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ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/G 4/2  
1970A 6SRS, MISSILE NUMBER 321, ROUND NUMBER B-25. 9 JULY 1979--ETC(U)  
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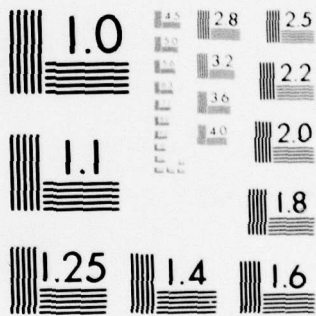
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MICROCOPY RESOLUTION TEST CHART  
 NATIONAL BUREAU OF STANDARDS-1963-A

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July 1979

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METEOROLOGICAL DATA REPORT

19702A GSRS  
Missile No. 321  
Round No. B-25  
9 July 1979

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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
1. REPORT NUMBER DR 1042	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) 19702A GSRS, Missile Number 321, Round Number B-25. 9 July 1979.		5. TYPE OF REPORT & PERIOD COVERED
7. AUTHOR(S) White Sands Meteorological Team		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS 12) 28 P.		8. CONTRACT OR GRANT NUMBER(S) 16) <del>DT665702D126</del>
11. CONTROLLING OFFICE NAME AND ADDRESS US Army Electronics Research & Development Comd. Atmospheric Sciences Laboratory White Sands Missile Range, New Mexico 88002		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS 17) 03
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) US Army Electronics Research & Development Comd.		12. REPORT DATE 11) July 1979
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.		13. NUMBER OF PAGES
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) 9) Meteorological data rept.		15. SECURITY CLASS. (of this report) UNCLASSIFIED
18. SUPPLEMENTARY NOTES 14) ERADCOM/ASL-DR-1042		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
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 19702A GSRS, Missile Number 321, Round Number B-25, are presented in tabular form.		

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CONTENTS

INTRODUCTION----- 1

DISCUSSION----- 1

MAP----- 2

TABLES

1. Surface Observation taken at 1301 MDT at LC-33----- 3
2. Anemometer Measured Wind Speed and Direction, LC-33 Fixed Pole taken at 1301 MDT----- 4
3. Anemometer Measured Wind Speed and Direction, Tower Levels 1, 2, 3, and 4, taken at 1301 MDT----- 5
4. Pilot-Balloon-Measured Wind Data at 1250 MDT----- 6,7
5. Pilot-Balloon-Measured Wind Data at 1301 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 321, Round Number B-25, was launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 1301 MDT, 9 July 1979. The scheduled launch time was 1300 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:

### i. Observations

#### a. Surface

(1) Standard surface observations to include pressure, temperature ( $^{\circ}\text{C}$ ), relative humidity, dew point ( $^{\circ}\text{C}$ ), density ( $\text{gm}/\text{m}^3$ ), 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:

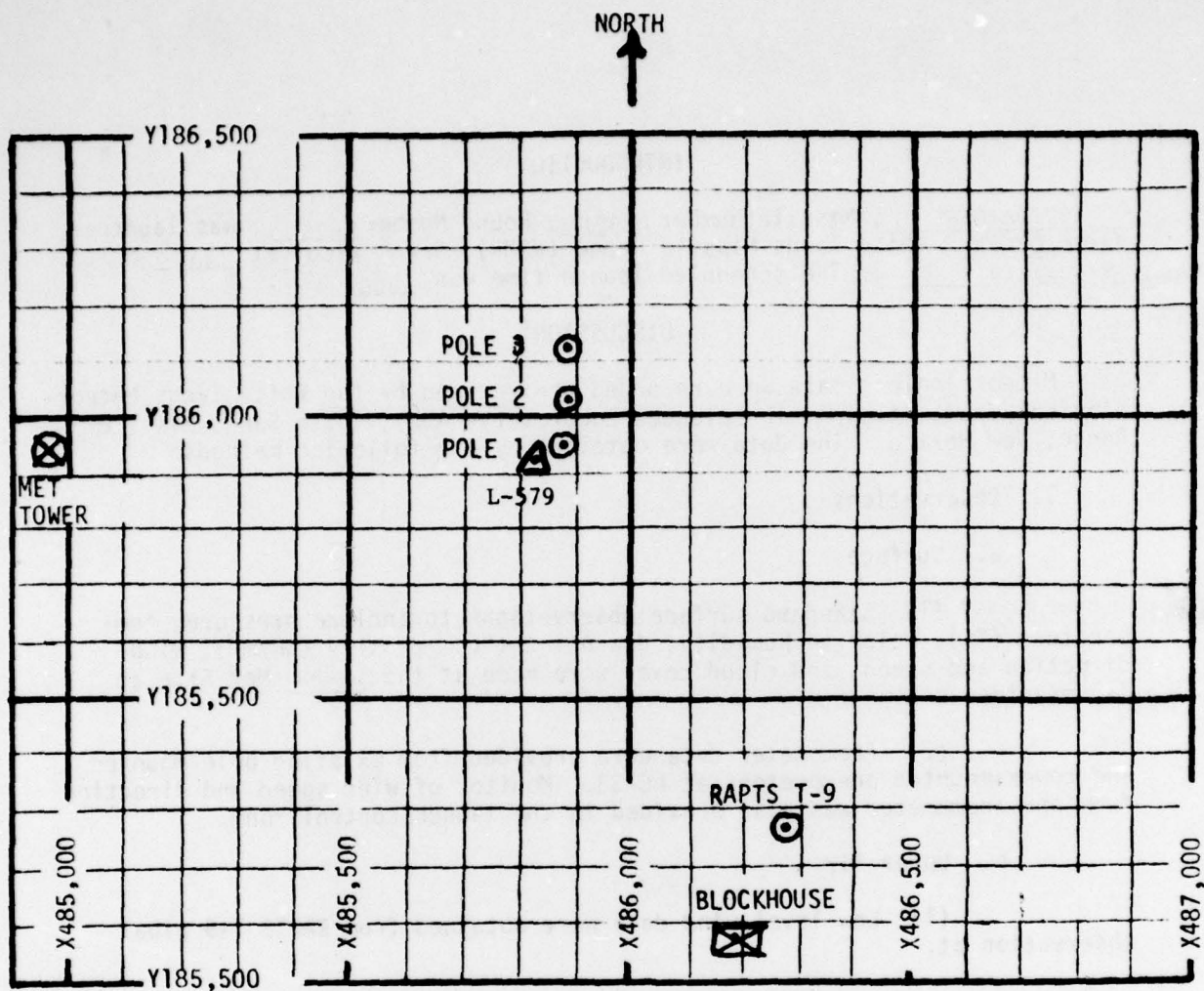
### SITE AND ALTITUDE

LC-33	1080 meters	1250 MDT
LC-33	1080 meters	1301 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 Radar Automatic Pilot-Balloon Tracking System T-9 Radar.

TABLE 1. Surface Observations taken at LC-33  
 9 July 1979 at 1301 MDT, 19702A GSRS,  
 Missile No. 321, Round No. B-25.

ELEVATION	3977.30	FT/MSL
PRESSURE	880.4	MBS
TEMPERATURE	35.0	°C
RELATIVE HUMIDITY	26	%
DEW POINT	12.5	°C
DENSITY	989	GM/M <sup>3</sup>
WIND SPEED	05	MPH
WIND DIRECTION	030	DEGREES
CLOUD COVER	1 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	000	00	-30	330	08	-30	287	06
-20	000	00	-20	330	09	-20	303	06
-10	000	00	-10	336	06	-10	308	06
0.0	000	00	0.0	332	08	0.0	316	03
+10	000	00	+10	307	06	+10	324	02

Type 19702A GSRS, Missile No. 321, Round No. B-25 launched  
 from LC-33 on 9 July 1979 at 1301 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	M	07	-30	260	08
-20	M	10	-20	250	12
-10	M	09	-10	249	10
0.0	M	07	0.0	246	08
+10	M	06	+10	253	07
LEVEL #3 102 ft.			LEVEL #4 202 ft.		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	247	02	-30	240	06
-20	258	04	-20	245	06
-10	267	06	-10	250	06
0.0	265	04	0.0	252	07
+10	274	03	+10	254	08

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

Type 19702A GSRS, Missile No. 321, Round No. B-25 launched  
from LC-33 on 9 July 1979 at 1301 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	347	0.5
60	334	0.5
90	321	0.5
120	307	0.5
150	322	1.0
180	337	1.5
210	352	2.0
240	006	2.0
270	356	3.0
300	346	4.0
330	336	5.0
360	326	5.5

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
390	335	6.0
420	344	6.0
450	353	6.0
480	001	6.0
510	001	6.5
540	360	7.0
570	360	7.5
600	359	7.5
630	356	8.0
660	352	8.0
690	349	8.5
720	345	8.5
750	342	9.0

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

Released from LC-33 on 9 July 1979 at 1250 MDT.

Type 19702A GSRS, Missile No. 321, Round No. B-25 launched from LC-33 on 9 July 1979 at 1301 MDT.

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

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
780	338	9.5
810	335	10.0
840	331	10.5
870	331	10.5
900	330	10.0
930	330	10.0
960	329	9.5
990	326	9.5
1020	322	9.5
1050	319	9.5
1080	315	9.5
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	CALM	CALM
30	"	"
60	"	"
90	"	"
120	"	"
150	"	"
180	"	"
210	"	"
240	"	"
270	033	1.0
300	021	2.0
330	009	3.0
360	356	4.0

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
390	338	5.5
420	320	6.5
450	302	7.5
480	283	8.5
510	290	7.5
540	297	6.0
570	304	4.5
600	311	3.0
630	306	5.5
660	301	7.5
690	296	9.5
720	291	11.5
750	298	10.5

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

Released from LC-33 on 9 July 1979 at 1301 MDT.

Type 19702A GSRS, Missile No. 321, Round No. B-25 launched from LC-33 on 9 July 1979 at 1301 MDT.

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

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
780	305	9.0
810	312	7.5
840	318	6.0
870	323	6.0
900	327	6.0
930	331	6.0
960	335	5.5
990	323	6.0
1020	310	6.5
1050	297	7.0
1080	284	7.5
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  
 9 JULY 79  
 ASCENSION NO. 230

SIGNIFICANT LEVEL DATA  
 1900060230  
 S M R

GEODEIC COORDINATES  
 32.48034 LAT DEG  
 106.42307 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT
879.9	3997.3	21.5	38.0
859.2	4304.5	9.0	21.0
556.0	4818.6	7.9	21.0
742.4	3947.1	4.5	36.0
703.0	3043.3	2.9	40.0
649.4	12577.1	7.4	49.0
630.4	13435.9	-6.0	36.0
605.8	14760.0	-7.6	38.0
602.5	14703.0	-12.4	28.0
504.4	19477.9	-16.6	18.0
488.9	20297.7	-23.0	26.0
481.2	20703.7	-19.5	40.0
451.0	22345.5	-26.0	41.0
436.0	23192.3	-14.6	35.0
404.1	25072.4	-16.4	28.0
339.0	29300.3	-28.7	39.0
303.4	31078.6	-35.7	50.0
295.4	32488.5	-37.4	49.0
289.5	32946.8	-37.9	46.0
277.8	33890.0	-39.4	38.0
253.5	35923.9	-44.0	
217.6	39239.3	-52.3	
202.7	40743.7	-51.5	
194.0	41605.6	-55.9	
194.2	42755.2	-55.3	
158.0	45338.0	-61.2	
152.2	46705.4	-60.6	
109.6	52249.1	-73.2	
102.0	54632.7	-74.4	
96.6	55682.5	-72.0	
93.5	56313.8	-70.0	
97.4	57644.7	-69.7	
81.6	58005.0	-66.8	
78.7	59724.3	-68.4	
73.2	61168.6	-65.6	
67.7	62747.1	-62.0	
57.4	66131.2	-59.6	

STATION ALTITUDE 9997.50 FEET MSL  
 9 JULY 79  
 ASCENSION NO. 230

UPPER AIR DATA  
 1900060230  
 S M R

GEODETIC COORDINATES  
 32.48034 LAT DEG  
 106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES (TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
3997.3	879.9	38.3	21.5	38.0	973.4	691.3	97.4	0.0	1.000317
4000.0	879.8	36.3	21.4	37.9	973.4	691.3	97.4	0.0	1.000317
4500.0	863.2	34.1	20.7	21.0	979.2	684.6	97.4	0.4	1.000263
5000.0	850.7	32.6	19.9	21.7	964.5	682.9	97.4	0.9	1.000258
5500.0	833.1	31.1	19.2	23.5	952.7	681.2	97.4	1.3	1.000256
6000.0	821.8	29.6	18.5	25.3	941.2	679.5	97.4	1.7	1.000253
6500.0	807.8	28.0	17.8	27.1	929.0	677.7	97.4	2.2	1.000250
7000.0	794.0	26.5	17.0	28.9	918.7	676.0	97.4	2.6	1.000247
7500.0	780.4	25.0	16.3	30.7	907.7	674.2	99.8	2.7	1.000244
8000.0	767.0	23.4	15.6	32.6	896.9	672.5	108.0	2.3	1.000240
8500.0	753.9	21.9	14.9	34.4	885.2	670.7	119.7	1.9	1.000237
9000.0	741.0	20.4	14.2	36.1	873.0	668.9	133.4	1.2	1.000233
9500.0	728.0	19.0	13.5	37.4	864.5	667.5	142.7	0.3	1.000229
10000.0	715.2	17.7	12.8	38.7	853.1	665.8	169.0	1.6	1.000225
10500.0	702.6	16.4	12.1	40.1	842.1	664.2	309.6	4.4	1.000221
11000.0	690.0	14.8	11.4	42.1	831.4	662.4	314.5	7.4	1.000218
11500.0	677.5	13.3	10.7	44.2	820.9	660.7	316.7	9.3	1.000214
12000.0	665.5	11.8	10.0	46.2	810.5	658.9	318.6	10.5	1.000211
12500.0	653.6	10.3	9.3	48.3	800.3	657.1	320.0	10.8	1.000207
13000.0	641.7	9.1	8.6	43.8	789.6	655.5	320.8	10.0	1.000200
13500.0	630.1	8.1	7.9	36.0	778.7	654.1	319.1	10.5	1.000192
14000.0	618.5	6.8	7.2	37.0	767.9	652.6	318.2	9.9	1.000189
14500.0	607.2	5.8	6.5	27.7	757.0	651.1	310.8	8.4	1.000185
15000.0	596.0	4.6	5.8	27.4	746.4	649.7	305.3	5.5	1.000178
15500.0	585.0	4.7	5.1	26.3	732.5	649.9	294.5	3.0	1.000174
16000.0	574.2	4.9	4.4	25.3	718.4	650.1	295.0	2.0	1.000171
16500.0	563.5	5.0	3.7	24.2	704.8	650.2	319.0	1.6	1.000167
17000.0	553.2	5.2	3.0	23.2	691.4	650.4	353.0	2.7	1.000164
17500.0	543.0	5.3	2.3	22.1	678.3	650.6	4.5	4.2	1.000161
18000.0	532.9	5.5	1.6	21.1	665.5	650.7	6.9	5.9	1.000158
18500.0	523.1	5.6	0.9	20.0	652.9	650.9	6.9	7.5	1.000154
19000.0	513.5	5.8	0.2	19.0	640.5	651.0	355.7	9.0	1.000151
19500.0	504.0	5.5	-0.5	18.2	629.2	650.8	347.9	11.7	1.000148
20000.0	494.5	-2.6	-1.2	23.1	626.1	641.1	343.3	15.7	1.000148
20500.0	485.0	-7.9	-1.9	33.0	626.5	634.8	340.3	19.3	1.000146
21000.0	475.6	-9.1	-2.6	40.2	627.0	633.3	358.0	22.6	1.000146
21500.0	466.3	-10.4	-3.3	40.5	617.7	631.8	334.1	24.6	1.000144
22000.0	457.2	-11.6	-4.0	40.8	608.5	630.3	331.4	26.5	1.000141
22500.0	448.2	-12.9	-4.7	39.9	599.5	626.7	330.8	29.2	1.000139
23000.0	439.4	-14.1	-5.4	36.4	590.5	627.2	331.9	31.6	1.000136

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

UPPER AIR DATA  
 190000Z0200  
 5 M R

GEODETIC COORDINATES  
 32.48034 LAT DEG  
 106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE 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	430.6	-15.2	33.9	561.3	625.8	333.9	33.7	1.000133
24000.0	422.0	-16.2	32.0	571.9	624.6	336.1	34.7	1.000131
24500.0	413.6	-17.2	30.1	582.7	623.3	338.3	35.4	1.000128
25000.0	405.3	-18.3	28.3	593.7	622.1	338.9	36.7	1.000126
25500.0	397.0	-19.4	26.1	604.9	620.6	339.0	38.0	1.000124
26000.0	388.8	-20.7	30.4	616.3	619.1	337.7	39.3	1.000122
26500.0	380.8	-21.9	31.7	627.6	617.6	336.4	40.2	1.000120
27000.0	373.0	-23.1	33.0	639.5	616.1	335.0	40.6	1.000118
27500.0	365.3	-24.3	34.3	651.3	614.6	334.2	41.4	1.000116
28000.0	357.8	-25.5	35.6	663.3	613.1	333.8	42.3	1.000114
28500.0	350.5	-26.8	36.9	675.4	611.6	332.6	43.0	1.000112
29000.0	343.3	-28.0	38.2	687.6	610.1	330.8	43.5	1.000110
29500.0	335.1	-29.2	39.9	699.9	608.5	328.9	43.3	1.000108
30000.0	326.9	-30.5	42.0	712.3	606.8	326.9	42.8	1.000106
30500.0	318.9	-32.0	44.1	724.9	605.1	324.8	42.7	1.000105
31000.0	310.4	-33.3	46.3	737.6	603.4	322.8	42.7	1.000103
31500.0	301.8	-34.7	48.4	750.4	601.7	320.8	44.0	1.000101
32000.0	293.3	-36.0	49.8	763.3	599.9	318.8	45.6	1.000100
32500.0	285.0	-37.4	49.8	776.2	598.2	316.6	47.7	1.000098
33000.0	276.5	-38.8	45.5	789.2	596.5	313.6	51.0	1.000096
33500.0	268.2	-40.0	41.3	802.2	594.8	310.7	56.0	1.000094
34000.0	260.2	-41.9	35.8**	815.2	593.3	307.7	61.1	1.000092
34500.0	252.6	-43.0	26.5**	828.2	591.9	304.7	66.3	1.000091
35000.0	245.4	-44.2	17.9**	841.2	590.4	301.7	68.6	1.000089
35500.0	238.4	-45.4		854.2	588.9	298.7	69.0	1.000087
36000.0	231.7	-46.7		867.2	587.3	295.7	68.9	1.000086
36500.0	225.4	-47.9		880.2	585.6	292.7	68.6	1.000084
37000.0	219.4	-49.2		893.2	583.9	289.7	67.9	1.000083
37500.0	213.7	-50.4		906.2	582.2	286.7	66.9	1.000081
38000.0	208.4	-51.7		919.2	580.5	283.7	66.2	1.000080
38500.0	203.4	-52.7		932.2	578.7	280.7	65.9	1.000078
39000.0	198.9	-53.4		945.2	577.0	277.7	67.4	1.000077
39500.0	194.9	-54.1		958.2	575.3	274.7	70.0	1.000076
40000.0	191.5	-54.9		971.2	573.5	271.7	69.9	1.000074
40500.0	188.5	-55.6		984.2	571.6	268.7	67.6	1.000073
41000.0	186.5	-55.4		997.2	569.7	265.7	64.7	1.000071
41500.0	182.0	-55.8		1010.2	567.8	262.7	61.3	1.000070
42000.0				1023.2	565.9	259.7	59.7	1.000068
42500.0				1036.2	564.0	256.7	59.7	1.000066
43000.0				1049.2	562.1	253.7	59.2	1.000065

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

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

UPPER AIR DATA  
 1900060200  
 S M R

GEODETIC COORDINATES  
 32.48034 LAT DEG  
 106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE HILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GW/CUBIC METER	SPEED OF SOUND KNOTS	WIND DIRECTION DEGREES(TN)	WIND SPEED KNOTS	INDEX OF REFRACTION
4350.0	177.7	-56.7		286.0	573.2	302.4	58.1	1.000064
4400.0	173.5	-57.6		280.4	572.0	301.1	56.6	1.000062
4450.0	169.3	-58.5		274.9	570.7	300.9	54.2	1.000061
4500.0	165.3	-59.5		269.5	569.5	301.3	52.2	1.000060
4550.0	161.4	-60.4		264.2	568.3	304.0	50.9	1.000059
4600.0	157.5	-61.2		258.9	567.2	306.6	49.4	1.000058
4650.0	153.7	-60.8		252.2	567.8	309.1	45.2	1.000056
4700.0	150.0	-61.2		246.4	567.2	311.9	40.9	1.000055
4750.0	146.3	-62.1		241.4	565.9	310.1	33.9	1.000054
4800.0	142.6	-63.1		236.5	564.6	307.3	26.9	1.000053
4850.0	139.1	-64.1		231.7	563.3	295.2	24.6	1.000052
4900.0	135.6	-65.0		227.0	562.0	281.3	23.7	1.000051
4950.0	132.3	-66.0		222.4	560.7	273.5	24.4	1.000050
5000.0	129.0	-66.9		217.9	559.4	267.9	25.6	1.000049
5050.0	125.8	-67.9		213.5	558.1	266.4	25.9	1.000048
5100.0	122.7	-68.9		209.2	556.8	266.2	25.3	1.000047
5150.0	119.6	-69.8		205.0	555.5	270.3	24.8	1.000046
5200.0	116.7	-70.8		200.9	554.2	273.1	24.5	1.000045
5250.0	113.8	-71.8		196.8	552.9	276.0	24.4	1.000044
5300.0	111.0	-72.7		192.9	551.5	290.1	19.4	1.000043
5350.0	108.2	-73.4		188.7	550.6	312.3	16.2	1.000042
5400.0	105.4	-73.9		184.2	550.0	320.6	14.4	1.000041
5450.0	102.7	-74.3		179.9	549.4	320.5	12.5	1.000040
5500.0	100.1	-73.8		174.9	550.1	316.4	11.5	1.000039
5550.0	97.5	-72.9		169.7	551.3	304.0	13.8	1.000038
5600.0	95.0	-71.3		164.0	553.5	295.4	16.6	1.000037
5650.0	92.6	-70.0		158.8	559.3	301.9	15.1	1.000035
5700.0	90.3	-69.8		154.8	555.5	319.0	14.7	1.000034
5750.0	88.0	-69.7		150.8	553.6	337.7	14.8	1.000034
5800.0	85.8	-68.9		146.4	550.7	1.5	8.0	1.000033
5850.0	83.7	-67.9		142.1	558.2	68.6	6.5	1.000032
5900.0	81.6	-68.8		137.8	559.6	102.3	9.9	1.000031
5950.0	79.6	-67.9		133.1	558.1	115.9	13.2	1.000030
6000.0	77.6	-67.9		131.7	558.2	122.2	16.1	1.000029
6050.0	75.7	-66.9		127.9	559.5	117.1	14.9	1.000028
6100.0	73.8	-65.9		124.1	560.6	111.2	13.8	1.000028
6150.0	72.0	-65.0		120.5	562.0	106.1	13.6	1.000027
6200.0	70.2	-64.1		117.1	563.2	106.4	13.8	1.000026
6250.0	68.5	-63.2		113.7	564.4	105.2	14.3	1.000025
6300.0	66.9	-62.6		110.0	565.3	106.1	16.2	1.000025

GEODETIC COORDINATES  
 32.48034 LAT DEG  
 106.42307 LON DEG

UPPER AIR DATA  
 1900060230  
 S M R

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

GEODETIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CM <sup>3</sup> METER	SPEED OF SOUND M/SEC	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES CENTIGRADE	DEWPOINT 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	-59.2			96.3	568.5			1.000022
66000.0	57.8	-59.7			94.5	569.1			1.000021

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STATION ALTITUDE 5997.50 FEET MSL  
 9 JULY 79  
 ASCENSION NO. 430  
 1230 HRS MST

MRN SIGNIFICANT LEVEL DATA  
 1900000230  
 S M R

GEODETTIC COORDINATES  
 32.48034 LAT DEG  
 106.42307 LON DEG

GEOPOTENTIAL ALTITUDE JECAMETERS	DIRECTION DEG (TN)	WIND DATA		DEW PT DEP DEG C	TEMPERATURE		PRESSURE MILLIBARS
		SPEED MPS	N-S MPS		AIR DEG C		
2003.	9999.**	9909.**	-9999.**	99	-59.6	5.740+1	
1906.	106.	8.	2.	99	-62.8	6.770+1	
1859.	109.	7.	2.	99	-65.6	7.320+1	
1814.	120.	6.	4.	99	-68.4	7.870+1	
1793.	102.	5.	1.	99	-66.8	8.150+1	
1751.	342.	7.	-6.	99	-69.7	8.740+1	
1711.	297.	9.	-4.	99	-70.0	9.350+1	
1692.	300.	8.	-4.	99	-72.6	9.660+1	

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

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STATION ALTITUDE 3997.50 FEET MSL  
 9 JULY 79 1230 HRS MST  
 ASCENSION NO: 250

MANDATORY LEVELS  
 1900050250  
 S M R

GEODETIC COORDINATES  
 32.48034 LAT DEG  
 106.42597 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	TEMP POINT CENTIGRADE	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS
950.0	5023.	32.6	7.9	22.	97.4	.9
900.0	6707.	27.2	7.2	28.	97.4	2.4
750.0	8550.	21.4	5.3	35.	124.1	1.8
700.0	10593.	16.0	2.6	40.	310.9	5.0
650.0	12634.	9.0	-1.1	49.	320.2	10.6
600.0	14301.	4.5	-12.5	28.	307.9	6.6
550.0	17129.	5.2	-14.3	23.	357.5	3.1
500.0	19534.	2.2	-10.3	20.	345.7	13.3
450.0	22350.	-12.6	-23.2	41.	330.9	26.6
400.0	25230.	-19.0	-32.6	49.	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	48.1
250.0	36150.	-44.8			329.1	68.8
200.0	40926.	-54.9			312.1	64.7
175.0	43715.	-57.3			301.2	57.5
150.0	46875.	-61.2			311.9	41.1
125.0	50528.	-68.2			266.9	25.7
100.0	54842.	-73.7			318.6	11.4
70.0	61855.	-67.7			113.0	12.3
60.0	64982.	-64.0			106.2	13.8
		-50.5				

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STATION ALTITUDE 997.30 FEET MSL  
 9 JULY 79  
 ASCENSION NO: 230

WRN MANDATORY LEVELS  
 1900000230  
 S M R

GEODETIC COORDINATES  
 32.46034 LAT DEG  
 106.42307 LON DEG

GEOPOTENTIAL ALTITUDE METERS	DIRECTION DEG (TN)	SPEED MPS	WIND DATA N-S MPS	E-W MPS	DEW PT DEP DEG C	TEMPERATURE AIR DEG C	PRESSURE MILLIBARS
1961.	9999.**	9909.**	-9999.**	-9999.**	99	-60.5	6.000+1
1885.	106.	7.	2.	-7.	99	-64.0	7.000+1
1804.	113.	6.	2.	-9.	99	-67.7	8.000+1
1724.	317.	6.	-4.	4.	99	-73.7	1.000+2
1540.	267.	13.	1.	13.	99	-68.2	1.250+2
1429.	312.	21.	-14.	19.	99	-61.2	1.500+2
1332.	301.	30.	-15.	25.	99	-57.3	1.750+2
1247.	312.	33.	-22.	29.	99	-54.9	2.000+2
1102.	329.	35.	-30.	16.	99	-44.8	2.500+2
976.	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.	352.	2.	-2.	0.	19	5.2	5.500+2
451.	308.	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 RAW AZIMUTH AND ELEVATION ANGLES.

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