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ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/G 4/2
19305AT GSRS, MISSILES NUMBER 1042, 1039, ROUNDS NUMBER V-44, V--ETC(U)
JUN 79

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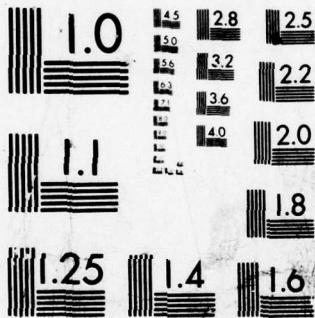
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DR 1035
June 1979

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METEOROLOGICAL DATA REPORT

19305AT GSRS
Missiles No. 1042, 1039
Rounds No. V-44, V-45
26 June 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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REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
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(6) 19305AT GSRS, Missiles Number 1042, 1039, Rounds Number V-44, V-45.		
18. SUPPLEMENTARY NOTES	(9) Meteorological data rept.	
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) 1. Ballistics 2. Meteorology 3. Wind		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of 19305AT GSRS, Missiles No. 1042 and 1039, Rounds No. V-44 and V-45, are presented in tabular form. ↗		

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INTRODUCTION

19305AT GSRS, Missile Numbers 1042 and 1039, Round Numbers V-44 and V-45, were launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 1045 and 1045:03 MDT, 26 June 1979. The scheduled launch times were 1045 and 1045:02 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:

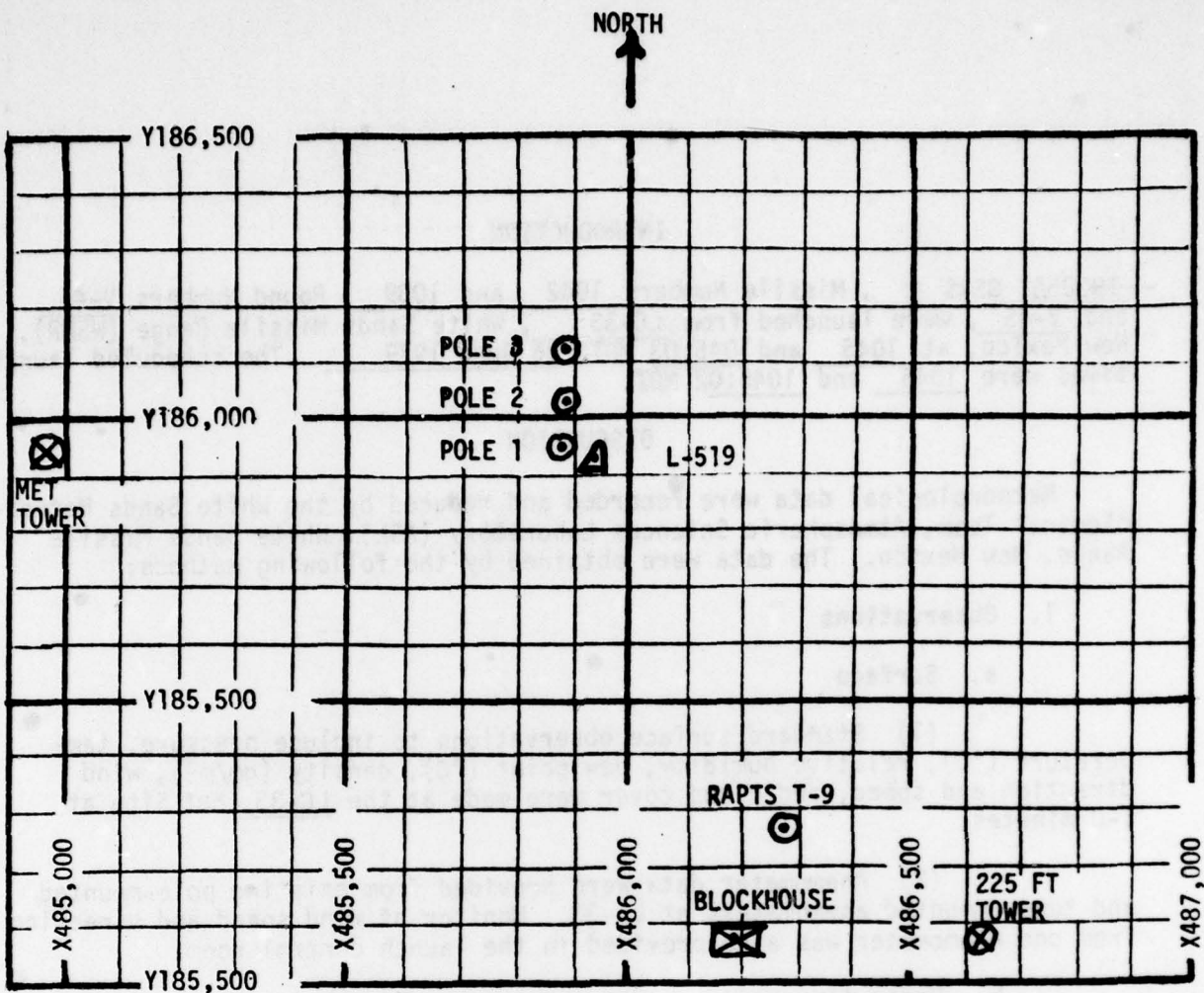
SITE AND ALTITUDE

LC-33 1080 meters

(2) Air structure data (rawinsonde) were collected at the following Met Sites. Data were collected from surface to 86,000 feet in 500-foot increments.

SITE AND TIME

SMR 0915 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. 225 FT WIND TOWER - 5 Bendix Model T-120 Anemometers at 35 ft, 88 ft, 128 ft, 168 ft and 200 ft with 5 X-Y visual indicators in Blockhouse.
4. RPTS T-9 - Radar Automatic Pilot-Balloon Tracking System T-9 Radar

TABLE 1. SURFACE OBSERVATIONS TAKEN AT 1045 MDT,
 26 JUNE 1979 AT LC-33, 19305AT GSRS,
 MISSILES NO. 1042 AND 1039, ROUNDS NO.
 V-44 AND V-45

ELEVATION	3977.30	FT/MSL
PRESSURE	886.7	MBS
TEMPERATURE	29.3	°C
RELATIVE HUMIDITY	34	%
DEW POINT	11.7	°C
DENSITY	1013	GM/M ³
WIND SPEED	Calm	MPH
WIND DIRECTION	Calm	DEGREES
CLOUD COVER	Clear	

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	000	.00	-30	169	05	-30	164	04
-20	000	00	-20	164	05	-20	147	04
-10	000	00	-10	171	04	-10	143	03
0.0	000	00	0.0	158	03	0.0	147	01
+10	000	00	+10	084	04	+10	179	06

Type 19305AT GSRS, Missiles No. 1042, 1039, Rounds No. V-44, V-45, launched from LC-33 on 26 June 1979 at 1045, 1045:03 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.		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	131	05	-30	139	01
-20	133	06	-20	134	03
-10	127	05	-10	131	04
0.0	103	06	0.0	117	02
+10	147	08	+10	117	02
LEVEL #3 102 ft.			LEVEL #4 202 ft.		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	154	04	-30	133	05
-20	149	04	-20	133	04
-10	149	05	-10	135	03
0.0	150	08	0.0	146	03
+10	156	07	+10	152	03

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

Type 19305AT GRS, Missiles No. 1042, 1039, Rounds No. V-44, V-45, launched from LC-33 on 26 June 1979 at 1045, 1045:03 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	Caln	00
30	040	0.5
60	079	0.5
90	119	0.5
120	158	0.5
150	158	2.5
180	157	4.5
210	156	6.5
240	155	8.5
270	154	8.5
300	153	8.0
330	152	7.5
360	150	7.0

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
390	150	6.5
420	149	6.0
450	149	5.5
480	148	5.0
510	148	5.5
540	147	5.5
570	147	6.0
600	146	6.0
630	142	6.5
660	137	6.5
690	132	6.5
720	127	6.5
750	136	5.5

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

Released from LC-33 on 26 June 1979 at 1045 MDT.

Type 19305AT GSRS, Missiles No. 1042, 1039, Rounds No. V-44, V-45, launched from LC-33 on 26 June 1979 at 1045, 1045:03 MDT.

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

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
780	144	4.5
810	153	3.5
840	161	2.0
870	157	3.0
900	153	4.0
930	149	5.0
960	145	6.0
990	146	6.0
1020	147	6.0
1050	148	6.0
1080	149	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		

STATION ALTITUDE 3997.30 FEET MSL
 26 JUNE 79 0915 HRS MST
 ASCENSION NO. 208

SIGNIFICANT LEVEL DATA
 1770060208
 S M R

GEODETIC COORDINATES
 32.48034 LAT DEG
 106.42307 LON DEG

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
885.8	30.4	33.0
872.4	26.4	37.0
850.0	23.8	41.0
774.4	17.0	52.0
743.2	15.5	40.0
700.0	12.6	40.0
674.4	10.4	29.0
576.0	.0	24.0
555.2	-2.7	45.0
543.0	-4.0	37.0
500.0	-8.3	28.0
477.9	-11.2	15.0
431.0	-16.5	16.0
424.2	-17.2	28.0
417.4	-17.2	15.0
400.0	-18.8	15.0
376.1	-22.2	20.0
369.2	-24.5	46.0
319.4	-31.3	22.0
300.0	-34.5	18.0
262.2	-42.2	
250.0	-43.5	
200.0	-53.4	
167.8	-58.7	
150.0	-62.9	
131.4	-66.9	
127.8	-66.3	
104.8	-70.4	
100.0	-72.3	
92.4	-76.0	
74.2	-62.7	
70.0	-62.1	
56.8	-61.0	
50.0	-56.6	
37.0	-54.8	
30.0	-49.5	
25.8	-48.5	
22.4	-43.5	

STATION ALTITUDE 3997.30 FEET MSL
 25 JUNE 79 0915 HRS MST
 ASCENSION NO. 208

UPPER AIR DATA
 1770060208
 S M R

GEODETIC COORDINATES
 32.48034 LAT DEG
 106.42307 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 SPEED KNOTS	INDEX OF REFRACTION
3997.3	885.8	30.4	12.3	33.0	1010.4	680.8	210.0	6.0	1.000284
4000.0	885.7	30.4	12.3	33.0	1010.3	680.8	209.9	6.0	1.000284
4500.0	870.6	26.2	10.5	37.3	1007.6	675.9	198.1	5.8	1.000278
5000.0	855.7	24.5	10.0	40.0	996.2	673.9	186.0	5.9	1.000275
5500.0	840.8	23.0	9.5	42.3	983.8	672.2	174.5	6.2	1.000271
6000.0	826.2	21.7	9.1	44.4	970.9	670.8	166.8	6.5	1.000267
6500.0	811.7	20.4	8.6	46.4	958.2	669.3	174.7	5.5	1.000263
7000.0	797.6	19.2	8.0	48.5	945.7	667.8	186.4	3.9	1.000259
7500.0	783.6	17.9	7.5	50.6	933.4	666.3	231.2	1.7	1.000254
8000.0	769.9	16.8	6.4	50.3	920.7	664.9	327.4	2.1	1.000249
8500.0	756.2	16.1	4.2	45.1	906.9	664.0	2.0	4.5	1.000240
9000.0	742.8	15.5	2.0	40.0	893.4	663.0	19.2	6.9	1.000231
9500.0	729.6	14.6	1.2	40.0	880.2	662.0	31.5	9.4	1.000227
10000.0	716.5	13.7	-.4	40.0	867.2	660.9	33.3	11.7	1.000222
10500.0	703.7	12.9	-.4	40.0	854.4	659.9	32.6	13.8	1.000218
11000.0	691.1	11.8	-2.6	36.2	842.4	658.6	28.9	13.8	1.000211
11500.0	678.6	10.8	-5.7	30.8	830.8	657.2	24.1	13.4	1.000204
12000.0	666.2	9.6	-7.7	28.6	819.2	655.7	23.0	13.3	1.000199
12500.0	653.9	8.4	-9.0	28.0	807.7	654.2	22.5	13.3	1.000195
13000.0	641.8	7.1	-10.4	27.4	796.4	652.8	23.4	14.0	1.000191
13500.0	630.0	5.9	-11.7	26.8	785.3	651.3	24.9	14.6	1.000187
14000.0	618.3	4.7	-13.0	26.2	774.3	649.8	27.8	14.8	1.000183
14500.0	606.9	3.4	-14.4	25.7	763.4	648.3	31.3	15.5	1.000160
15000.0	595.7	2.2	-15.7	25.1	752.8	646.8	35.2	16.7	1.000177
15500.0	584.7	1.0	-17.0	24.5	742.3	645.4	30.9	18.0	1.000173
16000.0	573.9	-.3	-17.4	26.1	731.9	643.9	37.3	19.3	1.000171
16500.0	563.0	-1.7	-14.4	37.0	721.5	642.3	38.2	20.8	1.000171
17000.0	552.4	-3.0	-13.7	43.2	711.3	640.8	39.4	22.5	1.000169
17500.0	541.9	-4.1	-16.7	36.8	700.8	639.4	43.3	23.8	1.000165
18000.0	531.4	-5.1	-18.3	34.7	690.0	638.1	48.2	24.9	1.000161
18500.0	521.2	-6.1	-19.9	32.5	679.4	636.9	50.8	24.3	1.000158
19000.0	511.2	-7.1	-21.6	30.4	668.9	635.6	53.1	23.2	1.000155
19500.0	501.3	-8.2	-23.3	28.3	658.6	634.4	52.9	21.5	1.000152
20000.0	491.6	-9.4	-26.6	23.1	648.9	632.9	53.3	20.1	1.000148
20500.0	482.0	-10.7	-30.6	17.5	639.4	631.3	55.1	19.1	1.000145
21000.0	472.5	-11.8	-33.0	15.1	629.6	629.9	57.0	18.0	1.000142
21500.0	463.2	-12.8	-33.7	15.3	619.6	628.7	59.0	16.9	1.000140
22000.0	454.0	-13.8	-34.5	15.5	609.7	627.4	61.4	15.7	1.000138
22500.0	445.0	-14.9	-35.2	15.7	600.0	626.2	64.2	14.5	1.000135
23000.0	436.2	-15.9	-35.9	15.9	590.5	624.9	66.4	13.2	1.000133

STATION ALTITUDE 3997.30 FEET MSL
 26 JUNE 79 0915 HRS MST
 ASCENSION NO. 208

UPPER AIR DATA
 1770060208
 S M R

GEODETTIC COORDINATES
 32.48034 LAT DEG
 106.42307 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
23500.0	427.5	-16.9	-33.4	22.2	580.9	623.8	69.0	11.9	1.000131
24000.0	418.9	-17.2	-35.8	17.9	570.0	623.3	71.6	11.6	1.000129
24500.0	410.5	-17.8	-38.1	15.0	560.0	622.6	75.0	11.4	1.000126
25000.0	402.2	-18.6	-38.7	15.0	550.3	621.6	82.1	11.3	1.000124
25500.0	394.1	-19.6	-38.8	16.2	541.4	620.4	88.2	10.9	1.000122
26000.0	386.1	-20.8	-38.8	17.9	532.8	619.0	91.1	9.1	1.000120
26500.0	378.2	-21.9	-38.9	19.5	524.3	617.6	94.2	7.3	1.000118
27000.0	370.5	-23.0	-36.0	29.1	515.8	616.2	94.7	5.5	1.000117
27500.0	362.9	-24.1	-33.4	41.6	507.4	614.9	92.9	3.7	1.000115
28000.0	355.3	-25.3	-34.1	43.3	499.2	613.5	72.3	2.2	1.000113
28500.0	347.9	-26.5	-36.2	39.1	491.2	612.0	20.0	2.1	1.000111
29000.0	340.6	-27.7	-38.4	34.8	483.2	610.5	1.6	5.0	1.000109
29500.0	333.5	-28.9	-40.7	30.6	475.5	609.0	2.6	7.7	1.000107
30000.0	319.7	-31.2	-43.1	26.4	467.8	607.5	17.1	10.0	1.000105
30500.0	312.9	-32.4	-45.8	22.2	460.3	606.0	25.8	11.9	1.000103
31000.0	306.2	-33.5	-47.3	20.7	452.6	604.6	32.7	12.1	1.000101
31500.0	299.6	-34.6	-48.9	19.3	445.0	603.2	38.2	11.6	1.000100
32000.0	293.1	-35.8	-50.5	17.8**	437.5	601.8	42.0	9.4	1.000098
32500.0	286.7	-37.1	-53.1	14.9**	430.2	600.2	50.0	7.2	1.000096
33000.0	280.4	-38.4	-55.9	11.9**	423.1	598.6	70.7	5.2	1.000094
33500.0	274.3	-39.6	-59.2	9.0**	416.1	597.0	102.6	4.4	1.000093
34000.0	268.3	-40.9	-63.2	6.0**	409.2	595.4	132.9	4.5	1.000091
34500.0	262.5	-42.1	-68.9	3.1**	402.4	593.7	155.7	5.4	1.000090
35000.0	256.6	-43.4	-88.7	.1**	395.8	592.1	173.6	5.6	1.000088
35500.0	250.9	-44.4			388.1	591.5	187.7	5.9	1.000086
36000.0	245.2	-45.4			380.5	590.5	194.4	4.6	1.000085
37000.0	239.6	-46.4			373.4	589.3	209.3	3.5	1.000083
37500.0	234.2	-47.4			366.5	588.0	247.6	3.5	1.000082
38000.0	228.8	-48.4			359.8	586.6	268.6	4.8	1.000080
38500.0	223.6	-49.5			353.2	585.3	259.4	6.8	1.000079
39000.0	218.5	-50.5			346.7	584.0	254.3	8.9	1.000077
39500.0	213.5	-51.5			340.3	582.7	246.8	10.4	1.000076
40000.0	208.7	-52.5			334.1	581.3	241.4	12.1	1.000074
40500.0	203.9	-53.5			328.0	580.0	245.7	14.0	1.000073
41000.0	199.2	-54.2			322.0	578.6	249.8	15.9	1.000072
41500.0	194.5	-55.0			316.0	577.4	254.4	16.0	1.000070
42000.0	190.0	-55.7			309.6	576.4	259.6	15.7	1.000069
42500.0	185.5	-56.4			303.3	575.5	265.3	13.5	1.000068
43000.0	181.1				297.1	574.5	274.0	10.7	1.000066
					291.1	573.6	267.8	7.8	1.000065

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

STATION ALTITUDE 3997.30 FEET MSL
 26 JUNE 79 0915 HRS MST
 ASCENSION NO. 208

UPPER AIR DATA
 1770060208
 S M R

GEOMETRIC COORDINATES
 32.48034 LAT DEG
 106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES(TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
43500.0	176.8	-57.1	285.2	572.6	242.4	5.6	1.000064	
44000.0	172.7	-57.8	279.4	571.7	214.5	7.4	1.000062	
44500.0	168.6	-58.6	273.7	570.7	202.9	10.9	1.000061	
45000.0	164.6	-59.4	268.2	569.5	199.1	13.9	1.000060	
45500.0	160.6	-60.3	262.9	568.3	200.6	15.2	1.000059	
46000.0	156.7	-61.3	257.7	567.1	201.8	16.6	1.000057	
46500.0	153.0	-62.2	252.5	565.9	196.9	16.1	1.000056	
47000.0	149.3	-63.1	247.5	564.7	191.5	15.7	1.000055	
47500.0	145.6	-63.8	242.3	563.7	188.3	15.5	1.000054	
48000.0	142.0	-64.6	237.2	562.7	187.8	15.4	1.000053	
48500.0	138.5	-65.3	232.2	561.7	187.3	15.3	1.000052	
49000.0	135.1	-66.1	227.3	560.6	186.3	16.4	1.000051	
49500.0	131.8	-66.8	222.5	559.6	185.4	17.6	1.000050	
50000.0	128.6	-66.4	216.6	560.1	182.4	19.1	1.000048	
50500.0	125.3	-66.7	211.5	559.8	179.0	20.8	1.000047	
51000.0	122.2	-67.2	206.8	559.1	175.7	21.4	1.000046	
51500.0	119.2	-67.7	202.1	558.3	171.4	19.8	1.000045	
52000.0	116.2	-68.3	197.6	557.6	166.3	18.4	1.000044	
52500.0	113.3	-68.8	193.1	556.9	167.2	15.5	1.000043	
53000.0	110.5	-69.3	188.8	556.2	169.4	12.5	1.000042	
53500.0	107.7	-69.8	184.6	555.5	176.4	9.7	1.000041	
54000.0	105.0	-70.4	180.4	554.8	194.0	7.8	1.000040	
54500.0	102.4	-71.3	176.7	553.4	218.8	7.0	1.000039	
55000.0	99.8	-72.4	173.2	552.0	228.3	5.2	1.000038	
55500.0	97.2	-73.6	169.7	550.3	243.7	3.3	1.000037	
56000.0	94.7	-74.8	166.4	548.6	270.1	1.9	1.000036	
56500.0	92.3	-75.9	163.0	547.1	317.2	.6	1.000035	
57000.0	90.0	-74.4	157.7	549.2	53.5	1.4	1.000034	
57500.0	87.7	-72.9	152.6	551.4	71.9	.8	1.000033	
58000.0	85.5	-71.3	147.6	553.5	200.3	.7	1.000032	
58500.0	83.4	-69.8	142.8	555.6	213.6	1.5	1.000031	
59000.0	81.3	-68.2	138.2	557.7	202.3	1.1	1.000030	
59500.0	79.3	-66.7	133.7	559.8	180.5	.8	1.000029	
60000.0	77.3	-65.2	129.4	561.8	85.8	4.1	1.000028	
60500.0	75.3	-63.6	125.3	563.9	79.9	8.9	1.000027	
61000.0	73.5	-62.6	121.6	565.3	84.3	12.4	1.000026	
61500.0	71.7	-62.3	118.5	565.6	96.1	14.0	1.000025	
62000.0	70.0	-62.1	115.5	566.0	105.2	16.1	1.000024	
62500.0	68.3	-62.0	112.6	566.1	111.6	15.8	1.000023	
63000.0	66.6	-61.8	109.8	566.3	118.2	15.1	1.000022	

GEODETIC COORDINATES
32.48034 LAT DEG
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UPPER AIR DATA
1770060206
S M R

STATION ALTITUDE 3997.30 FEET MSL
26 JUNE 79 0915 HRS MST
ASCENSION NO. 208

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
63500.0	65.0	-61.7	107.1	566.5	119.9	14.5	1.000024	
64000.0	63.4	-61.6	104.5	566.7	107.0	13.8	1.000023	
64500.0	61.9	-61.5	101.9	566.8	93.6	13.9	1.000023	
65000.0	60.4	-61.3	99.4	567.0	85.0	15.0	1.000022	
65500.0	59.0	-61.2	96.9	567.2	79.3	16.6	1.000022	
66000.0	57.5	-61.1	94.5	567.3	75.2	18.1	1.000021	
66500.0	56.2	-60.6	92.1	568.0	77.7	18.5	1.000021	
67000.0	54.8	-59.8	89.5	569.1	80.0	18.9	1.000020	
67500.0	53.5	-58.9	87.0	570.2	81.7	19.5	1.000019	
68000.0	52.2	-58.1	84.6	571.3	82.2	20.1	1.000019	
68500.0	51.0	-57.3	82.3	572.4	82.7	20.8	1.000018	
69000.0	49.8	-56.6	80.1	573.3	83.5	21.4	1.000018	
69500.0	48.6	-56.4	78.2	573.5	84.6	21.9	1.000017	
70000.0	47.5	-56.3	76.3	573.7	85.6	22.5	1.000017	
70500.0	46.4	-56.1	74.4	573.9	90.1	23.1	1.000017	
71000.0	45.3	-56.0	72.6	574.1	95.2	23.9	1.000016	
71500.0	44.2	-55.9	70.9	574.3	99.9	24.8	1.000016	
72000.0	43.2	-55.7	69.2	574.5	100.0	25.1	1.000015	
72500.0	42.2	-55.6	67.5	574.6	99.8	25.3	1.000015	
73000.0	41.2	-55.4	65.9	574.8	99.5	25.6	1.000015	
73500.0	40.2	-55.3	64.3	575.0	99.9	24.2	1.000014	
74000.0	39.3	-55.2	62.7	575.2	100.3	22.6	1.000014	
74500.0	38.3	-55.0	61.2	575.4	100.8	21.1	1.000014	
75000.0	37.4	-54.9	59.8	575.6	101.2	21.0	1.000013	
75500.0	36.6	-54.5	58.3	576.1	101.6	20.9	1.000013	
76000.0	35.7	-53.9	56.8	576.8	102.0	20.9	1.000013	
76500.0	34.9	-53.3	55.3	577.6	100.4	21.9	1.000012	
77000.0	34.1	-52.7	53.9	578.4	98.8	22.9	1.000012	
77500.0	33.3	-52.1	52.5	579.2	97.4	24.0	1.000012	
78000.0	32.5	-51.6	51.2	579.9	98.8	24.0	1.000011	
78500.0	31.8	-51.0	49.6	580.7	100.5	24.0	1.000011	
79000.0	31.1	-50.4	48.6	581.5	102.2	24.0	1.000011	
79500.0	30.3	-49.8	47.3	582.2	105.3	23.5	1.000011	
80000.0	29.6	-49.4	46.2	582.7	108.7	22.9	1.000010	
80500.0	29.0	-49.3	45.1	582.9	112.2	22.5	1.000010	
81000.0	28.3	-49.1	44.0	583.1	112.1	22.3	1.000010	
81500.0	27.7	-49.0	43.0	583.3	111.2	22.0	1.000010	
82000.0	27.0	-48.8	42.0	583.5	110.3	21.8	1.000009	
82500.0	26.4	-48.7	41.0	583.7	106.7	21.8	1.000009	
83000.0	25.8	-48.5	40.0	583.9	102.3	22.0	1.000009	

STATION ALTITUDE 3997.30 FEET MSL
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UPPER AIR DATA
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GEODETIC COORDINATES
 32.48034 LAT DEG
 106.42307 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 DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
83500.0	25.2	-47.7			39.0	584.9	98.0	22.3	1.000009
84000.0	24.7	-46.9			38.0	586.0			1.000008
84500.0	24.1	-46.1			37.0	587.0			1.000008
85000.0	23.6	-45.3			36.0	588.0			1.000008
85500.0	23.0	-44.5			35.1	589.1			1.000008
86000.0	22.5	-43.7			34.2	590.1			1.000008

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MRN SIGNIFICANT LEVEL DATA
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 S M R

GEODETIC COORDINATES
 32.48034 LAT DEG
 106.42307 LON DEG

GEOPOTENTIAL ALTITUDE DECAMETERS	DIRECTION DEG (TN)	SPEED MPS	WIND DATA	N-S MPS	E-W MPS	DEW PT DEP DEG C	TEMPERATURE AIR DEG C	PRESSURE MILLIBARS
2613.	9999.**	9999.**	-9999.**	-9999.**	-9999.**	99	-43.5	2.240+1
2519.	102.	11.	11.	2.	-11.	99	-48.5	2.580+1
2420.	107.	12.	12.	3.	-11.	99	-49.5	3.000+1
2284.	101.	11.	11.	2.	-11.	99	-54.8	3.700+1
2092.	83.	11.	11.	-1.	-11.	99	-56.6	5.000+1
2012.	77.	9.	9.	-2.	-9.	99	-61.0	5.680+1
1883.	105.	8.	8.	2.	-6.	99	-62.1	7.000+1
1847.	79.	6.	6.	-1.	-6.	99	-62.7	7.420+1
1716.	311.	0.	0.	-0.	0.	99	-76.0	9.240+1
1670.	228.	3.	3.	2.	2.	99	-72.3	1.000+2

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

STATION ALTITUDE 3997.30 FEET MSL
 26 JUNE 79 0915 HRS MST
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MANDATORY LEVELS
 1770060208
 S M R

GEODETIC COORDINATES
 32.48034 LAT DEG
 106.42307 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT DEGREE	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	5189.	23.8	9.8	41.	181.5	6.0
800.0	6915.	19.4	8.1	48.	183.9	4.4
750.0	8725.	15.8	3.2	43.	8.2	5.7
700.0	10637.	12.6	-6	40.	32.2	14.2
650.0	12660.	8.0	-9.5	28.	22.8	13.5
600.0	14806.	2.7	-15.2	25.	33.9	16.2
550.0	17090.	-3.3	-14.4	42.	39.6	22.9
500.0	19541.	-8.3	-23.5	28.	52.9	21.3
450.0	22192.	-14.3	-34.8	16.	62.6	15.2
400.0	25094.	-18.8	-38.9	15.	83.9	11.3
350.0	28312.	-26.1	-35.6	40.	37.6	1.6
300.0	31909.	-34.5	-50.4	18.	41.6	9.6
250.0	36002.	-43.5			195.5	4.4
200.0	40820.	-53.4			253.4	16.1
175.0	43614.	-57.4			227.9	5.6
150.0	46771.	-62.9			192.8	15.8
125.0	50412.	-66.8			178.8	20.9
100.0	54786.	-72.3			227.1	5.5
80.0	59088.	-67.3			193.0	.9
70.0	61774.	-62.1			104.6	15.9
60.0	64907.	-61.3			83.7	15.4
50.0	68650.	-56.6			83.2	21.2
40.0	73308.	-55.3			99.9	24.0
30.0	79396.	-49.5			106.6	23.2
25.0	83327.	-47.4				

STATION ALTITUDE 3997.30 FEET MSL
 26 JUNE 79 0915 HRS MST
 ASCENSION NO. 208

MRN MANDATORY LEVELS
 1770060208
 S M R

GEODETIC COORDINATES
 32.48034 LAT DEG
 106.42307 LON DEG

GEOPOTENTIAL ALTITUDE DECAMETERS	DIRECTION DEG (TN)	SPEED MPS	WIND DATA		E-W MPS	DEW PT DEP DEG C	TEMPERATURE		PRESSURE MILLIBARS
			N-S MPS	ANGLE			AIR DEG C	TEMP	
2540.	9999.**	9999.**	-9999.**		-9999.**	99	-47.4	2.500+1	
2420.	107.	12.	3.		-11.	99	-49.5	3.000+1	
2234.	100.	12.	2.		-12.	99	-55.3	4.000+1	
2092.	83.	11.	-1.		-11.	99	-56.6	5.000+1	
1978.	84.	8.	-1.		-8.	99	-61.3	6.000+1	
1883.	105.	8.	2.		-8.	99	-62.1	7.000+1	
1801.	193.	0.	0.		0.	99	-67.3	8.000+1	
1670.	227.	3.	2.		2.	99	-72.3	1.000+2	
1537.	179.	11.	11.		-0.	99	-66.8	1.250+2	
1426.	193.	8.	8.		2.	99	-62.9	1.500+2	
1329.	228.	3.	2.		2.	99	-57.4	1.750+2	
1244.	253.	8.	2.		8.	99	-53.4	2.000+2	
1097.	195.	2.	2.		1.	99	-43.5	2.500+2	
973.	42.	5.	-4.		-3.	16	-34.5	3.000+2	
863.	38.	1.	-1.		-1.	09	-26.1	3.500+2	
765.	84.	6.	-1.		-6.	20	-18.8	4.000+2	
676.	63.	8.	-4.		-7.	20	-14.3	4.500+2	
596.	53.	11.	-7.		-9.	15	-8.3	5.000+2	
521.	40.	12.	-9.		-8.	11	-3.3	5.500+2	
451.	34.	8.	-7.		-5.	18	2.7	6.000+2	
366.	23.	7.	-6.		-3.	17	8.0	6.500+2	
324.	32.	7.	-6.		-4.	13	12.6	7.000+2	
260.	8.	3.	-3.		-0.	13	15.8	7.500+2	
211.	184.	2.	2.		0.	11	19.4	8.000+2	
156.	181.	3.	3.		0.	14	23.8	8.500+2	

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