

AD-A081 015

ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/O 4/2  
18201 SIG-D, MISSILE NUMBER FTM-1, ROUND NUMBER 1, 30 AUGUST 19--ETC(U)  
AUG 79

UNCLASSIFIED ERADCOM/ASL-DR-1059

NL

| OF |  
AD  
A081015



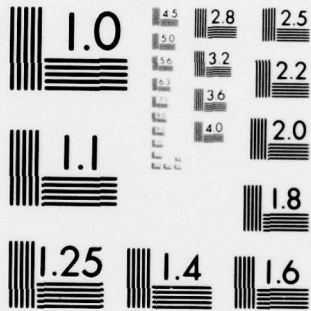
END

DATE

FILMED

3 - 80

DDC



MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

DR 1059  
AUGUST 1979  
AD

**LEVEL** *PH* *CDna*

ADA081015

METEOROLOGICAL DATA REPORT

18201 SIG-D  
Missile No, FTM-1  
Round No. 1  
30 August 1979

**DTIC**  
**ELECTE**  
FEB 20 1980  
*S* *C*

by

White Sands Meteorological Team

ATMOSPHERIC SCIENCES LABORATORY  
WHITE SANDS MISSILE RANGE, NEW MEXICO

DDG FILE COPY

**ECOM**

UNITED STATES ARMY ELECTRONICS COMMAND

80 2 20 018

REPORT DOCUMENTATION PAGE

READ INSTRUCTIONS  
BEFORE COMPLETING FORM

1. REPORT NUMBER

DR 1059

2. GOVT ACCESSION NUMBER

9) Meteorological data rpt.

3. TITLE (and Subtitle)

18201 SIG-D,  
Missile Number FTM-1,  
Round Number 1

30 August 1979.

5. PERFORMING ORG. REPORT NUMBER

8. CONTRACT OR GRANT NUMBER(s)

White Sands Meteorological Team

DA Task 1T6657-2D126-02

9. PERFORMING ORGANIZATION NAME AND ADDRESS

10. PROGRAM ELEMENT PROJECT, TASK AREA & WORK UNIT NUMBERS

11. CONTROLLING OFFICE NAME AND ADDRESS

US Army Electronics Research & Development Comd 11  
Atmospheric Sciences Laboratory  
White Sands Missile Range, New Mexico 88002

12. REPORT DATE  
Aug 79

13. NUMBER OF PAGES

14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)

US Army Electronics Research & Development Comd

15. SECURITY CLASS. (of this report)

UNCLASSIFIED

15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)

Approved for public release; distribution unlimited.

12 40

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18. SUPPLEMENTARY NOTES

14 ERADCOM/ASL-DR-1059

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

1. Ballistics
2. Meteorology
3. Winds

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

Meteorological data gathered for the launching of 18201 SIG-D, Missile Number FTM-1, Round Number 1, are presented in tabular form.

410663 Gu

CONTENTS

INTRODUCTION----- 1

DISCUSSION----- 1

MAP----- 2

TABLES

1. Surface Observation Taken at 1555 MDT at LC-33----- 3
2. Anemometer-Measured Wind Speed and Direction, LC-33 Fixed Pole, Taken at 1555 MDT----- 4
3. Anemometer-Measured Wind Speed and Direction, Tower Levels 1, 2, 3, and 4, taken at 1555 MDT----- 5
4. LC33 Pilot-Balloon-Measured Wind Data at 1555 MDT----- 6-8
5. WSD Significant Level Data at 1420 MST----- 9,10
6. WSD Upper Air Data at 1420 MST----- 11-15
7. WSD MRN Significant Levels at 1420 MST----- 16
8. WSD Mandatory Levels at 1420 MST----- 17
9. WSD MRN Mandatory Levels at 1420 MST----- 18
10. SMR Significant Level Data at 1400 MST----- 19
11. SMR Upper Air Data at 1400 MST----- 20-24
12. SMR MRN Significant Levels at 1400 MST----- 25
13. SMR Mandatory Levels at 1400 MST----- 26
14. SMR MRN Mandatory Levels at 1400 MST----- 27
15. HMN Significant Levels Data at 1500 MST----- 28
16. HMN Upper Air Data at 1500 MST----- 29-34
17. HMN MRN Significant Levels at 1500 MST----- 35
18. HMN Mandatory Levels at 1500 MST----- 36
19. HMN MRN Mandatory Levels at 1500 MST----- 37

Accession For	
NTIC G.M.&I	
DDC TAB	
Unannounced	
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or special
A	

## INTRODUCTION

18201A SIG-D, Missile Number FTM-1, Round Number1, was launched from LC33, White Sands Missile Range (WSMR), New Mexico, at 1555 MDT, 30 August 1979. The scheduled launch time was 1530 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 LC33 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

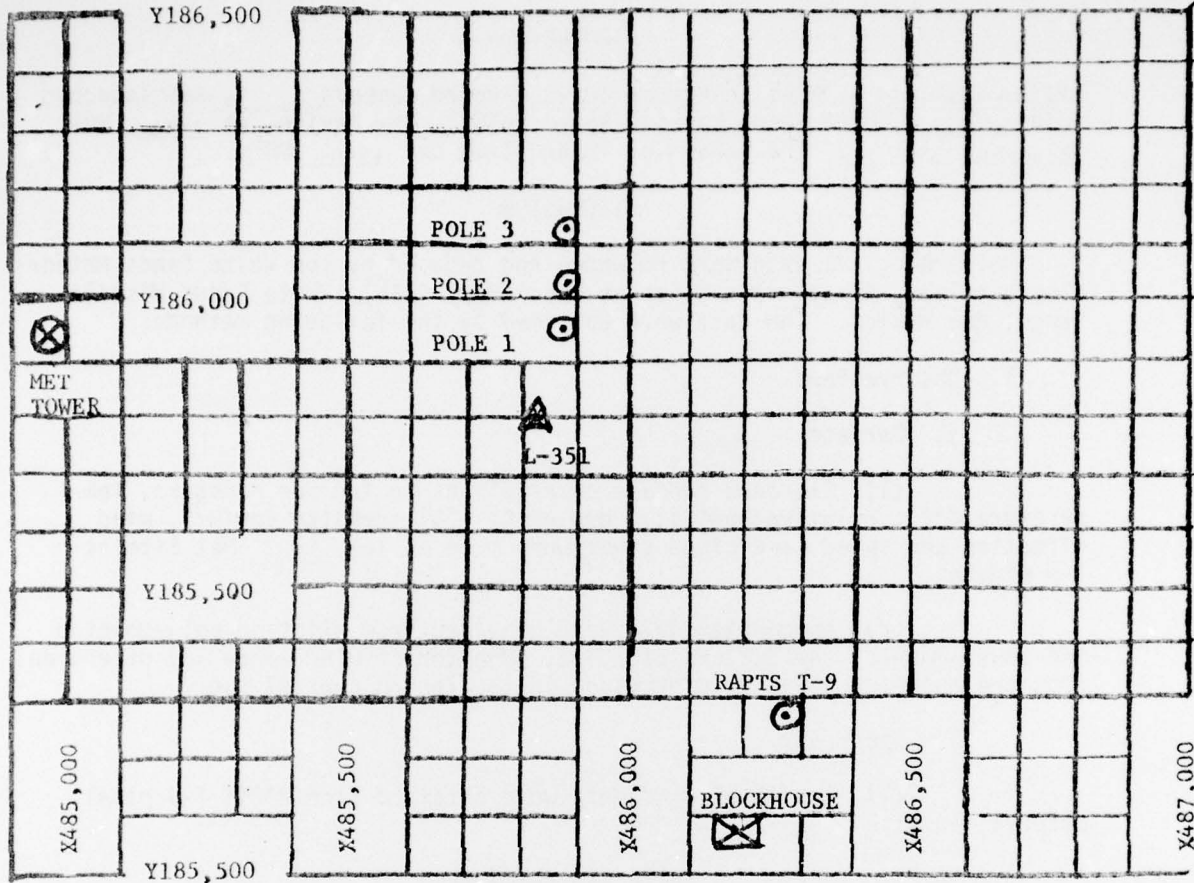
LC33 2820 Meters

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

### SITE AND TIME

WSD 1420 MST  
SMR 1400 MST  
HMN 1500 MST

NORTH



1. MET TOWER - 4 Bendix Model T-20 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. RAPTS T-9 Radar Automatic Pilot-Balloon Tracking System T-9 Radar.

TABLE 1. Surface Observation Taken at LC-33  
 30 August 1979 at 1555 MDT, 18201 SIG-D  
 Missile Number FTM-1, Round Number 1.

ELEVATION	3977.30	FT/MSL
PRESSURE	876.8	MBS
TEMPERATURE	33.8	°C
RELATIVE HUMIDITY	26	%
DEW POINT	11.5	°C
DENSITY	987.3	GM/M <sup>3</sup>
WIND SPEED	01	MPH 160
WIND DIRECTION	160	DEGREES
CLOUD COVER	3 TCU	
CLOUD COVER	1 AC	

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	164	01.0	-30	000	00.0	-30	174	03.0
-20	207	01.0	-20	000	00.0	-20	174	02.0
-10	207	02.0	-10	000	00.0	-10	174	01.0
0.0	195	02.0	0.0	176	01.0	0.0	000	00.0
+10	192	01.0	+10	000	00.0	+10	000	00.0

Type 18201 SIG-D, Missile No. FTM-1, Round No. 1 launched  
from LC-33 on 30 August 1979 at 1555 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	282	08.0	-30	264	08.0
-20	285	06.0	-20	265	07.0
-10	293	06.0	-10	271	07.0
0.0	295	06.0	0.0	275	07.0
+10	291	05.0	+10	278	05.0
LEVEL #3 102 ft.			LEVEL #4 202 ft.		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	269	06.0	-30	255	06.0
-20	276	06.0	-20	239	06.0
-10	300	06.0	-10	235	05.0
0.0	290	05.0	0.0	257	04.0
+10	295	05.0	+10	255	04.0

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

Type 18201 SIG-D, Missile No. FTM-1, Round No. 1 launched  
from LC-33 on 30 August 1979 at 1555 MDT.

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

## PILOT BALLOON MEASURED WIND DATA\*

TABLE 4RELEASED FROM LC 33 DATE 30 August 1979 TIME 1555 MDTRELEASE POINT COORDINATES (WSTM) X= 486,037.24 Y= 182,350.16 H= 3977.30MISSILE TYPE 18201 SIG-D MISSILE NO. FTM-1 ROUND NO. 1MISSILE LAUNCHED FROM LC 33 DATE 30 August 1979 TIME 1555 MDT.

NOTE: WIND DIRECTIONS ARE REFERENCED TO THE FIRING AZIMUTH \_\_\_\_\_

OR TRUE NORTH TRUE NORTHHeights are METERS AGL x or FEET AGL

HEIGHT AGL	DIRECTION DEGREES	SPEED MPH	HEIGHT AGL	DIRECTION DEGREES	SPEED MPH
SFC	160	1.0	390	189	6.5
30	162	2.0	420	190	7.0
60	164	2.5	450	205	6.5
90	166	3.5	480	219	5.5
120	167	4.0	510	210	7.5
150	169	4.5	540	200	9.0
180	170	5.0	570	204	8.0
210	171	8.0	600	207	7.0
240	171	11.0	630	196	7.0
270	167	9.0	660	185	7.0
300	162	7.0	690	192	6.5
330	175	6.5	720	199	6.0
360	188	6.0	750	211	7.0

\*These datum are manually computed, non-quality assured, quick look data and therefore are subject to computational errors.

DELAS-MS-MT-WS Form 46

1 Sept 1979

Replaces DELAS-MS-MT-WS  
forms 46-A & 46-B and all  
other Pibal forms which are  
obsolete.

RELEASED FROM IC-33

DATE 30 August 1979 TIME 1555 MDT

HEIGHT AGL	DIRECTION DEGREES	SPEED MPH
780	222	7.5
810	214	7.5
840	206	7.0
870	196	7.5
900	186	7.5
930	183	7.0
960	180	6.5
990	182	7.0
1020	184	7.5
1050	182	9.0
1080	179	10.5
1110	176	9.5
1140	173	8.0
1170	170	7.0
1200	166	6.0
1230	190	7.0
1260	213	7.5
1290	207	7.5
1320	201	7.5
1350	195	8.0
1380	188	8.0
1410	186	8.5

HEIGHT AGL	DIRECTION DEGREES	SPEED MPH
1440	184	8.5
1470	188	9.5
1500	191	10.0
1530	186	10.5
1560	180	10.5
1590	178	12.0
1620	176	13.5
1650	174	12.5
1680	172	11.0
1710	169	11.0
1740	166	10.5
1770	162	10.0
1800	157	9.0
1830	152	8.5
1860	146	7.5
1890	139	9.0
1920	131	10.0
1950	141	9.0
1980	151	8.0
2010	172	8.0
2040	193	7.5
2070	201	8.5



STATION ALTITUDE 3989.00 FEET MSL  
 30 AUG. 79  
 ASCENSION NO. 362

SIGNIFICANT LEVEL DATA  
 2420020362  
 WHITE SANDS

GEODETIC COORDINATES  
 32.40043 LAT DEG  
 106.37033 LONG DEG

PRESSURE GEOMETRIC ALTITUDE		TEMPERATURE AIR DEGREE CENTIGRADE	REL. HUM. PERCENT
MILLIBARS	MSL FEET		
877.3	3989.0	11.2	30.0
863.2	4454.4	10.2	30.0
850.0	4914.8	10.2	32.0
808.8	6334.4	9.1	36.0
736.2	9024.9	6.9	53.0
700.0	10427.5	5.6	63.0
646.0	12618.1	4.6	94.0
632.0	13208.6	.3	68.0
579.6	15520.0	-4.1	69.0
546.0	17092.6	-13.9	38.0
522.0	18264.8	-24.0	18.0
500.0	19376.3	-26.3	16.0
443.1	22447.2	-34.0	14.0
436.4	22831.0	-34.4	13.0
407.4	24553.3	-37.2	13.0
400.0	25009.0	-37.6	13.0
369.4	26965.9	-41.1	14.0
339.4	29003.9	-45.9	14.0
318.3	30519.0	-48.9	14.0
300.0	31905.5		
284.4	33149.8		
250.0	36100.4		
240.6	36961.0		
227.0	38234.0		
200.0	41010.0		
177.2	43565.5		
150.0	46977.0		
136.0	48933.6		
118.6	51623.1		
115.2	52191.6		
112.0	52742.1		
100.0	54966.6		
86.4	57860.7		
74.2	60915.0		
70.0	62097.6		
59.0	65616.0		
50.0	69063.6		
41.6	72933.4		
35.6	76249.3		
30.0	79914.1		

STATION ALTITUDE 3989.00 FEET MSL  
30 AUG. 79 1420 HRS MST  
ASCENSION NO. 362

SIGNIFICANT LEVEL DATA  
2420020362  
WHITE SANDS

GEODETIC COORDINATES  
32.40043 LAT DEG  
106.37033 LON DEG

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT
24.4 84372.1	-50.1	
20.0 88699.0	-47.3	
17.5 91652.9	-42.8	
10.4 103448.1	-36.4	

UPPER AIR DATA  
 2420020304  
 WHITE SANDS

STATION ALTITUDE 3989.00 FEET MSL  
 30 AUG. 79  
 ASCENSION NO. 302

GEODETIC COORDINATES  
 32.40043 LAT DEG  
 106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES	TEMPERATURE DEWPOINT DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES (T)	WIND SPEED KNOTS	INDEX OF REFRACTION
3989.0	877.3	30.8	11.2	30.0	999.7	681.2	170.0	2.9	1.000278
4000.0	877.0	30.8	11.2	30.0	999.4	681.1	169.8	2.9	1.000277
4500.0	862.1	29.5	10.2	30.2	986.9	679.0	158.0	2.2	1.000271
5000.0	847.5	28.3	10.2	32.4	974.1	678.2	158.4	1.6	1.000269
5500.0	833.0	26.8	9.8	34.4	962.2	676.0	115.4	1.4	1.000260
6000.0	816.8	25.3	9.4	36.5	950.4	674.9	148.2	1.5	1.000262
6500.0	804.7	23.9	9.0	38.8	938.6	673.2	171.2	2.0	1.000259
7000.0	790.6	22.4	8.7	41.6	926.8	671.6	197.7	3.0	1.000256
7500.0	776.8	21.0	8.4	44.4	915.2	669.9	210.0	4.3	1.000252
8000.0	763.3	19.5	8.0	47.2	903.8	668.2	207.4	5.8	1.000249
8500.0	749.9	18.0	7.5	50.1	892.5	666.5	201.3	7.4	1.000245
9000.0	736.8	16.6	6.9	52.9	881.5	664.8	190.3	8.3	1.000241
9500.0	723.7	15.1	6.5	56.4	870.2	663.1	190.0	8.1	1.000238
10000.0	710.8	13.6	6.0	60.0	859.1	661.4	183.5	8.1	1.000235
10500.0	698.1	12.2	5.6	64.0	848.2	659.7	178.8	7.9	1.000231
11000.0	685.5	10.6	5.6	71.1	837.3	657.9	181.8	7.0	1.000229
11500.0	673.0	9.0	5.4	78.2	826.7	656.1	165.0	6.1	1.000227
12000.0	660.8	7.4	5.1	85.3	816.3	654.2	191.8	5.3	1.000224
12500.0	648.8	5.9	4.7	92.3	806.0	652.4	207.7	4.5	1.000221
13000.0	636.9	5.6	2.0	77.2	792.6	651.8	228.1	4.2	1.000211
13500.0	625.1	5.1	-1.3	68.1	779.8	651.0	250.2	4.6	1.000203
14000.0	613.5	4.1	-1.2	68.3	768.4	649.7	268.0	5.8	1.000199
14500.0	602.2	3.0	-2.2	68.6	757.1	648.5	267.4	7.1	1.000195
15000.0	591.0	2.0	-3.1	68.8	746.0	647.2	260.4	8.3	1.000190
15500.0	580.0	.9	-4.1	69.0	735.0	645.9	254.1	9.2	1.000187
16000.0	569.1	.2	-6.8	59.5	723.6	644.9	247.0	9.9	1.000180
16500.0	558.4	-1.4	-9.8	49.7	712.3	643.8	240.7	10.9	1.000174
17000.0	547.9	-2.3	-13.2	39.8	701.2	642.8	234.0	12.1	1.000168
17500.0	537.5	-3.3	-17.1	31.0	690.6	641.5	229.2	12.7	1.000162
18000.0	527.3	-4.4	-21.6	22.5	680.2	640.2	225.3	12.5	1.000153
18500.0	517.3	-5.8	-25.4	17.6	670.2	638.6	220.5	12.0	1.000151
19000.0	507.3	-7.0	-27.1	16.7	660.7	637.2	218.7	11.6	1.000148
19500.0	497.6	-7.9	-28.6	15.9	651.0	635.7	219.1	11.9	1.000145
20000.0	487.9	-8.7	-29.5	15.6	640.4	634.7	219.4	12.3	1.000143
20500.0	478.4	-9.5	-30.4	14.9	629.9	633.6	221.9	11.8	1.000140
21000.0	469.1	-10.4	-31.3	14.6	619.7	632.6	221.9	11.0	1.000138
21500.0	459.9	-11.2	-32.2	14.3	609.6	631.6	229.2	8.7	1.000136
22000.0	451.0	-11.9	-33.2	13.9	599.6	630.6	233.4	6.5	1.000133
22500.0	442.2	-11.9	-34.0	13.0	589.5	629.7	245.7	5.9	1.000130
23000.0	433.5	-11.9	-34.7	13.0	577.9	629.7	252.0		

STATION ALTITUDE 3989.00 FEET MSL  
 30 AUG. 79  
 ASCENSION NO. 302

UPPER AIR DATA  
 2420020362  
 WHITE SANDS

GEODETIC COORDINATES  
 32.40043 LAT DEG  
 106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT DEGREES				DIRECTION DEGREES(TM)	SPEED KNOTS	
23500.0	424.9	-12.9	-35.5	13.0	568.7	626.5	255.2	26.6	1.000128
24000.0	418.5	-13.9	-36.3	13.0	559.5	627.3	251.3	9.4	1.000128
24500.0	408.3	-14.9	-37.1	13.0	550.6	628.1	250.1	11.9	1.000124
25000.0	400.1	-15.5	-37.5	13.0	540.9	628.4	249.8	14.2	1.000122
25500.0	392.1	-16.8	-38.4	13.3	532.7	628.8	249.0	15.6	1.000120
26000.0	384.2	-18.1	-39.3	13.5	524.7	628.2	248.4	16.7	1.000118
26500.0	376.5	-19.5	-40.2	13.8	516.9	628.0	248.3	17.5	1.000116
27000.0	368.9	-20.8	-41.2	14.0	509.1	618.9	250.4	18.1	1.000114
27500.0	361.3	-22.2	-42.3	14.0	501.5	617.2	251.2	18.9	1.000113
28000.0	353.9	-23.6	-43.5	14.0	494.0	615.4	252.0	19.6	1.000111
28500.0	346.6	-25.1	-44.7	14.0	486.6	613.6	250.0	20.1	1.000109
29000.0	339.5	-26.5	-45.9	14.0	479.4	611.9	247.7	20.6	1.000107
29500.0	332.3	-27.7	-46.9	14.0	471.7	610.4	244.4	21.7	1.000106
30000.0	325.4	-28.9	-47.9	14.0	464.1	608.8	241.3	22.9	1.000104
30500.0	318.6	-30.2	-48.9	14.0	456.7	607.3	241.2	27.5	1.000102
31000.0	311.8	-30.3	-52.6	14.0	447.3	607.1	241.4	32.5	1.000100
31500.0	305.2	-30.4	-59.2	9.1**	438.1	607.0	241.8	36.6	1.000098
32000.0	298.8	-30.7		4.1**	429.2	606.7	242.1	40.7	1.000096
32500.0	292.4	-31.5			421.6	605.6	242.5	42.0	1.000094
33000.0	286.2	-32.3			414.1	604.5	243.0	42.8	1.000092
33500.0	280.1	-33.4			406.9	603.2	243.0	42.5	1.000091
34000.0	274.0	-34.5			400.0	601.8	242.9	42.1	1.000089
34500.0	268.1	-35.6			393.2	600.4	242.7	43.2	1.000088
35000.0	262.3	-36.7			386.5	599.0	242.0	44.5	1.000086
35500.0	256.6	-37.9			380.0	597.8	243.3	45.5	1.000085
36000.0	251.1	-39.0			373.5	596.2	244.1	46.4	1.000083
36500.0	245.6	-40.3			367.4	594.5	244.5	47.2	1.000082
37000.0	240.2	-41.7			361.5	592.7	244.9	47.9	1.000081
37500.0	234.8	-42.6			354.9	591.5	244.9	49.0	1.000079
38000.0	229.6	-43.6			348.5	590.2	244.0	50.4	1.000078
38500.0	224.4	-44.7			342.3	588.8	244.7	50.8	1.000076
39000.0	219.4	-46.0			336.4	587.1	245.3	50.0	1.000075
39500.0	214.4	-47.3			330.7	585.5	246.1	49.6	1.000074
40000.0	209.5	-48.6			325.0	583.8	247.2	49.7	1.000072
40500.0	204.7	-49.9			319.5	582.1	248.1	50.9	1.000071
41000.0	200.1	-51.2			314.0	580.4	248.7	52.8	1.000070
41500.0	195.4	-52.4			308.4	578.8	249.4	52.0	1.000069
42000.0	190.8	-53.7			303.0	577.1	250.2	49.9	1.000067
42500.0	186.4	-55.0			297.9	575.4	250.8	48.0	1.000066
43000.0	182.0	-56.3			292.3	573.7	250.7	46.2	1.000065

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

UPPER AIR DATA  
 2420020362  
 WHITE SANDS

STATION ALTITUDE 3989.00 FEET MSL  
 30 AUG. 79  
 1420 HRS MST  
 ASCENSION NO. 362

GEODETIC COORDINATES  
 32.40043 LAT UEG  
 106.37033 LON LEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE				DIRECTION DEGREES (TN)	SPEED KNOTS	
43500.0	177.8	-57.5		287.2	572.1	250.3	45.2	1.000064	
44000.0	173.5	-58.6		281.6	570.7	249.3	45.8	1.000063	
44500.0	169.3	-59.6		276.2	569.3	248.1	46.4	1.000062	
45000.0	165.2	-60.6		270.8	568.0	245.5	46.9	1.000060	
45500.0	161.2	-61.6		265.5	566.6	243.0	47.5	1.000059	
46000.0	157.3	-62.6		260.3	565.3	241.3	48.6	1.000058	
46500.0	153.5	-63.6		255.3	563.9	239.4	43.7	1.000057	
47000.0	149.8	-64.6		250.3	562.5	239.3	42.4	1.000056	
47500.0	146.1	-65.6		245.2	561.3	240.8	41.3	1.000055	
48000.0	142.5	-66.5		240.2	560.1	242.2	40.5	1.000053	
48500.0	139.0	-67.4		235.3	558.8	243.8	40.2	1.000052	
49000.0	135.5	-68.3		230.5	557.6	245.4	39.9	1.000051	
49500.0	132.1	-68.9		225.3	556.8	248.4	36.9	1.000050	
50000.0	128.8	-69.5		220.3	556.0	247.8	33.9	1.000049	
50500.0	125.6	-70.1		215.4	555.2	245.8	30.4	1.000048	
51000.0	122.4	-70.7		210.6	554.4	242.2	26.8	1.000047	
51500.0	119.3	-71.3		205.9	553.6	235.1	23.9	1.000046	
52000.0	116.3	-70.7		200.2	554.3	224.7	21.8	1.000045	
52500.0	113.4	-71.0		195.4	554.0	218.5	20.4	1.000044	
53000.0	110.5	-71.1		190.6	553.8	212.8	19.0	1.000042	
53500.0	107.8	-70.5		185.2	554.6	208.7	17.9	1.000041	
54000.0	105.0	-69.9		180.0	553.4	208.5	17.1	1.000040	
54500.0	102.4	-69.3		175.0	553.3	203.8	16.4	1.000039	
55000.0	99.8	-68.7		170.1	557.1	197.1	17.8	1.000038	
55500.0	97.3	-68.6		165.8	557.2	191.5	19.3	1.000037	
56000.0	94.9	-68.5		161.5	557.4	181.5	21.7	1.000036	
56500.0	92.5	-68.3		157.4	557.5	172.8	24.7	1.000035	
57000.0	90.2	-66.2		153.4	557.7	169.0	25.1	1.000034	
57500.0	88.0	-68.1		149.5	557.9	167.3	23.5	1.000033	
58000.0	85.8	-67.8		145.5	558.3	167.3	20.3	1.000032	
58500.0	83.7	-67.0		141.4	559.3	172.4	14.2	1.000031	
59000.0	81.6	-66.2		137.4	560.4	183.9	8.5	1.000030	
59500.0	79.6	-65.5		133.6	561.4	197.3	4.4	1.000029	
60000.0	77.7	-64.7		129.8	562.5	273.1	2.0	1.000028	
60500.0	75.8	-63.9		126.1	563.5	265.3	1.0	1.000027	
61000.0	73.9	-63.3		122.7	564.4	138.9	1.1	1.000027	
61500.0	72.1	-63.3		119.7	564.4	127.7	2.9	1.000027	
62000.0	70.3	-63.3		116.8	564.4	124.3	4.8	1.000026	
62500.0	68.6	-62.6		113.6	565.2	122.9	6.7	1.000025	
63000.0	67.0	-61.8		110.4	566.3	120.3	7.1	1.000025	

STATION ALTITUDE 3989.00 FEET MSL  
 30 AUG. 79  
 ASCENSION NO. 362

UPPER AIR DATA  
 2420020362  
 WHITE SANDS

GEODETIC COORDINATES  
 32.40043 LAT DEG  
 105.57033 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES (TN)	SPEED KNOTS	
6350.0	65.4	-61.0		107.4	567.5	117.7	7.5	1.000024
6400.0	63.8	-60.2		104.4	568.6	112.4	8.4	1.000023
64500.0	62.3	-59.3		101.5	569.7	104.5	10.6	1.000023
65000.0	60.8	-58.5		96.7	570.7	99.5	12.9	1.000022
65500.0	59.3	-57.7		95.9	571.8	88.6	15.8	1.000021
66000.0	57.9	-57.6		93.6	572.0	79.4	19.3	1.000021
66500.0	56.5	-57.7		91.4	571.8	75.1	22.2	1.000020
67000.0	55.2	-57.8		89.3	571.7	75.5	22.0	1.000020
67500.0	53.9	-57.9		87.2	571.5	75.0	21.7	1.000019
68000.0	52.6	-58.1		85.2	571.4	76.6	20.6	1.000019
68500.0	51.4	-58.2		83.2	571.2	78.4	19.0	1.000019
69000.0	50.2	-58.3		81.3	571.1	80.2	17.5	1.000018
69500.0	49.0	-57.7		79.2	571.8	80.9	16.8	1.000018
70000.0	47.8	-57.1		77.1	572.6	81.7	16.1	1.000017
70500.0	46.7	-56.4		75.1	573.5	82.7	15.5	1.000017
71000.0	45.6	-55.8		73.1	574.4	84.2	15.0	1.000016
71500.0	44.5	-55.2		71.2	575.2	85.7	14.5	1.000016
72000.0	43.5	-54.5		69.3	576.1	86.4	13.4	1.000015
72500.0	42.5	-53.9		67.5	576.9	91.8	12.2	1.000015
73000.0	41.5	-53.3		65.7	577.6	93.5	11.1	1.000015
73500.0	40.5	-53.3		64.2	577.6	85.6	13.6	1.000014
74000.0	39.6	-53.3		62.7	577.6	79.1	16.3	1.000014
74500.0	38.6	-53.3		61.2	577.6	74.7	18.9	1.000014
75000.0	37.8	-53.3		59.8	577.6	72.4	20.4	1.000013
75500.0	36.9	-53.3		58.4	577.6	70.5	21.9	1.000013
76000.0	36.0	-53.3		57.1	577.6	69.5	22.5	1.000013
76500.0	35.2	-53.1		55.9	577.9	70.5	20.6	1.000012
77000.0	34.4	-52.8		54.3	578.3	71.5	18.7	1.000012
77500.0	33.6	-52.5		53.0	578.7	74.9	18.1	1.000012
78000.0	32.8	-52.2		51.7	579.1	81.5	19.7	1.000011
79000.0	31.3	-51.5		50.4	579.6	87.1	21.5	1.000011
79500.0	30.6	-51.2		49.2	580.0	91.4	22.2	1.000011
80000.0	29.9	-50.9		48.0	580.4	95.3	21.8	1.000011
80500.0	29.2	-50.8		46.8	580.8	99.3	21.5	1.000010
81000.0	28.5	-50.7		45.7	580.9	98.8	21.3	1.000010
81500.0	27.9	-50.6		44.7	581.0	94.7	21.3	1.000010
82000.0	27.2	-50.5		43.6	581.2	90.6	21.4	1.000010
82500.0	26.6	-50.4		42.6	581.3	87.1	23.0	1.000009
83000.0	26.0	-50.3		41.6	581.4	84.5	26.1	1.000009
83500.0	25.0	-50.3		40.7	581.5	82.5	29.2	1.000009

UPPER AIR DATA  
 2420020302  
 WHITE SANDS

STATION ALTITUDE 3989.00 FEET MSL  
 30 AUG. 79 1420 HRS MST  
 ASCENSION NO. 362

GEODETIC COORDINATES  
 32.40043 LAT DEG  
 105.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INJEX OF REFRACTION
						DIRECTION DEGREES (TIL)	SPEED KNOTS	
83500.0	25.4	-50.3		39.7	561.6	81.9	30.9	1.000009
84000.0	24.8	-50.2		38.8	561.7	82.4	30.8	1.000009
84500.0	24.3	-50.0		37.9	561.9	83.0	30.8	1.000008
85000.0	23.7	-49.7		37.0	562.4	83.8	30.5	1.000008
85500.0	23.2	-49.4		36.1	562.8	85.1	29.6	1.000008
86000.0	22.6	-49.0		35.2	563.2	85.4	28.9	1.000008
86500.0	22.1	-48.7		34.3	563.6	87.2	28.4	1.000008
87000.0	21.6	-48.4		33.5	564.0	86.9	28.6	1.000007
87500.0	21.1	-48.1		32.7	564.5	86.6	28.8	1.000007
88000.0	20.7	-47.8		31.9	564.9	86.6	29.0	1.000007
88500.0	20.2	-47.4		31.2	565.3	87.4	29.4	1.000007
89000.0	19.7	-46.8		30.4	566.1	88.1	29.8	1.000007
89500.0	19.3	-46.1		29.6	567.1	88.6	30.1	1.000007
90000.0	18.9	-45.3		28.8	568.0	88.4	29.8	1.000006
90500.0	18.4	-44.6		28.1	569.0	88.2	29.6	1.000006
91000.0	18.0	-43.8		27.4	590.0	87.9	29.3	1.000006
91500.0	17.6	-43.0		26.7	591.0	87.3	29.1	1.000006
92000.0	17.2	-42.6		26.0	591.5	86.7	29.0	1.000006
92500.0	16.9	-42.3		25.4	591.9	86.0	28.8	1.000006
93000.0	16.5	-42.1		24.9	592.2	86.1	29.2	1.000006
93500.0	16.1	-41.8		24.3	592.6	86.2	29.6	1.000005
94000.0	15.8	-41.5		23.7	592.9	86.3	30.1	1.000005
94500.0	15.4	-41.3		23.2	593.3	86.6	30.4	1.000005
95000.0	15.1	-41.0		22.7	593.6	87.0	30.8	1.000005
95500.0	14.8	-40.7		22.1	593.9	87.4	31.2	1.000005
96000.0	14.4	-40.4		21.6	594.3	87.7	31.6	1.000005
96500.0	14.1	-40.2		21.1	594.6	86.9	32.2	1.000005
97000.0	13.8	-39.9		20.6	595.0	86.1	32.9	1.000005
97500.0	13.5	-39.6		20.2	595.3	85.4	33.5	1.000004
98000.0	13.2	-39.4		19.7	595.7	84.1	33.5	1.000004
98500.0	12.9	-39.1		19.3	596.0	82.6	32.5	1.000004
99000.0	12.7	-38.8		18.8	596.4	79.7	31.5	1.000004
99500.0	12.4	-38.5		18.4	596.7	77.3	30.6	1.000004
100000.0	12.1	-38.3		18.0	597.1	78.3	28.3	1.000004
100500.0	11.8	-38.0		17.5	597.4	60.9	25.6	1.000004
101000.0	11.6	-37.7		17.1	597.7	84.1	23.0	1.000004
101500.0	11.3	-37.5		16.8	598.1			1.000004
102000.0	11.1	-37.2		16.4	598.4			1.000004
102500.0	10.8	-36.9		16.0	598.8			1.000004
103000.0	10.6	-36.6		15.6	599.1			1.000003

MRN SIGNIFICA LEVEL DATA  
 2420040002  
 WHITE SANDS

STATION ALTITUDE 3989.00 FEET MSL  
 30 AUG. 79 1420 HRS MST  
 ASCENSION NO. 302

GEODETIC COORDINATES  
 32.40043 LAT DEG  
 106.37033 LON DEG

GEOPOTENTIAL ALTITUDE DECAMETERS	DIRECTION VEG (TN)	WIND DATA			E-W MPS	DEW PT DEP DEG C	TEMPERATURE		PRESSURE MILLIBARS
		SPEED MPS	N-S MPS				AIR DEG C		
3136.	9999.**	9999.**	-9999.**	-9999.**	99		-36.4		1.040+1
2780.	87.	15.	-1.	-15.	99		-42.8		1.750+1
2691.	88.	15.	-1.	-15.	99		-47.3		2.000+1
2560.	83.	16.	-2.	-10.	99		-50.1		2.440+1
2425.	99.	11.	2.	-11.	99		-50.9		3.000+1
2314.	70.	11.	-4.	-10.	99		-53.3		3.560+1
2214.	95.	6.	1.	-0.	99		-53.3		4.160+1
2097.	80.	9.	-2.	-9.	99		-58.3		5.000+1
1993.	86.	4.	-1.	-9.	99		-57.5		5.900+1
1886.	124.	3.	1.	-2.	99		-63.3		7.000+1
1850.	146.	0.	0.	-0.	99		-63.3		7.420+1
1758.	166.	11.	11.	-3.	99		-68.0		8.640+1
1070.	198.	9.	9.	3.	99		-68.7		1.000+2

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

STATION ALTITUDE 3989.00 FEET MSL  
 30 AUG. 79  
 ASCENSION NO. 302

MANDATORY LEVELS  
 2420020302  
 WHITE SANDS

GEODETIC COORDINATES  
 32.40043 LAT DEG  
 106.37033 LONG DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.	WIND DATA		
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS	SPEED KNOTS
850.0	4911.	28.5	10.2	32.	142.8	1.7	1.7
800.0	6663.	23.4	8.9	40.	180.8	4.2	4.2
750.0	8496.	18.0	7.5	50.	201.3	7.4	7.4
700.0	10417.	12.4	5.6	63.	178.4	8.0	8.0
650.0	12436.	6.0	4.3	92.	205.7	4.6	4.6
600.0	14584.	2.8	-2.4	89.	205.9	7.3	7.3
550.0	16879.	-1.2	-12.5	42.	235.3	11.8	11.8
500.0	19349.	-6.8	-28.3	16.	219.2	11.7	11.7
450.0	22024.	-11.3	-33.3	14.	234.3	8.5	8.5
400.0	24967.	-15.5	-37.6	13.	249.6	14.2	14.2
350.0	28217.	-24.4	-44.1	14.	251.2	19.9	19.9
300.0	31841.	-30.5			242.0	39.8	39.8
250.0	36020.	-39.2			244.2	40.5	40.5
200.0	40909.	-51.2			248.7	52.8	52.8
175.0	43711.	-58.2			249.7	45.6	45.6
150.0	46848.	-64.6			239.4	42.5	42.5
125.0	50448.	-70.2			245.2	29.9	29.9
100.0	54795.	-68.7			197.9	17.6	17.6
80.0	59196.	-65.6			191.7	5.5	5.5
70.0	61882.	-63.3			124.1	5.0	5.0
60.0	65030.	-58.1			94.9	14.1	14.1
50.0	68801.	-58.3			60.2	17.4	17.4
40.0	73472.	-53.3			62.4	14.8	14.8
30.0	79569.	-50.9			98.3	21.5	21.5
25.0	83469.	-50.2			62.2	30.8	30.8
20.0	88279.	-47.3			87.6	29.6	29.6
15.0	94633.	-40.9			67.1	50.9	50.9

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

STATION ALTITUDE 3489.00 FEET MSL  
 30 AUG. 79 1420 HRS MST  
 ASCENSION NO. 362

MRN MANDATORY LEVELS  
 2420020362  
 WHITE SANDS

GEODEIC COORDINATES  
 32.40043 LAT DEG  
 106.37033 LON DEG

GEOPOTENTIAL ALTITUDE DECAMETERS	DIRECTION DEG (TN)	WIND DATA		E-W MPS	DEW PT DEP DEG C	TEMPERATURE		PRESSURE MILLIBARS
		SPEED MPS	N-S MPS			AIR DEG C		
2884.	87.	16.	-1.	-15.	99	-40.9	1.500*1	
2691.	86.	15.	-1.	-15.	99	-47.3	2.000*1	
2544.	82.	16.	-2.	-15.	99	-50.2	2.500*1	
2425.	98.	11.	2.	-11.	99	-50.9	3.000*1	
2239.	82.	6.	-1.	-6.	99	-53.3	4.000*1	
2097.	80.	9.	-2.	-9.	99	-58.3	5.000*1	
1982.	95.	7.	1.	-7.	99	-58.1	6.000*1	
1886.	124.	3.	1.	-2.	99	-63.3	7.000*1	
1804.	192.	3.	3.	1.	99	-65.6	8.000*1	
1670.	198.	9.	9.	3.	99	-68.7	1.000*2	
1538.	245.	15.	6.	14.	99	-70.2	1.250*2	
1428.	239.	22.	11.	19.	99	-64.6	1.500*2	
1332.	250.	23.	8.	22.	99	-56.2	1.750*2	
1247.	249.	27.	10.	23.	99	-51.2	2.000*2	
1098.	244.	24.	10.	22.	99	-39.2	2.500*2	
971.	242.	20.	10.	18.	99	-30.5	3.000*2	
860.	251.	10.	3.	10.	20	-24.4	3.500*2	
761.	250.	7.	3.	7.	22	-15.5	4.000*2	
671.	234.	4.	3.	4.	22	-11.3	4.500*2	
590.	219.	6.	5.	4.	22	-6.8	5.000*2	
514.	235.	6.	3.	5.	11	-1.2	5.500*2	
445.	266.	4.	0.	4.	05	2.8	6.000*2	
379.	206.	2.	2.	1.	01	6.0	6.500*2	
316.	178.	4.	4.	-0.	07	12.4	7.000*2	
259.	201.	4.	4.	1.	11	16.0	7.500*2	
203.	161.	1.	1.	0.	14	23.4	8.000*2	
150.	143.	1.	1.	-1.	18	28.5	8.500*2	

STATION ALTITUDE 3997.30 FEET MSL  
 30 AUG. 79  
 ASCENSION NO. 285

SIGNIFICANT LEVEL DATA  
 242000285  
 S M R

GEODETIC COORDINATES  
 32°48'03"4 LAT DEG  
 106°42'30"7 LON DEG

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
877.1	35.6	30.0
850.0	32.8	33.0
807.2	27.0	40.0
767.8	23.6	49.0
700.0	16.0	66.0
644.6	10.5	86.0
626.6	9.8	86.0
573.6	6.1	72.0
539.8	3.0	70.0
507.0	-1.5	68.0
467.6	-2.5	18.0
452.2	-5.7	14.0
400.0	-5.7	12.0
370.0	-12.7	10.0
300.0	-22.1	10.0
289.0	-28.5	11.0
250.0	-29.2	11.0
200.0	-36.1	
179.4	-48.8	
150.0	-54.4	
138.0	-62.4	
119.8	-66.0	
100.0	-69.4	
70.0	-67.0	
57.8	-60.7	
50.0	-55.0	
30.0	-55.1	
21.2	-47.4	
20.0	-46.1	
13.6	-43.9	
12.6	-38.0	
	-37.5	

ALL DATA DOUBTFUL, EXCEPT WIND DATA.

STATION ALTITUDE 3997.30 FEET MSL  
 30 AUG. 79 1400 HRS MST  
 ASCENSION NO. 285

UPPER AIR DATA  
 2420060285  
 S M R

GEODETIC COORDINATES  
 32.48034 LAT DEG  
 106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
3997.3	877.1	35.6	15.3	30.0	982.2	687.1	.0	1.000288	
4000.0	877.0	35.6	15.3	30.0	982.1	687.1	.0	1.000288	
4500.0	862.4	34.1	14.9	31.6	970.6	685.4	1.1	1.000284	
5000.0	848.0	32.5	14.3	33.3	959.4	683.6	2.2	1.000280	
5500.0	833.7	30.6	13.7	35.6	949.3	681.4	3.4	1.000276	
6000.0	819.6	28.7	13.0	37.9	939.4	679.2	4.5	1.000272	
6500.0	805.8	26.9	12.3	40.3	929.3	677.1	5.5	1.000267	
7000.0	792.0	25.7	12.3	43.4	916.8	675.8	5.5	1.000265	
7500.0	778.4	24.5	12.3	46.5	904.0	674.5	5.5	1.000263	
8000.0	765.0	23.3	12.2	49.7	892.6	673.1	5.8	1.000260	
8500.0	751.6	21.8	11.8	52.9	881.4	671.5	6.1	1.000257	
9000.0	738.5	20.4	11.4	56.2	870.3	669.8	6.5	1.000253	
9500.0	725.6	19.0	10.9	59.4	859.5	668.1	6.9	1.000249	
10000.0	712.9	17.5	10.3	62.6	848.8	666.4	7.3	1.000245	
10500.0	700.5	16.1	9.7	65.9	838.3	664.7	7.8	1.000241	
11000.0	688.0	14.8	9.5	70.2	828.0	663.3	8.2	1.000238	
11500.0	675.7	13.6	9.2	74.6	815.4	661.9	8.5	1.000235	
12000.0	663.6	12.4	8.9	78.9	804.2	660.5	8.3	1.000232	
12500.0	651.8	11.2	8.5	83.3	793.5	659.1	5.7	1.000229	
13000.0	640.1	10.3	6.8	78.8	782.0	657.9	4.4	1.000221	
13500.0	628.5	9.9	2.5	60.1	770.2	656.9	7.7	1.000206	
14000.0	617.1	9.2	1.6	59.3	756.3	656.0	8.5	1.000199	
14500.0	605.8	8.4	1.5	62.0	746.4	655.1	9.3	1.000196	
15000.0	594.8	7.6	1.4	64.7	734.8	654.2	9.7	1.000194	
15500.0	583.9	6.8	1.2	67.4	723.4	653.3	10.1	1.000191	
16000.0	573.3	6.0	1.0	70.1	712.4	652.3	9.9	1.000184	
16500.0	562.7	2.7	-1.9	71.6	706.0	648.2	9.7	1.000180	
17000.0	552.2	1.6	-3.2	70.0	697.8	648.9	9.5	1.000175	
17500.0	541.9	.5	-4.6	68.3	687.7	645.5	10.1	1.000168	
18000.0	531.7	-1.1	-7.8	56.0	670.8	644.5	10.9	1.000160	
18500.0	521.7	-1.7	-12.3	40.8	665.9	643.6	11.0	1.000153	
19000.0	511.9	-1.2	-18.4	25.6	655.1	642.8	10.9	1.000148	
19500.0	502.2	-2.2	-25.1	15.3	645.3	641.5	10.9	1.000145	
20000.0	492.6	-3.2	-27.2	13.6	635.4	640.2	10.7	1.000142	
20500.0	483.2	-4.1	-28.4	13.0	625.5	639.1	9.9	1.000140	
21000.0	474.0	-5.1	-29.6	12.4	615.7	638.0	9.0	1.000137	
21500.0	464.9	-5.7	-30.8	11.7	605.4	637.2	6.4	1.000134	
22000.0	456.0	-5.7	-31.9	10.5	593.7	637.2	3.8	1.000132	
22500.0	447.2	-6.3	-32.9	10.0	583.7	636.5	3.3	1.000130	
23000.0	438.5	-7.5	-33.7	10.0	574.7	635.1			

ALL DATA DOUBTFUL, EXCEPT WIND DATA.

STATION ALTITUDE 3497.30 FEET MSL  
 30 AUG. 79  
 ASCENSION NO. 285

UPPER AIR DATA  
 2420000265  
 S M R

GEODETTIC COORDINATES  
 32.48034 LAT DEG  
 106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREE CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION, DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
23500.0	429.9	-8.6	10.0	565.0	633.8	235.0	2.9	1.000128
24000.0	421.6	-9.7	10.0	557.3	632.4	248.1	4.8	1.000126
24500.0	413.4	-10.8	10.0	548.8	631.1	254.3	7.8	1.000124
25000.0	405.3	-11.9	10.0	540.5	629.7	257.8	10.7	1.000122
25500.0	397.4	-13.1	10.0	532.2	628.3	260.2	13.6	1.000120
26000.0	389.4	-14.4	10.2	524.2	626.7	261.1	15.9	1.000118
26500.0	381.6	-15.7	10.3	516.3	625.1	260.6	17.3	1.000116
27000.0	373.9	-17.0	10.5	508.5	623.5	260.4	18.3	1.000114
27500.0	366.4	-18.3	10.6	500.8	621.9	260.8	18.6	1.000112
28000.0	359.0	-19.6	10.7	493.3	620.4	261.0	18.8	1.000111
28500.0	351.8	-20.9	10.9	485.9	618.8	259.8	18.7	1.000109
29000.0	344.8	-22.2	11.0	478.5	617.2	258.0	18.8	1.000107
29500.0	337.6	-23.3	11.0	470.8	615.8	250.4	20.5	1.000105
30000.0	330.6	-24.5	11.0	463.1	614.4	244.8	22.5	1.000104
30500.0	323.8	-25.6	11.0	455.6	613.0	243.6	25.1	1.000102
31000.0	317.1	-26.7	11.0	448.2	611.6	243.3	28.1	1.000100
31500.0	310.5	-27.9	11.0	441.0	610.1	245.3	32.6	1.000099
32000.0	304.0	-28.5	6.4**	433.0	609.3	246.0	36.9	1.000097
32500.0	297.7	-28.7		424.2	609.1	244.9	41.0	1.000094
33000.0	291.4	-29.1		415.9	608.6	244.3	43.5	1.000093
33500.0	285.2	-29.8		408.4	607.7	244.1	44.3	1.000091
34000.0	279.2	-30.8		401.4	606.4	244.2	45.4	1.000089
34500.0	273.2	-31.9		394.5	605.1	244.5	46.7	1.000088
35000.0	267.4	-32.9		387.7	603.8	244.7	47.4	1.000086
35500.0	261.7	-33.9		381.1	602.6	244.9	47.9	1.000085
36000.0	256.1	-35.0		374.5	601.3	244.7	48.6	1.000083
36500.0	250.6	-36.0		368.1	600.0	244.4	49.6	1.000082
37000.0	245.1	-37.2		361.9	598.4	244.3	50.7	1.000081
37500.0	239.7	-38.5		355.8	596.8	244.4	52.0	1.000079
38000.0	234.3	-39.8		349.8	595.1	244.9	52.1	1.000078
38500.0	229.1	-41.1		343.9	593.5	248.0	50.7	1.000077
39000.0	224.0	-42.3		338.2	591.9	247.3	49.7	1.000075
39500.0	219.1	-43.6		332.5	590.2	248.6	50.6	1.000074
40000.0	214.2	-44.9		326.9	588.6	249.8	51.4	1.000073
40500.0	209.4	-46.2		321.5	586.9	250.3	53.4	1.000072
41000.0	204.8	-47.5		316.1	585.3	251.2	55.3	1.000070
41500.0	200.2	-48.7		310.6	583.6	251.4	55.7	1.000069
42000.0	195.6	-49.9		305.3	582.0	251.8	55.9	1.000068
42500.0	191.1	-51.1		299.9	580.5	251.9	55.4	1.000067
43000.0	186.7	-52.3		294.5	578.9	252.1	54.7	1.000066

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

ALL DATA DOUBTFUL, EXCEPT WIND DATA.

STATION ALTITUDE 3997.30 FEET MSL  
 30 AUG. 79 1400 HRS MST  
 ASCENSION NO. 285

UPPER AIR DATA  
 2420060285  
 S M R

GEODETIC COORDINATES  
 32.48034 LAT DEG  
 106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
43500.0	182.4	-53.6		289.3	577.3	252.1	53.7	1.000064
44000.0	178.1	-54.7		284.1	575.8	251.6	52.3	1.000062
44500.0	173.9	-55.8		278.7	574.4	250.8	51.0	1.000062
45000.0	169.7	-56.9		273.4	572.9	248.3	50.3	1.000061
45500.0	165.7	-58.0		268.2	571.5	245.8	49.7	1.000060
46000.0	161.8	-59.0		263.2	570.1	243.8	53.5	1.000059
46500.0	157.9	-60.1		258.2	568.6	242.1	58.1	1.000058
47000.0	154.1	-61.2		253.3	567.2	240.9	62.5	1.000056
47500.0	150.5	-62.3		248.6	565.7	240.9	60.9	1.000055
48000.0	146.8	-63.3		243.7	564.3	241.0	59.3	1.000054
48500.0	143.2	-64.4		239.0	562.9	241.2	57.7	1.000053
49000.0	139.7	-65.5		234.3	561.4	241.4	56.1	1.000052
49500.0	136.3	-66.3		229.5	560.3	243.3	47.7	1.000051
50000.0	132.9	-66.9		224.4	559.5	249.0	32.9	1.000050
50500.0	129.6	-67.5		219.5	558.7	252.7	25.1	1.000049
51000.0	126.3	-68.1		214.7	557.6	255.3	18.9	1.000048
51500.0	123.2	-68.7		209.9	557.0	249.2	15.0	1.000047
52000.0	120.1	-69.3		205.3	556.2	235.5	14.2	1.000046
52500.0	117.1	-69.1		200.0	555.5	221.2	16.7	1.000045
53000.0	114.2	-68.6		194.7	557.0	214.3	18.6	1.000043
53500.0	111.4	-68.4		189.5	557.4	211.3	19.7	1.000042
54000.0	108.6	-68.1		184.5	557.9	209.5	20.1	1.000041
54500.0	105.9	-67.8		179.5	556.3	210.4	18.4	1.000040
55000.0	103.2	-67.4		174.8	558.8	211.4	16.7	1.000039
55500.0	100.7	-67.1		170.2	559.2	202.9	16.9	1.000038
56000.0	98.2	-66.7		165.7	559.8	194.6	17.4	1.000037
56500.0	95.8	-66.2		161.3	560.4	186.9	16.7	1.000036
57000.0	93.5	-65.8		157.0	561.0	180.5	20.8	1.000035
57500.0	91.2	-65.4		152.9	561.6	175.9	23.2	1.000034
58000.0	89.0	-64.9		148.8	562.2	175.9	20.4	1.000033
58500.0	86.8	-64.5		144.9	562.7	178.9	17.5	1.000032
59000.0	84.7	-64.1		141.1	563.3	179.6	12.9	1.000031
59500.0	82.6	-63.6		137.3	563.9	190.8	6.4	1.000031
60000.0	80.6	-63.2		133.7	564.5	277.3	2.5	1.000030
60500.0	78.6	-62.8		130.2	565.1	309.8	2.1	1.000029
61000.0	76.7	-62.3		126.7	565.7	346.2	1.7	1.000028
61500.0	74.8	-61.9		123.4	566.3	33.0	1.5	1.000027
62000.0	73.0	-61.4		120.1	566.8	108.3	2.2	1.000027
62500.0	71.2	-61.0		117.0	567.4	127.8	4.3	1.000026
63000.0	69.5	-60.5		113.8	568.1	119.1	5.0	1.000025

ALL DATA DOUBTFUL, EXCEPT WIND DATA.

STATION ALTITUDE 3997.30 FEET MSL  
 30 AUG. 79 1400 HRS MST  
 ASCENSION NO. 285

UPPER AIR DATA  
 2420060285  
 S M R

GEODETIC COORDINATES  
 32.48034 LAT DEG  
 106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES (TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
63500.0	67.9	-59.8	-59.1	110.8	569.1	105.5	105.5	5.4	1.000025
64000.0	66.2	-59.1	-58.3	107.8	570.0	94.4	94.4	6.1	1.000024
64500.0	64.7	-58.3	-57.6	104.9	571.0	84.8	84.8	8.7	1.000023
65000.0	63.1	-57.6	-56.9	102.1	571.9	79.5	79.5	11.4	1.000023
65500.0	61.6	-56.9	-56.2	99.3	572.9	77.1	77.1	13.6	1.000022
66000.0	60.2	-56.2	-55.5	96.6	573.8	77.0	77.0	14.4	1.000022
66500.0	58.8	-55.5	-55.0	94.0	574.8	76.9	76.9	15.1	1.000021
67000.0	57.4	-55.0	-54.7	91.6	575.4	78.8	78.8	15.1	1.000020
67500.0	56.0	-54.7	-54.3	89.5	575.4	82.2	82.2	14.5	1.000020
68000.0	54.7	-54.3	-53.6	87.4	575.4	85.9	85.9	13.9	1.000019
68500.0	53.4	-53.6	-52.9	85.3	575.3	88.7	88.7	14.9	1.000019
69000.0	52.2	-53.1	-52.6	83.3	575.3	91.0	91.0	16.0	1.000019
69500.0	51.0	-52.6	-52.2	81.4	575.3	92.7	92.7	16.7	1.000018
70000.0	49.8	-52.2	-51.9	79.5	575.4	93.8	93.8	16.7	1.000018
70500.0	48.6	-51.9	-51.5	77.5	575.8	94.9	94.9	16.7	1.000017
71000.0	47.5	-51.5	-51.2	75.6	576.3	95.1	95.1	16.3	1.000017
71500.0	46.4	-51.2	-50.8	73.8	576.8	94.8	94.8	15.7	1.000016
72000.0	45.3	-50.8	-50.5	72.0	577.2	94.6	94.6	15.2	1.000016
72500.0	44.3	-50.5	-50.1	70.2	577.7	92.1	92.1	15.0	1.000016
73000.0	43.3	-50.1	-49.8	68.5	578.1	88.8	88.8	15.0	1.000015
73500.0	42.3	-49.8	-49.4	66.8	578.6	85.6	85.6	15.1	1.000015
74000.0	41.3	-49.4	-48.7	65.1	579.1	84.7	84.7	16.2	1.000014
74500.0	40.4	-48.7	-48.4	63.5	579.5	84.5	84.5	17.6	1.000014
75000.0	39.4	-48.4	-47.7	62.0	580.0	84.2	84.2	19.1	1.000014
75500.0	38.5	-48.0	-47.4	60.5	580.4	86.7	86.7	19.7	1.000013
76000.0	37.6	-47.7	-47.3	59.0	580.9	89.8	89.8	20.1	1.000013
76500.0	36.8	-47.4	-47.0	57.5	581.3	92.7	92.7	20.6	1.000013
77000.0	35.9	-47.0	-46.7	56.1	581.8	95.0	95.0	20.9	1.000012
77500.0	35.1	-46.7	-46.4	54.7	582.3	97.2	97.2	21.1	1.000012
78000.0	34.3	-46.4	-46.0	53.4	582.7	99.4	99.4	21.4	1.000012
78500.0	33.5	-46.0	-45.7	52.1	583.2	99.1	99.1	21.9	1.000012
79000.0	32.7	-45.7	-45.3	50.8	583.6	98.3	98.3	22.5	1.000011
79500.0	32.0	-45.3	-45.0	49.6	584.1	97.5	97.5	23.0	1.000011
80000.0	31.2	-45.0	-44.7	48.4	584.5	95.8	95.8	24.0	1.000011
80500.0	30.5	-44.7	-44.4	47.2	585.0	94.1	94.1	25.0	1.000011
81000.0	29.8	-44.4	-44.1	46.0	585.4	92.5	92.5	26.1	1.000010
81500.0	29.2	-44.1	-43.8	45.0	585.5	91.4	91.4	26.6	1.000010
82000.0	28.5	-43.8	-43.5	43.9	585.6	90.3	90.3	26.9	1.000010
82500.0	27.9	-43.5	-43.1	42.9	585.7	89.3	89.3	27.3	1.000010
83000.0	27.2	-43.1	-42.8	42.0	585.8	88.0	88.0	28.1	1.000009

STATION ALTITUDE 3997.30 FEET MSL  
 30 AUG. 79 1400 HRS MST  
 ASCENSION NO. 205

UPPER AIR DATA  
 2420060203  
 S M R

GEODETIC COORDINATES  
 32.48034 LAT DEG  
 106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT DEGREES CENTIGRADE				DIRECTION DEGREES(TN)	SPEED KNOTS	
83500.0	26.6	-47.0			41.0	585.9	86.6	29.1	1.000009
84000.0	26.0	-46.9			40.1	580.0	85.4	30.1	1.000009
84500.0	25.4	-46.8			39.1	580.1	85.8	30.9	1.000009
85000.0	24.9	-46.7			38.2	580.3	87.0	31.6	1.000009
85500.0	24.3	-46.6			37.4	586.4	88.1	32.3	1.000008
86000.0	23.8	-46.5			36.5	580.5	89.4	31.6	1.000008
86500.0	23.2	-46.4			35.7	580.6	91.0	30.1	1.000008
87000.0	22.7	-46.4			34.9	580.7	92.7	28.6	1.000008
87500.0	22.2	-46.3			34.1	586.8	94.0	27.5	1.000008
88000.0	21.7	-46.2			33.3	580.9	93.9	26.9	1.000007
88500.0	21.2	-46.1			32.5	587.0	93.8	26.3	1.000007
89000.0	20.7	-45.2			31.7	588.1	93.7	25.7	1.000007
89500.0	20.3	-44.4			30.9	589.2	93.1	25.8	1.000007
90000.0	19.8	-43.8			30.1	590.0	92.5	26.0	1.000007
90500.0	19.4	-43.4			29.4	590.5	91.9	26.2	1.000007
91000.0	19.0	-43.1			28.7	590.9	91.4	26.3	1.000006
91500.0	18.5	-42.7			28.0	591.4	90.8	26.4	1.000006
92000.0	18.1	-42.4			27.4	591.8	90.3	26.5	1.000006
92500.0	17.7	-42.1			26.7	592.2	89.7	26.6	1.000006
93000.0	17.3	-41.7			26.1	592.7	89.0	26.6	1.000006
93500.0	17.0	-41.4			25.5	593.1	88.3	26.6	1.000006
94000.0	16.6	-41.0			24.9	593.5	87.6	26.7	1.000006
94500.0	16.2	-40.7			24.3	594.0	87.6	27.4	1.000005
95000.0	15.9	-40.4			23.7	594.4	88.3	28.7	1.000005
95500.0	15.5	-40.0			23.2	594.8	88.5	30.0	1.000005
96000.0	15.2	-39.7			22.6	595.3	89.4	31.3	1.000005
96500.0	14.8	-39.3			22.1	595.7	90.5	33.1	1.000005
97000.0	14.5	-39.0			21.6	596.1	91.7	34.9	1.000005
97500.0	14.2	-38.7			21.1	596.6			1.000005
98000.0	13.9	-38.5			20.6	597.0			1.000005
98500.0	13.6	-38.0			20.1	597.4			1.000004
99000.0	13.3	-37.8			19.7	597.6			1.000004
99500.0	13.0	-37.6			19.2	597.9			1.000004

ALL DATA DOUBTFUL, EXCEPT WIND DATA

STATION ALTITUDE 3997.30 FEET MSL  
 30 AUG. 79 1400 HRS MST  
 ASCENSION NO. 265

MRN SIGNIFICANT LEVEL DATA  
 2420000265  
 S M R

GEODETIC COORDINATES  
 32.48034 LAT DEG  
 106.42307 LON DEG

GEOPOTENTIAL ALTITUDE DECAMETERS	DIRECTION DEG (TN)	WIND DATA		E-W MPS	DEW PT DEG C	TEMPERATURE		PRESSURE MILLIBARS
		SPEED MPS	N-S MPS			AIR DEG C		
3028.	9999.**	9999.**	-9999.**	-9999.**	99	-37.5	1.280+1	
2986.	9999.**	9999.**	-9999.**	-9999.**	99	-38.0	1.360+1	
2724.	93.	13.	1.	-13.	99	-43.9	2.000+1	
2685.	94.	14.	1.	-13.	99	-46.1	2.120+1	
2454.	93.	13.	1.	-13.	99	-47.4	3.000+1	
2122.	94.	9.	1.	-9.	99	-55.1	5.000+1	
2030.	78.	6.	-2.	-8.	99	-55.0	5.780+1	
1909.	124.	3.	1.	-2.	99	-60.7	7.000+1	
1690.	201.	9.	8.	3.	99	-67.0	1.000+2	

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

ALL DATA DOUBTFUL, EXCEPT WIND DATA.

STATION ALTITUDE 3997.30 FEET MSL  
 30 AUG. 79  
 ASCENSION NO. 285

MANDATORY LEVELS  
 2420060285  
 S M R

GEODETIC COORDINATES  
 32.48034 LAT DEG  
 106.42307 LON DEG

PRESSURE GEOPOTENTIAL MILLIBARS	FEET	AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	WIND DATA	
					DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	4928.	32.8	14.4	33.	157.1	2.1
800.0	6704.	26.4	12.3	42.	159.5	5.5
750.0	8560.	21.7	11.8	53.	181.6	6.2
700.0	10509.	16.0	9.7	66.	189.1	7.8
650.0	12564.	11.1	8.5	84.	212.7	5.4
600.0	14749.	8.0	1.5	63.	276.7	9.0
550.0	17085.	1.4	-3.5	70.	243.9	9.7
500.0	19587.	-2.5	-26.3	14.	236.2	11.0
450.0	22306.	-6.0	-32.6	10.	237.2	4.7
400.0	25293.	-12.7	-37.9	10.	259.5	12.6
350.0	28581.	-21.3	-43.8	11.	259.5	18.7
300.0	32250.	-28.6			245.3	39.3
250.0	36477.	-36.1			244.4	49.7
200.0	41425.	-48.8			251.4	55.7
175.0	44260.	-55.5			251.2	51.5
150.0	47433.	-62.4			240.9	60.8
125.0	51065.	-68.4			253.3	17.4
100.0	55457.	-67.0			201.1	18.9
80.0	59920.	-63.1			292.0	2.7
70.0	62631.	-60.7			124.5	4.9
60.0	65812.	-56.1			77.0	14.4
50.0	69632.	-55.1			93.5	16.7
40.0	74344.	-51.7			84.4	18.0
30.0	80525.	-47.4			93.0	25.7
25.0	84486.	-46.7			88.6	31.3
20.0	89356.	-43.9			92.8	25.9
15.0	95755.	-39.5			89.9	32.0

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

ALL DATA DOUBTFUL, EXCEPT WIND DATA

STATION ALTITUDE 3997.30 FEET MSL  
 30 AUG. 79 1400 HRS MST  
 ASCENSION NO. 285

MRN MANDATORY LEVELS  
 2420060285  
 S M R

GEODETIC COORDINATES  
 32.48034 LAT DEG  
 106.42307 LON DEG

GEOPOTENTIAL ALTITUDE DECAMETERS	DIRECTION DEG (TN)	WIND DATA		E-W MPS	U-W PT DEP DEG C	TEMPERATURE		PRESSURE MILLIBARS
		SPEED MPS	N-S MPS			AIR DEG C		
2919.	90.	16.	0.	-16.	99	-39.5	1.500+1	
2724.	93.	13.	1.	-13.	99	-43.9	2.000+1	
2575.	87.	16.	-1.	-16.	99	-46.7	2.500+1	
2454.	93.	13.	1.	-13.	99	-47.4	3.000+1	
2266.	84.	9.	-1.	-9.	99	-51.7	4.000+1	
2122.	94.	9.	1.	-9.	99	-55.1	5.000+1	
2006.	77.	7.	-2.	-7.	99	-56.1	6.000+1	
1909.	125.	3.	1.	-2.	99	-60.7	7.000+1	
1826.	292.	1.	-1.	1.	99	-63.1	8.000+1	
1690.	201.	9.	8.	3.	99	-67.0	1.000+2	
1556.	253.	9.	3.	9.	99	-68.4	1.250+2	
1446.	241.	31.	15.	27.	99	-62.4	1.500+2	
1349.	251.	26.	9.	25.	99	-55.5	1.750+2	
1263.	251.	29.	9.	27.	99	-48.8	2.000+2	
1112.	244.	26.	11.	23.	99	-36.1	2.500+2	
871.	259.	10.	8.	18.	99	-28.6	3.000+2	
771.	259.	6.	1.	9.	23	-21.3	3.500+2	
680.	237.	2.	1.	6.	25	-12.7	4.000+2	
597.	236.	6.	3.	2.	27	-6.0	4.500+2	
521.	244.	5.	2.	5.	24	-2.5	5.000+2	
450.	277.	5.	-1.	4.	05	1.4	5.500+2	
383.	213.	3.	2.	5.	07	8.0	6.000+2	
320.	189.	4.	4.	2.	03	11.1	6.500+2	
261.	182.	3.	3.	1.	06	16.0	7.000+2	
204.	160.	3.	3.	0.	10	21.7	7.500+2	
150.	157.	1.	1.	-1.	14	26.4	8.000+2	
				-0.	18	32.8	8.500+2	

ALL DATA DOUBTFUL, EXCEPT WIND DATA.

STATION ALTITUDE 4126.59 FEET MSL  
 30 AUG. 79  
 ASCENSION NO. 456

SIGNIFICANT LEVEL DATA  
 2420010456  
 HOLLOMAN

GEODETIC COORDINATES  
 32.88865 LAT DEG  
 106.09965 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE		TEMPERATURE		REL. HUM. PERCENT
	MSL FEET	FEET	AIR DEGREES	DEWPOINT CENTIGRADE	
873.0	4126.6		31.9	9.4	25.0
850.0	4910.1		28.9	8.6	28.0
756.4	8259.6		19.0	3.6	36.0
700.0	10423.0		12.7	2.0	48.0
679.2	11252.7		10.6	-0.0	46.0
625.2	13501.7		5.4	-3.1	54.0
605.2	14372.1		2.7	-1.3	75.0
588.4	15120.0		1.0	-2.7	76.0
518.6	18414.2		-5.1	-14.4	48.0
500.0	19353.6		-7.9	-13.9	62.0
487.1	20032.1		-7.9	-28.6	17.0
467.6	21072.9		-9.7	-32.1	14.0
460.6	21456.7		-9.6	-32.0	13.0
400.0	24936.4		-17.0	-38.8	13.0
317.4	30552.6		-31.0	-49.0	15.0
300.0	31806.4		-32.0		
290.4	32622.8		-32.0		
250.0	36053.8		-39.4		
200.0	40935.8		-51.6		
172.6	44055.1		-58.9		
150.0	46921.3		-64.4		
130.4	49714.3		-68.9		
116.0	52019.5		-69.6		
112.4	52637.3		-71.1		
100.0	54922.0		-70.7		
85.2	58098.3		-65.3		
70.0	62047.8		-65.3		
65.6	63363.6		-61.9		
50.0	68966.5		-57.9		
30.0	79742.1		-52.7		
20.0	88533.1		-46.2		
10.0	104016.0		-39.7		
9.2	105909.2		-39.0		

STATION ALTITUDE 4126.59 FEET MSL  
 30 AUG. 79  
 ASCENSION NO. 456

UPPER AIR DATA  
 2420010456  
 HOLLOWAY

GEODETIC COORDINATES  
 32.88805 LAT DEG  
 106.09965 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	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
4126.6	873.0	31.9	9.4	25.0	991.9	682.2	150.0	6.0	1.000269
4500.0	802.0	30.5	9.1	26.4	984.0	680.6			1.000267
5000.0	847.3	28.6	8.5	28.2	973.3	678.5			1.000263
5500.0	832.7	27.2	7.8	29.4	961.3	678.7			1.000259
6000.0	818.3	25.7	7.1	30.6	949.5	675.0			1.000254
6500.0	804.2	24.2	6.4	31.8	937.9	673.3			1.000250
7000.0	790.3	22.7	5.6	33.0	926.5	671.8			1.000246
8000.0	776.7	21.2	4.8	34.2	915.2	669.8			1.000242
9000.0	763.3	19.8	4.0	35.4	904.1	668.1			1.000238
9500.0	749.9	18.3	3.5	37.3	892.8	666.4			1.000234
10000.0	736.6	16.8	3.2	40.1	881.4	664.7			1.000231
10500.0	723.5	15.4	2.8	42.9	870.1	663.1			1.000228
11000.0	710.7	13.9	2.4	45.7	859.1	661.4			1.000225
11500.0	698.0	12.5	1.8	47.8	848.1	659.7			1.000221
12000.0	685.5	11.2	.8	46.6	836.8	658.1			1.000216
12500.0	673.0	10.0	.2	46.9	825.3	656.6			1.000211
13000.0	660.8	8.9	-1.3	48.7	813.6	655.3			1.000208
13500.0	648.7	7.7	-1.9	50.4	802.1	653.9			1.000204
14000.0	636.9	6.6	-2.5	52.2	790.6	652.5			1.000201
14500.0	625.2	5.4	-3.1	54.0	779.6	651.2			1.000197
15000.0	613.7	3.9	-1.9	66.0	769.2	649.5			1.000198
15500.0	602.3	2.4	-1.5	75.2	758.8	647.8			1.000196
16000.0	591.1	1.3	-2.5	75.8	747.9	646.4			1.000192
16500.0	579.9	.3	-4.0	72.8	736.6	645.2			1.000187
17000.0	568.2	-1.6	-5.7	68.5	725.3	644.0			1.000182
17500.0	557.6	-2.5	-7.4	64.3	714.3	642.8			1.000177
18000.0	547.6	-3.4	-9.2	60.0	703.3	641.6			1.000172
18500.0	537.2	-4.3	-11.0	55.8	692.5	640.4			1.000168
19000.0	527.1	-5.4	-12.8	51.5	681.9	639.3			1.000164
19500.0	517.1	-6.8	-14.3	49.3	671.6	638.0			1.000160
20000.0	507.1	-8.8	-16.0	56.6	662.3	636.3			1.000159
20500.0	497.3	-7.9	-15.8	52.8	652.3	634.9			1.000155
21000.0	487.7	-7.9	-27.3	19.2	640.2	634.6			1.000146
21500.0	478.2	-8.7	-30.1	15.7	629.8	633.6			1.000143
22000.0	468.9	-9.6	-31.9	14.2	619.6	632.6			1.000140
22500.0	459.8	-8.7	-32.1	13.0	608.5	633.0			1.000137
23000.0	450.7	-9.9	-33.0	13.0	599.3	632.2			1.000135
23500.0	441.8	-11.1	-34.0	13.0	587.2	630.8			1.000133
24000.0	433.1	-12.3	-34.9	13.0	576.2	629.3			1.000131
24500.0	424.6	-13.4	-35.9	13.0	569.4	627.9			1.000128

AX WIND DATA INVALID DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.

STATION ALTITUDE 4126.59 FEET MSL  
 30 AUG. 79 1500 HRS MST  
 ASCENSION NO. 456

UPPER AIR DATA  
 2420010450  
 HOLLOMAN

GEODETIC COORDINATES  
 32.8865 LAT DEG  
 106.09965 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CENTIGRADE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES (TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
		AIR	DEWPOINT						
24000.0	416.2	-14.6	-36.9	13.0	560.7	626.5	257.0	6.2	1.000126
24500.0	408.0	-15.8	-37.8	13.0	552.2	625.0	253.3	9.7	1.000124
25000.0	399.9	-17.0	-38.8	13.0	543.8	623.6	256.2	11.8	1.000122
25500.0	391.7	-18.3	-39.7	13.2	535.3	622.0	260.1	14.3	1.000120
26000.0	383.6	-19.5	-40.6	13.4	526.9	620.5	259.0	16.6	1.000118
26500.0	375.7	-20.8	-41.5	13.5	518.6	618.9	257.4	18.8	1.000116
27000.0	368.0	-22.0	-42.4	13.7	510.5	617.4	257.0	20.4	1.000115
27500.0	360.4	-23.3	-43.3	13.9	502.5	615.8	256.6	21.9	1.000113
28000.0	353.0	-24.6	-44.2	14.1	494.6	614.3	257.1	22.9	1.000111
28500.0	345.7	-25.8	-45.1	14.3	486.9	612.7	257.3	23.7	1.000109
29000.0	338.6	-27.1	-46.1	14.4	479.3	611.1	257.0	24.0	1.000107
29500.0	331.6	-28.3	-47.0	14.6	471.9	609.6	255.5	24.2	1.000106
30000.0	324.8	-29.6	-47.9	14.8	464.5	608.0	252.5	24.4	1.000104
30500.0	318.1	-30.9	-48.9	15.0	457.3	606.4	250.6	26.9	1.000102
31000.0	311.4	-31.3	-52.8	9.9**	448.5	605.8	249.8	30.4	1.000100
31500.0	304.8	-31.7	-60.0	4.2**	439.7	605.3	249.4	35.4	1.000098
32000.0	298.3	-32.0			430.9	605.0	249.1	40.2	1.000096
32500.0	291.9	-32.0			421.7	605.0	248.5	42.7	1.000094
33000.0	285.7	-32.8			414.1	604.0	248.2	44.6	1.000092
33500.0	279.5	-33.9			406.9	602.6	248.4	45.0	1.000091
34000.0	273.5	-35.0			400.0	601.2	248.3	45.6	1.000089
34500.0	267.5	-36.0			393.1	599.9	248.1	46.6	1.000088
35000.0	261.8	-37.1			386.4	598.5	247.8	47.8	1.000086
35500.0	256.1	-38.2			379.8	597.1	247.7	49.4	1.000085
36000.0	250.6	-39.3			373.3	595.8	247.6	50.9	1.000083
36500.0	245.0	-40.5			366.8	594.2	248.0	51.7	1.000082
37000.0	239.5	-41.6			360.5	592.6	248.5	52.5	1.000080
37500.0	234.1	-43.0			354.3	591.0	249.7	53.3	1.000079
38000.0	228.8	-44.2			348.2	589.4	250.5	53.9	1.000078
38500.0	223.7	-45.5			342.2	587.8	250.4	53.8	1.000076
39000.0	218.6	-46.7			336.4	586.2	250.2	53.9	1.000075
39500.0	213.7	-48.0			330.6	584.6	249.3	54.3	1.000074
40000.0	208.9	-49.2			325.0	583.0	249.4	54.4	1.000072
40500.0	204.2	-50.5			319.4	581.4	251.0	54.0	1.000071
41000.0	199.6	-51.7			314.0	579.7	252.2	53.2	1.000070
41500.0	194.9	-52.9			308.2	578.2	252.7	51.6	1.000069
42000.0	190.3	-54.1			302.6	576.6	252.9	50.7	1.000067
42500.0	185.8	-55.2			297.1	575.1	252.7	50.9	1.000066
43000.0	181.5	-56.4			291.7	573.5	252.5	51.2	1.000065
43500.0	177.2	-57.6			286.4	572.0	252.5	51.6	1.000064

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

UPPER AIR DATA  
 2420010450  
 HOLLOWAY

STATION ALTITUDE 4126.59 FEET MSL  
 30 AUG. 79 1500 HRS MST  
 ASCENSION NO. 456

GEODETTIC COORDINATES  
 32.88805 LAT DEG  
 100.09965 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES (TN)	SPEED KNOTS	
44000.0	173.1	-58.8		281.2	570.4	251.6	51.8	1.000063
44500.0	168.9	-59.8		275.7	569.1	249.4	51.7	1.000061
45000.0	164.8	-60.7		270.2	567.8	247.3	51.7	1.000060
45500.0	160.8	-61.7		264.9	566.5	245.5	51.6	1.000059
46000.0	156.9	-62.6		259.7	565.2	244.7	50.9	1.000058
46500.0	153.1	-63.6		254.6	564.0	243.7	48.4	1.000057
47000.0	149.4	-64.5		249.5	562.7	243.7	45.1	1.000056
47500.0	145.7	-65.3		244.3	561.6	240.7	40.7	1.000054
48000.0	142.1	-66.1		239.1	560.5	251.9	37.1	1.000053
48500.0	138.6	-66.9		234.1	559.4	252.1	34.2	1.000052
49000.0	135.2	-67.7		229.2	558.3	251.3	31.2	1.000051
49500.0	131.8	-68.6		224.4	557.2	249.4	28.1	1.000050
50000.0	128.5	-69.0		219.3	556.7	245.2	25.8	1.000049
50500.0	125.3	-69.1		214.0	556.4	237.5	24.7	1.000048
51000.0	122.2	-69.3		208.8	556.2	230.1	24.3	1.000046
51500.0	119.1	-69.4		203.7	556.0	224.9	25.1	1.000045
52000.0	116.1	-69.6		198.7	555.6	220.2	26.0	1.000044
52500.0	113.2	-70.8		194.8	554.2	217.0	24.8	1.000043
53000.0	110.3	-71.0		190.2	553.9	214.6	23.7	1.000042
53500.0	107.5	-70.9		185.3	554.0	211.1	22.2	1.000041
54000.0	104.8	-70.9		180.5	554.1	207.1	20.8	1.000040
54500.0	102.2	-70.8		175.9	554.2	202.7	20.0	1.000039
55000.0	99.6	-70.6		171.3	554.5	198.0	19.5	1.000038
55500.0	97.1	-69.7		166.3	555.7	194.3	20.0	1.000037
56000.0	94.7	-68.9		161.5	550.8	191.5	21.1	1.000036
56500.0	92.4	-68.0		156.8	558.0	194.2	21.8	1.000035
57000.0	90.1	-67.2		152.3	559.1	201.2	22.6	1.000034
57500.0	87.8	-66.3		147.9	560.3	209.0	20.7	1.000033
58000.0	85.6	-65.5		143.6	561.4	222.1	16.2	1.000032
58500.0	83.5	-65.3		140.0	561.7	236.1	11.9	1.000031
59000.0	81.5	-65.3		136.5	561.7	234.6	5.1	1.000030
59500.0	79.5	-65.3		133.2	561.7	99.1	1.4	1.000030
60000.0	77.5	-65.3		129.9	561.7	94.1	3.6	1.000029
60500.0	75.6	-65.3		126.7	561.7	100.0	5.9	1.000028
61000.0	73.7	-65.3		123.6	561.7	109.7	6.5	1.000028
61500.0	71.9	-65.3		120.6	561.7	120.0	6.8	1.000027
62000.0	70.2	-65.3		117.6	561.7	121.5	7.6	1.000026
62500.0	68.5	-64.1		114.1	563.2	118.4	8.5	1.000025
63000.0	66.8	-62.8		110.6	563.0	109.0	8.6	1.000025
63500.0	65.2	-61.8		107.4	566.4	95.4	7.9	1.000024

STATION ALTITUDE 4126.59 FEET MSL  
 30 AUG. 79 1500 HRS MST  
 ASCENSION NO. 456

UPPER AIR DATA  
 2420010456  
 HOLLoman

GEODETIC COORDINATES  
 32.88865 LAT DEG  
 106.09965 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	DEWPOINT DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES (TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
64000.0	03.6	-61.4			104.7	560.8	63.0	8.8	1.000023
64500.0	02.1	-61.1			102.0	567.3	53.1	11.3	1.000023
65000.0	00.6	-60.7			99.4	567.8	46.7	14.0	1.000022
65500.0	59.1	-60.4			96.6	568.3	58.0	15.9	1.000022
66000.0	57.7	-60.0			94.4	568.7	59.1	18.3	1.000021
66500.0	56.3	-59.7			91.9	569.2	77.8	17.9	1.000020
67000.0	55.0	-59.3			89.6	569.7	88.4	16.2	1.000020
67500.0	53.7	-58.9			87.3	570.2	99.1	14.4	1.000019
68000.0	52.4	-58.6			85.1	570.7	108.0	11.7	1.000019
68500.0	51.1	-58.2			82.9	571.1	122.4	9.5	1.000018
69000.0	49.9	-57.9			80.8	571.6	117.1	9.0	1.000018
69500.0	48.8	-57.6			78.8	571.9	109.0	8.8	1.000018
70000.0	47.6	-57.4			76.9	572.2	96.0	9.5	1.000017
70500.0	46.5	-57.2			75.0	572.5	83.1	11.3	1.000017
71000.0	45.4	-56.9			73.2	572.9	73.8	13.6	1.000016
71500.0	44.3	-56.7			71.4	573.2	69.2	15.8	1.000016
72000.0	43.3	-56.4			69.6	573.5	65.7	18.0	1.000015
72500.0	42.3	-56.2			67.9	573.8	65.1	18.9	1.000015
73000.0	41.3	-56.0			66.2	574.1	60.4	18.7	1.000015
73500.0	40.3	-55.7			64.6	574.5	68.4	18.6	1.000014
74000.0	39.4	-55.5			63.0	574.8	76.0	18.4	1.000014
74500.0	38.5	-55.2			61.5	575.1	83.0	18.5	1.000014
75000.0	37.6	-55.0			60.0	575.4	85.0	18.9	1.000013
75500.0	36.7	-54.7			58.5	575.7	85.0	19.3	1.000013
76000.0	35.8	-54.5			57.1	576.1	89.0	19.8	1.000013
76500.0	35.0	-54.3			55.7	576.4	69.0	19.2	1.000012
77000.0	34.2	-54.0			54.3	576.7	90.0	18.3	1.000012
77500.0	33.4	-53.8			53.0	577.0	91.4	17.3	1.000012
78000.0	32.6	-53.5			51.7	577.3	92.6	18.1	1.000012
78500.0	31.8	-53.3			50.4	577.6	94.0	18.9	1.000011
79000.0	31.1	-53.1			49.2	578.0	95.2	19.7	1.000011
79500.0	30.3	-52.8			48.0	578.3	95.1	20.5	1.000011
80000.0	29.6	-52.5			46.8	578.7	97.0	21.3	1.000010
80500.0	29.0	-52.1			45.7	579.2	98.9	21.8	1.000010
81000.0	28.3	-51.8			44.3	579.6	93.0	22.0	1.000010
81500.0	27.7	-51.4			43.5	580.1	94.7	22.2	1.000010
82000.0	27.0	-51.0			42.4	580.6	92.9	23.0	1.000009
82500.0	26.4	-50.7			41.4	581.1	91.0	24.0	1.000009
83000.0	25.8	-50.3			40.4	581.6	89.3	25.1	1.000009
83500.0	25.2	-49.9			39.4	582.1	92.2	25.6	1.000009

STATION ALTITUDE 4126.59 FEET MSL  
 30 AUG. 79  
 ASSEMBLY NO. 456

UPPER AIR DATA  
 2420010450  
 HOLLOWMAN

GEODETIC COORDINATES  
 32.88885 LAT DEG  
 106.09965 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES (TH)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
84000.0	24.7	-49.6		38.4	566.5	95.3	26.1	1.000009
84500.0	24.1	-49.2		37.5	565.0	98.2	26.7	1.000008
85000.0	23.5	-48.8		36.6	563.5	95.8	26.3	1.000008
85500.0	23.0	-48.4		35.7	564.0	95.4	25.9	1.000008
86000.0	22.5	-48.1		34.8	564.5	93.9	25.4	1.000008
86500.0	22.0	-47.7		33.9	564.9	69.5	24.9	1.000008
87000.0	21.5	-47.3		33.1	565.4	64.0	24.6	1.000007
87500.0	21.0	-47.0		32.3	565.9	79.9	24.4	1.000007
88000.0	20.5	-46.6		31.5	565.4	77.1	25.1	1.000007
88500.0	20.0	-46.2		30.7	565.9	74.6	26.1	1.060007
89000.0	19.6	-46.0		30.0	567.1	72.8	27.1	1.000007
89500.0	19.2	-45.8		29.3	567.4	73.7	27.9	1.000007
90000.0	18.7	-45.6		28.7	567.7	75.6	28.7	1.000006
90500.0	18.3	-45.4		28.0	568.0	77.9	29.5	1.000006
91000.0	17.9	-45.2		27.4	568.2	80.9	30.2	1.000006
91500.0	17.5	-45.0		26.7	568.5	64.8	31.0	1.000006
92000.0	17.1	-44.7		26.1	568.8	88.5	32.0	1.000006
92500.0	16.7	-44.5		25.5	569.0	91.5	32.9	1.000006
93000.0	16.4	-44.3		24.9	569.3	93.3	33.5	1.000006
93500.0	16.0	-44.1		24.4	569.6	95.0	34.2	1.000005
94000.0	15.7	-43.9		23.8	569.9	96.5	34.9	1.050005
94500.0	15.3	-43.7		23.2	590.1	96.7	35.1	1.000005
95000.0	15.0	-43.5		22.7	590.4	96.9	35.4	1.000005
95500.0	14.6	-43.3		22.2	590.7	97.2	35.7	1.000005
96000.0	14.3	-43.1		21.7	590.9	95.6	34.6	1.000005
96500.0	14.0	-42.9		21.2	591.2	93.8	33.5	1.000005
97000.0	13.7	-42.6		20.7	591.5	91.9	32.4	1.000005
97500.0	13.4	-42.4		20.2	591.7	89.8	31.5	1.000005
98000.0	13.1	-42.2		19.7	592.0	87.5	30.7	1.000004
98500.0	12.8	-42.0		19.3	592.3	65.2	29.9	1.000004
99000.0	12.5	-41.8		16.8	592.5	63.3	29.2	1.000004
99500.0	12.2	-41.6		16.4	592.8	61.8	28.4	1.000004
100000.0	12.0	-41.4		16.0	593.1	60.2	27.7	1.000004
100500.0	11.7	-41.2		17.6	593.4	78.0	27.1	1.000004
101000.0	11.4	-41.0		17.2	593.8	75.0	27.0	1.000004
101500.0	11.2	-40.8		16.8	593.9	71.9	26.9	1.000004
102000.0	10.9	-40.5		16.4	594.2	69.8	27.1	1.000004
102500.0	10.7	-40.3		16.0	594.4	71.2	28.4	1.000004
103000.0	10.5	-40.1		15.6	594.7	72.4	29.8	1.000003
103500.0	10.2	-39.9		15.3	595.0			1.000003

STATION ALTITUDE 4126.59 FEET MSL  
 30 AUG. 79 1500 HRS MST  
 ASCENSION NO. 456

UPPER AIR DATA  
 2420010456  
 HOLLOWMAN

GEODETTIC COORDINATES  
 32.88865 LAT DEG  
 106.09965 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE				DIRECTION DEGREES(TN)	SPEED KNOTS	
104000.0	10.0	-39.7			14.9	595.2			1.000003
104500.0	9.8	-39.5			14.6	595.5			1.000003
105000.0	9.6	-39.3			14.3	595.7			1.000003
105500.0	9.4	-39.2			13.9	595.9			1.000003

STATION ALTITUDE 4125.59 FEET MSL  
 30 AUG. 79 1500 HRS MST  
 ASCENSION NO. 456

MRN SIGNIFICANT LEVEL DATA  
 2420010450  
 HOLLOMAN

GEODETIC COORDINATES  
 32.88865 LAT DEG  
 106.09965 LON DEG

GEOPOTENTIAL ALTITUDE METERS	DIRECTION DEG (TN)	WIND DATA		E-W MPS	DEW PT DEF DEG C	TEMPERATURE		PRESSURE MILLIBARS
		SPEED MPS	N-S MPS			AIR DEG C		
3210.	9999.**	9999.**	-9999.**	-9999.**	99	-39.0	9.200+0	
3153.	9999.**	9999.**	-9999.**	-9999.**	99	-39.7	1.000+1	
2686.	75.	13.	-4.	-13.	99	-46.2	2.000+1	
2420.	97.	11.	1.	-11.	99	-52.7	3.000+1	
2094.	116.	5.	2.	-4.	99	-57.9	5.000+1	
1925.	92.	4.	0.	-4.	99	-61.9	6.560+1	
1685.	121.	4.	2.	-3.	99	-65.3	7.000+1	
1705.	226.	8.	6.	0.	99	-65.3	8.520+1	
1069.	199.	10.	10.	3.	99	-70.7	1.000+2	

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

STATION ALTITUDE 4126.59 FEET MSL  
 30 AUG. 79 1500 HRS MST  
 ASCENSION NO. 456

MANDATORY LEVELS  
 2420010456  
 HOLLOMAN

GEODETIC COORDINATES  
 32.88865 LAT DEG  
 106.09965 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	4907.	28.9	8.6	28.	9999.0	9999.0XX
800.0	6660.	23.8	6.2	52.	9999.0	9999.0XX
750.0	8492.	18.3	3.5	37.	9999.0	9999.0XX
700.0	10413.	12.7	2.0	48.	249.3	3.4
650.0	12438.	7.8	-1.9	50.	259.9	5.9
600.0	14565.	2.2	-1.7	75.	251.3	7.4
550.0	16874.	-2.3	-8.8	61.	245.8	14.8
500.0	19337.	-7.9	-13.9	62.	248.6	13.8
450.0	22015.	-10.0	-33.1	13.	302.4	9.1
400.0	24955.	-17.0	-38.8	13.	298.0	11.7
350.0	28191.	-25.1	-44.6	14.	257.2	25.3
300.0	31803.	-32.0			249.2	39.0
250.0	35975.	-39.4			247.7	50.9
200.0	40857.	-51.6			252.1	53.4
175.0	43657.	-56.2			252.6	51.8
150.0	46795.	-64.4			248.3	48.0
125.0	50403.	-69.2			237.1	40.0
100.0	54753.	-70.7			199.0	24.6
80.0	59168.	-65.3			19.6	19.6
70.0	61835.	-65.3			218.8	6
60.0	64960.	-60.6			121.4	7.6
50.0	68700.	-57.9			49.5	14.6
40.0	73348.	-55.6			118.1	9.0
30.0	79402.	-52.7			70.0	18.5
25.0	83290.	-49.8			98.5	20.9
20.0	88118.	-46.2			93.0	23.7
15.0	94430.	-43.5			74.8	28.1
10.0	103452.	-39.7			98.9	35.3

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

AX WIND DATA INVALID DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.

STATION ALTITUDE 4126.59 FEET MSL  
 30 AUG 79 1500 HRS MST  
 ASCENSION NO. 456

MRN MANDATORY LEVELS  
 2420010450  
 HOLLOWMAN

GEODEIC COORDINATES  
 32.88855 LAT DEG  
 106.09965 LON DEG

GEOPOTENTIAL ALTITUDE METERS	DIRECTION DEG (TN)	SPEED MPS	WIND DATA		DEW PT DEG C	TEMPERATURE		PRESSURE MILLIBARS
			N-S MPS	E-W MPS		AIR DEG C		
3153.	9999.**	9999.**	-9999.**	-9999.**	99		-39.7	1.000+1
2678.	97.	15.	2.	-18.	99		-43.5	1.500+1
2686.	75.	13.	-4.	-13.	99		-46.2	2.000+1
2539.	93.	13.	1.	-13.	99		-49.8	2.500+1
2420.	97.	11.	1.	-11.	99		-52.7	3.000+1
2436.	70.	10.	-3.	-9.	99		-55.6	4.000+1
2094.	118.	5.	2.	-4.	99		-57.9	5.000+1
1960.	50.	6.	-5.	-3.	99		-60.6	6.000+1
1885.	121.	4.	2.	-3.	99		-65.3	7.000+1
1803.	217.	0.	0.	0.	99		-65.3	8.000+1
1669.	199.	10.	10.	3.	99		-70.7	1.000+2
1536.	237.	13.	7.	11.	99		-69.2	1.250+2
1420.	248.	24.	9.	22.	99		-64.4	1.500+2
1331.	253.	27.	6.	20.	99		-58.2	1.750+2
1245.	252.	27.	8.	20.	99		-51.6	2.000+2
1097.	246.	26.	10.	24.	99		-39.4	2.500+2
969.	249.	20.	7.	19.	99		-32.0	3.000+2
859.	257.	12.	3.	12.	20		-25.1	3.500+2
761.	250.	6.	1.	0.	22		-17.0	4.000+2
671.	302.	5.	-3.	4.	23		-10.0	4.500+2
589.	249.	7.	3.	7.	00		-7.9	5.000+2
514.	246.	8.	3.	7.	00		-2.3	5.500+2
445.	251.	4.	1.	4.	04		2.2	6.000+2
379.	260.	2.	0.	2.	10		7.8	6.500+2
317.	249.	2.	1.	2.	11		12.7	7.000+2
259.	9999.**	9999.**	-9999.**	-9999.**	15		18.3	7.500+2
203.	9999.**	9999.**	-9999.**	-9999.**	18		23.8	8.000+2
150.	9999.**	9999.**	-9999.**	-9999.**	20		28.9	8.500+2

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