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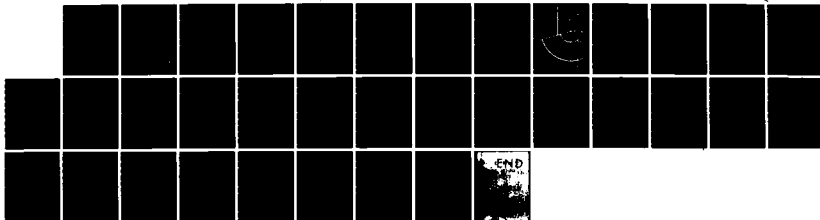
19320A MLRS MISSILE NUMBER V-6148 V-6149 V6150 V6151
V-6163 V-6169 V-6160. (U) ARMY ELECTRONICS RESEARCH AND
DEVELOPMENT COMMAND WSMR NM ATM. D C KELLER JUL 84
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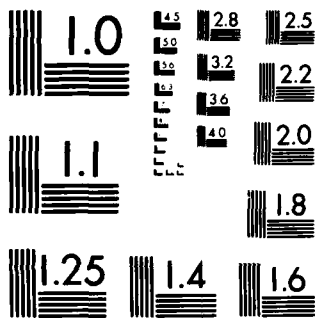
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

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DR-1351
Jul 84

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METEOROLOGICAL DATA REPORT

19320A MLRS

Missile Number V-6148, V-6149, V-6150, V-6151,
V-6163, V-6169, V-6160, V-6161, V-6164

Round Number V618/AT2-75 thru V626/AT2-83
12 July 1984

by

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AVN Number 349-9568

ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

ECOM

UNITED STATES ARMY ELECTRONICS COMMAND

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AUG 23 1984
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REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
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18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for launching of the 19320A MLRS, Missile Number V-6148, V-6149, V-6150, V-6151, V-6163, V-6169, V-6160, V-6161, V-6164 Round Number V618/AT2-75 thru V626/AT2-83 are presented in tabular form.		

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INTRODUCTION

19320A MLRS, Missile Numbers V-6148, V-6149, V-6150, V-6151, V-6163, V-6169, V-6160 V-6161, and V-6164, Round Numbers V618/AT2-75 thru V626/AT2-83, were launched from LC-33 White Sands Missile Range (WSMR). New Mexico, at 1400:29, 1400:34, 1400:39, 1400:44, 1400:49, 1400:54, 1445:06, 1445:11 and 1445:16 MDT, 12 Jul 84. The scheduled launch times were 1400(6T's and 1445(3T's) MDT with a 4.5 second separation.

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 (gm/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 pilot-balloon observations at:

SITE AND ALTITUDE

LC-33	2 km
SMR	2 km

(2) Air structure data (rawinsonde) were collected at the following Met Sites.

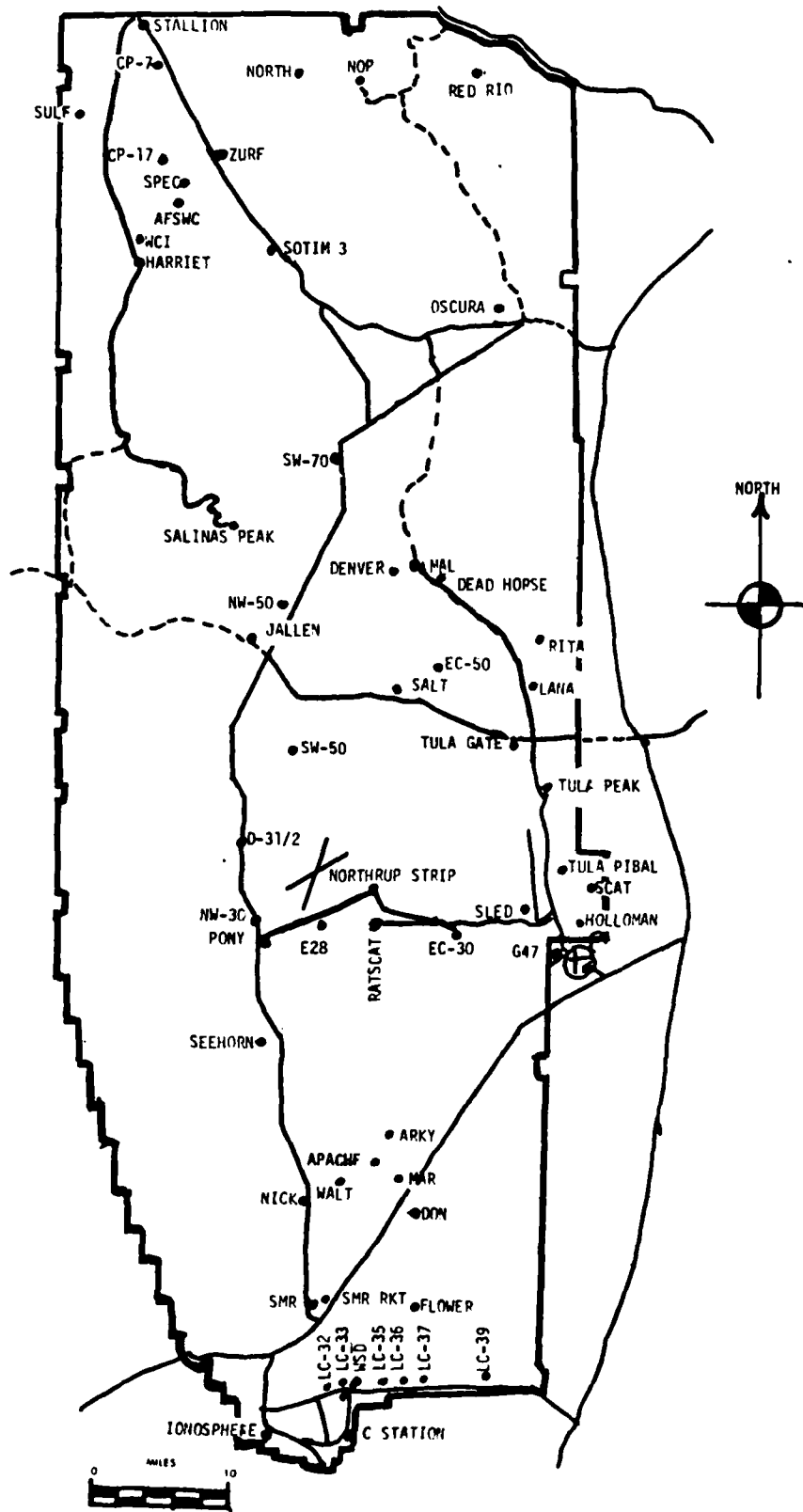
SITE AND TIME

WSD	1045 MDT
WSD	1215 MDT
SMR	1245 MDT
WSD	1400 MDT
SMR	1445 MDT

Accession For	
NTIS GRA&I	☒
DTIC TAB	☐
Unannounced	☐
Justification	
By _____	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	



WSMR METEOROLOGICAL SITES



PROJECT SURFACE OBSERVATION

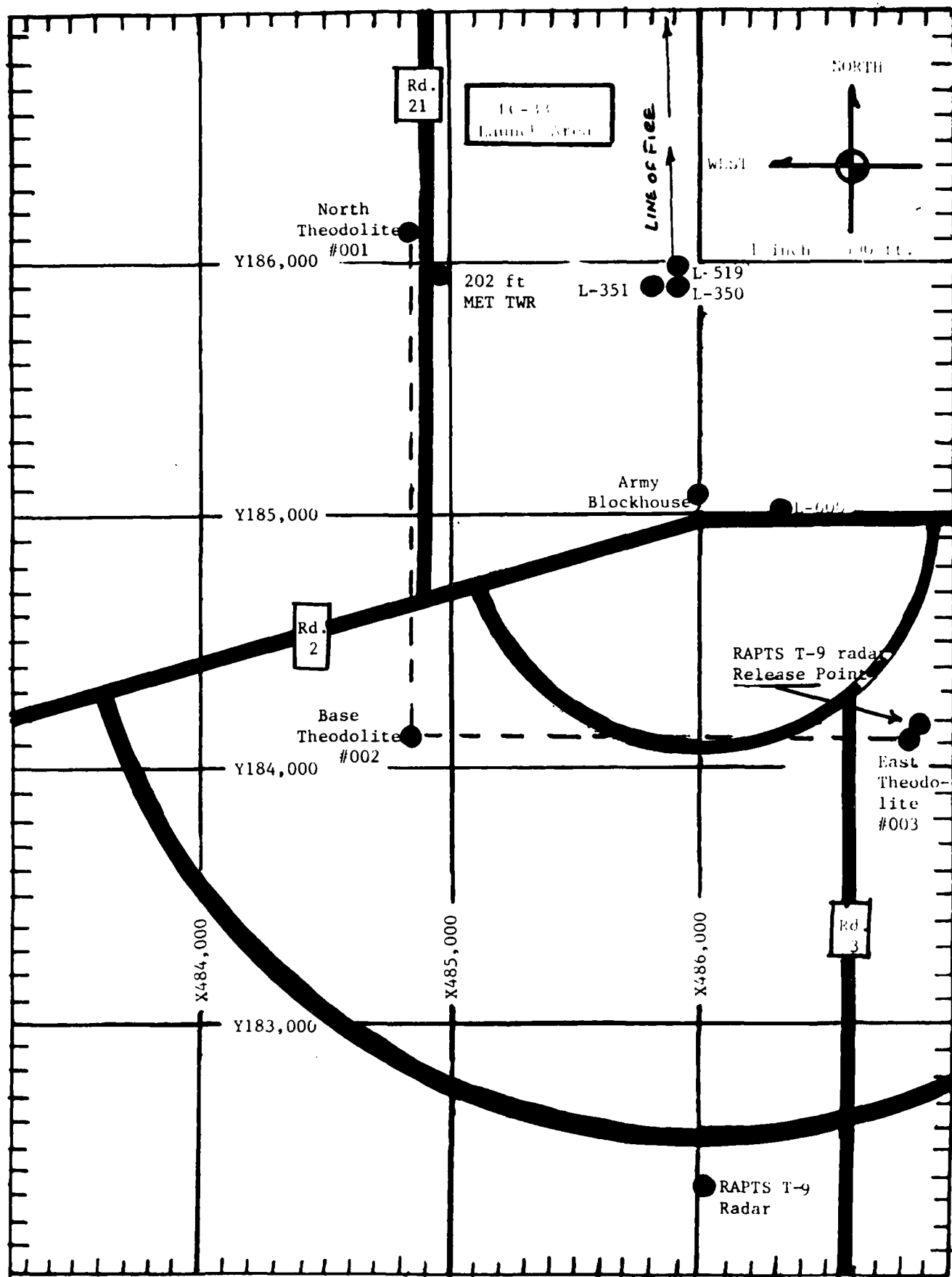
TABLE 1		STATION LC-33	
DATE	12 July 1984	X=	484,982.64
		Y=	185,957.73
		H=	3,995.00

TIME	PRESSURE hPa	TEMPERATURE °C	DEW POINT °C	RELATIVE HUMIDITY %	DENSITY g/m ³	DIRECTION deg	WIND SPEED kts	WIND CHARACTER kts	VISIBIL- ITY
1400	878.9	28.7	18.2	53		330	06		30
1445	878.5	30.2	17.2	4.6			CALM		

OBSTRUCTIONS TO VISIBILITY	CLOUDS						REMARKS
	1st LAYER		2nd LAYER		3rd LAYER		
	AMT	TYPE	HGT	AMT	TYPE	HGT	
	5	CU	6,000	1	AS	10,000	CB'S ALD'S RWU ALD'S
	3	CU	6,000	2	AS	10,000	CB'S NE&E RWU NEIE

PSYCHROMETRIC COMPUTATION

TIME: MDT	1400	1445
DRY BULB TEMP.	28.7	30.2
WET BULB TEMP.	21.2	20.8
WET BULB DEPR.	7.5	9.4
DEW POINT	18.2	17.2
RELATIVE HUMID.	53	46



LC-33 METEOROLOGICAL TOWER
ANEMOMETER MEASURED WIND DATA

WSTM COORDINATES X=484,982.64 Y=185,957.73 H=3983.00(BASE)

TABLE NO. 2

DATE 12 July 1984 1400 M D T
DAY MONTH YEAR TIME

LEVEL #1 12 FT AGL			LEVEL #2 62 FT AGL		
T-TIME (SEC)	DIR (DEG)	SPEED (KTS)	T-TIME (SEC)	DIR (DEG)	SPEED (KTS)
T-30	313	08	T-30	305	08
T-20	317	04	T-20	316	10
T-10	315	08	T-10	314	10
T- 0 (1st T)	315	08	T- 0 (1st T)	314	09
T+10	323	08	T+10	314	09
T+20	313	08	T+20	315	09
T+30	318	07	T+30	317	09
T+40			T+40		
T+50			T+50		
T+60			T+60		

LEVEL #3 102 FT AGL			LEVEL #4 202 FT AGL		
T-TIME (SEC)	DIR (DEG)	SPEED (KTS)	T-TIME (SEC)	DIR (DEG)	SPEED (KTS)
T-30	307	09	T-30	306	08
T-20	303	10	T-20	289	10
T-10	309	10	T-10	295	12
T- 0 (1st T)	309	10	T- 0 (1st T)	304	11
T+10	314	09	T+10	305	10
T+20	315	10	T+20	305	13
T+30	312	12	T+30	297	12
T+40			T+40		
T+50			T+50		
T+60			T+60		

LC-33 METEOROLOGICAL TOWER
ANEMOMETER MEASURED WIND DATA

WSTM COORDINATES X=484,982.64 Y=185,957.73 H=3983.00(BASE)

TABLE NO. 3

DATE 12 July 1984 M D T

DAY MONTH YEAR TIME

LEVEL #1 12 FT AGL			LEVEL #2 62 FT AGL		
T-TIME (SEC)	DIR (DEG)	SPEED (KTS)	T-TIME (SEC)	DIR (DEG)	SPEED (KTS)
T-30	296	06	T-30	299	05
T-20	296	04	T-20	299	04
T-10	296	01	T-10	299	04
T- 0 (1st T)	281	03	T- 0 (1st T)	299	04
T+10	292	02	T+10	299	03
T+20	278	00	T+20	299	02
T+30	278	00	T+30	299	02
T+40			T+40		
T+50			T+50		
T+60			T+60		

LEVEL #3 102 FT AGL			LEVEL #4 202 FT AGL		
T-TIME (SEC)	DIR (DEG)	SPEED (KTS)	T-TIME (SEC)	DIR (DEG)	SPEED (KTS)
T-30	285	06	T-30	290	06
T-20	285	06	T-20	286	07
T-10	281	05	T-10	290	07
T- 0 (1st T)	288	05	T- 0 (1st T)	302	06
T+10	289	04	T+10	306	05
T+20	285	04	T+20	398	04
T+30	283	03	T+30	314	04
T+40			T+40		
T+50			T+50		
T+60			T+60		

TABLE 4

T-TIME PILOT-BALLOON MEASURED WIND DATA

DATE 12 July 1984

SITE: LC-33
TIME: 1400 MDT
WSTM COORDINATES:
X= 486,037.24
Y= 182,350.16
H= 3,977.30

SITE: SMR
TIME 1400 MDT
WSTM COORDINATES:
X= 472,444.85
Y= 213,781.96
H= 4,000.99

LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS
SURFACE	330	06
150	319	07
210	308	08
270	310	09
330	283	05
390	295	06
500	023	03
650	103	06
800	092	12
950	104	10
1150	097	12
1350	109	12
1550	105	17
1750	109	18
2000	108	18

LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS
SURFACE		CALM
150	274	01
210	236	03
270	275	04
330	216	09
390	174	03
500	139	03
650	126	08
800	129	10
950	128	12
1150	132	11
1350	133	16
1550	134	16
1750	135	18
2000	134	16

All data obtained from RAPTS T-9 Radar tracked pilot-balloon observations.

T-TIME PILOT-BALLOON MEASURED WIND DATA

DATE 12 July 1984

SITE: LC-33
 TIME: 1445 MDT
 WSTM COORDINATES:
 X= 486,037.24
 Y= 182,350.16
 H= 3,977.30

SITE: SMR
 TIME 1445 MDT
 WSTM COORDINATES:
 X= 472,444.85
 Y= 213,781.96
 H= 4,000.99

LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS
SURFACE		CALM
150		CALM
210	162	02
270	188	01
330	208	02
390	210	02
500	040	08
650	024	08
800	059	11
950	060	10
1150	072	14
1350	083	19
1550	092	16
1750	189	14
2000	102	16

LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS
SURFACE	150	04
150	070	02
210	105	02
270	137	03
330	122	05
390	126	06
500	116	05
650	116	05
800	093	07
950	094	11
1150	093	08
1350	112	10
1550	115	16
1750	123	15
2000	124	13

All data obtained from RAPTS T-9 Radar Tracked Pilot-Balloon Observations.

TABLE 6

AIMING AND T-TIME COMPUTER MET MESSAGE DATA

12 July 1984

WSD 1045 MDT
 METCM1324064
 121680122881
 00044004 29870881
 01070005 29850871
 02141005 29740846
 03164007 29400808
 04191012 28980762
 05192014 28570718
 06191015 28220677
 07193014 27920637
 08185012 27570599
 09190015 27280563
 10193016 27060529
 11142010 26680496
 12178005 26100450

WSD 1215 MDT
 METCM1324064
 121830122880
 00587001 30250880
 01552006 30070870
 02066006 29850846
 03154012 29520808
 04178014 29060762
 05194019 28660719
 06181009 28280677
 07168013 27880637
 08150014 27630599
 09204013 27330563
 10212019 26950529
 11167015 26570496
 12196008 26320450

SMR 1245 MDT
 METCM1325064
 121880122880
 00240002 30480880
 01226003 30180870
 02252006 29890846
 03196008 29560808
 04198019 29160762
 05202019 28700719
 06208016 28280677
 07169011 27880637
 08141013 27600599
 09152012 27310563
 10185014 27100529
 11214014 26820497
 12206006 26320451

WSD 1400 MDT
 METCM1324064
 122000122879
 00587007 29920879
 01558012 30160869
 02445001 30060845
 03215010 29750807
 04222015 29300762
 05224019 28800719
 06229020 28350677
 07208015 28000637
 08184013 27700599
 09206009 27340563
 10227010 27030529
 11193011 26750497
 12165005 26330451

SMR 145 MDT
 METCM1325064
 122080122879
 00267004 30440879
 01183001 30260869
 02213004 29960845
 03177009 29520807
 04210013 29080761
 05225013 28590718
 06237011 28160676
 07221011 27810636
 08172008 27510598
 09225010 27220562
 10271009 26900527
 11209010 26620495
 12198008 26190449

STATION ALTITUDE 3989.00 FEET MSL
12 JULY 84
ASCENSION NO. 372

SIGNIFICANT LEVEL DATA
1940020372
WHITE SANDS
TABLE 7

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

PRESSURE	GEOMETRIC ALTITUDE	TEMPERATURE AIR	TEMPERATURE DEMPPOINT	REL. HUM. PERCENT
MILLIBARS	MSL FEET	DEGREES	CENTIGRADE	
880.9	3989.0	22.9	18.0	74.0
863.2	4571.9	22.9	16.0	65.0
850.0	5013.8	22.4	15.0	63.0
831.8	5632.0	20.8	13.5	63.0
771.1	7770.5	15.7	10.5	71.0
712.3	9966.9	10.0	8.6	91.0
700.0	10444.4	10.0	8.3	89.0
664.8	11848.5	6.1	5.5	96.0
649.1	12494.1	6.2	2.1	75.0
640.1	12870.5	5.2	3.4	88.0
630.7	13267.9	4.0	3.6	97.0
576.8	15643.0	-4	-7	98.0
557.1	16555.5	-2.5	-2.8	98.0
551.4	16825.5	-4	-7	98.0
548.8	16949.9	-1.6	-1.9	98.0
531.6	17784.3	-2.5	-2.8	98.0
523.3	18195.4	-3.0	-6.0	80.0
517.6	18479.5	-6.0	-9.5	76.0
509.0	18911.1	-6.5	-10.7	72.0
500.0	19370.3	-6.5	-8.9	83.0
490.5	19863.6	-7.2	-9.3	85.0
471.9	20852.3	-9.1	-16.5	55.0
460.8	21455.8	-11.4	-22.0	41.0
459.2	21543.8	-10.4	-16.8	59.0
450.0	22054.7	-12.4	-25.3	33.0
414.8	24080.9	-17.8	-37.4	16.0
400.0	24974.0	-18.5	-38.0	16.0

STATION ALTITUDE 3989.00 FEET MSL
12 JULY 84
ASCENSION NO. 372

1045 MDT

UPPER AIR DATA
1940020372
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 8

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
3989.0	880.9	22.9	18.0	74.0	1027.4	673.3	25.0	4.1	1.000318
4000.0	880.6	22.9	18.0	73.8	1027.0	673.3	25.5	4.1	1.000318
4500.0	865.4	22.9	16.2	66.1	1010.1	673.0	47.1	4.0	1.000305
5000.0	850.4	22.4	15.0	63.1	994.7	672.3	66.8	4.4	1.000296
5500.0	835.7	21.1	13.8	63.0	982.1	670.7	81.4	5.3	1.000288
6000.0	821.0	19.9	13.0	64.4	969.2	669.2	91.5	6.4	1.000282
6500.0	806.6	18.7	12.3	66.2	956.2	667.8	97.7	7.5	1.000277
7000.0	792.4	17.5	11.6	68.1	943.5	666.4	101.8	8.4	1.000272
7500.0	778.5	16.3	10.9	70.0	930.9	665.0	105.1	9.3	1.000266
8000.0	764.7	15.1	10.3	73.1	918.5	663.5	105.1	10.6	1.000262
8500.0	751.1	13.8	10.0	77.6	906.1	662.0	105.1	11.8	1.000258
9000.0	737.6	12.5	9.6	82.2	894.0	660.5	105.9	13.0	1.000255
9500.0	724.4	11.2	9.1	86.7	882.1	658.9	107.4	14.0	1.000251
10000.0	711.4	10.0	8.6	90.9	870.1	657.5	108.6	15.0	1.000247
10500.0	698.6	9.8	8.2	89.3	854.9	657.3	108.5	15.3	1.000242
11000.0	685.9	8.5	7.2	91.8	843.7	655.6	108.3	15.6	1.000237
11500.0	673.4	7.1	6.2	94.3	832.7	653.9	108.1	15.5	1.000231
12000.0	661.1	6.1	4.8	91.1	820.6	652.7	107.5	14.8	1.000225
12500.0	649.0	6.2	2.1	75.2	806.0	652.5	107.0	14.1	1.000214
13000.0	637.0	4.8	3.5	90.9	794.7	651.0	107.2	13.6	1.000216
13500.0	625.2	3.6	3.2	97.1	783.4	649.6	107.7	13.1	1.000213
14000.0	613.6	2.6	2.3	97.3	771.6	648.4	108.0	12.7	1.000208
14500.0	602.1	1.7	1.4	97.5	759.9	647.3	106.5	13.1	1.000203
15000.0	590.9	.6	.5	97.7	748.4	646.1	105.1	13.5	1.000199
15500.0	579.9	-.1	-.4	97.9	737.1	645.0	104.9	13.7	1.000194
16000.0	569.0	-1.2	-1.5	98.0	726.3	643.6	105.6	13.9	1.000190
16500.0	558.3	-2.4	-2.6	98.0	715.8	642.2	106.3	14.0	1.000185
17000.0	547.8	-1.7	-1.9	98.0	700.3	643.1	106.5	13.8	1.000183
17500.0	537.4	-2.2	-2.5	98.0	688.4	642.4	106.7	13.6	1.000180
18000.0	527.2	-2.6	-4.4	88.6	677.1	641.6	106.8	13.3	1.000174
18500.0	517.2	-6.0	-9.6	75.8	673.0	637.4	105.7	12.6	1.000166
19000.0	507.2	-6.5	-10.3	74.1	661.3	636.8	104.3	11.9	1.000162
19500.0	497.5	-6.7	-9.0	83.5	648.9	636.7	102.7	11.2	1.000161
20000.0	487.9	-7.5	-10.2	80.9	638.3	635.7	101.1	10.2	1.000157
20500.0	478.4	-8.4	-13.7	65.7	628.5	634.4	99.1	9.1	1.000152
21000.0	469.2	-9.7	-17.7	51.6	619.5	632.8	96.7	7.8	1.000146
21500.0	460.0	-10.9	-19.2	50.0	610.4	631.2	93.2	6.2	1.000143
22000.0	451.0	-12.2	-24.2	35.8	601.6	629.6	86.7	4.8	1.000139
22500.0	442.0	-13.6	-27.7	29.3	592.9	627.8	74.2	3.8	1.000136
23000.0	433.2	-14.9	-30.4	25.1	584.2	626.2	55.0	3.2	1.000133

STATION ALTITUDE 3989.00 FEET MSL	UPPER AIR DATA	GEODETIC COORDINATES
12 JULY 84	1940020372	32.40043 LAT DEG
ASCENSION NO. 372	WHITE SANDS	106.37033 LON DEG

TABLE 8 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PER. ENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE				DIRECTION DEGREES(TN)	SPEED KNOTS	
23500.0	424.6	-16.3	-33.5	20.9	575.6	624.5			1.000130
24000.0	416.2	-17.6	-36.8	16.7	567.1	622.9			1.000128
24500.0	407.8	-18.1	-37.7	16.0	556.9	622.2			1.000125

STATION ALTITUDE 3989.00 FEET MSL
12 JULY 84
ASCENSION NO. 372

MANDATORY LEVELS
1940020372
WHITE SANDS

TABLE 9

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	5010.	21.4	15.0	63.	67.2	4.5
800.0	6731.	19.2	12.0	67.	99.7	7.9
750.0	8536.	17.7	9.9	78.	105.1	11.9
700.0	10434.	16.0	8.3	89.	108.5	15.3
650.0	12443.	14.2	2.3	76.	107.0	14.2
600.0	14582.	11.5	1.2	98.	106.3	13.1
550.0	16870.	8.0	-1.3	98.	106.5	13.9
500.0	19343.	4.5	-8.9	83.	103.1	11.4
450.0	22020.	1.4	-25.3	33.	85.9	4.7
400.0	24932.	1.5	-38.0	16.		

STATION ALTITUDE 3989.00 FEET MSL
12 JULY 84
ASCENSION NO. 373 1215 MDT

SIGNIFICANT LEVEL DATA

1940020373
WHITE SANDS
GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 10

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
	AIR DEGREES	DEWPOINT CENTIGRADE	
860.3	27.0	16.6	53.0
861.6	23.9	14.0	54.0
850.0	23.6	14.3	56.0
824.3	21.8	12.9	57.0
791.5	18.3	11.1	63.0
726.1	12.1	8.9	81.0
716.7	11.7	7.2	74.0
700.0	10.8	6.9	77.0
667.0	7.3	1.8	68.0
651.0	6.1	2.0	75.0
638.8	4.0	1.0	81.0
630.0	4.0	-2.6	62.0
623.5	4.0	-2.2	64.0
606.4	3.0	-5	78.0
585.0	.6	-1.3	87.0
579.6	.7	-2.0	82.0
562.4	-4	-2.8	84.0
542.6	-3.7	-6.3	82.0
533.9	-4.3	-5.8	89.0
524.3	-3.7	-4.4	95.0
516.1	-5.8	-6.1	98.0
509.4	-7.0	-12.3	66.0
500.0	-7.8	-15.2	55.0
479.6	-8.8	-15.1	60.0
469.7	-8.6	-21.3	35.0
455.7	-8.8	-20.5	38.0
433.0	-12.2	-26.9	28.0
400.0	-15.6	-32.4	22.0

STATION ALTITUDE 3989.00 FEET MSL
12 JULY 84 1215 MDT
ASCENSION NO. 373

UPPER AIR DATA
1940020373
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 11

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PER. ENT	SPEED OF SOUND		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		GM/CUBIC METER	KNOTS	DIRECTION DEGREES(TN)	SPEED KNOTS	
3989.0	880.3	27.0	16.6	53.0	1013.4	677.7	330.0	1.0	1.000306
4000.0	880.0	26.9	16.6	53.0	1013.2	677.6	332.8	.9	1.000305
4500.0	864.9	24.5	14.5	53.8	1005.1	674.5	63.9	2.2	1.000295
5000.0	850.0	23.6	14.3	56.0	990.6	673.6	76.3	4.4	1.000291
5500.0	835.3	22.6	13.5	56.6	977.1	672.3	80.2	6.8	1.000285
6000.0	820.8	21.4	12.7	57.6	964.1	670.9	82.1	9.1	1.000279
6500.0	806.5	19.9	12.0	60.2	952.4	669.1	83.2	11.5	1.000274
7000.0	792.4	18.4	11.2	62.8	940.8	667.3	90.4	12.5	1.000269
7500.0	778.4	17.1	10.8	66.5	928.3	665.8	96.7	13.6	1.000265
8000.0	764.6	15.8	10.4	70.2	916.0	664.3	101.5	14.7	1.000261
8500.0	751.0	14.5	9.9	74.0	903.8	662.8	104.7	15.7	1.000258
9000.0	737.7	13.2	9.4	77.7	891.9	661.3	107.6	16.7	1.000253
9500.0	724.5	12.0	8.7	79.8	879.9	659.8	107.9	16.3	1.000248
10000.0	711.5	11.4	7.1	74.9	866.3	659.0	106.8	15.2	1.000240
10500.0	698.7	10.7	6.7	76.7	853.0	658.1	105.6	14.1	1.000236
11000.0	686.0	9.3	4.8	73.2	842.0	656.3	103.6	12.5	1.000229
11500.0	673.6	8.0	2.8	69.8	831.0	654.6	101.0	10.9	1.000221
12000.0	661.3	6.9	1.9	70.5	819.4	653.2	98.1	9.7	1.000216
12500.0	649.2	5.8	1.9	75.9	807.4	652.0	96.9	10.0	1.000214
13000.0	637.2	4.0	.4	77.5	797.9	649.8	95.7	10.3	1.000209
13500.0	625.4	4.0	-2.3	63.4	783.6	649.6	94.8	10.4	1.000200
14000.0	613.8	3.4	-1.1	71.9	770.4	649.0	93.9	10.5	1.000200
14500.0	602.4	2.6	-6	79.7	758.4	648.1	94.2	11.2	1.000198
15000.0	591.2	1.3	-1.0	84.4	747.7	646.6	96.0	13.0	1.000195
15500.0	580.1	.7	-1.9	82.5	735.5	645.8	97.4	14.8	1.000191
16000.0	569.3	.0	-2.5	83.2	723.4	645.0	100.9	16.1	1.000187
16500.0	558.5	-1.0	-3.4	83.6	712.8	643.7	105.3	17.3	1.000183
17000.0	548.0	-2.8	-5.3	82.6	704.1	641.5	109.1	18.5	1.000178
17500.0	537.6	-4.0	-6.0	86.0	694.0	640.0	110.6	18.5	1.000175
18000.0	527.3	-3.9	-4.8	93.1	680.2	640.2	111.6	18.0	1.000174
18500.0	517.3	-5.5	-5.8	97.6	671.3	638.3	112.6	17.5	1.000170
19000.0	507.3	-7.2	-12.9	63.6	663.4	635.9	108.6	16.2	1.000160
19500.0	497.5	-7.9	-15.2	55.6	652.5	634.9	103.2	14.9	1.000155
20000.0	487.9	-8.4	-15.2	57.9	641.0	634.4	98.3	13.6	1.000153
20500.0	478.4	-8.8	-15.7	57.1	629.5	633.9	99.8	11.9	1.000150
21000.0	469.1	-8.6	-21.2	35.1	617.2	633.9	101.9	10.2	1.000144
21500.0	460.0	-8.7	-20.7	37.1	605.5	633.8	104.2	8.9	1.000141
22000.0	451.1	-9.5	-21.7	36.0	595.4	632.9	106.5	7.9	1.000138
22500.0	442.2	-10.8	-24.2	32.1	586.8	631.2	109.5	7.0	1.000135
23000.0	433.6	-12.1	-26.7	28.3	578.3	629.6			1.000133

STATION ALTITUDE 3989.00 FEET MSL
 12 JULY 84
 ASCENSION NO. 373

UPPER AIR DATA
 1940020373
 WHITE SANDS

GEODETIC COORDINATES
 32.40043 LAT DEG
 106.37033 LON DEG

TABLE 11 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
							DIRECTION DEGREES(TN)	SPEED KNOTS	
23500.0	425.0	-13.0	-28.2	26.6	568.8	628.5			1.000130
24000.0	416.6	-13.9	-29.5	25.1	559.5	627.5			1.000128
24500.0	408.4	-14.7	-30.9	23.6	550.2	626.4			1.000125
25000.0	400.3	-15.6	-32.3	22.1	541.1	625.4			1.000123

STATION ALTITUDE 3989.00 FEET MSL
12 JULY 84 1215 MDT
ASCENSION NO. 373

MANDATORY LEVELS
1940J20373
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 12

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	4997.	21.6	14.3	56.	76.2	4.4
800.0	6726.	11.2	11.6	61.	86.4	12.0
750.0	8535.	11.4	9.9	74.	105.0	15.8
700.0	10439.	11.8	6.9	77.	105.7	14.2
650.0	12452.	1.9	1.9	75.	97.0	10.0
600.0	14590.	1.3	-7	81.	94.6	11.6
550.0	16883.	-1.5	-5.0	83.	108.4	18.2
500.0	19346.	-1.8	-15.2	55.	104.8	15.2
450.0	22027.	-1.6	-22.0	36.	106.8	7.9
400.0	24974.	-1.6	-32.4	22.		

GEOMETRIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

SIGNIFICANT LEVEL DATA
1940060132
S M R

STATION ALTITUDE 3997.30 FEET MSL
12 JULY 84
1245 MDT
ASCENSION NO. 132

TABLE 13

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES	DEWPOINT CENTIGRADE	
880.2	3997.3	29.1	15.2	43.0
871.7	4280.1	26.5	11.4	39.0
850.0	5008.3	24.2	11.9	46.0
743.6	8797.5	15.0	8.7	66.0
709.0	10467.9	10.2	5.4	72.0
690.2	10853.8	9.7	2.8	62.0
687.8	10947.0	9.5	4.3	70.0
664.8	11874.7	7.4	1.0	64.0
622.6	13638.6	3.0	.4	83.0
614.4	13992.2	2.8	-3.3	64.0
603.4	14473.3	2.3	-.6	81.0
562.3	16339.3	-1.1	-2.8	88.0
532.6	17760.5	-3.0	-5.3	84.0
523.6	18205.4	-2.5	-11.5	50.0
509.8	18900.9	-3.9	-16.4	37.0
500.0	19404.0	-5.0	-14.5	47.0
470.0	20994.4	-8.4	-17.4	48.0
448.4	22192.2	-9.9	-23.4	32.0
422.2	23708.5	-14.0	-28.5	28.0
400.0	25054.0	-15.6	-30.7	26.0

STATION ALTITUDE 3997.30 FEET MSL
12 JULY 84
ASCENSION NO. 132

UPPER AIR DATA
1940063132
S M R

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

TABLE 14

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS		WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE							
3997.3	880.2	29.1	15.2	43.0	1006.9	679.8		135.0	1.9	1.000296
4000.0	880.1	29.1	15.2	43.0	1006.9	679.8		134.9	1.9	1.000296
4500.0	865.1	25.8	11.6	41.1	1002.0	675.6		126.5	2.9	1.000281
5000.0	850.2	24.2	11.9	45.9	989.9	673.9		122.1	3.8	1.000286
5500.0	835.4	23.0	11.6	48.6	976.6	672.5		119.5	4.8	1.000277
6000.0	820.8	21.8	11.3	51.2	963.4	671.8		116.9	6.3	1.000273
6500.0	806.4	20.6	10.9	53.9	950.5	669.7		114.6	8.9	1.000269
7000.0	792.3	19.4	10.5	56.5	937.9	668.3		113.1	12.0	1.000265
7500.0	778.4	18.2	10.1	59.2	925.4	666.9		112.1	15.6	1.000261
8000.0	764.8	16.9	9.6	61.8	913.1	665.5		111.2	17.5	1.000257
8500.0	751.4	15.7	9.0	64.4	901.0	664.3		110.4	18.9	1.000253
9000.0	738.2	14.4	8.3	66.7	889.2	662.5		111.9	18.9	1.000248
9500.0	724.9	13.0	7.3	68.5	877.9	660.8		113.6	18.7	1.000243
10000.0	711.9	11.5	6.3	70.3	866.7	659.0		116.2	18.0	1.000238
10500.0	699.2	10.2	5.2	71.2	855.6	657.3		118.9	17.3	1.000232
11000.0	686.5	9.4	4.1	69.7	842.6	656.8		117.5	16.3	1.000227
11500.0	674.0	8.3	2.4	66.4	831.0	654.9		115.7	15.3	1.000220
12000.0	661.7	7.1	1.0	65.3	819.5	653.4		108.6	13.8	1.000214
12500.0	649.5	5.8	.9	70.7	807.9	652.0		99.2	12.6	1.000212
13000.0	637.6	4.6	.8	76.1	796.6	650.5		95.3	12.1	1.000209
13500.0	625.8	3.3	.5	81.5	785.5	649.0		91.5	11.8	1.000206
14000.0	614.2	2.8	-3.3	64.3	773.1	648.1		86.2	12.2	1.000196
15000.0	591.5	1.3	-1.2	83.0	759.7	647.7		81.2	12.4	1.000196
15500.0	580.4	.4	-1.8	84.9	748.0	646.6		76.3	11.9	1.000195
16000.0	569.6	-5	-2.4	86.7	736.5	645.5		77.1	11.5	1.000191
16500.0	558.9	-1.3	-3.1	87.5	725.2	644.4		82.6	11.1	1.000188
17000.0	548.3	-2.0	-4.0	86.1	713.8	643.4		89.2	11.8	1.000184
17500.0	537.9	-2.7	-4.9	84.7	702.2	642.5		95.6	12.8	1.000180
18000.0	527.7	-3.1	-8.2	65.7	690.7	641.7		102.2	14.3	1.000176
18500.0	517.7	-3.1	-13.5	44.5	678.3	641.4		106.1	15.2	1.000168
19000.0	507.9	-4.1	-16.0	39.0	666.8	640.7		108.1	15.1	1.000160
19500.0	498.1	-5.2	-14.7	47.1	656.8	639.4		111.0	14.0	1.000155
20000.0	488.5	-6.3	-15.6	47.4	646.7	638.2		115.2	12.3	1.000154
20500.0	479.1	-7.3	-16.5	47.7	636.8	636.9		119.5	10.8	1.000152
21000.0	469.9	-8.4	-17.4	47.9	627.1	635.6		124.7	9.4	1.000149
21500.0	460.8	-9.0	-19.8	41.2	617.5	634.3		127.1	8.6	1.000146
22000.0	451.8	-9.7	-22.3	34.6	607.1	633.5		129.6	7.8	1.000142
22500.0	443.0	-10.7	-24.4	31.2	596.8	632.6		126.5	6.7	1.000138
23000.0	434.2	-12.1	-26.1	29.9	587.6	631.3		121.0	5.5	1.000136
					579.1	629.7		103.3	4.2	1.000133

STATION ALTITUDE 3997.30 FEET MSL
 12 JULY 84
 ASCENSION NO. 132

UPPER AIR DATA
 1940060132
 S M R

GEODETIC COORDINATES
 32.48034 LAT DEG
 106.42307 LONG DEG

TABLE 14 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PER. ENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE				DIRECTION DEGREES(TN)	SPEED KNOTS	
23500.0	425.7	-13.4	-27.8	28.6	570.7	628.0			1.000131
24000.0	417.3	-14.3	-29.0	27.6	561.4	626.9			1.000128
24500.0	409.0	-14.9	-29.8	26.8	551.5	626.2			1.000126
25000.0	400.9	-15.5	-30.6	26.1	541.8	625.4			1.000123

STATION ALTITUDE 397.30 FEET MSL
12 JULY R4
ASCENSION NO. 132

MANDATORY LEVELS
1940060132
S M R

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

TABLE 15

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.		WIND DATA	
MILLIBARS	FEET	A: R DEGREES	DEWPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS	
850.0	5005.	21.2	11.9	46.	122.1	3.8	
800.0	6735.	21.0	10.7	55.	113.8	10.2	
750.0	8551.	11.6	9.0	65.	110.4	19.0	
700.0	10458.	11.2	5.4	72.	118.7	17.3	
650.0	12470.	11.9	1.0	71.	99.6	12.6	
600.0	14606.	11.0	-8	82.	80.1	12.3	
550.0	16898.	11.9	-3.8	86.	94.2	12.6	
500.0	19376.	11.0	-14.5	47.	114.2	12.6	
450.0	22068.	11.8	-22.9	33.	125.6	6.5	
400.0	25012.	11.6	-30.7	26.			

STATION ALTITUDE 3929.00 FEET MSL
12 JULY 84 1400 MDT
ASCENSION NO. 374

SIGNIFICANT LEVEL DATA
1940020374
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.57033 LONG DEG

TABLE 16

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES	DEWPOINT CENTIGRADE	
879.2	3989.0	23.4	17.8	71.0
873.8	4167.2	27.0	14.4	46.0
850.0	4968.6	26.0	12.5	43.0
812.0	6286.6	23.2	9.9	43.0
759.0	8204.7	18.0	7.4	50.0
700.0	10456.8	11.2	5.5	68.0
684.9	11054.8	9.5	5.3	75.0
647.3	12590.4	6.8	1.5	69.0
629.3	13350.8	4.8	1.1	77.0
617.2	13871.6	4.2	-2.0	64.0
593.1	14935.4	2.6	-3.7	63.0
575.7	15726.0	.9	-3.2	74.0
545.6	17137.6	-3.0	-3.5	96.0
536.9	17556.7	-3.6	-4.0	97.0
523.1	18234.6	-3.7	-7.5	75.0
518.9	18444.4	-3.5	-8.0	71.0
500.0	19405.5	-6.1	-11.8	64.0
494.9	19669.4	-6.7	-11.6	68.0
486.9	20088.2	-6.9	-19.1	37.0
473.7	20793.8	-7.0	-16.4	47.0
465.7	21230.3	-8.1	-16.0	53.0
457.0	21711.1	-9.8	-13.1	77.0
447.8	22226.5	-11.4	-13.3	86.0
436.7	22860.4	-11.5	-17.9	59.0
434.3	22999.4	-12.0	-20.5	49.0
424.4	23578.5	-13.6	-20.3	57.0
418.9	23904.7	-14.1	-26.5	34.0
416.0	24078.2	-14.1	-29.4	26.0
411.5	24349.8	-14.3	-30.4	24.0
400.0	25054.8	-16.0	-33.2	21.0

UPPER AIR DATA
1940020374
WHITE SANDS

STATION ALTITUDE 3989.00 FEET MSL
12 JULY 84
ASCENSION NO. 374

1400 MDT

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

TABLE 17

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
3989.0	879.2	23.4	71.0	1023.7	673.9	330.0	7.0	1.000316
4000.0	878.9	23.6	69.5	1022.6	674.1	330.2	6.9	1.000315
4500.0	863.8	26.6	44.8	997.1	676.8	343.2	4.0	1.000288
5000.0	849.1	25.9	43.0	982.6	675.9	33.6	2.0	1.000280
5500.0	834.5	24.9	43.0	969.5	674.6	97.7	3.4	1.000274
6000.0	820.1	23.8	43.0	956.5	673.3	114.7	6.3	1.000268
6500.0	805.9	22.6	43.8	943.9	671.9	121.4	9.7	1.000262
7000.0	791.9	21.3	45.6	931.8	670.3	125.6	14.9	1.000258
7500.0	776.1	19.9	47.4	919.9	668.7	127.6	20.0	1.000254
8000.0	764.5	18.6	49.3	908.2	667.1	127.1	18.8	1.000249
8500.0	751.0	17.1	52.4	896.7	665.4	126.5	17.2	1.000246
9000.0	737.6	15.6	56.4	885.3	663.7	125.6	15.7	1.000243
9500.0	724.5	14.1	60.4	874.2	661.9	124.5	14.4	1.000239
10000.0	711.6	12.6	64.3	863.2	660.2	124.2	14.1	1.000236
10500.0	698.9	11.1	68.5	852.4	658.4	126.3	16.9	1.000232
11000.0	686.3	9.7	74.4	841.2	656.8	127.8	19.6	1.000230
11500.0	673.8	8.7	73.3	828.9	655.6	127.2	21.0	1.000224
12000.0	661.5	7.8	71.3	816.6	654.5	126.5	22.1	1.000218
12500.0	649.5	7.0	69.4	804.5	653.3	125.5	22.8	1.000213
13000.0	637.5	5.7	73.3	793.2	651.9	120.4	19.3	1.000210
13500.0	625.8	4.6	73.3	781.9	650.5	113.1	16.0	1.000205
14000.0	614.2	4.0	63.9	769.6	649.6	109.4	14.3	1.000197
14500.0	602.8	3.3	63.4	757.5	648.7	108.3	13.4	1.000193
15000.0	591.7	2.5	63.9	745.6	647.7	107.5	12.4	1.000189
15500.0	580.6	1.4	70.9	734.5	646.5	109.7	11.1	1.000186
16000.0	569.7	.1	78.3	723.9	645.1	112.4	9.8	1.000186
16500.0	559.0	-1.2	86.1	713.8	643.5	115.5	9.5	1.000184
17000.0	548.5	-2.6	93.9	704.0	641.8	118.6	9.7	1.000181
17500.0	538.1	-3.5	96.9	693.0	640.7	121.5	9.8	1.000178
18000.0	527.8	-3.7	82.6	680.5	640.4	121.2	10.1	1.000172
18500.0	517.8	-3.7	70.6	667.7	640.3	120.5	10.4	1.000166
19000.0	507.9	-5.0	67.0	658.4	638.6	118.7	10.6	1.000162
19500.0	498.2	-6.3	65.4	649.1	637.0	110.5	10.1	1.000158
20000.0	488.6	-6.9	43.5	638.4	636.1	101.7	9.9	1.000151
20500.0	479.2	-7.0	42.8	626.3	636.0	97.1	9.2	1.000148
21000.0	469.9	-7.5	49.6	615.4	635.4	95.9	7.9	1.000146
21500.0	460.8	-9.1	66.5	606.8	633.6	94.4	6.7	1.000146
22000.0	451.8	-10.7	82.0	598.6	631.7	96.6	5.8	1.000146
22500.0	443.0	-11.4	74.4	588.7	630.7	103.0	5.1	1.000142
23000.0	434.3	-12.0	49.0	578.7	629.9	111.4	4.5	1.000136

STATION ALTITUDE 3989.00 FEET MSL
 12 JULY 84
 ASCENSION NO. 374

UPPER AIR DATA
 1940020374
 WHITE SANDS

GEODETIC COORDINATES
 32.40043 LAT DEG
 106.37033 LON DEG

TABLE 17 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE			KNOTS	KNOTS	DIRECTION DEGREES(TN)	SPEED KNOTS	
23500.0	425.7	-13.4	-20.3	55.9	570.3	628.2				1.000134
24000.0	417.3	-14.1	-28.0	29.6	560.9	627.2				1.000126
24500.0	409.0	-14.7	-31.0	23.4	551.0	626.5				1.000125
25000.0	400.9	-15.9	-33.0	21.2	542.6	625.0				1.000123

STATION ALTITUDE 3989.00 FEET MSL
 12 JULY 84 1400 MDT
 ASCENSION NO. 374

MANDATORY LEVELS
 1940320374
 WHITE SANDS

GEODETIC COORDINATES
 32.40043 LAT DEG
 106.37033 LON DEG

TABLE 18

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	A: R DEGREES	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	4965.	27.0	12.5	43.	27.8	2.1
800.0	6707.	27.1	9.4	45.	123.6	11.9
750.0	8532.	11.0	7.3	53.	126.4	17.1
700.0	10446.	1.2	5.5	68.	126.1	16.6
650.0	12464.	1.0	1.8	69.	125.8	23.0
600.0	14610.	1.1	-3.2	63.	108.1	13.1
550.0	16906.	-1.4	-3.4	93.	118.1	9.6
500.0	19378.	-1.1	-11.8	64.	112.3	10.2
450.0	22068.	-11.0	-13.2	84.	97.6	5.6
400.0	25012.	-11.0	-33.2	21.		

STATION ALTITUDE 3997.30 FEET MSL
12 JULY 84
ASCENSION NO. 133

SIGNIFICANT LEVEL DATA
1940060133
S M R

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

TABLE 19

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE		REL. HUM. PERCENT
878.9	3997.3	29.1	15.2	43.0
876.9	4063.9	28.3	14.2	42.0
850.0	4968.7	25.6	8.6	34.0
816.5	6121.9	21.4	8.3	43.0
748.0	8590.1	14.9	6.5	57.0
700.0	10419.2	9.3	4.3	71.0
645.4	12618.5	4.7	1.7	81.0
598.3	14639.0	.9	-2.3	79.0
583.5	15301.5	.5	-4.1	71.0
557.9	16481.2	-2.2	-5.7	77.0
516.0	18510.2	-5.5	-15.5	45.0
500.0	19321.1	-6.9	-18.5	39.0
472.4	20773.3	-9.0	-18.7	45.0
456.7	21631.0	-11.1	-18.5	54.0
449.8	22015.4	-11.5	-26.3	28.0
429.1	23199.4	-13.4	-31.5	20.0
421.6	23640.9	-13.4	-32.6	18.0
400.0	24948.7	-17.0	-34.5	20.0

STATION ALTITUDE 3997.30 FEET MSL
12 JULY 24
ASCENSION NO. 133

UPPER AIR DATA
1940060133
S M R

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

TABLE 20

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE			KNOTS	KNOTS	DIRECTION DEGREES(TN)	SPEED KNOTS	
3997.3	878.9	29.1	15.2	43.0	1005.4	679.8	150.0	150.0	4.1	1.000296
4000.0	878.8	29.1	15.2	43.0	1005.5	679.8	149.9	149.9	4.1	1.000296
4500.0	863.8	27.0	11.5	38.1	996.6	677.0	133.7	133.7	4.5	1.000279
5000.0	849.1	25.5	8.6	34.2	985.5	674.9	121.0	121.0	5.2	1.000267
5500.0	834.4	23.7	8.6	38.1	974.4	672.9	111.7	111.7	6.1	1.000265
6000.0	820.0	21.8	8.4	42.0	963.4	670.8	104.9	104.9	7.1	1.000263
6500.0	805.6	20.4	8.1	45.1	951.2	669.2	99.9	99.9	8.2	1.000260
7000.0	791.4	19.1	7.8	48.0	938.7	667.7	99.3	99.3	9.1	1.000256
7500.0	777.5	17.8	7.5	50.8	926.4	666.2	103.6	103.6	10.2	1.000253
8000.0	763.8	16.5	7.0	53.7	914.2	664.6	111.6	111.6	11.8	1.000249
8500.0	750.4	15.1	6.6	56.5	902.3	663.1	116.8	116.8	13.4	1.000245
9000.0	737.0	13.6	6.1	60.1	890.9	661.3	120.5	120.5	14.7	1.000242
9500.0	723.7	12.1	5.5	64.0	879.6	659.6	122.4	122.4	14.2	1.000238
10000.0	710.7	10.6	4.9	67.8	868.6	657.7	124.7	124.7	13.6	1.000234
10500.0	697.9	9.1	4.2	71.4	857.4	656.0	128.0	128.0	13.0	1.000230
11000.0	685.1	8.1	3.7	73.6	845.0	654.8	131.4	131.4	12.4	1.000226
11500.0	672.6	7.0	3.1	75.9	832.7	653.5	135.0	135.0	11.8	1.000222
12000.0	660.3	6.0	2.5	78.2	820.6	652.3	134.1	134.1	11.2	1.000218
12500.0	648.2	4.9	1.9	80.5	808.7	651.0	131.7	131.7	10.7	1.000214
13000.0	636.2	4.0	1.0	80.6	796.6	649.8	128.0	128.0	11.2	1.000210
13500.0	624.4	3.0	-0.0	80.1	784.7	648.6	123.7	123.7	11.3	1.000205
14000.0	612.8	2.1	-1.0	79.6	772.9	647.6	115.9	115.9	10.5	1.000201
14500.0	601.4	1.2	-2.0	79.1	761.3	646.3	108.1	108.1	9.7	1.000196
15000.0	590.2	.7	-3.3	74.6	748.5	645.7	100.8	100.8	8.7	1.000191
15500.0	579.1	.0	-4.4	72.0	736.3	644.8	101.3	101.3	8.3	1.000186
16000.0	568.2	-1.1	-5.0	74.6	725.6	643.5	109.5	109.5	8.2	1.000183
16500.0	557.5	-2.2	-5.8	76.7	714.9	642.1	118.9	118.9	8.6	1.000180
17000.0	546.9	-3.0	-7.9	68.8	703.7	641.0	128.2	128.2	9.2	1.000174
17500.0	536.5	-3.9	-10.3	60.9	692.6	639.9	136.9	136.9	9.4	1.000169
18000.0	526.2	-4.7	-12.8	53.0	681.7	638.9	146.0	146.0	9.4	1.000164
18500.0	516.2	-5.5	-15.5	45.2	670.9	637.8	148.5	148.5	9.4	1.000159
19000.0	506.3	-6.3	-17.3	41.4	660.3	636.7	146.5	146.5	9.3	1.000155
19500.0	496.5	-7.2	-18.5	39.7	649.6	635.7	137.9	137.9	9.3	1.000152
20000.0	486.9	-7.9	-18.6	41.6	638.7	634.9	124.1	124.1	9.8	1.000150
20500.0	477.5	-8.6	-18.7	43.9	628.1	634.0	116.5	116.5	10.2	1.000147
21000.0	468.2	-9.6	-18.6	47.4	618.1	632.9	111.6	111.6	10.4	1.000145
21500.0	459.1	-10.8	-18.5	52.6	608.8	631.4	112.4	112.4	9.6	1.000143
22000.0	450.1	-11.5	-25.9	29.0	598.8	630.4	114.0	114.0	8.8	1.000137
22500.0	441.2	-12.3	-28.3	24.7	588.9	629.4	111.0	111.0	8.3	1.000134
23000.0	432.5	-13.1	-30.5	21.3	579.1	628.4	107.9	107.9	7.6	1.000132

STATION ALTITUDE 3907.30 FEET MSL
12 JULY 84
ASCENSION NO. 133

1445 MDT

UPPER AIR DATA
1940060133
S M R

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

TABLE 20 Cont'd

GEOMETRIC ALTITUDE FT	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
23500.0	424.0	-13.4	18.6	568.4	628.0	105.0	6.4	1.000129
24000.0	415.6	-14.4	18.5	559.3	626.8			1.000127
24500.0	407.3	-15.8	19.3	551.1	625.1			1.000125

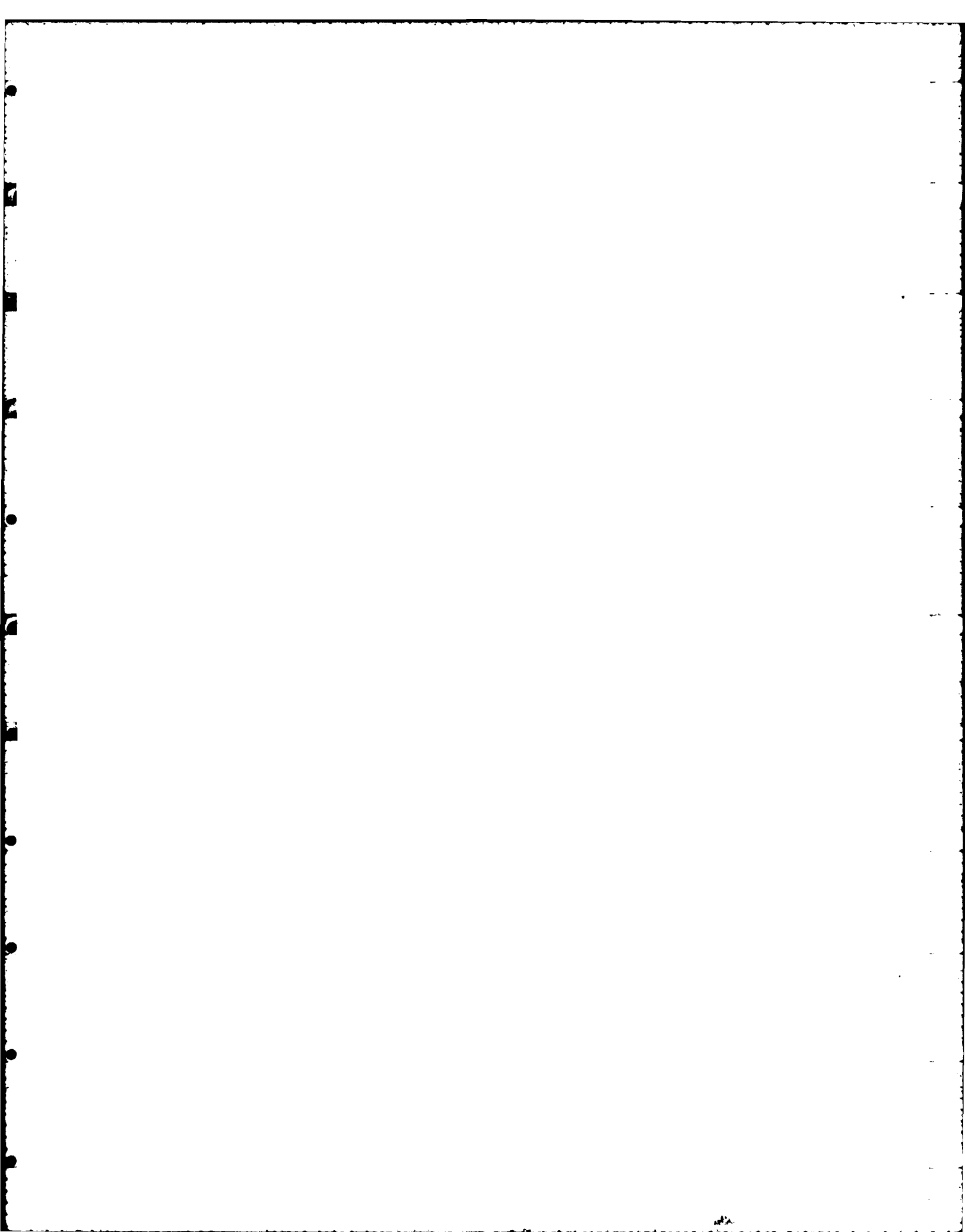
STATION ALTITUDE 3997.30 FEET MSL
12 JULY 84
ASCENSION NO. 133 1445 MDT

MANDATORY LEVELS
1940060133
S M R

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

TABLE 21

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	4965.	21.6	8.6	34.	121.8	5.2
800.0	6696.	11.9	8.0	46.	99.2	8.6
750.0	8508.	11.1	6.5	57.	116.9	13.4
700.0	10409.	6.3	4.3	71.	127.4	13.1
650.0	12414.	1.1	2.0	80.	132.1	10.8
600.0	14547.	1.0	-2.2	79.	107.4	9.6
550.0	16832.	-1.8	-7.3	71.	125.5	9.0
500.0	19294.	-1.9	-18.5	39.	143.3	9.3
450.0	21970.	-11.5	-26.0	29.	114.0	8.8
400.0	24907.	-11.0	-34.5	20.		



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