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ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/G 4/2  
19305A GSRS, MISSILE NUMBER 1053, ROUND NUMBER V-35.(U)  
MAY 79

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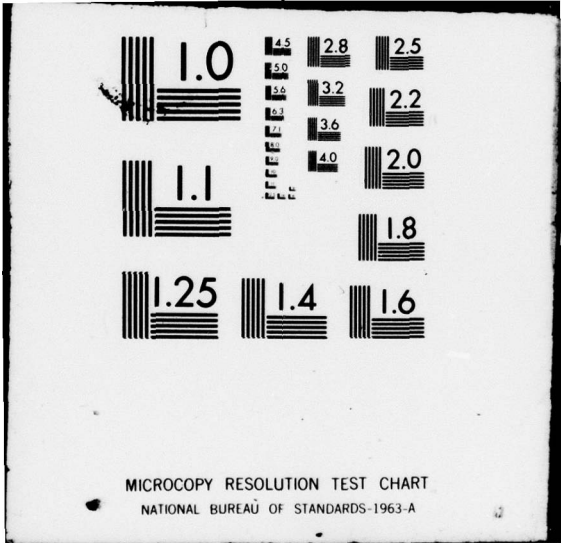
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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of 19305A GSRS, Missile No. 1053, Round No. V-35, are presented in tabular form.			

9 Meteorological data rept.

6 19305A GSRS  
Missile No. 1053 Number 1053  
Round No. V-35 Number V-35.

12 17p.

11 31 May 1979

14 ERADCOM/ASL-DR-1025

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## INTRODUCTION

19305A GSRS, Missile Number 1053, Round Number V-35, was launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 1125 MDT, 31 May 1979. The scheduled launch time was 1125 MDT.

## DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

### 1. Observations

#### a. Surface

(1) Standard surface observations to include pressure, temperature ( $^{\circ}\text{C}$ ), relative humidity, dew point ( $^{\circ}\text{C}$ ), density ( $\text{gm}/\text{m}^3$ ), wind direction and speed, and cloud cover were made at the LC-33 Met Site at T-0 minutes.

(2) Anemometer data were provided from existing pole-mounted and tower-mounted anemometers at LC-33. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

#### b. Upper Air

(1) Low level wind data were obtained from RAPTS T-9 pibal observation at:

## SITE AND ALTITUDE

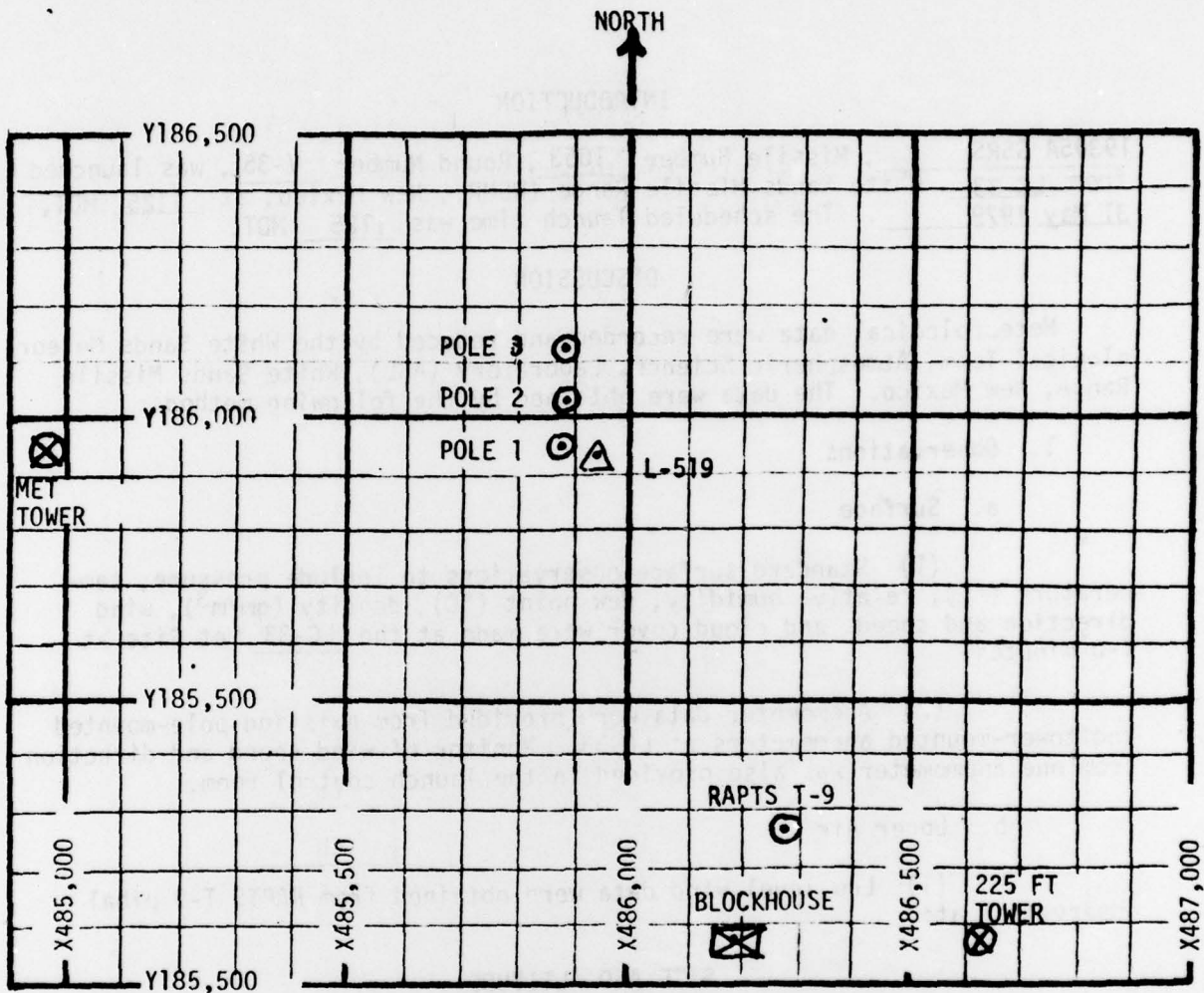
LC-33 1020 meters (30-meter increments) 1225 MDT

(2) Air structure data (rawinsonde) were collected at the following Met Sites. Data were collected from surface to 62,500 feet in 500-foot increments.

## SITE AND TIME

SMR 1125 MST





1. MET TOWER - 4 Bendix Model T-120 Anemometers at 12 ft, 62 ft, 102 ft and 202 ft with E/A recorders.
2. POLE ANEMOMETER - Bendix Model T-120 with E/A recorders.
  - (a) Pole #1 - 38.7 ft
  - (b) Pole #2 - 53.0 ft
  - (c) Pole #3 - 83.6 ft
3. 225 FT WIND TOWER - 5 Bendix Model T-120 Anemometers at 35 ft, 88 ft, 128 ft, 168 ft and 200 ft with 5 X-Y visual indicators in Blockhouse.
4. RAPTTS T-9 - Radar Automatic Pilot-Balloon Tracking System T-9 Radar

TABLE 1. SURFACE OBSERVATIONS TAKEN AT 1125 MDT,  
 31 MAY 1979 AT LC-33, 19305A GSRS,  
 MISSILE NO. 1053, ROUND NO. V-35

ELEVATION	3977.30	FT/MSL
PRESSURE	878.1	MBS
TEMPERATURE	29.5	°C
RELATIVE HUMIDITY	27	%
DEW POINT	8.5	°C
DENSITY	1004	GM/M <sup>3</sup>
WIND SPEED	02	MPH
WIND DIRECTION	280	DEGREES
CLOUD COVER	1	Cu
CLOUD COVER	1	Cb



TABLE 2. LC-33 FIXED POLE ANEMOMETER-MEASURED WINDS

POLE #1			POLE #2			POLE #3		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	169	01	-30	128	05	-30	159	04
-20	143	01	-20	099	05	-20	160	04
-10	175	01	-10	200	06	-10	159	04
0.0	175	04	0.0	218	10	0.0	165	03
+10	170	02	+10	211	07	+10	163	03

Type 19305A GSRS, Missile No. 1053, Round No. V-35 launched  
 from LC-33 on 31 May 1979 at 1225 MDT.

POLE #1 = X485,874.29 Y185,958.90 H4018.74 38.7 ft. AGL

POLE #2 = X485,874.93 Y186,012.00 H4033.57 53.0 ft. AGL

POLE #3 = X485,877.29 Y186,116.06 H4063.92 83.6 ft. AGL

NOTE: Wind directions are referenced to the firing azimuth \_\_\_\_\_  
 or true north true north.

TABLE 3. LC-33 METEOROLOGICAL TOWER ANEMOMETER-MEASURED WINDS (202 FT. TOWER)

LEVEL #1 12 ft.			LEVEL #2 62 ft.		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	170	03	-30	147	05
-20	146	04	-20	133	04
-10	148	04	-10	139	04
0.0	155	04	0.0	145	04
+10	147	03	+10	145	04
LEVEL #3 102 ft.			LEVEL #4 202 ft.		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	156	02	-30	129	03
-20	155	02	-20	144	03
-10	161	02	-10	151	04
0.0	162	02	0.0	093	01
+10	170	02	+10	127	01

WTSM Coordinates: X484,982.64 Y185,957.73 H3983.00 (base)

Type 19305A GSR, Missile No. 1053, Round No. V-35 launched  
from LC-33 on 31 May 1979 at 1225 MDT.

NOTE: Wind directions are referenced to the firing azimuth \_\_\_\_\_  
or true north true north.

TABLE 4. PILOT-BALLOON-MEASURED WIND DATA (30-METER INCREMENTS)

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
SFC	280	2.0
30	343	1.0
60	Caln	Caln
90	357	1.5
120	308	3.0
150	308	4.0
180	308	5.0
210	325	4.5
240	342	4.0
270	006	4.5
300	029	4.5
330	044	4.5
360	058	4.5

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
390	055	6.5
420	052	8.0
450	063	7.5
480	074	6.5
510	076	4.5
540	077	2.0
570	093	4.0
600	109	5.5
630	042	4.0
660	335	2.0
690	017	2.5
720	058	3.0
750	047	4.5

Release Point Coordinates (WSTM): X486,037.24 Y486,037.24 H3977.30

Released from LC-33 on 31 May 1979 at 1225 MDT.

Type 19305A GSRS, Missile No. 1053, Round No. V-35 launched from LC-33 on 31 May 1979 at 1225 MDT.

NOTE: Wind directions are referenced to the firing azimuth or true north true north.

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
780	036	5.5
810	016	4.0
840	355	2.5
870	026	2.0
900	056	1.5
930	040	2.5
960	024	3.5
990	035	3.5
1020	045	3.0
1050		
1080		
1110		
1140		
1170		
1200		
1230		
1260		
1290		
1320		
1350		
1380		
1410		

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
1440		
1470		
1500		
1530		
1560		
1590		
1620		
1650		
1680		
1710		
1740		
1770		
1800		
1830		
1860		
1890		
1920		
1950		
1980		
2010		
2040		
2070		



GEODETIC COORDINATES  
32.48034 LAT DEG  
106.42307 LON DEG

SIGNIFICANT LEVEL DATA  
15100601b1  
S M R

STATION ALTITUDE 3997.30 FEET MSL  
31 MAY 79  
ASCENSION NO. 161  
1125 HRS MST

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
876.9	3997.3	29.7	9.8	29.0
854.3	4413.0	25.6	9.8	28.0
850.0	4898.5	24.6	4.4	27.0
810.3	6286.0	20.6	11.0	54.0
777.6	7422.7	18.0	-2.5	24.0
700.0	10341.0	9.8	-3.5	39.0
599.3	14889.8	-2.9	-8.9	83.0
522.8	18016.2	-9.3	-31.1	15.0
500.0	19144.4	-11.8	-33.1	15.0
469.3	20784.4	-14.6	-31.7	22.0
403.8	24058.1	-22.4	-37.8	23.0
400.0	24642.1	-23.3	-39.9	20.0
374.6	26193.3	-26.8	-44.9	16.0
317.8	30037.9	-36.7	-49.4	25.0
300.0	31341.1	-40.7		
282.8	32655.6	-43.9		
250.0	35350.6	-49.1		
255.8	36791.2	-51.5		
200.0	40107.0	-54.7		
191.3	41043.5	-55.3		
187.3	41498.5	-54.6		
161.2	44566.6	-56.0		
150.0	46145.7	-59.4		
128.3	49371.9	-60.4		
104.6	53454.5	-68.2		
100.0	54364.7	-67.5		
91.8	56037.9	-66.9		
88.6	56753.9	-64.7		
75.3	59876.6	-66.9		
70.0	61516.9	-65.9		
65.2	62956.0	-61.5		

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GEODETIC COORDINATES  
32.48034 LAT DEG  
106.42307 LON DEG

UPPER AIR DATA  
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STATION ALTITUDE 3997.30 FEET MSL  
31 MAY 79 1125 HRS MST  
ASCENSION NO. 101

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREE CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES (TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
3997.3	876.9	29.7	29.0	1003.4	679.7	0	0	1.000274
4000.0	876.8	29.7	29.0	1003.4	679.7	27.9	0	1.000274
4500.0	861.8	25.4	27.8	1001.6	674.5	27.9	1.2	1.000262
5000.0	847.0	24.3	29.0	988.1	673.2	27.9	2.4	1.000258
5500.0	832.3	22.8	38.9	974.8	671.9	27.9	3.6	1.000264
6000.0	817.9	21.4	48.7	961.8	670.5	27.2	3.6	1.000269
6500.0	803.6	20.1	47.9	949.7	668.9	24.8	2.3	1.000261
7000.0	789.5	19.0	35.0	938.1	667.1	24.9	1.2	1.000243
7500.0	775.6	17.8	24.4	928.5	665.3	105.6	0.3	1.000229
8000.0	761.8	16.4	27.0	914.3	663.7	145.6	2.0	1.000226
8500.0	748.1	15.0	29.5	902.2	662.1	143.7	4.1	1.000224
9000.0	734.7	13.6	32.1	890.4	660.5	140.3	6.6	1.000221
9500.0	721.6	12.2	34.7	878.8	658.9	145.3	7.8	1.000219
10000.0	708.7	10.8	37.2	867.3	657.3	151.3	8.7	1.000216
10500.0	695.8	9.4	39.8	855.9	655.8	159.6	8.7	1.000213
11000.0	682.9	8.0	42.5	844.2	654.0	169.8	8.8	1.000210
11500.0	670.3	6.6	45.1	832.7	652.4	167.7	8.6	1.000207
12000.0	657.8	5.2	47.8	821.4	650.7	168.8	8.7	1.000204
12500.0	645.6	3.8	50.4	810.2	649.1	170.3	9.5	1.000200
13000.0	633.6	2.4	53.0	799.3	647.4	178.7	10.6	1.000197
13500.0	621.9	1.0	55.7	788.5	645.7	190.7	12.4	1.000194
14000.0	610.3	-0.4	58.3	777.9	644.1	200.6	15.1	1.000191
14500.0	599.0	-1.8	60.9	767.4	642.4	208.0	18.4	1.000188
15000.0	587.8	-3.1	61.3	756.9	640.8	212.8	21.4	1.000184
15500.0	576.5	-4.1	53.6	745.4	639.5	218.3	24.3	1.000179
16000.0	565.4	-5.2	46.0	734.1	638.1	219.5	26.4	1.000174
16500.0	554.5	-6.2	39.3	722.9	636.8	222.4	28.3	1.000169
17000.0	543.8	-7.2	30.6	711.9	635.5	224.5	28.9	1.000164
17500.0	533.4	-8.2	22.9	701.1	634.2	228.6	29.4	1.000160
18000.0	523.1	-9.3	15.2	690.4	633.0	230.6	30.4	1.000156
18500.0	512.9	-10.4	15.0	679.7	631.6	234.3	31.5	1.000154
19000.0	502.9	-11.5	15.0	669.3	630.3	238.5	31.8	1.000151
19500.0	492.9	-12.5	16.5	658.5	629.1	238.9	31.2	1.000149
20000.0	483.2	-13.4	18.7	647.8	628.0	239.9	26.5	1.000147
20500.0	473.6	-14.3	20.8	637.2	626.9	240.1	22.9	1.000144
21000.0	464.2	-15.3	22.1	626.9	625.7	238.9	21.3	1.000142
21500.0	454.9	-16.5	22.2	617.1	624.5	231.4	21.7	1.000140
22000.0	445.7	-17.6	22.4	607.4	623.0	225.1	23.6	1.000137
22500.0	436.7	-18.8	22.5	597.9	621.4	220.8	24.7	1.000135
23000.0	427.9	-19.9	22.7	588.5	620.0	218.5	25.5	1.000133

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STATION ALTITUDE 3997.30 FEET MSL  
 31 MAY 79 1125 HFS MST  
 ASCENSION NO. 151

UPPER AIR DATA  
 151060163  
 S M R

GEODETTIC COORDINATES  
 32.48034 LAT DEG  
 106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES(TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
2350.0	419.2	-21.1	-36.7	22.8	579.3	616.6	216.1	26.3	1.000131
2400.0	410.8	-22.3	-37.7	23.0	570.3	617.1	216.4	27.1	1.000128
2450.0	402.4	-23.1	-39.4	20.7	560.4	616.1	219.6	27.1	1.000126
2500.0	394.1	-24.1	-41.0	19.1	551.1	614.8	224.3	27.0	1.000124
2550.0	385.9	-25.2	-42.6	17.8	542.2	613.5	227.1	27.2	1.000122
2600.0	377.9	-26.4	-44.2	16.5	533.4	612.1	229.1	27.5	1.000120
2650.0	370.0	-27.6	-45.2	16.7	524.8	610.5	229.1	27.1	1.000118
2700.0	362.1	-28.9	-46.2	17.9	516.3	608.9	229.6	26.9	1.000116
2750.0	354.4	-30.2	-46.2	19.1	508.1	607.3	231.5	26.9	1.000114
2800.0	346.9	-31.4	-46.7	20.2	499.9	605.7	231.8	27.7	1.000112
2850.0	339.5	-32.7	-47.4	21.4	491.9	604.1	231.2	29.2	1.000110
2900.0	332.3	-34.0	-48.0	22.6	484.1	602.5	229.6	29.9	1.000108
2950.0	325.2	-35.3	-48.7	23.7	476.3	600.8	227.0	30.1	1.000107
3000.0	318.3	-36.6	-49.4	24.9	468.6	599.2	226.5	29.4	1.000105
3050.0	311.4	-38.1	-54.3	16.1**	461.5	597.3	225.8	28.3	1.000103
3100.0	304.6	-39.7	-62.6	6.5**	454.4	595.3	225.2	27.5	1.000101
3150.0	297.9	-41.1			447.1	593.5	224.0	26.9	1.000100
3200.0	291.3	-42.3			439.5	591.9	223.8	26.9	1.000098
3250.0	284.8	-43.5			432.0	590.3	223.0	27.3	1.000096
3300.0	278.4	-44.6			424.5	589.0	223.4	25.1	1.000094
3350.0	272.1	-45.5			416.4	587.8	223.2	29.5	1.000093
3400.0	265.9	-46.5			408.7	585.5	227.0	31.2	1.000091
3450.0	259.9	-47.5			401.2	585.5	231.4	34.1	1.000089
3500.0	254.0	-48.4			393.8	584.0	234.7	34.1	1.000088
3550.0	248.3	-49.3			386.5	582.8	235.7	37.7	1.000086
3600.0	242.6	-50.2			379.0	581.7	236.6	38.2	1.000084
3650.0	237.0	-51.0			371.7	580.6	236.9	37.4	1.000083
3700.0	231.5	-51.7			364.2	579.7	236.9	36.1	1.000081
3750.0	226.1	-52.2			356.5	579.1	237.4	35.2	1.000079
3800.0	220.9	-52.7			349.0	578.5	238.8	35.0	1.000078
3850.0	215.7	-53.1			341.6	577.8	240.1	34.9	1.000076
3900.0	210.7	-53.6			334.4	577.2	240.8	35.5	1.000074
3950.0	205.8	-54.1			327.3	576.6	241.5	36.0	1.000073
4000.0	201.0	-54.8			320.4	575.9	242.2	36.1	1.000071
4050.0	196.3	-55.0			313.4	575.5	242.9	35.9	1.000070
4100.0	191.7	-55.3			306.5	575.0	243.6	35.4	1.000068
4150.0	187.2	-54.6			298.4	575.9	244.7	34.0	1.000066
4200.0	182.8	-54.3			291.7	575.6	245.0	32.7	1.000065
4250.0	178.5	-55.1			285.1	575.5	245.5	32.0	1.000064
4300.0	174.3	-55.3			278.7	575.0	247.1	31.6	1.000062

AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

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UPPER AIR DATA  
 1510060161  
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STATION ALTITUDE 3997.30 FEET MSL  
 31 MAY 79 1125 HRS MST  
 ASCENSION NO. 161

GEODETIC COORDINATES  
 32.48034 LAT DEG  
 106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM <sup>3</sup> WATER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES (TR)	WIND SPEED KNOTS	INDEX OF REFRACTION
4550.0	170.2	-55.5		272.5	574.7	247.9	30.8	1.000061
4400.0	166.2	-55.7		266.3	574.4	249.2	29.5	1.000059
4250.0	162.3	-56.0		260.4	574.1	250.7	28.1	1.000058
4100.0	158.5	-56.7		255.0	573.2	251.1	27.6	1.000057
3950.0	154.7	-57.4		249.8	572.2	251.3	27.8	1.000056
3800.0	151.1	-58.2		244.8	571.2	251.0	28.5	1.000055
3650.0	147.4	-58.6		239.4	570.6	250.1	30.5	1.000053
3500.0	143.9	-58.9		234.0	570.2	249.3	32.4	1.000052
3350.0	140.5	-59.2		228.8	569.8	248.1	33.8	1.000051
3200.0	137.1	-59.5		223.6	569.4	247.0	35.1	1.000050
3050.0	133.8	-59.9		218.6	569.0	246.7	35.7	1.000049
2900.0	130.6	-60.2		213.7	568.5	247.3	35.6	1.000048
2750.0	127.5	-60.6		209.0	567.9	247.8	35.4	1.000047
2600.0	124.4	-61.6		204.6	568.0	248.9	35.4	1.000046
2450.0	121.3	-62.6		200.7	568.4	250.0	35.3	1.000045
2300.0	118.4	-63.5		196.7	564.1	250.2	35.2	1.000044
2150.0	115.5	-64.5		192.7	562.8	249.0	34.9	1.000043
2000.0	112.6	-65.4		188.9	561.5	247.6	34.7	1.000042
1850.0	109.9	-66.4		185.1	560.2	247.1	33.9	1.000041
1700.0	107.2	-67.3		181.4	558.9	246.7	32.9	1.000040
1550.0	104.6	-68.2		177.7	557.8	246.0	31.9	1.000040
1400.0	102.0	-67.8		173.0	556.3	243.1	31.1	1.000039
1250.0	99.4	-67.5		168.4	558.7	240.0	30.4	1.000038
1100.0	97.0	-67.3		164.1	559.0	237.2	29.3	1.000037
950.0	94.5	-67.1		159.9	559.2	234.4	27.5	1.000036
800.0	92.2	-66.9		155.8	559.4	231.3	25.9	1.000035
650.0	89.9	-66.5		150.9	561.3	21.5	24.6	1.000034
500.0	87.7	-64.9		146.7	562.2	252.1	23.3	1.000033
350.0	85.6	-65.4		143.4	561.6	252.9	22.3	1.000032
200.0	83.4	-65.8		140.2	561.0	252.9	22.1	1.000031
50.0	81.4	-66.2		137.0	560.4	252.9	21.9	1.000031
	79.4	-66.7		133.9	559.8	232.9	22.1	1.000030
	77.4	-66.8		130.7	559.0	232.9	22.7	1.000029
	75.5	-66.6		127.4	559.9	232.9	23.4	1.000028
	73.7	-66.4		124.1	560.2			1.000028
	71.8	-66.1		120.9	560.5			1.000027
	70.1	-65.9		117.8	560.8			1.000026
	68.4	-64.4		114.1	562.3			1.000025
	66.7	-62.9		110.5	564.9			1.000025



STATION ALTITUDE 997.30 FEET MSL  
 31 MAY 79 1125 HRS MST  
 ASCENSION, NO. 101

MRN SIGNIFICANT LEVEL DATA  
 1510060161  
 S M R

GEODETIC COORDINATES  
 32.48034 LAT DEG  
 106.42307 LON DEG

GEOPOTENTIAL ALTITUDE METERS	DIRECTION DEG (TN)	WIND DATA		E-W MPS	DEW PT DEP DEG C	TEMPERATURE		PRESSURE MILLIBARS
		SPEED MPS	N-S MPS			AIR DEG C		
1912.	9999.**	9999.**	-9999.**	-9999.**	99	-61.5	6.520+1	
1865.	9999.**	9999.**	-9999.**	-9999.**	99	-65.9	7.000+1	
1801.	233.	12.	7.	9.	99	-66.9	7.830+1	
1724.	232.	12.	8.	10.	99	-64.7	8.880+1	
1704.	231.	13.	8.	10.	99	-66.9	9.180+1	
1653.	241.	10.	8.	14.	99	-67.5	1.000+2	

\*\* WIND DATA NOT COMPUTED DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.

STATION ALTITUDE 3997.30 FEET MSL  
 31 MAY 79 1125 HRS MST  
 ASCENSION NO. 101

MANDATORY LEVELS  
 1010060161  
 S M R

GEODETIC COORDINATES  
 32.48034 LAT DEG  
 106.42307 LON DEG

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	WIND DATA	
					DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	4895.	24.6	4.4	27.	27.9	2.2
800.0	6624.	19.8	7.4	45.	24.3	2.0
750.0	8432.	15.2	-2.6	29.	144.5	3.8
700.0	10331.	9.8	-3.5	39.	156.8	6.7
650.0	12331.	4.3	-5.4	49.	169.9	9.2
600.0	14447.	-1.7	-8.3	61.	207.5	18.1
550.0	16698.	-6.6	-19.5	35.	223.3	28.6
500.0	19117.	-11.8	-33.1	15.	237.1	31.8
450.0	21739.	-17.1	-33.5	22.	228.0	22.7
400.0	24601.	-23.3	-39.9	20.	220.8	27.1
350.0	27760.	-30.9	-46.5	20.	232.1	27.1
300.0	31279.	-40.7			224.8	27.1
250.0	35274.	-49.1			235.4	37.5
200.0	40010.	-54.7			242.3	30.1
175.0	42810.	-55.2			247.0	31.7
150.0	46021.	-58.4			250.8	29.0
125.0	49763.	-61.4			248.6	35.4
100.0	54217.	-67.5			240.9	30.6
80.0	56653.	-66.5			232.9	
70.0	61300.	-65.9				21.8

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.



STATION ALTITUDE 3997.30 FEET MSL  
 31 MAY 79 1125 HRS MST  
 ASCENSION NO. 101

MRN MANDATORY LEVELS  
 1510060101  
 S M R

GEOPOTENTIAL ALTITUDE METERS	DIRECTION DEG (TR)	SPEED MPS	WIND DATA		DEW PT DEP DEG C	TEMPERATURE		PRESSURE MILLIBARS
			N-S MPS	E-W MPS		AIR DEG C		
169.	9999.**	9999.**	-9999.**	-9999.**	99	-65.9	7.00+1	
178.	233.	11.	7.	9.	99	-66.5	8.00+1	
185.	241.	16.	8.	14.	99	-67.5	1.00+2	
191.	249.	18.	7.	17.	99	-61.4	1.25+2	
1403.	251.	15.	5.	14.	99	-58.4	1.50+2	
1362.	247.	16.	6.	15.	99	-55.2	1.75+2	
1220.	242.	19.	9.	16.	99	-54.7	2.00+2	
1075.	235.	19.	11.	16.	99	-49.1	2.50+2	
953.	225.	14.	10.	10.	99	-40.7	3.00+2	
840.	232.	14.	9.	11.	16	-30.9	3.50+2	
750.	221.	14.	11.	9.	17	-23.3	4.00+2	
663.	223.	12.	8.	9.	16	-17.1	4.50+2	
583.	237.	16.	9.	14.	21	-11.8	5.00+2	
509.	223.	15.	11.	10.	13	-6.6	5.50+2	
440.	207.	9.	8.	4.	07	-1.7	6.00+2	
370.	170.	5.	5.	-1.	10	4.3	6.50+2	
315.	157.	4.	4.	-2.	13	9.8	7.00+2	
257.	144.	2.	2.	-1.	18	15.2	7.50+2	
202.	24.	1.	-1.	-0.	12	19.8	8.00+2	
149.	28.	1.	-1.	-1.	20	24.6	8.50+2	

\*\* WIND DATA NOT COMPUTED DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.