AD-A071 335 ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/G 4/2
12821 LANCE MISSILE NUMBER 4388 ROUND NUMBER 330 ACL26 APRIL 19--ETC(U)
APR 79

UNCLASSIFIED ERADCOM/ASL-DR-1007 NL

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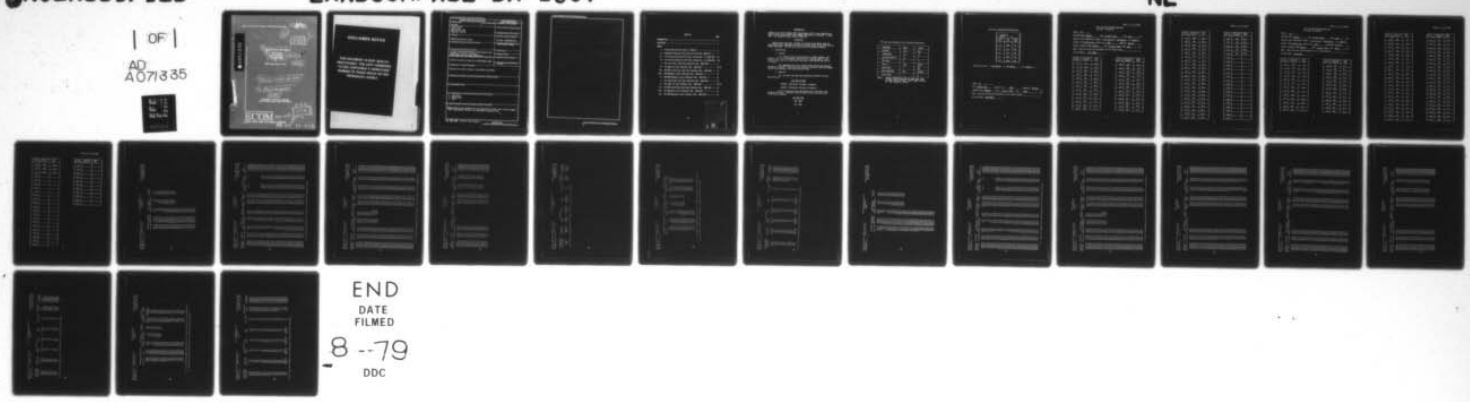

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(11) DR 1007 APRIL 1979

(12) 8.S.

LEVEL II

AD A071335

(9) METEOROLOGICAL DATA REPORT,

(6) 12821 Lance
Missile ~~ML-~~ 4388
Round ~~No.~~ 33W ACL
26 April 1979,
by

Number

MSMR Meteorological Team

(12) 28p.

(14) ERADCOM/ASL-DR-1007

(16) 1T665702D126

(17) 02

ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

ECOM 410 663

UNITED STATES ARMY ELECTRONICS COMMAND

LB

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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER DR 1007	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
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7. AUTHOR(s) WSMR Meteorological Team		8. CONTRACT OR GRANT NUMBER(s) DA Task 1T665702D126-02
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11. CONTROLLING OFFICE NAME AND ADDRESS US Army Electronics Research & Development Comd Atmospheric Sciences Laboratory White Sands Missile Range, New Mexico		12. REPORT DATE 13. NUMBER OF PAGES
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19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

1. Ballistics
2. Meteorology
3. Wind

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

Meteorological data gathered for the launching of 12821 Lance, Missile Number 4388, Round Number 330 ACL, are presented in tabular form.

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

CONTENTS

INTRODUCTION

12821A Lance, Missile Number 4388, Round Number 330 ACL, was launched from RATSCAT, White Sands Missile Range (WSMR), New Mexico, at 0846 MST, 26 April 1979. The scheduled launch time was 0830 MST.

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 (°C), relative humidity, dew point (°C), density (gm/m^3), wind direction and speed, and cloud cover were made at the RATSCAT Met Site at T-0 minutes.

(2) Anemometer data were provided from existing pole-mounted anemometer at RATSCAT. 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	
RATSCAT	1560 meters (30-meter increments)
RATSCAT	2160 meters (30-meter increments)

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

SITE AND TIME	
HMN	0820
JAL	0820

The data are presented in the following tabulations:

ELEVATION	3965	FT/MSL
PRESSURE	879.5	MBS
TEMPERATURE	22.5	°C
RELATIVE HUMIDITY	30	%
DEW POINT	4	°C
DENSITY	1031	GM/M^3
WIND SPEED	3	MPH
WIND DIRECTION	085	DEGREES
CLOUD COVER	3	C1

TABLE I. SURFACE OBSERVATIONS TAKEN AT 0846 LOCAL TIME, 26 APRIL 1979 AT RATSCAT, 12821A LANCE, MISSILE NO. 4388, ROUND NO. 330 ACL.

FIXED POLE ANEMOMETER MEASURED WINDS

ANEMOMETER HEIGHT FT.		
T-TIME SEC	DIR DEG	SPEED MPH
-30	076	05
-20	077	05
-10	081	06
0.0	084	06
+10	085	05

WSTM COORDINATES: X= 513,312.04 Y= 357,958.56 H= 3,964.61

TABLE II

TYPE 12821A Lance MISSILE NO. 4388 ROUND NO. 330 ACL

LAUNCHED FROM RATSCAT DATE 26 April 1979 TIME 0846 LST

NOTE: WIND DIRECTIONS ARE REFERENCED TO THE FIRING AZIMUTH

OR TRUE NORTH TRUE NORTH .

PILOT BALLOON MEASURED WIND DATA
(30 meter increments)

TABLE III

RELEASED FROM RATSCAT DATE 26 April 1979 TIME 0827 LST

RELEASE POINT COORDINATES (WSTM) X= 513,312.04 Y= 357,958.56 H= 3,964.61

MISSILE TYPE 12821A Lance MISSILE NO. 4388 ROUND NO. 330 ACL

MISSILE LAUNCHED FROM RATSCAT DATE 26 April 1979 TIME 0846 LST

NOTE: WIND DIRECTIONS ARE REFERENCED TO THE FIRING AZIMUTH

OR TRUE NORTH TRUE NORTH.

HEIGHT mtrs AGL	DIRECTION DEGREES	SPEED MPH
SFC	085	03.0
30	075	04.5
60	064	06.0
90	054	07.5
120	043	09.0
150	043	09.5
180	042	09.5
210	041	09.5
240	040	09.5
270	037	10.0
300	033	10.5
330	030	11.0
360	026	11.5

HEIGHT mtrs AGL	DIRECTION DEGREES	SPEED MPH
390	028	12.0
420	029	12.5
450	031	13.0
480	032	13.0
510	028	13.0
540	024	13.0
570	020	13.0
600	015	12.5
630	013	12.5
660	011	12.5
690	009	12.5
720	006	12,0
750	005	11.0

HEIGHT mtrs AGL	DIRECTION DEGREES	SPEED MPH
780	004	09.5
810	003	08.5
840	002	07.0
870	360	07.0
900	357	07.0
930	355	07.0
960	352	07.0
990	350	07.5
1020	348	08.0
1050	346	08.5
1080	343	08.5
1110	343	08.5
1140	342	08.5
1170	341	08.5
1200	340	08.5
1230	337	08.0
1260	333	07.5
1290	329	07.0
1320	325	06.0
1350	326	06.5
1380	327	07.0
1410	328	07.5

HEIGHT mtrs AGL	DIRECTION DEGREES	SPEED MPH
1440	328	07.5
1470	330	08.0
1500	332	08.5
1530	334	09.0
1560	335	09.5
1590		
1620		
1650		
1680		
1710		
1740		
1770		
1800		
1830		
1860		
1890		
1920		
1950		
1980		
2010		
2040		
2070		

PILOT BALLOON MEASURED WIND DATA
(30 meter increments)

TABLE IV

RELEASED FROM RATSCAT DATE 26 April 1979 TIME 0847 LST

RELEASE POINT COORDINATES (WSTM) X= 513,012.04 Y= 357,958.56 H= 3,964.61

MISSILE TYPE 12821A Lance MISSILE NO. 4388 ROUND NO. 330 ACL

MISSILE LAUNCHED FROM RATSCAT DATE 26 April 1979 TIME 0846 LST

NOTE: WIND DIRECTIONS ARE REFERENCED TO THE FIRING AZIMUTH

OR TRUE NORTH TRUE NORTH.

HEIGHT mtrs AGL	DIRECTION DEGREES	SPEED MPH
SFC	090	2.0
30	104	2.0
60	117	2.0
90	131	2.0
120	144	2.0
150	116	4.0
180	087	5.5
210	059	7.5
240	030	9.0
270	031	10.0
300	031	10.5
330	031	11.0
360	031	11.5

HEIGHT mtrs AGL	DIRECTION DEGREES	SPEED MPH
390	031	11.5
420	030	11.5
450	030	11.5
480	029	11.5
510	028	11.0
540	026	10.5
570	024	10.0
600	022	9.5
630	022	8.5
660	022	7.5
690	022	6.5
720	021	5.5
750	021	5.0

HEIGHT mtrs AGL	DIRECTION DEGREES	SPEED MPH
780	020	4.5
810	019	4.0
840	018	3.5
870	010	4.0
900	002	4.0
930	354	4.0
960	346	4.0
990	341	5.0
1020	335	5.5
1050	329	6.0
1080	323	6.5
1110	320	6.5
1140	316	6.5
1170	313	6.5
1200	309	6.5
1230	312	6.5
1260	315	6.5
1290	318	6.5
1320	321	6.5
1350	321	7.0
1380	321	7.5
1410	321	8.0

HEIGHT mtrs AGL	DIRECTION DEGREES	SPEED MPH
1440	321	8.0
1470	322	8.5
1500	323	8.5
1530	324	8.5
1560	324	8.5
1590	324	8.5
1620	323	8.5
1650	322	8.5
1680	321	8.5
1710	319	8.0
1740	317	8.0
1770	315	8.0
1800	312	7.5
1830	312	8.0
1860	312	8.0
1890	312	8.0
1920	311	8.0
1950	309	8.0
1980	306	8.0
2010	303	8.0
2040	300	8.0
2070	297	8.0

HEIGHT mtrs AGL	DIRECTION DEGREES	SPEED MPH
2100	294	8.0
2130	291	8.0
2160	287	8.0
2190		
2220		
2250		
2280		
2310		
2340		
2370		
2400		
2430		
2460		
2490		
2520		
2550		
2580		
2610		
2640		
2670		
2700		
2730		

HEIGHT mtrs AGL	DIRECTION DEGREES	SPEED MPH
2760		
2790		
2820		
2850		
2880		
2910		
2940		
2970		
3000		
3030		
3060		

STATION ALTITUDE 4126.59 FEET MSL
24 APR. 79 0820 HRS MST
ASCENSION NO. 202

SIGNIFICANT LEVEL DATA
1150010202
HOLLOMAN

GEODETIC COORDINATES
32.06865 LAT DEG
106.09965 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT
874.5	4126.6	20.2	6.9	42.0
850.0	4927.5	17.4	1.4	34.0
829.2	5618.9	14.9	-.8	34.0
700.0	10242.4	4.8	-4.7	50.0
617.8	13550.7	-2.0	-7.9	54.0
590.0	14750.1	-4.0	-15.9	39.0
575.8	15380.9	-4.9	-19.8	30.0
535.4	17245.7	-9.5	-17.3	53.0
500.0	18971.8	-13.3	-22.7	45.0
481.6	19906.7	-15.6	-24.5	46.0
435.5	22362.9	-20.1	-26.9	45.0
421.5	23176.3	-22.4	-28.6	57.0
400.0	24434.8	-25.2	-33.2	47.0
369.4	26320.6	-29.5	-40.6	33.0
348.2	27697.9	-33.4	-40.6	48.0
335.8	28536.4	-33.2	-50.3	16.0
300.0	31109.3	-39.7		
250.0	35115.1	-51.0		
241.6	35844.2	-53.0		
225.1	37344.0	-53.4		
212.0	38603.8	-57.0		
200.0	39817.9	-57.5		
181.0	41892.2	-58.2		
168.4	43360.8	-60.7		
164.4	43875.4	-59.4		
150.0	45763.8	-60.2		
130.6	48580.0	-65.0		
101.2	53688.1	-66.7		
100.0	53926.2	-65.4		
96.1	54723.0	-65.4		

UPPER AIR DATA
11600102 02
HOLLOMAN

STATION ALTITUDE 4126.59 FEET MSL
20 APR. 79 0820 HRS MST
ASCENSION NO. 202

GEODETIC COORDINATES
32.56865 LAT DEG
106.09905 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4126.6	874.5	20.2	6.9	42.0	1037.3	666.7	250.0	1.0	1.000274
4500.0	863.0	18.9	4.4	38.3	1025.6	667.0			1.000266
5000.0	847.8	17.1	1.2	34.0	1011.4	664.7			1.000256
5500.0	832.7	15.3	-.4	34.0	1002.7	662.6			1.000250
6000.0	817.7	14.1	-1.0	35.3	989.2	661.1			1.000246
6500.0	802.9	13.0	-1.3	37.0	975.0	659.5			1.000243
7000.0	788.3	11.9	-1.7	38.8	960.9	658.6			1.000239
7500.0	774.0	10.8	-2.1	40.5	947.2	657.3			1.000236
8000.0	759.9	9.7	-2.5	42.2	933.6	656.0			1.000232
8500.0	746.1	8.6	-2.9	44.0	920.2	654.7	311.6	11.7	1.000229
9000.0	732.6	7.5	-3.4	45.7	907.1	653.5	302.7	12.4	1.000225
9500.0	719.3	6.4	-3.9	47.4	894.1	652.2	293.8	13.2	1.000221
10000.0	706.2	5.3	-4.5	49.2	881.4	650.9	285.9	14.2	1.000218
10500.0	693.2	4.3	-4.9	51.1	868.5	649.6	276.5	16.0	1.000214
11000.0	680.3	3.2	-5.3	53.2	855.4	648.4	269.8	18.2	1.000211
11500.0	667.5	2.2	-5.8	55.3	842.6	647.2	270.4	19.8	1.000208
12000.0	655.1	1.2	-6.3	57.4	830.0	646.0	272.0	21.1	1.000204
12500.0	642.8	.2	-6.8	59.6	817.6	644.8	268.3	21.3	1.000201
13000.0	630.8	-.9	-7.3	61.7	805.3	643.6	268.2	22.0	1.000197
13500.0	619.0	-1.9	-7.8	63.8	793.3	642.3	275.4	23.6	1.000194
14000.0	607.4	-2.7	-10.5	54.6	781.0	641.2	301.2	25.5	1.000188
14500.0	595.7	-3.6	-14.0	44.2	768.8	640.0	302.9	27.0	1.000182
15000.0	584.3	-4.4	-17.3	35.4	756.5	637.9	303.8	28.3	1.000177
15500.0	573.1	-5.2	-19.5	31.5	744.5	636.8	301.5	28.6	1.000173
16000.0	562.1	-6.4	-18.5	37.6	733.4	635.5	298.2	29.0	1.000171
16500.0	551.2	-7.7	-17.8	43.8	722.5	635.1	291.1	29.8	1.000169
17000.0	540.6	-8.9	-17.4	50.0	711.8	633.6	285.0	30.8	1.000167
17500.0	530.0	-10.1	-18.1	51.8	701.1	632.2	280.3	31.7	1.000164
18000.0	519.6	-11.2	-19.6	49.5	690.3	630.9	277.6	32.8	1.000161
18500.0	509.4	-12.3	-21.2	47.2	679.7	629.5	277.8	34.1	1.000158
19000.0	499.4	-13.4	-22.7	45.0	669.2	628.1	279.0	35.5	1.000155
19500.0	489.5	-14.6	-23.7	45.6	659.1	626.6	281.3	37.0	1.000152
20000.0	479.8	-15.8	-24.7	46.0	649.0	625.2	282.6	38.3	1.000149
20500.0	470.1	-16.7	-25.6	45.8	638.2	624.1	283.5	39.5	1.000147
21000.0	460.7	-17.6	-26.5	45.6	627.6	623.0	281.6	41.3	1.000144
21500.0	451.4	-18.5	-27.4	45.4	617.2	621.9	279.4	43.3	1.000141
22000.0	442.3	-19.4	-28.2	45.2	607.0	620.7	279.7	45.3	1.000139
22500.0	433.4	-20.4	-28.3	46.8	597.2	619.5	280.4	46.6	1.000136
23000.0	424.6	-21.9	-28.6	54.3	588.4	617.7	282.7	45.9	1.000134
23500.0	416.9	-23.1	-29.7	59.4	579.1	616.2	285.7	45.2	1.000132

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

STATION ALTITUDE 4126.59 FEET MSL
26 APR. 79 0820 HRS MST
ASCENSION NO. 204

UPPER AIR DATA
1.000.0202
HULLOMAN

GEODETIC COORDINATES
32.00005 LAT DEG
106.09965 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
24000.0	407.3	-24.2	-31.6	50.5	589.6	614.5	269.5	44.7	1.000150
24500.0	396.9	-25.3	-33.4	46.5	580.6	613.4	270.0	45.2	1.000147
25000.0	386.8	-26.5	-35.3	42.8	571.5	611.9	269.4	46.0	1.000125
25500.0	382.4	-27.0	-37.2	39.1	562.5	610.5	266.2	46.6	1.000142
26000.0	374.4	-28.8	-39.2	35.4	553.6	609.1	264.2	47.7	1.000120
26500.0	366.5	-30.0	-40.5	35.0	545.1	607.5	263.5	49.4	1.000118
27000.0	358.4	-31.4	-40.4	40.4	537.0	605.8	262.6	51.2	1.000116
27500.0	351.2	-32.8	-40.5	45.8	529.0	604.0	261.8	53.0	1.000115
28000.0	343.7	-33.3	-43.1	36.5	522.2	603.4	261.8	55.8	1.000112
28500.0	336.3	-33.2	-49.5	17.4	516.3	603.5	262.0	58.7	1.000109
29000.0	329.0	-34.4	-52.9	13.1**	510.0	602.0	261.9	59.9	1.000107
29500.0	321.9	-35.6	-56.2	10.0**	503.1	600.4	261.7	59.9	1.000105
30000.0	314.9	-36.9	-60.1	6.9**	496.4	598.8	261.0	56.5	1.000104
30500.0	308.1	-38.2	-65.5	3.8**	490.8	597.2	260.3	54.1	1.000102
31000.0	301.4	-39.4	-77.9	.7**	485.3	595.6	259.7	53.0	1.000100
31500.0	294.7	-40.8			479.9	594.0	259.5	52.1	1.000098
32000.0	288.1	-42.2			474.6	592.3	259.5	51.2	1.000097
32500.0	281.6	-43.6			469.4	590.7	259.5	50.0	1.000095
33000.0	275.3	-45.0			464.4	589.1	259.5	48.7	1.000094
33500.0	269.1	-46.4			459.5	587.5	259.9	49.0	1.000092
34000.0	263.0	-47.9			454.7	585.8	259.2	50.1	1.000091
34500.0	257.1	-49.3			450.0	584.2	259.3	51.1	1.000089
35000.0	251.3	-50.7			445.5	582.6	259.7	52.1	1.000088
35500.0	245.5	-52.1			441.0	581.0	260.3	54.6	1.000086
36000.0	239.8	-53.1			436.7	579.3	262.4	57.9	1.000085
36500.0	234.2	-53.3			432.5	577.6	264.0	61.8	1.000083
37000.0	228.8	-53.6			428.3	577.2	265.2	65.7	1.000081
37500.0	223.4	-54.2			424.2	576.5	265.8	69.5	1.000079
38000.0	218.2	-55.5			420.2	574.8	266.1	72.9	1.000078
38500.0	213.1	-56.7			416.2	573.1	266.2	75.3	1.000076
39000.0	208.0	-57.2			412.3	572.5	266.4	77.1	1.000075
39500.0	203.1	-57.4			408.5	572.3	266.6	77.2	1.000073
40000.0	198.3	-57.6			404.7	572.0	266.9	76.8	1.000071
40500.0	193.5	-57.7			401.0	571.8	267.0	74.2	1.000070
41000.0	188.9	-57.9			397.4	571.6	267.0	71.9	1.000068
41500.0	184.4	-58.1			393.8	571.3	267.1	70.7	1.000067
42000.0	180.1	-58.4			390.3	570.9	267.3	70.1	1.000065
42500.0	175.7	-59.2			386.8	569.8	267.8	70.3	1.000064
43000.0	171.5	-60.1			383.4	568.7	268.5	72.0	1.000062
43500.0	167.4	-60.4			380.1	568.3	269.1	72.6	1.000061

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

STATION ALTITUDE 4126.39 FEET MSL
29 APR. 79 0820 HRS MST
ASCENSION NO. 202

UPPER AIR DATA
7500010202
HOLLOMAN

GEODETIC COORDINATES
32.80805 LAT DEG
106.09965 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	RELHUM PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
44000.0	163.4	-59.5			200.4	569.5	269.6	73.0	1.000059
44500.0	159.5	-59.7			196.3	569.2	270.1	71.5	1.000058
45000.0	155.7	-59.7			192.3	568.9	270.6	69.0	1.000057
45500.0	151.9	-60.1			188.4	568.7	271.2	65.4	1.000055
46000.0	148.3	-60.6			184.8	568.0	271.9	60.9	1.000054
46500.0	144.7	-61.5			181.1	568.6	272.4	56.2	1.000053
47000.0	141.2	-62.3			177.2	568.7	272.8	52.5	1.000052
47500.0	137.7	-63.2			173.5	568.5	272.7	50.8	1.000051
48000.0	134.4	-64.0			169.8	568.4	272.2	51.4	1.000050
48500.0	131.1	-64.9			166.3	568.2	271.8	53.9	1.000049
49000.0	127.9	-65.1			164.2	567.9	271.9	57.8	1.000048
49500.0	124.7	-65.3			159.1	568.0	271.0	62.7	1.000047
50000.0	121.7	-65.5			156.1	568.4	271.3	66.1	1.000046
50500.0	118.7	-65.6			152.2	568.2	271.6	68.9	1.000044
51000.0	115.7	-65.8			149.5	568.0	272.1	69.8	1.000043
51500.0	112.9	-66.0			146.8	568.7	272.4	69.1	1.000042
52000.0	110.1	-66.1			144.3	568.5	272.3	67.3	1.000041
52500.0	107.4	-66.3			141.9	568.3	272.3	65.7	1.000040
53000.0	104.7	-66.5			139.5	568.1			1.000039
53500.0	102.2	-66.6			137.3	567.8			1.000038
54000.0	99.6	-66.3			135.0	568.3			1.000037
54500.0	97.2	-66.7			133.2	568.1			1.000036

RAW SIGNIFICANT LEVEL DATA

STATION ALTITUDE 4126.59 FEET MSL
26 APR. 79 0820 HRS MST
ASCENSION NO. 202

1158N0202
HOLLOMAN

GEODETIC COORDINATES
32.00065 LAT DEG
106.04965 LON DEG

GEOPOTENTIAL ALTITUDE DECAMETERS	WIND DATA DIRECTION DEG (TN)	SPEED MPS	N-S MPS	E-W MPS	DEW PT DEP DEG C	TEMPERATURE AIR DEG C	PRESSURE MILLIBARS
1663.	9999.**	9999.**	-9999.**	-9999.**	99	-65.4	9.810+1
1639.	9999.**	9999.**	-9999.**	-9999.**	99	-66.4	1.000+2

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

STATION ALTITUDE 4125.59 FEET MSL
26 APR. 79 0820 HRS MST
ASCENSION NO. 252

MANDATORY LEVELS
11600102Q2
HOLLOMAN

GEODETIC COORDINATES
32.00865 LAT DEG
106.09965 LON DEG

PRESSURE	GEOPOTENTIAL	TEMPERATURE		REL.HUM.	WIND DATA	
		AIR	DEWPOINT	PERCENT	DIRECTION	SPEED
MILLIBARS	FEET	DEGREES CENTIGRADE			DEGREES(TN)	KNOTS
850.0	4924.	17.4	1.4	34.	9999.0	9999.0AA
808.0	8606.	12.8	-1.1	37.	9999.0	9999.0AA
750.0	8372.	8.9	-2.6	43.	314.0	11.6
700.0	10233.	4.6	-4.7	50.	291.3	15.0
650.0	12202.	.8	-6.5	58.	275.5	21.1
600.0	14297.	-3.3	-12.7	45.	302.3	26.4
550.0	16539.	-7.8	-17.0	44.	290.4	29.9
500.0	18946.	-13.3	-22.7	45.	276.4	35.4
450.0	21550.	-18.6	-27.5	45.	279.4	43.6
400.0	24395.	-25.2	-33.2	47.	280.0	45.1
350.0	27530.	-33.1	-40.5	47.	281.7	53.2
300.0	31049.	-39.7			279.6	52.5
250.0	35040.	-51.0			278.7	52.3
200.0	39724.	-57.5			280.7	70.5
175.0	42484.	-59.4			287.9	71.0
150.0	45643.	-60.2			291.5	63.2
125.0	49321.	-65.3			291.1	75.2
100.0	53763.	-66.4				

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

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

STATION ALTITUDE 4126.59 FEET MSL
20 APR. 77 0820 HRS MST
ASCENSION NO. 202

HRR MANDATORY LEVELS
13000.0292
HAILCOMAN

GEODETIC COORDINATES
32.00005 LAT DEG
106.09905 LON DEG

GEOPOTENTIAL ALTITUDE DECAMETERS	WIND DATA DIRECTION DEG (FM)	SPEED MPS	N-S MPS	E-W MPS	DEW PT DEP DEG C	TEMPERATURE AIR DEG C	PRESSURE MILLIBARS
1639.	9999.**	9999.**	-9999.**	-9999.**	99	-66.4	1.000+2
1503.	291.	39.	-14.	36.	99	-65.3	1.250+2
1371.	292.	33.	-12.	30.	99	-60.2	1.500+2
1295.	280.	37.	-11.	35.	99	-59.4	1.750+2
1211.	287.	39.	-11.	38.	99	-57.5	2.000+2
1066.	279.	27.	-4.	27.	99	-51.0	2.500+2
946.	280.	27.	-5.	27.	99	-39.7	3.000+2
839.	282.	27.	-6.	27.	07	-33.1	3.500+2
744.	290.	23.	-8.	22.	08	-25.2	4.000+2
657.	279.	22.	-4.	22.	07	-18.0	4.500+2
577.	279.	16.	-3.	16.	09	-13.3	5.000+2
504.	290.	15.	-5.	14.	10	-7.8	5.500+2
436.	302.	14.	-7.	11.	07	-3.3	6.000+2
372.	275.	11.	-1.	11.	07	.8	6.500+2
312.	281.	8.	-2.	8.	10	4.8	7.000+2
255.	314.	8.	-4.	7.	12	8.7	7.500+2
201.	9999.**	9999.**	-9999.**	-9999.**	14	12.8	8.000+2
150.	9999.**	9999.**	-9999.**	-9999.**	16	17.4	8.500+2

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

STATION ALTITUDE 4051.00 FEET MSL
26 APR. 79 0820 HRS MST
ASCENSION NO. 49

SIGNIFICANT LEVEL DATA
11600300Y99
JALLEN

GEODETIC COORDINATES
33.10714 LAT DEG
106.49511 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT
877.3	4051.0	23.0	5.9	33.0
867.9	4374.2	20.3	2.6	30.0
850.0	4946.6	18.9	1.9	32.0
768.6	7739.5	10.5	-1.9	42.0
700.0	10272.5	4.9	-4.1	52.0
679.9	11269.9	3.9	-6.9	47.0
647.4	12354.5	.3	-8.9	50.0
630.0	13071.9	-1.0	-6.7	63.0
595.2	14554.9	-3.0	-7.8	64.0
580.6	14932.9	-3.9	-13.2	50.0
570.0	15674.1	-5.9	-15.1	48.0
553.2	16442.0	-8.0	-12.7	69.0
500.0	19001.1	-13.3	-22.9	46.0
465.9	20732.0	-16.7	-26.5	42.0
429.9	22756.1	-21.5	-27.7	57.0
415.0	23579.3	-29.2	-25.5	89.0
400.0	24460.6	-25.5	-30.8	61.0
347.2	27784.7	-33.7	-40.3	51.0
328.2	29077.7	-36.0	-48.8	25.0
300.0	31113.0	-40.9		
250.0	35107.3	-51.6		
232.0	36698.6	-53.2		
207.9	39052.6	-57.8		
209.0	39808.0	-57.6		
171.6	42978.9	-59.7		
163.9	43990.2	-58.7		
150.0	45757.9	-59.6		
126.0	49451.8	-68.9		
100.0	53879.0	-68.7		
85.8	56958.7	-61.5		
79.2	59993.6	-59.7		
70.0	61142.7	-61.0		
65.8	62415.8	-59.6		
57.6	65152.3	-61.9		
50.9	68042.3	-59.8		
39.0	73241.3	-55.6		
30.9	78638.8	-49.9		
28.9	84229.3	-49.0		
24.9	87603.8	-45.3		
12.6	97962.7	-41.9		

UPPER AIR DATA
11003D0044
JALLEN

STATION ALTITUDE 4051.00 FEET MSL
26 APR. 79 0820 HRS MST
ASCENSION NO. 44

GEODETIC COORDINATES
33.16712 LAT DEG
106.44511 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4051.0	877.3	23.0	5.9	33.0	1027.9	671.8	75.0	4.1	1.000269
4500.0	863.5	20.3	2.4	30.4	1022.0	668.4			1.000260
5000.0	848.4	18.2	1.4	32.2	1011.2	666.0			1.000255
5500.0	833.2	16.8	.9	34.0	996.0	664.4			1.000252
6000.0	818.3	15.4	.4	35.8	985.0	662.8			1.000248
6500.0	803.7	14.0	-.2	37.6	972.3	661.1			1.000244
7000.0	789.4	12.6	-.9	39.4	959.7	659.4			1.000240
7500.0	775.3	11.2	-1.5	41.1	947.3	657.8			1.000237
8000.0	761.2	9.9	-2.0	43.0	934.4	656.3			1.000233
8500.0	747.3	8.8	-2.4	45.0	920.9	655.0	301.0	14.0	1.000230
9000.0	733.7	7.7	-2.9	47.0	907.7	653.7	298.1	14.8	1.000226
9500.0	720.2	6.6	-3.3	49.0	894.6	652.4	291.8	16.2	1.000222
10000.0	707.1	5.5	-3.8	50.9	881.8	651.1	284.7	17.0	1.000219
10500.0	694.1	4.7	-4.6	50.9	868.3	650.1	276.1	17.5	1.000215
11000.0	681.2	4.2	-5.7	48.4	853.9	649.5	271.3	18.1	1.000210
11500.0	668.5	3.1	-6.9	47.6	841.3	648.2	268.7	18.7	1.000206
12000.0	656.1	1.5	-8.0	49.0	830.7	646.2	273.7	18.9	1.000202
12500.0	643.8	.0	-8.4	53.0	819.4	644.5	281.1	19.3	1.000199
13000.0	631.7	-.9	-6.9	63.5	806.5	643.5	288.1	20.0	1.000198
13500.0	619.7	-1.9	-7.6	64.7	794.2	642.3	294.5	21.0	1.000195
14000.0	608.0	-2.9	-8.6	64.4	782.1	641.1	298.0	22.4	1.000191
14500.0	596.5	-3.9	-9.7	64.0	770.2	639.9	298.5	24.0	1.000187
15000.0	585.1	-4.5	-13.4	49.8	757.7	638.9	298.3	25.6	1.000180
15500.0	573.9	-5.5	-14.7	48.5	746.1	637.7	296.3	26.7	1.000177
16000.0	562.8	-6.8	-13.9	56.9	735.1	636.3	294.2	28.0	1.000175
16500.0	551.9	-8.1	-12.9	68.5	724.4	634.7	290.3	29.7	1.000174
17000.0	541.1	-9.2	-14.7	64.0	713.1	633.4	286.9	31.5	1.000169
17500.0	530.6	-10.2	-15.5	59.5	702.0	632.1	284.5	33.6	1.000166
18000.0	520.2	-11.2	-18.4	55.0	691.1	630.8	282.5	35.7	1.000162
18500.0	510.0	-12.3	-20.4	50.5	680.4	629.5	282.9	36.2	1.000158
19000.0	500.0	-13.3	-22.4	46.0	669.8	628.2	283.7	36.4	1.000155
19500.0	490.1	-14.3	-23.6	44.8	659.0	627.0	283.7	36.9	1.000152
20000.0	480.3	-15.3	-24.8	43.7	648.4	625.8	283.4	37.4	1.000149
20500.0	470.8	-16.2	-26.0	42.5	638.0	624.6	283.0	39.7	1.000146
21000.0	461.3	-17.3	-26.6	44.0	627.9	623.3	282.5	42.3	1.000144
21500.0	452.0	-18.5	-26.8	47.7	618.0	621.8	283.0	43.2	1.000142
22000.0	442.9	-19.7	-27.1	51.4	608.4	620.4	283.6	43.7	1.000139
22500.0	433.9	-20.9	-27.5	55.1	598.9	618.9	283.8	41.8	1.000137
23000.0	425.1	-22.3	-26.8	66.5	590.0	617.2	284.2	40.6	1.000135
23500.0	416.4	-23.9	-25.6	85.9	581.6	615.2	284.7	42.2	1.000134

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

UPPER AIR DATA
11600300044
JALLEN

STATION ALTITUDE 4051.00 FEET MSL
26 APR. 79 0820 HRS MST
ASCENSION NO. 44

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
24000.0	107.8	-24.8	-27.9	75.6	571.7	614.1	285.4	44.1	1.000131
24500.0	399.3	-25.6	-30.9	60.9	561.7	613.1	286.2	46.9	1.000128
25000.0	390.9	-26.8	-32.3	57.4	552.7	611.5	286.9	48.8	1.000126
25500.0	382.7	-28.1	-33.7	57.9	543.8	610.0	287.5	49.0	1.000123
26000.0	374.6	-29.3	-35.2	56.4	535.0	608.4	287.9	49.4	1.000121
26500.0	366.7	-30.5	-36.6	54.9	526.4	606.9	288.0	50.1	1.000119
27000.0	359.0	-31.8	-38.0	53.4	518.0	605.3	287.9	51.1	1.000117
27500.0	351.4	-33.0	-39.5	51.9	509.7	603.8	287.6	52.3	1.000115
28000.0	344.0	-34.1	-41.5	46.7	501.1	602.4	287.3	53.6	1.000113
28500.0	336.6	-35.0	-44.5	36.6	492.2	601.3	287.0	55.1	1.000110
29000.0	329.3	-35.9	-48.2	20.6	483.4	600.1	286.1	56.1	1.000108
29500.0	322.1	-36.9	-51.6	19.8**	475.0	598.8	284.9	56.7	1.000106
30000.0	315.1	-38.0	-55.6	13.7**	466.8	597.4	282.6	58.0	1.000104
30500.0	308.2	-39.1	-61.1	7.5**	458.7	595.0	280.1	59.6	1.000102
31000.0	301.5	-40.2	-73.8	1.4**	450.8	594.7	278.9	60.6	1.000100
31500.0	294.7	-41.5			443.2	593.0	278.3	60.6	1.000099
32000.0	288.1	-42.9			435.9	591.2	279.2	58.1	1.000097
32500.0	281.6	-44.3			428.6	589.4	280.1	56.4	1.000095
33000.0	275.2	-45.7			421.5	587.6	281.1	56.2	1.000094
33500.0	269.0	-47.1			414.6	585.7	282.0	56.5	1.000092
34000.0	263.0	-48.5			407.8	583.9	282.8	57.9	1.000091
34500.0	257.0	-49.9			401.1	582.1	283.6	58.9	1.000089
35000.0	251.2	-51.3			394.5	580.3	284.4	58.8	1.000088
35500.0	245.4	-52.0			388.0	579.4	285.1	58.7	1.000086
36000.0	239.7	-52.5			381.5	578.7	285.8	59.0	1.000084
36500.0	234.2	-53.0			375.2	578.0	286.4	59.2	1.000083
37000.0	228.7	-53.8			368.9	577.0	287.3	61.3	1.000081
37500.0	223.3	-54.8			362.7	575.7	288.2	63.6	1.000079
38000.0	218.1	-55.7			356.7	574.4	288.9	67.6	1.000078
38500.0	212.9	-56.7			350.7	573.1	288.9	71.9	1.000076
39000.0	207.9	-57.7			344.8	571.8	288.9	74.9	1.000075
39500.0	203.0	-57.7			339.0	571.9	288.9	77.7	1.000073
40000.0	198.2	-57.7			333.4	571.8	288.2	78.2	1.000071
40500.0	193.4	-58.1			327.8	571.4	287.9	78.2	1.000070
41000.0	188.8	-58.4			322.3	570.9	287.5	77.3	1.000068
41500.0	184.3	-58.7			316.9	570.5	287.0	76.2	1.000067
42000.0	179.9	-59.1			311.7	570.0	287.0	75.1	1.000065
42500.0	175.6	-59.4			306.6	569.6	287.0	74.1	1.000064
43000.0	171.4	-59.7			301.6	569.2	287.7	73.7	1.000062
43500.0	167.3	-59.2			296.7	569.9	288.6	73.6	1.000061

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

UPPER AIR DATA

STATION ALTITUDE 4051.00 FEET MSL
26 APR. 79 0820 HRS MST
ASCENSION NO. 44

11600300044
JALLEN

GEODETIC COORDINATES
33.10712 LAT DEG
106.49511 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
44000.0	103.3	-38.7			205.3	570.5	289.7	73.2	1.000059
44500.0	159.4	-59.0			207.3	570.1	290.9	72.7	1.000058
45000.0	155.6	-59.3			203.5	569.7	292.0	71.6	1.000056
45500.0	151.9	-59.6			247.8	569.3	292.7	69.5	1.000055
46000.0	148.2	-60.3			242.5	568.4	293.5	67.5	1.000054
46500.0	144.6	-61.2			237.7	567.1	294.0	66.1	1.000053
47000.0	141.1	-62.2			233.0	565.8	294.5	64.7	1.000052
47500.0	137.6	-63.1			228.3	564.6	295.0	63.7	1.000051
48000.0	134.3	-64.1			223.8	563.3	295.4	62.7	1.000050
48500.0	131.0	-65.1			219.3	562.0	295.4	61.7	1.000049
49000.0	127.8	-66.0			215.0	560.7	295.2	60.6	1.000048
49500.0	124.7	-66.9			210.6	559.5	294.9	59.9	1.000047
50000.0	121.6	-67.1			205.6	559.2	294.4	60.3	1.000046
50500.0	118.6	-67.3			200.7	558.9	293.8	60.7	1.000045
51000.0	115.6	-67.5			195.9	558.6	293.2	63.1	1.000044
51500.0	112.7	-67.7			191.2	558.4	292.7	65.6	1.000043
52000.0	109.9	-67.9			186.6	558.1	292.2	68.0	1.000042
52500.0	107.2	-68.1			182.2	557.8	291.8	70.4	1.000041
53000.0	104.5	-68.3			177.8	557.5	291.4	71.4	1.000040
53500.0	101.9	-68.5			173.5	557.3	291.0	69.0	1.000039
54000.0	99.4	-68.4			169.1	557.4	290.7	66.7	1.000038
54500.0	97.0	-67.2			164.0	559.0	290.6	64.8	1.000037
55000.0	94.6	-66.1			159.1	560.6	290.5	62.9	1.000035
55500.0	92.3	-64.9			154.3	562.2	291.5	60.7	1.000034
56000.0	90.0	-63.7			149.7	563.8	293.7	58.1	1.000033
56500.0	87.8	-62.6			145.2	565.3	296.2	54.4	1.000032
57000.0	85.6	-61.5			140.9	566.8	303.0	38.5	1.000031
57500.0	83.6	-61.2			137.3	567.2	318.6	23.8	1.000031
58000.0	81.6	-60.9			133.8	567.6	351.8	13.8	1.000030
58500.0	79.6	-60.6			130.4	568.0	49.3	13.7	1.000029
59000.0	77.7	-60.3			127.1	568.4	76.4	20.8	1.000028
59500.0	75.8	-60.0			123.9	568.8	78.0	18.1	1.000028
60000.0	74.0	-59.8			120.8	569.1	80.0	15.4	1.000027
60500.0	72.2	-60.3			118.2	568.4	79.0	12.0	1.000026
61000.0	70.5	-60.8			115.7	567.6	72.5	8.1	1.000026
61500.0	68.8	-60.7			112.8	567.9	55.0	4.5	1.000025
62000.0	67.1	-60.2			109.8	568.5	2.5	3.4	1.000024
62500.0	65.5	-59.8			107.0	569.0	320.9	5.3	1.000024
63000.0	64.0	-60.1			104.6	568.6	308.1	8.1	1.000023
63500.0	62.4	-60.4			102.2	568.2	304.4	10.6	1.000023

STATION ALTITUDE 4051.00 FEET MSL
26 APR. 79 0820 HRS MST
ASCENSION NO. 44

UPPER AIR DATA
11.0033044
JALLEN

GEODETIC COORDINATES
33.10712 LAT DEG
106.49511 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
64000.0	60.9	-60.7			99.9	567.8	302.1	13.1	1.000022
64500.0	59.5	-61.0			97.6	567.4	309.8	10.7	1.000022
65000.0	58.0	-61.3			95.4	567.0	324.1	8.1	1.000021
65500.0	56.6	-61.2			93.1	567.2	330.3	6.2	1.000021
66000.0	55.3	-60.9			90.7	567.5	30.8	6.1	1.000020
66500.0	53.9	-60.7			88.4	567.7	58.8	8.5	1.000020
67000.0	52.7	-60.4			86.2	568.3	70.5	10.1	1.000019
67500.0	51.4	-60.1			84.0	568.6	78.7	11.9	1.000019
68000.0	50.2	-59.8			81.9	569.0	84.7	13.8	1.000018
68500.0	49.0	-59.5			79.8	569.5	89.6	16.0	1.000018
69000.0	47.8	-59.1			77.8	570.0	93.2	18.3	1.000017
69500.0	46.7	-58.7			75.8	570.5	95.5	20.0	1.000017
70000.0	45.6	-58.3			73.9	571.0	95.5	19.3	1.000016
70500.0	44.5	-57.9			72.0	571.5	95.5	18.6	1.000016
71000.0	43.4	-57.5			70.2	572.1	94.1	16.4	1.000016
71500.0	42.4	-57.1			68.4	572.6	83.7	9.9	1.000015
72000.0	41.4	-56.8			66.6	573.1	44.3	4.7	1.000015
72500.0	40.4	-56.4			64.9	573.6	346.2	5.1	1.000014
73000.0	39.5	-55.0			63.3	574.1	347.2	4.9	1.000014
73500.0	38.5	-55.5			61.7	574.7	349.3	4.8	1.000014
74000.0	37.6	-55.0			60.1	575.4	329.0	6.2	1.000013
74500.0	36.8	-54.5			58.6	576.1	304.3	13.0	1.000013
75000.0	35.9	-53.9			57.1	576.8	297.0	20.6	1.000013
75500.0	35.1	-53.4			55.6	577.5	293.7	24.2	1.000012
76000.0	34.3	-52.9			54.2	578.2	290.5	19.9	1.000012
76500.0	33.5	-52.4			52.8	578.9	285.5	15.7	1.000012
77000.0	32.7	-51.8			51.5	579.6	272.8	8.0	1.000011
77500.0	31.9	-51.3			50.2	580.2	132.8	7.8	1.000011
78000.0	31.2	-50.8			48.9	580.9	119.5	22.3	1.000011
78500.0	30.5	-50.3			47.6	581.6	116.9	29.8	1.000011
79000.0	29.8	-49.9			46.5	582.1	115.1	25.0	1.000010
79500.0	29.1	-49.8			45.4	582.2	112.3	20.3	1.000010
80000.0	28.4	-49.7			44.3	582.3	108.1	16.6	1.000010
80500.0	27.8	-49.6			43.3	582.5	102.4	14.5	1.000010
81000.0	27.2	-49.5			42.3	582.6	94.9	12.6	1.000009
81500.0	26.5	-49.5			41.3	582.7	86.2	10.2	1.000009
82000.0	25.9	-49.4			40.4	582.8	73.5	6.6	1.000009
82500.0	25.3	-49.3			39.4	582.9	39.0	4.0	1.000009
83000.0	24.8	-49.2			38.5	583.0	352.5	3.9	1.000009
83500.0	24.2	-49.1			37.6	583.1	342.9	3.8	1.000008

UPPER AIR DATA
11000J00044
JALLEN

STATION ALTITUDE 4051.00 FEET MSL
20 APR. 79 0920 HRS MST
ASCENSION NO. 44

GEODETIC COORDINATES
33.10712 LAT DEG
106.49511 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
84000.0	23.6	-49.0			36.8	583.2	332.6	3.7	1.000008
84500.0	23.1	-48.7			35.9	583.6	328.1	3.2	1.000008
85000.0	22.6	-48.2			35.0	584.3	62.8	2.0	1.000008
85500.0	22.1	-47.6			34.1	585.0	99.2	5.4	1.000008
86000.0	21.6	-47.1			33.3	585.7	106.8	9.3	1.000007
86500.0	21.1	-46.6			32.4	586.4	107.9	9.5	1.000007
87000.0	20.6	-46.0			31.6	587.1	108.9	9.7	1.000007
87500.0	20.2	-45.5			30.8	587.8	109.9	9.9	1.000007
88000.0	19.7	-45.2			30.1	588.2	112.8	11.2	1.000007
88500.0	19.3	-45.0			29.4	588.5	115.3	12.8	1.000007
89000.0	18.8	-44.8			28.7	588.7	117.3	14.4	1.000006
89500.0	18.4	-44.6			28.1	589.0	119.7	14.6	1.000006
90000.0	18.0	-44.4			27.4	589.2	122.5	14.2	1.000006
90500.0	17.6	-44.2			26.8	589.4	125.5	13.9	1.000006
91000.0	17.2	-44.0			26.2	589.7	130.0	12.7	1.000006
91500.0	16.8	-43.8			25.6	589.9	138.0	10.6	1.000006
92000.0	16.5	-43.7			25.0	590.2	149.4	8.8	1.000006
92500.0	16.1	-43.5			24.4	590.4	162.3	6.6	1.000005
93000.0	15.7	-43.3			23.9	590.7	252.5	11.5	1.000005
93500.0	15.4	-43.1			23.3	590.9	269.1	21.7	1.000005
94000.0	15.1	-42.9			22.8	591.1	274.5	31.4	1.000005
94500.0	14.7	-42.7			22.2	591.4	272.8	26.1	1.000005
95000.0	14.4	-42.5			21.7	591.6	270.4	20.9	1.000005
95500.0	14.1	-42.3			21.2	591.9	266.3	15.7	1.000005
96000.0	13.8	-42.1			20.8	592.1			1.000005
96500.0	13.5	-42.0			20.3	592.4			1.000005
97000.0	13.2	-41.8			19.8	592.6			1.000004
97500.0	12.9	-41.6			19.4	592.8			1.000004

MRN SIGNIFICANT LEVEL DATA

STATION ALTITUDE 4051.00 FEET MSL
26 APR. 79 0820 HRS MST
ASCENSION NO. 44

11600300H4
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

GEOPOTENTIAL ALTITUDE DECAMETERS	WIND DATA DIRECTION DEG (TN)	SPEED MPS	N-S MPS	E-W MPS	DEW PT DEP DEG C	TEMPERATURE AIR DEG C	PRESSURE MILLIBARS
2971.	9999.**	9999.**	-9999.**	-9999.**	99	-41.4	1.260+1
2660.	111.	5.	-2.	-5.	99	-45.3	2.000+1
2556.	328.	2.	-2.	1.	99	-49.0	2.340+1
2393.	116.	14.	6.	-12.	99	-49.9	3.000+1
2224.	348.	3.	-2.	1.	99	-55.8	3.900+1
2067.	85.	7.	-1.	-7.	99	-59.8	5.000+1
1979.	330.	4.	-3.	2.	99	-61.4	5.760+1
1896.	325.	3.	-2.	1.	99	-59.8	6.580+1
1857.	69.	4.	-1.	-3.	99	-61.0	7.000+1
1821.	80.	8.	-1.	-8.	99	-59.7	7.420+1
1731.	302.	20.	-11.	17.	99	-61.5	8.580+1
1637.	291.	35.	-12.	32.	99	-68.7	1.000+2

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

STATION ALTITUDE 4051.00 FEET MSL
26 APR. 79 0820 HRS MST
ASCENSION NO. 44

MANDATORY LEVELS
1160J0J0044
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.44511 LON DEG

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS
850.0	4943.	10.4	1.4	32.	9999.0	9999.0AA
800.0	6633.	13.6	-.4	38.	9999.0	9999.0AA
750.0	8401.	9.0	-2.4	49.	301.5	13.9
700.0	10263.	4.9	-4.1	54.	290.0	17.3
650.0	12236.	.7	-8.5	50.	277.3	19.0
600.0	14330.	-3.6	-9.3	64.	276.3	23.5
550.0	16570.	-8.3	-13.2	66.	269.7	30.0
500.0	18976.	-13.3	-22.4	46.	263.7	36.4
450.0	21582.	-18.8	-26.7	48.	263.1	43.3
400.0	24421.	-25.5	-30.8	61.	266.1	46.6
350.0	27551.	-33.2	-39.7	52.	267.6	52.5
300.0	31053.	-40.4			270.6	60.8
250.0	35033.	-51.6			284.5	58.8
200.0	39715.	-57.6			266.3	78.1
175.0	42469.	-59.4			287.0	74.0
150.0	45638.	-59.8			293.1	68.5
125.0	49313.	-66.9			295.0	59.9
100.0	53717.	-68.7			290.8	67.4
80.0	58205.	-60.6			35.0	12.5
70.0	60937.	-61.0			70.0	7.2
60.0	64090.	-60.9			305.7	11.9
50.0	67811.	-59.8			85.1	13.9
40.0	72425.	-56.2			345.9	5.0
30.0	78508.	-49.9			115.9	26.9
25.0	82425.	-49.2			8.8	3.7
20.0	87259.	-45.3			110.4	10.1
15.0	93592.	-42.9			274.5	31.2

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

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

MRN MANDATORY LEVELS
11600300H4
JALLEN

STATION ALTITUDE 4051.00 FEET MSL
26 APR. 79 0820 HRS MST
ASCENSION NO. 44

GEODETIC COORDINATES
33.10712 LAT DEG
106.49511 LON DEG

GEOPOTENTIAL ALTITUDE DECAMETERS	WIND DATA DIRECTION DEG (TN)	SPEED MPS	N-S MPS	E-W MPS	DEW PT DEP DEG C	TEMPERATURE AIR DEG C	PRESSURE MILLIBARS
2853.	274.	16.	-1.	16.	99	-42.9	1.500+1
2660.	110.	5.	2.	-5.	99	-45.3	2.000+1
2512.	9.	2.	-2.	-0.	99	-49.2	2.500+1
2393.	116.	14.	6.	-12.	99	-49.9	3.000+1
2208.	346.	3.	-3.	1.	99	-56.2	4.000+1
2067.	85.	7.	-1.	-7.	99	-59.8	5.000+1
1953.	30.	6.	-4.	5.	99	-60.9	6.000+1
1857.	70.	4.	-1.	-3.	99	-61.0	7.000+1
1774.	35.	6.	-5.	-4.	99	-60.6	8.000+1
1637.	291.	35.	-12.	32.	99	-68.7	1.000+2
1503.	295.	31.	-13.	26.	99	-66.9	1.250+2
1391.	293.	35.	-14.	32.	99	-59.8	1.500+2
1294.	287.	38.	-11.	36.	99	-59.4	1.750+2
1211.	288.	40.	-13.	36.	99	-57.6	2.000+2
1068.	284.	30.	-8.	29.	99	-51.6	2.500+2
947.	279.	31.	-5.	31.	99	-40.4	3.000+2
840.	288.	27.	-8.	26.	07	-33.2	3.500+2
744.	286.	24.	-7.	23.	05	-25.5	4.000+2
658.	283.	22.	-5.	22.	08	-18.8	4.500+2
578.	284.	19.	-4.	18.	09	-13.3	5.000+2
505.	290.	15.	-5.	15.	05	-8.3	5.500+2
437.	298.	12.	-6.	11.	06	-3.6	6.000+2
373.	277.	10.	-1.	10.	09	.7	6.500+2
313.	280.	9.	-2.	9.	07	4.9	7.000+2
256.	302.	7.	-4.	6.	11	9.0	7.500+2
202.	9999.**	9999.**	-9999.**	-9999.**	14	13.6	8.000+2
151.	9999.**	9999.**	-9999.**	-9999.**	17	18.4	8.500+2

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