	0.00000
5117689.9	140.00	28693234.75	25.96976	0.00	0.000	14913.82	0.00000
5119198.9	160.00	36211532.01	16.61727	0.00	0.000	12151.12	0.00000
5121035.3	180.00	39385251.29	.08103	0.00	0.000	11030.94	0.00000

REVOLUTION 37

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
5121035.3	-180.00	35920556.14	.08103	0.00	0.000	11611.52	0.00000
5122684.6	-160.00	33181520.23	15.28377	0.00	0.000	12646.59	0.00000
5124062.2	-140.00	26589371.87	24.27513	0.00	0.000	15239.24	0.00000
5125076.8	-120.00	19115251.57	27.11444	0.00	0.000	18520.31	0.00000
5125790.3	-100.00	12638755.15	26.01672	0.00	0.000	21883.29	0.00000
5126298.5	-80.00	7709801.83	22.60772	0.00	0.000	24969.48	0.00000
5126678.6	-60.00	4237434.61	17.83756	0.00	0.000	27556.33	0.00000
5126981.9	-40.00	1973758.92	12.26286	.02	.000	29497.77	.00000
5127242.3	-20.00	703738.40	6.23459	.50	.008	30698.81	.00042
5127267.0	-18.00	625519.03	5.61692	.68	.016	30775.77	.00079
5127291.4	-16.00	555755.85	4.99745	.95	.030	30844.72	.00152
5127315.8	-14.00	494374.52	4.37641	1.41	.066	30905.64	.00330
5127340.0	-12.00	441309.53	3.75400	2.41	.190	30958.48	.00952
5127364.1	-10.00	396504.16	3.13046	4.95	.798	31003.23	.04001
5127388.1	-8.00	359910.49	2.50602	10.87	3.830	31039.87	.19184
5127412.0	-6.00	331489.33	1.88096	21.90	15.489	31068.39	.77511
5127435.9	-4.00	311210.24	1.25576	38.06	46.660	31088.77	2.33348
5127459.7	-2.00	299051.47	.63188	54.19	94.480	31101.00	4.72308
5127482.0	0.00	295000.00	.08103	60.98	119.597	31105.07	5.97790
5127504.2	2.00	299051.47	.63188	54.19	94.480	31101.00	4.72308
5127528.1	4.00	311210.24	1.25576	38.06	46.660	31088.77	2.33348
5127551.9	6.00	331489.33	1.88096	21.90	15.489	31068.39	.77511
5127575.8	8.00	359910.49	2.50602	10.87	3.830	31039.87	.19184
5127599.8	10.00	396504.16	3.13046	4.95	.798	31003.23	.04001
5127623.9	12.00	441309.53	3.75400	2.41	.190	30958.48	.00952
5127648.1	14.00	494374.52	4.37641	1.41	.066	30905.64	.00330
5127672.5	16.00	555755.85	4.99745	.95	.030	30844.72	.00152
5127696.9	18.00	625519.03	5.61692	.68	.016	30775.77	.00079
5127721.6	20.00	703738.40	6.23459	.50	.008	30698.81	.00042
5127982.0	40.00	1973758.92	12.26286	.02	.000	29497.77	.00000
5128285.3	60.00	4237434.61	17.83756	0.00	0.000	27556.33	0.00000
5128665.4	80.00	7709801.83	22.60772	0.00	0.000	24969.48	0.00000
5129173.6	100.00	12638755.15	26.01672	0.00	0.000	21883.29	0.00000
5129887.1	120.00	19115251.57	27.11444	0.00	0.000	18520.31	0.00000
5130901.7	140.00	26589371.87	24.27513	0.00	0.000	15239.24	0.00000
5132279.3	160.00	33181520.23	15.28377	0.00	0.000	12646.59	0.00000
5133928.6	180.00	35920556.14	.08103	0.00	0.000	11611.52	0.00000

REVOLUTION 38

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P I
5133928.6	-180.00	32645150.23	.08103	0.00	0.000	12220.33	0.00000
5135409.7	-160.00	30290820.84	13.99555	0.00	0.000	13173.12	0.00000
5136666.4	-140.00	24537737.34	22.57784	0.00	0.000	15594.75	0.00000
5137614.1	-120.00	17862402.13	25.54583	0.00	0.000	18706.40	0.00000
5138296.2	-100.00	11942453.34	24.72896	0.00	0.000	21928.46	0.00000
5138791.8	-80.00	7349979.99	21.61398	0.00	0.000	24903.57	0.00000
5139167.7	-60.00	4068322.17	17.11806	0.00	0.000	27406.48	0.00000
5139470.6	-40.00	1907972.09	11.79606	.02	.000	29289.05	.00000
5139732.3	-20.00	688576.24	6.00508	.51	.009	30455.11	.00046
5139757.1	-18.00	613301.12	5.41058	.70	.017	30529.87	.00086
5139781.8	-16.00	546146.85	4.81422	.98	.033	30596.85	.00166
5139806.3	-14.00	487047.68	4.21622	1.46	.072	30656.02	.00365
5139830.7	-12.00	435945.61	3.61681	2.52	.212	30707.35	.01075
5139855.0	-10.00	392790.39	3.01622	5.20	.905	30750.83	.04573
5139879.2	-8.00	357539.51	2.41469	11.19	4.168	30786.43	.21049
5139903.3	-6.00	330158.20	1.81252	22.10	16.206	30814.13	.81766
5139927.3	-4.00	310619.43	1.21020	37.69	47.039	30833.93	2.37185
5139951.4	-2.00	298903.89	.60925	53.03	92.967	30845.81	4.68589
5139973.9	0.00	295000.00	.08103	59.42	116.676	30849.77	5.88018
5139996.4	2.00	298903.89	.60925	53.03	92.967	30845.81	4.68589
5140020.4	4.00	310619.43	1.21020	37.69	47.039	30833.93	2.37185
5140044.5	6.00	330158.20	1.81252	22.10	16.206	30814.13	.81766
5140068.6	8.00	357539.51	2.41469	11.19	4.168	30786.43	.21049
5140092.8	10.00	392790.39	3.01622	5.20	.905	30750.83	.04573
5140117.0	12.00	435945.61	3.61681	2.52	.212	30707.35	.01075
5140141.4	14.00	487047.68	4.21622	1.46	.072	30656.02	.00365
5140165.9	16.00	546146.85	4.81422	.98	.033	30596.85	.00166
5140190.6	18.00	613301.12	5.41058	.70	.017	30529.87	.00086
5140215.4	20.00	688576.24	6.00508	.51	.009	30455.11	.00046
5140477.1	40.00	1907972.09	11.79606	.02	.000	29289.05	.00000
5140780.1	60.00	4068322.17	17.11806	0.00	0.000	27406.48	0.00000
5141155.9	80.00	7349979.99	21.61398	0.00	0.000	24903.57	0.00000
5141651.5	100.00	11942453.34	24.72896	0.00	0.000	21928.46	0.00000
5142333.7	120.00	17862402.13	25.54583	0.00	0.000	18706.40	0.00000
5143281.3	140.00	24537737.34	22.57784	0.00	0.000	15594.75	0.00000
5144538.0	160.00	30290820.84	13.99555	0.00	0.000	13173.12	0.00000
5146019.1	180.00	32645150.23	.08103	0.00	0.000	12220.33	0.00000

REVOLUTION 39

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
5146019.1	-180.00	29541878.81	.08103	0.00	0.000	12860.07	0.00000
5147348.6	-160.00	27528204.85	12.75076	0.00	0.000	13733.17	0.00000
5148493.8	-140.00	22535064.52	20.87971	0.00	0.000	15982.96	0.00000
5149377.5	-120.00	16609052.94	23.93443	0.00	0.000	18917.80	0.00000
5150028.8	-100.00	11230539.87	23.38419	0.00	0.000	21989.31	0.00000
5150511.4	-80.00	6975822.32	20.56598	0.00	0.000	24844.32	0.00000
5150882.9	-60.00	3890335.59	16.35475	0.00	0.000	27255.95	0.00000
5151185.4	-40.00	1838180.34	11.29909	.02	.000	29074.30	.00000
5151448.5	-20.00	672418.69	5.76029	.53	.010	30202.16	.00052
5151473.5	-18.00	600277.49	5.19049	.73	.019	30274.50	.00095
5151498.3	-16.00	535901.64	4.61876	1.01	.036	30339.32	.00183
5151523.0	-14.00	479234.03	4.04533	1.52	.081	30396.59	.00412
5151547.6	-12.00	430224.23	3.47044	2.64	.241	30446.27	.01229
5151572.1	-10.00	388828.50	2.89432	5.48	1.033	30488.35	.05268
5151596.5	-8.00	355009.80	2.31724	11.55	4.564	30522.81	.23247
5151620.8	-6.00	328737.82	1.73949	22.34	17.036	30549.63	.86700
5151645.1	-4.00	309988.97	1.16158	37.33	47.469	30568.79	2.41429
5151669.3	-2.00	298746.40	.58512	51.84	91.419	30580.29	4.64789
5151692.0	0.00	295000.00	.08103	57.82	113.688	30584.13	5.77934
5151714.8	2.00	298746.40	.58512	51.84	91.419	30580.29	4.64789
5151739.0	4.00	309988.97	1.16158	37.33	47.469	30568.79	2.41429
5151763.3	6.00	328737.82	1.73949	22.34	17.036	30549.63	.86700
5151787.6	8.00	355009.80	2.31724	11.55	4.564	30522.81	.23247
5151812.0	10.00	388828.50	2.89432	5.48	1.033	30488.35	.05268
5151836.5	12.00	430224.23	3.47044	2.64	.241	30446.27	.01229
5151861.1	14.00	479234.03	4.04533	1.52	.081	30396.59	.00412
5151885.8	16.00	535901.64	4.61876	1.01	.036	30339.32	.00183
5151910.6	18.00	600277.49	5.19049	.73	.019	30274.50	.00095
5151935.6	20.00	672418.69	5.76029	.53	.010	30202.16	.00052
5152198.6	40.00	1838180.34	11.29909	.02	.000	29074.30	.00000
5152501.2	60.00	3890335.59	16.35475	0.00	0.000	27255.95	0.00000
5152872.7	80.00	6975822.32	20.56598	0.00	0.000	24844.32	0.00000
5153355.2	100.00	11230539.87	23.38419	0.00	0.000	21989.31	0.00000
5154006.5	120.00	16609052.94	23.93443	0.00	0.000	18917.80	0.00000
5154890.3	140.00	22535064.52	20.87971	0.00	0.000	15982.96	0.00000
5156035.4	160.00	27528204.85	12.75076	0.00	0.000	13733.17	0.00000
5157365.0	180.00	29541878.81	.08103	0.00	0.000	12860.07	0.00000

REVOLUTION 40

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
5157365.0	-180.00	26594759.66	.08103	0.00	0.000	13533.96	0.00000
5158557.6	-160.00	24882856.35	11.54721	0.00	0.000	14329.75	0.00000
5159599.9	-140.00	20577762.24	19.18209	0.00	0.000	16406.97	0.00000
5160422.6	-120.00	15353997.11	22.27951	0.00	0.000	19157.44	0.00000
5161043.3	-100.00	10501775.31	21.97875	0.00	0.000	22068.09	0.00000
5161512.6	-80.00	6586072.42	19.45880	0.00	0.000	24793.02	0.00000
5161879.5	-60.00	3702572.22	15.54299	0.00	0.000	27105.11	0.00000
5162181.6	-40.00	1763932.87	10.76850	.03	.000	28853.18	.00000
5162446.0	-20.00	655147.21	5.49839	.55	.011	29939.15	.00058
5162471.2	-18.00	586351.88	4.95498	.75	.021	30008.85	.00106
5162496.2	-16.00	524943.98	4.40958	1.05	.040	30071.30	.00204
5162521.1	-14.00	470875.08	3.86243	1.60	.092	30126.48	.00473
5162545.9	-12.00	424102.33	3.31377	2.81	.280	30174.36	.01442
5162570.6	-10.00	384588.54	2.76384	5.79	1.187	30214.91	.06109
5162595.2	-8.00	352302.16	2.21292	11.94	5.032	30248.11	.25863
5162619.8	-6.00	327217.36	1.66132	22.61	17.984	30273.95	.92358
5162644.2	-4.00	309314.03	1.10955	37.00	48.044	30292.42	2.46583
5162668.7	-2.00	298577.79	.55930	50.62	89.835	30303.51	4.60906
5162691.7	0.00	295000.00	.08103	56.19	110.627	30307.20	5.67516
5162714.7	2.00	298577.79	.55930	50.62	89.835	30303.51	4.60906
5162739.1	4.00	309314.03	1.10955	37.00	48.044	30292.42	2.46583
5162763.6	6.00	327217.36	1.66132	22.61	17.984	30273.95	.92358
5162788.2	8.00	352302.16	2.21292	11.94	5.032	30248.11	.25863
5162812.8	10.00	384588.54	2.76384	5.79	1.187	30214.91	.06109
5162837.5	12.00	424102.33	3.31377	2.81	.280	30174.36	.01442
5162862.2	14.00	470875.08	3.86243	1.60	.092	30126.48	.00473
5162887.2	16.00	524943.98	4.40958	1.05	.040	30071.30	.00204
5162912.2	18.00	586351.88	4.95498	.75	.021	30008.85	.00106
5162937.4	20.00	655147.21	5.49839	.55	.011	29939.15	.00058
5163201.8	40.00	1763932.87	10.76850	.03	.000	28853.18	.00000
5163503.9	60.00	3702572.22	15.54299	0.00	0.000	27105.11	0.00000
5163870.8	80.00	6586072.42	19.45880	0.00	0.000	24793.02	0.00000
5164340.1	100.00	10501775.31	21.97875	0.00	0.000	22068.09	0.00000
5164960.8	120.00	15353997.11	22.27951	0.00	0.000	19157.44	0.00000
5165783.5	140.00	20577762.24	19.18209	0.00	0.000	16406.97	0.00000
5166825.7	160.00	24882856.35	11.54721	0.00	0.000	14329.75	0.00000
5168018.4	180.00	26594759.66	.08103	0.00	0.000	13533.96	0.00000

REVOLUTION 41

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
5168018.4	-180.00	23788690.13	.08103	0.00	0.000	14245.96	0.00000
5169087.2	-160.00	22344189.08	10.38239	0.00	0.000	14966.57	0.00000
5170034.4	-140.00	18661810.25	17.48572	0.00	0.000	16870.45	0.00000
5170798.7	-120.00	14095572.22	20.57987	0.00	0.000	19428.79	0.00000
5171389.2	-100.00	9754558.06	20.50825	0.00	0.000	22167.43	0.00000
5171844.9	-80.00	6179187.48	18.28661	0.00	0.000	24751.21	0.00000
5172206.9	-60.00	3503934.66	14.67721	0.00	0.000	26954.39	0.00000
5172508.5	-40.00	1684681.07	10.20009	.03	.000	28625.26	.00000
5172774.3	-20.00	636617.24	5.21716	.58	.013	29665.12	.00066
5172799.7	-18.00	571406.84	4.70205	.79	.023	29731.90	.00121
5172825.0	-16.00	513180.84	4.18490	1.10	.045	29791.74	.00234
5172850.1	-14.00	461899.44	3.66596	1.70	.107	29844.62	.00556
5172875.1	-12.00	417527.37	3.14546	3.01	.333	29890.50	.01731
5172900.1	-10.00	380033.96	2.62366	6.15	1.379	29929.37	.07165
5172924.9	-8.00	349393.17	2.10084	12.41	5.601	29961.19	.29066
5172949.7	-6.00	325583.65	1.57732	22.92	19.072	29985.96	.98885
5172974.4	-4.00	308588.76	1.05365	36.66	48.696	30003.66	2.52335
5172999.1	-2.00	298396.59	.53159	49.37	88.211	30014.29	4.56934
5173022.3	0.00	295000.00	.08103	54.51	107.489	30017.83	5.56730
5173045.6	2.00	298396.59	.53159	49.37	88.211	30014.29	4.56934
5173070.3	4.00	308588.76	1.05365	36.66	48.696	30003.66	2.52335
5173095.0	6.00	325583.65	1.57732	22.92	19.072	29985.96	.98885
5173119.8	8.00	349393.17	2.10084	12.41	5.601	29961.19	.29066
5173144.6	10.00	380033.96	2.62366	6.15	1.379	29929.37	.07165
5173169.5	12.00	417527.37	3.14546	3.01	.333	29890.50	.01731
5173194.5	14.00	461899.44	3.66596	1.70	.107	29844.62	.00556
5173219.6	16.00	513180.84	4.18490	1.10	.045	29791.74	.00234
5173244.9	18.00	571406.84	4.70205	.79	.023	29731.90	.00121
5173270.3	20.00	636617.24	5.21716	.58	.013	29665.12	.00066
5173536.2	40.00	1684681.07	10.20009	.03	.000	28625.26	.00000
5173837.7	60.00	3503934.66	14.67721	0.00	0.000	26954.39	0.00000
5174199.8	80.00	6179187.48	18.28661	0.00	0.000	24751.21	0.00000
5174655.5	100.00	9754558.06	20.50825	0.00	0.000	22167.43	0.00000
5175245.9	120.00	14095572.22	20.57987	0.00	0.000	19428.79	0.00000
5176010.3	140.00	18661810.25	17.48572	0.00	0.000	16870.45	0.00000
5176957.4	160.00	22344189.08	10.38239	0.00	0.000	14966.57	0.00000
5178026.2	180.00	23788690.13	.08103	0.00	0.000	14245.96	0.00000

REVOLUTION 42

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
5178026.2	-180.00	21109120.01	.08103	0.00	0.000	15000.99	0.00000
5178982.7	-160.00	19901612.91	9.25342	0.00	0.000	15648.27	0.00000
5179841.8	-140.00	16782599.94	15.79056	0.00	0.000	17377.92	0.00000
5180550.3	-120.00	12831510.34	18.83366	0.00	0.000	19736.03	0.00000
5181110.8	-100.00	8986793.35	18.96735	0.00	0.000	22290.55	0.00000
5181552.5	-80.00	5753236.43	17.04229	0.00	0.000	24720.76	0.00000
5181909.5	-60.00	3293063.35	13.75056	0.00	0.000	26804.36	0.00000
5182210.4	-40.00	1599744.79	9.58864	.03	.000	28390.01	.00000
5182477.8	-20.00	616649.10	4.91382	.61	.015	29378.84	.00077
5182503.5	-18.00	555296.38	4.42920	.83	.026	29442.39	.00139
5182528.9	-16.00	500496.54	3.94249	1.16	.052	29499.35	.00274
5182554.3	-14.00	452218.33	3.45395	1.83	.128	29549.68	.00672
5182579.5	-12.00	410433.98	2.96382	3.28	.408	29593.35	.02142
5182604.7	-10.00	375119.30	2.47236	6.62	1.654	29630.35	.08681
5182629.8	-8.00	346253.70	1.97987	12.98	6.341	29660.64	.33236
5182654.8	-6.00	323820.29	1.48667	23.28	20.332	29684.22	1.06492
5182679.8	-4.00	307805.86	.99333	36.33	49.440	29701.07	2.58800
5182704.7	-2.00	298200.99	.50171	48.09	86.543	29711.19	4.52869
5182728.2	0.00	295000.00	.08103	52.80	104.264	29714.56	5.45538
5182751.8	2.00	298200.99	.50171	48.09	86.543	29711.19	4.52869
5182776.7	4.00	307805.86	.99333	36.33	49.440	29701.07	2.58800
5182801.7	6.00	323820.29	1.48667	23.28	20.332	29684.22	1.06492
5182826.7	8.00	346253.70	1.97987	12.98	6.341	29660.64	.33236
5182851.8	10.00	375119.30	2.47236	6.62	1.654	29630.35	.08681
5182876.9	12.00	410433.98	2.96382	3.28	.408	29593.35	.02142
5182902.2	14.00	452218.33	3.45395	1.83	.128	29549.68	.00672
5182927.5	16.00	500496.54	3.94249	1.16	.052	29499.35	.00274
5182953.0	18.00	555296.38	4.42920	.83	.026	29442.39	.00139
5182978.6	20.00	616649.10	4.91382	.61	.015	29378.84	.00077
5183246.0	40.00	1599744.79	9.58864	.03	.000	28390.01	.00000
5183547.0	60.00	3293063.35	13.75056	0.00	0.000	26804.36	0.00000
5183903.9	80.00	5753236.43	17.04229	0.00	0.000	24720.76	0.00000
5184345.7	100.00	8986793.35	18.96735	0.00	0.000	22290.55	0.00000
5184906.1	120.00	12831510.34	18.83366	0.00	0.000	19736.03	0.00000
5185614.6	140.00	16782599.94	15.79056	0.00	0.000	17377.92	0.00000
5186473.8	160.00	19901612.91	9.25342	0.00	0.000	15648.27	0.00000
5187430.2	180.00	21109120.01	.08103	0.00	0.000	15000.99	0.00000

REVOLUTION 43

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
5187430.2	-180.00	18541649.76	.08103	0.00	0.000	15805.31	0.00000
5188284.5	-160.00	17544213.43	8.15689	0.00	0.000	16380.81	0.00000
5189062.0	-140.00	14934685.77	14.09550	0.00	0.000	17935.05	0.00000
5189717.0	-120.00	11558707.87	17.03793	0.00	0.000	20084.33	0.00000
5190247.6	-100.00	8195694.15	17.34929	0.00	0.000	22441.42	0.00000
5190675.1	-80.00	5305745.79	15.71698	0.00	0.000	24704.00	0.00000
5191026.6	-60.00	3068234.69	12.75444	0.00	0.000	26655.67	0.00000
5191326.9	-40.00	1508261.68	8.92760	.04	.000	28146.74	.00000
5191595.9	-20.00	595014.53	4.58486	.66	.017	29078.76	.00092
5191621.7	-18.00	537834.99	4.13324	.88	.031	29138.71	.00165
5191647.5	-16.00	486744.09	3.67951	1.26	.062	29192.45	.00333
5191673.1	-14.00	441718.93	3.22392	2.00	.158	29239.93	.00841
5191698.6	-12.00	402739.10	2.76672	3.66	.527	29281.15	.02796
5191724.0	-10.00	369786.76	2.30818	7.19	2.019	29316.06	.10707
5191749.3	-8.00	342846.70	1.84858	13.65	7.259	29344.65	.38459
5191774.6	-6.00	321906.39	1.38829	23.68	21.809	29366.90	1.15465
5191799.8	-4.00	306956.05	.92788	36.00	50.295	29382.80	2.66127
5191825.0	-2.00	297988.66	.46933	46.77	84.826	29392.35	4.48701
5191848.9	0.00	295000.00	.08103	51.03	100.941	29395.53	5.33887
5191872.7	2.00	297988.66	.46933	46.77	84.826	29392.35	4.48701
5191897.9	4.00	306956.05	.92788	36.00	50.295	29382.80	2.66127
5191923.2	6.00	321906.39	1.38829	23.68	21.809	29366.90	1.15465
5191948.5	8.00	342846.70	1.84858	13.65	7.259	29344.65	.38459
5191973.8	10.00	369786.76	2.30818	7.19	2.019	29316.06	.10707
5191999.2	12.00	402739.10	2.76672	3.66	.527	29281.15	.02796
5192024.7	14.00	441718.93	3.22392	2.00	.158	29239.93	.00841
5192050.3	16.00	486744.09	3.67951	1.26	.062	29192.45	.00333
5192076.0	18.00	537834.99	4.13324	.88	.031	29138.71	.00165
5192101.9	20.00	595014.53	4.58486	.66	.017	29078.76	.00092
5192370.9	40.00	1508261.68	8.92760	.04	.000	28146.74	.00000
5192671.1	60.00	3068234.69	12.75444	0.00	0.000	26655.67	0.00000
5193022.7	80.00	5305745.79	15.71698	0.00	0.000	24704.00	0.00000
5193450.1	100.00	8195694.15	17.34929	0.00	0.000	22441.42	0.00000
5193980.7	120.00	11558707.87	17.03793	0.00	0.000	20084.33	0.00000
5194635.8	140.00	14934685.77	14.09550	0.00	0.000	17935.05	0.00000
5195413.3	160.00	17544213.43	8.15689	0.00	0.000	16380.81	0.00000
5196267.5	180.00	18541649.76	.08103	0.00	0.000	15805.31	0.00000

REVOLUTION 44

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
5196267.5	-180.00	16071482.29	.08103	0.00	0.000	16667.14	0.00000
5197028.6	-160.00	15260276.01	7.08877	0.00	0.000	17172.02	0.00000
5197730.2	-140.00	13111383.37	12.39797	0.00	0.000	18549.18	0.00000
5198333.9	-120.00	10272857.31	15.18810	0.00	0.000	20480.26	0.00000
5198834.8	-100.00	7377465.17	15.64520	0.00	0.000	22625.10	0.00000
5199247.5	-80.00	4833455.96	14.29930	0.00	0.000	24703.90	0.00000
5199593.2	-60.00	2827200.93	11.67777	0.00	0.000	26509.18	0.00000
5199892.7	-40.00	1409107.45	8.20843	.05	.000	27894.55	.00001
5200163.4	-20.00	571415.34	4.22569	.71	.021	28762.81	.00113
5200189.5	-18.00	518780.33	3.81004	.95	.038	28818.72	.00203
5200215.5	-16.00	471731.41	3.39227	1.39	.079	28868.84	.00427
5200241.3	-14.00	430253.78	2.97263	2.24	.206	28913.13	.01107
5200267.1	-12.00	394334.14	2.55137	4.17	.709	28951.57	.03809
5200292.8	-10.00	363960.79	2.12877	7.96	2.573	28984.14	.13802
5200318.4	-8.00	339123.74	1.70512	14.44	8.447	29010.81	.45267
5200344.0	-6.00	319814.70	1.28078	24.16	23.574	29031.57	1.26250
5200369.5	-4.00	306027.20	.85638	35.67	51.286	29046.41	2.74517
5200395.0	-2.00	297756.57	.43402	45.41	83.054	29055.32	4.44422
5200419.2	0.00	295000.00	.08103	49.21	97.507	29058.29	5.21707
5200443.3	2.00	297756.57	.43402	45.41	83.054	29055.32	4.44422
5200468.8	4.00	306027.20	.85638	35.67	51.286	29046.41	2.74517
5200494.4	6.00	319814.70	1.28078	24.16	23.574	29031.57	1.26250
5200519.9	8.00	339123.74	1.70512	14.44	8.447	29010.81	.45267
5200545.6	10.00	363960.79	2.12877	7.96	2.573	28984.14	.13802
5200571.2	12.00	394334.14	2.55137	4.17	.709	28951.57	.03809
5200597.0	14.00	430253.78	2.97263	2.24	.206	28913.13	.01107
5200622.9	16.00	471731.41	3.39227	1.39	.079	28868.84	.00427
5200648.9	18.00	518780.33	3.81004	.95	.038	28818.72	.00203
5200674.9	20.00	571415.34	4.22569	.71	.021	28762.81	.00113
5200945.7	40.00	1409107.45	8.20843	.05	.000	27894.55	.00001
5201245.1	60.00	2827200.93	11.67777	0.00	0.000	26509.18	0.00000
5201590.9	80.00	4833455.96	14.29930	0.00	0.000	24703.90	0.00000
5202003.6	100.00	7377465.17	15.64520	0.00	0.000	22625.10	0.00000
5202504.5	120.00	10272857.31	15.18810	0.00	0.000	20480.26	0.00000
5203108.2	140.00	13111383.37	12.39797	0.00	0.000	18549.18	0.00000
5203809.7	160.00	15260276.01	7.08877	0.00	0.000	17172.02	0.00000
5204570.8	180.00	16071482.29	.08103	0.00	0.000	16667.14	0.00000

REVOLUTION 45

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
5204570.8	-180.00	13682568.82	.08103	0.00	0.000	17597.61	0.00000
5205246.5	-160.00	13036519.29	6.04404	0.00	0.000	18032.59	0.00000
5205877.2	-140.00	11304086.89	10.69323	0.00	0.000	19230.20	0.00000
5206431.5	-120.00	8967826.07	13.27697	0.00	0.000	20932.56	0.00000
5206902.7	-100.00	6526773.08	13.84294	0.00	0.000	22848.24	0.00000
5207300.1	-80.00	4331914.40	12.77402	0.00	0.000	24724.37	0.00000
5207639.7	-60.00	2566923.72	10.50570	0.00	0.000	26365.97	0.00000
5207938.2	-40.00	1300763.68	7.41962	.06	.000	27632.15	.00001
5208210.7	-20.00	545448.21	3.83012	.78	.026	28428.19	.00144
5208237.1	-18.00	497804.51	3.45399	1.06	.049	28479.51	.00266
5208263.4	-16.00	455198.62	3.07576	1.59	.108	28525.52	.00586
5208289.5	-14.00	417623.36	2.69568	2.61	.290	28566.18	.01576
5208315.6	-12.00	385072.15	2.31400	4.83	.988	28601.48	.05371
5208341.6	-10.00	357539.15	1.93100	8.91	3.353	28631.38	.18206
5208367.5	-8.00	335019.27	1.54696	15.48	10.098	28655.88	.54786
5208393.4	-6.00	317508.30	1.16227	24.77	25.817	28674.95	1.39979
5208419.2	-4.00	305002.88	.77759	35.34	52.450	28688.58	2.84247
5208445.0	-2.00	297500.60	.39519	43.99	81.216	28696.76	4.40015
5208469.6	0.00	295000.00	.08103	47.32	93.939	28699.49	5.08903
5208494.1	2.00	297500.60	.39519	43.99	81.216	28696.76	4.40015
5208519.9	4.00	305002.88	.77759	35.34	52.450	28688.58	2.84247
5208545.7	6.00	317508.30	1.16227	24.77	25.817	28674.95	1.39979
5208571.6	8.00	335019.27	1.54696	15.48	10.098	28655.88	.54786
5208597.5	10.00	357539.15	1.93100	8.91	3.353	28631.38	.18206
5208623.5	12.00	385072.15	2.31400	4.83	.988	28601.48	.05371
5208649.6	14.00	417623.36	2.69568	2.61	.290	28566.18	.01576
5208675.7	16.00	455198.62	3.07576	1.59	.108	28525.52	.00586
5208702.0	18.00	497804.51	3.45399	1.06	.049	28479.51	.00266
5208728.4	20.00	545448.21	3.83012	.78	.026	28428.19	.00144
5209000.9	40.00	1300763.68	7.41962	.06	.000	27632.15	.00001
5209299.4	60.00	2566923.72	10.50570	0.00	0.000	26365.97	0.00000
5209639.0	80.00	4331914.40	12.77402	0.00	0.000	24724.37	0.00000
5210036.4	100.00	6526773.08	13.84294	0.00	0.000	22848.24	0.00000
5210507.6	120.00	8967826.07	13.27697	0.00	0.000	20932.56	0.00000
5211061.9	140.00	11304086.89	10.69323	0.00	0.000	19230.20	0.00000
5211692.6	160.00	13036519.29	6.04404	0.00	0.000	18032.59	0.00000
5212368.3	180.00	13682568.82	.08103	0.00	0.000	17597.61	0.00000

REVOLUTION 46

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
5212368.3	-180.00	11356289.91	.08103	0.00	0.000	18612.54	0.00000
5212965.5	-160.00	10856745.71	5.01606	0.00	0.000	18977.75	0.00000
5213529.7	-140.00	9501029.99	8.97321	0.00	0.000	19992.09	0.00000
5214036.2	-120.00	7634534.14	11.29294	0.00	0.000	21453.33	0.00000
5214477.6	-100.00	5635795.06	11.92498	0.00	0.000	23120.02	0.00000
5214859.0	-80.00	3794748.15	11.11980	0.00	0.000	24770.80	0.00000
5215191.9	-60.00	2283099.62	9.21742	.01	.000	26227.52	.00000
5215489.2	-40.00	1181082.93	6.54501	.08	.000	27357.71	.00002
5215763.8	-20.00	516542.02	3.38936	.89	.036	28070.86	.00198
5215790.4	-18.00	474443.20	3.05716	1.25	.070	28116.90	.00385
5215817.0	-16.00	436777.62	2.72291	1.89	.160	28158.18	.00885
5215843.5	-14.00	403545.01	2.38687	3.20	.456	28194.67	.02515
5215869.9	-12.00	374744.96	2.04928	5.73	1.453	28226.35	.08006
5215896.2	-10.00	350376.95	1.71041	10.07	4.481	28253.19	.24656
5215922.5	-8.00	330440.42	1.37055	16.73	12.337	28275.18	.67834
5215948.7	-6.00	314934.86	1.03011	25.50	28.602	28292.30	1.57180
5215974.9	-4.00	303859.82	.68976	35.02	53.837	28304.54	2.95723
5216001.0	-2.00	297214.94	.35206	42.51	79.296	28311.88	4.35457
5216025.9	0.00	295000.00	.08103	45.35	90.208	28314.33	4.95335
5216050.8	2.00	297214.94	.35206	42.51	79.296	28311.88	4.35457
5216077.0	4.00	303859.82	.68976	35.02	53.837	28304.54	2.95723
5216103.2	6.00	314934.86	1.03011	25.50	28.602	28292.30	1.57180
5216129.4	8.00	330440.42	1.37055	16.73	12.337	28275.18	.67834
5216155.6	10.00	350376.95	1.71041	10.07	4.481	28253.19	.24656
5216182.0	12.00	374744.96	2.04928	5.73	1.453	28226.35	.08006
5216208.4	14.00	403545.01	2.38687	3.20	.456	28194.67	.02515
5216234.8	16.00	436777.62	2.72291	1.89	.160	28158.18	.00885
5216261.4	18.00	474443.20	3.05716	1.25	.070	28116.90	.00385
5216288.1	20.00	516542.02	3.38936	.89	.036	28070.86	.00198
5216562.6	40.00	1181082.93	6.54501	.08	.000	27357.71	.00002
5216859.9	60.00	2283099.62	9.21742	.01	.000	26227.52	.00000
5217192.8	80.00	3794748.15	11.11980	0.00	0.000	24770.80	0.00000
5217574.3	100.00	5635795.06	11.92498	0.00	0.000	23120.02	0.00000
5218015.7	120.00	7634534.14	11.29294	0.00	0.000	21453.33	0.00000
5218522.1	140.00	9501029.99	8.97321	0.00	0.000	19992.09	0.00000
5219086.4	160.00	10856745.71	5.01606	0.00	0.000	18977.75	0.00000
5219683.5	180.00	11356289.91	.08103	0.00	0.000	18612.54	0.00000

REVOLUTION 47

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
5219683.5	-180.00	9068533.21	.08103	0.00	0.000	19735.88	0.00000
5220217.9	-160.00	8699205.14	3.99543	0.00	0.000	20030.58	0.00000
5220709.4	-140.00	7684826.41	7.22405	0.00	0.000	20855.91	0.00000
5221169.2	-120.00	6258734.81	9.21656	0.00	0.000	22060.57	0.00000
5221580.4	-100.00	4692346.53	9.86419	0.00	0.000	23453.95	0.00000
5221945.0	-80.00	3212238.33	9.30458	0.00	0.000	24851.10	0.00000
5222270.5	-60.00	1969233.95	7.78183	.01	.000	26095.91	.00000
5222566.6	-40.00	1046830.94	5.56029	.11	.001	27068.36	.00004
5222843.2	-20.00	483835.85	2.89022	1.09	.056	27684.67	.00315
5222870.2	-18.00	447996.42	2.60760	1.57	.116	27724.52	.00651
5222897.1	-16.00	415913.44	2.32307	2.45	.281	27760.26	.01574
5222923.9	-14.00	387592.59	2.03684	4.20	.821	27791.87	.04595
5222950.7	-12.00	363038.67	1.74916	7.15	2.377	27819.30	.13284
5222977.4	-10.00	342255.73	1.46030	11.73	6.383	27842.56	.35643
5223004.0	-8.00	325247.12	1.17054	18.35	15.576	27861.60	.86921
5223030.6	-6.00	312015.51	.88029	26.39	32.170	27876.44	1.79419
5223057.2	-4.00	302562.92	.59032	34.70	55.527	27887.04	3.09573
5223083.8	-2.00	296890.80	.30349	40.95	77.273	27893.40	4.30713
5223109.1	0.00	295000.00	.08103	43.27	86.264	27895.52	4.80790
5223134.4	2.00	296890.80	.30349	40.95	77.273	27893.40	4.30713
5223160.9	4.00	302562.92	.59032	34.70	55.527	27887.04	3.09573
5223187.5	6.00	312015.51	.88029	26.39	32.170	27876.44	1.79419
5223214.1	8.00	325247.12	1.17054	18.35	15.576	27861.60	.86921
5223240.8	10.00	342255.73	1.46030	11.73	6.383	27842.56	.35643
5223267.5	12.00	363038.67	1.74916	7.15	2.377	27819.30	.13284
5223294.2	14.00	387592.59	2.03684	4.20	.821	27791.87	.04595
5223321.0	16.00	415913.44	2.32307	2.45	.281	27760.26	.01574
5223347.9	18.00	447996.42	2.60760	1.57	.116	27724.52	.00651
5223374.9	20.00	483835.85	2.89022	1.09	.056	27684.67	.00315
5223651.6	40.00	1046830.94	5.56029	.11	.001	27068.36	.00004
5223947.6	60.00	1969233.95	7.78183	.01	.000	26095.91	.00000
5224273.2	80.00	3212238.33	9.30458	0.00	0.000	24851.10	0.00000
5224637.8	100.00	4692346.53	9.86419	0.00	0.000	23453.95	0.00000
5225049.0	120.00	6258734.81	9.21656	0.00	0.000	22060.57	0.00000
5225508.7	140.00	7684826.41	7.22405	0.00	0.000	20855.91	0.00000
5226010.3	160.00	8699205.14	3.99543	0.00	0.000	20030.58	0.00000
5226534.6	180.00	9068533.21	.08103	0.00	0.000	19735.88	0.00000

REVOLUTION 48

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
5226534.6	-180.00	6783860.92	.08103	0.00	0.000	21007.29	0.00000
5226990.6	-160.00	6530702.19	2.96716	0.00	0.000	21229.43	0.00000
5227432.2	-140.00	5826934.12	5.42071	0.00	0.000	21856.43	0.00000
5227846.0	-120.00	4816035.29	7.01283	0.00	0.000	22783.62	0.00000
5228226.1	-100.00	3675699.39	7.61448	0.00	0.000	23871.85	0.00000
5228572.7	-80.00	2568149.41	7.27548	0.00	0.000	24977.90	0.00000
5228890.0	-60.00	1614587.73	6.14792	.03	.000	25974.35	.00000
5229184.4	-40.00	892674.27	4.42558	.17	.001	26759.24	.00009
5229463.5	-20.00	445909.47	2.31096	1.53	.116	27259.34	.00662
5229490.8	-18.00	417309.26	2.08567	2.27	.255	27291.75	.01453
5229518.1	-16.00	391690.42	1.85868	3.67	.663	27320.82	.03774
5229545.3	-14.00	369062.87	1.63020	5.87	1.696	27346.53	.09642
5229572.5	-12.00	349435.25	1.40044	9.32	4.261	27368.86	.24204
5229599.6	-10.00	332814.97	1.16966	14.22	9.897	27387.78	.56184
5229626.7	-8.00	319208.21	.93814	20.49	20.505	27403.28	1.16334
5229653.7	-6.00	308620.01	.70632	27.57	37.082	27415.36	2.10294
5229680.7	-4.00	301054.26	.47505	34.39	57.654	27423.99	3.26857
5229707.7	-2.00	296513.70	.24777	39.27	75.106	27429.17	4.25720
5229733.5	0.00	295000.00	.08103	41.04	82.025	27430.90	4.64907
5229759.3	2.00	296513.70	.24777	39.27	75.106	27429.17	4.25720
5229786.3	4.00	301054.26	.47505	34.39	57.654	27423.99	3.26857
5229813.3	6.00	308620.01	.70632	27.57	37.082	27415.36	2.10294
5229840.4	8.00	319208.21	.93814	20.49	20.505	27403.28	1.16334
5229867.5	10.00	332814.97	1.16966	14.22	9.897	27387.78	.56184
5229894.6	12.00	349435.25	1.40044	9.32	4.261	27368.86	.24204
5229921.7	14.00	369062.87	1.63020	5.87	1.696	27346.53	.09642
5229949.0	16.00	391690.42	1.85868	3.67	.663	27320.82	.03774
5229976.3	18.00	417309.26	2.08567	2.27	.255	27291.75	.01453
5230003.6	20.00	445909.47	2.31096	1.53	.116	27259.34	.00662
5230282.6	40.00	892674.27	4.42558	.17	.001	26759.24	.00009
5230577.1	60.00	1614587.73	6.14792	.03	.000	25974.35	.00000
5230894.4	80.00	2568149.41	7.27548	0.00	0.000	24977.90	0.00000
5231241.0	100.00	3675699.39	7.61448	0.00	0.000	23871.85	0.00000
5231621.1	120.00	4816035.29	7.01283	0.00	0.000	22783.62	0.00000
5232034.8	140.00	5826934.12	5.42071	0.00	0.000	21856.43	0.00000
5232476.4	160.00	6530702.19	2.96716	0.00	0.000	21229.43	0.00000
5232932.4	180.00	6783860.92	.08103	0.00	0.000	21007.29	0.00000

REVOLUTION 49

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
5232932.4	-180.00	4439093.67	.08103	0.00	0.000	22502.60	0.00000
5233322.9	-160.00	4290605.51	1.90326	0.00	0.000	22647.57	0.00000
5233706.0	-140.00	3872599.87	3.51230	0.00	0.000	23059.94	0.00000
5234073.2	-120.00	3258393.31	4.61020	0.00	0.000	23677.79	0.00000
5234420.5	-100.00	2545284.68	5.08542	0.00	0.000	24414.35	0.00000
5234747.2	-80.00	1831194.51	4.93151	.02	.000	25174.52	.00000
5235054.9	-60.00	1198668.42	4.21917	.06	.000	25868.50	.00001
5235347.3	-40.00	708467.88	3.06532	.30	.005	26420.75	.00030
5235629.1	-20.00	400061.41	1.61036	2.91	.445	26775.06	.02586
5235656.9	-18.00	380184.91	1.45410	4.33	.984	26798.09	.05710
5235684.6	-16.00	362366.66	1.29653	6.47	2.199	26818.75	.12746
5235712.3	-14.00	346618.10	1.13781	9.39	4.613	26837.02	.26727
5235740.0	-12.00	332949.23	.97814	13.32	9.263	26852.90	.53632
5235767.6	-10.00	321368.73	.81774	18.15	17.187	26866.35	.99459
5235795.2	-8.00	311883.88	.65690	23.61	29.045	26877.38	1.68012
5235822.7	-6.00	304500.64	.49611	29.23	44.452	26885.97	2.57055
5235850.3	-4.00	299223.60	.33646	34.10	60.471	26892.11	3.49610
5235877.8	-2.00	296056.06	.18235	37.41	72.717	26895.80	4.20352
5235904.2	0.00	295000.00	.08103	38.58	77.328	26897.03	4.46987
5235930.5	2.00	296056.06	.18235	37.41	72.717	26895.80	4.20352
5235958.1	4.00	299223.60	.33646	34.10	60.471	26892.11	3.49610
5235985.6	6.00	304500.64	.49611	29.23	44.452	26885.97	2.57055
5236013.2	8.00	311883.88	.65690	23.61	29.045	26877.38	1.68012
5236040.8	10.00	321368.73	.81774	18.15	17.187	26866.35	.99459
5236068.4	12.00	332949.23	.97814	13.32	9.263	26852.90	.53632
5236096.0	14.00	346618.10	1.13781	9.39	4.613	26837.02	.26727
5236123.7	16.00	362366.66	1.29653	6.47	2.199	26818.75	.12746
5236151.5	18.00	380184.91	1.45410	4.33	.984	26798.09	.05710
5236179.3	20.00	400061.41	1.61036	2.91	.445	26775.06	.02586
5236461.0	40.00	708467.88	3.06532	.30	.005	26420.75	.00030
5236753.4	60.00	1198668.42	4.21917	.06	.000	25868.50	.00001
5237061.1	80.00	1831194.51	4.93151	.02	.000	25174.52	.00000
5237387.8	100.00	2545284.68	5.08542	0.00	0.000	24414.35	0.00000
5237735.2	120.00	3258393.31	4.61020	0.00	0.000	23677.79	0.00000
5238102.4	140.00	3872599.87	3.51230	0.00	0.000	23059.94	0.00000
5238485.4	160.00	4290605.51	1.90326	0.00	0.000	22647.57	0.00000
5238875.9	180.00	4439093.67	.08103	0.00	0.000	22502.60	0.00000

REVOLUTION 50

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
5238875.9	-180.00	1882015.28	.08103	.01	.000	24409.91	.00000
5239200.3	-160.00	1830697.78	.73555	.01	.000	24466.95	.00000
5239523.1	-140.00	1684216.43	1.36735	.02	.000	24630.45	.00000
5239840.7	-120.00	1463416.09	1.82257	.03	.000	24878.85	.00000
5240151.3	-100.00	1198384.33	2.04741	.06	.000	25180.22	.00001
5240454.4	-80.00	923149.30	2.02200	.13	.001	25497.02	.00007
5240750.2	-60.00	670681.94	1.75820	.33	.006	25791.17	.00038
5241039.7	-40.00	469145.33	1.29416	1.03	.061	26028.50	.00365
5241324.8	-20.00	339618.16	.68797	10.32	6.050	26182.25	.35925
5241353.1	-18.00	331196.29	.62232	12.89	9.425	26192.28	.55944
5241381.5	-16.00	323638.83	.55611	15.79	14.118	26201.29	.83777
5241409.8	-14.00	316953.16	.48948	18.95	20.330	26209.25	1.20599
5241438.1	-12.00	311145.76	.42260	22.28	28.080	26216.18	1.66528
5241466.3	-10.00	306222.27	.35568	25.70	37.307	26222.05	2.21200
5241494.6	-8.00	302187.45	.28911	28.91	47.209	26226.86	2.79861
5241522.8	-6.00	299045.22	.22360	31.69	56.702	26230.61	3.36086
5241551.1	-4.00	296798.60	.16095	33.84	64.626	26233.29	3.83016
5241579.3	-2.00	295449.76	.10680	35.20	69.906	26234.90	4.14285
5241606.4	0.00	295000.00	.08103	35.67	71.761	26235.44	4.25268
5241633.4	2.00	295449.76	.10680	35.20	69.906	26234.90	4.14285
5241661.7	4.00	296798.60	.16095	33.84	64.626	26233.29	3.83016
5241689.9	6.00	299045.22	.22360	31.69	56.702	26230.61	3.36086
5241718.1	8.00	302187.45	.28911	28.91	47.209	26226.86	2.79861
5241746.4	10.00	306222.27	.35568	25.70	37.307	26222.05	2.21200
5241774.7	12.00	311145.76	.42260	22.28	28.080	26216.18	1.66528
5241803.0	14.00	316953.16	.48948	18.95	20.330	26209.25	1.20599
5241831.3	16.00	323638.83	.55611	15.79	14.118	26201.29	.83777
5241859.6	18.00	331196.29	.62232	12.89	9.425	26192.28	.55944
5241887.9	20.00	339618.16	.68797	10.32	6.050	26182.25	.35925
5242173.0	40.00	469145.33	1.29416	1.03	.061	26028.50	.00365
5242462.6	60.00	670681.94	1.75820	.33	.006	25791.17	.00038
5242758.3	80.00	923149.30	2.02200	.13	.001	25497.02	.00007
5243061.4	100.00	1198384.33	2.04741	.06	.000	25180.22	.00001
5243372.1	120.00	1463416.09	1.82257	.03	.000	24878.85	.00000
5243689.6	140.00	1684216.43	1.36735	.02	.000	24630.45	.00000
5244012.4	160.00	1830697.78	.73555	.01	.000	24466.95	.00000
5244336.8	180.00	1882015.28	.08103	.01	.000	24409.91	.00000

Part 1

Listing of Punched Card CMA Input

REVOLUTION 1

TIME	H_R	QDOTR	$QDOTC/H_R$	P_{TA}	I. D.
0.0000	25316.620	0.0000	.0000001	.000000	GLFC TRANS.
21.6245	25464.897	0.0000	.0000002	.000000	GLFC TRANS.
43.0123	25598.056	0.0000	.0000005	.000000	GLFC TRANS.
64.1907	25715.933	0.0000	.0000011	.000001	GLFC TRANS.
85.1853	25818.385	0.0000	.0000026	.000001	GLFC TRANS.
106.0192	25905.287	0.0000	.0000084	.000004	GLFC TRANS.
126.7116	25976.534	0.0000	.0000473	.000025	GLFC TRANS.
147.2715	26032.038	0.0000	.0003285	.000174	GLFC TRANS.
167.6751	26071.732	0.0000	.0016843	.000893	GLFC TRANS.
187.7131	26095.568	0.0000	.0031175	.002636	GLFC TRANS.
202.7735	26103.517	0.0000	.0037507	.003815	GLFC TRANS.
217.8339	26095.568	0.0000	.0031175	.002636	GLFC TRANS.
237.8719	26071.732	0.0000	.0016843	.000893	GLFC TRANS.
258.2755	26032.038	0.0000	.0003285	.000174	GLFC TRANS.
278.8354	25976.534	0.0000	.0000473	.000025	GLFC TRANS.
299.5278	25905.287	0.0000	.0000084	.000004	GLFC TRANS.
320.3617	25818.385	0.0000	.0000026	.000001	GLFC TRANS.
341.3563	25715.933	0.0000	.0000011	.000001	GLFC TRANS.
362.5347	25598.056	0.0000	.0000005	.000000	GLFC TRANS.
383.9225	25464.897	0.0000	.0000002	.000000	GLFC TRANS.
405.5470	25316.620	0.0000	.0000001	.000000	GLFC TRANS.

REVOLUTION 6

TIME	H_R	QDOTR	$QDOTC/H_R$	P_{TA}	I. D.
0.0000	24861.041	0.0000	.0000001	.000000	GLFC TRANS.
21.8051	25006.504	0.0000	.0000002	.000000	GLFC TRANS.
43.3776	25137.135	0.0000	.0000005	.000000	GLFC TRANS.
64.7450	25252.774	0.0000	.0000012	.000001	GLFC TRANS.
85.9337	25353.282	0.0000	.0000027	.000001	GLFC TRANS.
106.9683	25438.535	0.0000	.0000090	.000005	GLFC TRANS.
127.8713	25508.429	0.0000	.0000508	.000027	GLFC TRANS.
148.6601	25562.880	0.0000	.0003423	.000180	GLFC TRANS.
169.3359	25601.821	0.0000	.0017129	.000900	GLFC TRANS.
189.8075	25625.204	0.0000	.0030959	.002607	GLFC TRANS.
206.5114	25633.002	0.0000	.0037116	.003746	GLFC TRANS.
223.2152	25625.204	0.0000	.0030959	.002607	GLFC TRANS.
243.6868	25601.821	0.0000	.0017129	.000900	GLFC TRANS.
264.3627	25562.880	0.0000	.0003423	.000180	GLFC TRANS.
285.1515	25508.429	0.0000	.0000508	.000027	GLFC TRANS.
306.0545	25438.535	0.0000	.0000090	.000005	GLFC TRANS.
327.0891	25353.282	0.0000	.0000027	.000001	GLFC TRANS.
348.2777	25252.774	0.0000	.0000012	.000001	GLFC TRANS.
369.6452	25137.135	0.0000	.0000005	.000000	GLFC TRANS.
391.2177	25006.504	0.0000	.0000002	.000000	GLFC TRANS.
413.0227	24861.041	0.0000	.0000001	.000000	GLFC TRANS.

REVOLUTION 11

TIME	H R	QDOTR	QDOTC/H R	P T A	I. D.
0.0000	24262.806	0.0000	.0000001	.000000	GLFC TRANS.
22.0437	24404.407	0.0000	.0000003	.000000	GLFC TRANS.
43.8591	24531.569	0.0000	.0000006	.000000	GLFC TRANS.
65.4736	24644.138	0.0000	.0000012	.000001	GLFC TRANS.
86.9132	24741.977	0.0000	.0000029	.000002	GLFC TRANS.
108.2030	24824.966	0.0000	.0000097	.000005	GLFC TRANS.
129.3663	24893.005	0.0000	.0000558	.000029	GLFC TRANS.
150.4234	24946.010	0.0000	.0003626	.000188	GLFC TRANS.
171.3849	24983.917	0.0000	.0017555	.000911	GLFC TRANS.
192.2059	25006.680	0.0000	.0030675	.002568	GLFC TRANS.
209.9887	25014.270	0.0000	.0036599	.003656	GLFC TRANS.
227.7715	25006.680	0.0000	.0030675	.002568	GLFC TRANS.
248.5925	24983.917	0.0000	.0017555	.000911	GLFC TRANS.
269.5540	24946.010	0.0000	.0003626	.000188	GLFC TRANS.
290.6111	24893.005	0.0000	.0000558	.000029	GLFC TRANS.
311.7744	24824.966	0.0000	.0000097	.000005	GLFC TRANS.
333.0642	24741.977	0.0000	.0000029	.000002	GLFC TRANS.
354.5038	24644.138	0.0000	.0000012	.000001	GLFC TRANS.
376.1183	24531.569	0.0000	.0000006	.000000	GLFC TRANS.
397.9337	24404.407	0.0000	.0000003	.000000	GLFC TRANS.
419.9774	24262.806	0.0000	.0000001	.000000	GLFC TRANS.

REVOLUTION 16

TIME	H R	QDOTR	QDOTC/H R	P T A	I. D.
0.0000	23523.855	0.0000	.0000001	.000000	GLFC TRANS.
22.3482	23660.403	0.0000	.0000003	.000000	GLFC TRANS.
44.4737	23783.028	0.0000	.0000006	.000000	GLFC TRANS.
66.4031	23891.580	0.0000	.0000013	.000001	GLFC TRANS.
88.1620	23985.927	0.0000	.0000032	.000002	GLFC TRANS.
109.7752	24065.955	0.0000	.0000109	.000006	GLFC TRANS.
131.2662	24131.566	0.0000	.0000632	.000032	GLFC TRANS.
152.6562	24182.679	0.0000	.0003931	.000201	GLFC TRANS.
173.9601	24219.234	0.0000	.0018137	.000927	GLFC TRANS.
195.1561	24241.184	0.0000	.0030322	.002521	GLFC TRANS.
213.8024	24248.504	0.0000	.0035950	.003544	GLFC TRANS.
232.4487	24241.184	0.0000	.0030322	.002521	GLFC TRANS.
253.6446	24219.234	0.0000	.0018137	.000927	GLFC TRANS.
274.9486	24182.679	0.0000	.0003931	.000201	GLFC TRANS.
296.3386	24131.566	0.0000	.0000632	.000032	GLFC TRANS.
317.8295	24065.955	0.0000	.0000109	.000006	GLFC TRANS.
339.4427	23985.927	0.0000	.0000032	.000002	GLFC TRANS.
361.2017	23891.580	0.0000	.0000013	.000001	GLFC TRANS.
383.1311	23783.028	0.0000	.0000006	.000000	GLFC TRANS.
405.2566	23660.403	0.0000	.0000003	.000000	GLFC TRANS.
427.6048	23523.855	0.0000	.0000001	.000000	GLFC TRANS.

REVOLUTION 21

TIME	H R	QDOTR	QDOTC/H R	P T A	I. D.
0.0000	22644.320	0.0000	.0000002	.000000	GLFC TRANS.
22.7277	22774.404	0.0000	.0000003	.000000	GLFC TRANS.
45.2400	22891.223	0.0000	.0000007	.000000	GLFC TRANS.
67.5625	22994.637	0.0000	.0000015	.000001	GLFC TRANS.
89.7201	23084.518	0.0000	.0000036	.000002	GLFC TRANS.
111.7369	23160.757	0.0000	.0000128	.000006	GLFC TRANS.
133.6359	23223.262	0.0000	.0000739	.000037	GLFC TRANS.
155.4385	23271.956	0.0000	.0004361	.000218	GLFC TRANS.
177.1617	23306.780	0.0000	.0018543	.000948	GLFC TRANS.
198.7964	23327.691	0.0000	.0029900	.002466	GLFC TRANS.
218.2328	23334.664	0.0000	.0035165	.003410	GLFC TRANS.
237.6693	23327.691	0.0000	.0029900	.002466	GLFC TRANS.
259.3040	23306.780	0.0000	.0018543	.000948	GLFC TRANS.
281.0272	23271.956	0.0000	.0004361	.000218	GLFC TRANS.
302.8298	23223.262	0.0000	.0000739	.000037	GLFC TRANS.
324.7288	23160.757	0.0000	.0000128	.000006	GLFC TRANS.
346.7455	23084.518	0.0000	.0000036	.000002	GLFC TRANS.
368.9031	22994.637	0.0000	.0000015	.000001	GLFC TRANS.
391.2257	22891.223	0.0000	.0000007	.000000	GLFC TRANS.
413.7380	22774.404	0.0000	.0000003	.000000	GLFC TRANS.
436.4657	22644.320	0.0000	.0000002	.000000	GLFC TRANS.

REVOLUTION 26

TIME	H R	QDOTR	QDOTC/H R	P T A	I. D.
0.0000	21621.906	0.0000	.0000002	.000000	GLFC TRANS.
23.1951	21743.779	0.0000	.0000004	.000000	GLFC TRANS.
46.1846	21853.225	0.0000	.0000008	.000000	GLFC TRANS.
68.9928	21950.111	0.0000	.0000018	.000001	GLFC TRANS.
91.6434	22034.319	0.0000	.0000044	.000002	GLFC TRANS.
114.1594	22105.747	0.0000	.0000160	.000008	GLFC TRANS.
136.5631	22164.306	0.0000	.0000906	.000044	GLFC TRANS.
158.8755	22209.927	0.0000	.0004980	.000244	GLFC TRANS.
181.1141	22242.553	0.0000	.0018771	.000979	GLFC TRANS.
203.2774	22262.144	0.0000	.0029407	.002402	GLFC TRANS.
223.5087	22268.677	0.0000	.0034232	.003255	GLFC TRANS.
243.7401	22262.144	0.0000	.0029407	.002402	GLFC TRANS.
265.9034	22242.553	0.0000	.0018771	.000979	GLFC TRANS.
288.1420	22209.927	0.0000	.0004980	.000244	GLFC TRANS.
310.4544	22164.306	0.0000	.0000906	.000044	GLFC TRANS.
332.8581	22105.747	0.0000	.0000160	.000008	GLFC TRANS.
355.3741	22034.319	0.0000	.0000044	.000002	GLFC TRANS.
378.0247	21950.111	0.0000	.0000018	.000001	GLFC TRANS.
400.8329	21853.225	0.0000	.0000008	.000000	GLFC TRANS.
423.8223	21743.779	0.0000	.0000004	.000000	GLFC TRANS.
447.0175	21621.906	0.0000	.0000002	.000000	GLFC TRANS.

REVOLUTION 31

TIME	H_R	QDOTR	$QDOTC/H_R$	P_{TA}	I. D.
0.0000	20450.128	0.0000	.0000003	.000000	GLFC TRANS.
23.7701	20561.517	0.0000	.0000005	.000000	GLFC TRANS.
47.3479	20661.548	0.0000	.0000010	.000000	GLFC TRANS.
70.7560	20750.099	0.0000	.0000022	.000001	GLFC TRANS.
94.0165	20827.063	0.0000	.0000058	.000003	GLFC TRANS.
117.1509	20892.346	0.0000	.0000221	.000010	GLFC TRANS.
140.1802	20945.867	0.0000	.0001203	.000057	GLFC TRANS.
163.1242	20987.563	0.0000	.0005949	.000283	GLFC TRANS.
186.0005	21017.382	0.0000	.0019100	.001022	GLFC TRANS.
208.8117	21035.288	0.0000	.0028838	.002330	GLFC TRANS.
229.9010	21041.259	0.0000	.0033134	.003075	GLFC TRANS.
250.9903	21035.288	0.0000	.0028838	.002330	GLFC TRANS.
273.8016	21017.382	0.0000	.0019100	.001022	GLFC TRANS.
296.6778	20987.563	0.0000	.0005949	.000283	GLFC TRANS.
319.6219	20945.867	0.0000	.0001203	.000057	GLFC TRANS.
342.6511	20892.346	0.0000	.0000221	.000010	GLFC TRANS.
365.7855	20827.063	0.0000	.0000058	.000003	GLFC TRANS.
389.0460	20750.099	0.0000	.0000022	.000001	GLFC TRANS.
412.4541	20661.548	0.0000	.0000010	.000000	GLFC TRANS.
436.0319	20561.517	0.0000	.0000005	.000000	GLFC TRANS.
459.8020	20450.128	0.0000	.0000003	.000000	GLFC TRANS.

REVOLUTION 36

TIME	H_R	QDOTR	$QDOTC/H_R$	P_{TA}	I. D.
0.0000	19114.032	0.0000	.0000004	.000000	GLFC TRANS.
24.4847	19211.774	0.0000	.0000008	.000000	GLFC TRANS.
48.7960	19299.550	0.0000	.0000015	.000001	GLFC TRANS.
72.9539	19377.252	0.0000	.0000031	.000001	GLFC TRANS.
96.9784	19444.787	0.0000	.0000089	.000004	GLFC TRANS.
120.8888	19502.071	0.0000	.0000364	.000017	GLFC TRANS.
144.7040	19549.036	0.0000	.0001805	.000083	GLFC TRANS.
168.4423	19585.623	0.0000	.0007582	.000348	GLFC TRANS.
192.1198	19611.789	0.0000	.0019587	.001086	GLFC TRANS.
215.7416	19627.501	0.0000	.0028187	.002249	GLFC TRANS.
237.8135	19632.741	0.0000	.0031840	.002869	GLFC TRANS.
259.8854	19627.501	0.0000	.0028187	.002249	GLFC TRANS.
283.5072	19611.789	0.0000	.0019587	.001086	GLFC TRANS.
307.1847	19585.623	0.0000	.0007582	.000348	GLFC TRANS.
330.9229	19549.036	0.0000	.0001805	.000083	GLFC TRANS.
354.7382	19502.071	0.0000	.0000364	.000017	GLFC TRANS.
378.6486	19444.787	0.0000	.0000089	.000004	GLFC TRANS.
402.6730	19377.252	0.0000	.0000031	.000001	GLFC TRANS.
426.8310	19299.550	0.0000	.0000015	.000001	GLFC TRANS.
451.1422	19211.774	0.0000	.0000008	.000000	GLFC TRANS.
475.6269	19114.032	0.0000	.0000004	.000000	GLFC TRANS.

REVOLUTION 41

TIME	H_R	QDOTR	QDOTC/H_R	P_{TA}	I. D.
0.0000	17578.234	0.0000	.0000007	.000000	GLFC TRANS.
25.3988	17657.468	0.0000	.0000013	.000001	GLFC TRANS.
50.6521	17728.623	0.0000	.0000025	.000001	GLFC TRANS.
75.7765	17791.612	0.0000	.0000060	.000003	GLFC TRANS.
100.7886	17846.359	0.0000	.0000186	.000008	GLFC TRANS.
125.7046	17892.796	0.0000	.0000771	.000034	GLFC TRANS.
150.5402	17930.868	0.0000	.0003124	.000137	GLFC TRANS.
175.3110	17960.528	0.0000	.0010619	.000467	GLFC TRANS.
200.0307	17981.739	0.0000	.0020389	.001192	GLFC TRANS.
224.7046	17994.476	0.0000	.0027439	.002159	GLFC TRANS.
247.9753	17998.723	0.0000	.0030288	.002631	GLFC TRANS.
271.2461	17994.476	0.0000	.0027439	.002159	GLFC TRANS.
295.9200	17981.739	0.0000	.0020389	.001192	GLFC TRANS.
320.6397	17960.528	0.0000	.0010619	.000467	GLFC TRANS.
345.4104	17930.868	0.0000	.0003124	.000137	GLFC TRANS.
370.2461	17892.796	0.0000	.0000771	.000034	GLFC TRANS.
395.1620	17846.359	0.0000	.0000186	.000008	GLFC TRANS.
420.1741	17791.612	0.0000	.0000060	.000003	GLFC TRANS.
445.2986	17728.623	0.0000	.0000025	.000001	GLFC TRANS.
470.5519	17657.468	0.0000	.0000013	.000001	GLFC TRANS.
495.9507	17578.234	0.0000	.0000007	.000000	GLFC TRANS.

REVOLUTION 46

TIME	H_R	QDOTR	QDOTC/H_R	P_{TA}	I. D.
0.0000	15739.628	0.0000	.0000023	.000001	GLFC TRANS.
26.6568	15791.300	0.0000	.0000044	.000002	GLFC TRANS.
53.2143	15837.703	0.0000	.0000101	.000004	GLFC TRANS.
79.6837	15878.781	0.0000	.0000287	.000012	GLFC TRANS.
106.0760	15914.484	0.0000	.0000913	.000038	GLFC TRANS.
132.4023	15944.768	0.0000	.0002810	.000116	GLFC TRANS.
158.6732	15969.596	0.0000	.0007725	.000321	GLFC TRANS.
184.8992	15988.938	0.0000	.0015951	.000743	GLFC TRANS.
211.0898	16002.771	0.0000	.0021881	.001397	GLFC TRANS.
237.2476	16011.077	0.0000	.0026553	.002058	GLFC TRANS.
262.1361	16013.847	0.0000	.0028320	.002340	GLFC TRANS.
287.0247	16011.077	0.0000	.0026553	.002058	GLFC TRANS.
313.1825	16002.771	0.0000	.0021881	.001397	GLFC TRANS.
339.3731	15988.938	0.0000	.0015951	.000743	GLFC TRANS.
365.5991	15969.596	0.0000	.0007725	.000321	GLFC TRANS.
391.8700	15944.768	0.0000	.0002810	.000116	GLFC TRANS.
418.1963	15914.484	0.0000	.0000913	.000038	GLFC TRANS.
444.5886	15878.781	0.0000	.0000287	.000012	GLFC TRANS.
471.0580	15837.703	0.0000	.0000101	.000004	GLFC TRANS.
497.6155	15791.300	0.0000	.0000044	.000002	GLFC TRANS.
524.2723	15739.628	0.0000	.0000023	.000001	GLFC TRANS.

APPENDIX J

Trajectory and Reentry Environment Output From Computer Code HRS017 (Version 3) for a Perigee Altitude of 300,000 Feet (Sixty-Five Revolutions)

Part 1. Trajectory and Reentry Environment Tabulated Data (269)

Part 2. Listing of Punched Card CMA Input (334)

Part 1

Trajectory and Reentry Environment Tabulated Data

REVOLUTION 1

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
0.0	-180.00	1246374303.00	.08103	0.00	0.000	605.39	0.00000
384953.7	-160.00	436550188.69	74.57395	0.00	0.000	6304.88	0.00000
422278.4	-140.00	140159001.24	67.36531	0.00	0.000	12375.62	0.00000
428408.9	-120.00	59915138.54	58.33837	0.00	0.000	18080.42	0.00000
430273.7	-100.00	29252722.96	48.85656	0.00	0.000	23238.60	0.00000
431089.9	-80.00	14823189.91	39.19490	0.00	0.000	27691.90	0.00000
431545.4	-60.00	7218107.63	29.44607	0.00	0.000	31304.51	0.00000
431850.1	-40.00	3058643.99	19.65089	0.00	0.000	33966.42	0.00000
432086.5	-20.00	948541.70	9.83112	.35	.002	35596.66	.00011
432108.2	-18.00	823322.07	8.84838	.52	.006	35700.76	.00024
432129.6	-16.00	712086.01	7.86555	.78	.012	35793.97	.00053
432150.8	-14.00	614560.61	6.88265	1.16	.027	35876.29	.00117
432171.8	-12.00	530508.29	5.89969	1.78	.063	35947.69	.00274
432192.6	-10.00	459725.53	4.91671	3.14	.196	36008.14	.00846
432213.3	-8.00	402041.86	3.93373	7.15	1.009	36057.62	.04352
432233.9	-6.00	357318.92	2.95082	18.57	6.787	36096.12	.29232
432254.3	-4.00	325449.85	1.96816	41.36	33.583	36123.63	1.44539
432274.3	-2.00	306358.68	.98658	70.31	96.897	36140.14	4.16854
432289.4	0.00	300000.00	.08103	84.64	140.363	36145.64	6.03753
432304.5	2.00	306358.68	.98658	70.31	96.897	36140.14	4.16854
432324.5	4.00	325449.85	1.96816	41.36	33.583	36123.63	1.44539
432344.9	6.00	357318.92	2.95082	18.57	6.787	36096.12	.29232
432365.5	8.00	402041.86	3.93373	7.15	1.009	36057.62	.04352
432386.2	10.00	459725.53	4.91671	3.14	.196	36008.14	.00846
432407.0	12.00	530508.29	5.89969	1.78	.063	35947.69	.00274
432428.0	14.00	614560.61	6.88265	1.16	.027	35876.29	.00117
432449.2	16.00	712086.01	7.86555	.78	.012	35793.97	.00053
432470.6	18.00	823322.07	8.84838	.52	.006	35700.76	.00024
432492.2	20.00	948541.70	9.83112	.35	.002	35596.66	.00011
432728.7	40.00	3058643.99	19.65089	0.00	0.000	33966.42	0.00000
433033.4	60.00	7218107.63	29.44607	0.00	0.000	31304.51	0.00000
433488.9	80.00	14823189.91	39.19490	0.00	0.000	27691.90	0.00000
434305.1	100.00	29252722.96	48.85656	0.00	0.000	23238.60	0.00000
436169.9	120.00	59915138.54	58.33837	0.00	0.000	18080.42	0.00000
442300.4	140.00	140159001.24	67.36531	0.00	0.000	12375.62	0.00000
479625.1	160.00	436550188.69	74.57395	0.00	0.000	6304.88	0.00000
864578.8	180.00	1246374303.00	.08103	0.00	0.000	605.39	0.00000

REVOLUTION 2

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
864578.8	-180.00	1087270939.28	.08103	0.00	0.000	691.49	0.00000
1174569.8	-160.00	414656240.59	73.80062	0.00	0.000	6306.09	0.00000
1209469.1	-140.00	137604413.76	66.98770	0.00	0.000	12365.03	0.00000
1215465.6	-120.00	59363654.31	58.09997	0.00	0.000	18061.42	0.00000
1217313.5	-100.00	29085891.23	48.69244	0.00	0.000	23212.59	0.00000
1218126.6	-80.00	14763470.29	39.07932	0.00	0.000	27660.06	0.00000
1218581.5	-60.00	7195692.43	29.36654	0.00	0.000	31268.01	0.00000
1218886.3	-40.00	3051023.13	19.60074	0.00	0.000	33926.52	0.00000
1219122.9	-20.00	946907.30	9.80683	.35	.003	35554.69	.00011
1219144.6	-18.00	822010.78	8.82656	.52	.006	35658.65	.00024
1219166.0	-16.00	711058.70	7.84619	.78	.012	35751.75	.00054
1219187.2	-14.00	613779.95	6.86573	1.16	.027	35833.97	.00118
1219208.2	-12.00	529938.46	5.88521	1.78	.063	35905.27	.00275
1219229.1	-10.00	459331.98	4.90466	3.14	.197	35965.64	.00851
1219249.8	-8.00	401791.11	3.92410	7.16	1.015	36015.06	.04383
1219270.4	-6.00	357178.36	2.94360	18.56	6.807	36053.52	.29352
1219290.9	-4.00	325387.53	1.96335	41.27	33.576	36080.99	1.44679
1219311.0	-2.00	306343.13	.98419	70.08	96.642	36097.48	4.16247
1219326.4	0.00	300000.00	.08103	84.33	139.867	36102.98	6.02328
1219341.8	2.00	306343.13	.98419	70.08	96.642	36097.48	4.16247
1219361.9	4.00	325387.53	1.96335	41.27	33.576	36080.99	1.44679
1219382.4	6.00	357178.36	2.94360	18.56	6.807	36053.52	.29352
1219403.0	8.00	401791.11	3.92410	7.16	1.015	36015.06	.04383
1219423.7	10.00	459331.98	4.90466	3.14	.197	35965.64	.00851
1219444.6	12.00	529938.46	5.88521	1.78	.063	35905.27	.00275
1219465.6	14.00	613779.95	6.86573	1.16	.027	35833.97	.00118
1219486.8	16.00	711058.70	7.84619	.78	.012	35751.75	.00054
1219508.2	18.00	822010.78	8.82656	.52	.006	35658.65	.00024
1219529.9	20.00	946907.30	9.80683	.35	.003	35554.69	.00011
1219766.5	40.00	3051023.13	19.60074	0.00	0.000	33926.52	0.00000
1220071.3	60.00	7195692.43	29.36654	0.00	0.000	31268.01	0.00000
1220526.2	80.00	14763470.29	39.07932	0.00	0.000	27660.06	0.00000
1221339.3	100.00	29085891.23	48.69244	0.00	0.000	23212.59	0.00000
1223187.2	120.00	59363654.31	58.09997	0.00	0.000	18061.42	0.00000
1229183.7	140.00	137604413.76	66.98770	0.00	0.000	12365.03	0.00000
1264083.0	160.00	414656240.59	73.80062	0.00	0.000	6306.09	0.00000
1574074.0	180.00	1087270939.28	.08103	0.00	0.000	691.49	0.00000

REVOLUTION 3

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
1574074.0	-180.00	956701047.32	.08103	0.00	0.000	782.87	0.00000
1826829.5	-160.00	393553971.63	72.98042	0.00	0.000	6308.65	0.00000
1859418.9	-140.00	134974251.71	66.58628	0.00	0.000	12354.40	0.00000
1865278.1	-120.00	58785172.25	57.84642	0.00	0.000	18041.62	0.00000
1867108.3	-100.00	28909625.05	48.51787	0.00	0.000	23185.23	0.00000
1867918.1	-80.00	14700157.74	38.95637	0.00	0.000	27626.42	0.00000
1868372.4	-60.00	7171885.74	29.28193	0.00	0.000	31229.38	0.00000
1868677.2	-40.00	3042921.18	19.54740	0.00	0.000	33884.26	0.00000
1868914.1	-20.00	945168.86	9.78099	.35	.003	35510.21	.00011
1868935.8	-18.00	820615.96	8.80334	.52	.006	35614.03	.00024
1868957.2	-16.00	709965.94	7.82559	.78	.012	35707.01	.00054
1868978.4	-14.00	612949.54	6.84774	1.16	.027	35789.11	.00119
1868999.5	-12.00	529332.29	5.86981	1.78	.064	35860.32	.00276
1869020.4	-10.00	458913.33	4.89184	3.15	.198	35920.61	.00857
1869041.1	-8.00	401524.36	3.91385	7.16	1.022	35969.96	.04416
1869061.8	-6.00	357028.84	2.93592	18.55	6.828	36008.36	.29481
1869082.3	-4.00	325321.24	1.95824	41.18	33.568	36035.80	1.44830
1869102.5	-2.00	306326.58	.98164	69.83	96.372	36052.26	4.15605
1869118.1	0.00	300000.00	.08103	83.99	139.342	36057.75	6.00820
1869133.8	2.00	306326.58	.98164	69.83	96.372	36052.26	4.15605
1869154.0	4.00	325321.24	1.95824	41.18	33.568	36035.80	1.44830
1869174.5	6.00	357028.84	2.93592	18.55	6.828	36008.36	.29481
1869195.1	8.00	401524.36	3.91385	7.16	1.022	35969.96	.04416
1869215.9	10.00	458913.33	4.89184	3.15	.198	35920.61	.00857
1869236.8	12.00	529332.29	5.86981	1.78	.064	35860.32	.00276
1869257.9	14.00	612949.54	6.84774	1.16	.027	35789.11	.00119
1869279.1	16.00	709965.94	7.82559	.78	.012	35707.01	.00054
1869300.5	18.00	820615.96	8.80334	.52	.006	35614.03	.00024
1869322.2	20.00	945168.86	9.78099	.35	.003	35510.21	.00011
1869559.1	40.00	3042921.18	19.54740	0.00	0.000	33884.26	0.00000
1869863.9	60.00	7171885.74	29.28193	0.00	0.000	31229.38	0.00000
1870318.1	80.00	14700157.74	38.95637	0.00	0.000	27626.42	0.00000
1871128.0	100.00	28909625.05	48.51787	0.00	0.000	23185.23	0.00000
1872958.2	120.00	58785172.25	57.84642	0.00	0.000	18041.62	0.00000
1878817.4	140.00	134974251.71	66.58628	0.00	0.000	12354.40	0.00000
1911406.8	160.00	393553971.63	72.98042	0.00	0.000	6308.65	0.00000
2164162.3	180.00	956701047.32	.08103	0.00	0.000	782.87	0.00000

REVOLUTION 4

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
2164162.3	-180.00	848100203.39	.08103	0.00	0.000	879.53	0.00000
2372483.5	-160.00	373296970.76	72.11363	0.00	0.000	6312.77	0.00000
2402883.4	-140.00	132278281.73	66.16087	0.00	0.000	12343.84	0.00000
2408602.3	-120.00	58180642.75	57.57759	0.00	0.000	18021.09	0.00000
2410414.2	-100.00	28724020.17	48.33274	0.00	0.000	23156.57	0.00000
2411220.6	-80.00	14633249.97	38.82597	0.00	0.000	27591.03	0.00000
2411674.2	-60.00	7146679.07	29.19219	0.00	0.000	31188.65	0.00000
2411979.0	-40.00	3034333.80	19.49082	0.00	0.000	33839.64	0.00000
2412216.1	-20.00	943325.28	9.75358	.35	.003	35463.23	.00011
2412237.8	-18.00	819136.74	8.77872	.52	.006	35566.89	.00025
2412259.3	-16.00	708807.02	7.80374	.78	.012	35659.73	.00054
2412280.5	-14.00	612068.82	6.82865	1.16	.027	35741.72	.00119
2412301.6	-12.00	528689.39	5.85347	1.78	.064	35812.82	.00277
2412322.5	-10.00	458469.30	4.87824	3.15	.199	35873.02	.00863
2412343.3	-8.00	401241.45	3.90298	7.17	1.029	35922.30	.04452
2412364.0	-6.00	356870.25	2.92778	18.54	6.851	35960.65	.29618
2412384.5	-4.00	325250.93	1.95281	41.09	33.561	35988.05	1.44991
2412404.8	-2.00	306309.03	.97893	69.58	96.088	36004.49	4.14928
2412420.7	0.00	300000.00	.08103	83.64	138.789	36009.97	5.99229
2412436.7	2.00	306309.03	.97893	69.58	96.088	36004.49	4.14928
2412456.9	4.00	325250.93	1.95281	41.09	33.561	35988.05	1.44991
2412477.5	6.00	356870.25	2.92778	18.54	6.851	35960.65	.29618
2412498.1	8.00	401241.45	3.90298	7.17	1.029	35922.30	.04452
2412518.9	10.00	458469.30	4.87824	3.15	.199	35873.02	.00863
2412539.9	12.00	528689.39	5.85347	1.78	.064	35812.82	.00277
2412560.9	14.00	612068.82	6.82865	1.16	.027	35741.72	.00119
2412582.2	16.00	708807.02	7.80374	.78	.012	35659.73	.00054
2412603.7	18.00	819136.74	8.77872	.52	.006	35566.89	.00025
2412625.4	20.00	943325.28	9.75358	.35	.003	35463.23	.00011
2412862.5	40.00	3034333.80	19.49082	0.00	0.000	33839.64	0.00000
2413167.3	60.00	7146679.07	29.19219	0.00	0.000	31188.65	0.00000
2413620.9	80.00	14633249.97	38.82597	0.00	0.000	27591.03	0.00000
2414427.3	100.00	28724020.17	48.33274	0.00	0.000	23156.57	0.00000
2416239.1	120.00	58180642.75	57.57759	0.00	0.000	18021.09	0.00000
2421958.1	140.00	132278281.73	66.16087	0.00	0.000	12343.84	0.00000
2452358.0	160.00	373296970.76	72.11363	0.00	0.000	6312.77	0.00000
2660679.2	180.00	848100203.39	.08103	0.00	0.000	879.53	0.00000