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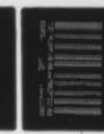


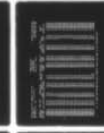







ARMY ELECTRONICS COMMAND WHITE SANDS MISSILE RANGE N--ETC F/G 4/2  
14822B LANCE MISSILE NUMBER 3329, ROUND NUMBER 314 AST.(U)  
JUL 78

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July 1978

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METEOROLOGICAL DATA REPORT

14822B LANCE  
MISSILE NO. 3329, ROUND NO. 314 AST  
(14 JUNE 1978)

BY

WSMR METEOROLOGICAL TEAM

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ATMOSPHERIC SCIENCES LABORATORY  
WHITE SANDS MISSILE RANGE, NEW MEXICO

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UNITED STATES ARMY ELECTRONICS COMMAND

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of 14822B Lance, Missile Number 3329, Round Number 314 AST, are presented in tabular form.			

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### INTRODUCTION

14822B Lance, Missile Number 3329, Round Number 314 AST, was launched from LC-39, White Sands Missile Range (WSMR), New Mexico, at 1430 HRS MDT, 14 June 1978. The scheduled launch time was 1430 HRS MDT.

### DISCUSSION

Meteorological data were recorded and reduced by the WSMR Meteorological Team, Atmospheric Sciences Laboratory (ASL), WSMR, New Mexico. The data are presented in the following tabulations.

ELEVATION	4,179.9	FEET/MSL
PRESSURE	880.0	MBS
TEMPERATURE	36.7	°C
RELATIVE HUMIDITY	17	%
DEW POINT	7.3	°C
DENSITY	986.5	GM/M <sup>3</sup>
WIND SPEED	12	MPH
WIND DIRECTION	210	DEGREES
CLOUD COVER	1/10	Cb

TABLE I. Surface Observations taken at WSD,  
1430 HRS MDT/14 June 1978

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)	HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
SUR	210	4.0	2100	192	15.5
100	195	2.5	2200	192	18.0
200	180	0.5	2300	195	18.5
300	171	0.5	2400	197	18.5
400	162	0.5	2500	194	22.0
500	178	3.0	2600	191	25.5
600	194	5.0	2700	192	21.0
700	195	6.0	2800	193	16.5
800	195	7.0	2900	195	16.5
900	192	8.0	3000	197	16.0
1000	188	8.5	3100	202	14.0
1100	190	8.5	3200	207	12.0
1200	192	8.0	3300	208	11.5
1300	196	7.0	3400	209	11.0
1400	199	6.0	3500	203	12.5
1500	198	8.5	3600	197	13.5
1600	197	11.0	3700	200	14.5
1700	193	11.0	3800	202	15.5
1800	188	11.0	3900	197	16.5
1900	190	12.0	4000	192	17.0
2000	191	12.5	4100	190	16.0

TABLE II. PILOT-BALLOON-MEASURED WIND DATA, RELEASE NO. 1  
RELEASED FROM LC-39, AT 1420 HRS MDT/14 JUNE 1978  
14822B LANCE, MISSILE NO. 3329, ROUND NO. 314 AST

PIBAL RELEASE POINT WSTM COORDINATES:

X = 571,739.24    Y = 362,745.21    Z = 4,126.59

APPROXIMATELY: 3/4 MILE SOUTH OF LAUNCHER.

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
4200	187	15.0
4300	188	16.0
4400	188	17.0
4500	188	15.0
4600	187	13.0
4700	191	13.5
4800	194	14.0
4900	192	13.5
5000	190	13.0
5100	190	14.5
5200	190	15.5
5300	189	14.5
5400	187	13.5
5500	191	12.0
5600	194	10.5
5700	194	12.5
5800	194	14.0
5900	197	12.0
6000	200	10.0
6100	202	11.0
6200	204	11.5
6300	204	12.0
6400	204	12.0
6500	203	13.5
6600	201	14.5

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
6700	207	13.0
6800	213	11.0
6900	211	11.5
7000	208	11.5
7100	205	12.0
7200	202	12.5
7300	205	12.0
7400	207	11.0
7500	203	12.0
7600	198	12.5
7700	198	11.5
7800	197	10.5
7900	197	11.5
8000	196	12.0
8100	202	10.0
8200	208	7.5
8300	220	8.5
8400	232	9.0
8500	230	9.5
8600	227	10.0
8700	232	9.0
8800	236	7.5
8900	242	7.0
9000	247	6.0

TABLE II. (CONT)

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.



HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)	HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
SUR	210	4.0	2100	211	6.5
100	195	2.5	2200	208	5.0
200	180	0.5	2300	208	6.5
300	182	3.0	2400	208	8.0
400	184	5.0	2500	208	7.5
500	185	6.5	2600	207	6.5
600	185	8.0	2700	205	7.5
700	183	7.0	2800	202	8.5
800	180	6.0	2900	203	8.5
900	194	6.0	3000	204	8.0
1000	207	5.5	3100	199	8.0
1100	198	7.5	3200	193	7.5
1200	189	9.0	3300	198	8.5
1300	192	9.5	3400	203	9.0
1400	195	9.5	3500	200	8.0
1500	196	10.0	3600	197	6.5
1600	196	10.0	3700	199	8.5
1700	200	8.5	3800	201	10.5
1800	204	7.0	3900	197	11.5
1900	209	7.5	4000	193	12.5
2000	213	7.5	4100	194	10.5

TABLE III. PILOT-BALLOON-MEASURED WIND DATA, RELEASE NO. 2  
RELEASED FROM LC-39, AT 1430 HRS MDT/14 JUNE 1978  
14822B LANCE, MISSILE NO. 3329, ROUND NO. 314 AST

PIBAL RELEASE POINT WSTM COORDINATES:

X = 571,739.24    Y = 362,745.21    Z = 4,126.59

APPROXIMATELY:    3/4 MILE SOUTH OF LAUNCHER.

NOTE:    WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)	HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
4200	194	8.5	6700	219	11.5
4300	196	9.0	6800	218	12.0
4400	198	9.0	6900	226	12.5
4500	198	7.5	7000	234	12.5
4600	198	6.0	7100	227	12.5
4700	192	7.5	7200	220	12.5
4800	185	9.0	7300	216	14.0
4900	185	9.0	7400	212	15.5
5000	184	9.0	7500	213	14.5
5100	190	8.5	7600	213	13.0
5200	196	8.0	7700	229	11.0
5300	195	8.0	7800	244	9.0
5400	193	8.0	7900	249	9.0
5500	190	9.0	8000	254	9.0
5600	186	9.5	8100	237	11.0
5700	194	9.0	8200	220	12.5
5800	202	8.5	8300	238	10.5
5900	201	9.0	8400	255	8.0
6000	200	9.5	8500	231	9.5
6100	197	11.0	8600	207	10.5
6200	194	12.5	8700	221	9.0
6300	201	11.0	8800	234	7.5
6400	207	9.5	8900	228	5.5
6500	213	10.0	9000	221	3.5
6600	219	10.5			

TABLE III. (CONT)

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

STATION ALTITUDE 3997.30 FEET MSL  
 14 JUNE 78 1410 HRS MDT  
 ASCENSION NO. 73

SIGNIFICANT LEVEL DATA  
 1650060073  
 S M R  
 TABLE IV.

GEODETIC COORDINATES  
 32.48034 LAT DEG  
 106.42307 LON DEG

PRESSURE MILLIBARS	PRESSURE GEOMETRIC ALTITUDE		TEMPERATURE		REL. HUM. PERCENT
	MSL FEET	DEGREES	AIR DEGREES	DEWPOINT CENTIGRADE	
880.8	3997.3	36.7	7.7		17.0
850.0	5056.9	32.6	12.3		29.0
700.0	10638.1	15.4	3.9		46.0
646.6	12827.9	9.4	.3		53.0
599.0	14893.7	3.7	-4.0		57.0
544.8	17396.0	-3.5	-6.9		77.0
536.0	17819.1	-4.4	-10.0		65.0
519.2	18642.9	-5.8	-11.1		66.0
510.1	19097.7	-7.4	-10.7		77.0
500.0	19610.5	-7.4	-17.3		45.0
478.8	20718.0	-8.7	-23.5		29.0
463.2	21562.0	-9.0	-23.4		30.0
433.4	23240.6	-13.7	-25.5		36.0
400.0	25235.3	-16.7	-30.1		30.0
300.0	32114.5	-33.7	-44.9		31.0
274.4	34151.9	-39.0	-49.4		32.0
250.0	36232.7	-44.1			
234.2	37604.5	-47.6			
200.0	41054.2	-53.7			
158.8	45809.1	-65.6			
150.0	46951.2	-65.8			
124.4	50666.9	-69.4			
121.2	51161.3	-68.3			
115.2	52161.6	-70.2			
103.3	54314.2	-71.3			
100.0	54949.8	-69.9			
89.0	57224.7	-72.5			
83.6	58451.6	-68.3			
80.8	59125.6	-68.8			
70.0	61996.4	-63.7			

STATION ALTITUDE 3997.30 FEET MSL  
14 JUNE 78 1410 HRS MDT  
ASCENSION NO. 73

SIGNIFICANT LEVEL DATA  
1650060073  
S M R  
TABLE IV. (CONT)

GEODETTIC COORDINATES  
32.48034 LAT DEG  
106.42307 LON DEG

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
65.4 63381.7	-61.2	
57.8 65912.4	-61.6	
50.0 68906.7	-57.8	
42.4 72376.4	-53.7	
34.0 77096.1	-51.1	

UPPER AIR DATA  
 1650060073  
 S M R  
 TABLE V.

STATION ALTITUDE 3997.30 FEET MSL  
 14 JUNE 78  
 1410 HRS MDT  
 ASCENSION NO. 73

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	DENPOINT CENTIGRADE				DIRECTION DEGREES(TN)	SPEED KNOTS	
3997.3	880.8	36.7	7.7	17.0	985.8	687.3	120.0	8.9	1.000261
4000.0	880.7	36.7	7.7	17.0	985.8	687.3	120.1	8.9	1.000261
4500.0	866.1	34.8	10.4	22.7	974.5	685.5	130.7	9.6	1.000268
5000.0	851.6	32.8	12.1	28.4	963.5	683.6	139.7	10.6	1.000272
5500.0	837.0	31.2	11.8	30.3	951.9	681.8	146.9	11.8	1.000269
6000.0	822.6	29.7	11.2	31.9	940.4	680.0	152.8	13.2	1.000265
6500.0	808.4	28.2	10.5	33.4	929.1	678.3	157.5	14.6	1.000260
7000.0	794.4	26.6	9.9	34.9	917.9	676.5	163.6	14.9	1.000256
7500.0	780.7	25.1	9.1	36.4	906.9	674.7	172.6	14.0	1.000252
8000.0	767.3	23.5	8.4	38.0	896.1	672.9	181.8	13.4	1.000247
8500.0	754.0	22.0	7.6	39.5	885.4	671.0	190.2	12.8	1.000243
9000.0	741.0	20.4	6.8	41.0	874.9	669.2	199.3	12.5	1.000238
9500.0	728.3	18.9	5.9	42.5	864.5	667.4	206.7	12.4	1.000234
10000.0	715.7	17.4	5.0	44.1	854.3	665.6	214.1	12.5	1.000230
10500.0	703.4	15.8	4.1	45.6	844.2	663.7	224.9	11.6	1.000225
11000.0	690.9	14.4	3.3	47.2	833.4	662.0	239.5	10.7	1.000221
11500.0	678.5	13.0	2.5	48.8	822.5	660.4	251.8	10.7	1.000217
12000.0	666.3	11.7	1.7	50.4	811.8	658.8	257.9	11.0	1.000213
12500.0	654.3	10.3	.9	52.0	801.2	657.1	261.2	11.6	1.000209
13000.0	642.5	8.9	-.0	53.3	790.6	655.5	257.7	12.7	1.000205
13500.0	630.7	7.5	-1.1	54.3	780.1	653.8	256.5	13.6	1.000201
14000.0	619.1	6.2	-2.1	55.3	769.7	652.1	258.2	14.3	1.000197
14500.0	607.8	4.8	-3.2	56.2	759.5	650.5	261.1	15.0	1.000193
15000.0	596.6	3.4	-4.1	57.8	749.4	648.8	265.2	15.8	1.000189
15500.0	585.4	2.0	-4.6	61.8	739.2	647.1	268.9	16.6	1.000186
16000.0	574.4	.5	-5.1	65.8	729.2	645.4	272.5	17.3	1.000184
16500.0	563.6	-.9	-5.7	69.8	719.3	643.6	277.1	18.0	1.000181
17000.0	553.0	-2.4	-6.4	73.8	709.6	641.9	282.6	18.7	1.000178
17500.0	542.6	-3.7	-7.7	74.0	699.9	640.2	288.6	18.7	1.000174
18000.0	532.3	-4.7	-10.2	65.2	689.4	638.9	295.5	18.4	1.000168

STATION ALTITUDE 3997.30 FEET MSL  
 14 JUNE 78 1410 HRS MDT  
 ASCENSION NO. 73

UPPER AIR DATA  
 1650060073  
 S M R  
 TABLE V. (CONT)

GEODETIC COORDINATES  
 32.48034 LAT DEG  
 106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		DEGREES	DEWPOINT CENTIGRADE				DIRECTION DEGREES(TN)	SPEED KNOTS	
16500.0	522.1	-5.6	-10.9	65.8	678.4	637.9	299.3	17.3	1.000165
19000.0	512.0	-7.1	-10.8	74.6	669.0	636.1	302.4	15.9	1.000163
19500.0	502.2	-7.4	-15.6	51.9	657.4	635.5	303.2	15.0	1.000156
20000.0	492.4	-7.9	-19.2	39.4	646.0	634.9	304.0	14.1	1.000151
20500.0	482.9	-8.4	-22.1	32.1	635.0	634.1	304.8	13.1	1.000147
21000.0	473.5	-8.8	-23.4	29.3	623.6	633.6	301.8	11.4	1.000144
21500.0	464.3	-9.0	-23.4	29.9	611.9	633.4	295.8	9.6	1.000141
22000.0	455.2	-10.2	-23.9	31.6	602.7	631.9	294.0	9.1	1.000139
22500.0	446.3	-11.6	-24.5	33.4	594.1	630.2	294.5	9.0	1.000137
23000.0	437.6	-13.0	-25.2	35.1	585.6	628.5	299.0	9.5	1.000135
23500.0	428.9	-14.1	-26.1	35.2	576.4	627.2	304.1	9.1	1.000132
24000.0	420.4	-14.8	-27.2	33.7	566.6	626.3	311.2	8.1	1.000130
24500.0	412.0	-15.6	-28.4	32.2	557.0	625.4	315.5	7.6	1.000127
25000.0	403.8	-16.3	-29.6	30.7	547.5	624.5	318.1	7.4	1.000125
25500.0	395.6	-17.4	-30.7	30.0	538.5	623.2	315.3	7.5	1.000123
26000.0	387.4	-18.6	-31.8	30.1	530.0	621.7	311.0	7.7	1.000121
26500.0	379.4	-19.8	-32.8	30.2	521.5	620.2	307.1	8.3	1.000118
27000.0	371.5	-21.1	-33.9	30.3	513.3	618.7	303.7	9.0	1.000116
27500.0	363.9	-22.3	-35.0	30.3	505.1	617.1	299.1	10.1	1.000114
28000.0	356.3	-23.5	-36.0	30.4	497.1	615.6	296.4	11.6	1.000112
28500.0	349.0	-24.8	-37.1	30.5	489.3	614.1	296.2	13.5	1.000111
29000.0	341.7	-26.0	-38.2	30.5	481.6	612.5	298.6	15.4	1.000109
29500.0	334.7	-27.2	-39.3	30.6	474.0	611.0	302.0	17.3	1.000107
30000.0	327.7	-28.5	-40.3	30.7	466.5	609.4	302.8	18.3	1.000105
30500.0	321.0	-29.7	-41.4	30.8	459.2	607.9	302.7	19.0	1.000103
31000.0	314.3	-30.9	-42.5	30.8	452.0	606.3	296.4	19.4	1.000102
31500.0	307.8	-32.2	-43.6	30.9	444.9	604.8	288.8	20.1	1.000100
32000.0	301.4	-33.4	-44.6	31.0	438.0	603.2	286.2	20.9	1.000098
32500.0	295.0	-34.7	-45.7	31.2	430.9	601.6	286.3	21.7	1.000097
33000.0	288.6	-36.0	-46.8	31.4	423.9	600.0	287.7	22.6	1.000095

STATION ALTITUDE 3997.30 FEET MSL  
 14 JUNE 78 1410 HRS MDT  
 ASCENSION NO. 73

UPPER AIR DATA  
 1650060073  
 S M R (CONT)  
 TABLE V.

GEODETIC COORDINATES  
 32.46034 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
33500.0	282.3	-37.3	-47.9	31.7	417.0	598.3	291.0	23.9	1.000093
34000.0	276.2	-38.6	-49.0	31.9	410.2	596.7	293.4	24.9	1.000092
34500.0	270.2	-39.9	-51.7	26.6**	403.4	595.1	292.4	24.9	1.000090
35000.0	264.2	-41.1	-55.6	19.0**	396.5	593.5	291.3	24.8	1.000089
35500.0	258.3	-42.3	-60.7	11.3**	389.8	591.9	292.2	24.4	1.000087
36000.0	252.6	-43.5	-69.9	3.6**	383.3	590.3	293.1	24.0	1.000085
36500.0	247.0	-44.8			376.7	588.8	293.4	24.4	1.000084
37000.0	241.4	-46.0			370.2	587.2	293.2	24.8	1.000082
37500.0	236.0	-47.2			363.8	585.6	289.9	24.8	1.000081
38000.0	230.6	-48.2			357.1	584.3	286.5	25.1	1.000080
38500.0	225.3	-49.1			350.3	583.1	283.3	26.1	1.000078
39000.0	220.1	-50.0			343.6	582.0	283.1	27.0	1.000077
39500.0	215.0	-50.9			337.0	580.8	283.9	27.7	1.000075
40000.0	210.1	-51.8			330.6	579.6	284.4	26.7	1.000074
40500.0	205.2	-52.7			324.3	578.4	284.8	25.6	1.000072
41000.0	200.5	-53.6			318.1	577.2	284.3	24.3	1.000071
41500.0	195.7	-54.8			312.3	575.6	283.9	23.1	1.000070
42000.0	191.0	-56.1			306.6	574.0	283.4	22.9	1.000068
42500.0	186.5	-57.3			300.9	572.3	282.9	22.7	1.000067
43000.0	182.0	-58.6			295.4	570.7	282.8	22.5	1.000066
43500.0	177.6	-59.8			290.1	569.0	282.7	22.3	1.000065
44000.0	173.4	-61.1			284.8	567.3	282.9	22.7	1.000063
44500.0	169.2	-62.3			279.6	565.7	283.1	23.4	1.000062
45000.0	165.2	-63.6			274.5	564.0	282.9	24.8	1.000061
45500.0	161.2	-64.8			269.6	562.3	282.4	27.0	1.000060
46000.0	157.3	-65.6			264.1	561.2	281.9	28.7	1.000059
46500.0	153.4	-65.7			257.7	561.1	281.2	29.3	1.000057
47000.0	149.6	-65.8			251.4	560.9	280.7	29.6	1.000056
47500.0	145.9	-66.3			245.8	560.3	280.2	28.0	1.000055
48000.0	142.3	-66.8			240.2	559.6	279.6	26.6	1.000053

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

STATION ALTITUDE 3997.30 FEET MSL  
 14 JUNE 78  
 ASCENSION NO. 73

UPPER AIR DATA  
 1650060073  
 S M R

GEODETIC COORDINATES  
 32.48034 LAT DEG  
 106.42307 LON DEG

TABLE V. (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREE CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INJEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
48500.0	138.7	-67.3		234.8	558.9	278.9	25.6	1.000052
49000.0	135.3	-67.8		229.5	558.3	278.2	24.4	1.000051
49500.0	131.9	-68.3		224.3	557.6	276.9	21.2	1.000050
50000.0	128.6	-68.8		219.3	557.0	275.2	18.0	1.000049
50500.0	125.4	-69.2		214.3	556.3	272.5	13.7	1.000048
51000.0	122.3	-68.7		208.4	557.1	267.1	9.3	1.000046
51500.0	119.3	-68.9		203.4	556.8	260.4	6.8	1.000045
52000.0	116.3	-69.9		199.2	555.5	256.5	5.9	1.000044
52500.0	113.3	-70.4		194.7	554.8	252.1	5.4	1.000043
53000.0	110.5	-70.6		190.0	554.4	249.5	5.6	1.000042
53500.0	107.7	-70.9		185.5	554.1	245.7	6.0	1.000041
54000.0	105.0	-71.1		181.0	553.7	237.3	7.2	1.000040
54500.0	102.3	-70.9		176.2	554.1	231.1	8.6	1.000039
55000.0	99.7	-70.0		171.0	555.3	218.3	11.1	1.000038
55500.0	97.2	-70.5		167.1	554.5	210.5	13.9	1.000037
56000.0	94.8	-71.1		163.4	553.8	203.3	16.2	1.000036
56500.0	92.4	-71.7		159.7	553.0	196.8	18.4	1.000036
57000.0	90.0	-72.2		156.1	552.2	192.6	19.3	1.000035
57500.0	87.8	-71.6		151.7	553.1	191.2	16.2	1.000034
58000.0	85.5	-69.8		146.6	555.5	189.1	13.1	1.000033
58500.0	83.4	-68.3		141.8	557.5	181.1	9.5	1.000032
59000.0	81.3	-68.7		138.6	557.0	163.8	6.3	1.000031
59500.0	79.3	-68.1		134.8	557.8	157.8	4.7	1.000030
60000.0	77.3	-67.2		130.9	559.0	167.6	3.8	1.000029
60500.0	75.4	-66.4		127.1	560.2	170.8	3.3	1.000028
61000.0	73.6	-65.5		123.4	561.4	152.3	3.6	1.000027
61500.0	71.8	-64.6		119.9	562.6	138.0	4.2	1.000027
62000.0	70.0	-63.7		116.4	563.8	122.2	7.3	1.000026
62500.0	68.3	-62.8		113.1	565.0	115.9	10.5	1.000025
63000.0	66.6	-61.9		109.9	566.2	115.5	12.3	1.000024

120 62 80 29 82



STATION ALTITUDE 3997.30 FEET MSL  
 14 JUNE 78 1410 HRS MDT  
 ASCENSION NO. 73

UPPER AIR DATA  
 1650060073  
 S M R  
 TABLE V. (CONT)

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 CENTIGRADE	DEWPOINT CENTIGRADE				DIRECTION DEGREES(TN)	SPEED KNOTS	
03500.0	65.0	-61.2		106.9	567.1	116.9	13.2	1.000024	
04000.0	63.5	-61.3		104.3	567.0	116.5	14.5	1.000023	
04500.0	61.9	-61.4		101.9	566.9	113.0	16.4	1.000023	
05000.0	60.4	-61.5		99.4	566.8	110.2	18.4	1.000022	
05500.0	59.0	-61.5		97.1	566.7	110.3	18.7	1.000022	
06000.0	57.6	-61.5		94.7	566.8	110.5	18.9	1.000021	
06500.0	56.2	-60.9		92.2	567.6	108.1	19.4	1.000021	
07000.0	54.8	-60.2		89.7	568.5	103.7	20.4	1.000020	
07500.0	53.5	-59.6		87.3	569.3	99.3	21.6	1.000019	
08000.0	52.2	-59.0		85.0	570.2	93.1	23.6	1.000019	
08500.0	51.0	-58.3		82.7	571.0	87.6	25.8	1.000018	
09000.0	49.8	-57.7		80.5	571.8	87.6	26.2	1.000018	
09500.0	48.6	-57.1		78.4	572.6	89.2	25.9	1.000017	
70000.0	47.5	-56.5		76.3	573.4	90.7	26.2	1.000017	
70500.0	46.4	-55.9		74.3	574.2	92.0	29.0	1.000017	
71000.0	45.3	-55.3		72.4	575.0	93.1	31.9	1.000016	
71500.0	44.2	-54.7		70.5	575.8	92.8	27.9	1.000016	
72000.0	43.2	-54.1		68.7	576.5	91.0	19.4	1.000015	
72500.0	42.2	-53.6		66.9	577.2	86.4	10.9	1.000015	
73000.0	41.2	-53.4		65.3	577.6	66.9	5.7	1.000015	
73500.0	40.2	-53.1		63.7	577.9	352.6	3.8	1.000014	
74000.0	39.3	-52.8		62.1	578.3	352.0	3.8	1.000014	
74500.0	38.4	-52.5		60.6	578.7	83.5	9.3	1.000013	
75000.0	37.5	-52.3		59.1	579.0	95.0	19.0	1.000013	
75500.0	36.6	-52.0		57.7	579.4			1.000013	
76000.0	35.8	-51.7		56.3	579.7			1.000013	
76500.0	35.0	-51.4		54.9	580.1			1.000012	
77000.0	34.2	-51.2		53.6	580.5			1.000012	

STATION ALTITUDE 3997.30 FEET MSL  
 14 JUNE 78  
 ASCENSION NO. 73

MANDATORY LEVELS  
 1650060073  
 S M R  
 TABLE VI.

GEODETIC COORDINATES  
 32.48034 LAT DEG  
 106.42307 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	5053.	32.6	12.3	29.	140.5	10.8
800.0	6830.	27.2	10.1	34.	160.8	15.3
750.0	8685.	21.5	7.3	40.	193.6	12.6
700.0	10627.	15.4	3.9	46.	228.5	11.3
650.0	12671.	9.8	.6	53.	259.9	12.0
600.0	14831.	3.8	-3.9	57.	263.9	15.5
550.0	17126.	-2.8	-6.6	75.	284.0	18.9
500.0	19582.	-7.4	-17.3	45.	303.4	14.8
450.0	22261.	-11.0	-24.2	33.	292.9	8.9
400.0	25193.	-16.7	-30.1	30.	317.8	7.4
350.0	28434.	-24.6	-37.0	30.	296.2	13.4
300.0	32049.	-33.7	-44.9	31.	286.2	21.1
250.0	36152.	-44.1			293.3	24.2
200.0	40954.	-53.7			284.3	24.2
175.0	43725.	-60.6			282.8	22.5
150.0	46823.	-65.8			280.7	29.8
125.0	50425.	-69.3			272.1	13.3
100.0	54778.	-69.9			219.9	10.6
80.0	59125.	-68.4			154.8	5.1
70.0	61782.	-63.7			122.9	7.0
60.0	64913.	-61.5			110.0	16.6
50.0	68646.	-57.8			87.4	26.3
40.0	73321.	-53.0			340.7	4.2

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

STATION ALTITUDE 3989.00 FEET MSL  
 14 JUNE 78  
 ASCENSION NO. 368  
 1420 HRS XDT

SIGNIFICANT LEVEL DATA  
 1650020368  
 WHITE SANDS  
 TABLE VII.

GEODEIC COORDINATES  
 32.40043 LAT DEG  
 106.37033 LON DEG

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT
881.0	36.7	17.0
850.0	31.7	26.0
759.4	22.0	33.0
700.0	15.1	41.0
632.4	7.8	51.0
611.4	4.9	48.0
570.0	-0.4	63.0
553.0	-1.8	61.0
525.2	-6.4	75.0
500.0	-8.1	52.0
479.2	-9.6	32.0
471.6	-8.1	20.0
441.0	-12.4	25.0
400.0	-15.7	19.0
397.4	-16.4	19.0
336.8	-27.1	20.0
300.0	-33.6	20.0
250.0	-44.0	20.0
200.0	-53.7	20.0
160.8	-64.1	20.0
150.0	-64.5	20.0
134.0	-68.4	20.0
120.0	-68.4	20.0
104.0	-70.6	20.0
100.0	-68.6	20.0
89.0	-70.9	20.0
86.2	-67.8	20.0
75.0	-67.8	20.0
70.0	-64.3	20.0
64.2	-60.6	20.0

STATION ALTITUDE 3989.00 FEET MSL  
14 JUNE 78  
ASCENSION NO. 368  
1420 HRS MDT

SIGNIFICANT LEVEL DATA  
1650020368  
WHITE SANDS  
TABLE VII. (CONT)

GEODETTIC COORDINATES  
32.40043 LAT DEG  
106.37033 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT
61.6	64657.7	-61.6		
50.0	68972.1	-57.3		
38.4	74553.2	-52.2		
30.0	79871.0	-49.3		
26.2	82960.3	-26.2		

STATION ALTITUDE 3989.00 FEET MSL  
 14 JUNE 78  
 ASCENSION NO. 368  
 1420 HRS MDT

UPPER AIR DATA  
 1650020368  
 WHITE SANDS  
 TABLE VIII.

GEODETIC COORDINATES  
 32.40043 LAT DEG  
 106.37033 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 DATA SPEED KNOTS	INDEX OF REFRACTION
3989.0	881.0	36.7	7.7	17.0	986.0	687.3	180.0	6.0	1.000261
4000.0	880.7	36.6	7.7	17.1	985.8	687.3	180.4	6.0	1.000261
4500.0	866.0	34.3	9.1	21.3	976.3	684.8	196.9	7.4	1.000264
5000.0	851.5	32.0	9.8	25.5	967.0	682.3	207.7	9.1	1.000265
5500.0	837.0	30.4	9.3	27.0	955.6	680.5	214.9	11.1	1.000261
6000.0	822.7	28.9	8.6	28.0	944.0	678.8	209.2	12.1	1.000257
6500.0	808.6	27.4	7.9	29.1	932.6	677.1	197.5	12.7	1.000252
7000.0	794.8	25.9	7.1	30.2	921.4	675.4	193.6	14.0	1.000248
7500.0	781.2	24.4	6.3	31.2	910.3	673.6	190.3	15.4	1.000244
8000.0	767.9	23.0	5.5	32.3	899.4	671.9	194.1	14.4	1.000240
8500.0	754.6	21.5	4.8	33.6	888.5	670.1	198.8	13.4	1.000236
9000.0	741.4	20.0	4.2	35.4	877.4	668.4	203.5	12.1	1.000232
9500.0	728.3	18.5	3.6	37.1	866.5	666.6	208.9	10.7	1.000228
10000.0	715.5	17.0	2.9	38.8	855.8	664.9	214.6	9.4	1.000225
10500.0	702.9	15.5	2.1	40.6	845.2	663.1	221.0	8.3	1.000221
11000.0	690.3	14.1	1.5	42.4	834.1	661.5	231.3	7.1	1.000217
11500.0	677.9	12.8	.9	44.2	822.9	660.0	247.4	6.1	1.000214
12000.0	665.7	11.5	.3	45.9	811.8	658.4	259.8	6.5	1.000210
12500.0	653.7	10.2	-.4	47.7	801.0	656.9	264.1	7.8	1.000207
13000.0	641.9	8.9	-1.1	49.5	790.3	655.3	268.2	9.3	1.000203
13500.0	630.3	7.5	-2.0	50.7	779.9	653.7	272.4	10.8	1.000199
14000.0	618.7	5.9	-3.9	49.1	770.2	651.7	275.4	12.4	1.000194
14500.0	607.3	4.4	-5.2	49.4	760.3	649.9	276.3	13.3	1.000190
15000.0	596.0	3.0	-5.5	53.5	750.0	648.2	277.0	14.1	1.000187
15500.0	584.9	1.5	-5.9	57.5	739.9	646.5	278.5	14.5	1.000185
16000.0	574.0	.1	-6.4	61.5	729.9	644.8	281.0	14.4	1.000182
16500.0	563.2	-1.0	-7.3	62.2	719.1	643.5	283.5	14.4	1.000178
17000.0	552.6	-1.9	-8.3	61.2	708.0	642.4	285.6	14.9	1.000175
17500.0	542.0	-3.6	-8.9	66.4	699.0	640.3	287.4	15.6	1.000172
18000.0	531.7	-5.3	-9.6	71.7	690.1	638.3	290.1	16.0	1.000169

STATION ALTITUDE 3989.00 FEET MSL  
 14 JUNE 78  
 ASCENSION NO. 368 1420 HRS MDT

UPPER AIR DATA  
 1650020368  
 WHITE SANDS  
 TABLE VIII. (CONT)

GEODETIC COORDINATES  
 32.40043 LAT DEG  
 106.37033 LON 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
18500.0	521.5	-6.6	-10.9	71.7	680.4	636.6	292.8	16.3	1.000166
19000.0	511.5	-7.3	-13.2	62.6	669.2	635.7	296.2	15.3	1.000161
19500.0	501.6	-8.0	-15.7	53.5	658.1	634.8	300.4	13.9	1.000156
20000.0	491.9	-8.7	-18.6	44.3	647.2	633.9	300.9	12.5	1.000152
20500.0	482.3	-9.4	-21.9	35.0	636.4	633.0	299.5	11.1	1.000147
21000.0	472.9	-8.4	-26.2	22.1	621.8	634.1	299.9	10.5	1.000142
21500.0	463.7	-9.2	-27.3	21.3	611.6	633.1	301.2	10.3	1.000140
22000.0	454.6	-10.4	-27.6	22.7	602.6	631.6	305.0	10.0	1.000138
22500.0	445.8	-11.7	-28.1	24.2	593.7	630.1	310.9	9.7	1.000136
23000.0	437.0	-12.7	-28.8	24.4	584.2	628.9	314.9	9.5	1.000133
23500.0	428.3	-13.4	-29.9	23.2	574.2	628.0	316.4	9.4	1.000131
24000.0	419.8	-14.1	-31.1	22.0	564.3	627.2	318.0	9.2	1.000128
24500.0	411.5	-14.7	-32.3	20.7	554.6	626.4	316.3	8.9	1.000126
25000.0	403.4	-15.4	-33.5	19.5	545.0	625.5	314.1	8.5	1.000123
25500.0	395.3	-16.7	-34.8	19.0	536.9	623.9	312.2	8.5	1.000121
26000.0	387.2	-18.1	-35.9	19.2	528.7	622.3	311.2	9.0	1.000119
26500.0	379.3	-19.4	-36.9	19.3	520.6	620.6	310.2	9.5	1.000117
27000.0	371.6	-20.7	-38.0	19.4	512.7	619.0	306.0	10.7	1.000116
27500.0	364.0	-22.1	-39.1	19.5	504.9	617.4	302.1	12.2	1.000114
28000.0	356.6	-23.4	-40.2	19.7	497.3	615.7	299.7	13.7	1.000112
28500.0	349.3	-24.7	-41.2	19.8	489.7	614.1	299.6	15.5	1.000110
29000.0	342.1	-26.1	-42.3	19.9	482.3	612.4	299.5	17.3	1.000108
29500.0	335.1	-27.4	-43.4	20.0	474.9	610.8	301.3	17.9	1.000107
30000.0	328.0	-28.6	-44.4	20.0	467.2	609.3	303.7	18.2	1.000105
30500.0	321.1	-29.8	-45.4	20.0	459.6	607.8	304.1	18.0	1.000103
31000.0	314.3	-31.0	-46.4	20.0	452.1	606.3	301.8	17.4	1.000101
31500.0	307.7	-32.2	-47.5	20.0	444.7	604.8	299.0	17.1	1.000100
32000.0	301.2	-33.4	-48.5	20.0	437.5	603.3	294.7	19.0	1.000098
32500.0	294.6	-34.6	-50.5	18.0**	430.3	601.7	291.2	20.9	1.000096
33000.0	288.2	-35.9	-52.8	15.6**	423.1	600.1	290.1	22.4	1.000095

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

UPPER AIR DATA  
 1650020366  
 WHITE SANDS  
 TABLE VIII. (CONT)

STATION ALTITUDE 3989.00 FEET MSL  
 14 JUNE 78  
 ASCENSION NO. 368

GEODETIC COORDINATES  
 32.40043 LAT DEG  
 106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
33500.0	281.9	-37.2	13.2**	416.1	598.5	290.9	23.3	1.000093
34000.0	275.7	-38.4	10.7**	409.2	596.9	291.7	24.2	1.000091
34500.0	269.7	-39.7	8.3**	402.4	595.3	292.9	24.0	1.000090
35000.0	263.8	-40.9	5.9**	395.7	593.7	294.2	23.7	1.000088
35500.0	258.0	-42.2	3.5**	389.2	592.0	294.5	23.4	1.000087
36000.0	252.4	-43.5	1.0**	382.6	590.4	291.1	23.4	1.000085
36500.0	246.7	-44.6		376.0	589.0	287.6	23.5	1.000084
37000.0	241.1	-45.6		369.0	587.7	284.5	23.7	1.000082
37500.0	235.6	-46.6		362.2	586.4	281.7	23.9	1.000081
38000.0	230.2	-47.6		355.5	585.1	279.0	24.1	1.000079
38500.0	224.9	-48.6		348.9	583.8	280.3	24.8	1.000078
39000.0	219.8	-49.6		342.5	582.5	281.7	25.5	1.000076
39500.0	214.8	-50.6		336.2	581.2	282.6	25.8	1.000075
40000.0	209.9	-51.6		330.0	579.9	282.8	25.4	1.000074
40500.0	205.1	-52.6		323.9	578.5	283.0	25.0	1.000072
41000.0	200.4	-53.6		318.0	577.2	283.1	24.1	1.000071
41500.0	195.6	-54.8		312.0	575.7	283.2	23.0	1.000069
42000.0	191.0	-55.9		306.2	574.2	283.2	22.1	1.000068
42500.0	186.4	-57.1		300.5	572.7	283.3	22.4	1.000067
43000.0	181.9	-58.2		294.9	571.2	283.4	22.6	1.000066
43500.0	177.6	-59.4		289.4	569.6	281.2	24.4	1.000064
44000.0	173.4	-60.5		284.0	568.1	278.9	26.3	1.000063
44500.0	169.2	-61.7		278.7	566.5	278.1	27.9	1.000062
45000.0	165.2	-62.8		273.6	565.0	278.6	28.9	1.000061
45500.0	161.2	-64.0		268.5	563.4	279.0	29.9	1.000060
46000.0	157.3	-64.2		262.3	563.1	279.6	28.8	1.000058
46500.0	153.4	-64.4		256.0	562.9	280.2	27.8	1.000057
47000.0	149.7	-64.6		250.0	562.6	279.6	26.9	1.000056
47500.0	146.0	-65.4		244.8	561.5	278.0	25.9	1.000055
48000.0	142.4	-66.3		239.8	560.3	276.3	25.0	1.000053

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

UPPER AIR DATA  
 1650020368  
 WHITE SANDS  
 TABLE VIII. (CONT)

STATION ALTITUDE 3989.00 FEET MSL  
 14 JUNE 78  
 ASCENSION NO. 368  
 1420 HRS MDT

GEODETIC COORDINATES  
 32.40043 LAT DEG  
 106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
48500.0	138.8	-67.2	234.8	559.1	275.7	24.2	1.000052	
49000.0	135.4	-68.0	230.0	557.9	275.0	23.3	1.000051	
49500.0	132.0	-68.4	224.7	557.5	274.4	21.3	1.000050	
50000.0	128.8	-68.4	219.1	557.5	273.7	17.9	1.000049	
50500.0	125.5	-68.4	213.6	557.5	272.8	14.4	1.000048	
51000.0	122.4	-68.4	208.3	557.5	269.9	10.0	1.000046	
51500.0	119.3	-68.5	203.1	557.3	262.3	5.5	1.000045	
52000.0	116.4	-68.9	197.4	556.8	242.8	2.6	1.000044	
52500.0	113.4	-69.3	193.8	556.3	193.7	1.5	1.000043	
53000.0	110.6	-69.7	189.3	555.7	154.0	1.9	1.000042	
53500.0	107.8	-70.0	184.9	555.2	182.0	1.8	1.000041	
54000.0	105.1	-70.4	180.6	554.7	205.1	2.3	1.000040	
54500.0	102.5	-69.8	175.6	555.5	206.4	5.5	1.000039	
55000.0	99.9	-68.6	170.2	557.2	206.7	8.7	1.000038	
55500.0	97.4	-69.1	166.3	556.5	203.7	11.6	1.000037	
56000.0	94.9	-69.6	162.5	555.8	198.6	14.1	1.000036	
56500.0	92.6	-70.1	158.8	555.1	195.1	16.8	1.000035	
57000.0	90.2	-70.6	155.2	554.4	195.2	15.8	1.000035	
57500.0	88.0	-69.8	150.7	555.6	196.3	13.8	1.000034	
58000.0	85.8	-67.8	145.5	558.3	197.3	11.3	1.000032	
58500.0	83.6	-67.8	141.9	558.3	197.3	7.3	1.000032	
59000.0	81.6	-67.8	138.4	558.3	197.2	3.4	1.000031	
59500.0	79.5	-67.8	134.9	558.3	171.6	2.5	1.000030	
60000.0	77.6	-67.8	131.6	558.3	143.3	3.0	1.000029	
60500.0	75.6	-67.8	128.3	558.3	130.3	4.0	1.000029	
61000.0	73.8	-67.0	124.6	559.4	128.4	5.3	1.000028	
61500.0	71.9	-65.7	120.8	561.1	127.2	6.6	1.000027	
62000.0	70.2	-64.4	117.1	562.8	115.6	8.8	1.000026	
62500.0	68.5	-63.3	113.7	564.3	108.4	11.3	1.000025	
63000.0	66.8	-62.3	110.4	565.7	105.9	13.1	1.000025	



UPPER AIR DATA  
 1650020368  
 WHITE SANDS  
 TABLE VIII. (CONT)

STATION ALTITUDE 3989.00 FEET MSL  
 14 JUNE 78  
 ASCENSION NO. 368  
 1420 HRS MDT

GEODETIC COORDINATES  
 32.40043 LAT DEG  
 106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
63500.0	65.2	-61.2	107.2	567.1	106.4	14.2	1.000024	
64000.0	63.6	-60.8	104.4	567.7	106.8	15.3	1.000023	
64500.0	62.1	-61.4	102.1	566.9	108.3	15.1	1.000023	
65000.0	60.6	-61.3	99.6	567.1	109.9	14.7	1.000022	
65500.0	59.1	-60.8	97.0	567.8	110.5	14.9	1.000022	
66000.0	57.7	-60.3	94.5	568.4	109.7	15.9	1.000021	
66500.0	56.3	-59.8	92.0	569.1	109.0	16.9	1.000020	
67000.0	55.0	-59.3	89.6	569.8	105.6	17.8	1.000020	
67500.0	53.7	-58.8	87.2	570.4	101.9	18.8	1.000019	
68000.0	52.4	-58.3	85.0	571.1	99.1	19.6	1.000019	
68500.0	51.2	-57.8	82.7	571.7	98.4	19.3	1.000018	
69000.0	49.9	-57.3	80.6	572.4	97.7	19.0	1.000018	
69500.0	48.8	-56.8	78.5	573.0	98.2	18.5	1.000017	
70000.0	47.6	-56.4	76.5	573.6	99.3	17.8	1.000017	
70500.0	46.5	-55.9	74.6	574.2	100.5	17.2	1.000017	
71000.0	45.4	-55.4	72.7	574.8	96.0	16.6	1.000016	
71500.0	44.4	-55.0	70.8	575.4	90.7	16.2	1.000016	
72000.0	43.3	-54.5	69.0	576.0	85.8	16.0	1.000015	
72500.0	42.3	-54.1	67.3	576.6	84.0	16.3	1.000015	
73000.0	41.3	-53.6	65.6	577.2	82.2	16.6	1.000015	
73500.0	40.4	-53.2	63.9	577.8	83.3	17.0	1.000014	
74000.0	39.4	-52.7	62.3	578.4	88.3	17.6	1.000014	
74500.0	38.5	-52.2	60.7	579.0	93.0	18.4	1.000014	
75000.0	37.6	-52.0	59.2	579.4	97.2	18.9	1.000013	
75500.0	36.7	-51.7	57.8	579.8	101.2	19.2	1.000013	
76000.0	35.9	-51.4	56.4	580.1	105.1	19.7	1.000013	
76500.0	35.1	-51.1	55.0	580.5	107.0	20.3	1.000012	
77000.0	34.3	-50.9	53.7	580.8	108.4	20.8	1.000012	
77500.0	33.5	-50.6	52.4	581.2	109.7	21.4	1.000012	
78000.0	32.7	-50.3	51.2	581.5	109.7	21.6	1.000011	

STATION ALTITUDE 3989.00 FEET MSL  
 14 JUNE 78  
 ASCENSION NO. 368

UPPER AIR DATA  
 1650020366  
 WHITE SANDS  
 TABLE VIII. (CONT)

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 CENTIGRADE				DIRECTION DEGREES(TN)	SPEED KNOTS	
78500.0	32.0	-50.0		49.9	581.9	109.4	21.7	1.000011	
79000.0	31.2	-49.8		48.7	582.3	109.0	21.7	1.000011	
79500.0	30.5	-49.5		47.5	582.6	109.3	22.0	1.000011	
80000.0	29.8	-48.3		46.2	584.1	109.8	22.3	1.000010	
80500.0	29.2	-44.6		44.5	589.0	110.3	22.7	1.000010	
81000.0	28.6	-40.9		42.8	593.8			1.000010	
81500.0	27.9	-37.1		41.2	598.5			1.000009	
82000.0	27.3	-33.4		39.7	603.2			1.000009	
82500.0	26.7	-29.6		38.2	607.9			1.000009	

STATION ALTITUDE 3989.00 FEET MSL  
 14 JUNE 78  
 ASCENSION NO. 368  
 1420 HRS MDT

MANDATORY LEVELS  
 1650020368  
 WHITE SANDS  
 TABLE IX.

GEODETIC COORDINATES  
 32.40043 LAT DEG  
 106.37033 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.		WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS	
850.0	5050.	31.7	9.8	26.	208.6	9.3	
800.0	6819.	26.5	7.4	30.	194.9	13.6	
750.0	8669.	20.9	4.6	34.	200.6	13.0	
700.0	10607.	15.1	2.0	41.	222.7	8.1	
650.0	12649.	9.8	-6	48.	265.2	8.2	
600.0	14807.	3.5	-5.4	52.	276.7	13.8	
550.0	17100.	-2.3	-8.5	62.	286.0	15.1	
500.0	19553.	-8.1	-16.2	52.	301.1	13.7	
450.0	22228.	-11.1	-27.8	23.	307.9	9.8	
400.0	25166.	-15.7	-34.0	19.	313.2	8.4	
350.0	28412.	-24.6	-41.1	20.	299.6	15.3	
300.0	32026.	-33.6	-48.7	20.	294.1	19.2	
250.0	36132.	-44.0			289.7	23.5	
200.0	40942.	-53.7			283.1	24.1	
175.0	43717.	-60.1			279.7	25.6	
150.0	46829.	-64.5			279.8	27.0	
125.0	50437.	-68.4			272.6	14.0	
100.0	54808.	-68.6			206.7	8.4	
80.0	59185.	-67.8			181.1	2.5	
70.0	61832.	-64.3			115.3	8.9	
60.0	64961.	-61.1			110.4	14.6	
50.0	68710.	-57.3			97.8	19.1	
40.0	73385.	-53.0			84.8	17.2	
30.0	79527.	-49.3			109.6	22.2	

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

STATION ALTITUDE 3951.40 FEET MSL  
 14 JUNE 78  
 ASCENSION NO. 66

SIGNIFICANT LEVEL DATA  
 1650050066  
 APACHE  
 TABLE X.

GEODETIC COORDINATES  
 32.62700 LAT DEG  
 106.39352 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT
882.2	3951.4	35.2	6.5	17.0
878.9	4062.3	31.6	4.4	18.0
850.0	5042.6	29.3	6.7	24.0
782.4	7434.7	22.0	4.1	31.0
758.6	8312.3	20.0	2.8	32.0
700.0	10563.6	13.6	.6	41.0
668.4	11834.7	9.9	-.0	50.0
638.0	13097.4	5.5	-1.0	63.0
628.6	13496.0	4.2	-1.4	67.0
599.2	14772.4	1.4	-4.4	65.0
581.4	15568.8	-.6	-6.1	66.0
564.2	16356.0	-2.5	-9.4	59.0
538.8	17552.8	-5.1	-14.6	47.0
530.4	17957.9	-6.6	-16.0	47.0
520.2	18457.0	-6.6	-15.0	51.0
500.0	19469.7	-9.5	-15.2	63.0
488.4	20064.6	-11.3	-17.9	58.0
471.0	20979.4	-11.9	-29.7	21.0
463.4	21389.0	-11.9	-27.9	25.0
426.4	23466.9	-16.3	-29.8	30.0
412.2	24305.3	-16.5	-31.6	25.0
400.0	25045.9	-18.4	-34.3	23.0
311.4	31003.2	-34.4	-46.8	27.0
300.0	31858.9	-36.1	-48.9	25.0
263.8	34748.9	-44.2		
250.0	35930.5	-46.2		
238.0	37000.5	-49.2		
228.2	37906.7	-50.4		
200.0	40709.1	-55.6		
161.6	45075.6	-66.4		

STATION ALTITUDE 3951.40 FEET MSL  
 14 JUNE 78  
 ASCENSION I.O. 66

SIGNIFICANT LEVEL DATA  
 1650050066  
 APACHE  
 TABLE X. (CONT)

GEODETTIC COORDINATES  
 32.62700 LAT DEG  
 106.39352 LON DEG

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
150.0 46556.7	-68.1	
142.6 47553.7	-70.1	
131.8 49096.5	-70.6	
128.4 49608.0	-70.5	
125.2 50103.3	-69.5	
115.8 51630.3	-71.8	
103.4 53835.6	-71.5	
100.0 54486.7	-71.8	
91.8 56146.4	-73.1	
72.6 60749.6	-67.4	
70.0 61479.0	-65.3	
67.2 62305.4	-62.4	
50.0 68365.1	-58.8	
30.6 78744.8	-51.7	
30.0 79170.6	-50.7	
25.6 82566.1	-51.1	
20.0 87945.0	-47.3	
15.3 93850.3	-44.4	
12.2 98916.8	-40.7	

UPPER AIR DATA  
 1650050066  
 APACHE  
 TABLE XI.

STATION ALTITUDE 3951.40 FEET MSL  
 14 JUNE 78  
 ASCENSION NO. 66  
 1420 HRS MDI

GEODETIC COORDINATES  
 32-62700 LAT DEG  
 106-39352 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TH)	SPEED KNOTS	INDEX OF REFRACTION
3951.4	882.2	35.2	17.0	992.6	685.5	90.0	8.0	1.000260
4000.0	880.8	33.6	17.4	996.3	683.7	91.7	7.9	1.000259
4500.0	865.9	30.6	20.7	989.2	680.3	111.8	7.2	1.00025A
5000.0	851.2	29.4	23.7	975.9	679.1	132.6	7.6	1.000258
5500.0	836.6	27.9	25.3	963.9	677.4	149.5	8.8	1.000255
6000.0	822.3	26.4	26.8	952.3	675.7	161.6	10.6	1.000251
6500.0	808.1	24.9	28.3	940.8	673.9	167.5	12.1	1.000248
7000.0	794.3	23.3	29.7	929.5	672.2	168.2	12.6	1.000244
7500.0	780.6	21.9	31.1	918.2	670.4	168.8	13.2	1.000240
8000.0	767.0	20.7	31.6	905.8	669.1	168.1	12.8	1.000236
8500.0	753.5	19.5	32.8	893.8	667.7	167.1	12.4	1.000232
9000.0	740.2	18.0	34.7	882.3	666.0	166.0	11.9	1.000229
9500.0	727.1	16.6	36.7	871.0	664.4	164.6	10.8	1.000225
10000.0	714.2	15.2	38.7	859.8	662.7	162.9	9.5	1.000222
10500.0	701.6	13.8	40.7	848.9	661.1	160.6	8.3	1.000219
11000.0	689.0	12.3	44.1	837.8	659.4	160.6	7.7	1.000216
11500.0	676.6	10.9	47.6	827.0	657.7	162.2	7.5	1.000213
12000.0	664.3	9.3	51.7	816.5	655.9	164.0	7.2	1.000211
12500.0	652.2	7.6	56.8	806.6	653.9	189.0	9.0	1.00020A
13000.0	640.3	5.8	62.0	796.8	651.8	207.3	12.2	1.000205
13500.0	628.5	4.2	67.0	786.8	649.9	221.6	15.5	1.000203
14000.0	616.8	3.1	66.2	775.4	648.5	233.1	15.5	1.000198
14500.0	605.4	2.0	65.4	764.2	647.1	246.5	14.5	1.000193
15000.0	594.1	.8	65.3	753.3	645.7	263.3	13.5	1.000189
15500.0	582.9	-.4	65.9	742.7	644.2	279.6	13.6	1.000185
16000.0	571.9	-1.6	62.2	732.2	642.6	287.2	13.5	1.000180
16500.0	561.1	-2.8	57.6	721.6	641.2	290.9	13.0	1.000176
17000.0	550.4	-3.9	52.5	710.9	639.8	289.3	11.9	1.000171
17500.0	539.9	-5.0	47.5	700.4	638.4	287.5	11.9	1.000167
18000.0	529.5	-6.6	47.3	691.2	636.4	286.1	12.2	1.000163

STATION ALTITUDE 3951.40 FEET MSL  
 14 JUNE 70  
 ASCENSION NO. 66

UPPER AIR DATA  
 1650050066  
 APACHE  
 TABLE XI. (CONT)

1420 HRS MDT  
 GEODETIC COORDINATES  
 32.62700 LAT DEG  
 106.39352 LON 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 DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
18500.0	519.3	-6.7	-15.0	51.5	678.1	636.3	286.0	12.6	1.000161
19000.0	509.3	-8.2	-15.0	57.4	668.5	634.6	286.1	12.4	1.000159
19500.0	499.4	-9.6	-15.3	62.7	659.2	632.9	286.5	11.4	1.000157
20000.0	489.6	-11.1	-17.6	58.5	650.2	631.0	288.3	11.1	1.000153
20500.0	480.0	-11.6	-22.3	40.4	638.6	630.3	291.0	11.2	1.000148
21000.0	470.6	-11.9	-29.6	21.2	627.3	629.6	291.6	12.8	1.000143
21500.0	461.3	-12.1	-28.0	25.3	615.4	629.6	291.4	14.4	1.000140
22000.0	452.2	-13.2	-28.4	26.5	605.7	628.3	288.5	14.3	1.000138
22500.0	443.2	-14.3	-28.8	27.7	596.1	627.0	288.5	13.4	1.000136
23000.0	434.4	-15.3	-29.3	28.9	586.7	625.7	294.0	11.4	1.000134
23500.0	425.8	-16.3	-29.9	29.8	577.3	624.5	301.7	10.3	1.000132
24000.0	417.3	-16.4	-31.1	26.8	566.1	624.5	310.4	10.0	1.000129
24500.0	409.0	-17.0	-32.5	24.5	556.0	623.6	311.0	9.1	1.000126
25000.0	400.7	-18.3	-34.2	23.1	547.6	622.0	308.5	8.0	1.000124
25500.0	392.4	-19.6	-35.3	23.3	539.1	620.4	309.7	6.3	1.000122
26000.0	384.3	-21.0	-36.3	23.6	530.7	618.7	307.2	5.8	1.000120
26500.0	376.3	-22.3	-37.3	24.0	522.4	617.1	301.4	6.9	1.000118
27000.0	368.5	-23.6	-38.3	24.3	514.3	615.4	296.2	9.7	1.000116
27500.0	360.8	-25.0	-39.4	24.6	506.4	613.8	293.9	12.7	1.000114
28000.0	353.3	-26.3	-40.4	25.0	498.6	612.1	294.8	15.3	1.000112
28500.0	345.9	-27.7	-41.4	25.3	490.9	610.4	296.1	17.3	1.000110
29000.0	338.8	-29.0	-42.5	25.7	483.3	608.8	297.8	18.7	1.000109
29500.0	331.7	-30.4	-43.5	26.0	475.9	607.1	298.0	19.3	1.000107
30000.0	324.8	-31.7	-44.6	26.3	468.6	605.4	297.6	19.8	1.000105
30500.0	318.1	-33.0	-45.7	26.7	461.4	603.7	294.9	19.2	1.000103
31000.0	311.4	-34.4	-46.7	27.0	454.4	602.0	291.9	18.8	1.000102
31500.0	304.7	-35.4	-49.7	25.8**	446.4	600.7	288.9	19.1	1.000100
32000.0	298.1	-36.5	-49.7	23.8**	438.8	599.3	286.6	19.7	1.000098
32500.0	291.6	-37.9	-52.6	19.5**	431.7	597.6	286.9	22.2	1.000096
33000.0	285.1	-39.3	-55.9	15.1**	424.6	595.8	287.2	24.5	1.000095

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

STATION ALTITUDE 3951.40 FEET MSL  
 14 JUNE 78  
 ASCENSION NO. 66  
 1420 HRS NDT

UPPER AIR DATA  
 1650050066  
 APACHE  
 TABLE XI. (CONT)

GEODETIC COORDINATES  
 32.62700 LAT DEG  
 106.39352 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
33500.0	278.9	-40.7	10.8**	417.9	594.0	288.0	25.8	1.000093
34000.0	272.7	-42.1	6.5**	411.2	592.2	288.7	26.7	1.000092
34500.0	266.7	-43.5	2.2**	404.6	590.4	289.5	26.1	1.000090
35000.0	260.8	-44.6		397.6	588.9	290.2	25.7	1.000089
35500.0	254.9	-45.5		390.1	587.8	290.8	25.6	1.000087
36000.0	249.2	-46.4		382.9	586.6	291.3	25.6	1.000085
36500.0	243.5	-47.8		376.5	584.8	290.6	25.5	1.000084
37000.0	238.0	-49.2		370.2	583.0	289.7	25.4	1.000082
37500.0	232.5	-49.9		362.8	582.1	287.7	25.6	1.000081
38000.0	227.2	-50.6		355.6	581.2	286.2	25.9	1.000079
38500.0	221.9	-51.5		348.8	580.0	286.6	26.6	1.000078
39000.0	216.8	-52.4		342.1	578.8	287.0	27.0	1.000076
39500.0	211.7	-53.4		335.6	577.6	287.1	26.8	1.000075
40000.0	206.8	-54.3		329.1	576.3	286.7	26.4	1.000073
40500.0	202.0	-55.2		322.9	575.1	284.0	25.7	1.000072
41000.0	197.2	-56.3		316.8	573.7	281.2	25.0	1.000071
41500.0	192.4	-57.6		310.9	572.0	279.1	24.3	1.000069
42000.0	187.8	-58.8		305.2	570.4	276.9	23.7	1.000068
42500.0	183.3	-60.0		299.5	568.7	274.9	24.0	1.000067
43000.0	178.8	-61.3		294.0	567.1	273.2	24.7	1.000065
43500.0	174.5	-62.5		288.6	565.4	271.9	25.6	1.000064
44000.0	170.3	-63.7		283.3	563.8	271.7	27.3	1.000063
44500.0	166.2	-65.0		278.1	562.1	271.6	29.0	1.000062
45000.0	162.2	-66.2		273.0	560.4	273.2	29.9	1.000061
45500.0	158.2	-66.9		267.2	559.5	275.7	30.5	1.000060
46000.0	154.3	-67.5		261.3	558.7	278.0	30.9	1.000058
46500.0	150.4	-68.0		255.5	557.9	279.1	31.0	1.000057
47000.0	146.7	-69.0		250.3	556.7	280.2	31.1	1.000056
47500.0	143.0	-70.0		245.2	555.3	281.0	28.8	1.000055
48000.0	139.4	-70.2		239.3	554.9	282.0	26.0	1.000053

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



UPPER AIR DATA  
 1650050066  
 APACHE  
 TABLE XI. (CONT)

STATION ALTITUDE 3951.40 FEET MSL  
 14 JUNE 78  
 ASCENSION 10. 66  
 1420 HRS MDI

GEODETIC COORDINATES  
 32.62700 LAT DEG  
 106.39352 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
48500.0	135.9	-70.4		233.5	554.7	282.7	22.4	1.000052
49000.0	132.5	-70.6		227.8	554.5	283.0	17.7	1.000051
49500.0	129.1	-70.5		222.0	554.6	283.5	13.1	1.000049
50000.0	125.9	-69.7		215.5	555.7	272.4	10.8	1.000048
50500.0	122.7	-70.1		210.5	555.1	256.4	9.1	1.000047
51000.0	119.6	-70.9		205.9	554.1	243.9	8.9	1.000046
51500.0	116.6	-71.6		201.5	553.1	239.0	9.4	1.000045
52000.0	113.6	-71.7		196.5	552.9	234.7	10.0	1.000044
52500.0	110.7	-71.7		191.5	553.0	233.0	10.0	1.000043
53000.0	107.9	-71.6		186.6	553.1	231.4	9.9	1.000042
53500.0	105.2	-71.5		181.8	553.2	227.5	9.7	1.000040
54000.0	102.5	-71.6		177.2	553.1	220.5	9.4	1.000039
54500.0	99.9	-71.8		172.9	552.8	213.3	9.2	1.000038
55000.0	97.4	-72.2		168.8	552.3	208.9	9.2	1.000038
55500.0	94.9	-72.6		164.9	551.7	204.6	9.3	1.000037
56000.0	92.5	-73.0		161.0	551.2	201.4	9.2	1.000036
56500.0	90.2	-72.7		156.7	551.6	198.6	9.1	1.000035
57000.0	87.9	-72.0		152.2	552.5	195.4	8.7	1.000034
57500.0	85.7	-71.4		148.0	553.3	190.7	8.0	1.000033
58000.0	83.5	-70.8		143.8	554.2	185.1	7.5	1.000032
58500.0	81.4	-70.2		139.7	555.0	181.8	7.0	1.000031
59000.0	79.4	-69.6		135.8	555.9	179.0	6.8	1.000030
59500.0	77.4	-68.9		132.0	556.7	170.6	6.7	1.000029
60000.0	75.4	-68.3		128.3	557.6	155.6	7.1	1.000029
60500.0	73.5	-67.7		124.7	558.4	142.8	8.0	1.000028
61000.0	71.7	-66.7		121.0	559.8	128.0	10.1	1.000027
61500.0	69.9	-65.2		117.2	561.8	118.7	12.6	1.000026
62000.0	68.2	-63.5		113.3	564.1	115.2	14.0	1.000025
62500.0	66.6	-62.3		110.0	565.7	113.6	14.6	1.000024
63000.0	65.0	-62.0		107.2	566.1	112.6	15.0	1.000024

UPPER AIR DATA  
 16S0050066  
 APACHE  
 TABLE XI. (CONT)

STATION ALTITUDE 3951.40 FEET MSL  
 14 JUNE 78  
 ASCENSION NO. 66  
 1420 HRS MDT

GEODETIC COORDINATES  
 32.62700 LAT DEG  
 106.39352 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
63500.0	63.4	-61.7		104.5	566.5	112.2	15.0	1.000023
64000.0	61.9	-61.4		101.8	566.9	111.8	15.0	1.000023
64500.0	60.4	-61.1		99.2	567.3	111.7	15.2	1.000022
65000.0	58.9	-60.8		96.7	567.7	111.7	15.6	1.000022
65500.0	57.5	-60.5		94.3	568.1	111.0	16.1	1.000021
66000.0	56.1	-60.2		91.9	568.5	106.8	16.8	1.000020
66500.0	54.8	-59.9		89.5	568.9	103.0	17.7	1.000020
67000.0	53.5	-59.6		87.3	569.3	103.0	19.3	1.000019
67500.0	52.2	-59.3		85.0	569.7	104.7	21.3	1.000019
68000.0	50.9	-59.0		82.9	570.1	105.9	23.1	1.000018
68500.0	49.7	-58.7		80.8	570.5	104.4	22.1	1.000018
69000.0	48.6	-58.4		78.8	570.9	102.8	21.2	1.000018
69500.0	47.4	-58.0		76.8	571.4	99.2	20.0	1.000017
70000.0	46.3	-57.7		74.9	571.8	92.7	18.4	1.000017
70500.0	45.2	-57.4		73.0	572.3	85.2	17.1	1.000016
71000.0	44.2	-57.0		71.2	572.8	85.3	17.0	1.000016
71500.0	43.1	-56.7		69.4	573.2	87.3	17.1	1.000015
72000.0	42.1	-56.3		67.7	573.7	88.9	17.2	1.000015
72500.0	41.1	-56.0		66.0	574.1	88.9	17.1	1.000015
73000.0	40.2	-55.6		64.3	574.6	88.9	17.0	1.000014
73500.0	39.2	-55.3		62.7	575.0	91.7	16.8	1.000014
74000.0	38.3	-55.0		61.2	575.5	97.9	16.7	1.000014
74500.0	37.4	-54.6		59.6	575.9	104.1	16.8	1.000013
75000.0	36.5	-54.3		58.2	576.4	108.9	17.2	1.000013
75500.0	35.7	-53.9		56.7	576.8	112.7	17.6	1.000013
76000.0	34.9	-53.6		55.3	577.3	116.4	18.1	1.000012
76500.0	34.0	-53.2		53.9	577.7	117.1	18.7	1.000012
77000.0	33.2	-52.9		52.6	578.2	117.1	19.4	1.000012
77500.0	32.5	-52.6		51.3	578.6	117.1	20.1	1.000011
78000.0	31.7	-52.2		50.0	579.1	116.8	21.4	1.000011

STATION ALTITUDE 3951.40 FEET MSL  
 14 JUNE 78  
 ASCENSION NO. 66

UPPER AIR DATA  
 1650050066  
 APACHE  
 TABLE XI. (CONT)

GEODETIC COORDINATES  
 32.62700 LAT DEG  
 106.39352 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)	SPEED KNOTS	INJEX OF REFRACTION
78500.0	31.0	-51.9			48.7	579.5	116.5	22.7	1.000011
79000.0	30.2	-51.1			47.4	580.5	115.9	23.7	1.000011
79500.0	29.5	-50.7			46.3	581.0	113.1	23.0	1.000010
80000.0	28.9	-50.8			45.2	580.9	110.1	22.3	1.000010
80500.0	28.2	-50.9			44.2	580.8	107.1	21.5	1.000010
81000.0	27.6	-50.9			43.2	580.8	104.1	20.5	1.000010
81500.0	26.9	-51.0			42.2	580.7	100.7	19.5	1.000009
82000.0	26.3	-51.0			41.3	580.6	99.6	19.3	1.000009
82500.0	25.7	-51.1			40.3	580.5	101.0	20.0	1.000009
83000.0	25.1	-50.8			39.4	580.9	102.3	20.7	1.000009
83500.0	24.5	-50.5			38.4	581.4	98.7	21.8	1.000009
84000.0	24.0	-50.1			37.5	581.8	93.7	23.2	1.000008
84500.0	23.4	-49.7			36.5	582.3	89.3	24.6	1.000008
85000.0	22.9	-49.4			35.7	582.8	89.0	26.6	1.000008
85500.0	22.4	-49.0			34.8	583.2	89.0	28.4	1.000008
86000.0	21.9	-48.7			33.9	583.7	89.6	29.8	1.000008
86500.0	21.4	-48.3			33.1	584.1	94.9	28.6	1.000007
87000.0	20.9	-48.0			32.3	584.6	100.6	27.6	1.000007
87500.0	20.4	-47.6			31.5	585.1	104.9	26.6	1.000007
88000.0	20.0	-47.3			30.8	585.5	105.5	25.0	1.000007
88500.0	19.5	-47.0			30.0	585.8	106.3	23.3	1.000007
89000.0	19.1	-46.8			29.3	586.1	105.7	22.2	1.000007
89500.0	18.6	-46.5			28.7	586.5	103.5	21.6	1.000006
90000.0	18.2	-46.3			28.0	586.8	101.1	21.1	1.000006
90500.0	17.8	-46.0			27.3	587.1	99.0	20.4	1.000006
91000.0	17.4	-45.8			26.7	587.4	96.9	19.7	1.000006
91500.0	17.0	-45.6			26.1	587.7	94.6	19.1	1.000006
92000.0	16.6	-45.3			25.4	588.0	93.9	18.3	1.000006
92500.0	16.3	-45.1			24.8	588.4	93.4	17.4	1.000006
93000.0	15.9	-44.8			24.3	588.7	92.9	16.5	1.000005

UPPER AIR DATA  
 1650050066  
 APACHE  
 TABLE XI. (CONT)

STATION ALTITUDE 3951.40 FEET MSL  
 14 JUNE 78  
 ASCENSION NO. 66 1420 HRS MDT

GEODETIC COORDINATES  
 32.62700 LAT DEG  
 106.39352 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 DATA SPEED KNOTS	INDEX OF REFRACTION
93500.0	15.5	-44.6			23.7	589.0	92.0	15.2	1.000005
94000.0	15.2	-44.3			23.1	589.4	90.8	14.0	1.000005
94500.0	14.9	-43.9			22.6	589.8	89.0	12.9	1.000005
95000.0	14.5	-43.6			22.1	590.3	84.2	14.4	1.000005
95500.0	14.2	-43.2			21.5	590.8	80.3	15.9	1.000005
96000.0	13.9	-42.8			21.0	591.2	77.1	17.5	1.000005
96500.0	13.6	-42.5			20.5	591.7			1.000005
97000.0	13.3	-42.1			20.0	592.2			1.000004
97500.0	13.0	-41.7			19.6	592.6			1.000004
98000.0	12.7	-41.4			19.1	593.1			1.000004
98500.0	12.4	-41.0			18.7	593.6			1.000004

STATION ALTITUDE 3951.40 FEET MSL  
 14 JUNE 78  
 ASCENSION NO. 66

MANDATORY LEVELS  
 1650050066  
 APACHE  
 TABLE XII.

GEODETIC COORDINATES  
 32.62700 LAT DEG  
 106.39352 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	5039.	29.3	6.7	24.	134.1	7.7
800.0	6793.	24.0	4.9	29.	167.9	12.4
750.0	8627.	19.1	2.6	33.	166.8	12.2
700.0	10553.	13.6	.6	41.	160.3	8.1
650.0	12581.	7.3	-.5	58.	192.8	9.6
600.0	14720.	1.5	-4.4	65.	253.8	13.9
550.0	16998.	-3.9	-12.2	52.	289.2	11.8
500.0	19442.	-9.5	-15.2	63.	286.4	11.5
450.0	22092.	-13.5	-28.5	27.	287.8	14.2
400.0	25004.	-18.4	-34.3	23.	308.6	7.9
350.0	28219.	-26.9	-40.9	25.	295.2	16.7
300.0	31775.	-36.1	-48.9	25.	287.0	19.2
250.0	35852.	-46.2			291.3	25.6
200.0	40610.	-55.6			283.0	25.4
175.0	43359.	-62.4			271.9	25.5
150.0	46431.	-68.1			279.2	31.0
125.0	49991.	-69.5			269.3	10.4
100.0	54319.	-71.8			213.7	9.2
80.0	58636.	-69.8			180.1	6.9
70.0	61269.	-65.3			119.5	12.4
60.0	64393.	-61.0			111.7	15.3
50.0	68129.	-58.8			104.9	22.4
40.0	72760.	-55.6			88.9	17.0
30.0	78833.	-50.7			115.2	23.5
25.0	82727.	-50.7			102.4	20.8
20.0	87534.	-47.3			105.4	25.3
15.0	93821.	-44.1			90.1	13.3