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LM TEST OPERATIONS

FILE: I-6

REPORT NUMBER 53966-125

APOLLO 10 THERMODYNAMIC ANALYSIS

FOR

LM LANDING RADAR ANTENNA ASSEMBLY

RYAN



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APOLLO 10 THERMODYNAMIC ANALYSIS
FOR
LM LANDING RADAR ANTENNA ASSEMBLY

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CONTRACT NAS 9-1100
LUNAR MODULE
LANDING RADAR

PREPARED FOR:

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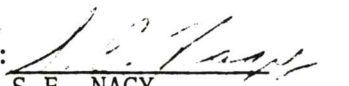
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FOR
LM LANDING RADAR ANTENNA ASSEMBLY

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APOLLO 10 THERMODYNAMIC ANALYSIS

LUNAR MODULE LANDING RADAR

1.1 INTRODUCTION

This report presents the results of a thermodynamic study that was performed to predict the time-temperature history of the Apollo 10 LM Landing Radar Antenna Assembly for the actual mission profile. Calculation of temperatures was accomplished with the aid of a digital computer program used to thermally model the Antenna Assembly. Incident heat loads, which served as input to this program, were calculated from Apollo 10 mission trajectory and attitude data using the Ryan "Thermal Radiant Energy Program (ST. NERO)". The calculated thermal mounting plate surface temperature, which showed reasonable correlation with telemetry data, remained well below the upper specification limit of 145°F, and above the lower limit of 50°F.

1.2 TEMPERATURE PROFILE DETERMINATION

The analysis was initiated at 95:39:21 (HR:MIN:SEC) Ground Elapsed Time (GET), the time that the spacecraft entered sunlight on the eleventh orbit of the moon. The analysis was concluded at 102:33:18. This time interval was chosen because of the relative abundance of spacecraft position and orientation data, and because of the occurrence of critical maneuvers such as engine burn and antenna activation. Initial Antenna Assembly temperatures were determined prior to this time interval by inputting equilibrium "cold hold" temperature values into the model and running the model for the preceding umbral period. The Antenna Assembly electronics was activated for two time intervals during the mission, from 98:24:22 to 98:37:49 and from 100:32:42 to 101:01:52. The highest Antenna Assembly electronics temperatures of the mission were experienced at the end of these time intervals.

The current thermal model of the Antenna Assembly, consisting of 98 separate but thermally coupled nodes, was utilized for calculation purposes. Computer solution of this model, represented mathematically by 99 simultaneous differential equations, provided a complete Antenna Assembly time-temperature history. Math model solution was accomplished by use of a Ryan general purpose, multi-nodal digital computer program which utilizes the incident heat loads to the external surface of the Antenna Assembly, electrical power dissipation

values associated with Antenna Assembly operation, and radiant heating effects from the descent engine skirt as input.

Antenna Assembly incident heat loads (solar, lunar albedo, and lunar thermal) were computed from mission trajectory and spacecraft attitude data by means of the Ryan Thermal Radiant Energy digital computer program (ST. NERO). Spacecraft attitude data from 92:00:00 to 102:33:18 is presented in Figure 1. For ease of calculation, attitude data from 95:39:21 to 102:33:18 was approximated by 14 circular orbital segments. Subdivision was performed in such a way that a constant roll, pitch, and yaw rate could be assumed for each segment. Linearization of the pitch data during some of the segments was done in such a manner as to have negligible effects on the final computer output. Roll, pitch and yaw values for each of the 14 segments considered are shown in Table 1.

Comparison between computed and measured Antenna Assembly temperature values could be made for only one node, since just one telemetry measurement was assigned to the Antenna Assembly for the Apollo 10 mission. The measurement monitored the internal surface temperature of the center section of the thermal mounting plate, represented by Node 33 in the thermal math model. In general, analytical and measured data agreed well throughout the run, except during the sharp transients generated by electronics turn-on. The computed temperature history of Node 33 indicated that a maximum temperature of 128.7°F would be obtained at 101:01:52, while telemetry recorded a maximum temperature of 104.5°F at the same time. Both of these values are well below the maximum allowable thermal mounting plate temperature of 145°F. A presentation of computed mounting plate surface temperature and the corresponding flight data is shown in Figure 2.

The temperature histories of selected Antenna Assembly nodes are presented in Figures 3 through 16. Critical temperature areas within the Antenna Assembly are presented in this group of figures. The math model and a complete tabulation of time-temperature data for all nodes is presented in Appendix I. An explanation of the computer output format is presented at the beginning of Appendix I.

E-1

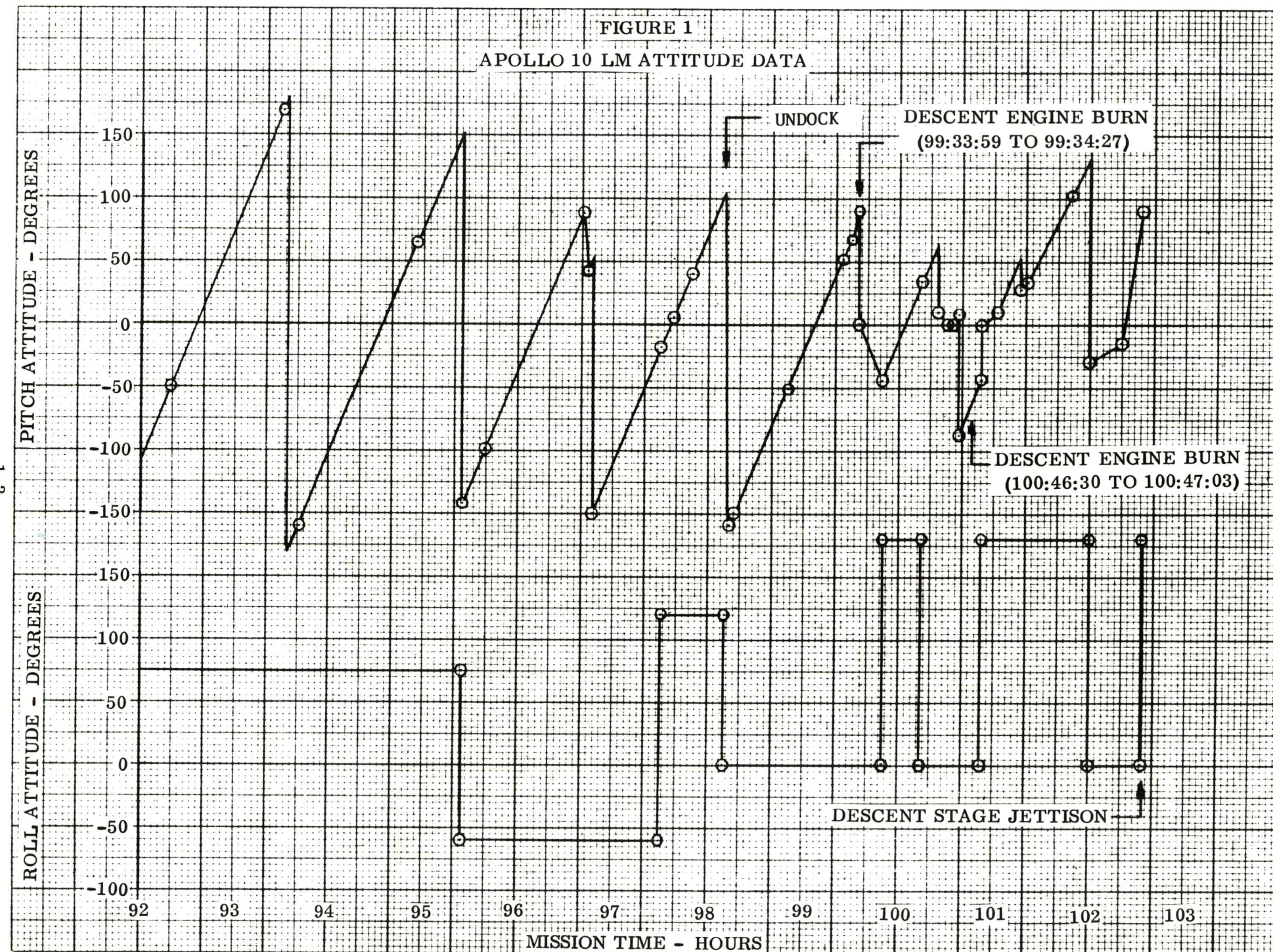


TABLE I
APOLLO 10 LM ATTITUDE
(LOCAL HORIZONTAL REFERENCE)

ORBITAL SEGMENT	TIME INTERVAL (HR:MIN:SEC)		INITIAL ROLL ATTITUDE (DEGREES)	ROLL RATE (DEG/MIN)	INITIAL PITCH ATTITUDE (DEGREES)	PITCH RATE (DEG/MIN)
	FROM	TO				
1	95:39:21	96:46:39	-60	0	-98.3	3.038
2	96:46:39	97:30:00	-60	0	-149.9	3.014
3	97:30:00	98:12:39	120	0	-18.2	3.014
4	98:12:39	99:33:59	0	0	-158.7	3.058
5	99:33:59	99:34:27	0	0	90.0	3.058
6	99:34:27	99:49:27	0	0	-0.1	-2.970
7	99:49:27	100:14:17	180	0	-44.4	3.157
8	100:14:17	100:24:37	0	0	34.0	3.157
9	100:24:37	100:38:21	0	0	10.0	-7.123
10	100:38:21	100:46:30	0	0	-87.8	2.715
11	100:46:30	100:47:03	0	0	-61.2	2.715
12	100:47:03	100:52:03	0	0	-58.9	2.715
13	100:52:03	101:59:18	180	0	-1.0	2.715
14	101:59:18	102:33:18	0	0	-29.8	3.524

NOTE: YAW = 0, YAW RATE = 0 FOR ALL SEGMENTS

FIGURE 2
THERMAL MOUNTING PLATE, CENTER (NODE 33) TEMPERATURE

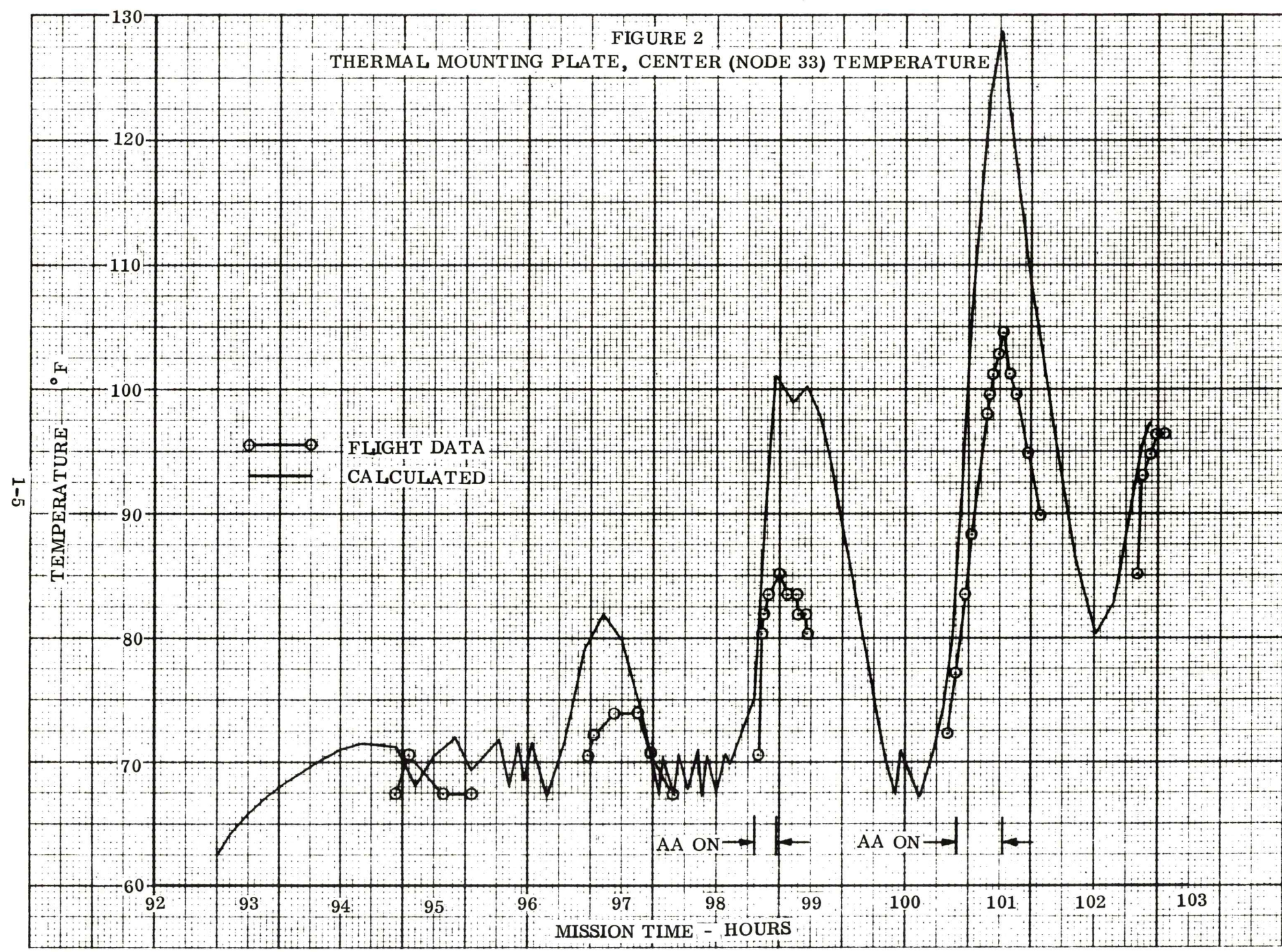


FIGURE 3

VELOCITY SENSOR RECEIVER NUMBER 3 (NODE 1)

140
— CALCULATED

°F
TEMPERATURE

20

0

95

96

97

98

99

100

101

102

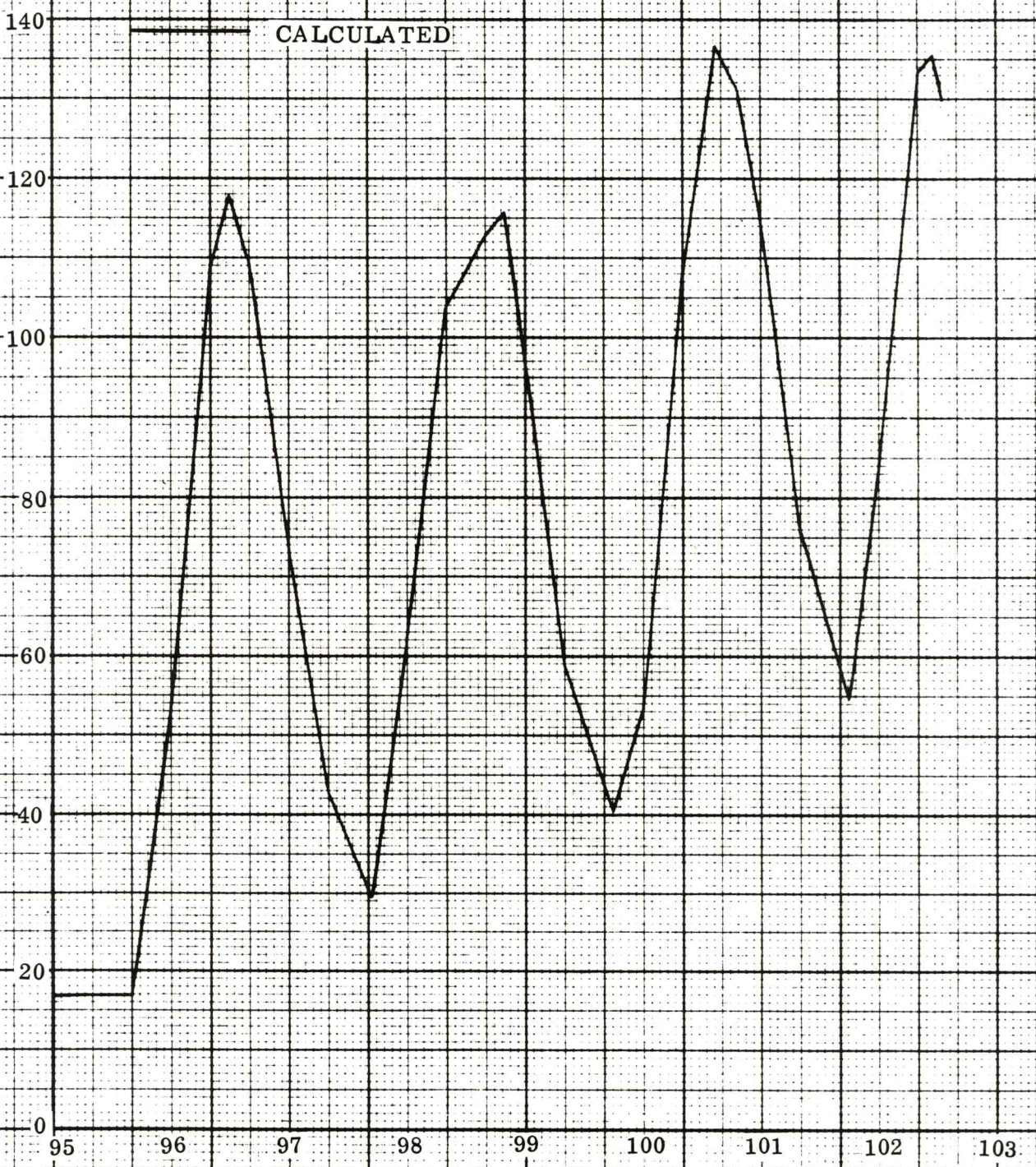
103

MISSION TIME - HOURS

FIGURE 4
VELOCITY SENSOR RECEIVER NUMBER 2 (NODE 3)

140 ——— CALCULATED

TEMPERATURE °F



MISSION TIME - HOURS
1-7

FIGURE 5

ALTITUDE SENSOR RECEIVER (NODE 4)

140 ————— CALCULATED

TEMPERATURE °F

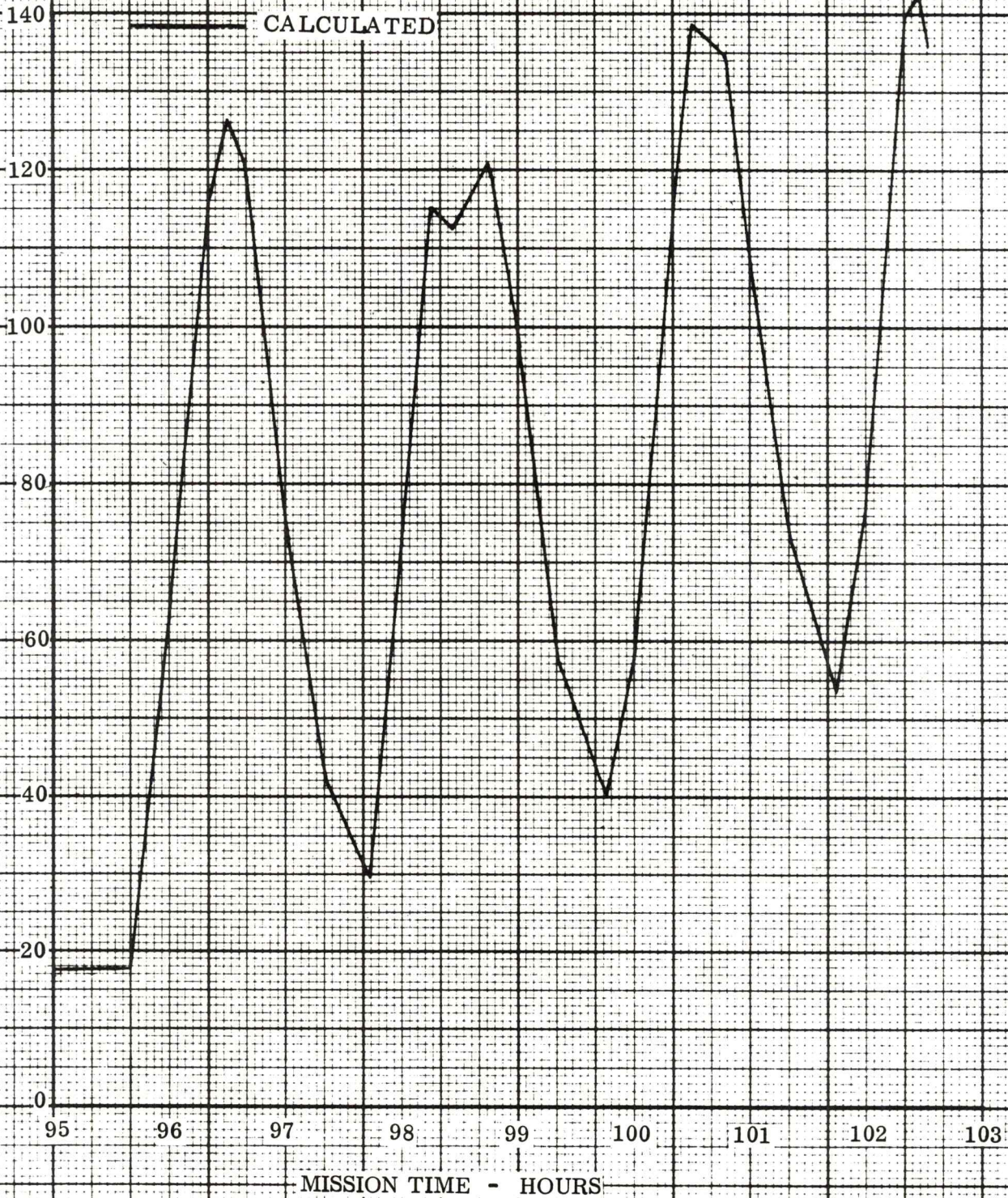


FIGURE 6

TRANSMITTER ARRAY (NODE 6)

140 ——— CALCULATED

TEMPERATURE °F

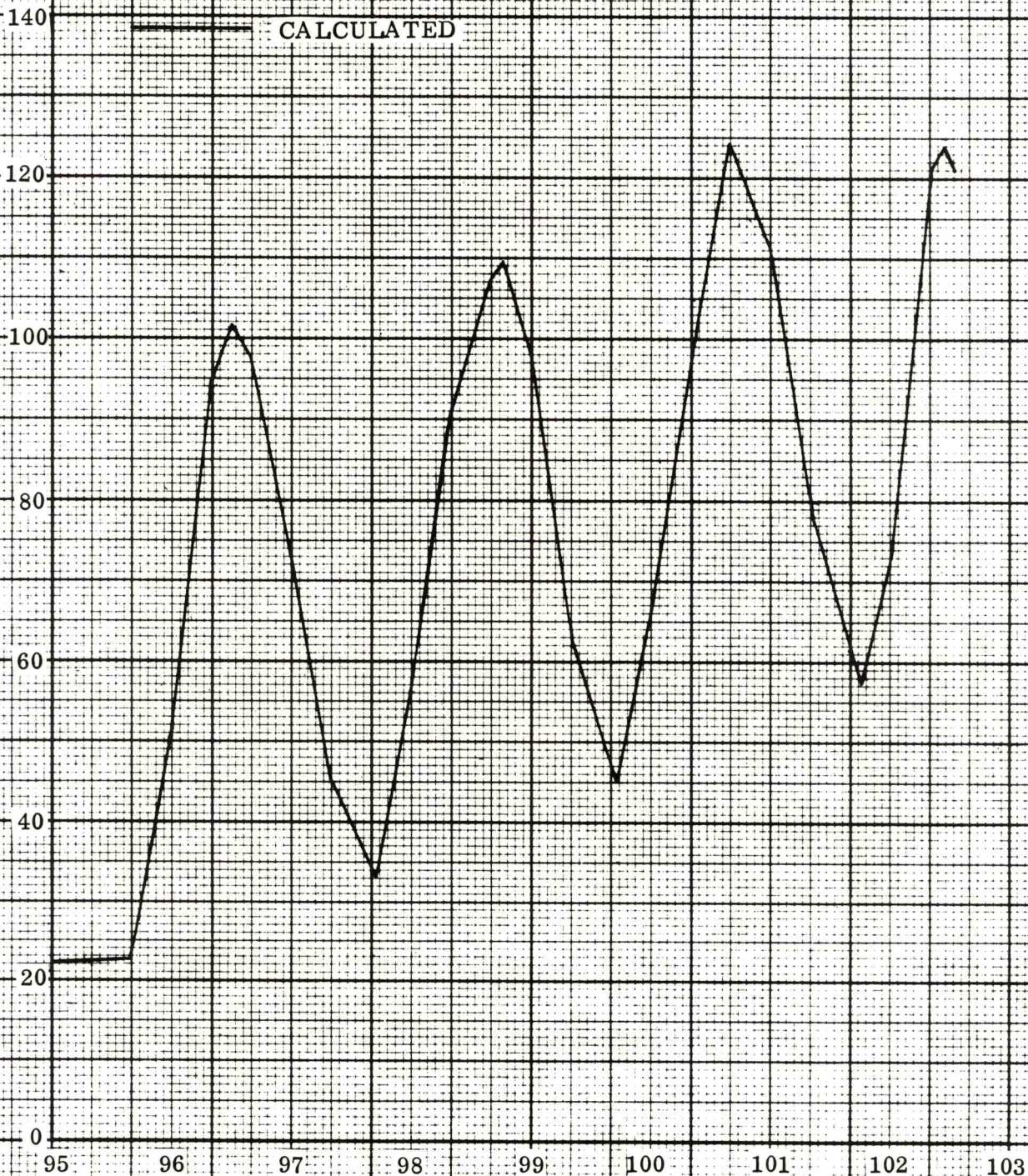
95 96 97 98 99 100 101 102 103

MISSION TIME - HOURS

FIGURE 7

STRUCTURAL SUPPORT, LEFT FORWARD (NODE 7)

140 ——— CALCULATED



MISSION TIME - HOURS

FIGURE 8

STRUCTURAL SUPPORT, RIGHT FORWARD (NODE 9)

TEMPERATURE - °F

CALCULATED



MISSION TIME - HOURS

FIGURE 9

THERMAL COVER, AFT CENTER (NODE 11)

CALCULATED

TEMPERATURE °F

MISSION TIME - HOURS

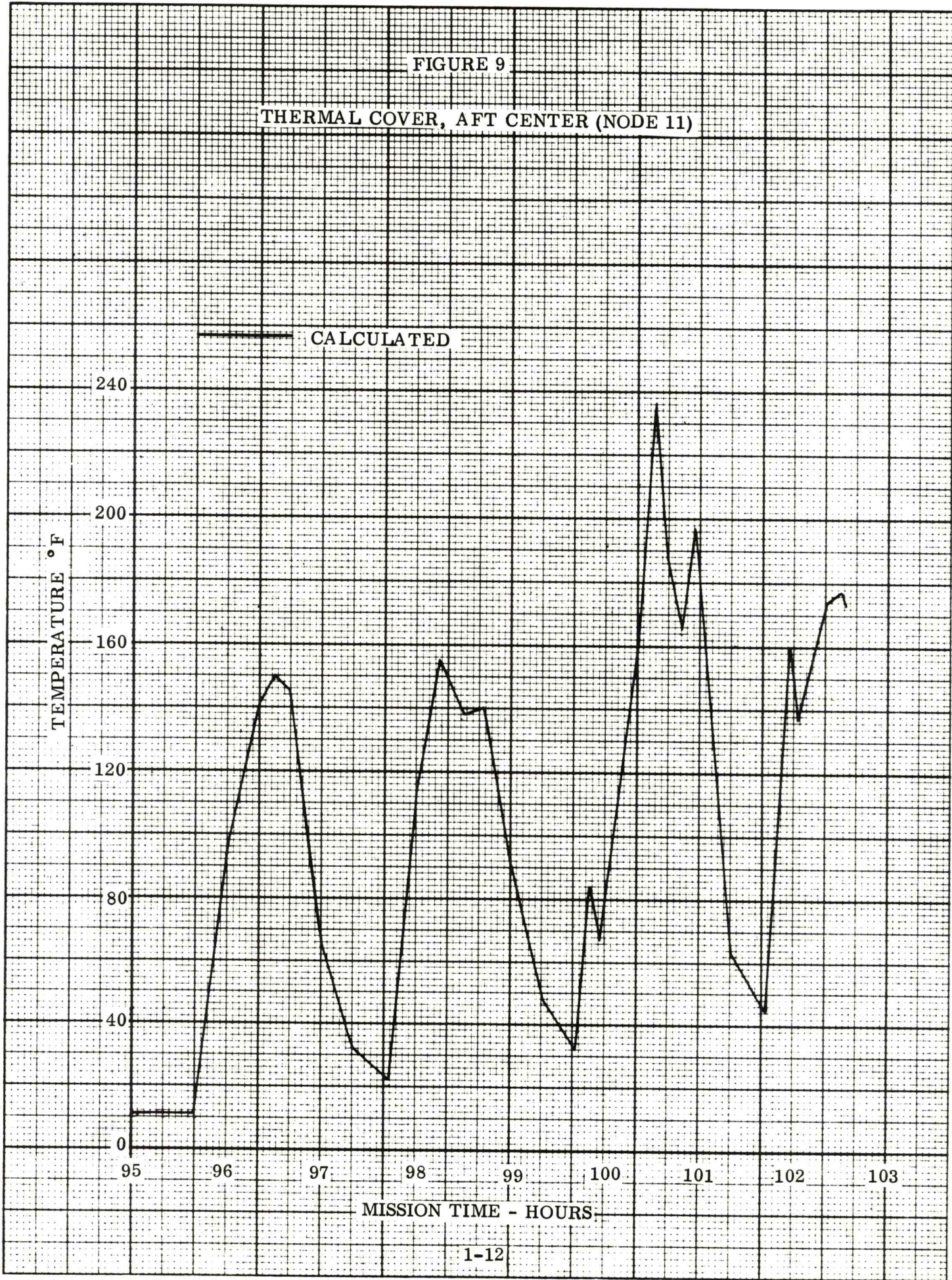




FIGURE 10

FREQUENCY MODULATOR (NODE 41)

140
120
100
80
60
40
20
0

TEMPERATURE °F

CALCULATED

TEMPERATURE °F

95 96 97 98 99 100 101 102 103

MISSION TIME - HOURS

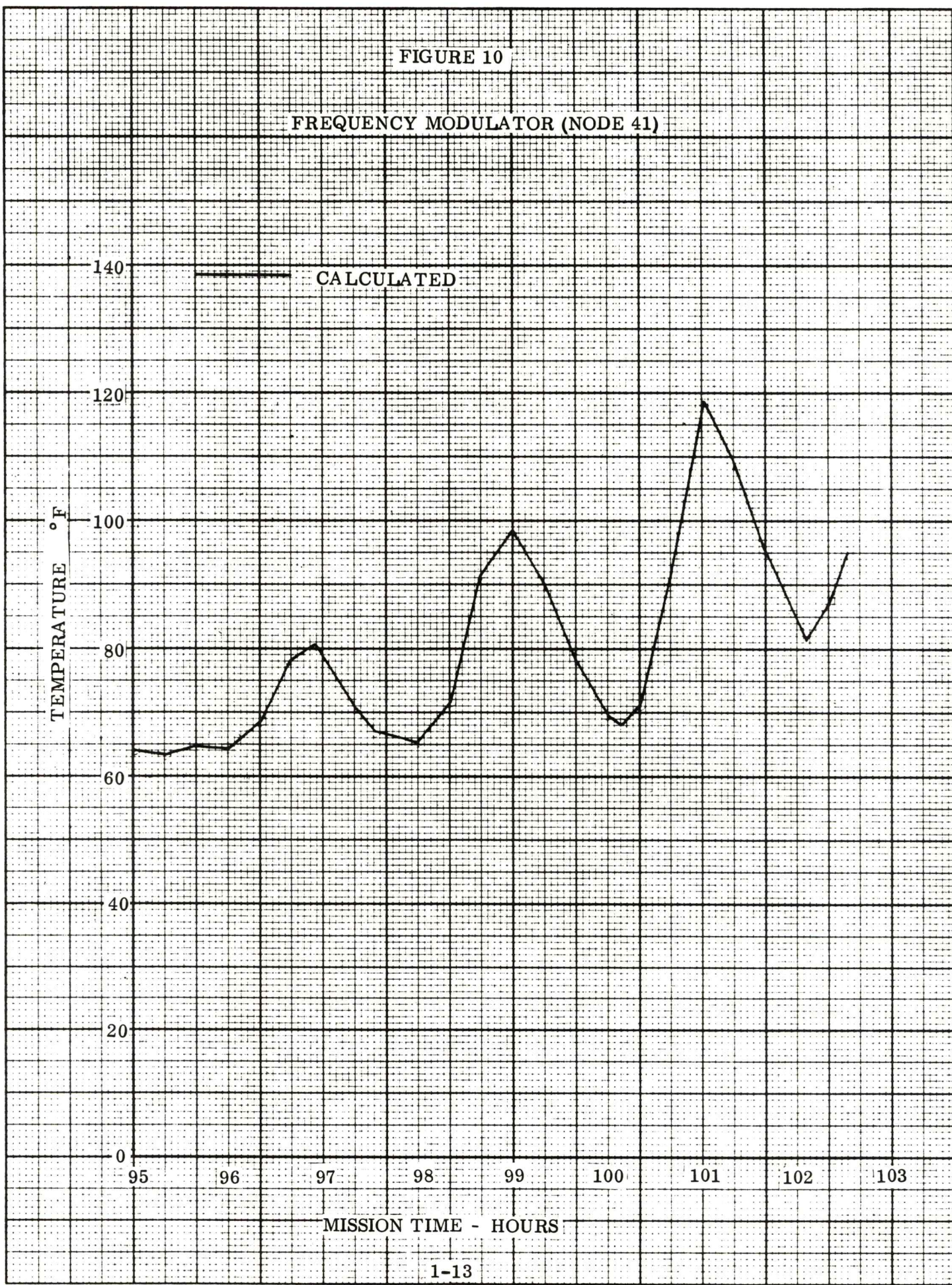


FIGURE 11

ALTITUDE SENSOR SOLID STATE TRANSMITTER (NODE 42)

140 ——— CALCULATED

TEMPERATURE °F

140

120

100

80

60

40

20

0

95

96

97

98

99

100

101

102

103

MISSION TIME - HOURS

PRINTED IN U.S.A. ON CLEARPRINT TECHNICAL PAPER NO. 1075
CLEARPRINT QUARTZ
NO. C-38X 20 DIVISIONS PER INCH BOTH WAYS 150 BY 200 DIVISIONS

FIGURE 12

VELOCITY SENSOR SOLID STATE TRANSMITTER (NODE 43)

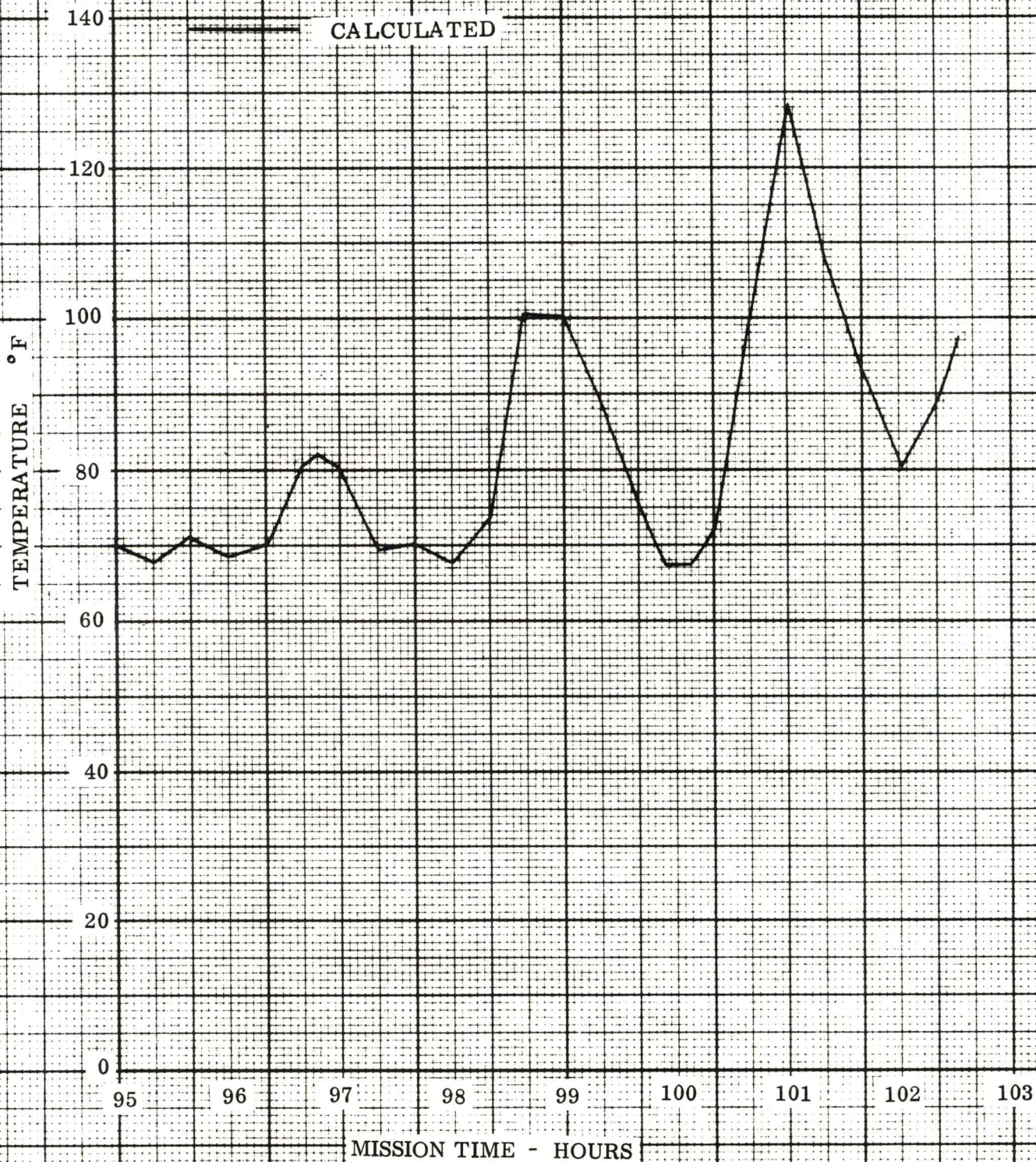


FIGURE 13

LEVELER (NODE 56)

140
120
100
80
60
40
20
0

TEMPERATURE °F

CALCULATED

95 96 97 98 99 100 101 102 103

MISSION TIME - HOURS

FIGURE 14

FREQUENCY MODULATOR CASE (NODE 75)

— CALCULATED

TEMPERATURE °F

140

120

100

80

60

40

20

0

95

96

97

98

99

100

101

102

103

MISSION TIME - HOURS

FIGURE 15

VELOCITY SENSOR CASE (NODE 81)

140 ——— CALCULATED

TEMPERATURE
°F

140

120

100

80

60

40

20

0

95

96

97

98

99

100

101

102

103

MISSION TIME - HOURS

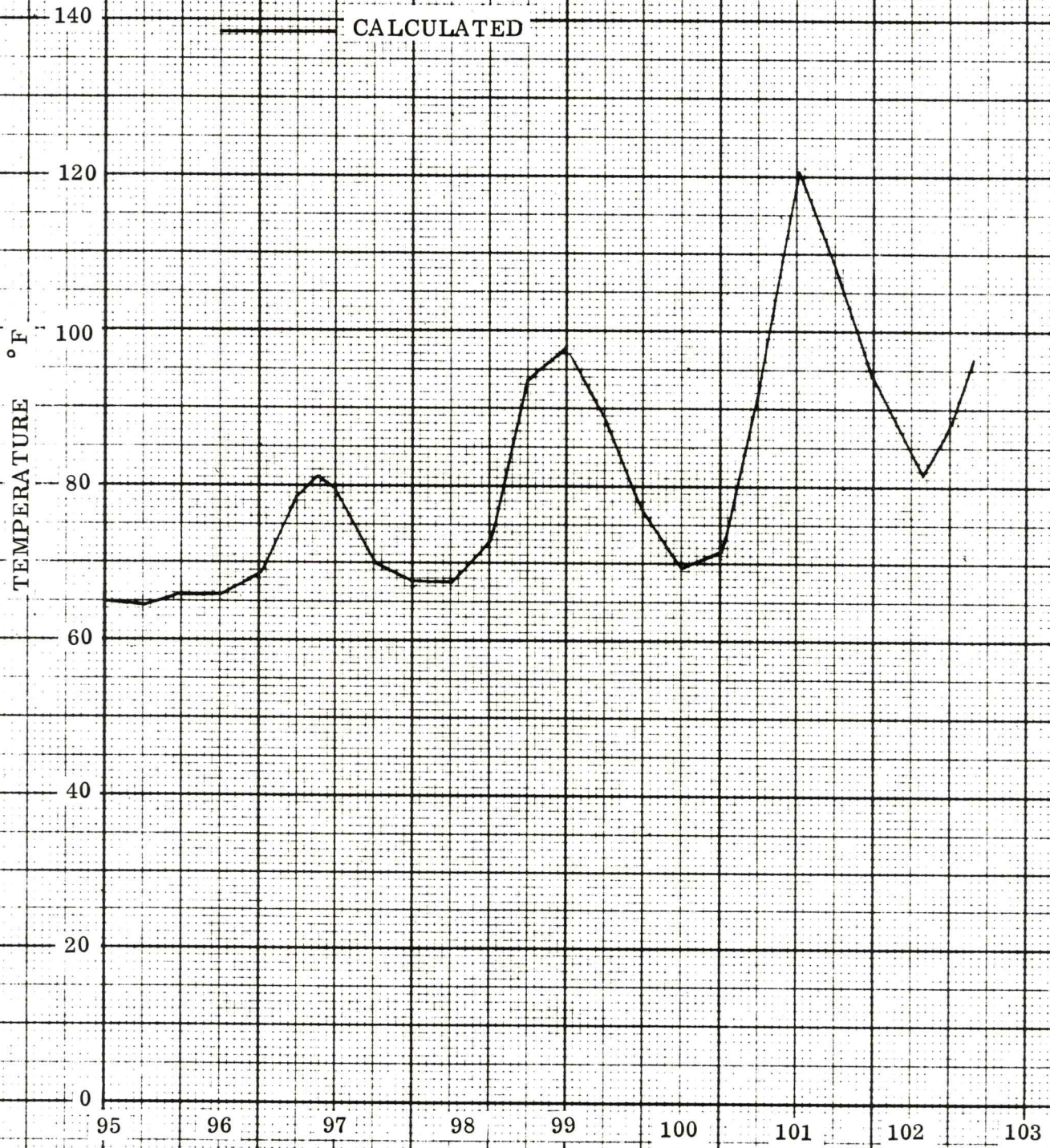


FIGURE 16

WAVEGUIDE, VELOCITY SENSOR NUMBER 1, AFT (NODE 88)

140
CALCULATED

TEMPERATURE °F

140

120

100

80

60

40

20

0

95

96

97

98

99

100

101

102

103

MISSION TIME - HOURS

APPENDIX I

COMPLETE COMPUTER MODEL
AND
CALCULATED TEMPERATURE HISTORY

THERMAL ANALYSIS COMPUTER OUTPUT FORMAT

Pages 1 and 2

TEMP - initial temperature in °F
W - weight in LB
A - radiating area in IN²
C - specific heat in BTU/LB-°F
Q-DIS - power dissipation in WATTS
ALPHA - solar absorbtance
EPSILON - thermal emittance - This EPSILON is really the absorbtance to IR fluxes (THERMAL) in the ENVIRONMENT input. F in the radiative path input includes the emittance factor.

Pages 3-6

CONDUCTIVE PATHS

Paths are numbered in consecutive order.

Numbers under FROM and TO are the end points of that path.

K is conductance in BTU/HR-°F
if $L = 12 \text{ IN}$ and $A = 144 \text{ IN}^2$

or

K is thermal conductivity $\frac{\text{BTU}}{\text{HR-FT-°F}}$

where

A conductive area in IN²

L conductive path length in IN

Pages 7-10

RADIATIVE PATHS

Same type of format as CONDUCTIVE

F is combined script F, that is combined area - emittance factor for radiation.

The areas for nodes involved in radiative paths are given in the node definition between W and C in IN².

Pages 11-16

Q - TABLE

This lists the conductive (or convective) and radiative paths for each node.

A positive or negative path designation is made to enable the TRACE routine to calculate net heat flows to all nodes.

17-104

TIME-TEMPERATURE PROFILE

Prints out nodal temperatures versus time.

INTEGRATION OF THERMAL TRANSIENTS

PGM 1179

APOLLO 10 MISSION ANALYSIS

98 NODES
194 PATHS, CONDUCTIVE
189 PATHS, RADIATIVE
23 NODES AFFECTED BY ENVIRONMENT

INITIAL TIME (HOURS) 92.66

PRINT INCREMENT 5.0000E-02
FINAL 98.41

	NODE	TEMP	H	A	C	Q-DIS	ALPHA	EPS	ILCN
VSR 3	1	8.1	.7000	54.94	.2400		.1930	.3460	
FILLER BLK	2	10.9	.04200	12.03	.2500		.1210	.03000	
VSR 2	3	11.6	.4800	54.94	.2400		.1930	.3460	
ALTIM	4	8.7	.5000	57.27	.2400		.1907	.3550	
VSR 1	5	10.5	.4800	54.94	.2400		.1930	.3460	
XTRMA	6	27.3	2.420	204.2	.2400		.2080	.3850	
SUP LF FWD	7	17.3	.01850	12.30	.2600		.1210	.03000	
SUP LF AFT	8	19.6	.01850	12.60	.2600		.1210	.03000	
SUP RT FWD	9	10.0	.01450	15.27	.2600		.1210	.03000	
SUP RT AFT	10	12.0	.01525	14.62	.2600		.1210	.03000	
SHROUD A C	11	7.6	.02880	58.87	.3100		.2300	.03000	
SHROUD F C	12	6.0	.03040	62.06	.3100		.2300	.03000	
SHROUD F R	13	-5.6	.02210	45.08	.3100		.2300	.03000	
SHROUD R F	14	0.2	.01740	35.61	.3100		.2300	.03000	
SHROUD L F	15	3.4	.01140	23.24	.3100		.2300	.03000	
SHROUD TOP	16	-4.3	.1790	365.0	.3100		.2300	.03000	
SHROUD R A	17	4.3	.009800	20.02	.3100		.2300	.03000	
SUP RC	18	4.6	.03200	17.45	.2600		.1210	.03000	
SHROUD L A	19	5.5	.01150	23.51	.3100		.2300	.03000	
SHROUD F L	20	5.0	.008200	16.82	.3100		.2300	.03000	
SHROUD A L	21	7.7	.008200	16.79	.3100		.2300	.03000	
SHROUD A R	22	6.9	.009300	19.08	.3100		.2300	.03000	
LEM BASE	23	-225.0	17.34	17328	.1200		.7500	.7500	
TLT EX FWD	24	-115.0	.02460	29.90	.1200		.4030	.1400	
TLT EX LFT	25	-67.2	.009700	11.75	.1200		.4030	.1400	
TLT EX AFT	26	-96.6	.01810	22.08	.1200		.4030	.1400	
TLT EXT RT	27	-67.2	.009700	11.75	.1200		.4030	.1400	
PLT MODALT	28	56.3	.4523	20.00	.2450	4.030			
PLT A5,A6	29	54.4	.2214	20.00	.2450	2.330			
PLT A-22	30	61.5	.09320		.2450	2.880			
PLT A4	31	62.2	.1553		.2450	1.640			
PLT A4	32	62.3	.2615	20.00	.2450	7.300			
PLT CENTER	33	62.5	.07020		.2450	.7400			
PLT CNTLR	34	67.1	.1089	20.00	.2450	7.910			
PLT A9-12	35	54.2	.08380		.2450	.8800			
PLT A-14	36	56.5	.09712	20.00	.2450	1.020			
PLT A-14	37	56.7	.04615		.2450	.4900			
PLT A14	38	58.9	.1290		.2450	1.360			
PLT A26	39	58.7	.06571		.2450	.7000			
PLT A7,A8	40	57.0	.1055		.2450	1.110			
FREQ MOD	41	56.3	.5500		.1700				
ALT SSX	42	56.2	1.688		.1700				
V.S. SSX	43	62.2	1.810		.1700				
AMP.SW A13	44	54.5	.05400		.1700				
AMP.SW A13	45	54.5	.05400		.1700				
AMP.SW A14	46	56.4	.06817		.1700				
AMP.SW A14	47	56.4	.06817		.1700				
AMP.SW A14	48	55.9	.06817		.1700				

INTEGRATION OF THERMAL TRANSIENTS

PGM 1179

APOLLO 1C MISSION ANALYSIS

	NODE	TEMP	W	A	C	Q-DIS	ALPHA	EPSILON
AMP.SW A14	49	56.1	.06817		.1700			
AMP.SW A14	50	58.1	.06817		.1700			
AMP.SW A14	51	58.1	.06817		.1700			
TH DET A13	52	54.5	.05400		.1700			
TH DET A14	53	58.4	.05788		.1700			
TH DET A14	54	58.5	.05788		.1700			
TH DET A14	55	58.5	.05788		.1700			
LEVELER	56	49.4	.4900		.1700			
55LB AMP 5	57	49.4	.1025		.1700			
55LB AMP 9	58	50.4	.05437		.1700			
55LB AMP 9	59	50.4	.05438		.1700			
55LB AMP 9	60	50.4	.05437		.1700			
55LB AMP 9	61	50.4	.05438		.1700			
55LB AMP 7	62	52.3	.05798		.1700			
55LB AMP 7	63	52.3	.05798		.1700			
HYB VS1	64	52.3	.1416		.2450			
HYB VS3	65	50.4	.2655		.2450			
HYB A6T	66	49.3	.1430		.2450			
ENC FT FWD	67	52.2	.04100	40.40	.2200			
SUP RT FWD	68	49.0	.03450	14.10	.2200			
SUP RT MID	69	10.8	.03200	17.20	.2200			
SUP RT AFT	70	52.0	.03675		.2200			
ENC AFT	71	58.3	.1910	40.50	.2200			
SUP LF AFT	72	50.3	.04650		.2200			
SUP LF MID	73	11.3	.06200		.2200			
SUP LF FWD	74	14.5	.04650		.2200			
FM CASE	75	55.7	.1800	39.10	.2450			
ALT X CASE	76	54.8	.4120	76.80	.2450			
ALTA MB	77	56.4	.02400	19.37	.2450			
CASE A5, A6	78	51.0	.02771	10.70	.2450			
CASE A9-12	79	50.3	.05740	19.26	.2450			
CASE MBA14	80	52.1	.06713	43.30	.2450			
CASE VSX	81	58.9	.4410	79.70	.2450			
CASE A7, A8	82	51.6	.03060	10.60	.2450			
WG VS2 AFT	83	31.3	.03200		.2450			
WG VS2MAFT	84	44.5	.08851		.2450			
WG VS2MFWD	85	44.7	.08851		.2450			
WG VS2 FWD	86	23.9	.05600		.2450			
WG VS1MAFT	87	46.1	.09438	3.400	.2450			
WG VS1 AFT	88	30.3	.05154		.2450			
WG ALT MID	89	41.8	.2685		.2450			
WG ALT CEN	90	25.3	.02000		.2450			
HYE A25	91	48.4	.2359	7.000	.2450			
HYE A24	92	46.7	.4425	8.000	.2450			
HYE A23	93	44.9	.2383	9.000	.2450			
TOP COVER	94	19.7	.6500	368.0	.3100			
TILT STRCT	95	52.1	4.110	75.60	.2300			
HTR CNTRLR	96	67.1	.2000	20.00	.2400			
SPACE	97	-460.0						
ACTUATOR	98	54.8	1.010		.1200			
		0		2	BTU/ 0			
		F	LBS	IN	/LB.F	WATTS		

APOLLO 10 MISSION ANALYSIS

CONDUCTIVE PATH	FROM	TO	K	L	A
1 FREQ MOD	41	28 PLT MCDALT	300.0	12.00	11.54
2 ALT SSX	42	28 PLT MCDALT	300.0	12.00	25.24
3 TILT STRCT	95	98 ACTUATOR	75.00	12.00	.5000
4 V.S. SSX	43	31 PLT A4	300.0	12.00	13.86
5 V.S. SSX	43	32 PLT A4	300.0	12.00	12.48
6 V.S. SSX	43	33 PLT CENTER	300.0	12.00	4.752
7 AMP.SW A13	44	29 PLT A5,A6	.4268	12.00	144.0
8 AMP.SW A13	45	29 PLT A5,A6	.4268	12.00	144.0
9 AMP.SW A14	46	36 PLT A-14	.4268	12.00	144.0
10 AMP.SW A14	47	36 PLT A-14	.4268	12.00	144.0
11 AMP.SW A14	48	36 PLT A-14	.4268	12.00	144.0
12 AMP.SW A14	49	37 PLT A-14	.4268	12.00	144.0
13 AMP.SW A14	50	39 PLT A26	.4268	12.00	144.0
14 AMP.SW A14	51	39 PLT A26	.4268	12.00	144.0
15 TH DET A13	52	29 PLT A5,A6	.6660	12.00	144.0
16 TH DET A14	53	38 PLT A14	.6804	12.00	144.0
17 TH DET A14	54	38 PLT A14	.7429	12.00	144.0
18 TH DET A14	55	38 PLT A14	.7429	12.00	144.0
19 LEVELER	56	30 PLT A-22	300.0	12.00	.2500
20 55DB AMP 5	57	66 HYB A6T	.7800	12.00	144.0
21 55DB AMP 9	58	65 HYB VS3	.3900	12.00	144.0
22 55DB AMP 9	59	65 HYB VS3	.3900	12.00	144.0
23 55DB AMP 9	60	65 HYB VS3	.3900	12.00	144.0
24 55DB AMP 9	61	65 HYB VS3	.3900	12.00	144.0
25 55DB AMP 7	62	64 HYB VS1	.3900	12.00	144.0
26 55DB AMP 7	63	64 HYB VS1	.3900	12.00	144.0
27 HYB VS1	64	40 PLT A7,A8	2.300	.05000	.3181
28 HYB VS3	65	35 PLT A9-12	2.300	.05000	.6362
29 HYB A6T	66	29 PLT A5,A6	2.300	.05000	.3181
30 SUP RT AFT	10	6 XTRMA	.007000	12.00	144.0
31 FILLER BLK	2	6 XTRMA	.05600	12.00	144.0
32 SUP RC	18	9 SUP RT FWD	.03800	12.00	144.0
33 SUP RT FWD	9	6 XTRMA	.007000	12.00	144.0
34 SUP LF FWD	7	12 SHROUD F C	.02300	12.00	144.0
35 SUP LF FWD	7	6 XTRMA	.2500	12.00	144.0
36 SUP LF AFT	8	6 XTRMA	.2500	12.00	144.0
37 PLT MODALT	28	34 PLT CNTLR	72.00	5.650	.4250
38 PLT MODALT	28	33 PLT CENTER	72.00	5.750	.3100
39 SUP LF AFT	8	11 SHROUD A C	.02300	12.00	144.0
40 SUP LF MID	73	72 SUP LF AFT	.2830	3.000	.2500
41 PLT MODALT	28	67 END FT FWD	.2830	1.565	1.600
42 PLT MODALT	28	29 PLT A5,A6	72.00	4.440	.8920
43 PLT MODALT	28	30 PLT A-22	72.00	5.350	.2375
44 PLT A5,A6	29	67 END FT FWD	.2830	1.565	1.137
45 PLT A5,A6	29	68 SUP RT FWD	.2830	1.565	1.364
46 PLT A5,A6	29	30 PLT A-22	72.00	3.800	.6225
47 PLT A-22	30	68 SUP RT FWD	.2830	1.565	.3520
48 PLT A-22	30	31 PLT A4	72.00	2.600	.6250
49 ALTIM	4	9 SUP RT FWD	.1250	12.00	144.0
50 PLT A4	31	32 PLT A4	72.00	3.560	.6850
51 PLT A4	31	33 PLT CENTER	72.00	3.080	.5950
52 PLT A4	32	70 SUP RT AFT	.2830	1.565	.4925
53 PLT A4	32	40 PLT A7,A8	72.00	4.150	.3900

APOLLO 10 MISSION ANALYSIS

CONDUCTIVE	PATH	FROM	TO		K	L	A
54	PLT A4	32	39	PLT A26	72.00	3.750	.2070
55	PLT A4	32	38	PLT A14	72.00	4.220	.3225
56	PLT A4	32	36	PLT A-14	72.00	4.020	.4925
57	PLT A4	32	33	PLT CENTER	72.00	4.020	.3100
58	PLT CENTER	33	34	PLT CCNTRL	72.00	2.380	.5400
59	TOP COVER	94	16	SHROUD TOP	.03000	12.00	144.0
60	PLT CCNTRL	34	35	PLT A9-12	72.00	5.640	.1786
61	PLT CCNTRL	34	36	PLT A-14	72.00	4.350	.2550
62	PLT A9-12	35	36	PLT A-14	72.00	1.900	.7860
63	PLT A9-12	35	37	PLT A-14	72.00	2.860	.3600
64	PLT A9-12	35	71	END AFT	.2830	1.500	.1695
65	PLT A-14	36	38	PLT A14	72.00	3.430	.2670
66	PLT A-14	36	37	PLT A-14	72.00	3.740	.2550
67	PLT A-14	37	71	END AFT	.2830	1.565	.2550
68	PLT A-14	37	38	PLT A14	72.00	2.160	.2700
69	PLT A14	38	71	END AFT	.2830	1.565	.3225
70	PLT A14	38	39	PLT A26	72.00	1.760	.6375
71	PLT A26	39	40	PLT A7,A8	72.00	1.970	.6375
72	PLT A26	39	71	END AFT	.2830	1.565	.2085
73	PLT A7,A8	40	70	SUP RT AFT	.2830	1.565	.6380
74	PLT A7,A8	40	71	END AFT	.2830	1.565	.3875
75	END FT FWD	67	68	SUP RT FWD	.2830	9.500	.8451
76	SUP RT FWD	68	69	SUP RT MID	.2830	6.500	.8451
77	SUP RT MID	69	70	SUP RT AFT	.2830	10.00	.8451
78	SUP RT AFT	70	71	END AFT	.2830	10.50	.8451
79	END AFT	71	72	SUP LF AFT	.2830	12.00	.8451
80	TLT EXT RT	27	24	TLT EX FWD	9.400	6.000	.001700
81	TLT EX AFT	26	27	TLT EXT RT	9.400	6.000	.001300
82	SUP LF FWD	74	67	END FT FWD	.2830	5.000	.8451
83	HYB VS1	64	70	SUP RT AFT	.1300	.01800	9.000
84	HYB VS3	65	72	SUP LF AFT	.1300	.01800	18.60
85	HYB A6T	66	68	SUP RT FWD	.1300	.01800	9.800
86	FM CASE	75	41	FREQ MOD	72.00	2.000	.4270
87	ALTX CASE	76	42	ALT SSX	90.00	2.170	.3392
88	CASE VSX	81	43	V.S. SSX	90.00	2.170	.4480
89	ALTA MB	77	52	TH DET A13	.01210	12.00	144.0
90	ALTA MB	77	44	AMP. SW A13	.01210	12.00	144.0
91	ALTA MB	77	45	AMP. SW A13	.01210	12.00	144.0
92	HTR CNTRL	56	34	PLT CCNTRL	300.0	12.00	10.08
93	CASE A5,A6	78	57	55DB AMP 5	.05000	12.00	144.0
94	CASE A9-12	79	58	55DB AMP 9	.02500	12.00	144.0
95	CASE A9-12	79	59	55DB AMP 9	.02500	12.00	144.0
96	CASE A9-12	79	60	55DB AMP 9	.02500	12.00	144.0
97	CASE A9-12	79	61	55DB AMP 9	.02500	12.00	144.0
98	CASE MBA14	80	46	AMP. SW A14	.01210	12.00	144.0
99	CASE MBA14	80	47	AMP. SW A14	.01140	12.00	144.0
100	WG VS2 AFT	83	48	AMP. SW A14	.01140	12.00	144.0
101	WG VS2 AFT	83	49	AMP. SW A14	.01140	12.00	144.0
102	WG VS2 AFT	83	50	AMP. SW A14	.01140	12.00	144.0
103	WG VS2 AFT	83	51	AMP. SW A14	.01140	12.00	144.0
104	WG VS2 AFT	83	53	TH DET A14	.01140	12.00	144.0
105	WG VS2 AFT	83	54	TH DET A14	.01100	12.00	144.0
106	WG VS2 AFT	83	55	TH DET A14	.01140	12.00	144.0

INTEGRATION OF THERMAL TRANSIENTS

PGM 1179

APOLLO 10 MISSION ANALYSIS

CONDUCTIVE	PATH	FROM	TO	K	L	A
107	CASE A7,A8	82	62 55DB AMP 7	.02500	12.00	144.0
108	CASE A7,A8	82	63 55DB AMP 7	.02500	12.00	144.0
109	VSR 2	3	83 WG VS2 AFT	72.00	2.200	.1212
110	WG VS2 AFT	83	84 WG VS2MAFT	72.00	2.200	.1212
111	WG VS2MAFT	84	85 WG VS2MFWD	72.00	3.300	.2600
112	WG VS2MFWD	85	86 WG VS2 FWD	72.00	4.000	.1212
113	WG VS2 FWD	86	1 VSR 3	72.00	3.000	.1212
114	WG VS2MAFT	84	92 HYB A24	72.00	1.000	.3200
115	WG VS2MFWD	85	92 HYB A24	72.00	1.000	.3200
116	HYB VS3	65	92 HYB A24	72.00	2.000	.7000
117	WG VS1MAFT	87	88 WG VS1 AFT	72.00	2.000	.1200
118	WG VS1 AFT	88	5 VSR 1	72.00	2.500	.1200
119	WG VS1MAFT	87	91 HYB A25	72.00	1.000	.3200
120	HYB A25	91	64 HYB VS1	72.00	2.000	.3500
121	WG ALT MID	89	90 WG ALT CEN	72.00	2.000	.1200
122	WG ALT CEN	90	4 ALTIM	72.00	2.000	.1200
123	WG ALT MID	89	93 HYB A23	72.00	1.000	.3200
124	HYB A23	93	66 HYB A6T	72.00	2.000	.3500
125	SUP LF MID	73	74 SUP LF FWD	.2830	3.000	.2500
126	SUP RC	18	69 SUP RT MID	.03000	12.00	144.0
127	XTRMA	6	28 PLT MCDALT	.4995	12.00	144.0
128	XTRMA	6	29 PLT A5,A6	.2590	12.00	144.0
129	XTRMA	6	30 PLT A-22	.07400	12.00	144.0
130	XTRMA	6	31 PLT A4	.1850	12.00	144.0
131	XTRMA	6	32 PLT A4	.2220	12.00	144.0
132	XTRMA	6	33 PLT CENTER	.09250	12.00	144.0
133	XTRMA	6	34 PLT CCNTR	.1850	12.00	144.0
134	XTRMA	6	35 PLT A9-12	.1480	12.00	144.0
135	SUP RT AFT	10	11 SHROUD A C	.02300	12.00	144.0
136	XTRMA	6	36 PLT A-14	.1110	12.00	144.0
137	XTRMA	6	37 PLT A-14	.03700	12.00	144.0
138	XTRMA	6	38 PLT A14	.07400	12.00	144.0
139	XTRMA	6	40 PLT A7,A8	.1480	12.00	144.0
140	TLT EX LFT	25	26 TLT EX AFT	9.400	6.000	.001300
141	SHROUD R A	17	18 SUP RC	.01400	12.00	144.0
142	SUP LF FWD	7	74 SUP LF FWD	.2833	5.000	2.200
143	SUP LF AFT	8	72 SUP LF AFT	.2833	5.000	2.200
144	SUP RT FWD	9	68 SUP RT FWD	.2833	5.000	2.250
145	SUP RT AFT	10	70 SUP RT AFT	.2833	5.000	2.125
146	VSR 3	1	2 FILLER BLK	.3750	12.00	144.0
147	VSR 2	3	2 FILLER BLK	.3750	12.00	144.0
148	SHROUD TOP	16	11 SHROUD A C	25.00	12.00	1.000
149	SHROUD TOP	16	12 SHROUD F C	25.00	12.00	1.000
150	SHROUD TOP	16	13 SHROUD F R	25.00	12.00	.7000
151	SHROUD TOP	16	14 SHROUD R F	25.00	12.00	.8000
152	SHROUD TOP	16	15 SHROUD L F	25.00	12.00	.7000
153	SHROUD TOP	16	17 SHROUD R A	25.00	12.00	.8000
154	SHROUD TOP	16	19 SHROUD L A	25.00	12.00	.7000
155	SHROUD TOP	16	20 SHROUD F L	25.00	12.00	.6500
156	SHROUD TOP	16	21 SHROUD A L	25.00	12.00	.6500
157	SHROUD TOP	16	22 SHROUD A R	25.00	12.00	.6500
158	SHROUD A C	11	21 SHROUD A L	120.0	9.000	.01000
159	SHROUD A C	11	22 SHROUD A R	120.0	9.000	.01000

APOLLO 10 MISSION ANALYSIS

CONDUCTIVE	PATH	FROM	TO	K	L	A
160	SHROUD A L	21	19 SHROUD L A	120.0	9.000	.01000
161	SHROUD L A	19	15 SHROUD L F	120.0	6.000	.02000
162	SHROUD L F	15	20 SHROUD F L	120.0	9.000	.01000
163	SHROUD F L	20	12 SHROUD F C	120.0	9.000	.01000
164	SHROUD F C	12	13 SHROUD F R	120.0	9.000	.03000
165	SHROUD F R	13	14 SHROUD R F	120.0	8.000	.03000
166	SHROUD R F	14	17 SHROUD R A	120.0	8.000	.01000
167	SHROUD R A	17	22 SHROUD A R	120.0	9.000	.01000
168	SHROUD R A	17	5 VSR 1	.2670	12.00	144.0
169	SHROUD R F	14	4 ALTIM	.2000	12.00	144.0
170	SHROUD F R	13	4 ALTIM	.1200	12.00	144.0
171	SHROUD F C	12	6 XTRMA	.1600	12.00	144.0
172	SHROUD F L	20	1 VSR 3	.4000	12.00	144.0
173	SHROUD L F	15	1 VSR 3	.2670	12.00	144.0
174	SHROUD L A	19	3 VSR 2	.2670	12.00	144.0
175	SHROUD A L	21	3 VSR 2	.4000	12.00	144.0
176	SHROUD A C	11	6 XTRMA	.1600	12.00	144.0
177	SHROUD A R	22	5 VSR 1	.4000	12.00	144.0
178	HYB A23	93	76 ALTX CASE	72.00	6.500	.1200
179	WG VS1MAFT	87	81 CASE VSX	72.00	6.500	.1200
180	VSR 3	1	73 SUP LF MID	.2830	1.000	1.690
181	VSR 3	1	74 SUP LF FWD	.2830	1.500	2.000
182	VSR 3	1	7 SUP LF FWD	.2000	12.00	144.0
183	VSR 2	3	73 SUP LF MID	.2830	1.000	1.690
184	VSR 2	3	72 SUP LF AFT	.2830	1.500	2.000
185	VSR 2	3	8 SUP LF AFT	.2000	12.00	144.0
186	VSR 1	5	70 SUP RT AFT	.2830	1.500	2.000
187	VSR 1	5	69 SUP RT MID	.2830	1.500	1.690
188	VSR 1	5	10 SUP RT AFT	.1430	12.00	144.0
189	ALTIM	4	68 SUP RT FWD	.2830	1.500	2.250
190	ALTIM	4	69 SUP RT MID	.2830	1.500	1.690
191	TLT EX FWD	24	25 TLT EX LFT	9.400	6.000	.001700
192	PLT CONTRL	34	73 SUP LF MID	.04640	12.00	144.0
193	SUP LF MID	73	1 VSR 3	.001700	12.00	144.0
194	PLT A4	31	4 ALTIM	.07910	12.00	144.0
				BTU/	0	2
				/HR.FT.F	INCHES	INCH

PATHS 180 AND 193 BOTH CONNECT NODE 73 WITH 1

APOLLO 10 MISSION ANALYSIS

RADIATIVE PATH	FROM	TO	F
1	LEM BASE	23 97 SPACE	.7500
2	VSR 3	1 97 SPACE	.3460
3	FILLER BLK	2 97 SPACE	.03000
4	VSR 2	3 97 SPACE	.3460
5	ALTIM	4 97 SPACE	.3550
6	VSR 1	5 97 SPACE	.3460
7	XTRMA	6 97 SPACE	.3850
8	SUP LF FWD	7 97 SPACE	.05000
9	SUP LF AFT	8 97 SPACE	.04650
10	SUP RT FWD	9 97 SPACE	.03500
11	SUP RT AFT	10 97 SPACE	.04100
12	SHROLD A C	11 97 SPACE	.05000
13	SHROLD F C	12 97 SPACE	.04910
14	SHROLD F R	13 97 SPACE	.04910
15	SHROLD R F	14 97 SPACE	.04720
16	SHROLD L F	15 97 SPACE	.05000
17	SHROLD TOP	16 97 SPACE	.05000
18	SHROLD R A	17 97 SPACE	.04720
19	SUP RC	18 97 SPACE	.05000
20	SHROLD L A	19 97 SPACE	.05000
21	SHROLD F L	20 97 SPACE	.05000
22	SHROLD A L	21 97 SPACE	.05000
23	SHROLD A R	22 97 SPACE	.05000
24	VSR 3	1 7 SUP LF FWD	.000800
25	VSR 2	3 8 SUP LF AFT	.000800
26	VSR 1	5 10 SUP RT AFT	.001600
27	ALTIM	4 9 SUP RT FWD	.001200
28	TLT EXT RT	27 23 LEM BASE	.07200
29	ALTIM	4 18 SUP RC	.02620
30	SUP RT FWD	9 18 SUP RC	.005000
31	SHROLD TOP	16 23 LEM BASE	.02020
32	SHROLD F L	20 23 LEM BASE	.003400
33	SHROLD F C	12 23 LEM BASE	.003400
34	SHROLD F R	13 23 LEM BASE	.1034
35	SHROLD R F	14 23 LEM BASE	.01050
36	SHROLD R A	17 23 LEM BASE	.01050
37	FM CASE	75 76 ALTX CASE	.3820
38	FM CASE	75 77 ALTA MB	.09600
39	ALTX CASE	76 77 ALTA MB	.07300
40	FM CASE	75 78 CASE A5,A6	.03100
41	ALTX CASE	76 78 CASE A5,A6	.03500
42	ALTA MB	77 78 CASE A5,A6	.05900
43	FM CASE	75 79 CASE A9-12	.006000
44	ALTX CASE	76 79 CASE A9-12	.01000
45	ALTA MB	77 79 CASE A9-12	.001000
46	CASE A5,A6	78 79 CASE A9-12	.007000
47	FM CASE	75 80 CASE MBA14	.01400
48	ALTX CASE	76 80 CASE MBA14	.01900
49	ALTA MB	77 80 CASE MBA14	.005000
50	CASE A5,A6	78 80 CASE MBA14	.01600
51	CASE A9-12	79 80 CASE MBA14	.2510
52	FM CASE	75 81 CASE VSX	.05900
53	ALTX CASE	76 81 CASE VSX	.1410

APOLLO 10 MISSION ANALYSIS

RADIATIVE PAIR	FROM	TO	F
54	ALTA MB	77	81 CASE VSX .1400
55	CASE A5,A6	78	81 CASE VSX .1280
56	CASE A9-12	79	81 CASE VSX .1390
57	CASE MBA14	80	81 CASE VSX .2430
58	FM CASE	75	82 CASE A7,A8 .003000
59	ALTX CASE	76	82 CASE A7,A8 .003000
60	TLT EX LFT	25	23 LEM BASE .07200
61	CASE A5,A6	78	82 CASE A7,A8 .004000
62	CASE A9-12	79	82 CASE A7,A8 .05300
63	CASE MBA14	80	82 CASE A7,A8 .07000
64	CASE VSX	81	82 CASE A7,A8 .02500
65	FM CASE	75	94 TOP COVER .008000
66	ALTX CASE	76	94 TOP COVER .01000
67	ALTA MB	77	94 TOP COVER .004000
68	CASE A5,A6	78	94 TOP COVER .01000
69	CASE A9-12	79	94 TOP COVER .01200
70	CASE MBA14	80	94 TOP COVER .01100
71	CASE VSX	81	94 TOP COVER .008000
72	CASE A7,A8	82	94 TOP COVER .01500
73	FM CASE	75	67 END FT FWD .02600
74	ALTX CASE	76	67 END FT FWD .01300
75	ALTA MB	77	67 END FT FWD .009000
76	CASE A5,A6	78	67 END FT FWD .009000
77	CASE A9-12	79	67 END FT FWD .01300
78	CASE MBA14	80	67 END FT FWD .01500
79	CASE VSX	81	67 END FT FWD .006000
80	CASE A7,A8	82	67 END FT FWD .01900
81	FM CASE	75	68 SUP RT FWD .002000
82	ALTX CASE	76	68 SUP RT FWD .001000
83	ALTA MB	77	68 SUP RT FWD .01100
84	CASE A5,A6	78	68 SUP RT FWD .002000
85	FM CASE	75	4 ALTIM .02600
86	ALTX CASE	76	4 ALTIM .03200
87	ALTA MB	77	4 ALTIM .01400
88	CASE A5,A6	78	4 ALTIM .03000
89	CASE A9-12	79	4 ALTIM .002000
90	CASE MBA14	80	4 ALTIM .001000
91	CASE VSX	81	4 ALTIM .02800
92	CASE A7,A8	82	4 ALTIM .001000
93	TOP COVER	94	4 ALTIM .009600
94	SUP RT FWD	68	4 ALTIM .001000
95	FM CASE	75	1 VSR 3 .01600
96	ALTX CASE	76	1 VSR 3 .01300
97	ALTA MB	77	1 VSR 3 .008000
98	CASE A5,A6	78	1 VSR 3 .01500
99	CASE A9-12	79	1 VSR 3 .009000
100	CASE MBA14	80	1 VSR 3 .01000
101	CASE VSX	81	1 VSR 3 .01000
102	CASE A7,A8	82	1 VSR 3 .01100
103	TOP COVER	94	1 VSR 3 .01180
104	SUP RT FWD	68	1 VSR 3 .003000
105	ALTIM	4	1 VSR 3 .03000
106	FM CASE	75	5 VSR 1 .01100

APOLLO 10 MISSION ANALYSIS

RADIATIVE PATH	FROM	TO	F
107	AL TX CASE	76 5 VSR 1	.01200
108	AL TA MB	77 5 VSR 1	.007000
109	CASE A5,A6	78 5 VSR 1	.01000
110	CASE A9-12	79 5 VSR 1	.03700
111	CASE MBA14	80 5 VSR 1	.03300
112	CASE VSX	81 5 VSR 1	.03500
113	WG VS1MAFT	87 5 VSR 1	.04500
114	TOP COVER	94 5 VSR 1	.01180
115	SUP RT FWD	68 5 VSR 1	.01100
116	AL TIM	4 5 VSR 1	.1460
117	VSR 3	1 5 VSR 1	.1250
118	FM CASE	75 3 VSR 2	.01200
119	AL TX CASE	76 3 VSR 2	.008000
120	AL TA MB	77 3 VSR 2	.005000
121	CASE A5,A6	78 3 VSR 2	.009000
122	CASE A9-12	79 3 VSR 2	.02700
123	CASE MBA14	80 3 VSR 2	.02600
124	CASE VSX	81 3 VSR 2	.01100
125	CASE A7,A8	82 3 VSR 2	.03500
126	TOP COVER	94 3 VSR 2	.01180
127	END FT FWD	67 3 VSR 2	.006000
128	VSR 3	1 3 VSR 2	.2500
129	VSR 1	5 3 VSR 2	.007000
130	FM CASE	75 93 HYB A23	.001000
131	AL TX CASE	76 93 HYB A23	.002000
132	AL TA MB	77 93 HYB A23	.002000
133	CASE A5,A6	78 93 HYB A23	.02600
134	CASE VSX	81 93 HYB A23	.002000
135	CASE MBA14	80 91 HYB A25	.03000
136	CASE A7,A8	82 91 HYB A25	.02500
137	TLT EX AFT	26 23 LEM BASE	.09600
138	CASE A9-12	79 92 HYB A24	.03700
139	CASE MBA14	80 92 HYB A24	.01300
140	CASE VSX	81 92 HYB A24	.003000
141	CASE A7,A8	82 92 HYB A24	.01000
142	VSR 1	5 92 HYB A24	.001000
143	FM CASE	75 34 PLT CCNTRL	.03000
144	AL TX CASE	76 34 PLT CCNTRL	.07000
145	AL TA MB	77 34 PLT CCNTRL	.2610
146	CASE A5,A6	78 34 PLT CCNTRL	.03300
147	CASE A9-12	79 34 PLT CCNTRL	.03000
148	CASE MBA14	80 34 PLT CCNTRL	.06100
149	CASE VSX	81 34 PLT CCNTRL	.05400
150	CASE A7,A8	82 34 PLT CCNTRL	.005000
151	AL TIM	4 29 PLT A5,A6	.2372
152	VSR 3	1 28 PLT MODALT	.2405
153	VSR 1	5 32 PLT A4	.2405
154	VSR 2	3 36 PLT A-14	.2405
155	HYB A23	93 34 PLT CCNTRL	.002000
156	HYB A24	92 34 PLT CCNTRL	.2000
157	FM CASE	75 95 TILT STRCT	.03310
158	AL TX CASE	76 95 TILT STRCT	.1189
159	AL TA MB	77 95 TILT STRCT	.05120

APOLLO 10 MISSION ANALYSIS

RADIATIVE PATH		FROM	TO		F
160	CASE A5,A6	78	95	TILT STRCT	.1051
161	CASE A9-12	79	95	TILT STRCT	.1634
162	CASE MBA14	80	95	TILT STRCT	.06940
163	CASE VSX	81	95	TILT STRCT	.2681
164	CASE A7,A8	82	95	TILT STRCT	.04230
165	HTR CONTRL	96	94	TOP COVER	.01980
166	END FT FWD	67	95	TILT STRCT	.002900
167	VSR 3	1	95	TILT STRCT	.09840
168	VSR 2	3	95	TILT STRCT	.09750
169	ALTIM	4	95	TILT STRCT	.09770
170	VSR 1	5	95	TILT STRCT	.09750
171	HTR CONTRL	96	95	TILT STRCT	.3036
172	END AFT	71	95	TILT STRCT	.003700
173	HYB A23	93	95	TILT STRCT	.005900
174	HYB A25	91	95	TILT STRCT	.01150
175	HYB A24	92	95	TILT STRCT	.007800
176	SUP RT MID	69	95	TILT STRCT	.003600
177	TLT EX FWD	24	97	SPACE	.06400
178	TLT EX LFT	25	97	SPACE	.06400
179	TLT EX AFT	26	97	SPACE	.03200
180	TLT EXT RT	27	97	SPACE	.06400
181	TLT EX FWD	24	23	LEM BASE	.07200
182	TILT STRCT	95	24	TLT EX FWD	.01000
183	TILT STRCT	95	25	TLT EX LFT	.01000
184	TILT STRCT	95	26	TLT EX AFT	.01000
185	TILT STRCT	95	27	TLT EXT RT	.01000
186	PLT A4	32	4	ALTIM	.03580
187	PLT A4	32	5	VSR 1	.03580
188	PLT CONTRL	34	1	VSR 3	.01710
189	PLT CONTRL	34	3	VSR 2	.01710

PATHS 153 AND 187 BOTH CONNECT NODE 32 WITH 5

APOLLO 10 MISSION ANALYSIS

VSR 3	1	QC:	113	-146	172	173	-180	-181	-182	193		
		QR:	-2	-24	95	96	97	98	99	100	101	102
			103	104	105	-117	-128	-152	-167	188		
FILLER BLK	2	QC:	-31	146	147							
		QR:	-3									
VSR 2	3	QC:	-109	-147	174	175	-183	-184	-185			
		QR:	-4	-25	118	119	120	121	122	123	124	125
			126	127	128	129	-154	-168	189			
ALTIM	4	QC:	-49	122	169	170	-189	-190	194			
		QR:	-5	-27	-29	85	86	87	88	89	90	91
			92	93	94	-105	-116	-151	-169	186		
VSR 1	5	QC:	118	168	177	-186	-187	-188				
		QR:	-6	-26	106	107	108	109	110	111	112	113
			114	115	116	117	-129	-142	-153	-170	187	
XTRMA	6	QC:	30	31	33	35	36	-127	-128	-129	-130	-131
			-132	-133	-134	-136	-137	-138	-139	171	176	
		QR:	-7									
SUP LF FWD	7	QC:	-34	-35	-142	182						
		QR:	-8	24								
SUP LF AFT	8	QC:	-36	-39	-143	185						
		QR:	-9	25								
SUP RT FWD	9	QC:	32	-33	49	-144						
		QR:	-10	27	-30							
SUP RT AFT	10	QC:	-30	-135	-145	188						
		QR:	-11	26								
SHROUD A C	11	QC:	39	135	148	-158	-159	-176				
		QR:	-12									
SHROUD F C	12	QC:	34	149	163	-164	-171					
		QR:	-13	-33								
SHROUD F R	13	QC:	150	164	-165	-170						
		QR:	-14	-34								
SHROUD R F	14	QC:	151	165	-166	-169						
		QR:	-15	-35								
SHROUD L F	15	QC:	152	161	-162	-173						
		QR:	-16									
SHROUD TOP	16	QC:	55	-148	-149	-150	-151	-152	-153	-154	-155	-156
			-157									
		QR:	-17	-31								

APOLLO 10 MISSION ANALYSIS

SHROUD R A	17	QC: -141 153 166 -167 -168																		
		QR: -18 -36																		
SUP RC	18	QC: -32 -126 141																		
		QR: -19 29 30																		
SHROUD L A	19	QC: 154 160 -161 -174																		
		QR: -20																		
SHROUD F L	20	QC: 155 162 -163 -172																		
		QR: -21 -32																		
SHROUD A L	21	QC: 156 158 -160 -175																		
		QR: -22																		
SHROUD A R	22	QC: 157 159 167 -177																		
		QR: -23																		
LEM BASE	23	QR: -1 28 31 32 33 34 35 36 60 137																		
		181																		
TLT EX FWD	24	QC: 80 -191																		
		QR: -177 -181 182																		
TLT EX LFT	25	QC: -140 191																		
		QR: -60 -178 183																		
TLT EX AFT	26	QC: -81 140																		
		QR: -137 -179 184																		
TLT EXT RT	27	QC: -80 81																		
		QR: -28 -180 185																		
PLT MODALT	28	QC: 1 2 -37 -38 -41 -42 -43 127																		
		QR: 152																		
PLT A5, A6	29	QC: 7 8 15 29 42 -44 -45 -46 128																		
		QR: 151																		
PLT A-22	30	QC: 19 43 46 -47 -48 129																		
PLT A4	31	QC: 4 48 -50 -51 130 -194																		
PLT A4	32	QC: 5 50 -52 -53 -54 -55 -56 -57 131																		
		QR: 153 -186 -187																		
PLT CENTER	33	QC: 6 38 51 57 -58 132																		
PLT CNTLR	34	QC: 37 58 -60 -61 92 133 -192																		
		QR: 143 144 145 146 147 148 149 150 155 156																		
		-188 -189																		

APOLLO 10 MISSION ANALYSIS

PLT A9-12	35 QC:	28	60	-62	-63	-64	134			
PLT A-14	36 QC:	9	10	11	56	61	62	-65	-66	136
	QR:	154								
PLT A-14	37 QC:	12	63	66	-67	-68	137			
PLT A14	38 QC:	16	17	18	55	65	68	-69	-70	138
PLT A26	39 QC:	13	14	54	70	-71	-72			
PLT A7,A8	40 QC:	27	53	71	-73	-74	139			
FREQ MOD	41 QC:	-1	86							
ALT SSX	42 QC:	-2	87							
V.S. SSX	43 QC:	-4	-5	-6	88					
AMP.SW A13	44 QC:	-7	90							
AMP.SW A13	45 QC:	-8	91							
AMP.SW A14	46 QC:	-9	98							
AMP.SW A14	47 QC:	-10	99							
AMP.SW A14	48 QC:	-11	100							
AMP.SW A14	49 QC:	-12	101							
AMP.SW A14	50 QC:	-13	102							
AMP.SW A14	51 QC:	-14	103							
TH DET A13	52 QC:	-15	89							
TH DET A14	53 QC:	-16	104							
TH DET A14	54 QC:	-17	105							
TH DET A14	55 QC:	-18	106							
LEVELER	56 QC:	-19								
55CB AMP 5	57 QC:	-20	93							
55CB AMP 9	58 QC:	-21	94							
55CB AMP 9	59 QC:	-22	95							

APOLLO 10 MISSION ANALYSIS

55CB AMP 9	60 QC:	-23	96							
55CB AMP 9	61 QC:	-24	97							
55CB AMP 7	62 QC:	-25	107							
55CB AMP 7	63 QC:	-26	108							
HYB VS1	64 QC:	25	26	-27	-83	120				
HYB VS3	65 QC:	21	22	23	24	-28	-84	-116		
HYB A6T	66 QC:	20	-29	-85	124					
END FT FWD	67 QC:	41	44	-75	82					
	QR:	72	74	75	76	77	78	79	80	-127 -166
SUP RT FWD	68 QC:	45	47	75	-76	85	144	189		
	QR:	81	82	83	84	-94	-104	-115		
SUP RT MID	69 QC:	76	-77	126	187	190				
	QR:	-176								
SUP RT AFT	70 QC:	52	73	77	-78	83	145	186		
END AFT	71 QC:	64	67	69	72	74	78	-79		
	QR:	-172								
SUP LF AFT	72 QC:	40	79	84	143	184				
SUP LF MID	73 QC:	-40	-125	180	183	192	-193			
SUP LF FWD	74 QC:	-82	125	142	181					
FM CASE	75 QC:	-86								
	QR:	-37	-38	-40	-43	-47	-52	-58	-65	-73 -81
		-85	-95	-106	-118	-130	-143	-157		
ALTX CASE	76 QC:	-87	178							
	QR:	37	-39	-41	-44	-48	-53	-59	-66	-74 -82
		-86	-96	-107	-119	-131	-144	-158		
ALTA MB	77 QC:	-89	-90	-91						
	QR:	38	39	-42	-45	-49	-54	-67	-75	-83 -87
		-97	-108	-120	-132	-145	-159			
CASE A5, A6	78 QC:	-93								
	QR:	40	41	42	-46	-50	-55	-61	-68	-76 -84
		-88	-98	-109	-121	-133	-146	-160		

APOLLO 10 MISSION ANALYSIS

CASE A9-12	79	QC:	-94	-95	-96	-97							
		QR:	43	44	45	46	-51	-56	-62	-69	-77	-89	
			-99	-110	-122	-138	-147	-161					
CASE MBA14	80	QC:	-98	-99									
		QR:	47	48	49	50	51	-57	-63	-70	-78	-90	
			-100	-111	-123	-135	-139	-148	-162				
CASE VSX	81	QC:	-88	179									
		QR:	52	53	54	55	56	57	-64	-71	-79	-91	
			-101	-112	-124	-134	-140	-149	-163				
CASE A7, A8	82	QC:	-107	-108									
		QR:	58	59	61	62	63	64	-72	-80	-92	-102	
			-125	-136	-141	-150	-164						
WG VS2 AFT	83	QC:	-100	-101	-102	-103	-104	-105	-106	109	-110		
WG VS2MAFT	84	QC:	110	-111	-114								
WG VS2MFWD	85	QC:	111	-112	-115								
WG VS2 FWD	86	QC:	112	-113									
WG VS1MAFT	87	QC:	-117	-119	-179								
		QR:	-113										
WG VS1 AFT	88	QC:	117	-118									
WG ALT MID	89	QC:	-121	-123									
WG ALT CEN	90	QC:	121	-122									
HYE A25	91	QC:	119	-120									
		QR:	135	136	-174								
HYE A24	92	QC:	114	115	116								
		QR:	138	139	140	141	142	-156	-175				
HYE A23	93	QC:	123	-124	-178								
		QR:	130	131	132	133	134	-155	-173				
TOP COVER	94	QC:	-55										
		QR:	65	66	67	68	69	70	71	72	-93	-103	
			-114	-126	165								
TILT STRCT	95	QC:	-3										
		QR:	157	158	159	160	161	162	163	164	166	167	
			168	169	170	171	172	173	174	175	176	-182	
			-183	-184	-185								

INTEGRATION OF THERMAL TRANSIENTS

PGM 1179

APOLLO 10 MISSION ANALYSIS

HTR CNTLR 96 QC: -92
QR: -165 -171

ACTUATOR 98 QC: 3

COMPUTED TIME INCREMENT = $4.55E-04$ HOUR

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	92.656	92.700	92.750	92.800	92.850
VSR 3	1	8.1	8.1	8.1	8.1	8.2
FILLER BLK	2	10.9	10.8	10.8	10.9	11.0
VSR 2	3	11.6	11.6	11.7	11.8	12.0
ALTIM	4	8.7	9.8	10.6	11.1	11.6
VSR 1	5	10.5	10.5	10.4	10.3	10.3
XTRMA	6	27.3	27.3	27.3	27.4	27.5
SUP LF FWD	7	17.3	17.2	17.2	17.2	17.3
SUP LF AFT	8	19.6	19.6	19.6	19.7	19.8
SUP RT FWD	9	10.0	9.7	10.2	10.6	11.0
SUP RT AFT	10	12.0	11.2	11.0	10.9	10.9
SHROUD A C	11	7.6	6.9	6.5	6.3	6.3
SHROUD F C	12	6.0	4.9	4.5	4.3	4.3
SHROUD F R	13	-5.6	-7.9	-8.2	-8.2	-8.1
SHROUD R F	14	0.2	-0.2	-0.1	0.1	0.3
SHROUD L F	15	3.4	2.6	2.4	2.3	2.4
SHROUD TOP	16	-4.3	-5.2	-5.7	-5.9	-6.0
SHROUD R A	17	4.3	3.6	3.3	3.2	3.2
SUP RC	18	4.6	4.2	4.1	4.1	4.2
SHROUD L A	19	5.5	4.6	4.5	4.5	4.5
SHROUD F L	20	5.0	4.2	4.1	4.1	4.1
SHROUD A L	21	7.7	7.0	6.9	6.9	7.0
SHROUD A R	22	6.9	6.0	5.8	5.7	5.6
LEM BASE	23	-225.0	-234.1	-242.9	-250.4	-256.9
TLT EX FWD	24	-115.0	-116.4	-118.0	-119.5	-120.9
TLT EX LFT	25	-67.2	-68.4	-69.7	-70.8	-71.7
TLT EX AFT	26	-96.6	-97.4	-98.5	-99.6	-100.6
TLT EXT RT	27	-67.2	-68.4	-69.7	-70.8	-71.7
PLT MODALT	28	56.3	56.6	57.0	57.3	57.7
PLT A5, A6	29	54.4	55.1	55.5	55.9	56.3
PLT A-22	30	61.5	61.2	62.0	62.7	63.4
PLT A4	31	62.2	62.5	63.1	63.6	64.1
PLT A4	32	62.3	63.0	63.6	64.1	64.6
PLT CENTER	33	62.5	63.1	63.7	64.2	64.7
PLT CNTLR	34	67.1	68.6	69.4	69.9	70.4
PLT A9-12	35	54.2	54.9	55.3	55.7	56.0
PLT A-14	36	56.5	57.4	57.9	58.3	58.7
PLT A-14	37	56.7	57.6	58.2	58.6	59.0
PLT A14	38	58.9	59.9	60.5	61.0	61.4
PLT A26	39	58.7	59.7	60.3	60.7	61.1
PLT A7, A8	40	57.0	57.9	58.4	58.8	59.2
FREQ MOD	41	56.3	56.5	56.9	57.2	57.6
ALT SSX	42	56.2	56.5	56.9	57.2	57.6
V.S. SSX	43	62.2	62.7	63.2	63.8	64.2
AMP.SW A13	44	54.5	54.9	55.3	55.8	56.2
AMP.SW A13	45	54.5	54.9	55.3	55.8	56.2
AMP.SW A14	46	56.4	56.9	57.4	57.9	58.3
AMP.SW A14	47	56.4	56.9	57.4	57.9	58.3
AMP.SW A14	48	55.9	56.3	56.9	57.4	57.8
AMP.SW A14	49	56.1	56.6	57.2	57.7	58.1
AMP.SW A14	50	58.1	58.6	59.2	59.7	60.1
AMP.SW A14	51	58.1	58.6	59.2	59.7	60.1

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	92.656	92.700	92.750	92.800	92.850
TH DET A13	52	54.5	55.0	55.4	55.8	56.2
TH DET A14	53	58.4	59.2	59.8	60.3	60.8
TH DET A14	54	58.5	59.2	59.9	60.4	60.8
TH DET A14	55	58.5	59.2	59.9	60.4	60.8
LEVELER	56	49.4	52.2	54.7	56.8	58.4
55CB AMP 5	57	49.4	49.5	49.7	50.0	50.3
55CB AMP 9	58	50.4	50.5	50.7	51.0	51.3
55CB AMP 9	59	50.4	50.5	50.7	51.0	51.3
55CB AMP 9	60	50.4	50.5	50.7	51.0	51.3
55CB AMP 9	61	50.4	50.5	50.7	51.0	51.3
55CB AMP 7	62	52.3	52.4	52.7	52.9	53.2
55CB AMP 7	63	52.3	52.4	52.7	52.9	53.2
HYB VS1	64	52.3	52.6	52.9	53.2	53.5
HYB VS3	65	50.4	50.6	50.9	51.2	51.5
HYB A6T	66	49.3	49.5	49.7	50.1	50.4
END FT FWD	67	52.2	52.2	52.2	52.4	52.6
SUP RT FWD	68	49.0	49.2	49.4	49.8	50.1
SUP RT MID	69	10.8	10.7	10.7	10.7	10.9
SUP RT AFT	70	52.0	52.3	52.6	52.9	53.2
END AFT	71	58.3	58.2	58.2	58.2	58.2
SUP LF AFT	72	50.3	50.5	50.8	51.0	51.3
SUP LF MID	73	11.3	18.1	23.2	26.4	28.5
SUP LF FWD	74	14.5	14.4	14.4	14.4	14.4
FM CASE	75	55.7	55.8	56.0	56.4	56.7
ALTX CASE	76	54.8	54.8	54.9	55.2	55.4
ALTA MB	77	56.4	56.5	56.8	57.2	57.5
CASE A5,A6	78	51.0	51.0	51.0	51.2	51.4
CASE A9-12	79	50.3	50.2	50.3	50.4	50.5
CASE MBA14	80	52.1	52.0	52.1	52.2	52.4
CASE VSX	81	58.9	58.9	59.2	59.6	60.0
CASE A7,A8	82	51.6	51.6	51.6	51.7	51.9
WG VS2 AFT	83	31.3	31.3	31.4	31.6	31.8
WG VS2MAFT	84	44.5	44.5	44.6	44.8	45.0
WG VS2MFWD	85	44.7	44.7	44.8	45.0	45.2
WG VS2 FWD	86	23.9	23.8	23.8	23.9	24.0
WG VS1MAFT	87	46.1	46.1	46.2	46.4	46.6
WG VS1 AFT	88	30.3	30.3	30.3	30.3	30.4
WG ALT MID	89	41.8	41.8	41.9	42.1	42.4
WG ALT CEN	90	25.3	25.7	26.2	26.6	26.9
HYB A25	91	48.4	48.4	48.5	48.7	49.0
HYB A24	92	46.7	46.7	46.9	47.1	47.3
HYB A23	93	44.9	44.9	45.0	45.2	45.5
TOP COVER	94	19.7	19.5	19.3	19.1	18.9
TILT STRCT	95	52.1	51.9	51.6	51.4	51.2
HTR CNTLR	96	67.1	68.5	69.3	69.8	70.3
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	54.8	54.5	54.2	53.9	53.7

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	92.900	92.950	93.000	93.050	93.100
VSR 3	1	8.3	8.4	8.6	8.7	8.9
FILLER BLK	2	11.1	11.3	11.4	11.6	11.7
VSR 2	3	12.1	12.3	12.4	12.6	12.8
ALTIM	4	12.0	12.3	12.6	12.8	13.1
VSR 1	5	10.3	10.4	10.5	10.6	10.8
XTRMA	6	27.7	27.9	28.1	28.3	28.5
SUP LF FWD	7	17.5	17.6	17.8	18.0	18.2
SUP LF AFT	8	19.9	20.1	20.3	20.5	20.7
SUP RT FWD	9	11.3	11.6	11.9	12.2	12.4
SUP RT AFT	10	10.9	11.0	11.1	11.2	11.4
SHROUD A C	11	6.4	6.5	6.6	6.8	6.9
SHROUD F C	12	4.4	4.5	4.6	4.8	4.9
SHROUD F R	13	-7.9	-7.8	-7.7	-7.5	-7.4
SHROUD R F	14	0.5	0.7	0.9	1.1	1.2
SHROUD L F	15	2.4	2.5	2.7	2.8	2.9
SHROUD TOP	16	-6.0	-5.9	-5.8	-5.7	-5.6
SHROUD R A	17	3.2	3.3	3.4	3.5	3.6
SUP RC	18	4.3	4.5	4.7	4.9	5.1
SHROUD L A	19	4.6	4.8	4.9	5.0	5.2
SHROUD F L	20	4.2	4.3	4.4	4.5	4.7
SHROUD A L	21	7.1	7.2	7.4	7.5	7.7
SHROUD A R	22	5.7	5.7	5.8	5.9	6.1
LEM BASE	23	-262.7	-267.9	-272.5	-276.7	-280.6
TLT EX FWD	24	-122.2	-123.4	-124.5	-125.5	-126.4
TLT EX LFT	25	-72.6	-73.3	-74.0	-74.6	-75.1
TLT EX AFT	26	-101.6	-102.6	-103.4	-104.3	-105.0
TLT EXT RT	27	-72.6	-73.3	-74.0	-74.6	-75.1
PLT MODALT	28	58.0	58.3	58.7	59.0	59.3
PLT A5,A6	29	56.7	57.1	57.5	57.8	58.2
PLT A-22	30	64.0	64.5	64.9	65.4	65.8
PLT A4	31	64.6	65.0	65.3	65.7	66.0
PLT A4	32	65.0	65.4	65.8	66.1	66.5
PLT CENTER	33	65.1	65.5	65.9	66.2	66.6
PLT CNTLR	34	70.7	71.1	71.5	71.8	72.1
PLT A9-12	35	56.4	56.7	57.0	57.3	57.6
PLT A-14	36	59.0	59.4	59.7	60.0	60.3
PLT A-14	37	59.3	59.7	60.0	60.3	60.6
PLT A14	38	61.8	62.1	62.4	62.8	63.1
PLT A26	39	61.5	61.9	62.2	62.5	62.8
PLT A7,A8	40	59.5	59.9	60.2	60.5	60.8
FREQ MOD	41	57.9	58.3	58.6	58.9	59.3
ALT SSX	42	57.9	58.3	58.6	58.9	59.3
V.S. SSX	43	64.7	65.1	65.5	65.8	66.2
AMP.SW A13	44	56.6	57.0	57.3	57.7	58.1
AMP.SW A13	45	56.6	57.0	57.3	57.7	58.1
AMP.SW A14	46	58.7	59.0	59.3	59.6	59.9
AMP.SW A14	47	58.7	59.0	59.3	59.6	59.9
AMP.SW A14	48	58.1	58.5	58.8	59.1	59.4
AMP.SW A14	49	58.4	58.8	59.1	59.4	59.7
AMP.SW A14	50	60.5	60.9	61.2	61.6	61.9
AMP.SW A14	51	60.5	60.9	61.2	61.6	61.9

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	92.500	92.950	93.000	93.050	93.100
TH DET A13	52	56.6	57.0	57.4	57.8	58.1
TH DET A14	53	61.2	61.5	61.9	62.2	62.5
TH DET A14	54	61.2	61.6	61.9	62.2	62.6
TH DET A14	55	61.2	61.6	61.9	62.2	62.5
LEVELER	56	59.8	61.0	62.0	62.8	63.6
55CB AMP 5	57	50.6	51.0	51.3	51.7	52.0
55CB AMP 9	58	51.6	51.9	52.2	52.4	52.7
55CB AMP 9	59	51.6	51.9	52.2	52.4	52.7
55CB AMP 9	60	51.6	51.9	52.2	52.4	52.7
55CB AMP 9	61	51.6	51.9	52.2	52.4	52.7
55CB AMP 7	62	53.5	53.8	54.1	54.4	54.7
55CB AMP 7	63	53.5	53.8	54.1	54.4	54.7
HYB VS1	64	53.8	54.1	54.4	54.7	55.0
HYB VS3	65	51.8	52.1	52.4	52.7	52.9
HYB A6T	66	50.7	51.1	51.4	51.8	52.1
END FT FWD	67	52.8	53.1	53.3	53.6	53.9
SUP RT FWD	68	50.4	50.8	51.1	51.5	51.8
SUP RT MID	69	11.0	11.2	11.4	11.6	11.8
SUP RT AFT	70	53.5	53.8	54.1	54.4	54.7
END AFT	71	58.2	58.2	58.2	58.2	58.2
SUP LF AFT	72	51.6	51.9	52.2	52.5	52.8
SUP LF MID	73	29.9	30.8	31.4	31.9	32.3
SUP LF FWD	74	14.5	14.6	14.7	14.8	15.0
FM CASE	75	57.0	57.4	57.7	58.0	58.3
ALTX CASE	76	55.7	56.0	56.3	56.7	57.0
ALTA MB	77	57.8	58.2	58.5	58.8	59.1
CASE A5, A6	78	51.7	51.9	52.2	52.5	52.8
CASE A9-12	79	50.7	50.9	51.2	51.4	51.6
CASE MBA14	80	52.6	52.9	53.1	53.4	53.6
CASE VSX	81	60.3	60.7	61.0	61.3	61.6
CASE A7, A8	82	52.1	52.4	52.6	52.9	53.1
WG VS2 AFT	83	32.0	32.2	32.5	32.7	32.9
WG VS2MAFT	84	45.3	45.6	45.8	46.1	46.4
WG VS2MFWD	85	45.5	45.7	46.0	46.3	46.5
WG VS2 FWD	86	24.1	24.3	24.5	24.7	24.9
WG VS1MAFT	87	46.9	47.1	47.4	47.6	47.9
WG VS1 AFT	88	30.6	30.7	30.9	31.1	31.3
WG ALT MID	89	42.7	43.0	43.3	43.7	44.0
WG ALT CEN	90	27.3	27.6	27.9	28.2	28.5
HYB A25	91	49.2	49.5	49.8	50.0	50.3
HYB A24	92	47.6	47.9	48.1	48.4	48.7
HYB A23	93	45.8	46.1	46.4	46.8	47.1
TOP COVER	94	18.7	18.5	18.3	18.2	18.0
TILT STRCT	95	51.0	50.8	50.6	50.4	50.3
HTR CONTRL	96	70.7	71.1	71.4	71.7	72.0
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	53.4	53.1	52.9	52.6	52.4

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	93.150	93.200	93.250	93.300	93.350
VSR 3	1	9.0	9.2	9.4	9.5	9.7
FILLER BLK	2	11.9	12.1	12.2	12.4	12.6
VSR 2	3	12.9	13.1	13.3	13.5	13.6
ALTIM	4	13.3	13.5	13.8	14.0	14.2
VSR 1	5	10.9	11.1	11.2	11.4	11.6
XTRMA	6	28.8	29.0	29.2	29.5	29.7
SUP LF FWD	7	18.3	18.5	18.7	18.9	19.1
SUP LF AFT	8	20.9	21.1	21.3	21.5	21.7
SUP RT FWD	9	12.6	12.8	13.1	13.3	13.5
SUP RT AFT	10	11.5	11.7	11.9	12.0	12.2
SHROUD A C	11	7.1	7.3	7.5	7.6	7.8
SHROUD F C	12	5.1	5.3	5.4	5.6	5.8
SHROUD F R	13	-7.2	-7.1	-6.9	-6.7	-6.6
SHROUD R F	14	1.4	1.6	1.8	2.0	2.1
SHROUD L F	15	3.1	3.2	3.4	3.5	3.7
SHROUD TOP	16	-5.5	-5.3	-5.2	-5.1	-4.9
SHROUD R A	17	3.8	3.9	4.1	4.2	4.4
SUP RC	18	5.3	5.4	5.6	5.8	6.0
SHROUD L A	19	5.3	5.5	5.7	5.8	6.0
SHROUD F L	20	4.8	5.0	5.1	5.3	5.4
SHROUD A L	21	7.9	8.0	8.2	8.4	8.5
SHROUD A R	22	6.2	6.4	6.5	6.7	6.8
LEM BASE	23	-284.1	-287.3	-290.4	-293.2	-295.8
TLT EX FWD	24	-127.3	-128.0	-128.7	-129.4	-130.0
TLT EX LFT	25	-75.6	-76.0	-76.3	-76.7	-77.0
TLT EX AFT	26	-105.7	-106.3	-106.9	-107.4	-107.9
TLT EXT RT	27	-75.6	-76.0	-76.3	-76.7	-77.0
PLT MODALT	28	59.7	60.0	60.3	60.6	60.9
PLT A5, A6	29	58.5	58.8	59.1	59.4	59.7
PLT A-22	30	66.2	66.5	66.8	67.2	67.5
PLT A4	31	66.4	66.7	67.0	67.3	67.5
PLT A4	32	66.8	67.1	67.4	67.7	68.0
PLT CENTER	33	66.9	67.2	67.5	67.8	68.1
PLT CONTRL	34	72.4	72.7	73.0	73.3	73.5
PLT A9-12	35	57.9	58.1	58.4	58.7	58.9
PLT A-14	36	60.6	60.9	61.1	61.4	61.7
PLT A-14	37	60.9	61.2	61.5	61.7	62.0
PLT A14	38	63.4	63.7	64.0	64.2	64.5
PLT A26	39	63.2	63.4	63.7	64.0	64.3
PLT A7, A8	40	61.1	61.4	61.7	62.0	62.2
FREQ MOD	41	59.6	59.9	60.2	60.5	60.8
ALT SSX	42	59.6	59.9	60.2	60.5	60.8
V.S. SSX	43	66.5	66.8	67.1	67.4	67.6
AMP.SW A13	44	58.4	58.7	59.0	59.3	59.6
AMP.SW A13	45	58.4	58.7	59.0	59.3	59.6
AMP.SW A14	46	60.2	60.5	60.8	61.1	61.3
AMP.SW A14	47	60.2	60.5	60.8	61.1	61.3
AMP.SW A14	48	59.7	60.0	60.3	60.5	60.8
AMP.SW A14	49	60.0	60.3	60.6	60.9	61.1
AMP.SW A14	50	62.2	62.5	62.8	63.1	63.3
AMP.SW A14	51	62.2	62.5	62.8	63.1	63.3

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	93.150	93.200	93.250	93.300	93.350
TH DET A13	52	58.4	58.8	59.1	59.4	59.7
TH DET A14	53	62.8	63.1	63.4	63.7	63.9
TH DET A14	54	62.9	63.2	63.4	63.7	64.0
TH DET A14	55	62.8	63.1	63.4	63.7	64.0
LEVELER	56	64.2	64.8	65.3	65.7	66.1
55CB AMP 5	57	52.3	52.7	53.0	53.3	53.6
55CB AMP 9	58	53.0	53.3	53.5	53.8	54.1
55CB AMP 9	59	53.0	53.3	53.5	53.8	54.1
55CB AMP 9	60	53.0	53.3	53.5	53.8	54.1
55CB AMP 9	61	53.0	53.3	53.5	53.8	54.1
55CB AMP 7	62	55.0	55.3	55.6	55.8	56.1
55CB AMP 7	63	55.0	55.3	55.6	55.8	56.1
HYB VS1	64	55.3	55.6	55.8	56.1	56.4
HYB VS3	65	53.2	53.5	53.8	54.0	54.3
HYB A6T	66	52.5	52.8	53.1	53.4	53.7
END FT FWD	67	54.2	54.5	54.8	55.1	55.4
SUP RT FWD	68	52.2	52.5	52.8	53.1	53.4
SUP RT MID	69	12.0	12.2	12.3	12.5	12.7
SUP RT AFT	70	54.9	55.2	55.5	55.8	56.0
END AFT	71	58.2	58.3	58.3	58.4	58.5
SUP LF AFT	72	53.1	53.3	53.6	53.9	54.1
SUP LF MID	73	32.6	32.9	33.2	33.4	33.6
SUP LF FWD	74	15.1	15.3	15.4	15.6	15.7
FM CASE	75	58.7	59.0	59.3	59.6	59.9
ALT X CASE	76	57.3	57.6	57.9	58.1	58.4
ALTA MB	77	59.4	59.7	60.0	60.2	60.5
CASE A5, A6	78	53.1	53.4	53.6	53.9	54.2
CASE A9-12	79	51.8	52.0	52.3	52.5	52.7
CASE M6A14	80	53.8	54.1	54.3	54.5	54.7
CASE VSX	81	61.9	62.2	62.5	62.7	63.0
CASE A7, A8	82	53.4	53.6	53.9	54.1	54.4
WG VS2 AFT	83	33.2	33.4	33.6	33.8	34.0
WG VS2MAFT	84	46.6	46.9	47.1	47.4	47.6
WG VS2MFWD	85	46.8	47.0	47.3	47.6	47.8
WG VS2 FWD	86	25.1	25.3	25.5	25.7	25.9
WG VS1MAFT	87	48.2	48.4	48.7	48.9	49.2
WG VS1 AFT	88	31.5	31.7	32.0	32.2	32.4
WG ALT MID	89	44.3	44.6	44.9	45.2	45.5
WG ALT CEN	90	28.8	29.0	29.3	29.5	29.8
HYE A25	91	50.6	50.9	51.1	51.4	51.6
HYE A24	92	49.0	49.2	49.5	49.7	50.0
HYE A23	93	47.4	47.7	48.0	48.3	48.6
TCP COVER	94	17.9	17.8	17.7	17.6	17.5
TILT STRCT	95	50.1	49.9	49.8	49.7	49.5
HTR CNTLR	96	72.3	72.6	72.9	73.2	73.5
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	52.1	51.9	51.7	51.5	51.3

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	93.400	93.450	93.500	93.550	93.600
VSR 3	1	9.8	10.0	10.2	10.3	10.5
FILLER BLK	2	12.8	12.9	13.1	13.3	13.5
VSR 2	3	13.8	14.0	14.2	14.3	14.5
ALTIM	4	14.4	14.6	14.8	14.9	15.1
VSR I	5	11.7	11.9	12.1	12.2	12.4
XTRMA	6	29.9	30.1	30.3	30.6	30.8
SUP LF FWD	7	19.3	19.5	19.7	19.9	20.1
SUP LF AFT	8	21.9	22.1	22.3	22.5	22.7
SUP RT FWD	9	13.7	13.9	14.1	14.3	14.5
SUP RT AFT	10	12.4	12.5	12.7	12.9	13.0
SHROUD A C	11	8.0	8.1	8.3	8.5	8.7
SHROUD F C	12	5.9	6.1	6.3	6.5	6.6
SHROUD F R	13	-6.5	-6.3	-6.2	-6.0	-5.9
SHROUD R F	14	2.3	2.5	2.6	2.8	3.0
SHROUD L F	15	3.8	4.0	4.2	4.3	4.5
SHROUD TOP	16	-4.8	-4.6	-4.5	-4.4	-4.2
SHROUD R A	17	4.5	4.7	4.8	5.0	5.2
SUP RC	18	6.2	6.4	6.6	6.8	7.0
SHROUD L A	19	6.1	6.3	6.5	6.6	6.8
SHROUD F L	20	5.6	5.8	5.9	6.1	6.2
SHROUD A L	21	8.7	8.9	9.0	9.2	9.3
SHROUD A R	22	7.0	7.1	7.3	7.5	7.6
LEM BASE	23	-298.2	-300.5	-302.7	-304.7	-306.6
TLT EX FWD	24	-130.5	-131.0	-131.4	-131.8	-132.2
TLT EX LFT	25	-77.2	-77.5	-77.7	-77.9	-78.1
TLT EX AFT	26	-108.4	-108.8	-109.2	-109.5	-109.8
TLT EXT RT	27	-77.2	-77.5	-77.7	-77.9	-78.1
PLT MOCAIT	28	61.1	61.4	61.7	62.0	62.2
PLT A5,A6	29	60.0	60.3	60.6	60.8	61.1
PLT A-22	30	67.8	68.0	68.3	68.6	68.8
PLT A4	31	67.8	68.1	68.3	68.6	68.8
PLT A4	32	68.2	68.5	68.7	69.0	69.2
PLT CENTER	33	68.3	68.6	68.8	69.1	69.3
PLT CENTLR	34	73.8	74.0	74.3	74.5	74.8
PLT A9-12	35	59.2	59.4	59.7	59.9	60.2
PLT A-14	36	61.9	62.2	62.4	62.7	62.9
PLT A-14	37	62.3	62.5	62.8	63.0	63.2
PLT A14	38	64.8	65.0	65.3	65.5	65.8
PLT A26	39	64.5	64.8	65.0	65.3	65.5
PLT A7,A8	40	62.5	62.7	63.0	63.2	63.5
FREQ MOD	41	61.1	61.4	61.6	61.9	62.1
ALT SSX	42	61.1	61.3	61.6	61.9	62.1
V.S. SSX	43	67.9	68.2	68.4	68.7	68.9
AMP.SW A13	44	59.9	60.2	60.5	60.7	61.0
AMP.SW A13	45	59.9	60.2	60.5	60.7	61.0
AMP.SW A14	46	61.6	61.8	62.1	62.3	62.6
AMP.SW A14	47	61.6	61.8	62.1	62.3	62.6
AMP.SW A14	48	61.1	61.3	61.6	61.8	62.1
AMP.SW A14	49	61.4	61.6	61.9	62.1	62.4
AMP.SW A14	50	63.6	63.9	64.1	64.4	64.6
AMP.SW A14	51	63.6	63.9	64.1	64.4	64.6

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	93.400	93.450	93.500	93.550	93.600
TH DET A13	52	60.0	60.2	60.5	60.8	61.0
TH DET A14	53	64.2	64.4	64.7	64.9	65.2
TH DET A14	54	64.3	64.5	64.8	65.0	65.3
TH DET A14	55	64.2	64.5	64.7	65.0	65.2
LEVELER	56	66.5	66.9	67.2	67.5	67.8
55CB AMP 5	57	53.9	54.1	54.4	54.7	54.9
55CB AMP 9	58	54.3	54.5	54.8	55.0	55.3
55CB AMP 9	59	54.3	54.5	54.8	55.0	55.3
55CB AMP 9	60	54.3	54.5	54.8	55.0	55.3
55CB AMP 9	61	54.3	54.5	54.8	55.0	55.3
55CB AMP 7	62	56.4	56.6	56.9	57.1	57.3
55CB AMP 7	63	56.4	56.6	56.9	57.1	57.3
HYB VS1	64	56.6	56.9	57.1	57.4	57.6
HYB VS3	65	54.5	54.8	55.0	55.3	55.5
HYB A6T	66	54.0	54.2	54.5	54.8	55.0
END FT FWD	67	55.6	55.9	56.2	56.4	56.7
SUP RT FWD	68	53.7	53.9	54.2	54.5	54.7
SUP RT MID	69	12.9	13.1	13.3	13.5	13.7
SUP RT AFT	70	56.3	56.5	56.8	57.0	57.3
END AFT	71	58.5	58.6	58.7	58.8	58.8
SUP LF AFT	72	54.4	54.6	54.9	55.1	55.3
SUP LF MID	73	33.8	34.1	34.3	34.5	34.6
SUP LF FWD	74	15.9	16.1	16.3	16.4	16.6
FM CASE	75	60.1	60.4	60.7	60.9	61.2
ALTX CASE	76	58.7	59.0	59.2	59.5	59.7
ALTA MB	77	60.8	61.0	61.3	61.5	61.7
CASE A5, A6	78	54.4	54.7	54.9	55.1	55.4
CASE A9-12	79	52.9	53.1	53.3	53.5	53.7
CASE MBA14	80	54.9	55.1	55.3	55.5	55.7
CASE VSX	81	63.2	63.4	63.7	63.9	64.1
CASE A7, A8	82	54.6	54.9	55.1	55.3	55.5
WG VS2 AFT	83	34.3	34.5	34.7	34.9	35.1
WG VS2MAFT	84	47.9	48.1	48.4	48.6	48.8
WG VS2MFWD	85	48.1	48.3	48.5	48.8	49.0
WG VS2 FWD	86	26.1	26.3	26.5	26.7	26.9
WG VS1MAFT	87	49.4	49.7	49.9	50.1	50.4
WG VS1 AFT	88	32.6	32.8	33.0	33.2	33.4
WG ALT MID	89	45.8	46.1	46.3	46.6	46.8
WG ALT CEN	90	30.0	30.3	30.5	30.7	31.0
HYB A25	91	51.9	52.1	52.4	52.6	52.8
HYB A24	92	50.2	50.5	50.7	51.0	51.2
HYB A23	93	48.9	49.2	49.5	49.8	50.0
TOP COVER	94	17.4	17.3	17.2	17.2	17.1
TILT STRCT	95	49.4	49.3	49.2	49.1	49.0
HTR CONTRL	96	73.7	74.0	74.2	74.5	74.7
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	51.1	50.9	50.7	50.6	50.4

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	93.650	93.700	93.750	93.800	93.850
VSR 3	1	10.7	10.8	11.0	11.2	11.3
FILLER BLK	2	13.6	13.8	14.0	14.1	14.3
VSR 2	3	14.7	14.8	15.0	15.1	15.3
ALTIM	4	15.3	15.5	15.7	15.8	16.0
VSR 1	5	12.6	12.7	12.9	13.0	13.2
XTRMA	6	31.0	31.2	31.4	31.6	31.8
SUP LF FWD	7	20.3	20.5	20.6	20.8	21.0
SUP LF AFT	8	22.9	23.1	23.2	23.4	23.6
SUP RT FWD	9	14.7	14.8	15.0	15.2	15.3
SUP RT AFT	10	13.2	13.4	13.5	13.7	13.9
SHROUD A C	11	8.8	9.0	9.2	9.3	9.5
SHROUD F C	12	6.8	7.0	7.1	7.3	7.4
SHROUD F R	13	-5.7	-5.6	-5.4	-5.3	-5.2
SHROUD R F	14	3.1	3.3	3.4	3.6	3.7
SHROUD L F	15	4.6	4.8	4.9	5.1	5.2
SHROUD TOP	16	-4.1	-3.9	-3.8	-3.7	-3.5
SHROUD R A	17	5.3	5.5	5.6	5.8	5.9
SUP RC	18	7.1	7.3	7.5	7.6	7.8
SHROUD L A	19	6.9	7.1	7.2	7.4	7.5
SHROUD F L	20	6.4	6.6	6.7	6.9	7.0
SHROUD A L	21	9.5	9.7	9.8	10.0	10.1
SHROUD A R	22	7.8	7.9	8.1	8.3	8.4
LEM BASE	23	-308.4	-310.2	-311.8	-313.4	-314.9
TLT EX FWD	24	-132.6	-132.9	-133.2	-133.4	-133.7
TLT EX LFT	25	-78.3	-78.4	-78.6	-78.7	-78.8
TLT EX AFT	26	-110.1	-110.4	-110.6	-110.8	-111.0
TLT EXT RT	27	-78.3	-78.4	-78.6	-78.7	-78.8
PLT MODALT	28	62.5	62.7	62.9	63.2	63.4
PLT A5,A6	29	61.3	61.6	61.8	62.0	62.2
PLT A-22	30	69.1	69.3	69.6	69.8	70.0
PLT A4	31	69.1	69.3	69.5	69.7	69.9
PLT A4	32	69.5	69.7	69.9	70.1	70.3
PLT CENTER	33	69.6	69.8	70.0	70.2	70.4
PLT CONTRL	34	75.0	75.2	75.4	75.6	75.9
PLT A9-12	35	60.4	60.6	60.8	61.1	61.3
PLT A-14	36	63.1	63.3	63.6	63.8	64.0
PLT A-14	37	63.5	63.7	63.9	64.1	64.4
PLT A14	38	66.0	66.2	66.4	66.7	66.9
PLT A26	39	65.8	66.0	66.2	66.4	66.6
PLT A7,A8	40	63.7	63.9	64.1	64.4	64.6
FREQ MOD	41	62.4	62.6	62.9	63.1	63.3
ALT SSX	42	62.4	62.6	62.9	63.1	63.3
V.S. SSX	43	69.2	69.4	69.6	69.8	70.0
AMP.SW A13	44	61.2	61.5	61.7	61.9	62.2
AMP.SW A13	45	61.2	61.5	61.7	61.9	62.2
AMP.SW A14	46	62.8	63.0	63.2	63.5	63.7
AMP.SW A14	47	62.8	63.0	63.3	63.5	63.7
AMP.SW A14	48	62.3	62.5	62.7	62.9	63.2
AMP.SW A14	49	62.6	62.8	63.1	63.3	63.5
AMP.SW A14	50	64.8	65.1	65.3	65.5	65.7
AMP.SW A14	51	64.8	65.1	65.3	65.5	65.7

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	93.650	93.700	93.750	93.800	93.850
TH DET A13	52	61.3	61.5	61.7	62.0	62.2
TH DET A14	53	65.4	65.6	65.9	66.1	66.3
TH DET A14	54	65.5	65.7	65.9	66.1	66.4
TH DET A14	55	65.5	65.7	65.9	66.1	66.4
LEVELER	56	68.1	68.4	68.7	68.9	69.2
55CB AMP 5	57	55.2	55.4	55.7	55.9	56.1
55CB AMP 9	58	55.5	55.7	55.9	56.2	56.4
55CB AMP 9	59	55.5	55.7	55.9	56.2	56.4
55CB AMP 9	60	55.5	55.7	55.9	56.2	56.4
55CB AMP 9	61	55.5	55.7	55.9	56.2	56.4
55CB AMP 7	62	57.6	57.8	58.0	58.2	58.5
55CB AMP 7	63	57.6	57.8	58.0	58.2	58.5
HYB VS1	64	57.8	58.0	58.3	58.5	58.7
HYB VS3	65	55.7	55.9	56.2	56.4	56.6
HYE A6T	66	55.3	55.5	55.8	56.0	56.2
END FT FWD	67	56.9	57.2	57.4	57.6	57.9
SUP RT FWD	68	55.0	55.2	55.5	55.7	55.9
SUP RT MID	69	13.9	14.0	14.2	14.4	14.5
SUP RT AFT	70	57.5	57.7	57.9	58.1	58.4
END AFT	71	58.9	59.0	59.1	59.2	59.3
SUP LF AFT	72	55.6	55.8	56.0	56.2	56.4
SUP LF MID	73	34.8	35.0	35.2	35.4	35.6
SUP LF FWD	74	16.8	17.0	17.1	17.3	17.5
FM CASE	75	61.4	61.7	61.9	62.1	62.3
ALTX CASE	76	59.9	60.2	60.4	60.6	60.8
ALTA MB	77	61.9	62.2	62.4	62.6	62.8
CASE A5, A6	78	55.6	55.8	56.0	56.2	56.4
CASE A9-12	79	53.9	54.1	54.3	54.4	54.6
CASE MBA14	80	55.9	56.1	56.3	56.5	56.6
CASE VSX	81	64.3	64.5	64.7	64.9	65.1
CASE A7, A8	82	55.7	55.9	56.1	56.3	56.5
WG VS2 AFT	83	35.3	35.5	35.7	35.9	36.1
WG VS2MAFT	84	49.0	49.3	49.5	49.7	49.9
WG VS2MFWD	85	49.2	49.4	49.7	49.9	50.1
WG VS2 FWD	86	27.1	27.3	27.4	27.6	27.8
WG VS1MAFT	87	50.6	50.8	51.0	51.2	51.4
WG VS1 AFT	88	33.6	33.8	34.0	34.2	34.4
WG ALT MID	89	47.1	47.3	47.6	47.8	48.0
WG ALT CEN	90	31.2	31.4	31.6	31.8	32.0
HYB A25	91	53.1	53.3	53.5	53.7	53.9
HYB A24	92	51.4	51.6	51.9	52.1	52.3
HYB A23	93	50.3	50.5	50.8	51.0	51.2
TOP COVER	94	17.1	17.0	17.0	17.0	16.9
TILT STRCT	95	48.9	48.8	48.7	48.7	48.6
HTR CNTLR	96	74.9	75.1	75.4	75.6	75.8
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	50.2	50.1	49.9	49.8	49.7

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	93.900	93.950	94.000	94.050	94.100
VSR 3	1	11.5	11.6	11.8	11.9	12.1
FILLER BLK	2	14.5	14.6	14.8	14.9	15.0
VSR 2	3	15.5	15.6	15.8	15.9	16.1
ALTIM	4	16.2	16.3	16.5	16.7	16.8
VSR 1	5	13.3	13.5	13.6	13.8	13.9
XTRMA	6	32.0	32.1	32.3	32.5	32.6
SUP LF FWD	7	21.2	21.3	21.5	21.6	21.8
SUP LF AFT	8	23.8	24.0	24.1	24.3	24.4
SUP RT FWD	9	15.5	15.7	15.8	16.0	16.2
SUP RT AFT	10	14.0	14.2	14.3	14.5	14.6
SHROUD A C	11	9.6	9.8	9.9	10.1	10.2
SHROUD F C	12	7.6	7.7	7.9	8.0	8.2
SHROUD F R	13	-5.0	-4.9	-4.8	-4.6	-4.5
SHROUD R F	14	3.9	4.0	4.2	4.3	4.4
SHROUD L F	15	5.4	5.5	5.7	5.8	5.9
SHROUD TOP	16	-3.4	-3.2	-3.1	-3.0	-2.9
SHROUD R A	17	6.1	6.2	6.4	6.5	6.6
SUP RC	18	8.0	8.1	8.3	8.4	8.6
SHROUD L A	19	7.7	7.9	8.0	8.1	8.3
SHROUD F L	20	7.2	7.3	7.5	7.6	7.7
SHROUD A L	21	10.3	10.4	10.6	10.7	10.9
SHROUD A R	22	8.6	8.7	8.8	9.0	9.1
LEM BASE	23	-316.3	-317.7	-319.0	-320.3	-321.5
TLT EX FWD	24	-133.9	-134.1	-134.3	-134.5	-134.6
TLT EX LFT	25	-78.9	-79.0	-79.1	-79.2	-79.3
TLT EX AFT	26	-111.2	-111.4	-111.6	-111.7	-111.8
TLT EXT RT	27	-78.9	-79.0	-79.1	-79.2	-79.3
PLT MOCAIT	28	63.6	63.8	64.0	64.2	64.4
PLT A5,A6	29	62.5	62.7	62.9	63.1	63.3
PLT A-22	30	70.2	70.4	70.6	70.8	71.0
PLT A4	31	70.1	70.3	70.5	70.7	70.9
PLT A4	32	70.5	70.7	70.9	71.1	71.3
PLT CENTER	33	70.7	70.8	71.0	71.2	71.4
PLT CNTLR	34	76.1	76.2	76.4	76.6	76.8
PLT A9-12	35	61.5	61.7	61.9	62.1	62.3
PLT A-14	36	64.2	64.4	64.6	64.8	65.0
PLT A-14	37	64.6	64.8	65.0	65.1	65.3
PLT A14	38	67.1	67.3	67.5	67.7	67.9
PLT A26	39	66.9	67.1	67.2	67.4	67.6
PLT A7,A8	40	64.8	65.0	65.2	65.4	65.6
FREQ MOD	41	63.5	63.8	64.0	64.2	64.4
ALT SSX	42	63.5	63.7	64.0	64.2	64.3
V.S. SSX	43	70.2	70.4	70.6	70.8	71.0
AMP.SW A13	44	62.4	62.6	62.8	63.0	63.2
AMP.SW A13	45	62.4	62.6	62.8	63.0	63.2
AMP.SW A14	46	63.9	64.1	64.3	64.5	64.7
AMP.SW A14	47	63.9	64.1	64.3	64.5	64.7
AMP.SW A14	48	63.4	63.6	63.8	63.9	64.1
AMP.SW A14	49	63.7	63.9	64.1	64.3	64.5
AMP.SW A14	50	65.9	66.1	66.3	66.5	66.7
AMP.SW A14	51	65.9	66.1	66.3	66.5	66.7

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NOCE	TIME	93.900	93.950	94.000	94.050	94.100
TH DET A13	52	62.4	62.6	62.8	63.0	63.2
TH DET A14	53	66.5	66.7	66.9	67.1	67.3
TH DET A14	54	66.6	66.8	67.0	67.2	67.4
TH DET A14	55	66.6	66.8	67.0	67.2	67.3
LEVELER	56	69.4	69.7	69.9	70.1	70.3
55CB AMP 5	57	56.4	56.6	56.8	57.0	57.2
55CB AMP 9	58	56.6	56.8	57.0	57.2	57.4
55CB AMP 9	59	56.6	56.8	57.0	57.2	57.4
55CB AMP 9	60	56.6	56.8	57.0	57.2	57.4
55CB AMP 9	61	56.6	56.8	57.0	57.2	57.4
55CB AMP 7	62	58.7	58.9	59.1	59.2	59.4
55CB AMP 7	63	58.7	58.9	59.1	59.2	59.4
HYB VS1	64	58.9	59.1	59.3	59.5	59.7
HYB VS3	65	56.8	57.0	57.2	57.4	57.6
HYB A6T	66	56.4	56.7	56.9	57.1	57.3
END FT FWD	67	58.1	58.3	58.5	58.7	58.9
SUP RT FWC	68	56.1	56.4	56.6	56.8	57.0
SUP RT MID	69	14.7	14.9	15.0	15.2	15.4
SUP RT AFT	70	58.6	58.8	59.0	59.1	59.3
END AFT	71	59.4	59.5	59.6	59.8	59.9
SUP LF AFT	72	56.7	56.9	57.1	57.2	57.4
SUP LF MID	73	35.8	36.0	36.1	36.3	36.5
SUP LF FWD	74	17.6	17.8	18.0	18.1	18.3
FM CASE	75	62.6	62.8	63.0	63.2	63.4
ALTX CASE	76	61.0	61.3	61.5	61.6	61.8
ALTA MB	77	63.0	63.2	63.4	63.6	63.8
CASE A5, A6	78	56.6	56.8	57.0	57.2	57.4
CASE A9-12	79	54.8	55.0	55.1	55.3	55.5
CASE MBA14	80	56.8	57.0	57.1	57.3	57.5
CASE VSX	81	65.3	65.5	65.7	65.8	66.0
CASE A7, A8	82	56.7	56.9	57.1	57.3	57.4
WG VS2 AFT	83	36.3	36.5	36.6	36.8	37.0
WG VS2MAFT	84	50.1	50.3	50.5	50.7	50.9
WG VS2MFWD	85	50.3	50.5	50.7	50.9	51.1
WG VS2 FWD	86	28.0	28.2	28.3	28.5	28.7
WG VS1MAFT	87	51.6	51.8	52.0	52.2	52.4
WG VS1 AFT	88	34.6	34.7	34.9	35.1	35.2
WG ALT MID	89	48.3	48.5	48.7	48.9	49.1
WG ALT CEN	90	32.2	32.4	32.6	32.8	32.9
HYB A25	91	54.1	54.3	54.5	54.7	54.9
HYB A24	92	52.5	52.7	52.9	53.1	53.3
HYB A23	93	51.4	51.6	51.9	52.1	52.3
TOP COVER	94	16.9	16.9	16.9	16.9	16.9
TILT STRCT	95	48.5	48.5	48.4	48.4	48.3
HTR CNTLR	96	76.0	76.2	76.4	76.6	76.7
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	49.6	49.4	49.3	49.2	49.1

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	94.150	94.200	94.250	94.300	94.350
VSR 3	1	12.2	12.3	12.5	12.6	12.6
FILLER BLK	2	15.2	15.3	15.5	15.6	15.5
VSR 2	3	16.2	16.4	16.5	16.5	16.5
ALTIM.	4	17.0	17.1	17.2	17.2	17.2
VSR 1	5	14.1	14.2	14.3	14.4	14.3
XTRMA	6	32.8	33.0	33.1	32.9	32.6
SUP LF FWD	7	21.9	22.1	22.3	22.3	22.1
SUP LF AFT	8	24.6	24.7	24.9	24.9	24.6
SUP RT FWD	9	16.3	16.5	16.6	16.6	16.6
SUP RT AFT	10	14.7	14.9	15.0	15.1	15.0
SHROUD A C	11	10.4	10.5	10.6	10.7	10.6
SHROUD F C	12	8.3	8.4	8.6	8.6	8.5
SHROUD F R	13	-4.4	-4.3	-4.2	-4.1	-4.1
SHROUD R F	14	4.6	4.7	4.8	4.9	4.9
SHROUD L F	15	6.1	6.2	6.3	6.4	6.5
SHROUD TOP	16	-2.7	-2.6	-2.5	-2.4	-2.4
SHROUD R A	17	6.7	6.9	7.0	7.1	7.1
SUP RC	18	8.7	8.9	9.0	9.1	9.2
SHROUD L A	19	8.4	8.5	8.7	8.7	8.7
SHROUD F L	20	7.9	8.0	8.1	8.2	8.3
SHROUD A L	21	11.0	11.1	11.3	11.3	11.3
SHROUD A R	22	9.2	9.4	9.5	9.6	9.5
LEM BASE	23	-322.6	-323.8	-324.8	-325.9	-326.9
TLT EX FWD	24	-134.8	-134.9	-135.0	-135.2	-135.3
TLT EX LFT	25	-79.4	-79.5	-79.5	-79.6	-79.6
TLT EX AFT	26	-112.0	-112.1	-112.2	-112.3	-112.4
TLT EXT RT	27	-79.4	-79.5	-79.5	-79.6	-79.6
PLT MODALT	28	64.6	64.8	65.0	63.1	63.4
PLT A5,A6	29	62.5	63.7	63.8	59.7	62.0
PLT A-22	30	71.2	71.4	71.6	64.8	69.1
PLT A4	31	71.1	71.3	71.5	67.0	68.0
PLT A4	32	71.5	71.7	71.9	66.8	68.4
PLT CENTER	33	71.6	71.8	72.0	67.0	68.5
PLT CONTRL	34	77.0	77.2	77.4	66.0	73.3
PLT A9-12	35	62.4	62.6	62.8	59.2	60.8
PLT A-14	36	65.2	65.3	65.5	61.1	63.0
PLT A-14	37	65.5	65.7	65.9	61.6	63.4
PLT A14	38	68.1	68.2	68.4	63.9	65.6
PLT A26	39	67.8	68.0	68.2	63.8	65.5
PLT A7,A8	40	65.8	65.9	66.1	62.0	63.8
FREQ MOD	41	64.5	64.7	64.9	63.3	63.3
ALT SSX	42	64.5	64.7	64.9	63.3	63.3
V.S. SSX	43	71.2	71.4	71.6	67.4	68.1
AMP.SW A13	44	62.4	63.6	63.8	61.3	61.6
AMP.SW A13	45	62.4	63.6	63.8	61.3	61.6
AMP.SW A14	46	64.9	65.0	65.2	63.0	62.5
AMP.SW A14	47	64.9	65.0	65.2	63.0	62.5
AMP.SW A14	48	64.3	64.5	64.7	62.4	62.0
AMP.SW A14	49	64.7	64.9	65.0	62.9	62.4
AMP.SW A14	50	66.9	67.1	67.3	65.1	64.5
AMP.SW A14	51	66.9	67.1	67.3	65.1	64.5

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	94.150	94.200	94.250	94.300	94.350
TH DET A13	52	63.4	63.6	63.8	60.8	61.7
TH DET A14	53	67.5	67.7	67.9	64.8	64.9
TH DET A14	54	67.6	67.7	67.9	64.7	64.9
TH DET A14	55	67.5	67.7	67.9	64.7	64.9
LEVELER	56	70.5	70.7	70.9	70.0	69.5
55CB AMP 5	57	57.4	57.6	57.8	57.2	56.7
55CB AMP 9	58	57.6	57.8	57.9	57.5	56.9
55CB AMP 9	59	57.6	57.8	57.9	57.5	56.9
55CB AMP 9	60	57.6	57.8	57.9	57.5	56.9
55CB AMP 9	61	57.6	57.8	57.9	57.5	56.9
55CB AMP 7	62	59.6	59.8	60.0	59.5	58.8
55CB AMP 7	63	59.6	59.8	60.0	59.5	58.8
HYB VS1	64	59.9	60.1	60.2	59.0	58.8
HYB VS3	65	57.8	58.0	58.2	57.0	56.9
HYB A6T	66	57.5	57.7	57.9	56.6	56.7
END FT FWD	67	59.1	59.3	59.5	59.3	59.1
SUP RT FWD	68	57.2	57.3	57.5	56.3	56.4
SUP RT MID	69	15.5	15.7	15.8	15.9	16.0
SUP RT AFT	70	59.5	59.7	59.9	58.7	58.5
END AFT	71	60.0	60.1	60.2	60.3	60.3
SUP LF AFT	72	57.6	57.8	58.0	56.9	56.8
SUP LF MID	73	36.6	36.8	37.0	36.3	35.8
SUP LF FWD	74	18.5	18.6	18.8	19.0	19.1
FM CASE	75	63.6	63.8	64.0	63.4	62.7
ALTX CASE	76	62.0	62.2	62.4	62.1	61.5
ALTA MB	77	63.9	64.1	64.3	63.0	62.3
CASE A5, A6	78	57.6	57.7	57.9	57.9	57.4
CASE A9-12	79	55.6	55.8	55.9	55.9	55.6
CASE MBA14	80	57.6	57.8	57.9	57.7	57.2
CASE VSX	81	66.2	66.3	66.5	65.6	64.4
CASE A7, A8	82	57.6	57.8	58.0	58.0	57.7
WG VS2 AFT	83	37.1	37.3	37.5	37.3	37.0
WG VS2MAFT	84	51.1	51.3	51.5	51.4	51.0
WG VS2MFWD	85	51.3	51.5	51.6	51.6	51.2
WG VS2 FWD	86	28.8	29.0	29.2	29.3	29.2
WG VS1MAFT	87	52.6	52.8	52.9	52.9	52.4
WG VS1 AFT	88	35.4	35.6	35.7	35.8	35.6
WG ALT MID	89	49.3	49.5	49.7	49.8	49.5
WG ALT CEN	90	33.1	33.3	33.4	33.5	33.4
HYB A25	91	55.1	55.3	55.5	55.3	54.8
HYB A24	92	53.5	53.7	53.9	53.7	53.3
HYB A23	93	52.5	52.7	52.8	52.7	52.5
TOP COVER	94	16.9	17.0	17.0	17.0	17.0
TILT STRCT	95	48.3	48.3	48.2	48.2	48.1
HTR CUNTLR	96	76.9	77.1	77.3	66.4	73.1
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	49.0	48.9	48.9	48.8	48.7

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	94.400	94.450	94.500	94.550	94.600
VSR 3	1	12.6	12.7	12.7	12.7	12.8
FILLER BLK	2	15.5	15.5	15.6	15.6	15.6
VSR 2	3	16.4	16.4	16.5	16.5	16.6
ALTIM	4	17.1	17.2	17.2	17.3	17.3
VSR 1	5	14.3	14.3	14.3	14.3	14.4
XTRMA	6	32.6	32.6	32.6	32.7	32.9
SUP LF FWD	7	22.1	22.1	22.1	22.2	22.3
SUP LF AFT	8	24.6	24.6	24.6	24.7	24.8
SUP RT FWD	9	16.6	16.6	16.6	16.7	16.7
SUP RT AFT	10	15.0	14.9	15.0	15.0	15.1
SHROUD A C	11	10.5	10.5	10.5	10.6	10.6
SHROUD F C	12	8.5	8.5	8.5	8.5	8.6
SHROUD F R	13	-4.1	-4.1	-4.1	-4.1	-4.0
SHROUD R F	14	4.5	4.9	4.9	4.9	5.0
SHROUD L F	15	6.5	6.5	6.5	6.5	6.6
SHROUD TOP	16	-2.4	-2.4	-2.4	-2.4	-2.4
SHROUD R A	17	7.0	7.0	7.0	7.1	7.1
SUP RC	18	9.3	9.3	9.3	9.3	9.4
SHROUD L A	19	8.7	8.7	8.7	8.7	8.8
SHROUD F L	20	8.3	8.3	8.3	8.4	8.4
SHROUD A L	21	11.3	11.3	11.3	11.3	11.4
SHROUD A R	22	9.5	9.5	9.5	9.5	9.6
LEM BASE	23	-327.8	-328.8	-329.7	-330.5	-331.4
TLT EX FWD	24	-135.4	-135.5	-135.6	-135.6	-135.7
TLT EX LFT	25	-79.7	-79.8	-79.8	-79.9	-79.9
TLT EX AFT	26	-112.5	-112.6	-112.6	-112.7	-112.8
TLT EXT RT	27	-79.7	-79.8	-79.8	-79.9	-79.9
PLT MODALT	28	63.6	63.8	64.0	64.2	64.5
PLT A5, A6	29	62.5	62.7	63.0	63.2	63.4
PLT A-22	30	69.7	70.1	70.4	70.7	70.9
PLT A4	31	68.9	69.5	70.0	70.4	70.7
PLT A4	32	69.3	69.9	70.4	70.8	71.1
PLT CENTER	33	69.4	70.1	70.5	70.9	71.2
PLT CNTLR	34	75.0	75.7	76.1	76.4	76.7
PLT A9-12	35	61.2	61.5	61.8	62.0	62.2
PLT A-14	36	63.6	64.0	64.4	64.6	64.9
PLT A-14	37	63.9	64.4	64.7	65.0	65.2
PLT A14	38	66.2	66.7	67.1	67.4	67.7
PLT A26	39	66.0	66.5	66.9	67.2	67.5
PLT A7, A8	40	64.2	64.6	64.9	65.2	65.4
FREQ MOD	41	63.5	63.7	64.0	64.2	64.4
ALT SSX	42	63.5	63.7	64.0	64.2	64.4
V.S. SSX	43	69.0	69.6	70.1	70.4	70.8
AMP.SW A13	44	62.3	62.6	62.9	63.1	63.3
AMP.SW A13	45	62.3	62.6	62.9	63.1	63.3
AMP.SW A14	46	63.1	63.6	64.0	64.3	64.5
AMP.SW A14	47	63.1	63.6	64.0	64.3	64.6
AMP.SW A14	48	62.6	63.1	63.5	63.8	64.0
AMP.SW A14	49	63.0	63.4	63.8	64.1	64.4
AMP.SW A14	50	65.0	65.5	65.9	66.2	66.5
AMP.SW A14	51	65.0	65.5	65.9	66.2	66.5

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	94.400	94.450	94.500	94.550	94.600
TH DET A13	52	62.4	62.7	62.9	63.1	63.3
TH DET A14	53	65.5	66.1	66.5	66.8	67.1
TH DET A14	54	65.6	66.1	66.6	66.9	67.2
TH DET A14	55	65.6	66.1	66.5	66.9	67.2
LEVELER	56	69.5	69.6	69.8	70.0	70.2
55CB AMP 5	57	56.9	57.0	57.2	57.3	57.5
55CB AMP 9	58	56.9	57.0	57.1	57.3	57.5
55CB AMP 9	59	56.9	57.0	57.1	57.3	57.5
55CB AMP 9	60	56.9	57.0	57.1	57.3	57.5
55CB AMP 9	61	56.9	57.0	57.1	57.3	57.5
55CB AMP 7	62	58.8	58.9	59.0	59.2	59.4
55CB AMP 7	63	58.8	58.9	59.0	59.2	59.4
HYB VS1	64	58.9	59.0	59.2	59.4	59.6
HYB VS3	65	57.0	57.2	57.3	57.5	57.7
HYE A6T	66	56.9	57.1	57.3	57.4	57.6
END FT FWD	67	58.9	58.9	58.9	59.0	59.1
SUP RT FWD	68	56.6	56.8	56.9	57.1	57.3
SUP RT MID	69	16.0	16.0	16.0	16.1	16.1
SUP RT AFT	70	58.6	58.7	58.9	59.1	59.3
END AFT	71	60.4	60.4	60.5	60.6	60.7
SUP LF AFT	72	56.9	57.0	57.2	57.4	57.5
SUP LF MID	73	36.0	36.2	36.5	36.7	36.8
SUP LF FWD	74	19.1	19.2	19.3	19.3	19.4
FM CASE	75	62.6	62.8	63.0	63.2	63.4
ALTX CASE	76	61.4	61.4	61.5	61.7	61.9
ALTA MB	77	62.7	63.0	63.3	63.5	63.7
CASE A5, A6	78	57.2	57.2	57.2	57.4	57.5
CASE A9-12	79	55.4	55.3	55.3	55.4	55.5
CASE MBA14	80	57.0	57.0	57.0	57.2	57.3
CASE VSX	81	64.4	64.7	65.0	65.4	65.7
CASE A7, A8	82	57.4	57.2	57.2	57.3	57.4
WG VS2 AFT	83	37.0	37.0	37.1	37.2	37.3
WG VS2MAFT	84	50.8	50.8	50.9	51.0	51.1
WG VS2MFWD	85	51.0	51.0	51.1	51.2	51.3
WG VS2 FWD	86	29.1	29.1	29.1	29.2	29.2
WG VS1MAFT	87	52.2	52.1	52.1	52.3	52.4
WG VS1 AFT	88	35.4	35.3	35.3	35.4	35.5
WG ALT MID	89	49.4	49.4	49.4	49.5	49.6
WG ALT CEN	90	33.3	33.3	33.3	33.4	33.5
HYE A25	91	54.6	54.5	54.6	54.7	54.9
HYB A24	92	53.1	53.1	53.2	53.3	53.5
HYB A23	93	52.4	52.4	52.5	52.6	52.7
TCP COVER	94	17.0	17.0	17.0	17.1	17.1
TILT STRCT	95	48.1	48.0	48.0	47.9	47.9
HTR CONTRL	96	74.9	75.6	76.0	76.3	76.6
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	48.6	48.5	48.5	48.4	48.4

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	94.650	94.700	94.750	94.800	94.850
VSR 3	1	12.8	12.9	13.0	13.0	13.0
FILLER BLK	2	15.7	15.8	15.9	15.9	15.9
VSR 2	3	16.7	16.7	16.8	16.9	16.8
ALTIM	4	17.4	17.5	17.6	17.6	17.5
VSR 1	5	14.4	14.5	14.6	14.7	14.6
XTRMA	6	33.0	33.1	33.3	33.2	32.8
SUP LF FWD	7	22.4	22.5	22.6	22.6	22.4
SUP LF AFT	8	24.9	25.0	25.1	25.1	24.9
SUP RT FWD	9	16.8	16.9	17.0	17.0	16.9
SUP RT AFT	10	15.1	15.2	15.3	15.4	15.3
SHROUD A C	11	10.7	10.8	10.9	10.9	10.8
SHROUD F C	12	8.7	8.7	8.8	8.9	8.8
SHROUD F R	13	-4.0	-3.9	-3.9	-3.8	-3.8
SHROUD R F	14	5.0	5.1	5.2	5.2	5.2
SHROUD L F	15	6.6	6.7	6.8	6.8	6.8
SHROUD TOP	16	-2.3	-2.2	-2.2	-2.1	-2.1
SHROUD R A	17	7.2	7.2	7.3	7.4	7.3
SUP RC	18	9.4	9.5	9.5	9.6	9.6
SHROUD L A	19	8.9	8.9	9.0	9.1	9.0
SHROUD F L	20	8.4	8.5	8.6	8.6	8.6
SHROUD A L	21	11.4	11.5	11.6	11.7	11.6
SHROUD A R	22	9.6	9.7	9.8	9.9	9.8
LEM BASE	23	-332.2	-333.0	-333.8	-334.5	-335.2
TLT EX FWD	24	-135.8	-135.9	-136.0	-136.0	-136.1
TLT EX LFT	25	-80.0	-80.0	-80.1	-80.1	-80.2
TLT EX AFT	26	-112.9	-112.9	-113.0	-113.1	-113.1
TLT EXT RT	27	-80.0	-80.0	-80.1	-80.1	-80.2
PLT MODALT	28	64.6	64.8	65.0	63.7	63.4
PLT A5,A6	29	63.6	63.8	63.9	60.5	62.0
PLT A-22	30	71.2	71.4	71.6	65.6	69.0
PLT A4	31	70.9	71.2	71.4	68.1	67.8
PLT A4	32	71.3	71.6	71.8	67.9	68.2
PLT CENTER	33	71.5	71.7	71.9	68.1	68.2
PLT CNTLR	34	76.9	77.1	77.3	67.8	72.6
PLT A9-12	35	62.5	62.7	62.8	59.9	60.7
PLT A-14	36	65.1	65.3	65.5	62.0	62.8
PLT A-14	37	65.5	65.7	65.9	62.5	63.3
PLT A14	38	68.0	68.2	68.4	64.9	65.4
PLT A26	39	67.7	67.9	68.2	64.7	65.3
PLT A7,A8	40	65.7	65.9	66.1	62.8	63.7
FREQ MOD	41	64.6	64.8	65.0	63.8	63.3
ALT SSX	42	64.6	64.8	65.0	63.9	63.3
V.S. SSX	43	71.0	71.3	71.5	68.5	67.9
AMP.SW A13	44	63.5	63.7	63.9	62.1	61.5
AMP.SW A13	45	63.5	63.7	63.9	62.1	61.5
AMP.SW A14	46	64.8	65.0	65.2	63.7	62.5
AMP.SW A14	47	64.8	65.0	65.2	63.8	62.5
AMP.SW A14	48	64.3	64.5	64.7	63.2	61.9
AMP.SW A14	49	64.6	64.8	65.0	63.6	62.4
AMP.SW A14	50	66.8	67.0	67.2	65.8	64.5
AMP.SW A14	51	66.8	67.0	67.2	65.8	64.5

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NOTE	TIME	24.650	24.700	24.750	24.800	24.850
TH DET A13	52	63.5	63.7	63.9	61.7	61.6
TH DET A14	53	67.4	67.6	67.8	65.7	64.7
TH DET A14	54	67.4	67.7	67.9	65.7	64.8
TH DET A14	55	67.4	67.7	67.9	65.6	64.7
LEVELER	56	70.4	70.6	70.8	70.3	69.6
55CB AMP 5	57	57.7	57.8	58.0	57.7	56.9
55CB AMP 9	58	57.7	57.8	58.0	57.8	57.0
55CB AMP 9	59	57.7	57.8	58.0	57.8	57.0
55CB AMP 9	60	57.7	57.8	58.0	57.8	57.0
55CB AMP 9	61	57.7	57.8	58.0	57.8	57.0
55CB AMP 7	62	59.6	59.8	60.0	59.8	58.9
55CB AMP 7	63	59.6	59.8	60.0	59.8	58.9
HYB VS1	64	59.8	60.0	60.2	59.4	58.9
HYB VS3	65	57.9	58.1	58.2	57.5	57.0
HYB A6T	66	57.7	57.9	58.1	57.2	56.8
END FT FWD	67	59.3	59.4	59.6	59.6	59.2
SUP RT FWD	68	57.4	57.6	57.7	56.9	56.5
SUP RT MID	69	16.2	16.2	16.3	16.4	16.3
SUP RT AFT	70	59.5	59.7	59.9	59.1	58.5
END AFT	71	60.8	60.8	60.9	61.0	61.0
SUP LF AFT	72	57.7	57.9	58.1	57.4	56.8
SUP LF MID	73	37.0	37.1	37.3	36.9	36.1
SUP LF FWD	74	19.4	19.5	19.6	19.6	19.7
FM CASE	75	63.6	63.8	64.0	63.7	62.8
ALTX CASE	76	62.1	62.2	62.4	62.4	61.7
ALTA MB	77	63.9	64.1	64.3	63.5	62.3
CASE A5, A6	78	57.7	57.9	58.0	58.1	57.6
CASE A9-12	79	55.6	55.8	55.9	56.0	55.7
CASE MBA14	80	57.5	57.7	57.9	57.8	57.3
CASE VSX	81	66.0	66.2	66.4	66.0	64.5
CASE A7, A8	82	57.6	57.7	57.9	58.0	57.8
WG VS2 AFT	83	37.4	37.5	37.7	37.7	37.2
WG VS2MAFT	84	51.3	51.4	51.6	51.7	51.2
WG VS2MFWD	85	51.5	51.6	51.8	51.9	51.4
WG VS2 FWD	86	29.3	29.4	29.5	29.6	29.6
WG VS1MAFT	87	52.6	52.8	53.0	53.0	52.6
WG VS1 AFT	88	35.6	35.7	35.9	36.0	35.8
WG ALT MID	89	49.7	49.9	50.0	50.1	49.9
WG ALT CEN	90	33.6	33.7	33.8	33.9	33.7
HYB A25	91	55.1	55.3	55.5	55.5	54.9
HYB A24	92	53.7	53.8	54.0	54.0	53.5
HYB A23	93	52.9	53.0	53.1	53.1	52.7
TOP COVER	94	17.1	17.1	17.2	17.2	17.2
TILT STRCT	95	47.9	47.8	47.8	47.8	47.7
HTR CNTLR	96	76.8	77.1	77.3	68.3	72.3
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	48.3	48.3	48.2	48.2	48.1

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	94.900	94.950	95.000	95.050	95.100
VSR 3	1	13.0	12.9	12.9	12.9	12.9
FILLER BLK	2	15.8	15.8	15.8	15.8	15.8
VSR 2	3	16.7	16.7	16.6	16.7	16.7
ALTIM	4	17.4	17.4	17.4	17.4	17.5
VSR 1	5	14.5	14.5	14.4	14.5	14.5
XTRMA	6	32.7	32.7	32.7	32.8	32.9
SUP LF FWD	7	22.3	22.3	22.3	22.3	22.4
SUP LF AFT	8	24.8	24.7	24.7	24.8	24.9
SUP RT FWD	9	16.8	16.8	16.8	16.8	16.9
SUP RT AFT	10	15.2	15.1	15.1	15.1	15.2
SHROUD A C	11	10.7	10.7	10.7	10.7	10.7
SHROUD F C	12	8.7	8.6	8.6	8.6	8.7
SHROUD F R	13	-3.9	-3.9	-3.9	-3.9	-3.9
SHROUD R F	14	5.1	5.1	5.1	5.1	5.1
SHROUD L F	15	6.8	6.8	6.7	6.7	6.7
SHROUD TOP	16	-2.2	-2.2	-2.2	-2.2	-2.2
SHROUD R A	17	7.3	7.2	7.2	7.2	7.2
SUP RC	18	9.6	9.6	9.6	9.6	9.6
SHROUD L A	19	9.0	8.9	8.9	8.9	8.9
SHROUD F L	20	8.6	8.6	8.6	8.6	8.6
SHROUD A L	21	11.5	11.5	11.5	11.5	11.5
SHROUD A R	22	9.7	9.7	9.7	9.7	9.7
LEM BASE	23	-335.9	-336.6	-337.3	-337.9	-338.6
TLT EX FWD	24	-136.1	-136.2	-136.2	-136.3	-136.3
TLT EX LFT	25	-80.2	-80.3	-80.3	-80.4	-80.4
TLT EX AFT	26	-113.2	-113.2	-113.3	-113.3	-113.4
TLT EXT RT	27	-80.2	-80.3	-80.3	-80.4	-80.4
PLT MODALT	28	63.6	63.8	64.1	64.3	64.5
PLT A5,A6	29	62.5	62.8	63.0	63.2	63.4
PLT A-22	30	69.6	70.1	70.4	70.7	71.0
PLT A4	31	68.8	69.4	69.9	70.3	70.7
PLT A4	32	69.2	69.8	70.3	70.7	71.1
PLT CENTER	33	69.3	70.0	70.5	70.9	71.2
PLT CNTLR	34	74.8	75.6	76.0	76.4	76.7
PLT A9-12	35	61.2	61.5	61.8	62.1	62.3
PLT A-14	36	63.5	64.0	64.4	64.7	64.9
PLT A-14	37	63.9	64.3	64.7	65.0	65.3
PLT A14	38	66.1	66.7	67.1	67.4	67.7
PLT A26	39	66.0	66.4	66.8	67.2	67.5
PLT A7,A8	40	64.1	64.5	64.9	65.2	65.4
FREQ MOD	41	63.5	63.8	64.0	64.2	64.4
ALT SSX	42	63.5	63.8	64.0	64.2	64.4
V.S. SSX	43	68.8	69.5	70.0	70.4	70.8
AMP.SW A13	44	62.3	62.7	62.9	63.1	63.3
AMP.SW A13	45	62.3	62.7	62.9	63.1	63.3
AMP.SW A14	46	63.0	63.6	64.0	64.3	64.6
AMP.SW A14	47	63.0	63.6	64.0	64.3	64.6
AMP.SW A14	48	62.5	63.1	63.5	63.8	64.1
AMP.SW A14	49	62.9	63.4	63.8	64.1	64.4
AMP.SW A14	50	64.9	65.4	65.9	66.2	66.5
AMP.SW A14	51	64.9	65.4	65.9	66.2	66.5

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	94.500	94.550	95.000	95.050	95.100
TH DET A13	52	62.4	62.7	63.0	63.2	63.4
TH DET A14	53	65.5	66.0	66.5	66.8	67.1
TH DET A14	54	65.5	66.1	66.5	66.9	67.2
TH DET A14	55	65.5	66.1	66.5	66.9	67.2
LEVELER	56	65.5	69.6	69.8	70.0	70.2
55CB AMP 5	57	57.0	57.1	57.3	57.4	57.6
55CB AMP 9	58	57.0	57.0	57.2	57.4	57.5
55CB AMP 9	59	57.0	57.0	57.2	57.4	57.5
55CB AMP 9	60	57.0	57.0	57.2	57.4	57.5
55CB AMP 9	61	57.0	57.0	57.2	57.4	57.5
55CB AMP 7	62	58.8	58.9	59.0	59.2	59.4
55CB AMP 7	63	58.8	58.9	59.0	59.2	59.4
HYB VS1	64	58.9	59.0	59.2	59.4	59.6
HYB VS3	65	57.1	57.2	57.4	57.6	57.7
HYB A6T	66	57.0	57.2	57.4	57.5	57.6
END FT FWD	67	59.1	59.0	59.0	59.1	59.2
SUP RT FWD	68	56.7	56.9	57.0	57.2	57.3
SUP RT MID	69	16.3	16.3	16.3	16.3	16.3
SUP RT AFT	70	58.6	58.7	58.9	59.1	59.3
END AFT	71	61.0	61.1	61.2	61.2	61.3
SUP LF AFT	72	56.9	57.1	57.2	57.4	57.6
SUP LF MID	73	36.2	36.4	36.6	36.8	37.0
SUP LF FWD	74	19.7	19.7	19.7	19.7	19.7
FM CASE	75	62.7	62.8	63.0	63.2	63.4
ALTX CASE	76	61.4	61.4	61.5	61.7	61.9
ALTA MB	77	62.6	63.0	63.2	63.5	63.7
CASE A5, A6	78	57.3	57.2	57.3	57.4	57.6
CASE A9-12	79	55.4	55.3	55.3	55.4	55.5
CASE MBA14	80	57.0	56.9	57.0	57.1	57.3
CASE VSX	81	64.3	64.6	65.0	65.3	65.7
CASE A7, A8	82	57.4	57.3	57.2	57.3	57.4
WG VS2 AFT	83	37.1	37.1	37.2	37.3	37.4
WG VS2MAFT	84	51.0	50.9	51.0	51.1	51.2
WG VS2MFWD	85	51.2	51.1	51.2	51.3	51.4
WG VS2 FWD	86	29.4	29.3	29.3	29.3	29.4
WG VS1MAFT	87	52.3	52.2	52.2	52.3	52.5
WG VS1 AFT	88	35.5	35.4	35.4	35.4	35.5
WG ALT MID	89	49.7	49.6	49.6	49.7	49.7
WG ALT CEN	90	33.5	33.5	33.5	33.5	33.6
HYB A25	91	54.7	54.6	54.6	54.8	54.9
HYB A24	92	53.3	53.3	53.3	53.4	53.6
HYB A23	93	52.6	52.6	52.7	52.7	52.8
TOP COVER	94	17.2	17.2	17.2	17.2	17.3
TILT STRCT	95	47.7	47.6	47.6	47.5	47.5
HTR CNTLR	96	74.7	75.5	76.0	76.3	76.6
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	48.1	48.0	47.9	47.9	47.8

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	95.150	95.200	95.250	95.300	95.350
VSR 3	1	13.0	13.0	13.1	13.1	13.1
FILLER BLK	2	15.8	15.9	16.0	16.0	15.9
VSR 2	3	16.8	16.8	16.9	16.9	16.8
ALTIM	4	17.5	17.6	17.7	17.7	17.5
VSR 1	5	14.5	14.6	14.7	14.7	14.6
XTRMA	6	33.1	33.2	33.3	33.2	32.8
SUP LF FWD	7	22.5	22.5	22.6	22.7	22.4
SUP LF AFT	8	25.0	25.1	25.2	25.2	24.9
SUP RT FWD	9	16.9	17.0	17.1	17.1	17.0
SUP RT AFT	10	15.2	15.3	15.4	15.4	15.3
SHROUD A C	11	10.8	10.9	11.0	11.0	10.9
SHROUD F C	12	8.7	8.8	8.9	8.9	8.8
SHROUD F R	13	-3.9	-3.8	-3.8	-3.7	-3.8
SHROUD R F	14	5.1	5.2	5.2	5.3	5.2
SHROUD L F	15	6.8	6.8	6.9	6.9	6.9
SHROUD TOP	16	-2.2	-2.1	-2.1	-2.0	-2.0
SHROUD R A	17	7.3	7.3	7.4	7.4	7.4
SUP RC	18	9.6	9.6	9.7	9.7	9.7
SHROUD L A	19	9.0	9.0	9.1	9.1	9.1
SHROUD F L	20	8.6	8.6	8.7	8.7	8.7
SHROUD A L	21	11.6	11.6	11.7	11.7	11.6
SHROUD A R	22	9.7	9.8	9.9	9.9	9.8
LEM BASE	23	-339.2	-339.8	-340.4	-340.9	-341.5
TLT EX FWD	24	-136.4	-136.5	-136.5	-136.6	-136.6
TLT EX LFT	25	-80.4	-80.5	-80.5	-80.5	-80.6
TLT EX AFT	26	-113.4	-113.5	-113.6	-113.6	-113.6
TLT EXT RT	27	-80.4	-80.5	-80.5	-80.5	-80.6
PLT MODALT	28	64.7	64.9	65.1	63.5	63.4
PLT A5, A6	29	63.6	63.8	64.0	60.3	62.0
PLT A-22	30	71.2	71.4	71.6	65.3	69.1
PLT A4	31	70.9	71.2	71.4	67.7	67.9
PLT A4	32	71.3	71.6	71.8	67.5	68.3
PLT CENTER	33	71.5	71.7	71.9	67.7	68.3
PLT CCNTRLR	34	76.9	77.1	77.4	67.2	72.9
PLT A9-12	35	62.5	62.7	62.9	59.7	60.8
PLT A-14	36	65.2	65.4	65.6	61.7	62.9
PLT A-14	37	65.5	65.7	65.9	62.2	63.4
PLT A14	38	68.0	68.2	68.4	64.6	65.5
PLT A26	39	67.7	68.0	68.2	64.4	65.4
PLT A7, A8	40	65.7	65.9	66.1	62.5	63.7
FREQ MOD	41	64.6	64.8	65.0	63.7	63.4
ALT SSX	42	64.6	64.8	65.0	63.7	63.4
V.S. SSX	43	71.0	71.3	71.5	68.1	67.9
AMP.SW A13	44	63.5	63.7	63.9	61.9	61.6
AMP.SW A13	45	63.5	63.7	63.9	61.9	61.6
AMP.SW A14	46	64.8	65.0	65.2	63.5	62.5
AMP.SW A14	47	64.8	65.0	65.3	63.5	62.5
AMP.SW A14	48	64.3	64.5	64.7	63.0	62.0
AMP.SW A14	49	64.7	64.9	65.1	63.4	62.5
AMP.SW A14	50	66.8	67.0	67.3	65.6	64.5
AMP.SW A14	51	66.8	67.0	67.3	65.6	64.5

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	95.150	95.200	95.250	95.300	95.350
TH DET A13	52	63.6	63.7	63.9	61.4	61.7
TH DET A14	53	67.4	67.6	67.9	65.4	64.8
TH DET A14	54	67.5	67.7	67.9	65.4	64.8
TH DET A14	55	67.4	67.7	67.9	65.3	64.8
LEVELER	56	70.4	70.6	70.8	70.2	69.5
55CB AMP 5	57	57.7	57.9	58.0	57.7	56.9
55CB AMP 9	58	57.7	57.9	58.1	57.8	57.0
55CB AMP 9	59	57.7	57.9	58.1	57.8	57.0
55CB AMP 9	60	57.7	57.9	58.1	57.8	57.0
55CB AMP 9	61	57.7	57.9	58.1	57.8	57.0
55CB AMP 7	62	59.6	59.8	60.0	59.7	58.9
55CB AMP 7	63	59.6	59.8	60.0	59.7	58.9
HYB VS1	64	59.8	60.0	60.2	59.3	58.9
HYB VS3	65	57.9	58.1	58.3	57.4	57.0
HYB A6T	66	57.8	58.0	58.1	57.1	56.9
END FT FWD	67	59.3	59.5	59.6	59.6	59.2
SUP RT FWD	68	57.5	57.6	57.8	56.8	56.5
SUP RT MID	69	16.3	16.4	16.4	16.5	16.4
SUP RT AFT	70	59.5	59.7	59.9	59.0	58.5
END AFT	71	61.3	61.4	61.5	61.6	61.6
SUP LF AFT	72	57.8	58.0	58.1	57.3	56.9
SUP LF MID	73	37.1	37.2	37.4	36.8	36.2
SUP LF FWD	74	19.7	19.8	19.8	19.8	19.9
FM CASE	75	63.6	63.8	64.0	63.6	62.8
ALT X CASE	76	62.1	62.3	62.4	62.3	61.7
ALTA MB	77	63.9	64.1	64.3	63.3	62.3
CASE A5, A6	78	57.7	57.9	58.0	58.0	57.6
CASE A9-12	79	55.6	55.8	55.9	56.0	55.7
CASE MBA14	80	57.5	57.7	57.8	57.7	57.2
CASE VSX	81	65.9	66.2	66.4	65.8	64.4
CASE A7, A8	82	57.6	57.7	57.9	58.0	57.7
WG VS2 AFT	83	37.5	37.6	37.8	37.7	37.3
WG VS2MAFT	84	51.4	51.5	51.7	51.7	51.2
WG VS2MFWD	85	51.5	51.7	51.9	51.9	51.5
WG VS2 FWD	86	29.4	29.5	29.6	29.7	29.6
WG VS1MAFT	87	52.6	52.8	53.0	53.0	52.6
WG VS1 AFT	88	35.6	35.8	35.9	36.0	35.8
WG ALT MID	89	49.8	50.0	50.1	50.2	49.9
WG ALT CEN	90	33.7	33.8	33.9	33.9	33.7
HYB A25	91	55.1	55.3	55.5	55.4	54.9
HYB A24	92	53.7	53.9	54.1	54.0	53.5
HYB A23	93	53.0	53.1	53.2	53.1	52.8
TOP COVER	94	17.3	17.3	17.4	17.4	17.4
TILT STRCT	95	47.5	47.4	47.4	47.4	47.3
HTR CNTLR	96	76.8	77.1	77.3	67.6	72.6
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	47.8	47.7	47.7	47.7	47.6

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	95.400	95.450	95.500	95.550	95.600
VSR 3	1	13.1	13.0	13.0	13.0	13.0
FILLER BLK	2	15.9	15.8	15.8	15.8	15.8
VSR 2	3	16.7	16.7	16.7	16.7	16.7
ALTIM	4	17.4	17.4	17.4	17.4	17.5
VSR 1	5	14.5	14.5	14.5	14.5	14.5
XTRMA	6	32.7	32.7	32.8	32.9	33.0
SUP LF FWD	7	22.4	22.3	22.3	22.4	22.4
SUP LF AFT	8	24.8	24.8	24.8	24.8	24.9
SUP RT FWD	9	16.9	16.9	16.9	16.9	16.9
SUP RT AFT	10	15.2	15.2	15.1	15.1	15.2
SHROUD A C	11	10.8	10.7	10.7	10.7	10.8
SHROUD F C	12	8.7	8.7	8.7	8.7	8.7
SHROUD F R	13	-3.8	-3.9	-3.9	-3.9	-3.9
SHROUD R F	14	5.2	5.1	5.1	5.1	5.1
SHROUD L F	15	6.9	6.8	6.8	6.8	6.8
SHROUD TOP	16	-2.1	-2.2	-2.2	-2.2	-2.2
SHROUD R A	17	7.3	7.3	7.2	7.2	7.3
SUP RC	18	9.7	9.7	9.7	9.6	9.6
SHROUD L A	19	9.0	9.0	8.9	8.9	9.0
SHROUD F L	20	8.7	8.6	8.6	8.6	8.6
SHROUD A L	21	11.6	11.5	11.5	11.5	11.5
SHROUD A R	22	9.8	9.7	9.7	9.7	9.7
LEM BASE	23	-342.0	-342.6	-343.1	-343.6	-344.1
TLT EX FWD	24	-136.7	-136.7	-136.7	-136.7	-136.8
TLT EX LFT	25	-80.6	-80.7	-80.7	-80.7	-80.7
TLT EX AFT	26	-113.7	-113.7	-113.8	-113.8	-113.8
TLT EXT RT	27	-80.6	-80.7	-80.7	-80.7	-80.7
PLT MODALT	28	63.6	63.9	64.1	64.3	64.5
PLT A5,A6	29	62.5	62.8	63.1	63.3	63.4
PLT A-22	30	69.7	70.1	70.4	70.7	71.0
PLT A4	31	68.8	69.5	70.0	70.4	70.7
PLT A4	32	69.2	69.9	70.4	70.8	71.1
PLT CENTER	33	69.3	70.0	70.5	70.9	71.2
PLT CNTLR	34	74.9	75.6	76.1	76.4	76.7
PLT A9-12	35	61.2	61.6	61.9	62.1	62.3
PLT A-14	36	63.6	64.1	64.4	64.7	65.0
PLT A-14	37	64.0	64.4	64.8	65.1	65.3
PLT A14	38	66.2	66.7	67.1	67.5	67.8
PLT A26	39	66.0	66.5	66.9	67.2	67.5
PLT A7,A8	40	64.2	64.6	64.9	65.2	65.5
FREQ MOD	41	63.6	63.8	64.0	64.2	64.4
ALT SSX	42	63.6	63.8	64.0	64.2	64.4
V.S. SSX	43	68.9	69.5	70.1	70.5	70.8
AMP.SW A13	44	62.3	62.7	63.0	63.2	63.4
AMP.SW A13	45	62.3	62.7	63.0	63.2	63.4
AMP.SW A14	46	63.1	63.6	64.0	64.3	64.6
AMP.SW A14	47	63.1	63.6	64.0	64.3	64.6
AMP.SW A14	48	62.6	63.1	63.5	63.8	64.1
AMP.SW A14	49	63.0	63.5	63.8	64.2	64.4
AMP.SW A14	50	65.0	65.5	65.9	66.3	66.6
AMP.SW A14	51	65.0	65.5	65.9	66.3	66.6

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	95.400	95.450	95.500	95.550	95.600
TH DET A13	52	62.4	62.8	63.0	63.2	63.4
TH DET A14	53	65.5	66.1	66.5	66.9	67.2
TH DET A14	54	65.6	66.1	66.6	66.9	67.2
TH DET A14	55	65.6	66.1	66.6	66.9	67.2
LEVELER	56	69.5	69.6	69.8	70.0	70.2
55CB AMP 5	57	57.0	57.2	57.3	57.5	57.6
55CB AMP 9	58	57.0	57.1	57.2	57.4	57.6
55CB AMP 9	59	57.0	57.1	57.2	57.4	57.6
55CB AMP 9	60	57.0	57.1	57.2	57.4	57.6
55CB AMP 9	61	57.0	57.1	57.2	57.4	57.6
55CB AMP 7	62	58.8	58.9	59.0	59.2	59.4
55CB AMP 7	63	58.8	58.9	59.0	59.2	59.4
HYB VS1	64	58.9	59.1	59.2	59.4	59.7
HYB VS3	65	57.1	57.3	57.4	57.6	57.8
HYB A6T	66	57.1	57.3	57.4	57.5	57.7
END FT FWD	67	59.1	59.0	59.0	59.1	59.2
SUP RT FWD	68	56.8	56.9	57.1	57.2	57.4
SUP RT MID	69	16.4	16.4	16.3	16.3	16.3
SUP RT AFT	70	58.6	58.7	58.9	59.1	59.3
END AFT	71	61.6	61.6	61.6	61.7	61.8
SUP LF AFT	72	57.0	57.1	57.3	57.5	57.6
SUP LF MIC	73	36.3	36.5	36.7	36.9	37.0
SUP LF FWD	74	19.9	19.9	19.8	19.8	19.8
FM CASE	75	62.7	62.8	63.0	63.2	63.4
ALTX CASE	76	61.4	61.4	61.6	61.7	61.9
ALTA MB	77	62.7	63.0	63.3	63.5	63.7
CASE A5, A6	78	57.3	57.2	57.3	57.4	57.6
CASE A9-12	79	55.4	55.3	55.3	55.3	55.5
CASE MBA14	80	57.0	56.9	57.0	57.1	57.3
CASE VSX	81	64.3	64.6	65.0	65.3	65.7
CASE A7, A8	82	57.4	57.2	57.2	57.3	57.4
WG VS2 AFT	83	37.2	37.2	37.2	37.3	37.4
WG VS2MAFT	84	51.0	51.0	51.0	51.1	51.2
WG VS2MFWD	85	51.2	51.2	51.2	51.3	51.4
WG VS2 FWD	86	29.5	29.4	29.4	29.4	29.4
WG VS1MAFT	87	52.3	52.2	52.2	52.3	52.5
WG VS1 AFT	88	35.6	35.4	35.4	35.5	35.6
WG ALT MID	89	49.7	49.7	49.7	49.7	49.8
WG ALT CEN	90	33.6	33.5	33.5	33.6	33.6
HYB A25	91	54.7	54.6	54.7	54.8	55.0
HYB A24	92	53.3	53.3	53.4	53.5	53.6
HYB A23	93	52.7	52.7	52.7	52.8	52.9
TCP COVER	94	17.4	17.4	17.4	17.4	17.4
TILT STRCT	95	47.3	47.2	47.2	47.2	47.2
HTR CONTRL	96	74.8	75.5	76.0	76.3	76.6
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	47.5	47.5	47.5	47.5	47.4

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	95.450	95.700	95.750	95.800	95.850
VSR 3	1	12.0	14.4	18.3	23.5	29.5
FILLER BLK	2	15.9	16.8	20.4	25.3	30.7
VSR 2	3	16.8	18.6	23.6	29.1	34.5
ALTIM	4	17.5	21.5	28.9	36.2	43.1
VSR 1	5	14.6	20.2	29.7	38.9	47.1
XTRMA	6	33.1	33.4	34.4	35.6	37.6
SUP LF FWD	7	22.5	23.8	27.0	30.6	34.8
SUP LF AFT	8	25.0	26.4	29.9	33.5	37.4
SUP RT FWD	9	17.0	44.3	53.3	60.5	67.4
SUP RT AFT	10	15.2	37.7	49.5	58.9	67.0
SHROUD A C	11	10.8	31.7	54.8	67.9	76.3
SHROUD F C	12	8.8	30.8	55.6	71.7	83.3
SHROUD F R	13	-3.9	23.1	49.8	66.6	78.6
SHROUD R F	14	5.2	72.8	97.7	112.0	122.0
SHROUD L F	15	6.8	26.7	42.9	53.5	62.2
SHROUD TOP	16	-2.2	72.1	110.8	131.1	144.1
SHROUD R A	17	7.3	72.5	92.9	106.2	116.1
SUP RC	18	5.6	15.5	24.4	33.4	42.5
SHROUD L A	19	5.0	29.0	45.8	56.7	65.2
SHROUD F L	20	8.6	24.5	37.0	46.1	54.1
SHROUD A L	21	11.6	27.8	40.9	49.9	57.2
SHROUD A R	22	5.8	29.1	45.8	57.7	67.0
LEM BASE	23	-344.5	-345.0	-344.4	-315.4	-243.7
TLT EX FWD	24	-136.8	-136.8	-136.9	-136.8	-136.5
TLT EX LFT	25	-80.8	-80.8	-80.8	-80.8	-80.5
TLT EX AFT	26	-113.8	-113.9	-113.9	-113.9	-113.4
TLT EXT RT	27	-80.8	-80.8	-80.8	-80.8	-80.5
PLT MODALT	28	64.7	64.9	64.3	63.5	64.1
PLT A5, A6	29	63.6	63.9	61.9	62.3	63.9
PLT A-22	30	71.2	71.5	67.1	69.0	70.4
PLT A4	31	71.0	71.3	69.6	67.8	69.5
PLT A4	32	71.4	71.7	69.4	68.2	69.9
PLT CENTER	33	71.5	71.8	69.8	68.0	69.9
PLT CUNTLR	34	76.9	77.2	70.9	71.2	75.2
PLT A9-12	35	62.5	62.8	61.0	60.9	62.2
PLT A-14	36	65.2	65.4	63.4	63.0	64.6
PLT A-14	37	65.5	65.8	63.7	63.4	64.7
PLT A14	38	68.0	68.3	66.2	65.4	66.9
PLT A26	39	67.8	68.0	66.0	65.4	66.8
PLT A7, A8	40	65.7	66.0	64.0	64.0	65.4
FREQ MOD	41	64.6	64.8	64.4	63.4	64.0
ALT SSX	42	64.6	64.8	64.4	63.4	64.0
V.S. SSX	43	71.1	71.3	70.0	67.8	69.4
AMP.SW A13	44	63.6	63.8	63.3	61.7	63.3
AMP.SW A13	45	63.6	63.8	63.3	61.7	63.3
AMP.SW A14	46	64.8	65.1	64.7	62.6	63.7
AMP.SW A14	47	64.9	65.1	64.7	62.6	63.7
AMP.SW A14	48	64.3	64.6	64.2	62.2	63.3
AMP.SW A14	49	64.7	64.9	64.5	62.6	63.5
AMP.SW A14	50	66.8	67.1	66.7	64.7	65.6
AMP.SW A14	51	66.8	67.1	66.7	64.7	65.6

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NOCE	TIME	95.650	95.700	95.750	95.800	95.850
TH DET A13	52	63.6	63.8	63.1	61.7	63.5
TH DET A14	53	67.4	67.7	66.9	64.7	66.1
TH DET A14	54	67.5	67.7	66.9	64.7	66.2
TH DET A14	55	67.5	67.7	66.9	64.7	66.2
LEVELER	56	70.4	70.7	70.6	69.6	69.6
55CB AMP 5	57	57.7	58.0	58.2	57.6	58.4
55CB AMP 9	58	57.7	57.9	58.1	57.3	57.6
55CB AMP 9	59	57.7	57.9	58.1	57.3	57.6
55CB AMP 9	60	57.7	57.9	58.1	57.3	57.6
55CB AMP 9	61	57.7	57.9	58.1	57.3	57.6
55CB AMP 7	62	59.6	59.9	60.2	59.7	60.3
55CB AMP 7	63	59.6	59.9	60.2	59.7	60.3
HYB VS1	64	59.9	60.2	60.3	59.8	60.9
HYB VS3	65	58.0	58.2	58.0	57.3	58.0
HYB A6T	66	57.8	58.1	58.1	57.7	58.9
ENC FT FWD	67	59.3	59.5	59.7	59.4	59.5
SUP RT FWD	68	57.5	57.9	58.0	57.5	58.8
SUP RT MID	69	16.4	17.3	21.2	27.1	33.9
SUP RT AFT	70	59.5	59.9	60.1	59.7	60.8
ENC AFT	71	61.8	61.9	61.9	61.9	61.9
SUP LF AFT	72	57.8	58.0	57.9	57.2	57.9
SUP LF MID	73	37.1	37.4	38.2	38.9	41.3
SUP LF FWD	74	19.8	19.9	20.5	21.8	23.7
FM CASE	75	63.6	63.9	64.0	63.1	63.1
ALTX CASE	76	62.1	62.3	62.5	62.0	62.0
ALTA MB	77	63.9	64.1	64.1	62.7	63.3
CASE A5, A6	78	57.7	57.9	58.2	58.2	58.3
CASE A9-12	79	55.6	55.8	56.1	56.2	56.3
CASE MBA14	80	57.5	57.7	58.1	58.0	58.4
CASE VSX	81	65.9	66.2	66.4	65.0	65.0
CASE A7, A8	82	57.6	57.7	58.0	58.2	58.3
WG VS2 AFT	83	37.5	38.2	40.4	42.7	45.4
WG VS2MAFT	84	51.4	51.6	52.1	52.3	53.0
WG VS2MFWD	85	51.6	51.8	52.1	52.3	52.8
WG VS2 FWD	86	29.5	29.8	31.4	34.0	37.2
WG VS1MAFT	87	52.7	53.0	54.0	55.1	56.5
WG VS1 AFT	88	35.7	37.1	41.4	46.1	50.6
WG ALT MID	89	49.9	50.1	50.8	51.7	52.8
WG ALT CEN	90	33.7	35.3	39.3	43.4	47.4
HYE A25	91	55.1	55.4	56.0	56.5	57.5
HYB A24	92	53.8	53.9	54.2	54.1	54.5
HYB A23	93	53.0	53.2	53.6	53.9	54.8
TOP COVER	94	17.4	17.7	18.5	19.7	21.1
TILT STRCT	95	47.1	47.1	47.1	47.2	47.3
HTR CNTLR	96	76.9	77.1	71.5	70.8	75.0
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	47.4	47.4	47.3	47.3	47.3

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NOCE	TIME	95.900	95.950	96.000	96.050	96.100
VSR 3	1	36.3	43.8	51.8	60.3	69.1
FILLER BLK	2	36.7	43.3	50.4	58.2	66.6
VSR 2	3	40.4	46.7	53.6	61.3	69.7
ALTIM	4	49.7	56.4	63.3	70.8	78.6
VSR 1	5	54.5	61.4	68.0	74.8	81.7
XTRMA	6	40.4	43.8	47.6	52.5	57.7
SUP LF FWD	7	39.7	45.3	51.3	58.0	64.9
SUP LF AFT	8	41.8	46.7	52.1	58.3	65.0
SUP RT FWD	9	74.0	80.4	86.7	93.4	100.4
SUP RT AFT	10	73.9	80.2	86.1	92.2	98.5
SHROUD A C	11	82.8	89.0	95.2	101.8	108.7
SHROUD F C	12	92.7	101.3	109.5	116.8	123.6
SHROUD F R	13	89.0	100.5	113.0	123.7	133.0
SHROUD R F	14	130.1	137.8	145.6	153.3	160.7
SHROUD L F	15	70.5	78.9	87.7	96.5	105.2
SHROUD TCP	16	153.8	162.6	171.3	179.2	186.4
SHROUD R A	17	124.3	131.8	139.0	146.0	152.9
SUP RC	18	51.5	60.3	68.6	76.4	83.9
SHROUD L A	19	72.9	80.6	88.7	97.0	105.5
SHROUD F L	20	61.8	69.8	78.0	86.4	94.6
SHROUD A L	21	63.9	70.7	77.9	85.7	93.8
SHROUD A R	22	75.0	82.3	89.3	96.4	103.4
LEM BASE	23	-124.4	-7.5	61.6	97.7	121.6
TLT EX FWD	24	-134.1	-123.9	-102.0	-72.9	-42.0
TLT EX LFT	25	-78.2	-68.8	-49.4	-25.5	-2.1
TLT EX AFT	26	-110.3	-96.9	-68.7	-32.5	4.0
TLT EXT RT	27	-78.2	-68.8	-49.4	-25.5	-2.1
PLT MODALT	28	64.9	64.2	64.4	65.7	65.4
PLT A5,A6	29	65.2	62.8	65.1	66.8	65.4
PLT A-22	30	71.7	66.5	70.4	70.6	67.5
PLT A4	31	71.1	68.7	68.8	71.3	69.0
PLT A4	32	71.5	68.6	69.3	71.1	68.9
PLT CENTER	33	71.5	68.6	69.0	71.6	68.8
PLT CNTLR	34	77.1	68.2	72.5	75.2	67.9
PLT A9-12	35	63.5	61.6	63.3	65.0	64.1
PLT A-14	36	66.1	63.6	65.2	67.2	65.7
PLT A-14	37	66.1	63.7	65.3	67.1	65.6
PLT A14	38	66.4	65.8	67.0	69.0	67.1
PLT A26	39	66.3	65.9	67.2	69.0	67.2
PLT A7,A8	40	66.9	64.7	66.5	68.2	66.8
FREQ MOD	41	64.8	64.3	64.3	65.7	65.4
ALT SSX	42	64.8	64.3	64.3	65.7	65.4
V.S. SSX	43	71.1	68.9	68.7	71.4	69.1
AMP.SW A13	44	64.6	63.8	63.8	66.5	65.6
AMP.SW A13	45	64.6	63.8	63.8	66.5	65.6
AMP.SW A14	46	65.1	64.6	64.0	66.5	66.0
AMP.SW A14	47	65.1	64.7	64.0	66.5	66.0
AMP.SW A14	48	64.8	64.4	63.9	66.4	66.0
AMP.SW A14	49	64.9	64.5	64.0	66.4	65.9
AMP.SW A14	50	67.0	66.6	65.9	68.2	67.6
AMP.SW A14	51	67.0	66.6	65.9	68.2	67.6

APOLLO 1C MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	95.500	95.950	96.000	96.050	96.100
TH DET A13	52	64.8	63.5	64.0	66.9	65.5
TH DET A14	53	67.6	66.4	66.0	68.8	67.4
TH DET A14	54	67.7	66.4	66.0	68.8	67.3
TH DET A14	55	67.7	66.4	66.0	68.8	67.3
LEVELER	56	70.0	69.8	69.2	69.8	69.4
55CB AMP 5	57	59.6	60.4	60.7	62.5	63.5
55CB AMP 9	58	58.4	59.1	59.2	60.6	61.7
55CB AMP 9	59	58.4	59.1	59.2	60.6	61.7
55CB AMP 9	60	58.4	59.1	59.2	60.6	61.7
55CB AMP 9	61	58.4	59.1	59.2	60.6	61.7
55CB AMP 7	62	61.5	62.5	62.9	64.5	65.6
55CB AMP 7	63	61.5	62.5	62.9	64.5	65.6
HYB VS1	64	62.4	62.9	63.6	65.7	66.2
HYB VS3	65	59.0	59.2	59.7	61.5	62.1
HYB A6T	66	60.2	60.5	61.3	63.4	63.9
END FT FWD	67	59.9	60.3	60.6	61.4	62.1
SUP RT FWD	68	60.1	60.5	61.3	63.5	64.1
SUP RT MID	69	41.0	48.1	55.2	62.2	69.2
SUP RT AFT	70	62.3	62.9	63.6	65.7	66.3
END AFT	71	62.0	62.1	62.1	62.2	62.3
SUP LF AFT	72	58.9	59.2	59.7	61.5	62.1
SUP LF MID	73	44.6	47.8	50.9	55.6	59.9
SUP LF FWD	74	26.4	29.7	33.8	38.4	43.6
FM CASE	75	63.8	64.1	63.8	64.7	65.2
ALTX CASE	76	62.4	62.9	62.9	63.6	64.2
ALTA MB	77	64.4	64.4	63.8	65.6	65.5
CASE A5, A6	78	59.0	59.8	60.3	61.2	62.4
CASE A9-12	79	56.9	57.6	58.2	59.1	60.3
CASE MBA14	80	59.2	60.1	60.6	61.8	62.9
CASE VSX	81	66.0	66.5	65.8	66.9	67.3
CASE A7, A8	82	58.8	59.7	60.4	61.3	62.5
WG VS2 AFT	83	48.6	52.0	55.4	59.8	64.4
WG VS2MAFT	84	54.1	55.5	56.7	58.5	60.6
WG VS2MFWD	85	53.9	55.3	56.5	58.2	60.2
WG VS2 FWD	86	41.1	45.6	50.5	55.8	61.5
WG VS1MAFT	87	58.4	60.5	62.1	64.0	66.1
WG VS1 AFT	88	55.0	59.3	63.2	67.2	71.4
WG ALT MID	89	54.4	56.2	57.8	59.8	62.0
WG ALT CEN	90	51.5	55.7	59.9	64.6	69.6
HYB A25	91	59.1	60.8	62.0	63.8	65.5
HYB A24	92	55.4	56.5	57.3	58.9	60.5
HYB A23	93	56.1	57.5	58.6	60.4	62.1
TOP COVER	94	22.7	24.5	26.4	28.6	31.0
TILT STRCT	95	47.4	47.6	47.8	48.1	48.5
HTR CONTRL	96	76.9	68.5	72.1	75.8	68.0
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	47.3	47.3	47.3	47.4	47.5

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	96.150	96.200	96.250	96.300	96.350
VSR 3	1	77.6	85.8	93.2	99.5	104.6
FILLER BLK	2	75.0	83.4	91.2	98.3	104.2
VSR 2	3	78.4	87.0	95.4	102.9	109.2
ALTIM	4	86.7	94.7	102.6	109.8	116.1
VSR 1	5	88.9	96.1	103.3	110.2	116.5
XTRMA	6	63.0	68.5	73.8	78.8	83.3
SUP LF FWD	7	71.8	78.5	84.7	90.1	94.7
SUP LF AFT	8	71.8	78.6	85.2	91.1	96.3
SUP RT FWD	9	107.4	114.4	121.3	127.9	133.9
SUP RT AFT	10	104.8	111.4	117.9	124.4	130.4
SHROUD A C	11	115.6	122.5	129.2	135.5	141.0
SHROUD F C	12	129.3	134.2	138.5	142.1	145.1
SHROUD F R	13	140.8	147.4	152.7	156.6	159.3
SHROUD R F	14	167.8	174.6	180.9	186.7	191.6
SHROUD L F	15	113.4	120.9	127.6	133.1	137.5
SHROUD TOP	16	192.8	198.6	203.7	208.2	211.9
SHROUD R A	17	159.6	166.2	172.5	178.5	183.9
SUP RC	18	90.8	97.3	103.4	109.0	114.2
SHROUD L A	19	113.7	121.5	128.8	134.9	140.0
SHROUD F L	20	102.5	109.9	116.5	122.2	126.7
SHROUD A L	21	102.0	110.2	117.9	124.9	130.9
SHROUD A R	22	110.5	117.5	124.4	130.8	136.8
LEM BASE	23	137.5	146.3	150.5	146.8	139.2
TLT EX FWD	24	-13.2	11.2	29.2	40.7	46.2
TLT EX LFT	25	18.0	33.7	44.3	50.2	51.9
TLT EX AFT	26	35.7	60.3	76.8	85.8	88.6
TLT EXT RT	27	18.0	33.7	44.3	50.2	51.9
PLT MODALT	28	65.3	65.6	66.3	67.4	68.7
PLT A5,A6	29	65.7	66.7	68.0	69.7	71.6
PLT A-22	30	67.0	67.2	67.8	68.9	70.3
PLT A4	31	67.7	67.4	67.9	68.9	70.3
PLT A4	32	67.7	67.4	67.9	68.9	70.4
PLT CENTER	33	67.5	67.2	67.7	68.7	70.1
PLT CNTLR	34	66.2	66.2	67.0	68.3	69.9
PLT A9-12	35	64.4	65.3	66.7	68.4	70.4
PLT A-14	36	65.6	66.2	67.5	69.1	71.1
PLT A-14	37	65.4	65.9	67.0	68.6	70.4
PLT A14	38	66.5	66.6	67.4	68.7	70.4
PLT A26	39	66.7	66.9	67.7	68.9	70.6
PLT A7,A8	40	66.7	67.2	68.2	69.6	71.3
FREQ MOD	41	65.3	65.6	66.3	67.3	68.6
ALT SSX	42	65.3	65.6	66.2	67.2	68.5
V.S. SSX	43	67.7	67.4	67.8	68.7	70.1
AMP.SW A13	44	65.5	66.2	67.4	68.9	70.7
AMP.SW A13	45	65.5	66.2	67.4	68.9	70.7
AMP.SW A14	46	65.5	65.8	66.8	68.2	70.0
AMP.SW A14	47	65.5	65.8	66.8	68.2	70.0
AMP.SW A14	48	65.6	66.0	67.1	68.6	70.4
AMP.SW A14	49	65.5	65.8	66.7	68.1	69.9
AMP.SW A14	50	67.0	66.9	67.5	68.6	70.1
AMP.SW A14	51	67.0	66.9	67.5	68.6	70.1

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	96.150	96.200	96.250	96.300	96.350
TH DET A13	52	65.6	66.4	67.6	69.2	71.0
TH DET A14	53	66.6	66.6	67.3	68.6	70.2
TH DET A14	54	66.6	66.6	67.3	68.6	70.2
TH DET A14	55	66.6	66.6	67.3	68.6	70.2
LEVELER	56	68.8	68.3	68.1	68.2	68.5
55CB AMP 5	57	64.3	65.4	66.9	68.6	70.6
55CB AMP 9	58	62.4	63.4	64.7	66.4	68.3
55CB AMP 9	59	62.4	63.4	64.7	66.4	68.3
55CB AMP 9	60	62.4	63.4	64.7	66.4	68.3
55CB AMP 9	61	62.4	63.4	64.7	66.4	68.3
55CB AMP 7	62	66.3	67.1	68.1	69.5	71.1
55CB AMP 7	63	66.3	67.1	68.1	69.5	71.1
HYB VS1	64	66.8	67.7	68.9	70.4	72.2
HYB VS3	65	62.9	64.0	65.5	67.3	69.4
HYE A6T	66	64.8	66.1	67.7	69.6	71.7
ENC FT FWD	67	62.8	63.5	64.4	65.6	66.9
SUP RT FWD	68	65.0	66.3	68.0	69.9	72.0
SUP RT MID	69	76.2	83.2	90.1	96.7	103.0
SUP RT AFT	70	67.0	67.9	69.2	70.7	72.5
ENC AFT	71	62.4	62.4	62.5	62.7	62.8
SUP LF AFT	72	62.9	64.1	65.6	67.4	69.5
SUP LF MID	73	64.1	68.7	73.5	78.4	83.2
SUP LF FWD	74	49.3	55.4	61.5	67.7	73.6
FM CASE	75	65.3	65.5	66.1	66.9	68.2
ALTX CASE	76	64.6	64.9	65.5	66.4	67.6
ALTA MB	77	65.2	65.5	66.1	67.2	68.6
CASE A5, A6	78	63.3	64.2	65.3	66.6	68.2
CASE A9-12	79	61.3	62.4	63.6	65.0	66.7
CASE MBA14	80	63.8	64.7	65.9	67.3	68.9
CASE VSX	81	66.9	66.6	66.8	67.5	68.6
CASE A7, A8	82	63.6	64.6	65.7	66.9	68.3
WG VS2 AFT	83	69.0	73.8	78.6	83.2	87.5
WG VS2MAFT	84	62.5	64.6	66.8	69.2	71.7
WG VS2MFWD	85	62.1	64.1	66.2	68.5	71.0
WG VS2 FWD	86	67.3	72.9	78.3	83.2	87.6
WG VS1MAFT	87	67.9	69.7	71.6	73.6	75.9
WG VS1 AFT	88	75.6	79.8	84.0	88.2	92.4
WG ALT MID	89	64.2	66.5	68.9	71.4	74.1
WG ALT CEN	90	74.8	79.9	85.0	89.9	94.5
HYB A25	91	67.0	68.4	70.0	71.7	73.7
HYB A24	92	62.0	63.6	65.5	67.5	69.8
HYB A23	93	63.8	65.6	67.6	69.7	72.1
TOP COVER	94	33.5	36.3	39.3	42.4	45.7
TILT STRCT	95	49.0	49.5	50.1	50.7	51.5
HTR CONTRL	96	66.2	66.2	66.9	68.2	69.8
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	47.6	47.7	47.9	48.2	48.4

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NOTE	TIME	96.400	96.450	96.500	96.550	96.600
VSR 3	1	108.3	110.6	111.4	111.0	109.4
FILLER BLK	2	108.7	111.6	112.9	112.5	110.6
VSR 2	3	114.0	116.9	117.9	116.9	114.1
ALTIM	4	121.1	124.6	126.3	126.1	124.1
VSR 1	5	122.0	126.2	129.0	130.0	129.3
XTRMA	6	86.8	89.3	90.6	90.5	89.3
SUP LF FWD	7	98.2	100.5	101.6	101.4	100.0
SUP LF AFT	8	100.3	102.9	104.0	103.6	101.8
SUP RT FWD	9	139.0	143.1	145.9	147.1	146.7
SUP RT AFT	10	135.8	140.2	143.4	145.1	145.1
SHROUD A C	11	145.6	148.7	150.4	150.3	148.5
SHROUD F C	12	147.4	149.0	149.7	149.8	148.9
SHROUD F R	13	160.7	160.9	159.8	157.7	154.6
SHROUD R F	14	195.6	198.4	199.8	199.9	198.4
SHROUD L F	15	140.5	142.2	142.5	141.7	139.8
SHROUD TOP	16	214.7	216.6	217.5	217.3	216.1
SHROUD R A	17	188.5	192.1	194.4	195.3	194.7
SUP RC	18	118.8	122.8	125.9	128.2	129.5
SHROUD L A	19	143.7	145.8	146.2	145.1	142.6
SHROUD F L	20	130.1	132.2	133.0	132.6	131.2
SHROUD A L	21	135.4	138.2	139.3	138.5	136.1
SHROUD A R	22	141.7	145.5	147.9	148.7	147.8
LEM BASE	23	125.3	106.5	83.0	54.3	21.1
TLT EX FWD	24	46.1	41.8	33.8	23.1	10.4
TLT EX LFT	25	49.8	44.7	37.0	27.5	16.5
TLT EX AFT	26	85.8	78.9	68.5	55.3	40.2
TLT EXT RT	27	49.8	44.7	37.0	27.5	16.5
PLT MOCALT	28	70.2	71.9	73.6	75.3	76.8
PLT A5, A6	29	73.6	75.6	77.5	79.3	80.7
PLT A-22	30	72.0	73.8	75.5	77.2	78.7
PLT A4	31	72.0	73.9	75.8	77.5	79.1
PLT A4	32	72.1	74.0	75.9	77.7	79.3
PLT CENTER	33	71.9	73.7	75.6	77.4	79.0
PLT CONTRL	34	71.7	73.6	75.5	77.3	78.8
PLT A9-12	35	72.6	74.8	76.9	78.8	80.5
PLT A-14	36	73.2	75.4	77.4	79.2	80.7
PLT A-14	37	72.5	74.6	76.7	78.6	80.2
PLT A14	38	72.3	74.3	76.3	78.2	79.9
PLT A26	39	72.4	74.4	76.5	78.4	80.1
PLT A7, A8	40	73.2	75.3	77.3	79.2	80.9
FREQ MOD	41	70.1	71.8	73.5	75.2	76.7
ALT SSX	42	70.0	71.7	73.4	75.1	76.7
V.S. SSX	43	71.8	73.7	75.6	77.4	79.0
AMP.SW A13	44	72.7	74.7	76.6	78.4	80.0
AMP.SW A13	45	72.7	74.7	76.6	78.4	80.0
AMP.SW A14	46	72.0	74.1	76.2	78.2	79.9
AMP.SW A14	47	72.0	74.1	76.2	78.2	79.9
AMP.SW A14	48	72.5	74.7	76.8	78.7	80.4
AMP.SW A14	49	71.9	74.0	76.1	78.0	79.8
AMP.SW A14	50	71.9	73.9	75.9	77.8	79.6
AMP.SW A14	51	71.9	73.9	75.9	77.8	79.6

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	96.400	96.450	96.500	96.550	96.600
TH DET A13	52	73.0	75.0	77.0	78.7	80.3
TH DET A14	53	72.1	74.1	76.1	78.0	79.7
TH DET A14	54	72.1	74.1	76.1	78.0	79.7
TH DET A14	55	72.1	74.1	76.1	78.0	79.7
LEVELER	56	69.2	70.2	71.4	72.7	74.1
55CB AMP 5	57	72.7	74.9	77.1	79.2	81.1
55CB AMP 9	58	70.4	72.7	74.9	77.1	79.1
55CB AMP 9	59	70.4	72.7	74.9	77.1	79.1
55CB AMP 9	60	70.4	72.7	74.9	77.1	79.1
55CB AMP 9	61	70.4	72.7	74.9	77.1	79.1
55CB AMP 7	62	73.0	75.0	77.2	79.3	81.3
55CB AMP 7	63	73.0	75.0	77.2	79.3	81.3
HYB VS1	64	74.2	76.3	78.5	80.6	82.5
HYB VS3	65	71.6	73.9	76.2	78.3	80.1
HYB A6T	66	73.9	76.1	78.3	80.3	82.1
END FT FWD	67	68.4	70.1	71.9	73.7	75.5
SUP RT FWD	68	74.2	76.5	78.7	80.7	82.4
SUP RT MID	69	108.8	113.9	118.1	121.1	122.9
SUP RT AFT	70	74.5	76.7	78.9	80.9	82.8
END AFT	71	63.1	63.3	63.7	64.0	64.5
SUP LF AFT	72	71.7	74.0	76.3	78.4	80.2
SUP LF MID	73	87.6	91.4	94.4	96.6	97.8
SUP LF FWD	74	79.2	84.2	88.5	92.0	94.6
FM CASE	75	69.6	71.2	72.9	74.6	76.2
ALTX CASE	76	69.0	70.6	72.2	74.0	75.6
ALTA MB	77	70.2	72.0	73.8	75.5	77.1
CASE A5, A6	78	69.9	71.8	73.7	75.6	77.3
CASE A9-12	79	68.5	70.5	72.5	74.4	76.2
CASE MBA14	80	70.7	72.7	74.6	76.4	78.0
CASE VSX	81	70.1	71.8	73.6	75.4	77.1
CASE A7, A8	82	70.0	71.8	73.7	75.6	77.4
WG VS2 AFT	83	91.1	93.9	95.8	96.7	96.6
WG VS2MAFT	84	74.3	76.8	79.2	81.2	82.9
WG VS2MFWD	85	73.5	76.0	78.4	80.5	82.3
WG VS2 FWD	86	91.2	94.1	96.2	97.4	97.8
WG VS1MAFT	87	78.2	80.7	83.1	85.3	87.3
WG VS1 AFT	88	96.2	99.7	102.5	104.6	105.7
WG ALT MID	89	76.8	79.4	81.9	84.1	86.0
WG ALT CEN	90	98.4	101.6	103.9	105.0	105.1
HYB A25	91	75.9	78.2	80.5	82.8	84.8
HYB A24	92	72.2	74.6	77.0	79.2	81.1
HYB A23	93	74.5	77.0	79.4	81.7	83.6
TOP COVER	94	49.1	52.5	56.0	59.3	62.5
TILT STRCT	95	52.2	53.1	53.9	54.8	55.6
HTR CONTRL	96	71.6	73.5	75.4	77.2	78.7
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	48.8	49.2	49.6	50.1	50.6

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	96.650	96.700	96.750	96.800	96.850
VSR 3	1	106.9	103.6	99.9	98.2	97.5
FILLER BLK	2	107.5	103.5	98.8	94.8	92.4
VSR 2	3	110.0	104.8	99.0	94.0	89.2
ALTIM	4	120.5	115.5	109.5	103.1	95.7
VSR 1	5	126.9	123.0	117.8	110.6	99.7
XTRMA	6	87.0	83.8	80.0	76.4	73.8
SUP LF FWD	7	97.7	94.6	90.9	93.7	93.5
SUP LF AFT	8	98.8	94.8	90.1	90.3	86.4
SUP RT FWD	9	144.8	141.4	136.7	113.9	102.2
SUP RT AFT	10	143.5	140.2	135.6	116.1	99.5
SHROUD A C	11	145.1	140.2	134.2	122.5	101.5
SHROUD F C	12	147.3	144.9	141.8	178.4	182.8
SHROUD F R	13	150.7	146.1	141.0	161.9	159.0
SHROUD R F	14	155.5	191.3	186.0	139.6	113.6
SHROUD L F	15	137.0	133.5	129.5	133.9	122.0
SHROUD TOP	16	213.9	210.7	206.6	168.4	133.6
SHROUD R A	17	192.4	188.6	183.6	132.0	111.0
SUP RC	18	129.6	128.6	126.5	132.5	138.4
SHROUD L A	19	138.9	134.3	129.1	131.6	117.1
SHROUD F L	20	128.8	125.7	122.0	125.9	117.6
SHROUD A L	21	132.2	127.2	121.6	110.7	98.4
SHROUD A R	22	145.3	141.4	136.3	123.5	106.3
LEM BASE	23	-16.8	-59.2	-107.0	-54.2	28.4
TLT EX FWD	24	-2.7	-18.4	-33.1	-45.4	-43.8
TLT EX LFT	25	4.8	-7.2	-18.7	-27.7	-23.3
TLT EX AFT	26	23.8	6.9	-9.9	-23.4	-18.9
TLT EXT RT	27	4.8	-7.2	-18.7	-27.7	-23.3
PLT MODALT	28	78.2	79.2	79.9	80.4	80.6
PLT A5,A6	29	81.8	82.5	82.7	82.7	82.3
PLT A-22	30	79.9	80.8	81.3	81.5	81.4
PLT A4	31	80.4	81.4	81.9	82.1	81.9
PLT A4	32	80.6	81.6	82.1	82.2	82.1
PLT CENTER	33	80.3	81.2	81.8	81.9	81.8
PLT CCNTRLR	34	80.0	80.8	81.3	81.3	81.2
PLT A9-12	35	81.7	82.6	83.0	83.0	82.8
PLT A-14	36	81.9	82.6	82.9	82.9	82.6
PLT A-14	37	81.4	82.3	82.8	82.8	82.6
PLT A14	38	81.2	82.2	82.8	82.9	82.8
PLT A26	39	81.5	82.5	83.1	83.3	83.2
PLT A7,A8	40	82.2	83.2	83.7	83.9	83.7
FREQ MOD	41	78.0	79.1	79.9	80.3	80.5
ALT SSX	42	78.0	79.1	79.9	80.3	80.5
V.S. SSX	43	80.3	81.3	81.9	82.1	82.0
AMP.SW A13	44	81.2	82.1	82.6	82.6	82.4
AMP.SW A13	45	81.2	82.1	82.6	82.6	82.4
AMP.SW A14	46	81.2	82.1	82.7	82.8	82.7
AMP.SW A14	47	81.2	82.1	82.7	82.8	82.7
AMP.SW A14	48	81.7	82.5	83.0	83.1	82.9
AMP.SW A14	49	81.2	82.2	82.8	83.0	82.9
AMP.SW A14	50	81.1	82.3	83.0	83.4	83.4
AMP.SW A14	51	81.1	82.3	83.0	83.4	83.4

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	96.650	96.700	96.750	96.800	96.850
TH DET A13	52	81.4	82.2	82.6	82.7	82.4
TH DET A14	53	81.1	82.2	82.8	83.0	82.9
TH DET A14	54	81.1	82.2	82.8	83.0	82.9
TH DET A14	55	81.1	82.2	82.8	83.0	82.9
LEVELER	56	75.5	76.8	77.9	78.9	79.5
55CB AMP 5	57	82.6	83.8	84.6	84.9	84.8
55CB AMP 9	58	80.7	82.0	82.9	83.4	83.6
55CB AMP 9	59	80.7	82.0	82.9	83.4	83.6
55CB AMP 9	60	80.7	82.0	82.9	83.4	83.6
55CB AMP 9	61	80.7	82.0	82.9	83.4	83.6
55CB AMP 7	62	83.1	84.5	85.5	86.1	86.2
55CB AMP 7	63	83.1	84.5	85.5	86.1	86.2
HYB VS1	64	84.1	85.4	86.2	86.6	86.4
HYB VS3	65	81.6	82.8	83.5	83.8	83.8
HYB A6T	66	83.5	84.5	85.1	85.2	84.9
END FT FWD	67	77.1	78.5	79.6	80.4	81.0
SUP RT FWD	68	83.8	84.8	85.3	85.4	85.0
SUP RT MID	69	123.4	122.5	120.4	117.6	115.1
SUP RT AFT	70	84.5	85.7	86.5	86.8	86.5
END AFT	71	64.9	65.4	65.8	66.3	66.8
SUP LF AFT	72	81.7	82.8	83.5	83.8	83.8
SUP LF MID	73	98.1	97.5	96.2	94.4	92.6
SUP LF FWD	74	96.4	97.3	97.3	96.9	96.6
FM CASE	75	77.6	78.8	79.7	80.2	80.5
ALTX CASE	76	77.0	78.3	79.3	79.9	80.3
ALTA MB	77	78.5	79.5	80.3	80.7	80.8
CASE A5, A6	78	78.8	80.0	80.9	81.5	81.7
CASE A9-12	79	77.8	79.1	80.0	80.6	80.8
CASE MBA14	80	79.4	80.4	81.1	81.4	81.4
CASE VSX	81	78.5	79.7	80.5	81.0	81.1
CASE A7, A8	82	79.1	80.5	81.6	82.4	82.9
WG VS2 AFT	83	95.7	94.0	91.8	89.5	87.3
WG VS2MAFT	84	84.3	85.1	85.5	85.6	85.3
WG VS2MFWD	85	83.8	84.8	85.4	85.6	85.5
WG VS2 FWD	86	97.4	96.4	94.8	93.2	92.8
WG VS1MAFT	87	88.8	89.9	90.5	90.5	89.8
WG VS1 AFT	88	105.9	105.1	103.4	100.9	96.2
WG ALT MID	89	87.5	88.5	88.9	88.9	88.4
WG ALT CEN	90	104.2	102.3	99.6	96.5	92.6
HYB A25	91	86.5	87.9	88.7	89.1	88.8
HYB A24	92	82.7	83.8	84.6	84.9	84.9
HYB A23	93	85.2	86.4	87.1	87.3	87.1
TOP COVER	94	65.4	68.1	70.5	72.5	73.9
TILT STRCT	95	56.4	57.2	57.9	58.5	59.1
HTR CENTLR	96	79.9	80.7	81.2	81.3	81.1
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	51.1	51.7	52.3	52.9	53.5

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	96.900	96.950	97.000	97.050	97.100
VSR 3	1	55.1	88.7	80.7	73.4	67.0
FILLER BLK	2	89.1	84.1	77.3	70.8	64.9
VSR 2	3	84.6	79.1	72.8	66.8	61.5
ALTIM	4	89.3	82.7	75.1	68.0	61.9
VSR 1	5	90.5	82.7	75.1	68.1	62.0
XTRMA	6	71.4	68.7	65.4	62.2	59.3
SUP LF FWD	7	89.6	79.7	72.4	67.0	62.3
SUP LF AFT	8	81.5	73.9	68.7	64.1	59.9
SUP RT FWD	9	97.2	90.3	81.3	73.0	65.9
SUP RT AFT	10	89.6	81.7	74.1	67.1	60.9
SHROUD A C	11	90.2	79.0	66.1	56.5	49.8
SHROUD F C	12	162.6	99.7	67.7	55.5	48.2
SHROUD F R	13	141.9	90.5	61.6	48.5	40.3
SHROUD R F	14	102.3	86.6	70.2	59.1	51.3
SHROUD L F	15	111.3	89.4	75.6	65.9	58.6
SHROUD TOP	16	117.1	91.6	68.2	54.2	45.2
SHROUD R A	17	99.6	86.2	72.7	62.9	55.5
SUP RC	18	136.4	119.0	100.8	87.3	76.6
SHROUD L A	19	105.0	83.7	70.8	62.0	55.3
SHROUD F L	20	108.5	89.3	77.0	68.1	61.0
SHROUD A L	21	91.0	81.3	71.0	63.1	56.9
SHROUD A R	22	95.4	84.0	72.8	64.1	57.2
LEM BASE	23	28.0	-57.7	-124.6	-161.5	-186.0
TLT EX FWD	24	-36.5	-38.4	-48.6	-59.3	-68.9
TLT EX LFT	25	-14.8	-16.1	-25.1	-34.0	-41.2
TLT EX AFT	26	-7.9	-9.7	-22.4	-35.3	-46.4
TLT EXT RT	27	-14.8	-16.1	-25.1	-34.0	-41.2
PLT MOCALT	28	80.5	80.2	79.7	78.9	77.8
PLT A5, A6	29	81.8	81.0	80.0	78.7	77.3
PLT A-22	30	81.1	80.6	79.8	78.8	77.5
PLT A4	31	81.5	80.9	80.0	78.8	77.5
PLT A4	32	81.6	80.9	80.0	78.9	77.5
PLT CENTER	33	81.4	80.8	79.9	78.8	77.5
PLT CONTRL	34	80.8	80.2	79.3	78.2	76.9
PLT A9-12	35	82.4	81.7	80.8	79.5	78.0
PLT A-14	36	82.1	81.3	80.3	79.0	77.5
PLT A-14	37	82.2	81.5	80.6	79.3	77.9
PLT A14	38	82.4	81.7	80.8	79.5	78.1
PLT A26	39	82.7	82.1	81.1	79.8	78.4
PLT A7, A8	40	83.2	82.3	81.2	79.8	78.3
FREQ MOD	41	80.5	80.3	79.8	79.0	78.0
ALT SSX	42	80.5	80.3	79.8	79.0	78.0
V.S. SSX	43	81.6	80.9	80.1	79.0	77.6
AMP.SW A13	44	82.0	81.3	80.4	79.2	77.9
AMP.SW A13	45	82.0	81.3	80.4	79.2	77.9
AMP.SW A14	46	82.3	81.7	80.8	79.6	78.2
AMP.SW A14	47	82.3	81.7	80.8	79.6	78.2
AMP.SW A14	48	82.4	81.8	80.8	79.6	78.1
AMP.SW A14	49	82.5	81.9	81.1	79.9	78.5
AMP.SW A14	50	83.0	82.4	81.6	80.4	79.0
AMP.SW A14	51	83.0	82.4	81.6	80.4	79.0

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	96.900	96.950	97.000	97.050	97.100
TH DET A13	52	81.9	81.2	80.3	79.1	77.7
TH DET A14	53	82.6	81.9	81.0	79.8	78.4
TH DET A14	54	82.5	81.9	81.0	79.8	78.4
TH DET A14	55	82.5	81.9	81.0	79.8	78.4
LEVELER	56	80.0	80.2	80.2	79.9	79.4
55CB AMP 5	57	84.4	83.7	82.8	81.5	80.0
55CB AMP 9	58	83.5	83.1	82.4	81.5	80.2
55CB AMP 9	59	83.5	83.1	82.4	81.5	80.2
55CB AMP 9	60	83.5	83.1	82.4	81.5	80.2
55CB AMP 9	61	83.5	83.1	82.4	81.5	80.2
55CB AMP 7	62	85.9	85.1	83.9	82.5	80.9
55CB AMP 7	63	85.9	85.1	83.9	82.5	80.9
HYB VS1	64	85.7	84.7	83.4	81.9	80.1
HYB VS3	65	83.5	83.0	82.2	81.1	79.7
HYB A6T	66	84.3	83.5	82.4	81.0	79.4
END FT FWD	67	81.3	81.3	81.0	80.5	79.7
SUP RT FWD	68	84.4	83.5	82.4	80.9	79.3
SUP RT MID	69	111.7	106.2	98.1	89.2	80.7
SUP RT AFT	70	85.8	84.8	83.4	81.8	80.0
END AFT	71	67.2	67.6	68.0	68.3	68.6
SUP LF AFT	72	83.5	83.0	82.2	81.1	79.6
SUP LF MID	73	90.8	88.5	85.3	81.6	77.6
SUP LF FWD	74	96.0	94.7	92.1	88.7	84.8
FM CASE	75	80.6	80.4	79.9	79.2	78.3
ALTX CASE	76	80.4	80.2	79.8	79.2	78.3
ALTA MB	77	80.6	80.2	79.5	78.6	77.5
CASE A5, A6	78	81.5	81.2	80.5	79.6	78.5
CASE A9-12	79	80.7	80.4	79.8	78.9	77.9
CASE MBA14	80	81.0	80.3	79.5	78.4	77.1
CASE VSX	81	80.8	80.3	79.6	78.7	77.5
CASE A7, A8	82	82.9	82.6	82.0	81.1	79.9
WG VS2 AFT	83	85.0	82.3	79.0	75.5	72.2
WG VS2MAFT	84	84.9	84.2	83.0	81.5	79.8
WG VS2MFWD	85	85.3	84.6	83.6	82.1	80.3
WG VS2 FWD	86	91.8	89.3	85.0	80.2	75.6
WG VS1MAFT	87	88.3	86.6	84.6	82.4	80.1
WG VS1 AFT	88	91.2	86.6	82.1	77.7	73.6
WG ALT MID	89	87.4	86.2	84.6	82.7	80.7
WG ALT CEN	90	88.9	85.0	80.5	76.0	71.8
HYB A25	91	87.8	86.5	84.8	83.0	80.9
HYB A24	92	84.6	84.1	83.3	82.0	80.5
HYB A23	93	86.4	85.5	84.2	82.7	80.9
TOP COVER	94	74.9	75.5	75.6	75.4	75.0
TILT STRCT	95	59.6	60.0	60.4	60.6	60.8
HTR CNTLR	96	80.8	80.2	79.3	78.2	76.9
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	54.0	54.6	55.2	55.7	56.2

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	97.150	97.200	97.250	97.300	97.350
VSR 3	1	61.3	56.4	52.0	48.2	44.7
FILLER BLK	2	59.8	55.2	51.2	47.7	44.5
VSR 2	3	56.8	52.7	49.0	45.8	42.8
ALTIM	4	56.7	52.3	48.4	45.1	42.1
VSR 1	5	56.6	51.9	47.9	44.3	41.1
XTRMA	6	56.6	54.0	51.7	49.5	47.3
SUP LF FWD	7	58.1	54.4	51.1	48.1	45.3
SUP LF AFT	8	56.2	52.9	50.0	47.3	44.8
SUP RT FWD	9	60.0	54.9	50.6	46.8	43.5
SUP RT AFT	10	55.6	51.1	47.2	43.7	40.6
SHROUD A C	11	44.9	40.9	37.5	34.6	32.0
SHROUD F C	12	43.1	39.0	35.6	32.7	30.1
SHROUD F R	13	34.3	29.7	25.9	22.7	19.9
SHROUD R F	14	45.4	40.6	36.6	33.2	30.3
SHROUD L F	15	52.7	47.7	43.5	39.8	36.5
SHROUD TOP	16	38.9	34.0	30.0	26.6	23.7
SHROUD R A	17	49.6	44.7	40.6	37.1	33.9
SUP RC	18	67.8	60.6	54.4	49.1	44.6
SHROUD L A	19	49.9	45.5	41.7	38.3	35.4
SHROUD F L	20	55.1	50.2	45.9	42.2	38.9
SHROUD A L	21	51.8	47.5	43.7	40.5	37.5
SHROUD A R	22	51.6	46.8	42.8	39.3	36.1
LEM BASE	23	-204.1	-218.1	-229.4	-238.8	-246.9
TLT EX FWD	24	-17.1	-84.1	-90.1	-95.2	-99.5
TLT EX LFT	25	-47.0	-51.5	-55.0	-57.8	-60.0
TLT EX AFT	26	-55.7	-63.4	-69.7	-75.0	-79.4
TLT EXT RT	27	-47.0	-51.5	-55.0	-57.8	-60.0
PLT MODALT	28	76.6	75.3	73.8	72.3	70.6
PLT A5,A6	29	75.7	74.0	72.3	70.5	68.7
PLT A-22	30	76.2	74.7	73.1	71.4	69.7
PLT A4	31	76.0	74.4	72.8	71.0	69.3
PLT A4	32	76.0	74.4	72.7	71.0	69.2
PLT CENTER	33	76.0	74.4	72.7	71.0	69.2
PLT CCNTRLR	34	75.4	73.8	72.1	70.3	68.6
PLT A9-12	35	76.4	74.6	72.8	70.8	68.9
PLT A-14	36	75.8	74.0	72.2	70.3	68.4
PLT A-14	37	76.3	74.5	72.7	70.8	68.9
PLT A14	38	76.5	74.8	73.0	71.1	69.2
PLT A26	39	76.7	75.0	73.2	71.3	69.4
PLT A7,A8	40	76.5	74.7	72.8	70.9	68.9
FREQ MOD	41	76.8	75.4	74.0	72.4	70.8
ALT SSX	42	76.8	75.4	74.0	72.4	70.8
V.S. SSX	43	76.2	74.6	72.9	71.2	69.4
AMP.SW A13	44	76.3	74.7	73.0	71.3	69.5
AMP.SW A13	45	76.3	74.7	73.0	71.3	69.5
AMP.SW A14	46	76.7	75.0	73.2	71.3	69.4
AMP.SW A14	47	76.7	75.0	73.2	71.3	69.4
AMP.SW A14	48	76.5	74.8	72.9	71.1	69.1
AMP.SW A14	49	76.9	75.2	73.4	71.5	69.6
AMP.SW A14	50	77.4	75.7	73.9	72.0	70.1
AMP.SW A14	51	77.4	75.7	73.9	72.0	70.1

APOLLO 1C MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	97.150	97.200	97.250	97.300	97.350
TH DET A13	52	76.1	74.5	72.8	71.0	69.2
TH DET A14	53	76.8	75.1	73.3	71.5	69.6
TH DET A14	54	76.8	75.1	73.3	71.4	69.5
TH DET A14	55	76.8	75.1	73.3	71.4	69.5
LEVELER	56	78.7	77.8	76.7	75.5	74.2
55CB AMP 5	57	78.3	76.5	74.7	72.8	70.8
55CB AMP 9	58	78.7	77.0	75.2	73.3	71.3
55CB AMP 9	59	78.7	77.0	75.2	73.3	71.3
55CB AMP 9	60	78.7	77.0	75.2	73.3	71.3
55CB AMP 9	61	78.7	77.0	75.2	73.3	71.3
55CB AMP 7	62	79.1	77.1	75.1	73.1	71.0
55CB AMP 7	63	79.1	77.1	75.1	73.1	71.0
HYB VS1	64	78.2	76.2	74.1	72.0	69.9
HYB VS3	65	78.1	76.3	74.4	72.4	70.4
HYB A6T	66	77.6	75.8	73.9	71.9	70.0
ENC FT FWD	67	78.7	77.5	76.1	74.6	73.0
SUP RT FWD	68	77.5	75.6	73.7	71.8	69.8
SUP RT MID	69	73.1	66.3	60.5	55.4	50.9
SUP RT AFT	70	78.1	76.0	73.9	71.8	69.7
ENC AFT	71	68.8	69.0	69.1	69.2	69.2
SUP LF AFT	72	78.0	76.2	74.3	72.4	70.3
SUP LF MID	73	73.6	69.7	66.1	62.7	59.5
SUP LF FWD	74	80.7	76.4	72.2	68.1	64.2
FM CASE	75	77.2	75.9	74.5	73.0	71.4
ALTX CASE	76	77.2	76.0	74.7	73.2	71.7
ALTA MB	77	76.3	74.9	73.4	71.9	70.3
CASE A5, A6	78	77.2	75.8	74.2	72.6	71.0
CASE A9-12	79	76.7	75.3	73.8	72.3	70.6
CASE MBA14	80	75.7	74.2	72.7	71.1	69.4
CASE VSX	81	76.2	74.8	73.2	71.6	70.0
CASE A7, A8	82	78.5	77.0	75.3	73.6	71.9
WG VS2 AFT	83	69.0	66.0	63.2	60.5	58.0
WG VS2MAFT	84	77.8	75.8	73.6	71.5	69.3
WG VS2MFWD	85	78.4	76.3	74.2	72.0	69.8
WG VS2 FWD	86	71.3	67.4	63.8	60.4	57.4
WG VS1MAFT	87	77.7	75.3	72.9	70.6	68.3
WG VS1 AFT	88	69.7	66.2	63.0	60.0	57.2
WG ALT MID	89	78.5	76.2	74.0	71.7	69.5
WG ALT CEN	90	68.1	64.7	61.6	58.8	56.1
HYB A25	91	78.7	76.5	74.2	71.9	69.7
HYB A24	92	78.7	76.8	74.8	72.7	70.6
HYB A23	93	78.9	76.8	74.7	72.6	70.5
TOP COVER	94	74.3	73.5	72.6	71.6	70.5
TILT STRCT	95	61.0	61.0	61.0	61.0	60.9
HTR CONTRL	96	75.4	73.8	72.1	70.4	68.6
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	56.7	57.1	57.5	57.8	58.1

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	97.400	97.450	97.500	97.550	97.600
VSR 3	1	41.6	38.8	36.3	34.1	32.1
FILLER BLK	2	41.6	39.0	36.7	34.7	32.8
VSR 2	3	40.2	37.8	35.8	33.9	32.3
ALTIM	4	39.4	37.1	35.2	33.3	31.7
VSR 1	5	38.3	35.8	33.6	31.7	30.0
XTRMA	6	45.3	43.7	42.6	41.2	40.2
SUP LF FWD	7	42.8	40.5	38.7	37.0	35.4
SUP LF AFT	8	42.5	40.4	38.9	37.3	36.0
SUP RT FWD	9	40.5	37.9	35.8	33.8	32.0
SUP RT AFT	10	37.8	35.4	33.3	31.4	29.8
SHROUD A C	11	29.6	27.5	25.8	24.2	22.8
SHROUD F C	12	27.7	25.6	23.9	22.3	20.8
SHROUD F R	13	17.4	15.1	13.2	11.6	10.0
SHROUD R F	14	27.6	25.3	23.3	21.5	19.9
SHROUD L F	15	33.6	30.9	28.6	26.5	24.6
SHROUD TOP	16	21.1	18.8	16.7	14.9	13.3
SHROUD R A	17	31.1	28.6	26.5	24.6	22.9
SUP RC	18	40.7	37.2	34.2	31.6	29.2
SHROUD L A	19	32.7	30.3	28.2	26.4	24.7
SHROUD F L	20	35.9	33.2	30.8	28.7	26.8
SHROUD A L	21	34.9	32.5	30.5	28.7	27.0
SHROUD A R	22	33.4	30.9	28.8	26.9	25.2
LEM BASE	23	-253.8	-259.9	-265.3	-270.2	-274.6
TLT EX FWD	24	-103.2	-106.5	-109.2	-111.7	-113.8
TLT EX LFT	25	-61.8	-63.3	-64.5	-65.5	-66.4
TLT EX AFT	26	-83.1	-86.2	-88.8	-91.1	-93.0
TLT EXT RT	27	-61.8	-63.3	-64.5	-65.5	-66.4
PLT MODALT	28	69.0	69.2	68.5	67.0	67.5
PLT A5,A6	29	66.9	69.2	66.9	64.9	67.4
PLT A-22	30	68.0	73.0	69.0	67.8	72.2
PLT A4	31	67.5	69.9	69.8	67.2	70.1
PLT A4	32	67.4	70.4	69.7	67.6	70.5
PLT CENTER	33	67.4	70.4	70.0	67.3	70.6
PLT CNTLR	34	66.8	76.0	71.4	67.8	76.5
PLT A9-12	35	66.9	68.5	66.8	64.8	66.7
PLT A-14	36	66.5	68.9	67.3	65.1	67.7
PLT A-14	37	67.0	69.2	67.6	65.5	68.0
PLT A14	38	67.3	69.8	68.5	66.3	69.0
PLT A26	39	67.4	69.8	68.4	66.3	68.9
PLT A7,A8	40	67.0	69.1	67.3	65.4	67.8
FREQ MOD	41	69.1	69.1	68.6	67.0	67.5
ALT SSX	42	69.2	69.1	68.7	67.0	67.4
V.S. SSX	43	67.6	69.8	70.0	67.2	70.0
AMP.SW A13	44	67.7	68.3	68.2	65.5	66.8
AMP.SW A13	45	67.7	68.3	68.2	65.5	66.8
AMP.SW A14	46	67.5	67.8	68.3	65.9	66.8
AMP.SW A14	47	67.5	67.8	68.3	65.9	66.8
AMP.SW A14	48	67.2	67.5	67.9	65.5	66.4
AMP.SW A14	49	67.7	67.9	68.3	65.9	66.8
AMP.SW A14	50	68.1	68.4	68.9	66.7	67.6
AMP.SW A14	51	68.1	68.4	68.9	66.7	67.6

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	97.400	97.450	97.500	97.550	97.600
TH DET A13	52	67.4	68.6	67.9	65.1	67.0
TH DET A14	53	67.6	68.7	69.1	66.4	68.1
TH DET A14	54	67.6	68.8	69.1	66.3	68.2
TH DET A14	55	67.6	68.8	69.1	66.3	68.2
LEVELER	56	72.7	72.2	72.1	70.9	70.9
55CB AMP 5	57	68.9	67.6	67.1	65.4	64.6
55CB AMP 9	58	69.3	67.8	67.2	65.6	64.7
55CB AMP 9	59	69.3	67.8	67.2	65.6	64.7
55CB AMP 9	60	69.3	67.8	67.2	65.6	64.7
55CB AMP 9	61	69.3	67.8	67.2	65.6	64.7
55CB AMP 7	62	68.9	67.4	66.9	65.4	64.6
55CB AMP 7	63	68.9	67.4	66.9	65.4	64.6
HYB VS1	64	67.8	67.0	66.3	64.5	64.5
HYB VS3	65	68.4	67.5	66.7	64.8	64.6
HYB A6T	66	68.0	67.4	66.5	64.5	64.5
END FT FWD	67	71.4	69.9	68.9	67.7	66.7
SUP RT FWD	68	67.8	67.2	66.3	64.3	64.2
SUP RT MID	69	47.0	43.6	40.6	38.0	35.7
SUP RT AFT	70	67.6	66.8	66.1	64.3	64.2
END AFT	71	69.1	69.1	69.1	69.0	68.9
SUP LF AFT	72	68.3	67.4	66.6	64.7	64.5
SUP LF MID	73	56.6	54.6	53.3	51.0	49.8
SUP LF FWD	74	60.4	56.9	53.6	50.6	47.8
FM CASE	75	69.8	68.8	68.6	67.4	66.9
ALTX CASE	76	70.1	68.8	68.3	67.3	66.6
ALTA MB	77	68.6	68.3	68.6	66.8	67.0
CASE A5, A6	78	69.3	67.8	67.0	66.0	65.0
CASE A9-12	79	69.0	67.4	66.3	65.3	64.2
CASE MBA14	80	67.8	66.5	65.8	64.7	64.0
CASE VSX	81	68.3	67.5	68.2	67.1	66.9
CASE A7, A8	82	70.1	68.3	67.1	66.1	65.0
WG VS2 AFT	83	55.6	53.6	52.2	50.5	49.1
WG VS2MAFT	84	67.1	65.1	63.8	62.4	61.0
WG VS2MFWD	85	67.6	65.6	64.3	62.8	61.4
WG VS2 FWD	86	54.5	51.9	49.6	47.6	45.8
WG VS1MAFT	87	66.0	64.0	62.7	61.4	60.1
WG VS1 AFT	88	54.7	52.3	50.4	48.8	47.3
WG ALT MID	89	67.4	65.3	63.8	62.2	60.8
WG ALT CEN	90	53.7	51.5	49.7	48.0	46.4
HYB A25	91	67.5	65.6	64.5	63.1	62.0
HYB A24	92	68.5	66.6	65.5	64.0	62.8
HYB A23	93	68.5	66.7	65.4	63.8	62.6
TOP COVER	94	69.4	68.2	67.0	65.8	64.6
TILT STRCT	95	60.7	60.6	60.4	60.2	60.0
HTR CNTLR	96	66.8	75.6	71.8	67.1	76.2
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	58.4	58.6	58.8	58.9	59.0

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	97.650	97.700	97.750	97.800	97.850
VSR 3	1	30.3	28.8	29.1	32.7	37.7
FILLER BLK	2	31.3	29.8	29.6	32.6	37.5
VSR 2	3	30.9	29.6	30.1	34.4	40.2
ALTIM	4	30.5	29.3	31.1	37.7	45.5
VSR 1	5	28.6	27.3	29.3	36.3	45.0
XTRMA	6	39.5	38.5	38.5	39.9	41.6
SUP LF FWD	7	34.2	33.2	35.1	39.5	43.4
SUP LF AFT	8	35.0	33.9	34.2	37.6	41.7
SUP RT FWD	9	30.6	30.9	40.2	50.0	58.6
SUP RT AFT	10	28.4	28.3	35.7	45.5	55.3
SHROUD A C	11	21.6	21.5	37.6	65.0	83.0
SHROUD F C	12	19.7	27.1	84.5	130.8	150.2
SHROUD F R	13	8.7	14.5	63.2	104.9	124.2
SHROUD R F	14	18.5	22.0	56.2	89.7	108.4
SHROUD L F	15	23.0	22.8	38.1	58.6	71.0
SHROUD TOP	16	11.9	18.7	77.6	132.1	158.2
SHROUD R A	17	21.4	25.7	56.9	83.2	99.3
SUP RC	18	27.2	26.6	35.7	49.0	60.2
SHROUD L A	19	23.3	23.2	38.4	59.2	72.0
SHROUD F L	20	25.1	26.8	45.2	61.7	71.8
SHROUD A L	21	25.6	25.5	37.6	53.7	64.6
SHROUD A R	22	23.7	23.6	36.8	55.0	68.2
LEM BASE	23	-278.6	-282.2	-285.6	-283.8	-271.8
TLT EX FWD	24	-115.6	-117.2	-118.7	-119.9	-120.9
TLT EX LFT	25	-67.1	-67.7	-68.3	-68.7	-69.1
TLT EX AFT	26	-94.6	-96.1	-97.3	-98.4	-99.2
TLT EXT RT	27	-67.1	-67.7	-68.3	-68.7	-69.1
PLT MODALT	28	67.1	65.8	66.4	66.4	65.0
PLT A5,A6	29	65.3	64.4	66.0	65.2	63.0
PLT A-22	30	68.4	69.2	71.5	69.1	66.7
PLT A4	31	69.8	67.6	69.9	70.5	67.2
PLT A4	32	69.7	68.1	70.4	70.3	67.6
PLT CENTER	33	70.1	67.8	70.5	70.9	67.2
PLT CNTLR	34	71.8	70.1	76.3	73.9	67.4
PLT A9-12	35	65.1	64.0	65.2	64.6	62.5
PLT A-14	36	66.2	64.9	66.7	66.2	63.6
PLT A-14	37	66.5	65.3	67.0	66.4	63.9
PLT A14	38	67.9	66.4	68.3	68.1	65.3
PLT A26	39	67.6	66.4	68.2	67.8	65.2
PLT A7,A8	40	66.2	65.2	66.8	66.3	64.0
FREQ MOD	41	67.2	65.8	66.3	66.5	65.0
ALT SSX	42	67.2	65.8	66.3	66.5	65.0
V.S. SSX	43	70.1	67.6	69.9	70.8	67.2
AMP.SW A13	44	66.7	64.1	65.5	66.2	63.6
AMP.SW A13	45	66.7	64.1	65.5	66.2	63.6
AMP.SW A14	46	67.2	64.9	65.9	66.8	64.5
AMP.SW A14	47	67.2	64.9	65.9	66.8	64.5
AMP.SW A14	48	66.8	64.5	65.4	66.4	64.2
AMP.SW A14	49	67.1	64.9	65.8	66.7	64.4
AMP.SW A14	50	68.2	66.0	66.9	68.0	65.7
AMP.SW A14	51	68.2	66.0	66.9	68.0	65.7

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	97.650	97.700	97.750	97.800	97.850
TH DET A13	52	66.4	63.9	65.7	66.1	63.2
TH DET A14	53	66.4	65.8	67.5	68.5	65.4
TH DET A14	54	66.5	65.8	67.6	68.5	65.4
TH DET A14	55	66.4	65.8	67.6	68.5	65.4
LEVELER	56	71.0	70.0	70.2	70.6	69.6
55CB AMP 5	57	64.3	62.8	62.4	62.6	61.8
55CB AMP 9	58	64.4	63.1	62.6	62.6	61.8
55CB AMP 9	59	64.4	63.1	62.6	62.6	61.8
55CB AMP 9	60	64.4	63.1	62.6	62.6	61.8
55CB AMP 9	61	64.4	63.1	62.6	62.6	61.8
55CB AMP 7	62	64.4	63.2	62.8	63.1	62.5
55CB AMP 7	63	64.4	63.2	62.8	63.1	62.5
HYB VS1	64	64.1	62.6	62.8	63.1	62.1
HYB VS3	65	64.1	62.5	62.5	62.5	61.3
HYB A6T	66	63.9	62.2	62.4	62.6	61.3
END FT FWD	67	66.1	65.2	64.5	64.2	63.7
SUP RT FWD	68	63.7	61.9	62.2	62.4	61.2
SUP RT MID	69	33.7	32.0	31.8	35.0	40.8
SUP RT AFT	70	63.9	62.3	62.6	63.0	62.0
END AFT	71	66.8	68.7	68.6	68.5	68.4
SUP LF AFT	72	64.0	62.4	62.4	62.5	61.2
SUP LF MID	73	49.0	47.2	46.6	47.1	47.6
SUP LF FWD	74	45.3	42.9	41.0	39.9	39.8
FM CASE	75	67.0	65.9	65.7	66.0	65.3
ALTX CASE	76	66.4	65.6	65.2	65.2	64.9
ALTA MB	77	67.3	65.6	66.0	66.7	65.3
CASE A5, A6	78	64.5	63.7	63.0	62.9	62.7
CASE A9-12	79	63.6	62.9	62.1	61.9	61.7
CASE MBA14	80	63.7	62.9	62.5	62.6	62.5
CASE VSX	81	67.7	66.6	66.5	67.4	66.7
CASE A7, A8	82	64.3	63.6	62.9	62.6	62.5
WG VS2 AFT	83	46.2	46.9	46.5	48.1	50.4
WG VS2MAFT	84	60.2	59.2	58.3	58.1	58.1
WG VS2MFWD	85	60.6	59.5	58.6	58.3	58.2
WG VS2 FWD	86	44.2	42.8	41.9	42.6	44.8
WG VS1MAFT	87	59.5	58.6	57.8	58.1	58.7
WG VS1 AFT	88	46.1	45.1	44.8	47.0	51.0
WG ALT MID	89	59.7	58.6	57.6	57.4	57.7
WG ALT CEN	90	45.2	44.1	44.2	47.0	51.1
HYB A25	91	61.4	60.4	59.7	59.8	59.9
HYB A24	92	62.0	60.9	60.1	59.8	59.5
HYE A23	93	61.8	60.5	59.7	59.5	59.3
TOP COVER	94	63.3	62.1	61.2	60.8	60.9
TILT STRCT	95	59.8	59.6	59.4	59.2	59.1
HTR CONTRL	96	72.3	69.5	76.1	74.5	66.7
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	59.1	59.1	59.2	59.2	59.1

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	97.900	97.950	98.000	98.050	98.100
VSR 3	1	43.2	48.9	54.9	61.3	68.2
FILLER BLK	2	43.1	49.3	55.9	62.9	70.6
VSR 2	3	46.8	54.0	61.6	69.7	78.4
ALTIM	4	54.2	63.4	72.9	82.7	92.8
VSR 1	5	54.8	65.2	75.7	86.1	96.3
XTRMA	6	44.3	47.9	51.9	56.6	62.2
SUP LF FWD	7	47.5	52.0	56.9	62.3	68.4
SUP LF AFT	8	46.3	51.5	57.2	63.3	70.3
SUP RT FWD	9	67.5	76.5	85.4	94.1	102.9
SUP RT AFT	10	65.0	74.9	84.6	93.9	103.1
SHROUD A C	11	95.2	105.1	113.8	121.9	129.9
SHROUD F C	12	160.1	166.9	172.4	177.8	183.6
SHROUD F R	13	135.3	143.7	151.5	159.9	169.0
SHROUD R F	14	120.9	131.1	140.1	148.7	157.3
SHROUD L F	15	75.6	86.7	93.5	100.3	107.5
SHROUD TOP	16	172.5	182.2	189.9	197.0	203.9
SHROUD R A	17	111.6	122.4	132.3	141.5	150.5
SUP RC	18	70.0	79.0	87.7	96.2	104.6
SHROUD L A	19	61.3	85.3	96.9	104.8	113.0
SHROUD F L	20	75.4	85.9	92.2	98.6	105.3
SHROUD A L	21	73.4	81.5	89.4	97.5	105.9
SHROUD A R	22	75.4	89.9	100.0	109.8	119.4
LEM BASE	23	-238.2	-182.0	-109.3	-39.0	13.8
TLT EX FWD	24	-121.5	-121.2	-118.4	-110.9	-97.2
TLT EX LFT	25	-65.1	-68.3	-65.4	-58.4	-46.4
TLT EX AFT	26	-55.5	-58.7	-94.7	-84.6	-66.9
TLT EXT RT	27	-65.1	-68.3	-65.4	-58.4	-46.4
PLT MOCALT	28	66.0	66.1	65.2	66.5	67.0
PLT A5, A6	29	66.4	65.4	64.4	68.4	68.0
PLT A-22	30	71.6	68.3	66.6	72.4	69.4
PLT A4	31	70.0	70.1	67.7	70.3	70.7
PLT A4	32	70.5	70.0	67.6	70.9	70.7
PLT CENTER	33	70.5	70.2	67.5	70.6	70.7
PLT CONTRL	34	76.0	71.3	66.4	75.4	70.9
PLT A9-12	35	65.1	64.5	63.4	66.6	66.6
PLT A-14	36	66.8	66.1	64.6	68.2	68.1
PLT A-14	37	66.9	66.1	64.6	68.0	67.8
PLT A14	38	68.3	67.6	65.8	69.0	68.9
PLT A26	39	68.2	67.5	65.9	69.1	68.9
PLT A7, A8	40	67.1	66.3	65.2	68.7	68.6
FREQ MOD	41	65.9	66.1	65.3	66.3	67.0
ALT SSX	42	65.8	66.2	65.3	66.2	67.0
V.S. SSX	43	70.0	70.3	67.8	70.1	70.8
AMP.SW A13	44	65.4	66.2	64.8	66.7	68.1
AMP.SW A13	45	65.4	66.2	64.8	66.7	68.1
AMP.SW A14	46	65.6	66.7	65.3	66.3	68.0
AMP.SW A14	47	65.6	66.7	65.3	66.3	68.0
AMP.SW A14	48	65.3	66.5	65.1	66.3	68.1
AMP.SW A14	49	65.5	66.5	65.1	66.2	67.8
AMP.SW A14	50	66.8	67.8	66.4	67.4	68.9
AMP.SW A14	51	66.8	67.8	66.4	67.4	68.9

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	57.500	57.550	58.000	58.050	58.100
TH DET A13	52	65.7	66.1	64.6	67.2	68.2
TH DET A14	53	67.3	68.1	66.1	67.8	69.1
TH DET A14	54	67.4	68.1	66.1	67.9	69.1
TH DET A14	55	67.4	68.1	66.1	67.9	69.1
LEVELER	56	69.7	70.1	69.3	69.3	69.7
55CB AMP 5	57	62.1	63.2	63.3	64.2	66.2
55CB AMP 9	58	61.7	62.4	62.3	62.8	64.3
55CB AMP 9	59	61.7	62.4	62.3	62.8	64.3
55CB AMP 9	60	61.7	62.4	62.3	62.8	64.3
55CB AMP 9	61	61.7	62.4	62.3	62.8	64.3
55CB AMP 7	62	62.7	63.8	64.2	65.1	67.0
55CB AMP 7	63	62.7	63.8	64.2	65.1	67.0
HYB VS1	64	63.2	64.3	64.5	66.1	67.9
HYB VS3	65	61.9	62.5	62.3	63.4	64.8
HYB A6T	66	62.5	63.4	63.4	65.2	66.9
END FT FWD	67	63.5	63.7	63.7	64.0	64.7
SUP RT FWD	68	62.4	63.4	63.5	65.3	67.1
SUP RT MID	69	48.0	56.0	64.5	73.2	82.1
SUP RT AFT	70	63.2	64.3	64.5	66.2	68.1
END AFT	71	68.3	68.2	68.1	68.0	68.0
SUP LF AFT	72	61.9	62.5	62.3	63.4	64.8
SUP LF MID	73	49.7	52.9	55.4	59.0	63.5
SUP LF FWD	74	40.6	42.3	44.6	47.6	51.2
FM CASE	75	65.2	65.9	65.6	65.7	66.8
ALTX CASE	76	64.7	65.1	65.2	65.3	66.2
ALTA MB	77	65.8	66.8	65.9	66.5	67.9
CASE A5, A6	78	62.6	63.2	63.7	64.3	65.5
CASE A9-12	79	61.6	62.0	62.6	63.1	64.2
CASE MBA14	80	62.8	63.6	64.2	65.0	66.5
CASE VSX	81	66.7	67.8	67.4	67.4	68.9
CASE A7, A8	82	62.4	62.8	63.4	64.0	65.1
WG VS2 AFT	83	53.4	57.1	60.8	64.9	69.8
WG VS2MAFT	84	58.4	59.5	60.6	61.8	63.7
WG VS2MFWD	85	58.4	59.3	60.2	61.3	63.1
WG VS2 FWD	86	47.7	51.0	54.7	58.6	63.0
WG VS1MAFT	87	55.8	61.7	63.8	65.9	68.7
WG VS1 AFT	88	55.6	61.0	66.8	72.6	78.6
WG ALT MID	89	58.4	59.9	61.6	63.5	66.0
WG ALT CEN	90	55.6	60.9	66.5	72.3	78.5
HYB A25	91	60.5	62.0	63.5	65.1	67.5
HYB A24	92	59.5	60.3	60.9	61.7	63.3
HYB A23	93	59.7	60.8	61.9	63.4	65.5
TOP COVER	94	61.3	61.9	62.9	64.0	65.5
TILT STRCT	95	59.0	58.9	59.0	59.1	59.3
HTR CONTRL	96	75.7	71.7	66.5	74.9	71.1
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	59.1	59.1	59.1	59.1	59.1

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	98.150	98.200	98.250	98.300	98.350
VSR 3	1	75.6	83.3	90.0	93.9	96.8
FILLER BLK	2	78.5	86.7	95.9	99.4	101.5
VSR 2	3	87.3	96.1	101.0	102.7	103.5
ALTIM	4	102.5	111.7	115.1	114.7	114.0
VSR 1	5	105.7	114.2	118.1	118.2	117.6
XTRMA	6	67.9	73.8	79.0	82.6	85.5
SUP LF FWD	7	75.0	81.7	85.5	88.2	90.8
SUP LF AFT	8	77.5	84.7	90.5	93.1	94.8
SUP RT FWD	9	111.4	119.4	114.8	113.3	112.5
SUP RT AFT	10	111.6	119.2	118.5	118.2	117.3
SHROUD A C	11	137.0	143.6	154.6	146.1	141.4
SHROUD F C	12	185.4	155.3	141.8	123.9	120.0
SHROUD F R	13	177.8	186.1	154.7	143.6	140.1
SHROUD R F	14	165.4	172.9	147.3	135.4	130.5
SHROUD L F	15	115.0	122.8	116.7	111.6	110.3
SHROUD TOP	16	210.7	217.1	174.1	152.4	143.3
SHROUD R A	17	158.7	166.2	142.1	134.1	130.3
SUP RC	18	112.9	121.1	118.1	114.5	113.0
SHROUD L A	19	121.5	129.8	123.3	116.9	114.4
SHROUD F L	20	112.4	119.7	109.2	107.0	107.2
SHROUD A L	21	114.3	122.6	121.5	117.5	115.8
SHROUD A R	22	128.3	136.3	134.4	129.1	126.4
LEM BASE	23	50.7	78.3	194.5	203.1	209.9
TLT EX FWD	24	-78.6	-57.1	-16.7	30.3	62.7
TLT EX LFT	25	-31.1	-14.4	19.0	55.0	76.3
TLT EX AFT	26	-43.6	-17.6	31.6	84.8	116.3
TLT EXT RT	27	-31.1	-14.4	19.0	55.0	76.3
PLT MODALT	28	67.3	68.0	69.0	70.3	71.7
PLT A5, A6	29	68.7	70.0	71.7	73.4	74.9
PLT A-22	30	69.3	69.9	71.0	72.3	73.6
PLT A4	31	70.1	70.3	71.3	72.5	73.8
PLT A4	32	70.1	70.4	71.3	72.6	74.0
PLT CENTER	33	69.9	70.1	71.0	72.3	73.7
PLT CCNTRLR	34	68.9	69.2	70.3	71.8	73.3
PLT A9-12	35	67.2	68.4	70.0	71.8	73.6
PLT A-14	36	68.3	69.4	70.9	72.5	74.2
PLT A-14	37	68.0	68.9	70.4	72.0	73.7
PLT A14	38	68.8	69.5	70.7	72.2	73.9
PLT A26	39	69.0	69.7	71.0	72.5	74.2
PLT A7, A8	40	69.1	70.2	71.7	73.3	75.0
FREQ MOD	41	67.3	67.9	68.9	70.2	71.6
ALT SSX	42	67.3	67.9	68.9	70.1	71.5
V.S. SSX	43	70.1	70.3	71.1	72.3	73.7
AMP.SW A13	44	68.3	69.4	71.0	72.6	74.2
AMP.SW A13	45	68.3	69.4	71.0	72.6	74.2
AMP.SW A14	46	68.1	68.8	70.1	71.7	73.3
AMP.SW A14	47	68.1	68.8	70.1	71.7	73.3
AMP.SW A14	48	68.2	69.0	70.4	72.0	73.7
AMP.SW A14	49	67.9	68.6	69.9	71.5	73.2
AMP.SW A14	50	69.0	69.5	70.6	72.1	73.6
AMP.SW A14	51	69.0	69.5	70.6	72.1	73.6

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	58.150	58.200	58.250	58.300	58.350
TH DET A13	52	68.4	69.6	71.2	72.9	74.5
TH DET A14	53	68.8	69.4	70.5	72.0	73.6
TH DET A14	54	68.8	69.4	70.5	72.0	73.6
TH DET A14	55	68.8	69.4	70.5	72.0	73.6
LEVELER	56	69.6	69.6	69.8	70.3	71.0
55CB AMP 5	57	67.5	69.1	70.9	72.9	74.7
55CB AMP 9	58	65.3	66.5	68.0	69.8	71.6
55CB AMP 9	59	65.3	66.5	68.0	69.8	71.6
55CB AMP 9	60	65.3	66.5	68.0	69.8	71.6
55CB AMP 9	61	65.3	66.5	68.0	69.8	71.6
55CB AMP 7	62	68.4	69.9	71.6	73.5	75.3
55CB AMP 7	63	68.4	69.9	71.6	73.5	75.3
HYB VS1	64	69.2	70.9	72.7	74.6	76.3
HYB VS3	65	65.7	67.1	68.8	70.6	72.5
HYE A6T	66	68.2	69.9	71.9	73.8	75.6
END FT FWD	67	65.5	66.4	67.5	68.8	70.1
SUP RT FWD	68	68.4	70.2	72.2	74.1	75.9
SUP RT MID	69	90.9	99.6	106.5	109.8	111.1
SUP RT AFT	70	69.5	71.2	73.0	74.8	76.6
END AFT	71	68.0	68.0	68.0	68.1	68.2
SUP LF AFT	72	65.8	67.2	68.9	70.7	72.6
SUP LF MID	73	67.6	72.0	76.6	80.6	83.8
SUP LF FWD	74	55.3	60.0	65.0	69.9	74.4
FM CASE	75	67.3	67.9	68.8	69.9	71.2
ALTX CASE	76	67.0	67.7	68.6	69.8	71.0
ALTA MB	77	68.2	68.8	69.8	71.0	72.3
CASE A5, A6	78	66.8	68.1	69.6	71.0	72.5
CASE A9-12	79	65.5	66.8	68.3	69.7	71.2
CASE MBA14	80	67.9	69.3	70.8	72.2	73.6
CASE VSX	81	69.4	69.8	70.6	71.6	72.8
CASE A7, A8	82	66.5	67.9	69.5	71.0	72.6
WG VS2 AFT	83	74.6	79.6	83.4	85.4	86.9
WG VS2MAFT	84	65.8	67.9	70.2	72.2	74.2
WG VS2MFWD	85	64.9	67.0	69.2	71.4	73.5
WG VS2 FWD	86	67.8	72.9	78.1	82.1	85.1
WG VS1MAFT	87	71.5	74.2	76.8	78.9	80.6
WG VS1 AFT	88	84.5	89.9	94.1	95.9	96.8
WG ALT MID	89	68.7	71.6	74.4	76.7	78.7
WG ALT CEN	90	84.8	90.8	94.5	95.6	96.3
HYB A25	91	69.8	72.1	74.4	76.6	78.4
HYB A24	92	64.9	66.6	68.6	70.7	72.6
HYE A23	93	67.6	69.9	72.4	74.7	76.7
TCP COVER	94	67.2	69.1	71.2	72.9	74.6
TILT STRCT	95	59.6	60.0	60.4	60.9	61.5
HTR CONTRL	96	68.9	69.1	70.3	71.7	73.2
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	59.1	59.1	59.2	59.4	59.5

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NOTE	TIME	58.400	58.406
VSR 3	1	99.4	99.7
FILLER BLK	2	103.2	103.5
VSR 2	3	104.3	104.4
ALTIM	4	113.6	113.5
VSR 1	5	117.0	116.9
XTRMA	6	88.1	88.4
SUP LF FWD	7	93.2	93.5
SUP LF AFT	8	96.3	96.5
SUP RT FWD	9	112.0	112.0
SUP RT AFT	10	116.6	116.5
SHROUD A C	11	139.2	139.0
SHROUD F C	12	119.7	119.7
SHROUD F R	13	139.6	139.6
SHROUD R F	14	128.1	127.8
SHROUD L F	15	110.2	110.3
SHROUD TOP	16	138.2	137.7
SHROUD R A	17	128.1	127.9
SUP RC	18	112.6	112.6
SHROUD L A	19	113.3	113.2
SHROUD F L	20	108.1	108.3
SHROUD A L	21	115.2	115.1
SHROUD A R	22	124.7	124.5
LEM BASE	23	217.4	218.4
TLT EX FWD	24	84.2	86.3
TLT EX LFT	25	89.3	90.6
TLT EX AFT	26	134.8	136.5
TLT EXT RT	27	89.3	90.6
PLT MODALT	28	73.2	73.3
PLT A5,A6	29	76.5	76.6
PLT A-22	30	75.0	75.2
PLT A4	31	75.3	75.5
PLT A4	32	75.4	75.6
PLT CENTER	33	75.1	75.3
PLT CUNTLR	34	74.9	75.1
PLT A9-12	35	75.4	75.6
PLT A-14	36	75.9	76.1
PLT A-14	37	75.4	75.6
PLT A14	38	75.5	75.7
PLT A26	39	75.8	76.0
PLT A7,A8	40	76.7	76.9
FREQ MOD	41	73.0	73.2
ALT SSX	42	73.0	73.2
V.S. SSX	43	75.1	75.3
AMP.SW A13	44	75.7	75.9
AMP.SW A13	45	75.7	75.9
AMP.SW A14	46	75.0	75.2
AMP.SW A14	47	75.0	75.2
AMP.SW A14	48	75.3	75.5
AMP.SW A14	49	74.9	75.1
AMP.SW A14	50	75.2	75.4
AMP.SW A14	51	75.2	75.4

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	58.400	58.406
TH DET A13	52	76.0	76.2
TH DET A14	53	75.2	75.4
TH DET A14	54	75.3	75.5
TH DET A14	55	75.3	75.5
LEVELER	56	71.9	72.0
55CB AMP 5	57	76.3	76.5
55CB AMP 9	58	73.4	73.6
55CB AMP 9	59	73.4	73.6
55CB AMP 9	60	73.4	73.6
55CB AMP 9	61	73.4	73.6
55CB AMP 7	62	77.0	77.2
55CB AMP 7	63	77.0	77.2
HYB VS1	64	78.0	78.2
HYB VS3	65	74.3	74.5
HYB A6T	66	77.2	77.4
END FT FWD	67	71.5	71.7
SUP RT FWD	68	77.5	77.7
SUP RT MID	69	111.6	111.6
SUP RT AFT	70	78.2	78.4
END AFT	71	68.4	68.4
SUP LF AFT	72	74.4	74.6
SUP LF MID	73	86.5	86.8
SUP LF FWD	74	78.5	78.9
FM CASE	75	72.6	72.8
ALTX CASE	76	72.3	72.5
ALTA MB	77	73.7	73.8
CASE A5, A6	78	73.9	74.1
CASE A9-12	79	72.7	72.8
CASE MBA14	80	74.9	75.0
CASE VSX	81	74.0	74.2
CASE A7, A8	82	74.1	74.3
WG VS2 AFT	83	88.3	88.5
WG VS2MAFT	84	76.1	76.3
WG VS2MFWD	85	75.4	75.7
WG VS2 FWD	86	87.6	87.9
WG VS1MAFT	87	82.1	82.3
WG VS1 AFT	88	97.4	97.5
WG ALT MID	89	80.4	80.6
WG ALT CEN	90	96.9	97.0
HYE A25	91	80.0	80.2
HYB A24	92	74.6	74.8
HYB A23	93	78.4	78.6
TOP COVER	94	76.1	76.3
TILT STRCT	95	62.1	62.2
HTR CONTRL	96	74.8	75.0
SPACE	97	-460.0	-460.0
ACTUATOR	98	59.8	59.8

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	58.406	58.450	58.500	58.550	58.600
VSR 3	1	99.7	101.9	104.4	107.0	109.3
FILLER BLK	2	103.5	105.1	107.1	109.4	111.8
VSR 2	3	104.4	105.3	106.8	108.7	110.8
ALTIM	4	113.5	113.6	114.4	115.6	117.3
VSR 1	5	116.9	116.7	117.0	117.8	119.0
XTRMA	6	88.4	91.0	94.5	98.4	102.4
SUP LF FWD	7	93.5	95.7	98.5	101.4	104.3
SUP LF AFT	8	96.5	98.1	100.4	103.0	105.9
SUP RT FWD	9	112.0	112.0	112.4	113.3	114.4
SUP RT AFT	10	116.5	116.2	116.3	116.9	117.9
SHROUD A C	11	139.0	138.2	138.0	138.3	138.9
SHROUD F C	12	119.7	119.8	119.9	119.5	118.2
SHROUD F R	13	139.6	139.9	140.2	140.1	138.7
SHROUD R F	14	127.8	126.5	125.3	124.4	123.5
SHROUD L F	15	110.3	110.5	110.8	111.1	111.3
SHROUD TOP	16	137.7	134.2	130.4	126.7	123.1
SHROUD R A	17	127.9	126.5	125.2	124.3	123.6
SUP RC	18	112.6	112.7	113.1	113.5	113.7
SHROUD L A	19	113.2	112.6	112.3	112.2	112.2
SHROUD F L	20	108.3	109.2	110.3	111.3	112.1
SHROUD A L	21	115.1	115.0	115.3	115.9	116.7
SHROUD A R	22	124.5	123.5	122.8	122.6	122.8
LEM BASE	23	218.4	225.7	232.7	238.4	239.2
TLT EX FWD	24	86.3	98.9	109.6	117.4	122.3
TLT EX LFT	25	90.6	98.4	105.3	110.7	114.2
TLT EX AFT	26	136.5	147.0	155.9	162.6	166.8
TLT EXT RT	27	90.6	98.4	105.3	110.7	114.2
PLT MOCALT	28	73.3	76.8	80.8	84.8	88.7
PLT A5, A6	29	76.6	82.4	86.6	90.5	94.3
PLT A-22	30	75.2	83.7	88.6	93.2	97.4
PLT A4	31	75.5	81.6	87.7	93.1	97.8
PLT A4	32	75.6	82.4	88.5	93.8	98.6
PLT CENTER	33	75.3	82.1	88.3	93.6	98.4
PLT CCNTRLR	34	75.1	88.4	95.5	100.6	105.1
PLT A9-12	35	75.6	81.0	85.7	90.0	94.2
PLT A-14	36	76.1	82.3	87.6	92.3	96.6
PLT A-14	37	75.6	81.8	87.0	91.7	96.1
PLT A14	38	75.7	82.0	87.6	92.6	97.2
PLT A26	39	76.0	82.1	87.5	92.4	96.9
PLT A7, A8	40	76.9	82.7	87.6	92.2	96.5
FREQ MOD	41	75.2	76.4	80.4	84.3	88.3
ALT SSX	42	75.2	76.4	80.3	84.3	88.2
V.S. SSX	43	75.3	81.2	87.4	92.8	97.6
AMP.SW A13	44	75.9	80.1	84.7	88.7	92.6
AMP.SW A13	45	75.9	80.1	84.7	88.7	92.6
AMP.SW A14	46	75.2	79.3	84.6	89.5	94.0
AMP.SW A14	47	75.2	79.3	84.6	89.5	94.0
AMP.SW A14	48	75.5	79.6	85.0	89.9	94.4
AMP.SW A14	49	75.1	79.1	84.4	89.3	93.8
AMP.SW A14	50	75.4	79.4	84.8	89.9	94.5
AMP.SW A14	51	75.4	79.4	84.8	89.9	94.5

INTEGRATION OF THERMAL TRANSIENTS

PGM 1179

APOLLO 1C MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	98.400	98.450	98.500	98.550	98.600
TH DET A13	52	76.2	80.9	85.4	89.4	93.2
TH DET A14	53	75.4	80.4	86.1	91.2	95.9
TH DET A14	54	75.5	80.5	86.2	91.3	96.0
TH DET A14	55	75.5	80.5	86.2	91.3	96.0
LEVELER	56	72.0	74.1	77.4	81.0	84.9
55CB AMP 5	57	76.5	78.7	81.9	85.2	88.4
55CB AMP 9	58	73.6	75.9	79.3	83.0	86.7
55CB AMP 9	59	73.6	75.9	79.3	83.0	86.7
55CB AMP 9	60	73.6	75.9	79.3	83.0	86.7
55CB AMP 9	61	73.6	75.9	79.3	83.0	86.7
55CB AMP 7	62	77.2	79.3	82.6	86.2	89.8
55CB AMP 7	63	77.2	79.3	82.6	86.2	89.8
HYB VS1	64	78.2	81.0	84.6	88.4	92.1
HYB VS3	65	74.5	77.5	81.2	85.0	88.8
HYB A6T	66	77.4	80.3	83.7	86.9	90.2
END FT FWD	67	71.7	73.4	75.8	78.7	81.8
SUP RT FWD	68	77.7	80.5	83.8	87.1	90.3
SUP RT MID	69	111.6	111.8	112.1	112.6	113.4
SUP RT AFT	70	78.4	81.2	84.8	88.5	92.2
END AFT	71	68.4	68.7	69.1	69.6	70.3
SUP LF AFT	72	74.6	77.6	81.3	85.0	88.8
SUP LF MID	73	86.8	89.7	93.5	97.2	100.7
SUP LF FWD	74	78.9	82.2	85.7	89.0	92.2
FM CASE	75	72.8	74.9	78.3	82.1	86.0
ALTX CASE	76	72.5	74.2	77.0	80.4	83.9
ALTA MB	77	73.8	76.7	80.9	85.0	88.9
CASE A5, A6	78	74.1	75.6	77.9	80.8	84.0
CASE A9-12	79	72.8	74.3	76.5	79.2	82.3
CASE MBA14	80	75.0	76.6	79.2	82.2	85.5
CASE VSX	81	74.2	76.5	80.8	85.3	89.7
CASE A7, A8	82	74.3	75.7	77.9	80.7	83.8
WG VS2 AFT	83	88.5	90.0	92.4	95.1	98.0
WG VS2MAFT	84	76.3	78.1	80.9	84.0	87.4
WG VS2MFWC	85	75.7	77.5	80.3	83.5	86.8
WG VS2 FWC	86	87.9	89.9	92.4	95.1	97.9
WG VS1MAFT	87	82.3	83.7	85.9	88.7	91.8
WG VS1 AFT	88	97.5	98.0	99.2	100.9	103.0
WG ALT MID	89	80.6	82.0	84.0	86.3	88.8
WG ALT CEN	90	97.0	97.7	99.0	100.7	102.8
HYB A25	91	80.2	81.8	84.4	87.3	90.6
HYB A24	92	74.8	76.8	79.7	83.0	86.5
HYB A23	93	78.6	80.3	82.7	85.3	88.0
TOP COVER	94	76.3	77.6	79.0	80.5	81.9
TILT STRCT	95	62.2	62.8	63.5	64.3	65.2
HTR CNTLR	96	75.0	87.9	95.1	100.3	104.9
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	59.8	60.0	60.3	60.7	61.1

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	SE. 630
VSR 3	1	110.6
FILLER BLK	2	113.2
VSR 2	3	112.1
ALTIM	4	118.4
VSR 1	5	119.9
XTRMA	6	104.8
SUP LF FWD	7	106.0
SUP LF AFT	8	107.7
SUP RT FWD	9	115.2
SUP RT AFT	10	118.6
SHROUD A C	11	139.3
SHROUD F C	12	117.1
SHROUD F R	13	137.5
SHROUD R F	14	122.9
SHROUD L F	15	111.3
SHROUD TOP	16	120.8
SHROUD R A	17	122.2
SUP RC	18	113.8
SHROUD L A	19	112.3
SHROUD F L	20	112.4
SHROUD A L	21	117.3
SHROUD A R	22	123.0
LEM BASE	23	239.2
TLT EX FWD	24	124.0
TLT EX LFT	25	115.4
TLT EX AFT	26	168.0
TLT EXT RT	27	115.4
PLT MODALT	28	91.1
PLT A5, A6	29	96.6
PLT A-22	30	99.9
PLT A4	31	100.5
PLT A4	32	101.3
PLT CENTER	33	101.1
PLT CONTRL	34	107.7
PLT A9-12	35	96.6
PLT A-14	36	99.1
PLT A-14	37	98.6
PLT A14	38	99.8
PLT A26	39	99.5
PLT A7, A8	40	99.0
FREQ MOD	41	90.7
ALT SSX	42	90.6
V.S. SSX	43	100.3
AMP.SW A13	44	94.8
AMP.SW A13	45	94.8
AMP.SW A14	46	96.6
AMP.SW A14	47	96.6
AMP.SW A14	48	96.9
AMP.SW A14	49	96.4
AMP.SW A14	50	97.2
AMP.SW A14	51	97.2

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	TEMP
TH DET A13	52	95.5
TH DET A14	53	98.6
TH DET A14	54	98.7
TH DET A14	55	98.7
LEVELER	56	87.3
55CB AMP 5	57	90.4
55CB AMP 9	58	89.0
55CB AMP 9	59	89.0
55CB AMP 9	60	89.0
55CB AMP 9	61	89.0
55CB AMP 7	62	92.1
55CB AMP 7	63	92.1
HYB VS1	64	94.4
HYB VS3	65	91.1
HYB A6T	66	92.2
END FT FWD	67	83.8
SUP RT FWD	68	92.3
SUP RT MID	69	114.0
SUP RT AFT	70	94.5
END AFT	71	70.7
SUP LF AFT	72	91.1
SUP LF MID	73	102.7
SUP LF FWD	74	94.1
FM CASE	75	88.3
ALTX CASE	76	86.1
ALTA MB	77	91.2
CASE A5, A6	78	85.9
CASE A9-12	79	84.2
CASE MBA14	80	87.6
CASE VSX	81	92.3
CASE A7, A8	82	85.8
WG VS2 AFT	83	99.8
WG VS2MAFT	84	89.5
WG VS2MFWD	85	89.0
WG VS2 FWD	86	99.5
WG VS1MAFT	87	93.8
WG VS1 AFT	88	104.4
WG ALT MID	89	90.4
WG ALT CEN	90	104.1
HYB A25	91	92.6
HYB A24	92	88.6
HYB A23	93	89.8
TOP COVER	94	82.8
TILT STRCT	95	65.7
HTR CENTLR	96	107.4
SPACE	97	-460.0
ACTUATOR	98	61.3

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	98.630	98.650	98.700	98.750	98.800
VSR 3	1	110.6	111.3	112.4	112.6	111.6
FILLER BLK	2	113.2	114.0	115.7	116.5	116.3
VSR 2	3	112.1	112.9	114.6	115.6	115.6
ALTIM	4	118.4	119.1	120.3	120.9	120.5
VSR 1	5	119.9	120.4	121.6	122.2	122.0
XTRMA	6	104.8	106.2	108.8	110.5	110.9
SUP LF FWD	7	106.0	107.0	108.8	109.6	109.2
SUP LF AFT	8	107.7	108.8	110.9	112.1	112.4
SUP RT FWD	9	115.2	115.6	116.4	116.5	115.9
SUP RT AFT	10	118.6	119.1	120.0	120.6	120.4
SHROUD A C	11	139.3	139.6	140.0	139.8	139.1
SHROUD F C	12	117.1	116.2	113.1	109.0	104.1
SHROUD F R	13	137.5	136.5	132.4	127.0	119.9
SHROUD R F	14	122.9	122.6	121.2	119.2	116.4
SHROUD L F	15	111.3	111.3	110.8	109.6	107.5
SHROUD TOP	16	120.8	119.4	115.8	112.1	108.1
SHROUD R A	17	123.2	122.9	122.1	120.8	118.8
SUP RC	18	113.8	113.7	113.1	111.9	109.9
SHROUD L A	19	112.3	112.3	112.0	111.3	109.8
SHROUD F L	20	112.4	112.5	112.2	111.1	109.0
SHROUD A L	21	117.3	117.7	118.3	118.3	117.6
SHROUD A R	22	123.0	123.2	123.4	123.1	122.2
LEM BASE	23	239.2	237.2	229.2	215.0	195.8
TLT EX FWD	24	124.0	124.6	123.2	118.5	109.7
TLT EX LFT	25	115.4	115.7	114.1	109.7	101.7
TLT EX AFT	26	168.0	168.3	165.9	159.9	149.3
TLT EXT RT	27	115.4	115.7	114.1	109.7	101.7
PLT MOCALT	28	91.1	91.6	93.0	94.4	95.6
PLT A5, A6	29	96.6	95.4	95.8	96.9	98.0
PLT A-22	30	99.9	96.5	96.4	97.0	97.7
PLT A4	31	100.5	100.0	99.0	98.8	99.0
PLT A4	32	101.3	100.1	99.2	99.0	99.2
PLT CENTER	33	101.1	100.1	98.9	98.7	98.9
PLT CONTRL	34	107.7	102.2	98.2	97.9	98.3
PLT A9-12	35	96.6	95.9	96.5	97.5	98.5
PLT A-14	36	99.1	98.1	98.0	98.6	99.3
PLT A-14	37	98.6	97.6	97.7	98.3	99.0
PLT A14	38	99.8	98.8	98.5	98.8	99.4
PLT A26	39	99.5	98.5	98.5	98.9	99.4
PLT A7, A8	40	99.0	98.0	98.4	99.0	99.7
FREQ MUD	41	90.7	91.4	92.9	94.2	95.5
ALT SSX	42	90.6	91.3	92.8	94.2	95.4
V.S. SSX	43	100.3	100.0	99.0	98.8	99.0
AMP.SW A13	44	94.8	95.3	95.4	96.3	97.4
AMP.SW A13	45	94.8	95.3	95.4	96.3	97.4
AMP.SW A14	46	96.6	97.4	97.7	98.1	98.7
AMP.SW A14	47	96.6	97.4	97.7	98.1	98.8
AMP.SW A14	48	96.9	97.7	98.0	98.4	99.1
AMP.SW A14	49	96.4	97.2	97.7	98.2	98.8
AMP.SW A14	50	97.2	98.1	98.5	98.8	99.3
AMP.SW A14	51	97.2	98.1	98.5	98.8	99.3

INTEGRATION OF THERMAL TRANSIENTS

PGM 1179

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	98.630	98.650	98.700	98.750	98.800
TH DET A13	52	95.5	95.6	95.5	96.5	97.6
TH DET A14	53	98.6	99.0	98.6	98.8	99.3
TH DET A14	54	98.7	99.0	98.6	98.8	99.3
TH DET A14	55	98.7	99.0	98.6	98.8	99.3
LEVELER	56	87.3	88.5	90.6	92.2	93.6
55CB AMP 5	57	90.4	91.6	93.3	94.9	96.3
55CB AMP 9	58	89.0	90.4	92.7	94.5	96.1
55CB AMP 9	59	89.0	90.4	92.7	94.5	96.1
55CB AMP 9	60	89.0	90.4	92.7	94.5	96.1
55CB AMP 9	61	89.0	90.4	92.7	94.5	96.1
55CB AMP 7	62	92.1	93.4	95.7	97.3	98.6
55CB AMP 7	63	92.1	93.4	95.7	97.3	98.6
HYB VS1	64	94.4	95.3	96.9	98.3	99.5
HYB VS3	65	91.1	92.1	93.9	95.6	97.1
HYB A6T	66	92.2	92.9	94.3	95.7	97.1
END FT FWD	67	83.8	85.1	87.9	90.2	92.2
SUP RT FWD	68	92.2	93.1	94.4	95.9	97.3
SUP RT MID	69	114.0	114.3	115.3	115.9	116.0
SUP RT AFT	70	94.5	95.4	97.1	98.5	99.7
END AFT	71	70.7	71.0	71.7	72.4	73.2
SUP LF AFT	72	91.1	92.1	94.0	95.6	97.1
SUP LF MID	73	102.7	103.7	105.2	106.2	106.8
SUP LF FWD	74	94.1	95.2	98.0	100.4	102.3
FM CASE	75	88.3	89.6	91.8	93.4	94.7
ALTX CASE	76	86.1	87.5	90.1	91.9	93.4
ALTA MB	77	91.2	92.1	93.0	93.9	94.9
CASE A5,A6	78	85.9	87.2	89.8	91.7	93.2
CASE A9-12	79	84.2	85.4	88.2	90.4	92.1
CASE MBA14	80	87.6	88.8	91.2	92.9	94.2
CASE VSX	81	92.3	93.6	95.2	95.8	96.3
CASE A7,A8	82	85.8	87.2	90.2	92.5	94.3
WG VS2 AFT	83	99.8	101.0	103.1	104.7	105.7
WG VS2MAFT	84	89.5	90.8	93.7	95.9	97.6
WG VS2MFWD	85	89.0	90.3	93.2	95.4	97.2
WG VS2 FWD	86	99.5	100.6	102.9	104.5	105.2
WG VS1MAFT	87	93.8	95.1	97.7	99.7	101.1
WG VS1 AFT	88	104.4	105.4	107.6	109.2	110.1
WG ALT MID	89	90.4	91.5	94.0	96.1	97.8
WG ALT CEN	90	104.1	105.0	107.0	108.4	109.1
HYB A25	91	92.6	93.9	96.5	98.5	100.0
HYB A24	92	88.6	90.0	92.7	94.9	96.7
HYB A23	93	89.8	90.9	93.2	95.1	96.8
TOP COVER	94	82.8	83.3	84.7	86.1	87.4
TILT STRCT	95	65.7	66.1	67.1	68.0	69.0
HTR CNTLR	96	107.4	102.5	98.2	97.8	98.2
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	61.3	61.5	62.0	62.6	63.2

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	58.850	58.900	58.950	59.000	59.050
VSR 3	1	110.1	108.7	105.1	97.8	90.8
FILLER BLK	2	115.4	114.3	109.4	99.4	91.1
VSR 2	3	115.0	114.2	108.8	97.3	88.3
ALTIM	4	119.5	118.4	112.2	99.2	88.9
VSR 1	5	121.3	120.4	114.3	101.1	90.6
XTRMA	6	110.7	110.3	106.6	98.2	91.0
SUP LF FWD	7	108.4	107.6	105.0	97.7	90.4
SUP LF AFT	8	112.1	111.5	108.0	98.0	89.7
SUP RT FWD	9	114.8	113.8	109.9	100.1	91.0
SUP RT AFT	10	119.8	119.1	114.4	101.3	90.3
SHROUD A C	11	137.9	137.1	117.0	90.6	79.0
SHROUD F C	12	101.0	99.2	96.3	86.9	76.7
SHROUD F R	13	115.2	112.6	102.0	80.2	66.4
SHROUD R F	14	113.9	112.2	105.1	90.0	78.1
SHROUD L F	15	105.4	103.8	100.7	91.9	83.1
SHROUD TOP	16	104.8	102.7	97.6	83.8	71.6
SHROUD R A	17	117.1	115.8	108.3	94.2	83.0
SUP RC	18	107.9	106.4	104.6	100.5	94.5
SHROUD L A	19	108.3	107.1	103.1	91.9	81.8
SHROUD F L	20	107.0	105.4	102.0	93.5	85.3
SHROUD A L	21	116.5	115.5	107.0	93.5	83.7
SHROUD A R	22	121.0	119.9	111.1	96.4	85.4
LEM BASE	23	188.2	183.5	77.0	-71.8	-131.5
TLT EX FWD	24	100.7	94.2	77.9	38.5	5.5
TLT EX LFT	25	94.0	88.8	74.1	38.4	10.6
TLT EX AFT	26	139.2	132.5	112.8	64.9	26.8
TLT EXT RT	27	94.0	88.8	74.1	38.4	10.6
PLT MODALT	28	96.7	97.6	98.4	98.6	98.3
PLT A5, A6	29	98.9	99.7	100.2	99.7	98.5
PLT A-22	30	98.5	99.2	99.7	99.4	98.6
PLT A4	31	99.5	99.9	100.3	100.0	99.1
PLT A4	32	99.6	100.1	100.4	100.1	99.2
PLT CENTER	33	99.3	99.8	100.2	99.9	99.1
PLT CNTLR	34	98.9	99.4	99.8	99.5	98.5
PLT A9-12	35	99.4	100.2	100.7	100.3	99.3
PLT A-14	36	100.0	100.6	100.9	100.3	99.1
PLT A-14	37	99.8	100.4	100.9	100.5	99.5
PLT A14	38	99.9	100.5	101.0	100.7	99.8
PLT A26	39	100.0	100.6	101.1	100.9	100.0
PLT A7, A8	40	100.4	101.0	101.4	101.0	100.0
FREQ MOD	41	96.6	97.5	98.3	98.6	98.3
ALT SSX	42	96.5	97.5	98.3	98.6	98.3
V.S. SSX	43	99.4	99.9	100.2	100.0	99.2
AMP.SW A13	44	98.4	99.3	100.0	99.8	99.0
AMP.SW A13	45	98.4	99.3	100.0	99.8	99.0
AMP.SW A14	46	99.5	100.1	100.6	100.5	99.6
AMP.SW A14	47	99.5	100.1	100.6	100.5	99.6
AMP.SW A14	48	99.7	100.4	100.9	100.7	99.7
AMP.SW A14	49	99.6	100.2	100.8	100.7	99.9
AMP.SW A14	50	99.9	100.4	101.0	101.0	100.4
AMP.SW A14	51	99.9	100.4	101.0	101.0	100.4

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	98.850	98.900	98.950	99.000	99.050
TH DET A13	52	98.6	99.5	100.1	99.8	98.8
TH DET A14	53	99.9	100.5	100.9	100.8	100.0
TH DET A14	54	99.9	100.5	100.9	100.8	100.0
TH DET A14	55	99.9	100.5	100.9	100.8	100.0
LEVELER	56	94.8	95.9	96.8	97.6	98.0
55CB AMP 5	57	97.6	98.7	99.7	100.0	99.6
55CB AMP 9	58	97.4	98.6	99.5	100.0	99.8
55CB AMP 9	59	97.4	98.6	99.5	100.0	99.8
55CB AMP 9	60	97.4	98.6	99.5	100.0	99.8
55CB AMP 9	61	97.4	98.6	99.5	100.0	99.8
55CB AMP 7	62	99.7	100.6	101.4	101.7	101.3
55CB AMP 7	63	99.7	100.6	101.4	101.7	101.3
HYB VS1	64	100.5	101.3	101.9	101.9	101.1
HYB VS3	65	98.3	99.3	100.1	100.3	99.8
HYB A6T	66	98.4	99.4	100.2	100.2	99.5
END FT FWD	67	93.8	95.2	96.4	97.1	97.4
SUP RT FWD	68	98.5	99.5	100.3	100.2	99.4
SUP RT MID	69	115.6	114.9	113.5	109.2	102.8
SUP RT AFT	70	100.6	101.4	102.0	101.9	101.0
END AFT	71	72.9	74.6	75.3	76.0	76.7
SUP LF AFT	72	98.3	99.4	100.1	100.3	99.8
SUP LF MID	73	107.1	107.1	106.6	104.5	101.0
SUP LF FWD	74	103.7	104.5	104.8	104.1	102.1
FM CASE	75	95.8	96.9	97.7	98.1	98.0
ALTX CASE	76	94.7	95.7	96.7	97.2	97.2
ALTA MB	77	95.8	96.6	97.3	97.5	97.1
CASE A5, A6	78	94.4	95.5	96.4	96.8	96.6
CASE A9-12	79	93.5	94.6	95.5	95.8	95.7
CASE MBA14	80	95.2	96.0	96.6	96.5	95.9
CASE VSX	81	96.7	97.3	97.7	97.8	97.4
CASE A7, A8	82	95.6	96.7	97.6	98.0	98.0
WG VS2 AFT	83	106.2	106.4	105.1	100.2	95.6
WG VS2MAFT	84	99.0	100.1	100.8	100.6	99.7
WG VS2MFWD	85	98.6	99.7	100.5	100.6	100.0
WG VS2 FWD	86	105.3	105.0	104.2	101.4	97.4
WG VS1MAFT	87	102.2	103.0	103.5	103.0	101.5
WG VS1 AFT	88	110.6	110.7	109.6	104.4	98.8
WG ALT MID	89	99.3	100.5	101.3	101.2	100.2
WG ALT CEN.	90	109.4	109.4	107.4	101.0	95.3
HYB A25	91	101.2	102.1	102.7	102.7	101.8
HYB A24	92	98.1	99.3	100.2	100.5	100.1
HYB A23	93	98.3	99.5	100.5	100.8	100.2
TOP COVER	94	88.5	89.6	90.5	91.0	91.1
TILT STRCT	95	69.9	70.7	71.6	72.2	72.8
HTR CNTLR	96	98.8	99.3	99.8	99.5	98.5
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	63.8	64.5	65.1	65.8	66.5

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	99.100	99.150	99.200	99.250	99.300
VSR 3	1	84.3	78.5	73.3	68.7	64.5
FILLER BLK	2	84.1	78.2	73.0	68.4	64.4
VSR 2	3	81.2	75.3	70.4	66.2	62.4
ALTIM	4	80.9	74.5	69.2	64.8	61.0
VSR 1	5	82.2	75.4	69.7	64.9	60.8
XTRMA	6	85.1	80.1	75.8	72.0	68.7
SUP LF FWD	7	84.1	78.7	73.9	69.7	65.9
SUP LF AFT	8	83.0	77.5	72.9	68.9	65.3
SUP RT FWD	9	83.4	76.9	71.5	66.8	62.7
SUP RT AFT	10	81.8	74.9	69.2	64.5	60.3
SHROUD A C	11	70.8	64.4	59.1	54.8	51.0
SHROUD F C	12	68.6	62.2	56.9	52.5	48.8
SHROUD F R	13	57.1	50.1	44.7	40.2	36.5
SHROUD R F	14	69.1	62.2	56.6	52.0	48.1
SHROUD L F	15	75.7	69.5	64.1	59.4	55.4
SHROUD TOP	16	62.5	55.4	49.7	45.1	41.1
SHROUD R A	17	74.3	67.3	61.6	56.8	52.6
SUP RC	18	87.7	81.1	74.8	69.1	64.0
SHROUD L A	19	73.9	67.6	62.4	57.9	54.1
SHROUD F L	20	78.2	72.1	66.8	62.1	58.0
SHROUD A L	21	76.0	69.8	64.7	60.3	56.5
SHROUD A R	22	76.7	69.8	64.1	59.3	55.2
LEM BASE	23	-165.8	-189.1	-206.4	-219.9	-230.9
TLT EX FWD	24	-19.0	-37.5	-51.9	-63.2	-72.3
TLT EX LFT	25	-8.4	-21.6	-30.9	-37.7	-42.7
TLT EX AFT	26	-0.2	-19.9	-34.7	-46.1	-55.0
TLT EXT RT	27	-8.4	-21.6	-30.9	-37.7	-42.7
PLT MODALT	28	97.5	96.4	95.0	93.4	91.7
PLT A5,A6	29	97.1	95.4	93.6	91.7	89.7
PLT A-22	30	97.5	96.1	94.4	92.7	90.8
PLT A4	31	97.8	96.2	94.4	92.5	90.5
PLT A4	32	97.8	96.2	94.4	92.5	90.5
PLT CENTER	33	97.8	96.2	94.4	92.5	90.5
PLT CNTLR	34	97.1	95.5	93.7	91.7	89.7
PLT A9-12	35	97.9	96.2	94.3	92.3	90.1
PLT A-14	36	97.6	95.8	93.8	91.8	89.6
PLT A-14	37	98.1	96.4	94.4	92.4	90.2
PLT A14	38	98.4	96.8	94.9	92.8	90.7
PLT A26	39	98.6	97.0	95.1	93.0	90.9
PLT A7,A8	40	98.5	96.8	94.8	92.6	90.4
FREQ MOD	41	97.5	96.5	95.1	93.6	91.9
ALT SSX	42	97.6	96.5	95.1	93.6	91.9
V.S. SSX	43	97.9	96.3	94.6	92.7	90.7
AMP.SW A13	44	97.6	96.1	94.3	92.5	90.5
AMP.SW A13	45	97.6	96.1	94.3	92.5	90.5
AMP.SW A14	46	98.3	96.7	94.8	92.8	90.7
AMP.SW A14	47	98.3	96.7	94.8	92.8	90.7
AMP.SW A14	48	98.3	96.6	94.6	92.6	90.5
AMP.SW A14	49	98.7	97.1	95.2	93.2	91.1
AMP.SW A14	50	99.2	97.6	95.8	93.8	91.7
AMP.SW A14	51	99.2	97.6	95.8	93.8	91.7

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NOTE	TIME	99.100	99.150	99.200	99.250	99.300
TH DET A13	52	97.5	95.9	94.1	92.2	90.2
TH DET A14	53	98.7	97.1	95.2	93.2	91.1
TH DET A14	54	98.7	97.1	95.2	93.2	91.1
TH DET A14	55	98.7	97.1	95.2	93.2	91.1
LEVELER	56	98.0	97.6	97.0	96.0	94.9
55CB AMP 5	57	98.6	97.2	95.5	93.7	91.7
55CB AMP 9	58	99.0	97.8	96.2	94.4	92.4
55CB AMP 9	59	99.0	97.8	96.2	94.4	92.4
55CB AMP 9	60	99.0	97.8	96.2	94.4	92.4
55CB AMP 9	61	99.0	97.8	96.2	94.4	92.4
55CB AMP 7	62	100.2	98.7	96.8	94.8	92.6
55CB AMP 7	63	100.2	98.7	96.8	94.8	92.6
HYB VS1	64	99.7	98.0	96.0	93.8	91.5
HYB VS3	65	98.8	97.3	95.6	93.7	91.6
HYB A6T	66	98.2	96.7	94.8	92.9	90.8
END FT FWD	67	97.3	96.7	95.8	94.6	93.2
SUP RT FWD	68	98.1	96.5	94.7	92.7	90.7
SUP RT MID	69	95.8	88.9	82.5	76.7	71.5
SUP RT AFT	70	99.6	97.9	95.8	93.6	91.3
END AFT	71	77.3	77.8	78.3	78.7	79.1
SUP LF AFT	72	98.7	97.3	95.5	93.6	91.5
SUP LF MID	73	97.0	92.8	88.6	84.7	80.9
SUP LF FWD	74	99.3	95.9	92.2	88.3	84.5
FM CASE	75	97.5	96.6	95.3	93.9	92.3
ALTX CASE	76	96.8	96.1	95.0	93.6	92.1
ALTA MB	77	96.3	95.2	93.9	92.3	90.7
CASE A5,A6	78	96.1	95.1	93.9	92.5	90.9
CASE A9-12	79	95.1	94.2	93.1	91.7	90.1
CASE MBA14	80	94.9	93.7	92.3	90.7	89.1
CASE VSX	81	96.5	95.3	93.9	92.2	90.5
CASE A7,A8	82	97.5	96.5	95.3	93.8	92.1
WG VS2 AFT	83	91.5	87.9	84.6	81.5	78.6
WG VS2MAFT	84	98.3	96.6	94.7	92.6	90.4
WG VS2MFWD	85	98.8	97.1	95.2	93.1	90.9
WG VS2 FWD	86	93.2	89.1	85.2	81.5	78.0
WG VS1MAFT	87	99.5	97.2	94.8	92.3	89.8
WG VS1 AFT	88	93.7	89.2	85.1	81.5	78.1
WG ALT MID	89	98.6	96.7	94.6	92.4	90.2
WG ALT CEN	90	90.4	86.1	82.4	79.1	76.0
HYE A25	91	100.3	98.3	96.1	93.7	91.3
HYE A24	92	99.1	97.6	95.9	93.9	91.8
HYE A23	93	99.0	97.3	95.5	93.4	91.3
TOP COVER	94	90.7	90.2	89.4	88.5	87.4
TILT STRCT	95	73.2	73.5	73.7	73.8	73.9
HTR CNTLR	96	97.2	95.5	93.7	91.8	89.8
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	67.1	67.7	68.3	68.9	69.4

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	99.250	99.400	99.450	99.500	99.550
VSR 3	1	60.7	57.3	54.2	51.4	48.7
FILLER BLK	2	60.8	57.6	54.6	51.9	49.3
VSR 2	3	59.1	56.1	53.3	50.7	48.3
ALTIM	4	57.7	54.8	52.1	49.6	47.3
VSR 1	5	57.2	54.0	51.1	48.4	46.0
XTRMA	6	65.7	63.0	60.4	58.0	55.8
SUP LF FWD	7	62.5	59.4	56.6	54.0	51.6
SUP LF AFT	8	62.1	59.3	56.6	54.1	51.8
SUP RT FWD	9	59.1	55.8	52.9	50.3	47.9
SUP RT AFT	10	56.7	53.5	50.7	48.0	45.6
SHROUD A C	11	47.7	44.8	42.2	39.8	37.6
SHROUD F C	12	45.5	42.6	40.0	37.6	35.4
SHROUD F R	13	33.3	30.5	28.0	25.7	23.6
SHROUD R F	14	44.8	41.8	39.2	36.7	34.5
SHROUD L F	15	51.7	48.5	45.5	42.8	40.3
SHROUD TOP	16	37.8	34.8	32.1	29.7	27.5
SHROUD R A	17	49.1	45.9	43.1	40.5	38.1
SUP RC	18	59.5	55.4	51.8	48.5	45.6
SHROUD L A	19	50.7	47.7	44.9	42.4	40.1
SHROUD F L	20	54.3	51.0	48.0	45.3	42.7
SHROUD A L	21	53.2	50.2	47.4	44.9	42.6
SHROUD A R	22	51.6	48.5	45.6	43.0	40.6
LEM BASE	23	-240.0	-247.9	-254.7	-260.7	-266.0
TLT EX FWD	24	-79.7	-85.8	-90.9	-95.1	-98.7
TLT EX LFT	25	-46.4	-49.3	-51.4	-53.2	-54.5
TLT EX AFT	26	-62.1	-67.7	-72.4	-76.1	-79.3
TLT EXT RT	27	-46.4	-49.3	-51.4	-53.2	-54.5
PLT MOCAIT	28	89.9	88.0	86.0	84.1	82.1
PLT A5, A6	29	87.7	85.6	83.5	81.5	79.4
PLT A-22	30	88.9	86.9	84.9	82.9	80.8
PLT A4	31	88.5	86.4	84.3	82.2	80.1
PLT A4	32	88.4	86.3	84.2	82.1	80.0
PLT CENTER	33	88.4	86.3	84.2	82.1	80.1
PLT CCNTR	34	87.7	85.6	83.5	81.4	79.3
PLT A9-12	35	87.9	85.7	83.5	81.3	79.1
PLT A-14	36	87.4	85.2	83.0	80.8	78.7
PLT A-14	37	88.0	85.8	83.6	81.4	79.2
PLT A14	38	88.5	86.3	84.1	81.9	79.7
PLT A26	39	88.7	86.4	84.2	82.0	79.8
PLT A7, A8	40	88.2	85.9	83.7	81.4	79.2
FREQ MOD	41	90.0	88.2	86.2	84.2	82.3
ALT SSX	42	90.1	88.2	86.3	84.3	82.3
V.S. SSX	43	88.6	86.5	84.4	82.3	80.2
AMP.SW A13	44	88.5	86.5	84.4	82.4	80.3
AMP.SW A13	45	88.5	86.5	84.4	82.4	80.3
AMP.SW A14	46	88.6	86.4	84.2	82.0	79.8
AMP.SW A14	47	88.6	86.4	84.2	82.0	79.8
AMP.SW A14	48	88.3	86.1	83.9	81.7	79.5
AMP.SW A14	49	88.9	86.7	84.4	82.2	80.0
AMP.SW A14	50	89.5	87.3	85.0	82.8	80.6
AMP.SW A14	51	89.5	87.3	85.0	82.8	80.6

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	99.350	99.400	99.450	99.500	99.550
TH DET A13	52	88.2	86.2	84.1	82.1	80.0
TH DET A14	53	88.9	86.7	84.5	82.3	80.1
TH DET A14	54	88.9	86.7	84.4	82.2	80.0
TH DET A14	55	88.9	86.7	84.4	82.2	80.0
LEVELER	56	92.5	92.0	90.3	88.6	86.7
55CB AMP 5	57	89.6	87.6	85.5	83.3	81.2
55CB AMP 9	58	90.3	88.2	85.9	83.7	81.5
55CB AMP 9	59	90.3	88.2	85.9	83.7	81.5
55CB AMP 9	60	90.3	88.2	85.9	83.7	81.5
55CB AMP 9	61	90.3	88.2	85.9	83.7	81.5
55CB AMP 7	62	90.3	88.0	85.7	83.4	81.1
55CB AMP 7	63	90.3	88.0	85.7	83.4	81.1
HYB VS1	64	89.1	86.8	84.5	82.2	79.9
HYB VS3	65	89.4	87.2	85.0	82.7	80.5
HYB A6T	66	88.8	86.6	84.5	82.4	80.3
END FT FWD	67	91.6	89.9	88.1	86.2	84.2
SUP RT FWD	68	88.6	86.4	84.3	82.2	80.0
SUP RT MID	69	66.9	62.8	59.1	55.8	52.8
SUP RT AFT	70	89.0	86.6	84.3	82.0	79.7
END AFT	71	79.4	79.6	79.7	79.8	79.8
SUP LF AFT	72	89.4	87.1	84.9	82.6	80.4
SUP LF MID	73	77.4	74.2	71.1	68.2	65.5
SUP LF FWD	74	80.6	76.9	73.3	69.8	66.6
FM CASE	75	90.6	88.7	86.8	84.9	83.0
ALTX CASE	76	90.5	88.8	87.0	85.1	83.2
ALTA MB	77	88.9	87.1	85.2	83.3	81.4
CASE A5, A6	78	89.2	87.4	85.6	83.8	81.9
CASE A9-12	79	88.5	86.7	84.9	83.1	81.2
CASE MBA14	80	87.3	85.5	83.7	81.9	80.0
CASE VSX	81	88.7	86.8	84.9	82.9	81.0
CASE A7, A8	82	90.2	88.3	86.4	84.4	82.4
WG VS2 AFT	83	75.8	73.2	70.6	68.2	65.8
WG VS2MAFT	84	88.1	85.7	83.4	81.1	78.7
WG VS2MFWD	85	88.6	86.3	83.9	81.6	79.2
WG VS2 FWD	86	74.7	71.7	68.8	66.0	63.4
WG VS1MAFT	87	87.2	84.7	82.3	79.9	77.6
WG VS1 AFT	88	75.0	72.1	69.4	66.9	64.4
WG ALT MID	89	87.9	85.6	83.4	81.1	78.9
WG ALT CEN	90	73.2	70.5	68.1	65.7	63.4
HYB A25	91	88.8	86.4	84.0	81.6	79.3
HYB A24	92	89.5	87.3	84.9	82.6	80.3
HYB A23	93	89.1	86.9	84.7	82.5	80.4
TOP COVER	94	86.3	85.1	83.8	82.5	81.2
TILT STRCT	95	73.9	73.9	73.8	73.6	73.5
HTR CONTRL	96	87.7	85.7	83.6	81.5	79.4
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	69.8	70.2	70.6	70.9	71.1

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	99.600	99.650	99.700	99.750	99.800
VSR 3	1	46.3	43.9	41.7	40.4	43.2
FILLER BLK	2	46.9	44.7	42.6	40.8	42.5
VSR 2	3	46.1	43.9	41.9	40.5	43.7
ALTIM	4	45.2	43.2	41.2	40.0	42.9
VSP 1	5	43.7	41.5	39.5	38.0	41.4
XTRMA	6	53.6	51.6	49.6	47.9	47.5
SUP LF FWD	7	49.3	47.1	45.0	45.6	48.8
SUP LF AFT	8	49.6	47.5	45.5	44.8	46.8
SUP RT FWD	9	45.6	43.4	41.4	40.2	42.4
SUP RT AFT	10	43.3	41.2	39.2	37.6	41.6
SHROUD A C	11	35.5	33.5	31.6	37.8	71.0
SHROUD F C	12	33.4	31.4	29.6	79.0	124.4
SHROUD F R	13	21.7	19.8	18.1	57.1	97.5
SHROUD R F	14	32.4	30.5	28.6	37.8	73.7
SHROUD L F	15	38.0	35.8	33.8	44.3	71.9
SHROUD TOP	16	25.4	23.5	21.7	68.1	149.5
SHROUD R A	17	35.9	33.8	31.9	41.2	71.0
SUP RC	18	42.9	40.5	38.2	42.8	48.4
SHROUD L A	19	37.9	35.8	33.8	44.1	71.9
SHROUD F L	20	40.4	38.2	36.1	52.7	71.0
SHROUD A L	21	40.2	38.3	36.3	42.9	64.0
SHROUD A P	22	38.4	36.3	34.3	40.7	61.8
LEM BASE	23	-270.8	-275.1	-279.0	-282.6	-285.8
TLT EX FWD	24	-101.7	-104.3	-106.6	-108.5	-110.2
TLT EX LFT	25	-55.6	-56.6	-57.4	-58.1	-58.7
TLT EX AFT	26	-81.9	-84.1	-85.9	-87.5	-88.9
TLT EXT RT	27	-55.6	-56.6	-57.4	-58.1	-58.7
PLT MODALT	28	80.0	78.1	76.1	74.1	72.2
PLT A5, A6	29	77.4	75.3	73.3	71.3	69.6
PLT A-22	30	78.8	76.8	74.8	72.8	70.9
PLT A4	31	78.0	76.0	73.9	71.9	70.0
PLT A4	32	77.9	75.8	73.8	71.8	69.9
PLT CENTER	33	78.0	75.9	73.9	71.9	70.0
PLT CONTRL	34	77.3	75.2	73.2	71.2	69.3
PLT A9-12	35	76.9	74.7	72.6	70.5	68.6
PLT A-14	36	76.5	74.4	72.3	70.2	68.4
PLT A-14	37	77.0	74.9	72.8	70.7	68.8
PLT A14	38	77.5	75.4	73.3	71.2	69.3
PLT A26	39	77.6	75.5	73.4	71.3	69.4
PLT A7, A8	40	77.0	74.9	72.8	70.7	68.8
FREQ MOD	41	80.2	78.2	76.3	74.3	72.4
ALT SSX	42	80.3	78.3	76.3	74.3	72.4
V.S. SSX	43	78.2	76.1	74.1	72.1	70.2
AMP.SW A13	44	78.3	76.2	74.2	72.2	70.4
AMP.SW A13	45	78.3	76.2	74.2	72.2	70.4
AMP.SW A14	46	77.7	75.5	73.4	71.4	69.4
AMP.SW A14	47	77.7	75.5	73.4	71.4	69.4
AMP.SW A14	48	77.3	75.2	73.0	71.0	69.0
AMP.SW A14	49	77.8	75.7	73.5	71.4	69.5
AMP.SW A14	50	78.4	76.3	74.1	72.0	70.1
AMP.SW A14	51	78.4	76.3	74.1	72.0	70.1

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	99.600	99.650	99.700	99.750	99.800
TH DET A13	52	78.0	75.9	73.9	71.9	70.1
TH DET A14	53	77.9	75.8	73.6	71.6	69.6
TH DET A14	54	77.9	75.7	73.6	71.5	69.6
TH DET A14	55	77.9	75.7	73.6	71.5	69.6
LEVELER	56	84.9	82.9	81.0	79.0	77.1
55CB AMP 5	57	79.1	77.1	75.0	73.0	71.1
55CB AMP 9	58	79.3	77.1	74.9	72.8	70.7
55CB AMP 9	59	79.3	77.1	74.9	72.8	70.7
55CB AMP 9	60	79.3	77.1	74.9	72.8	70.7
55CB AMP 9	61	79.3	77.1	74.9	72.8	70.7
55CB AMP 7	62	78.9	76.6	74.5	72.3	70.3
55CB AMP 7	63	78.9	76.6	74.5	72.3	70.3
HYB VS1	64	77.6	75.4	73.3	71.1	69.2
HYB VS3	65	78.2	76.0	73.8	71.7	69.7
HYE A6T	66	78.2	76.1	74.0	72.0	70.1
END FT FWD	67	82.3	80.3	78.3	76.4	74.5
SUP RT FWD	68	77.9	75.9	73.8	71.8	70.0
SUP RT MID	69	50.1	47.6	45.2	43.4	43.9
SUP RT AFT	70	77.4	75.2	73.1	70.9	69.0
END AFT	71	79.7	79.6	79.4	79.2	78.9
SUP LF AFT	72	78.1	75.9	73.8	71.6	69.6
SUP LF MID	73	63.0	60.5	58.2	56.0	54.6
SUP LF FWD	74	63.5	60.5	57.7	55.1	53.3
FM CASE	75	81.0	79.0	77.1	75.1	73.2
ALTX CASE	76	81.3	79.4	77.5	75.6	73.7
ALTA MB	77	79.5	77.6	75.7	73.8	72.1
CASE A5, A6	78	80.0	78.1	76.3	74.4	72.7
CASE A9-12	79	79.3	77.5	75.6	73.8	72.1
CASE MBA14	80	78.2	76.4	74.6	72.8	71.1
CASE VSX	81	79.1	77.1	75.2	73.4	71.5
CASE A7, A8	82	80.4	78.4	76.4	74.5	72.6
WG VS2 AFT	83	63.5	61.3	59.2	57.2	57.1
WG VS2MAFT	84	76.5	74.2	72.0	69.8	68.0
WG VS2MFWD	85	76.9	74.7	72.5	70.3	68.3
WG VS2 FWD	86	61.0	58.6	56.3	54.3	53.7
WG VS1MAFT	87	75.3	73.0	70.8	68.7	66.9
WG VS1 AFT	88	62.1	59.9	57.7	55.7	55.3
WG ALT MID	89	76.8	74.6	72.6	70.5	68.7
WG ALT CEN	90	61.3	59.2	57.2	55.4	55.6
HYE A25	91	77.0	74.7	72.5	70.4	68.4
HYE A24	92	78.1	75.8	73.6	71.4	69.4
HYE A23	93	78.2	76.1	74.0	72.0	70.0
TCP COVER	94	79.8	78.4	77.0	75.7	75.0
TILT STRCT	95	73.2	73.0	72.6	72.3	71.9
HTR CONTRL	96	77.3	75.3	73.3	71.3	69.4
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	71.3	71.5	71.6	71.7	71.7

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	99.850	99.900	99.950	100.000	100.050
VSR 3	1	51.1	58.3	63.1	66.7	69.6
FILLER BLK	2	49.1	54.5	57.6	60.1	62.4
VSR 2	3	49.1	51.0	51.9	53.2	55.0
ALTIM	4	47.9	52.1	55.2	57.8	60.3
VSR 1	5	47.1	48.7	49.3	50.2	51.8
XTRMA	6	49.7	53.0	55.6	57.7	59.2
SUP LF FWD	7	53.9	59.7	63.3	66.3	68.7
SUP LF AFT	8	50.6	53.0	54.7	56.6	58.5
SUP RT FWD	9	47.2	55.4	61.8	66.6	70.5
SUP RT AFT	10	48.5	50.3	50.8	52.1	54.1
SHROUD A C	11	83.5	69.5	67.3	70.6	75.9
SHROUD F C	12	162.8	165.2	165.0	167.5	170.6
SHROUD F R	13	132.5	149.1	151.6	153.7	156.4
SHROUD R F	14	84.2	76.1	76.4	79.5	83.4
SHROUD L F	15	76.6	70.2	72.1	75.9	79.8
SHROUD TOP	16	124.5	95.9	93.2	97.2	102.8
SHROUD R A	17	74.1	65.5	65.4	68.0	71.5
SUP RC	18	63.9	84.9	98.5	107.9	114.5
SHROUD L A	19	75.6	66.0	65.6	67.9	71.1
SHROUD F L	20	80.6	79.5	82.4	86.1	89.6
SHROUD A L	21	66.1	60.2	60.2	62.2	65.2
SHROUD A R	22	64.6	58.3	58.0	59.8	62.6
LEM BASE	23	39.3	193.2	194.3	192.1	190.2
TLT EX FWD	24	-107.3	-51.8	4.4	42.0	64.2
TLT EX LFT	25	-55.0	-3.0	42.0	66.3	77.8
TLT EX AFT	26	-84.3	-11.2	57.0	96.2	115.3
TLT EXT RT	27	-55.0	-3.0	42.0	66.3	77.8
PLT LOCALT	28	70.5	69.2	70.1	69.7	69.0
PLT A5, A6	29	68.2	67.3	70.6	68.7	67.9
PLT A-22	30	69.4	68.2	74.0	70.0	68.9
PLT A4	31	68.5	67.3	70.5	70.2	68.8
PLT A4	32	68.3	67.1	71.0	70.0	68.7
PLT CENTER	33	68.4	67.3	71.0	70.3	68.8
PLT CNTLR	34	67.8	66.8	76.8	71.1	68.6
PLT A9-12	35	67.1	66.1	68.8	67.5	66.8
PLT A-14	36	67.0	66.0	69.4	68.1	67.1
PLT A-14	37	67.2	66.2	69.5	68.1	67.2
PLT A14	38	67.6	66.5	69.9	68.8	67.7
PLT A26	39	67.7	66.6	69.8	68.6	67.6
PLT A7, A8	40	67.3	66.2	69.3	67.9	67.1
FREQ MOD	41	70.7	69.4	69.9	69.8	69.1
ALT SSX	42	70.7	69.4	69.9	69.8	69.1
V.S. SSX	43	68.6	67.4	70.3	70.3	68.9
AMP.SW A13	44	68.8	67.7	69.2	69.3	68.2
AMP.SW A13	45	68.8	67.7	69.2	69.3	68.2
AMP.SW A14	46	67.8	66.6	67.8	68.6	67.6
AMP.SW A14	47	67.8	66.6	67.8	68.6	67.6
AMP.SW A14	48	67.5	66.3	67.5	68.3	67.4
AMP.SW A14	49	67.8	66.5	67.7	68.4	67.5
AMP.SW A14	50	68.3	67.0	68.0	68.8	67.9
AMP.SW A14	51	68.3	67.0	68.0	68.8	67.9

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	99.850	99.900	99.950	100.000	100.050
TH DET A13	52	68.5	67.5	69.6	69.1	68.1
TH DET A14	53	67.9	66.7	68.6	69.0	67.9
TH DET A14	54	67.9	66.7	68.7	69.0	67.8
TH DET A14	55	67.9	66.7	68.7	69.0	67.8
LEVELER	56	75.2	73.4	72.8	72.5	71.7
55CB AMP 5	57	68.4	68.1	67.7	68.1	67.7
55CB AMP 9	58	68.9	67.4	66.8	67.1	66.7
55CB AMP 9	59	68.9	67.4	66.8	67.1	66.7
55CB AMP 9	60	68.9	67.4	66.8	67.1	66.7
55CB AMP 9	61	68.9	67.4	66.8	67.1	66.7
55CB AMP 7	62	68.5	67.1	66.5	66.8	66.4
55CB AMP 7	63	68.5	67.1	66.5	66.8	66.4
HYB VS1	64	67.5	66.3	66.6	66.6	66.1
HYB VS3	65	68.0	66.7	66.9	66.9	66.5
HYB A6T	66	68.6	67.5	68.0	67.9	67.4
END FT FWD	67	72.7	71.1	70.0	69.5	69.0
SUP RT FWD	68	68.4	67.4	67.9	67.9	67.4
SUP RT MID	69	46.4	52.5	59.0	64.8	69.6
SUP RT AFT	70	67.4	66.2	66.4	66.5	66.0
ENC AFT	71	78.6	78.2	77.9	77.6	77.3
SUP LF AFT	72	68.0	66.7	66.9	66.9	66.5
SUP LF MID	73	54.7	56.0	58.2	60.6	62.0
SUP LF FWD	74	52.6	53.5	55.2	57.2	59.5
FM CASE	75	71.5	70.0	69.5	69.7	69.3
ALTX CASE	76	72.0	70.5	69.7	69.6	69.3
ALTA MB	77	70.5	69.2	69.4	70.0	69.2
CASE A5, A6	78	71.1	69.8	68.9	68.7	68.5
CASE A9-12	79	70.5	69.2	68.2	67.8	67.5
CASE MBA14	80	69.8	68.7	68.0	68.0	67.8
CASE VSX	81	69.9	68.6	68.4	69.4	69.1
CASE A7, A8	82	70.9	69.5	68.3	67.8	67.5
WG VS2 AFT	83	58.7	59.2	59.4	60.1	60.8
WG VS2MAFT	84	66.6	65.6	65.0	65.2	65.3
WG VS2MFWD	85	66.8	65.9	65.5	65.7	65.8
WG VS2 FWD	86	55.4	59.3	62.4	64.8	66.8
WG VS1MAFT	87	65.6	64.8	64.1	64.1	64.1
WG VS1 AFT	88	56.8	57.6	57.5	57.7	58.3
WG ALT MID	89	67.3	66.4	65.9	65.9	66.0
WG ALT CEN	90	57.4	59.1	60.4	61.7	63.0
HYB A25	91	66.8	65.7	65.0	65.0	64.9
HYB A24	92	67.7	66.5	65.9	66.0	65.9
HYB A23	93	68.4	67.3	66.7	66.8	66.6
TOP COVER	94	74.8	74.3	73.8	73.5	73.2
TILT STRCT	95	71.6	71.3	71.1	70.9	70.8
HTR CENTLR	96	67.9	66.9	76.4	71.4	68.6
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	71.7	71.7	71.6	71.5	71.5

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	100.100	100.150	100.200	100.250	100.300
VSR 3	1	72.2	74.5	76.6	80.6	91.3
FILLER BLK	2	64.6	67.0	69.7	73.6	87.3
VSR 2	3	57.3	60.1	63.6	71.7	91.2
ALTIM	4	63.0	66.2	70.1	79.4	99.7
VSR 1	5	54.1	57.3	61.4	70.6	92.9
XTRMA	6	60.4	61.5	63.0	68.2	80.1
SUP LF FWD	7	70.7	72.5	74.3	77.2	87.5
SUP LF AFT	8	60.4	62.4	64.8	69.3	84.7
SUP RT FWD	9	74.0	77.4	81.0	86.0	96.7
SUP RT AFT	10	56.7	59.9	63.7	69.2	87.4
SHROUD A C	11	81.5	86.8	91.8	97.3	133.5
SHROUD F C	12	173.6	175.9	177.8	164.3	177.1
SHROUD F R	13	159.3	161.8	164.2	157.0	179.6
SHROUD R F	14	87.6	91.5	95.2	104.2	144.6
SHROUD L F	15	83.5	86.6	89.3	97.4	130.0
SHROUD TOP	16	108.4	112.6	115.7	152.2	226.9
SHROUD R A	17	75.3	79.3	83.3	95.3	135.7
SUP RC	18	119.5	123.4	126.8	123.9	112.5
SHROUD L A	19	74.5	78.0	81.3	91.1	129.0
SHROUD F L	20	92.8	95.4	97.8	99.9	125.0
SHROUD A L	21	68.5	72.1	75.7	85.5	118.7
SHROUD A R	22	65.9	69.7	73.8	84.0	119.3
LEM BASE	23	188.3	186.4	186.1	207.8	209.0
TLT EX FWD	24	76.3	82.2	84.9	87.9	97.3
TLT EX LFT	25	82.7	84.4	84.8	86.5	94.5
TLT EX AFT	26	123.5	126.5	127.2	129.6	140.3
TLT EXT RT	27	82.7	84.4	84.8	86.5	94.5
PLT MODALT	28	68.5	68.0	69.0	69.6	70.1
PLT A5, A6	29	67.4	67.2	70.3	69.8	71.0
PLT A-22	30	68.2	67.6	73.0	70.4	70.9
PLT A4	31	67.9	67.2	69.8	70.9	71.0
PLT A4	32	67.7	67.1	70.3	70.8	71.0
PLT CENTER	33	67.8	67.2	70.2	71.0	71.0
PLT CCNTRLR	34	67.5	67.0	75.3	72.4	71.1
PLT A9-12	35	66.3	66.0	68.7	68.7	69.8
PLT A-14	36	66.5	66.2	69.3	69.5	70.5
PLT A-14	37	66.6	66.2	69.2	69.2	70.0
PLT A14	38	66.9	66.4	69.4	69.6	70.0
PLT A26	39	66.9	66.4	69.3	69.4	69.8
PLT A7, A8	40	66.5	66.1	69.0	68.8	69.7
FREQ MOD	41	68.5	68.1	68.8	69.6	70.1
ALT SSX	42	68.5	68.1	68.8	69.6	70.0
V.S. SSX	43	67.9	67.2	69.5	70.9	70.9
AMP.SW A13	44	67.6	67.3	68.6	70.1	70.5
AMP.SW A13	45	67.6	67.3	68.6	70.1	70.5
AMP.SW A14	46	66.9	66.4	67.4	69.3	69.9
AMP.SW A14	47	66.9	66.4	67.4	69.3	69.9
AMP.SW A14	48	66.7	66.2	67.3	69.3	70.0
AMP.SW A14	49	66.8	66.3	67.3	69.1	69.6
AMP.SW A14	50	67.1	66.5	67.4	69.3	69.6
AMP.SW A14	51	67.1	66.5	67.4	69.3	69.6

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	100.100	100.150	100.200	100.250	100.300
TH DET A13	52	67.5	67.3	69.1	70.1	70.6
TH DET A14	53	67.0	66.5	68.0	69.7	69.9
TH DET A14	54	67.0	66.5	68.1	69.7	69.9
TH DET A14	55	67.0	66.5	68.1	69.7	69.9
LEVELER	56	70.8	70.0	69.9	70.4	70.5
55DB AMP 5	57	67.3	67.1	67.4	68.6	69.4
55CB AMP 9	58	66.4	66.1	66.2	67.3	68.1
55CB AMP 9	59	66.4	66.1	66.2	67.3	68.1
55CB AMP 9	60	66.4	66.1	66.2	67.3	68.1
55CB AMP 9	61	66.4	66.1	66.2	67.3	68.1
55CB AMP 7	62	66.0	65.6	65.7	66.8	67.6
55CB AMP 7	63	66.0	65.6	65.7	66.8	67.6
HYB VS1	64	65.7	65.4	66.1	67.1	68.2
HYB VS3	65	66.2	66.0	66.7	67.7	68.6
HYE A6T	66	67.1	67.0	67.9	68.9	70.0
END FT FWD	67	68.5	68.1	68.0	68.4	68.9
SUP RT FWD	68	67.1	67.0	67.9	69.0	70.2
SUP RT MID	69	72.6	77.3	80.8	84.6	89.8
SUP RT AFT	70	65.6	65.4	66.0	67.2	68.3
END AFT	71	77.0	76.7	76.4	76.2	75.9
SUP LF AFT	72	66.1	66.0	66.6	67.7	68.6
SUP LF MID	73	63.2	64.5	66.2	68.9	72.9
SUP LF FWD	74	61.7	63.9	66.0	68.1	71.2
FM CASE	75	68.8	68.3	68.3	69.3	69.9
ALTX CASE	76	68.9	68.4	68.3	68.9	69.6
ALTA MB	77	68.5	68.1	68.5	70.0	70.4
CASE A5, A6	78	68.2	68.0	67.9	68.5	69.5
CASE A9-12	79	67.3	67.1	67.0	67.5	68.5
CASE MBA14	80	67.5	67.3	67.3	68.1	69.5
CASE VSX	81	68.4	67.8	67.8	69.4	70.3
CASE A7, A8	82	67.2	66.9	66.7	67.1	67.9
WG VS2 AFT	83	61.7	62.9	64.5	67.7	76.9
WG VS2MAFT	84	65.3	65.5	65.8	66.8	68.8
WG VS2MFWD	85	65.9	66.0	66.3	67.1	68.6
WG VS2 FWD	86	68.5	69.9	71.3	72.9	77.6
WG VS1MAFT	87	64.0	64.1	64.4	65.5	67.9
WG VS1 AFT	88	59.2	60.5	62.2	65.2	74.7
WG ALT MID	89	66.1	66.3	66.7	67.7	69.8
WG ALT CEN	90	64.4	66.0	68.1	72.1	83.3
HYE A25	91	64.7	64.6	64.7	65.7	67.2
HYE A24	92	65.8	65.8	66.0	66.9	68.1
HYE A23	93	66.6	66.6	66.9	67.8	69.1
TOP COVER	94	73.0	73.0	73.0	73.3	74.5
TILT STRCT	95	70.7	70.6	70.6	70.6	70.7
HTR CNTLR	96	67.6	67.0	74.8	72.6	71.1
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	71.4	71.3	71.2	71.1	71.1

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	100.350	100.400	100.450	100.500	100.545
VSR 3	1	102.3	111.6	121.9	130.3	134.1
FILLER BLK	2	101.2	112.4	122.2	129.5	133.5
VSR 2	3	107.8	119.9	129.1	134.1	136.3
ALTIM	4	116.2	127.8	135.5	138.0	138.5
VSR 1	5	112.5	127.0	137.5	142.8	145.0
XTRMA	6	89.9	97.1	104.4	109.9	112.9
SUP LF FWD	7	98.4	107.1	113.5	120.0	123.4
SUP LF AFT	8	98.4	108.5	116.7	123.7	126.9
SUP RT FWD	9	108.5	118.5	126.9	132.7	135.1
SUP RT AFT	10	107.3	122.7	135.3	146.0	150.5
SHROUD A C	11	159.6	174.7	202.0	233.0	235.9
SHROUD F C	12	198.3	210.6	187.9	184.0	175.1
SHROUD F R	13	199.6	209.0	201.5	197.8	187.2
SHROUD R F	14	169.1	182.6	192.2	190.6	179.9
SHROUD L F	15	148.4	160.0	167.5	168.0	161.2
SHROUD TOP	16	257.3	272.1	278.9	257.9	222.8
SHROUD R A	17	159.2	173.7	185.5	185.4	176.6
SUP RC	18	111.8	115.9	121.8	128.8	133.8
SHROUD L A	19	151.0	164.4	171.8	170.7	162.7
SHROUD F L	20	140.8	151.5	155.5	158.2	154.2
SHROUD A L	21	139.3	152.6	165.8	171.1	166.7
SHROUD A R	22	142.2	157.3	171.8	177.7	173.4
LEM BASE	23	195.0	174.2	232.5	216.8	210.4
TLT EX FWD	24	98.6	92.8	101.8	109.3	108.7
TLT EX LFT	25	94.8	88.8	97.9	104.3	103.2
TLT EX AFT	26	140.4	132.4	144.5	152.7	150.9
TLT EXT RT	27	94.8	88.8	97.9	104.3	103.2
PLT MODALT	28	71.4	73.2	75.4	78.0	80.5
PLT A5,A6	29	73.3	76.1	79.2	82.3	85.0
PLT A-22	30	72.4	74.6	77.1	79.9	82.5
PLT A4	31	72.3	74.4	77.1	80.1	82.8
PLT A4	32	72.3	74.5	77.2	80.3	83.0
PLT CENTER	33	72.2	74.4	77.0	80.0	82.8
PLT CNTRLR	34	72.4	74.6	77.4	80.5	83.3
PLT A9-12	35	71.9	74.6	77.7	81.1	84.1
PLT A-14	36	72.6	75.4	78.6	82.0	85.0
PLT A-14	37	71.9	74.4	77.5	80.8	83.8
PLT A14	38	71.6	74.0	76.9	80.1	83.1
PLT A26	39	71.4	73.8	76.7	79.9	82.9
PLT A7,A8	40	71.6	74.2	77.3	80.7	83.8
FREQ MOD	41	71.2	73.0	75.2	77.8	80.3
ALT SSX	42	71.2	72.9	75.1	77.7	80.2
V.S. SSX	43	72.1	74.2	76.8	79.8	82.6
AMP.SW A13	44	72.3	74.9	77.8	80.9	83.6
AMP.SW A13	45	72.3	74.9	77.8	80.9	83.6
AMP.SW A14	46	71.5	73.9	76.9	80.2	83.2
AMP.SW A14	47	71.5	73.9	76.9	80.2	83.2
AMP.SW A14	48	71.8	74.4	77.4	80.8	83.8
AMP.SW A14	49	71.2	73.5	76.4	79.6	82.6
AMP.SW A14	50	70.9	73.0	75.7	78.8	81.8
AMP.SW A14	51	70.9	73.0	75.7	78.8	81.8

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	100.350	100.400	100.450	100.500	100.545
TH DET A13	52	72.6	75.3	78.3	81.4	84.1
TH DET A14	53	71.3	73.6	76.4	79.6	82.6
TH DET A14	54	71.3	73.6	76.4	79.6	82.6
TH DET A14	55	71.3	73.6	76.4	79.6	82.6
LEVELER	56	70.8	71.5	72.6	74.2	75.9
55CB AMP 5	57	71.1	73.6	76.6	79.8	82.7
55CB AMP 9	58	69.5	71.7	74.4	77.6	80.6
55CB AMP 9	59	69.5	71.7	74.4	77.6	80.6
55CB AMP 9	60	69.5	71.7	74.4	77.6	80.6
55CB AMP 9	61	69.5	71.7	74.4	77.6	80.6
55CB AMP 7	62	69.2	71.6	74.7	78.2	81.5
55CB AMP 7	63	69.2	71.6	74.7	78.2	81.5
HYB VS1	64	70.2	73.1	76.5	80.2	83.5
HYB VS3	65	70.4	72.8	75.8	79.1	82.2
HYB 46T	66	72.1	74.9	78.1	81.4	84.3
END FT FWD	67	69.9	71.4	73.3	75.5	77.8
SUP RT FWD	68	72.4	75.3	78.5	81.8	84.7
SUP RT MID	69	97.4	106.1	114.7	122.2	127.4
SUP RT AFT	70	70.5	73.4	76.8	80.5	83.9
END AFT	71	75.8	75.7	75.7	75.7	75.9
SUP LF AFT	72	70.5	73.0	76.0	79.3	82.4
SUP LF MID	73	78.8	85.7	92.7	99.4	104.7
SUP LF FWD	74	75.8	81.3	87.4	93.9	99.7
FM CASE	75	70.9	72.5	74.6	77.0	79.4
ALTX CASE	76	70.7	72.2	74.1	76.5	78.7
ALTA MB	77	71.6	73.5	75.9	78.6	81.0
CASE A5, A6	78	71.0	73.0	75.4	78.1	80.6
CASE A9-12	79	70.0	72.1	74.6	77.4	80.0
CASE MBA14	80	71.5	74.1	77.0	80.1	82.8
CASE VSX	81	71.4	73.2	75.5	78.2	80.7
CASE A7, A8	82	69.3	71.2	73.6	76.5	79.3
WG VS2 AFT	83	86.0	93.5	99.7	104.3	107.2
WG VS2MAFT	84	71.7	75.0	78.5	82.2	85.4
WG VS2MFWD	85	70.9	73.9	77.4	81.1	84.5
WG VS2 FWD	86	84.3	91.2	98.1	105.1	110.0
WG VS1MAFT	87	71.5	75.8	80.3	84.6	88.2
WG VS1 AFT	88	85.6	95.2	103.0	108.7	112.2
WG ALT MID	89	72.9	76.6	80.4	84.2	87.2
WG ALT CEN	90	93.3	101.2	107.3	110.8	112.6
HYB 425	91	69.8	73.4	77.3	81.4	85.0
HYB 424	92	70.1	72.8	76.0	79.5	82.7
HYB 423	93	71.5	74.6	78.1	81.6	84.7
TOP COVER	94	76.5	79.2	82.2	85.3	88.0
TILT STRCT	95	71.0	71.5	72.1	72.8	73.5
HTR CNTLR	96	72.3	74.5	77.3	80.4	83.2
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	71.0	71.0	71.1	71.2	71.4

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NOTE	TIME	100.545	100.550	100.600	100.650	100.700
VSR 3	1	134.1	134.3	134.1	133.3	131.9
FILLER BLK	2	133.5	133.8	135.1	135.7	134.8
VSR 2	3	136.3	136.4	136.5	135.2	133.9
ALTIM	4	138.5	138.5	138.1	137.3	136.4
VSR 1	5	145.0	145.2	145.3	143.5	141.3
XTRM	6	112.9	113.2	115.2	117.7	119.7
SUP LF FWD	7	123.4	123.6	124.1	124.2	124.2
SUP LF AFT	8	126.9	127.1	127.7	126.9	126.6
SUP RT FWD	9	135.1	135.2	135.9	134.5	133.1
SUP RT AFT	10	150.5	150.7	150.5	145.6	141.5
SHROUD A C	11	235.9	235.2	218.1	186.8	176.1
SHROUD F C	12	175.1	173.7	156.0	143.4	135.7
SHROUD F R	13	187.2	185.8	169.1	164.0	158.2
SHROUD R F	14	179.9	178.3	159.9	148.4	142.6
SHROUD L F	15	161.2	160.0	145.7	137.9	133.3
SHROUD TCP	16	222.8	218.1	172.2	153.6	143.5
SHROUD R A	17	176.6	175.3	159.8	150.0	144.5
SUP RC	18	133.8	134.2	136.9	136.7	134.8
SHROUD L A	19	162.7	161.5	147.3	139.2	134.5
SHROUD F L	20	154.2	153.4	143.1	137.6	133.8
SHROUD A L	21	166.7	165.9	154.9	145.7	142.0
SHROUD A R	22	173.4	172.6	161.7	152.0	147.6
LEM BASE	23	210.4	209.8	220.0	259.7	257.4
TLT EX FWD	24	108.7	108.6	107.3	121.1	133.3
TLT EX LFT	25	103.2	103.0	101.8	115.0	125.6
TLT EX AFT	26	150.9	150.6	148.8	166.1	179.4
TLT EXT RT	27	103.2	103.0	101.8	115.0	125.6
PLT MDCALT	28	80.5	81.1	86.2	91.3	96.1
PLT A5, A6	29	85.0	86.2	93.1	98.2	102.7
PLT A-22	30	82.5	85.0	93.6	99.5	104.8
PLT A4	31	82.8	83.7	92.0	99.2	105.3
PLT A4	32	83.0	84.6	92.9	100.0	106.1
PLT CENTER	33	82.8	83.8	92.6	99.8	105.9
PLT CENTLR	34	83.3	86.3	100.0	107.5	113.2
PLT A9-12	35	84.1	85.3	92.3	98.0	103.1
PLT A-14	36	85.0	86.2	94.0	100.1	105.5
PLT A-14	37	82.8	85.0	92.8	99.0	104.5
PLT A14	38	82.1	84.3	92.4	99.1	105.0
PLT A26	39	82.9	84.2	92.1	98.7	104.5
PLT A7, A8	40	82.8	85.0	92.6	98.8	104.4
FREQ MOD	41	80.3	80.7	85.7	90.8	95.6
ALT SSX	42	80.2	80.6	85.6	90.6	95.5
V.S. SSX	43	82.6	83.2	91.6	98.8	104.9
AMP.SW A13	44	83.6	84.0	90.4	95.9	100.6
AMP.SW A13	45	83.6	84.0	90.4	95.9	100.6
AMP.SW A14	46	83.2	83.6	90.2	96.7	102.4
AMP.SW A14	47	83.2	83.6	90.2	96.7	102.4
AMP.SW A14	48	82.8	84.2	90.8	97.2	102.9
AMP.SW A14	49	82.6	83.1	89.6	96.1	101.9
AMP.SW A14	50	81.8	82.2	88.9	95.6	101.7
AMP.SW A14	51	81.8	82.2	88.9	95.6	101.7

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NOTE	TIME	100.545	100.550	100.600	100.650	100.700
TH DET A13	52	84.1	84.5	91.4	96.7	101.4
TH DET A14	53	82.6	83.0	90.6	97.5	103.5
TH DET A14	54	82.6	83.1	90.7	97.6	103.6
TH DET A14	55	82.6	83.1	90.7	97.6	103.6
LEVELER	56	75.9	76.2	79.9	84.4	89.2
55CB AMP 5	57	82.7	83.1	87.3	91.8	96.1
55CB AMP 9	58	80.6	80.9	85.3	90.3	95.1
55CB AMP 9	59	80.6	80.9	85.3	90.3	95.1
55CB AMP 9	60	80.6	80.9	85.3	90.3	95.1
55CB AMP 9	61	80.6	80.9	85.3	90.3	95.1
55CB AMP 7	62	81.5	81.9	86.5	91.7	96.8
55CB AMP 7	63	81.5	81.9	86.5	91.7	96.8
HYB VS1	64	82.5	83.9	89.3	94.6	99.7
HYB VS3	65	82.2	82.6	87.7	92.8	97.6
HYB A6T	66	84.3	84.7	89.5	94.0	98.2
END FT FWD	67	77.8	78.1	81.3	85.0	89.0
SUP RT FWD	68	84.7	85.0	89.8	94.3	98.5
SUP RT MID	69	127.4	127.9	131.9	134.0	134.7
SUP RT AFT	70	82.5	84.3	89.6	94.9	99.9
END AFT	71	75.9	75.9	76.2	76.7	77.4
SUP LF AFT	72	82.4	82.8	87.8	92.9	97.7
SUP LF MID	73	104.7	105.2	110.8	115.5	118.9
SUP LF FWD	74	99.7	100.3	105.7	110.1	113.4
FM CASE	75	75.4	75.7	83.6	88.3	93.1
ALTX CASE	76	78.7	79.0	82.4	86.5	91.0
ALTA MB	77	81.0	81.3	86.3	91.7	96.5
CASE A5, A6	78	80.6	80.8	84.0	87.7	91.7
CASE A9-12	79	80.0	80.3	83.5	87.1	90.9
CASE MBA14	80	82.8	83.1	86.6	90.5	94.5
CASE VSX	81	80.7	81.0	85.5	91.2	96.8
CASE A7, A8	82	75.3	75.6	82.9	86.8	91.0
WG VS2 AFT	83	107.2	107.5	110.0	112.1	113.9
WG VS2MAFT	84	85.4	85.8	89.5	93.6	97.6
WG VS2MFWD	85	84.5	84.9	88.7	92.8	96.9
WG VS2 FWD	86	110.0	110.4	113.3	115.0	116.2
WG VS1MAFT	87	88.2	88.6	92.5	96.7	100.7
WG VS1 AFT	88	112.2	112.5	115.1	116.9	118.2
WG ALT MID	89	87.2	87.5	90.7	94.1	97.4
WG ALT CEN	90	112.6	112.8	114.2	115.5	116.7
HYB A25	91	85.0	85.4	89.6	94.1	98.6
HYB A24	92	82.7	83.0	87.1	91.5	95.8
HYB A23	93	84.7	85.0	88.6	92.3	96.1
TOP COVER	94	88.0	88.3	90.8	93.0	95.0
TILT STRCT	95	73.5	73.5	74.4	75.3	76.3
HTR CNTLR	96	83.2	85.2	99.5	107.1	112.9
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	71.4	71.4	71.7	72.0	72.3

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NOTE	TIME	100.750	100.800	100.850	100.900	100.950
VSR 3	1	130.0	127.4	124.3	118.6	115.0
FILLER BLK	2	133.5	131.8	129.6	121.4	115.7
VSR 2	3	132.8	131.4	129.6	121.3	116.5
ALTIM	4	135.6	134.3	132.6	122.1	113.3
VSR 1	5	139.6	137.8	135.8	126.6	121.0
XTRMA	6	121.3	122.1	122.2	116.7	110.9
SUP LF FWD	7	123.9	122.9	121.5	117.5	113.5
SUP LF AFT	8	126.7	126.4	125.6	121.1	116.5
SUP RT FWD	9	131.7	130.1	128.1	122.8	115.0
SUP RT AFT	10	139.2	137.3	135.3	131.1	127.7
SHROUD A C	11	171.8	168.4	165.1	177.7	197.2
SHROUD F C	12	129.1	122.9	118.1	128.5	143.9
SHROUD F R	13	151.4	144.1	137.7	128.8	136.4
SHROUD R F	14	138.0	133.7	129.7	139.5	153.2
SHROUD L F	15	129.3	125.3	121.5	134.4	146.8
SHROUD TCP	16	136.1	129.9	124.8	195.8	235.9
SHROUD R A	17	140.2	136.3	132.8	145.1	156.2
SUP RC	18	132.0	128.6	125.0	121.5	118.0
SHROUD L A	19	130.9	127.6	124.6	136.4	147.8
SHROUD F L	20	130.2	126.4	122.7	131.7	139.0
SHROUD A L	21	139.3	136.8	134.2	141.8	147.9
SHROUD A R	22	144.5	141.6	138.8	145.7	151.3
LEM BASE	23	251.2	240.6	230.1	-1.0	-100.1
TLT EX FWD	24	136.9	134.7	129.4	94.4	43.4
TLT EX LFT	25	128.0	125.4	120.5	87.3	41.9
TLT EX AFT	26	182.0	178.1	171.5	127.3	66.7
TLT EXT RT	27	128.0	125.4	120.5	87.3	41.9
PLT MODALT	28	100.7	105.0	109.0	112.5	115.3
PLT A5, A6	29	106.9	110.8	114.3	117.0	118.8
PLT A-22	30	109.6	114.0	118.0	121.3	123.8
PLT A4	31	110.6	115.3	119.5	122.9	125.4
PLT A4	32	111.4	116.1	120.3	123.7	126.1
PLT CENTER	33	111.2	115.9	120.0	123.4	125.9
PLT CNTRLR	34	118.2	122.6	126.4	129.6	131.7
PLT A9-12	35	107.8	112.0	115.7	118.7	120.8
PLT A-14	36	110.3	114.5	118.3	121.2	123.1
PLT A-14	37	109.5	113.9	117.8	121.0	123.2
PLT A14	38	110.2	114.8	118.9	122.3	124.8
PLT A26	39	109.8	114.4	118.5	122.0	124.5
PLT A7, A8	40	109.4	113.8	117.8	121.1	123.4
FREQ MOD	41	100.2	104.5	108.5	112.1	114.9
ALT SSX	42	100.1	104.4	108.5	112.0	114.9
V.S. SSX	43	110.3	115.1	119.3	122.8	125.4
AMP.SW A13	44	109.0	109.0	112.7	115.8	117.9
AMP.SW A13	45	109.0	109.0	112.7	115.8	117.9
AMP.SW A14	46	107.4	111.9	115.9	119.3	121.7
AMP.SW A14	47	107.4	112.0	116.0	119.3	121.7
AMP.SW A14	48	107.9	112.4	116.3	119.6	121.9
AMP.SW A14	49	107.1	111.7	115.8	119.3	121.8
AMP.SW A14	50	107.2	112.1	116.4	120.1	123.0
AMP.SW A14	51	107.2	112.1	116.4	120.1	123.0

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	100.750	100.800	100.850	100.900	100.950
TH DET A13	52	105.7	105.7	113.3	116.3	118.3
TH DET A14	53	108.9	113.6	117.8	121.4	124.0
TH DET A14	54	109.0	113.7	117.9	121.5	124.1
TH DET A14	55	109.0	113.7	117.9	121.5	124.1
LEVELER	56	94.1	98.9	103.5	107.9	111.8
55CB AMP 5	57	100.1	103.9	107.5	110.7	113.1
55CB AMP 9	58	99.7	104.0	108.0	111.6	114.5
55CB AMP 9	59	99.7	104.0	108.0	111.6	114.5
55DB AMP 9	60	99.7	104.0	108.0	111.6	114.5
55CB AMP 9	61	99.7	104.0	108.0	111.6	114.5
55CB AMP 7	62	101.6	106.1	110.3	114.0	117.0
55CB AMP 7	63	101.6	106.1	110.3	114.0	117.0
HYB VS1	64	104.4	108.7	112.7	116.2	118.8
HYB VS3	65	102.2	106.4	110.2	113.6	116.1
HYB A6T	66	102.2	105.9	109.3	112.3	114.3
END FT FWD	67	93.1	97.1	101.1	104.8	108.0
SUP RT FWD	68	102.4	106.1	109.4	112.3	114.3
SUP RT MID	69	134.4	133.5	132.0	129.3	124.6
SUP RT AFT	70	104.5	108.9	112.8	116.2	118.8
END AFT	71	78.2	79.1	80.1	81.1	82.3
SUP LF AFT	72	102.2	106.4	110.2	113.5	116.1
SUP LF MID	73	121.5	123.3	124.5	124.7	123.7
SUP LF FWD	74	116.0	117.8	118.8	119.0	118.3
FM CASE	75	97.7	102.0	106.1	109.7	112.8
ALTX CASE	76	95.4	99.6	103.6	107.2	110.3
ALTA MB	77	101.1	105.2	109.1	112.4	115.0
CASE A5, A6	78	95.6	99.4	103.0	106.2	108.8
CASE A9-12	79	94.7	98.5	102.0	105.2	107.8
CASE MEA14	80	98.4	102.1	105.6	108.6	110.9
CASE VSX	81	101.9	106.5	110.6	114.2	117.0
CASE A7, A8	82	95.2	99.4	103.4	106.9	110.0
WG VS2 AFT	83	115.8	117.4	118.6	117.4	115.9
WG VS2MAFT	84	101.5	105.2	108.6	111.4	113.5
WG VS2MFWD	85	100.9	104.6	108.0	111.0	113.3
WG VS2 FWD	86	117.1	117.5	117.5	116.5	115.0
WG VS1MAFT	87	104.7	108.4	111.8	114.7	116.6
WG VS1 AFT	88	119.6	121.0	122.1	121.1	119.0
WG ALT MID	89	100.7	103.8	106.8	109.3	110.8
WG ALT CEN.	90	118.0	119.0	119.6	116.5	112.4
HYB A25	91	102.9	106.9	110.7	114.0	116.5
HYB A24	92	100.1	104.1	107.7	111.0	113.6
HYB A23	93	99.7	103.1	106.3	109.3	111.3
TOP COVER	94	96.8	98.4	99.9	101.3	102.8
TILT STRUCT	95	77.3	78.4	79.5	80.6	81.5
HTR CONTRL	96	117.9	122.3	126.1	129.3	131.5
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	72.8	73.3	73.9	74.5	75.1

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	101.000	101.031
VSR 3	1	113.3	111.9
FILLER BLK	2	113.4	112.1
VSR 2	3	114.8	113.1
ALTIM	4	108.8	106.6
VSR 1	5	118.9	116.8
XTRMA	6	107.0	105.0
SUP LF FWD	7	111.0	109.2
SUP LF AFT	8	113.7	111.0
SUP RT FWD	9	109.8	106.8
SUP RT AFT	10	125.9	122.0
SHROUD A C	11	195.3	163.1
SHROUD F C	12	155.1	144.5
SHROUD F R	13	139.4	128.6
SHROUD R F	14	154.7	140.4
SHROUD L F	15	148.2	136.3
SHROUD TOP	16	235.6	188.3
SHROUD R A	17	156.2	140.9
SUP RC	18	114.3	111.8
SHROUD L A	19	145.2	137.0
SHROUD F L	20	139.0	129.0
SHROUD A L	21	145.7	131.3
SHROUD A R	22	148.9	134.3
LEM BASE	23	-146.5	-165.8
TLT EX FWD	24	8.2	-8.3
TLT EX LFT	25	13.2	0.8
TLT EX AFT	26	27.3	9.6
TLT EXT RT	27	13.2	0.8
PLT MODALT	28	117.5	118.7
PLT 15, A6	29	120.2	121.0
PLT 1-22	30	125.7	126.7
PLT 14	31	127.3	128.3
PLT 14	32	128.0	129.0
PLT CENTER	33	127.8	128.7
PLT CNTRLR	34	133.4	134.2
PLT 14-12	35	122.5	123.3
PLT 1-14	36	124.7	125.6
PLT 1-14	37	124.9	125.8
PLT 114	38	126.6	127.6
PLT 126	39	126.4	127.3
PLT 17, A8	40	125.1	126.0
FREQ MOD	41	117.2	118.5
ALT SSX	42	117.2	118.4
V.S. SSX	43	127.3	128.3
AMP.SW A13	44	119.5	120.4
AMP.SW A13	45	119.5	120.4
AMP.SW A14	46	123.5	124.5
AMP.SW A14	47	123.6	124.5
AMP.SW A14	48	123.7	124.6
AMP.SW A14	49	123.7	124.7
AMP.SW A14	50	125.1	126.2
AMP.SW A14	51	125.1	126.2

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	101.000	101.031
TH DET A13	52	119.8	120.6
TH DET A14	53	125.9	126.9
TH DET A14	54	126.0	127.0
TH DET A14	55	126.0	127.0
LEVELER	56	115.3	117.2
550R AMP 5	57	114.9	115.8
550R AMP 9	58	116.8	118.0
550R AMP 9	59	116.8	118.0
550R AMP 9	60	116.8	118.0
550R AMP 9	61	116.8	118.0
550B AMP 7	62	119.3	120.5
550B AMP 7	63	119.3	120.5
HYB VS1	64	120.8	121.9
HYE VS3	65	118.2	119.2
HYE AGT	66	115.9	116.6
END RT FWD	67	110.8	112.3
SUP RT FWD	68	115.8	116.6
SUP RT MID	69	120.3	117.9
SUP RT AFT	70	120.8	121.8
END AFT	71	83.4	84.1
SUP LF AFT	72	118.1	119.2
SUP LF MID	73	122.7	122.2
SUP LF FWD	74	117.3	116.6
FM CASE	75	115.3	116.6
ALTX CASE	76	112.9	114.3
ALTA MB	77	117.2	118.3
CASE A5, A6	78	111.0	112.2
CASE A9-12	79	110.1	111.3
CASE MB A14	80	112.9	114.0
CASE VSX	81	119.2	120.3
CASE A7, A8	82	112.6	113.9
WG VS2 AFT	83	116.1	116.1
WG VS2MAFT	84	115.3	116.3
WG VS2MFWD	85	115.2	116.2
WG VS2 FWD	86	114.3	114.1
WG VS1MAFT	87	118.1	119.0
WG VS1 AFT	88	118.5	118.3
WG ALT MID	89	111.9	112.4
WG ALT GEN	90	110.5	109.7
HYE A25	91	118.4	119.4
HYE A24	92	115.6	116.7
HYE A23	93	112.8	113.5
TOP COVER	94	104.4	105.1
TILT STRUCT	95	82.4	83.0
HTR CENTER	96	133.2	134.0
SPACE	97	-460.0	-460.0
ACTUATOR	98	75.8	76.3

INTEGRATION OF THERMAL TRANSIENTS

PGM 1179

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F.

NODE	TIME	101.031	101.050	101.100	101.150	101.200
VSR 3	1	111.9	110.5	105.0	98.7	92.7
FILLER BLK	2	112.1	110.8	105.2	98.7	92.5
VSR 2	3	113.1	111.0	103.9	96.7	90.3
ALTIM	4	106.6	104.8	98.8	92.4	86.6
VSR 1	5	116.8	114.4	106.3	98.1	90.8
XTRMA	6	105.0	103.7	99.7	95.6	91.6
SUP LF FWD	7	109.2	107.5	102.0	96.4	91.2
SUP LF AFT	8	111.0	108.6	101.9	95.9	90.6
SUP RT FWD	9	106.8	104.9	99.8	94.0	88.4
SUP RT AFT	10	122.0	118.1	107.1	97.7	90.0
SHROUD A C	11	163.1	139.7	104.5	87.6	77.9
SHROUD F C	12	144.5	132.0	102.5	85.4	75.4
SHROUD F R	13	128.6	116.6	88.5	72.1	62.2
SHROUD R F	14	140.4	126.8	99.8	84.6	75.2
SHROUD L F	15	136.3	125.1	104.3	92.1	83.7
SHROUD TOP	16	188.3	154.6	105.6	82.6	70.1
SHROUD R A	17	140.9	128.0	105.0	91.4	82.1
SUP RC	18	111.8	109.9	104.0	97.7	91.5
SHROUD L A	19	137.0	125.6	103.8	91.0	82.4
SHROUD F L	20	129.0	120.3	104.2	93.8	86.2
SHROUD A L	21	131.3	121.2	103.7	92.5	84.6
SHROUD A R	22	134.3	123.8	105.5	93.5	84.9
LEM BASE	23	-165.8	-175.4	-196.0	-211.6	-224.0
TLT EX FWD	24	-8.3	-16.9	-35.4	-49.5	-60.5
TLT EX LFT	25	0.8	-5.3	-17.8	-26.4	-32.5
TLT EX AFT	26	9.6	0.5	-18.6	-32.8	-43.5
TLT EXT RT	27	0.8	-5.3	-17.8	-26.4	-32.5
PLT MODALT	28	118.7	118.4	117.4	116.1	114.5
PLT A5, A6	29	121.0	118.8	116.4	114.5	112.5
PLT A-22	30	126.7	122.3	119.5	117.2	114.9
PLT A4	31	128.3	126.6	122.6	119.2	116.1
PLT A4	32	129.0	126.7	122.6	119.2	116.1
PLT CENTER	33	128.7	126.7	122.4	119.0	116.0
PLT CNTLR	34	134.2	127.8	120.8	117.3	114.5
PLT A9-12	35	123.3	121.6	119.3	117.1	114.8
PLT A-14	36	125.6	123.4	120.1	117.3	114.7
PLT A-14	37	125.8	123.6	120.7	118.0	115.4
PLT A14	38	127.6	125.5	122.2	119.2	116.4
PLT A26	39	127.3	125.3	122.2	119.4	116.6
PLT A7, A8	40	126.0	124.0	121.3	118.8	116.1
FREQ MOD	41	118.5	118.4	117.5	116.2	114.7
ALT SSX	42	118.4	118.4	117.5	116.2	114.7
V.S. SSX	43	128.3	126.9	122.9	119.4	116.4
AMP.SW A13	44	120.4	119.9	117.3	115.3	113.3
AMP.SW A13	45	120.4	119.9	117.3	115.3	113.3
AMP.SW A14	46	124.5	124.2	121.5	118.7	116.0
AMP.SW A14	47	124.5	124.2	121.5	118.7	116.0
AMP.SW A14	48	124.6	124.3	121.5	118.6	115.8
AMP.SW A14	49	124.7	124.5	121.9	119.2	116.5
AMP.SW A14	50	126.2	126.0	123.5	120.6	117.8
AMP.SW A14	51	126.2	126.0	123.5	120.6	117.8

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	101.031	101.050	101.100	101.150	101.200
TH DET A13	52	120.6	119.7	117.0	115.0	113.1
TH DET A14	53	126.9	126.3	122.9	119.9	117.0
TH DET A14	54	127.0	126.2	122.8	119.8	116.9
TH DET A14	55	127.0	126.2	122.8	119.8	116.9
LEVELER	56	117.2	118.0	118.7	118.6	117.9
55CB AMP 5	57	115.8	116.2	115.7	114.6	113.2
55CB AMP 9	58	118.0	118.5	118.5	117.7	116.3
55CB AMP 9	59	118.0	118.5	118.5	117.7	116.3
55CB AMP 9	60	118.0	118.5	118.5	117.7	116.3
55CB AMP 9	61	118.0	118.5	118.5	117.7	116.3
55CB AMP 7	62	120.5	121.1	121.0	119.9	118.1
55CB AMP 7	63	120.5	121.1	121.0	119.9	118.1
HYB VS1	64	121.9	121.9	121.0	119.4	117.3
HYB VS3	65	119.2	119.3	118.7	117.5	115.8
HYB A6T	66	116.6	116.5	115.5	114.2	112.7
END FT FWD	67	112.3	113.0	114.3	114.5	114.1
SUP RT FWD	68	116.6	116.5	115.4	114.1	112.5
SUP RT MID	69	117.9	116.4	111.9	106.4	100.5
SUP RT AFT	70	121.8	121.9	120.9	119.3	117.1
END AFT	71	84.1	84.6	85.6	86.5	87.4
SUP LF AFT	72	119.2	119.3	118.6	117.4	115.7
SUP LF MID	73	122.2	121.5	118.4	114.2	109.7
SUP LF FWD	74	116.6	116.2	114.5	112.0	109.0
FM CASE	75	116.6	117.1	117.2	116.2	114.8
ALTX CASE	76	114.3	114.9	115.5	115.1	114.0
ALTA MB	77	118.3	118.4	116.9	115.1	113.3
CASE A5, A6	78	112.2	112.7	113.4	113.0	111.9
CASE A9-12	79	111.3	111.9	112.8	112.6	111.7
CASE MBA14	80	114.0	114.4	114.5	113.6	112.0
CASE VSX	81	120.3	120.7	119.7	117.5	115.1
CASE A7, A8	82	113.9	114.7	115.9	115.9	115.0
WG VS2 AFT	83	116.1	115.6	112.6	108.7	104.8
WG VS2MAFT	84	116.3	116.8	117.1	116.2	114.6
WG VS2MFWD	85	116.2	116.8	117.2	116.6	115.1
WG VS2 FWD	86	114.1	113.8	112.0	108.7	104.8
WG VS1MAFT	87	119.0	119.4	119.5	118.2	116.0
WG VS1 AFT	88	118.3	117.9	115.1	110.9	106.5
WG ALT MID	89	112.4	112.7	112.9	112.3	111.0
WG ALT CEN	90	109.7	109.0	106.3	102.8	99.3
HYB A25	91	119.4	119.9	120.1	119.1	117.3
HYB A24	92	116.7	117.3	117.7	117.1	115.8
HYB A23	93	113.5	113.9	114.0	113.4	112.2
TCP COVER	94	105.1	105.4	105.7	105.5	104.9
TILT STRCT	95	83.0	83.3	84.0	84.7	85.1
HTR CNTLR	96	134.0	128.2	120.9	117.3	114.5
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	76.3	76.5	77.2	78.0	78.7

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	101.250	101.300	101.350	101.400	101.450
VSR 3	1	87.2	82.2	77.7	73.8	70.1
FILLER BLK	2	87.0	82.1	77.8	73.9	70.5
VSR 2	3	84.8	80.1	76.0	72.4	69.1
ALTIM	4	81.6	77.3	73.5	70.1	67.1
VSR 1	5	84.5	79.3	74.7	70.7	67.2
XTRMA	6	87.9	84.5	81.4	78.5	75.7
SUP LF FWD	7	86.6	82.4	78.7	75.2	72.1
SUP LF AFT	8	86.0	81.9	78.3	75.1	72.1
SUP RT FWD	9	83.3	78.8	74.8	71.3	68.0
SUP RT AFT	10	83.7	78.5	74.0	70.0	66.6
SHROUD A C	11	71.4	66.5	62.5	59.2	56.1
SHROUD F C	12	68.8	63.9	60.0	56.6	53.7
SHROUD F R	13	55.5	50.6	46.7	43.4	40.5
SHROUD R F	14	68.6	63.6	59.5	56.0	52.9
SHROUD L F	15	77.4	72.1	67.7	63.8	60.4
SHROUD TOP	16	62.1	56.5	52.1	48.5	45.3
SHROUD R A	17	75.2	69.8	65.3	61.4	58.0
SUP RC	18	85.7	80.3	75.4	70.9	67.0
SHROUD L A	19	76.0	70.9	66.6	63.0	59.7
SHROUD F L	20	80.1	75.0	70.6	66.7	63.2
SHROUD A L	21	78.5	73.6	69.4	65.7	62.5
SHROUD A R	22	78.2	72.8	68.3	64.4	61.0
LEM BASE	23	-234.3	-242.9	-250.3	-256.8	-262.5
TLT EX FWD	24	-65.2	-76.3	-82.0	-86.7	-90.6
TLT EX LFT	25	-36.8	-40.0	-42.3	-44.0	-45.4
TLT EX AFT	26	-51.8	-58.3	-63.4	-67.6	-70.9
TLT EXT RT	27	-36.8	-40.0	-42.3	-44.0	-45.4
PLT MODALT	28	112.7	110.8	108.7	106.5	104.3
PLT A5, A6	29	110.4	108.3	106.0	103.7	101.4
PLT A-22	30	112.7	110.4	108.1	105.7	103.4
PLT A4	31	113.3	110.6	108.0	105.4	102.9
PLT A4	32	113.3	110.6	107.9	105.3	102.8
PLT CENTER	33	112.2	110.5	107.9	105.3	102.8
PLT CNTLR	34	111.9	109.3	106.8	104.3	101.8
PLT A9-12	35	112.4	109.9	107.3	104.8	102.2
PLT A-14	36	112.0	109.4	106.8	104.2	101.6
PLT A-14	37	112.8	110.2	107.6	104.9	102.3
PLT A14	38	113.6	110.9	108.2	105.5	102.9
PLT A26	39	112.9	111.2	108.5	105.8	103.1
PLT A7, A8	40	113.4	110.7	108.0	105.3	102.6
FREQ MOD	41	112.9	110.9	108.9	106.7	104.5
ALT SSX	42	112.9	111.0	108.9	106.8	104.6
V.S. SSX	43	113.5	110.8	108.2	105.6	103.1
AMP.SW A13	44	111.3	109.2	107.0	104.7	102.4
AMP.SW A13	45	111.3	109.2	107.0	104.7	102.4
AMP.SW A14	46	113.4	110.7	108.1	105.5	102.9
AMP.SW A14	47	113.4	110.7	108.1	105.5	102.9
AMP.SW A14	48	113.2	110.5	107.8	105.2	102.6
AMP.SW A14	49	113.9	111.2	108.6	106.0	103.3
AMP.SW A14	50	115.0	112.3	109.5	106.8	104.2
AMP.SW A14	51	115.0	112.3	109.5	106.8	104.2

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	101.250	101.300	101.350	101.400	101.450
TH DET A13	52	111.0	108.9	106.6	104.4	102.1
TH DET A14	53	114.2	111.5	108.7	106.1	103.4
TH DET A14	54	114.2	111.4	108.7	106.0	103.4
TH DET A14	55	114.1	111.4	108.7	106.0	103.4
LEVELER	56	116.8	115.3	113.7	111.8	109.9
55CB AMP 5	57	111.6	109.7	107.6	105.5	103.3
55CB AMP 9	58	114.4	112.3	110.0	107.5	105.0
55CB AMP 9	59	114.4	112.3	110.0	107.5	105.0
55CB AMP 9	60	114.4	112.3	110.0	107.5	105.0
55CB AMP 9	61	114.4	112.3	110.0	107.5	105.0
55CB AMP 7	62	115.9	113.4	110.7	107.9	105.2
55CB AMP 7	63	115.9	113.4	110.7	107.9	105.2
HYB VS1	64	114.8	112.2	109.4	106.6	103.8
HYB VS3	65	113.7	111.5	109.0	106.5	103.9
HYB A6T	66	110.9	108.9	106.8	104.5	102.3
ENC FT FWD	67	113.2	111.8	110.1	108.3	106.3
SUP RT FWD	68	110.7	108.7	106.5	104.3	102.0
SUP RT MID	69	94.6	89.2	84.1	79.5	75.4
SUP RT AFT	70	114.6	112.0	109.2	106.4	103.6
ENC AFT	71	88.1	88.8	89.4	89.8	90.2
SUP LF AFT	72	113.7	111.4	109.0	106.4	103.8
SUP LF MID	73	105.1	100.7	96.5	92.6	89.0
SUP LF FWD	74	105.5	101.7	97.9	94.1	90.3
FM CASE	75	113.2	111.3	109.4	107.3	105.1
ALTX CASE	76	112.6	110.9	109.0	107.0	105.0
ALTA MB	77	111.4	109.5	107.4	105.3	103.1
CASE A5, A6	78	110.5	108.8	107.0	105.1	103.1
CASE A9-12	79	110.4	108.7	106.8	104.8	102.7
CASE MBA14	80	110.1	108.0	105.9	103.7	101.5
CASE VSX	81	112.6	110.2	107.8	105.4	103.1
CASE A7, A8	82	113.5	111.6	109.5	107.3	105.0
WG VS2 AFT	83	101.1	97.6	94.3	91.2	88.2
WG VS2MAFT	84	112.5	110.2	107.7	105.0	102.4
WG VS2MFWD	85	113.1	110.8	108.2	105.6	102.9
WG VS2 FWD	86	100.8	96.9	93.2	89.6	86.3
WG VS1MAFT	87	113.4	110.5	107.5	104.6	101.6
WG VS1 AFT	88	102.2	98.1	94.4	90.8	87.6
WG ALT MID	89	109.3	107.4	105.3	103.1	100.8
WG ALT CEN	90	95.9	92.8	89.8	87.0	84.3
HYB A25	91	114.9	112.1	109.3	106.4	103.5
HYB A24	92	113.9	111.7	109.2	106.7	104.0
HYB A23	93	110.6	108.8	106.7	104.6	102.3
TOP COVER	94	104.1	103.1	101.9	100.7	99.4
TILT STRCT	95	85.5	85.8	86.0	86.1	86.1
HTR CNTLR	96	111.9	109.4	106.9	104.4	101.9
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	79.3	80.0	80.6	81.1	81.6

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	101.500	101.550	101.600	101.650	101.700
VSR 3	1	66.8	63.8	61.0	58.4	55.9
FILLER BLK	2	67.3	64.4	61.7	59.1	56.7
VSR 2	3	66.1	63.3	60.8	58.3	56.0
ALTIM	4	64.4	61.9	59.5	57.3	55.1
VSR 1	5	64.1	61.2	58.5	56.1	53.7
XTRMA	6	72.1	70.7	68.3	66.0	63.9
SUP LF FWD	7	69.1	66.4	63.8	61.4	59.1
SUP LF AFT	8	69.3	66.7	64.2	61.9	59.7
SUP RT FWD	9	65.1	62.4	59.9	57.5	55.3
SUP RT AFT	10	63.4	60.6	58.0	55.5	53.2
SHROUD A C	11	53.4	50.9	48.6	46.4	44.3
SHROUD F C	12	51.0	48.5	46.2	44.1	42.0
SHROUD F R	13	38.0	35.6	33.5	31.5	29.6
SHROUD R F	14	50.2	47.7	45.4	43.3	41.2
SHROUD L F	15	57.3	54.4	51.8	49.3	47.1
SHROUD TOP	16	42.5	40.0	37.7	35.6	33.6
SHROUD R A	17	55.0	52.2	49.7	47.3	45.1
SUP RC	18	62.4	60.1	57.1	54.4	51.8
SHROUD L A	19	56.8	54.1	51.6	49.3	47.1
SHROUD F L	20	60.0	57.1	54.4	51.9	49.6
SHROUD A L	21	59.6	56.9	54.4	52.0	49.8
SHROUD A R	22	57.9	55.1	52.5	50.2	47.9
LEM BASE	23	-267.6	-272.2	-276.3	-280.1	-283.6
TLT EX FWD	24	-93.9	-96.6	-98.9	-100.9	-102.6
TLT EX LFT	25	-46.4	-47.2	-47.9	-48.5	-49.0
TLT EX AFT	26	-73.6	-75.8	-77.7	-79.3	-80.6
TLT EXT RT	27	-46.4	-47.2	-47.9	-48.5	-49.0
PLT MODALT	28	102.1	99.8	97.5	95.3	93.0
PLT A5,A6	29	99.1	96.8	94.5	92.3	90.0
PLT A-22	30	101.0	98.7	96.4	94.1	91.8
PLT A4	31	100.4	98.0	95.6	93.2	90.9
PLT A4	32	100.3	97.8	95.4	93.0	90.7
PLT CENTER	33	100.4	97.9	95.5	93.1	90.8
PLT CONTRL	34	99.4	97.0	94.6	92.3	90.0
PLT A9-12	35	99.6	97.0	94.5	92.1	89.6
PLT A-14	36	99.0	96.5	94.0	91.6	89.2
PLT A-14	37	99.7	97.2	94.7	92.2	89.8
PLT A14	38	100.3	97.8	95.2	92.8	90.3
PLT A26	39	100.5	97.9	95.4	92.9	90.5
PLT A7,A8	40	100.0	97.4	94.8	92.3	89.9
FREQ MOD	41	102.3	100.0	97.7	95.5	93.2
ALT SSX	42	102.3	100.1	97.8	95.5	93.3
V.S. SSX	43	100.6	98.1	95.7	93.4	91.0
AMP.SW A13	44	100.1	97.8	95.6	93.3	91.0
AMP.SW A13	45	100.1	97.8	95.6	93.3	91.0
AMP.SW A14	46	100.4	97.8	95.3	92.9	90.5
AMP.SW A14	47	100.4	97.8	95.3	92.9	90.5
AMP.SW A14	48	100.0	97.5	95.0	92.5	90.1
AMP.SW A14	49	100.7	98.2	95.6	93.1	90.7
AMP.SW A14	50	101.5	98.9	96.4	93.8	91.4
AMP.SW A14	51	101.5	98.9	96.4	93.8	91.4

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	101.500	101.550	101.600	101.650	101.700
TH DET A13	52	99.8	97.5	95.2	92.9	90.6
TH DET A14	53	100.8	98.2	95.7	93.2	90.8
TH DET A14	54	100.8	98.2	95.7	93.2	90.8
TH DET A14	55	100.8	98.2	95.7	93.2	90.7
LEVELER	56	107.8	105.6	103.4	101.2	98.9
55CB AMP 5	57	101.0	98.7	96.4	94.1	91.9
55CB AMP 9	58	102.4	99.9	97.3	94.8	92.3
55CB AMP 9	59	102.4	99.9	97.3	94.8	92.3
55CB AMP 9	60	102.4	99.9	97.3	94.8	92.3
55CB AMP 9	61	102.4	99.9	97.3	94.8	92.3
55CB AMP 7	62	102.5	99.7	97.1	94.5	92.0
55CB AMP 7	63	102.5	99.7	97.1	94.5	92.0
HYB VS1	64	101.1	98.4	95.7	93.1	90.6
HYB VS3	65	101.3	98.7	96.2	93.7	91.2
HYB A6T	66	100.0	97.7	95.4	93.1	90.8
END FT FWD	67	104.2	102.0	99.8	97.6	95.4
SUP RT FWD	68	99.7	97.4	95.1	92.8	90.6
SUP RT MID	69	71.7	68.3	65.2	62.4	59.8
SUP RT AFT	70	100.8	98.1	95.5	92.9	90.4
END AFT	71	90.5	90.7	90.9	90.9	90.9
SUP LF AFT	72	101.3	98.7	96.1	93.6	91.1
SUP LF MID	73	85.6	82.5	79.5	76.7	74.1
SUP LF FWD	74	86.6	83.1	79.7	76.5	73.4
FM CASE	75	102.9	100.7	98.5	96.2	94.0
ALTX CASE	76	102.9	100.8	98.6	96.5	94.3
ALTA MB	77	101.0	98.8	96.7	94.5	92.4
CASE A5, A6	78	101.0	99.0	96.9	94.8	92.8
CASE A9-12	79	100.6	98.5	96.4	94.3	92.2
CASE MBA14	80	99.4	97.2	95.1	93.0	90.9
CASE VSX	81	100.8	98.6	96.3	94.1	92.0
CASE A7, A8	82	102.6	100.3	98.0	95.7	93.4
WG VS2 AFT	83	85.4	82.7	80.1	77.5	75.1
WG VS2MAFT	84	99.7	97.0	94.4	91.8	89.3
WG VS2MFWD	85	100.2	97.6	94.9	92.3	89.8
WG VS2 FWD	86	82.1	80.1	77.3	74.6	72.1
WG VS1MAFT	87	98.8	96.0	93.3	90.6	88.1
WG VS1 AFT	88	84.5	81.6	78.9	76.3	73.8
WG ALT MID	89	98.5	96.1	93.8	91.5	89.2
WG ALT CEN	90	81.8	79.3	77.0	74.7	72.5
HYE A25	91	100.7	97.9	95.2	92.5	90.0
HYE A24	92	101.4	98.8	96.1	93.6	91.0
HYE A23	93	100.0	97.7	95.4	93.1	90.8
TOP COVER	94	98.0	96.5	95.1	93.6	92.0
TILT STRCT	95	86.1	86.0	85.9	85.6	85.4
HTR CONTRL	96	99.5	97.1	94.7	92.4	90.1
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	82.0	82.4	82.8	83.1	83.3

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NOTE	TIME	101.750	101.800	101.850	101.900	101.950
VSR 3	1	54.0	55.1	59.0	63.9	69.2
FILLER BLK	2	54.8	55.4	59.4	64.5	70.3
VSR 2	3	54.6	57.3	63.1	69.4	76.5
ALTIM	4	53.4	54.1	57.7	62.5	69.2
VSR 1	5	52.4	55.7	62.6	70.3	79.0
XTRMA	6	61.9	60.7	60.5	61.0	62.7
SUP LF FWD	7	57.3	57.9	60.6	63.5	66.9
SUP LF AFT	8	58.3	60.3	64.0	67.5	71.6
SUP RT FWD	9	53.7	53.7	55.7	59.2	64.3
SUP RT AFT	10	52.7	58.5	67.5	75.5	83.4
SHROUD A C	11	61.8	108.5	138.5	152.2	160.4
SHROUD F C	12	48.3	78.9	107.6	122.0	129.4
SHROUD F R	13	35.9	65.7	93.5	107.9	116.4
SHROUD R F	14	49.5	81.0	106.5	119.7	128.6
SHROUD L F	15	54.1	75.8	99.1	109.6	116.8
SHROUD TOP	16	72.7	159.3	206.3	226.4	236.6
SHROUD R A	17	54.5	84.3	105.9	118.2	127.6
SUP RC	18	49.8	49.6	51.5	54.4	58.2
SHROUD L A	19	54.3	80.9	101.4	112.7	120.9
SHROUD F L	20	55.1	74.6	89.1	97.7	104.2
SHROUD A L	21	58.1	81.1	97.1	106.8	114.7
SHROUD A R	22	56.1	79.5	96.4	107.2	116.3
LEM BASE	23	-286.8	-289.7	-292.2	-279.8	-204.4
TLT EX FWD	24	-104.0	-105.3	-106.4	-107.4	-107.7
TLT EX LFT	25	-49.4	-49.9	-50.3	-50.7	-50.5
TLT EX AFT	26	-81.7	-82.7	-83.5	-84.3	-84.2
TLT EXT RT	27	-49.4	-49.9	-50.3	-50.7	-50.5
PLT MOCAIT	28	90.8	88.6	86.6	84.8	83.3
PLT A5, A6	29	87.8	85.7	83.9	82.3	81.2
PLT A-22	30	89.5	87.3	85.4	83.7	82.4
PLT A4	31	88.6	86.4	84.5	82.8	81.5
PLT A4	32	88.4	86.3	84.3	82.7	81.4
PLT CENTER	33	88.5	86.4	84.4	82.8	81.5
PLT CCNTR	34	87.7	85.6	83.7	82.1	80.9
PLT A9-12	35	87.2	85.0	83.1	81.6	80.5
PLT A-14	36	86.8	84.7	82.9	81.4	80.4
PLT A-14	37	87.4	85.2	83.3	81.7	80.5
PLT A14	38	88.0	85.7	83.7	82.1	80.8
PLT A26	39	88.1	85.9	83.9	82.2	81.0
PLT A7, A8	40	87.5	85.3	83.3	81.7	80.6
FREQ MOD	41	91.0	88.8	86.8	85.0	83.5
ALT SSX	42	91.1	88.9	86.9	85.1	83.5
V.S. SSX	43	88.7	86.6	84.6	82.9	81.6
AMP.SW A13	44	88.8	86.6	84.7	83.0	81.7
AMP.SW A13	45	88.8	86.6	84.7	83.0	81.7
AMP.SW A14	46	88.1	85.9	83.9	82.3	81.0
AMP.SW A14	47	88.1	85.9	83.9	82.3	81.0
AMP.SW A14	48	87.7	85.5	83.6	82.0	80.9
AMP.SW A14	49	88.3	86.0	84.0	82.3	81.0
AMP.SW A14	50	89.0	86.7	84.6	82.9	81.5
AMP.SW A14	51	89.0	86.7	84.6	82.9	81.5

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	101.750	101.800	101.850	101.900	101.950
TH DET A13	52	88.4	86.3	84.4	82.8	81.5
TH DET A14	53	88.4	86.1	84.1	82.4	81.1
TH DET A14	54	88.4	86.1	84.1	82.4	81.1
TH DET A14	55	88.4	86.1	84.1	82.4	81.1
LEVELER	56	96.7	94.4	92.2	90.1	88.2
55CB AMP 5	57	89.6	87.4	85.4	83.7	82.3
55CB AMP 9	58	89.9	87.5	85.4	83.5	82.1
55CB AMP 9	59	89.9	87.5	85.4	83.5	82.1
55CB AMP 9	60	89.9	87.5	85.4	83.5	82.1
55CB AMP 9	61	89.9	87.5	85.4	83.5	82.1
55CB AMP 7	62	89.5	87.1	85.0	83.3	82.1
55CB AMP 7	63	89.5	87.1	85.0	83.3	82.1
HYB VS1	64	88.2	85.9	83.9	82.4	81.4
HYB VS3	65	88.7	86.4	84.4	82.7	81.4
HYB A6T	66	88.6	86.4	84.5	82.9	81.7
END FT FWD	67	92.2	91.0	89.0	87.1	85.5
SUP RT FWD	68	88.3	86.2	84.3	82.7	81.6
SUP RT MID	69	57.4	55.9	56.4	58.6	62.3
SUP RT AFT	70	88.0	85.7	83.8	82.4	81.4
END AFT	71	90.8	90.7	90.5	90.3	90.0
SUP LF AFT	72	88.6	86.3	84.3	82.7	81.4
SUP LF MID	73	71.6	69.7	69.2	69.8	71.4
SUP LF FWD	74	70.5	68.0	66.5	66.0	66.4
FM CASE	75	91.8	89.7	87.7	85.8	84.3
ALTX CASE	76	92.2	90.1	88.1	86.4	84.8
ALTA MB	77	90.3	88.2	86.4	84.8	83.5
CASE A5, A6	78	90.7	88.7	86.9	85.3	84.0
CASE A9-12	79	90.1	88.2	86.4	84.9	83.8
CASE MBA14	80	88.9	87.0	85.5	84.3	83.4
CASE VSX	81	89.8	87.8	85.9	84.3	83.0
CASE A7, A8	82	91.2	89.0	87.1	85.4	84.1
WG VS2 AFT	83	72.9	72.4	73.8	75.8	78.4
WG VS2MAFT	84	86.8	84.6	82.9	81.7	81.0
WG VS2MFWD	85	87.3	85.0	83.1	81.7	80.8
WG VS2 FWD	86	69.7	68.2	68.6	70.2	72.5
WG VS1MAFT	87	85.6	83.5	82.0	81.2	80.9
WG VS1 AFT	88	71.5	70.9	72.5	75.1	78.6
WG ALT MID	89	87.0	84.8	83.0	81.7	80.8
WG ALT CEN	90	70.4	69.5	70.2	71.8	74.6
HYB A25	91	87.5	85.2	83.3	82.0	81.3
HYB A24	92	88.5	86.2	84.1	82.6	81.4
HYB A23	93	88.5	86.3	84.4	82.8	81.6
TOP COVER	94	90.6	89.7	89.5	89.6	90.0
TILT STRCT	95	85.1	84.8	84.4	84.1	83.9
HTR CNTLR	96	87.8	85.7	83.8	82.2	80.9
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	83.5	83.6	83.7	83.8	83.8

INTEGRATION OF THERMAL TRANSIENTS

PGM 1179

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	102.000	102.050	102.100	102.150	102.200
VSR 3	1	75.9	85.8	95.2	104.0	111.8
FILLER BLK	2	76.8	84.7	93.2	101.8	110.1
VSR 2	3	83.6	90.0	97.6	106.2	114.7
ALTIM	4	76.8	85.5	95.8	106.7	117.3
VSR 1	5	87.6	94.3	102.2	111.2	120.4
XTRMA	6	66.0	71.9	78.9	86.2	93.4
SUP LF FWD	7	72.3	81.8	89.9	97.9	105.4
SUP LF AFT	8	76.6	81.4	88.2	95.8	103.5
SUP RT FWD	9	70.2	78.4	88.3	98.6	108.9
SUP RT AFT	10	90.5	93.6	99.6	107.4	115.9
SHROUD A C	11	151.6	137.4	141.4	148.5	156.1
SHROUD F C	12	160.7	157.0	207.7	215.6	222.6
SHROUD F R	13	144.1	177.1	192.7	204.0	213.2
SHROUD R F	14	135.1	141.7	150.6	159.6	168.0
SHROUD L F	15	124.2	130.1	137.8	145.4	152.4
SHROUD TOP	16	237.6	235.2	239.8	244.8	249.1
SHROUD R A	17	133.6	137.3	144.5	152.5	160.5
SUP RC	18	66.0	80.8	93.5	105.0	115.9
SHROUD L A	19	128.8	132.5	139.0	146.4	153.7
SHROUD F L	20	117.7	126.1	134.7	142.8	150.0
SHROUD A L	21	116.7	120.0	126.9	134.6	142.5
SHROUD A R	22	119.5	122.9	129.9	138.0	146.3
LEM BASE	23	-56.5	92.4	147.9	175.5	188.3
TLT EX FWD	24	-104.1	-81.9	-41.7	0.6	37.0
TLT EX LFT	25	-46.8	-26.2	7.9	39.8	64.2
TLT EX AFT	26	-79.1	-49.8	1.2	51.1	89.9
TLT EXT RT	27	-46.8	-26.2	7.9	39.8	64.2
PLT MODALT	28	82.1	81.4	81.3	81.7	82.6
PLT A5,A6	29	80.5	80.5	81.1	82.3	84.1
PLT A-22	30	81.4	81.0	81.2	82.0	83.3
PLT A4	31	80.7	80.4	80.6	81.5	82.9
PLT A4	32	80.6	80.3	80.6	81.5	82.9
PLT CENTER	33	80.6	80.3	80.5	81.4	82.8
PLT CONTRL	34	80.1	79.9	80.3	81.4	82.9
PLT A9-12	35	79.9	79.9	80.5	81.6	83.4
PLT A-14	36	79.9	79.9	80.6	81.9	83.7
PLT A-14	37	79.8	79.7	80.3	81.4	83.0
PLT A14	38	80.1	79.8	80.2	81.2	82.7
PLT A26	39	80.2	80.0	80.3	81.3	82.8
PLT A7,A8	40	80.0	80.0	80.5	81.6	83.2
FREQ MOD	41	82.2	81.5	81.3	81.6	82.5
ALT SSX	42	82.3	81.5	81.3	81.6	82.5
V.S. SSX	43	80.7	80.4	80.6	81.4	82.7
AMP.SW A13	44	80.8	80.5	80.8	81.8	83.3
AMP.SW A13	45	80.8	80.5	80.8	81.8	83.3
AMP.SW A14	46	80.3	80.0	80.3	81.3	82.8
AMP.SW A14	47	80.2	80.0	80.3	81.3	82.8
AMP.SW A14	48	80.2	80.0	80.4	81.4	83.1
AMP.SW A14	49	80.2	79.9	80.1	81.0	82.5
AMP.SW A14	50	80.6	80.1	80.3	81.0	82.3
AMP.SW A14	51	80.6	80.1	80.3	81.0	82.3

INTEGRATION OF THERMAL TRANSIENTS

PGM 1179

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	102.000	102.050	102.100	102.150	102.200
TH DET A13	52	80.7	80.5	80.9	81.9	83.5
TH DET A14	53	80.2	79.9	80.2	81.1	82.5
TH DET A14	54	80.2	79.9	80.2	81.1	82.5
TH DET A14	55	80.2	79.9	80.2	81.1	82.5
LEVELER	56	86.5	85.1	84.0	83.3	83.1
55CB AMP 5	57	81.4	80.9	81.0	81.7	83.0
55CB AMP 9	58	81.1	80.6	80.6	81.2	82.3
55CB AMP 9	59	81.1	80.6	80.6	81.2	82.3
55CB AMP 9	60	81.1	80.6	80.6	81.2	82.3
55CB AMP 9	61	81.1	80.6	80.6	81.2	82.3
55CB AMP 7	62	81.3	80.9	81.1	81.8	83.0
55CB AMP 7	63	81.3	80.9	81.1	81.8	83.0
HYB VS1	64	80.9	80.8	81.2	82.2	83.7
HYB VS3	65	80.6	80.4	80.6	81.5	82.8
HYB A6T	66	80.9	80.7	81.1	82.1	83.7
END FT FWD	67	84.1	83.1	82.4	82.3	82.6
SUP RT FWD	68	80.9	80.7	81.2	82.2	83.9
SUP RT MID	69	67.2	74.1	82.3	91.3	100.7
SUP RT AFT	70	80.9	80.9	81.4	82.4	83.9
END AFT	71	89.7	89.4	89.1	88.9	88.7
SUP LF AFT	72	80.7	80.4	80.7	81.5	82.9
SUP LF MID	73	73.8	77.1	81.1	85.7	90.8
SUP LF FWD	74	67.7	70.3	74.1	78.7	83.9
FM CASE	75	83.0	82.1	81.7	81.8	82.5
ALTX CASE	76	83.5	82.6	82.1	82.1	82.6
ALTA MB	77	82.5	81.9	81.8	82.2	83.2
CASE A5, A6	78	83.0	82.4	82.2	82.5	83.4
CASE A9-12	79	83.0	82.5	82.4	82.8	83.6
CASE MEA14	80	82.9	82.7	82.9	83.6	84.8
CASE VSX	81	82.1	81.5	81.4	81.8	82.8
CASE A7, A8	82	83.1	82.5	82.3	82.6	83.4
WG VS2 AFT	83	81.4	84.2	87.8	92.1	96.9
WG VS2MAFT	84	80.8	81.0	81.7	82.9	84.7
WG VS2MFWD	85	80.4	80.6	81.2	82.4	84.1
WG VS2 FWD	86	75.4	80.1	85.6	91.2	96.6
WG VS1MAFT	87	81.3	81.9	82.9	84.4	86.4
WG VS1 AFT	88	82.6	86.1	89.9	94.4	99.5
WG ALT MID	89	80.5	80.7	81.5	83.0	85.0
WG ALT CEN	90	78.2	82.5	87.9	94.0	100.3
HYB A25	91	81.1	81.4	82.0	83.1	84.7
HYB A24	92	80.8	80.6	80.9	81.8	83.2
HYB A23	93	80.9	80.7	81.1	82.1	83.8
TOP COVER	94	90.6	91.5	92.5	93.9	95.5
TILT STRCT	95	83.7	83.5	83.5	83.5	83.7
HTR CNTLR	96	80.1	79.9	80.3	81.3	82.8
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	83.8	83.7	83.7	83.7	83.7

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	102.250	102.300	102.350	102.400	102.450
VSR 3	1	118.4	123.4	126.9	128.8	129.1
FILLER BLK	2	117.5	123.5	127.8	130.1	130.6
VSR 2	3	122.6	128.8	133.2	135.3	135.4
ALTIM	4	126.9	134.5	139.8	142.3	142.3
VSR 1	5	129.2	136.3	141.6	144.3	144.7
XTRMA	6	99.8	104.8	108.3	110.0	110.1
SUP LF FWD	7	112.0	117.3	121.1	123.2	123.8
SUP LF AFT	8	110.5	116.3	120.5	122.8	123.3
SUP RT FWD	9	118.5	126.7	133.1	137.4	139.5
SUP RT AFT	10	124.2	131.4	137.1	140.7	142.1
SHROUD A C	11	163.4	169.6	174.4	177.3	178.1
SHROUD F C	12	228.4	233.1	236.5	238.6	239.5
SHROUD F R	13	220.1	224.0	225.7	224.9	222.4
SHROUD R F	14	175.2	180.7	184.1	185.3	184.5
SHROUD L F	15	158.1	162.4	165.2	166.4	166.2
SHROUD TOP	16	252.3	254.1	254.4	253.3	251.1
SHROUD R A	17	167.7	173.3	177.3	179.0	178.8
SUP RC	18	126.0	135.2	143.4	150.3	155.6
SHROUD L A	19	160.1	165.1	168.5	169.9	169.6
SHROUD F L	20	156.0	160.5	163.6	165.1	165.2
SHROUD A L	21	149.6	155.3	159.2	161.0	160.9
SHROUD A R	22	154.1	160.5	165.0	167.4	167.5
LEM BASE	23	193.5	184.5	169.8	145.9	115.8
TLT EX FWD	24	62.6	76.3	79.9	75.3	65.0
TLT EX LFT	25	79.3	85.6	84.9	78.6	68.4
TLT EX AFT	26	113.9	124.0	123.8	115.5	101.9
TLT EXT RT	27	79.3	85.6	84.9	78.6	68.4
PLT MOCALT	28	82.9	85.6	87.6	89.6	91.6
PLT A5, A6	29	86.2	88.6	91.0	93.3	95.4
PLT A-22	30	85.0	87.0	89.1	91.3	93.3
PLT A4	31	84.7	86.9	89.2	91.6	93.8
PLT A4	32	84.8	87.0	89.4	91.8	94.0
PLT CENTER	33	84.6	86.8	89.2	91.5	93.7
PLT CENLR	34	84.9	87.1	89.5	91.8	93.9
PLT A9-12	35	85.5	87.9	90.4	92.8	95.1
PLT A-14	36	85.9	88.4	91.0	93.4	95.6
PLT A-14	37	85.1	87.5	90.0	92.5	94.7
PLT A14	38	84.7	87.0	89.5	91.9	94.2
PLT A26	39	84.7	87.0	89.4	91.9	94.2
PLT A7, A8	40	85.3	87.6	90.2	92.6	94.9
FREQ MOD	41	83.8	85.5	87.4	89.4	91.4
ALT SSX	42	83.8	85.4	87.3	89.3	91.3
V.S. SSX	43	84.5	86.7	89.0	91.4	93.6
AMP.SW A13	44	85.3	87.5	89.9	92.3	94.5
AMP.SW A13	45	85.3	87.5	89.9	92.3	94.5
AMP.SW A14	46	84.8	87.1	89.6	92.1	94.4
AMP.SW A14	47	84.8	87.1	89.6	92.1	94.4
AMP.SW A14	48	85.1	87.5	90.1	92.6	94.9
AMP.SW A14	49	84.4	86.7	89.2	91.7	94.0
AMP.SW A14	50	84.1	86.2	88.6	91.1	93.5
AMP.SW A14	51	84.1	86.2	88.6	91.1	93.5

INTEGRATION OF THERMAL TRANSIENTS

PGM 1179

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	102.250	102.300	102.350	102.400	102.450
TH DET A13	52	85.6	87.9	90.3	92.7	94.8
TH DET A14	53	84.4	86.6	89.1	91.6	93.9
TH DET A14	54	84.4	86.7	89.1	91.6	93.9
TH DET A14	55	84.4	86.7	89.1	91.6	93.9
LEVELER	56	83.4	84.1	85.1	86.5	88.0
55CB AMP 5	57	84.8	87.0	89.5	92.0	94.5
55CB AMP 9	58	83.9	85.9	88.2	90.7	93.1
55CB AMP 9	59	83.9	85.9	88.2	90.7	93.1
55CB AMP 9	60	83.9	85.9	88.2	90.7	93.1
55CB AMP 9	61	83.9	85.9	88.2	90.7	93.1
55CB AMP 7	62	84.7	86.8	89.2	91.7	94.3
55CB AMP 7	63	84.7	86.8	89.2	91.7	94.3
HYB VS1	64	85.6	88.0	90.5	93.1	95.7
HYB VS3	65	84.7	86.9	89.3	91.8	94.2
HYB A6T	66	85.7	88.1	90.7	93.3	95.7
END FT FWD	67	83.5	84.7	86.4	88.2	90.2
SUP RT FWD	68	86.0	88.4	91.0	93.6	96.0
SUP RT MID	69	110.0	118.9	126.8	133.4	138.2
SUP RT AFT	70	85.9	88.3	90.8	93.5	96.0
END AFT	71	88.5	88.4	88.4	88.5	88.6
SUP LF AFT	72	84.8	87.0	89.4	91.9	94.3
SUP LF MID	73	96.1	101.2	105.8	109.7	112.6
SUP LF FWD	74	89.4	94.9	100.1	104.8	108.7
FM CASE	75	83.6	85.2	87.0	89.0	90.9
ALTX CASE	76	83.6	85.0	86.8	88.7	90.7
ALTA MB	77	84.6	86.4	88.4	90.5	92.6
CASE A5, A6	78	84.7	86.4	88.4	90.6	92.7
CASE A9-12	79	84.9	86.6	88.6	90.7	92.8
CASE MEA14	80	86.4	88.3	90.5	92.7	94.8
CASE VSX	81	84.2	86.1	88.2	90.4	92.5
CASE A7, A8	82	84.6	86.2	88.2	90.3	92.5
WG VS2 AFT	83	101.6	105.9	109.5	112.1	113.6
WG VS2MAFT	84	87.0	89.5	92.1	94.7	97.1
WG VS2MFWD	85	86.3	88.7	91.3	93.9	96.3
WG VS2 FWD	86	101.5	105.9	109.6	112.3	114.1
WG VS1MAFT	87	88.9	91.7	94.7	97.5	100.2
WG VS1 AFT	88	104.8	109.7	114.0	117.3	119.4
WG ALT MID	89	87.6	90.4	93.4	96.3	98.9
WG ALT CEN	90	106.4	111.8	116.1	119.0	120.5
HYB A25	91	86.8	89.3	92.1	94.9	97.6
HYB A24	92	85.2	87.4	89.9	92.5	94.9
HYB A23	93	85.9	88.4	91.2	93.9	96.6
TOP COVER	94	97.4	99.5	101.8	104.1	106.3
TILT STRCT	95	84.1	84.5	85.0	85.6	86.2
HTR CNTLR	96	84.8	87.0	89.3	91.7	93.8
SPACE	97	-460.0	-460.0	-460.0	-460.0	-460.0
ACTUATOR	98	83.7	83.7	83.8	83.9	84.1

INTEGRATION OF THERMAL TRANSIENTS

PGM 1179

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

HOURS .VS. DEG.F

NODE	TIME	102.500	102.550	102.555
VSR 3	1	128.2	126.4	126.1
FILLER BLK	2	129.5	127.2	126.9
VSR 2	3	133.6	130.3	130.0
ALTIM	4	140.1	136.2	135.8
VSR 1	5	142.9	139.3	138.9
XTRMA	6	108.7	106.4	106.1
SUP LF FWD	7	123.1	121.2	121.0
SUP LF AFT	8	122.2	119.7	119.4
SUP RT FWD	9	139.5	137.7	137.5
SUP RT AFT	10	141.3	138.8	138.4
SHROUD A C	11	177.1	173.8	173.4
SHROUD F C	12	239.4	238.2	238.0
SHROUD F R	13	218.6	213.8	213.3
SHROUD R F	14	181.9	177.8	177.3
SHROUD L F	15	164.7	162.2	161.9
SHROUD TOP	16	247.6	243.2	242.7
SHROUD R A	17	176.6	172.9	172.5
SUP RC	18	159.4	161.7	161.8
SHROUD L A	19	167.6	164.3	163.9
SHROUD F L	20	164.1	162.0	161.8
SHROUD A L	21	158.9	155.5	155.1
SHROUD A R	22	165.6	162.0	161.6
LEM BASE	23	79.1	38.3	34.0
TLT EX FWD	24	50.7	34.0	32.4
TLT EX LFT	25	55.6	41.4	40.0
TLT EX AFT	26	64.4	64.8	62.9
TLT EXT RT	27	55.6	41.4	40.0
PLT MOCALT	28	93.4	95.0	95.1
PLT A5,A6	29	97.1	98.4	98.5
PLT A-22	30	95.0	96.5	96.6
PLT A4	31	95.7	97.3	97.4
PLT A4	32	95.9	97.5	97.6
PLT CENTER	33	95.6	97.2	97.3
PLT CONTRL	34	95.7	97.2	97.3
PLT A9-12	35	97.0	98.6	98.7
PLT A-14	36	97.5	98.9	99.0
PLT A-14	37	96.7	98.3	98.4
PLT A14	38	96.2	97.9	98.0
PLT A26	39	96.3	98.0	98.1
PLT A7,A8	40	97.0	98.6	98.7
FREQ MOD	41	93.2	94.8	95.0
ALT SSX	42	93.2	94.8	94.9
V.S. SSX	43	95.6	97.2	97.3
AMP.SW A13	44	96.3	97.8	97.9
AMP.SW A13	45	96.3	97.8	97.9
AMP.SW A14	46	96.4	98.1	98.2
AMP.SW A14	47	96.4	98.1	98.2
AMP.SW A14	48	96.9	98.5	98.7
AMP.SW A14	49	96.1	97.8	98.0
AMP.SW A14	50	95.7	97.5	97.7
AMP.SW A14	51	95.7	97.5	97.7

INTEGRATION OF THERMAL TRANSIENTS

PGM 1179

APOLLO 10 MISSION ANALYSIS

TIME - TEMPERATURE PROFILE

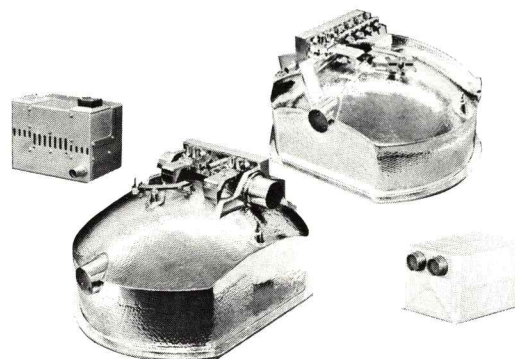
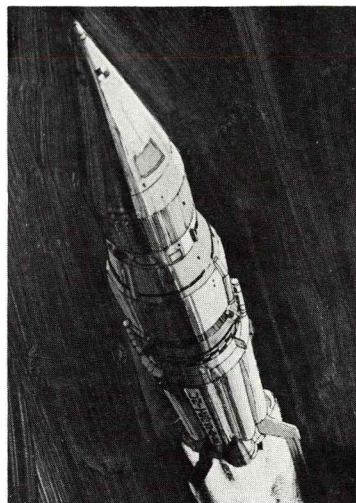
HOURS .VS. DEG.F

NODE	TIME	102.500	102.550	102.555
TH DET A13	52	96.6	98.0	98.1
TH DET A14	53	96.0	97.7	97.9
TH DET A14	54	96.0	97.7	97.9
TH DET A14	55	96.0	97.7	97.9
LEVELER	56	89.7	91.3	91.5
55CB AMP 5	57	96.7	98.6	98.7
55CB AMP 9	58	95.3	97.3	97.5
55CB AMP 9	59	95.3	97.3	97.5
55CB AMP 9	60	95.3	97.3	97.5
55CB AMP 9	61	95.3	97.3	97.5
55CB AMP 7	62	96.7	98.7	98.9
55CB AMP 7	63	96.7	98.7	98.9
HYB VS1	64	97.9	99.8	100.0
HYB VS3	65	96.4	98.2	98.4
HYE A6T	66	97.8	99.4	99.6
END FT FWD	67	92.1	94.0	94.1
SUP RT FWD	68	98.1	99.7	99.8
SUP RT MID	69	141.3	142.6	142.6
SUP RT AFT	70	98.2	100.1	100.2
END AFT	71	88.8	89.0	89.1
SUP LF AFT	72	96.5	98.3	98.5
SUP LF MID	73	114.6	115.6	115.6
SUP LF FWD	74	111.9	114.1	114.3
FM CASE	75	92.8	94.5	94.7
ALTX CASE	76	92.5	94.3	94.4
ALTA MB	77	94.4	96.0	96.2
CASE A5, A6	78	94.7	96.4	96.5
CASE A9-12	79	94.7	96.4	96.6
CASE MBA14	80	96.6	98.1	98.3
CASE VSX	81	94.5	96.2	96.3
CASE A7, A8	82	94.7	96.6	96.8
WG VS2 AFT	83	114.2	113.8	113.8
WG VS2MAFT	84	99.2	100.9	101.0
WG VS2MFWD	85	98.5	100.3	100.4
WG VS2 FWD	86	115.1	115.3	115.3
WG VS1MAFT	87	102.4	104.1	104.2
WG VS1 AFT	88	120.3	120.0	120.0
WG ALT MID	89	101.1	102.9	103.0
WG ALT CEN	90	120.7	119.8	119.6
HYE A25	91	99.9	101.9	102.1
HYE A24	92	97.2	99.1	99.3
HYE A23	93	98.9	100.8	100.9
TOP COVER	94	108.4	110.3	110.5
TILT STRCT	95	86.8	87.4	87.4
HTR CNTLR	96	95.6	97.1	97.2
SPACE	97	-460.0	-460.0	-460.0
ACTUATOR	98	84.4	84.6	84.7

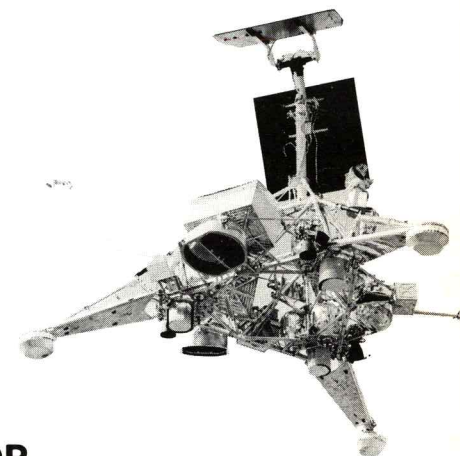
RADARS FOR SPACE TEN YEARS OF SPACE RADAR EXPERIENCE



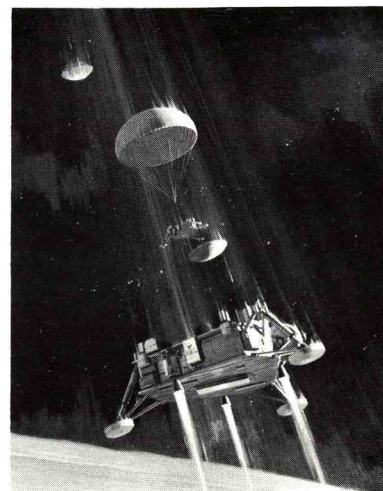
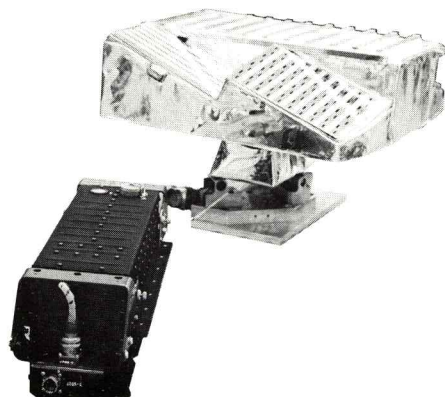
SATURN



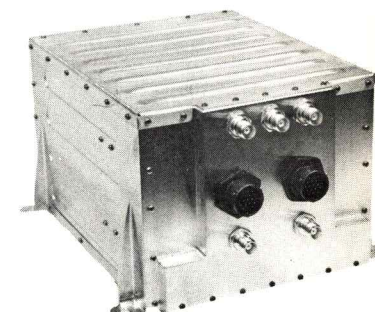
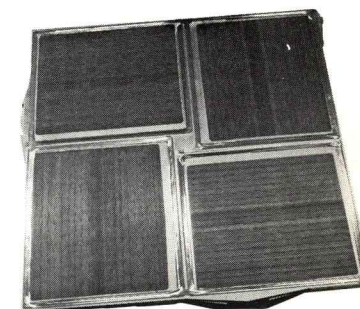
SURVEYOR



APOLLO



VIKING



THE SPACE RADAR SCORE

6 SATURN ALTIMETER FLIGHTS	100% SUCCESS
7 SURVEYOR FLIGHTS, <u>5</u> LANDINGS	100% SUCCESS
<u>9</u> APOLLO FLIGHTS, <u>5</u> LANDINGS	100% SUCCESS
NO TELEDYNE RYAN EQUIPMENT HAS EVER FAILED IN SPACE!	