

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

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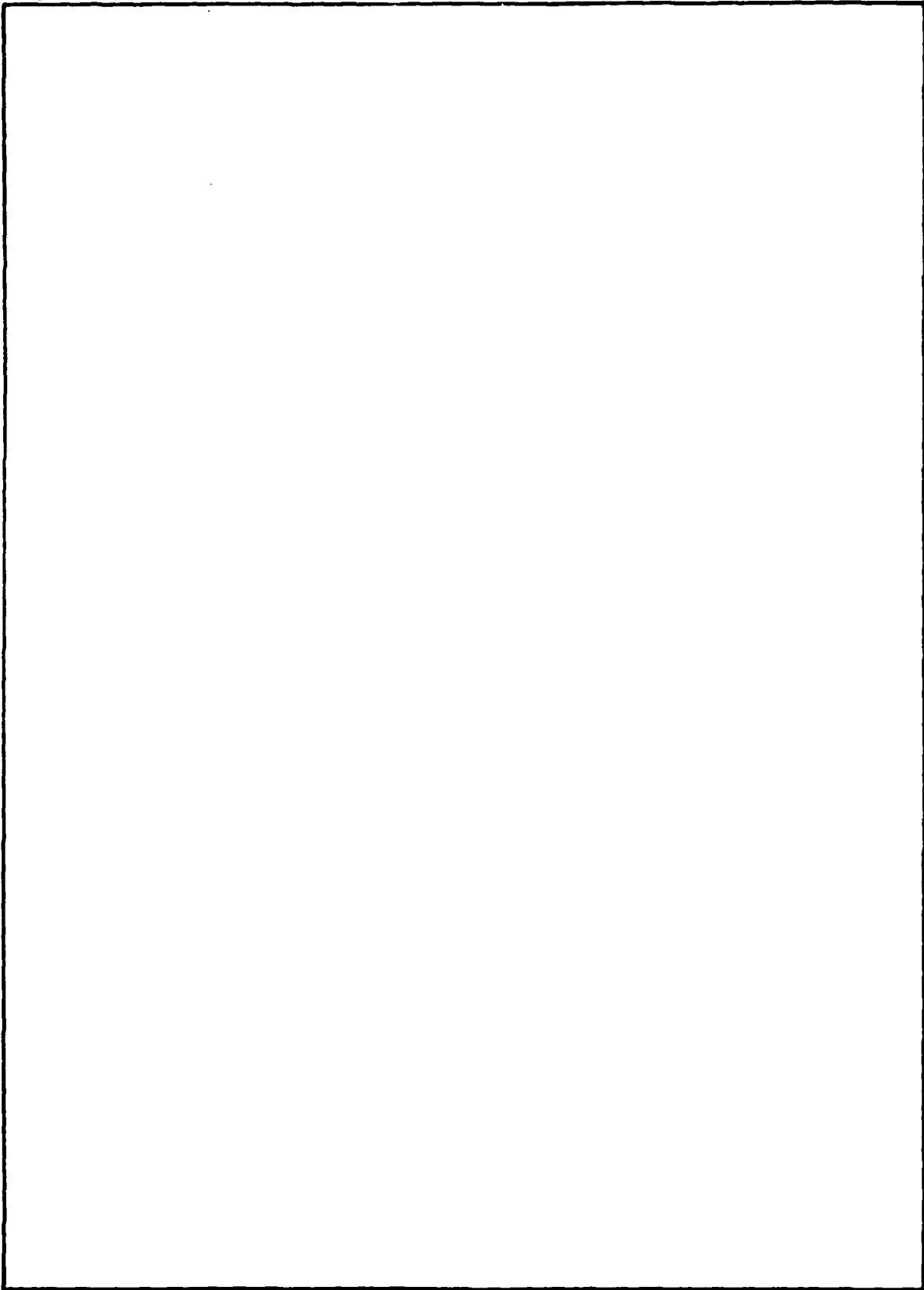
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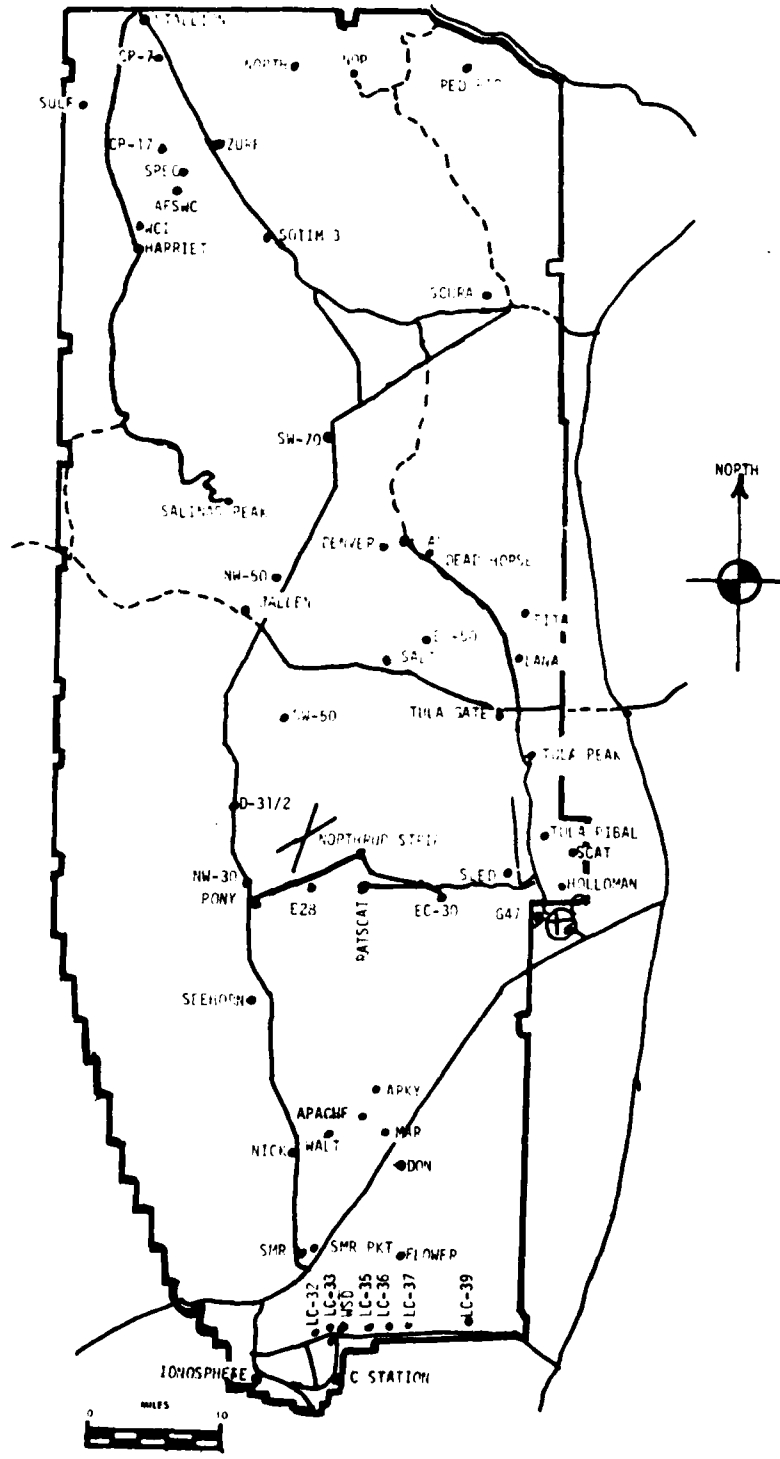
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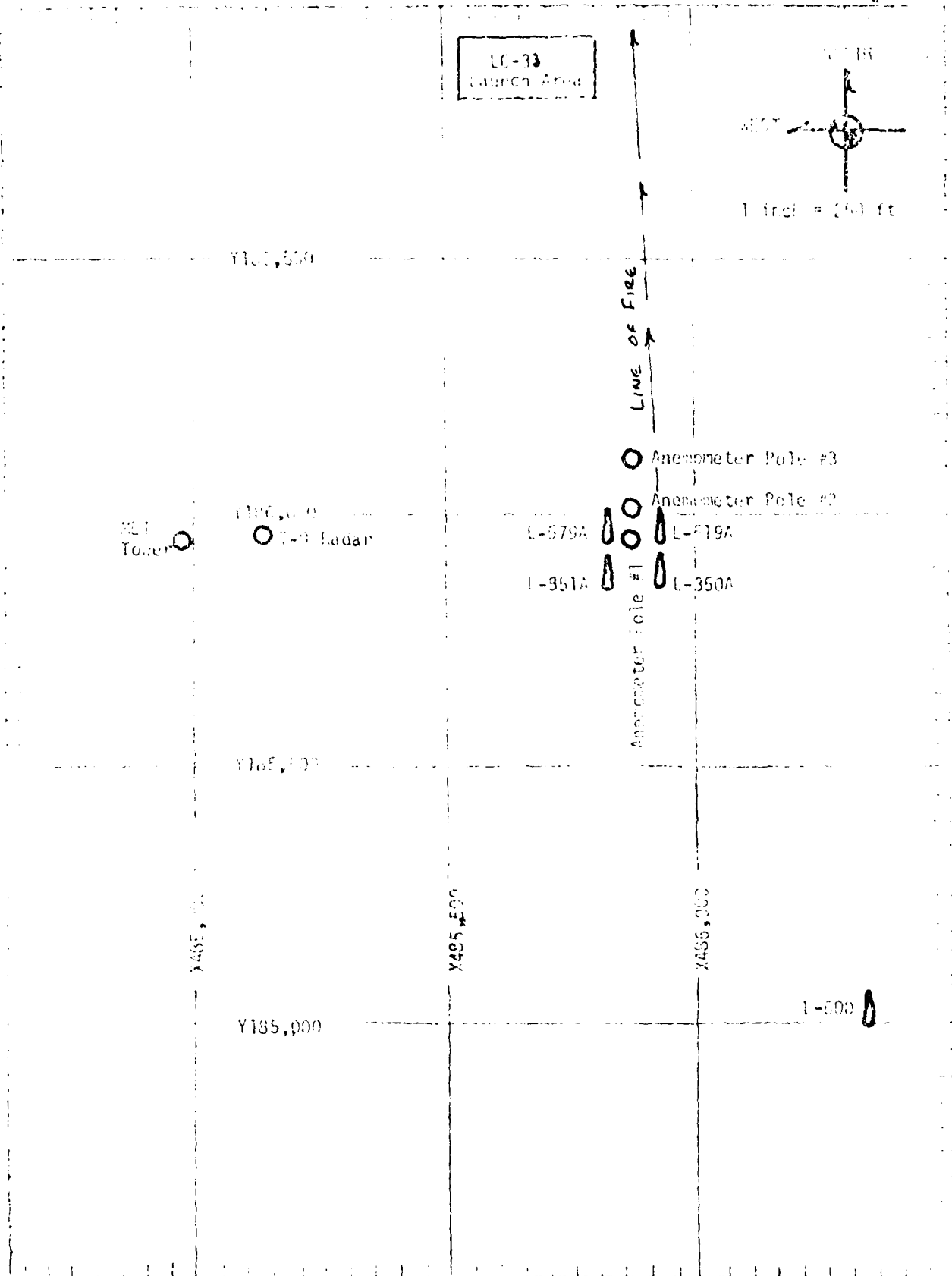
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WSMR METEOROLOGICAL SITES





PROJECT SURFACE OBSERVATION

TABLE 1 STATION LC-33 E & A
 DATE 24 Sep 82 Y = 484,982.64 Y = 185,957.73 H = 3995.00
 DAY MONTH YEAR

TIME M D T	PRESSURE mbs	TEMPERATURE OF OC	DEW POINT OF OC	RELATIVE HUMIDITY %	DENSITY g/m ³	WIND		VISIBIL- ITY
						DIRECTION degs In	SPEED kts	
1514	881.6	30.2	9.9	28	1011	020	10	50 ml

OBSTRUCTIONS TO VISIBILITY	CLOUDS						REMARKS
	1st LAYER		2nd LAYER		3rd LAYER		
	AMT	TYPE	AMT	TYPE	AMT	TYPE	
	1	CU	6,500	8	CI	25,000	H ALDS

PSYCHROMETRIC COMPUTATION

TIME:	1514
DRY BULB TEMP.	30.2
WET BULB TEMP.	17.2
WET BULB DEPP.	13.0
DEW POINT	9.9
RELATIVE HUMID.	28

TABLE 2 LC-33 FINED POLE ANEMOMETER MEASURED WINDS

*

POLE #1 X485,874.24 Y185,958.90 H4018.74 33.7 ft. AGL			POLE #2 X485,874.24 Y185,958.90 H4003.17 33.7 ft. AGL			POLE #3 X485,874.24 Y185,958.90 H4003.90 33.7 ft. AGL		
T-TIME SEC	DIR DEG	SPEED KNOTS	T-TIME SEC	DIR DEG	SPEED KNOTS	T-TIME SEC	DIR DEG	SPEED KNOTS
T-30	020	10	T-30	007	10	T-30	028	12
T-20	020	12	T-20	011	11	T-20	027	14
T-10	020	10	T-10	017	10	T-10	034	13
T-0.0	020	10	T-0.0	014	09	T-0.0	027	16
T+10	020	13	T+10	007	12	T+10	028	15

TABLE 3 LC-33 MEDIUM POLE ANEMOMETER MEASURED WINDS (ESTIMATED WIND)

LEVEL #1, 100 FEET X484,982.64, Y185,957.73, H3983.00 (base)			LEVEL #2, 200 FEET X484,982.64, Y185,957.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KNOTS	T-TIME SEC	DIR DEG	SPEED KNOTS
T-30	035	10	T-30	026	12
T-20	023	10	T-20	026	10
T-10	035	10	T-10	027	10
T-0.0	017	10	T-0.0	021	14
T+10	036	10	T+10	034	14

LEVEL #3, 100 FEET X484,982.64, Y185,957.73, H3983.00 (base)			LEVEL #4, 200 FEET X484,982.64, Y185,957.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KNOTS	T-TIME SEC	DIR DEG	SPEED KNOTS
T-30	021	13	T-30	022	14
T-20	023	14	T-20	021	15
T-10	035	13	T-10	026	15
T-0.0	011	14	T-0.0	023	14
T+10	021	14	T+10	025	14

* Pole #1 Dirs are estimated!

TABLE 4

T-TIME PILOT-BALLOON MEASURED WIND DATA

DATE 24 Sep 1982

SITE: WSD
 TIME: 1508 MDT
 WSTM COORDINATES:
 X = 488,852.29
 Y = 184,982.45
 Z = 3,993.75

SITE: DON
 TIME: 1514 MDT
 WSTM COORDINATES:
 X = 511,988.37
 Y = 247,396.36
 Z = 3,996.83

LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS	LAYER MIDPOINT METERS AGL	DIRECTION DEGREES	SPEED KNOTS
SURFACE	030	14	SURFACE	350	05
150	015	14	150	345	12
210	023	14	210	345	14
270	023	12	270	344	14
330	022	13	330	343	14
390	031	11	390	343	14
500	026	10	500	344	14
650	019	07	650	341	12
800	356	04	800	342	12
950	312	06	950	348	13
1150	298	08	1150	347	14
1350	300	08	1350	345	13
1550	302	08	1550	327	11
1750	289	07	1750	304	10
2000	Balloon Burst		2000	287	12

All data obtained from single Theodolite Tracked Pilot-Balloon Observations

TABLE 5

TIMING AND T-TIME COMPUTER MET MESSAGES
24 SEPTEMBER 1982

LC-37 1200 MDT

METCM1324063	
241800124881	
00587004	30060881
01002010	30300871
02637016	29820847
03011007	29500809
04538008	29300763
05562005	28920720
06544002	28480678
07243003	28030639
08627003	27680601
09638009	27470565
10590008	27250531
11565006	26910498
12589013	16360453

WSD 1300 MDT

METCM1324064	
241900122884	
00027014	30450884
01042012	30230874
02038010	29890849
03041004	29650811
04529008	29320766
05516008	28920722
06443002	28460680
07309003	27980641
08631005	27720603
09631009	27460566
10595009	27200532
11560007	26870500
12611015	26320454

LC-37 1400 MDT

METCM1324063	
2400124880	
00560005	30450880
01587010	30230870
02046009	30010846
03022005	29750808
04546008	29380763
05532008	28930720
06500003	28480678
07388003	27970638
08605004	27660601
09609011	27460565
10592010	27180530
11548009	26870498
12575014	26300452

WSD 1505 MDT

METCM1324064	
242110122882	
00053010	30700882
01039013	30380872
02025015	30020848
03037007	29700810
04557007	29380765
05537008	28930765
06538005	28470680
07501005	28020640
08574009	27680602
09615011	27410566
10579011	27120532
11512010	26860499
12594017	26360453

STATION ALTITUDE 4051.77 FEET MSL
 24 SEP. 82 1200 HRS MDT
 OBSERVATION NO. 97

TEMPERATURE LEVEL DATA
 2520180097
 10-87

GEOGRAPHIC COORDINATES
 32.40175 LAT DEG
 106.31252 LONG DEG

TABLE 6

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES CENTIGRADE	WET BULB DEGREES CENTIGRADE	
881.3	4051.4	25.7	11.2	41.0
862.3	4680.3	24.7	9.4	38.0
850.0	5093.5	24.2	6.5	32.0
823.9	5985.6	21.7	5.0	33.0
811.3	6424.3	21.9	5.8	35.0
737.9	9104.5	16.8	2.8	39.0
709.0	10571.2	13.1	-3.2	32.0
652.0	12515.9	8.0	-4.1	40.0
612.9	14180.3	3.4	-5.0	34.0
607.4	14420.7	3.1	-10.8	35.0
588.8	15249.0	3.1	-18.2	19.0
570.8	16072.0	1.3	-19.7	19.0
561.9	16488.6	1.3	-20.4	18.0
527.4	18157.6	-1.0	-23.0	18.0
500.0	19549.5	-3.9	-26.0	16.0
455.0	21769.2	-10.0	-31.6	15.0
425.8	23645.8	-11.8	-32.5	16.0
400.0	25208.6	-15.8	-34.6	18.0

STATION ALTITUDE 4051.47 FEET MSL
 24 SEP. 62 1200 HRS MDT
 ASCENSION NO. 97

UPPER AIR DATA
 20701 0097
 LC-37

OPTIC COORDINATES
 32.40175 LAT DEG
 106.31232 LON DEG

TABLE 7

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE FIP DEGREES CENTIGRADE	REL. HUM. PERCENT	WIND DIRECTION DEGREES	WIND SPEED KNOTS	INDEX OF REFRACTION
4051.4	891.5	25.7	91.0	1021.5	675.4	1.000285
4500.0	867.7	25.0	58.9	1008.5	674.5	1.000277
5000.0	852.8	24.3	33.4	994.2	673.4	1.000265
5500.0	838.0	23.1	33.4	981.9	671.9	1.000259
6000.0	823.5	21.7	35.0	968.4	670.4	1.000256
6500.0	809.1	21.8	35.1	951.7	670.5	1.000252
7000.0	795.0	20.8	35.0	939.1	669.3	1.000248
7500.0	781.0	19.9	36.6	924.0	668.2	1.000244
8000.0	767.3	18.9	37.4	911.0	667.1	1.000239
8500.0	753.4	18.0	39.1	898.0	666.0	1.000235
9000.0	740.6	17.0	38.8	885.8	664.9	1.000231
9500.0	727.5	15.8	37.1	874.0	663.4	1.000225
10000.0	714.5	14.5	34.7	862.0	661.8	1.000219
10500.0	701.8	13.3	32.3	851.5	660.2	1.000212
11000.0	689.1	12.0	33.8	840.0	658.7	1.000209
11500.0	676.6	10.7	35.8	828.4	657.2	1.000206
12000.0	664.4	9.4	37.9	817.2	655.6	1.000203
12500.0	652.4	8.0	39.9	806.2	654.1	1.000200
13000.0	640.4	6.7	44.1	795.2	652.5	1.000198
13500.0	628.6	5.3	49.3	784.4	650.9	1.000196
14000.0	617.0	3.9	52.5	773.5	649.3	1.000193
14500.0	605.6	3.1	53.5	762.5	648.0	1.000188
15000.0	594.3	3.1	53.7	748.6	647.9	1.000176
15500.0	583.3	2.6	19.0	736.3	647.2	1.000171
16000.0	572.4	1.5	19.6	725.5	645.9	1.000168
16500.0	561.7	1.3	18.0	712.4	645.6	1.000165
17000.0	551.1	.6	17.4	700.0	644.6	1.000162
17500.0	540.7	-.1	16.8	687.4	644.0	1.000159
18000.0	530.6	-.8	16.3	676.2	643.2	1.000156
18500.0	520.5	-1.7	16.0	667.0	642.0	1.000153
19000.0	510.6	-2.8	16.0	657.5	640.6	1.000151
19500.0	500.9	-3.8	16.0	647.5	639.6	1.000148
20000.0	491.3	-5.0	15.0	638.0	638.1	1.000146
20500.0	481.8	-6.3	15.6	628.7	636.5	1.000143
21000.0	472.5	-7.6	15.4	619.0	635.0	1.000141
21500.0	463.4	-8.8	15.2	610.5	633.5	1.000139
22000.0	454.4	-10.0	15.0	601.5	632.0	1.000136
22500.0	445.5	-10.6	15.3	590.9	631.4	1.000134
23000.0	436.8	-11.1	15.6	580.5	630.8	1.000132
23500.0	428.3	-11.6	15.0	570.3	630.1	1.000129

XX WIND DATA INVALID DUE TO MISSING RADAR RETURN WIND ELEVATION ANGLES.

STATION ALTITUDE 4051.37 FEET MSL
 24 SEP. 82 1200 HRS MDT
 ASCENSION NO. 97

UPPER AIR DATA
 202010097

GEOCENTRIC COORDINATES
 32.40175 LAT DEG
 106.51232 LON DEG

TABLE 7 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	WIND VELOCITY GM/CUBIC METER	WIND DIRECTION DEGREES (TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
24000.0	419.8	-12.7	16.5	561.3	331.8	20.4	1.000127
24500.0	411.5	-14.0	17.1	553.0			1.000125
25000.0	403.4	-15.3	17.7	544.7			1.000123

STATION ALTITUDE 4051.07 FEET MSL
 24 SEP. 82
 ASCENSION NO. 97

MANDATORY LEVELS
 2070100097
 UC-17
 TABLE 6

GEODETIC COORDINATES
 32.40175 LAT DEG
 106.31232 LON DEG

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUMID. PERCENT	WIND DATA	
				DIRECTION (DEGREES TN)	SPEED KNOTS
850.0	5090.	24.2	32.	9999.0	9999.0XX
800.0	6819.	21.1	36.	9999.0	9999.0XX
750.0	8640.	17.7	30.	304.5	7.8
700.0	10561.	13.1	32.	315.5	5.4
650.0	12585.	7.8	41.	122.8	4.6
600.0	14729.	3.1	29.	354.8	4.6
550.0	17032.	.5	17.	345.5	9.4
500.0	19521.	-3.9	15.	317.7	6.5
450.0	22215.	-10.3	15.	335.0	13.8
400.0	25166.	-15.0	18.		

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

STATION ALTITUDE 3989.00 FEET MSL
 24 SEP. 82
 ASCENSION NO. 485

SIMPLE TIGHT LEVEL DATA
 POTENTIALS
 WHITE SANDS
 TABLE 9

GEODETIC COORDINATES
 32.400043 LAT DEG
 106.37033 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MCL FEET	TEMP AIR DEGREES CENTIGRADE	TEMP SURF DEWPOINT CENTIGRADE	REL HUM. PERCENT
803.6	3989.0	29.5	12.9	36.0
868.2	4501.2	26.3	10.5	37.0
850.0	5112.5	24.1	10.0	41.0
827.6	5877.9	22.3	9.1	40.0
807.8	6569.3	22.3	5.3	33.0
760.0	7060.9	19.1	5.2	40.0
731.2	9382.9	16.0	3.8	44.0
700.0	10593.5	12.6	-1.0	39.0
676.5	11531.7	10.4	-4.8	34.0
630.8	13425.9	4.6	-5.2	49.0
624.9	13677.5	4.2	-7.9	41.0
599.9	14760.8	3.4	-10.2	18.0
550.9	16600.2	.6	-20.9	18.0
528.9	18197.2	-1.5	-24.0	16.0
500.0	19560.2	-4.5	-26.5	16.0
456.9	21070.3	-10.0	-31.0	16.0
423.5	23784.5	-13.1	-33.5	16.0
400.0	25206.0	-16.6	-35.3	18.0

STATION ALTITUDE 3999.00 FEET MSL
 24 SEP. 82 1300 HRS MDT
 ASCENSION NO. 485

UPPER AIR DATA
 2970020485
 32117 30115
 TABLE 10

GEODETIC COORDINATES
 32.40043 LAT DEG
 106.37033 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIR (DEGREES- TRUE)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
3989.0	883.6	29.5	36.0	1010.6	679.9	15.0	14.0	1.000287
4000.0	883.3	29.4	36.0	1010.5	679.8	15.0	13.9	1.000287
4500.0	868.2	26.3	37.0	1004.5	670.0	15.0	11.8	1.000277
5000.0	853.5	24.5	40.3	993.2	674.0	16.4	9.6	1.000274
5500.0	835.6	23.2	40.5	980.7	672.4	17.7	7.4	1.000268
6000.0	824.1	22.3	38.8	967.0	671.2	20.2	5.2	1.000261
6500.0	809.8	22.3	33.7	950.7	671.1	16.0	4.1	1.000251
7000.0	795.6	21.3	33.2	937.5	669.9	.7	3.3	1.000248
7500.0	781.7	20.2	37.7	924.5	668.7	316.9	4.7	1.000245
8000.0	768.1	19.0	40.1	911.8	667.4	303.2	7.1	1.000242
8500.0	754.5	17.9	41.5	899.2	666.1	290.0	9.4	1.000239
9000.0	741.2	16.8	42.9	886.7	664.8	274.5	9.4	1.000235
9500.0	728.1	15.7	43.5	874.7	663.4	270.2	8.2	1.000230
10000.0	715.1	14.3	41.5	863.7	661.0	255.7	6.4	1.000225
10500.0	702.4	12.9	39.4	852.0	659.9	241.8	4.1	1.000217
11000.0	689.7	11.6	36.8	840.5	658.4	227.0	2.7	1.000211
11500.0	677.3	10.5	34.2	829.9	656.9	236.0	2.1	1.000205
12000.0	664.9	9.0	37.7	819.0	655.2	212.2	2.2	1.000203
12500.0	652.7	7.4	41.7	808.4	653.4	195.0	2.5	1.000201
13000.0	640.8	5.9	45.6	798.0	651.0	185.0	2.6	1.000198
13500.0	629.1	4.5	46.6	787.5	649.9	205.4	1.4	1.000195
14000.0	617.4	4.1	34.2	774.4	649.3	278.0	1.3	1.000186
14500.0	605.0	4.0	23.7	760.8	648.9	351.8	4.0	1.000179
15000.0	594.7	3.5	18.0	748.2	648.2	359.0	6.7	1.000174
15500.0	583.6	2.6	18.0	736.7	647.2	2.0	8.4	1.000171
16000.0	572.7	1.7	18.0	725.3	646.1	359.0	9.1	1.000168
16500.0	562.0	.8	18.0	714.2	645.0	352.1	9.3	1.000165
17000.0	551.4	.0	17.5	702.7	644.1	346.9	9.4	1.000162
17500.0	541.1	-.7	16.8	691.2	643.3	342.1	9.5	1.000159
18000.0	530.9	-1.4	16.1	680.0	642.5	350.4	8.7	1.000156
18500.0	520.8	-2.3	16.0	669.5	641.3	329.4	7.9	1.000153
19000.0	510.9	-3.4	16.0	659.5	640.1	321.9	7.3	1.000151
19500.0	501.2	-4.4	16.0	649.2	638.9	315.7	6.9	1.000148
20000.0	491.5	-5.5	16.0	639.5	637.5	313.7	7.4	1.000146
20500.0	482.0	-6.7	16.0	630.0	636.0	315.5	8.1	1.000143
21000.0	472.7	-7.9	16.0	620.0	634.0	323.8	10.0	1.000141
21500.0	463.6	-9.1	16.0	611.4	632.2	330.1	12.2	1.000139
22000.0	454.6	-10.2	16.0	602.0	631.0	340.1	15.4	1.000137
22500.0	445.6	-11.0	16.0	592.0	630.0	340.5	19.0	1.000134
23000.0	436.4	-11.8	16.0	582.7	629.9	348.5	20.9	1.000132

STATION ALTITUDE 3989.00 FEET MSL
 24 SEP. 82 1300 HRS MDT
 ASCENSION NO. 485

WIND DATA
 2670020485
 WHITE SANDS
 TABLE 10 CONT'D

GLOTTIC COORDINATES
 32.40043 LAT DEG
 106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GRAMS PER CUBIC METER	SPEED OF WIND KNOTS	WIND DATA		INDEX OF REFRACTION
							DIRECTION DEGREES (TN)	SPEED KNOTS	
23500.0	426.3	-12.6	-33.1	16.0	572.6	620.9	350.1	22.8	1.000130
24000.0	419.9	-13.6	-33.8	16.3	563.4	627.7			1.000127
24500.0	411.5	-14.9	-34.4	17.0	554.8	620.2			1.000125
25000.0	403.3	-16.1	-35.0	17.7	546.4	624.7			1.000123

STATION ALTITUDE 3984.0 FEET MSL
 24 SEP. 82
 ASCENSION NO. 405
 1300 HRS MDT

LABORATORY LEVELS

26700-20485
 WHITE SANDS

TABLE 11

BLUDETIC COORDINATES
 32.40043 LAT DEG
 106.37033 LON DEG

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE		REL. HUM. PERCENT	WIND DATA		
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS	
850.0	5109.	24.1	10.0	41.	16.7	9.1	
800.0	6840.	21.7	5.3	34.	12.7	3.4	
750.0	8664.	17.6	4.5	42.	297.2	9.4	
700.0	10583.	12.6	-1.0	39.	280.6	3.7	
650.0	12605.	7.1	-4.0	43.	193.3	2.5	
600.0	14747.	3.9	-18.2	18.	357.3	5.7	
550.0	17046.	-1.1	-21.9	17.	346.3	9.4	
500.0	19532.	-4.5	-26.5	16.	312.8	6.9	
450.0	22221.	-10.6	-31.5	16.	343.0	17.1	
400.0	25163.	-16.6	-35.3	10.			

STATION ALTITUDE 4051.77 FEET MSL
 24 SEP. 82
 ASCENSION NO. 08

SIGNIFICANT LEVEL DATA
 267018009J
 LC-37
 TABLE 12

GEODETLIC COORDINATES
 32.40175 LAT DEG
 106.31232 LONG DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT PERCENT	REL. HUM. PERCENT
880.3	4051.4	29.5	16.4	55.0
868.0	4161.4	26.8	6.7	32.0
850.0	5068.1	25.8	6.8	34.0
826.6	5972.3	23.8	9.0	39.0
806.3	6585.3	23.1	6.8	35.0
766.8	8015.5	19.6	7.4	45.0
710.1	10168.4	-14.2	-1.0	35.0
700.0	10565.3	13.5	-1.3	36.0
642.8	12894.2	6.3	-5.3	43.0
629.8	13443.7	4.0	-5.0	49.0
613.1	14162.0	3.1	-13.6	28.0
589.1	15270.6	3.1	-18.2	19.0
533.2	17858.9	-1.3	-23.2	17.0
517.9	18620.1	-2.5	-24.1	17.0
510.4	18999.9	-3.5	-25.6	16.0
500.0	19534.2	-4.2	-26.2	16.0
453.4	22040.0	-10.6	-30.8	17.0
426.3	23593.5	-12.8	-26.3	31.0
400.0	25181.4	-16.3	-29.1	32.0

STATION ALTITUDE 4051.17 FEET MSL
 24 SEP. 82
 ASCENSION NO. 98

UPPER AIR DATA
 2870180000
 LC-37
 TABLE 13

GEOMETRIC ALTITUDE MSL FEET
 PRESSURE MILLIBARS
 TEMPERATURE AIR DEGREES
 DENSITY POINT DEGREE CENTIGRADE
 WIND DIRECTION DEGREES
 WIND SPEED KNOTS
 REFRACTION INDEX OF REFRACTION

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	DENSITY POINT DEGREE CENTIGRADE	WIND DIRECTION DEGREES	WIND SPEED KNOTS	REFRACTION INDEX OF REFRACTION
4051.4	880.3	29.5	12.4	35.0	1007.0	679.9
4500.0	866.8	28.7	8.7	32.1	1002.0	676.3
5000.0	852.0	25.9	8.8	33.1	987.5	675.4
5500.0	837.4	24.7	8.9	36.7	974.2	674.1
6000.0	822.9	23.7	8.6	38.3	960.6	672.9
6500.0	808.7	23.2	7.1	35.5	946.2	672.2
7000.0	794.6	22.1	7.1	37.0	933.1	671.0
7500.0	780.8	20.9	7.3	41.0	920.0	669.7
8000.0	767.2	19.6	7.4	44.7	906.2	668.3
8500.0	753.7	18.4	5.5	42.7	896.5	666.7
9000.0	740.3	17.1	3.6	40.4	884.9	665.1
9500.0	727.2	15.9	1.6	39.1	873.4	663.5
10000.0	714.4	14.6	-0.3	35.8	862.1	661.9
10500.0	701.7	13.6	-1.2	35.3	849.8	660.7
11000.0	689.0	12.2	-2.0	37.3	838.8	659.0
11500.0	676.5	10.6	-2.8	38.8	826.2	657.2
12000.0	664.2	9.1	-3.7	40.3	817.7	655.3
12500.0	652.1	7.5	-4.6	41.8	807.4	653.5
13000.0	640.3	6.0	-5.3	44.2	797.1	651.7
13500.0	628.5	4.7	-5.6	47.4	786.2	650.1
14000.0	616.8	3.5	-11.3	32.7	775.6	648.5
14500.0	605.4	3.1	-14.9	25.1	762.5	647.9
15000.0	594.1	3.1	-17.0	21.2	748.4	647.6
15500.0	583.0	2.7	-19.7	18.8	735.6	647.3
16000.0	572.1	1.9	-18.6	18.4	724.1	646.3
16500.0	561.4	1.0	-20.6	18.1	712.7	645.3
17000.0	550.8	.2	-21.5	17.7	701.6	644.3
17500.0	540.5	-0.7	-22.5	17.3	690.6	643.3
18000.0	530.3	-1.5	-23.3	17.0	679.7	642.3
18500.0	520.3	-2.3	-24.0	17.0	668.8	641.3
19000.0	510.4	-3.5	-25.6	16.0	659.0	639.9
19500.0	500.7	-4.2	-27.2	16.2	648.0	639.1
20000.0	491.0	-5.4	-28.1	16.2	638.5	637.6
20500.0	481.5	-6.7	-28.0	16.4	629.1	636.1
21000.0	472.2	-7.9	-28.9	16.6	620.0	634.6
21500.0	463.1	-9.2	-29.8	16.7	611.0	633.0
22000.0	454.1	-10.5	-30.8	17.0	602.1	631.5
22500.0	445.2	-11.3	-29.1	21.1	591.9	630.6
23000.0	436.5	-12.0	-27.6	25.7	581.8	629.6
23500.0	427.9	-12.7	-26.5	30.2	571.9	629.0

STATION ALTITUDE 4051.37 FFFT MSL
 24 SEP. 82
 ASCENSION NO. 98

UPPER AIR DATA
 267010090
 LC-37

TABLE 13 Cont'd

GEODETIC COORDINATES
 52.40175 LAT DEG
 106.51232 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(TW) SPEED KNOTS	INJEX OF REFRACTION
24000.0	419.4	-13.7	31.3	562.0	627.7		1.000129
24500.0	411.1	-14.8	31.6	554.0	626.4		1.000127
25000.0	402.9	-15.9	31.9	545.5	625.0		1.000125

STATION ALTITUDE 4051.37 FEET MSL
 24 SEP. 82 1400 HRS MDT
 ASCENSION NO. 98

MAINTENANCE LEVELS
 2070100090
 LC-17

TABLE 14

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.		WIND DATA	
MILLIBARS	FEET	AIR DEGRS.	DEWPOINT DEGRS.	PERCENT	DIRECTION DEGRS.	SPEED KNOTS	
850.0	5064.	25.8	8.8	34.	329.3	4.6	
800.0	6004.	22.6	7.0	37.	356.3	4.7	
750.0	6673.	18.0	5.0	42.	307.6	7.5	
700.0	10555.	13.5	-1.3	30.	290.3	5.0	
650.0	12579.	7.2	-4.8	42.	223.7	3.2	
600.0	14719.	3.1	-15.8	23.	344.3	8.2	
550.0	17022.	.1	-21.8	18.	340.5	11.3	
500.0	19506.	-4.2	-26.2	16.	310.1	9.1	
450.0	22196.	-10.9	-30.1	19.	327.4	15.1	
400.0	25139.	-16.3	-29.1	32.			

STATION ALTITUDE 3989.00 FEET MSL
 24 SEP. 82
 ASCENSION NO. 486

SIGNIFICANT LEVEL DATA

2670020486
 WHITE SAUND

GEODETTIC COORDINATES
 32.40043 LAT DEG
 106.37033 LON DEG

TABLE 15

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT
882.5	3989.0	32.5	23.0
876.0	4206.3	29.8	21.0
850.0	5081.9	25.8	26.0
815.2	6283.0	23.0	29.0
766.2	8046.4	19.9	30.0
700.0	10572.3	13.2	22.0
630.9	13403.1	5.6	21.0
622.5	13762.7	4.8	22.0
549.9	17052.8	-0.5	15.0
527.1	18160.9	-2.7	14.0
512.2	18907.7	-3.1	14.0
500.0	19533.2	-4.7	14.0
462.4	21540.4	-8.8	14.0
449.0	22288.2	-9.8	14.0
400.0	25161.6	-17.0	16.0

STATION ALTITUDE 3989.0 FEET MSL
 24 SEP. 82
 ASCENSION NO. 486

UPPER AIR DATA
 26700, 0400
 WHITE SANDS
 TABLE 1f

GEODETIC COORDINATES
 32.90043 LAT DEG
 106.37033 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND METERS	WIND DIRECTION (TURNS)	WIND VELOCITY (KNOTS)	INDEX OF REFRACTION
3989.0	802.5	32.5	23.0	1001.0	682.7	50.0	9.9	1.000209
4000.0	802.2	32.4	22.9	1001.1	682.6	29.9	9.9	1.000208
4500.0	867.2	28.5	22.7	997.8	677.9	20.9	9.8	1.000259
5000.0	852.4	26.2	25.5	990.2	675.3	23.0	9.8	1.000257
5500.0	837.7	24.8	27.0	975.6	673.6	20.7	9.7	1.000294
6000.0	823.3	23.7	28.3	962.6	672.5	17.6	9.7	1.000250
6500.0	809.0	22.6	29.1	949.3	671.2	9.3	8.1	1.000246
7000.0	794.9	21.7	29.4	935.6	670.2	35.3	6.5	1.000242
7500.0	781.1	20.9	29.7	922.2	669.2	35.3	6.3	1.000238
8000.0	767.5	20.0	30.0	908.9	668.2	31.4	7.0	1.000233
8500.0	753.9	18.7	29.6	897.1	666.6	30.8	7.3	1.000227
9000.0	740.5	17.4	27.0	885.5	664.9	30.6	7.4	1.000221
9500.0	727.4	16.0	23.4	874.1	663.3	30.1	7.4	1.000216
10000.0	714.5	14.7	23.8	862.0	661.7	30.2	7.3	1.000210
10500.0	701.8	13.4	22.2	851.7	660.1	30.5	6.5	1.000206
11000.0	689.1	12.1	21.6	840.3	658.5	29.7	5.5	1.000202
11500.0	676.6	10.7	21.7	829.0	656.9	29.5	4.6	1.000198
12000.0	664.3	9.4	21.5	817.9	655.3	29.6	3.6	1.000194
12500.0	652.2	8.0	21.3	806.9	653.7	29.7	4.6	1.000191
13000.0	640.3	6.7	21.1	796.2	652.1	29.7	5.7	1.000187
13500.0	628.6	5.4	21.3	785.3	650.6	29.7	6.9	1.000184
14000.0	617.0	4.4	21.5	773.5	649.4	29.9	6.1	1.000181
14500.0	605.4	3.6	20.4	761.3	648.4	31.3	8.5	1.000178
15000.0	594.1	2.8	19.4	749.3	647.5	33.5	9.6	1.000174
15500.0	583.0	2.0	18.3	737.6	646.5	34.6	10.6	1.000171
16000.0	572.2	1.2	17.2	726.0	645.5	34.8	11.3	1.000168
16500.0	561.5	.4	16.2	714.6	644.5	34.6	11.0	1.000164
17000.0	551.0	-.4	15.1	703.4	643.6	35.4	10.8	1.000161
17500.0	540.6	-1.4	14.6	692.6	642.6	35.7	10.7	1.000158
18000.0	530.4	-2.4	14.1	682.0	641.2	32.9	10.2	1.000156
18500.0	520.3	-2.9	14.0	670.3	640.6	31.2	9.9	1.000153
19000.0	510.4	-3.3	14.0	658.6	640.1	30.5	9.8	1.000150
19500.0	500.6	-4.6	14.0	649.2	638.5	29.1	10.0	1.000148
20000.0	491.0	-5.7	14.0	639.2	637.3	29.8	10.7	1.000145
20500.0	481.5	-6.7	14.0	629.2	636.1	30.4	11.5	1.000143
21000.0	472.2	-7.7	14.0	619.5	634.9	31.7	12.7	1.000141
21500.0	463.1	-8.7	14.0	609.9	633.6	32.9	14.7	1.000138
22000.0	454.1	-9.4	14.0	599.6	632.8	33.6	16.8	1.000136
22500.0	445.2	-10.3	14.1	589.9	631.7	34.1	19.0	1.000134
23000.0	436.4	-11.6	14.5	581.0	630.2			1.000131

STATION ALTITUDE 3989.00 FEET MSL
 24 SEP. R2 1505 HRS MDT
 ASCENSION NO. 486

UPPER AIR DATA
 2670020486
 WHITE SANDS
 TABLE IC Cont'd

GEODETIC COORDINATES
 32.40043 LAT DEG
 106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GRAMS PER CUBIC METER	SPEED OF WIND KNOTS	WIND DATA DIRECTION (DEGREES TRUE)	SPEED KNOTS	INDEX OF REFRACTION
23500.0	427.8	-12.8	-30.1	14.8	572.3	620.7			1.000129
24000.0	419.3	-14.1	-30.8	15.2	563.7	627.2			1.000127
24500.0	411.0	-15.3	-35.6	15.5	555.2	625.7			1.000125
25000.0	402.9	-16.5	-36.5	15.9	546.9	624.1			1.000123

STATION ALTITUDE 3989.00 FEET MSL
 24 SEP. 82
 ASCENSION NO. 486

TEMPERATURE LEVELS
 25700.0486
 WHITE SANDS
 TABLE 17

GEODETIC COORDINATES
 32.40043 LAT DEG
 106.37033 LONG DEG

PRESSURE MILLIBARS	GEOPOTENTIAL FELT	TEMPERATURE		REL. HUM. PERCENT	WIND DATA		
		ATM DEGREES	DEWPOINT CENTIGRADE		DIRECTION DEGREES (TN)	SPEED KNOTS	
850.0	5078.	25.8	4.9	26.	23.3	9.8	
800.0	6815.	22.1	3.4	29.	1.1	7.1	
750.0	8641.	18.3	-4	28.	306.7	7.3	
700.0	10562.	13.2	-8.0	22.	300.1	6.4	
650.0	12585.	7.8	-13.0	21.	294.2	4.8	
600.0	14728.	3.2	-17.0	20.	327.7	9.0	
550.0	17026.	-5	-23.9	15.	338.0	10.8	
500.0	19505.	-4.7	-28.1	14.	290.7	10.0	
450.0	22197.	-9.7	-32.1	14.	339.4	17.8	
400.0	25139.	-17.0	-36.8	10.			

**DAT
ILMI**