

AD-A073 394 ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/G 4/2
19702A GSRS, MISSILE NUMBER 306, ROUND NUMBER B-26. 9 JULY 1979--ETC(U)
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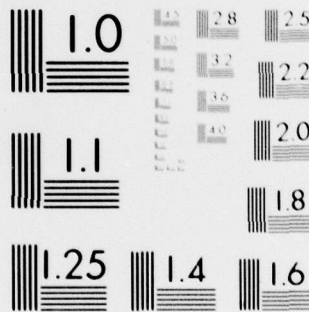
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July 1979

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METEOROLOGICAL DATA REPORT

19702A GSRS
Missile No. 306
Round No. B-26
9 July 1979

by

White Sands 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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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of 19702A GSRS, Missile Number 306, Round Number B-26, are presented in tabular form.		

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CONTENTS

INTRODUCTION----- 1

DISCUSSION----- 1

MAP----- 2

TABLES

1. Surface Observation taken at 1345 MDT at LC-33----- 3
2. Anemometer Measured Wind Speed and Direction, LC-33 Fixed Pole taken at 1345 MDT----- 4
3. Anemometer Measured Wind Speed and Direction, Tower Levels 1, 2, 3, and 4, taken at 1345 MDT----- 5
4. Pilot-Balloon-Measured Wind Data at 1333 MDT----- 6,7
5. Pilot-Balloon-Measured Wind Data at 1345 MDT----- 8,9
6. SMR Significant Level Data at 1230 MST----- 10
7. SMR Upper Air Data at 1230 MST----- 11-14
8. SMR MRN Significant Level Data at 1230 MST----- 15
9. SMR Mandatory Levels at 1230 MST----- 16
10. SMR MRN Mandatory Levels at 1230 MST----- 17

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INTRODUCTION

19702A GSRS, Missile Number 306, Round Number B-26, was launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 1345 MDT, 9 July 1979. The scheduled launch time was 1345 MDT.

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 ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), wind direction and speed, and cloud cover were made at the LC-33 Met Site at T-0 minutes.

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

b. Upper Air

(1) Low level wind data were obtained from RAPTS T-9 pibal observation at:

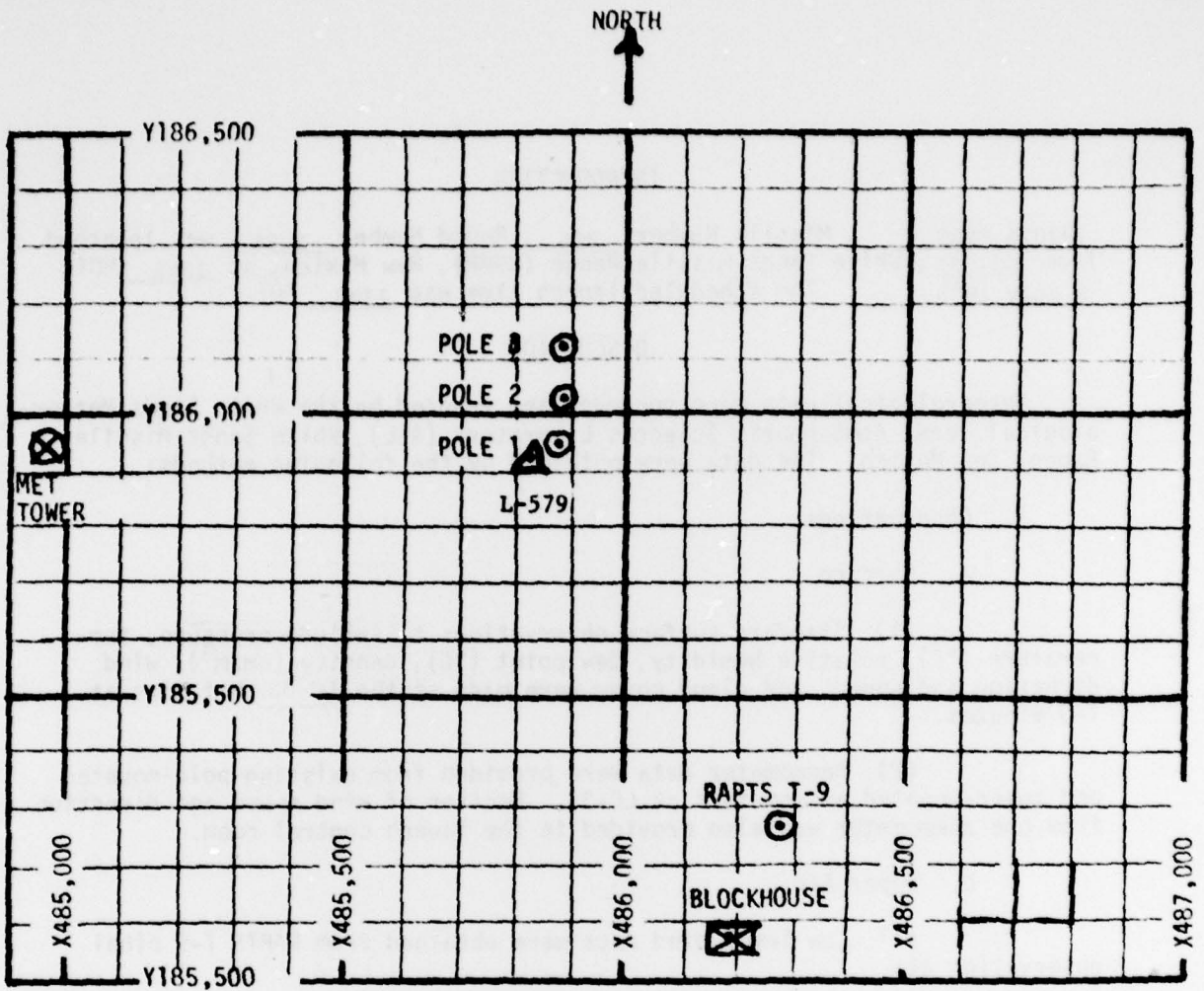
SITE AND ALTITUDE

LC-33	1080	1333	MDT
LC-33	1050	1345	MDT

(2) Air structure data (rawinsonde) were collected at the following Met Sites. Data were collected from surface to 66,000 feet in 500-foot increments.

SITE AND TIME

SMR 1230 MST



1. MET TOWER - 4 Bendix Model T-120 Anemometers at 12 ft, 62 ft, 102 ft and 202 ft with E/A recorders.
2. POLE ANEMOMETER - Bendix Model T-120 with E/A recorders.
 - (a) Pole #1 - 38.7 ft
 - (b) Pole #2 - 53.0 ft
 - (c) Pole #3 - 83.6 ft
3. RAPTS T-9 Radat Automatic Pilot-Balloon Tracking System T-9 Radar.

TABLE 1. Surface Observations taken at LC-33
9 July 1979 at 1345 MDT, 19702A GSRS,
Missile No. 306, Round No B-26

ELEVATION	3977.30	FT/MSL
PRESSURE	879.7	MBS
TEMPERATURE	36.0	°C
RELATIVE HUMIDITY	22	%
DEW POINT	10.8	°C
DENSITY	984	GM/M ³
WIND SPEED	08	MPH
WIND DIRECTION	360	DEGREES
CLOUD COVER	2 cu	

TABLE 2. LC-33 FIXED POLE ANEMOMETER-MEASURED WINDS

POLE #1			POLE #2			POLE #3		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	M	M	-30	314	05	-30	035	09
-20	M	M	-20	310	04	-20	015	07
-10	M	M	-10	330	03	-10	055	13
0.0	M	M	0.0	345	03	0.0	050	17
+10	M	M	+10	294	06	+10	356	13

Type 19702A GSRS, Missile No. 306, Round No. B-26 launched
from LC-33 on 9 July 1979 at 1345 MDT.

POLE #1 = X485,874.29 Y185,958.90 H4018.74 38.7 ft. AGL

POLE #2 = X485,874.93 Y186,012.00 H4033.57 53.0 ft. AGL

POLE #3 = X485,877.29 Y186,116.06 H4063.92 83.6 ft. AGL

NOTE: Wind directions are referenced to the firing azimuth _____
or true north true north.

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

LEVEL #1 12 ft.			LEVEL #2 62 ft.		
Y-TIME SEC	DIR DEG	SPEED MPH	Y-TIME SEC	DIR DEG	SPEED MPH
-30	M	07	-30	004	12
-20	M	06	-20	027	09
-10	M	08	-10	026	09
0.0	M	08	0.0	017	09
+10	M	07	+10	015	10
LEVEL #3 102 ft.			LEVEL #4 202 ft.		
Y-TIME SEC	DIR DEG	SPEED MPH	Y-TIME SEC	DIR DEG	SPEED MPH
-30	M	10	-30	015	12
-20	M	08	-20	013	10
-10	M	06	-10	005	11
0.0	M	09	0.0	343	15
+10	M	07	+10	358	14

WTSM Coordinates: X484,982.64 Y185,957.73 H3983.00 (base)

Type 19702A GSRS, Missile No. 306, Round No. B-26 launched
from LC-33 on 9 July 1979 at 1345 MDT.

NOTE: Wind directions are referenced to the firing azimuth _____
or true north true north.

TABLE 4. PILOT-BALLOON-MEASURED WIND DATA (30-METER INCREMENTS)

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
SFC	CALM	
30	330	0.5
60	300	1.0
90	270	1.5
120	240	1.5
150	239	2.0
180	238	2.5
210	237	3.0
240	235	3.0
270	247	3.0
300	259	2.5
330	271	2.5
360	282	2.0

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
390	280	2.5
420	277	3.0
450	274	3.5
480	271	4.0
510	278	4.5
540	285	4.5
570	292	4.5
600	298	4.5
630	312	5.0
660	325	5.0
690	339	5.0
720	352	5.0
750	360	5.0

Release Point Coordinates (WSTM): X486,037.24 Y486,037.24 H3977.30

Released from LC-33 on 9 July 1979 at 1333 MDT.

Type 19702A GSRS, Missile No. 306, Round No. B-26 launched from LC-33 on 9 July 1979 at 1345 MDT.

NOTE: Wind directions are referenced to the firing azimuth or true north true north.

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
780	007	4.5
810	014	4.5
840	021	4.0
870	028	4.5
900	035	4.5
930	042	4.5
960	048	4.5
990	040	5.0
1020	032	5.0
1050	024	5.5
1080	015	5.5
1110		
1140		
1170		
1200		
1230		
1260		
1290		
1320		
1350		
1380		
1410		

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
1440		
1470		
1500		
1530		
1560		
1590		
1620		
1650		
1680		
1710		
1740		
1770		
1800		
1830		
1860		
1890		
1920		
1950		
1980		
2010		
2040		
2070		

TABLE 5. PILOT-BALLOON-MEASURED WIND DATA (30-METER INCREMENTS)

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
SFC	033	8.0
30	025	7.5
60	017	6.5
90	009	5.5
120	360	4.5
150	003	6.5
180	005	8.0
210	008	10.0
240	010	11.5
270	007	12.0
300	004	12.5
330	001	13.0
360	358	13.0

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
390	359	12.5
420	360	12.5
450	360	12.0
480	360	11.5
510	360	10.5
540	360	9.5
570	360	8.5
600	021	7.5
630	041	6.0
660	061	5.0
690	081	3.5
720	066	3.5
750	051	3.5

Release Point Coordinates (WSTM): X486,037.24 Y486,037.24 H3977.30

Released from LC-33 on 9 July 1979 at 1345 MDT.

Type 19702A GSRS, Missile No. 306, Round No. B-26 launched from LC-33 on 9 July 1979 at 1345 MDT.

NOTE: Wind directions are referenced to the firing azimuth or true north true north.

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
780	036	3.5
810	021	3.0
840	021	3.0
870	021	2.5
900	021	2.5
930	021	2.0
960	022	4.5
990	023	6.5
1020	024	9.0
1050	024	11.0
1080		
1110		
1140		
1170		
1200		
1230		
1260		
1290		
1320		
1350		
1380		
1410		

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
1440		
1470		
1500		
1530		
1560		
1590		
1620		
1650		
1680		
1710		
1740		
1770		
1800		
1830		
1860		
1890		
1920		
1950		
1980		
2010		
2040		
2070		

GEODETIC COORDINATES
 32.48034 LAT DEG
 106.42507 LON DEG

SIGNIFICANT LEVEL DATA
 1900060230
 S M R

STATION ALTITUDE 3997.30 FEET MSL
 9 JULY 79
 ASCENSION NO. 250

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR TEMPT DEGREES CENTIGRADE	REL. HUM. PERCENT
379.9	21.5	38.0
397.3	9.0	21.0
4304.5	7.9	21.0
4813.6	4.9	36.0
5047.1	2.5	40.0
703.0	1.4	49.0
949.4	-0.0	36.0
12677.1	-7.2	38.0
13485.9	-12.4	28.0
14560.9	-16.6	18.0
505.8	-23.6	26.0
602.6	-19.5	40.0
504.4	-25.0	41.0
486.9	-26.6	35.0
491.2	-32.3	28.0
451.0	-29.7	59.0
436.0	-42.5	50.0
404.1	-44.1	49.0
339.0	-45.2	46.0
302.4	-46.2	38.0
295.4		
289.5		
277.8		
253.5		
217.6		
202.7		
194.0		
184.2		
156.0		
152.2		
109.6		
102.0		
96.6		
93.5		
37.4		
31.6		
78.7		
73.2		
67.7		
57.4		

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STATION ALTITUDE 3997.30 FEET MSL
 9 JULY 79
 ASCENSION NO: 230

UPPER AIR DATA
 1900000200
 5 M R

GEODETIC COORDINATES
 32.48034 LAT DEG
 106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE WILLIAMS DEGREES	AIR TEMPERATURE DEGREES CENTIGRADE	TEMPERATURE DEPT POINT	REL HUM. PERCENT	DENSITY gm/cubic meter	SPEED OF SOUND KNOTS	DIRECTION DEGREES (TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
3997.3	873.9	36.3	21.5	38.0	973.4	691.3	90	0.0	1.000317
4000.0	873.8	36.3	21.4	37.9	973.4	691.3	97.4	0.0	1.000317
4500.0	850.2	34.1	20.7	34.2	975.2	684.6	97.4	0.0	1.000263
5000.0	829.7	32.6	19.9	21.0	984.5	684.9	97.4	0.9	1.000258
5500.0	829.1	31.1	19.3	23.3	982.7	681.2	97.4	1.3	1.000255
6000.0	824.8	29.6	18.6	25.3	941.2	679.5	97.4	1.7	1.000253
6500.0	807.8	28.0	17.9	27.1	929.8	677.7	97.4	2.2	1.000250
7000.0	794.0	26.5	17.0	28.9	916.7	676.0	97.4	2.6	1.000247
7500.0	780.4	25.0	16.5	30.7	907.7	674.2	93.8	2.7	1.000244
8000.0	767.0	23.4	16.0	32.6	895.9	672.5	109.0	2.3	1.000240
8500.0	753.9	21.9	15.5	34.4	889.2	670.7	119.7	1.9	1.000237
9000.0	741.0	20.4	14.9	36.1	879.0	669.9	133.4	1.2	1.000233
9500.0	729.0	18.0	14.2	37.4	854.0	667.3	242.7	0.3	1.000229
10000.0	715.2	17.7	13.5	38.7	853.1	665.8	269.0	1.6	1.000225
10500.0	702.6	16.4	12.8	40.1	842.1	664.2	309.0	4.4	1.000221
11000.0	690.0	15.8	12.1	42.1	831.4	662.4	314.3	7.4	1.000218
11500.0	677.5	15.3	11.4	44.2	820.9	660.7	316.7	9.3	1.000214
12000.0	665.5	14.8	10.7	46.2	810.5	659.9	319.6	10.5	1.000211
12500.0	653.6	14.3	10.1	48.3	800.3	657.1	320.0	10.6	1.000207
13000.0	641.7	13.8	9.4	43.6	789.6	655.5	320.6	10.0	1.000200
13500.0	629.1	13.1	8.1	46.0	778.7	654.1	319.1	10.5	1.000192
14000.0	616.5	12.6	7.6	47.0	767.9	652.6	316.2	9.9	1.000189
14500.0	604.2	12.1	7.0	47.9	757.0	651.1	310.6	6.4	1.000185
15000.0	592.0	11.6	6.4	47.4	746.4	649.7	305.3	5.5	1.000178
15500.0	579.0	11.1	5.9	46.3	736.0	649.9	294.0	3.0	1.000174
16000.0	567.2	10.6	5.3	45.3	726.4	650.1	295.0	2.0	1.000171
16500.0	555.2	10.1	4.7	44.2	716.4	650.2	319.0	1.6	1.000167
17000.0	543.0	9.6	4.2	43.2	704.8	650.4	353.0	2.7	1.000164
17500.0	530.0	9.1	3.7	42.1	691.4	650.4	4.5	4.2	1.000161
18000.0	517.5	8.6	3.2	41.1	679.0	650.7	6.9	5.9	1.000158
18500.0	505.0	8.1	2.7	40.0	665.5	650.9	6.9	7.5	1.000154
19000.0	492.5	7.6	2.2	39.0	652.9	651.0	355.7	9.0	1.000151
19500.0	480.0	7.1	1.7	38.1	640.3	651.0	347.9	11.7	1.000148
20000.0	467.5	6.6	1.2	37.1	627.1	651.0	343.3	15.7	1.000148
20500.0	455.0	6.1	0.7	36.0	614.0	650.6	340.3	19.3	1.000148
21000.0	442.5	5.6	0.2	35.0	601.0	650.8	336.0	22.8	1.000146
21500.0	430.0	5.1	-0.3	34.0	588.0	650.9	334.1	24.6	1.000144
22000.0	417.5	4.6	-0.8	33.0	575.0	651.0	331.4	26.5	1.000141
22500.0	405.0	4.1	-1.3	32.0	562.0	651.0	330.0	29.2	1.000139
23000.0	392.5	3.6	-1.8	31.0	549.0	651.0	331.0	31.6	1.000136

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STATION ALTITUDE 3997.30 FEET MSL
 9 JULY 79
 ASCENSION NO. 230

UPPER AIR DATA
 190000ZJUL
 5 M R

GEODETIC COORDINATES
 32.48034 LAT DEG
 106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREE CENTIGRADE	TEMPERATURE DEWPOINT DEGREE CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
2350.0	430.6	-15.2	-27.5	33.9	561.3	625.8	333.9	33.7	1.000133
2400.0	422.0	-16.2	-29.0	32.0	571.9	624.6	336.1	34.7	1.000131
2450.0	413.6	-17.2	-30.6	30.1	582.7	623.3	338.3	35.4	1.000128
2500.0	405.3	-18.3	-32.1	28.3	593.7	622.1	338.9	36.7	1.000126
2550.0	397.0	-19.4	-33.6	26.1	604.9	620.9	339.0	38.0	1.000124
2600.0	388.8	-20.7	-35.5	24.4	616.3	619.1	337.7	39.3	1.000122
2650.0	380.8	-21.9	-37.1	22.7	627.8	617.6	336.4	40.2	1.000120
2700.0	373.0	-23.1	-38.8	21.0	639.5	616.1	335.0	40.6	1.000118
2750.0	365.3	-24.3	-40.5	19.3	651.3	614.6	334.2	41.4	1.000116
2800.0	357.8	-25.5	-42.3	17.6	663.3	613.1	333.8	42.3	1.000114
2850.0	350.5	-26.8	-44.0	16.0	675.4	611.6	332.6	43.0	1.000112
2900.0	343.3	-28.0	-45.8	14.4	687.6	610.1	330.8	43.5	1.000110
2950.0	336.1	-29.2	-47.6	12.8	700.0	608.5	328.9	42.8	1.000108
3000.0	328.9	-30.6	-49.3	11.2	712.5	606.8	327.8	42.7	1.000106
3050.0	321.9	-32.0	-51.1	9.6	725.1	605.1	327.8	42.7	1.000103
3100.0	315.1	-33.3	-52.9	8.0	737.8	603.4	329.3	42.7	1.000101
3150.0	308.4	-34.7	-54.7	6.4	750.6	601.7	331.8	44.0	1.000100
3200.0	301.8	-36.0	-56.5	4.8	763.5	599.9	333.7	45.6	1.000100
3250.0	295.3	-37.4	-58.3	3.2	776.5	598.2	333.6	47.7	1.000098
3300.0	288.8	-38.8	-60.1	1.6	789.5	596.4	333.3	51.0	1.000096
3350.0	282.5	-40.2	-61.9	0.0	802.6	594.6	332.7	56.0	1.000094
3400.0	276.3	-41.7	-63.7	-1.6	815.7	592.8	332.5	61.1	1.000092
3450.0	270.2	-43.1	-65.5	-3.2	828.8	591.0	332.0	66.3	1.000091
3500.0	264.2	-44.5	-67.3	-4.8	842.0	589.2	331.3	68.6	1.000089
3550.0	258.4	-45.9	-69.1	-6.4	855.2	587.4	329.9	69.0	1.000088
3600.0	252.6	-47.3	-70.9	-8.0	868.5	585.6	329.1	68.9	1.000086
3650.0	246.9	-48.7	-72.7	-9.6	881.8	583.8	328.5	68.6	1.000084
3700.0	241.2	-50.1	-74.5	-11.2	895.1	582.0	328.0	67.9	1.000083
3750.0	235.7	-51.5	-76.3	-12.8	908.4	580.2	327.5	66.9	1.000081
3800.0	230.4	-52.9	-78.1	-14.4	921.7	578.4	327.0	66.2	1.000080
3850.0	225.1	-54.3	-79.9	-16.0	935.0	576.6	326.5	65.9	1.000078
3900.0	220.0	-55.7	-81.7	-17.6	948.3	574.8	326.0	67.4	1.000077
3950.0	214.9	-57.1	-83.5	-19.2	961.6	573.0	325.5	70.0	1.000076
4000.0	209.9	-58.5	-85.3	-20.8	974.9	571.2	325.0	69.9	1.000074
4050.0	205.0	-59.9	-87.1	-22.4	988.2	569.4	324.5	67.6	1.000073
4100.0	200.2	-61.3	-88.9	-24.0	1001.5	567.6	324.0	64.7	1.000071
4150.0	195.5	-62.7	-90.7	-25.6	1014.8	565.8	323.5	61.3	1.000070
4200.0	190.9	-64.1	-92.5	-27.2	1028.1	564.0	323.0	59.7	1.000068
4250.0	186.5	-65.5	-94.3	-28.8	1041.4	562.2	322.5	59.7	1.000066
4300.0	182.0	-66.9	-96.1	-30.4	1054.7	560.4	322.0	59.2	1.000065

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

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GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

UPPER AIR DATA
1900060200
S M R

STATION ALTITUDE 3997.30 FEET MSL
9 JULY 79 1230 HRS MST
ASCENSION NO. 230

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
43500.0	177.7	-56.7		286.0	573.2	302.4	58.1	1.000064
44000.0	173.5	-57.6		280.4	572.0	301.1	56.6	1.000062
44500.0	169.3	-58.5		274.9	570.7	300.9	54.2	1.000061
45000.0	165.3	-59.5		269.5	569.5	301.3	52.2	1.000060
45500.0	161.4	-60.4		264.2	568.3	304.0	50.9	1.000059
46000.0	157.5	-61.2		258.9	567.2	308.6	49.4	1.000058
46500.0	153.7	-60.8		252.2	567.8	309.1	45.2	1.000056
47000.0	150.0	-61.2		248.4	567.2	311.9	40.9	1.000055
47500.0	146.3	-62.1		241.4	565.9	310.1	33.9	1.000054
48000.0	142.6	-63.1		236.5	564.6	307.3	26.9	1.000053
48500.0	139.1	-64.1		231.7	563.3	295.2	24.6	1.000052
49000.0	135.6	-65.0		227.0	562.0	281.3	23.7	1.000051
49500.0	132.3	-66.0		222.4	560.7	273.5	24.4	1.000050
50000.0	129.0	-66.9		217.9	559.4	267.9	25.6	1.000049
50500.0	125.8	-67.9		213.5	558.1	266.4	25.9	1.000048
51000.0	122.7	-68.9		209.2	556.8	266.2	25.3	1.000047
51500.0	119.5	-69.8		205.0	555.5	270.3	24.8	1.000046
52000.0	116.7	-70.8		200.9	554.2	273.1	24.5	1.000045
52500.0	113.8	-71.8		196.8	552.9	276.0	24.4	1.000044
53000.0	111.0	-72.7		192.9	551.5	290.1	19.4	1.000043
53500.0	108.2	-73.4		188.7	550.6	312.3	16.2	1.000042
54000.0	105.4	-73.9		184.2	550.0	320.6	14.4	1.000041
54500.0	102.7	-74.3		179.9	549.4	320.5	12.5	1.000040
55000.0	100.1	-73.8		174.9	550.1	316.4	11.5	1.000039
55500.0	97.5	-72.9		169.7	551.3	304.0	13.8	1.000038
56000.0	95.0	-71.3		164.0	553.5	295.4	16.6	1.000037
56500.0	92.5	-70.0		159.8	555.5	301.9	16.1	1.000035
57000.0	90.3	-69.8		154.8	555.5	319.0	14.7	1.000034
57500.0	88.0	-69.7		150.8	555.0	337.7	14.8	1.000034
58000.0	85.8	-68.9		146.4	558.7	1.5	8.0	1.000033
58500.0	83.7	-67.9		142.1	558.2	88.8	6.5	1.000032
59000.0	81.6	-68.8		137.8	559.6	102.3	9.9	1.000031
59500.0	79.5	-67.9		133.1	558.1	115.9	13.2	1.000030
60000.0	77.6	-67.9		127.9	559.5	122.2	16.1	1.000029
60500.0	75.7	-66.9		124.1	560.8	111.2	14.9	1.000028
61000.0	73.8	-65.9		120.5	562.0	106.1	13.8	1.000028
61500.0	72.0	-65.0		117.1	563.2	108.4	13.6	1.000027
62000.0	70.2	-64.1		113.7	564.4	105.4	13.8	1.000026
62500.0	68.5	-63.2		110.0	565.3	105.1	14.3	1.000025
63000.0	66.9	-62.6				106.1	16.2	1.000025

STATION ALTITUDE 3997.30 FEET NSL
 9 JULY 79 1230 HRS MST
 ASCENSION NO. 230

UPPER AIR DATA
 1900060230
 S H R

GEODETTIC COORDINATES
 32.48034 LAT DEG
 106.42307 LON DEG

GEODETTIC 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 DEGREES CENTIGRADE				DIRECTION DEGREES(TN)	SPEED KNOTS	
03500.0	65.5	-62.1		107.7	566.0	106.6	18.1	1.000024	
04000.0	63.7	-61.6		104.9	566.6			1.000023	
04500.0	62.2	-61.1		102.1	567.2			1.000023	
05000.0	60.7	-60.7		99.4	567.9			1.000022	
05500.0	59.2	-60.2		95.8	568.5			1.000022	
06000.0	57.8	-59.7		94.5	569.1			1.000021	

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MRN SIGNIFICANT LEVEL DATA

STATION ALTITUDE 5997.30 FEET MSL
 9 JULY 79
 ASCENSION NO. 230

GEODETIC COORDINATES
 32.48034 LAT DEG
 106.42307 LON DEG

1400000230
 S M R

GEOPOTENTIAL ALTITUDE METERS	DIRECTION DEG (TN)	WIND DATA			DEW PT DEP DEG C	TEMPERATURE		PRESSURE MILLIBARS
		SPEED MPS	N-S MPS	E-W MPS		AIR DEG C		
2003.	999.99	999.99	-999.99	-999.99	99	-59.6	5.740+1	
1906.	106.	8.	2.	-6.	99	-62.6	6.770+1	
1858.	109.	7.	2.	-7.	99	-65.6	7.320+1	
1814.	120.	8.	4.	-7.	99	-68.4	7.870+1	
1793.	102.	5.	1.	-5.	99	-66.8	8.160+1	
1751.	342.	7.	-6.	2.	99	-69.7	8.740+1	
1711.	297.	9.	-4.	8.	99	-70.0	9.350+1	
1692.	300.	8.	-4.	7.	99	-72.6	9.660+1	

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

STATION ALTITUDE 3997.30 FEET MSL
 9 JULY 75
 ASCENSION NO: 230

MANDATORY LEVELS
 1900060200
 S M R

GEODEIC COORDINATES
 32.46034 LAT DEG
 106.42307 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.		WIND DATA	
MILLIBARS	FEET	AIR DEGREES	TEMPPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS	
850.0	5023.	32.6	7.9	22.	97.4	0.9	
800.0	5797.	27.2	7.2	28.	97.4	2.4	
750.0	6550.	21.4	5.3	35.	124.1	1.8	
700.0	10593.	16.0	2.5	40.	310.9	5.0	
650.0	12678.	9.0	-1.1	49.	320.2	10.6	
600.0	14301.	4.5	-12.5	28.	307.9	5.6	
550.0	17129.	5.2	-14.3	23.	357.5	3.1	
500.0	19504.	2.2	-18.3	20.	345.7	13.3	
450.0	22359.	-12.6	-23.2	41.	330.9	26.6	
400.0	25230.	-19.0	-32.0	29.	339.2	37.5	
350.0	28492.	-26.8	-37.1	37.	332.5	43.0	
300.0	32071.	-36.4	-43.1	50.	333.7	46.1	
250.0	36150.	-44.8			329.1	66.8	
200.0	40926.	-54.9			312.1	64.7	
175.0	43715.	-57.3			301.2	57.5	
150.0	46675.	-61.2			311.9	41.1	
125.0	50528.	-68.2			266.9	25.7	
100.0	54842.	-73.7			316.6	11.4	
75.0	59202.	-67.7			113.0	12.3	
50.0	61555.	-64.0			106.2	13.8	
25.0	64982.	-50.5					

STATION ALTITUDE 9997.00 FEET MSL
 9 JULY 79 1230 HRS MST
 ASCENSION NO. 230

VRM MANDATORY LEVELS
 100000200
 S M R

GEODETIC COORDINATES
 32.46034 LAT DEG
 106.42307 LONG DEG

GEOPOTENTIAL ALTITUDE METERS	DIRECTION DEG (TN)	SPEED MPS	WIND DATA		DEW PT DEP DEG C	TEMPERATURE AIR		PRESSURE MILLIBARS
			N-S MPS	E-W MPS		DEG C	DEG C	
1961.	9999.**	9999.**	-9999.**	-9999.**	99	-60.5	6.000+1	
1883.	106.	7.	2.	-7.	99	-64.0	7.000+1	
1804.	113.	6.	2.	-9.	99	-67.7	8.000+1	
1672.	1072.	6.	-4.	4.	99	-73.7	1.000+2	
1540.	267.	13.	1.	13.	99	-68.2	1.250+2	
1429.	312.	21.	-14.	15.	99	-61.2	1.500+2	
1332.	301.	30.	-15.	25.	99	-57.3	1.750+2	
1247.	312.	33.	-22.	23.	99	-54.9	2.000+2	
1102.	329.	35.	-30.	16.	99	-44.8	2.500+2	
970.	334.	24.	-21.	11.	07	-36.4	3.000+2	
868.	332.	22.	-20.	10.	10	-26.8	3.500+2	
771.	339.	19.	-16.	7.	14	-19.0	4.000+2	
682.	331.	15.	-13.	7.	11	-12.6	4.500+2	
600.	346.	7.	-7.	2.	20	2.2	5.000+2	
522.	358.	2.	-2.	0.	19	5.2	5.500+2	
451.	306.	3.	-2.	3.	17	4.5	6.000+2	
385.	320.	5.	-4.	3.	10	9.9	6.500+2	
323.	311.	3.	-2.	2.	13	16.0	7.000+2	
264.	124.	1.	1.	-1.	16	21.4	7.500+2	
207.	97.	1.	0.	-1.	20	27.2	8.000+2	
153.	97.	0.	0.	-0.	25	32.6	8.500+2	

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

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