

AD-A124 117

12830C LANCE MISSILE NUMBER 2540 ROUND NUMBER 381-DSL 6 1/1

DECEMBER 1982(U) ARMY ELECTRONICS RESEARCH AND

DEVELOPMENT COMMAND WSMR NM ATM... D C KELLER DEC 82

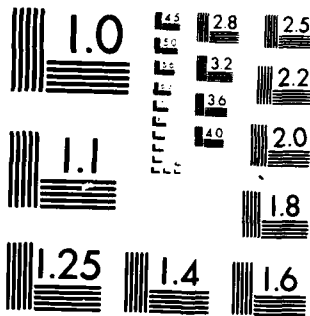
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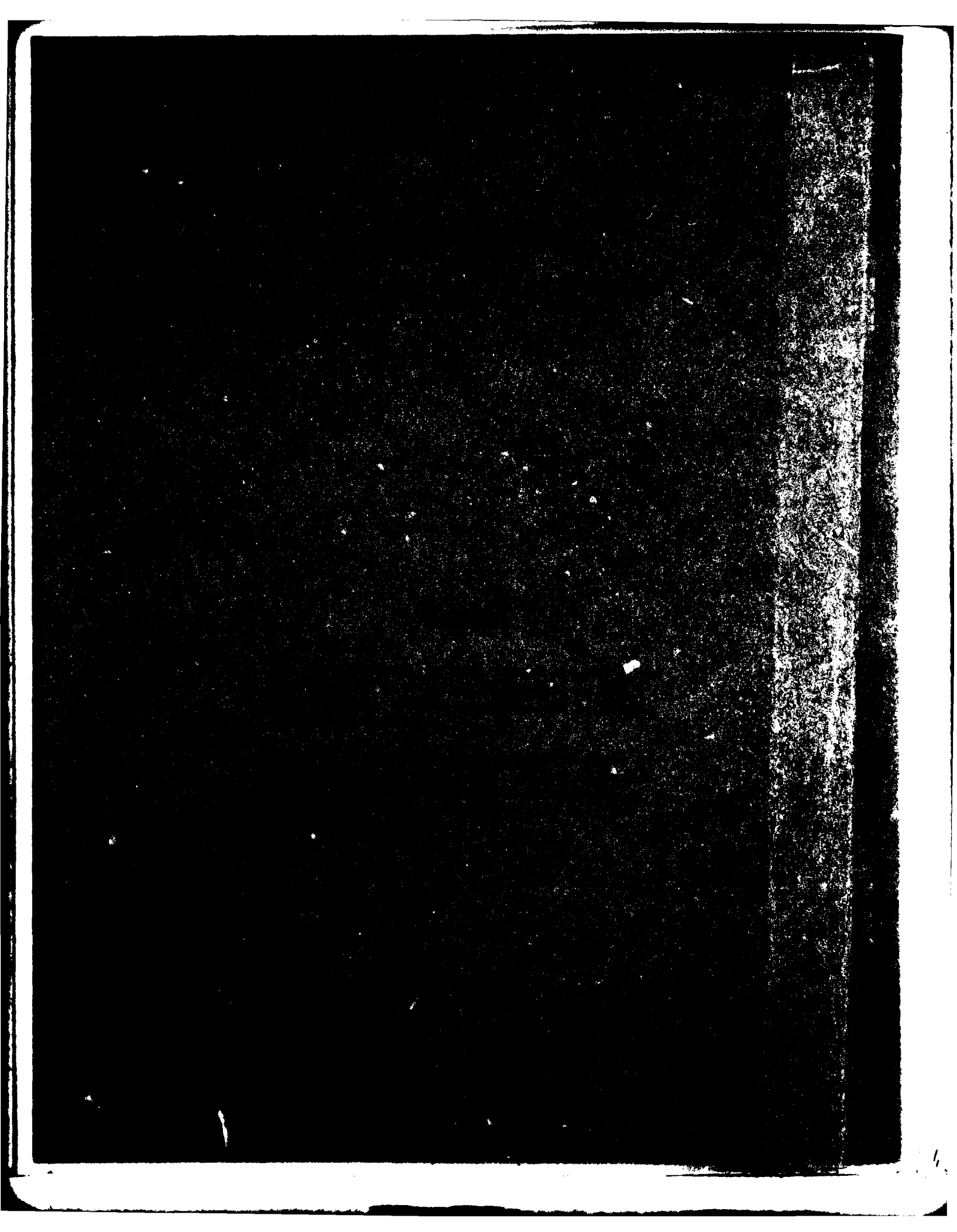
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MICROCOPY RESOLUTION TEST CHART
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18. SUPPLEMENTARY NOTES			
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)			
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of the 12830C LANCE, Missile Number 2540, Round Number 381-DSL are presented in tabular form.			

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EDITION OF 1 NOV 65 IS OBSOLETE

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INTRODUCTION

12830C LANCE, Missile Number 2540, Round Number 381-DSL, was launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 1632:35 MST, 6 Dec 82. The scheduled launch time was 1615 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/m³), wind direction and speed, and cloud cover were made at the LC-33 Met Site at T-0 minutes. CUM

(2) → Anemometer data were provided from existing pole-mounted and tower-mounted anemometers at LC-33. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

b. Upper Air

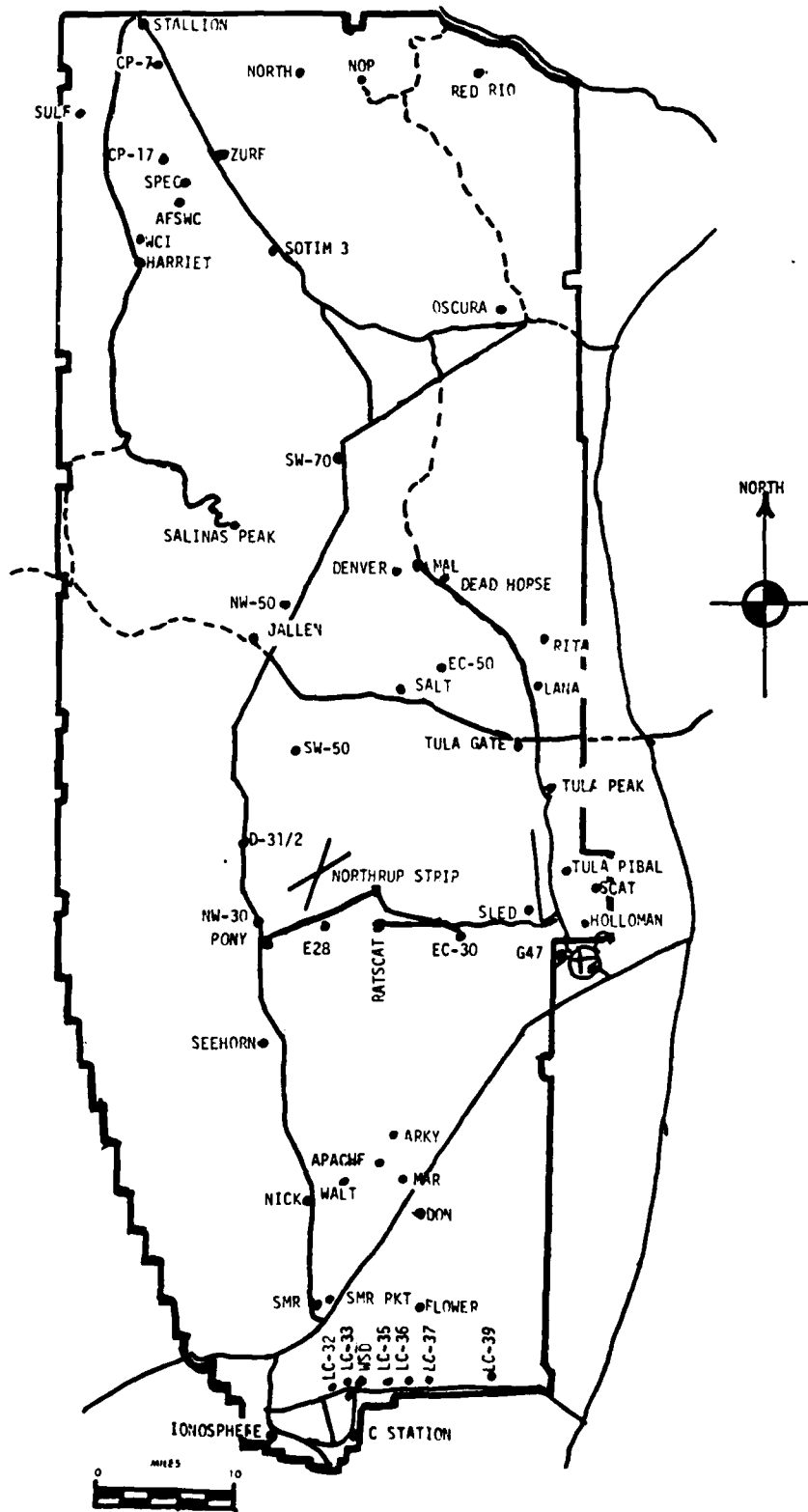
(1) Low level wind data were obtained from a NIKE-HERCULES Radar Tracked Pilot-Balloon observation at:

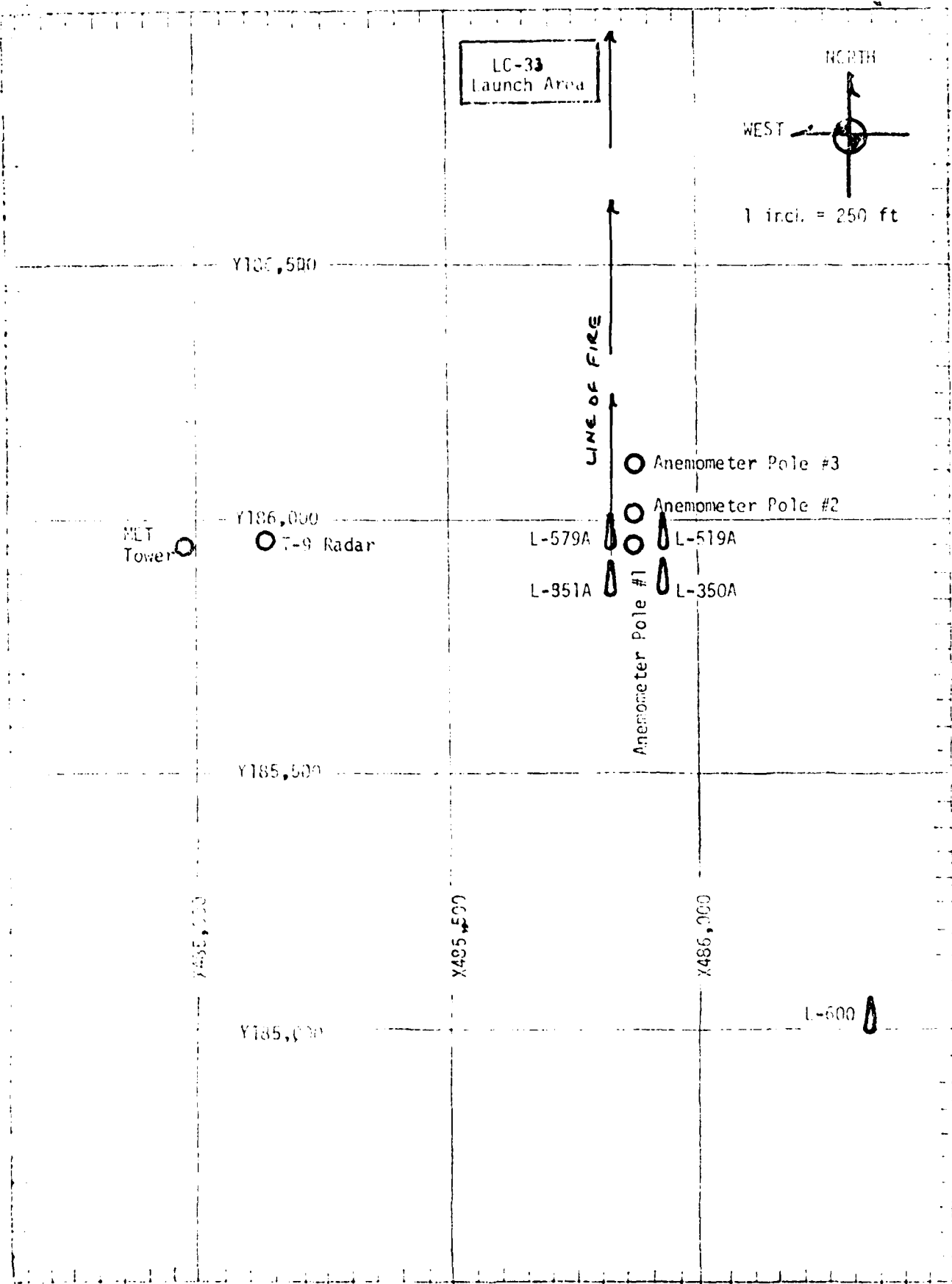
SITE AND ALTITUDE
WSD 2760 Meters

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

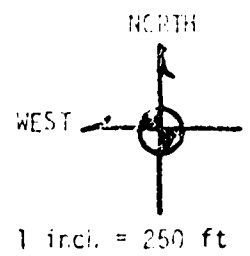
SITE AND TIME
LC-37 (Launch Area) 1605 MST
JALLEN (Mid-Course) 1445 MST
STALLION (Impact Area) 1645 MST

WSMR METEOROLOGICAL SITES





LC-33
Launch Area



Y186,500

LINE OF FIRE

Anemometer Pole #3

Anemometer Pole #2

MET
Tower

Y186,000

T-9 Radar

L-579A

L-519A

L-951A

L-350A

Anemometer Pole #1

Y185,500

X485,500

X485,500

X486,000

Y185,000

L-600

PROJECT SURFACE OBSERVATION

STATION LC-33									
TABLE 1		DATE 6 DAY		Dec MONTH		82 YEAR		X= 484,982.64 Y= 185,957.73 H= 3995.00	
TIME M.S.L.	PRESSURE mbs	TEMPERATURE OF °C	DEW POINT OF °C	RELATIVE HUMIDITY %	DENSITY gm/m ³	DIRECTION degs In	WIND SPEED kts	CHARACTER kts	VISIBILITY
1633	880.3	11.1	-1.0	43		180	03		50

OBSTRUCTIONS TO VISIBILITY	CLOUDS						REMARKS
	1st LAYER		2nd LAYER		3rd LAYER		
	AMT	HGT	AMT	HGT	AMT	HGT	
	0	AS 15,000	1	CI 25,000			

PSYCHROMETRIC COMPUTATION

TIME:	1633
DRY BULB TEMP.	11.1
WET BULB TEMP.	5.3
WET BULB DEPR.	5.8
DEW POINT	-1.0
RELATIVE HUMID.	43

TABLE 2 LC-33 FIXED POLE ANEMOMETER MEASURED WINDS

POLE #1 X485,874.29 Y185,958.90 H4018.74 38.7 ft. AGL			POLE #2 X485,874.29 Y186.012.00 H4033.57 53.0 ft. AGL			POLE #3 X485,877.29 Y186,116.06 H4063.92 83.6 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	165	04	T -30	172	03	T -30	169	05
T -20	165	04	T -20	172	03	T -20	169	05
T -10	165	04	T -10	172	03	T -10	168	05
T 0.0	165	04	T 0.0	171	03	T 0.0	168	04
T +10	165	04	T +10	158	02	T +10	168	04

TABLE 3 LC-33 METEOROLOGICAL TOWER ANEMOMETER MEASURED WINDS (202 FT TOWER)

LEVEL #1, 12 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #2, 62 FEET X484,982.64, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KNOTS	T-TIME SEC	DIR DEG	SPEED KNOTS
T -30	189	03	T -30	170	04
T -20	188	03	T -20	170	04
T -10	186	03	T -10	170	04
T 0.0	182	03	T 0.0	170	04
T +10	186	03	T +10	170	04

LEVEL #3, 102 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #4, 202 FEET X484,982.64, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KNOTS	T-TIME SEC	DIR DEG	SPEED KNOTS
T -30	182	05	T -30	171	04
T -20	182	05	T -20	171	04
T -10	182	05	T -10	172	04
T 0.0	182	05	T 0.0	172	04
T +10	182	05	T +10	172	04

WIND DATA

DATE 4

WSD

DATE 6 Dec 82

TIME 1633

COORDINATES (W/M)

X= 488,852.29

Y= 184,982.45

Z= 3993.75

WIND DATA

WIND DATA

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS	HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS	HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
SFC	170	02	1800	220	15			
60	172	02	1860	213	17			
120	175	05	1920	226	13			
180	186	03	1980	226	13			
240	172	03	2040	237	12			
300	176	05	2100	229	12			
360	177	04	2160	221	14			
420	156	04	2220	222	16			
480	164	03	2280	218	15			
540	169	02	2340	213	16			
600	174	04	2400	216	16			
660	190	04	2460	214	15			
720	220	03	2520	216	15			
730	213	02	2580	219	15			
840	213	02	2640	219	14			
900	217	06	2700	221	14			
960	210	11	2760	222	14			
1020	207	15						
1080	213	13						
1140	206	15						
1200	209	15						
1260	208	15						
1320	211	17						
1380	210	17						
1440	207	17						
1500	203	16						
1560	208	16						
1620	212	15						
1680	214	16						
1740	213	16						

COMPUTER MET MESSAGE DATA
6 Dec 82

LC-37 1605 MST	JALLEN 1445 MST	STALLION 1645 MST
METCM1325064	METCM1332065	METCM1338067
062310124878	062180124878	062380151850
00000000 28600878	00178003 23780878	00276002 23170850
01397002 28680868	01269003 23510868	01294006 23290839
02330004 28450842	02285006 28270842	02319008 28140814
03366005 28170802	03373005 28040802	03378016 27980776
04382014 28190755	04407015 27970755	04417016 27990730
05384014 27970711	05382013 27980710	05419019 27740687
06391014 27710669	06406018 27660668	06424019 27380645
07392016 27230628	07418021 27290628	07432020 26980606
08440016 26810590	08445017 26880590	08434020 26570569
09452021 26480553	09469022 26480553	09435024 26160533
10437024 26070519	10446024 26060518	10431026 25840499
11442027 25690486	11447028 25670485	11443023 25460467
12448030 25130439	12459025 25060439	12462023 24870422
13453032 24270382	13464028 24290382	13489022 24010367
14468027 23400332	14464028 23510331	
15489025 22630286	15482028 22590286	
16502028 22260246	16501029 22220246	
17528031 22230211	17517036 22210211	
18486029 22220181	18512030 22370181	
19475030 21700155	19477026 21880155	
20520023 21330132	20512028 21460133	
21522014 20770113	21529017 20940113	
22615009 20440096	22582015 20600096	
	23083000 20640081	
	24099006 20980069	
	25233002 21170059	
	26006006 21030050	

STATION ALTITUDE 6051.37 FEET MSL
 8 WFC. 82 1605 HRS MST
 ASCENSION NO. 119

SIGNIFICANT LEVEL DATA

3400180119
 LC-37

TABLE 6

PRESSURE GEOMETRIC ALTITUDE MILLIHRS MSL FEET	TEMPERATURE		REL. HUM. PERCENT	
	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		
877.9	4051.4	12.0	-2.2	37.0
875.7	4120.6	13.8	-2.6	32.0
850.0	4941.3	11.6	-3.3	35.0
812.7	6164.4	7.6	-5.1	40.0
792.3	6852.4	7.8	-11.5	24.0
783.1	7162.0	8.8	-12.3	21.0
768.6	7676.5	8.7	-11.8	22.0
752.9	8236.9	8.7	-11.2	23.0
724.8	9266.2	6.7	-12.9	23.0
700.0	10203.3	5.8	-14.2	22.0
668.5	11436.6	3.9	-15.8	22.0
603.2	14139.6	-4.3	-24.3	23.0
564.9	15829.2	-7.3	-25.3	22.0
500.0	18911.1	-14.8	-31.2	23.0
435.9	22278.4	-22.1	-37.5	23.0
400.0	24334.4	-27.8	-40.3	29.0
334.5	28469.2	-38.8	-49.2	32.0
300.0	30899.1	-44.5		
267.1	33428.7	-50.2		
250.0	34851.3	-50.3		
234.9	36188.9	-50.9		
219.7	37622.8	-51.1		
209.7	38619.2	-51.9		
204.9	39114.2	-51.4		
200.0	39635.0	-49.0		
176.3	42350.0	-51.3		
162.6	44068.5	-54.9		
150.0	45760.2	-57.0		
141.5	46972.9	-58.8		
129.6	48787.4	-59.8		
112.2	51715.9	-66.0		
100.0	54005.7	-68.6		
50.4	55998.2	-69.2		
66.6	56845.7	-68.8		

STATION ALTITUDE 4051.37 FEET MSL
 6 DEC. 84
 ASCENSION NO. 117

UPPER AIR DATA
 3400180119
 LC-37

TABLE 7

GEODETIC COORDINATES
 32.40175 LAT DEG
 106.31232 LON DEG

GEOGRAPHIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	TEMPERATURE DMPPOINT CENTIGRADE	REFL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRFRES(TN) DEGREES	WIND DATA		INDEX OF REFRACTION
								SPEED KNOTS	DIRECTION	
451.4	877.9	12.0	-2.2	37.0	1070.1	658.6	.0	.0	1.000263	
450.0	863.7	12.8	-2.9	33.4	1050.0	659.5	189.4	1.1	1.000257	
500.0	848.2	11.4	-3.4	35.2	1036.2	657.9	169.4	2.2	1.000253	
550.0	832.6	9.8	-4.1	37.3	1023.3	656.0	180.4	3.4	1.000249	
600.0	817.6	8.1	-4.9	39.3	1010.6	654.0	191.5	4.6	1.000246	
650.0	802.7	7.7	-7.8	32.2	994.1	653.4	204.9	6.3	1.000238	
700.0	788.0	6.3	-11.8	22.6	974.3	653.9	212.4	8.2	1.000229	
750.0	773.6	8.7	-12.0	21.7	954.9	654.5	215.3	10.8	1.000224	
800.0	759.5	8.7	-11.5	22.6	937.6	654.5	216.6	13.0	1.000221	
850.0	745.6	8.2	-11.7	23.0	922.1	653.9	215.5	13.6	1.000217	
900.0	732.0	7.2	-12.5	23.0	908.4	652.7	214.9	14.0	1.000214	
950.0	718.5	6.5	-13.3	22.8	894.1	651.8	215.7	13.7	1.000210	
1000.0	705.3	6.0	-14.0	22.2	879.2	651.3	216.7	13.5	1.000206	
1050.0	692.3	5.3	-14.6	22.0	865.1	650.5	218.5	13.5	1.000202	
1100.0	679.5	4.6	-15.3	22.0	851.4	649.6	219.8	13.6	1.000199	
1150.0	666.9	3.7	-16.0	22.0	838.3	648.5	219.9	14.1	1.000195	
1200.0	654.3	2.2	-17.2	22.2	827.1	646.7	219.9	14.7	1.000192	
1250.0	642.0	.7	-18.4	22.4	816.1	644.9	220.1	15.5	1.000189	
1300.0	629.9	-2.8	-19.5	22.6	805.2	643.1	221.2	16.2	1.000186	
1350.0	618.1	-3.9	-20.7	22.8	794.5	641.3	222.0	16.2	1.000183	
1400.0	606.4	-4.9	-21.9	22.9	784.0	639.5	232.8	16.3	1.000180	
1450.0	594.8	-5.8	-22.9	22.8	772.1	638.2	242.8	16.6	1.000177	
1500.0	583.4	-6.7	-23.6	22.5	759.8	637.1	252.2	17.4	1.000174	
1550.0	572.2	-7.7	-24.7	22.2	747.7	636.1	254.1	18.7	1.000171	
1600.0	561.1	-8.7	-25.6	22.1	736.0	634.9	254.7	20.0	1.000168	
1650.0	550.1	-9.9	-26.6	22.2	724.9	633.4	252.6	21.1	1.000165	
1700.0	539.3	-10.1	-27.6	22.4	714.0	631.9	249.5	22.3	1.000163	
1750.0	528.7	-11.4	-28.5	22.5	703.3	630.5	247.4	23.4	1.000160	
1800.0	518.4	-12.6	-29.5	22.7	692.8	629.0	246.6	24.1	1.000157	
1850.0	508.2	-13.8	-30.4	22.9	682.4	627.5	245.9	24.9	1.000155	
1900.0	498.2	-15.0	-31.4	23.0	672.1	626.0	247.0	25.8	1.000152	
1950.0	488.1	-16.1	-32.3	23.0	661.3	624.7	248.1	26.7	1.000150	
2000.0	478.3	-17.2	-33.3	23.0	650.7	623.4	249.3	27.8	1.000147	
2050.0	468.7	-18.2	-34.2	23.0	640.3	622.1	250.4	29.2	1.000145	
2100.0	459.2	-19.3	-35.1	23.0	630.1	620.7	251.7	29.9	1.000142	
2150.0	450.9	-20.4	-36.1	23.0	620.0	619.4	251.5	30.0	1.000140	
2200.0	442.9	-21.5	-37.0	23.0	610.2	618.1	251.8	30.0	1.000137	
2250.0	434.9	-22.7	-37.8	23.0	600.6	616.6	252.6	30.1	1.000135	
2300.0	427.9	-24.1	-38.4	23.1	591.5	614.9	253.4	30.2	1.000133	
2350.0	414.2	-25.5	-39.1	26.6	582.5	613.1	253.4	30.8	1.000131	

STATION ALTITUDE 4051.17 FEET MSL
 6 DEG. 32'
 ASCENSION NO. 115

UPPER AIR DATA
 34001R0110
 LC-37

GEODETIC COORDINATES
 52-40175 LAT DEG
 106-11252 LON DEG

TABLE 7 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
2400.0	405.6	-26.7	28.0	573.7	611.4	253.3	253.3	1.000129
2450.0	397.1	-25.2	29.1	564.8	609.7	253.4	253.4	1.000127
2500.0	388.6	-41.7	29.5	555.8	608.1	253.8	253.8	1.000125
2550.0	380.3	-30.9	29.8	546.9	606.4	254.2	254.2	1.000123
2600.0	372.2	-32.2	30.2	538.1	604.7	255.5	255.5	1.000121
2650.0	364.2	-33.6	30.6	529.5	603.0	257.0	257.0	1.000119
2700.0	356.4	-34.9	30.9	521.1	601.4	258.5	258.5	1.000117
2750.0	348.2	-36.2	31.3	512.8	599.7	259.1	259.1	1.000115
2800.0	341.4	-37.6	31.7	504.7	598.0	260.0	260.0	1.000113
2850.0	334.0	-38.9	31.6**	496.7	596.3	261.8	261.8	1.000111
2900.0	326.6	-40.0	25.0**	488.1	594.8	264.0	264.0	1.000109
2950.0	319.4	-41.2	16.4**	479.7	593.3	266.2	266.2	1.000107
3000.0	312.7	-42.4	11.8**	471.5	591.8	268.7	268.7	1.000105
3050.0	305.4	-43.6	5.3**	463.4	590.3	270.2	270.2	1.000103
3100.0	298.6	-44.7		455.4	588.8	272.3	272.3	1.000101
3150.0	291.8	-45.9		447.3	587.3	274.8	274.8	1.000100
3200.0	285.2	-47.0		439.3	585.9	277.4	277.4	1.000098
3250.0	278.7	-48.1		431.5	584.4	278.1	278.1	1.000096
3300.0	272.4	-49.2		423.8	583.0	278.6	278.6	1.000094
3350.0	266.2	-50.2		416.0	581.7	278.9	278.9	1.000093
3400.0	260.1	-50.2		408.5	581.6	278.9	278.9	1.000091
3450.0	254.1	-50.3		397.2	581.6	278.9	278.9	1.000088
3500.0	248.3	-50.4		388.2	581.5	281.0	281.0	1.000086
3550.0	242.6	-50.6		379.7	581.2	283.7	283.7	1.000085
3600.0	237.0	-50.8		371.3	580.9	286.1	286.1	1.000083
3650.0	231.5	-50.9		363.0	580.7	288.3	288.3	1.000081
3700.0	226.2	-51.0		354.7	580.6	290.4	290.4	1.000079
3750.0	221.0	-51.1		346.6	580.5	292.5	292.5	1.000077
3800.0	215.9	-51.4		339.1	580.1	294.7	294.7	1.000076
3850.0	210.9	-51.8		331.9	579.6	296.9	296.9	1.000074
3900.0	206.0	-51.5		323.8	580.0	296.3	296.3	1.000072
3950.0	201.3	-49.6		313.7	582.5	294.8	294.8	1.000070
4000.0	196.6	-49.3		306.0	582.9	292.6	292.6	1.000068
4050.0	192.1	-49.7		299.6	582.3	289.2	289.2	1.000067
4100.0	187.7	-50.2		293.7	581.8	285.6	285.6	1.000065
4150.0	183.4	-50.6		287.1	581.2	279.6	279.6	1.000064
4200.0	179.2	-51.0		281.0	580.7	273.2	273.2	1.000063
4250.0	175.1	-51.6		275.1	579.9	266.8	266.8	1.000061
4300.0	171.0	-52.7		270.2	578.5	260.8	260.8	1.000059
4350.0	167.0	-53.7		265.1	577.1	259.0	259.0	1.000059

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

UPPER AIR DATA
 34001RU119
 LC-37

STATION ALTITUDE 4051.77 FEET MSL
 SEC. RL 1605 HRS MST
 ASCENSION NO. 119

GEODETIC COORDINATES
 32.40175 LAT DLG
 106.31232 LON DLG

TABLE 7 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GN/CUBIC MFLR	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TW)	SPEED KNOTS	
4400.0	163.1	-54.5		260.2	575.7	261.8	29.3	1.000056
4450.0	159.3	-55.4		254.9	574.8	264.5	29.9	1.000057
4500.0	155.5	-56.1		249.6	574.0	267.0	29.9	1.000056
4550.0	151.7	-56.7		244.4	573.2	269.7	30.0	1.000054
4600.0	148.3	-57.4		239.4	572.3	273.6	30.8	1.000053
4650.0	144.6	-58.1		234.5	571.3	277.3	31.7	1.000052
4700.0	141.3	-58.8		229.7	570.4	282.0	30.3	1.000051
4750.0	137.9	-59.1		224.5	570.0	287.2	28.9	1.000050
4800.0	134.6	-59.4		219.4	569.6	290.9	25.8	1.000049
4850.0	131.4	-59.6		214.4	569.3	295.0	22.2	1.000048
4900.0	128.3	-60.3		209.9	568.4	297.7	19.1	1.000047
4950.0	125.1	-61.3		205.8	567.0	299.2	16.4	1.000046
5000.0	122.1	-62.4		201.8	565.6	297.9	14.4	1.000045
5050.0	119.1	-63.4		197.9	564.2	292.7	13.4	1.000044
5100.0	116.2	-64.5		194.0	562.8	288.0	13.0	1.000043
5150.0	113.4	-65.5		190.3	561.3	286.8	13.8	1.000042
5200.0	110.6	-66.3		186.3	560.3	286.1	14.7	1.000041
5250.0	107.9	-66.9		182.2	559.5	297.1	15.5	1.000041
5300.0	105.2	-67.5		178.1	558.7	306.7	16.8	1.000040
5350.0	102.6	-68.0		174.2	558.0	317.5	15.5	1.000039
5400.0	100.0	-68.6		170.4	557.2	330.9	14.4	1.000038
5450.0	97.5	-68.7		166.2	557.0	344.4	11.6	1.000037
5500.0	95.1	-68.9		162.2	556.8	6.6	8.3	1.000036
5550.0	92.7	-69.0		158.7	556.6			1.000035
5600.0	90.4	-69.2		154.4	556.4			1.000034
5650.0	88.1	-69.0		150.4	556.7			1.000033

GEODETIC COORDINATES
 33°16'12" LAT DEG
 106°49'51" LONG DEG

SIGNIFICANT LEVEL DATA
 3400030190
 JALLEN
 TABLE 8

STATION ALTITUDE 4051.00 FEET MSL
 6 DEC 62 1445 HRS MST
 ASCENSION NO. 130

GEOMETRIC ALTITUDE	TEMPERATURE	REL. HUM.
MILLIBARS MSL FEET	AIR DEWPOINT	PERCENT
	DEGREES CENTIGRADE	
670.3	14.0	39.0
674.2	11.6	32.0
850.0	9.1	38.0
826.9	7.2	41.0
786.7	6.4	39.0
757.7	5.5	23.0
750.6	6.5	19.0
724.5	7.5	16.0
700.0	5.7	17.0
653.5	2.1	17.0
565.1	-7.2	15.0
500.0	-14.9	18.0
400.0	-28.1	25.0
391.6	-29.0	24.0
336.2	-38.3	25.0
300.0	-44.5	
274.6	-49.9	
250.0	-52.8	
246.4	-50.4	
243.6	-51.2	
232.4	-49.2	
221.2	-51.3	
200.0	-51.5	
196.5	-49.2	
180.0	-48.6	
161.9	-53.2	
155.8	-53.7	
150.0	-55.8	
124.1	-60.1	
108.7	-65.5	
100.0	-66.9	
84.7	-68.0	
75.3	-63.3	
70.0	-63.3	
63.4	-64.0	
54.7	-60.7	
50.0	-64.1	
38.0	-58.0	
30.0	-57.0	

STATION ALTITUDE 4051.00 FEET MSL
 6 DEC. 52 1445 HRS MS
 ASCENSION NO. 190

UPPER AIR DATA
 3400030190
 JALLEN
 TABLE 9

GEODLTIC COORDINATES
 33.10712 LAT DEG
 106.49511 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES	TEMPERATURE DEWPOINT DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION (DEGREES) (TN)	SPEED KNOTS	INDEX OF REFRACTION
4051.0	878.3	14.0	3	39.0	1062.7	661.0	180.0	2.9	1.000265
4500.0	864.0	10.6	-4.4	34.5	1058.9	656.8	176.7	3.6	1.000257
5000.0	840.3	9.0	-4.5	38.2	1045.5	655.0	174.2	4.4	1.000254
5500.0	832.0	7.7	-5.0	40.2	1031.1	653.5	172.5	5.2	1.000250
6000.0	817.6	7.0	-5.5	40.5	1014.7	652.7	184.4	5.3	1.000246
6500.0	802.6	6.7	-6.0	39.8	997.1	652.3	207.6	5.7	1.000241
7000.0	787.8	6.4	-6.5	39.1	979.9	652.0	222.7	8.6	1.000237
7500.0	773.3	6.0	-6.5	31.7	963.7	651.4	229.2	12.3	1.000229
8000.0	759.1	5.5	-13.5	23.8	947.8	650.7	227.9	14.1	1.000222
8500.0	745.1	6.7	-15.7	18.4	926.7	652.0	225.7	14.5	1.000215
9000.0	731.4	7.2	-16.3	16.8	908.0	652.6	220.3	12.3	1.000211
9500.0	718.0	7.0	-16.8	16.3	892.0	652.4	217.4	12.5	1.000207
10000.0	704.8	6.1	-17.3	16.8	878.6	651.2	217.4	13.7	1.000203
10500.0	691.7	5.1	-17.9	17.0	865.4	650.1	220.4	15.8	1.000200
11000.0	678.9	4.1	-18.7	17.0	852.4	648.9	224.7	17.0	1.000197
11500.0	666.3	3.1	-19.5	17.0	839.6	647.8	228.9	18.2	1.000193
12000.0	653.9	2.1	-20.3	17.0	827.0	646.6	232.5	19.8	1.000190
12500.0	641.5	.9	-21.5	16.7	814.9	645.2	233.9	20.6	1.000187
13000.0	629.3	-.3	-22.7	16.5	803.1	643.7	235.1	20.5	1.000184
13500.0	617.4	-1.5	-23.9	16.2	791.4	642.2	237.5	18.4	1.000181
14000.0	605.6	-2.8	-25.1	16.0	779.9	640.8	242.7	16.9	1.000178
14500.0	594.1	-4.0	-26.2	15.7	768.6	639.3	249.7	16.3	1.000175
15000.0	582.8	-5.2	-27.4	15.4	757.5	637.8	256.6	18.2	1.000172
15500.0	571.8	-6.4	-28.6	15.2	746.6	636.3	260.6	20.2	1.000169
16000.0	560.8	-7.7	-29.6	15.2	735.6	634.9	263.2	22.0	1.000167
16500.0	549.8	-8.9	-30.3	15.7	724.6	633.4	261.8	22.7	1.000164
17000.0	539.0	-10.2	-31.0	16.2	713.8	631.9	259.2	23.3	1.000161
17500.0	528.4	-11.4	-31.7	16.6	703.1	630.4	251.6	23.9	1.000159
18000.0	518.1	-12.7	-32.5	17.1	692.7	628.8	246.9	24.7	1.000156
18500.0	507.9	-13.9	-33.2	17.6	682.3	627.3	246.7	25.4	1.000154
19000.0	497.9	-15.2	-34.0	18.1	672.1	625.8	249.0	26.2	1.000152
19500.0	487.7	-16.4	-34.6	18.8	661.5	624.3	253.2	27.3	1.000149
20000.0	477.7	-17.6	-35.3	19.4	651.1	622.9	254.5	27.3	1.000147
20500.0	468.0	-18.8	-36.0	20.1	640.9	621.4	255.0	26.9	1.000144
21000.0	458.4	-20.0	-36.8	20.7	630.8	619.9	256.7	25.5	1.000142
21500.0	449.1	-21.3	-37.5	21.4	620.9	618.4	258.2	25.0	1.000140
22000.0	439.9	-22.5	-38.3	22.0	611.2	616.9	259.4	25.9	1.000137
22500.0	430.9	-23.7	-39.0	22.7	601.7	615.4	259.4	26.8	1.000135
23000.0	422.1	-24.9	-39.8	23.3	592.3	613.9	259.6	27.6	1.000133
23500.0	413.5	-26.1	-40.6	24.0	583.1	612.3	260.7	27.7	1.000131

UPPER AIR DATA
 3400030190
 JALLEN
 106.49511 Lon DEG

STATION ALTITUDE 4051.00 FEET MSL
 6 DEC. 62 1445 HRS MST
 ASCENSION NO. 190

GEODETIC COORDINATES
 33.16712 LAT DEG
 106.49511 Lon DEG

TABLE 9 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION (DEGREES(TN))	WIND SPEED KNOTS	INDEX OF REFRACTION
24000.0	405.1	-27.4	24.6	574.0	610.8	261.7	27.6	1.000129
24500.0	396.7	-28.4	24.6	564.7	609.5	261.5	27.4	1.000127
25000.0	388.3	-29.5	24.1	555.2	608.1	260.9	27.5	1.000124
25500.0	380.0	-30.8	24.2	546.3	606.5	259.8	27.8	1.000122
26000.0	371.9	-32.2	24.3	537.5	604.8	261.2	27.1	1.000120
26500.0	363.9	-33.5	24.5	528.9	603.2	263.0	26.3	1.000118
27000.0	356.1	-34.8	24.6	520.4	601.5	263.2	25.5	1.000116
27500.0	348.5	-36.1	24.8	512.1	599.8	262.8	25.4	1.000115
28000.0	341.0	-37.4	24.9	504.0	598.1	261.1	26.7	1.000113
28500.0	333.6	-38.7	23.3**	495.7	596.5	260.2	27.8	1.000111
29000.0	326.3	-39.9	18.4**	487.3	595.0	259.9	28.6	1.000109
29500.0	319.0	-41.2	13.5**	479.0	593.4	260.9	29.6	1.000107
30000.0	312.0	-42.4	8.6**	470.9	591.8	262.4	30.6	1.000105
30500.0	305.1	-43.6	3.7**	462.9	590.3	263.3	30.6	1.000103
31000.0	298.3	-44.9		455.1	588.6	264.3	30.7	1.000101
31500.0	291.5	-46.3		447.6	586.8	265.8	29.3	1.000100
32000.0	284.9	-47.7		440.1	585.0	267.7	28.0	1.000098
32500.0	278.4	-49.1		432.8	583.2	271.6	26.7	1.000096
33000.0	272.1	-50.2		425.1	581.7	275.6	25.7	1.000095
33500.0	265.8	-50.9		416.6	580.8	278.9	25.1	1.000093
34000.0	259.6	-51.6		408.3	579.8	281.3	25.3	1.000091
34500.0	253.6	-52.4		400.2	578.9	282.1	26.3	1.000089
35000.0	247.6	-53.3		389.1	580.2	283.1	28.3	1.000087
35500.0	242.1	-50.9		379.5	580.7	284.2	30.8	1.000085
36000.0	236.5	-49.9		369.1	582.0	284.5	33.4	1.000082
36500.0	231.1	-49.4		359.8	582.7	284.4	35.9	1.000080
37000.0	225.8	-50.4		353.1	581.4	285.4	37.2	1.000079
37500.0	220.6	-51.3		346.4	580.3	287.7	36.8	1.000077
38000.0	215.5	-51.4		338.4	580.2	290.4	36.1	1.000075
38500.0	210.5	-51.4		330.7	580.1	293.6	34.9	1.000074
39000.0	205.6	-51.4		323.1	580.1	295.9	34.3	1.000072
39500.0	200.9	-51.5		315.7	580.0	296.4	34.3	1.000070
40000.0	196.3	-49.2		305.3	583.0	296.5	34.4	1.000068
40500.0	191.6	-49.0		298.1	583.2	296.0	34.7	1.000066
41000.0	187.4	-48.9		291.1	583.4	294.3	34.0	1.000065
41500.0	183.1	-48.7		284.3	583.6	289.7	31.3	1.000063
42000.0	178.9	-48.9		277.9	583.4	284.4	28.8	1.000062
42500.0	174.8	-49.9		272.8	582.1	279.0	26.6	1.000061
43000.0	170.8	-50.9		267.7	580.8	272.8	24.7	1.000060
43500.0	166.9	-51.9		262.7	579.5	271.5	25.1	1.000059

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

STATION ALTITUDE 4051.00 FEET MSL
 6 DEC. 52
 ASCENSION 140. 190

UPPER AIR DATA
 3400030190
 JALLEN
 TABLE 9 Cont'd

GEODLTIC COORDINATE,
 33.16712 LAT DEG
 106.49511 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	REFRACTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
44000.0	163.0	-52.9		257.8	578.2	270.7	25.6	1.000057
44500.0	159.2	-53.4		252.4	577.5	269.2	25.7	1.000056
45000.0	155.5	-53.8		247.0	577.0	267.5	25.6	1.000055
45500.0	151.9	-55.1		242.7	575.3	267.4	26.4	1.000054
46000.0	148.3	-56.1		238.0	574.0	268.2	27.8	1.000053
46500.0	144.8	-56.6		232.9	573.3	271.1	29.1	1.000052
47000.0	141.3	-57.2		227.9	572.6	276.5	30.6	1.000051
47500.0	138.0	-57.7		223.1	571.8	281.3	31.6	1.000050
48000.0	134.7	-58.2		218.3	571.1	285.8	30.7	1.000049
48500.0	131.5	-58.8		213.7	570.4	290.4	30.0	1.000048
49000.0	128.4	-59.3		209.1	569.7	292.4	27.7	1.000047
49500.0	125.3	-59.9		204.7	568.9	294.7	25.4	1.000046
50000.0	122.3	-60.7		200.5	567.8	296.7	22.1	1.000045
50500.0	119.3	-61.7		196.6	566.5	299.3	18.6	1.000044
51000.0	116.4	-62.7		192.7	565.2	300.8	16.2	1.000043
51500.0	113.6	-63.7		188.9	563.8	301.0	14.8	1.000042
52000.0	110.8	-64.7		185.2	562.5	301.1	14.8	1.000041
52500.0	108.1	-65.6		181.5	561.3	300.9	17.3	1.000040
53000.0	105.5	-66.0		177.4	560.7	301.1	19.8	1.000040
53500.0	102.9	-66.4		173.3	560.1	304.4	20.6	1.000039
54000.0	100.3	-66.8		169.4	559.6	307.4	21.6	1.000038
54500.0	97.8	-67.0		165.3	559.3	316.2	18.1	1.000037
55000.0	95.4	-67.2		161.4	559.1	322.9	14.1	1.000036
55500.0	93.0	-67.4		157.5	558.8	333.3	11.2	1.000035
56000.0	90.7	-67.5		153.7	558.6	17.3	8.9	1.000034
56500.0	88.5	-67.7		150.0	558.4	41.9	9.5	1.000033
57000.0	86.3	-67.9		146.4	558.2	41.6	7.8	1.000033
57500.0	84.1	-67.7		142.7	558.4	41.3	7.1	1.000032
58000.0	82.1	-66.7		138.5	559.7	45.4	7.6	1.000031
58500.0	80.0	-65.7		134.4	561.1	48.9	8.1	1.000030
59000.0	78.1	-64.7		130.5	562.4	54.1	7.1	1.000029
59500.0	76.1	-63.7		126.7	563.6	62.0	5.8	1.000028
60000.0	74.3	-63.3		123.3	564.4	66.4	4.8	1.000027
60500.0	72.5	-63.3		120.3	564.4	67.0	4.0	1.000027
61000.0	70.7	-63.3		117.4	564.4	68.4	3.4	1.000026
61500.0	69.0	-63.5		114.6	564.1	72.1	3.1	1.000026
62000.0	67.3	-63.9		112.0	563.6	76.5	2.8	1.000025
62500.0	65.7	-64.3		109.5	563.0	75.5	2.8	1.000024
63000.0	64.1	-64.6		107.0	562.5	73.7	2.9	1.000024
63500.0	62.5	-64.4		104.3	562.9	79.1	3.0	1.000023

UPPER AIR DATA
 3400030190
 JALLEN
 TABLE 9 Cont'd

STATION ALTITUDE 4051.00 FEET MSL
 6 DEC. 52 1445 HRS MST
 ASCENSION NO. 177

GEOMETRIC ALTITUDE
 MSL FEET

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREE CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION (DEGREES(TN))	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
64000.0	61.0	-63.7		101.4	563.8	89.9	3.3	1.000023
64500.0	59.5	-63.0		98.6	564.7	90.2	3.6	1.000022
65000.0	58.1	-62.4		95.9	565.6	85.6	3.6	1.000021
65500.0	56.6	-61.7		93.3	566.5	75.5	3.7	1.000021
66000.0	55.3	-61.0		90.8	567.5	51.3	4.4	1.000020
66500.0	53.9	-61.2		88.7	567.1	32.7	5.8	1.000020
67000.0	52.6	-62.2		86.9	565.9	20.4	6.8	1.000019
67500.0	51.4	-63.1		85.2	564.6	27.8	7.1	1.000019
68000.0	50.1	-64.0		83.5	563.4	29.6	7.3	1.000019
68500.0	48.9	-63.6		81.3	563.9	39.9	7.0	1.000018
69000.0	47.7	-63.1		79.1	564.7	50.7	7.0	1.000018
69500.0	46.6	-62.5		77.0	565.4	61.4	8.4	1.000017
70000.0	45.5	-62.0		75.0	566.1	68.6	10.5	1.000017
70500.0	44.4	-61.4		73.0	566.8	73.2	12.6	1.000016
71000.0	43.3	-60.9		71.1	567.6	76.3	14.0	1.000016
71500.0	42.3	-60.4		69.2	568.3	78.7	15.4	1.000015
72000.0	41.2	-59.8		67.3	569.0	80.1	16.7	1.000015
72500.0	40.2	-59.3		65.6	569.7	80.7	17.7	1.000015
73000.0	39.3	-58.7		63.8	570.5	81.3	18.8	1.000014
73500.0	38.3	-58.2		62.1	571.2	80.4	19.2	1.000014
74000.0	37.4	-57.9		60.6	571.5	79.7	19.6	1.000013
74500.0	36.5	-57.8		59.1	571.7	80.0	19.7	1.000013
75000.0	35.7	-57.7		57.7	571.8	82.1	19.3	1.000013
75500.0	34.8	-57.6		56.3	571.9	84.2	19.0	1.000013
76000.0	34.0	-57.5		54.9	572.1	87.2	20.1	1.000012
76500.0	33.2	-57.4		53.6	572.2	90.1	21.6	1.000012
77000.0	32.4	-57.3		52.3	572.3	92.5	23.2	1.000012
77500.0	31.6	-57.2		51.1	572.5			1.000011
78000.0	30.9	-57.1		49.8	572.6			1.000011
78500.0	30.2	-57.0		48.6	572.7			1.000011

STATION ALTITUDE 4051.00 FEET MSL
 6 DEC. 62
 ASSEMBLY NO. 190

MANDATORY LEVELS
 3400000190
 JALLEN
 TABLE 10

GEODETIC COORDINATES
 33.16712 LAT DEG
 106.49511 LONG DEG

PRESSURE MILLIBARS	POTENTIAL FEET	AIR TEMPERATURE DEGREES CENTIGRADE	TEMPERATURE DEWPOINT PERCENT	REL. HUMID. PERCENT	WIND DIRECTION DEGREES (TN)	WIND DATA SPEED KNOTS
850.0	4944.	9.1	-4.4	38.	174.4	4.3
800.0	6502.	6.7	-6.1	40.	211.0	5.8
750.0	8316.	6.5	-15.4	19.	227.2	15.2
700.0	10174.	5.7	-17.4	17.	218.6	14.5
650.0	12148.	1.8	-20.7	17.	233.3	20.2
600.0	14244.	-3.4	-25.6	16.	240.0	18.4
550.0	16477.	-8.9	-30.3	16.	251.8	22.7
500.0	18871.	-14.9	-33.8	18.	247.9	26.0
450.0	21455.	-21.1	-37.4	21.	258.2	25.0
400.0	24268.	-28.1	-41.9	25.	261.6	27.5
350.0	27365.	-35.8	-48.8	25.	263.1	25.1
300.0	30815.	-44.5			264.0	30.7
250.0	34737.	-52.8			282.7	27.2
200.0	39503.	-51.5			296.5	34.3
175.0	42378.	-49.8			279.5	26.8
150.0	45642.	-55.8			267.8	27.1
125.0	49414.	-59.9			294.8	25.3
100.0	53899.	-66.9			307.6	21.7
80.0	58313.	-65.7			48.8	8.1
70.0	60999.	-63.3			69.6	3.3
60.0	64097.	-63.3			95.3	3.5
50.0	67793.	-64.1			29.9	7.3
40.0	72329.	-59.1			80.8	17.9
30.0	78286.	-57.0				

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

STATION ALTITUDE 4946.00 FEET "MSL
 6 DEC. P.
 ASCENSION NO. 53

SIGNIFICANT LEVEL DATA
 3400040053
 STATION
 TABLE II

GEODETIC COORDINATES
 33.81920 LAT DEG
 106.66501 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT
849.5	4940.0	8.1	42.0
844.4	5103.7	9.8	36.0
787.9	6976.6	5.8	36.0
768.3	7656.0	6.2	24.0
758.6	7998.2	6.7	21.0
729.5	9052.6	6.8	19.0
700.0	10162.4	5.2	18.0
663.5	11590.3	2.2	17.0
591.6	14592.2	-5.0	16.0
531.9	17303.7	-12.0	18.0
500.0	18851.5	-14.7	18.0
400.0	24269.7	-27.6	22.0
349.9	27381.2	-36.2	29.0
336.3	28282.2	-38.6	31.0
310.2	30991.1	-43.2	

UPPER AIR DATA
 3400060053
 STALLION
 TABLE 12

STATION ALTITUDE 4940.00 FEET MSL
 6 DEC 52
 1645 HRS MST
 ASCENSION NO. 53

GEODETIC COORDINATES
 33.81920 LAT DLG
 106.66501 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
4540.0	849.5	8.1	42.0	1050.1	654.0	155.0	1.9	1.000250
5000.0	847.6	8.7	39.8	1045.5	654.7	163.5	2.2	1.000254
5500.0	832.1	9.0	36.0	1025.7	654.9	192.4	4.7	1.000240
6000.0	816.9	7.9	36.0	1010.8	653.7	190.9	8.0	1.000244
6500.0	802.0	6.8	36.0	996.2	652.4	203.2	11.2	1.000235
7000.0	787.3	5.8	35.6	981.6	651.2	207.0	13.9	1.000235
7500.0	772.8	6.1	26.8	962.8	651.4	213.6	15.7	1.000227
8000.0	758.5	6.7	21.0	943.3	652.0	219.4	16.8	1.000220
8500.0	744.6	6.7	20.0	925.8	652.1	226.1	16.5	1.000216
9000.0	730.9	6.8	19.1	908.7	652.1	231.9	16.7	1.000212
9500.0	717.5	6.7	18.6	894.0	651.4	236.2	17.5	1.000208
10000.0	704.2	5.4	16.1	879.9	650.5	237.0	18.1	1.000204
10500.0	691.2	4.5	17.8	866.6	649.4	236.0	19.6	1.000200
11000.0	678.4	3.4	17.4	853.7	648.2	235.5	18.6	1.000197
11500.0	665.8	2.4	17.1	841.1	646.9	235.1	18.6	1.000194
12000.0	653.2	1.2	16.9	828.8	645.5	237.2	18.6	1.000190
12500.0	640.8	.0	16.7	816.8	644.1	239.2	18.7	1.000187
13000.0	628.7	-1.2	16.5	804.9	642.6	240.8	18.9	1.000184
13500.0	616.8	-2.4	16.4	793.2	641.2	242.4	19.1	1.000181
14000.0	605.1	-3.6	16.2	781.7	639.8	243.7	19.0	1.000178
14500.0	593.7	-4.8	16.0	770.3	638.3	244.9	18.9	1.000175
15000.0	582.7	-6.1	16.3	759.0	636.8	245.4	18.4	1.000172
15500.0	570.9	-7.3	16.7	747.9	635.3	245.9	18.0	1.000170
16000.0	559.8	-8.6	17.0	737.0	633.7	245.6	18.9	1.000167
16500.0	548.9	-9.9	17.4	726.2	632.2	245.2	20.4	1.000165
17000.0	538.3	-11.2	17.8	715.7	630.6	244.2	23.1	1.000162
17500.0	527.7	-12.5	18.0	704.7	629.2	243.4	25.4	1.000159
18000.0	517.5	-13.2	18.0	693.1	628.2	242.7	26.4	1.000157
18500.0	507.1	-14.1	18.0	681.7	627.1	242.0	27.5	1.000154
19000.0	497.0	-15.1	18.1	670.6	626.0	242.0	26.8	1.000151
19500.0	486.8	-16.2	18.5	660.0	624.5	244.6	25.5	1.000149
20000.0	476.9	-17.4	18.8	649.5	623.1	246.4	24.7	1.000146
20500.0	467.2	-18.6	19.2	639.3	621.6	248.2	24.3	1.000144
21000.0	457.7	-19.8	19.6	629.2	620.1	249.6	24.1	1.000142
21500.0	448.3	-21.0	20.0	619.3	618.7	250.8	24.1	1.000139
22000.0	439.2	-22.2	20.3	609.6	617.2	253.1	23.9	1.000137
22500.0	430.2	-23.4	20.7	600.0	615.7	256.5	23.5	1.000135
23000.0	421.5	-24.6	21.1	590.6	614.3	260.1	23.3	1.000133
23500.0	412.9	-25.5	21.4	581.3	612.8	263.8	23.2	1.000130
24000.0	404.5	-27.0	21.6	572.2	611.3	264.6	22.2	1.000128

UPPER AIR DATA
 3400040053
 STATION
 TABLE 12 Cont'd

STATION ALTITUDE 4040.00 FEET MSL
 C. LFC. 82
 ASCENSION NO. 53
 1645 HRS MST

GEOMETRIC COORDINATES
 33.81920 LAT DEG
 106.66501 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	WET BULB DEWPOINT DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
							DIRECTION DEGREES(TM)	SPEED KNOTS	
24500.0	396.1	-28.2	-43.0	22.5	563.3	609.7	265.4	21.2	1.000126
25000.0	387.6	-29.0	-43.8	23.6	554.4	608.0	266.4	21.0	1.000124
25500.0	379.4	-31.0	-44.5	24.8	545.7	606.3	268.2	20.8	1.000122
26000.0	371.3	-32.4	-45.4	25.9	537.2	604.5	274.6	21.6	1.000120
26500.0	363.4	-33.8	-46.2	27.0	528.8	602.8	279.6	22.5	1.000118
27000.0	355.7	-35.1	-47.0	28.1	520.6	601.0	281.0	23.1	1.000117
27500.0	348.1	-36.5	-47.9	29.3	512.4	599.3	281.0	23.5	1.000115
28000.0	340.5	-37.6	-48.8	30.4	504.1	597.6	278.5	23.7	1.000113
28500.0	333.0	-39.2	-50.9	27.3**	495.8	596.0			1.000111
29000.0	325.7	-40.4	-55.1	18.7**	487.5	594.3			1.000109
29500.0	318.5	-41.7	-61.0	10.1**	479.4	592.7			1.000107
30000.0	311.5	-43.0	-75.0	1.6**	471.4	591.1			1.000105

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

MANDATORY LEVELS
 3400040053
 STATION
 TABLE 13

STATION ALTITUDE 4740.00 FEET MSL
 G. LFC. PC
 ASCENSION 40. 53
 1645 HRS MST

GEODETIC COORDINATES
 33.81920 LAT DEG
 106.66501 LON DEG

PRESSURE GEOPOTENTIAL MILLIBARS	TEMPERATURE AIR DEGREES CFNTIGRADE	DEWPOINT DEGREES CFNTIGRADE	REL. HUM. PERCENT	WIND DATA	
				DIRECTION DEGREES(TN)	SPEED KNOTS
300.0	6.7	-7.3	76.	207.5	11.6
750.0	6.7	-14.4	20.	223.4	16.6
700.0	5.2	-17.1	18.	236.7	18.3
650.0	.9	-21.5	17.	237.7	18.6
600.0	-4.1	-26.1	16.	244.3	19.0
550.0	-9.8	-29.9	17.	245.3	20.1
500.0	-14.7	-33.7	18.	247.5	27.2
450.0	-20.8	-37.8	20.	250.6	24.1
400.0	-27.6	-42.7	22.	265.0	21.7
350.0	-36.2	-47.7	29.	261.7	23.5