REVOLUTION 5

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
2660679.2	-180.00	756714652.07	.08103	0.00	0.000	981.52	0.00000
2834005.4	-160.00	353916725.28	71.20061	0.00	0.000	6318.70	0.00000
2862337.7	-140.00	129525925.89	65.71131	0.00	0.000	12333.45	0.00000
2867914.3	-120.00	57551021.45	57.29332	0.00	0.000	17999.90	0.00000
2869707.0	-100.00	28529170.46	48.13694	0.00	0.000	23126.63	0.00000
2870509.7	-80.00	14562742.22	38.68804	0.00	0.000	27553.90	0.00000
2870962.7	-60.00	7120062.48	29.09727	0.00	0.000	31145.82	0.00000
2871267.5	-40.00	3025256.02	19.43097	0.00	0.000	33792.66	0.00000
2871504.8	-20.00	941375.31	9.72458	.35	.003	35413.73	.00011
2871526.6	-18.00	817572.11	8.75268	.52	.006	35517.24	.00025
2871548.1	-16.00	707581.14	7.78063	.78	.012	35609.93	.00055
2871569.4	-14.00	611137.21	6.80846	1.16	.028	35691.79	.00120
2871590.5	-12.00	528009.32	5.83619	1.78	.064	35762.78	.00279
2871611.4	-10.00	457999.58	4.86385	3.15	.200	35822.89	.00869
2871632.3	-8.00	400942.16	3.89148	7.18	1.036	35872.10	.04490
2871653.0	-6.00	356702.48	2.91916	18.53	6.875	35910.38	.29765
2871673.5	-4.00	325176.55	1.94707	40.99	33.554	35937.74	1.45162
2871693.9	-2.00	306290.46	.97607	69.31	95.789	35954.15	4.14216
2871710.0	0.00	300000.00	.08103	83.27	138.207	35959.63	5.97554
2871726.2	2.00	306290.46	.97607	69.31	95.789	35954.15	4.14216
2871746.5	4.00	325176.55	1.94707	40.99	33.554	35937.74	1.45162
2871767.1	6.00	356702.48	2.91916	18.53	6.875	35910.38	.29765
2871787.8	8.00	400942.16	3.89148	7.18	1.036	35872.10	.04490
2871808.6	10.00	457999.58	4.86385	3.15	.200	35822.89	.00869
2871829.6	12.00	528009.32	5.83619	1.78	.064	35762.78	.00279
2871850.7	14.00	611137.21	6.80846	1.16	.028	35691.79	.00120
2871872.0	16.00	707581.14	7.78063	.78	.012	35609.93	.00055
2871893.5	18.00	817572.11	8.75268	.52	.006	35517.24	.00025
2871915.2	20.00	941375.31	9.72458	.35	.003	35413.73	.00011
2872152.6	40.00	3025256.02	19.43097	0.00	0.000	33792.66	0.00000
2872457.4	60.00	7120062.48	29.09727	0.00	0.000	31145.82	0.00000
2872910.3	80.00	14562742.22	38.68804	0.00	0.000	27553.90	0.00000
2873713.1	100.00	28529170.46	48.13694	0.00	0.000	23126.63	0.00000
2875505.8	120.00	57551021.45	57.29332	0.00	0.000	17999.90	0.00000
2881082.3	140.00	129525925.89	65.71131	0.00	0.000	12333.45	0.00000
2909414.7	160.00	353916725.28	71.20061	0.00	0.000	6318.70	0.00000
3082740.9	180.00	756714652.07	.08103	0.00	0.000	981.52	0.00000

REVOLUTION 6

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
3082740.9	-180.00	679027071.66	.08103	0.00	0.000	1088.85	0.00000
3228158.2	-160.00	335426784.81	70.24183	0.00	0.000	6326.67	0.00000
3254544.8	-140.00	126726224.70	65.23738	0.00	0.000	12323.37	0.00000
3259977.2	-120.00	56897268.08	56.99342	0.00	0.000	17978.11	0.00000
3261750.1	-100.00	28325168.23	47.93032	0.00	0.000	23095.46	0.00000
3262549.0	-80.00	14488627.43	38.54248	0.00	0.000	27515.05	0.00000
3263001.2	-60.00	7092024.67	28.99708	0.00	0.000	31100.90	0.00000
3263306.1	-40.00	3015682.33	19.36780	0.00	0.000	33743.34	0.00000
3263543.7	-20.00	939317.60	9.69398	.35	.003	35361.72	.00011
3263565.4	-18.00	815920.96	8.72519	.52	.006	35465.06	.00025
3263587.0	-16.00	706287.44	7.75624	.78	.013	35557.60	.00055
3263608.3	-14.00	610154.02	6.78715	1.16	.028	35639.33	.00121
3263629.4	-12.00	527291.59	5.81795	1.78	.064	35710.20	.00280
3263650.4	-10.00	457503.85	4.84867	3.15	.202	35770.21	.00876
3263671.3	-8.00	400626.29	3.87935	7.19	1.044	35819.34	.04530
3263692.0	-6.00	356525.41	2.91007	18.52	6.901	35857.56	.29920
3263712.6	-4.00	325098.05	1.94102	40.89	33.547	35884.87	1.45344
3263733.0	-2.00	306270.86	.97305	69.03	95.476	35901.26	4.13469
3263749.4	0.00	300000.00	.08103	82.89	137.598	35906.72	5.95797
3263765.8	2.00	306270.86	.97305	69.03	95.476	35901.26	4.13469
3263786.2	4.00	325098.05	1.94102	40.89	33.547	35884.87	1.45344
3263806.8	6.00	356525.41	2.91007	18.52	6.901	35857.56	.29920
3263827.5	8.00	400626.29	3.87935	7.19	1.044	35819.34	.04530
3263848.4	10.00	457503.85	4.84867	3.15	.202	35770.21	.00876
3263869.4	12.00	527291.59	5.81795	1.78	.064	35710.20	.00280
3263890.5	14.00	610154.02	6.78715	1.16	.028	35639.33	.00121
3263911.9	16.00	706287.44	7.75624	.78	.013	35557.60	.00055
3263933.4	18.00	815920.96	8.72519	.52	.006	35465.06	.00025
3263955.2	20.00	939317.60	9.69398	.35	.003	35361.72	.00011
3264192.7	40.00	3015682.33	19.36780	0.00	0.000	33743.34	0.00000
3264497.6	60.00	7092024.67	28.99708	0.00	0.000	31100.90	0.00000
3264949.8	80.00	14488627.43	38.54248	0.00	0.000	27515.05	0.00000
3265748.7	100.00	28325168.23	47.93032	0.00	0.000	23095.46	0.00000
3267521.6	120.00	56897268.08	56.99342	0.00	0.000	17978.11	0.00000
3272954.0	140.00	126726224.70	65.23738	0.00	0.000	12323.37	0.00000
3299340.6	160.00	335426784.81	70.24183	0.00	0.000	6326.67	0.00000
3444757.9	180.00	679027071.66	.08103	0.00	0.000	1088.85	0.00000

REVOLUTION 7

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
3444757.9	-180.00	612385886.42	.08103	0.00	0.000	1201.57	0.00000
3567670.7	-160.00	317826435.51	69.23789	0.00	0.000	6336.97	0.00000
3592231.1	-140.00	123887806.77	64.73891	0.00	0.000	12313.73	0.00000
3597518.1	-120.00	56220345.14	56.67772	0.00	0.000	17955.80	0.00000
3599270.5	-100.00	28112104.59	47.71275	0.00	0.000	23063.11	0.00000
3600065.5	-80.00	14410896.26	38.38918	0.00	0.000	27474.51	0.00000
3600516.9	-60.00	7062552.98	28.89156	0.00	0.000	31053.90	0.00000
3600821.9	-40.00	3005606.62	19.30127	0.00	0.000	33691.66	0.00000
3601059.7	-20.00	937150.63	9.66174	.35	.003	35307.20	.00011
3601081.5	-18.00	814182.08	8.69623	.52	.006	35410.36	.00025
3601103.0	-16.00	704924.95	7.73054	.78	.013	35502.74	.00055
3601124.4	-14.00	609118.52	6.76470	1.16	.028	35584.32	.00121
3601145.6	-12.00	526535.65	5.79873	1.78	.065	35655.07	.00282
3601166.6	-10.00	456981.71	4.83267	3.16	.203	35714.98	.00884
3601187.5	-8.00	400293.59	3.86657	7.20	1.052	35764.02	.04573
3601208.2	-6.00	356338.91	2.90049	18.51	6.928	35802.17	.30085
3601228.9	-4.00	325015.36	1.93464	40.78	33.539	35829.43	1.45538
3601249.3	-2.00	306250.22	.96987	68.73	95.148	35845.80	4.12688
3601265.9	0.00	300000.00	.08103	82.49	136.962	35851.25	5.93958
3601282.5	2.00	306250.22	.96987	68.73	95.148	35845.80	4.12688
3601303.0	4.00	325015.36	1.93464	40.78	33.539	35829.43	1.45538
3601323.6	6.00	356338.91	2.90049	18.51	6.928	35802.17	.30085
3601344.4	8.00	400293.59	3.86657	7.20	1.052	35764.02	.04573
3601365.3	10.00	456981.71	4.83267	3.16	.203	35714.98	.00884
3601386.3	12.00	526535.65	5.79873	1.78	.065	35655.07	.00282
3601407.5	14.00	609118.52	6.76470	1.16	.028	35584.32	.00121
3601428.9	16.00	704924.95	7.73054	.78	.013	35502.74	.00055
3601450.4	18.00	814182.08	8.69623	.52	.006	35410.36	.00025
3601472.2	20.00	937150.63	9.66174	.35	.003	35307.20	.00011
3601710.0	40.00	3005606.62	19.30127	0.00	0.000	33691.66	0.00000
3602014.9	60.00	7062552.98	28.89156	0.00	0.000	31053.90	0.00000
3602466.4	80.00	14410896.26	38.38918	0.00	0.000	27474.51	0.00000
3603261.4	100.00	28112104.59	47.71275	0.00	0.000	23063.11	0.00000
3605013.8	120.00	56220345.14	56.67772	0.00	0.000	17955.80	0.00000
3610300.8	140.00	123887806.77	64.73891	0.00	0.000	12313.73	0.00000
3634861.2	160.00	317826435.51	69.23789	0.00	0.000	6336.97	0.00000
3757773.9	180.00	612385886.42	.08103	0.00	0.000	1201.57	0.00000

REVOLUTION 8

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
3757773.9	-180.00	554759093.74	.08103	0.00	0.000	1319.71	0.00000
3862360.8	-160.00	301103867.89	68.18953	0.00	0.000	6349.85	0.00000
3885211.4	-140.00	121018865.15	64.21567	0.00	0.000	12304.65	0.00000
3890352.2	-120.00	55521216.45	56.34602	0.00	0.000	17933.06	0.00000
3892083.5	-100.00	27890069.67	47.48407	0.00	0.000	23029.63	0.00000
3892874.4	-80.00	14329537.28	38.22803	0.00	0.000	27432.30	0.00000
3893325.0	-60.00	7031633.39	28.78063	0.00	0.000	31004.84	0.00000
3893630.0	-40.00	2995022.22	19.23132	0.00	0.000	33637.64	0.00000
3893868.0	-20.00	934872.75	9.62785	.35	.003	35250.17	.00012
3893889.9	-18.00	812354.12	8.66579	.52	.006	35353.13	.00025
3893911.5	-16.00	703492.63	7.70353	.78	.013	35445.34	.00056
3893932.8	-14.00	608029.91	6.74110	1.16	.028	35526.77	.00122
3893954.1	-12.00	525740.92	5.77853	1.78	.065	35597.39	.00284
3893975.1	-10.00	456432.77	4.81586	3.16	.204	35657.18	.00892
3893996.0	-8.00	399943.80	3.85313	7.21	1.061	35706.13	.04619
3894016.9	-6.00	356142.82	2.89042	18.50	6.957	35744.21	.30260
3894037.6	-4.00	324928.42	1.92793	40.67	33.532	35771.43	1.45744
3894058.1	-2.00	306228.52	.96653	68.43	94.806	35787.76	4.11873
3894074.9	0.00	300000.00	.08103	82.07	136.297	35793.20	5.92036
3894091.6	2.00	306228.52	.96653	68.43	94.806	35787.76	4.11873
3894112.1	4.00	324928.42	1.92793	40.67	33.532	35771.43	1.45744
3894132.8	6.00	356142.82	2.89042	18.50	6.957	35744.21	.30260
3894153.7	8.00	399943.80	3.85313	7.21	1.061	35706.13	.04619
3894174.6	10.00	456432.77	4.81586	3.16	.204	35657.18	.00892
3894195.6	12.00	525740.92	5.77853	1.78	.065	35597.39	.00284
3894216.9	14.00	608029.91	6.74110	1.16	.028	35526.77	.00122
3894238.2	16.00	703492.63	7.70353	.78	.013	35445.34	.00056
3894259.8	18.00	812354.12	8.66579	.52	.006	35353.13	.00025
3894281.7	20.00	934872.75	9.62785	.35	.003	35250.17	.00012
3894519.7	40.00	2995022.22	19.23132	0.00	0.000	33637.64	0.00000
3894824.7	60.00	7031633.39	28.78063	0.00	0.000	31004.84	0.00000
3895275.3	80.00	14329537.28	38.22803	0.00	0.000	27432.30	0.00000
3896066.2	100.00	27890069.67	47.48407	0.00	0.000	23029.63	0.00000
3897797.5	120.00	55521216.45	56.34602	0.00	0.000	17933.06	0.00000
3902938.3	140.00	121018865.15	64.21567	0.00	0.000	12304.65	0.00000
3925788.9	160.00	301103867.89	68.18953	0.00	0.000	6349.85	0.00000
4030375.8	180.00	554759093.74	.08103	0.00	0.000	1319.71	0.00000

REVOLUTION 9

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
4030375.8	-180.00	504566686.81	.08103	0.00	0.000	1443.31	0.00000
4119907.8	-160.00	285238855.73	67.09763	0.00	0.000	6365.62	0.00000
4141160.7	-140.00	118127139.53	63.66748	0.00	0.000	12296.29	0.00000
4146155.0	-120.00	54800845.51	55.99809	0.00	0.000	17909.96	0.00000
4147864.6	-100.00	27659152.75	47.24411	0.00	0.000	22995.05	0.00000
4148651.1	-80.00	14244536.93	38.05889	0.00	0.000	27388.46	0.00000
4149100.9	-60.00	6999250.55	28.66419	0.00	0.000	30953.73	0.00000
4149405.9	-40.00	2983921.86	19.15789	0.00	0.000	33581.26	0.00000
4149644.3	-20.00	932482.17	9.59227	.35	.003	35190.61	.00012
4149666.1	-18.00	810435.66	8.63383	.52	.006	35293.37	.00026
4149687.8	-16.00	701989.32	7.67518	.78	.013	35385.39	.00056
4149709.2	-14.00	606887.32	6.71633	1.16	.028	35466.66	.00123
4149730.4	-12.00	524906.75	5.75733	1.78	.065	35537.14	.00286
4149751.5	-10.00	455856.57	4.79821	3.16	.206	35596.82	.00900
4149772.5	-8.00	399576.65	3.83902	7.23	1.071	35645.67	.04672
4149793.3	-6.00	355937.00	2.87985	18.49	6.987	35683.68	.30445
4149814.1	-4.00	324837.17	1.92089	40.55	33.526	35710.84	1.45961
4149834.6	-2.00	306205.74	.96302	68.11	94.450	35727.14	4.11024
4149851.6	0.00	300000.00	.08103	81.63	135.606	35732.57	5.90032
4149868.6	2.00	306205.74	.96302	68.11	94.450	35727.14	4.11024
4149889.1	4.00	324837.17	1.92089	40.55	33.526	35710.84	1.45961
4149909.9	6.00	355937.00	2.87985	18.49	6.987	35683.68	.30445
4149930.7	8.00	399576.65	3.83902	7.23	1.071	35645.67	.04672
4149951.7	10.00	455856.57	4.79821	3.16	.206	35596.82	.00900
4149972.8	12.00	524906.75	5.75733	1.78	.065	35537.14	.00286
4149994.0	14.00	606887.32	6.71633	1.16	.028	35466.66	.00123
4150015.5	16.00	701989.32	7.67518	.78	.013	35385.39	.00056
4150037.1	18.00	810435.66	8.63383	.52	.006	35293.37	.00026
4150058.9	20.00	932482.17	9.59227	.35	.003	35190.61	.00012
4150297.3	40.00	2983921.86	19.15789	0.00	0.000	33581.26	0.00000
4150602.3	60.00	6999250.55	28.66419	0.00	0.000	30953.73	0.00000
4151052.1	80.00	14244536.93	38.05889	0.00	0.000	27388.46	0.00000
4151838.6	100.00	27659152.75	47.24411	0.00	0.000	22995.05	0.00000
4153548.2	120.00	54800845.51	55.99809	0.00	0.000	17909.96	0.00000
4158542.6	140.00	118127139.53	63.66748	0.00	0.000	12296.29	0.00000
4179795.4	160.00	285238855.73	67.09763	0.00	0.000	6365.62	0.00000
4269327.4	180.00	504566686.81	.08103	0.00	0.000	1443.31	0.00000

REVOLUTION 10

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
4269327.4	-180.00	460564066.79	.08103	0.00	0.000	1572.43	0.00000
4346393.5	-160.00	270204983.65	65.96328	0.00	0.000	6384.56	0.00000
4366155.7	-140.00	115219904.46	63.09411	0.00	0.000	12288.79	0.00000
4371003.7	-120.00	54060193.86	55.63371	0.00	0.000	17886.59	0.00000
4372691.0	-100.00	27419442.47	46.99270	0.00	0.000	22959.44	0.00000
4373473.0	-80.00	14155879.65	37.88165	0.00	0.000	27342.99	0.00000
4373922.0	-60.00	6965387.75	28.54215	0.00	0.000	30900.57	0.00000
4374227.0	-40.00	2972297.68	19.08093	0.00	0.000	33522.54	0.00000
4374465.6	-20.00	929976.96	9.55498	.35	.003	35128.51	.00012
4374487.5	-18.00	808425.11	8.60034	.53	.006	35231.06	.00026
4374509.2	-16.00	700413.80	7.64545	.78	.013	35322.89	.00057
4374530.7	-14.00	605689.80	6.69036	1.16	.028	35403.99	.00124
4374551.9	-12.00	524032.46	5.73510	1.77	.066	35474.33	.00288
4374573.1	-10.00	455252.65	4.77971	3.17	.208	35533.88	.00909
4374594.1	-8.00	399191.81	3.82424	7.24	1.082	35582.63	.04729
4374615.0	-6.00	355721.26	2.86877	18.48	7.020	35620.56	.30640
4374635.8	-4.00	324741.51	1.91351	40.43	33.519	35647.66	1.46191
4374656.4	-2.00	306181.86	.95934	67.78	94.081	35663.93	4.10140
4374673.5	0.00	300000.00	.08103	81.18	134.887	35669.35	5.87946
4374690.7	2.00	306181.86	.95934	67.78	94.081	35663.93	4.10140
4374711.3	4.00	324741.51	1.91351	40.43	33.519	35647.66	1.46191
4374732.1	6.00	355721.26	2.86877	18.48	7.020	35620.56	.30640
4374752.9	8.00	399191.81	3.82424	7.24	1.082	35582.63	.04729
4374773.9	10.00	455252.65	4.77971	3.17	.208	35533.88	.00909
4374795.1	12.00	524032.46	5.73510	1.77	.066	35474.33	.00288
4374816.4	14.00	605689.80	6.69036	1.16	.028	35403.99	.00124
4374837.8	16.00	700413.80	7.64545	.78	.013	35322.89	.00057
4374859.5	18.00	808425.11	8.60034	.53	.006	35231.06	.00026
4374881.4	20.00	929976.96	9.55498	.35	.003	35128.51	.00012
4375120.0	40.00	2972297.68	19.08093	0.00	0.000	33522.54	0.00000
4375425.0	60.00	6965387.75	28.54215	0.00	0.000	30900.57	0.00000
4375874.0	80.00	14155879.65	37.88165	0.00	0.000	27342.99	0.00000
4376656.0	100.00	27419442.47	46.99270	0.00	0.000	22959.44	0.00000
4378343.4	120.00	54060193.86	55.63371	0.00	0.000	17886.59	0.00000
4383191.3	140.00	115219904.46	63.09411	0.00	0.000	12288.79	0.00000
4402953.5	160.00	270204983.65	65.96328	0.00	0.000	6384.56	0.00000
4480019.6	180.00	460564066.79	.08103	0.00	0.000	1572.43	0.00000

REVOLUTION 11

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
4480019.6	-180.00	421759344.66	.08103	0.00	0.000	1707.10	0.00000
4546688.8	-160.00	255971471.44	64.78773	0.00	0.000	6406.99	0.00000
4565062.2	-140.00	112303962.77	62.49538	0.00	0.000	12282.33	0.00000
4569764.2	-120.00	53300219.30	55.25265	0.00	0.000	17863.05	0.00000
4571428.8	-100.00	27171026.85	46.72963	0.00	0.000	22922.84	0.00000
4572206.2	-80.00	14063547.85	37.69615	0.00	0.000	27295.95	0.00000
4572654.2	-60.00	6930026.92	28.41442	0.00	0.000	30845.37	0.00000
4572959.3	-40.00	2960141.19	19.00037	0.00	0.000	33461.46	0.00000
4573198.2	-20.00	927355.04	9.51595	.35	.003	35063.88	.00012
4573220.1	-18.00	806320.80	8.56528	.53	.006	35166.20	.00026
4573241.8	-16.00	698764.74	7.61434	.78	.013	35257.83	.00057
4573263.3	-14.00	604436.34	6.66318	1.16	.028	35338.75	.00125
4573284.7	-12.00	523117.30	5.71183	1.77	.066	35408.93	.00290
4573305.8	-10.00	454620.47	4.76034	3.17	.209	35468.35	.00918
4573326.9	-8.00	398788.97	3.80876	7.26	1.094	35516.99	.04789
4573347.8	-6.00	355495.42	2.85717	18.47	7.054	35554.84	.30846
4573368.6	-4.00	324641.38	1.90579	40.30	33.513	35581.88	1.46435
4573389.3	-2.00	306156.86	.95549	67.43	93.697	35598.11	4.09223
4573406.6	0.00	300000.00	.08103	80.70	134.142	35603.52	5.85778
4573423.9	2.00	306156.86	.95549	67.43	93.697	35598.11	4.09223
4573444.6	4.00	324641.38	1.90579	40.30	33.513	35581.88	1.46435
4573465.4	6.00	355495.42	2.85717	18.47	7.054	35554.84	.30846
4573486.3	8.00	398788.97	3.80876	7.26	1.094	35516.99	.04789
4573507.4	10.00	454620.47	4.76034	3.17	.209	35468.35	.00918
4573528.6	12.00	523117.30	5.71183	1.77	.066	35408.93	.00290
4573549.9	14.00	604436.34	6.66318	1.16	.028	35338.75	.00125
4573571.4	16.00	698764.74	7.61434	.78	.013	35257.83	.00057
4573593.1	18.00	806320.80	8.56528	.53	.006	35166.20	.00026
4573615.0	20.00	927355.04	9.51595	.35	.003	35063.88	.00012
4573853.9	40.00	2960141.19	19.00037	0.00	0.000	33461.46	0.00000
4574159.0	60.00	6930026.92	28.41442	0.00	0.000	30845.37	0.00000
4574607.0	80.00	14063547.85	37.69615	0.00	0.000	27295.95	0.00000
4575384.4	100.00	27171026.85	46.72963	0.00	0.000	22922.84	0.00000
4577049.0	120.00	53300219.30	55.25265	0.00	0.000	17863.05	0.00000
4581751.0	140.00	112303962.77	62.49538	0.00	0.000	12282.33	0.00000
4600124.4	160.00	255971471.44	64.78773	0.00	0.000	6406.99	0.00000
4666793.6	180.00	421759344.66	.08103	0.00	0.000	1707.10	0.00000

REVOLUTION 12

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
4666793.6	-180.00	387353657.05	.08103	0.00	0.000	1847.40	0.00000
4724734.7	-160.00	242504646.80	63.57243	0.00	0.000	6433.22	0.00000
4741815.5	-140.00	109385643.94	61.87110	0.00	0.000	12277.07	0.00000
4746372.5	-120.00	52521874.12	54.85465	0.00	0.000	17839.43	0.00000
4748013.8	-100.00	26913993.33	46.45471	0.00	0.000	22885.31	0.00000
4748786.4	-80.00	13967521.91	37.50223	0.00	0.000	27247.34	0.00000
4749233.5	-60.00	6893148.56	28.28087	0.00	0.000	30788.14	0.00000
4749538.6	-40.00	2947443.31	18.91614	0.00	0.000	33398.03	0.00000
4749777.8	-20.00	924614.17	9.47513	.35	.003	34996.70	.00012
4749799.8	-18.00	804120.92	8.52861	.53	.006	35098.78	.00027
4749821.5	-16.00	697040.71	7.58181	.78	.013	35190.20	.00058
4749843.1	-14.00	603125.85	6.63476	1.16	.029	35270.93	.00126
4749864.4	-12.00	522160.47	5.68750	1.77	.066	35340.95	.00292
4749885.6	-10.00	453959.50	4.74009	3.17	.211	35400.23	.00928
4749906.7	-8.00	398367.76	3.79257	7.28	1.106	35448.76	.04852
4749927.7	-6.00	355259.28	2.84505	18.45	7.090	35486.52	.31064
4749948.6	-4.00	324536.68	1.89771	40.17	33.507	35513.50	1.46692
4749969.3	-2.00	306130.72	.95146	67.08	93.300	35529.69	4.08272
4749986.8	0.00	300000.00	.08103	80.22	133.370	35535.08	5.83528
4750004.2	2.00	306130.72	.95146	67.08	93.300	35529.69	4.08272
4750024.9	4.00	324536.68	1.89771	40.17	33.507	35513.50	1.46692
4750045.8	6.00	355259.28	2.84505	18.45	7.090	35486.52	.31064
4750066.8	8.00	398367.76	3.79257	7.28	1.106	35448.76	.04852
4750087.9	10.00	453959.50	4.74009	3.17	.211	35400.23	.00928
4750109.1	12.00	522160.47	5.68750	1.77	.066	35340.95	.00292
4750130.4	14.00	603125.85	6.63476	1.16	.029	35270.93	.00126
4750152.0	16.00	697040.71	7.58181	.78	.013	35190.20	.00058
4750173.7	18.00	804120.92	8.52861	.53	.006	35098.78	.00027
4750195.7	20.00	924614.17	9.47513	.35	.003	34996.70	.00012
4750434.9	40.00	2947443.31	18.91614	0.00	0.000	33398.03	0.00000
4750740.0	60.00	6893148.56	28.28087	0.00	0.000	30788.14	0.00000
4751187.1	80.00	13967521.91	37.50223	0.00	0.000	27247.34	0.00000
4751959.7	100.00	26913993.33	46.45471	0.00	0.000	22885.31	0.00000
4753601.0	120.00	52521874.12	54.85465	0.00	0.000	17839.43	0.00000
4758158.0	140.00	109385643.94	61.87110	0.00	0.000	12277.07	0.00000
4775238.9	160.00	242504646.80	63.57243	0.00	0.000	6433.22	0.00000
4833179.9	180.00	387353657.05	.08103	0.00	0.000	1847.40	0.00000

REVOLUTION 13

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
4833179.9	-180.00	356697414.79	.08103	0.00	0.000	1993.39	0.00000
4883749.3	-160.00	229769117.50	62.31904	0.00	0.000	6463.59	0.00000
4899628.4	-140.00	106470806.85	61.22108	0.00	0.000	12273.19	0.00000
4904041.5	-120.00	51726103.30	54.43946	0.00	0.000	17815.84	0.00000
4905659.0	-100.00	26648428.82	46.16771	0.00	0.000	22846.92	0.00000
4906426.6	-80.00	13867780.20	37.29974	0.00	0.000	27197.21	0.00000
4906872.7	-60.00	6854731.78	28.14139	0.00	0.000	30728.91	0.00000
4907177.8	-40.00	2934194.27	18.82816	0.00	0.000	33332.25	0.00000
4907417.4	-20.00	921751.96	9.43250	.36	.003	34926.95	.00012
4907439.4	-18.00	801823.53	8.49032	.53	.006	35028.78	.00027
4907461.2	-16.00	695240.19	7.54783	.78	.013	35119.98	.00058
4907482.8	-14.00	601757.16	6.60507	1.16	.029	35200.51	.00127
4907504.2	-12.00	521161.12	5.66209	1.77	.067	35270.36	.00294
4907525.4	-10.00	453269.13	4.71894	3.18	.213	35329.49	.00938
4907546.6	-8.00	397927.81	3.77567	7.30	1.119	35377.90	.04919
4907567.6	-6.00	355012.63	2.83238	18.44	7.128	35415.57	.31293
4907588.5	-4.00	324427.32	1.88927	40.03	33.502	35442.48	1.46963
4907609.3	-2.00	306103.42	.94726	66.71	92.888	35458.63	4.07287
4907626.9	0.00	300000.00	.08103	79.71	132.571	35464.02	5.81196
4907644.5	2.00	306103.42	.94726	66.71	92.888	35458.63	4.07287
4907665.3	4.00	324427.32	1.88927	40.03	33.502	35442.48	1.46963
4907686.2	6.00	355012.63	2.83238	18.44	7.128	35415.57	.31293
4907707.2	8.00	397927.81	3.77567	7.30	1.119	35377.90	.04919
4907728.4	10.00	453269.13	4.71894	3.18	.213	35329.49	.00938
4907749.6	12.00	521161.12	5.66209	1.77	.067	35270.36	.00294
4907771.0	14.00	601757.16	6.60507	1.16	.029	35200.51	.00127
4907792.6	16.00	695240.19	7.54783	.78	.013	35119.98	.00058
4907814.4	18.00	801823.53	8.49032	.53	.006	35028.78	.00027
4907836.4	20.00	921751.96	9.43250	.36	.003	34926.95	.00012
4908075.9	40.00	2934194.27	18.82816	0.00	0.000	33332.25	0.00000
4908381.1	60.00	6854731.78	28.14139	0.00	0.000	30728.91	0.00000
4908827.2	80.00	13867780.20	37.29974	0.00	0.000	27197.21	0.00000
4909594.8	100.00	26648428.82	46.16771	0.00	0.000	22846.92	0.00000
4911212.3	120.00	51726103.30	54.43946	0.00	0.000	17815.84	0.00000
4915625.4	140.00	106470806.85	61.22108	0.00	0.000	12273.19	0.00000
4931504.5	160.00	229769117.50	62.31904	0.00	0.000	6463.59	0.00000
4982073.9	180.00	356697414.79	.08103	0.00	0.000	1993.39	0.00000

REVOLUTION 14

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P
4982073.9	-180.00	329257775.00	.08103	0.00	0.000	2145.12	0.00000
5026383.0	-160.00	217728690.60	61.02943	0.00	0.000	6498.42	0.00000
5041145.5	-140.00	103564846.42	60.54516	0.00	0.000	12270.89	0.00000
5045416.0	-120.00	50913842.72	54.00680	0.00	0.000	17792.40	0.00000
5047009.3	-100.00	26374419.61	45.86842	0.00	0.000	22807.72	0.00000
5047771.9	-80.00	13764299.05	37.08850	0.00	0.000	27145.59	0.00000
5048217.0	-60.00	6814754.18	27.99586	0.00	0.000	30667.66	0.00000
5048522.1	-40.00	2920383.66	18.73635	0.00	0.000	33264.10	0.00000
5048762.0	-20.00	918765.85	9.38801	.36	.003	34854.64	.00013
5048784.1	-18.00	799426.57	8.45035	.53	.006	34956.20	.00027
5048805.9	-16.00	693361.53	7.51237	.78	.013	35047.16	.00059
5048827.5	-14.00	600329.03	6.57409	1.16	.029	35127.48	.00128
5048849.0	-12.00	520118.32	5.63557	1.77	.067	35197.15	.00297
5048870.3	-10.00	452548.73	4.69686	3.18	.215	35256.13	.00949
5048891.4	-8.00	397468.71	3.75803	7.32	1.133	35304.41	.04990
5048912.5	-6.00	354755.24	2.81916	18.43	7.168	35341.98	.31535
5048933.4	-4.00	324313.19	1.88047	39.89	33.498	35368.82	1.47249
5048954.3	-2.00	306074.93	.94287	66.33	92.464	35384.93	4.06269
5048972.0	0.00	300000.00	.08103	79.19	131.746	35390.30	5.78783
5048989.8	2.00	306074.93	.94287	66.33	92.464	35384.93	4.06269
5049010.6	4.00	324313.19	1.88047	39.89	33.498	35368.82	1.47249
5049031.6	6.00	354755.24	2.81916	18.43	7.168	35341.98	.31535
5049052.7	8.00	397468.71	3.75803	7.32	1.133	35304.41	.04990
5049073.8	10.00	452548.73	4.69686	3.18	.215	35256.13	.00949
5049095.1	12.00	520118.32	5.63557	1.77	.067	35197.15	.00297
5049116.6	14.00	600329.03	6.57409	1.16	.029	35127.48	.00128
5049138.2	16.00	693361.53	7.51237	.78	.013	35047.16	.00059
5049160.0	18.00	799426.57	8.45035	.53	.006	34956.20	.00027
5049182.1	20.00	918765.85	9.38801	.36	.003	34854.64	.00013
5049422.0	40.00	2920383.66	18.73635	0.00	0.000	33264.10	0.00000
5049727.1	60.00	6814754.18	27.99586	0.00	0.000	30667.66	0.00000
5050172.2	80.00	13764299.05	37.08850	0.00	0.000	27145.59	0.00000
5050934.8	100.00	26374419.61	45.86842	0.00	0.000	22807.72	0.00000
5052528.1	120.00	50913842.72	54.00680	0.00	0.000	17792.40	0.00000
5056798.6	140.00	103564846.42	60.54516	0.00	0.000	12270.89	0.00000
5071561.1	160.00	217728690.60	61.02943	0.00	0.000	6498.42	0.00000
5115870.2	180.00	329257775.00	.08103	0.00	0.000	2145.12	0.00000

REVOLUTION 15

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
5115870.2	-180.00	304594144.80	.08103	0.00	0.000	2302.66	0.00000
5154835.3	-160.00	206347081.88	59.70569	0.00	0.000	6538.06	0.00000
5168560.7	-140.00	100672703.54	59.84320	0.00	0.000	12270.37	0.00000
5172690.5	-120.00	50086017.44	53.55640	0.00	0.000	17769.22	0.00000
5174259.2	-100.00	26092051.37	45.55659	0.00	0.000	22767.79	0.00000
5175016.5	-80.00	13657052.66	36.86832	0.00	0.000	27092.50	0.00000
5175460.5	-60.00	6773191.87	27.84414	0.00	0.000	30604.43	0.00000
5175765.7	-40.00	2906000.33	18.64063	0.00	0.000	33193.58	0.00000
5176006.0	-20.00	915653.09	9.34162	.36	.003	34779.73	.00013
5176028.1	-18.00	796927.82	8.40868	.53	.006	34881.02	.00028
5176049.9	-16.00	691403.01	7.47539	.78	.013	34971.73	.00060
5176071.6	-14.00	598840.11	6.54179	1.16	.029	35051.83	.00129
5176093.1	-12.00	519031.11	5.60792	1.77	.068	35121.30	.00300
5176114.4	-10.00	451797.61	4.67385	3.19	.217	35180.12	.00961
5176135.6	-8.00	396990.03	3.73963	7.34	1.148	35228.27	.05066
5176156.7	-6.00	354486.87	2.80537	18.42	7.211	35265.74	.31790
5176177.8	-4.00	324194.19	1.87129	39.75	33.494	35292.51	1.47551
5176198.6	-2.00	306045.22	.93829	65.93	92.025	35308.58	4.05218
5176216.5	0.00	300000.00	.08103	78.66	130.895	35313.93	5.76287
5176234.5	2.00	306045.22	.93829	65.93	92.025	35308.58	4.05218
5176255.3	4.00	324194.19	1.87129	39.75	33.494	35292.51	1.47551
5176276.4	6.00	354486.87	2.80537	18.42	7.211	35265.74	.31790
5176297.5	8.00	396990.03	3.73963	7.34	1.148	35228.27	.05066
5176318.7	10.00	451797.61	4.67385	3.19	.217	35180.12	.00961
5176340.0	12.00	519031.11	5.60792	1.77	.068	35121.30	.00300
5176361.5	14.00	598840.11	6.54179	1.16	.029	35051.83	.00129
5176383.2	16.00	691403.01	7.47539	.78	.013	34971.73	.00060
5176405.0	18.00	796927.82	8.40868	.53	.006	34881.02	.00028
5176427.1	20.00	915653.09	9.34162	.36	.003	34779.73	.00013
5176667.4	40.00	2906000.33	18.64063	0.00	0.000	33193.58	0.00000
5176972.6	60.00	6773191.87	27.84414	0.00	0.000	30604.43	0.00000
5177416.6	80.00	13657052.66	36.86832	0.00	0.000	27092.50	0.00000
5178173.9	100.00	26092051.37	45.55659	0.00	0.000	22767.79	0.00000
5179742.6	120.00	50086017.44	53.55640	0.00	0.000	17769.22	0.00000
5183872.4	140.00	100672703.54	59.84320	0.00	0.000	12270.37	0.00000
5197597.8	160.00	206347081.88	59.70569	0.00	0.000	6538.06	0.00000
5236562.9	180.00	304594144.80	.08103	0.00	0.000	2302.66	0.00000

REVOLUTION 16

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
5236562.9	-180.00	282339515.60	.08103	0.00	0.000	2466.11	0.00000
5270944.7	-160.00	195588453.07	58.35012	0.00	0.000	6582.86	0.00000
5283707.4	-140.00	97798877.89	59.11507	0.00	0.000	12271.83	0.00000
5287698.3	-120.00	49243539.94	53.08797	0.00	0.000	17746.42	0.00000
5289242.1	-100.00	25801408.99	45.23197	0.00	0.000	22727.20	0.00000
5289994.0	-80.00	13546013.13	36.63901	0.00	0.000	27037.99	0.00000
5290436.9	-60.00	6730019.33	27.68610	0.00	0.000	30539.20	0.00000
5290742.1	-40.00	2891032.44	18.54091	0.00	0.000	33120.70	0.00000
5290982.7	-20.00	912410.77	9.29329	.36	.003	34702.23	.00013
5291004.9	-18.00	794324.91	8.36527	.53	.006	34803.22	.00028
5291026.8	-16.00	689362.75	7.43687	.78	.014	34893.66	.00060
5291048.5	-14.00	597288.99	6.50813	1.16	.029	34973.54	.00131
5291070.0	-12.00	517898.43	5.57911	1.77	.068	35042.81	.00303
5291091.4	-10.00	451015.07	4.64987	3.19	.220	35101.46	.00973
5291112.7	-8.00	396491.30	3.72047	7.36	1.163	35149.47	.05146
5291133.8	-6.00	354207.25	2.79101	18.41	7.255	35186.83	.32058
5291154.9	-4.00	324070.21	1.86173	39.60	33.491	35213.52	1.47869
5291175.8	-2.00	306014.27	.93353	65.53	91.574	35229.54	4.04133
5291193.9	0.00	300000.00	.08103	78.10	130.018	35234.88	5.73710
5291211.9	2.00	306014.27	.93353	65.53	91.574	35229.54	4.04133
5291232.9	4.00	324070.21	1.86173	39.60	33.491	35213.52	1.47869
5291253.9	6.00	354207.25	2.79101	18.41	7.255	35186.83	.32058
5291275.1	8.00	396491.30	3.72047	7.36	1.163	35149.47	.05146
5291296.4	10.00	451015.07	4.64987	3.19	.220	35101.46	.00973
5291317.7	12.00	517898.43	5.57911	1.77	.068	35042.81	.00303
5291339.3	14.00	597288.99	6.50813	1.16	.029	34973.54	.00131
5291361.0	16.00	689362.75	7.43687	.78	.014	34893.66	.00060
5291382.9	18.00	794324.91	8.36527	.53	.006	34803.22	.00028
5291405.0	20.00	912410.77	9.29329	.36	.003	34702.23	.00013
5291645.7	40.00	2891032.44	18.54091	0.00	0.000	33120.70	0.00000
5291950.9	60.00	6730019.33	27.68610	0.00	0.000	30539.20	0.00000
5292393.8	80.00	13546013.13	36.63901	0.00	0.000	27037.99	0.00000
5293145.6	100.00	25801408.99	45.23197	0.00	0.000	22727.20	0.00000
5294689.5	120.00	49243539.94	53.08797	0.00	0.000	17746.42	0.00000
5298680.3	140.00	97798877.89	59.11507	0.00	0.000	12271.83	0.00000
5311443.1	160.00	195588453.07	58.35012	0.00	0.000	6582.86	0.00000
5345824.8	180.00	282339515.60	.08103	0.00	0.000	2466.11	0.00000

REVOLUTION 17

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
5345824.8	-180.00	262186085.99	.08103	0.00	0.000	2635.53	0.00000
5376258.0	-160.00	185417809.62	56.96522	0.00	0.000	6633.16	0.00000
5388127.4	-140.00	94947443.05	58.36069	0.00	0.000	12275.50	0.00000
5391981.5	-120.00	48387308.51	52.60120	0.00	0.000	17724.14	0.00000
5393500.1	-100.00	25502576.53	44.89429	0.00	0.000	22686.01	0.00000
5394246.4	-80.00	13431150.29	36.40036	0.00	0.000	26982.10	0.00000
5394688.2	-60.00	6685209.43	27.52158	0.00	0.000	30472.01	0.00000
5394993.4	-40.00	2875467.33	18.43708	0.00	0.000	33045.44	0.00000
5395234.4	-20.00	909035.79	9.24296	.36	.003	34622.10	.00013
5395256.6	-18.00	791615.35	8.32006	.53	.006	34722.79	.00028
5395278.6	-16.00	687238.78	7.39675	.78	.014	34812.96	.00061
5395300.3	-14.00	595674.15	6.47308	1.16	.030	34892.58	.00132
5395321.9	-12.00	516719.17	5.54911	1.78	.069	34961.64	.00307
5395343.3	-10.00	450200.32	4.62489	3.20	.222	35020.12	.00986
5395364.6	-8.00	395972.04	3.70051	7.38	1.180	35067.98	.05231
5395385.8	-6.00	353916.11	2.77606	18.40	7.302	35105.23	.32340
5395406.9	-4.00	323941.11	1.85177	39.45	33.489	35131.84	1.48203
5395427.9	-2.00	305982.04	.92856	65.11	91.109	35147.81	4.03016
5395446.1	0.00	300000.00	.08103	77.53	129.115	35153.13	5.71051
5395464.3	2.00	305982.04	.92856	65.11	91.109	35147.81	4.03016
5395485.3	4.00	323941.11	1.85177	39.45	33.489	35131.84	1.48203
5395506.4	6.00	353916.11	2.77606	18.40	7.302	35105.23	.32340
5395527.6	8.00	395972.04	3.70051	7.38	1.180	35067.98	.05231
5395548.9	10.00	450200.32	4.62489	3.20	.222	35020.12	.00986
5395570.4	12.00	516719.17	5.54911	1.78	.069	34961.64	.00307
5395592.0	14.00	595674.15	6.47308	1.16	.030	34892.58	.00132
5395613.7	16.00	687238.78	7.39675	.78	.014	34812.96	.00061
5395635.7	18.00	791615.35	8.32006	.53	.006	34722.79	.00028
5395657.8	20.00	909035.79	9.24296	.36	.003	34622.10	.00013
5395898.9	40.00	2875467.33	18.43708	0.00	0.000	33045.44	0.00000
5396204.1	60.00	6685209.43	27.52158	0.00	0.000	30472.01	0.00000
5396645.8	80.00	13431150.29	36.40036	0.00	0.000	26982.10	0.00000
5397392.1	100.00	25502576.53	44.89429	0.00	0.000	22686.01	0.00000
5398910.7	120.00	48387308.51	52.60120	0.00	0.000	17724.14	0.00000
5402764.8	140.00	94947443.05	58.36069	0.00	0.000	12275.50	0.00000
5414634.2	160.00	185417809.62	56.96522	0.00	0.000	6633.16	0.00000
5445067.4	180.00	262186085.99	.08103	0.00	0.000	2635.53	0.00000

REVOLUTION 18

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
5445067.4	-180.00	243874077.33	.08103	0.00	0.000	2811.02	0.00000
5472084.9	-160.00	175801286.39	55.55369	0.00	0.000	6689.31	0.00000
5483125.4	-140.00	92122063.49	57.57999	0.00	0.000	12281.62	0.00000
5486845.1	-120.00	47518205.63	52.09580	0.00	0.000	17702.52	0.00000
5488338.1	-100.00	25195637.05	44.54326	0.00	0.000	22644.32	0.00000
5489078.7	-80.00	13312431.70	36.15215	0.00	0.000	26924.85	0.00000
5489519.3	-60.00	6638733.28	27.35041	0.00	0.000	30402.86	0.00000
5489824.5	-40.00	2859291.56	18.32905	0.00	0.000	32967.79	0.00000
5490065.9	-20.00	905524.82	9.19059	.36	.003	34539.34	.00013
5490088.1	-18.00	788796.44	8.27302	.53	.006	34639.70	.00029
5490110.1	-16.00	685028.97	7.35501	.79	.014	34729.58	.00062
5490131.9	-14.00	593993.97	6.43661	1.16	.030	34808.95	.00133
5490153.6	-12.00	515492.15	5.51789	1.78	.070	34877.79	.00311
5490175.1	-10.00	449352.53	4.59891	3.20	.225	34936.08	.01001
5490196.4	-8.00	395431.70	3.67974	7.41	1.197	34983.79	.05320
5490217.7	-6.00	353613.15	2.76050	18.39	7.351	35020.91	.32637
5490238.8	-4.00	323806.78	1.84140	39.29	33.488	35047.44	1.48556
5490259.9	-2.00	305948.50	.92340	64.68	90.630	35063.36	4.01865
5490278.2	0.00	300000.00	.08103	76.95	128.187	35068.66	5.68310
5490296.5	2.00	305948.50	.92340	64.68	90.630	35063.36	4.01865
5490317.6	4.00	323806.78	1.84140	39.29	33.488	35047.44	1.48556
5490338.7	6.00	353613.15	2.76050	18.39	7.351	35020.91	.32637
5490360.0	8.00	395431.70	3.67974	7.41	1.197	34983.79	.05320
5490381.4	10.00	449352.53	4.59891	3.20	.225	34936.08	.01001
5490402.8	12.00	515492.15	5.51789	1.78	.070	34877.79	.00311
5490424.5	14.00	593993.97	6.43661	1.16	.030	34808.95	.00133
5490446.3	16.00	685028.97	7.35501	.79	.014	34729.58	.00062
5490468.3	18.00	788796.44	8.27302	.53	.006	34639.70	.00029
5490490.5	20.00	905524.82	9.19059	.36	.003	34539.34	.00013
5490731.9	40.00	2859291.56	18.32905	0.00	0.000	32967.79	0.00000
5491037.2	60.00	6638733.28	27.35041	0.00	0.000	30402.86	0.00000
5491477.7	80.00	13312431.70	36.15215	0.00	0.000	26924.85	0.00000
5492218.3	100.00	25195637.05	44.54326	0.00	0.000	22644.32	0.00000
5493711.3	120.00	47518205.63	52.09580	0.00	0.000	17702.52	0.00000
5497431.0	140.00	92122063.49	57.57999	0.00	0.000	12281.62	0.00000
5508471.6	160.00	175801286.39	55.55369	0.00	0.000	6689.31	0.00000
5535489.0	180.00	243874077.33	.08103	0.00	0.000	2811.02	0.00000

REVOLUTION 19

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
5535489.0	-180.00	227182952.70	.08103	0.00	0.000	2992.66	0.00000
5559540.1	-160.00	166706344.34	54.11839	0.00	0.000	6751.68	0.00000
5569811.6	-140.00	89326012.99	56.77295	0.00	0.000	12290.42	0.00000
5573399.4	-120.00	46637096.50	51.57146	0.00	0.000	17681.70	0.00000
5574866.6	-100.00	24880672.45	44.17861	0.00	0.000	22602.21	0.00000
5575601.3	-80.00	13189822.49	35.89415	0.00	0.000	26866.30	0.00000
5576040.7	-60.00	6590560.20	27.17244	0.00	0.000	30331.76	0.00000
5576345.9	-40.00	2842490.82	18.21669	0.00	0.000	32887.75	0.00000
5576587.7	-20.00	901874.34	9.13613	.36	.003	34453.93	.00014
5576610.0	-18.00	785865.33	8.22410	.53	.006	34553.95	.00029
5576632.1	-16.00	682731.08	7.31160	.79	.014	34643.52	.00063
5576653.9	-14.00	592246.73	6.39869	1.16	.030	34722.62	.00135
5576675.6	-12.00	514216.10	5.48543	1.78	.070	34791.23	.00315
5576697.1	-10.00	448470.85	4.57189	3.21	.228	34849.31	.01017
5576718.6	-8.00	394869.75	3.65814	7.43	1.215	34896.87	.05415
5576739.9	-6.00	353298.06	2.74431	18.38	7.403	34933.86	.32950
5576761.1	-4.00	323667.05	1.83062	39.13	33.488	34960.30	1.48927
5576782.2	-2.00	305913.62	.91802	64.24	90.139	34976.16	4.00681
5576800.6	0.00	300000.00	.08103	76.35	127.233	34981.45	5.65487
5576819.1	2.00	305913.62	.91802	64.24	90.139	34976.16	4.00681
5576840.2	4.00	323667.05	1.83062	39.13	33.488	34960.30	1.48927
5576861.4	6.00	353298.06	2.74431	18.38	7.403	34933.86	.32950
5576882.7	8.00	394869.75	3.65814	7.43	1.215	34896.87	.05415
5576904.1	10.00	448470.85	4.57189	3.21	.228	34849.31	.01017
5576925.7	12.00	514216.10	5.48543	1.78	.070	34791.23	.00315
5576947.4	14.00	592246.73	6.39869	1.16	.030	34722.62	.00135
5576969.2	16.00	682731.08	7.31160	.79	.014	34643.52	.00063
5576991.3	18.00	785865.33	8.22410	.53	.006	34553.95	.00029
5577013.5	20.00	901874.34	9.13613	.36	.003	34453.93	.00014
5577255.3	40.00	2842490.82	18.21669	0.00	0.000	32887.75	0.00000
5577560.6	60.00	6590560.20	27.17244	0.00	0.000	30331.76	0.00000
5578000.0	80.00	13189822.49	35.89415	0.00	0.000	26866.30	0.00000
5578734.7	100.00	24880672.45	44.17861	0.00	0.000	22602.21	0.00000
5580201.9	120.00	46637096.50	51.57146	0.00	0.000	17681.70	0.00000
5583789.7	140.00	89326012.99	56.77295	0.00	0.000	12290.42	0.00000
5594061.1	160.00	166706344.34	54.11839	0.00	0.000	6751.68	0.00000
5618112.3	180.00	227182952.70	.08103	0.00	0.000	2992.66	0.00000

REVOLUTION 20

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
5618112.3	-180.00	211924463.84	.08103	0.00	0.000	3180.57	0.00000
5639578.1	-160.00	158101897.16	52.66237	0.00	0.000	6820.60	0.00000
5649136.1	-140.00	86562194.09	55.93958	0.00	0.000	12302.16	0.00000
5652594.6	-120.00	45744827.49	51.02786	0.00	0.000	17661.85	0.00000
5654035.7	-100.00	24557763.28	43.80002	0.00	0.000	22559.76	0.00000
5654764.4	-80.00	13063285.29	35.62610	0.00	0.000	26806.50	0.00000
5655202.5	-60.00	6540657.56	26.98747	0.00	0.000	30258.72	0.00000
5655507.8	-40.00	2825049.88	18.09991	0.00	0.000	32805.30	0.00000
5655750.0	-20.00	898080.59	9.07951	.36	.003	34365.83	.00014
5655772.3	-18.00	782818.99	8.17324	.53	.007	34465.50	.00030
5655794.4	-16.00	680342.71	7.26646	.79	.014	34554.75	.00063
5655816.3	-14.00	590430.60	6.35925	1.16	.030	34633.57	.00136
5655838.1	-12.00	512889.68	5.45167	1.78	.071	34701.93	.00319
5655859.7	-10.00	447554.32	4.54379	3.22	.231	34759.81	.01034
5655881.1	-8.00	394285.56	3.63569	7.46	1.235	34807.19	.05516
5655902.5	-6.00	352970.50	2.72749	18.36	7.458	34844.06	.33279
5655923.8	-4.00	323521.80	1.81942	38.96	33.490	34870.40	1.49318
5655944.9	-2.00	305877.36	.91244	63.79	89.634	34886.21	3.99465
5655963.5	0.00	300000.00	.08103	75.73	126.254	34891.48	5.62582
5655982.1	2.00	305877.36	.91244	63.79	89.634	34886.21	3.99465
5656003.3	4.00	323521.80	1.81942	38.96	33.490	34870.40	1.49318
5656024.6	6.00	352970.50	2.72749	18.36	7.458	34844.06	.33279
5656045.9	8.00	394285.56	3.63569	7.46	1.235	34807.19	.05516
5656067.4	10.00	447554.32	4.54379	3.22	.231	34759.81	.01034
5656089.0	12.00	512889.68	5.45167	1.78	.071	34701.93	.00319
5656110.7	14.00	590430.60	6.35925	1.16	.030	34633.57	.00136
5656132.6	16.00	680342.71	7.26646	.79	.014	34554.75	.00063
5656154.7	18.00	782818.99	8.17324	.53	.007	34465.50	.00030
5656177.0	20.00	898080.59	9.07951	.36	.003	34365.83	.00014
5656419.3	40.00	2825049.88	18.09991	0.00	0.000	32805.30	0.00000
5656724.6	60.00	6540657.56	26.98747	0.00	0.000	30258.72	0.00000
5657162.6	80.00	13063285.29	35.62610	0.00	0.000	26806.50	0.00000
5657891.3	100.00	24557763.28	43.80002	0.00	0.000	22559.76	0.00000
5659332.4	120.00	45744827.49	51.02786	0.00	0.000	17661.85	0.00000
5662790.9	140.00	86562194.09	55.93958	0.00	0.000	12302.16	0.00000
5672349.0	160.00	158101897.16	52.66237	0.00	0.000	6820.60	0.00000
5693814.8	180.00	211924463.84	.08103	0.00	0.000	3180.57	0.00000

REVOLUTION 21

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
5693814.8	-180.00	197937101.68	.08103	0.00	0.000	3374.84	0.00000
5713019.5	-160.00	149958383.55	51.18878	0.00	0.000	6896.43	0.00000
5721915.6	-140.00	83833158.21	55.07994	0.00	0.000	12317.12	0.00000
5725247.5	-120.00	44842224.89	50.46468	0.00	0.000	17643.12	0.00000
5726662.3	-100.00	24226988.54	43.40716	0.00	0.000	22517.08	0.00000
5727384.9	-80.00	12932780.07	35.34775	0.00	0.000	26745.47	0.00000
5727821.6	-60.00	6488990.75	26.79533	0.00	0.000	30183.77	0.00000
5728126.9	-40.00	2806952.57	17.97856	0.00	0.000	32720.45	0.00000
5728369.6	-20.00	894139.57	9.02067	.36	.003	34275.04	.00014
5728392.0	-18.00	779654.16	8.12038	.54	.007	34374.33	.00030
5728414.1	-16.00	677861.30	7.21957	.79	.014	34463.25	.00064
5728436.1	-14.00	588543.63	6.31828	1.16	.031	34541.77	.00138
5728457.9	-12.00	511511.45	5.41660	1.78	.072	34609.87	.00323
5728479.5	-10.00	446601.96	4.51459	3.23	.235	34667.53	.01052
5728501.1	-8.00	393678.52	3.61236	7.49	1.256	34714.73	.05623
5728522.5	-6.00	352630.12	2.71000	18.35	7.516	34751.46	.33625
5728543.8	-4.00	323370.86	1.80777	38.79	33.493	34777.70	1.49730
5728565.0	-2.00	305839.67	.90664	63.33	89.116	34793.45	3.98217
5728583.7	0.00	300000.00	.08103	75.10	125.249	34798.70	5.59594
5728602.4	2.00	305839.67	.90664	63.33	89.116	34793.45	3.98217
5728623.7	4.00	323370.86	1.80777	38.79	33.493	34777.70	1.49730
5728645.0	6.00	352630.12	2.71000	18.35	7.516	34751.46	.33625
5728666.4	8.00	393678.52	3.61236	7.49	1.256	34714.73	.05623
5728688.0	10.00	446601.96	4.51459	3.23	.235	34667.53	.01052
5728709.6	12.00	511511.45	5.41660	1.78	.072	34609.87	.00323
5728731.4	14.00	588543.63	6.31828	1.16	.031	34541.77	.00138
5728753.4	16.00	677861.30	7.21957	.79	.014	34463.25	.00064
5728775.5	18.00	779654.16	8.12038	.54	.007	34374.33	.00030
5728797.9	20.00	894139.57	9.02067	.36	.003	34275.04	.00014
5729040.5	40.00	2806952.57	17.97856	0.00	0.000	32720.45	0.00000
5729345.9	60.00	6488990.75	26.79533	0.00	0.000	30183.77	0.00000
5729782.6	80.00	12932780.07	35.34775	0.00	0.000	26745.47	0.00000
5730505.2	100.00	24226988.54	43.40716	0.00	0.000	22517.08	0.00000
5731920.0	120.00	44842224.89	50.46468	0.00	0.000	17643.12	0.00000
5735251.9	140.00	83833158.21	55.07994	0.00	0.000	12317.12	0.00000
5744148.0	160.00	149958383.55	51.18878	0.00	0.000	6896.43	0.00000
5763352.7	180.00	197937101.68	.08103	0.00	0.000	3374.84	0.00000

REVOLUTION 22

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
5763352.7	-180.00	185081634.22	.08103	0.00	0.000	3575.59	0.00000
5780573.6	-160.00	142247797.55	49.70089	0.00	0.000	6979.51	0.00000
5788855.5	-140.00	81141126.20	54.19414	0.00	0.000	12335.57	0.00000
5792063.7	-120.00	43930093.54	49.88159	0.00	0.000	17625.69	0.00000
5793452.0	-100.00	23888425.41	42.99971	0.00	0.000	22474.27	0.00000
5794168.3	-80.00	12798263.98	35.05883	0.00	0.000	26683.29	0.00000
5794603.7	-60.00	6435522.99	26.59580	0.00	0.000	30106.90	0.00000
5794909.0	-40.00	2788181.65	17.85252	0.00	0.000	32633.18	0.00000
5795152.1	-20.00	890047.00	8.95955	.37	.003	34181.53	.00014
5795174.5	-18.00	776367.42	8.06548	.54	.007	34280.42	.00031
5795196.7	-16.00	675284.14	7.17085	.79	.014	34368.98	.00065
5795218.8	-14.00	586583.72	6.27571	1.16	.031	34447.19	.00140
5795240.6	-12.00	510079.89	5.38016	1.79	.073	34515.03	.00328
5795262.3	-10.00	445612.71	4.48426	3.24	.238	34572.46	.01072
5795283.9	-8.00	393047.95	3.58812	7.52	1.277	34619.47	.05736
5795305.4	-6.00	352276.53	2.69184	18.35	7.576	34656.05	.33990
5795326.8	-4.00	323214.06	1.79568	38.62	33.497	34682.19	1.50163
5795348.1	-2.00	305800.53	.90061	62.85	88.585	34697.88	3.96935
5795366.9	0.00	300000.00	.08103	74.45	124.220	34703.11	5.56524
5795385.7	2.00	305800.53	.90061	62.85	88.585	34697.88	3.96935
5795407.0	4.00	323214.06	1.79568	38.62	33.497	34682.19	1.50163
5795428.4	6.00	352276.53	2.69184	18.35	7.576	34656.05	.33990
5795449.9	8.00	393047.95	3.58812	7.52	1.277	34619.47	.05736
5795471.5	10.00	445612.71	4.48426	3.24	.238	34572.46	.01072
5795493.2	12.00	510079.89	5.38016	1.79	.073	34515.03	.00328
5795515.0	14.00	586583.72	6.27571	1.16	.031	34447.19	.00140
5795537.0	16.00	675284.14	7.17085	.79	.014	34368.98	.00065
5795559.2	18.00	776367.42	8.06548	.54	.007	34280.42	.00031
5795581.7	20.00	890047.00	8.95955	.37	.003	34181.53	.00014
5795824.8	40.00	2788181.65	17.85252	0.00	0.000	32633.18	0.00000
5796130.1	60.00	6435522.99	26.59580	0.00	0.000	30106.90	0.00000
5796565.5	80.00	12798263.98	35.05883	0.00	0.000	26683.29	0.00000
5797281.7	100.00	23888425.41	42.99971	0.00	0.000	22474.27	0.00000
5798670.1	120.00	43930093.54	49.88159	0.00	0.000	17625.69	0.00000
5801878.2	140.00	81141126.20	54.19414	0.00	0.000	12335.57	0.00000
5810160.1	160.00	142247797.55	49.70089	0.00	0.000	6979.51	0.00000
5827381.0	180.00	185081634.22	.08103	0.00	0.000	3575.59	0.00000

REVOLUTION 23

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
5827381.0	-180.00	173237493.94	.08103	0.00	0.000	3782.94	0.00000
5842856.0	-160.00	134943687.35	48.20205	0.00	0.000	7070.19	0.00000
5850567.9	-140.00	78488008.87	53.28235	0.00	0.000	12357.81	0.00000
5853655.2	-120.00	43009215.62	49.27826	0.00	0.000	17609.76	0.00000
5855017.0	-100.00	23542149.02	42.57731	0.00	0.000	22431.42	0.00000
5855726.8	-80.00	12659691.21	34.75904	0.00	0.000	26620.00	0.00000
5856160.7	-60.00	6380215.22	26.38867	0.00	0.000	30028.14	0.00000
5856466.1	-40.00	2768718.82	17.72165	0.00	0.000	32543.47	0.00000
5856709.6	-20.00	885798.36	8.89608	.37	.003	34085.27	.00015
5856732.1	-18.00	772955.08	8.00846	.54	.007	34183.74	.00031
5856754.4	-16.00	672608.31	7.12025	.79	.015	34271.93	.00066
5856776.5	-14.00	584548.67	6.23151	1.16	.031	34349.82	.00142
5856798.4	-12.00	508593.37	5.34232	1.79	.074	34417.36	.00333
5856820.1	-10.00	444585.43	4.45277	3.25	.242	34474.55	.01092
5856841.8	-8.00	392393.11	3.56294	7.55	1.300	34521.37	.05857
5856863.3	-6.00	351909.32	2.67297	18.34	7.640	34557.80	.34374
5856884.8	-4.00	323051.22	1.78312	38.45	33.504	34583.83	1.50619
5856906.1	-2.00	305759.87	.89435	62.37	88.042	34599.45	3.95622
5856925.1	0.00	300000.00	.08103	73.79	123.166	34604.66	5.53371
5856944.0	2.00	305759.87	.89435	62.37	88.042	34599.45	3.95622
5856965.4	4.00	323051.22	1.78312	38.45	33.504	34583.83	1.50619
5856986.9	6.00	351909.32	2.67297	18.34	7.640	34557.80	.34374
5857008.4	8.00	392393.11	3.56294	7.55	1.300	34521.37	.05857
5857030.0	10.00	444585.43	4.45277	3.25	.242	34474.55	.01092
5857051.8	12.00	508593.37	5.34232	1.79	.074	34417.36	.00333
5857073.7	14.00	584548.67	6.23151	1.16	.031	34349.82	.00142
5857095.8	16.00	672608.31	7.12025	.79	.015	34271.93	.00066
5857118.0	18.00	772955.08	8.00846	.54	.007	34183.74	.00031
5857140.5	20.00	885798.36	8.89608	.37	.003	34085.27	.00015
5857384.1	40.00	2768718.82	17.72165	0.00	0.000	32543.47	0.00000
5857689.5	60.00	6380215.22	26.38867	0.00	0.000	30028.14	0.00000
5858123.4	80.00	12659691.21	34.75904	0.00	0.000	26620.00	0.00000
5858833.2	100.00	23542149.02	42.57731	0.00	0.000	22431.42	0.00000
5860195.0	120.00	43009215.62	49.27826	0.00	0.000	17609.76	0.00000
5863282.3	140.00	78488008.87	53.28235	0.00	0.000	12357.81	0.00000
5870994.1	160.00	134943687.35	48.20205	0.00	0.000	7070.19	0.00000
5886469.1	180.00	173237493.94	.08103	0.00	0.000	3782.94	0.00000

REVOLUTION 24

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
5886469.1	-180.00	162299833.75	.08103	0.00	0.000	3997.03	0.00000
5900403.1	-160.00	128021130.50	46.69564	0.00	0.000	7168.81	0.00000
5907585.9	-140.00	75875427.46	52.34478	0.00	0.000	12384.14	0.00000
5910555.3	-120.00	42080349.55	48.65438	0.00	0.000	17595.51	0.00000
5911890.3	-100.00	23188232.12	42.13960	0.00	0.000	22388.67	0.00000
5912593.6	-80.00	12517012.76	34.44808	0.00	0.000	26555.66	0.00000
5913026.0	-60.00	6323025.97	26.17371	0.00	0.000	29947.51	0.00000
5913331.4	-40.00	2748544.59	17.58579	0.00	0.000	32451.32	0.00000
5913575.4	-20.00	881388.81	8.83018	.37	.003	33986.23	.00015
5913598.0	-18.00	769413.22	7.94927	.54	.007	34084.26	.00032
5913620.3	-16.00	669830.74	7.06772	.79	.015	34172.07	.00067
5913642.5	-14.00	582436.12	6.18561	1.16	.032	34249.60	.00144
5913664.4	-12.00	507050.15	5.30303	1.79	.075	34316.85	.00338
5913686.2	-10.00	443518.93	4.42006	3.26	.246	34373.79	.01114
5913707.9	-8.00	391713.24	3.53680	7.59	1.325	34420.40	.05985
5913729.6	-6.00	351528.07	2.65339	18.33	7.708	34456.67	.34778
5913751.1	-4.00	322882.15	1.77007	38.26	33.512	34482.59	1.51099
5913772.5	-2.00	305717.66	.88785	61.87	87.485	34498.14	3.94276
5913791.6	0.00	300000.00	.08103	73.11	122.087	34503.32	5.50134
5913810.6	2.00	305717.66	.88785	61.87	87.485	34498.14	3.94276
5913832.1	4.00	322882.15	1.77007	38.26	33.512	34482.59	1.51099
5913853.6	6.00	351528.07	2.65339	18.33	7.708	34456.67	.34778
5913875.2	8.00	391713.24	3.53680	7.59	1.325	34420.40	.05985
5913896.9	10.00	443518.93	4.42006	3.26	.246	34373.79	.01114
5913918.7	12.00	507050.15	5.30303	1.79	.075	34316.85	.00338
5913940.7	14.00	582436.12	6.18561	1.16	.032	34249.60	.00144
5913962.8	16.00	669830.74	7.06772	.79	.015	34172.07	.00067
5913985.1	18.00	769413.22	7.94927	.54	.007	34084.26	.00032
5914007.7	20.00	881388.81	8.83018	.37	.003	33986.23	.00015
5914251.7	40.00	2748544.59	17.58579	0.00	0.000	32451.32	0.00000
5914557.1	60.00	6323025.97	26.17371	0.00	0.000	29947.51	0.00000
5914989.6	80.00	12517012.76	34.44808	0.00	0.000	26555.66	0.00000
5915692.8	100.00	23188232.12	42.13960	0.00	0.000	22388.67	0.00000
5917027.8	120.00	42080349.55	48.65438	0.00	0.000	17595.51	0.00000
5919997.2	140.00	75875427.46	52.34478	0.00	0.000	12384.14	0.00000
5927180.0	160.00	128021130.50	46.69564	0.00	0.000	7168.81	0.00000
5941114.0	180.00	162299833.75	.08103	0.00	0.000	3997.03	0.00000

REVOLUTION 25

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
5941114.0	-180.00	152177113.40	.08103	0.00	0.000	4217.98	0.00000
5953084.2	-160.00	121456692.04	45.18504	0.00	0.000	7275.69	0.00000
5960375.7	-140.00	73304733.72	51.38174	0.00	0.000	12414.89	0.00000
5963230.3	-120.00	41144228.85	48.00960	0.00	0.000	17583.16	0.00000
5964538.4	-100.00	22826744.78	41.68618	0.00	0.000	22346.13	0.00000
5965234.9	-80.00	12370176.28	34.12562	0.00	0.000	26490.32	0.00000
5965665.9	-60.00	6263911.17	25.95067	0.00	0.000	29865.02	0.00000
5965971.3	-40.00	2727638.21	17.44479	0.00	0.000	32356.72	0.00000
5966215.8	-20.00	876813.17	8.76177	.37	.003	33884.38	.00015
5966238.4	-18.00	765737.67	7.88782	.54	.007	33981.96	.00032
5966260.8	-16.00	666948.12	7.01319	.79	.015	34069.35	.00068
5966283.0	-14.00	580243.53	6.13797	1.16	.032	34146.52	.00146
5966305.0	-12.00	505448.38	5.26225	1.79	.076	34213.46	.00344
5966326.9	-10.00	442411.91	4.38611	3.27	.251	34270.13	.01137
5966348.7	-8.00	391007.53	3.50967	7.62	1.351	34316.53	.06120
5966370.3	-6.00	351132.31	2.63306	18.32	7.778	34352.63	.35204
5966391.9	-4.00	322706.64	1.75653	38.08	33.522	34378.42	1.51604
5966413.4	-2.00	305673.84	.88110	61.36	86.916	34393.90	3.92898
5966432.6	0.00	300000.00	.08103	72.41	120.983	34399.06	5.46815
5966451.8	2.00	305673.84	.88110	61.36	86.916	34393.90	3.92898
5966473.3	4.00	322706.64	1.75653	38.08	33.522	34378.42	1.51604
5966494.9	6.00	351132.31	2.63306	18.32	7.778	34352.63	.35204
5966516.6	8.00	391007.53	3.50967	7.62	1.351	34316.53	.06120
5966538.3	10.00	442411.91	4.38611	3.27	.251	34270.13	.01137
5966560.2	12.00	505448.38	5.26225	1.79	.076	34213.46	.00344
5966582.2	14.00	580243.53	6.13797	1.16	.032	34146.52	.00146
5966604.4	16.00	666948.12	7.01319	.79	.015	34069.35	.00068
5966626.8	18.00	765737.67	7.88782	.54	.007	33981.96	.00032
5966649.4	20.00	876813.17	8.76177	.37	.003	33884.38	.00015
5966894.0	40.00	2727638.21	17.44479	0.00	0.000	32356.72	0.00000
5967199.3	60.00	6263911.17	25.95067	0.00	0.000	29865.02	0.00000
5967630.3	80.00	12370176.28	34.12562	0.00	0.000	26490.32	0.00000
5968326.8	100.00	22826744.78	41.68618	0.00	0.000	22346.13	0.00000
5969635.0	120.00	41144228.85	48.00960	0.00	0.000	17583.16	0.00000
5972489.5	140.00	73304733.72	51.38174	0.00	0.000	12414.89	0.00000
5979181.1	160.00	121456692.04	45.18504	0.00	0.000	7275.69	0.00000
5991751.2	180.00	152177113.40	.08103	0.00	0.000	4217.98	0.00000

REVOLUTION 26

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
5991751.2	-180.00	142789109.11	.08103	0.00	0.000	4445.95	0.00000
6003111.2	-160.00	115228370.65	43.67360	0.00	0.000	7391.15	0.00000
6009346.5	-140.00	70777029.48	50.39356	0.00	0.000	12450.38	0.00000
6012089.2	-120.00	40201561.20	47.34360	0.00	0.000	17572.92	0.00000
6013370.4	-100.00	22457753.99	41.21667	0.00	0.000	22303.93	0.00000
6014060.1	-80.00	12219125.73	33.79132	0.00	0.000	26424.06	0.00000
6014489.5	-60.00	6202823.97	25.71930	0.00	0.000	29780.68	0.00000
6014794.9	-40.00	2705977.56	17.29846	0.00	0.000	32259.64	0.00000
6015039.9	-20.00	872065.94	8.69077	.37	.003	33779.69	.00016
6015062.6	-18.00	761923.97	7.82404	.54	.007	33876.79	.00033
6015085.0	-16.00	663956.93	6.95659	.80	.015	33963.75	.00070
6015107.3	-14.00	577968.22	6.08852	1.17	.032	34040.54	.00148
6015129.4	-12.00	503786.09	5.21992	1.80	.077	34107.15	.00350
6015151.3	-10.00	441263.01	4.35088	3.29	.255	34163.54	.01161
6015173.2	-8.00	390275.08	3.48151	7.66	1.378	34209.71	.06265
6015194.9	-6.00	350721.55	2.61196	18.31	7.853	34245.63	.35654
6015216.6	-4.00	322524.47	1.74248	37.89	33.535	34271.30	1.52136
6015238.1	-2.00	305628.35	.87410	60.84	86.334	34286.70	3.91487
6015257.5	0.00	300000.00	.08103	71.70	119.856	34291.84	5.43411
6015276.8	2.00	305628.35	.87410	60.84	86.334	34286.70	3.91487
6015298.3	4.00	322524.47	1.74248	37.89	33.535	34271.30	1.52136
6015320.0	6.00	350721.55	2.61196	18.31	7.853	34245.63	.35654
6015341.7	8.00	390275.08	3.48151	7.66	1.378	34209.71	.06265
6015363.6	10.00	441263.01	4.35088	3.29	.255	34163.54	.01161
6015385.5	12.00	503786.09	5.21992	1.80	.077	34107.15	.00350
6015407.6	14.00	577968.22	6.08852	1.17	.032	34040.54	.00148
6015429.9	16.00	663956.93	6.95659	.80	.015	33963.75	.00070
6015452.3	18.00	761923.97	7.82404	.54	.007	33876.79	.00033
6015475.0	20.00	872065.94	8.69077	.37	.003	33779.69	.00016
6015720.0	40.00	2705977.56	17.29846	0.00	0.000	32259.64	0.00000
6016025.4	60.00	6202823.97	25.71930	0.00	0.000	29780.68	0.00000
6016454.8	80.00	12219125.73	33.79132	0.00	0.000	26424.06	0.00000
6017144.5	100.00	22457753.99	41.21667	0.00	0.000	22303.93	0.00000
6018425.7	120.00	40201561.20	47.34360	0.00	0.000	17572.92	0.00000
6021168.4	140.00	70777029.48	50.39356	0.00	0.000	12450.38	0.00000
6027403.7	160.00	115228370.65	43.67360	0.00	0.000	7391.15	0.00000
6038763.7	180.00	142789109.11	.08103	0.00	0.000	4445.95	0.00000

REVOLUTION 27

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
6038763.7	-180.00	134065263.53	.08103	0.00	0.000	4681.10	0.00000
6049047.1	-160.00	109315536.74	42.16463	0.00	0.000	7515.52	0.00000
6054858.6	-140.00	68293185.58	49.38067	0.00	0.000	12490.96	0.00000
6057492.6	-120.00	39253027.43	46.65606	0.00	0.000	17565.03	0.00000
6058746.8	-100.00	22081323.31	40.73065	0.00	0.000	22262.22	0.00000
6059429.4	-80.00	12063801.20	33.44481	0.00	0.000	26356.95	0.00000
6059857.2	-60.00	6139714.52	25.47932	0.00	0.000	29694.53	0.00000
6060162.6	-40.00	2683539.08	17.14664	0.00	0.000	32160.08	0.00000
6060408.2	-20.00	867141.24	8.61709	.38	.003	33672.12	.00016
6060430.9	-18.00	757967.37	7.75785	.55	.007	33768.72	.00034
6060453.4	-16.00	660853.42	6.89785	.80	.015	33855.22	.00071
6060475.8	-14.00	575607.30	6.03720	1.17	.033	33931.62	.00151
6060497.9	-12.00	502061.16	5.17598	1.80	.078	33997.88	.00356
6060520.0	-10.00	440070.76	4.31431	3.30	.260	34053.98	.01187
6060541.9	-8.00	389514.97	3.45228	7.70	1.407	34099.91	.06415
6060563.7	-6.00	350295.27	2.59005	18.31	7.932	34135.64	.36127
6060585.4	-4.00	322335.41	1.72790	37.70	33.551	34161.18	1.52697
6060607.0	-2.00	305581.15	.86683	60.31	85.740	34176.50	3.90045
6060626.5	0.00	300000.00	.08103	70.98	118.703	34181.61	5.39923
6060645.9	2.00	305581.15	.86683	60.31	85.740	34176.50	3.90046
6060667.5	4.00	322335.41	1.72790	37.70	33.551	34161.18	1.52697
6060689.3	6.00	350295.27	2.59005	18.31	7.932	34135.64	.36127
6060711.1	8.00	389514.97	3.45228	7.70	1.407	34099.91	.06415
6060733.0	10.00	440070.76	4.31431	3.30	.260	34053.98	.01187
6060755.0	12.00	502061.16	5.17598	1.80	.078	33997.88	.00356
6060777.2	14.00	575607.30	6.03720	1.17	.033	33931.62	.00151
6060799.5	16.00	660853.42	6.89785	.80	.015	33855.22	.00071
6060822.0	18.00	757967.37	7.75785	.55	.007	33768.72	.00034
6060844.7	20.00	867141.24	8.61709	.38	.003	33672.12	.00016
6061090.3	40.00	2683539.08	17.14664	0.00	0.000	32160.08	0.00000
6061395.7	60.00	6139714.52	25.47932	0.00	0.000	29694.53	0.00000
6061823.5	80.00	12063801.20	33.44481	0.00	0.000	26356.95	0.00000
6062506.1	100.00	22081323.31	40.73065	0.00	0.000	22262.22	0.00000
6063760.4	120.00	39253027.43	46.65606	0.00	0.000	17565.03	0.00000
6066394.3	140.00	68293185.58	49.38067	0.00	0.000	12490.96	0.00000
6072205.8	160.00	109315536.74	42.16463	0.00	0.000	7515.52	0.00000
6082489.2	180.00	134065263.53	.08103	0.00	0.000	4681.10	0.00000

REVOLUTION 28

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
6082489.2	-180.00	125943310.62	.08103	0.00	0.000	4923.60	0.00000
6091812.8	-160.00	103698865.54	40.66131	0.00	0.000	7649.10	0.00000
6097230.4	-140.00	65853859.97	48.34356	0.00	0.000	12537.00	0.00000
6099758.7	-120.00	38299280.67	45.94665	0.00	0.000	17559.73	0.00000
6100985.9	-100.00	21697512.35	40.22768	0.00	0.000	22221.13	0.00000
6101661.4	-80.00	11904138.55	33.08572	0.00	0.000	26289.05	0.00000
6102087.6	-60.00	6074529.77	25.23044	0.00	0.000	29606.57	0.00000
6102393.0	-40.00	2660297.62	16.98912	0.00	0.000	32058.02	0.00000
6102639.0	-20.00	862032.78	8.54063	.38	.004	33561.65	.00017
6102661.8	-18.00	753862.76	7.68916	.55	.007	33657.71	.00035
6102684.4	-16.00	657633.57	6.83690	.80	.016	33743.74	.00072
6102706.8	-14.00	573157.71	5.98394	1.17	.033	33819.71	.00153
6102729.1	-12.00	500271.34	5.13039	1.80	.079	33885.61	.00362
6102751.1	-10.00	438833.60	4.27636	3.32	.266	33941.40	.01218
6102773.1	-8.00	388726.19	3.42195	7.74	1.437	33987.08	.06573
6102795.0	-6.00	349852.89	2.56733	18.31	8.019	34022.62	.36644
6102816.8	-4.00	322139.22	1.71276	37.50	33.569	34048.01	1.53287
6102838.5	-2.00	305532.16	.85929	59.77	85.132	34063.25	3.88571
6102858.1	0.00	300000.00	.08103	70.24	117.527	34068.33	5.36351
6102877.6	2.00	305532.16	.85929	59.77	85.132	34063.25	3.88571
6102899.3	4.00	322139.22	1.71276	37.50	33.569	34048.01	1.53287
6102921.1	6.00	349852.89	2.56733	18.31	8.019	34022.62	.36644
6102943.0	8.00	388726.19	3.42195	7.74	1.437	33987.08	.06573
6102965.0	10.00	438833.60	4.27636	3.32	.266	33941.40	.01218
6102987.1	12.00	500271.34	5.13039	1.80	.079	33885.61	.00362
6103009.3	14.00	573157.71	5.98394	1.17	.033	33819.71	.00153
6103031.7	16.00	657633.57	6.83690	.80	.016	33743.74	.00072
6103054.3	18.00	753862.76	7.68916	.55	.007	33657.71	.00035
6103077.1	20.00	862032.78	8.54063	.38	.004	33561.65	.00017
6103323.2	40.00	2660297.62	16.98912	0.00	0.000	32058.02	0.00000
6103628.6	60.00	6074529.77	25.23044	0.00	0.000	29606.57	0.00000
6104054.7	80.00	11904138.55	33.08572	0.00	0.000	26289.05	0.00000
6104730.2	100.00	21697512.35	40.22768	0.00	0.000	22221.13	0.00000
6105957.4	120.00	38299280.67	45.94665	0.00	0.000	17559.73	0.00000
6108485.7	140.00	65853859.97	48.34356	0.00	0.000	12537.00	0.00000
6113903.3	160.00	103698865.54	40.66131	0.00	0.000	7649.10	0.00000
6123226.9	180.00	125943310.62	.08103	0.00	0.000	4923.60	0.00000

REVOLUTION 29

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	R/T
6123226.9	-180.00	118368124.30	.08103	0.00	0.000	5173.62	0.00000
6131692.7	-160.00	98360267.58	39.16669	0.00	0.000	7792.21	0.00000
6136744.2	-140.00	63459515.06	47.28281	0.00	0.000	12588.87	0.00000
6139169.8	-120.00	37340945.41	45.21506	0.00	0.000	17557.29	0.00000
6140370.0	-100.00	21306376.36	39.70731	0.00	0.000	22180.84	0.00000
6141038.2	-80.00	11740069.05	32.71364	0.00	0.000	26220.45	0.00000
6141462.7	-60.00	6007213.20	24.97235	0.00	0.000	29516.83	0.00000
6141768.0	-40.00	2636226.32	16.82570	0.00	0.000	31953.43	0.00000
6142014.7	-20.00	856733.82	8.46128	.38	.004	33448.21	.00017
6142037.5	-18.00	749604.69	7.61788	.55	.008	33543.71	.00035
6142060.2	-16.00	654293.07	6.77364	.80	.016	33629.24	.00074
6142082.7	-14.00	570616.16	5.92867	1.17	.034	33704.78	.00156
6142105.0	-12.00	498414.20	5.08308	1.81	.080	33770.29	.00370
6142127.1	-10.00	437549.84	4.23697	3.34	.272	33825.76	.01251
6142149.2	-8.00	387907.67	3.39048	7.78	1.468	33871.17	.06741
6142171.1	-6.00	349393.81	2.54374	18.32	8.118	33906.51	.37224
6142193.0	-4.00	321935.61	1.69705	37.30	33.590	33931.75	1.53910
6142214.8	-2.00	305481.32	.85147	59.22	84.513	33946.90	3.87065
6142234.5	0.00	300000.00	.08103	69.49	116.327	33951.95	5.32693
6142254.1	2.00	305481.32	.85147	59.22	84.513	33946.90	3.87065
6142275.9	4.00	321935.61	1.69705	37.30	33.590	33931.75	1.53910
6142297.8	6.00	349393.81	2.54374	18.32	8.118	33906.51	.37224
6142319.8	8.00	387907.67	3.39048	7.78	1.468	33871.17	.06741
6142341.8	10.00	437549.84	4.23697	3.34	.272	33825.76	.01251
6142364.0	12.00	498414.20	5.08308	1.81	.080	33770.29	.00370
6142386.3	14.00	570616.16	5.92867	1.17	.034	33704.78	.00156
6142408.7	16.00	654293.07	6.77364	.80	.016	33629.24	.00074
6142431.4	18.00	749604.69	7.61788	.55	.008	33543.71	.00035
6142454.3	20.00	856733.82	8.46128	.38	.004	33448.21	.00017
6142700.9	40.00	2636226.32	16.82570	0.00	0.000	31953.43	0.00000
6143006.3	60.00	6007213.20	24.97235	0.00	0.000	29516.83	0.00000
6143430.7	80.00	11740069.05	32.71364	0.00	0.000	26220.45	0.00000
6144099.0	100.00	21306376.36	39.70731	0.00	0.000	22180.84	0.00000
6145299.2	120.00	37340945.41	45.21506	0.00	0.000	17557.29	0.00000
6147724.7	140.00	63459515.06	47.28281	0.00	0.000	12588.87	0.00000
6152776.3	160.00	98360267.58	39.16669	0.00	0.000	7792.21	0.00000
6161242.0	180.00	118368124.30	.08103	0.00	0.000	5173.62	0.00000

REVOLUTION 30

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
6161242.0	-180.00	111290749.73	.08103	0.00	0.000	5431.37	0.00000
6168939.6	-160.00	93282818.28	37.68368	0.00	0.000	7945.14	0.00000
6173650.7	-140.00	61110434.06	46.19907	0.00	0.000	12646.96	0.00000
6175976.6	-120.00	36378616.77	44.46098	0.00	0.000	17558.00	0.00000
6177149.8	-100.00	20907965.59	39.16906	0.00	0.000	22141.50	0.00000
6177810.7	-80.00	11571519.02	32.32813	0.00	0.000	26151.23	0.00000
6178233.3	-60.00	5937704.50	24.70472	0.00	0.000	29425.33	0.00000
6178538.7	-40.00	2611296.45	16.65615	0.00	0.000	31846.31	0.00000
6178785.9	-20.00	851237.17	8.37895	.38	.004	33331.78	.00018
6178808.8	-18.00	745187.35	7.54391	.55	.008	33426.70	.00036
6178831.6	-16.00	650827.31	6.70799	.80	.016	33511.70	.00075
6178854.1	-14.00	567979.11	5.87132	1.17	.034	33586.77	.00159
6178876.5	-12.00	496487.16	5.03398	1.82	.082	33651.88	.00378
6178898.7	-10.00	436217.68	4.19610	3.36	.279	33707.01	.01287
6178920.8	-8.00	387058.25	3.35781	7.82	1.502	33752.14	.06920
6178942.9	-6.00	348917.39	2.51926	18.33	8.223	33787.26	.37838
6178964.8	-4.00	321724.30	1.68075	37.10	33.615	33812.35	1.54566
6178986.7	-2.00	305428.56	.84335	58.65	83.881	33827.41	3.85527
6179006.5	0.00	300000.00	.08103	68.72	115.103	33832.43	5.28949
6179026.3	2.00	305428.56	.84335	58.65	83.881	33827.41	3.85527
6179048.2	4.00	321724.30	1.68075	37.10	33.615	33812.35	1.54566
6179070.1	6.00	348917.39	2.51926	18.33	8.223	33787.26	.37838
6179092.2	8.00	387058.25	3.35781	7.82	1.502	33752.14	.06920
6179114.3	10.00	436217.68	4.19610	3.36	.279	33707.01	.01287
6179136.5	12.00	496487.16	5.03398	1.82	.082	33651.88	.00378
6179158.9	14.00	567979.11	5.87132	1.17	.034	33586.77	.00159
6179181.4	16.00	650827.31	6.70799	.80	.016	33511.70	.00075
6179204.2	18.00	745187.35	7.54391	.55	.008	33426.70	.00036
6179227.1	20.00	851237.17	8.37895	.38	.004	33331.78	.00018
6179474.3	40.00	2611296.45	16.65615	0.00	0.000	31846.31	0.00000
6179779.7	60.00	5937704.50	24.70472	0.00	0.000	29425.33	0.00000
6180202.3	80.00	11571519.02	32.32813	0.00	0.000	26151.23	0.00000
6180863.2	100.00	20907965.59	39.16906	0.00	0.000	22141.50	0.00000
6182036.4	120.00	36378616.77	44.46098	0.00	0.000	17558.00	0.00000
6184362.3	140.00	61110434.06	46.19907	0.00	0.000	12646.96	0.00000
6189073.4	160.00	93282818.28	37.68368	0.00	0.000	7945.14	0.00000
6196771.0	180.00	111290749.73	.08103	0.00	0.000	5431.37	0.00000

REVOLUTION 31

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
6196771.0	-180.00	104667584.97	.08103	0.00	0.000	5697.06	0.00000
6203779.2	-160.00	88450688.00	36.21499	0.00	0.000	8108.19	0.00000
6208173.4	-140.00	58806736.37	45.09305	0.00	0.000	12711.68	0.00000
6210402.8	-120.00	35412859.56	43.68412	0.00	0.000	17562.13	0.00000
6211549.0	-100.00	20502324.74	38.61246	0.00	0.000	22103.31	0.00000
6212202.4	-80.00	11398409.35	31.92875	0.00	0.000	26081.49	0.00000
6212623.2	-60.00	5865939.30	24.42718	0.00	0.000	29332.10	0.00000
6212928.5	-40.00	2585477.28	16.48024	0.00	0.000	31736.63	0.00000
6213176.3	-20.00	845535.08	8.29349	.39	.004	33212.31	.00018
6213199.3	-18.00	740604.45	7.46714	.56	.008	33306.60	.00037
6213222.1	-16.00	647231.35	6.63987	.81	.017	33391.05	.00077
6213244.8	-14.00	565242.78	5.81179	1.18	.035	33465.64	.00162
6213267.2	-12.00	494487.44	4.98302	1.82	.084	33530.32	.00387
6213289.5	-10.00	434835.21	4.15368	3.39	.286	33585.09	.01325
6213311.7	-8.00	386176.71	3.32390	7.87	1.538	33629.93	.07111
6213333.8	-6.00	348422.94	2.49385	18.34	8.334	33664.82	.38488
6213355.9	-4.00	321504.99	1.66383	36.90	33.643	33689.75	1.55258
6213377.8	-2.00	305373.80	.83492	58.08	83.236	33704.71	3.83957
6213397.7	0.00	300000.00	.08103	67.94	113.855	33709.70	5.25118
6213417.7	2.00	305373.80	.83492	58.08	83.236	33704.71	3.83957
6213439.6	4.00	321504.99	1.66383	36.90	33.643	33689.75	1.55258
6213461.6	6.00	348422.94	2.49385	18.34	8.334	33664.82	.38488
6213483.8	8.00	386176.71	3.32390	7.87	1.538	33629.93	.07111
6213506.0	10.00	434835.21	4.15368	3.39	.286	33585.09	.01325
6213528.3	12.00	494487.44	4.98302	1.82	.084	33530.32	.00387
6213550.7	14.00	565242.78	5.81179	1.18	.035	33465.64	.00162
6213573.3	16.00	647231.35	6.63987	.81	.017	33391.05	.00077
6213596.1	18.00	740604.45	7.46714	.56	.008	33306.60	.00037
6213619.2	20.00	845535.08	8.29349	.39	.004	33212.31	.00018
6213866.9	40.00	2585477.28	16.48024	0.00	0.000	31736.63	0.00000
6214172.3	60.00	5865939.30	24.42718	0.00	0.000	29332.10	0.00000
6214593.1	80.00	11398409.35	31.92875	0.00	0.000	26081.49	0.00000
6215246.5	100.00	20502324.74	38.61246	0.00	0.000	22103.31	0.00000
6216392.7	120.00	35412859.56	43.68412	0.00	0.000	17562.13	0.00000
6218622.0	140.00	58806736.37	45.09305	0.00	0.000	12711.68	0.00000
6223016.3	160.00	88450688.00	36.21499	0.00	0.000	8108.19	0.00000
6230024.5	180.00	104667584.97	.08103	0.00	0.000	5697.06	0.00000

REVOLUTION 32

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
6230024.5	-180.00	98459686.52	.08103	0.00	0.000	5970.89	0.00000
6236412.9	-160.00	83849073.47	34.76314	0.00	0.000	8281.66	0.00000
6240512.4	-140.00	56548392.03	43.96557	0.00	0.000	12783.44	0.00000
6242648.1	-120.00	34444207.54	42.88417	0.00	0.000	17570.00	0.00000
6243767.4	-100.00	20089492.24	38.03697	0.00	0.000	22066.44	0.00000
6244413.1	-80.00	11220654.99	31.51502	0.00	0.000	26011.32	0.00000
6244832.0	-60.00	5791848.74	24.13936	0.00	0.000	29237.16	0.00000
6245137.4	-40.00	2558735.84	16.29770	0.00	0.000	31624.36	0.00000
6245385.7	-20.00	839619.26	8.20480	.39	.004	33089.74	.00019
6245408.8	-18.00	735849.28	7.38745	.56	.008	33183.38	.00038
6245431.7	-16.00	643499.87	6.56915	.81	.017	33267.25	.00079
6245454.4	-14.00	562403.10	5.75000	1.18	.035	33341.32	.00165
6245476.9	-12.00	492412.04	4.93012	1.83	.085	33405.56	.00397
6245499.3	-10.00	433400.33	4.10965	3.41	.294	33459.95	.01365
6245521.6	-8.00	385261.71	3.28871	7.91	1.577	33504.48	.07316
6245543.8	-6.00	347909.70	2.46748	18.36	8.451	33539.13	.39177
6245565.9	-4.00	321277.34	1.64627	36.69	33.675	33563.89	1.55989
6245588.0	-2.00	305316.96	.82617	57.49	82.579	33578.75	3.82355
6245608.0	0.00	300000.00	.08103	67.14	112.583	33583.70	5.21200
6245628.0	2.00	305316.96	.82617	57.49	82.579	33578.75	3.82355
6245650.1	4.00	321277.34	1.64627	36.69	33.675	33563.89	1.55989
6245672.2	6.00	347909.70	2.46748	18.36	8.451	33539.13	.39177
6245694.4	8.00	385261.71	3.28871	7.91	1.577	33504.48	.07316
6245716.7	10.00	433400.33	4.10965	3.41	.294	33459.95	.01365
6245739.1	12.00	492412.04	4.93012	1.83	.085	33405.56	.00397
6245761.6	14.00	562403.10	5.75000	1.18	.035	33341.32	.00165
6245784.3	16.00	643499.87	6.56915	.81	.017	33267.25	.00079
6245807.2	18.00	735849.28	7.38745	.56	.008	33183.38	.00038
6245830.3	20.00	839619.26	8.20480	.39	.004	33089.74	.00019
6246078.6	40.00	2558735.84	16.29770	0.00	0.000	31624.36	0.00000
6246384.0	60.00	5791848.74	24.13936	0.00	0.000	29237.16	0.00000
6246802.9	80.00	11220654.99	31.51502	0.00	0.000	26011.32	0.00000
6247448.6	100.00	20089492.24	38.03697	0.00	0.000	22066.44	0.00000
6248567.9	120.00	34444207.54	42.88417	0.00	0.000	17570.00	0.00000
6250703.6	140.00	56548392.03	43.96557	0.00	0.000	12783.44	0.00000
6254803.1	160.00	83849073.47	34.76314	0.00	0.000	8281.66	0.00000
6261191.5	180.00	98459686.52	.08103	0.00	0.000	5970.89	0.00000

REVOLUTION 33

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
6261191.5	-180.00	92632177.75	.08103	0.00	0.000	6253.13	0.00000
6267021.4	-160.00	79464131.33	33.33043	0.00	0.000	8465.84	0.00000
6270846.4	-140.00	54335235.04	42.81751	0.00	0.000	12862.68	0.00000
6272891.5	-120.00	33473162.56	42.06088	0.00	0.000	17581.95	0.00000
6273984.0	-100.00	19669499.47	37.44208	0.00	0.000	22031.12	0.00000
6274621.9	-80.00	11038164.42	31.08641	0.00	0.000	25940.83	0.00000
6275038.9	-60.00	5715359.12	23.84086	0.00	0.000	29140.55	0.00000
6275344.2	-40.00	2531036.75	16.10827	0.00	0.000	31509.49	0.00000
6275593.2	-20.00	833480.75	8.11272	.39	.004	32964.02	.00019
6275616.3	-18.00	730914.60	7.30473	.56	.008	33056.97	.00039
6275639.3	-16.00	639627.16	6.49573	.81	.017	33140.23	.00081
6275662.1	-14.00	559455.69	5.68585	1.18	.036	33213.75	.00169
6275684.7	-12.00	490257.76	4.87521	1.84	.087	33277.53	.00407
6275707.1	-10.00	431910.83	4.06393	3.43	.302	33331.53	.01409
6275729.5	-8.00	384311.82	3.25217	7.97	1.618	33375.73	.07535
6275751.8	-6.00	347376.87	2.44010	18.37	8.576	33410.13	.39907
6275774.0	-4.00	321041.00	1.62804	36.47	33.711	33434.71	1.56760
6275796.1	-2.00	305257.94	.81709	56.89	81.910	33449.46	3.80722
6275816.3	0.00	300000.00	.08103	66.33	111.287	33454.37	5.17193
6275836.5	2.00	305257.94	.81709	56.89	81.910	33449.46	3.80722
6275858.6	4.00	321041.00	1.62804	36.47	33.711	33434.71	1.56760
6275880.8	6.00	347376.87	2.44010	18.37	8.576	33410.13	.39907
6275903.1	8.00	384311.82	3.25217	7.97	1.618	33375.73	.07535
6275925.4	10.00	431910.83	4.06393	3.43	.302	33331.53	.01409
6275947.9	12.00	490257.76	4.87521	1.84	.087	33277.53	.00407
6275970.5	14.00	559455.69	5.68585	1.18	.036	33213.75	.00169
6275993.3	16.00	639627.16	6.49573	.81	.017	33140.23	.00081
6276016.2	18.00	730914.60	7.30473	.56	.008	33056.97	.00039
6276039.4	20.00	833480.75	8.11272	.39	.004	32964.02	.00019
6276288.4	40.00	2531036.75	16.10827	0.00	0.000	31509.49	0.00000
6276593.7	60.00	5715359.12	23.84086	0.00	0.000	29140.55	0.00000
6277010.7	80.00	11038164.42	31.08641	0.00	0.000	25940.83	0.00000
6277648.6	100.00	19669499.47	37.44208	0.00	0.000	22031.12	0.00000
6278741.0	120.00	33473162.56	42.06088	0.00	0.000	17581.95	0.00000
6280786.1	140.00	54335235.04	42.81751	0.00	0.000	12862.68	0.00000
6284611.2	160.00	79464131.33	33.33043	0.00	0.000	8465.84	0.00000
6290441.1	180.00	92632177.75	.08103	0.00	0.000	6253.13	0.00000

REVOLUTION 34

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
6290441.1	-180.00	87153743.04	.08103	0.00	0.000	6544.03	0.00000
6295767.1	-160.00	75282914.20	31.91892	0.00	0.000	8661.04	0.00000
6299336.5	-140.00	52166975.77	41.64981	0.00	0.000	12949.87	0.00000
6301293.8	-120.00	32500193.63	41.21397	0.00	0.000	17598.33	0.00000
6302359.5	-100.00	19242369.89	36.82722	0.00	0.000	21997.56	0.00000
6302989.5	-80.00	10850838.91	30.64239	0.00	0.000	25870.13	0.00000
6303404.5	-60.00	5636391.36	23.53124	0.00	0.000	29042.30	0.00000
6303709.7	-40.00	2502341.96	15.91165	0.00	0.000	31391.99	0.00000
6303959.4	-20.00	827109.95	8.01711	.40	.004	32835.08	.00020
6303982.6	-18.00	725792.60	7.21884	.57	.009	32927.32	.00041
6304005.6	-16.00	635607.05	6.41950	.82	.018	33009.93	.00083
6304028.5	-14.00	556395.84	5.61924	1.19	.037	33082.88	.00173
6304051.2	-12.00	488021.13	4.81818	1.85	.089	33146.16	.00420
6304073.8	-10.00	430364.28	4.01646	3.46	.311	33199.74	.01456
6304096.2	-8.00	383325.52	3.21423	8.02	1.661	33243.61	.07770
6304118.6	-6.00	346823.59	2.41167	18.39	8.708	33277.74	.40682
6304140.9	-4.00	320795.58	1.60911	36.26	33.752	33302.13	1.57574
6304163.1	-2.00	305196.66	.80767	56.29	81.228	33316.77	3.79057
6304183.4	0.00	300000.00	.08103	65.51	109.968	33321.64	5.13098
6304203.7	2.00	305196.66	.80767	56.29	81.228	33316.77	3.79057
6304225.9	4.00	320795.58	1.60911	36.26	33.752	33302.13	1.57574
6304248.2	6.00	346823.59	2.41167	18.39	8.708	33277.74	.40682
6304270.5	8.00	383325.52	3.21423	8.02	1.661	33243.61	.07770
6304293.0	10.00	430364.28	4.01646	3.46	.311	33199.74	.01456
6304315.6	12.00	488021.13	4.81818	1.85	.089	33146.16	.00420
6304338.3	14.00	556395.84	5.61924	1.19	.037	33082.88	.00173
6304361.1	16.00	635607.05	6.41950	.82	.018	33009.93	.00083
6304384.2	18.00	725792.60	7.21884	.57	.009	32927.32	.00041
6304407.4	20.00	827109.95	8.01711	.40	.004	32835.08	.00020
6304657.0	40.00	2502341.96	15.91165	0.00	0.000	31391.99	0.00000
6304962.3	60.00	5636391.36	23.53124	0.00	0.000	29042.30	0.00000
6305377.3	80.00	10850838.91	30.64239	0.00	0.000	25870.13	0.00000
6306007.3	100.00	19242369.89	36.82722	0.00	0.000	21997.56	0.00000
6307072.9	120.00	32500193.63	41.21397	0.00	0.000	17598.33	0.00000
6309030.3	140.00	52166975.77	41.64981	0.00	0.000	12949.87	0.00000
6312599.7	160.00	75282914.20	31.91892	0.00	0.000	8661.04	0.00000
6317925.7	180.00	87153743.04	.08103	0.00	0.000	6544.03	0.00000

REVOLUTION 35

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
6317925.7	-180.00	81996193.51	.08103	0.00	0.000	6843.87	0.00000
6322796.1	-160.00	71293309.50	30.53044	0.00	0.000	8867.56	0.00000
6326127.2	-140.00	50043212.18	40.46351	0.00	0.000	13045.46	0.00000
6327999.7	-120.00	31525736.01	40.34320	0.00	0.000	17619.51	0.00000
6329038.6	-100.00	18808118.02	36.19180	0.00	0.000	21966.01	0.00000
6329660.6	-80.00	10658571.82	30.18238	0.00	0.000	25799.34	0.00000
6330073.5	-60.00	5554860.53	23.21003	0.00	0.000	28942.43	0.00000
6330378.7	-40.00	2472610.50	15.70752	0.00	0.000	31271.83	0.00000
6330629.0	-20.00	820496.44	7.91782	.40	.004	32702.87	.00021
6330652.4	-18.00	720474.87	7.12963	.57	.009	32794.35	.00042
6330675.5	-16.00	631432.89	6.34033	.82	.018	32876.28	.00085
6330698.4	-14.00	553218.45	5.55006	1.19	.038	32948.63	.00178
6330721.2	-12.00	485698.40	4.75895	1.87	.092	33011.39	.00433
6330743.9	-10.00	428758.10	3.96716	3.50	.322	33064.53	.01512
6330766.4	-8.00	382301.12	3.17482	8.08	1.708	33108.04	.08022
6330788.9	-6.00	346248.92	2.38214	18.42	8.848	33141.89	.41506
6330811.2	-4.00	320540.66	1.58944	36.04	33.798	33166.08	1.58436
6330833.6	-2.00	305133.00	.79787	55.67	80.534	33180.60	3.77361
6330854.0	0.00	300000.00	.08103	64.67	108.625	33185.43	5.08911
6330874.4	2.00	305133.00	.79787	55.67	80.534	33180.60	3.77361
6330896.7	4.00	320540.66	1.58944	36.04	33.798	33166.08	1.58436
6330919.1	6.00	346248.92	2.38214	18.42	8.848	33141.89	.41506
6330941.5	8.00	382301.12	3.17482	8.08	1.708	33108.04	.08022
6330964.1	10.00	428758.10	3.96716	3.50	.322	33064.53	.01512
6330986.7	12.00	485698.40	4.75895	1.87	.092	33011.39	.00433
6331009.5	14.00	553218.45	5.55006	1.19	.038	32948.63	.00178
6331032.5	16.00	631432.89	6.34033	.82	.018	32876.28	.00085
6331055.6	18.00	720474.87	7.12963	.57	.009	32794.35	.00042
6331078.9	20.00	820496.44	7.91782	.40	.004	32702.87	.00021
6331329.2	40.00	2472610.50	15.70752	0.00	0.000	31271.83	0.00000
6331634.4	60.00	5554860.53	23.21003	0.00	0.000	28942.43	0.00000
6332047.4	80.00	10658571.82	30.18238	0.00	0.000	25799.34	0.00000
6332669.3	100.00	18808118.02	36.19180	0.00	0.000	21966.01	0.00000
6333708.3	120.00	31525736.01	40.34320	0.00	0.000	17619.51	0.00000
6335580.7	140.00	50043212.18	40.46351	0.00	0.000	13045.46	0.00000
6338911.9	160.00	71293309.50	30.53044	0.00	0.000	8867.56	0.00000
6343782.3	180.00	81996193.51	.08103	0.00	0.000	6843.87	0.00000

REVOLUTION 36

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
6343782.3	-180.00	77134092.90	.08103	0.00	0.000	7152.95	0.00000
6348240.2	-160.00	67483981.28	29.16658	0.00	0.000	9085.72	0.00000
6351349.3	-140.00	47963440.16	39.25970	0.00	0.000	13149.95	0.00000
6353139.6	-120.00	30550190.16	39.44835	0.00	0.000	17645.89	0.00000
6354152.0	-100.00	18366748.36	35.53524	0.00	0.000	21936.71	0.00000
6354765.8	-80.00	10461247.75	29.70576	0.00	0.000	25728.61	0.00000
6355176.6	-60.00	5470675.16	22.87674	0.00	0.000	28840.99	0.00000
6355481.8	-40.00	2441798.12	15.49553	0.00	0.000	31148.99	0.00000
6355732.7	-20.00	813629.00	7.81466	.40	.004	32567.32	.00021
6355756.2	-18.00	714952.30	7.03694	.58	.009	32657.99	.00043
6355779.4	-16.00	627097.48	6.25806	.82	.018	32739.20	.00088
6355802.4	-14.00	549918.01	5.47818	1.20	.039	32810.93	.00183
6355825.3	-12.00	483285.52	4.69741	1.88	.095	32873.14	.00448
6355848.0	-10.00	427089.47	3.91593	3.54	.333	32925.81	.01574
6355870.7	-8.00	381236.84	3.13388	8.14	1.759	32968.94	.08294
6355893.2	-6.00	345651.85	2.35146	18.44	8.997	33002.50	.42383
6355915.7	-4.00	320275.80	1.56901	35.81	33.849	33026.47	1.59347
6355938.1	-2.00	305066.86	.78770	55.04	79.828	33040.86	3.75632
6355958.6	0.00	300000.00	.08103	63.81	107.258	33045.66	5.04633
6355979.2	2.00	305066.86	.78770	55.04	79.828	33040.86	3.75632
6356001.6	4.00	320275.80	1.56901	35.81	33.849	33026.47	1.59347
6356024.1	6.00	345651.85	2.35146	18.44	8.997	33002.50	.42383
6356046.6	8.00	381236.84	3.13388	8.14	1.759	32968.94	.08294
6356069.3	10.00	427089.47	3.91593	3.54	.333	32925.81	.01574
6356092.0	12.00	483285.52	4.69741	1.88	.095	32873.14	.00448
6356114.9	14.00	549918.01	5.47818	1.20	.039	32810.93	.00183
6356137.9	16.00	627097.48	6.25806	.82	.018	32739.20	.00088
6356161.1	18.00	714952.30	7.03694	.58	.009	32657.99	.00043
6356184.5	20.00	813629.00	7.81466	.40	.004	32567.32	.00021
6356435.5	40.00	2441798.12	15.49553	0.00	0.000	31148.99	0.00000
6356740.6	60.00	5470675.16	22.87674	0.00	0.000	28840.99	0.00000
6357151.5	80.00	10461247.75	29.70576	0.00	0.000	25728.61	0.00000
6357765.2	100.00	18366748.36	35.53524	0.00	0.000	21936.71	0.00000
6358777.7	120.00	30550190.16	39.44835	0.00	0.000	17645.89	0.00000
6360568.0	140.00	47963440.16	39.25970	0.00	0.000	13149.95	0.00000
6363677.1	160.00	67483981.28	29.16658	0.00	0.000	9085.72	0.00000
6368135.0	180.00	77134092.90	.08103	0.00	0.000	7152.95	0.00000

REVOLUTION 37

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
6368135.0	-180.00	72544434.17	.08103	0.00	0.000	7471.62	0.00000
6372218.7	-160.00	63844315.09	27.82870	0.00	0.000	9315.84	0.00000
6375120.7	-140.00	45927062.62	38.03955	0.00	0.000	13263.86	0.00000
6376831.6	-120.00	29573920.55	38.52920	0.00	0.000	17677.90	0.00000
6377817.6	-100.00	17918254.02	34.85688	0.00	0.000	21909.95	0.00000
6378423.1	-80.00	10258741.44	29.21188	0.00	0.000	25658.06	0.00000
6378831.7	-60.00	5383736.62	22.53082	0.00	0.000	28738.02	0.00000
6379136.8	-40.00	2409856.99	15.27532	0.00	0.000	31023.41	0.00000
6379388.5	-20.00	806495.44	7.70745	.41	.005	32428.34	.00022
6379412.0	-18.00	709215.01	6.94061	.58	.009	32518.17	.00045
6379435.3	-16.00	622593.01	6.17257	.83	.019	32598.62	.00090
6379458.4	-14.00	546488.54	5.40347	1.20	.040	32669.68	.00188
6379481.4	-12.00	480778.10	4.63345	1.90	.098	32731.31	.00464
6379504.2	-10.00	425355.34	3.86268	3.58	.346	32783.50	.01642
6379526.9	-8.00	380130.71	3.09132	8.21	1.813	32826.22	.08586
6379549.6	-6.00	345031.27	2.31957	18.47	9.155	32859.47	.43317
6379572.2	-4.00	320000.50	1.54778	35.59	33.906	32883.22	1.60311
6379594.7	-2.00	304998.12	.77713	54.40	79.109	32897.48	3.73872
6379615.3	0.00	300000.00	.08103	62.94	105.867	32902.23	5.00262
6379636.0	2.00	304998.12	.77713	54.40	79.109	32897.48	3.73872
6379658.5	4.00	320000.50	1.54778	35.59	33.906	32883.22	1.60311
6379681.1	6.00	345031.27	2.31957	18.47	9.155	32859.47	.43317
6379703.8	8.00	380130.71	3.09132	8.21	1.813	32826.22	.08586
6379726.5	10.00	425355.34	3.86268	3.58	.346	32783.50	.01642
6379749.3	12.00	480778.10	4.63345	1.90	.098	32731.31	.00464
6379772.3	14.00	546488.54	5.40347	1.20	.040	32669.68	.00188
6379795.4	16.00	622593.01	6.17257	.83	.019	32598.62	.00090
6379818.7	18.00	709215.01	6.94061	.58	.009	32518.17	.00045
6379842.2	20.00	806495.44	7.70745	.41	.005	32428.34	.00022
6380093.9	40.00	2409856.99	15.27532	0.00	0.000	31023.41	0.00000
6380399.0	60.00	5383736.62	22.53082	0.00	0.000	28738.02	0.00000
6380807.6	80.00	10258741.44	29.21188	0.00	0.000	25658.06	0.00000
6381413.1	100.00	17918254.02	34.85688	0.00	0.000	21909.95	0.00000
6382399.1	120.00	29573920.55	38.52920	0.00	0.000	17677.90	0.00000
6384110.0	140.00	45927062.62	38.03955	0.00	0.000	13263.86	0.00000
6387012.0	160.00	63844315.09	27.82870	0.00	0.000	9315.84	0.00000
6391095.7	180.00	72544434.17	.08103	0.00	0.000	7471.62	0.00000

REVOLUTION 38

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
6391095.7	-180.00	68206358.84	.08103	0.00	0.000	7800.21	0.00000
6394839.5	-160.00	60364365.66	26.51790	0.00	0.000	9558.26	0.00000
6397548.3	-140.00	43933397.71	36.80425	0.00	0.000	13387.71	0.00000
6399182.6	-120.00	28597254.30	37.58557	0.00	0.000	17715.98	0.00000
6400142.3	-100.00	17462615.26	34.15607	0.00	0.000	21886.02	0.00000
6400739.4	-80.00	10050916.74	28.70002	0.00	0.000	25587.86	0.00000
6401145.7	-60.00	5293938.25	22.17169	0.00	0.000	28633.56	0.00000
6401450.7	-40.00	2376735.26	15.04648	0.00	0.000	30895.08	0.00000
6401703.1	-20.00	799082.51	7.59599	.41	.005	32285.86	.00023
6401726.7	-18.00	703252.27	6.84046	.59	.010	32374.79	.00047
6401750.1	-16.00	617911.00	6.08367	.83	.019	32454.44	.00093
6401773.3	-14.00	542923.54	5.32578	1.21	.041	32524.80	.00194
6401796.4	-12.00	478171.37	4.56694	1.92	.101	32585.82	.00483
6401819.3	-10.00	423552.39	3.80731	3.62	.360	32637.49	.01715
6401842.1	-8.00	378980.62	3.04706	8.29	1.879	32679.79	.08938
6401864.9	-6.00	344386.00	2.28641	18.50	9.324	32712.71	.44313
6401887.6	-4.00	319714.24	1.52569	35.37	33.989	32736.23	1.61424
6401910.2	-2.00	304926.63	.76614	53.75	78.378	32750.35	3.72081
6401931.0	0.00	300000.00	.08103	62.06	104.453	32755.05	4.95797
6401951.8	2.00	304926.63	.76614	53.75	78.378	32750.35	3.72081
6401974.4	4.00	319714.24	1.52569	35.37	33.989	32736.23	1.61424
6401997.1	6.00	344386.00	2.28641	18.50	9.324	32712.71	.44313
6402019.8	8.00	378980.62	3.04706	8.29	1.879	32679.79	.08938
6402042.7	10.00	423552.39	3.80731	3.62	.360	32637.49	.01715
6402065.6	12.00	478171.37	4.56694	1.92	.101	32585.82	.00483
6402088.7	14.00	542923.54	5.32578	1.21	.041	32524.80	.00194
6402111.9	16.00	617911.00	6.08367	.83	.019	32454.44	.00093
6402135.3	18.00	703252.27	6.84046	.59	.010	32374.79	.00047
6402158.9	20.00	799082.51	7.59599	.41	.005	32285.86	.00023
6402411.2	40.00	2376735.26	15.04648	0.00	0.000	30895.08	0.00000
6402716.2	60.00	5293938.25	22.17169	0.00	0.000	28633.56	0.00000
6403122.6	80.00	10050916.74	28.70002	0.00	0.000	25587.86	0.00000
6403719.7	100.00	17462615.26	34.15607	0.00	0.000	21886.02	0.00000
6404679.4	120.00	28597254.30	37.58557	0.00	0.000	17715.98	0.00000
6406313.7	140.00	43933397.71	36.80425	0.00	0.000	13387.71	0.00000
6409022.4	160.00	60364365.66	26.51790	0.00	0.000	9558.26	0.00000
6412766.2	180.00	68206358.84	.08103	0.00	0.000	7800.21	0.00000

REVOLUTION 39

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
6412766.2	-180.00	64100912.67	.08103	0.00	0.000	8139.13	0.00000
6416200.8	-160.00	57034807.60	25.23508	0.00	0.000	9813.36	0.00000
6418729.2	-140.00	41981685.83	35.55506	0.00	0.000	13522.06	0.00000
6420289.4	-120.00	27620479.64	36.61728	0.00	0.000	17760.62	0.00000
6421223.0	-100.00	16999797.76	33.43211	0.00	0.000	21865.25	0.00000
6421811.6	-80.00	9837625.15	28.16945	0.00	0.000	25518.18	0.00000
6422215.6	-60.00	5201164.43	21.79873	0.00	0.000	28527.66	0.00000
6422520.5	-40.00	2342376.57	14.80857	0.00	0.000	30763.95	0.00000
6422773.6	-20.00	791375.81	7.48004	.42	.005	32139.77	.00024
6422797.3	-18.00	697052.39	6.73628	.59	.010	32227.76	.00048
6422820.8	-16.00	613042.21	5.99120	.84	.020	32306.57	.00097
6422844.1	-14.00	539215.93	5.24498	1.22	.042	32376.18	.00200
6422867.3	-12.00	475460.11	4.49776	1.94	.105	32436.56	.00503
6422890.3	-10.00	421677.00	3.74972	3.67	.375	32487.69	.01795
6422913.2	-8.00	377784.24	3.00103	8.39	1.951	32529.54	.09326
6422936.1	-6.00	343714.73	2.25191	18.54	9.504	32562.11	.45378
6422958.9	-4.00	319416.43	1.50272	35.15	34.080	32585.39	1.62604
6422981.6	-2.00	304852.26	.75470	53.09	77.634	32599.35	3.70257
6423002.5	0.00	300000.00	.08103	61.16	103.015	32604.01	4.91235
6423023.5	2.00	304852.26	.75470	53.09	77.634	32599.35	3.70257
6423046.2	4.00	319416.43	1.50272	35.15	34.080	32585.39	1.62604
6423069.0	6.00	343714.73	2.25191	18.54	9.504	32562.11	.45378
6423091.8	8.00	377784.24	3.00103	8.39	1.951	32529.54	.09326
6423114.8	10.00	421677.00	3.74972	3.67	.375	32487.69	.01795
6423137.8	12.00	475460.11	4.49776	1.94	.105	32436.56	.00503
6423161.0	14.00	539215.93	5.24498	1.22	.042	32376.18	.00200
6423184.3	16.00	613042.21	5.99120	.84	.020	32306.57	.00097
6423207.8	18.00	697052.39	6.73628	.59	.010	32227.76	.00048
6423231.5	20.00	791375.81	7.48004	.42	.005	32139.77	.00024
6423484.6	40.00	2342376.57	14.80857	0.00	0.000	30763.95	0.00000
6423789.5	60.00	5201164.43	21.79873	0.00	0.000	28527.66	0.00000
6424193.5	80.00	9837625.15	28.16945	0.00	0.000	25518.18	0.00000
6424782.0	100.00	16999797.76	33.43211	0.00	0.000	21865.25	0.00000
6425715.6	120.00	27620479.64	36.61728	0.00	0.000	17760.62	0.00000
6427275.8	140.00	41981685.83	35.55506	0.00	0.000	13522.06	0.00000
6429804.2	160.00	57034807.60	25.23508	0.00	0.000	9813.36	0.00000
6433238.8	180.00	64100912.67	.08103	0.00	0.000	8139.13	0.00000

REVOLUTION 40

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
6433238.8	-180.00	60210832.10	.08103	0.00	0.000	8488.81	0.00000
6436391.7	-160.00	53846888.69	23.98092	0.00	0.000	10081.51	0.00000
6438751.7	-140.00	40071095.59	34.29328	0.00	0.000	13667.50	0.00000
6440240.4	-120.00	26643844.02	35.62420	0.00	0.000	17812.33	0.00000
6441148.0	-100.00	16529750.54	32.68426	0.00	0.000	21847.99	0.00000
6441727.8	-80.00	9618704.29	27.61934	0.00	0.000	25449.20	0.00000
6442129.5	-60.00	5105289.47	21.41125	0.00	0.000	28420.37	0.00000
6442434.3	-40.00	2306719.51	14.56112	0.00	0.000	30629.98	0.00000
6442688.1	-20.00	783359.58	7.35938	.42	.005	31989.99	.00025
6442711.9	-18.00	690602.62	6.62785	.60	.010	32076.98	.00050
6442735.5	-16.00	607976.55	5.89496	.85	.021	32154.90	.00100
6442758.9	-14.00	535357.98	5.16087	1.23	.043	32223.73	.00208
6442782.2	-12.00	472638.66	4.42575	1.96	.109	32283.42	.00526
6442805.3	-10.00	419725.23	3.68976	3.72	.392	32333.97	.01884
6442828.4	-8.00	376539.06	2.95311	8.49	2.030	32375.36	.09748
6442851.3	-6.00	343016.04	2.21600	18.58	9.696	32407.56	.46518
6442874.2	-4.00	319106.45	1.47881	34.92	34.179	32430.57	1.63857
6442897.0	-2.00	304774.84	.74280	52.41	76.878	32444.38	3.68401
6442918.1	0.00	300000.00	.08103	60.25	101.552	32448.99	4.86574
6442939.2	2.00	304774.84	.74280	52.41	76.878	32444.38	3.68401
6442962.1	4.00	319106.45	1.47881	34.92	34.179	32430.57	1.63857
6442984.9	6.00	343016.04	2.21600	18.58	9.696	32407.56	.46518
6443007.9	8.00	376539.06	2.95311	8.49	2.030	32375.36	.09748
6443030.9	10.00	419725.23	3.68976	3.72	.392	32333.97	.01884
6443054.1	12.00	472638.66	4.42575	1.96	.109	32283.42	.00526
6443077.4	14.00	535357.98	5.16087	1.23	.043	32223.73	.00208
6443100.8	16.00	607976.55	5.89496	.85	.021	32154.90	.00100
6443124.4	18.00	690602.62	6.62785	.60	.010	32076.98	.00050
6443148.1	20.00	783359.58	7.35938	.42	.005	31989.99	.00025
6443402.0	40.00	2306719.51	14.56112	0.00	0.000	30629.98	0.00000
6443706.8	60.00	5105289.47	21.41125	0.00	0.000	28420.37	0.00000
6444108.4	80.00	9618704.29	27.61934	0.00	0.000	25449.20	0.00000
6444688.3	100.00	16529750.54	32.68426	0.00	0.000	21847.99	0.00000
6445595.9	120.00	26643844.02	35.62420	0.00	0.000	17812.33	0.00000
6447084.6	140.00	40071095.59	34.29328	0.00	0.000	13667.50	0.00000
6449444.6	160.00	53846888.69	23.98092	0.00	0.000	10081.51	0.00000
6452597.4	180.00	60210832.10	.08103	0.00	0.000	8488.81	0.00000

REVOLUTION 41

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	R/T
6452597.4	-180.00	56520356.96	.08103	0.00	0.000	8849.70	0.00000
6455493.4	-160.00	50792386.73	22.75587	0.00	0.000	10363.15	0.00000
6457695.9	-140.00	38200728.65	33.02023	0.00	0.000	13824.65	0.00000
6459115.6	-120.00	25667551.91	34.60618	0.00	0.000	17871.67	0.00000
6459997.4	-100.00	16052403.67	31.91177	0.00	0.000	21834.60	0.00000
6460568.5	-80.00	9393976.03	27.04884	0.00	0.000	25381.13	0.00000
6460967.6	-60.00	5006176.36	21.00851	0.00	0.000	28311.75	0.00000
6461272.3	-40.00	2269696.98	14.30361	.01	.000	30493.12	.00000
6461526.9	-20.00	775016.58	7.23372	.43	.005	31836.40	.00027
6461550.8	-18.00	683888.96	6.51494	.60	.011	31922.34	.00053
6461574.5	-16.00	602702.95	5.79473	.85	.021	31999.32	.00104
6461598.0	-14.00	531341.22	5.07327	1.24	.044	32067.31	.00216
6461621.4	-12.00	469700.76	4.35075	1.98	.114	32126.28	.00550
6461644.7	-10.00	417692.75	3.62732	3.79	.413	32176.22	.01995
6461667.8	-8.00	375242.30	2.90320	8.59	2.115	32217.11	.10208
6461690.9	-6.00	342288.37	2.17860	18.62	9.902	32248.92	.47740
6461713.9	-4.00	318783.60	1.45391	34.70	34.287	32271.66	1.65187
6461736.8	-2.00	304694.21	.73041	51.73	76.109	32285.30	3.66514
6461758.1	0.00	300000.00	.08103	59.33	100.065	32289.85	4.81814
6461779.3	2.00	304694.21	.73041	51.73	76.109	32285.30	3.66514
6461802.2	4.00	318783.60	1.45391	34.70	34.287	32271.66	1.65187
6461825.2	6.00	342288.37	2.17860	18.62	9.902	32248.92	.47740
6461848.3	8.00	375242.30	2.90320	8.59	2.115	32217.11	.10208
6461871.4	10.00	417692.75	3.62732	3.79	.413	32176.22	.01995
6461894.7	12.00	469700.76	4.35075	1.98	.114	32126.28	.00550
6461918.1	14.00	531341.22	5.07327	1.24	.044	32067.31	.00216
6461941.6	16.00	602702.95	5.79473	.85	.021	31999.32	.00104
6461965.3	18.00	683888.96	6.51494	.60	.011	31922.34	.00053
6461989.2	20.00	775016.58	7.23372	.43	.005	31836.40	.00027
6462243.8	40.00	2269696.98	14.30361	.01	.000	30493.12	.00000
6462548.5	60.00	5006176.36	21.00851	0.00	0.000	28311.75	0.00000
6462947.6	80.00	9393976.03	27.04884	0.00	0.000	25381.13	0.00000
6463518.7	100.00	16052403.67	31.91177	0.00	0.000	21834.60	0.00000
6464400.5	120.00	25667551.91	34.60618	0.00	0.000	17871.67	0.00000
6465820.2	140.00	38200728.65	33.02023	0.00	0.000	13824.65	0.00000
6468022.8	160.00	50792385.73	22.75587	0.00	0.000	10363.15	0.00000
6470918.7	180.00	56520356.96	.08103	0.00	0.000	8849.70	0.00000

REVOLUTION 42

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
6470918.7	-180.00	53015065.44	.08103	0.00	0.000	9222.33	0.00000
6473579.8	-160.00	47863562.60	21.56021	0.00	0.000	10658.74	0.00000
6475635.2	-140.00	36369623.30	31.73723	0.00	0.000	13994.15	0.00000
6476988.3	-120.00	24691762.12	33.56312	0.00	0.000	17939.23	0.00000
6477844.5	-100.00	15567665.37	31.11382	0.00	0.000	21825.51	0.00000
6478406.6	-80.00	9163244.30	26.45699	0.00	0.000	25314.18	0.00000
6478803.2	-60.00	4903675.23	20.58971	0.00	0.000	28201.85	0.00000
6479107.8	-40.00	2231235.41	14.03546	.01	.000	30353.32	.00000
6479363.2	-20.00	766327.87	7.10279	.43	.006	31678.88	.00028
6479387.2	-18.00	676896.05	6.39727	.61	.011	31763.70	.00055
6479411.0	-16.00	597209.26	5.69028	.86	.022	31839.68	.00108
6479434.6	-14.00	527156.32	4.98199	1.25	.046	31906.79	.00224
6479458.1	-12.00	466639.58	4.27259	2.01	.119	31965.00	.00579
6479481.5	-10.00	415574.79	3.56225	3.86	.436	32014.29	.02117
6479504.7	-8.00	373890.92	2.85118	8.71	2.209	32054.65	.10713
6479527.9	-6.00	341530.01	2.13962	18.67	10.123	32086.06	.49053
6479551.0	-4.00	318447.11	1.42796	34.47	34.406	32108.50	1.66602
6479574.1	-2.00	304610.18	.71750	51.03	75.327	32121.96	3.64594
6479595.5	0.00	300000.00	.08103	58.39	98.554	32126.45	4.76950
6479616.9	2.00	304610.18	.71750	51.03	75.327	32121.96	3.64594
6479639.9	4.00	318447.11	1.42796	34.47	34.406	32108.50	1.66602
6479663.0	6.00	341530.01	2.13962	18.67	10.123	32086.06	.49053
6479686.2	8.00	373890.92	2.85118	8.71	2.209	32054.65	.10713
6479709.5	10.00	415574.79	3.56225	3.86	.436	32014.29	.02117
6479732.9	12.00	466639.58	4.27259	2.01	.119	31965.00	.00579
6479756.3	14.00	527156.32	4.98199	1.25	.046	31906.79	.00224
6479780.0	16.00	597209.26	5.69028	.86	.022	31839.68	.00108
6479803.8	18.00	676896.05	6.39727	.61	.011	31763.70	.00055
6479827.8	20.00	766327.87	7.10279	.43	.006	31678.88	.00028
6480083.2	40.00	2231235.41	14.03546	.01	.000	30353.32	.00000
6480387.8	60.00	4903675.23	20.58971	0.00	0.000	28201.85	0.00000
6480784.3	80.00	9163244.30	26.45699	0.00	0.000	25314.18	0.00000
6481346.4	100.00	15567665.37	31.11382	0.00	0.000	21825.51	0.00000
6482202.7	120.00	24691762.12	33.56312	0.00	0.000	17939.23	0.00000
6483555.7	140.00	36369623.30	31.73723	0.00	0.000	13994.15	0.00000
6485611.2	160.00	47863562.60	21.56021	0.00	0.000	10658.74	0.00000
6488272.3	180.00	53015065.44	.08103	0.00	0.000	9222.33	0.00000

REVOLUTION 43

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
6488272.3	-180.00	49681728.04	.08103	0.00	0.000	9607.27	0.00000
6490718.7	-160.00	45053130.36	20.39403	0.00	0.000	10968.77	0.00000
6492636.6	-140.00	34576756.85	30.44562	0.00	0.000	14176.68	0.00000
6493925.3	-120.00	23716584.54	32.49493	0.00	0.000	18015.64	0.00000
6494756.2	-100.00	15075418.75	30.28954	0.00	0.000	21821.15	0.00000
6495309.2	-80.00	8926292.42	25.84280	0.00	0.000	25248.59	0.00000
6495703.1	-60.00	4797621.53	20.15396	0.00	0.000	28090.76	0.00000
6496007.5	-40.00	2191253.83	13.75605	.01	.000	30210.53	.00000
6496263.8	-20.00	757272.54	6.96625	.44	.006	31517.30	.00030
6496287.9	-18.00	669606.93	6.27456	.62	.012	31600.93	.00058
6496311.8	-16.00	591482.07	5.58135	.87	.023	31675.85	.00113
6496335.6	-14.00	522793.01	4.88679	1.26	.048	31742.03	.00234
6496359.2	-12.00	463447.56	4.19107	2.05	.125	31799.43	.00612
6496382.6	-10.00	413366.12	3.49438	3.94	.462	31848.04	.02253
6496406.0	-8.00	372481.54	2.79693	8.83	2.311	31887.83	.11266
6496429.3	-6.00	340739.05	2.09897	18.73	10.361	31918.80	.50467
6496452.6	-4.00	318096.15	1.40089	34.23	34.536	31940.93	1.68109
6496475.7	-2.00	304522.53	.70403	50.33	74.532	31954.21	3.62641
6496497.3	0.00	300000.00	.08103	57.43	97.018	31958.64	4.71980
6496518.8	2.00	304522.53	.70403	50.33	74.532	31954.21	3.62641
6496542.0	4.00	318096.15	1.40089	34.23	34.536	31940.93	1.68109
6496565.2	6.00	340739.05	2.09897	18.73	10.361	31918.80	.50467
6496588.5	8.00	372481.54	2.79693	8.83	2.311	31887.83	.11266
6496611.9	10.00	413366.12	3.49438	3.94	.462	31848.04	.02253
6496635.4	12.00	463447.56	4.19107	2.05	.125	31799.43	.00612
6496659.0	14.00	522793.01	4.88679	1.26	.048	31742.03	.00234
6496682.7	16.00	591482.07	5.58135	.87	.023	31675.85	.00113
6496706.6	18.00	669606.93	6.27456	.62	.012	31600.93	.00058
6496730.7	20.00	757272.54	6.96625	.44	.006	31517.30	.00030
6496987.0	40.00	2191253.83	13.75605	.01	.000	30210.53	.00000
6497291.4	60.00	4797621.53	20.15396	0.00	0.000	28090.76	0.00000
6497685.3	80.00	8926292.42	25.84280	0.00	0.000	25248.59	0.00000
6498238.4	100.00	15075418.75	30.28954	0.00	0.000	21821.15	0.00000
6499069.2	120.00	23716584.54	32.49493	0.00	0.000	18015.64	0.00000
6500358.0	140.00	34576756.85	30.44562	0.00	0.000	14176.68	0.00000
6502275.8	160.00	45053130.36	20.39403	0.00	0.000	10968.77	0.00000
6504722.2	180.00	49681728.04	.08103	0.00	0.000	9607.27	0.00000

REVOLUTION 44

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
6504722.2	-180.00	46508177.69	.08103	0.00	0.000	10005.13	0.00000
6506971.9	-160.00	42354208.94	19.25725	0.00	0.000	11293.82	0.00000
6508761.1	-140.00	32821046.47	29.14670	0.00	0.000	14373.00	0.00000
6509987.8	-120.00	22742076.13	31.40151	0.00	0.000	18101.61	0.00000
6510793.5	-100.00	14575517.75	29.43802	0.00	0.000	21822.03	0.00000
6511337.3	-80.00	8682880.02	25.20514	0.00	0.000	25184.64	0.00000
6511728.5	-60.00	4687833.91	19.70028	0.00	0.000	27978.54	0.00000
6512032.7	-40.00	2149662.84	13.46468	.02	.000	30064.66	.00000
6512289.8	-20.00	747827.46	6.82375	.45	.006	31351.50	.00031
6512314.1	-18.00	662002.84	6.14650	.63	.012	31433.88	.00061
6512338.1	-16.00	585506.52	5.46765	.88	.024	31507.67	.00118
6512361.9	-14.00	518239.91	4.78742	1.27	.050	31572.85	.00245
6512385.7	-12.00	460116.33	4.10598	2.08	.132	31629.40	.00647
6512409.3	-10.00	411060.89	3.42353	4.02	.490	31677.28	.02405
6512432.8	-8.00	371010.44	2.74030	8.96	2.423	31716.48	.11876
6512456.2	-6.00	339913.42	2.05653	18.79	10.619	31746.99	.52007
6512479.6	-4.00	317729.79	1.37264	34.00	34.679	31768.79	1.69716
6512502.9	-2.00	304431.02	.68998	49.61	73.724	31781.87	3.60656
6512524.5	0.00	300000.00	.08103	56.46	95.456	31786.23	4.66901
6512546.2	2.00	304431.02	.68998	49.61	73.724	31781.87	3.60656
6512569.5	4.00	317729.79	1.37264	34.00	34.679	31768.79	1.69716
6512592.9	6.00	339913.42	2.05653	18.79	10.619	31746.99	.52007
6512616.3	8.00	371010.44	2.74030	8.96	2.423	31716.48	.11876
6512639.8	10.00	411060.89	3.42353	4.02	.490	31677.28	.02405
6512663.4	12.00	460116.33	4.10598	2.08	.132	31629.40	.00647
6512687.2	14.00	518239.91	4.78742	1.27	.050	31572.85	.00245
6512711.0	16.00	585506.52	5.46765	.88	.024	31507.67	.00118
6512735.0	18.00	662002.84	6.14650	.63	.012	31433.88	.00061
6512759.2	20.00	747827.46	6.82375	.45	.006	31351.50	.00031
6513016.4	40.00	2149662.84	13.46468	.02	.000	30064.66	.00000
6513320.6	60.00	4687833.91	19.70028	0.00	0.000	27978.54	0.00000
6513711.8	80.00	8682880.02	25.20514	0.00	0.000	25184.64	0.00000
6514255.6	100.00	14575517.75	29.43802	0.00	0.000	21822.03	0.00000
6515061.3	120.00	22742076.13	31.40151	0.00	0.000	18101.61	0.00000
6516288.0	140.00	32821046.47	29.14670	0.00	0.000	14373.00	0.00000
6518077.1	160.00	42354208.94	19.25725	0.00	0.000	11293.82	0.00000
6520326.9	180.00	46508177.69	.08103	0.00	0.000	10005.13	0.00000

REVOLUTION 45

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
6520326.9	-180.00	43483193.32	.08103	0.00	0.000	10416.63	0.00000
6522396.2	-160.00	39760290.21	18.14964	0.00	0.000	11634.51	0.00000
6524064.8	-140.00	31101348.60	27.84177	0.00	0.000	14583.88	0.00000
6525231.8	-120.00	21768235.99	30.28278	0.00	0.000	18197.86	0.00000
6526012.4	-100.00	14067782.32	28.55830	0.00	0.000	21828.67	0.00000
6526546.9	-80.00	8432739.15	24.54283	0.00	0.000	25122.62	0.00000
6526935.3	-60.00	4574111.63	19.22763	0.00	0.000	27865.29	0.00000
6527239.3	-40.00	2106363.24	13.16058	.02	.000	29915.67	.00000
6527497.3	-20.00	737966.91	6.67489	.46	.007	31181.32	.00033
6527521.6	-18.00	654062.90	6.01270	.64	.013	31262.36	.00064
6527545.8	-16.00	579266.11	5.34887	.89	.025	31334.96	.00124
6527569.8	-14.00	513484.36	4.68359	1.29	.052	31399.09	.00259
6527593.6	-12.00	456636.57	4.01707	2.12	.140	31454.72	.00691
6527617.3	-10.00	408652.66	3.34951	4.13	.525	31501.83	.02590
6527641.0	-8.00	369473.49	2.68113	9.11	2.552	31540.40	.12579
6527664.5	-6.00	339050.76	2.01219	18.89	10.927	31570.41	.53812
6527688.0	-4.00	317346.99	1.34312	33.76	34.834	31591.86	1.71433
6527711.4	-2.00	304335.41	.67530	48.88	72.903	31604.73	3.58637
6527733.3	0.00	300000.00	.08103	55.48	93.868	31609.02	4.61710
6527755.1	2.00	304335.41	.67530	48.88	72.903	31604.73	3.58637
6527778.6	4.00	317346.99	1.34312	33.76	34.834	31591.86	1.71433
6527802.1	6.00	339050.76	2.01219	18.89	10.927	31570.41	.53812
6527825.6	8.00	369473.49	2.68113	9.11	2.552	31540.40	.12579
6527849.2	10.00	408652.66	3.34951	4.13	.525	31501.83	.02590
6527873.0	12.00	456636.57	4.01707	2.12	.140	31454.72	.00691
6527896.8	14.00	513484.36	4.68359	1.29	.052	31399.09	.00259
6527920.8	16.00	579266.11	5.34887	.89	.025	31334.96	.00124
6527945.0	18.00	654062.90	6.01270	.64	.013	31262.36	.00064
6527969.3	20.00	737966.91	6.67489	.46	.007	31181.32	.00033
6528227.3	40.00	2106363.24	13.16058	.02	.000	29915.67	.00000
6528531.3	60.00	4574111.63	19.22763	0.00	0.000	27865.29	0.00000
6528919.7	80.00	8432739.15	24.54283	0.00	0.000	25122.62	0.00000
6529454.2	100.00	14067782.32	28.55830	0.00	0.000	21828.67	0.00000
6530234.8	120.00	21768235.99	30.28278	0.00	0.000	18197.86	0.00000
6531401.8	140.00	31101348.60	27.84177	0.00	0.000	14583.88	0.00000
6533070.4	160.00	39760290.21	18.14964	0.00	0.000	11634.51	0.00000
6535139.7	180.00	43483193.32	.08103	0.00	0.000	10416.63	0.00000

REVOLUTION 46

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
6535139.7	-180.00	40596394.88	.08103	0.00	0.000	10842.54	0.00000
6537043.5	-160.00	37265201.72	17.07080	0.00	0.000	11991.53	0.00000
6538599.2	-140.00	29416456.35	26.53206	0.00	0.000	14810.17	0.00000
6539708.5	-120.00	20794999.19	29.13867	0.00	0.000	18305.23	0.00000
6540464.3	-100.00	13551992.51	27.64930	0.00	0.000	21841.66	0.00000
6540989.3	-80.00	8175569.72	23.85455	0.00	0.000	25062.85	0.00000
6541374.7	-60.00	4456231.37	18.73480	0.00	0.000	27751.09	0.00000
6541678.6	-40.00	2061244.51	12.84290	.02	.000	29763.45	.00000
6541937.5	-20.00	727662.17	6.51923	.47	.007	31006.57	.00036
6541961.9	-18.00	645763.81	5.87279	.65	.014	31086.19	.00068
6541986.2	-16.00	572742.39	5.22465	.90	.026	31157.52	.00131
6542010.3	-14.00	508512.21	4.57501	1.32	.055	31220.52	.00274
6542034.3	-12.00	452997.88	3.92409	2.17	.149	31275.18	.00740
6542058.1	-10.00	406134.17	3.27209	4.25	.567	31321.47	.02815
6542081.9	-8.00	367866.03	2.61924	9.30	2.707	31359.36	.13421
6542105.6	-6.00	338148.48	1.96581	18.99	11.261	31388.86	.55776
6542129.2	-4.00	316946.58	1.31224	33.53	35.005	31409.93	1.73271
6542152.8	-2.00	304235.40	.65995	48.14	72.068	31422.58	3.56585
6542174.8	0.00	300000.00	.08103	54.47	92.254	31426.80	4.56402
6542196.8	2.00	304235.40	.65995	48.14	72.068	31422.58	3.56585
6542220.4	4.00	316946.58	1.31224	33.53	35.005	31409.93	1.73271
6542244.0	6.00	338148.48	1.96581	18.99	11.261	31388.86	.55776
6542267.7	8.00	367866.03	2.61924	9.30	2.707	31359.36	.13421
6542291.5	10.00	406134.17	3.27209	4.25	.567	31321.47	.02815
6542315.3	12.00	452997.88	3.92409	2.17	.149	31275.18	.00740
6542339.3	14.00	508512.21	4.57501	1.32	.055	31220.52	.00274
6542363.4	16.00	572742.39	5.22465	.90	.026	31157.52	.00131
6542387.7	18.00	645763.81	5.87279	.65	.014	31086.19	.00068
6542412.1	20.00	727662.17	6.51923	.47	.007	31006.57	.00036
6542671.0	40.00	2061244.51	12.84290	.02	.000	29763.45	.00000
6542974.9	60.00	4456231.37	18.73480	0.00	0.000	27751.09	0.00000
6543360.3	80.00	8175569.72	23.85455	0.00	0.000	25062.85	0.00000
6543885.3	100.00	13551992.51	27.64930	0.00	0.000	21841.66	0.00000
6544641.1	120.00	20794999.19	29.13867	0.00	0.000	18305.23	0.00000
6545750.4	140.00	29416456.35	26.53206	0.00	0.000	14810.17	0.00000
6547306.1	160.00	37265201.72	17.07080	0.00	0.000	11991.53	0.00000
6549209.9	180.00	40596394.88	.08103	0.00	0.000	10842.54	0.00000

REVOLUTION 47

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
6549209.9	-180.00	37838147.55	.08103	0.00	0.000	11283.74	0.00000
6550961.4	-160.00	34863070.86	16.02023	0.00	0.000	12365.69	0.00000
6552411.3	-140.00	27765094.81	25.21873	0.00	0.000	15052.80	0.00000
6553465.0	-120.00	19822229.06	27.96908	0.00	0.000	18424.59	0.00000
6554196.2	-100.00	13027881.18	26.70991	0.00	0.000	21861.65	0.00000
6554711.6	-80.00	7911033.70	23.13883	0.00	0.000	25005.69	0.00000
6555094.0	-60.00	4333943.41	18.22049	0.00	0.000	27636.05	0.00000
6555397.6	-40.00	2014182.81	12.51069	.02	.000	29607.93	.00000
6555657.5	-20.00	716880.98	6.35627	.48	.008	30827.04	.00038
6555682.0	-18.00	637079.38	5.72631	.66	.014	30905.14	.00072
6555706.4	-16.00	565914.62	5.09458	.92	.027	30975.11	.00138
6555730.7	-14.00	503307.58	4.46132	1.34	.058	31036.92	.00291
6555754.8	-12.00	449188.57	3.82672	2.22	.159	31090.55	.00796
6555778.8	-10.00	403497.32	3.19101	4.38	.615	31135.96	.03072
6555802.7	-8.00	366182.88	2.55443	9.50	2.880	31173.14	.14366
6555826.5	-6.00	337203.64	1.91724	19.11	11.623	31202.07	.57917
6555850.3	-4.00	316527.26	1.27991	33.29	35.192	31222.75	1.75241
6555874.0	-2.00	304130.66	.64388	47.38	71.219	31235.16	3.54498
6555896.2	0.00	300000.00	.08103	53.46	90.613	31239.30	4.50972
6555918.4	2.00	304130.66	.64388	47.38	71.219	31235.16	3.54498
6555942.1	4.00	316527.26	1.27991	33.29	35.192	31222.75	1.75241
6555965.8	6.00	337203.64	1.91724	19.11	11.623	31202.07	.57917
6555989.7	8.00	366182.88	2.55443	9.50	2.880	31173.14	.14366
6556013.6	10.00	403497.32	3.19101	4.38	.615	31135.96	.03072
6556037.6	12.00	449188.57	3.82672	2.22	.159	31090.55	.00796
6556061.7	14.00	503307.58	4.46132	1.34	.058	31036.92	.00291
6556085.9	16.00	565914.62	5.09458	.92	.027	30975.11	.00138
6556110.3	18.00	637079.38	5.72631	.66	.014	30905.14	.00072
6556134.9	20.00	716880.98	6.35627	.48	.008	30827.04	.00038
6556394.7	40.00	2014182.81	12.51069	.02	.000	29607.93	.00000
6556698.3	60.00	4333943.41	18.22049	0.00	0.000	27636.05	0.00000
6557080.7	80.00	7911033.70	23.13883	0.00	0.000	25005.69	0.00000
6557596.2	100.00	13027881.18	26.70991	0.00	0.000	21861.65	0.00000
6558327.3	120.00	19822229.06	27.96908	0.00	0.000	18424.59	0.00000
6559381.0	140.00	27765094.81	25.21873	0.00	0.000	15052.80	0.00000
6560830.9	160.00	34863070.86	16.02023	0.00	0.000	12365.69	0.00000
6562582.5	180.00	37838147.55	.08103	0.00	0.000	11283.74	0.00000

REVOLUTION 48

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
6562582.5	-180.00	35199473.15	.08103	0.00	0.000	11741.22	0.00000
6564193.9	-160.00	32548288.46	14.99728	0.00	0.000	12757.89	0.00000
6565544.6	-140.00	26145913.59	23.90286	0.00	0.000	15312.79	0.00000
6566544.6	-120.00	18849707.36	26.77389	0.00	0.000	18556.93	0.00000
6567251.4	-100.00	12495124.96	25.73887	0.00	0.000	21889.38	0.00000
6567757.1	-80.00	7638748.06	22.39409	0.00	0.000	24951.56	0.00000
6568136.4	-60.00	4206966.83	17.68323	0.00	0.000	27520.28	0.00000
6568439.7	-40.00	1965038.62	12.16286	.02	.000	29449.00	.00000
6568700.5	-20.00	705586.93	6.18545	.49	.008	30642.48	.00041
6568725.2	-18.00	627980.06	5.57274	.67	.015	30718.97	.00077
6568749.7	-16.00	558759.42	4.95823	.93	.029	30787.50	.00146
6568774.1	-14.00	497852.51	4.34212	1.37	.062	30848.03	.00311
6568798.4	-12.00	445195.44	3.72464	2.29	.172	30900.55	.00865
6568822.5	-10.00	400732.91	3.10601	4.53	.670	30945.02	.03367
6568846.5	-8.00	364418.15	2.48647	9.71	3.075	30981.44	.15430
6568870.5	-6.00	336212.94	1.86631	19.23	12.019	31009.78	.60259
6568894.4	-4.00	316087.57	1.24600	33.04	35.398	31030.03	1.77359
6568918.3	-2.00	304020.83	.62704	46.61	70.356	31042.19	3.52377
6568940.6	0.00	300000.00	.08103	52.42	88.943	31046.24	4.45415
6568963.0	2.00	304020.83	.62704	46.61	70.356	31042.19	3.52377
6568986.8	4.00	316087.57	1.24600	33.04	35.398	31030.03	1.77359
6569010.8	6.00	336212.94	1.86631	19.23	12.019	31009.78	.60259
6569034.7	8.00	364418.15	2.48647	9.71	3.075	30981.44	.15430
6569058.8	10.00	400732.91	3.10601	4.53	.670	30945.02	.03367
6569082.9	12.00	445195.44	3.72464	2.29	.172	30900.55	.00865
6569107.2	14.00	497852.51	4.34212	1.37	.062	30848.03	.00311
6569131.5	16.00	558759.42	4.95823	.93	.029	30787.50	.00146
6569156.1	18.00	627980.06	5.57274	.67	.015	30718.97	.00077
6569180.8	20.00	705586.93	6.18545	.49	.008	30642.48	.00041
6569441.6	40.00	1965038.62	12.16286	.02	.000	29449.00	.00000
6569744.9	60.00	4206966.83	17.68323	0.00	0.000	27520.28	0.00000
6570124.2	80.00	7638748.06	22.39409	0.00	0.000	24951.56	0.00000
6570629.9	100.00	12495124.96	25.73887	0.00	0.000	21889.38	0.00000
6571336.7	120.00	18849707.36	26.77389	0.00	0.000	18556.93	0.00000
6572336.7	140.00	26145913.59	23.90286	0.00	0.000	15312.79	0.00000
6573687.4	160.00	32548288.46	14.99728	0.00	0.000	12757.89	0.00000
6575298.8	180.00	35199473.15	.08103	0.00	0.000	11741.22	0.00000

REVOLUTION 49

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
6575298.8	-180.00	32671966.92	.08103	0.00	0.000	12216.12	0.00000
6576781.2	-160.00	30315471.13	14.00119	0.00	0.000	13169.15	0.00000
6578038.8	-140.00	24557476.04	22.58540	0.00	0.000	15591.26	0.00000
6578987.1	-120.00	17877121.74	25.55291	0.00	0.000	18703.32	0.00000
6579669.6	-100.00	11953332.76	24.73482	0.00	0.000	21925.64	0.00000
6580165.4	-80.00	7358275.82	21.61853	0.00	0.000	24900.91	0.00000
6580541.4	-60.00	4074983.51	17.12136	0.00	0.000	27403.93	0.00000
6580844.5	-40.00	1913653.72	11.79820	.02	.000	29286.55	.00000
6581106.3	-20.00	693738.64	6.00613	.50	.009	30452.63	.00044
6581131.1	-18.00	618432.25	5.41153	.69	.016	30527.39	.00082
6581155.8	-16.00	551250.18	4.81506	.95	.031	30594.37	.00157
6581180.3	-14.00	492126.60	4.21696	1.40	.066	30653.54	.00336
6581204.7	-12.00	441003.47	3.61744	2.36	.186	30704.87	.00944
6581229.0	-10.00	397830.50	3.01674	4.70	.738	30748.35	.03731
6581253.2	-8.00	362565.15	2.41511	9.95	3.294	30783.95	.16636
6581277.3	-6.00	335172.61	1.81284	19.37	12.452	30811.65	.62831
6581301.4	-4.00	315625.83	1.21041	32.80	35.623	30831.45	1.79639
6581325.4	-2.00	303905.49	.60936	45.83	69.477	30843.33	3.50221
6581347.9	0.00	300000.00	.08103	51.37	87.244	30847.30	4.39725
6581370.4	2.00	303905.49	.60936	45.83	69.477	30843.33	3.50221
6581394.5	4.00	315625.83	1.21041	32.80	35.623	30831.45	1.79639
6581418.5	6.00	335172.61	1.81284	19.37	12.452	30811.65	.62831
6581442.6	8.00	362565.15	2.41511	9.95	3.294	30783.95	.16636
6581466.8	10.00	397830.50	3.01674	4.70	.738	30748.35	.03731
6581491.1	12.00	441003.47	3.61744	2.36	.186	30704.87	.00944
6581515.5	14.00	492126.60	4.21696	1.40	.066	30653.54	.00336
6581540.0	16.00	551250.18	4.81506	.95	.031	30594.37	.00157
6581564.7	18.00	618432.25	5.41153	.69	.016	30527.39	.00082
6581589.5	20.00	693738.64	6.00613	.50	.009	30452.63	.00044
6581851.3	40.00	1913653.72	11.79820	.02	.000	29286.55	.00000
6582154.4	60.00	4074983.51	17.12136	0.00	0.000	27403.93	0.00000
6582530.4	80.00	7358275.82	21.61853	0.00	0.000	24900.91	0.00000
6583026.2	100.00	11953332.76	24.73482	0.00	0.000	21925.64	0.00000
6583708.8	120.00	17877121.74	25.55291	0.00	0.000	18703.32	0.00000
6584657.0	140.00	24557476.04	22.58540	0.00	0.000	15591.26	0.00000
6585914.7	160.00	30315471.13	14.00119	0.00	0.000	13169.15	0.00000
6587397.0	180.00	32671966.92	.08103	0.00	0.000	12216.12	0.00000

REVOLUTION 50

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
6587397.0	-180.00	30247717.27	.08103	0.00	0.000	12709.72	0.00000
6588760.3	-160.00	28159420.96	13.03107	0.00	0.000	13600.68	0.00000
6589930.5	-140.00	22998243.93	21.26718	0.00	0.000	15889.48	0.00000
6590828.9	-120.00	16904049.57	24.30592	0.00	0.000	18864.97	0.00000
6591487.4	-100.00	11402031.23	23.69624	0.00	0.000	21971.35	0.00000
6591973.1	-80.00	7069114.61	20.81013	0.00	0.000	24854.26	0.00000
6592345.8	-60.00	3937630.50	16.53300	0.00	0.000	27287.13	0.00000
6592648.5	-40.00	1859847.36	11.41531	.02	.000	29120.42	.00000
6592911.3	-20.00	681288.73	5.81758	.52	.009	30257.17	.00048
6592936.3	-18.00	608397.48	5.24200	.70	.017	30330.07	.00089
6592961.1	-16.00	543356.43	4.66451	.97	.033	30395.39	.00169
6592985.8	-14.00	486106.49	4.08533	1.44	.072	30453.10	.00366
6593010.3	-12.00	436595.47	3.50470	2.44	.205	30503.17	.01043
6593034.8	-10.00	394778.15	2.92285	4.89	.818	30545.58	.04164
6593059.1	-8.00	360616.21	2.34005	10.20	3.542	30580.30	.18009
6593083.4	-6.00	334078.33	1.75659	19.52	12.927	30607.32	.65667
6593107.6	-4.00	315140.12	1.17296	32.55	35.872	30626.63	1.82101
6593131.8	-2.00	303784.16	.59077	45.04	68.583	30638.22	3.48027
6593154.5	0.00	300000.00	.08103	50.30	85.515	30642.09	4.33894
6593177.2	2.00	303784.16	.59077	45.04	68.583	30638.22	3.48027
6593201.4	4.00	315140.12	1.17296	32.55	35.872	30626.63	1.82101
6593225.6	6.00	334078.33	1.75659	19.52	12.927	30607.32	.65667
6593249.9	8.00	360616.21	2.34005	10.20	3.542	30580.30	.18009
6593274.3	10.00	394778.15	2.92285	4.89	.818	30545.58	.04164
6593298.7	12.00	436595.47	3.50470	2.44	.205	30503.17	.01043
6593323.3	14.00	486106.49	4.08533	1.44	.072	30453.10	.00366
6593347.9	16.00	543356.43	4.66451	.97	.033	30395.39	.00169
6593372.7	18.00	608397.48	5.24200	.70	.017	30330.07	.00089
6593397.7	20.00	681288.73	5.81758	.52	.009	30257.17	.00048
6593660.5	40.00	1859847.36	11.41531	.02	.000	29120.42	.00000
6593963.3	60.00	3937630.50	16.53300	0.00	0.000	27287.13	0.00000
6594335.9	80.00	7069114.61	20.81013	0.00	0.000	24854.26	0.00000
6594821.6	100.00	11402031.23	23.69624	0.00	0.000	21971.35	0.00000
6595480.2	120.00	16904049.57	24.30592	0.00	0.000	18864.97	0.00000
6596378.6	140.00	22998243.93	21.26718	0.00	0.000	15889.48	0.00000
6597548.8	160.00	28159420.96	13.03107	0.00	0.000	13600.68	0.00000
6598912.0	180.00	30247717.27	.08103	0.00	0.000	12709.72	0.00000

REVOLUTION 51

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
6598912.0	-180.00	27919226.19	.08103	0.00	0.000	13223.52	0.00000
6600165.3	-160.00	26075080.99	12.08594	0.00	0.000	14053.86	0.00000
6601253.4	-140.00	21466556.37	19.94883	0.00	0.000	16208.87	0.00000
6602103.6	-120.00	15929936.60	23.03255	0.00	0.000	19043.24	0.00000
6602738.3	-100.00	10840645.86	22.62141	0.00	0.000	22027.53	0.00000
6603213.0	-80.00	6770681.99	19.96663	0.00	0.000	24812.20	0.00000
6603502.9	-60.00	3794490.26	15.91602	0.00	0.000	27170.06	0.00000
6603885.3	-40.00	1803411.40	11.01260	.03	.000	28950.47	.00000
6604149.2	-20.00	668182.55	5.61895	.53	.010	30055.72	.00053
6604174.3	-18.00	597831.36	5.06339	.72	.019	30126.64	.00096
6604199.3	-16.00	535043.03	4.50588	1.00	.035	30190.18	.00183
6604224.1	-14.00	479765.20	3.94663	1.49	.079	30246.32	.00404
6604248.8	-12.00	431951.59	3.38590	2.54	.227	30295.03	.01163
6604273.4	-10.00	391562.04	2.82391	5.11	.913	30336.28	.04677
6604298.0	-8.00	358562.51	2.26095	10.47	3.817	30370.06	.19541
6604322.4	-6.00	332925.13	1.69731	19.69	13.452	30396.35	.68807
6604346.8	-4.00	314628.22	1.13351	32.31	36.146	30415.14	1.84768
6604371.1	-2.00	303656.28	.57119	44.23	67.672	30426.42	3.45796
6604394.0	0.00	300000.00	.08103	49.22	83.753	30430.18	4.27914
6604416.9	2.00	303656.28	.57119	44.23	67.672	30426.42	3.45796
6604441.3	4.00	314628.22	1.13351	32.31	36.146	30415.14	1.84768
6604465.7	6.00	332925.13	1.69731	19.69	13.452	30396.35	.68807
6604490.1	8.00	358562.51	2.26095	10.47	3.817	30370.06	.19541
6604514.6	10.00	391562.04	2.82391	5.11	.913	30336.28	.04677
6604539.2	12.00	431951.59	3.38590	2.54	.227	30295.03	.01163
6604563.9	14.00	479765.20	3.94663	1.49	.079	30246.32	.00404
6604588.8	16.00	535043.03	4.50588	1.00	.035	30190.18	.00183
6604613.7	18.00	597831.36	5.06339	.72	.019	30126.64	.00096
6604638.8	20.00	668182.55	5.61895	.53	.010	30055.72	.00053
6604902.7	40.00	1803411.40	11.01260	.03	.000	28950.47	.00000
6605205.1	60.00	3794490.26	15.91602	0.00	0.000	27170.06	0.00000
6605574.3	80.00	6770681.99	19.96663	0.00	0.000	24812.20	0.00000
6606049.8	100.00	10840645.86	22.62141	0.00	0.000	22027.53	0.00000
6606684.5	120.00	15929936.60	23.03255	0.00	0.000	19043.24	0.00000
6607534.7	140.00	21466556.37	19.94883	0.00	0.000	16208.87	0.00000
6608622.8	160.00	26075080.99	12.08594	0.00	0.000	14053.86	0.00000
6609876.0	180.00	27919226.19	.08103	0.00	0.000	13223.52	0.00000

REVOLUTION 52

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
6609876.0	-180.00	25679327.11	.08103	0.00	0.000	13759.26	0.00000
6611027.5	-160.00	24057484.05	11.16466	0.00	0.000	14530.32	0.00000
6612038.4	-140.00	19960600.66	18.63081	0.00	0.000	16551.07	0.00000
6612842.1	-120.00	14954068.72	21.73230	0.00	0.000	19239.67	0.00000
6613453.2	-100.00	10268476.09	21.50837	0.00	0.000	22095.36	0.00000
6613918.3	-80.00	6462296.12	19.08542	0.00	0.000	24775.40	0.00000
6614283.8	-60.00	3645077.77	15.26794	0.00	0.000	27052.92	0.00000
6614585.8	-40.00	1744103.88	10.58821	.03	.000	28776.51	.00000
6614850.8	-20.00	654356.44	5.40926	.55	.011	29847.87	.00058
6614876.0	-18.00	586682.17	4.87483	.74	.020	29916.64	.00105
6614901.2	-16.00	526269.00	4.33838	1.03	.039	29978.27	.00200
6614926.1	-14.00	473071.31	3.80017	1.55	.087	30032.72	.00451
6614951.0	-12.00	427048.70	3.26044	2.66	.254	30079.96	.01315
6614975.8	-10.00	388166.08	2.71943	5.35	1.022	30119.98	.05277
6615000.5	-8.00	356393.71	2.17741	10.76	4.128	30152.74	.21286
6615025.1	-6.00	331707.20	1.63470	19.87	14.034	30178.25	.72301
6615049.7	-4.00	314087.56	1.09184	32.06	36.449	30196.47	1.87666
6615074.2	-2.00	303521.21	.55052	43.41	66.744	30207.41	3.43527
6615097.3	0.00	300000.00	.08103	48.11	81.957	30211.06	4.21773
6615120.4	2.00	303521.21	.55052	43.41	66.744	30207.41	3.43527
6615144.9	4.00	314087.56	1.09184	32.06	36.449	30196.47	1.87666
6615169.5	6.00	331707.20	1.63470	19.87	14.034	30178.25	.72301
6615194.1	8.00	356393.71	2.17741	10.76	4.128	30152.74	.21286
6615218.8	10.00	388166.08	2.71943	5.35	1.022	30119.98	.05277
6615243.6	12.00	427048.70	3.26044	2.66	.254	30079.96	.01315
6615268.4	14.00	473071.31	3.80017	1.55	.087	30032.72	.00451
6615293.4	16.00	526269.00	4.33838	1.03	.039	29978.27	.00200
6615318.5	18.00	586682.17	4.87483	.74	.020	29916.64	.00105
6615343.8	20.00	654356.44	5.40926	.55	.011	29847.87	.00058
6615608.8	40.00	1744103.88	10.58821	.03	.000	28776.51	.00000
6615910.8	60.00	3645077.77	15.26794	0.00	0.000	27052.92	0.00000
6616276.3	80.00	6462296.12	19.08542	0.00	0.000	24775.40	0.00000
6616741.4	100.00	10268476.09	21.50837	0.00	0.000	22095.36	0.00000
6617352.4	120.00	14954068.72	21.73230	0.00	0.000	19239.67	0.00000
6618156.1	140.00	19960600.66	18.63081	0.00	0.000	16551.07	0.00000
6619167.1	160.00	24057484.05	11.16466	0.00	0.000	14530.32	0.00000
6620318.5	180.00	25679327.11	.08103	0.00	0.000	13759.26	0.00000

REVOLUTION 53

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
6620318.5	-180.00	23521096.08	.08103	0.00	0.000	14319.00	0.00000
6621375.8	-160.00	22101691.31	10.26599	0.00	0.000	15032.00	0.00000
6622314.0	-140.00	18478371.85	17.31327	0.00	0.000	16917.98	0.00000
6623072.8	-120.00	13975533.72	20.40444	0.00	0.000	19456.03	0.00000
6623660.4	-100.00	9684661.98	20.35485	0.00	0.000	22176.19	0.00000
6624114.9	-80.00	6143149.89	18.16348	0.00	0.000	24744.65	0.00000
6624476.6	-60.00	3488823.53	14.58587	0.00	0.000	26935.92	0.00000
6624778.2	-40.00	1681640.53	10.13996	.03	.000	28598.31	.00000
6625044.3	-20.00	639735.48	5.18737	.57	.012	29633.09	.00065
6625069.7	-18.00	574889.06	4.67526	.77	.022	29699.55	.00116
6625095.0	-16.00	516986.15	4.16110	1.07	.042	29759.11	.00221
6625120.2	-14.00	465987.82	3.64514	1.63	.098	29811.74	.00511
6625145.2	-12.00	421859.55	3.12762	2.80	.290	29857.40	.01508
6625170.1	-10.00	384571.34	2.60880	5.60	1.151	29896.08	.05985
6625195.0	-8.00	354097.69	2.08896	11.08	4.487	29927.75	.23308
6625219.8	-6.00	330417.71	1.56842	20.08	14.682	29952.40	.76212
6625244.6	-4.00	313515.09	1.04773	31.81	36.785	29970.02	1.90827
6625269.3	-2.00	303378.19	.52866	42.56	65.797	29980.59	3.41216
6625292.6	0.00	300000.00	.08103	46.98	80.123	29984.12	4.15460
6625315.9	2.00	303378.19	.52866	42.56	65.797	29980.59	3.41216
6625340.6	4.00	313515.09	1.04773	31.81	36.785	29970.02	1.90827
6625365.4	6.00	330417.71	1.56842	20.08	14.682	29952.40	.76212
6625390.2	8.00	354097.69	2.08896	11.08	4.487	29927.75	.23308
6625415.0	10.00	384571.34	2.60880	5.60	1.151	29896.08	.05985
6625440.0	12.00	421859.55	3.12762	2.80	.290	29857.40	.01508
6625465.0	14.00	465987.82	3.64514	1.63	.098	29811.74	.00511
6625490.2	16.00	516986.15	4.16110	1.07	.042	29759.11	.00221
6625515.5	18.00	574889.06	4.67526	.77	.022	29699.55	.00116
6625540.9	20.00	639735.48	5.18737	.57	.012	29633.09	.00065
6625807.0	40.00	1681640.53	10.13996	.03	.000	28598.31	.00000
6626108.6	60.00	3488823.53	14.58587	0.00	0.000	26935.92	0.00000
6626470.3	80.00	6143149.89	18.16348	0.00	0.000	24744.65	0.00000
6626924.8	100.00	9684661.98	20.35485	0.00	0.000	22176.19	0.00000
6627512.4	120.00	13975533.72	20.40444	0.00	0.000	19456.03	0.00000
6628271.2	140.00	18478371.85	17.31327	0.00	0.000	16917.98	0.00000
6629209.4	160.00	22101691.31	10.26599	0.00	0.000	15032.00	0.00000
6630266.6	180.00	23521096.08	.08103	0.00	0.000	14319.00	0.00000

REVOLUTION 54

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
6630266.6	-180.00	21437750.24	.08103	0.00	0.000	14905.19	0.00000
6631236.5	-160.00	20202715.24	9.38851	0.00	0.000	15561.21	0.00000
6632106.3	-140.00	17017616.14	15.99607	0.00	0.000	17311.83	0.00000
6632821.7	-120.00	12993168.54	19.04796	0.00	0.000	19694.38	0.00000
6633385.9	-100.00	9088138.56	19.15816	0.00	0.000	22271.61	0.00000
6633829.6	-80.00	5812275.72	17.19729	0.00	0.000	24720.87	0.00000
6634187.3	-60.00	3325050.28	13.86643	0.00	0.000	26819.34	0.00000
6634488.4	-40.00	1615683.22	9.66528	.03	.000	28415.60	.00000
6634755.7	-20.00	624230.40	4.95189	.60	.014	29410.79	.00072
6634781.3	-18.00	562379.49	4.46344	.80	.025	29474.74	.00129
6634806.8	-16.00	507136.99	3.97292	1.12	.048	29532.06	.00250
6634832.1	-14.00	458470.62	3.48056	1.72	.112	29582.71	.00587
6634857.3	-12.00	416351.69	2.98662	2.99	.337	29626.66	.01767
6634882.5	-10.00	380755.22	2.49136	5.89	1.305	29663.88	.06842
6634907.5	-8.00	351659.97	1.99505	11.44	4.903	29694.37	.25673
6634932.5	-6.00	329048.50	1.49805	20.31	15.424	29718.10	.80692
6634957.5	-4.00	312907.19	1.00090	31.56	37.158	29735.06	1.94290
6634982.4	-2.00	303226.31	.50546	41.70	64.831	29745.23	3.38862
6635005.9	0.00	300000.00	.08103	45.83	78.250	29748.63	4.08960
6635029.4	2.00	303226.31	.50546	41.70	64.831	29745.23	3.38862
6635054.3	4.00	312907.19	1.00090	31.56	37.158	29735.06	1.94290
6635079.3	6.00	329048.50	1.49805	20.31	15.424	29718.10	.80692
6635104.3	8.00	351659.97	1.99505	11.44	4.903	29694.37	.25673
6635129.3	10.00	380755.22	2.49136	5.89	1.305	29663.88	.06842
6635154.4	12.00	416351.69	2.98662	2.99	.337	29626.66	.01767
6635179.7	14.00	458470.62	3.48056	1.72	.112	29582.71	.00587
6635205.0	16.00	507136.99	3.97292	1.12	.048	29532.06	.00250
6635230.5	18.00	562379.49	4.46344	.80	.025	29474.74	.00129
6635256.1	20.00	624230.40	4.95189	.60	.014	29410.79	.00072
6635523.4	40.00	1615683.22	9.66528	.03	.000	28415.60	.00000
6635824.5	60.00	3325050.28	13.86643	0.00	0.000	26819.34	0.00000
6636182.2	80.00	5812275.72	17.19729	0.00	0.000	24720.87	0.00000
6636625.9	100.00	9088138.56	19.15816	0.00	0.000	22271.61	0.00000
6637190.1	120.00	12993168.54	19.04796	0.00	0.000	19694.38	0.00000
6637905.5	140.00	17017616.14	15.99607	0.00	0.000	17311.83	0.00000
6638775.3	160.00	20202715.24	9.38851	0.00	0.000	15561.21	0.00000
6639745.1	180.00	21437750.24	.08103	0.00	0.000	14905.19	0.00000

REVOLUTION 55

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
6639745.1	-180.00	19422524.49	.08103	0.00	0.000	15520.80	0.00000
6640633.8	-160.00	18355418.40	8.53063	0.00	0.000	16120.77	0.00000
6641439.0	-140.00	15575749.89	14.67865	0.00	0.000	17735.31	0.00000
6642112.4	-120.00	12005484.78	17.66142	0.00	0.000	19957.17	0.00000
6642653.4	-100.00	8477571.94	17.91505	0.00	0.000	22383.47	0.00000
6643086.0	-80.00	5468496.30	16.18262	0.00	0.000	24705.14	0.00000
6643439.6	-60.00	3152940.69	13.10553	0.00	0.000	26703.47	0.00000
6643740.2	-40.00	1545823.90	9.16105	.04	.000	28228.05	.00000
6644008.7	-20.00	607733.31	4.70116	.62	.016	29180.21	.00083
6644034.5	-18.00	549065.79	4.23788	.84	.028	29241.44	.00147
6644060.1	-16.00	496652.07	3.77250	1.17	.054	29296.32	.00286
6644085.7	-14.00	450466.40	3.30526	1.83	.130	29344.81	.00688
6644111.1	-12.00	410485.85	2.83641	3.21	.399	29386.90	.02109
6644136.4	-10.00	376690.42	2.36624	6.26	1.514	29422.55	.07998
6644161.7	-8.00	349063.05	1.89501	11.85	5.407	29451.74	.28545
6644186.9	-6.00	327589.72	1.42308	20.58	16.269	29474.47	.85817
6644212.0	-4.00	312259.48	.95102	31.30	37.576	29490.71	1.98101
6644237.1	-2.00	303064.48	.48078	40.82	63.842	29500.46	3.36463
6644260.9	0.00	300000.00	.08103	44.65	76.334	29503.71	4.02254
6644284.6	2.00	303064.48	.48078	40.82	63.842	29500.46	3.36463
6644309.7	4.00	312259.48	.95102	31.30	37.576	29490.71	1.98101
6644334.9	6.00	327589.72	1.42308	20.58	16.269	29474.47	.85817
6644360.1	8.00	349063.05	1.89501	11.85	5.407	29451.74	.28545
6644385.4	10.00	376690.42	2.36624	6.26	1.514	29422.55	.07998
6644410.7	12.00	410485.85	2.83641	3.21	.399	29386.90	.02109
6644436.1	14.00	450466.40	3.30526	1.83	.130	29344.81	.00688
6644461.6	16.00	496652.07	3.77250	1.17	.054	29296.32	.00286
6644487.3	18.00	549065.79	4.23788	.84	.028	29241.44	.00147
6644513.0	20.00	607733.31	4.70116	.62	.016	29180.21	.00083
6644781.6	40.00	1545823.90	9.16105	.04	.000	28228.05	.00000
6645082.2	60.00	3152940.69	13.10553	0.00	0.000	26703.47	0.00000
6645435.8	80.00	5468496.30	16.18262	0.00	0.000	24705.14	0.00000
6645868.4	100.00	8477571.94	17.91505	0.00	0.000	22383.47	0.00000
6646409.4	120.00	12005484.78	17.66142	0.00	0.000	19957.17	0.00000
6647082.8	140.00	15575749.89	14.67865	0.00	0.000	17735.31	0.00000
6647888.0	160.00	18355418.40	8.53063	0.00	0.000	16120.77	0.00000
6648776.6	180.00	19422524.49	.08103	0.00	0.000	15520.80	0.00000

REVOLUTION 56

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P T
6648776.6	-180.00	17468511.76	.08103	0.00	0.000	16169.49	0.00000
6649589.8	-160.00	16554374.07	7.69050	0.00	0.000	16714.18	0.00000
6650333.9	-140.00	14149741.47	13.35993	0.00	0.000	18191.70	0.00000
6650966.7	-120.00	11010560.87	16.24278	0.00	0.000	20247.33	0.00000
6651484.6	-100.00	7851267.07	16.62154	0.00	0.000	22514.04	0.00000
6651905.8	-80.00	5110353.88	15.11436	0.00	0.000	24698.80	0.00000
6652255.0	-60.00	2971491.10	12.29822	0.00	0.000	26588.69	0.00000
6652555.0	-40.00	1471561.68	8.62348	.04	.000	28035.24	.00000
6652824.9	-20.00	590111.57	4.43314	.66	.018	28940.44	.00096
6652850.9	-18.00	534840.17	3.99673	.88	.032	28998.69	.00169
6652876.7	-16.00	485445.96	3.55819	1.25	.063	29050.91	.00337
6652902.4	-14.00	441909.59	3.11779	1.97	.155	29097.05	.00829
6652928.0	-12.00	404213.77	2.67577	3.51	.491	29137.09	.02619
6652953.6	-10.00	372343.34	2.23241	6.69	1.780	29171.02	.09485
6652979.0	-8.00	346285.39	1.78800	12.35	6.040	29198.80	.32159
6653004.5	-6.00	326029.24	1.34289	20.88	17.232	29220.43	.91688
6653029.8	-4.00	311566.55	.89768	31.05	38.045	29235.89	2.02323
6653055.2	-2.00	302891.34	.45441	39.92	62.829	29245.16	3.34014
6653079.1	0.00	300000.00	.08103	43.44	74.368	29248.26	3.95318
6653103.1	2.00	302891.34	.45441	39.92	62.829	29245.16	3.34014
6653128.5	4.00	311566.55	.89768	31.05	38.045	29235.89	2.02323
6653153.8	6.00	326029.24	1.34289	20.88	17.232	29220.43	.91688
6653179.3	8.00	346285.39	1.78800	12.35	6.040	29198.80	.32159
6653204.7	10.00	372343.34	2.23241	6.69	1.780	29171.02	.09485
6653230.3	12.00	404213.77	2.67577	3.51	.491	29137.09	.02619
6653255.9	14.00	441909.59	3.11779	1.97	.155	29097.05	.00829
6653281.6	16.00	485445.96	3.55819	1.25	.063	29050.91	.00337
6653307.4	18.00	534840.17	3.99673	.88	.032	28998.69	.00169
6653333.4	20.00	590111.57	4.43314	.66	.018	28940.44	.00096
6653603.3	40.00	1471561.68	8.62348	.04	.000	28035.24	.00000
6653903.3	60.00	2971491.10	12.29822	0.00	0.000	26588.69	0.00000
6654252.5	80.00	5110353.88	15.11436	0.00	0.000	24698.80	0.00000
6654673.7	100.00	7851267.07	16.62154	0.00	0.000	22514.04	0.00000
6655191.6	120.00	11010560.87	16.24278	0.00	0.000	20247.33	0.00000
6655824.4	140.00	14149741.47	13.35993	0.00	0.000	18191.70	0.00000
6656568.5	160.00	16554374.07	7.69050	0.00	0.000	16714.18	0.00000
6657381.7	180.00	17468511.76	.08103	0.00	0.000	16169.49	0.00000

REVOLUTION 57

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	R_T
6657381.7	-180.00	15568442.23	.08103	0.00	0.000	16855.85	0.00000
6658124.3	-160.00	14793664.76	6.86598	0.00	0.000	17345.84	0.00000
6658810.7	-140.00	12735933.16	12.03810	0.00	0.000	18685.09	0.00000
6659404.0	-120.00	10005880.30	14.78917	0.00	0.000	20568.49	0.00000
6659898.8	-100.00	7207030.48	15.27256	0.00	0.000	22666.09	0.00000
6660308.5	-80.00	4736005.29	13.98616	0.00	0.000	24703.45	0.00000
6660653.1	-60.00	2779443.02	11.43833	0.00	0.000	26475.44	0.00000
6660952.4	-40.00	1392268.92	8.04780	.05	.000	27836.65	.00001
6661223.7	-20.00	571198.83	4.14528	.70	.021	28690.31	.00112
6661249.8	-18.00	519567.41	3.73768	.94	.037	28745.29	.00199
6661275.8	-16.00	473411.50	3.32795	1.36	.076	28794.57	.00412
6661301.8	-14.00	432717.92	2.91635	2.15	.192	28838.13	.01033
6661327.6	-12.00	397474.84	2.50314	3.88	.620	28875.94	.03338
6661353.4	-10.00	367671.84	2.08858	7.23	2.140	28907.97	.11511
6661379.1	-8.00	343299.97	1.67298	12.91	6.805	28934.20	.36568
6661404.7	-6.00	324351.84	1.25670	21.22	18.340	28954.62	.98480
6661430.3	-4.00	310821.64	.84036	30.80	38.575	28969.21	2.07029
6661455.9	-2.00	302705.20	.42612	39.00	61.788	28977.97	3.31511
6661480.1	0.00	300000.00	.08103	42.20	72.347	28980.89	3.88124
6661504.4	2.00	302705.20	.42612	39.00	61.788	28977.97	3.31511
6661529.9	4.00	310821.64	.84036	30.80	38.575	28969.21	2.07029
6661555.5	6.00	324351.84	1.25670	21.22	18.340	28954.62	.98480
6661581.2	8.00	343299.97	1.67298	12.91	6.805	28934.20	.36568
6661606.9	10.00	367671.84	2.08858	7.23	2.140	28907.97	.11511
6661632.6	12.00	397474.84	2.50314	3.88	.620	28875.94	.03338
6661658.5	14.00	432717.92	2.91635	2.15	.192	28838.13	.01033
6661684.4	16.00	473411.50	3.32795	1.36	.076	28794.57	.00412
6661710.5	18.00	519567.41	3.73768	.94	.037	28745.29	.00199
6661736.6	20.00	571198.83	4.14528	.70	.021	28690.31	.00112
6662007.8	40.00	1392268.92	8.04780	.05	.000	27836.65	.00001
6662307.2	60.00	2779443.02	11.43833	0.00	0.000	26475.44	0.00000
6662651.8	80.00	4736005.29	13.98616	0.00	0.000	24703.45	0.00000
6663061.5	100.00	7207030.48	15.27256	0.00	0.000	22666.09	0.00000
6663556.3	120.00	10005880.30	14.78917	0.00	0.000	20568.49	0.00000
6664149.6	140.00	12735933.16	12.03810	0.00	0.000	18685.09	0.00000
6664836.0	160.00	14793664.76	6.86598	0.00	0.000	17345.84	0.00000
6665578.6	180.00	15568442.23	.08103	0.00	0.000	16855.85	0.00000

REVOLUTION 58

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
6665578.6	-180.00	13714357.13	.08103	0.00	0.000	17585.82	0.00000
6666255.4	-160.00	13066575.51	6.05442	0.00	0.000	18021.45	0.00000
6666887.0	-140.00	11329762.66	10.71038	0.00	0.000	19220.73	0.00000
6667442.0	-120.00	8988080.05	13.29647	0.00	0.000	20925.24	0.00000
6667913.6	-100.00	6541957.48	13.86155	0.00	0.000	22843.09	0.00000
6668311.3	-80.00	4343059.80	12.78991	0.00	0.000	24721.13	0.00000
6668651.1	-60.00	2575177.75	10.51798	0.00	0.000	26364.28	0.00000
6668949.7	-40.00	1307139.28	7.42793	.06	.000	27631.58	.00001
6669222.3	-20.00	550781.11	3.83429	.76	.025	28428.30	.00136
6669248.7	-18.00	503073.58	3.45775	1.02	.045	28479.66	.00246
6669275.0	-16.00	460410.82	3.07910	1.50	.096	28525.71	.00523
6669301.1	-14.00	422785.55	2.69860	2.41	.247	28566.41	.01344
6669327.2	-12.00	390191.14	2.31651	4.37	.808	28601.73	.04394
6669353.2	-10.00	362621.67	1.93308	7.91	2.643	28631.67	.14352
6669379.1	-8.00	340072.04	1.54863	13.56	7.747	28656.18	.42032
6669405.0	-6.00	322537.95	1.16352	21.60	19.630	28675.27	1.06432
6669430.9	-4.00	310016.05	.77842	30.54	39.179	28688.91	2.12322
6669456.7	-2.00	302503.89	.39560	38.04	60.716	28697.09	3.28947
6669481.2	0.00	300000.00	.08103	40.93	70.263	28699.82	3.80632
6669505.7	2.00	302503.89	.39560	38.04	60.716	28697.09	3.28947
6669531.5	4.00	310016.05	.77842	30.54	39.179	28688.91	2.12322
6669557.4	6.00	322537.95	1.16352	21.60	19.630	28675.27	1.06432
6669583.3	8.00	340072.04	1.54863	13.56	7.747	28656.18	.42032
6669609.2	10.00	362621.67	1.93308	7.91	2.643	28631.67	.14352
6669635.2	12.00	390191.14	2.31651	4.37	.808	28601.73	.04394
6669661.3	14.00	422785.55	2.69860	2.41	.247	28566.41	.01344
6669687.4	16.00	460410.82	3.07910	1.50	.096	28525.71	.00523
6669713.7	18.00	503073.58	3.45775	1.02	.045	28479.66	.00246
6669740.1	20.00	550781.11	3.83429	.76	.025	28428.30	.00136
6670012.7	40.00	1307139.28	7.42793	.06	.000	27631.58	.00001
6670311.3	60.00	2575177.75	10.51798	0.00	0.000	26364.28	0.00000
6670651.1	80.00	4343059.80	12.78991	0.00	0.000	24721.13	0.00000
6671048.8	100.00	6541957.48	13.86155	0.00	0.000	22843.09	0.00000
6671520.5	120.00	8988080.05	13.29647	0.00	0.000	20925.24	0.00000
6672075.4	140.00	11329762.66	10.71038	0.00	0.000	19220.73	0.00000
6672707.0	160.00	13066575.51	6.05442	0.00	0.000	18021.45	0.00000
6673383.8	180.00	13714357.13	.08103	0.00	0.000	17585.82	0.00000

REVOLUTION 59

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
6673383.8	-180.00	11897092.88	.08103	0.00	0.000	18367.30	0.00000
6673998.8	-160.00	11365099.23	5.25252	0.00	0.000	18748.61	0.00000
6674578.3	-140.00	9925306.49	9.37258	0.00	0.000	19805.59	0.00000
6675095.8	-120.00	7952539.27	11.75867	0.00	0.000	21323.59	0.00000
6675544.3	-100.00	5852086.06	12.37961	0.00	0.000	23049.57	0.00000
6675929.6	-80.00	3928316.46	11.51491	0.00	0.000	24754.49	0.00000
6676264.2	-60.00	2356546.18	9.52681	0.00	0.000	26255.89	0.00000
6676561.9	-40.00	1215103.74	6.75581	.07	.000	27419.09	.00002
6676836.1	-20.00	528574.55	3.49581	.83	.031	28152.40	.00172
6676862.7	-18.00	485127.92	3.15301	1.14	.058	28199.72	.00319
6676889.2	-16.00	446261.01	2.80815	1.70	.128	28242.15	.00704
6676915.6	-14.00	411972.03	2.46147	2.77	.338	28279.66	.01860
6676941.9	-12.00	382259.22	2.11323	4.94	1.070	28312.22	.05876
6676968.2	-10.00	357120.87	1.76370	8.71	3.315	28339.81	.18184
6676994.4	-8.00	336555.43	1.41318	14.39	9.032	28362.41	.49511
6677020.5	-6.00	320561.58	1.06204	22.04	21.152	28380.00	1.15879
6677046.6	-4.00	309138.20	.71098	30.32	39.966	28392.58	2.18851
6677072.7	-2.00	302284.51	.36246	37.05	59.607	28400.13	3.26315
6677097.5	0.00	300000.00	.08103	39.61	68.102	28402.64	3.72790
6677122.3	2.00	302284.51	.36246	37.05	59.607	28400.13	3.26315
6677148.4	4.00	309138.20	.71098	30.32	39.966	28392.58	2.18851
6677174.5	6.00	320561.58	1.06204	22.04	21.152	28380.00	1.15879
6677200.7	8.00	336555.43	1.41318	14.39	9.032	28362.41	.49511
6677226.9	10.00	357120.87	1.76370	8.71	3.315	28339.81	.18184
6677253.1	12.00	382259.22	2.11323	4.94	1.070	28312.22	.05876
6677279.5	14.00	411972.03	2.46147	2.77	.338	28279.66	.01860
6677305.9	16.00	446261.01	2.80815	1.70	.128	28242.15	.00704
6677332.4	18.00	485127.92	3.15301	1.14	.058	28199.72	.00319
6677359.0	20.00	528574.55	3.49581	.83	.031	28152.40	.00172
6677633.1	40.00	1215103.74	6.75581	.07	.000	27419.09	.00002
6677930.9	60.00	2356546.18	9.52681	0.00	0.000	26255.89	0.00000
6678265.5	80.00	3928316.46	11.51491	0.00	0.000	24754.49	0.00000
6678650.8	100.00	5852086.06	12.37961	0.00	0.000	23049.57	0.00000
6679099.3	120.00	7952539.27	11.75867	0.00	0.000	21323.59	0.00000
6679616.8	140.00	9925306.49	9.37258	0.00	0.000	19805.59	0.00000
6680196.3	160.00	11365099.23	5.25252	0.00	0.000	18748.61	0.00000
6680811.3	180.00	11897092.88	.08103	0.00	0.000	18367.30	0.00000

REVOLUTION 60

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
6680811.3	-180.00	10105401.19	.08103	0.00	0.000	19211.21	0.00000
6681368.0	-160.00	9679083.66	4.45590	0.00	0.000	19537.86	0.00000
6681897.7	-140.00	8514485.04	8.01828	0.00	0.000	20449.27	0.00000
6682378.5	-120.00	6892665.54	10.16677	0.00	0.000	21771.75	0.00000
6682803.6	-100.00	5131798.59	10.81421	0.00	0.000	23291.68	0.00000
6683176.1	-80.00	3487311.52	10.14641	0.00	0.000	24807.09	0.00000
6683505.1	-60.00	2120576.51	8.45055	.01	.000	26151.20	.00000
6683801.9	-40.00	1114686.91	6.02036	.09	.000	27197.83	.00003
6684077.7	-20.00	504187.19	3.12382	.95	.042	27859.77	.00232
6684104.5	-18.00	465411.76	2.81802	1.33	.081	27902.54	.00453
6684131.2	-16.00	430709.45	2.51023	2.00	.184	27940.89	.01022
6684157.9	-14.00	400083.41	2.20070	3.33	.507	27974.80	.02820
6684184.5	-12.00	373536.22	1.88966	5.73	1.495	28004.24	.08302
6684211.0	-10.00	351070.00	1.57739	9.67	4.237	28029.18	.23504
6684237.5	-8.00	332686.43	1.26418	15.38	10.704	28049.62	.59331
6684264.0	-6.00	318386.82	.95042	22.60	23.054	28065.53	1.27714
6684290.4	-4.00	308172.14	.63685	30.11	40.883	28076.90	2.26391
6684316.7	-2.00	302043.07	.32617	36.02	58.452	28083.73	3.23601
6684341.9	0.00	300000.00	.08103	38.23	65.850	28086.00	3.64525
6684367.0	2.00	302043.07	.32617	36.02	58.452	28083.73	3.23601
6684393.4	4.00	308172.14	.63685	30.11	40.883	28076.90	2.26391
6684419.8	6.00	318386.82	.95042	22.60	23.054	28065.53	1.27714
6684446.2	8.00	332686.43	1.26418	15.38	10.704	28049.62	.59331
6684472.7	10.00	351070.00	1.57739	9.67	4.237	28029.18	.23504
6684499.2	12.00	373536.22	1.88966	5.73	1.495	28004.24	.08302
6684525.8	14.00	400083.41	2.20070	3.33	.507	27974.80	.02820
6684552.5	16.00	430709.45	2.51023	2.00	.184	27940.89	.01022
6684579.2	18.00	465411.76	2.81802	1.33	.081	27902.54	.00453
6684606.1	20.00	504187.19	3.12382	.95	.042	27859.77	.00232
6684881.9	40.00	1114686.91	6.02036	.09	.000	27197.83	.00003
6685178.6	60.00	2120576.51	8.45055	.01	.000	26151.20	.00000
6685507.7	80.00	3487311.52	10.14641	0.00	0.000	24807.09	0.00000
6685880.2	100.00	5131798.59	10.81421	0.00	0.000	23291.68	0.00000
6686305.2	120.00	6892665.54	10.16677	0.00	0.000	21771.75	0.00000
6686786.1	140.00	8514485.04	8.01828	0.00	0.000	20449.27	0.00000
6687315.7	160.00	9679083.66	4.45590	0.00	0.000	19537.86	0.00000
6687872.5	180.00	10105401.19	.08103	0.00	0.000	19211.21	0.00000

REVOLUTION 61

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	$\frac{P}{T}$
6687872.5	-180.00	832431n.45	.08103	0.00	0.000	20133.56	0.00000
6688374.0	-160.00	7994632.79	3.65833	0.00	0.000	20404.63	0.00000
6688855.7	-140.00	7085565.66	6.63737	0.00	0.000	21165.77	0.00000
6689300.5	-120.00	5798554.77	8.50669	0.00	0.000	22281.52	0.00000
6689701.7	-100.00	4372702.82	9.14666	0.00	0.000	23578.20	0.00000
6690060.7	-80.00	3013475.21	8.66293	0.00	0.000	24883.99	0.00000
6690383.7	-60.00	1862931.45	7.26858	.02	.000	26051.46	.00000
6690679.3	-40.00	1003740.58	5.20551	.12	.001	26965.81	.00005
6690956.9	-20.00	477048.27	2.70959	1.14	.062	27546.25	.00352
6690984.0	-18.00	443461.06	2.44488	1.63	.127	27583.81	.00718
6691011.0	-16.00	413388.27	2.17830	2.51	.301	27617.49	.01693
6691037.9	-14.00	386837.19	1.91009	4.19	.833	27647.28	.04683
6691064.8	-12.00	363814.09	1.64047	6.90	2.255	27673.14	.12669
6691091.7	-10.00	344324.28	1.36971	10.97	5.675	27695.06	.31858
6691118.5	-8.00	328372.19	1.09810	16.60	12.969	27713.01	.72756
6691145.2	-6.00	315961.38	.82605	23.26	25.432	27727.00	1.42605
6691172.0	-4.00	307094.59	.55435	29.90	41.968	27736.99	2.35245
6691198.7	-2.00	301773.74	.28602	34.93	57.241	27742.99	3.20785
6691224.1	0.00	300000.00	.08103	36.79	63.480	27744.99	3.55726
6691249.6	2.00	301773.74	.28602	34.93	57.241	27742.99	3.20785
6691276.3	4.00	307094.59	.55435	29.90	41.968	27736.99	2.35245
6691303.0	6.00	315961.38	.82605	23.26	25.432	27727.00	1.42605
6691329.8	8.00	328372.19	1.09810	16.60	12.969	27713.01	.72756
6691356.6	10.00	344324.28	1.36971	10.97	5.675	27695.06	.31858
6691383.4	12.00	363814.09	1.64047	6.90	2.255	27673.14	.12669
6691410.3	14.00	386837.19	1.91009	4.19	.833	27647.28	.04683
6691437.3	16.00	413388.27	2.17830	2.51	.301	27617.49	.01693
6691464.3	18.00	443461.06	2.44488	1.63	.127	27583.81	.00718
6691491.4	20.00	477048.27	2.70959	1.14	.062	27546.25	.00352
6691768.9	40.00	1003740.58	5.20551	.12	.001	26965.81	.00005
6692064.6	60.00	1862931.45	7.26858	.02	.000	26051.46	.00000
6692387.6	80.00	3013475.21	8.66293	0.00	0.000	24883.99	0.00000
6692746.6	100.00	4372702.82	9.14666	0.00	0.000	23578.20	0.00000
6693147.8	120.00	5798554.77	8.50669	0.00	0.000	22281.52	0.00000
6693592.5	140.00	7085565.66	6.63737	0.00	0.000	21165.77	0.00000
6694074.2	160.00	7994632.79	3.65833	0.00	0.000	20404.63	0.00000
6694575.8	180.00	832431n.45	.08103	0.00	0.000	20133.56	0.00000

REVOLUTION 62

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P T
6694575.8	-180.00	6531710.75	.08103	0.00	0.000	21159.52	0.00000
6695024.5	-160.00	6290765.96	2.85022	0.00	0.000	21373.26	0.00000
6695459.6	-140.00	5620028.86	5.21306	0.00	0.000	21977.10	0.00000
6695868.3	-120.00	4654193.12	6.75492	0.00	0.000	22871.33	0.00000
6696245.0	-100.00	3561303.98	7.34687	0.00	0.000	23922.66	0.00000
6696589.6	-80.00	2496383.71	7.03067	0.00	0.000	24992.94	0.00000
6696906.0	-60.00	1576786.27	5.94861	.03	.000	25958.49	.00000
6697200.4	-40.00	878894.02	4.28608	.17	.002	26719.80	.00009
6697479.8	-20.00	446262.35	2.23943	1.51	.114	27205.23	.00653
6697507.2	-18.00	418547.78	2.02121	2.21	.243	27236.70	.01390
6697534.5	-16.00	393720.30	1.80131	3.50	.607	27264.92	.03463
6697561.8	-14.00	371790.18	1.57995	5.49	1.492	27289.88	.08501
6697589.0	-12.00	352766.36	1.35735	8.57	3.626	27311.56	.20639
6697616.2	-10.00	336656.51	1.13375	12.77	8.038	27329.94	.45729
6697643.4	-8.00	323467.06	.90943	18.14	16.197	27344.99	.92093
6697670.5	-6.00	313203.23	.68483	24.07	28.465	27356.71	1.61774
6697697.6	-4.00	305869.05	.46084	29.70	43.282	27365.09	2.45910
6697724.6	-2.00	301467.41	.24096	33.77	55.953	27370.13	3.17838
6697750.5	0.00	300000.00	.08103	35.25	60.953	27371.80	3.46221
6697776.3	2.00	301467.41	.24096	33.77	55.953	27370.13	3.17838
6697803.4	4.00	305869.05	.46084	29.70	43.282	27365.09	2.45910
6697830.5	6.00	313203.23	.68483	24.07	28.465	27356.71	1.61774
6697857.6	8.00	323467.06	.90943	18.14	16.197	27344.99	.92093
6697884.7	10.00	336656.51	1.13375	12.77	8.038	27329.94	.45729
6697911.9	12.00	352766.36	1.35735	8.57	3.626	27311.56	.20639
6697939.1	14.00	371790.18	1.57995	5.49	1.492	27289.88	.08501
6697966.4	16.00	393720.30	1.80131	3.50	.607	27264.92	.03463
6697993.7	18.00	418547.78	2.02121	2.21	.243	27236.70	.01390
6698021.2	20.00	446262.35	2.23943	1.51	.114	27205.23	.00653
6698300.6	40.00	878894.02	4.28608	.17	.002	26719.80	.00009
6698594.9	60.00	1576786.27	5.94861	.03	.000	25958.49	.00000
6698911.3	80.00	2496383.71	7.03067	0.00	0.000	24992.94	0.00000
6699255.9	100.00	3561303.98	7.34687	0.00	0.000	23922.66	0.00000
6699632.6	120.00	4654193.12	6.75492	0.00	0.000	22871.33	0.00000
6700041.3	140.00	5620028.86	5.21306	0.00	0.000	21977.10	0.00000
6700476.5	160.00	6290765.96	2.85022	0.00	0.000	21373.26	0.00000
6700925.2	180.00	6531710.75	.08103	0.00	0.000	21159.52	0.00000

REVOLUTION 63

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
6700925.2	-180.00	4690035.84	.08103	0.00	0.000	22333.47	0.00000
6701322.4	-160.00	4531271.38	2.01476	0.00	0.000	22486.64	0.00000
6701711.6	-140.00	4084926.28	3.71431	0.00	0.000	22921.94	0.00000
6702083.7	-120.00	3430651.45	4.86797	0.00	0.000	23573.27	0.00000
6702434.7	-100.00	2673361.45	5.36066	0.00	0.000	24348.46	0.00000
6702763.6	-80.00	1917535.53	5.18996	.01	.000	25147.18	.00000
6703072.5	-60.00	1250125.60	4.43411	.06	.000	25875.26	.00001
6703365.3	-40.00	734231.84	3.21808	.28	.004	26453.98	.00025
6703646.8	-20.00	410258.95	1.68939	2.41	.305	26824.97	.01770
6703674.5	-18.00	389395.03	1.52536	3.63	.690	26849.08	.03996
6703702.2	-16.00	370693.24	1.35996	5.35	1.494	26870.70	.08642
6703729.9	-14.00	354165.03	1.19337	7.90	3.244	26889.83	.18758
6703757.5	-12.00	339820.47	1.02579	11.19	6.497	26906.44	.37539
6703785.1	-10.00	327668.21	.85744	15.44	12.344	26920.53	.71290
6703812.6	-8.00	317715.55	.68862	20.22	21.145	26932.07	1.22069
6703840.1	-6.00	309968.45	.51978	25.09	32.534	26941.06	1.87750
6703867.7	-4.00	304431.52	.35200	29.50	44.938	26947.48	2.59273
6703895.1	-2.00	301108.04	.18955	32.51	54.553	26951.34	3.14700
6703921.4	0.00	300000.00	.08103	33.58	58.195	26952.63	3.35698
6703947.7	2.00	301108.04	.18955	32.51	54.553	26951.34	3.14700
6703975.2	4.00	304431.52	.35200	29.50	44.938	26947.48	2.59273
6704002.7	6.00	309968.45	.51978	25.09	32.534	26941.06	1.87750
6704030.2	8.00	317715.55	.68862	20.22	21.145	26932.07	1.22069
6704057.8	10.00	327668.21	.85744	15.44	12.344	26920.53	.71290
6704085.4	12.00	339820.47	1.02579	11.19	6.497	26906.44	.37539
6704113.0	14.00	354165.03	1.19337	7.90	3.244	26889.83	.18758
6704140.6	16.00	370693.24	1.35996	5.35	1.494	26870.70	.08642
6704168.3	18.00	389395.03	1.52536	3.63	.690	26849.08	.03996
6704196.1	20.00	410258.95	1.68939	2.41	.305	26824.97	.01770
6704477.6	40.00	734231.84	3.21808	.28	.004	26453.98	.00025
6704770.3	60.00	1250125.60	4.43411	.06	.000	25875.26	.00001
6705079.2	80.00	1917535.53	5.18996	.01	.000	25147.18	.00000
6705408.2	100.00	2673361.45	5.36066	0.00	0.000	24348.46	0.00000
6705759.1	120.00	3430651.45	4.86797	0.00	0.000	23573.27	0.00000
6706131.3	140.00	4084926.28	3.71431	0.00	0.000	22921.94	0.00000
6706520.5	160.00	4531271.38	2.01476	0.00	0.000	22486.64	0.00000
6706917.7	180.00	4690035.84	.08103	0.00	0.000	22333.47	0.00000

REVOLUTION 64

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P/T
6706917.7	-180.00	2720419.19	.08103	0.00	0.000	23749.69	0.00000
6707263.1	-160.00	2639390.61	1.11628	0.00	0.000	23835.86	0.00000
6707605.2	-140.00	2409149.40	2.07289	0.00	0.000	24082.23	0.00000
6707938.9	-120.00	2064997.60	2.74979	.01	.000	24454.89	.00000
6708261.8	-100.00	1656450.45	3.07053	.02	.000	24904.40	.00000
6708572.9	-80.00	1237335.21	3.01369	.05	.000	25374.02	.00001
6708872.8	-60.00	857430.86	2.60569	.17	.002	25807.53	.00010
6709163.5	-40.00	557233.58	1.90877	.56	.018	26155.61	.00107
6709447.6	-20.00	365716.70	1.00920	5.68	1.785	26380.33	.10518
6709475.7	-18.00	353302.41	.91197	7.60	3.193	26394.97	.18807
6709503.8	-16.00	342166.27	.81387	9.95	5.470	26408.11	.32206
6709531.9	-14.00	332317.85	.71506	12.86	9.119	26419.74	.53665
6709560.0	-12.00	323765.55	.61570	16.17	14.393	26429.84	.84669
6709588.1	-10.00	316516.67	.51599	19.72	21.379	26438.40	1.25725
6709616.1	-8.00	310577.38	.41627	23.27	29.746	26445.42	1.74882
6709644.1	-6.00	305952.71	.31713	26.62	38.898	26450.89	2.28637
6709672.1	-4.00	302646.58	.22004	29.32	47.173	26454.80	2.77238
6709700.1	-2.00	300661.78	.13054	31.07	52.965	26457.15	3.11246
6709727.0	0.00	300000.00	.08103	31.68	55.050	26457.93	3.23488
6709753.8	2.00	300661.78	.13054	31.07	52.965	26457.15	3.11246
6709781.8	4.00	302646.58	.22004	29.32	47.173	26454.80	2.77238
6709809.8	6.00	305952.71	.31713	26.62	38.898	26450.89	2.28637
6709837.8	8.00	310577.38	.41627	23.27	29.746	26445.42	1.74882
6709865.9	10.00	316516.67	.51599	19.72	21.379	26438.40	1.25725
6709893.9	12.00	323765.55	.61570	16.17	14.393	26429.84	.84669
6709922.0	14.00	332317.85	.71506	12.86	9.119	26419.74	.53665
6709950.1	16.00	342166.27	.81387	9.95	5.470	26408.11	.32206
6709978.2	18.00	353302.41	.91197	7.60	3.193	26394.97	.18807
6710006.4	20.00	365716.70	1.00920	5.68	1.785	26380.33	.10518
6710290.4	40.00	557233.58	1.90877	.56	.018	26155.61	.00107
6710581.1	60.00	857430.86	2.60569	.17	.002	25807.53	.00010
6710881.1	80.00	1237335.21	3.01369	.05	.000	25374.02	.00001
6711192.2	100.00	1656450.45	3.07053	.02	.000	24904.40	.00000
6711515.0	120.00	2064997.60	2.74979	.01	.000	24454.89	.00000
6711848.7	140.00	2409149.40	2.07289	0.00	0.000	24082.23	0.00000
6712190.8	160.00	2639390.61	1.11628	0.00	0.000	23835.86	0.00000
6712536.3	180.00	2720419.19	.08103	0.00	0.000	23749.69	0.00000

REVOLUTION 65

TIME	THETA	ALTITUDE	GAMMA	QCONT	QFM	VELOCITY	P_T
6712536.3	-180.00	374748.95	.08103	4.26	1.097	25704.10	.06638
6712824.3	-160.00	372487.30	.08807	4.48	1.210	25706.83	.07320
6713113.5	-140.00	365977.81	.10377	5.20	1.633	25714.70	.09871
6713402.4	-120.00	356012.40	.11910	6.59	2.610	25726.76	.15770
6713690.9	-100.00	343800.75	.12809	8.82	4.676	25741.54	.28240
6713979.2	-80.00	330820.77	.12805	12.35	9.141	25757.26	.55178
6714267.1	-60.00	318638.01	.11899	17.15	17.605	25772.02	1.06203
6714554.7	-40.00	308716.86	.10366	22.66	30.675	25784.05	1.84967
6714842.1	-20.00	302246.28	.08802	27.38	44.746	25791.89	2.69730
6714870.8	-18.00	301822.97	.08678	27.72	45.865	25792.41	2.76470
6714899.5	-16.00	301442.84	.08564	28.03	46.893	25792.87	2.82665
6714928.3	-14.00	301106.34	.08460	28.31	47.823	25793.28	2.88265
6714957.0	-12.00	300813.89	.08368	28.55	48.646	25793.63	2.93223
6714985.7	-10.00	300565.82	.08289	28.76	49.355	25793.93	2.97494
6715014.4	-8.00	300362.46	.08223	28.93	49.945	25794.18	3.01043
6715043.1	-6.00	300204.02	.08171	29.07	50.408	25794.37	3.03836
6715071.9	-4.00	300090.72	.08133	29.16	50.743	25794.51	3.05850
6715100.6	-2.00	300022.69	.08110	29.22	50.945	25794.59	3.07065
6715128.2	0.00	300000.00	.08103	29.24	51.012	25794.62	3.07472
6715155.7	2.00	300022.69	.08110	29.22	50.945	25794.59	3.07065
6715184.5	4.00	300090.72	.08133	29.16	50.743	25794.51	3.05850
6715213.2	6.00	300204.02	.08171	29.07	50.408	25794.37	3.03836
6715241.9	8.00	300362.46	.08223	28.93	49.945	25794.18	3.01043
6715270.6	10.00	300565.82	.08289	28.76	49.355	25793.93	2.97494
6715299.3	12.00	300813.89	.08368	28.55	48.646	25793.63	2.93223
6715328.1	14.00	301106.34	.08460	28.31	47.823	25793.28	2.88265
6715356.8	16.00	301442.84	.08564	28.03	46.893	25792.87	2.82665
6715385.5	18.00	301822.97	.08678	27.72	45.865	25792.41	2.76470
6715414.3	20.00	302246.28	.08802	27.38	44.746	25791.89	2.69730
6715701.6	40.00	308716.86	.10366	22.66	30.675	25784.05	1.84967
6715989.2	60.00	318638.01	.11899	17.15	17.605	25772.02	1.06203
6716277.1	80.00	330820.77	.12805	12.35	9.141	25757.26	.55178
6716565.4	100.00	343800.75	.12809	8.82	4.676	25741.54	.28240
6716854.0	120.00	356012.40	.11910	6.59	2.610	25726.76	.15770
6717142.9	140.00	365977.81	.10377	5.20	1.633	25714.70	.09871
6717432.0	160.00	372487.30	.08807	4.48	1.210	25706.83	.07320
6717720.1	180.00	374748.95	.08103	4.26	1.097	25704.10	.06638

Part 2

Listing of Punched Card CMA Input

REVOLUTION 1

TIME	H_R	QDOTR	$QDOTC/H_R$	P_{TA}	I. D.
0.0000	25310.558	0.0000	.0000001	.000000	GLFC TRANS.
21.6322	25458.800	0.0000	.0000002	.000000	GLFC TRANS.
43.0276	25591.926	0.0000	.0000005	.000000	GLFC TRANS.
64.2135	25709.775	0.0000	.0000011	.000001	GLFC TRANS.
85.2155	25812.203	0.0000	.0000025	.000001	GLFC TRANS.
106.0569	25899.084	0.0000	.0000076	.000004	GLFC TRANS.
126.7566	25970.314	0.0000	.0000389	.000021	GLFC TRANS.
147.3238	26025.805	0.0000	.0002608	.000138	GLFC TRANS.
167.7348	26065.490	0.0000	.0012884	.000683	GLFC TRANS.
187.7800	26089.320	0.0000	.0026948	.001970	GLFC TRANS.
202.8463	26097.267	0.0000	.0032432	.002853	GLFC TRANS.
217.9126	26089.320	0.0000	.0026948	.001970	GLFC TRANS.
237.9578	26065.490	0.0000	.0012884	.000683	GLFC TRANS.
258.3687	26025.805	0.0000	.0002608	.000138	GLFC TRANS.
278.9359	25970.314	0.0000	.0000389	.000021	GLFC TRANS.
299.6357	25899.084	0.0000	.0000076	.000004	GLFC TRANS.
320.4770	25812.203	0.0000	.0000025	.000001	GLFC TRANS.
341.4790	25709.775	0.0000	.0000011	.000001	GLFC TRANS.
362.6650	25591.926	0.0000	.0000005	.000000	GLFC TRANS.
384.0604	25458.800	0.0000	.0000002	.000000	GLFC TRANS.
405.6926	25310.558	0.0000	.0000001	.000000	GLFC TRANS.

REVOLUTION 6

TIME	H_R	QDOTR	$QDOTC/H_R$	P_{TA}	I. D.
0.0000	24977.559	0.0000	.0000001	.000000	GLFC TRANS.
21.7645	25123.754	0.0000	.0000002	.000000	GLFC TRANS.
43.2954	25255.042	0.0000	.0000005	.000000	GLFC TRANS.
64.6202	25371.264	0.0000	.0000011	.000001	GLFC TRANS.
85.7651	25472.277	0.0000	.0000025	.000001	GLFC TRANS.
106.7548	25557.959	0.0000	.0000079	.000004	GLFC TRANS.
127.6111	25628.205	0.0000	.0000407	.000021	GLFC TRANS.
148.3503	25682.930	0.0000	.0002687	.000141	GLFC TRANS.
168.9699	25722.067	0.0000	.0013042	.000687	GLFC TRANS.
189.3601	25745.568	0.0000	.0026812	.001954	GLFC TRANS.
205.7491	25753.405	0.0000	.0032186	.002815	GLFC TRANS.
222.1382	25745.568	0.0000	.0026812	.001954	GLFC TRANS.
242.5284	25722.067	0.0000	.0013042	.000687	GLFC TRANS.
263.1480	25682.930	0.0000	.0002687	.000141	GLFC TRANS.
283.8872	25628.205	0.0000	.0000407	.000021	GLFC TRANS.
304.7435	25557.959	0.0000	.0000079	.000004	GLFC TRANS.
325.7332	25472.277	0.0000	.0000025	.000001	GLFC TRANS.
346.8781	25371.264	0.0000	.0000011	.000001	GLFC TRANS.
368.2029	25255.042	0.0000	.0000005	.000000	GLFC TRANS.
389.7338	25123.754	0.0000	.0000002	.000000	GLFC TRANS.
411.4983	24977.559	0.0000	.0000001	.000000	GLFC TRANS.

REVOLUTION 11

TIME	H_R	QDOTR	QDOTC/H_R	P_{TA}	I. D.
0.0000	24558.569	0.0000	.0000001	.000000	GLFC TRANS.
21.9304	24702.107	0.0000	.0000002	.000000	GLFC TRANS.
43.6304	24831.009	0.0000	.0000005	.000000	GLFC TRANS.
65.1273	24945.118	0.0000	.0000011	.000001	GLFC TRANS.
86.4474	25044.296	0.0000	.0000026	.000001	GLFC TRANS.
107.6157	25128.420	0.0000	.0000083	.000004	GLFC TRANS.
128.6553	25197.390	0.0000	.0000434	.000023	GLFC TRANS.
149.5855	25251.120	0.0000	.0002794	.000146	GLFC TRANS.
170.4133	25289.546	0.0000	.0013252	.000692	GLFC TRANS.
191.0762	25312.620	0.0000	.0026640	.001934	GLFC TRANS.
208.3934	25320.314	0.0000	.0031874	.002768	GLFC TRANS.
225.7105	25312.620	0.0000	.0026640	.001934	GLFC TRANS.
246.3735	25289.546	0.0000	.0013252	.000692	GLFC TRANS.
267.2012	25251.120	0.0000	.0002794	.000146	GLFC TRANS.
288.1314	25197.390	0.0000	.0000434	.000023	GLFC TRANS.
309.1710	25128.420	0.0000	.0000083	.000004	GLFC TRANS.
330.3393	25044.296	0.0000	.0000026	.000001	GLFC TRANS.
351.6594	24945.118	0.0000	.0000011	.000001	GLFC TRANS.
373.1564	24831.009	0.0000	.0000005	.000000	GLFC TRANS.
394.8563	24702.107	0.0000	.0000002	.000000	GLFC TRANS.
416.7867	24558.569	0.0000	.0000001	.000000	GLFC TRANS.

REVOLUTION 16

TIME	H_R	QDOTR	QDOTC/H_R	P_{TA}	I. D.
0.0000	24054.581	0.0000	.0000001	.000000	GLFC TRANS.
22.1338	24194.795	0.0000	.0000003	.000000	GLFC TRANS.
44.0407	24320.713	0.0000	.0000006	.000000	GLFC TRANS.
65.7479	24432.180	0.0000	.0000012	.000001	GLFC TRANS.
87.2814	24529.061	0.0000	.0000028	.000001	GLFC TRANS.
108.6662	24611.238	0.0000	.0000089	.000005	GLFC TRANS.
129.9257	24678.611	0.0000	.0000471	.000024	GLFC TRANS.
151.0807	24731.097	0.0000	.0002934	.000151	GLFC TRANS.
172.1434	24768.633	0.0000	.0013521	.000699	GLFC TRANS.
193.0771	24791.173	0.0000	.0026433	.001910	GLFC TRANS.
211.1340	24798.690	0.0000	.0031494	.002711	GLFC TRANS.
229.1909	24791.173	0.0000	.0026433	.001910	GLFC TRANS.
250.1246	24768.633	0.0000	.0013521	.000699	GLFC TRANS.
271.1872	24731.097	0.0000	.0002934	.000151	GLFC TRANS.
292.3422	24678.611	0.0000	.0000471	.000024	GLFC TRANS.
313.6018	24611.238	0.0000	.0000089	.000005	GLFC TRANS.
334.9865	24529.061	0.0000	.0000028	.000001	GLFC TRANS.
356.5200	24432.180	0.0000	.0000012	.000001	GLFC TRANS.
378.2272	24320.713	0.0000	.0000006	.000000	GLFC TRANS.
400.1342	24194.795	0.0000	.0000003	.000000	GLFC TRANS.
422.2680	24054.581	0.0000	.0000001	.000000	GLFC TRANS.

REVOLUTION 21

TIME	H_R	QDOTR	QDOTC/H_R	P_{TA}	I. D.
0.0000	23466.005	0.0000	.0000001	.000000	GLFC TRANS.
22.3781	23602.151	0.0000	.0000003	.000000	GLFC TRANS.
44.5339	23724.414	0.0000	.0000006	.000000	GLFC TRANS.
66.4939	23832.646	0.0000	.0000013	.000001	GLFC TRANS.
88.2836	23926.716	0.0000	.0000030	.000002	GLFC TRANS.
109.9279	24006.508	0.0000	.0000098	.000005	GLFC TRANS.
131.4501	24071.925	0.0000	.0000522	.000027	GLFC TRANS.
152.8717	24122.888	0.0000	.0003116	.000159	GLFC TRANS.
174.2076	24159.335	0.0000	.0013863	.000707	GLFC TRANS.
195.4370	24181.220	0.0000	.0026189	.001882	GLFC TRANS.
214.1419	24188.518	0.0000	.0031046	.002644	GLFC TRANS.
232.8469	24181.220	0.0000	.0026189	.001882	GLFC TRANS.
254.0763	24159.335	0.0000	.0013863	.000707	GLFC TRANS.
275.4122	24122.888	0.0000	.0003116	.000159	GLFC TRANS.
296.8338	24071.925	0.0000	.0000522	.000027	GLFC TRANS.
318.3560	24006.508	0.0000	.0000098	.000005	GLFC TRANS.
340.0003	23926.716	0.0000	.0000030	.000002	GLFC TRANS.
361.7900	23832.646	0.0000	.0000013	.000001	GLFC TRANS.
383.7500	23724.414	0.0000	.0000006	.000000	GLFC TRANS.
405.9058	23602.151	0.0000	.0000003	.000000	GLFC TRANS.
428.2839	23466.005	0.0000	.0000001	.000000	GLFC TRANS.

REVOLUTION 26

TIME	H_R	QDOTR	QDOTC/H_R	P_{TA}	I. D.
0.0000	22792.629	0.0000	.0000002	.000000	GLFC TRANS.
22.6680	22923.849	0.0000	.0000003	.000000	GLFC TRANS.
45.1191	23041.689	0.0000	.0000007	.000000	GLFC TRANS.
67.3792	23146.006	0.0000	.0000014	.000001	GLFC TRANS.
89.4734	23236.672	0.0000	.0000033	.000002	GLFC TRANS.
111.4258	23313.577	0.0000	.0000109	.000005	GLFC TRANS.
133.2595	23376.628	0.0000	.0000590	.000030	GLFC TRANS.
154.9962	23425.747	0.0000	.0003352	.000168	GLFC TRANS.
176.6524	23460.875	0.0000	.0014294	.000719	GLFC TRANS.
198.2174	23481.969	0.0000	.0025910	.001850	GLFC TRANS.
217.5327	23489.004	0.0000	.0030527	.002568	GLFC TRANS.
236.8480	23481.969	0.0000	.0025910	.001850	GLFC TRANS.
258.4129	23460.875	0.0000	.0014294	.000719	GLFC TRANS.
280.0691	23425.747	0.0000	.0003352	.000168	GLFC TRANS.
301.8058	23376.628	0.0000	.0000590	.000030	GLFC TRANS.
323.6395	23313.577	0.0000	.0000109	.000005	GLFC TRANS.
345.5919	23236.672	0.0000	.0000033	.000002	GLFC TRANS.
367.6861	23146.006	0.0000	.0000014	.000001	GLFC TRANS.
389.9462	23041.689	0.0000	.0000007	.000000	GLFC TRANS.
412.3973	22923.849	0.0000	.0000003	.000000	GLFC TRANS.
435.0653	22792.629	0.0000	.0000002	.000000	GLFC TRANS.

REVOLUTION 31

TIME	H R	QDOTR	QDOTC/H R	P T A	I. D.
0.0000	22033.389	0.0000	.0000002	.000000	GLFC TRANS.
23.0092	22158.675	0.0000	.0000004	.000000	GLFC TRANS.
45.8084	22271.187	0.0000	.0000007	.000000	GLFC TRANS.
68.4227	22370.787	0.0000	.0000016	.000001	GLFC TRANS.
90.8762	22457.354	0.0000	.0000037	.000002	GLFC TRANS.
113.1924	22530.782	0.0000	.0000127	.000006	GLFC TRANS.
135.3940	22590.982	0.0000	.0000681	.000034	GLFC TRANS.
157.5022	22637.880	0.0000	.0003681	.000182	GLFC TRANS.
179.5343	22671.420	0.0000	.0014839	.000734	GLFC TRANS.
201.4865	22691.560	0.0000	.0025594	.001814	GLFC TRANS.
221.4100	22698.276	0.0000	.0029932	.002481	GLFC TRANS.
241.3334	22691.560	0.0000	.0025594	.001814	GLFC TRANS.
263.2856	22671.420	0.0000	.0014839	.000734	GLFC TRANS.
285.3178	22637.880	0.0000	.0003681	.000182	GLFC TRANS.
307.4259	22590.982	0.0000	.0000681	.000034	GLFC TRANS.
329.6275	22530.782	0.0000	.0000127	.000006	GLFC TRANS.
351.9437	22457.354	0.0000	.0000037	.000002	GLFC TRANS.
374.3972	22370.787	0.0000	.0000016	.000001	GLFC TRANS.
397.0115	22271.187	0.0000	.0000007	.000000	GLFC TRANS.
419.8108	22158.675	0.0000	.0000004	.000000	GLFC TRANS.
442.8199	22033.389	0.0000	.0000002	.000000	GLFC TRANS.

REVOLUTION 36

TIME	H R	QDOTR	QDOTC/H R	P T A	I. D.
0.0000	21185.910	0.0000	.0000002	.000000	GLFC TRANS.
23.4097	21304.043	0.0000	.0000004	.000000	GLFC TRANS.
46.6184	21410.130	0.0000	.0000009	.000000	GLFC TRANS.
69.6496	21504.042	0.0000	.0000018	.000001	GLFC TRANS.
92.5267	21585.666	0.0000	.0000044	.000002	GLFC TRANS.
115.2721	21654.901	0.0000	.0000154	.000007	GLFC TRANS.
137.9076	21711.663	0.0000	.0000810	.000039	GLFC TRANS.
160.4540	21755.883	0.0000	.0004135	.000200	GLFC TRANS.
182.9287	21787.508	0.0000	.0015536	.000753	GLFC TRANS.
205.3323	21806.498	0.0000	.0025239	.001775	GLFC TRANS.
225.8893	21812.830	0.0000	.0029255	.002384	GLFC TRANS.
246.4463	21806.498	0.0000	.0025239	.001775	GLFC TRANS.
268.8499	21787.508	0.0000	.0015536	.000753	GLFC TRANS.
291.3247	21755.883	0.0000	.0004135	.000200	GLFC TRANS.
313.8710	21711.663	0.0000	.0000810	.000039	GLFC TRANS.
336.5066	21654.901	0.0000	.0000154	.000007	GLFC TRANS.
359.2519	21585.666	0.0000	.0000044	.000002	GLFC TRANS.
382.1290	21504.042	0.0000	.0000018	.000001	GLFC TRANS.
405.1603	21410.130	0.0000	.0000009	.000000	GLFC TRANS.
428.3689	21304.043	0.0000	.0000004	.000000	GLFC TRANS.
451.7736	21185.910	0.0000	.0000002	.000000	GLFC TRANS.

REVOLUTION 41

TIME	H R	QDOTR	QDOTC/H R	P T A	I. D.
0.0000	20245.622	0.0000	.0000003	.000000	GLFC TRANS.
23.8811	20355.068	0.0000	.0000005	.000000	GLFC TRANS.
47.5725	20453.354	0.0000	.0000010	.000000	GLFC TRANS.
71.0962	20540.361	0.0000	.0000022	.000001	GLFC TRANS.
94.4742	20615.983	0.0000	.0000055	.000003	GLFC TRANS.
117.7278	20680.127	0.0000	.0000200	.000009	GLFC TRANS.
140.8775	20732.716	0.0000	.0001020	.000048	GLFC TRANS.
163.9431	20773.685	0.0000	.0004767	.000226	GLFC TRANS.
186.9418	20802.984	0.0000	.0016482	.000781	GLFC TRANS.
209.8771	20820.577	0.0000	.0024845	.001732	GLFC TRANS.
231.1191	20826.444	0.0000	.0028487	.002277	GLFC TRANS.
252.3612	20820.577	0.0000	.0024845	.001732	GLFC TRANS.
275.2964	20802.984	0.0000	.0016482	.000781	GLFC TRANS.
298.2951	20773.685	0.0000	.0004767	.000226	GLFC TRANS.
321.3608	20732.716	0.0000	.0001020	.000048	GLFC TRANS.
344.5105	20680.127	0.0000	.0000200	.000009	GLFC TRANS.
367.7640	20615.983	0.0000	.0000055	.000003	GLFC TRANS.
391.1420	20540.361	0.0000	.0000022	.000001	GLFC TRANS.
414.6658	20453.354	0.0000	.0000010	.000000	GLFC TRANS.
438.3571	20355.068	0.0000	.0000005	.000000	GLFC TRANS.
462.2382	20245.622	0.0000	.0000003	.000000	GLFC TRANS.

REVOLUTION 46

TIME	H R	QDOTR	QDOTC/H R	P T A	I. D.
0.0000	19203.950	0.0000	.0000004	.000000	GLFC TRANS.
24.4406	19302.701	0.0000	.0000007	.000000	GLFC TRANS.
48.7061	19391.383	0.0000	.0000014	.000001	GLFC TRANS.
72.8170	19469.887	0.0000	.0000028	.000001	GLFC TRANS.
96.7932	19538.119	0.0000	.0000076	.000003	GLFC TRANS.
120.6544	19595.995	0.0000	.0000289	.000013	GLFC TRANS.
144.4197	19643.445	0.0000	.0001378	.000063	GLFC TRANS.
168.1073	19680.410	0.0000	.0005722	.000264	GLFC TRANS.
191.7335	19706.846	0.0000	.0017012	.000819	GLFC TRANS.
215.3035	19722.720	0.0000	.0024407	.001685	GLFC TRANS.
237.3124	19728.014	0.0000	.0027613	.002157	GLFC TRANS.
259.3214	19722.720	0.0000	.0024407	.001685	GLFC TRANS.
282.8913	19706.846	0.0000	.0017012	.000819	GLFC TRANS.
306.5176	19680.410	0.0000	.0005722	.000264	GLFC TRANS.
330.2052	19643.445	0.0000	.0001378	.000063	GLFC TRANS.
353.9704	19595.995	0.0000	.0000289	.000013	GLFC TRANS.
377.8316	19538.119	0.0000	.0000076	.000003	GLFC TRANS.
401.8078	19469.887	0.0000	.0000028	.000001	GLFC TRANS.
425.9187	19391.383	0.0000	.0000014	.000001	GLFC TRANS.
450.1842	19302.701	0.0000	.0000007	.000000	GLFC TRANS.
474.6248	19203.950	0.0000	.0000004	.000000	GLFC TRANS.

REVOLUTION 51

TIME	H R	QDOTR	QDOTC/H R	P T A	I. D.
0.0000	18044.191	0.0000	.0000006	.000000	GLFC TRANS.
25.1161	18129.441	0.0000	.0000010	.000000	GLFC TRANS.
50.0772	18205.999	0.0000	.0000019	.000001	GLFC TRANS.
74.9012	18273.772	0.0000	.0000043	.000002	GLFC TRANS.
99.6056	18332.676	0.0000	.0000124	.000005	GLFC TRANS.
124.2078	18382.639	0.0000	.0000496	.000022	GLFC TRANS.
148.7247	18423.602	0.0000	.0002072	.000092	GLFC TRANS.
173.1726	18455.514	0.0000	.0007289	.000325	GLFC TRANS.
197.5662	18478.336	0.0000	.0017483	.000873	GLFC TRANS.
221.9109	18492.040	0.0000	.0023919	.001634	GLFC TRANS.
244.8113	18496.610	0.0000	.0026608	.002022	GLFC TRANS.
267.7117	18492.040	0.0000	.0023919	.001634	GLFC TRANS.
292.0565	18478.336	0.0000	.0017483	.000873	GLFC TRANS.
316.4501	18455.514	0.0000	.0007289	.000325	GLFC TRANS.
340.8980	18423.602	0.0000	.0002072	.000092	GLFC TRANS.
365.4148	18382.639	0.0000	.0000496	.000022	GLFC TRANS.
390.0170	18332.676	0.0000	.0000124	.000005	GLFC TRANS.
414.7215	18273.772	0.0000	.0000043	.000002	GLFC TRANS.
439.5455	18205.999	0.0000	.0000019	.000001	GLFC TRANS.
464.5066	18129.441	0.0000	.0000010	.000000	GLFC TRANS.
489.6227	18044.191	0.0000	.0000006	.000000	GLFC TRANS.

REVOLUTION 56

TIME	H R	QDOTR	QDOTC/H R	P T A	I. D.
0.0000	16729.900	0.0000	.0000011	.000000	GLFC TRANS.
25.9608	16797.318	0.0000	.0000019	.000001	GLFC TRANS.
51.7952	16857.861	0.0000	.0000037	.000002	GLFC TRANS.
77.5175	16911.456	0.0000	.0000092	.000004	GLFC TRANS.
103.1420	16958.038	0.0000	.0000289	.000012	GLFC TRANS.
128.6827	16997.551	0.0000	.0001047	.000045	GLFC TRANS.
154.1535	17029.944	0.0000	.0003546	.000152	GLFC TRANS.
179.5675	17055.181	0.0000	.0010104	.000433	GLFC TRANS.
204.9370	17073.229	0.0000	.0018187	.000956	GLFC TRANS.
230.2663	17084.066	0.0000	.0023368	.001578	GLFC TRANS.
254.2579	17087.680	0.0000	.0025423	.001868	GLFC TRANS.
278.2494	17084.066	0.0000	.0023368	.001578	GLFC TRANS.
303.5787	17073.229	0.0000	.0018187	.000956	GLFC TRANS.
328.9482	17055.181	0.0000	.0010104	.000433	GLFC TRANS.
354.3623	17029.944	0.0000	.0003546	.000152	GLFC TRANS.
379.8330	16997.551	0.0000	.0001047	.000045	GLFC TRANS.
405.3737	16958.038	0.0000	.0000289	.000012	GLFC TRANS.
430.9982	16911.456	0.0000	.0000092	.000004	GLFC TRANS.
456.7206	16857.861	0.0000	.0000037	.000002	GLFC TRANS.
482.5550	16797.318	0.0000	.0000019	.000001	GLFC TRANS.
508.5157	16729.900	0.0000	.0000011	.000000	GLFC TRANS.

REVOLUTION 61

TIME	H R	QDOTR	QDOTC/H R	P T A	I. D.
0.0000	15156.817	0.0000	.0000041	.000002	GLFC TRANS.
27.1082	15198.177	0.0000	.0000084	.000003	GLFC TRANS.
54.1357	15235.321	0.0000	.0000197	.000008	GLFC TRANS.
81.0914	15268.201	0.0000	.0000545	.000022	GLFC TRANS.
107.9843	15296.780	0.0000	.0001474	.000060	GLFC TRANS.
134.8233	15321.020	0.0000	.0003704	.000151	GLFC TRANS.
161.6171	15340.894	0.0000	.0008454	.000344	GLFC TRANS.
188.3742	15356.376	0.0000	.0015148	.000674	GLFC TRANS.
215.1019	15367.449	0.0000	.0019456	.001112	GLFC TRANS.
241.8018	15374.098	0.0000	.0022721	.001516	GLFC TRANS.
267.2679	15376.315	0.0000	.0023926	.001681	GLFC TRANS.
292.7340	15374.098	0.0000	.0022721	.001516	GLFC TRANS.
319.4339	15367.449	0.0000	.0019456	.001112	GLFC TRANS.
346.1616	15356.376	0.0000	.0015148	.000674	GLFC TRANS.
372.9187	15340.894	0.0000	.0008454	.000344	GLFC TRANS.
399.7125	15321.020	0.0000	.0003704	.000151	GLFC TRANS.
426.5515	15296.780	0.0000	.0001474	.000060	GLFC TRANS.
453.4444	15268.201	0.0000	.0000545	.000022	GLFC TRANS.
480.4001	15235.321	0.0000	.0000197	.000008	GLFC TRANS.
507.4276	15198.177	0.0000	.0000084	.000003	GLFC TRANS.
534.5358	15156.817	0.0000	.0000041	.000002	GLFC TRANS.

APPENDIX K

Trajectory and Reentry Environment Output From the TTA Trajectory Computer Code for an Initial Drag Perigee of 259,570 Feet (Four Revolutions)

Part 1.	Listing of TTA Input Data	(343)
Part 2.	Trajectory and Reentry Environment Tabulated Data	(345)
Part 3.	Listing of Punched Card CMA Input	(353)

```
9PROGRM CARTAP,8600,      ,03, H. R. SPAHR    BOX 053 `UNCLASSIFIED
9CHARGE  8666,9513,0049237
9TAPE   OUTPUT,10222
1SCTLR  NASA LM  AD CR
1FORMT  2      1 8X,2A8
        NASA LM  AD CR
1WRITE  BINARY
1FORMT  10     1 10A8
 CD   HITE  6  STET STOP
1WRITE  BINARY
1FORMT   6     1 6F10.0
 400000.0  375000.0  350000.0  325000.0  300000.0  150000.0
 3.2       3.2       3.2       3.2       3.2       3.2
1WRITE  BINARY
1WRTLR
 END
9PROGRM CARTAP,8600,      ,03, H. R. SPAHR    BOX 053  UNCLASSIFIED
9CHARGE  8666,9513,0049237
9TAPE   OUTPUT,10222
1SCTLR  SANDIA   GLFC
1FORMT  2      1 8X,2A8
        SANDIA   GLFC
1WRITE  BINARY
1FORMT  10     1 10A8
 CD   HITE  6  STET STOP
1WRITE  BINARY
1FORMT   6     1 6F10.0
 400000.0  325000.   300000.   270000.   200000.0  150000.0
  7.39      7.39      5.70      4.23      4.23      4.23
1WRITF  BINARY
1WRTLR
 END
9PROGRM CARTAP,8600,      ,03, H. R. SPAHR    BOX 053  UNCLASSIFIED
9CHARGE  8666,9513,0049237
9TAPE   OUTPUT,10000
1SCTLR  21232 SPAHR3
1FORMT  2      1 8X,2A8
        21232 SPAHR3
1WRITF  BINARY
1FORMT  10     1 10A8
  CLEAR AND SET POINT MASS.
1WRITE  BINARY  REPEAT
 SET IDENT TO ( 21232 SPAHR3 GLFC MULTIPLE ORBITS ).
 SFT TTH.  SET QC TO 0.
 LOAD METRO ( ICAO  1962  ATMOSPHERE  KLETT  ).
 LOAD DATA A (  NASA LM  AD CR  ).
 SET INITIAL LAT TO 14.0, LONG TO 0.0, HITE TO 578068.0.
 SET INITIAL VI TO 35910.7, GAMMAI TO -6.97300, TAUI TO -90.0.
 SET INITIAL TIME TO 0.0, POTIM TO 0.0, POPRATE TO 100.0.
 SET WT TO 32963.6.
 SFT ARFA TO 129.4.
 SET HEADING DATA TO ( 2        WT       CD     AREA    VICRCL    NOSE  ).
 SET COLUMN HEADINGS TO     ( 2          HITE     LAT     LONG       Q      VT   MACH
   GAMMA      TAU     AT     DQC      QC         RADVC         TIME      CD ).
  SET MAXTM TO 0.1.
```

```
 START  TRJCTRY.
 WHEN TIME IS BETWEEN 1.01 AND 1.03, SET MAXTM TO 8.0.
 WHEN EVER HITE IS GREATER THAN 600000.0, SET POPRATE TO 1000.0.
 WHEN EVER HITE IS BETWEEN 600000.0 AND 400000.0, SET POPRATE TO 100.0.
 WHEN EVER HITE IS LESS THAN 400000.0, SET POPRATE TO 5.0.
 WHEN HITE IS BETWEEN 273000.5 AND 273000.0, PRINT.
 LOAD DATA A (  SANDIA   GLFC  ).
 SET WT TO 40..
 SET AREA TO 0.3491.
 WHEN CLOCK IS GREATER THAN 2685.0, END.
 STOP
1WRTLR
 END
9PROGRM TTA,8600,      ,03, H. R. SPAHR    BOX 053  UNCLASSIFIED
9TIME            45
9CHARGE  8666,9513,0049237
9TAPE   CONTROL,10000
9TAPF   PARAM,10222
9TAPE   METRO,10073
        21232 SPAHR3
 END
```

TTA7622 38-64 21232 SPAHR3 GLFC MULTIPLE ORBITS ATMOS= ICAO 1962 ATMOSPHERE KLETT

CONTROL21232 SPAHR3 DATA-A=NASA LM AD CR DATA-B= DATA-C= DATA-D=

OBSERVER 0.0000=LAT 0.0000=LONG 0.0000=ORNT 0=ELEV 0=X . 0=Y. 0=Z

WT	CD	AREA	VICRCL	NOSE
32963.6	3.2000	129.40	25604.0	1.000

HITE	LAT	LONG	Q	VT	MACH	GAMMA	TAU	AT	DOC	QC	RADVC	TIME	CD
578067.99805	14.00	.00000	8.3-4	35943	16.2	-6.96672	-92.445	.114	1.190	.0000	21499518.01	.000000000	3.200
392714.87646	8.692	-.22979	.0477	36109	30.7	-4.34299	-92.445	.072	8.985	177.5	21306659.56	55.0000000	3.200
369419.97363	8.205	-.25068	.0834	36120	32.7	-4.10218	-92.445	.068	11.88	229.6	21293537.29	60.0000000	3.200
356878.79592	7.717	-.27157	.1532	36131	34.6	-3.86106	-92.445	.063	16.10	299.0	21281159.25	65.0000000	3.200
345093.12940	7.229	-.29246	.2694	36141	35.8	-3.61966	-92.445	.057	21.34	392.2	21269527.12	70.0000000	3.200
334064.73926	6.740	-.31335	.4735	36149	37.1	-3.37799	-92.445	.051	28.29	515.6	21258642.59	75.0000000	3.200
323795.29884	6.251	-.33424	.8174	36157	38.1	-3.13609	-92.445	.042	37.15	678.4	21248507.25	80.0000000	3.200
314286.39063	5.761	-.35513	1.381	36163	39.0	-2.89398	-92.445	.031	48.98	891.0	21239122.59	85.0000000	3.200
305539.48684	5.271	-.37602	2.285	36167	39.9	-2.65171	-92.445	.016	62.07	1166.	21230490.03	90.0000000	3.200
297555.92774	4.780	-.39690	3.607	36168	40.5	-2.40933	-92.445	-.005	77.94	1515.	21222610.82	95.0000000	3.200
290336.84765	4.290	-.41778	5.326	36165	40.9	-2.16692	-92.445	-.030	94.65	1946.	21215486.05	100.000000	3.200
283883.07179	3.799	-.43865	7.891	36157	40.9	-1.92457	-92.445	-.067	115.1	2469.	21209116.47	105.000000	3.200
278195.00537	3.308	-.45952	10.75	36144	40.9	-1.68239	-92.445	-.107	134.2	3093.	21203502.45	110.000000	3.200
273272.43360	2.817	-.48037	14.24	36123	40.9	-1.44054	-92.445	-.155	154.2	3813.	21198643.72	115.000000	3.200
273000.13136	2.788	-.48163	14.43	36121	40.9	-1.42597	-92.445	-.157	155.2	3860.	21198374.94	115.301413	3.200
269117.02929	2.327	-.50119	17.54	36034	40.7	-1.19975	-92.445	-.627	170.2	4624.	21194541.91	120.000000	4.230
265726.08301	1.838	-.52194	21.46	35921	40.5	-.961040	-92.445	-.776	186.9	5517.	21191194.26	125.000000	4.230
263089.40138	1.350	-.54263	24.40	35787	40.3	-.724819	-92.445	-.889	197.7	6480.	21188590.62	130.000000	4.230
261194.78419	.8646	-.56323	26.41	35637	40.0	-.491523	-92.445	-.967	203.8	7486.	21186718.88	135.000000	4.230
260027.28371	.3810	-.58374	27.53	35477	39.8	-.261425	-92.445	-1.01	206.0	8512.	21185564.20	140.000000	4.230
259570.59668	-.1005	-.60416	28.02	35313	39.6	-.034695	-92.445	-1.03	205.7	9542.	21185110.38	145.000000	4.230
259807.73390	-.5796	-.62448	27.36	35147	39.4	.188593	-92.445	-1.01	201.3	10562	21185340.58	150.000000	4.230
260721.78661	-1.057	-.64471	25.99	34988	39.3	.408479	-92.445	-.966	194.3	11552	21186238.04	155.000000	4.230
262296.61671	-1.531	-.66485	24.01	34837	39.2	.625110	-92.445	-.897	185.0	12501	21187786.74	160.000000	4.230
264517.47413	-2.004	-.68491	21.35	34700	39.1	.838711	-92.444	-.803	173.1	13397	21189972.06	165.000000	4.230
267371.46533	-2.475	-.70489	18.05	34580	39.0	1.04959	-92.444	-.685	158.1	14226	21192781.22	170.000000	4.230
270848.00536	-2.944	-.72481	14.55	34480	39.0	1.25813	-92.444	-.564	141.0	14975	21196203.73	175.000000	4.272
274938.77001	-3.412	-.74468	11.84	34396	38.9	1.46471	-92.444	-.487	126.5	15643	21200231.34	180.000000	4.472
279637.01076	-3.879	-.76451	8.768	34325	38.8	1.66965	-92.444	-.388	108.5	16232	21204857.37	185.000000	4.702
284937.54152	-4.345	-.78430	6.703	34269	38.8	1.87323	-92.443	-.322	94.53	16737	21210076.69	190.000000	4.962
290836.43408	-4.810	-.80407	4.663	34223	38.7	2.07571	-92.443	-.249	78.65	17171	21215885.42	195.000000	5.251
297330.90481	-5.274	-.82381	3.271	34187	38.3	2.27730	-92.443	-.197	65.75	17531	21222280.84	200.000000	5.569
304418.92726	-5.737	-.84354	2.172	34159	37.8	2.47821	-92.442	-.155	53.52	17829	21229260.95	205.000000	5.999
312098.96728	-6.200	-.86325	1.371	34136	37.0	2.67857	-92.442	-.123	42.48	18068	21236824.27	210.000000	6.518
320369.81885	-6.662	-.88296	.8504	34119	36.2	2.87848	-92.441	-.101	33.44	18257	21244969.64	215.000000	7.077
329230.43702	-7.124	-.90266	.5329	34104	35.5	3.07802	-92.441	-.086	26.46	18406	21253696.07	220.000000	7.390
338679.80810	-7.585	-.92236	.3260	34091	34.5	3.27725	-92.440	-.076	20.70	18523	21263002.60	225.000000	7.390
348716.90673	-8.046	-.94205	.1975	34079	33.4	3.47620	-92.440	-.071	16.11	18615	21272888.28	230.000000	7.390
359340.63477	-8.507	-.96175	.1196	34067	32.4	3.67487	-92.439	-.069	12.54	18686	21283352.06	235.000000	7.390
370549.78273	-8.967	-.98143	.0702	34056	30.6	3.87329	-92.439	-.069	9.606	18741	21294392.82	240.000000	7.390
382343.04299	-9.426	-1.0011	.0429	34045	29.0	4.07144	-92.438	-.071	7.513	18784	21306009.32	245.000000	7.390
394719.01906	-9.885	-1.0208	.0265	34033	27.2	4.26932	-92.437	-.073	5.899	18817	21318200.25	250.000000	7.390
407676.22707	-10.34	-1.0405	.0159	34021	25.0	4.46693	-92.437	-.075	4.574	18843	21330964.21	255.000000	7.390
10749325.380	-76.68	-4.6253	2.3-3	26930	10.8	31.9893	-90.700	-.231	.1946	19175	31608194.55	1255.00000	7.390
25228419.681	-75.03	170.03	1.4-3	21122	8.46	41.9851	92.609	-.138	.1655	19356	46088245.81	2255.00000	7.390
39636673.081	-60.03	166.14	9.9-5	17675	7.08	45.7463	99.847	-.089	.1411	19509	59509413.43	3255.00000	7.390
50574355.199	-50.32	162.04	7.6-5	15482	6.20	46.5763	108.01	-.062	.1240	19641	71458232.97	4255.00000	7.390
61198585.811	-43.28	157.90	6.3-5	14023	5.62	45.5682	116.17	-.046	.1129	19759	82081082.53	5255.00000	7.390
70656469.414	-37.78	153.75	5.4-5	13039	5.22	43.3219	123.64	-.036	.1067	19868	91555632.56	6255.00000	7.390
79123994.943	-33.26	149.59	4.9-5	12383	4.96	40.2913	130.07	-.028	.1042	19973	100028398.2	7255.00000	7.390

TTA7622 39-64 21232 SPAHR3 GLFC MULTIPLE ORBITS ATMOS= ICAO 1962 ATMOSPHERE KLETT
CONTROL21232 SPAHR3 DATA-A=SANDIA GLFC DATA-B= DATA-C= DATA-D=
OBSERVER 0.0000=LAT 0.0000=LONG 0.0000=ORNT 0=ELEV 0=X . 0=Y. 0=Z

WT	CD	AREA	VICRCL	NOSE
40.0000	7.3900	.34910	11437.0	1.000

HITE	LAT	LONG	D	VT	MACH	GAMMA	TAU	AT	DOC	QC	RADVC	TIME	CD
86705216.515	-29.41	145.42	4.5-6	11959	4.79	36.8337	135.42	-.023	.1048	20078	107613808.9	8255.00000	7.390
93489031.709	-26.05	141.26	4.4-6	11702	4.69	33.2120	139.80	-.018	.1077	20184	114401021.0	9255.00000	7.390
99545375.708	-23.04	137.09	4.3-6	11564	4.63	29.6013	143.36	-.015	.1126	20294	120460149.4	10255.0000	7.390
104929865.74	-20.31	132.92	4.2-6	11509	4.61	26.1064	146.24	-.012	.1188	20409	125846938.9	11255.0000	7.390
109687145.13	-17.79	128.75	4.2-6	11509	4.61	22.7802	148.57	-.010	.1260	20532	130606124.6	12255.0000	7.390
113853282.96	-15.44	124.58	4.2-6	11545	4.63	19.6415	150.45	-.008	.1337	20662	134773843.2	13255.0000	7.390
117457509.68	-13.22	120.40	4.3-6	11602	4.65	16.6875	151.97	-.007	.1415	20799	138379375.7	14255.0000	7.390
120523485.00	-11.10	116.23	4.3-6	11668	4.67	13.9031	153.19	-.005	.1491	20944	141446419.4	15255.0000	7.390
123070232.19	-9.070	112.06	4.4-6	11734	4.70	11.2663	154.15	-.004	.1561	21097	143994026.3	16255.0000	7.390
125112829.23	-7.101	107.89	4.4-6	11794	4.73	8.75231	154.88	-.003	.1622	21256	146037295.7	17255.0000	7.390
126662918.91	-5.179	103.71	4.5-6	11844	4.75	6.33504	155.43	-.002	.1672	21421	147587886.5	18255.0000	7.390
127729080.38	-3.292	99.541	4.5-6	11881	4.76	3.98827	155.79	-.001	.1707	21590	148654388.8	19255.0000	7.390
128317089.95	-1.425	95.367	4.5-6	11902	4.77	1.68608	155.99	-6.-4	.1727	21762	149242586.5	20255.0000	7.390
128430090.99	.4332	91.194	4.5-6	11906	4.77	-.597179	156.02	2.-4	.1731	21935	149355627.0	21255.0000	7.390
128068684.28	2.294	87.021	4.5-6	11894	4.77	-2.88700	155.90	.001	.1719	22108	148994111.7	22255.0000	7.390
127230945.10	4.171	82.848	4.5-6	11865	4.75	-5.20891	155.62	.002	.1691	22278	148156113.6	23255.0000	7.390
125912368.26	6.074	78.674	4.4-6	11822	4.74	-7.38870	155.17	.003	.1648	22446	146837121.7	24255.0000	7.390
124105737.10	8.019	74.502	4.4-6	11766	4.71	-10.0525	154.53	.004	.1593	22608	145029910.0	25255.0000	7.390
121800908.09	10.02	70.329	4.4-6	11703	4.69	-12.6264	153.68	.005	.1527	22764	142724321.4	26255.0000	7.390
118984494.70	12.09	66.156	4.3-6	11636	4.66	-15.3362	152.60	.006	.1453	22913	139906950.9	27255.0000	7.390
115639427.90	14.26	61.984	4.3-6	11574	4.64	-18.2055	151.23	.007	.1376	23054	136560704.4	28255.0000	7.390
111744357.33	16.55	57.812	4.2-6	11527	4.62	-21.2532	149.53	.009	.1297	23188	132664198.4	29255.0000	7.390
107272842.31	18.98	53.641	4.2-6	11507	4.61	-24.4890	147.43	.011	.1223	23314	128190948.4	30255.0000	7.390
102192256.49	21.61	49.471	4.2-5	11533	4.62	-27.9059	144.83	.014	.1155	23433	123108269.3	31255.0000	7.390
96462294.991	24.47	45.302	4.3-5	11628	4.66	-31.4694	141.62	.017	.1100	23545	117375777.0	32255.0000	7.390
90032921.044	27.65	41.134	4.4-6	11823	4.74	-35.1020	137.65	.020	.1060	23653	110943325.7	33255.0000	7.390
82841511.970	31.25	36.968	4.7-6	12160	4.87	-38.6648	132.78	.025	.1042	23758	103748140.2	34255.0000	7.390
74808880.509	35.42	32.806	5.1-6	12695	5.09	-41.9387	126.87	.032	.1052	23862	95710815.75	35255.0000	7.390
65833822.044	40.40	28.648	5.8-6	13508	5.41	-44.6117	119.88	.041	.1095	23969	86729832.24	36255.0000	7.390
55796281.157	46.62	24.501	6.9-6	14717	5.90	-46.2767	111.99	.054	.1181	24083	76674679.58	37255.0000	7.390
44502456.471	54.85	20.377	8.7-6	16516	6.62	-46.4173	103.71	.074	.1322	24208	65380964.04	38255.0000	7.390
31803285.557	66.82	16.335	1.2-5	19271	7.72	-44.2595	95.924	.110	.1529	24349	52669345.27	39255.0000	7.390
17693095.976	87.07	14.726	1.8-5	23768	9.52	-37.9626	87.519	.181	.1812	24516	38538387.53	40255.0000	7.390
3913625.7165	48.97	-172.54	3.1-5	31160	12.5	-20.8245	-92.116	.252	.2123	24713	24799215.48	41255.0000	7.390
384557.77833	9.672	-174.42	.0396	34041	28.7	-4.13374	-92.434	.066	7.214	24990	21308125.77	41740.0000	7.390
372581.29494	9.213	-174.44	.0651	34051	30.3	-3.93571	-92.435	.062	9.248	25031	21296330.55	41745.0000	7.390
361188.85839	8.753	-174.46	.1100	34061	32.1	-3.73743	-92.436	.055	12.02	25084	21285111.05	41750.0000	7.390
350381.86621	8.293	-174.48	.1800	34069	33.2	-3.53894	-92.437	.048	15.37	25152	21274468.57	41755.0000	7.390
340161.73682	7.832	-174.50	.2966	34076	34.3	-3.34027	-92.437	.037	19.73	25240	21264404.45	41760.0000	7.390
330529.86231	7.371	-174.52	.4938	34081	35.4	-3.14144	-92.438	.021	25.44	25352	21254920.00	41765.0000	7.390
321487.59669	6.910	-174.54	.8087	34082	36.1	-2.94253	-92.438	-.001	32.54	25496	21246016.51	41770.0000	7.153
313036.20265	6.448	-174.56	1.307	34080	36.8	-2.74360	-92.439	-.029	41.33	25680	21237695.17	41775.0000	6.581
305176.73536	5.987	-174.58	2.071	34072	37.6	-2.54475	-92.439	-.067	51.98	25913	21229956.96	41780.0000	6.050
297909.96777	5.525	-174.60	3.124	34058	38.2	-2.34611	-92.440	-.113	63.74	26202	21222802.58	41785.0000	5.598
291236.24024	5.063	-174.62	4.528	34035	38.4	-2.14785	-92.440	-.172	76.59	26552	21216232.32	41790.0000	5.271
285155.30566	4.601	-174.64	6.521	34002	38.5	-1.95017	-92.440	-.250	91.68	26972	21210245.88	41795.0000	4.973
279666.05665	4.140	-174.66	8.562	33956	38.4	-1.75333	-92.441	-.322	104.7	27464	21204842.11	41800.0000	4.704
274766.22461	3.679	-174.68	11.60	33896	38.3	-1.55760	-92.441	-.426	121.4	28027	21200018.70	41805.0000	4.464
270452.08349	3.219	-174.70	14.24	33821	38.3	-1.36330	-92.441	-.506	133.8	28667	21195771.91	41810.0000	4.252
266718.53859	2.760	-174.72	17.89	33729	38.1	-1.17078	-92.442	-.640	149.0	29373	21192096.65	41815.0000	4.230

TTA7622 39-64 21232 SPAHR3 GLFC MULTIPLE ORBITS ATMOS= ICAO 1962 ATMOSPHERE KLETT

CONTROL21232 SPAHR3 DATA-A=SANDIA GLFC DATA-B= DATA-C= DATA-D=

OBSERVER 0.0000=LAT 0.0000=LONG 0.0000=ORNT 0=ELEV 0=X . 0=Y. 0=Z

WT	CD	AREA	VICRCL	NOSE
40.0000	4.2300	.34910	25794.8	1.000

HITE	LAT	LONG	D	VT	MACH	GAMMA	TAU	AT	DOC	QC	RADVC	TIME	CD
263558.62256	2.302	-174.73	21.05	33616	37.8	-.980444	-92.442	-.760	160.5	30148	21188985.97	41820.0000	4.230
260963.60938	1.845	-174.75	23.56	33486	37.6	-.792728	-92.442	-.856	168.3	30972	21186431.18	41825.0000	4.230
258922.24072	1.391	-174.77	25.93	33341	37.3	-.607990	-92.442	-.947	174.9	31830	21184421.08	41830.0000	4.230
257421.56885	.9386	-174.79	27.88	33182	36.9	-.426546	-92.442	-1.02	179.5	32717	21182942.83	41835.0000	4.230
256447.20214	.4884	-174.81	29.00	33014	36.6	-.248666	-92.442	-1.07	181.1	33620	21181982.13	41840.0000	4.230
255983.60010	.0404	-174.83	29.35	32841	36.4	-.074527	-92.442	-1.08	180.2	34524	21181523.56	41845.0000	4.230
256014.67821	-.4051	-174.85	29.01	32667	36.2	.095799	-92.442	-1.07	177.0	35418	21181551.18	41850.0000	4.230
256524.41164	-.8484	-174.87	28.00	32497	36.1	.262332	-92.442	-1.04	172.0	36291	21182049.10	41855.0000	4.230
257497.31299	-1.289	-174.89	26.37	32334	36.0	.425180	-92.442	-.981	165.1	37135	21183001.96	41860.0000	4.230
258918.87451	-1.728	-174.91	24.16	32183	36.0	.584536	-92.442	-.902	156.5	37940	21184395.36	41865.0000	4.230
260775.94677	-2.165	-174.92	21.73	32044	36.0	.740660	-92.441	-.815	147.1	38699	21186216.29	41870.0000	4.230
263056.90236	-2.600	-174.94	19.45	31920	35.9	.893853	-92.441	-.733	138.0	39412	21188453.22	41875.0000	4.230
265751.62450	-3.033	-174.96	16.80	31809	35.9	1.04442	-92.440	-.638	127.3	40076	21191096.11	41880.0000	4.230
268851.63623	-3.465	-174.98	13.84	31715	35.8	1.19269	-92.440	-.531	114.8	40682	21194136.57	41885.0000	4.230
272350.16797	-3.895	-175.00	11.43	31636	35.8	1.33902	-92.439	-.456	103.8	41228	21197567.88	41890.0000	4.345
276241.67822	-4.324	-175.02	9.262	31568	35.7	1.48371	-92.439	-.392	93.08	41720	21201384.56	41895.0000	4.536
280521.56887	-4.753	-175.03	7.031	31511	35.6	1.62700	-92.438	-.319	80.81	42156	21205582.05	41900.0000	4.746
285186.26760	-5.180	-175.05	5.574	31464	35.6	1.76913	-92.437	-.272	71.74	42536	21210156.84	41905.0000	4.974
290232.95314	-5.607	-175.07	4.040	31424	35.5	1.91030	-92.436	-.216	60.94	42868	21215106.12	41910.0000	5.221
295659.51562	-6.033	-175.09	3.058	31393	35.3	2.05067	-92.435	-.181	52.92	43152	21220427.83	41915.0000	5.487
301464.29248	-6.459	-175.11	2.128	31366	34.9	2.19042	-92.434	-.144	44.09	43394	21226120.35	41920.0000	5.799
307646.04444	-6.884	-175.12	1.505	31345	34.4	2.32965	-92.433	-.121	37.05	43596	21232182.46	41925.0000	6.217
314203.74318	-7.309	-175.14	1.041	31327	33.8	2.46846	-92.432	-.102	30.78	43766	21238613.18	41930.0000	6.660
321136.50292	-7.733	-175.16	.6931	31312	33.2	2.60692	-92.431	-.087	25.11	43905	21245411.65	41935.0000	7.129
328443.35812	-8.157	-175.18	.4725	31299	32.7	2.74509	-92.429	-.076	20.72	44019	21252577.17	41940.0000	7.390
336124.20607	-8.581	-175.20	.3189	31287	31.9	2.88300	-92.428	-.069	17.02	44113	21260109.06	41945.0000	7.390
344177.76222	-9.004	-175.21	.2107	31277	31.1	3.02069	-92.426	-.064	13.83	44190	21268006.70	41950.0000	7.390
352603.53516	-9.427	-175.23	.1390	31266	30.3	3.15816	-92.425	-.062	11.23	44253	21276269.44	41955.0000	7.390
361400.78955	-9.849	-175.25	.0918	31256	29.5	3.29545	-92.423	-.061	9.130	44303	21284896.61	41960.0000	7.390
370568.74806	-10.27	-175.27	.0591	31247	28.1	3.43254	-92.422	-.061	7.322	44344	21293887.49	41965.0000	7.390
380106.59522	-10.69	-175.29	.0390	31237	26.9	3.56944	-92.420	-.062	5.948	44377	21303241.31	41970.0000	7.390
390013.47072	-11.11	-175.30	.0264	31227	25.7	3.70615	-92.418	-.063	4.896	44404	21312957.29	41975.0000	7.390
400288.47899	-11.54	-175.32	.0175	31216	24.1	3.84266	-92.416	-.065	3.983	44426	21323034.60	41980.0000	7.390
7575386.0629	-77.72	-177.84	2.0-5	25317	10.1	23.0374	-89.304	-.211	.1371	44709	28433697.96	42980.0000	7.390
17448441.329	-67.64	-4.6799	1.2-5	19670	7.88	28.2225	92.528	-.141	.0989	44826	38313788.96	43980.0000	7.390
25762084.466	-46.57	-8.3369	8.3-6	16128	6.46	26.7983	98.813	-.091	.0721	44911	46650565.92	44980.0000	7.390
31976614.601	-31.25	-12.345	6.2-6	13944	5.59	21.7689	104.32	-.058	.0555	44974	52883255.24	45980.0000	7.390
36139705.861	-18.71	-16.421	5.1-6	12655	5.07	14.5163	108.37	-.034	.0461	45024	57058024.33	46980.0000	7.390
38348815.109	-7.511	-20.521	4.6-6	12023	4.82	5.99798	110.62	-.013	.0416	45068	59273156.52	47980.0000	7.390
38654013.234	3.218	-24.628	4.5-6	11936	4.78	-2.99857	110.96	.006	.0410	45109	59589332.23	48980.0000	7.390
37094131.993	14.18	-28.731	4.9-6	12381	4.96	-11.7558	109.39	.027	.0442	45151	58015463.38	49980.0000	7.390
33595821.616	26.15	-32.819	5.7-6	13432	5.38	-19.5242	105.95	.049	.0517	45199	54507728.03	50980.0000	7.390
28080625.363	40.31	-36.862	7.4-6	15278	6.12	-25.4218	100.90	.078	.0656	45257	48976764.46	51980.0000	7.390
20462682.459	58.94	-40.732	1.1-5	18291	7.33	-28.2663	94.819	.121	.0886	45333	41336610.91	52980.0000	7.390
10948445.383	87.54	-36.672	1.7-5	23151	9.28	-25.8610	81.395	.188	.1233	45438	31803682.97	53980.0000	7.390
1858521.5404	38.87	129.97	2.8-5	29831	12.0	-12.2796	-92.058	.178	.1615	45581	22756454.08	54980.0000	7.390
483366.13038	15.18	128.92	.0020	31133	16.3	-4.80761	-92.390	.079	1.354	45682	21404112.46	55280.0000	7.390
390509.19091	11.83	128.78	.0259	31224	25.6	-3.72189	-92.410	.060	4.846	45785	21313213.05	55320.0000	7.390
380560.25587	11.41	128.76	.0383	31234	26.8	-3.58526	-92.412	.057	5.893	45812	21303466.83	55325.0000	7.390
371080.36037	10.99	128.74	.0580	31243	28.0	-3.44846	-92.414	.054	7.252	45844	21294082.87	55330.0000	7.390

TTA7622 3R-64 21232 SPAHR3 GLFC MULTIPLE ORBITS ATMOS= ICAO 1962 ATMOSPHERE KLETT
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OBSERVER 0.0000=LAT 0.0000=LONG 0.0000=ORNT 0=ELEV 0=X . 0=Y. 0=Z

WT	CD	AREA	VICRCL	NOSE
40.0000	7.3900	.34910	25734.5	1.000

HITE	LAT	LONG	Q	VT	MACH	GAMMA	TAU	AT	DOC	QC	RADVC	TIME	CD
361870.35156	10.56	128.73	.0901	31251	29.4	-3.31149	-92.416	.049	9.039	45885	21285061.93	55335.0000	7.390
353031.11671	10.14	128.71	.1363	31259	30.3	-3.17437	-92.418	.044	11.13	45935	21276404.83	55340.0000	7.390
344563.51367	9.720	128.69	.2069	31265	31.0	-3.03712	-92.420	.037	13.69	45997	21268112.36	55345.0000	7.390
336468.37453	9.297	128.67	.3125	31271	31.8	-2.89975	-92.422	.028	16.83	46073	21260185.31	55350.0000	7.390
328746.50781	8.873	128.65	.4627	31274	32.6	-2.76232	-92.424	.016	20.47	46166	21252624.40	55355.0000	7.390
321398.66944	8.450	128.64	.6837	31276	33.1	-2.62485	-92.425	.001	24.87	46279	21245430.34	55360.0000	7.147
314425.53663	8.026	128.62	1.026	31275	33.7	-2.48739	-92.427	-.018	30.44	46417	21238603.75	55365.0000	6.675
307927.65673	7.602	128.60	1.480	31270	34.3	-2.35003	-92.428	-.041	36.54	46584	21232145.10	55370.0000	6.229
301905.39454	7.178	128.58	2.100	31261	34.8	-2.21284	-92.430	-.069	43.48	46784	21226054.71	55375.0000	5.809
295758.89455	6.754	128.56	3.012	31247	35.1	-2.07593	-92.431	-.110	52.00	47022	21220332.68	55380.0000	5.492
290288.02344	6.330	128.55	3.980	31226	35.3	-1.93943	-92.432	-.149	59.66	47302	21214978.81	55385.0000	5.224
285192.23732	5.907	128.53	5.479	31198	35.3	-1.80351	-92.433	-.208	69.84	47624	21209992.52	55390.0000	4.974
280470.38527	5.483	128.51	6.891	31160	35.2	-1.66836	-92.434	-.257	78.10	47995	21205372.61	55395.0000	4.743
276120.72511	5.060	128.49	9.061	31113	35.2	-1.53418	-92.435	-.332	89.23	48412	21201117.30	55400.0000	4.530
272140.58887	4.638	128.47	11.12	31055	35.1	-1.40123	-92.436	-.397	98.43	48882	21197223.90	55405.0000	4.335
268526.53859	4.217	128.46	13.49	30985	35.0	-1.26976	-92.437	-.477	107.9	49398	21193688.95	55410.0000	4.230
265273.97803	3.796	128.44	16.28	30900	34.8	-1.14008	-92.438	-.582	117.7	49961	21190507.87	55415.0000	4.230
262377.35842	3.376	128.42	18.70	30799	34.6	-1.01254	-92.439	-.673	125.3	50570	21187675.08	55420.0000	4.230
259829.66602	2.958	128.40	20.83	30684	34.4	-.887918	-92.439	-.754	131.1	51212	21185183.62	55425.0000	4.230
257622.35157	2.542	128.39	23.39	30555	34.0	-.765321	-92.440	-.851	137.7	51884	21183024.96	55430.0000	4.230
255745.66895	2.127	128.37	25.47	30412	33.7	-.646295	-92.440	-.930	142.2	52584	21181189.43	55435.0000	4.230
254188.66064	1.715	128.35	27.11	30257	33.3	-.530760	-92.441	-.992	145.1	53303	21179666.13	55440.0000	4.230
252939.11815	1.304	128.33	28.32	30093	33.0	-.418963	-92.441	-1.04	146.6	54033	21178442.94	55445.0000	4.230
251984.07765	.8959	128.32	29.13	29924	32.7	-.311099	-92.441	-1.07	146.9	54767	21177507.00	55450.0000	4.230
251310.03517	.4899	128.30	29.59	29750	32.5	-.207306	-92.441	-1.09	146.2	55500	21176844.93	55455.0000	4.230
250903.18848	.0863	128.28	29.71	29574	32.3	-.107675	-92.441	-1.09	144.6	56228	21176443.03	55460.0000	4.230
250749.66993	-.3149	128.26	29.53	29398	32.0	-.012249	-92.441	-1.09	142.3	56945	21176287.56	55465.0000	4.230
250835.71777	-.7137	128.25	29.09	29224	31.9	.078969	-92.441	-1.08	139.5	57650	21176364.88	55470.0000	4.230
251147.85009	-1.110	128.23	28.40	29053	31.7	.166019	-92.441	-1.05	136.1	58339	21176661.63	55475.0000	4.230
251672.99609	-1.504	128.21	27.49	28886	31.6	.248973	-92.440	-1.02	132.2	59010	21177164.86	55480.0000	4.230
252398.61329	-1.896	128.20	26.39	28725	31.5	.327938	-92.440	-.980	128.0	59661	21177862.14	55485.0000	4.230
253312.78174	-2.286	128.18	25.12	28571	31.4	.403051	-92.439	-.934	123.5	60290	21178741.65	55490.0000	4.230
254404.28857	-2.674	128.16	23.69	28425	31.3	.474477	-92.438	-.883	118.6	60895	21179792.31	55495.0000	4.230
255662.68654	-3.059	128.15	22.13	28287	31.3	.542405	-92.438	-.826	113.5	61475	21181003.73	55500.0000	4.230
257078.35206	-3.443	128.13	20.44	28159	31.3	.607047	-92.437	-.765	108.0	62029	21182366.40	55505.0000	4.230
258642.52491	-3.826	128.12	18.63	28041	31.3	.668639	-92.435	-.699	102.2	62555	21183871.62	55510.0000	4.230
260347.34328	-4.206	128.10	16.84	27934	31.4	.727431	-92.434	-.634	96.36	63051	21185511.61	55515.0000	4.230
262185.79738	-4.585	128.08	15.41	27837	31.3	.783671	-92.433	-.582	91.51	63521	21187279.42	55520.0000	4.230
264151.56593	-4.963	128.07	13.92	27747	31.2	.837580	-92.431	-.528	86.39	63965	21189168.77	55525.0000	4.230
266239.02394	-5.340	128.05	12.37	27667	31.2	.889366	-92.429	-.471	80.94	64384	21191174.10	55530.0000	4.230
268443.24267	-5.715	128.04	10.76	27596	31.2	.939254	-92.428	-.413	75.09	64774	21193290.51	55535.0000	4.230
270760.03811	-6.090	128.02	9.313	27533	31.1	.987472	-92.426	-.363	69.53	65135	21195513.86	55540.0000	4.267
273185.76662	-6.464	128.00	8.276	27477	31.1	1.03422	-92.424	-.334	65.27	65472	21197840.53	55545.0000	4.386
275717.09229	-6.837	127.99	7.206	27426	31.0	1.07963	-92.421	-.302	60.67	65787	21200267.23	55550.0000	4.510
278351.03127	-7.209	127.97	6.105	27380	31.0	1.12384	-92.419	-.266	55.66	66078	21202791.01	55555.0000	4.639
281085.01466	-7.581	127.96	5.162	27340	30.9	1.16697	-92.416	-.234	51.03	66345	21205409.31	55560.0000	4.773
283916.85255	-7.952	127.94	4.492	27304	30.9	1.20916	-92.414	-.213	47.48	66590	21208119.99	55565.0000	4.912
286844.56006	-8.322	127.93	3.804	27272	30.9	1.25052	-92.411	-.180	43.59	66818	21210921.07	55570.0000	5.055
289866.42236	-8.692	127.91	3.099	27243	30.8	1.29113	-92.408	-.162	39.26	67025	21213810.89	55575.0000	5.203
292981.01173	-9.062	127.89	2.660	27219	30.7	1.33109	-92.405	-.146	36.32	67214	21216788.02	55580.0000	5.356

TTA7622 38-64 21232 SPAHR3 GLFC MULTIPLE ORBITS ATMOS= ICAO 1962 ATMOSPHERE KLETT

CONTROL21232 SPAHR3 DATA-A=SANDIA GLFC DATA-B= DATA-C= DATA-D=

OBSERVER 0.0000=LAT 0.0000=LONG 0.0000=ORNT 0=ELEV 0=X , 0=Y, 0=Z

WT	CD	AREA	VICRCL	NOSE
40.0000	3.5132	.34910	25774.3	1.000

HITE	LAT	LONG	Q	VT	MACH	GAMMA	TAU	AT	DOC	QC	RADVC	TIME	CD
296187.05666	-9.431	127.88	2.224	27196	30.5	1.37049	-92.402	-.130	33.15	67388	21219851.23	55585.0000	5.513
299483.45312	-9.800	127.86	1.777	27177	30.4	1.40939	-92.398	-.111	29.60	67545	21222999.44	55590.0000	5.675
302969.28077	-10.17	127.85	1.490	27160	30.1	1.44786	-92.395	-.101	27.07	67686	21226231.75	55595.0000	5.894
306343.72023	-10.54	127.83	1.227	27144	29.9	1.48595	-92.391	-.090	24.54	67815	21229547.37	55600.0000	6.129
309906.04541	-10.91	127.82	.9581	27131	29.6	1.52370	-92.387	-.078	21.67	67931	21232945.61	55605.0000	6.370
313555.63818	-11.27	127.80	.8063	27119	29.3	1.56117	-92.383	-.072	19.87	68034	21236425.87	55610.0000	6.616
317291.93654	-11.64	127.79	.6546	27107	29.0	1.59838	-92.379	-.066	17.89	68128	21239987.62	55615.0000	6.869
321114.42531	-12.01	127.77	.5196	27097	28.7	1.63535	-92.375	-.059	15.93	68213	21243630.39	55620.0000	7.127
325022.65676	-12.37	127.75	.4311	27088	28.5	1.67212	-92.371	-.055	14.50	68289	21247353.75	55625.0000	7.390
329016.21339	-12.74	127.74	.3408	27079	28.2	1.70870	-92.366	-.050	12.89	68357	21251157.32	55630.0000	7.390
333094.73391	-13.11	127.72	.2782	27072	27.9	1.74512	-92.361	-.047	11.64	68419	21255040.78	55635.0000	7.390
337257.88330	-13.47	127.71	.2239	27064	27.5	1.78139	-92.357	-.044	10.44	68474	21259003.83	55640.0000	7.390
341505.34911	-13.84	127.69	.1772	27057	27.1	1.81752	-92.352	-.041	9.287	68523	21263046.19	55645.0000	7.390
345836.83448	-14.21	127.68	.1455	27051	26.7	1.85352	-92.347	-.040	8.414	68567	21267167.61	55650.0000	7.390
350252.04933	-14.57	127.66	.1140	27044	26.4	1.88941	-92.341	-.038	7.445	68607	21271367.83	55655.0000	7.390
354750.71484	-14.94	127.65	.0948	27038	26.0	1.92518	-92.336	-.038	6.790	68642	21275646.61	55660.0000	7.390
359332.55078	-15.30	127.63	.0753	27032	25.7	1.96084	-92.330	-.037	6.052	68675	21280003.73	55665.0000	7.390
363997.28222	-15.67	127.62	.0615	27026	25.1	1.99640	-92.325	-.037	5.468	68703	21284438.94	55670.0000	7.390
368744.63525	-16.04	127.60	.0485	27020	24.5	2.03186	-92.319	-.036	4.854	68729	21288952.02	55675.0000	7.390
373574.34377	-16.40	127.59	.0394	27014	24.0	2.06722	-92.313	-.036	4.374	68752	21293542.74	55680.0000	7.390
378486.13038	-16.76	127.57	.0316	27008	23.4	2.10247	-92.307	-.037	3.919	68773	21298210.88	55685.0000	7.390
383479.71974	-17.13	127.55	.0259	27002	22.9	2.13763	-92.301	-.037	3.548	68791	21302956.21	55690.0000	7.390
388554.83886	-17.49	127.54	.0211	26996	22.4	2.17269	-92.294	-.037	3.201	68808	21307778.50	55695.0000	7.390
393711.20656	-17.86	127.52	.0173	26989	21.7	2.20765	-92.288	-.037	2.898	68824	21312677.52	55700.0000	7.390
398948.53957	-18.22	127.51	.0139	26983	21.0	2.24251	-92.281	-.038	2.593	68837	21317653.03	55705.0000	7.390
404266.55567	-18.59	127.49	.0114	26977	20.3	2.27727	-92.274	-.038	2.352	68850	21322704.81	55710.0000	7.390
527102.07909	-25.82	127.20	8.0-4	26836	12.7	2.94987	-92.106	-.048	.6215	68968	21439371.40	55810.0000	7.390
2815659.3418	-88.63	-93.665	1.9-5	24353	9.76	6.17125	53.783	-.084	.0910	69113	23670807.18	56810.0000	7.390
4902511.8360	-35.66	-62.142	1.6-5	22318	8.94	3.35343	92.937	-.039	.0789	69195	25804227.85	57810.0000	7.390
5186612.7926	12.72	-65.553	1.5-5	22064	8.84	-1.96837	93.995	.023	.0774	69275	26108760.50	58810.0000	7.390
3521599.9538	63.86	-68.258	1.8-5	23642	9.47	-5.82969	90.069	.076	.0868	69356	24390462.56	59810.0000	7.390
1030512.9361	54.71	104.75	2.2-5	26267	10.5	-4.54561	-90.618	.071	.1021	69451	21909254.02	60810.0000	7.390
509939.52684	33.65	104.11	.0010	26855	13.1	-2.85749	-91.803	.046	.6973	69536	21413982.11	61110.0000	7.390
396499.08349	26.77	103.84	.0155	26984	21.3	-2.22180	-92.038	.035	2.740	69665	21307841.93	61205.0000	7.390
391310.00195	26.41	103.83	.0189	26990	22.1	-2.18729	-92.049	.034	3.027	69679	21303009.11	61210.0000	7.390
386201.20022	26.05	103.81	.0233	26995	22.6	-2.15269	-92.059	.033	3.366	69695	21298253.31	61215.0000	7.390
381172.92578	25.68	103.80	.0281	27001	23.1	-2.11799	-92.070	.033	3.694	69713	21293574.71	61220.0000	7.390
376225.45068	25.32	103.78	.0352	27006	23.6	-2.08321	-92.080	.032	4.134	69732	21288973.51	61225.0000	7.390
371359.04296	24.95	103.77	.0429	27011	24.2	-2.04835	-92.090	.030	4.563	69754	21284449.93	61230.0000	7.390
366573.95606	24.59	103.75	.0544	27016	24.8	-2.01340	-92.100	.029	5.141	69778	21280004.15	61235.0000	7.390
361870.45069	24.22	103.74	.0673	27021	25.4	-1.97838	-92.110	.028	5.719	69805	21275636.37	61240.0000	7.390
357248.76954	23.86	103.73	.0841	27026	25.9	-1.94328	-92.120	.026	6.393	69835	21271346.76	61245.0000	7.390
352709.14601	23.49	103.71	.1034	27030	26.2	-1.90812	-92.130	.024	7.087	69869	21267135.50	61250.0000	7.390
348251.81055	23.13	103.70	.1277	27034	26.5	-1.87290	-92.139	.022	7.875	69907	21263002.76	61255.0000	7.390
343876.96973	22.76	103.68	.1596	27037	26.9	-1.83763	-92.148	.020	8.804	69948	21258948.68	61260.0000	7.390
339584.82666	22.40	103.67	.1933	27040	27.3	-1.80231	-92.157	.017	9.689	69994	21254973.40	61265.0000	7.390
335375.56152	22.03	103.65	.2480	27043	27.6	-1.76697	-92.166	.013	10.97	70046	21251077.04	61270.0000	7.390
331249.33936	21.66	103.64	.3015	27045	28.0	-1.73161	-92.175	.009	12.10	70104	21247259.70	61275.0000	7.390
327206.29932	21.30	103.62	.3807	27046	28.3	-1.69625	-92.184	.003	13.59	70168	21243521.46	61280.0000	7.390
323246.84542	20.93	103.61	.4697	27046	28.5	-1.66092	-92.193	-.003	15.09	70239	21239862.36	61285.0000	7.271

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WT	CD	AREA	VICRCL	NOSE
40.0000	7.0094	.34910	25758.6	1.000

HITE	LAT	LONG	Q	VT	MACH	GAMMA	TAU	AT	DOC	OC	RADVC	TIME	CD
319370.14113	20.57	103.59	.5680	27045	28.7	-1.62563	-92.201	-.008	16.59	70319	21236282.39	61290.0000	7.009
315577.08253	20.20	103.58	.7206	27044	29.0	-1.59041	-92.209	-.017	18.68	70407	21232781.50	61295.0000	6.753
311867.32082	19.83	103.56	.8696	27041	29.3	-1.55530	-92.217	-.024	20.51	70505	21229359.57	61300.0000	6.502
308240.75586	19.47	103.55	1.076	27036	29.6	-1.52031	-92.225	-.034	22.79	70613	21226016.43	61305.0000	6.257
304697.19582	19.10	103.53	1.339	27030	29.9	-1.48550	-92.233	-.046	25.41	70733	21222751.83	61310.0000	6.018
301236.38917	18.73	103.52	1.596	27022	30.1	-1.45092	-92.241	-.057	27.72	70866	21219565.46	61315.0000	5.784
297857.96484	18.37	103.50	1.972	27011	30.3	-1.41660	-92.248	-.073	30.77	71012	21216456.87	61320.0000	5.595
294561.44873	18.00	103.49	2.408	26998	30.4	-1.38261	-92.256	-.092	33.96	71174	21213425.53	61325.0000	5.434
291346.25196	17.64	103.47	2.831	26982	30.5	-1.34904	-92.263	-.108	36.77	71351	21210470.78	61330.0000	5.276
288211.58644	17.27	103.46	3.410	26963	30.5	-1.31594	-92.270	-.131	40.28	71543	21207591.77	61335.0000	5.122
285156.49464	16.90	103.44	4.093	26940	30.5	-1.28342	-92.277	-.157	44.04	71754	21204787.47	61340.0000	4.973
282179.84229	16.54	103.43	4.756	26913	30.4	-1.25158	-92.284	-.180	47.36	71982	21202056.68	61345.0000	4.827
279280.20557	16.17	103.41	5.518	26883	30.4	-1.22052	-92.290	-.206	50.88	72228	21199397.91	61350.0000	4.685
276455.92432	15.81	103.40	6.614	26847	30.4	-1.19035	-92.297	-.243	55.53	72493	21196809.43	61355.0000	4.546
273705.11574	15.44	103.38	7.672	26805	30.3	-1.16121	-92.303	-.277	59.60	72781	21194289.30	61360.0000	4.412
271025.56935	15.08	103.37	8.692	26758	30.3	-1.13326	-92.309	-.306	63.18	73089	21191835.23	61365.0000	4.280
268414.66114	14.72	103.35	10.10	26705	30.2	-1.10664	-92.315	-.355	67.80	73416	21189444.54	61370.0000	4.230
265869.53565	14.35	103.34	11.71	26644	30.0	-1.08153	-92.321	-.415	72.64	73767	21187114.31	61375.0000	4.230
263387.02443	13.99	103.32	13.26	26573	29.9	-1.05819	-92.327	-.472	76.84	74141	21184841.29	61380.0000	4.230
260963.31837	13.63	103.31	14.75	26492	29.8	-1.03687	-92.333	-.528	80.48	74534	21182621.61	61385.0000	4.230
258593.99657	13.27	103.29	16.56	26402	29.5	-1.01782	-92.338	-.595	84.66	74947	21180450.77	61390.0000	4.230
256274.12550	12.91	103.28	18.57	26301	29.2	-1.00133	-92.344	-.669	88.88	75381	21178323.79	61395.0000	4.230
253998.21679	12.56	103.26	20.48	26188	28.8	-.987716	-92.349	-.740	92.47	75834	21176235.11	61400.0000	4.230
251760.04201	12.20	103.25	22.30	26063	28.5	-.977305	-92.354	-.807	95.50	76304	21174178.46	61405.0000	4.230
249552.66600	11.85	103.23	24.24	25928	28.2	-.970406	-92.359	-.879	98.42	76789	21172146.86	61410.0000	4.230
247368.61427	11.50	103.22	26.83	25779	27.8	-.967362	-92.364	-.975	102.3	77291	21170132.80	61415.0000	4.230
245199.84523	11.15	103.20	29.30	25615	27.5	-.968582	-92.368	-1.07	105.4	77810	21168128.21	61420.0000	4.230
243037.66308	10.80	103.19	31.66	25436	27.1	-.974511	-92.373	-1.15	107.9	78344	21166124.36	61425.0000	4.230
240872.44921	10.46	103.17	33.91	25244	26.7	-.985566	-92.377	-1.24	109.9	78888	21164111.62	61430.0000	4.230
238694.00488	10.11	103.16	36.80	25037	26.3	-1.00218	-92.381	-1.34	112.4	79444	21162079.78	61435.0000	4.230
236491.60302	9.775	103.14	40.05	24812	25.9	-1.02486	-92.385	-1.46	115.0	80012	21160018.13	61440.0000	4.230
234254.01464	9.438	103.13	43.15	24568	25.5	-1.05420	-92.389	-1.58	116.8	80592	21157915.42	61445.0000	4.230
231969.18945	9.106	103.12	46.12	24306	25.1	-1.09080	-92.393	-1.68	118.0	81179	21155759.62	61450.0000	4.230
229624.34962	8.777	103.10	49.23	24026	24.6	-1.13526	-92.396	-1.80	118.9	81772	21153537.99	61455.0000	4.230
227206.31689	8.452	103.09	53.60	23724	24.2	-1.18826	-92.400	-1.96	120.7	82370	21151237.37	61460.0000	4.230
224701.73536	8.131	103.08	57.77	23397	23.7	-1.25060	-92.403	-2.11	121.6	82977	21148844.45	61465.0000	4.230
222096.71288	7.815	103.06	61.74	23045	23.2	-1.32320	-92.406	-2.26	121.7	83585	21146345.38	61470.0000	4.230
219376.72118	7.503	103.05	66.02	22670	22.6	-1.40697	-92.409	-2.41	121.4	84193	21143725.67	61475.0000	4.230
216527.14110	7.197	103.04	71.84	22265	22.1	-1.50294	-92.411	-2.63	121.8	84801	21140970.80	61480.0000	4.230
213533.74121	6.897	103.02	77.26	21826	21.5	-1.61237	-92.414	-2.83	121.0	85409	21138066.58	61485.0000	4.230
210382.16014	6.602	103.01	82.27	21357	20.8	-1.73666	-92.416	-3.01	119.2	86010	21134998.73	61490.0000	4.230
207058.07814	6.315	103.00	89.74	20852	20.2	-1.87728	-92.418	-3.28	118.2	86603	21131753.04	61495.0000	4.230
203548.56055	6.034	102.99	96.79	20304	19.5	-2.03605	-92.420	-3.54	115.9	87188	21128316.66	61500.0000	4.230
199841.62648	5.762	102.98	103.1	19716	18.8	-2.21513	-92.421	-3.77	112.2	87759	21124677.70	61505.0000	4.230
195926.07079	5.497	102.96	112.2	19084	18.1	-2.41676	-92.423	-4.10	109.1	88312	21120825.09	61510.0000	4.230
191793.83301	5.242	102.95	121.8	18396	17.4	-2.64381	-92.424	-4.45	105.0	88848	21116750.89	61515.0000	4.230
187440.67676	4.996	102.94	131.8	17651	16.6	-2.89986	-92.424	-4.82	99.94	89361	21112450.98	61520.0000	4.230
182865.56054	4.761	102.93	141.9	16847	15.8	-3.18906	-92.425	-5.19	93.79	89846	21107924.44	61525.0000	4.230
178071.72265	4.537	102.92	152.0	15983	14.9	-3.51632	-92.425	-5.55	86.64	90297	21103174.68	61530.0000	4.230
173067.56397	4.325	102.91	161.8	15061	13.9	-3.88749	-92.425	-5.91	78.65	90711	21098210.26	61535.0000	4.230

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OBSERVER 0.0000=LAT 0.0000=LONG 0.0000=ORNT 0=ELEV 0=X . 0=Y. 0=Z

WT	CD	AREA	VICRCL	NOSE
40.0000	4.2300	.34910	25853.4	1.000

HITE	LAT	LONG	Q	VT	MACH	GAMMA	TAU	AT	DOC	QC	RADVC	TIME	CD
167867.92236	4.127	102.91	171.7	14082	13.0	-4.30965	-92.424	-6.26	70.08	91083	21093046.21	61540.0000	4.230
162495.50977	3.942	102.90	180.7	13048	12.1	-4.79156	-92.423	-6.59	60.99	91411	21087705.41	61545.0000	4.230
156981.26659	3.772	102.89	187.4	11968	11.1	-5.34417	-92.421	-6.83	51.56	91692	21082219.04	61550.0000	4.230
151363.82178	3.617	102.88	193.2	10853	10.1	-5.98107	-92.418	-7.03	42.41	91927	21076625.93	61555.0000	4.230
145690.93749	3.477	102.88	195.9	9712.	9.11	-6.71969	-92.416	-7.12	33.62	92117	21070974.09	61560.0000	4.230
140018.09374	3.353	102.87	193.8	8570.	8.12	-7.58297	-92.413	-7.02	25.54	92265	21065319.22	61565.0000	4.230
134400.15038	3.244	102.87	187.8	7454.	7.12	-8.59955	-92.409	-6.78	18.62	92375	21059716.47	61570.0000	4.230
128888.41651	3.151	102.87	176.8	6393.	6.17	-9.80562	-92.404	-6.36	12.98	92453	21054217.43	61575.0000	4.230
123523.94091	3.071	102.86	161.8	5415.	5.27	-11.2457	-92.399	-5.78	8.689	92507	21048863.44	61580.0000	4.230
118335.01173	3.005	102.86	144.5	4539.	4.46	-12.9737	-92.392	-5.11	5.616	92542	21043683.09	61585.0000	4.230
113336.78272	2.950	102.86	126.4	3774.	3.74	-15.0530	-92.384	-4.41	3.530	92565	21038691.83	61590.0000	4.230
108532.77394	2.905	102.86	108.7	3122.	3.12	-17.5552	-92.374	-3.72	2.177	92579	21033893.44	61595.0000	4.230
103917.30762	2.868	102.85	92.07	2578.	2.59	-20.5561	-92.363	-3.05	1.327	92587	21029282.49	61600.0000	4.230
99474.105468	2.838	102.85	77.60	2136.	2.16	-24.1225	-92.348	-2.46	.8126	92592	21024842.90	61605.0000	4.230
95182.539062	2.814	102.85	65.97	1781.	1.80	-28.2967	-92.330	-1.97	.5067	92596	21020554.22	61610.0000	4.230
91027.952637	2.795	102.85	56.83	1498.	1.52	-33.0832	-92.307	-1.56	.3243	92598	21016401.93	61615.0000	4.230
87001.632325	2.779	102.85	49.85	1275.	1.30	-38.4313	-92.275	-1.22	.2148	92599	21012377.43	61620.0000	4.230
83100.984376	2.767	102.85	44.72	1100.	1.12	-44.2118	-92.233	-.959	.1481	92600	21008478.22	61625.0000	4.230
79331.073243	2.757	102.85	41.07	963.2	.986	-50.2291	-92.180	-.753	.1065	92601	21004709.44	61630.0000	4.230
75702.483399	2.750	102.85	38.54	854.8	.877	-56.2400	-92.125	-.597	.0798	92601	21001081.72	61635.0000	4.230
72229.223145	2.744	102.85	36.83	768.0	.790	-62.0092	-92.056	-.482	.0620	92601	20997609.13	61640.0000	4.230
68924.871095	2.740	102.85	35.64	697.0	.718	-67.3324	-91.968	-.398	.0495	92602	20994305.27	61645.0000	4.230
65799.954588	2.737	102.85	34.76	637.6	.659	-72.0670	-91.856	-.337	.0403	92602	20991180.73	61650.0000	4.230
62858.937500	2.735	102.85	33.91	587.1	.606	-76.1378	-91.709	-.286	.0333	92602	20988239.98	61655.0000	4.230
60098.068360	2.733	102.85	33.20	543.7	.562	-79.5269	-91.514	-.247	.0280	92602	20985479.30	61660.0000	4.230
57508.803223	2.732	102.85	32.55	506.0	.523	-82.2648	-91.252	-.215	.0237	92602	20982890.16	61665.0000	4.230
55079.307130	2.731	102.85	31.94	473.1	.489	-84.4143	-90.890	-.188	.0203	92602	20980460.76	61670.0000	4.230
52795.857909	2.730	102.85	31.40	444.1	.459	-86.0558	-90.381	-.166	.0176	92602	20978177.37	61675.0000	4.230
50644.441894	2.730	102.85	30.91	418.5	.432	-87.2761	-89.652	-.146	.0154	92603	20976025.99	61680.0000	4.230
48611.496094	2.730	102.85	30.47	395.8	.409	-88.1594	-88.581	-.129	.0135	92603	20973993.07	61685.0000	4.230
46684.540528	2.730	102.85	30.10	375.6	.388	-88.7822	-86.978	-.115	.0120	92603	20972066.13	61690.0000	4.230
44852.557129	2.730	102.85	29.77	357.6	.369	-89.2100	-84.534	-.103	.0107	92603	20970234.16	61695.0000	4.230
43105.882324	2.730	102.85	29.50	341.4	.353	-89.4956	-80.752	-.092	.0097	92603	20968487.49	61700.0000	4.230
41436.270996	2.730	102.85	29.27	326.7	.337	-89.6804	-74.884	-.084	.0088	92603	20966817.88	61705.0000	4.230
39836.728517	2.730	102.85	29.05	313.3	.324	-89.7951	-65.997	-.076	.0080	92603	20965218.34	61710.0000	4.230
38301.046876	2.730	102.85	28.89	301.1	.311	-89.8618	-53.595	-.069	.0073	92603	20963682.66	61715.0000	4.230
36823.934569	2.730	102.85	28.73	289.9	.299	-89.8972	-38.995	-.063	.0067	92603	20962205.55	61720.0000	4.230
35400.340333	2.730	102.85	28.46	279.8	.288	-89.9142	-25.439	-.053	.0062	92603	20960781.96	61725.0000	4.230
34022.753420	2.730	102.85	28.23	271.4	.278	-89.9223	-15.335	-.045	.0058	92603	20959404.37	61730.0000	4.230
32684.233886	2.730	102.85	28.11	264.1	.269	-89.9265	-8.8056	-.040	.0054	92603	20958065.85	61735.0000	4.230
31380.881348	2.730	102.85	28.03	257.3	.260	-89.9293	-4.8892	-.037	.0051	92603	20956762.50	61740.0000	4.230
30110.043458	2.730	102.85	27.96	251.1	.252	-89.9314	-2.6268	-.034	.0049	92603	20955491.66	61745.0000	4.230
28869.591796	2.730	102.85	27.90	245.2	.245	-89.9333	-1.3956	-.032	.0046	92603	20954251.21	61750.0000	4.230
27657.706054	2.730	102.85	27.85	239.6	.238	-89.9350	-.65365	-.030	.0044	92603	20953039.33	61755.0000	4.230
26472.762695	2.730	102.85	27.80	234.4	.232	-89.9366	-.27193	-.028	.0042	92603	20951854.38	61760.0000	4.230
25313.257813	2.730	102.85	27.76	229.4	.226	-89.9381	-.06688	-.027	.0040	92603	20950694.87	61765.0000	4.230
24177.857910	2.730	102.85	27.72	224.8	.220	-89.9395	.04258	-.025	.0038	92603	20949559.48	61770.0000	4.230
23065.315917	2.730	102.85	27.69	220.3	.215	-89.9408	.09997	-.024	.0037	92603	20948446.94	61775.0000	4.230
21974.483400	2.730	102.85	27.65	216.1	.210	-89.9420	.13128	-.022	.0035	92603	20947356.10	61780.0000	4.230
20904.317381	2.730	102.85	27.63	212.0	.205	-89.9432	.15109	-.021	.0034	92603	20946285.94	61785.0000	4.230

```
TTA7622 38-64  21232 SPAHR3 GLFC MULTIPLE ORBITS                                    ATMOS= ICAO  1962  ATMOSPHERE  KLETT
CONTROL21232 SPAHR3      DATA-A=SANDIA    GLFC     DATA-B=                  DATA-C=                  DATA-D=
OBSERVER      0.0000=LAT      0.0000=LONG     0.0000=ORNT          0=ELEV            0=X .          0=Y.           0=Z
       WT       CD     AREA    VICRCL    NOSE
  40.0000  4.2300  .34910  25944.9  1.000
          HITE     LAT     LONG       D       VT   MACH     GAMMA      TAU     AT     DOC      QC        RADVC          TIME      CD
  19853.868163  2.730  102.85  27.60  208.2  .201 -89.9443  .16479 -.020  .0032  92603  20945235.49  61790.0000  4.230
  18822.271484  2.730  102.85  27.57  204.5  .196 -89.9454  .17295 -.019  .0031  92603  20944203.89  61795.0000  4.230
  17808.699706  2.730  102.85  27.55  201.0  .192 -89.9464  .17850 -.018  .0030  92603  20943190.32  61800.0000  4.230
  16812.317870  2.730  102.85  27.53  197.6  .188 -89.9474  .18405 -.017  .0029  92603  20942193.94  61805.0000  4.230
  15832.365723  2.730  102.85  27.51  194.4  .184 -89.9483  .18950 -.016  .0028  92603  20941213.98  61810.0000  4.230
  14868.204589  2.730  102.85  27.49  191.3  .181 -89.9492  .19451 -.016  .0027  92603  20940249.82  61815.0000  4.230
  13919.419434  2.730  102.85  27.46  188.3  .177 -89.9500  .19934 -.014  .0026  92603  20939301.04  61820.0000  4.230
  12985.036621  2.730  102.85  27.46  185.4  .174 -89.9508  .20404 -.014  .0025  92603  20938366.66  61825.0000  4.230
  12064.862306  2.730  102.85  27.44  182.7  .171 -89.9516  .20904 -.013  .0024  92603  20937446.48  61830.0000  4.230
  11158.171875  2.730  102.85  27.43  180.0  .168 -89.9523  .21391 -.013  .0024  92603  20936539.79  61835.0000  4.230
  10264.585938  2.730  102.85  27.41  177.4  .165 -89.9530  .21890 -.012  .0023  92603  20935646.20  61840.0000  4.230
   9383.5517577  2.730  102.85  27.40  175.0  .162 -89.9537  .22371 -.012  .0022  92603  20934765.17  61845.0000  4.230
   8514.6767579  2.730  102.85  27.39  172.6  .159 -89.9544  .22864 -.011  .0021  92603  20933896.30  61850.0000  4.230
   7657.5727539  2.730  102.85  27.37  170.3  .157 -89.9550  .23332 -.011  .0021  92603  20933039.19  61855.0000  4.230
   6811.6689649  2.730  102.85  27.37  168.0  .154 -89.9556  .23823 -.010  .0020  92603  20932193.31  61860.0000  4.230
   5976.9033204  2.730  102.85  27.36  165.9  .152 -89.9562  .24318 -.010  .0020  92603  20931358.52  61865.0000  4.230
   5152.7011720  2.730  102.85  27.35  163.8  .149 -89.9568  .24809 -.009  .0019  92603  20930534.32  61870.0000  4.230
   4338.8740235  2.730  102.85  27.34  161.8  .147 -89.9574  .25304 -.009  .0019  92604  20929720.49  61875.0000  4.230
   3534.9843750  2.730  102.85  27.33  159.8  .145 -89.9579  .25782 -.009  .0018  92604  20928916.60  61880.0000  4.230
   2740.7841797  2.730  102.85  27.32  157.9  .143 -89.9584  .26272 -.008  .0018  92604  20928122.40  61885.0000  4.230
   1955.9687501  2.730  102.85  27.32  156.0  .141 -89.9589  .26752 -.008  .0017  92604  20927337.59  61890.0000  4.230
   1180.2910157  2.730  102.85  27.31  154.2  .139 -89.9594  .27242 -.008  .0017  92604  20926561.91  61895.0000  4.230
    413.49169923  2.730  102.85  27.30  152.5  .137 -89.9599  .27723 -.007  .0016  92604  20925795.11  61900.0000  4.230
   -344.91748048  2.730  102.85  27.11  151.1  .135 -89.9603  .28204 -2.-4  .0016  92604  20925036.70  61905.0000  4.230
  -1099.4125978  2.730  102.85  27.03  150.8  .135 -89.9606  .25557  .003  .0016  92604  20924282.21  61910.0000  4.230
  -1853.3823243  2.730  102.85  27.02  150.8  .135 -89.9607  .28792  .003  .0016  92604  20923528.24  61915.0000  4.230
HITE LESS THAN MIN.
CLOCK= 1870.60
  -1853.3823243  2.730  102.85  27.02  150.8  .135 -89.9607  .28792  .003  .0016  92604  20923528.24  61915.0000  4.230
END OF RUN.
```

REVOLUTION 1

TIME	H R	QDOTR	QDOTC/H R	P T A	I. D.
0.0	25805.	0.04	1.550E-6	7.800E-7	ORBIT1 (5) TTA
55.	26044.	2.33	8.950E-5	4.500E-5	ORBIT1 (5) TTA
70.	26090.	12.15	4.657E-4	2.500E-4	
80.	26114.	36.36	1.392E-3	7.720E-4	ORBIT 1 (5) TTA
90.	26128.	104.7	4.007E-3	2.160E-3	ORBIT 1 (5) TTA
100.	26125.	115.9	4.436E-3	5.030E-3	ORBIT 1 (5) TTA
110.	26095.	164.3	6.296E-3	1.016E-2	
120.	25936.	208.4	8.035E-3	1.657E-2	ORBIT 1 (5) TTA
130.	25582.	242.1	9.464E-3	2.305E-2	ORBIT 1 (5) TTA
140.	25098.	252.3	1.005E-2	2.602E-2	
145.	24909.	251.9	1.011E-2	2.648E-2	ORBIT 1(5) TTA
155.	24452.	237.9	9.729E-3	2.456E-2	ORBIT 1(5) TTA
165.	24051.	212.0	8.814E-3	2.019E-2	ORBIT 1(5) TTA
175.	23747.	172.7	7.272E-3	1.375E-2	ORBIT 1 (5) TTA
185.	23534.	132.8	5.643E-3	8.290E-3	
195.	23395.	96.3	4.116E-3	4.410E-3	
210.	23276.	59.0	2.530E-3	1.300E-3	ORBIT 1 (5) TTA
225.	23215.	13.8	5.944E-4	3.080E-4	ORBIT 1 (5) TTA
240.	23167.	3.13	1.351E-4	6.630E-5	ORBIT 1 (5) TTA
255.	23119.	0.67	2.898E-5	1.500E-5	ORBIT 1 (5) TTA
300.	20000.	0.00	3.000E-6	1.000E-6	ORBIT 1 (5) TTA

REVOLUTION 2

TIME	H R	QDOTR	QDOTC/H R	P T A	I. D.
0.0	23147.	1.69	7.301E-5	3.740E-5	TTA 4 ORBIT
10.	23174.	4.81	2.076E-4	1.040E-4	
20.0	23194.	13.04	5.622E-4	2.803E-4	
30.0	23202.	34.8	1.500E-3	7.642E-4	
40.0	23189.	63.7	2.747E-3	1.952E-3	
50.	23138.	93.8	4.050E-3	4.279E-3	
60.0	23031.	128.3	5.571E-3	8.091E-3	
70.	22848.	163.9	7.713E-3	1.346E-2	
80.	22572.	196.6	8.710E-3	1.989E-2	
90.	22204.	214.3	9.651E-3	2.450E-2	
100.	21771.	222.8	1.023E-2	2.741E-2	
105.	21543.	220.7	1.024E-2	2.774E-2	
110.	21316.	216.8	1.017E-2	2.741E-2	
120.	20883.	202.2	9.682E-3	2.492E-2	
130.	20511.	180.2	8.786E-3	2.055E-2	
140.	20211.	155.9	7.713E-3	1.588E-2	
150.	19992.	121.2	6.067E-3	1.080E-2	
160.	19843.	99.0	4.989E-3	6.644E-3	
170.	19725.	74.6	3.782E-3	3.818E-3	
180.	19652.	54.0	2.750E-3	2.011E-3	
190.	19603.	40.0	2.041E-3	9.837E-4	
200.	19568.	21.4	1.093E-3	4.465E-4	
210.	19540.	8.13	4.160E-4	1.991E-4	
220.	19514.	3.65	1.870E-4	8.675E-3	
230.	19490.	1.56	8.000E-5	3.686E-5	
240.	19464.	0.69	3.540E-5	1.654E-5	

REVOLUTION 3

TIME	H_R	QDOTR	QDOTC/H_R	P_{TA}	I. D.
0.0	19474.	1.03	5.289E-5	2.448E-5	
10.0	19498.	2.31	1.185E-4	5.481E-5	
20.0	19518.	5.36	2.746E-4	1.290E-4	
30.0	19533.	12.0	6.143E-4	2.954E-4	
40.	19539.	27.0	1.382E-3	6.461E-4	
50.0	19532.	44.8	2.294E-3	1.399E-3	
60.0	19503.	63.7	3.266E-3	2.846E-3	
70.0	19442.	85.5	4.399E-3	5.178E-3	
80.0	19336.	109.3	5.653E-3	8.653E-3	
90.0	19177.	132.2	6.894E-3	1.275E-2	
100.0	19072.	153.5	8.048E-3	1.767E-2	
110.	18806.	168.7	8.971E-3	2.210E-2	
120.	18287.	177.7	9.717E-3	2.562E-2	
130.	17886.	180.0	1.006E-2	2.753E-2	
140.	17470.	177.1	1.014E-2	2.808E-2	
145.	17263.	174.3	1.010E-2	2.791E-2	
150.	17059.	170.9	1.002E-2	2.749E-2	
190.	16667.	161.9	9.714E-3	2.598E-2	
170.	16305.	151.2	9.279E-3	2.373E-2	
180.	15983.	139.0	8.697E-3	2.091E-2	
190.	15706.	125.2	7.971E-3	1.761E-2	
200.	15478.	112.1	7.243E-3	1.456E-2	
210.	15299.	99.2	6.484E-3	1.169E-2	
220.	15142.	85.2	5.627E-3	8.801E-3	
230.	14931.	62.5	4.186E-3	4.844E-3	
250.	14857.	53.4	3.594E-3	3.595E-3	
260.	14799.	44.5	3.007E-3	2.514E-3	
270.	14753.	36.2	2.454E-3	1.679E-3	
280.	14717.	31.3	2.127E-3	1.160E-3	
290.	14690.	27.2	1.852E-3	7.620E-4	
300.	14666.	17.9	1.221E-3	4.910E-4	
310.	14647.	11.4	7.988E-4	3.221E-4	
320.	14631.	7.64	5.222E-4	2.116E-4	
330.	14617.	4.86	3.325E-4	1.375E-4	

REVOLUTION 4

TIME	H_R	QDOTR	QDOTC/H_R	P_{TA}	I. D.
0.0	14551.	0.66	4.536E-5	1.786E-5	
20.0	14574.	1.50	1.029E-4	4.054E-5	
40.0	14594.	3.47	2.378E-4	9.771E-5	
60.0	14608.	8.45	5.755E-4	2.344E-4	
80.0	14610.	19.8	1.355E-3	1.265E-3	
100.	14594.	31.1	2.131E-3	2.675E-3	
120.	14543.	45.04	3.097E-3	2.675E-3	
140.	14436.	62.3	4.316E-3	5.215E-3	
160.	14245.	83.1	5.834E-3	9.450E-3	
180.	14105.	94.1	6.671E-3	1.253E-2	
200.	13699.	113.3	8.271E-3	1.935E-2	
220.	13106.	129.1	9.850E-3	2.291E-2	
240.	12729.	140.9	1.127E-2	3.204E-2	
260.	11801.	144.6	1.225E-2	4.358E-2	
280.	10608.	149.1	1.406E-2	5.834E-2	

300.	9111.	146.0	1.602E-2	7.775E-2
320.	7275.	133.6	1.836E-2	1.060E-1
340.	5103.	106.1	2.079E-2	1.436E-1
360.	2861.	63.2	2.209E-2	1.771E-1
380.	1110.	22.8	2.054E-2	1.775E-1
400.	285.	4.3	1.509E-2	1.194E-1
420.	63.	0.62	9.841E-3	6.234E-2
440.	18.	0.13	7.222E-3	3.881E-2
460.	8.1	0.05	6.173E-3	3.285E-2
480.	4.5	0.02	4.444E-3	3.018E-2
500.	2.8	0.01	3.571E-3	2.844E-2