SQT

DATA PROCESSING AND DISPLAY OF LASER DOPPLER EXPERIMENTAL RESULTS

NAS8-31771

VOLUME II

(NASA-CR-150442) DATA PROCESSING AND DISPLAY OF LASER DOPPLER EXPERIMENTAL RESULTS, VOLUME 2 (Arkansas Univ.) 340 p HC A15/MF A01 CSCL 20E
N78-13423
Unclas
G3/36 55842

Department of Industrial Engineering

NOV 1977
RECEIVED
NASA STI FACILITY

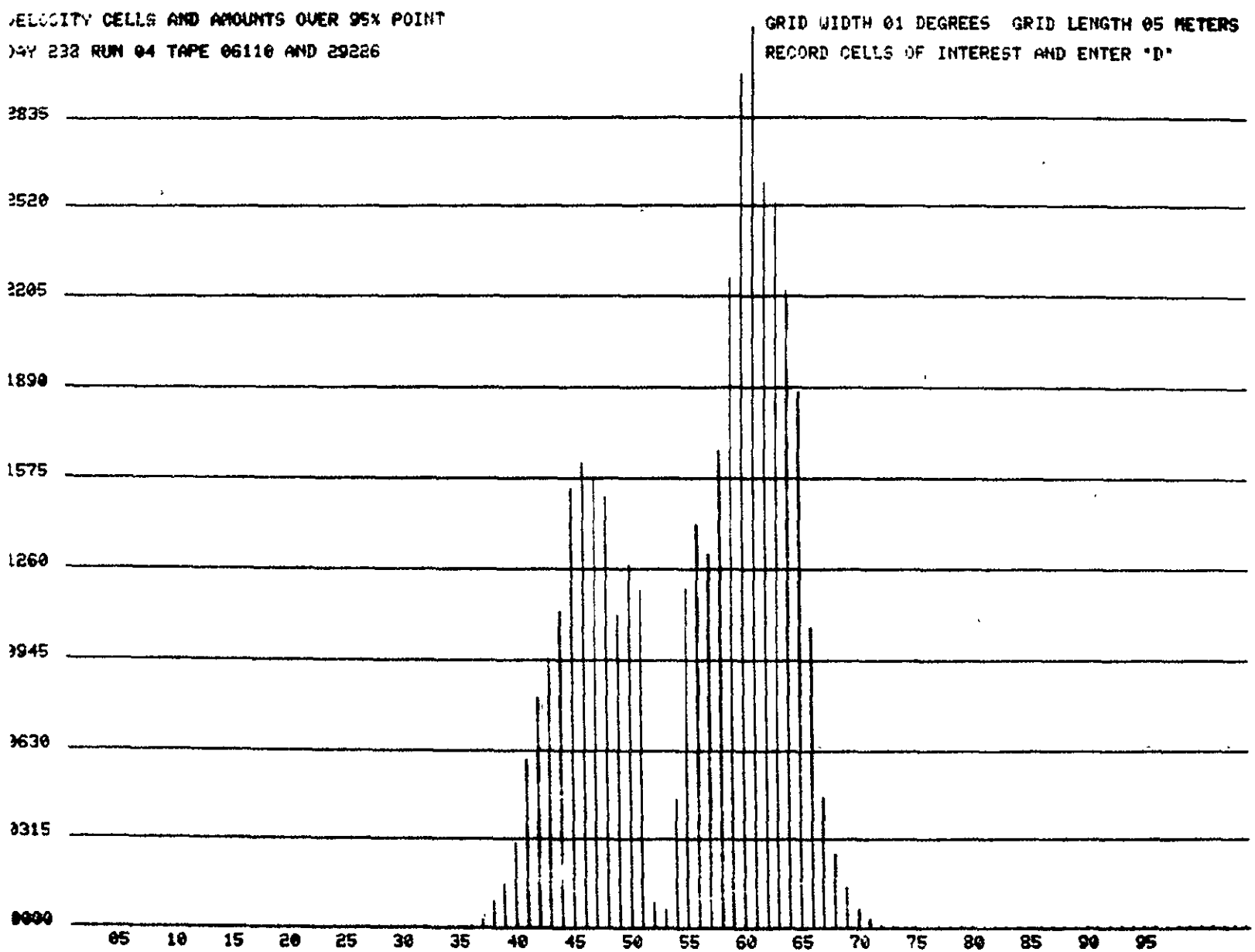
UNIVERSITY OF ARKANSAS

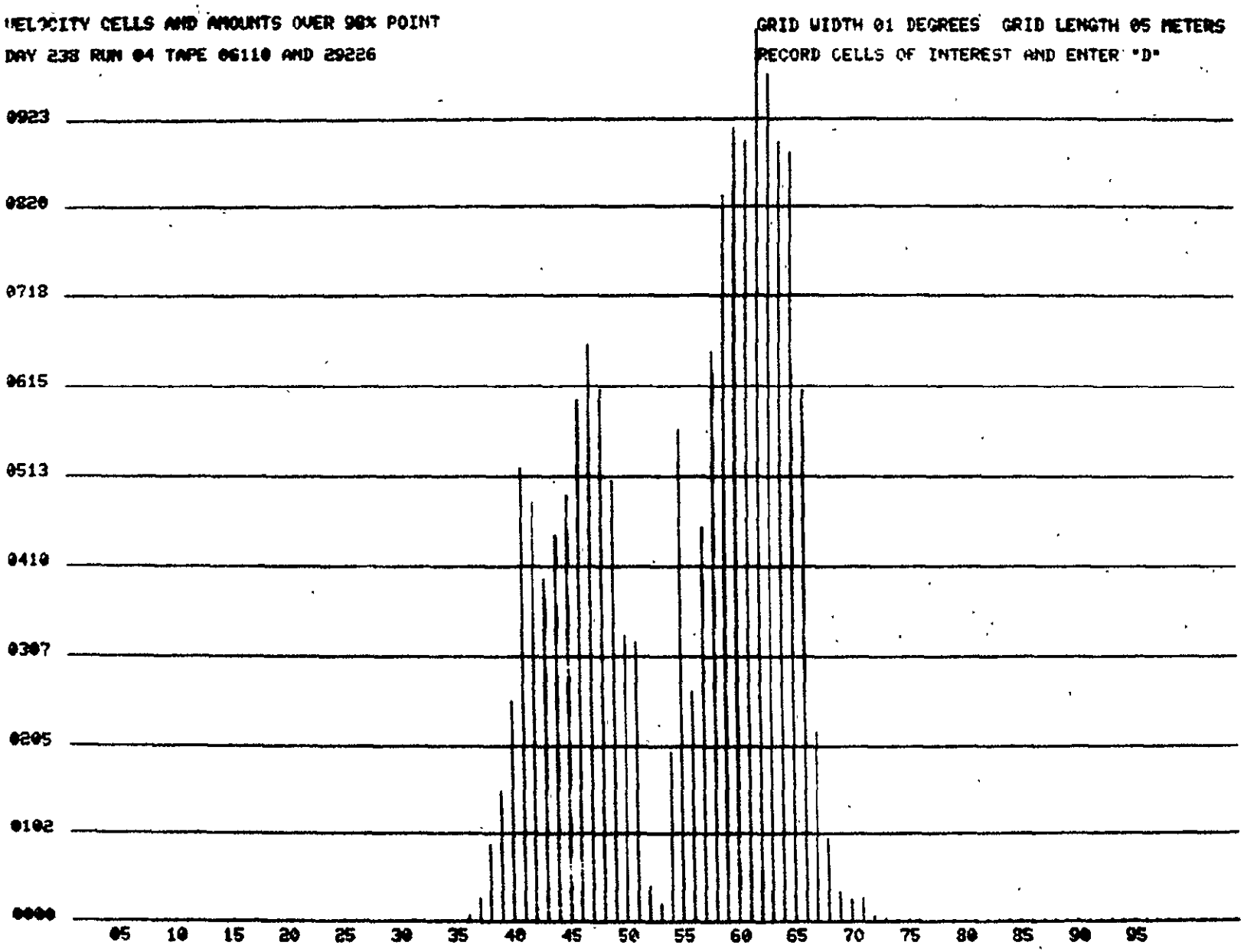
Fayetteville, Arkansas 72701

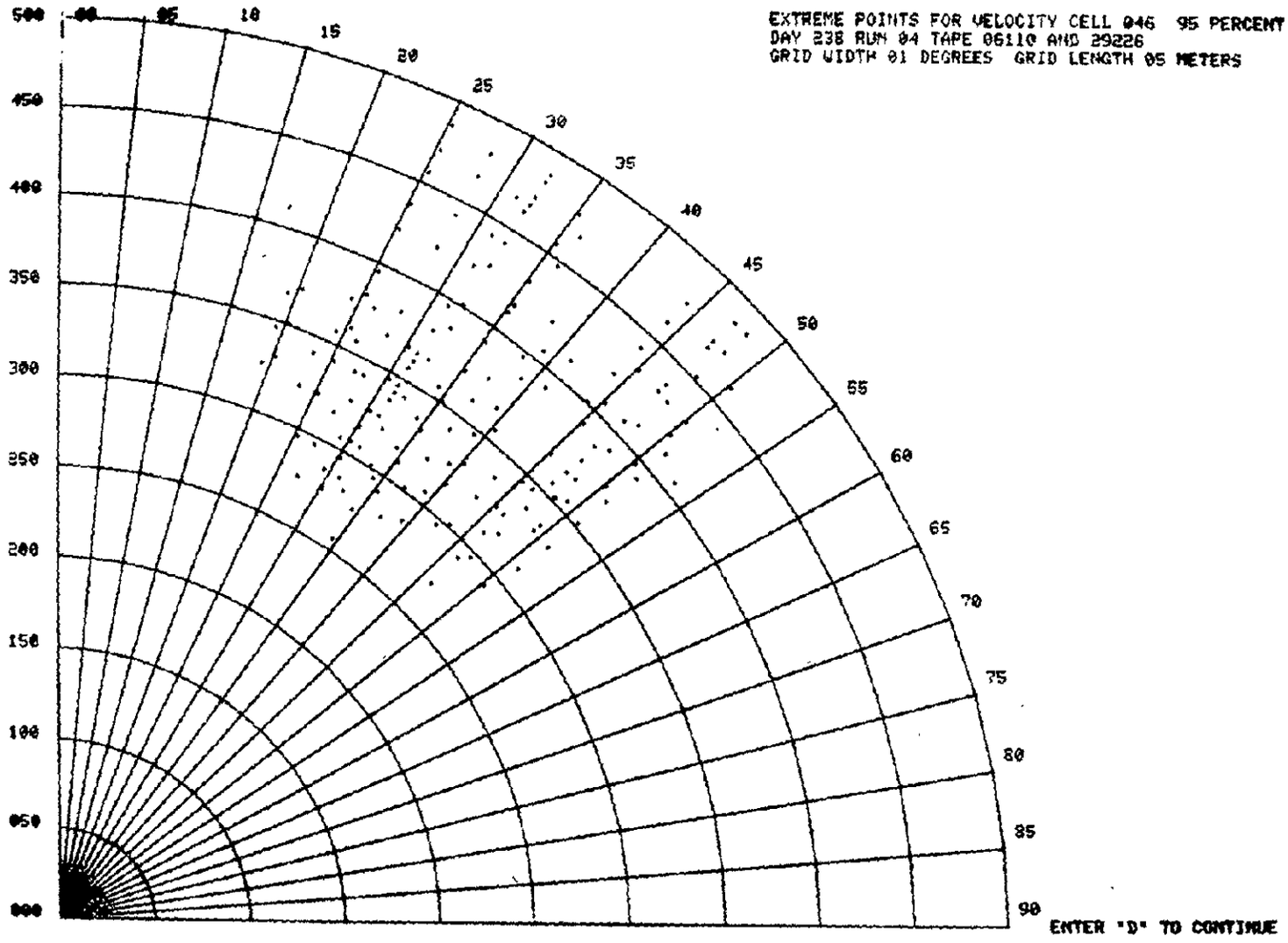
NOV 1977
RECEIVED
NASA STI FACILITY
ACQ BRANCH

APPENDIX IV.

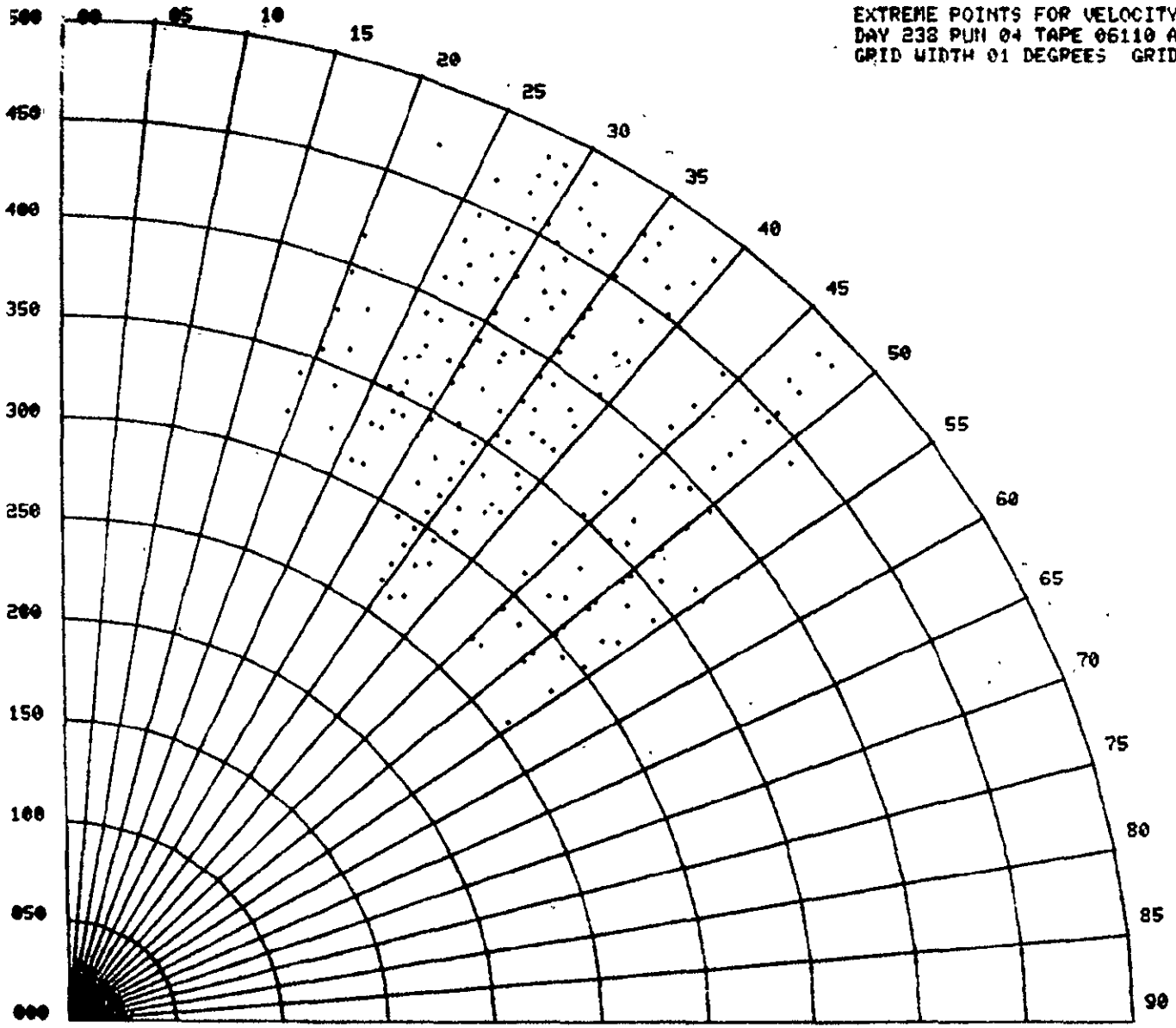
TRANSLATED HARDCOPIES


VELOCITY CELLS AND AMOUNTS OVER 95% POINT
DAY 232 RUN 04 TAPE 06110 AND 29226
GRID WIDTH 01 DEGREES GRID LENGTH 05 METERS
RECORD CELLS OF INTEREST AND ENTER "D"
2835
2520
2205
1890
1575
1260
0945
0630
0315
0000
05 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95

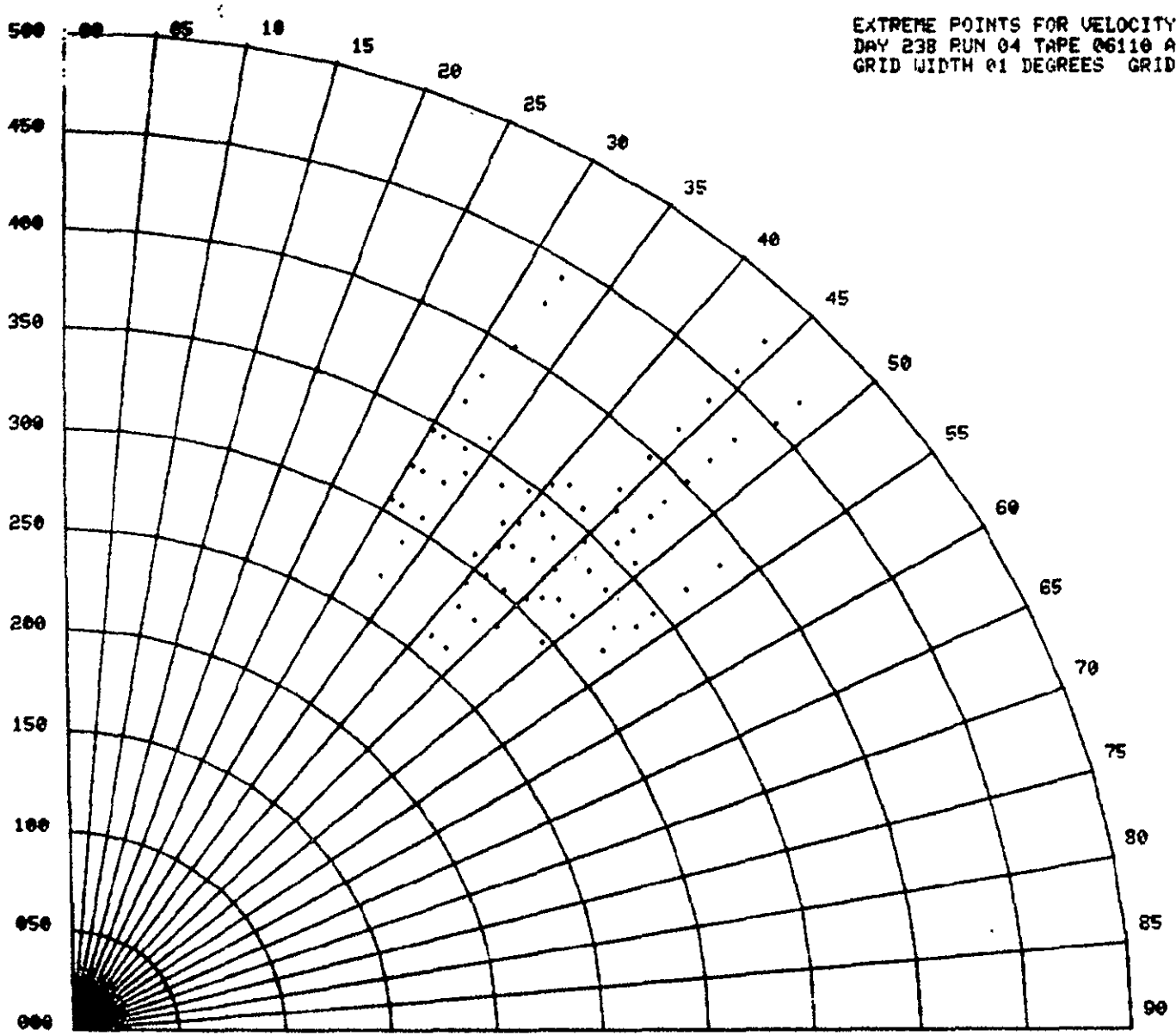

VELOCITY CELLS AND AMOUNTS OVER 90% POINT
DAY 238 RUN 04 TAPE 06110 AND 29226
GRID WIDTH 01 DEGREES GRID LENGTH 05 METERS
RECORD CELLS OF INTEREST AND ENTER "D"
0923
0820
0718
0615
0513
0410
0307
0205
0102
0000
05 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95


EXTREME POINTS FOR VELOCITY CELL 046 95 PERCENT
DAY 238 RUN 04 TAPE 06110 AND 29226
GRID WIDTH 01 DEGREES GRID LENGTH 05 METERS
500
450
400
350
300
250
200
150
100
050
000
00
05
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
ENTER "D" TO CONTINUE

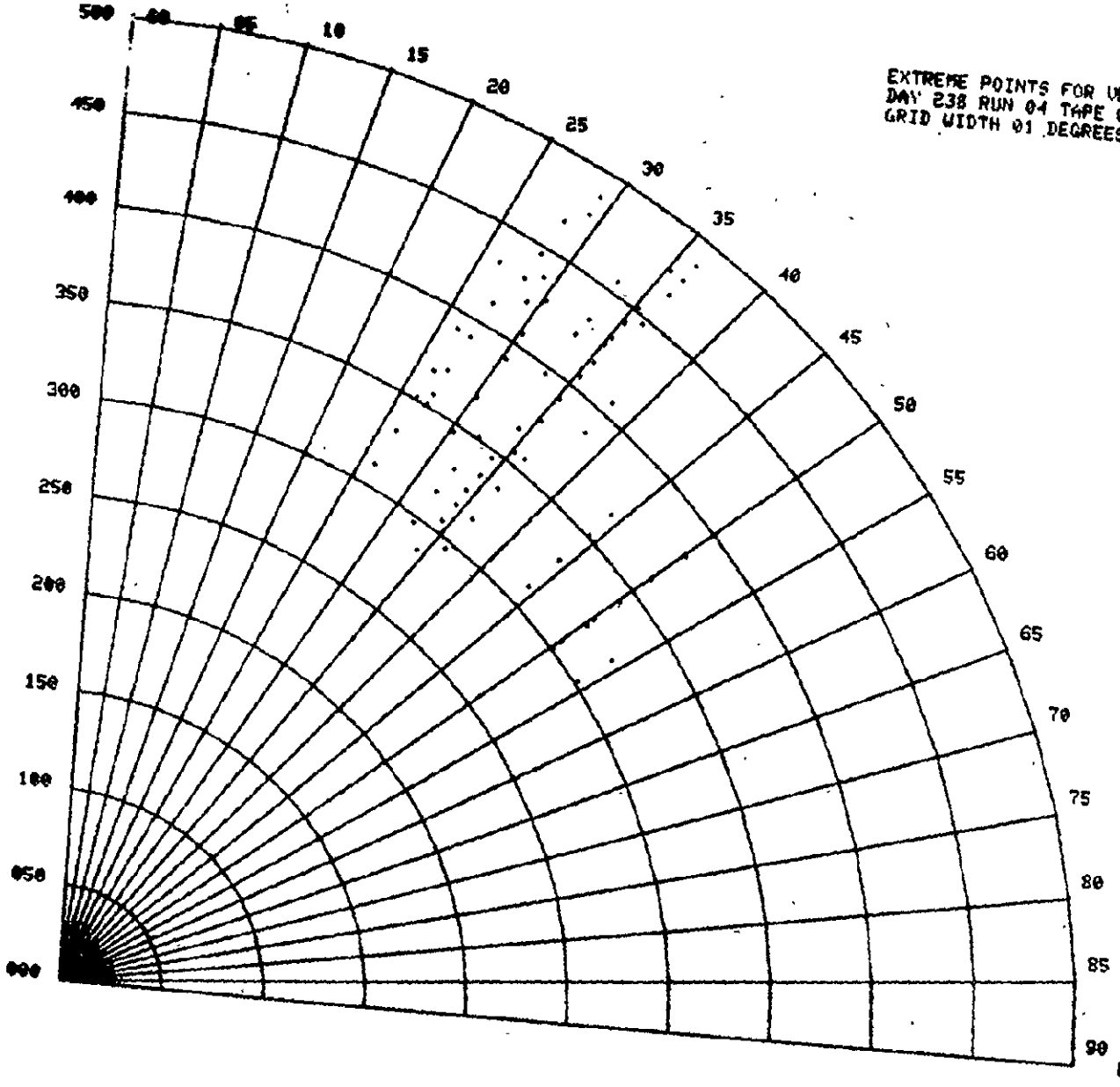
EXTREME POINTS FOR VELOCITY CELL 061 95 PERCENT
DAY 238 RUN 04 TAPE 06110 AND 29226
GRID WIDTH 01 DEGREES GRID LENGTH 05 METERS



ENTER "D" TO CONTINUE

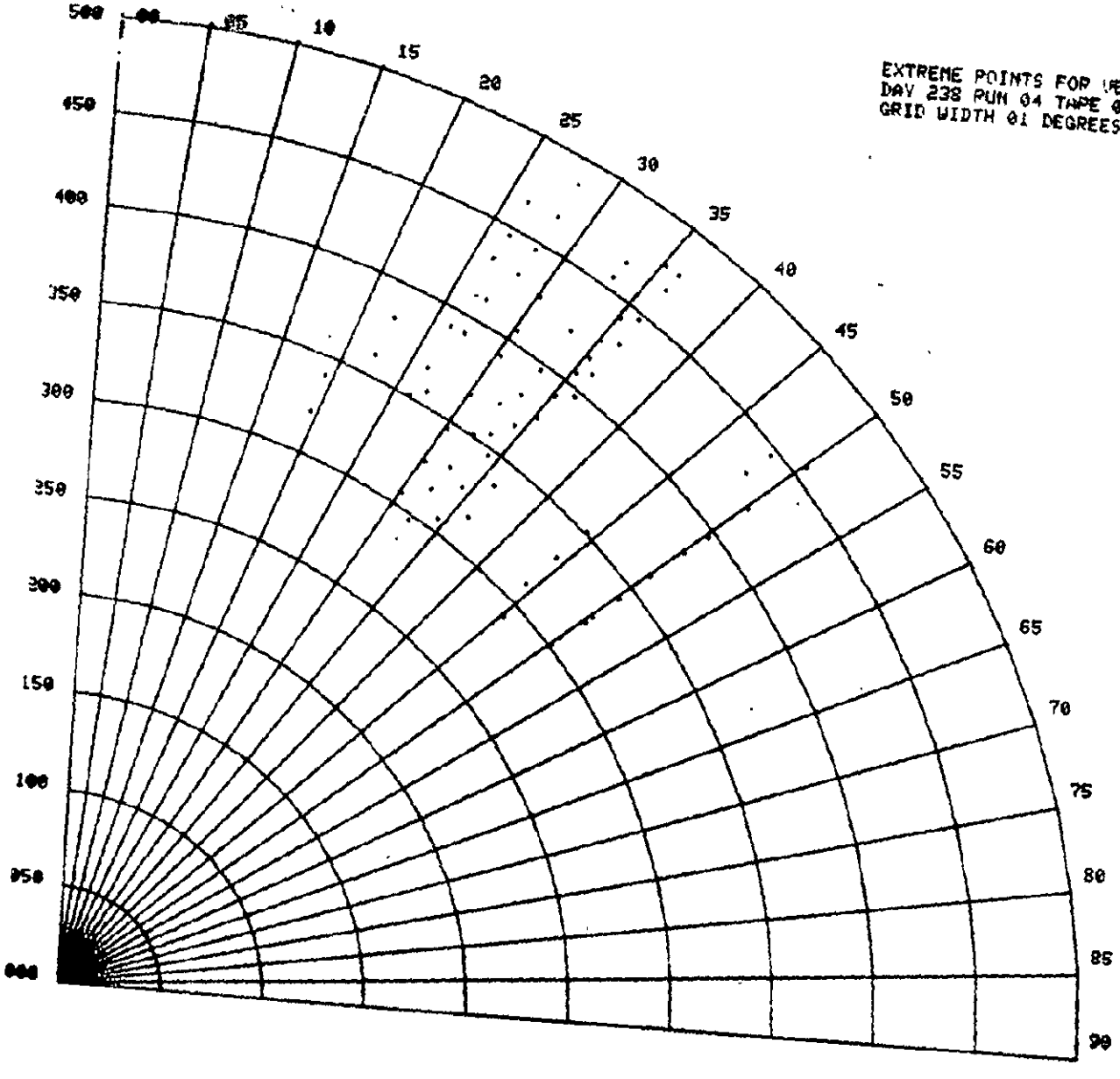


ENTER "D" TO CONTINUE



EXTREME POINTS FOR VELOCITY CELL 062 98 PERCENT
DAY 238 RUN 04 TAPE 06110 AND 29226
GRID WIDTH 01 DEGREES GRID LENGTH 05 METERS

ENTER 'B' TO CONTINUE



EXTREME POINTS FOR VELOCITY CELL 063 98 PERCENT
DAY 238 RUN 04 TAPE 06110 AND 29226
GRID WIDTH 01 DEGREES GRID LENGTH 05 METERS

ENTER "D" TO CONTINUE

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

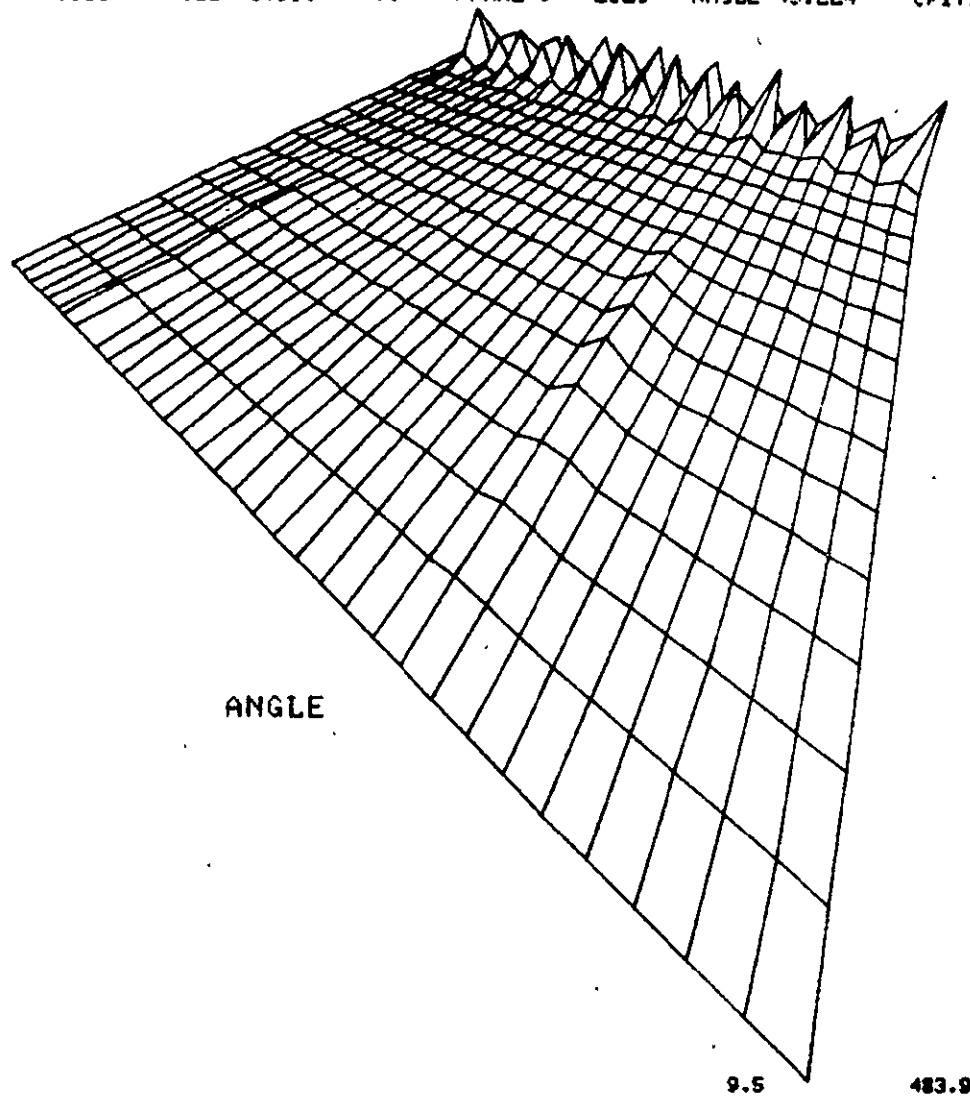
* SCAN # 1 FRAME # 1916 ANGLE 3.950 TO FRAME # 2525 ANGLE 45.224 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 50.0

AVERAGE I = 3.2

	ANGLE
1	9.5
2	9.8
3	10.4
4	11.2
5	12.2
6	13.3
7	14.4
8	15.6
9	16.8
10	18.0
11	19.1
12	20.2
13	21.3
14	22.5
15	23.7
16	24.9
17	26.1
18	27.3
19	28.4
20	29.6
21	30.8
22	31.9
23	33.0
24	34.2
25	35.4
26	36.5
27	37.6
28	38.9
29	40.0
30	41.2
31	42.3
32	43.5
33	44.4
34	45.1



	R
1	155.4
2	174.7
3	194.0
4	213.3
5	232.7
6	252.0
7	271.3
8	290.6
9	309.9
10	329.3
11	348.6
12	367.9
13	387.2
14	406.6
15	425.3
16	445.2
17	423.9

I_{MAX}, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

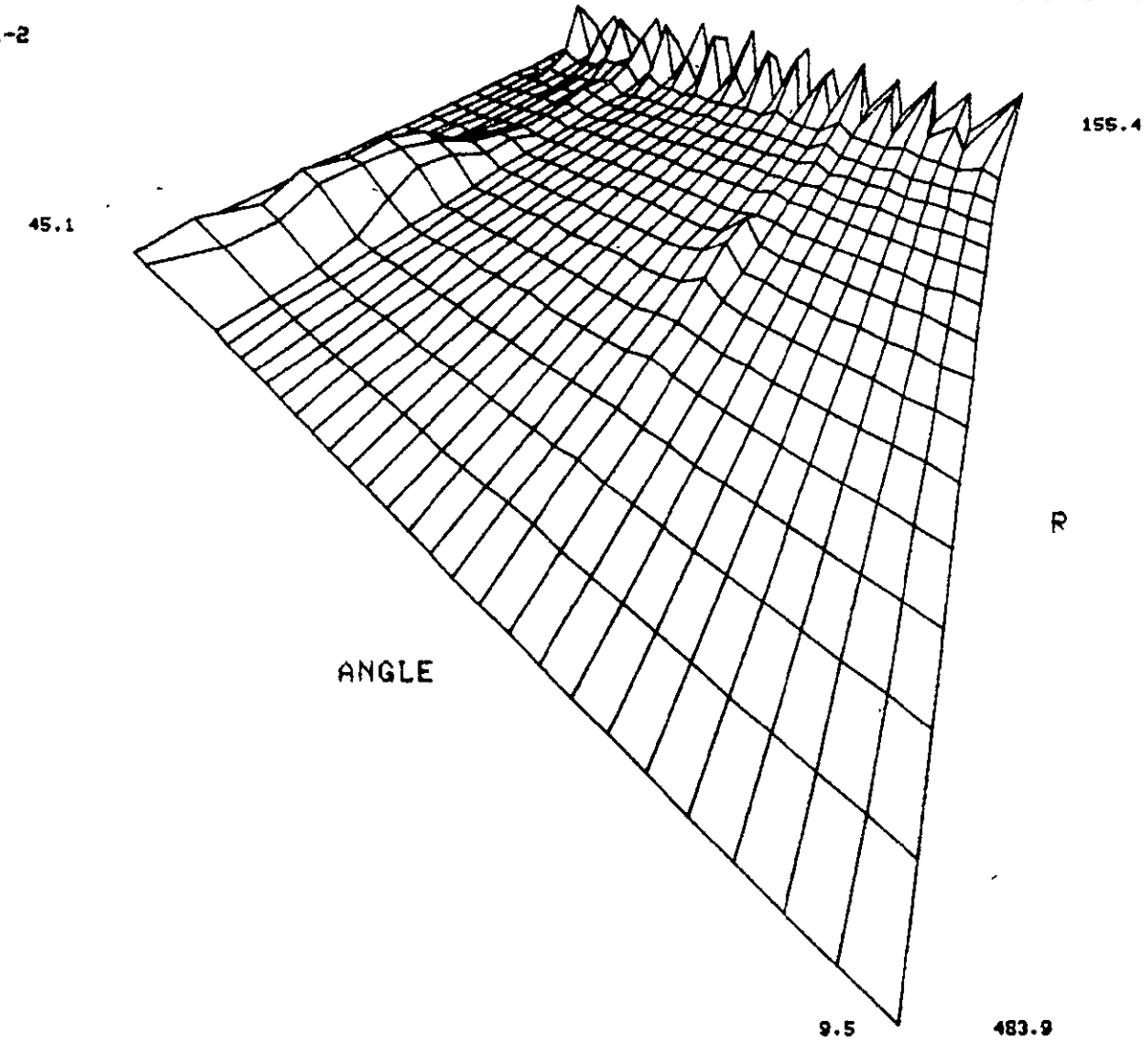
\# SCAN # 1 FRAME # 1916 ANGLE 8.950 TO FRAME # 2525 ANGLE 45.224 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 68.0

AVERAGE I = 8.1

ANGLE	
1	9.5
2	9.8
3	10.4
4	11.2
5	12.2
6	13.3
7	14.4
8	15.6
9	16.8
10	18.0
11	19.1
12	20.2
13	21.3
14	22.5
15	23.7
16	24.9
17	26.1
18	27.3
19	28.4
20	29.6
21	30.8
22	31.9
23	33.0
24	34.2
25	35.4
26	36.5
27	37.6
28	38.9
29	40.0
30	41.2
31	42.3
32	43.5
33	44.4
34	45.1



	R
1	155.4
2	174.7
3	194.0
4	213.3
5	232.7
6	252.0
7	271.3
8	290.6
9	309.9
10	329.3
11	348.6
12	367.9
13	387.2
14	406.6
15	425.9
16	445.2
17	483.9

ORIGINAL PAGE IS OF POOR QUALITY

I_{max}, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

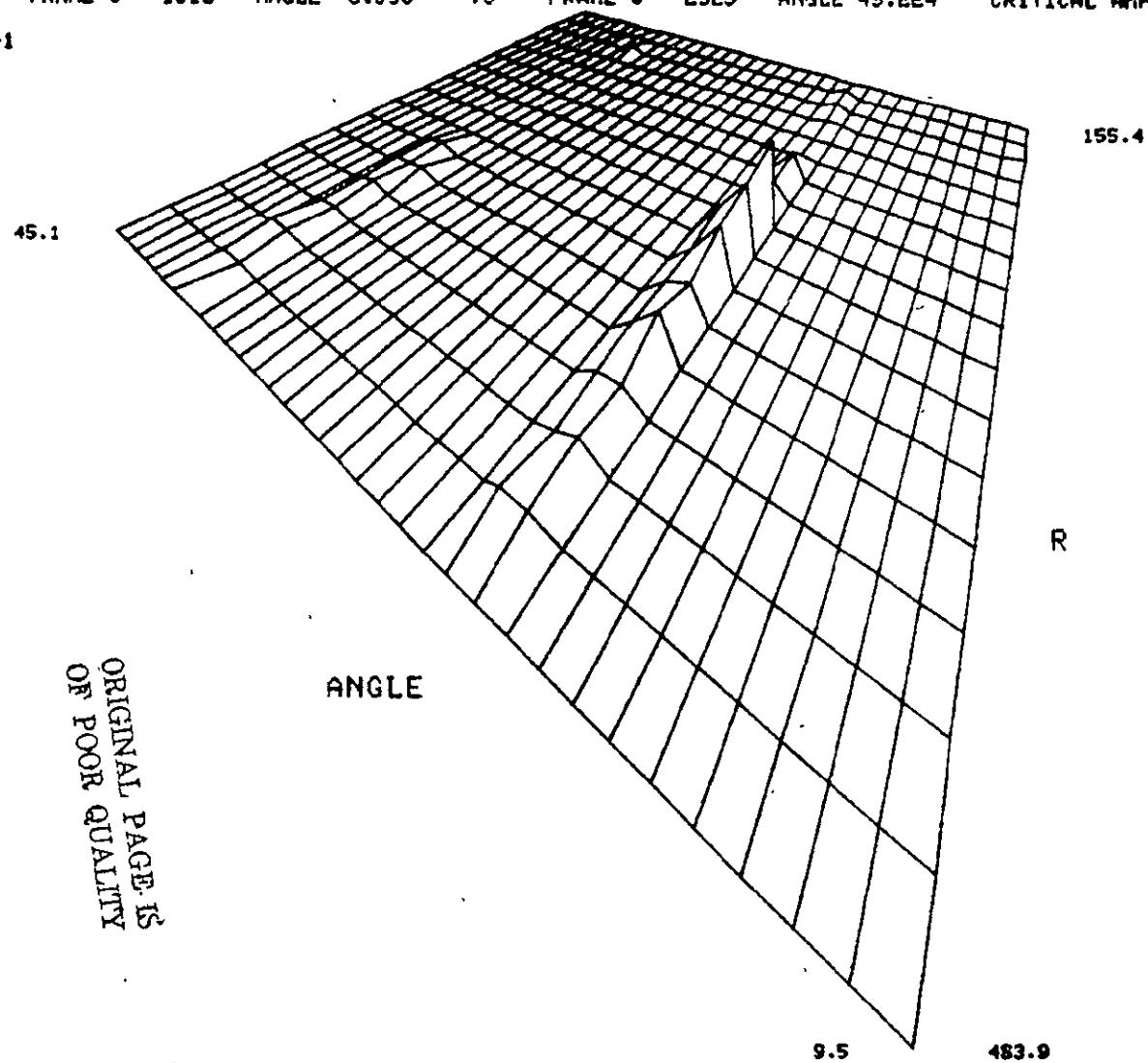
\# SCAN # 1 FRAME # 1916 ANGLE 8.950 TO FRAME # 2525 ANGLE 45.224 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 22.0

AVERAGE I = 0.4

	ANGLE
1	9.5
2	9.8
3	10.4
4	11.2
5	12.2
6	13.3
7	14.4
8	15.6
9	16.8
10	18.0
11	19.1
12	20.2
13	21.3
14	22.5
15	23.7
16	24.9
17	26.1
18	27.3
19	28.4
20	29.6
21	30.8
22	31.9
23	33.0
24	34.2
25	35.4
26	36.5
27	37.6
28	38.9
29	40.0
30	41.2
31	42.3
32	43.5
33	44.4
34	45.1



	R.
1	155.4
2	174.7
3	194.0
4	213.3
5	232.7
6	252.0
7	271.3
8	290.6
9	309.9
10	329.3
11	348.6
12	367.9
13	387.2
14	406.6
15	425.9
16	445.2
17	483.9

ORIGINAL PAGE IS
OF POOR QUALITY

I, R, A DISPLAY AT VELOCITY CELL 62

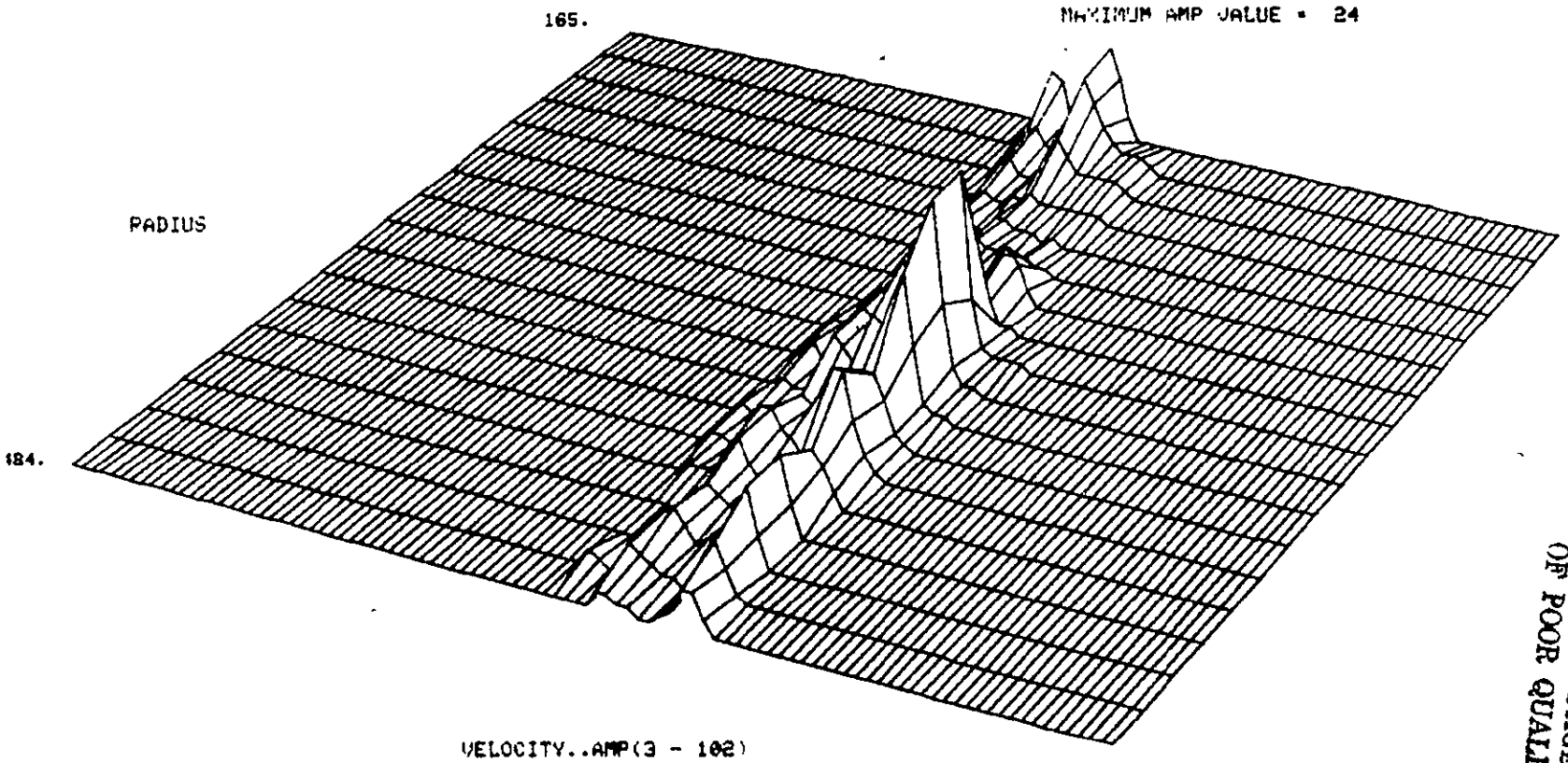
NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 1 FRAME # 1916 ANGLE 2.950 TO FRAME # 2525 ANGLE 45.224 CRITICAL AMP AT CELL 62

FRAME # 2099 TO 2117

ANGLE = 19.19

MAXIMUM AMP VALUE = 24



ORIGINAL PAGE IS
OF POOR QUALITY

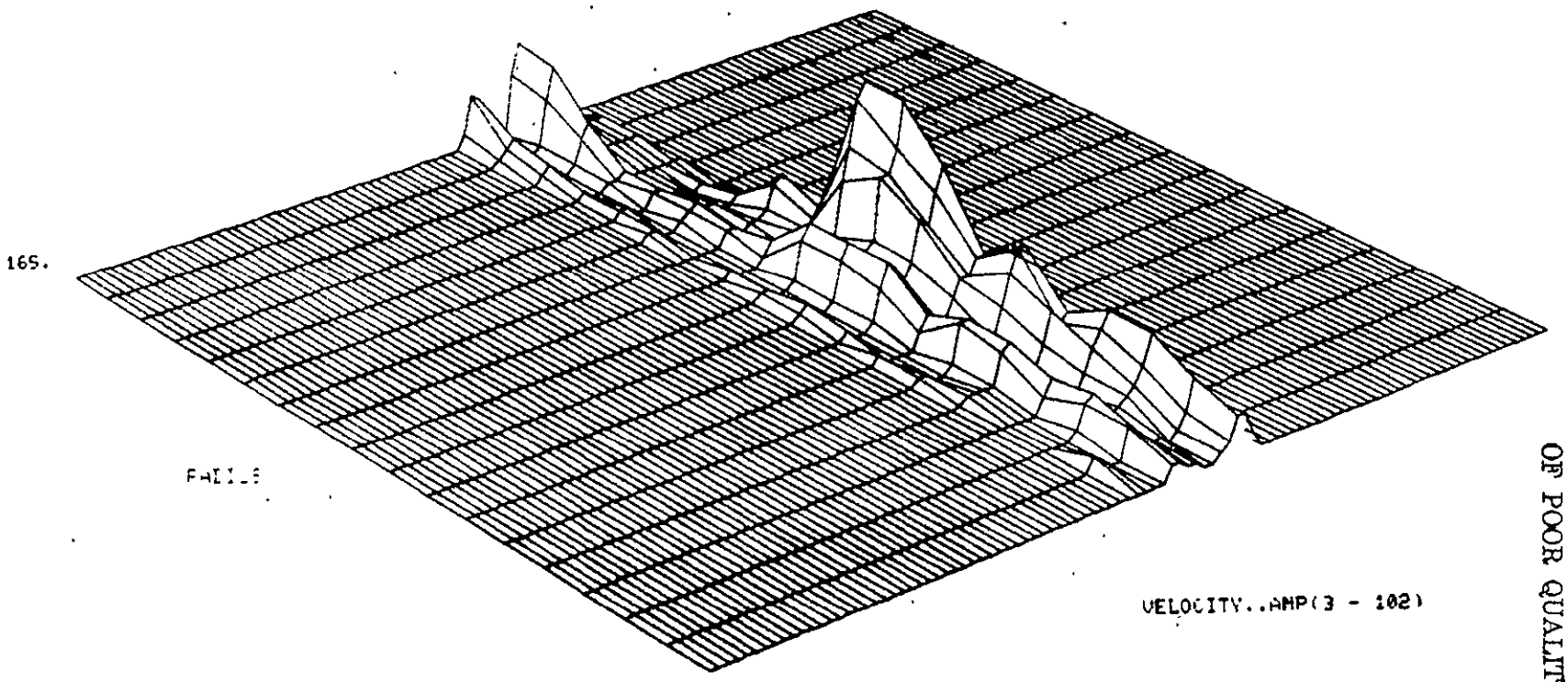
NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 1 FRAME # 1916 ANGLE 3.950 TO FRAME # 2525 ANGLE 45.224 CRITICAL AMP AT CELL 62

FRAME # 2099 TO 2117

ANGLE = 19.19

MAXIMUM AMP VALUE = 24



ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

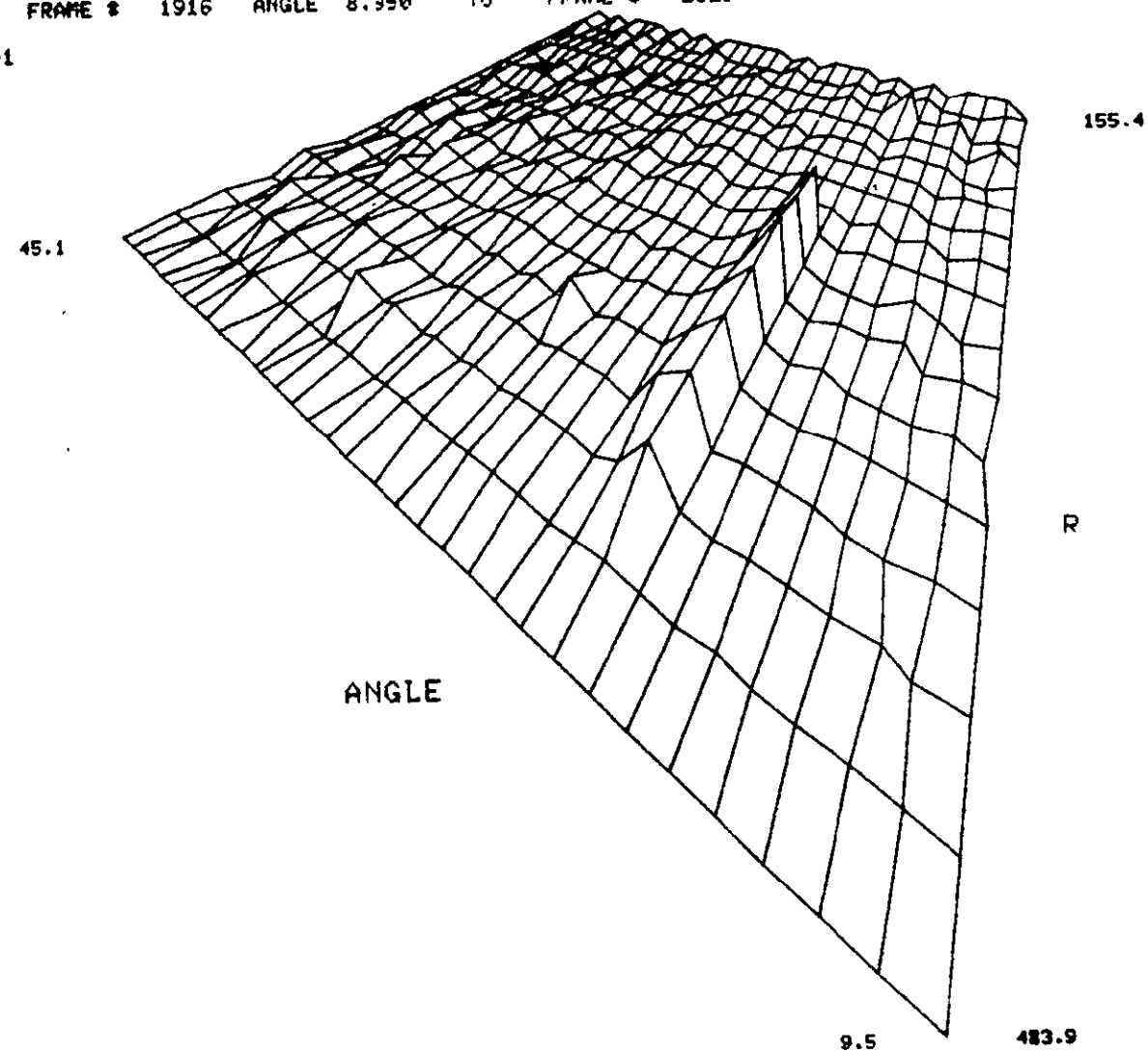
SCAN # 1 FRAME # 1916 ANGLE 8.350 TO FRAME # 2525 ANGLE 45.224 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 9.0

AVERAGE V = 1.9

ANGLE	
1	9.5
2	9.8
3	10.4
4	11.2
5	12.2
6	13.3
7	14.4
8	15.6
9	16.8
10	18.0
11	19.1
12	20.2
13	21.3
14	22.5
15	23.7
16	24.9
17	26.1
18	27.3
19	28.4
20	29.6
21	30.8
22	31.9
23	33.0
24	34.2
25	35.4
26	36.5
27	37.6
28	38.9
29	40.0
30	41.2
31	42.3
32	43.5
33	44.4
34	45.1



	R
1	155.4
2	174.7
3	194.0
4	213.3
5	232.7
6	252.0
7	271.3
8	290.6
9	309.9
10	329.3
11	348.6
12	367.9
13	387.2
14	406.6
15	425.9
16	445.2
17	483.9

V, R, A DISPLAY (VELOCITY AT I_{max})

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 5110

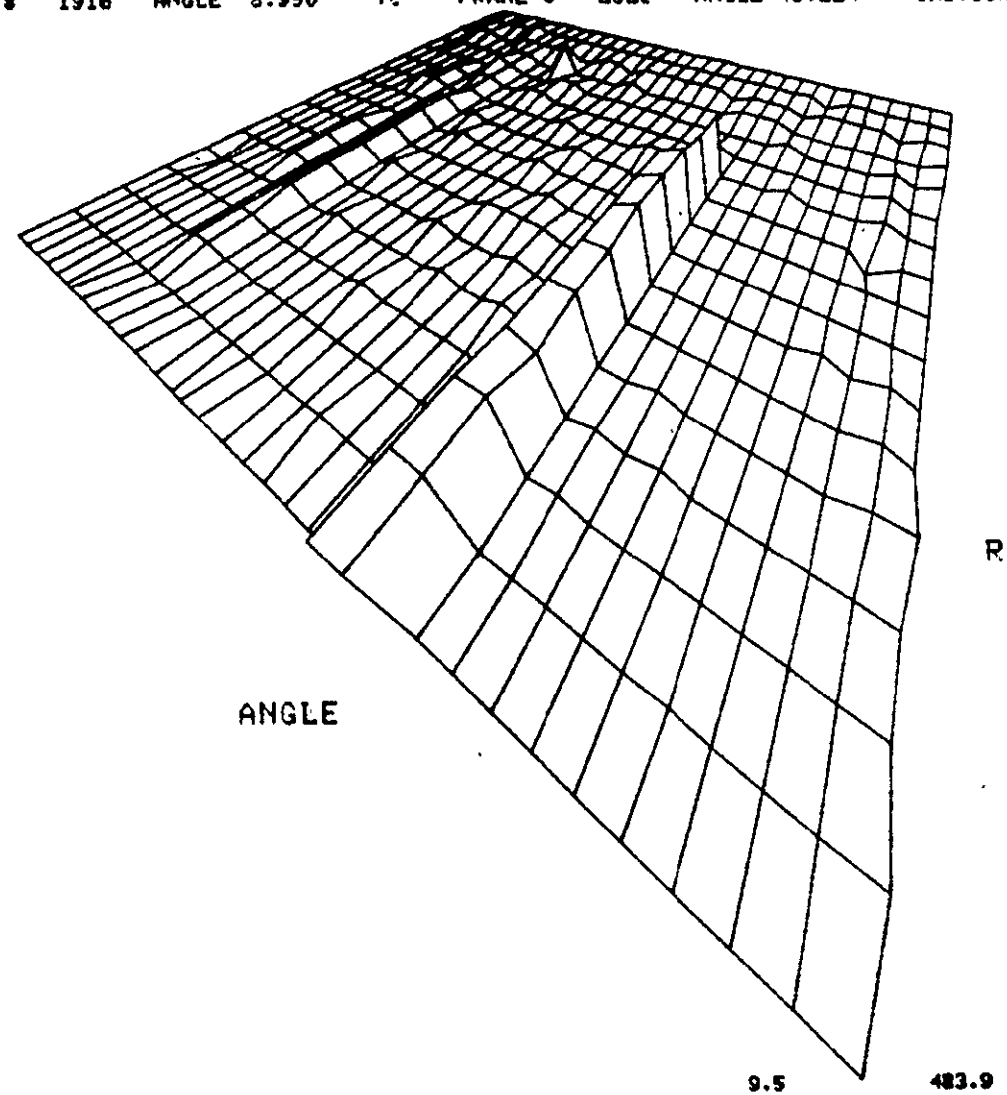
SCAN # 1 FRAME # 1916 ANGLE 8.950 TO FRAME # 2525 ANGLE 45.224 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V = 11.0

AVERAGE V = 3.6

ANGLE	
1	9.5
2	9.8
3	10.4
4	11.2
5	12.2
6	13.3
7	14.4
8	15.6
9	16.8
10	18.0
11	19.1
12	20.2
13	21.3
14	22.5
15	23.7
16	24.9
17	26.1
18	27.3
19	28.4
20	29.6
21	30.8
22	31.9
23	33.0
24	34.2
25	35.4
26	36.5
27	37.6
28	38.9
29	40.0
30	41.2
31	42.3
32	43.5
33	44.4
34	45.1



	R
1	155.4
2	174.7
3	194.0
4	213.3
5	232.7
6	252.0
7	271.3
8	290.6
9	309.9
10	329.3
11	348.6
12	367.9
13	387.2
14	406.6
15	425.9
16	445.2
17	483.9

V, R, A DISPLAY (VELOCITY AT I_{max})

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

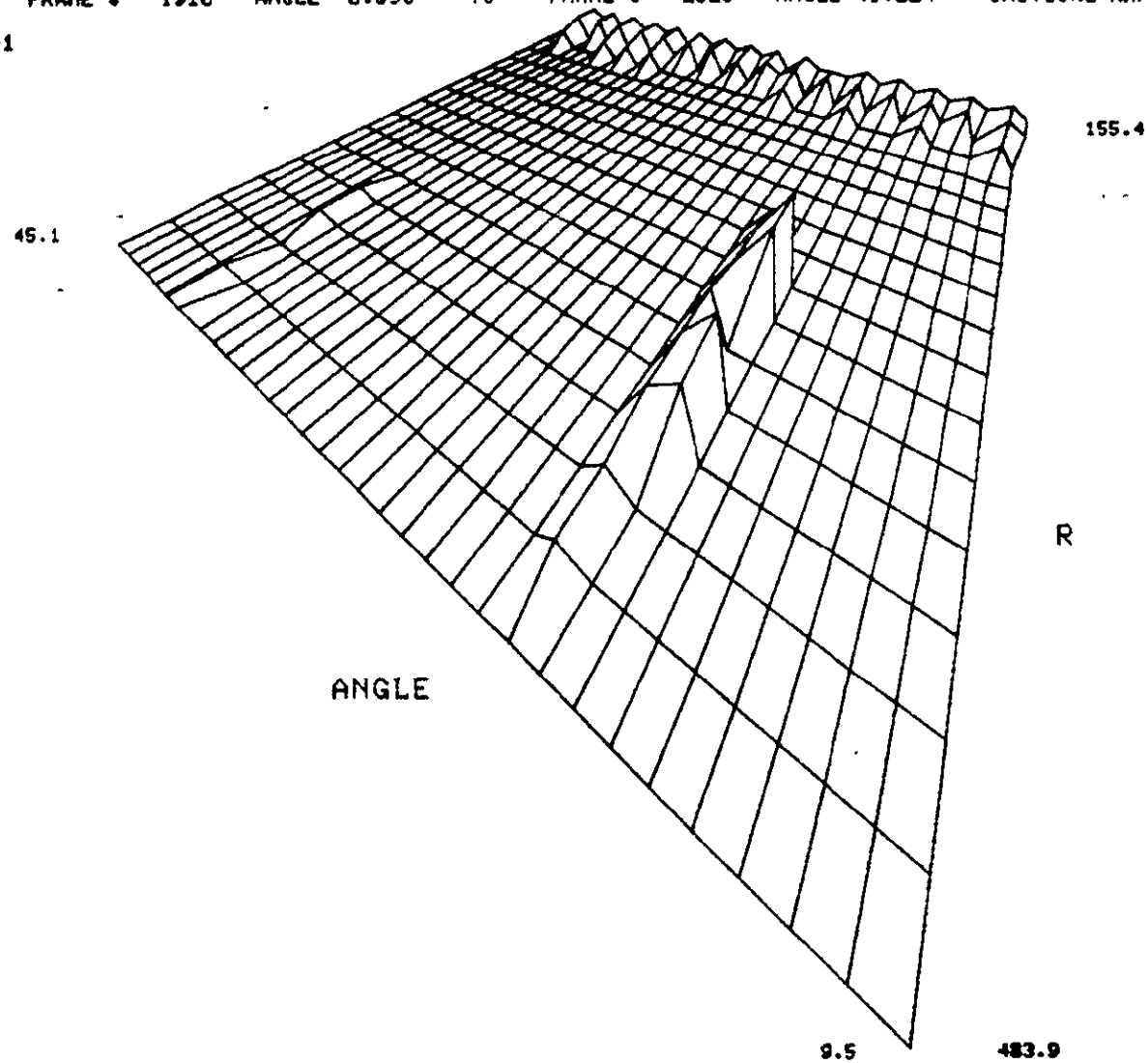
SCAN # 1 FRAME # 1916 ANGLE 8.950 TO FRAME # 2525 ANGLE 45.224 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 9.0

AVERAGE V = 1.4

ANGLE	
1	9.5
2	9.8
3	10.4
4	11.2
5	12.2
6	13.3
7	14.4
8	15.6
9	16.8
10	18.0
11	19.1
12	20.2
13	21.3
14	22.5
15	23.7
16	24.9
17	26.1
18	27.3
19	28.4
20	29.6
21	30.8
22	31.9
23	33.0
24	34.2
25	35.4
26	36.5
27	37.6
28	38.9
29	40.0
30	41.2
31	42.3
32	43.5
33	44.4
34	45.1



R	
1	155.4
2	174.7
3	194.0
4	213.3
5	232.7
6	252.0
7	271.3
8	290.6
9	309.9
10	329.3
11	348.6
12	367.9
13	387.2
14	406.6
15	425.9
16	445.2
17	483.9

Vmax, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

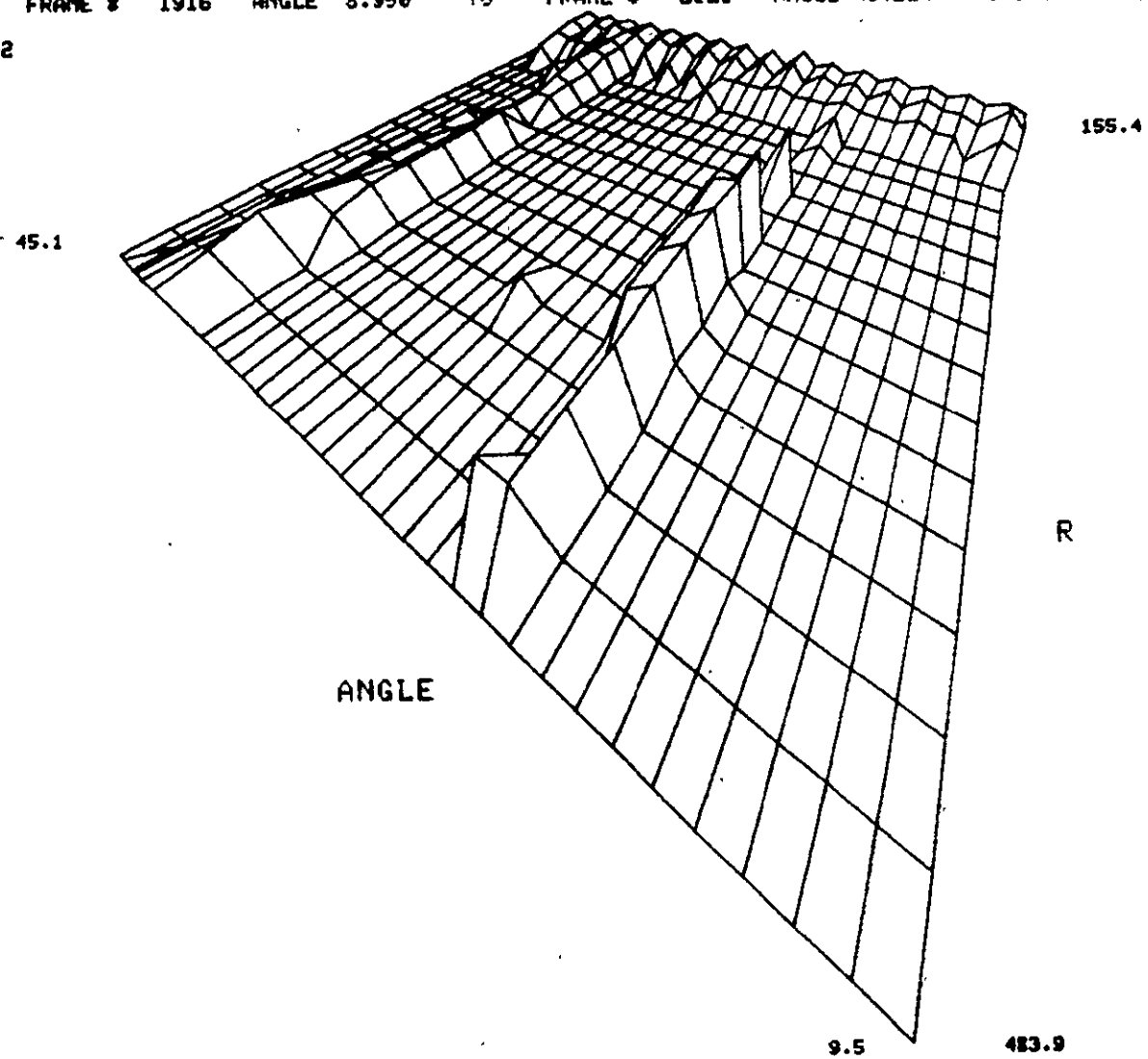
SCAN # 1 FRAME # 1916 ANGLE 3.950 TO FRAME # 2525 ANGLE 45.224 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM V = 12.0

AVERAGE V = 2.3

ANGLE	
1	9.5
2	9.8
3	10.4
4	11.2
5	12.2
6	13.3
7	14.4
8	15.6
9	16.8
10	18.0
11	19.1
12	20.2
13	21.3
14	22.5
15	23.7
16	24.9
17	26.1
18	27.3
19	28.4
20	29.6
21	30.8
22	31.9
23	33.0
24	34.2
25	35.4
26	36.5
27	37.6
28	38.9
29	40.0
30	41.2
31	42.3
32	43.5
33	44.4
34	45.1



	R
1	155.4
2	174.7
3	194.0
4	213.3
5	232.7
6	252.0
7	271.3
8	290.6
9	309.9
10	329.3
11	348.6
12	367.9
13	387.2
14	406.6
15	425.9
16	445.2
17	483.9

V_{max}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

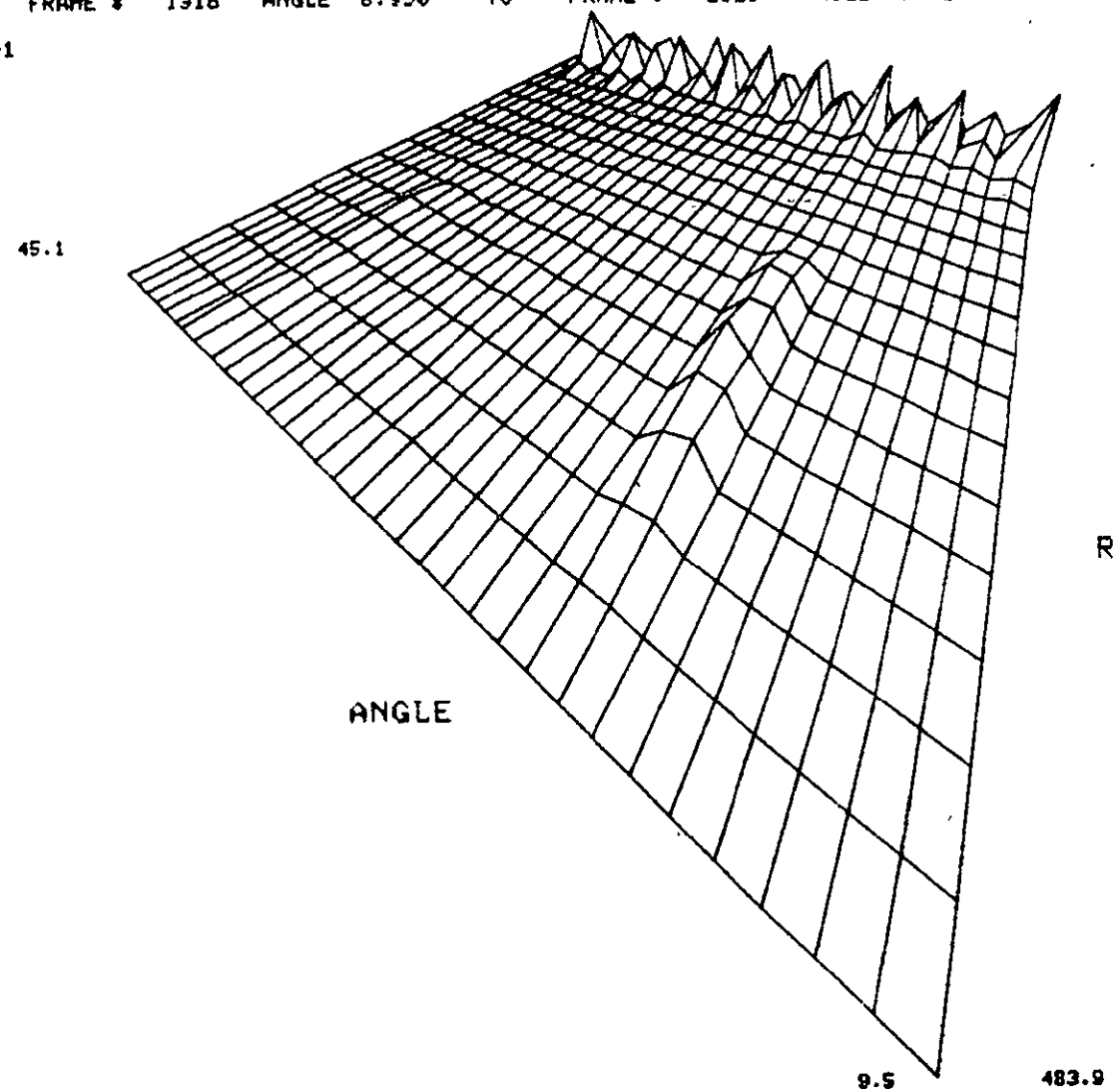
ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 1 FRAME # 1916 ANGLE 8.950 TO FRAME # 2525 ANGLE 45.224 CRITICAL AMP AT CELL 62

OPTION # 31-1

ANGLE	
1	9.5
2	9.8
3	10.4
4	11.2
5	12.2
6	13.3
7	14.4
8	15.6
9	16.8
10	18.0
11	19.1
12	20.2
13	21.3
14	22.5
15	23.7
16	24.9
17	26.1
18	27.3
19	28.4
20	29.6
21	30.8
22	31.9
23	33.0
24	34.2
25	35.4
26	36.5
27	37.6
28	38.9
29	40.0
30	41.2
31	42.3
32	43.5
33	44.4
34	45.1



	R
1	155.4
2	174.7
3	194.0
4	213.3
5	232.7
6	252.0
7	271.3
8	290.6
9	309.9
10	329.3
11	348.6
12	367.9
13	387.2
14	406.6
15	425.9
16	445.2
17	483.9

ORIGINAL PAGE IS OF POOR QUALITY

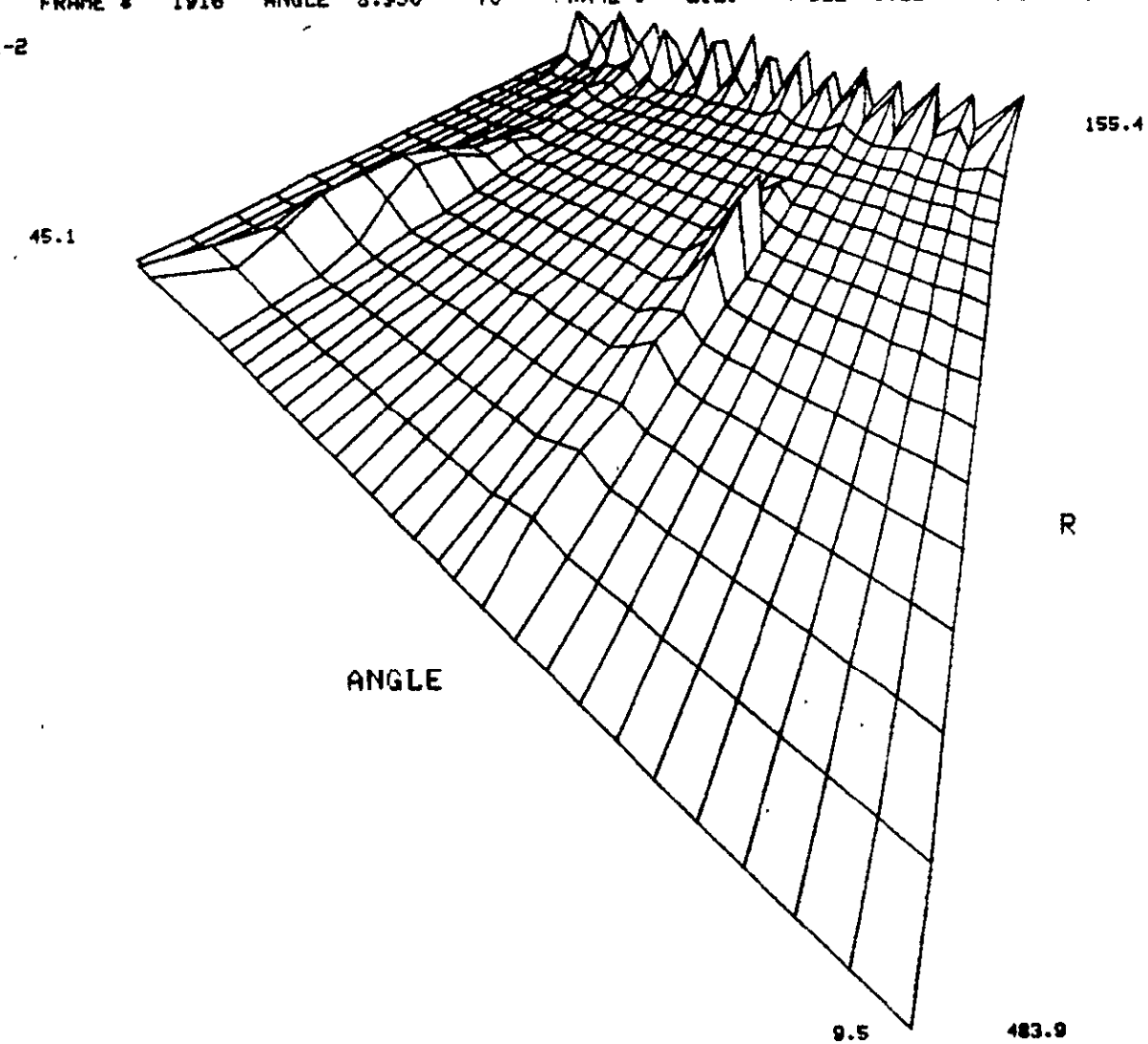
V * IMAX, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 1 FRAME # 1916 ANGLE 3.950 TO FRAME # 2525 ANGLE 45.224 CRITICAL AMP AT CELL 62

OPTION # 31-2

ANGLE	
1	9.5
2	9.8
3	10.4
4	11.2
5	12.2
6	13.3
7	14.4
8	15.6
9	16.8
10	18.0
11	19.1
12	20.2
13	21.3
14	22.5
15	23.7
16	24.9
17	26.1
18	27.3
19	28.4
20	29.6
21	30.8
22	31.9
23	33.0
24	34.2
25	35.4
26	36.5
27	37.6
28	38.9
29	40.0
30	41.2
31	42.3
32	43.5
33	44.4
34	45.1



	R
1	155.4
2	174.7
3	194.0
4	213.3
5	232.7
6	252.0
7	271.3
8	290.6
9	309.9
10	329.3
11	348.6
12	367.9
13	387.2
14	406.6
15	425.9
16	445.2
17	483.9

V * Imax, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

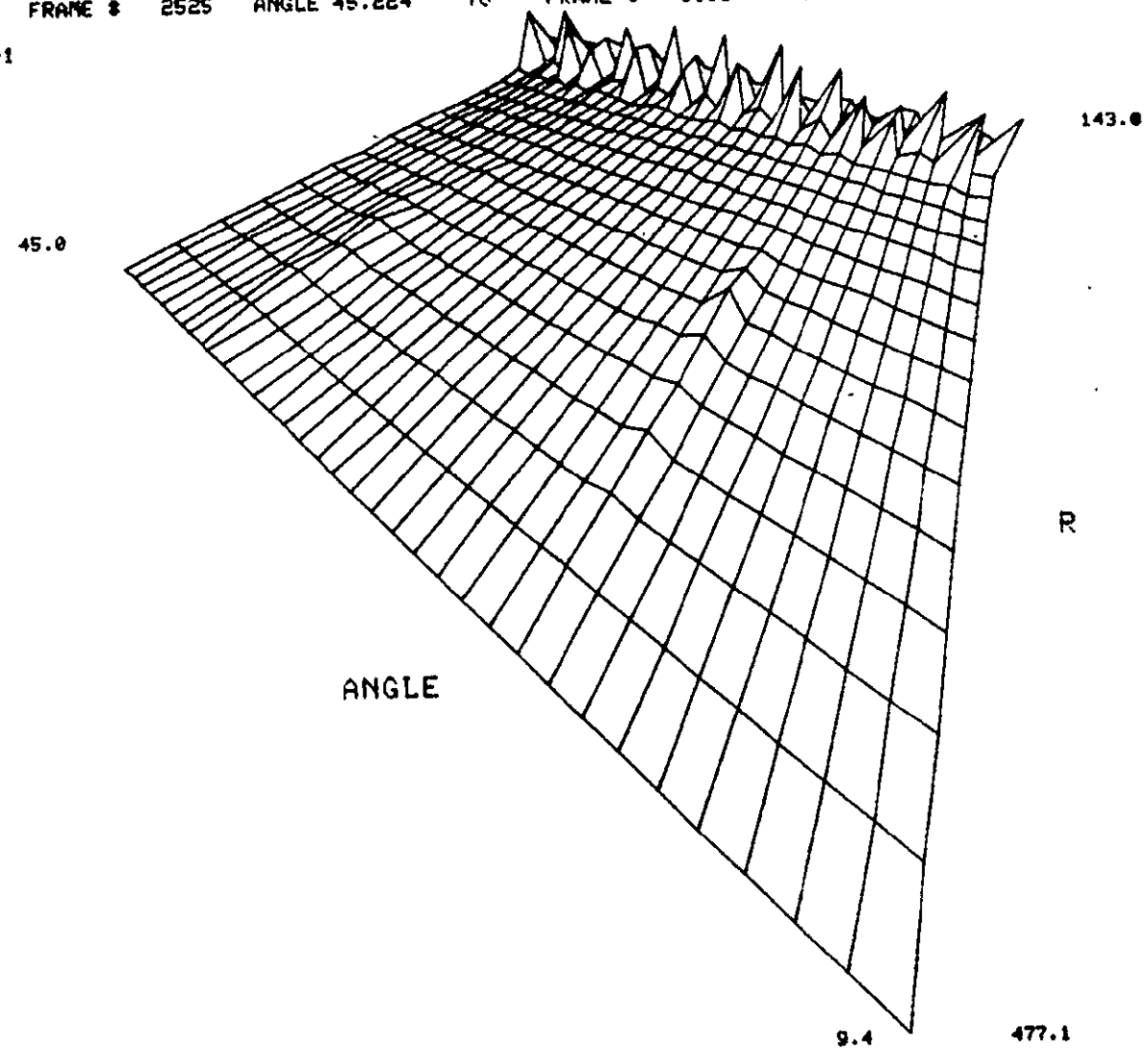
\# SCAN # 2 FRAME # 2525 ANGLE 45.224 TO FRAME # 3156 ANGLE 8.912 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 41.0

AVERAGE I = 2.9

ANGLE	
1	45.0
2	45.0
3	44.7
4	44.1
5	43.4
6	42.4
7	41.4
8	40.3
9	39.0
10	37.9
11	36.8
12	35.6
13	34.5
14	33.3
15	32.2
16	31.1
17	29.9
18	28.7
19	27.5
20	26.4
21	25.2
22	24.0
23	22.8
24	21.7
25	20.5
26	19.3
27	18.1
28	16.9
29	15.8
30	14.6
31	13.4
32	12.2
33	11.1
34	9.9
35	9.4



	R
1	143.0
2	162.7
3	182.3
4	202.0
5	221.6
6	241.3
7	260.9
8	280.6
9	300.2
10	319.9
11	339.5
12	359.2
13	378.9
14	398.5
15	418.2
16	437.8
17	477.1

I_{MAX}, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

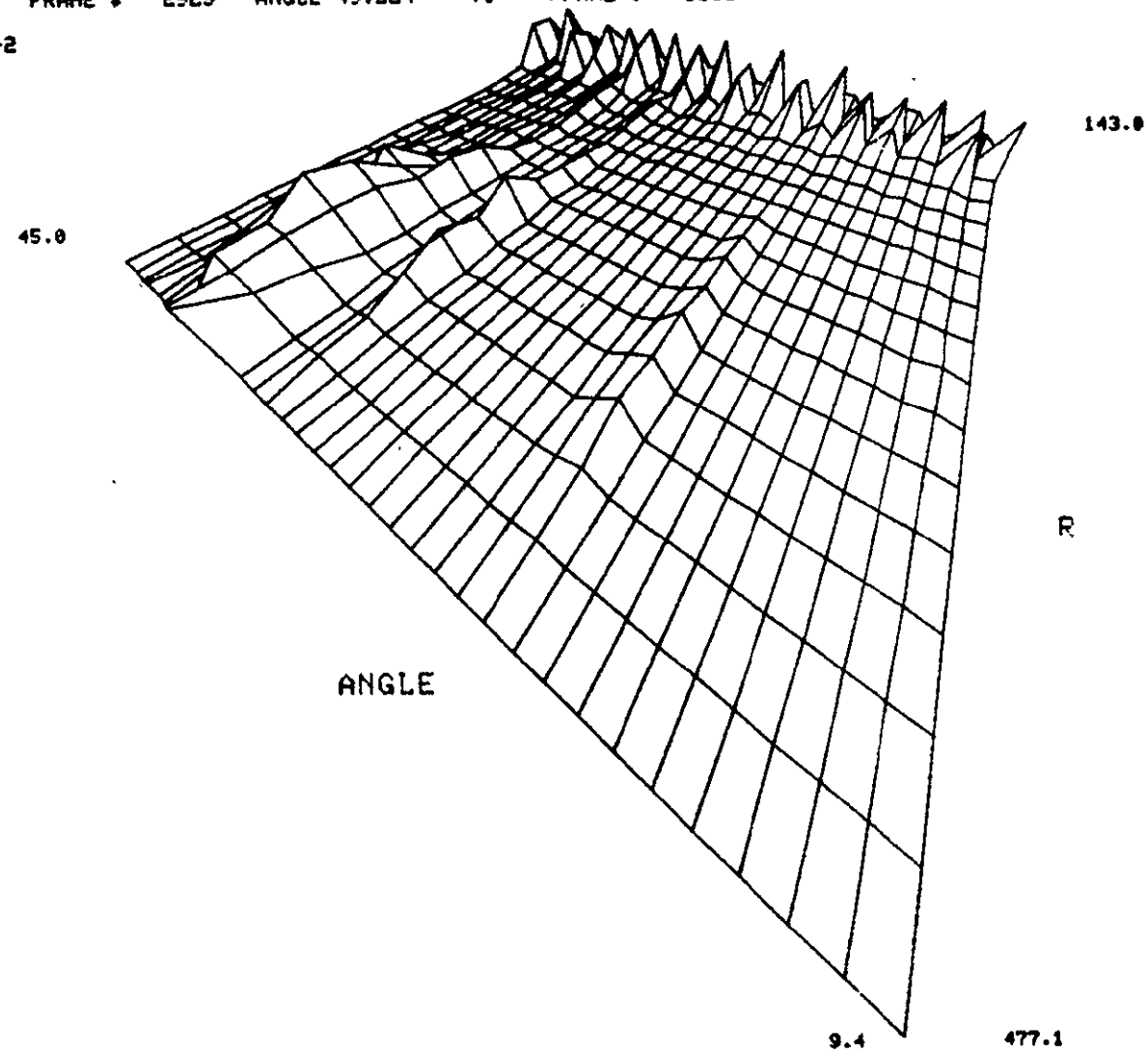
SCAN # 2 FRAME # 2525 ANGLE 45.224 TO FRAME # 3156 ANGLE 8.912 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 67.0

AVERAGE I = 8.0

ANGLE	
1	45.0
2	45.0
3	44.7
4	44.1
5	43.4
6	42.4
7	41.4
8	40.3
9	39.0
10	37.9
11	36.8
12	35.6
13	34.5
14	33.3
15	32.2
16	31.1
17	29.9
18	28.7
19	27.5
20	26.4
21	25.2
22	24.0
23	22.8
24	21.7
25	20.5
26	19.3
27	18.1
28	16.9
29	15.8
30	14.6
31	13.4
32	12.2
33	11.1
34	9.9
35	9.4



	R
1	143.0
2	162.7
3	182.3
4	202.0
5	221.6
6	241.3
7	260.9
8	280.6
9	300.2
10	319.9
11	339.5
12	359.2
13	378.9
14	398.5
15	418.2
16	437.8
17	477.1

Imax, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

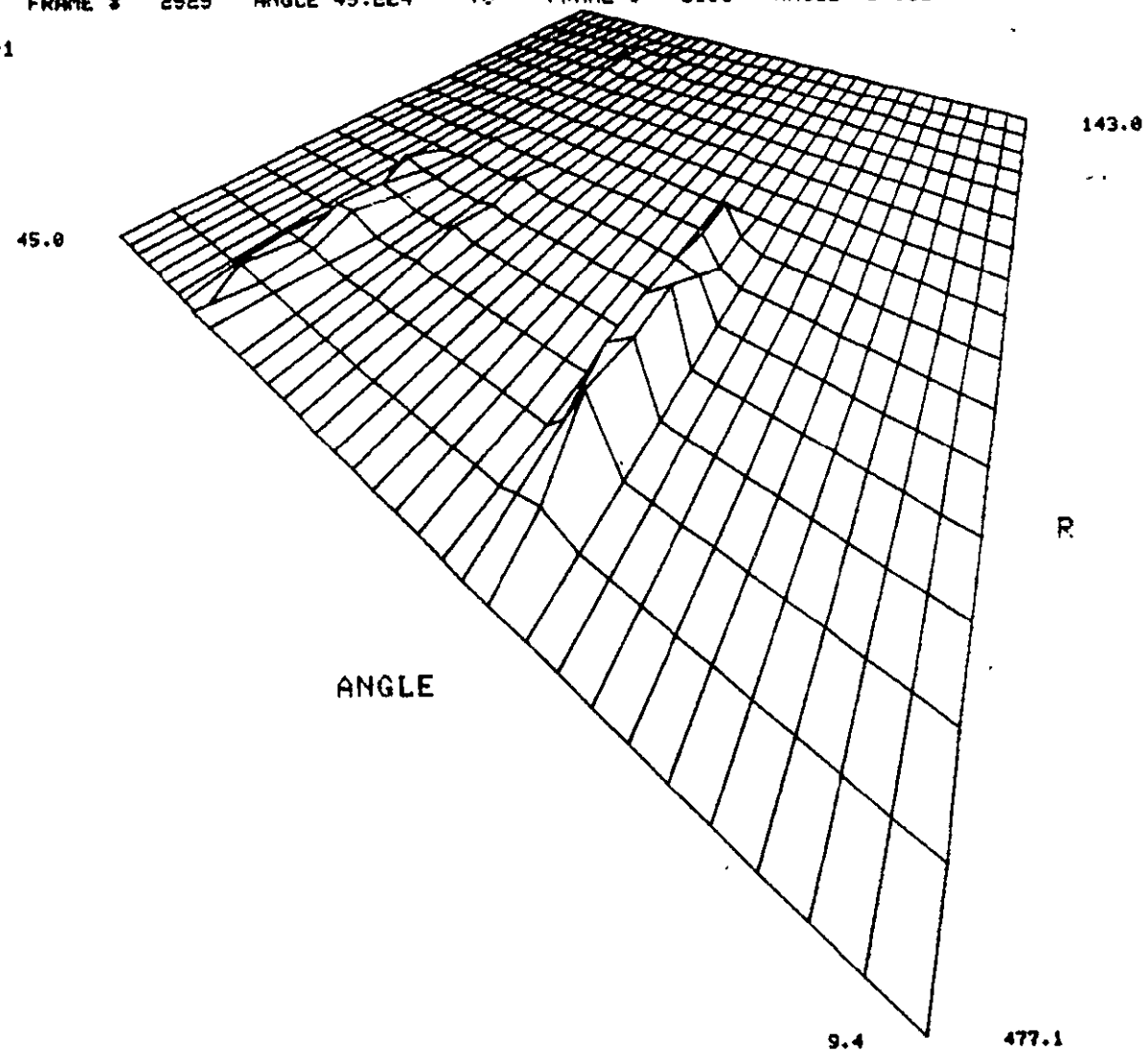
SCAN # 2 FRAME # 2525 ANGLE 45.224 TO FRAME # 3156 ANGLE 8.912 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 16.0

AVERAGE I = 0.3

ANGLE	
1	45.0
2	45.0
3	44.7
4	44.1
5	43.4
6	42.4
7	41.4
8	40.3
9	39.0
10	37.9
11	36.8
12	35.6
13	34.5
14	33.3
15	32.2
16	31.1
17	29.9
18	28.7
19	27.5
20	26.4
21	25.2
22	24.0
23	22.8
24	21.7
25	20.5
26	19.3
27	18.1
28	16.9
29	15.8
30	14.6
31	13.4
32	12.2
33	11.1
34	9.9
35	9.4



R	
1	143.0
2	162.7
3	182.3
4	202.0
5	221.6
6	241.3
7	260.9
8	280.6
9	300.2
10	319.9
11	339.5
12	359.2
13	378.9
14	398.5
15	418.2
16	437.8
17	477.1

ORIGINAL PAGE IS OF POOR QUALITY

I, R, A DISPLAY AT VELOCITY CELL 62

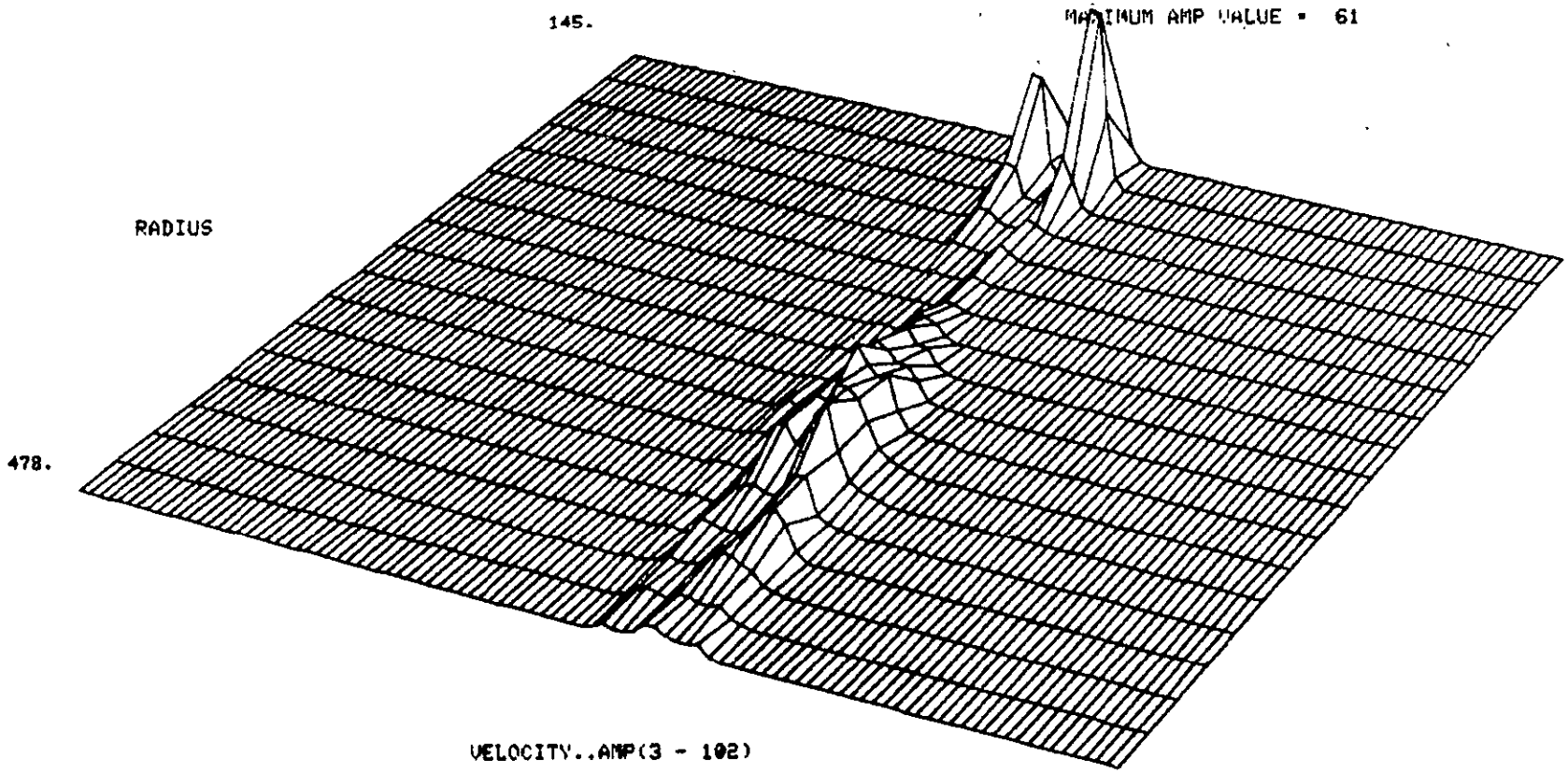
NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 2 FRAME # 2525 ANGLE 45.224 TO FRAME # 3156 ANGLE 8.912 CRITICAL AMP AT CELL 62

FRAME # 2955 TO 2973

ANGLE = 20.48

MAXIMUM AMP VALUE = 61



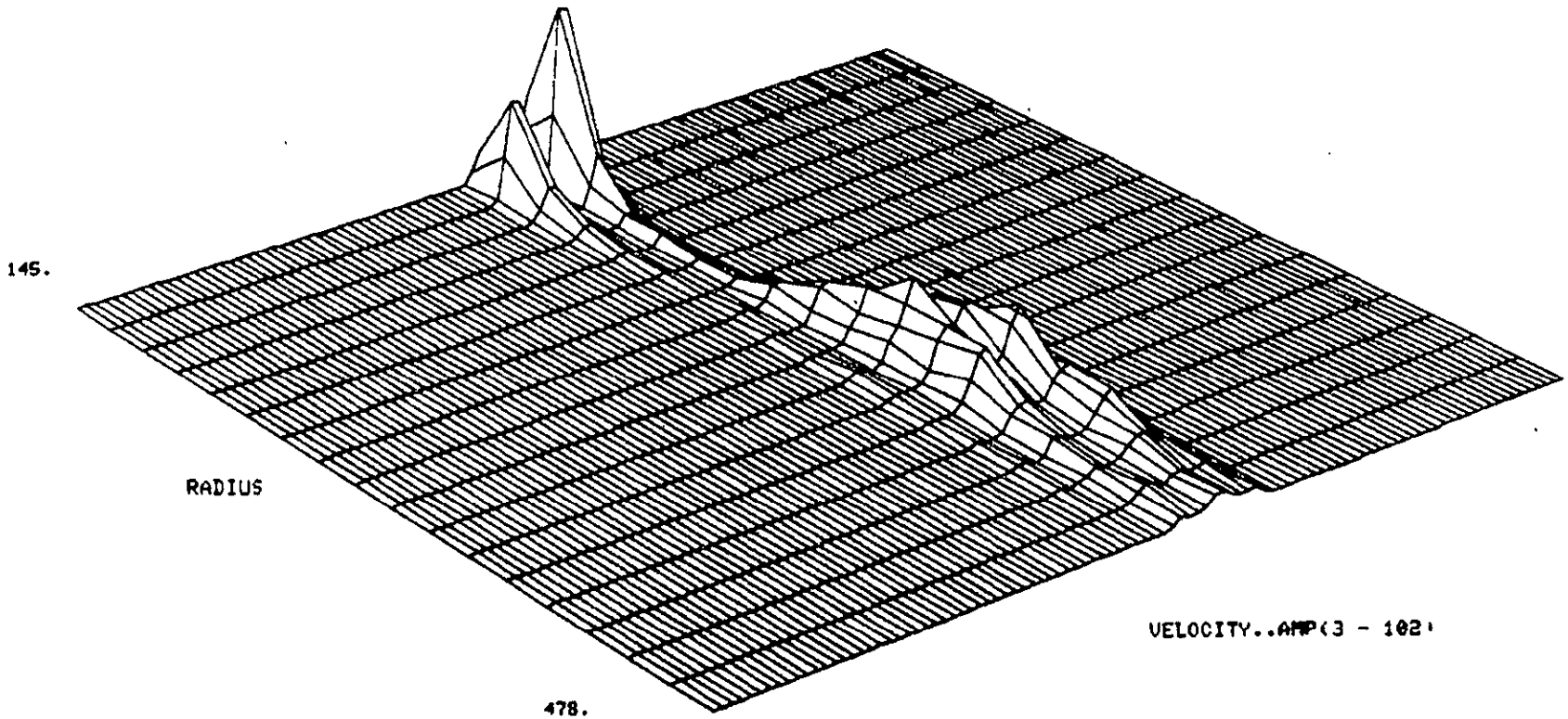
NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 2 FRAME # 2525 ANGLE 45.224 TO FRAME # 3156 ANGLE 8.912 CRITICAL AMP AT CELL 62

FRAME # 2955 TO 2973

ANGLE = 20.48

MAXIMUM AMP VALUE = 61



NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

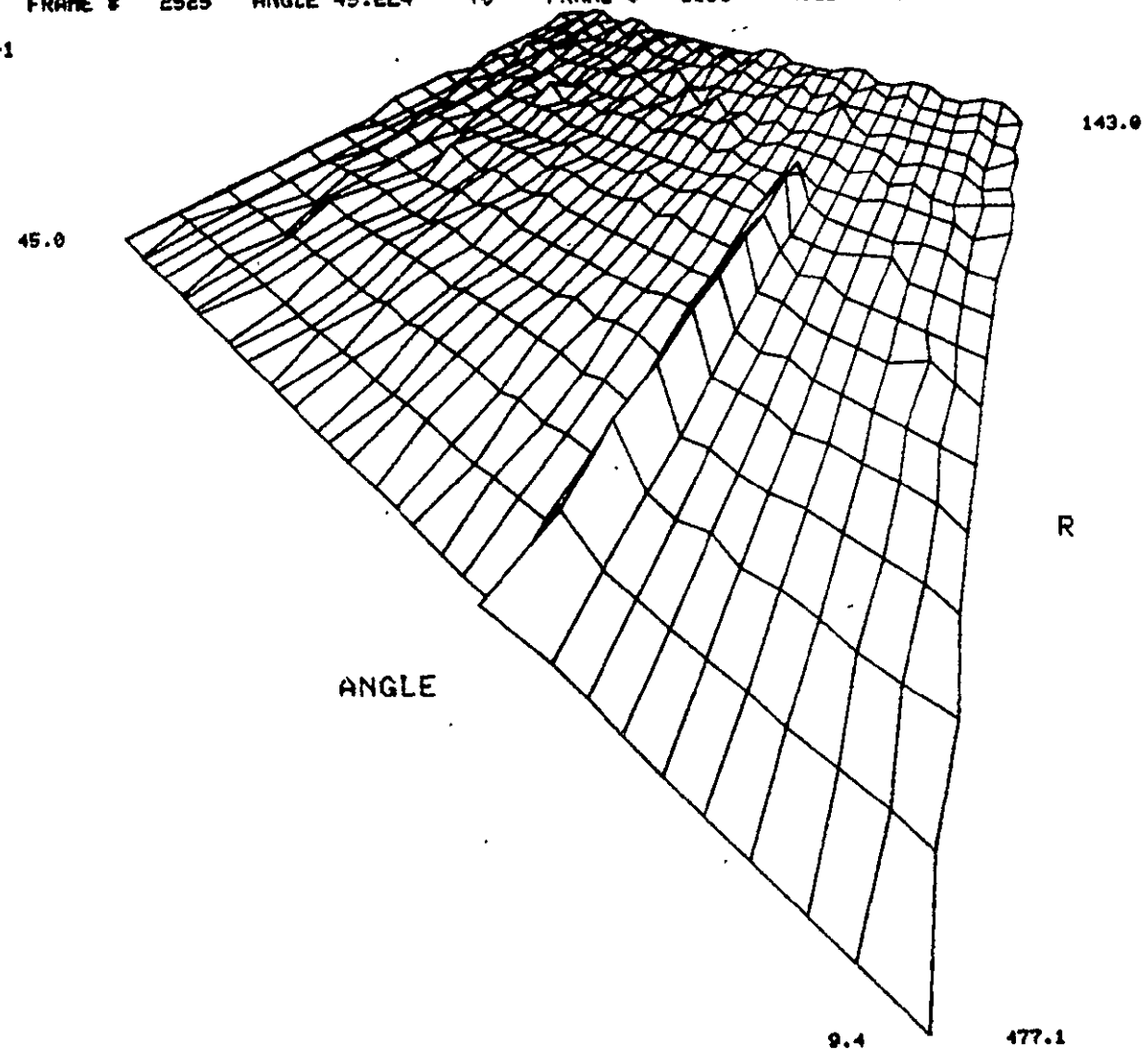
* SCAN # 2 FRAME # 2525 ANGLE 45.224 TO FRAME # 3156 ANGLE 6.912 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 10.0

AVERAGE V = 1.8

ANGLE	
1	45.0
2	45.0
3	44.7
4	44.1
5	43.4
6	42.4
7	41.4
8	40.3
9	39.0
10	37.9
11	36.8
12	35.6
13	34.5
14	33.3
15	32.2
16	31.1
17	29.9
18	28.7
19	27.5
20	26.4
21	25.2
22	24.0
23	22.8
24	21.7
25	20.5
26	19.3
27	18.1
28	16.9
29	15.8
30	14.6
31	13.4
32	12.2
33	11.1
34	9.9
35	9.4



	R
1	143.0
2	162.7
3	182.3
4	202.0
5	221.6
6	241.3
7	260.9
8	280.6
9	300.2
10	319.9
11	339.5
12	359.2
13	378.9
14	398.5
15	418.2
16	437.8
17	477.1

V, R, A DISPLAY (VELOCITY AT I_{MAX})

ORIGINAL PAGE IS OF POOR QUALITY

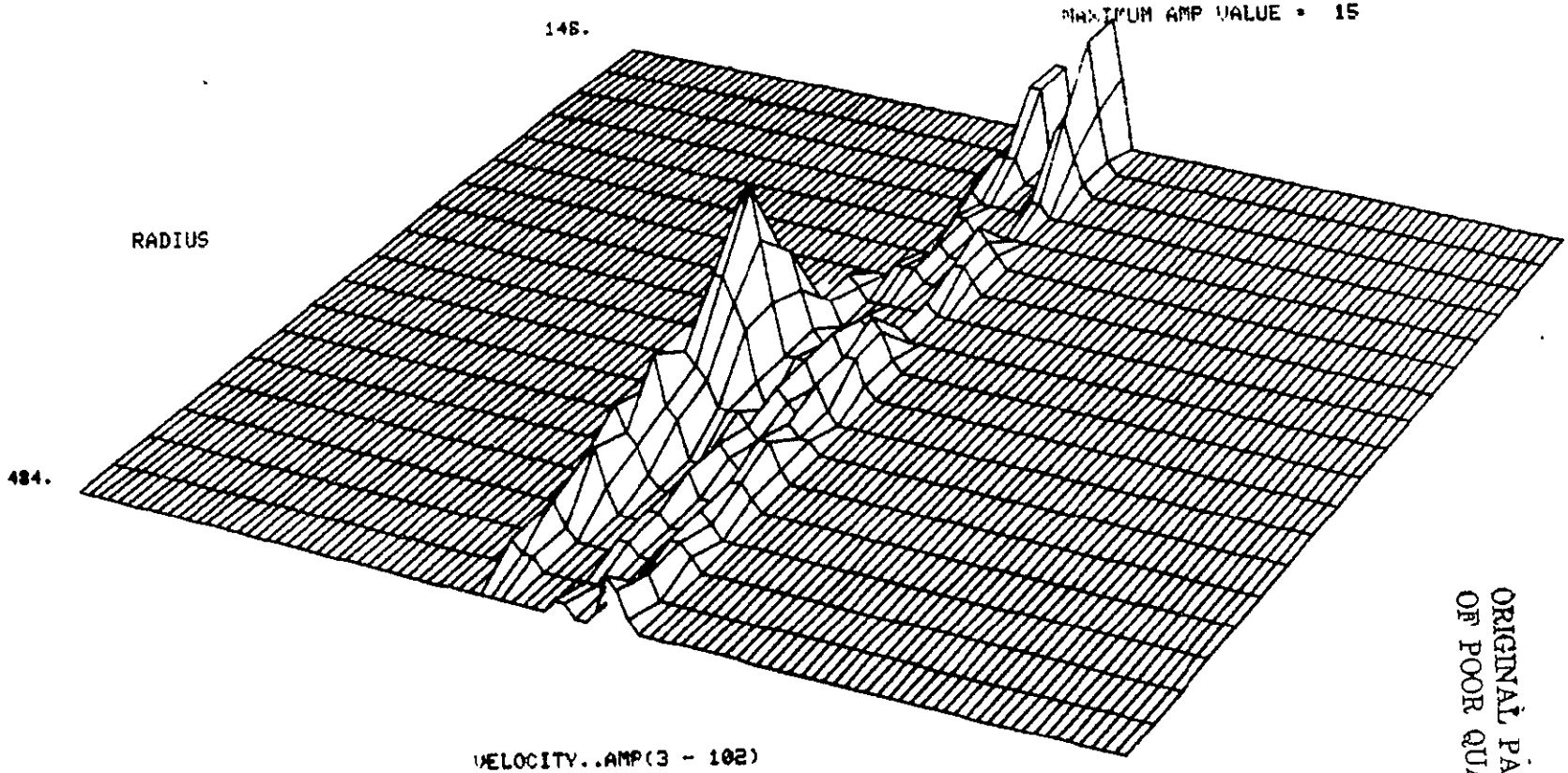
NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 3110

SCAN # 2 FRAME # 2525 ANGLE 45.224 TO FRAME # 3156 ANGLE 8.912 CRITICAL AMP AT CELL 62

FRAME # 2973 TO 2992

ANGLE = 19.32

MAXIMUM AMP VALUE = 15



ORIGINAL PAGE IS
OF POOR QUALITY

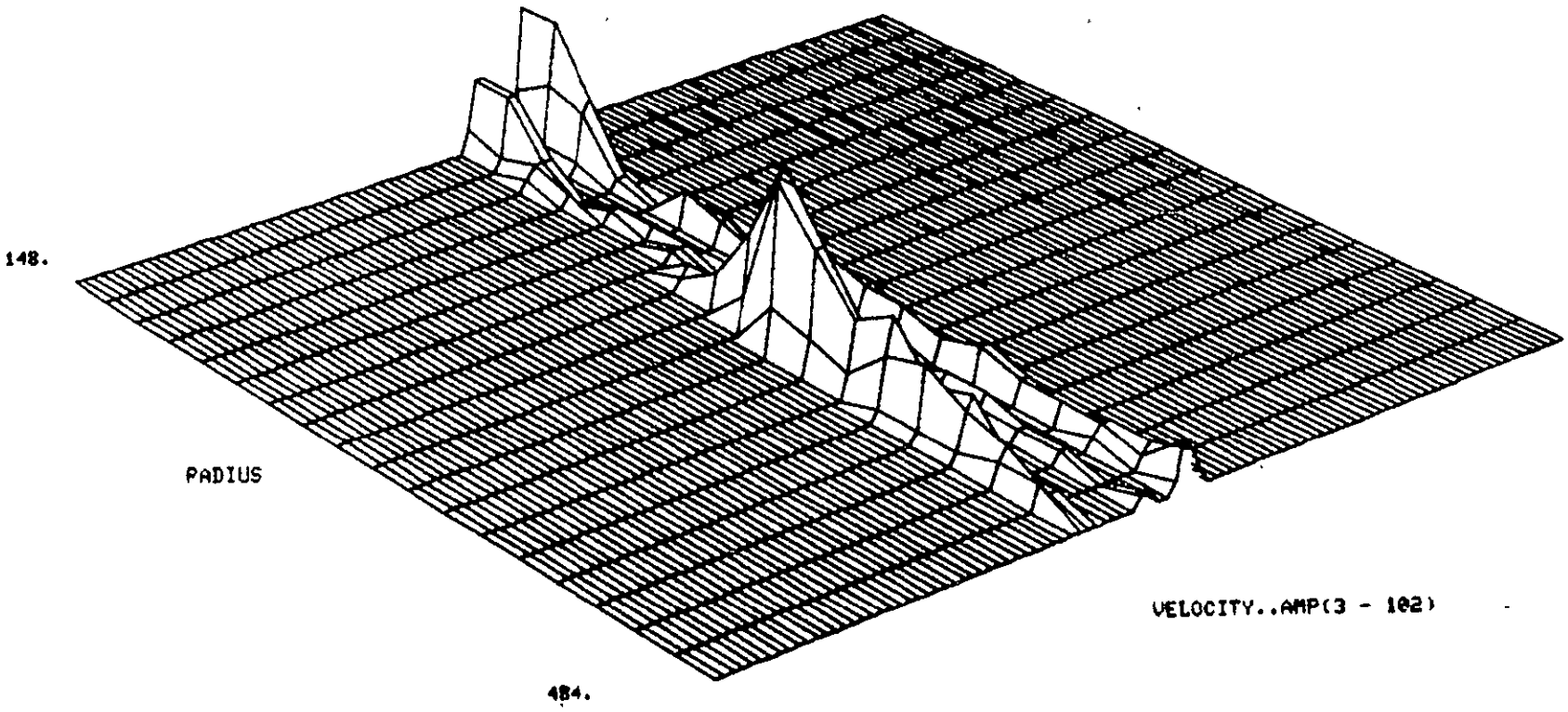
NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 2 FRAME # 2525 ANGLE 45.224 TO FRAME # 3156 ANGLE 8.912 CRITICAL AMP AT CELL 62

FRAME # 2973 TO 2992

ANGLE = 19.32

MAXIMUM AMP VALUE = 15



NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

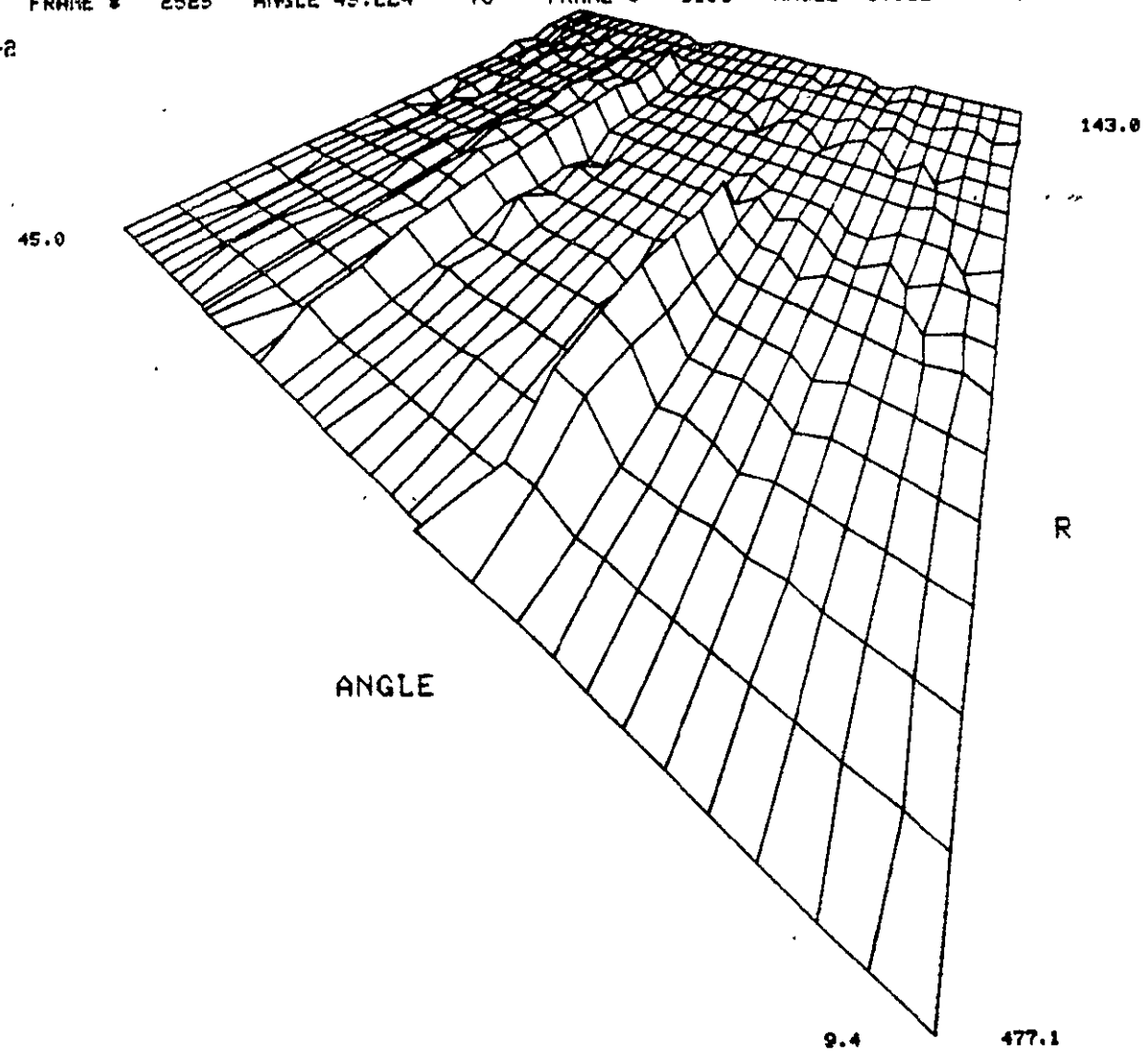
* SCAN # 2 FRAME # 2525 ANGLE 45.224 TO FRAME # 3156 ANGLE 8.912 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V = 11.0

AVERAGE V = 3.4

ANGLE	
1	45.0
2	45.0
3	44.7
4	44.1
5	43.4
6	42.4
7	41.4
8	40.3
9	39.0
10	37.9
11	36.8
12	35.6
13	34.5
14	33.3
15	32.2
16	31.1
17	29.9
18	28.7
19	27.5
20	26.4
21	25.2
22	24.0
23	22.8
24	21.7
25	20.5
26	19.3
27	18.1
28	16.9
29	15.8
30	14.6
31	13.4
32	12.2
33	11.1
34	9.9
35	9.4



	R
1	143.0
2	162.7
3	182.3
4	202.0
5	221.6
6	241.3
7	260.9
8	280.6
9	300.2
10	319.9
11	339.5
12	359.2
13	378.9
14	398.5
15	418.2
16	437.8
17	477.1

V, R, A DISPLAY (VELOCITY AT I_{MAX})

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

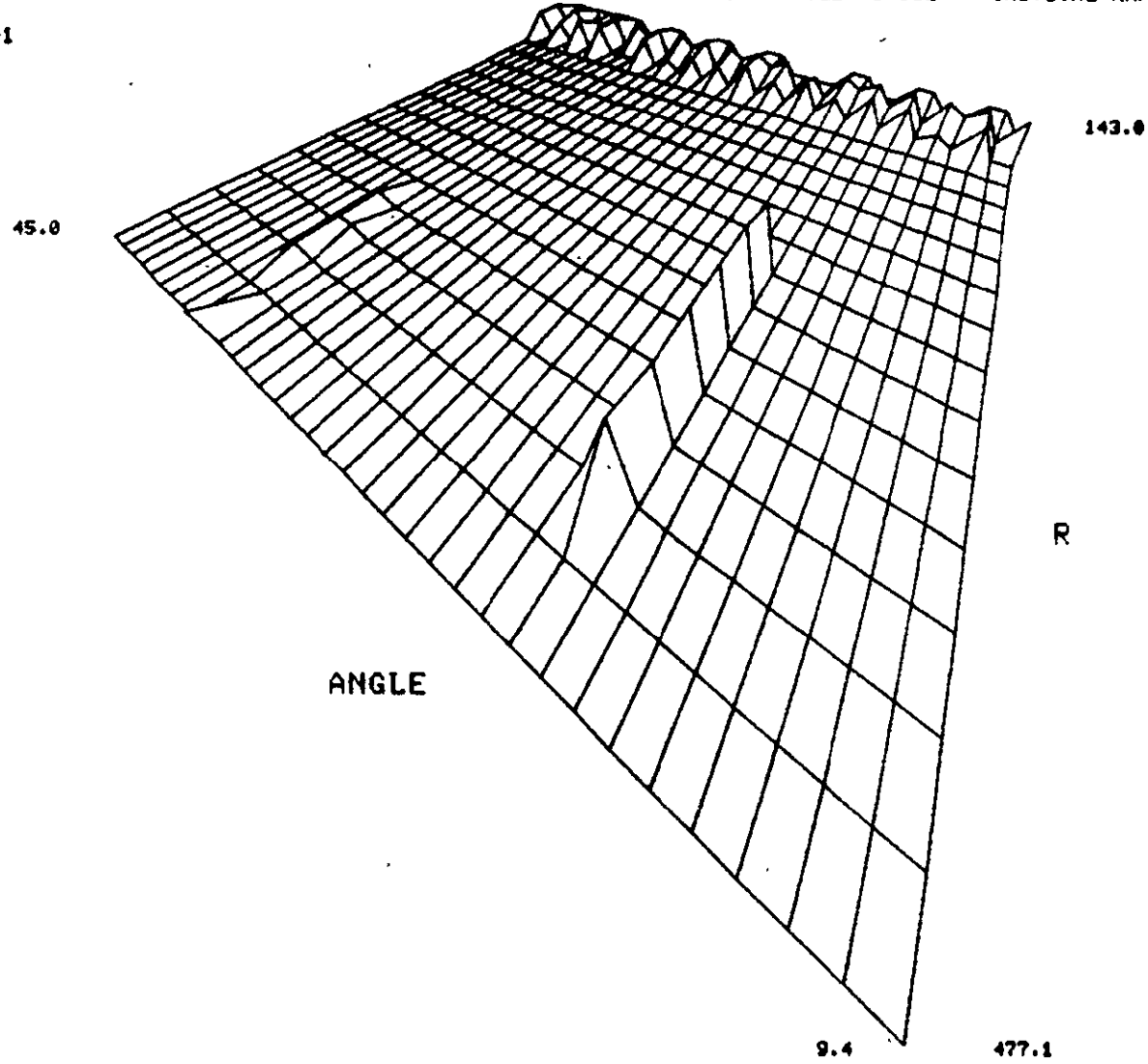
* SCAN # 2 FRAME # 2525 ANGLE 45.224 TO FRAME # 3156 ANGLE 8.312 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 9.0

AVERAGE V = 1.3

	ANGLE
1	45.0
2	45.0
3	44.7
4	44.1
5	43.4
6	42.4
7	41.4
8	40.3
9	39.0
10	37.9
11	36.8
12	35.6
13	34.5
14	33.3
15	32.2
16	31.1
17	29.9
18	28.7
19	27.5
20	26.4
21	25.2
22	24.0
23	22.8
24	21.7
25	20.5
26	19.3
27	18.1
28	16.9
29	15.8
30	14.6
31	13.4
32	12.2
33	11.1
34	9.9
35	9.4



	R
1	143.0
2	162.7
3	182.3
4	202.0
5	221.6
6	241.3
7	260.9
8	280.6
9	300.2
10	319.9
11	339.5
12	359.2
13	378.9
14	398.5
15	418.2
16	437.8
17	477.1

V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

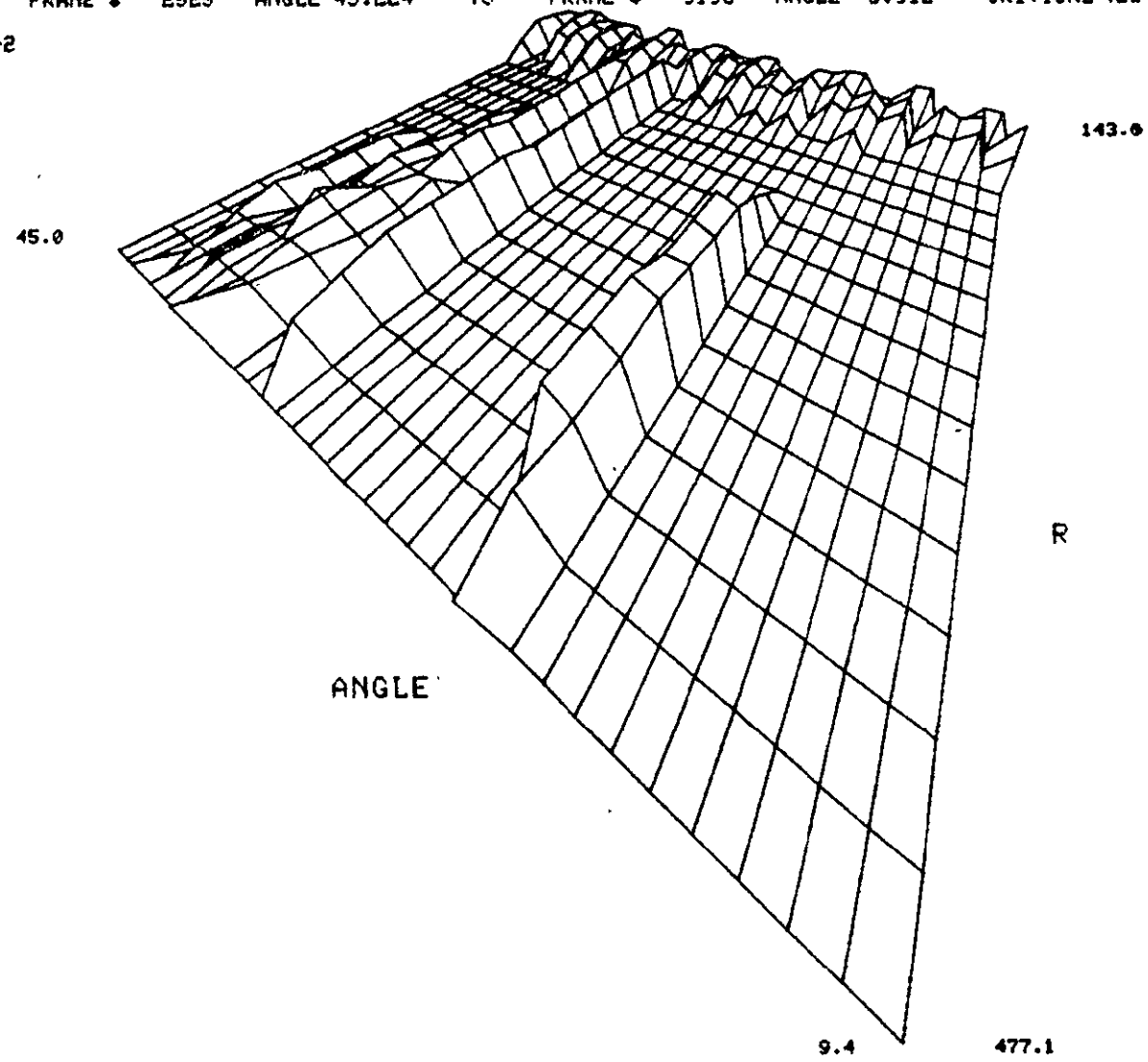
SCAN # 2 FRAME # 2525 ANGLE 45.224 TO FRAME # 3156 ANGLE 8.912 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM V = 12.0

AVERAGE V = 2.4

ANGLE	
1	45.0
2	45.0
3	44.7
4	44.1
5	43.4
6	42.4
7	41.4
8	40.3
9	39.0
10	37.9
11	36.8
12	35.6
13	34.5
14	33.3
15	32.2
16	31.1
17	29.9
18	28.7
19	27.5
20	26.4
21	25.2
22	24.0
23	22.8
24	21.7
25	20.5
26	19.3
27	18.1
28	16.9
29	15.8
30	14.6
31	13.4
32	12.2
33	11.1
34	9.9
35	9.4



	R
1	143.0
2	162.7
3	182.3
4	202.0
5	221.6
6	241.3
7	260.9
8	280.6
9	300.2
10	319.9
11	339.5
12	359.2
13	378.9
14	393.5
15	418.2
16	437.8
17	477.1

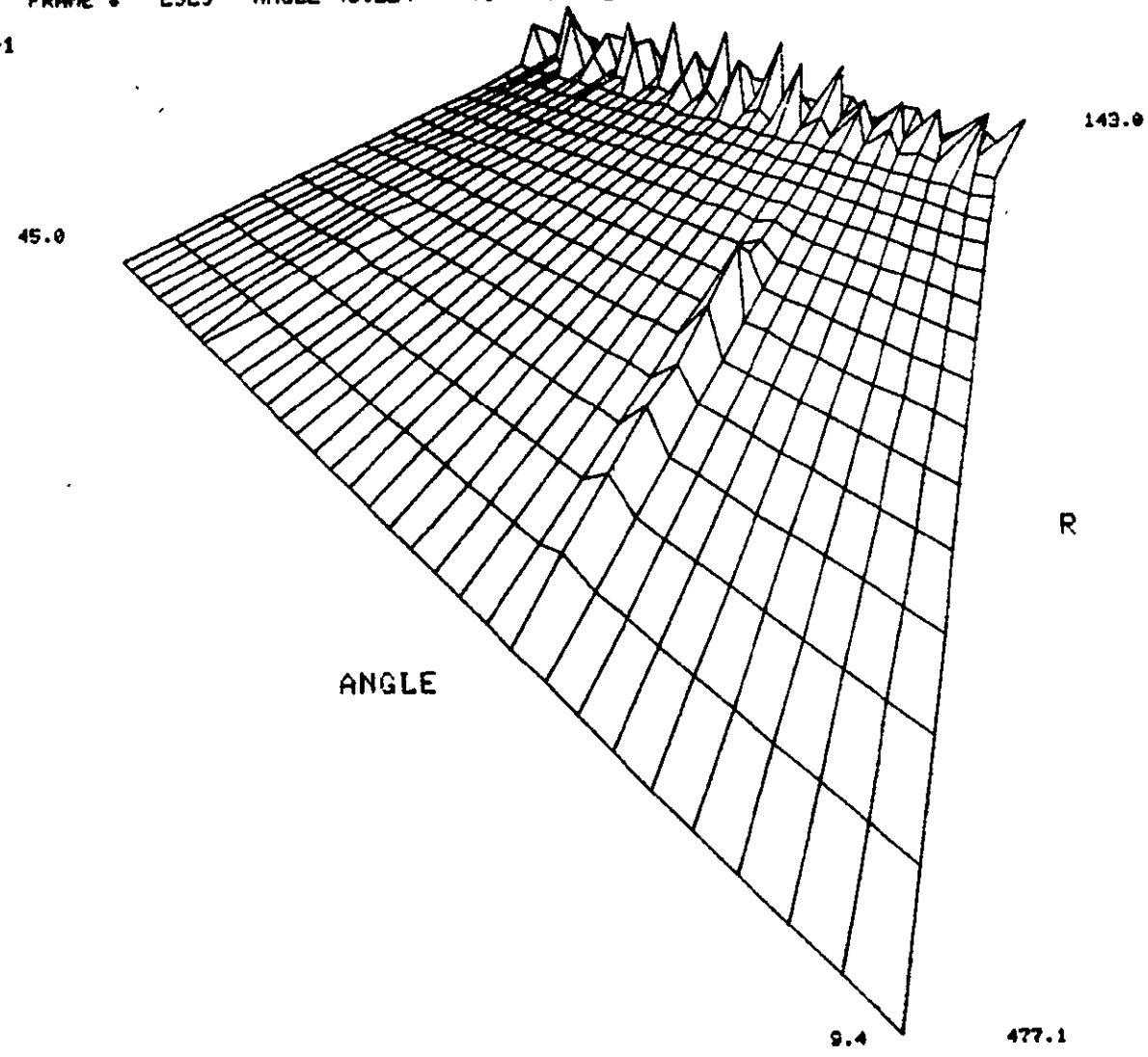
V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 2 FRAME # 2525 ANGLE 45.224 TO FRAME # 3156 ANGLE 8.912 CRITICAL AMP AT CELL 62

OPTION # 31-1

ANGLE	
1	45.0
2	45.0
3	44.7
4	44.1
5	43.4
6	42.4
7	41.4
8	40.3
9	39.0
10	37.9
11	36.8
12	35.6
13	34.5
14	33.3
15	32.2
16	31.1
17	29.9
18	28.7
19	27.5
20	26.4
21	25.2
22	24.0
23	22.8
24	21.7
25	20.5
26	19.3
27	18.1
28	16.9
29	15.8
30	14.6
31	13.4
32	12.2
33	11.1
34	9.9
35	9.4



	R
1	143.0
2	162.7
3	182.3
4	202.0
5	221.6
6	241.3
7	260.9
8	280.6
9	300.2
10	319.9
11	339.5
12	359.2
13	378.9
14	398.5
15	418.2
16	437.8
17	477.1

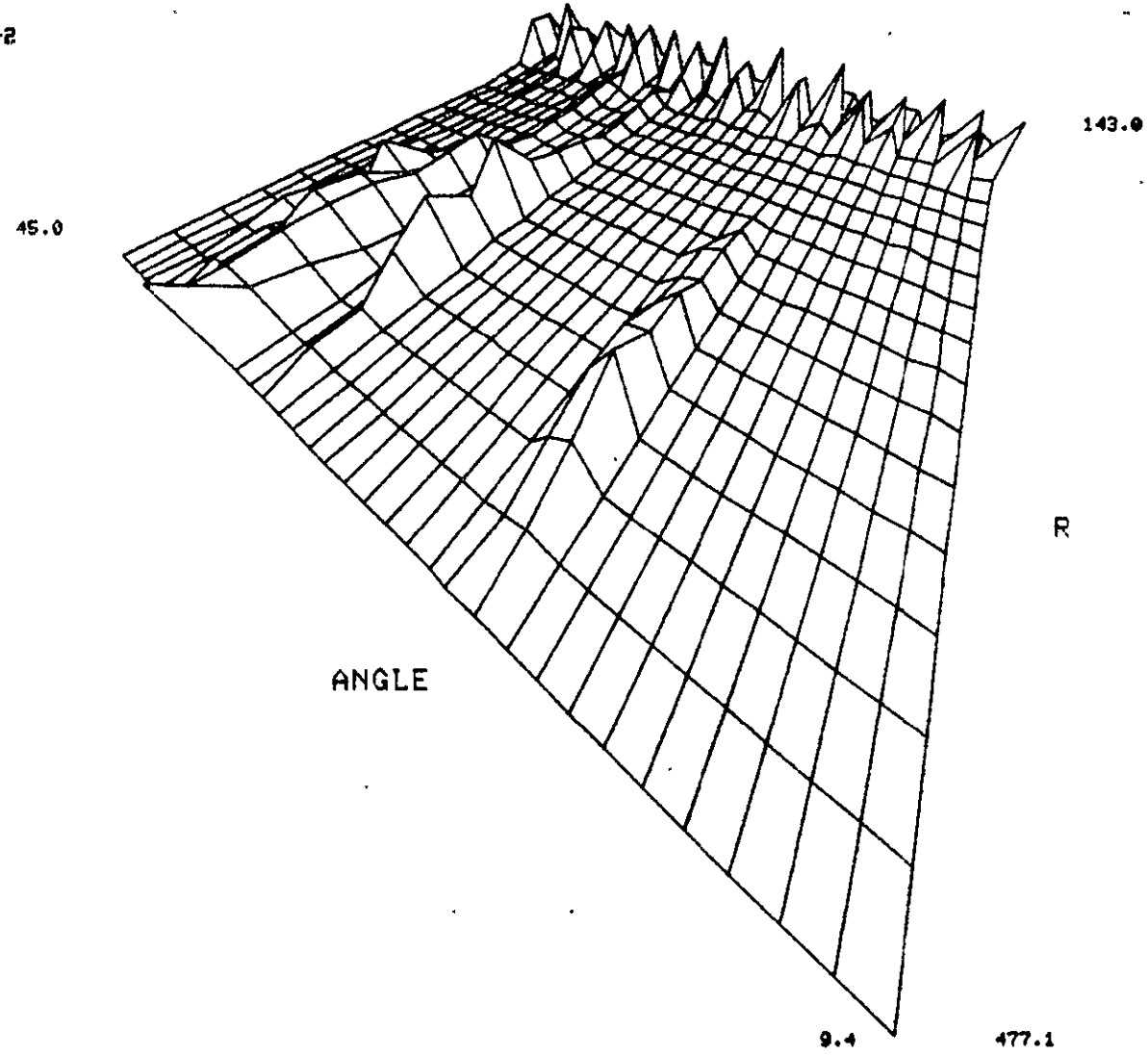
V * Imax, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 2 FRAME # 2525 ANGLE 45.224 TO FRAME # 3156 ANGLE 8.912 CRITICAL ANP AT CELL 62

OPTION # 31-2

ANGLE	
1	45.0
2	45.0
3	44.7
4	44.1
5	43.4
6	42.4
7	41.4
8	40.3
9	39.0
10	37.9
11	36.8
12	35.6
13	34.5
14	33.3
15	32.2
16	31.1
17	29.9
18	28.7
19	27.5
20	26.4
21	25.2
22	24.0
23	22.8
24	21.7
25	20.5
26	19.3
27	18.1
28	16.9
29	15.8
30	14.6
31	13.4
32	12.2
33	11.1
34	9.9
36	9.4



	R
1	143.0
2	162.7
3	182.3
4	202.0
5	221.6
6	241.3
7	260.9
8	280.6
9	300.2
10	319.9
11	339.5
12	359.2
13	378.9
14	392.5
15	418.2
16	437.8
17	477.1

V * Imax, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

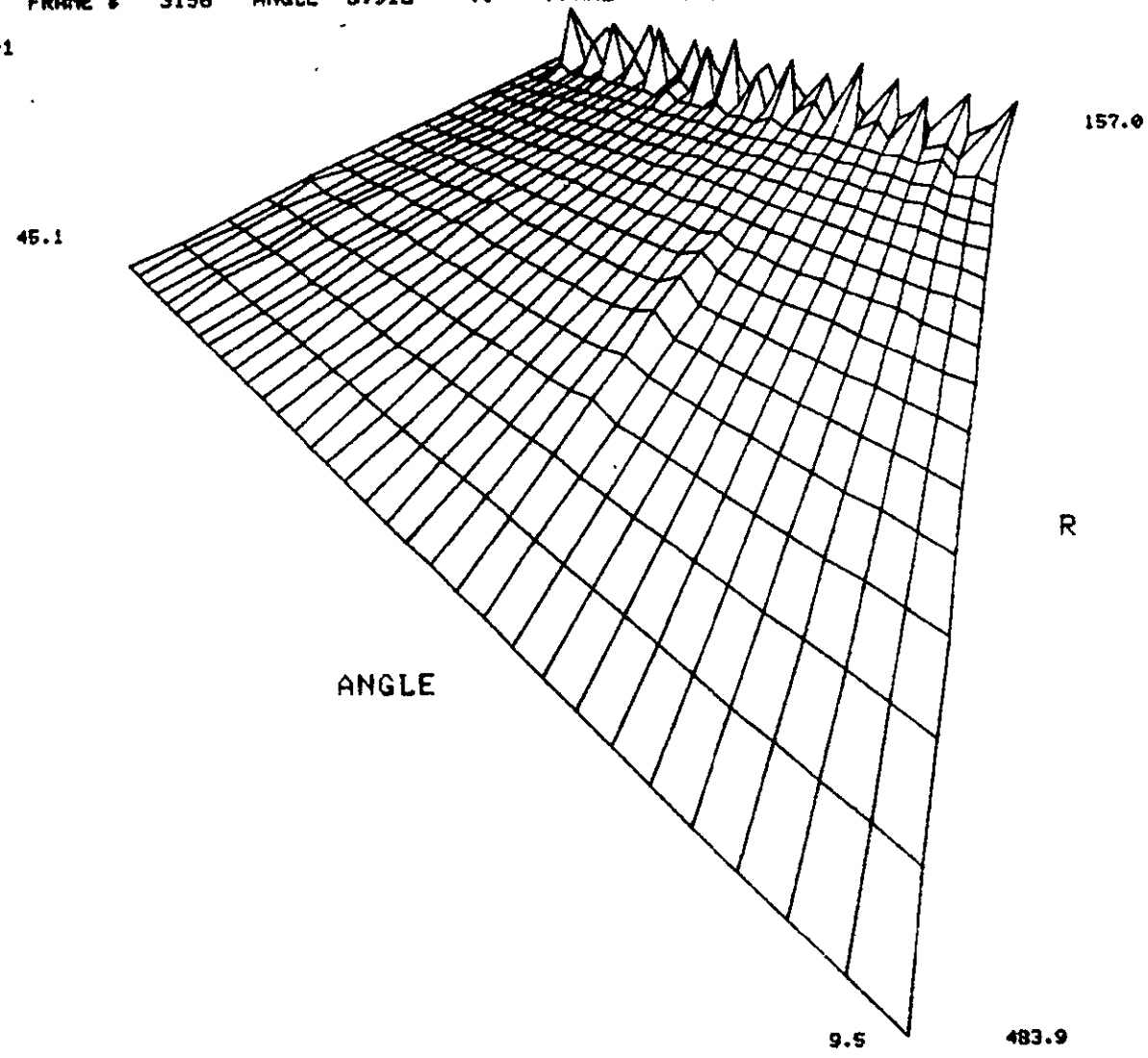
SCAN # 3 FRAME # 3156 ANGLE 5.912 TO FRAME # 3763 ANGLE 45.254 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 39.0

AVERAGE I = 2.2

ANGLE	
1	9.5
2	9.8
3	10.4
4	11.2
5	12.2
6	13.3
7	14.5
8	15.6
9	16.8
10	18.0
11	19.1
12	20.2
13	21.4
14	22.5
15	23.7
16	24.9
17	26.0
18	27.3
19	28.5
20	29.6
21	30.8
22	31.9
23	33.1
24	34.3
25	35.4
26	36.5
27	37.7
28	38.9
29	40.0
30	41.2
31	42.3
32	43.6
33	44.5
34	45.1



	R
1	157.0
2	176.2
3	195.4
4	214.7
5	233.9
6	253.1
7	272.4
8	291.6
9	310.8
10	330.1
11	349.3
12	368.5
13	387.7
14	407.0
15	426.2
16	445.4
17	483.9

I_{MAX}, R, A DISPLAY

NASA PROJECT DUST- DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

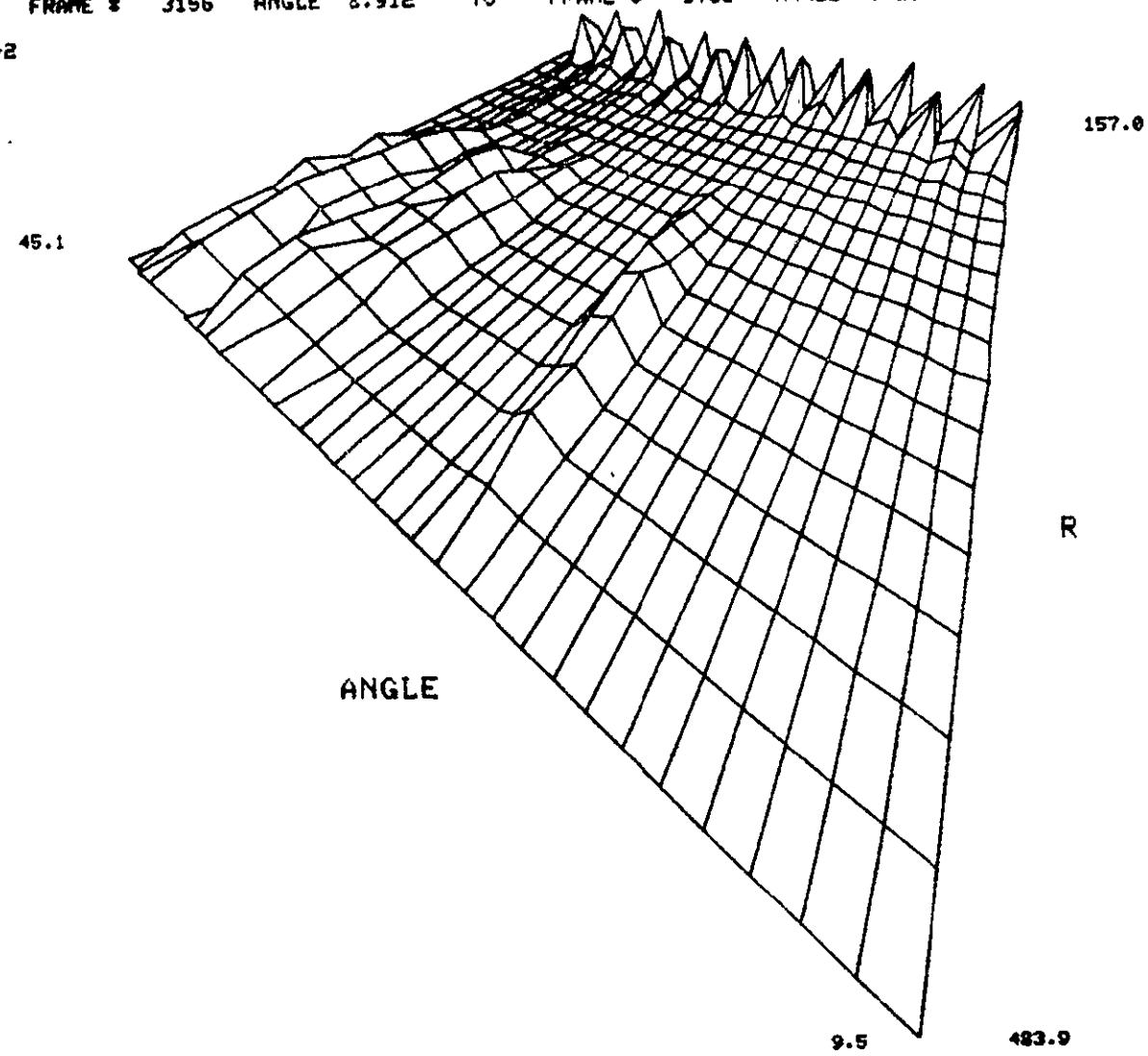
* SCAN # 3 FRAME # 3156 ANGLE 8.912 TO FRAME # 3763 ANGLE 45.254 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 63.0

AVERAGE I = 8.0

ANGLE	
1	9.5
2	9.8
3	10.4
4	11.2
5	12.2
6	13.3
7	14.5
8	15.6
9	16.8
10	18.0
11	19.1
12	20.2
13	21.4
14	22.5
15	23.7
16	24.9
17	26.0
18	27.3
19	28.5
20	29.6
21	30.8
22	31.9
23	33.1
24	34.3
25	35.4
26	36.5
27	37.7
28	38.9
29	40.0
30	41.2
31	42.3
32	43.6
33	44.5
34	45.1



	R
1	157.0
2	176.2
3	195.4
4	214.7
5	233.9
6	253.1
7	272.4
8	291.6
9	310.8
10	330.1
11	349.3
12	368.5
13	387.7
14	407.0
15	426.2
16	445.4
17	483.9

Imax, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

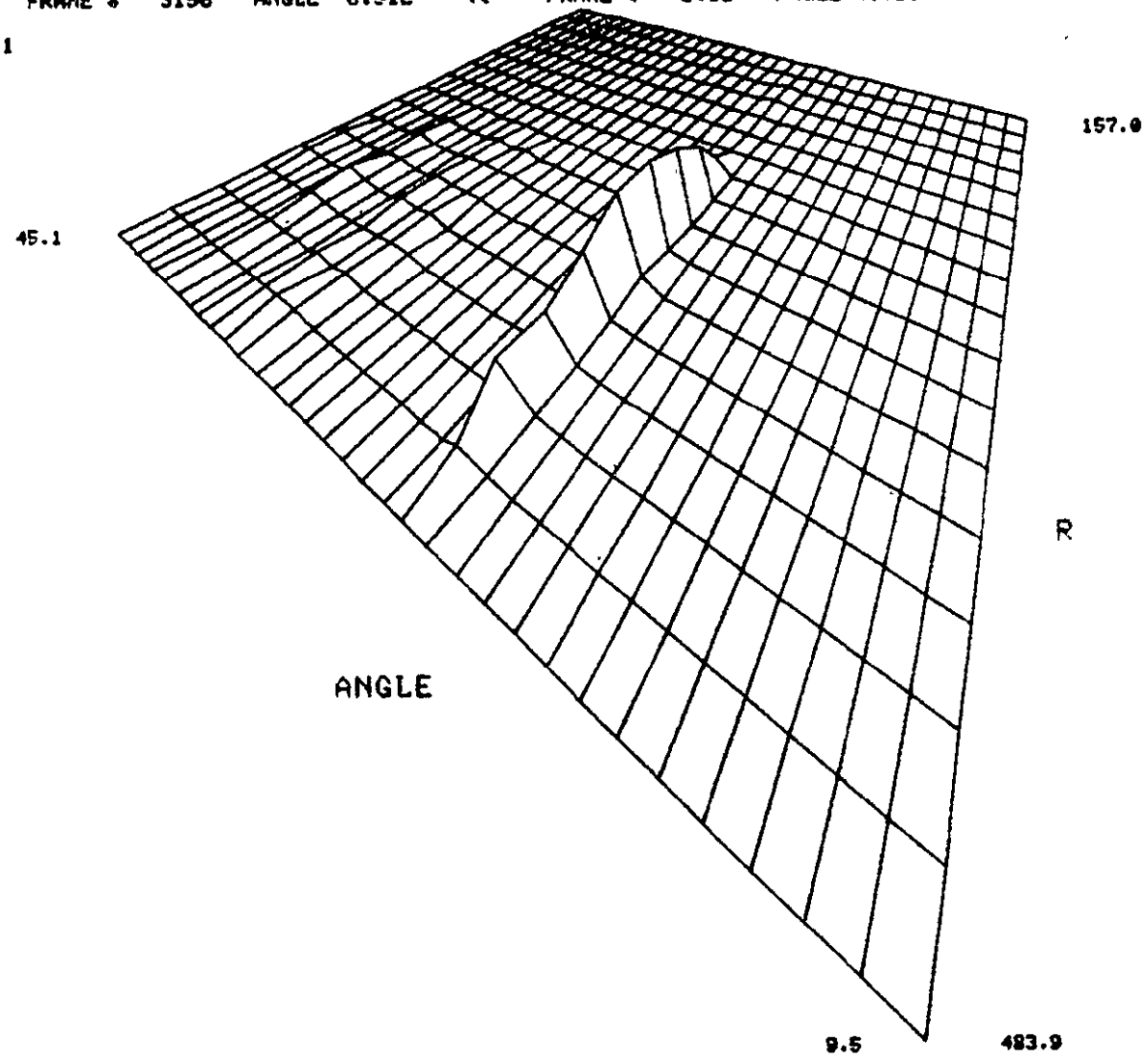
* SCAN # 3 FRAME # 3156 ANGLE 8.912 TO FRAME # 3763 ANGLE 45.254 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 20.0

AVERAGE I = 0.3

ANGLE	
1	9.5
2	9.8
3	10.4
4	11.2
5	12.2
6	13.3
7	14.5
8	15.6
9	16.8
10	18.0
11	19.1
12	20.2
13	21.4
14	22.5
15	23.7
16	24.9
17	26.0
18	27.3
19	28.5
20	29.6
21	30.8
22	31.9
23	33.1
24	34.3
25	35.4
26	36.5
27	37.7
28	38.9
29	40.0
30	41.2
31	42.3
32	43.6
33	44.5
34	45.1



	R
1	157.0
2	176.2
3	195.4
4	214.7
5	233.9
6	253.1
7	272.4
8	291.6
9	310.8
10	330.1
11	349.3
12	368.5
13	387.7
14	407.0
15	426.2
16	445.4
17	483.9

I, R, A DISPLAY AT VELOCITY CELL 62

ORIGINAL PAGE IS OF POOR QUALITY

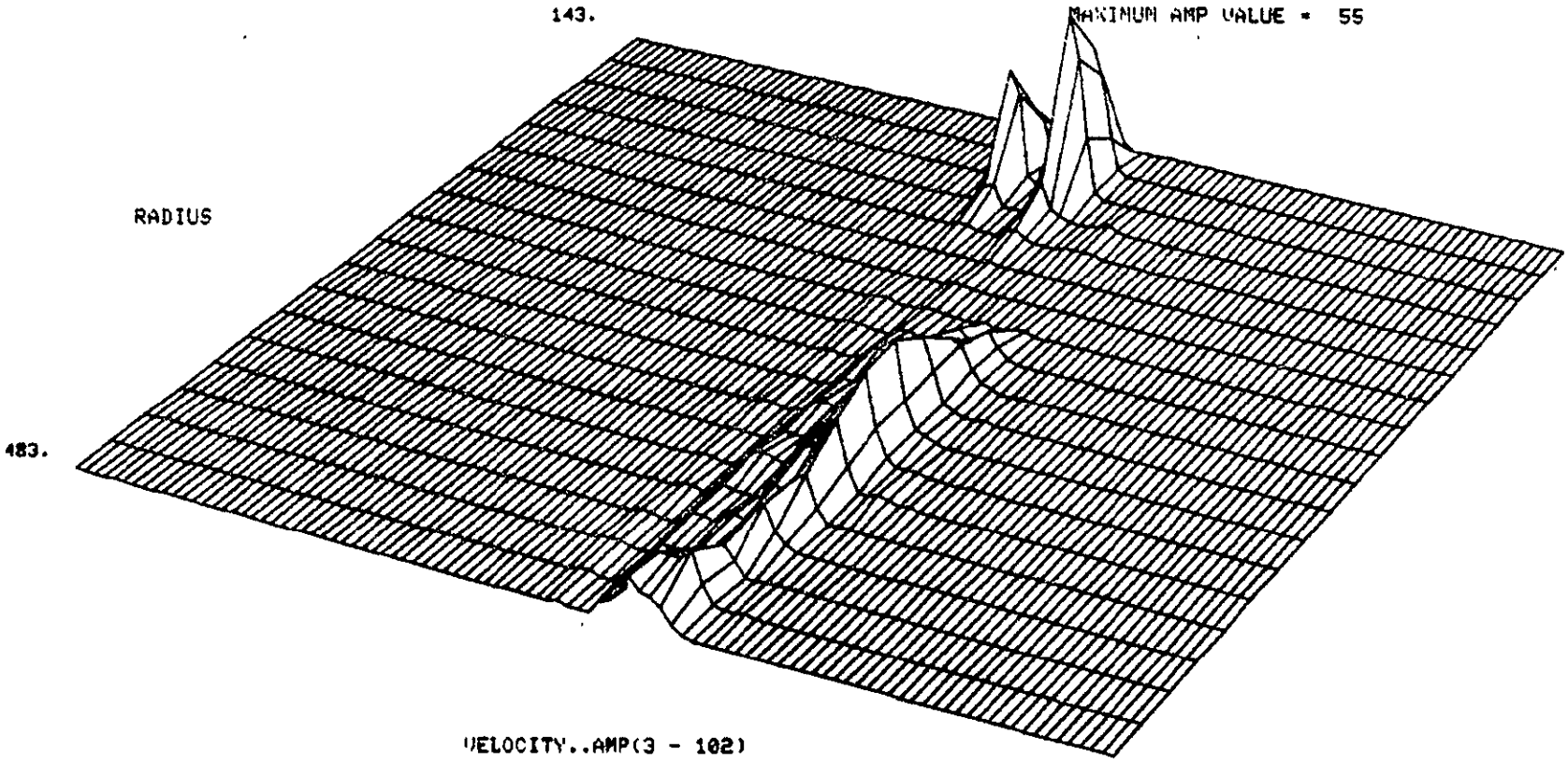
NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 3 FRAME # 3156 ANGLE 8.912 TO FRAME # 3763 ANGLE 45.254 CRITICAL AMP AT CELL 62

FRAME # 3392 TO 3411

ANGLE = 22.57

MAXIMUM AMP VALUE = 55



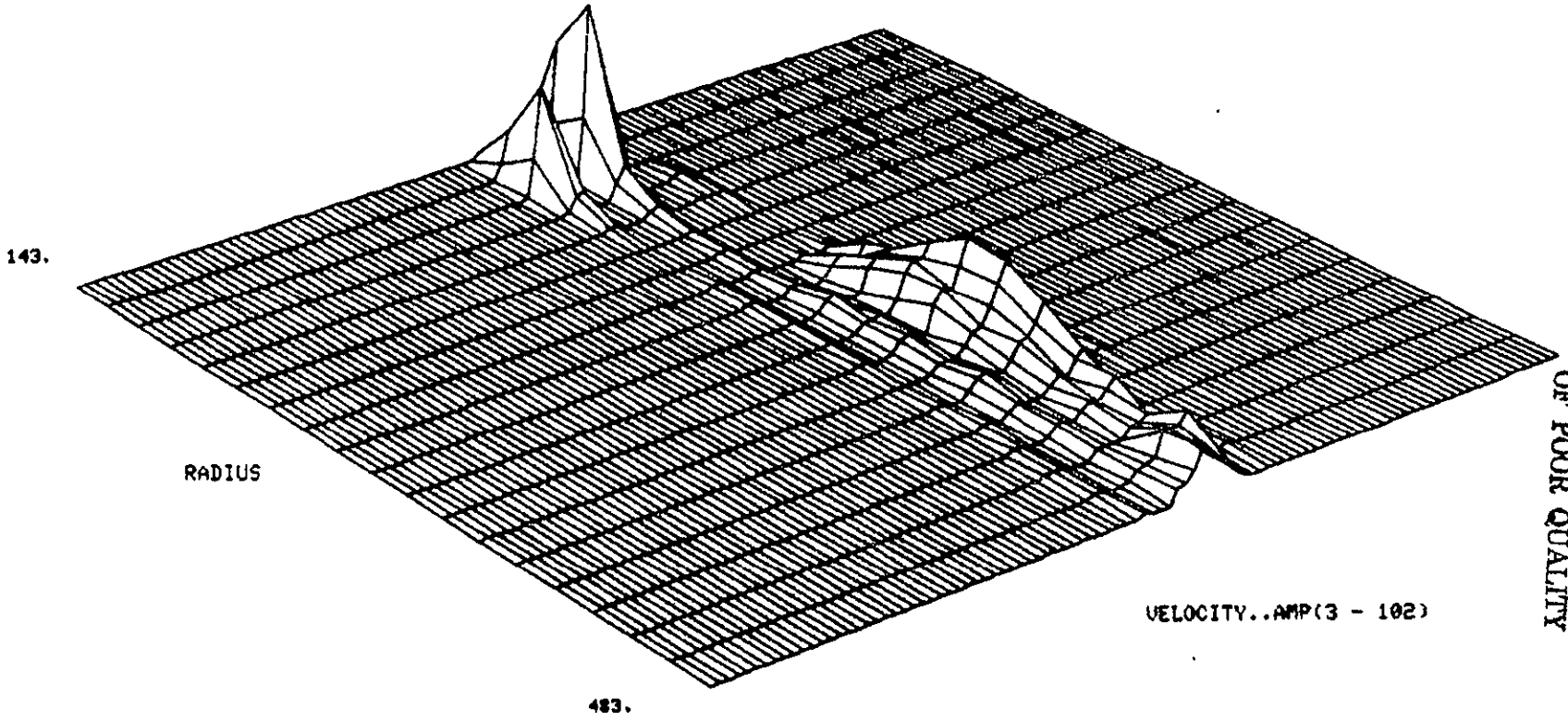
NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 3 FRAME # 3156 ANGLE 8.912 TO FRAME # 3763 ANGLE 45.254 CRITICAL AMP AT CELL 62

FRAME # 3392 TO 3411

ANGLE = 22.57

MAXIMUM AMP VALUE = 55



ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

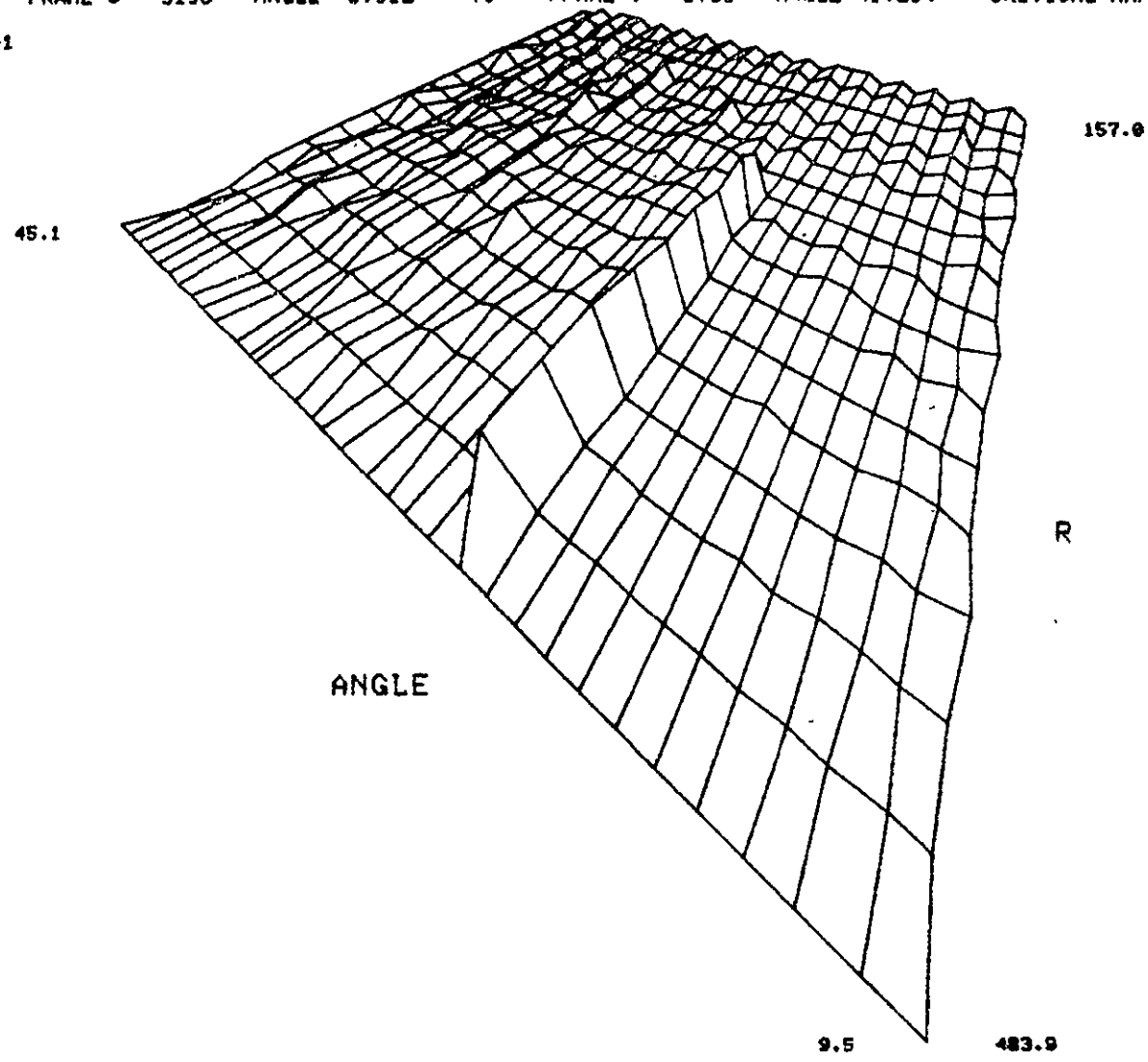
\# SCAN # 3 FRAME # 3156 ANGLE 8.912 TO FRAME # 3763 ANGLE 45.254 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 9.0

AVERAGE V = 1.7

ANGLE	
1	9.6
2	9.8
3	10.4
4	11.2
5	12.2
6	13.3
7	14.5
8	15.6
9	16.8
10	18.0
11	19.1
12	20.2
13	21.4
14	22.5
15	23.7
16	24.9
17	26.0
18	27.3
19	28.5
20	29.6
21	30.8
22	31.9
23	33.1
24	34.3
25	35.4
26	36.5
27	37.7
28	38.9
29	40.0
30	41.2
31	42.3
32	43.6
33	44.5
34	45.1



R	
1	157.0
2	176.2
3	195.4
4	214.7
5	233.9
6	253.1
7	272.4
8	291.6
9	310.8
10	330.1
11	349.3
12	363.5
13	387.7
14	407.0
15	426.2
16	445.4
17	483.9

ORIGINAL PAGE IS OF POOR QUALITY

V, R, A DISPLAY (VELOCITY AT I_{max})

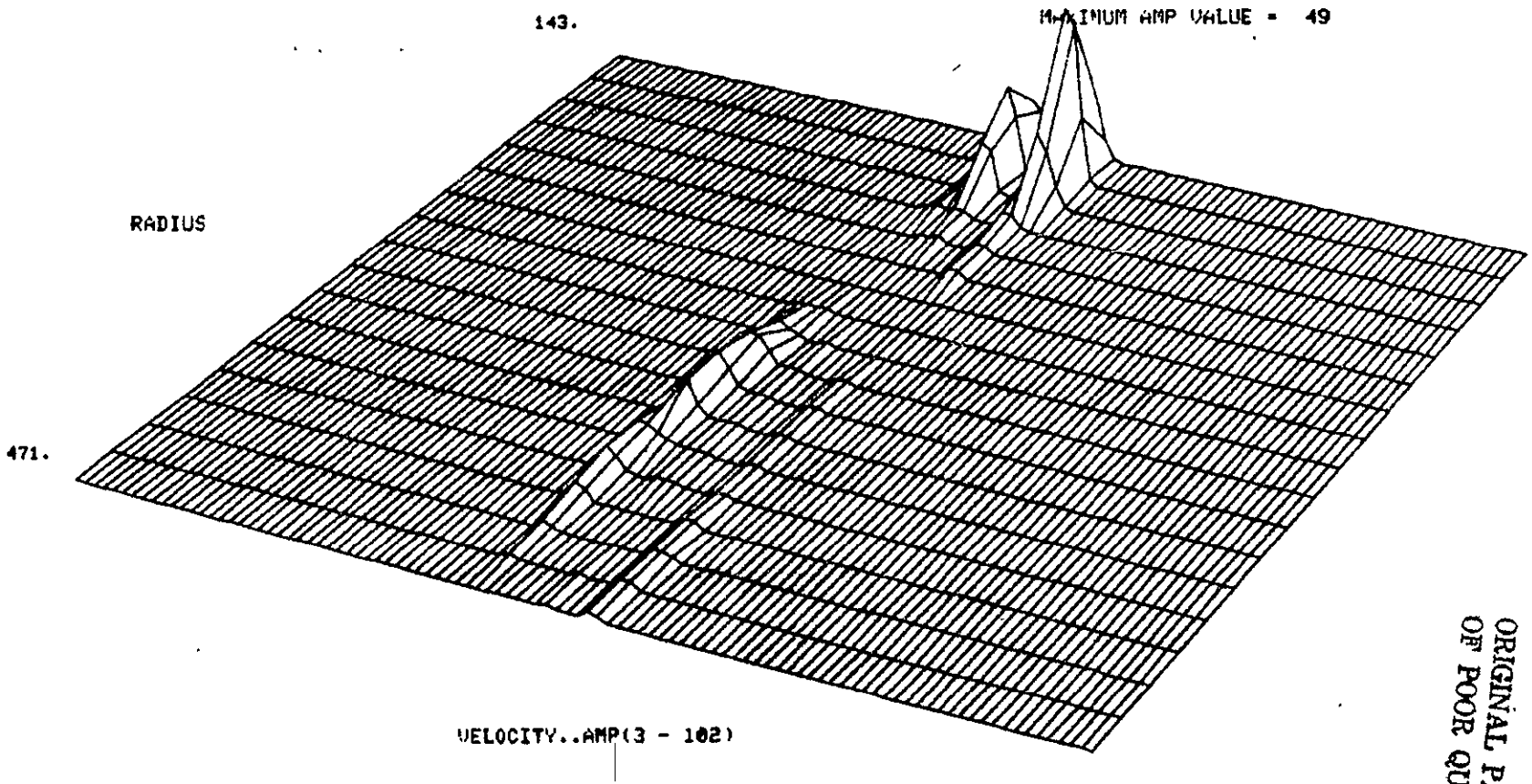
NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 3 FRAME # 3156 ANGLE 8.912 TO FRAME # 3763 ANGLE 45.254 CRITICAL AMP AT CELL 62

FRAME # 3356 TO 3374

ANGLE = 20.27

MAXIMUM AMP VALUE = 49



ORIGINAL PAGE IS OF POOR QUALITY

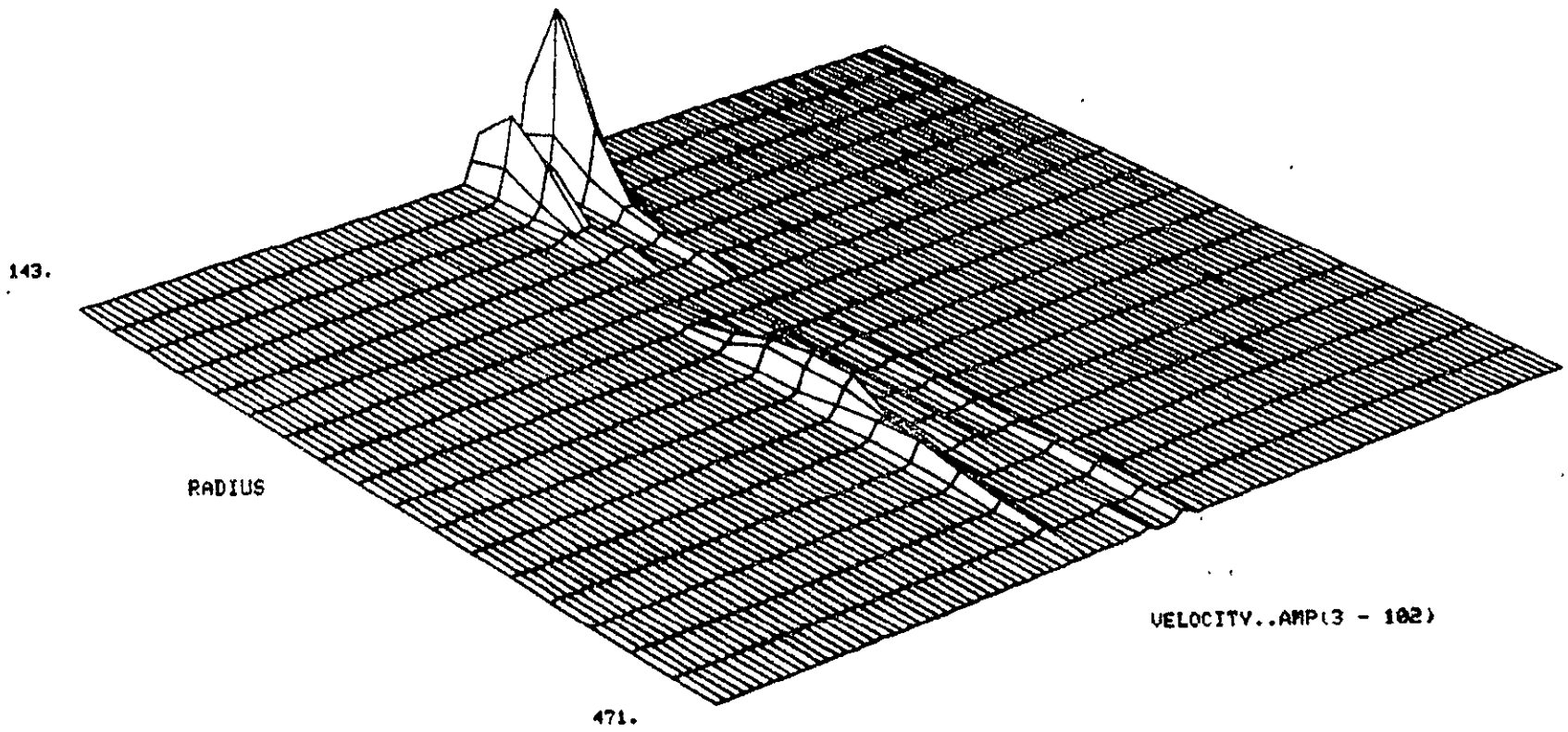
NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 3 FRAME # 3156 ANGLE 8.912 TO FRAME # 3763 ANGLE 45.254 CRITICAL AMP AT CELL 62

FRAME # 3356 TO 3374

ANGLE = 20.27

MAXIMUM AMP VALUE = .49



ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 228 RUN # 4 TAPE 1 OF 2- 6110

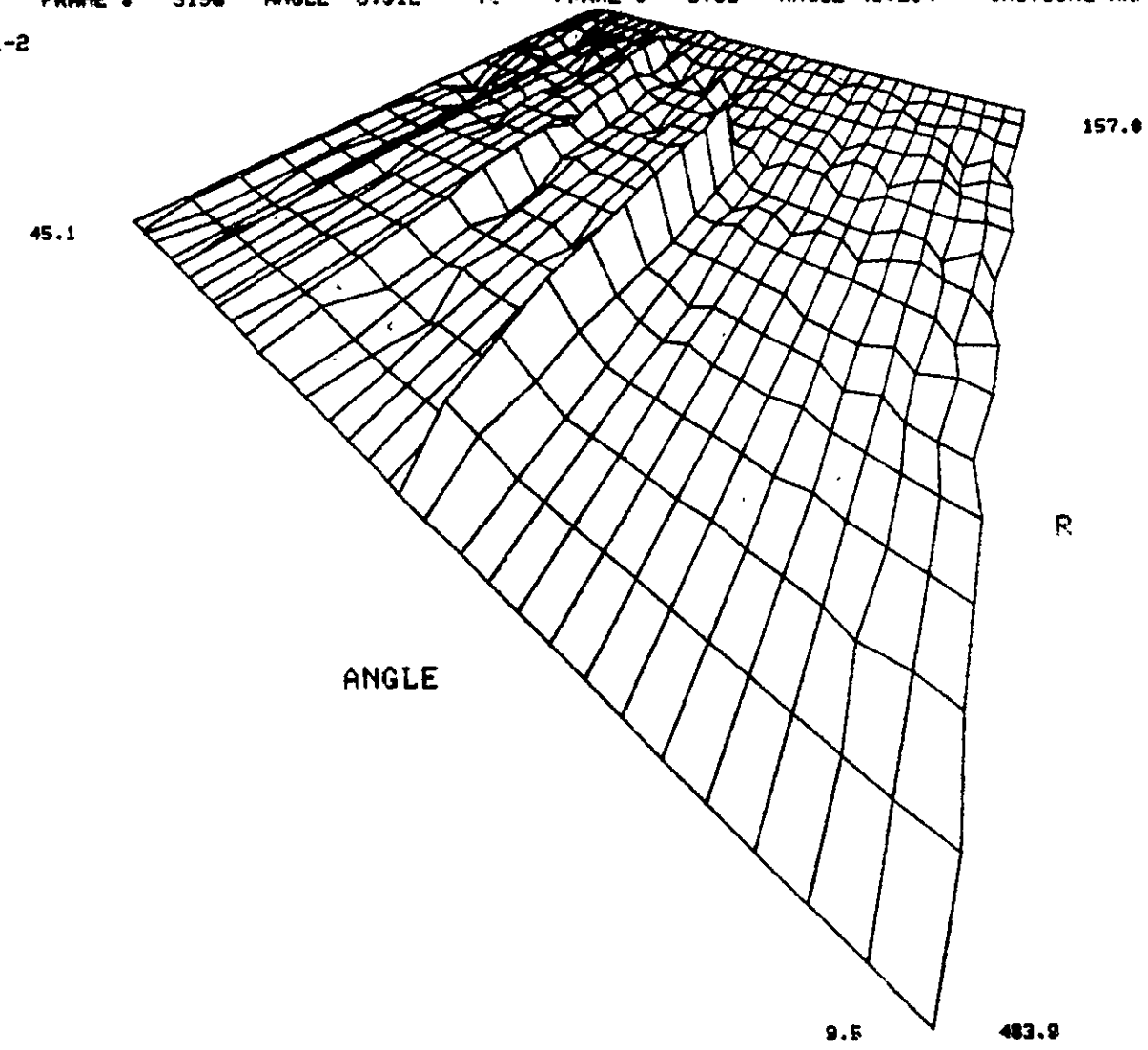
SCAN # 3 FRAME # 3156 ANGLE 8.912 TO FRAME # 3763 ANGLE 45.254 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V = 12.0

AVERAGE V = 3.5

	ANGLE
1	9.5
2	9.8
3	10.4
4	11.2
5	12.2
6	13.3
7	14.5
8	15.6
9	16.8
10	18.0
11	19.1
12	20.2
13	21.4
14	22.5
15	23.7
16	24.9
17	26.0
18	27.3
19	28.5
20	29.6
21	30.8
22	31.9
23	33.1
24	34.3
25	35.4
26	36.5
27	37.7
28	38.9
29	40.0
30	41.2
31	42.3
32	43.6
33	44.5
34	45.1



	R
1	157.0
2	176.2
3	195.4
4	214.7
5	233.9
6	253.1
7	272.4
8	291.6
9	310.8
10	330.1
11	349.3
12	368.5
13	387.7
14	407.0
15	426.2
16	445.4
17	483.9

V, R, A DISPLAY (VELOCITY AT Imax)

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

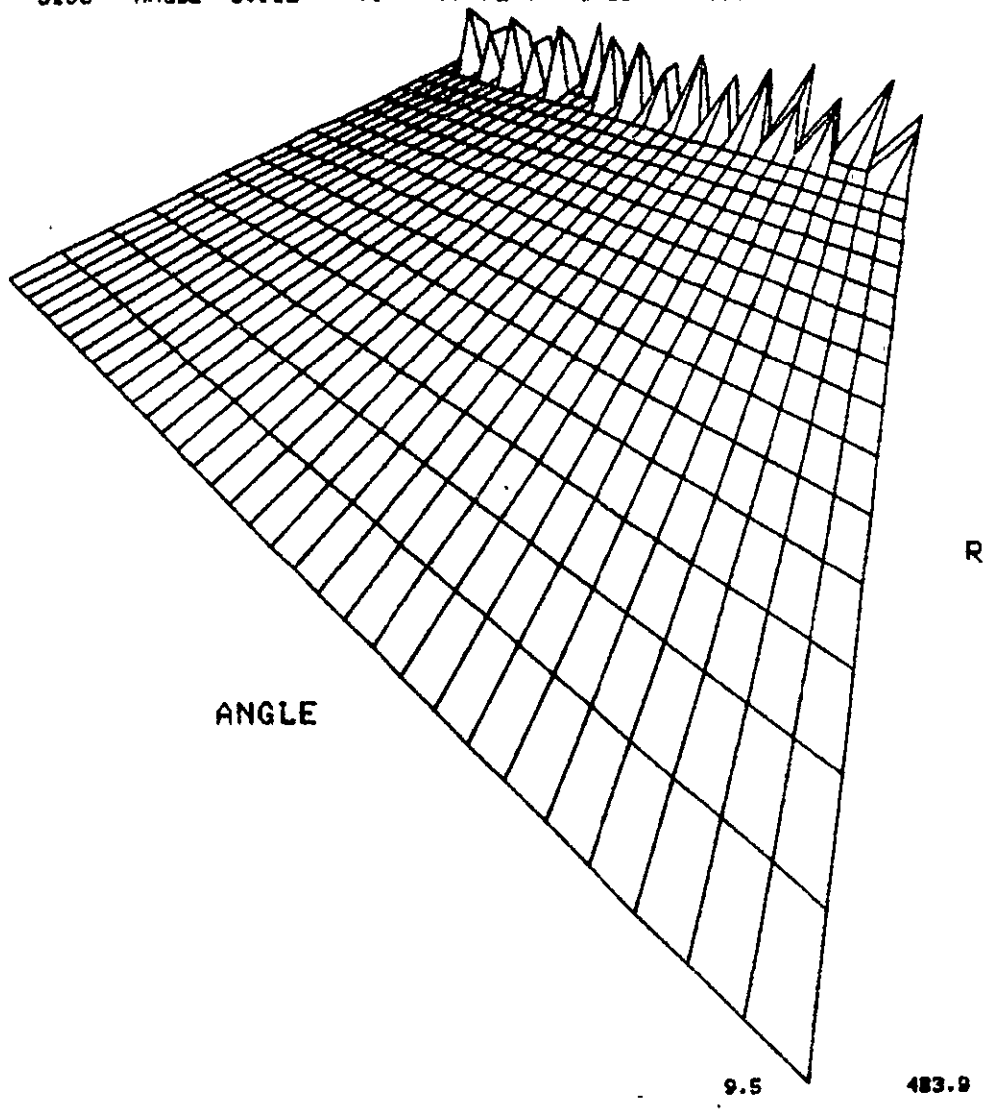
* SCAN # 3 FRAME # 3156 ANGLE 8.912 TO FRAME # 3763 ANGLE 45.254 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 4.0

AVERAGE V = 1.1

	ANGLE
1	9.5
2	9.8
3	10.4
4	11.2
5	12.2
6	13.3
7	14.5
8	15.6
9	16.8
10	18.0
11	19.1
12	20.2
13	21.4
14	22.5
15	23.7
16	24.9
17	26.0
18	27.3
19	28.5
20	29.6
21	30.8
22	31.9
23	33.1
24	34.3
25	35.4
26	36.5
27	37.7
28	38.9
29	40.0
30	41.2
31	42.3
32	43.6
33	44.5
34	45.1



	R
1	157.0
2	176.2
3	195.4
4	214.7
5	233.9
6	253.1
7	272.4
8	291.6
9	310.8
10	330.1
11	349.3
12	368.5
13	387.7
14	407.0
15	426.2
16	445.4
17	483.9

VMAX, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

NASA PROJECT DUST DEVIL DAY 23S RUN # 4 TAPE 1 OF 2- 6110

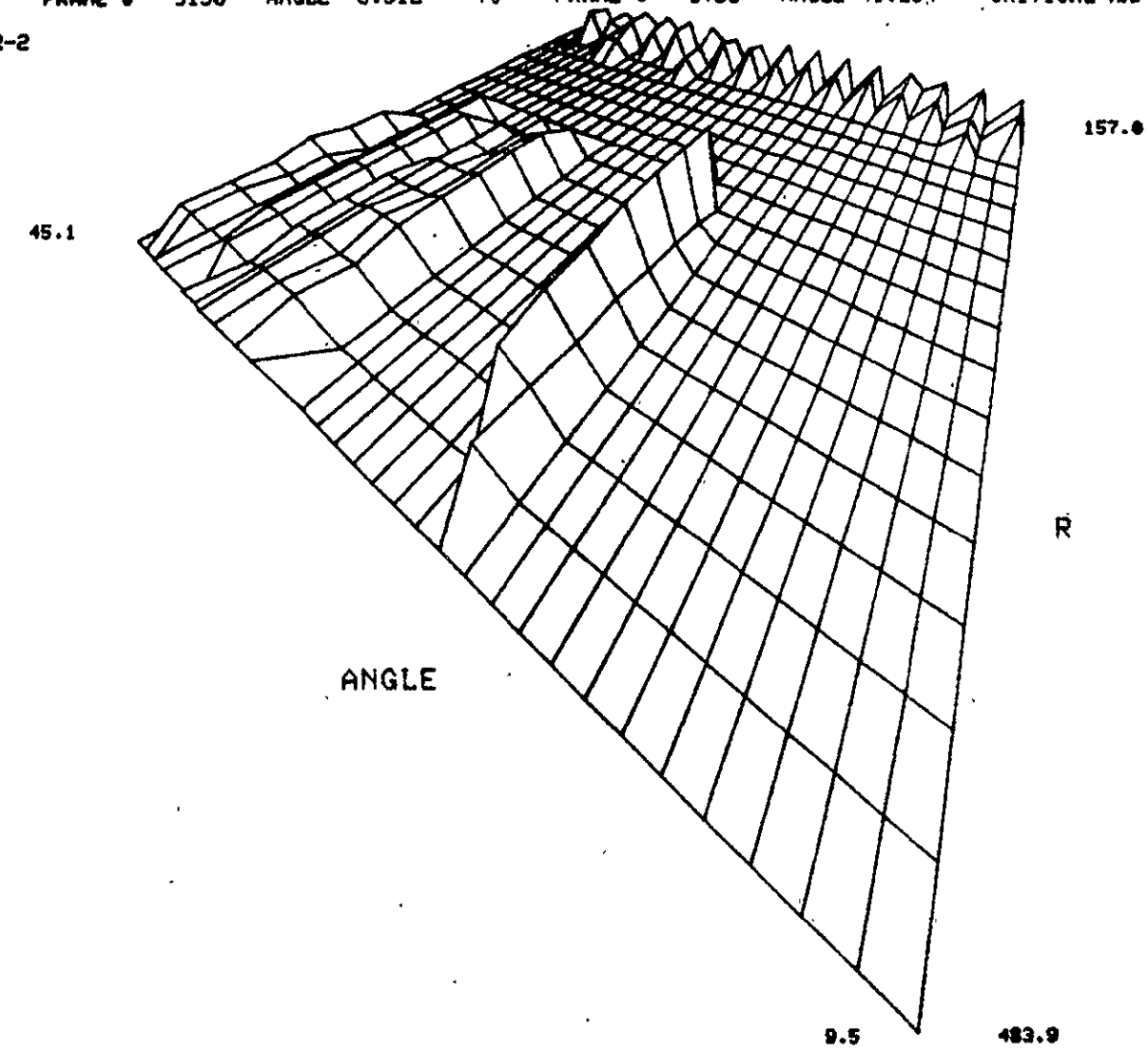
SCAN # 3 FRAME # 3156 ANGLE 8.912 TO FRAME # 3763 ANGLE 45.254 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM V = 12.0

AVERAGE V = 2.0

ANGLE	
1	9.5
2	9.8
3	10.4
4	11.2
5	12.2
6	13.3
7	14.5
8	15.6
9	16.8
10	18.0
11	19.1
12	20.2
13	21.4
14	22.5
15	23.7
16	24.9
17	26.0
18	27.3
19	28.5
20	29.6
21	30.8
22	31.9
23	33.1
24	34.3
25	35.4
26	36.5
27	37.7
28	38.9
29	40.0
30	41.2
31	42.3
32	43.6
33	44.5
34	45.1



	R
1	157.0
2	176.2
3	195.4
4	214.7
5	233.9
6	253.1
7	272.4
8	291.6
9	310.8
10	330.1
11	349.3
12	368.5
13	387.7
14	407.0
15	426.2
16	445.4
17	483.9

Vmax, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

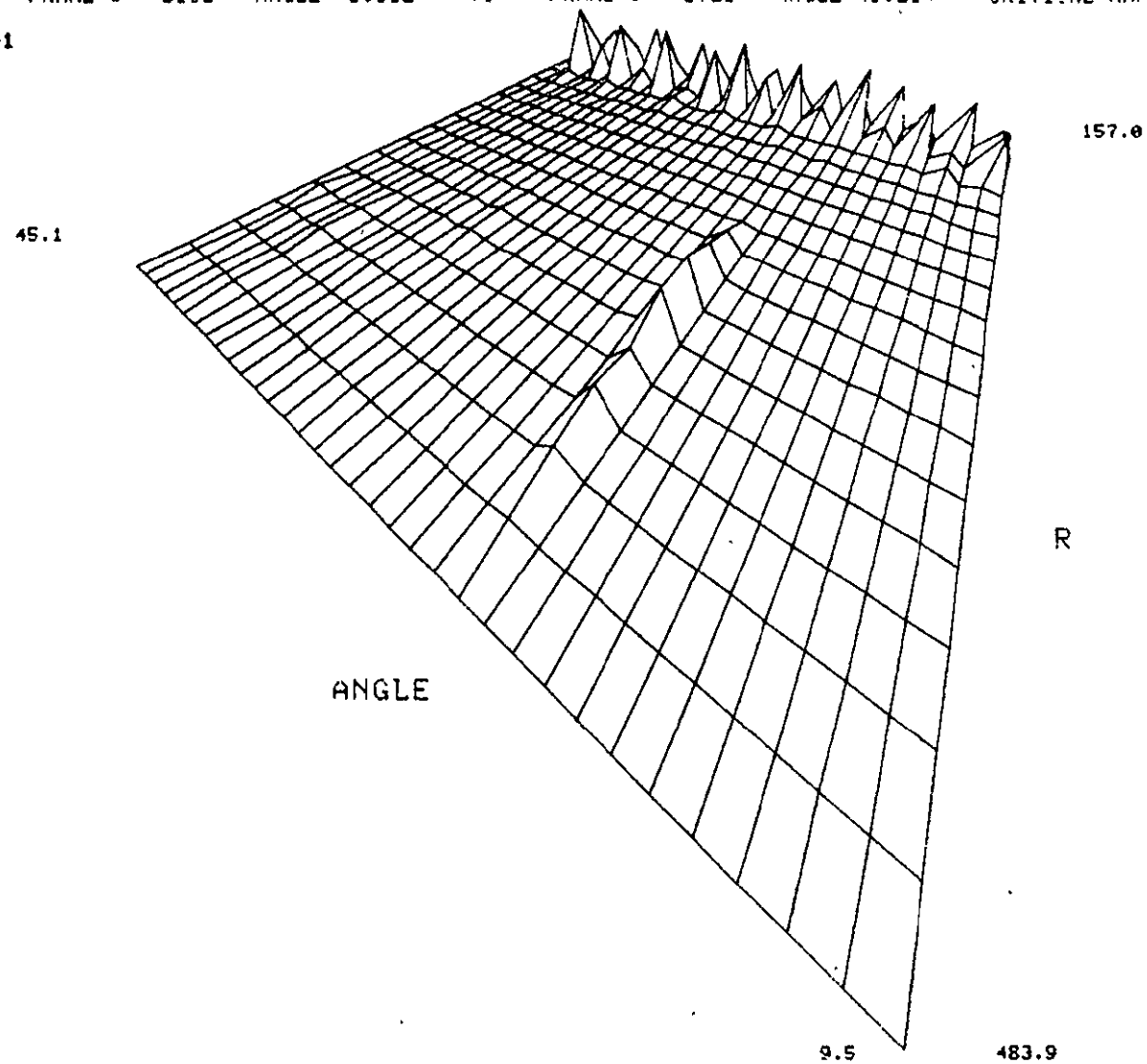
ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 3 FRAME # 3156 ANGLE 8.912 TO FRAME # 3763 ANGLE 45.254 CRITICAL AMP AT CELL 62

OPTION # 31-1

ANGLE	
1	9.5
2	9.8
3	10.4
4	11.2
5	12.2
6	13.3
7	14.5
8	15.6
9	16.8
10	18.0
11	19.1
12	20.2
13	21.4
14	22.5
15	23.7
16	24.9
17	26.0
18	27.3
19	28.5
20	29.6
21	30.8
22	31.9
23	33.1
24	34.3
25	35.4
26	36.5
27	37.7
28	38.9
29	40.0
30	41.2
31	42.3
32	43.6
33	44.5
34	45.1



	R
1	157.0
2	176.2
3	195.4
4	214.7
5	233.9
6	253.1
7	272.4
8	291.6
9	310.8
10	330.1
11	349.3
12	368.5
13	387.7
14	407.0
15	426.2
16	445.4
17	483.9

U * Imax, R, A DISPLAY

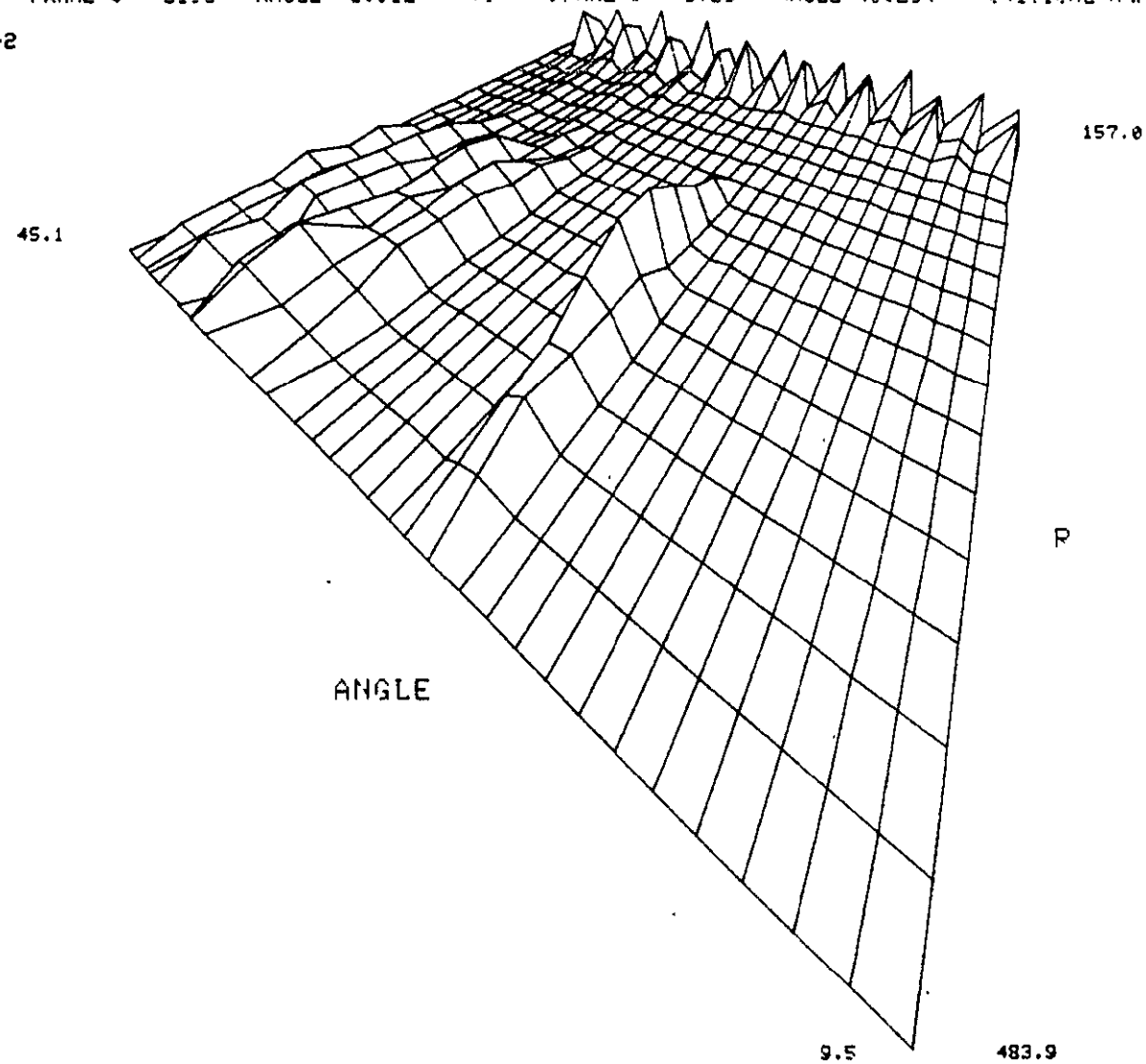
ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

* SCAN # 3 FRAME # 3156 ANGLE 3.912 TO FRAME # 3763 ANGLE 45.254 CRITICAL AMP AT CELL 62

OPTION # 31-2

ANGLE	
1	9.5
2	9.8
3	10.4
4	11.2
5	12.2
6	13.3
7	14.5
8	15.6
9	16.8
10	18.0
11	19.1
12	20.2
13	21.4
14	22.5
15	23.7
16	24.9
17	26.0
18	27.3
19	28.5
20	29.6
21	30.8
22	31.9
23	33.1
24	34.3
25	35.4
26	36.5
27	37.7
28	38.9
29	40.0
30	41.2
31	42.3
32	43.6
33	44.5
34	45.1



	R
1	157.0
2	176.2
3	195.4
4	214.7
5	233.9
6	253.1
7	272.4
8	291.6
9	310.8
10	330.1
11	349.3
12	368.5
13	387.7
14	407.0
15	426.2
16	445.4
17	483.9

U * IMAX, R, H DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

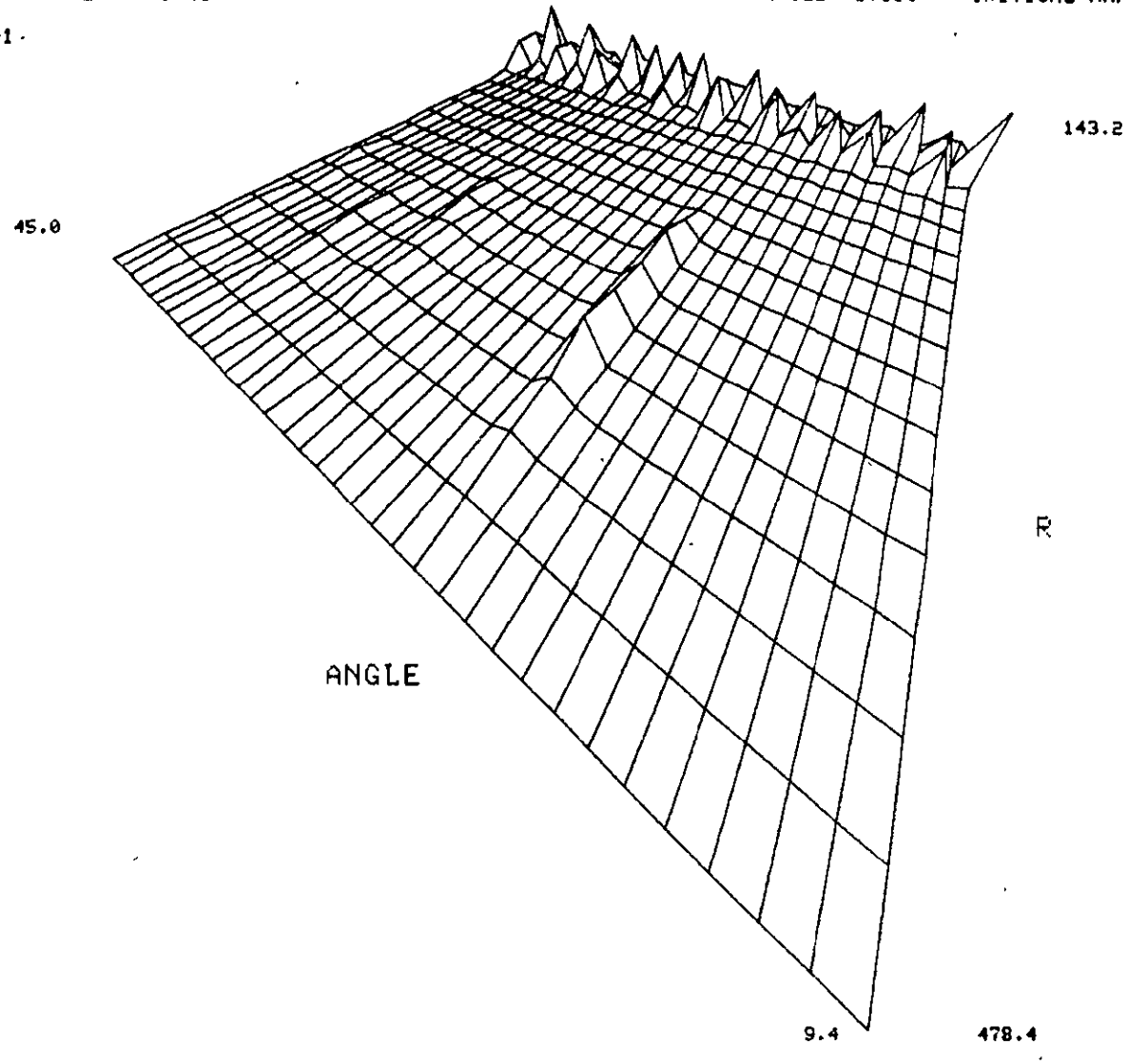
* SCAN # 4 FRAME # 3763 ANGLE 45.254 TO FRAME # 4395 ANGLE 8.950 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 41.0

AVERAGE I = 2.3

ANGLE	
1	45.0
2	44.9
3	44.7
4	44.2
5	43.4
6	42.4
7	41.4
8	40.3
9	39.1
10	37.9
11	36.7
12	35.6
13	34.5
14	33.3
15	32.2
16	31.1
17	29.9
18	28.7
19	27.6
20	26.4
21	25.2
22	23.9
23	22.8
24	21.6
25	20.5
26	19.4
27	18.1
28	17.0
29	15.8
30	14.6
31	13.4
32	12.2
33	11.0
34	9.9
35	9.4



	R
1	143.2
2	162.9
3	182.6
4	202.3
5	222.1
6	241.8
7	261.5
8	281.2
9	300.9
10	320.7
11	340.4
12	360.1
13	379.2
14	399.5
15	419.2
16	439.0
17	478.4

ORIGINAL PAGE IS OF POOR QUALITY

I_{MAX}, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 8110

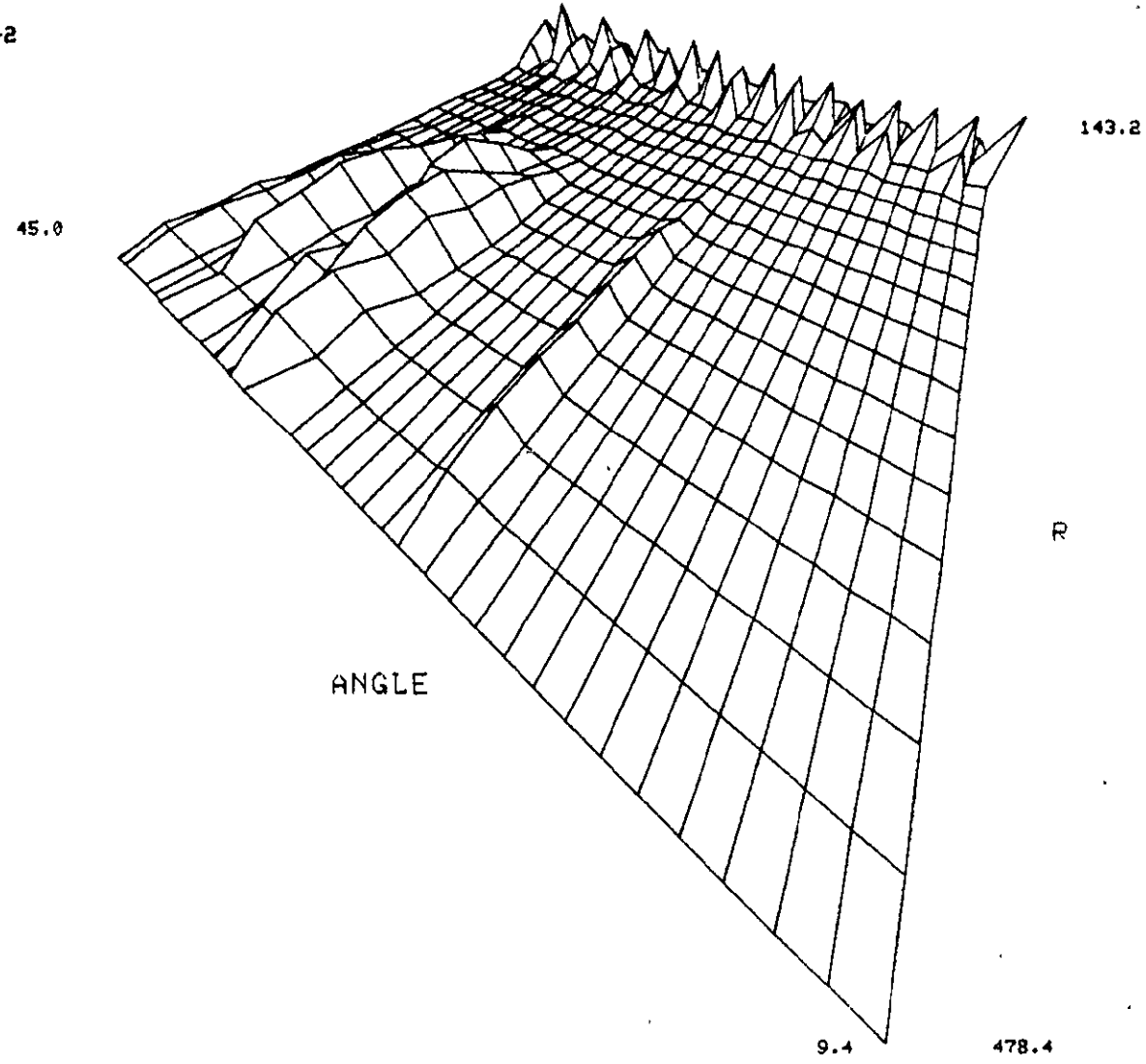
* SCAN # 4 FRAME # 3763 ANGLE 45.254 TO FRAME # 4395 ANGLE 8.950 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 65.0

AVERAGE I = 7.7

ANGLE	
1	45.0
2	44.9
3	44.7
4	44.2
5	43.4
6	42.4
7	41.4
8	40.3
9	39.1
10	37.9
11	36.7
12	35.6
13	34.5
14	33.3
15	32.2
16	31.1
17	29.9
18	28.7
19	27.6
20	26.4
21	25.2
22	23.9
23	22.8
24	21.6
25	20.5
26	19.4
27	18.1
28	17.0
29	15.8
30	14.6
31	13.4
32	12.2
33	11.0
34	9.9
35	9.4



	R
1	143.2
2	162.9
3	182.6
4	202.3
5	222.1
6	241.8
7	261.5
8	281.2
9	300.9
10	320.7
11	340.4
12	360.1
13	379.8
14	399.5
15	419.2
16	439.0
17	478.4

Imax, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 228 RUN # 4 TAPE 1 OF 2- 2110

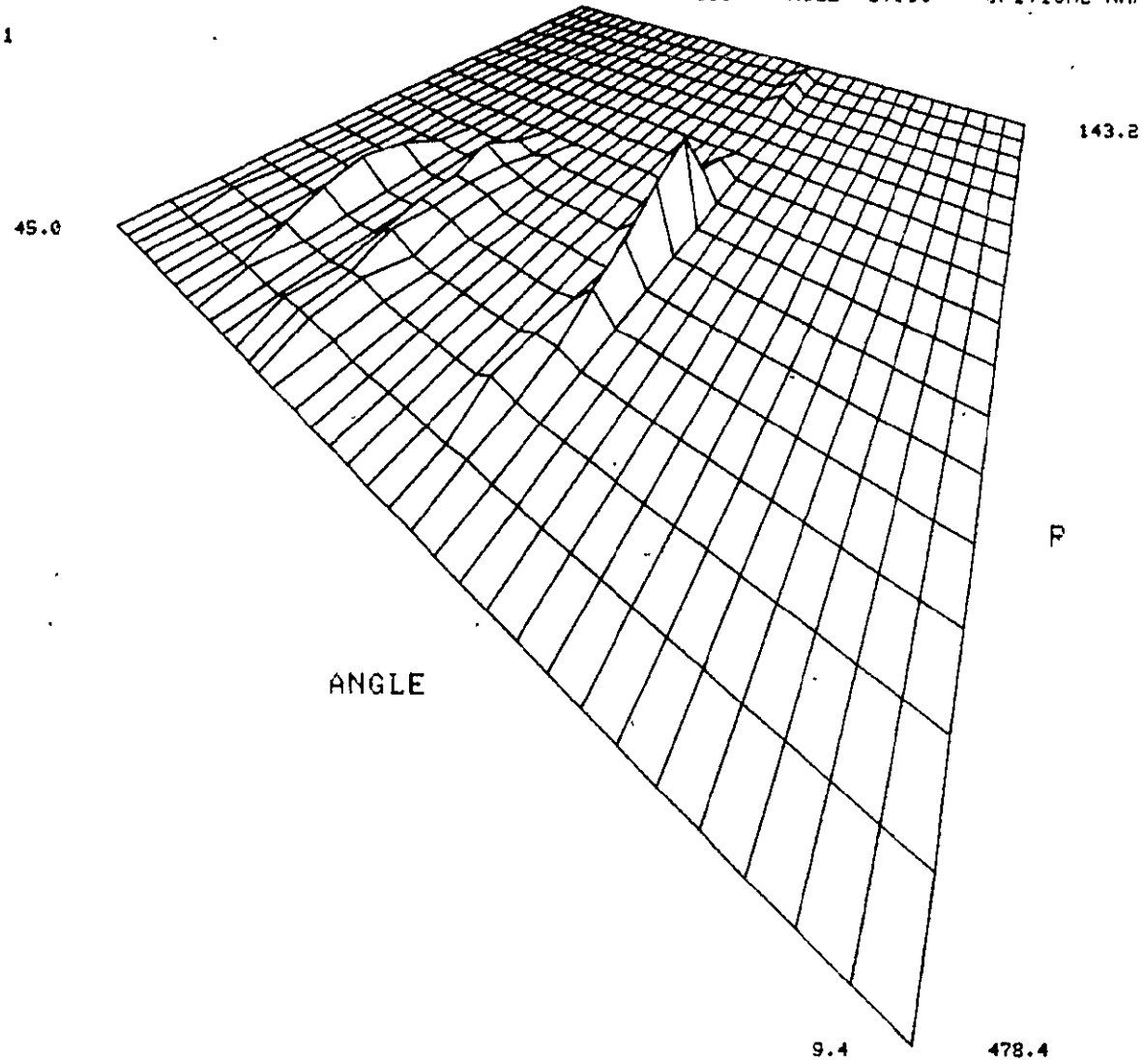
SCAN # 4 FRAME # 3763 ANGLE 45.254 TO FRAME # 4395 ANGLE 8.950 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 14.0

AVERAGE I = 0.2

	ANGLE
1	45.0
2	44.9
3	44.7
4	44.2
5	43.4
6	42.4
7	41.4
8	40.3
9	39.1
10	37.9
11	36.7
12	35.6
13	34.5
14	33.3
15	32.2
16	31.1
17	29.9
18	28.7
19	27.6
20	26.4
21	25.2
22	23.9
23	22.8
24	21.6
25	20.5
26	19.4
27	18.1
28	17.0
29	15.8
30	14.6
31	13.4
32	12.2
33	11.0
34	9.9
35	9.4



	R
1	143.2
2	162.9
3	182.6
4	202.3
5	222.1
6	241.8
7	261.5
8	281.2
9	300.9
10	320.7
11	340.4
12	360.1
13	379.8
14	399.5
15	419.2
16	439.0
17	478.4

I, R, A DISPLAY AT VELOCITY CELL 62

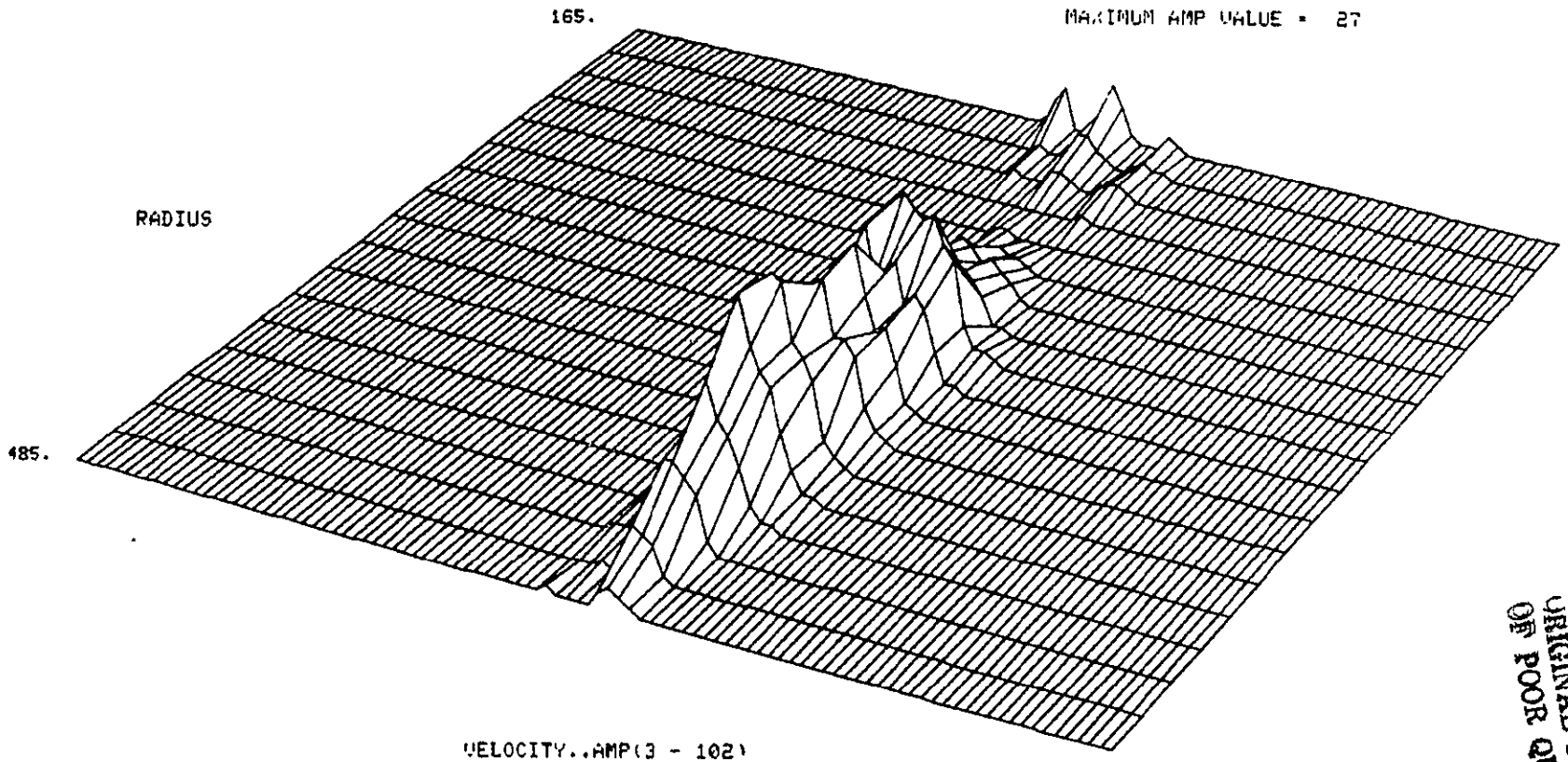
NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 3- E110

SCAN # 4 FRAME # 3763 ANGLE 45.254 TO FRAME # 4395 ANGLE 8.950 CRITICAL AMP AT CELL 62

FRAME # 4140 TO 4158

ANGLE = 23.93

MAXIMUM AMP VALUE = 27



ORIGINAL PAGE IS
OF POOR QUALITY

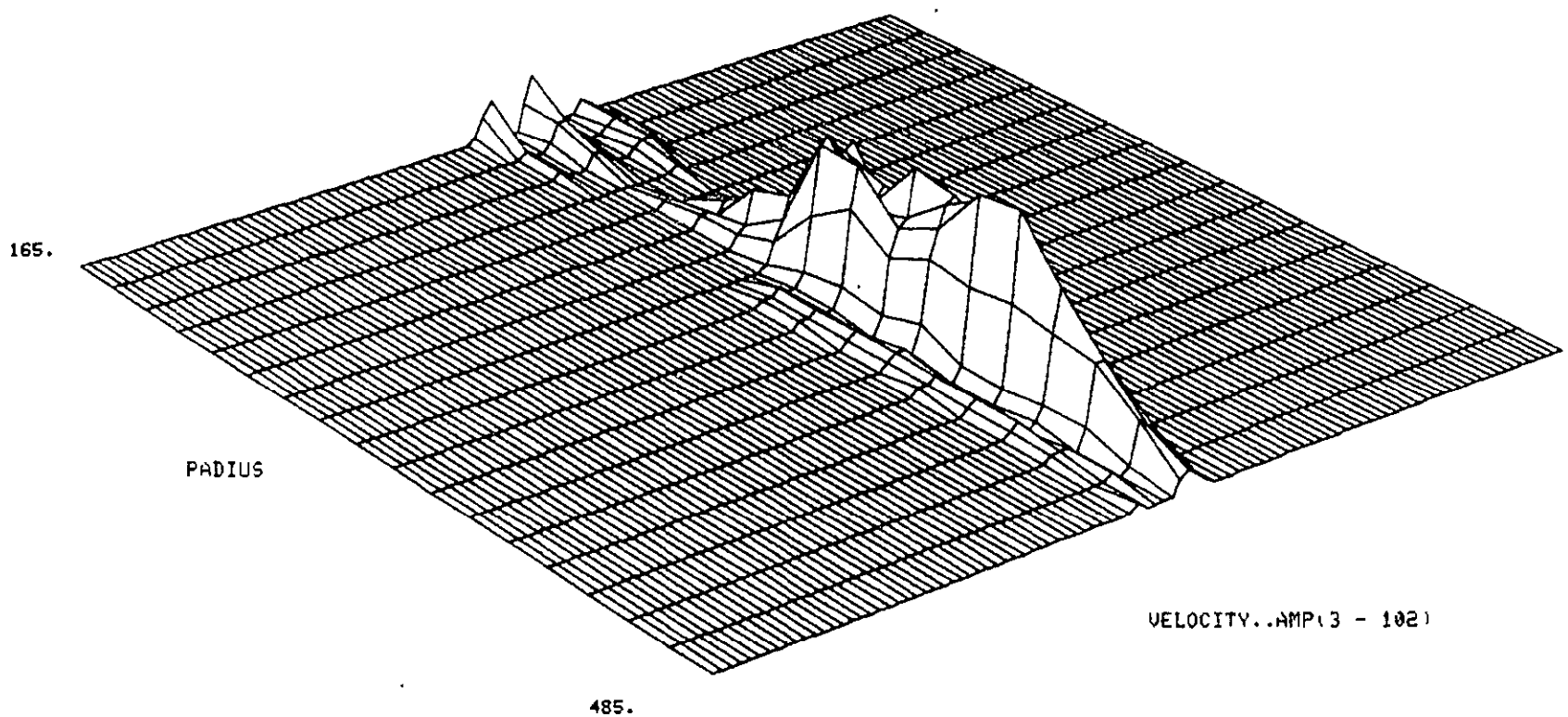
NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 4 FRAME # 3763 ANGLE 45.254 TO FRAME # 4395 ANGLE 8.950 CRITICAL AMP AT CELL 62

FRAME # 4140 TO 4158

ANGLE = 23.93

MAXIMUM AMP VALUE = 27



ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 3- 6110

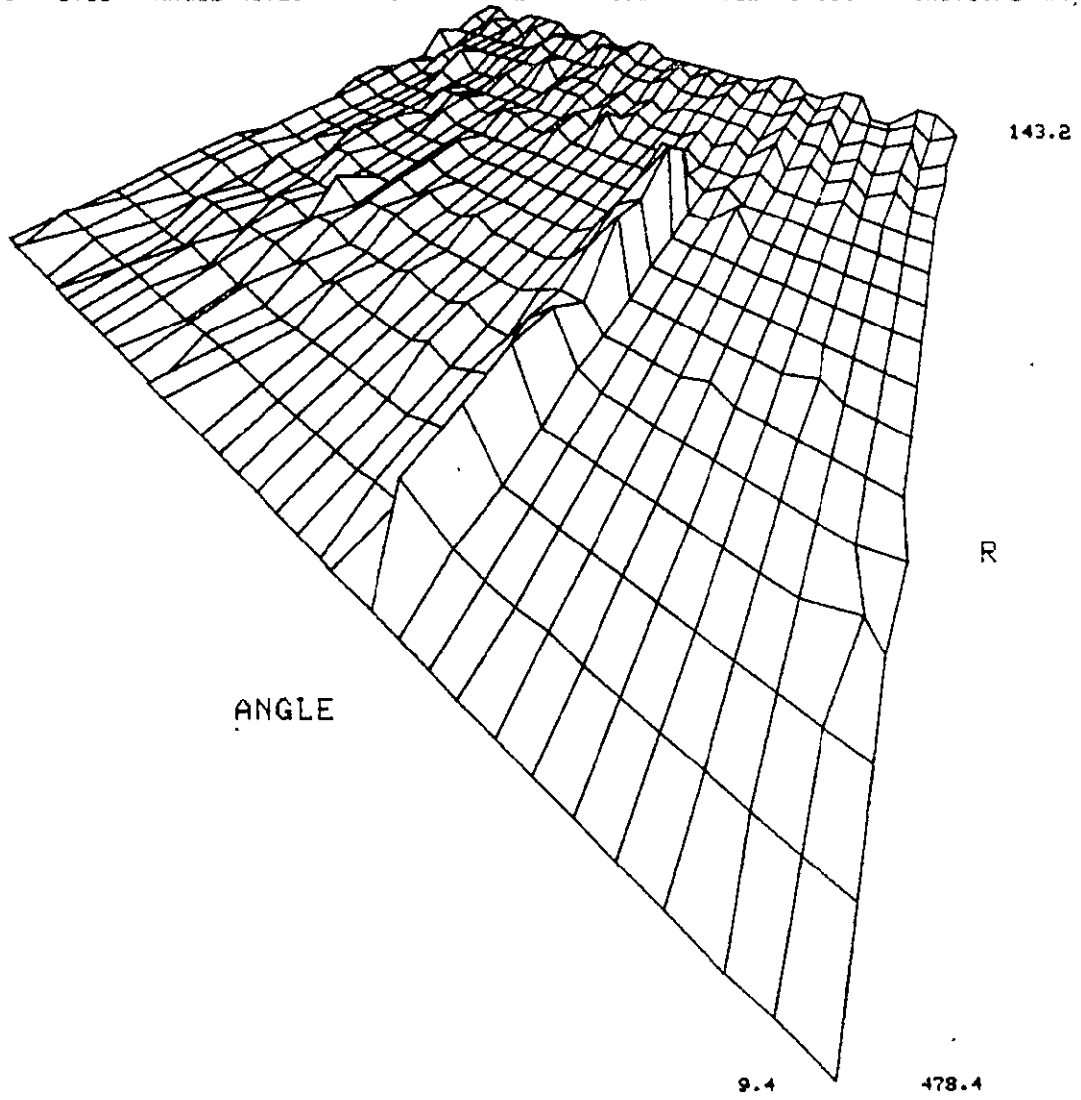
* SCAN # 4 FRAME # 3763 ANGLE 45.254 TO FRAME # 4395 ANGLE 8.950 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 8.0

AVERAGE V = 1.6

ANGLE	
1	45.0
2	44.9
3	44.7
4	44.2
5	43.4
6	42.4
7	41.4
8	40.3
9	39.1
10	37.9
11	36.7
12	35.6
13	34.5
14	33.3
15	32.2
16	31.1
17	29.9
18	28.7
19	27.6
20	26.4
21	25.2
22	23.9
23	22.8
24	21.6
25	20.5
26	19.4
27	18.1
28	17.0
29	15.8
30	14.6
31	13.4
32	12.2
33	11.0
34	9.9
35	9.4



R	
1	143.2
2	162.9
3	182.6
4	202.3
5	222.1
6	241.8
7	261.5
8	281.2
9	300.9
10	320.7
11	340.4
12	360.1
13	379.8
14	399.5
15	419.2
16	439.0
17	478.4

V, R, A DISPLAY (VELOCITY AT Imax)

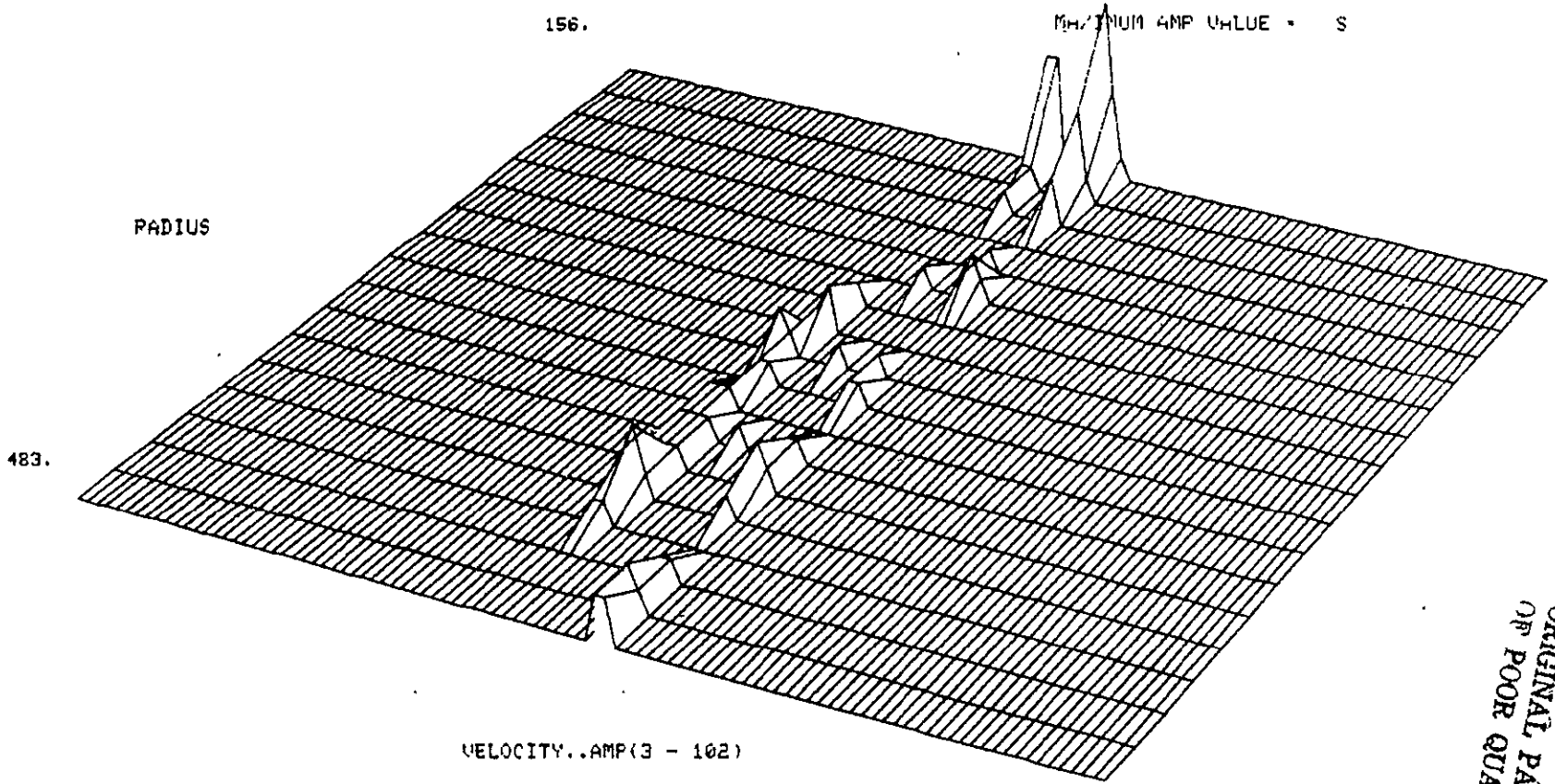
NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 3- 8110

SCAN # 4 FRAME # 3763 ANGLE 45.254 TO FRAME # 4395 ANGLE 8.950 CRITICAL AMP AT CELL 62

FRAME # 4176 TO 4194

ANGLE = 21.61

MAXIMUM AMP VALUE = 5



ORIGINAL PAGE IS OF POOR QUALITY

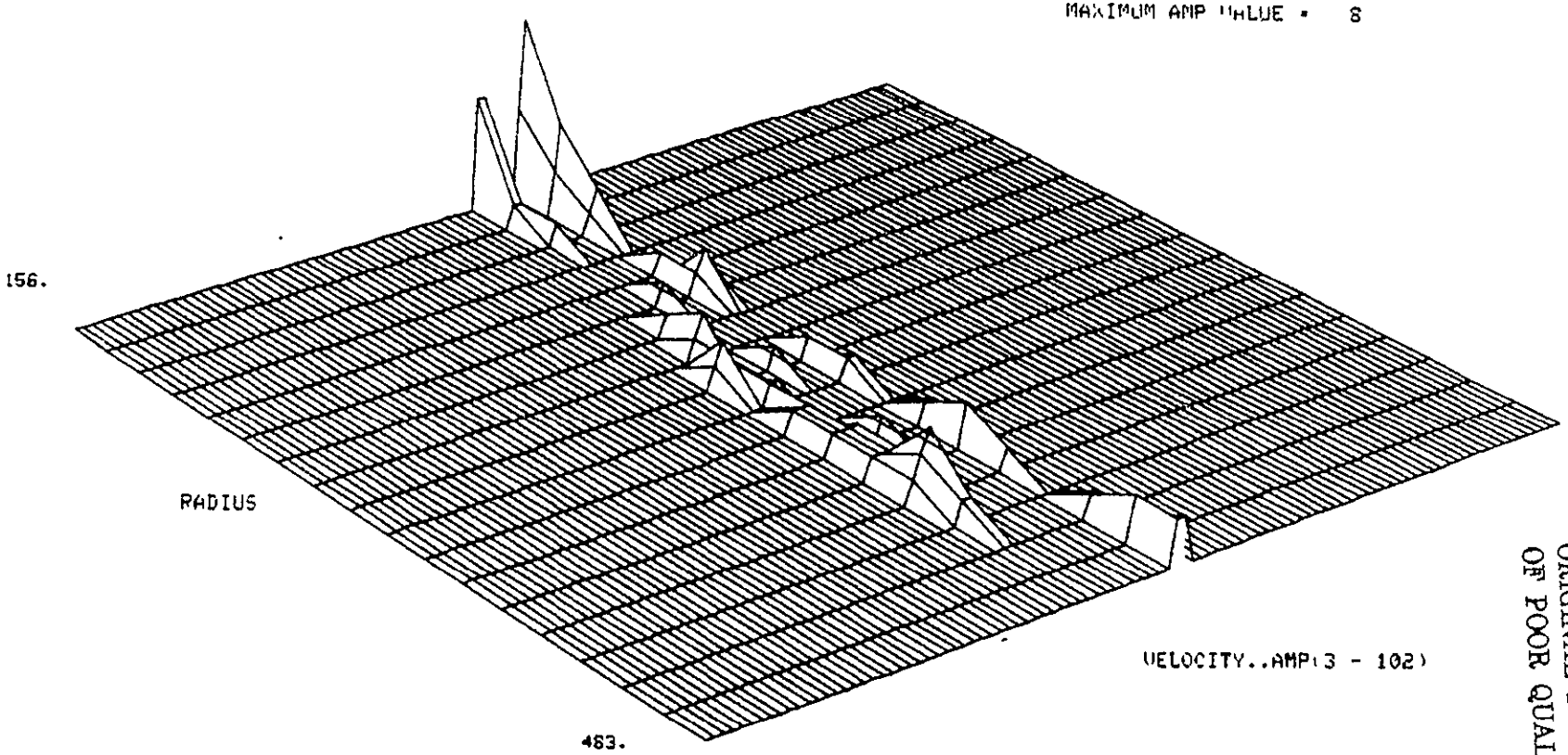
NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 5110

SCAN # 4 FRAME # 3763 ANGLE 45.254 TO FRAME # 4395 ANGLE 8.950 CRITICAL AMP AT CELL 62

FRAME # 4176 TO 4194

ANGLE = 21.61

MAXIMUM AMP VALUE = 8



ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF E- 3110

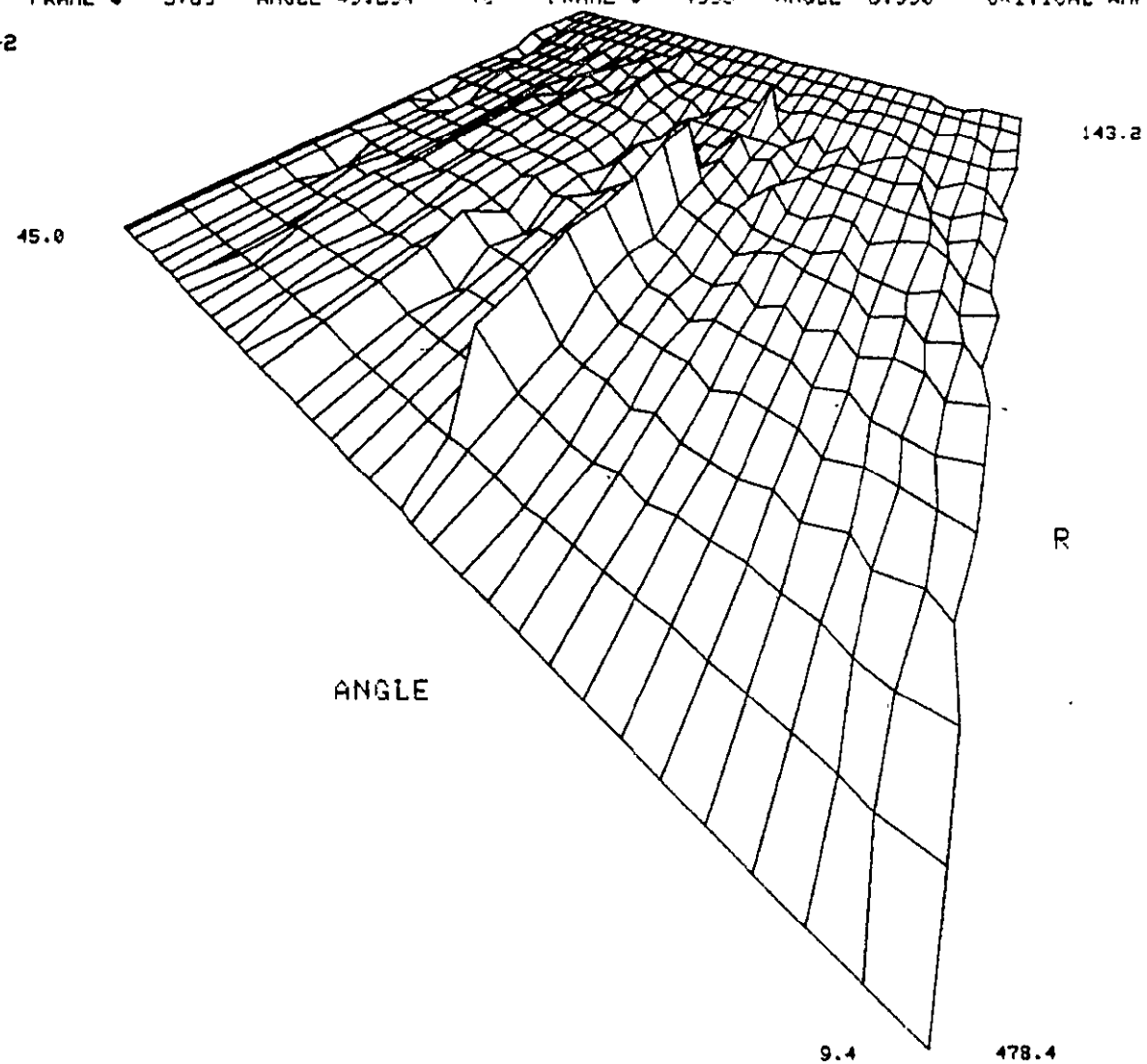
* SCAN # 4 FRAME # 3763 ANGLE 45.254 TO FRAME # 4395 ANGLE 8.950 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V = 12.0

AVERAGE V = 3.4

	ANGLE
1	45.0
2	44.9
3	44.7
4	44.2
5	43.4
6	42.4
7	41.4
8	40.3
9	39.1
10	37.9
11	36.7
12	35.6
13	34.5
14	33.3
15	32.2
16	31.1
17	29.9
18	28.7
19	27.6
20	26.4
21	25.2
22	23.9
23	22.8
24	21.6
25	20.5
26	19.4
27	18.1
28	17.0
29	15.8
30	14.6
31	13.4
32	12.2
33	11.0
34	9.9
35	9.4



	R
1	143.2
2	162.9
3	182.6
4	202.3
5	222.1
6	241.8
7	261.5
8	281.2
9	300.9
10	320.7
11	340.4
12	360.1
13	379.8
14	399.5
15	419.2
16	439.0
17	478.4

V, R, A DISPLAY (VELOCITY AT I_{MAX})

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 3- 6110

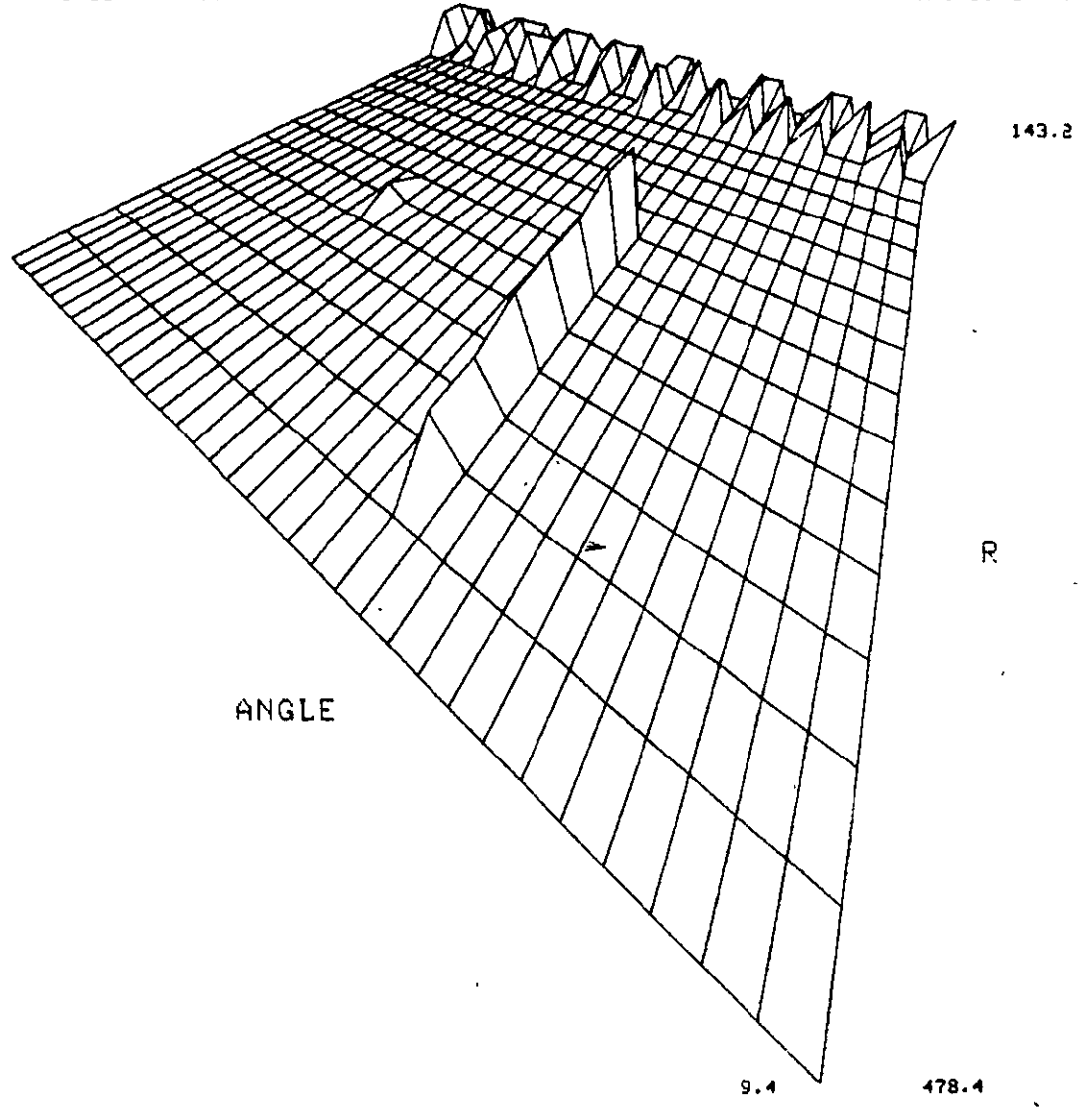
* SCAN # 4 FRAME # 3763 ANGLE 45.254 TO FRAME # 4395 ANGLE 8.950 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 6.0

AVERAGE V = 1.3

	ANGLE
1	45.0
2	44.9
3	44.7
4	44.2
5	43.4
6	42.4
7	41.4
8	40.3
9	39.1
10	37.9
11	36.7
12	35.6
13	34.5
14	33.3
15	32.2
16	31.1
17	29.9
18	28.7
19	27.6
20	26.4
21	25.2
22	23.9
23	22.8
24	21.6
25	20.5
26	19.4
27	18.1
28	17.0
29	15.8
30	14.6
31	13.4
32	12.2
33	11.0
34	9.9
35	9.4



	R
1	143.2
2	162.9
3	182.6
4	202.3
5	222.1
6	241.8
7	261.5
8	281.2
9	300.9
10	320.7
11	340.4
12	360.1
13	379.8
14	399.5
15	419.2
16	439.0
17	478.4

U_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 1 OF 2- 6110

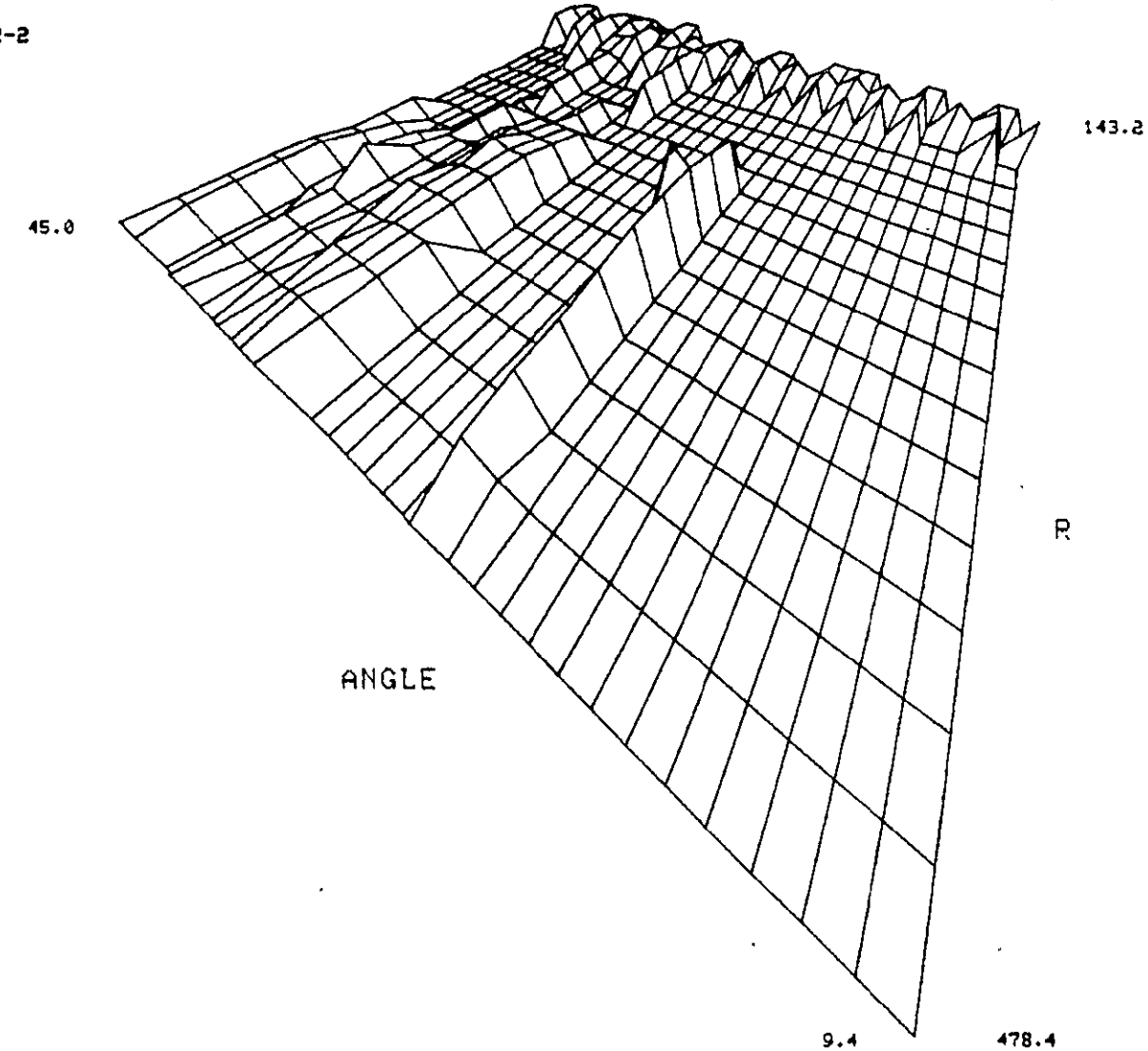
* SCAN # 4 FRAME # 3763 ANGLE 45.254 TO FRAME # 4395 ANGLE 8.950 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM V = 12.0

AVERAGE V = 2.4

	ANGLE
1	45.0
2	44.9
3	44.7
4	44.2
5	43.4
6	42.4
7	41.4
8	40.3
9	39.1
10	37.9
11	36.7
12	35.6
13	34.5
14	33.3
15	32.2
16	31.1
17	29.9
18	28.7
19	27.6
20	26.4
21	25.2
22	23.9
23	22.8
24	21.6
25	20.5
26	19.4
27	18.1
28	17.0
29	15.8
30	14.6
31	13.4
32	12.2
33	11.0
34	9.9
35	9.4



	R
1	143.2
2	162.9
3	182.6
4	202.3
5	222.1
6	241.8
7	261.5
8	281.2
9	300.9
10	320.7
11	340.4
12	360.1
13	379.3
14	399.5
15	419.2
16	439.0
17	478.4

ORIGINAL PAGE IS OF POOR QUALITY

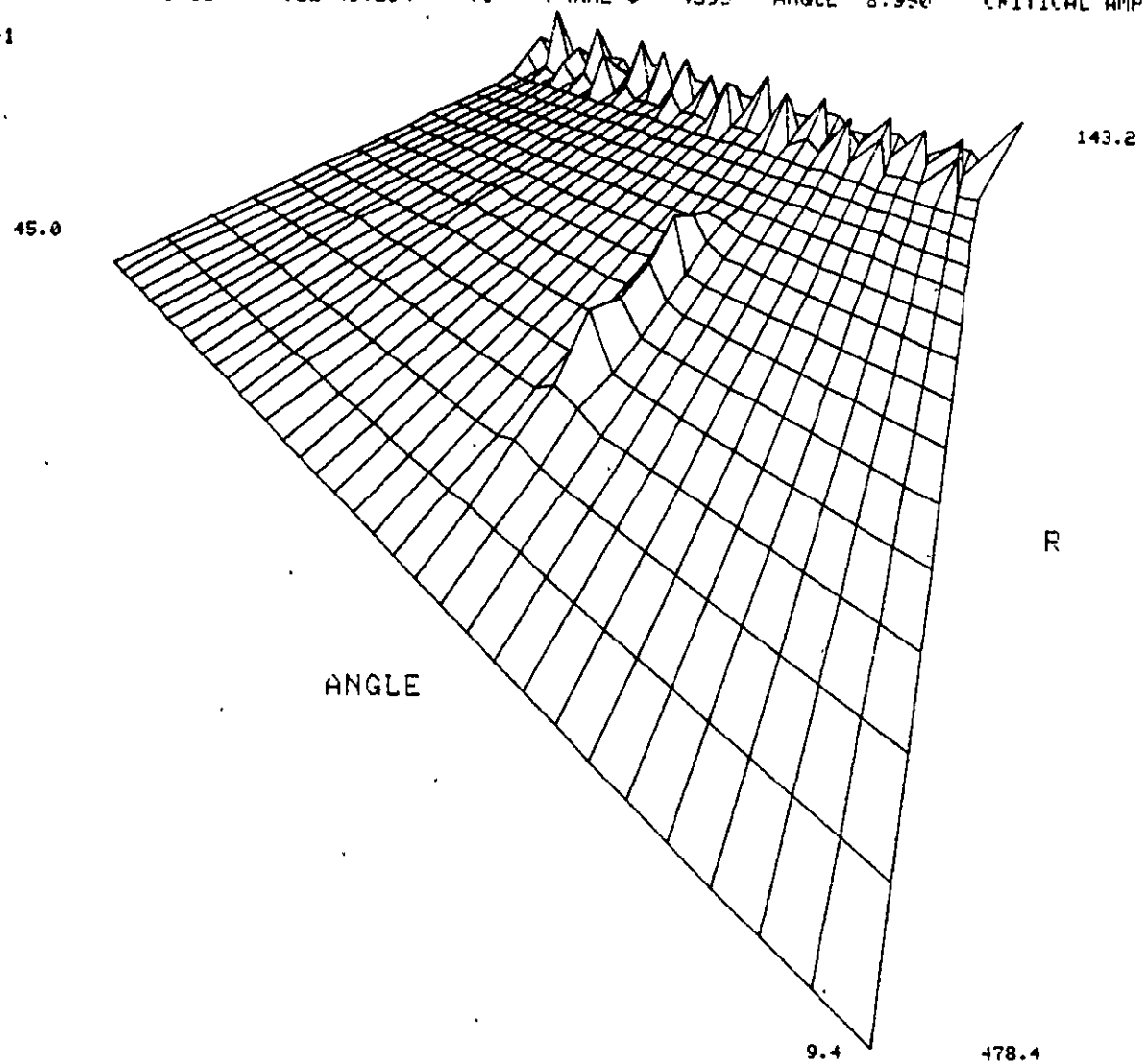
V_{max}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

NASA PROJECT DUST DEVIL DAY 236 RUN # 4 TAPE 1 OF E- 6110

SCAN # 4 FRAME # 3763 ANGLE 45.254 TO FRAME # 4395 ANGLE 8.950 CRITICAL AMP AT.CELL 62

OPTION # 31-1

	ANGLE
1	45.0
2	44.9
3	44.7
4	44.2
5	43.4
6	42.4
7	41.4
8	40.3
9	39.1
10	37.9
11	36.7
12	35.6
13	34.5
14	33.3
15	32.2
16	31.1
17	29.9
18	28.7
19	27.6
20	26.4
21	25.2
22	23.9
23	22.8
24	21.6
25	20.5
26	19.4
27	18.1
28	17.0
29	15.8
30	14.6
31	13.4
32	12.2
33	11.0
34	9.9
35	9.4



	R
1	143.2
2	162.9
3	182.6
4	202.3
5	222.1
6	241.8
7	261.5
8	281.2
9	300.9
10	320.7
11	340.4
12	360.1
13	379.8
14	399.5
15	419.2
16	439.0
17	478.4

V * IMAX, R, A DISPLAY

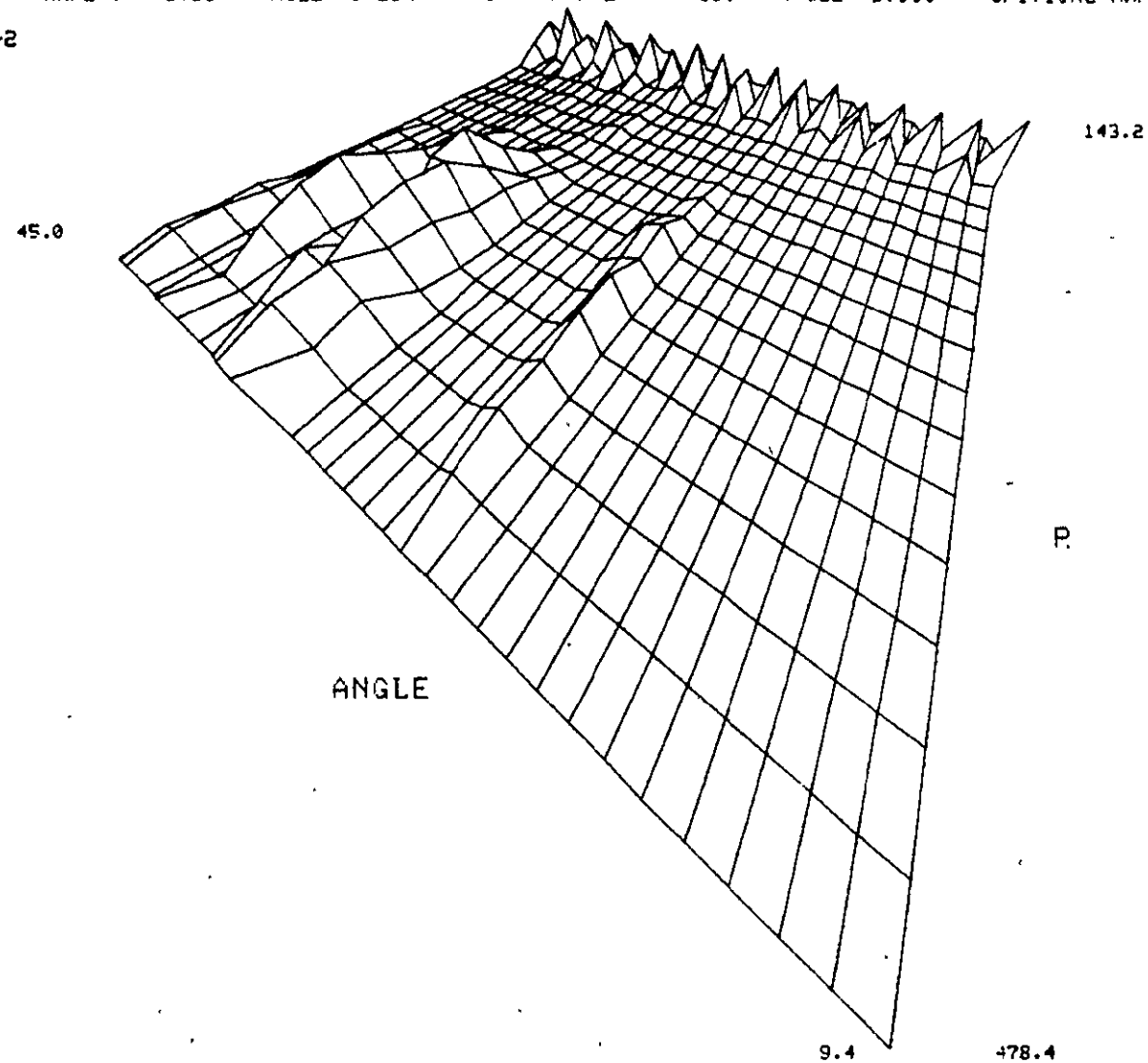
ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 8110

SCAN # 4 FRAME # 3763 ANGLE 45.254 TO FRAME # 4395 ANGLE 2.950 OPTICAL AMP AT CELL 62

OPTION # 31-2

ANGLE	
1	45.0
2	44.9
3	44.7
4	44.2
5	43.4
6	42.4
7	41.4
8	40.3
9	39.1
10	37.9
11	36.7
12	35.6
13	34.5
14	33.3
15	32.2
16	31.1
17	29.9
18	28.7
19	27.6
20	26.4
21	25.2
22	23.9
23	22.8
24	21.6
25	20.5
26	19.4
27	18.1
28	17.0
29	15.8
30	14.6
31	13.4
32	12.2
33	11.0
34	9.9
35	9.4



R	
1	143.2
2	162.9
3	182.6
4	202.3
5	222.1
6	241.8
7	261.5
8	281.2
9	300.9
10	320.7
11	340.4
12	360.1
13	379.8
14	399.5
15	419.2
16	439.0
17	458.4

U * Imax, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

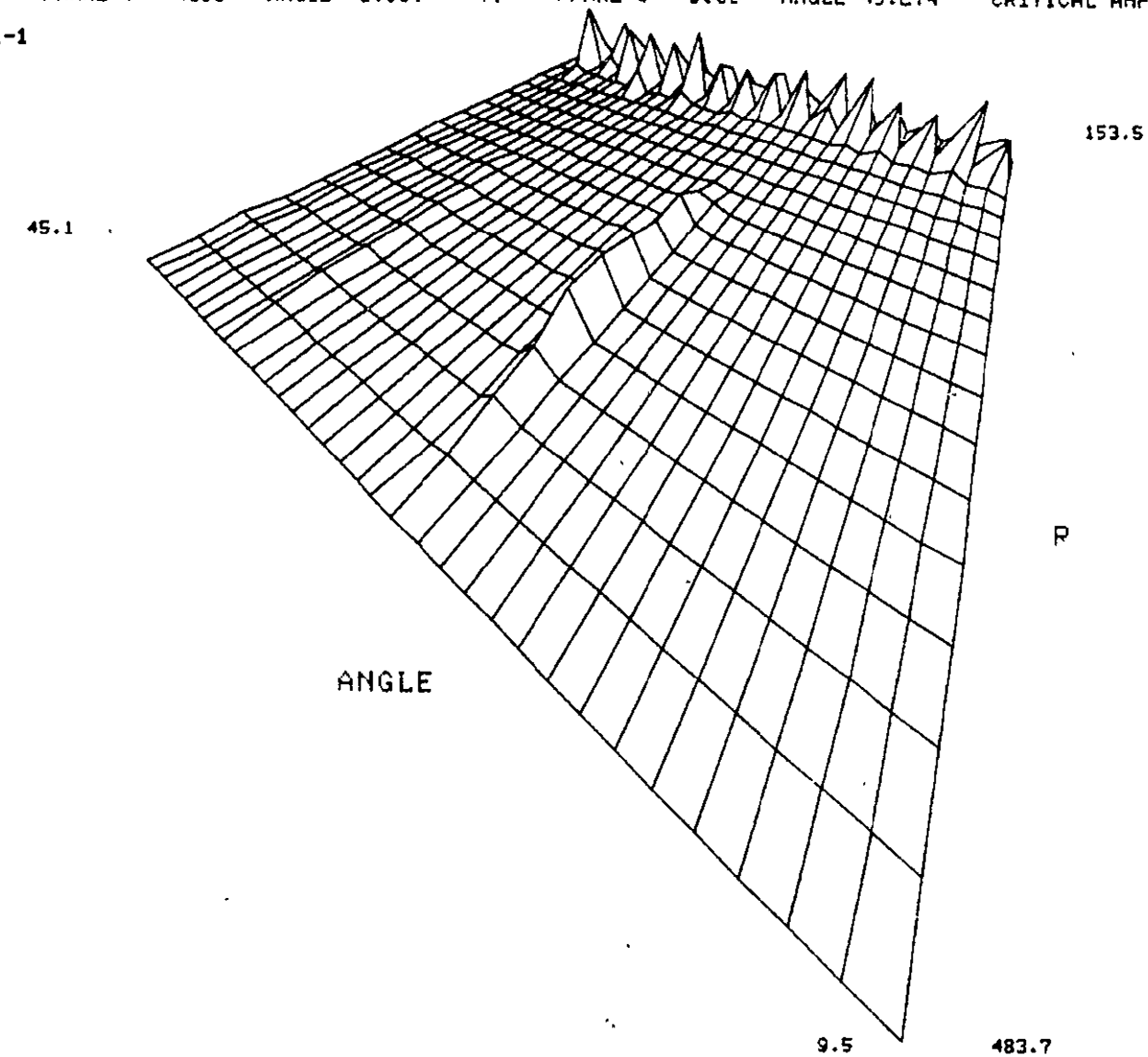
SCAN # 5 FRAME # 4395 ANGLE 8.950 TO FRAME # 5005 ANGLE 45.274 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I - 39.0

AVERAGE I - 2.0

ANGLE	
1	9.5
2	9.8
3	10.4
4	11.2
5	12.3
6	13.3
7	14.4
8	15.6
9	16.8
10	18.0
11	19.2
12	20.3
13	21.4
14	22.6
15	23.8
16	24.9
17	26.0
18	27.3
19	28.5
20	29.6
21	30.8
22	32.0
23	33.1
24	34.3
25	35.4
26	36.6
27	37.7
28	38.9
29	40.0
30	41.2
31	42.4
32	43.5
33	44.5
34	45.1



	R
1	153.5
2	172.9
3	192.4
4	211.8
5	231.2
6	250.6
7	270.1
8	289.5
9	308.9
10	328.3
11	347.7
12	367.2
13	386.6
14	406.0
15	425.4
16	444.9
17	483.7

I_{MAX}, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

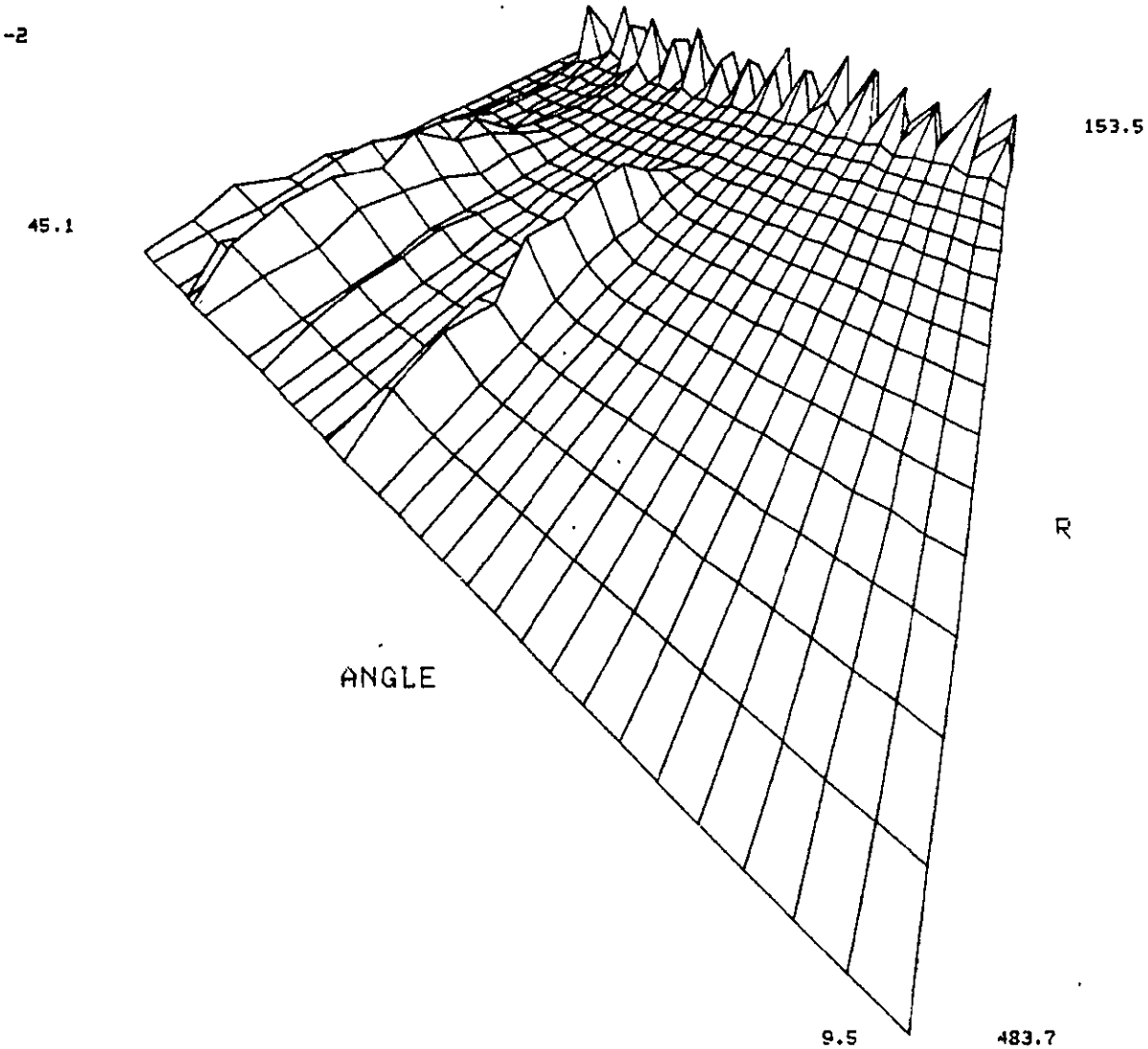
* SCAN # 5 FRAME # 4395 ANGLE 8.950 TO FRAME # 5005 ANGLE 45.274 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 59.0

AVERAGE I = 7.7

	ANGLE
1	9.5
2	9.8
3	10.4
4	11.2
5	12.3
6	13.3
7	14.4
8	15.6
9	16.8
10	18.0
11	19.2
12	20.3
13	21.4
14	22.6
15	23.8
16	24.9
17	26.0
18	27.3
19	28.5
20	29.6
21	30.8
22	32.0
23	33.1
24	34.3
25	35.4
26	36.6
27	37.7
28	38.9
29	40.0
30	41.2
31	42.4
32	43.5
33	44.5
34	45.1



	R
1	153.5
2	172.9
3	192.4
4	211.8
5	231.2
6	250.6
7	270.1
8	289.5
9	308.9
10	328.3
11	347.7
12	367.2
13	386.6
14	406.0
15	425.4
16	444.9
17	483.7

Imax, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 3- 8110

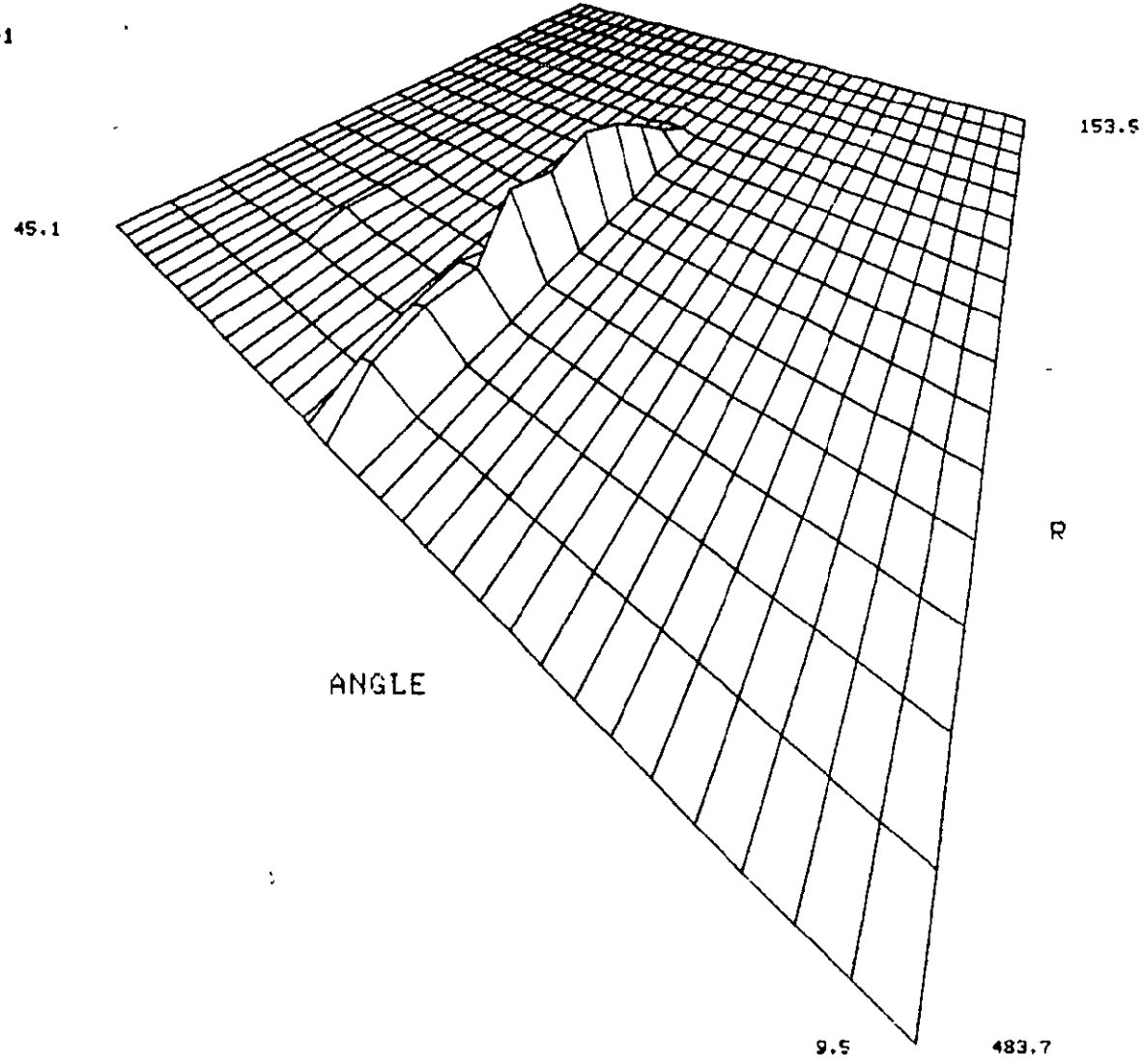
SCAN # 5 FRAME # 4395 ANGLE 2.950 TO FRAME # 5005 ANGLE 45.274 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 49.0

AVERAGE I = 1.0

	ANGLE
1	9.5
2	9.8
3	10.4
4	11.2
5	12.3
6	13.3
7	14.4
8	15.6
9	16.8
10	18.0
11	19.2
12	20.3
13	21.4
14	22.6
15	23.8
16	24.9
17	26.0
18	27.3
19	28.5
20	29.6
21	30.8
22	32.0
23	33.1
24	34.3
25	35.4
26	36.6
27	37.7
28	38.9
29	40.0
30	41.2
31	42.4
32	43.5
33	44.5
34	45.1



	R
1	153.5
2	172.9
3	192.4
4	211.8
5	231.2
6	250.6
7	270.1
8	289.5
9	308.9
10	328.3
11	347.7
12	367.2
13	386.6
14	406.0
15	425.4
16	444.9
17	483.7

ORIGINAL PAGE IS OF POOR QUALITY

I, R, A DISPLAY AT VELOCITY CELL 62

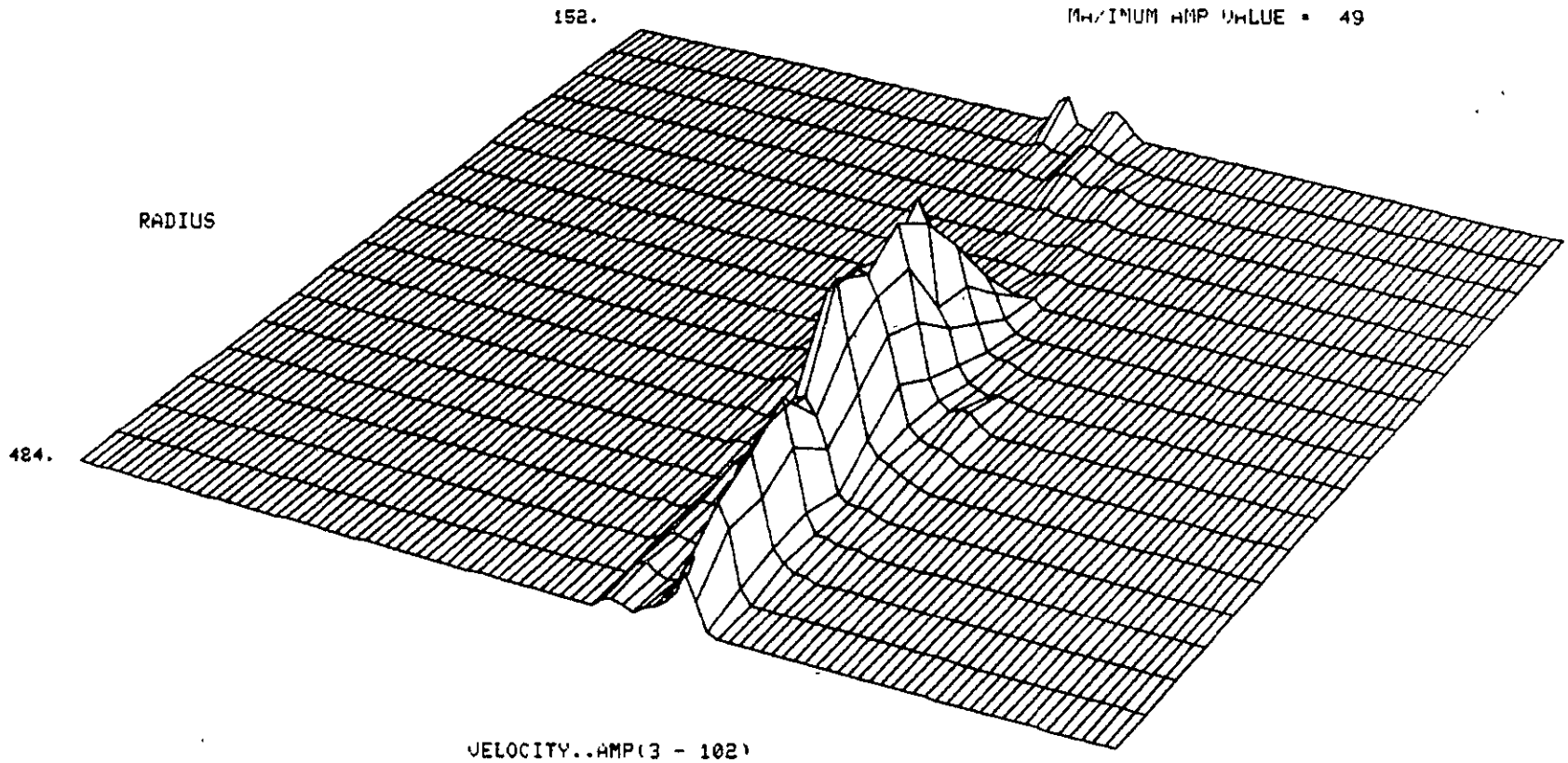
NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 5110

SCAN # 5 FRAME # 4395 ANGLE 3.950 TO FRAME # 5005 ANGLE 45.274 CRITICAL AMP AT CELL 62

FRAME # 4686 TO 4704

ANGLE = 26.07

MAXIMUM AMP VALUE = 49



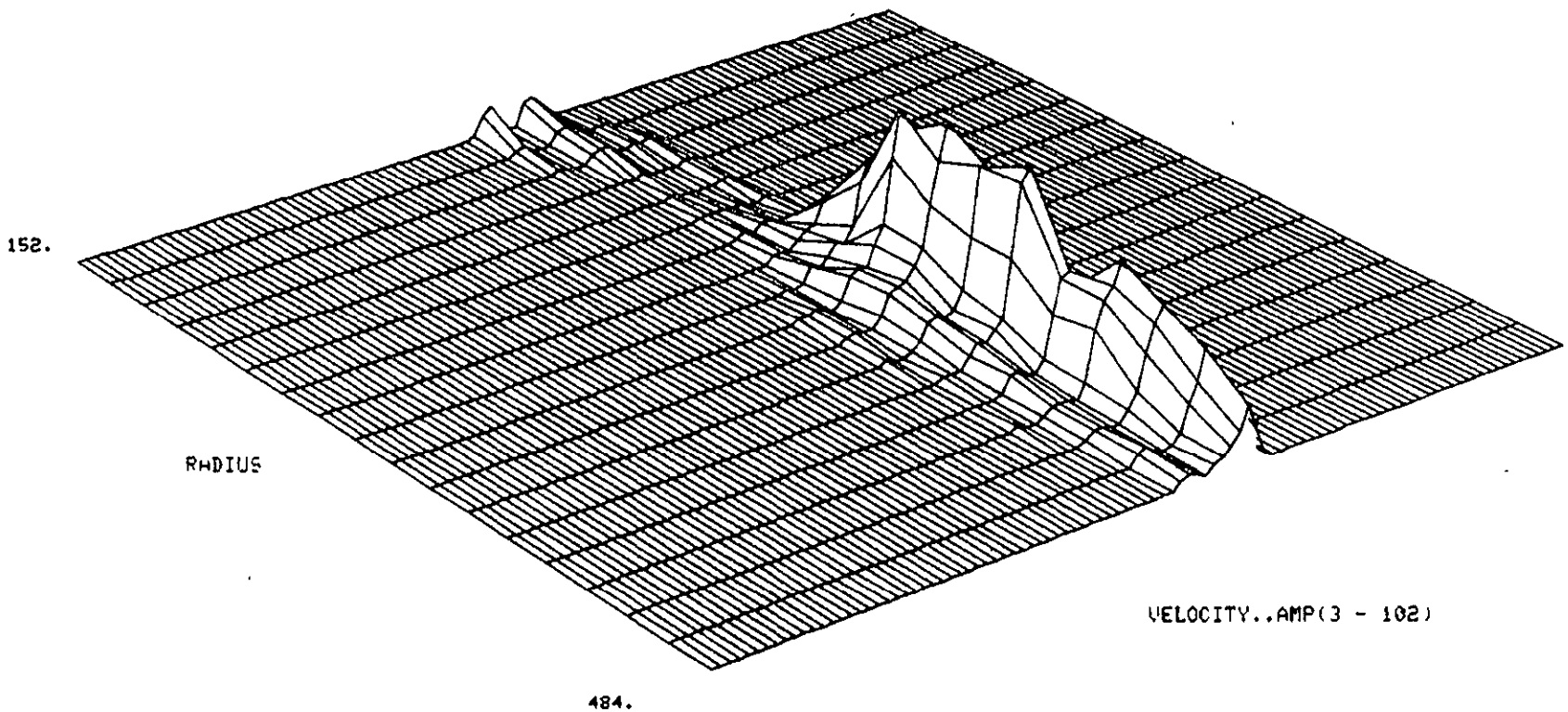
NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 2110

SCAN # 5 FRAME # 4395 ANGLE 8.950 TO FRAME # 5005 ANGLE 45.274 CRITICAL AMP AT CELL 62

FRAME # 4686 TO 4704

ANGLE = 26.07

MAXIMUM AMP VALUE = 49



NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 3- 6110

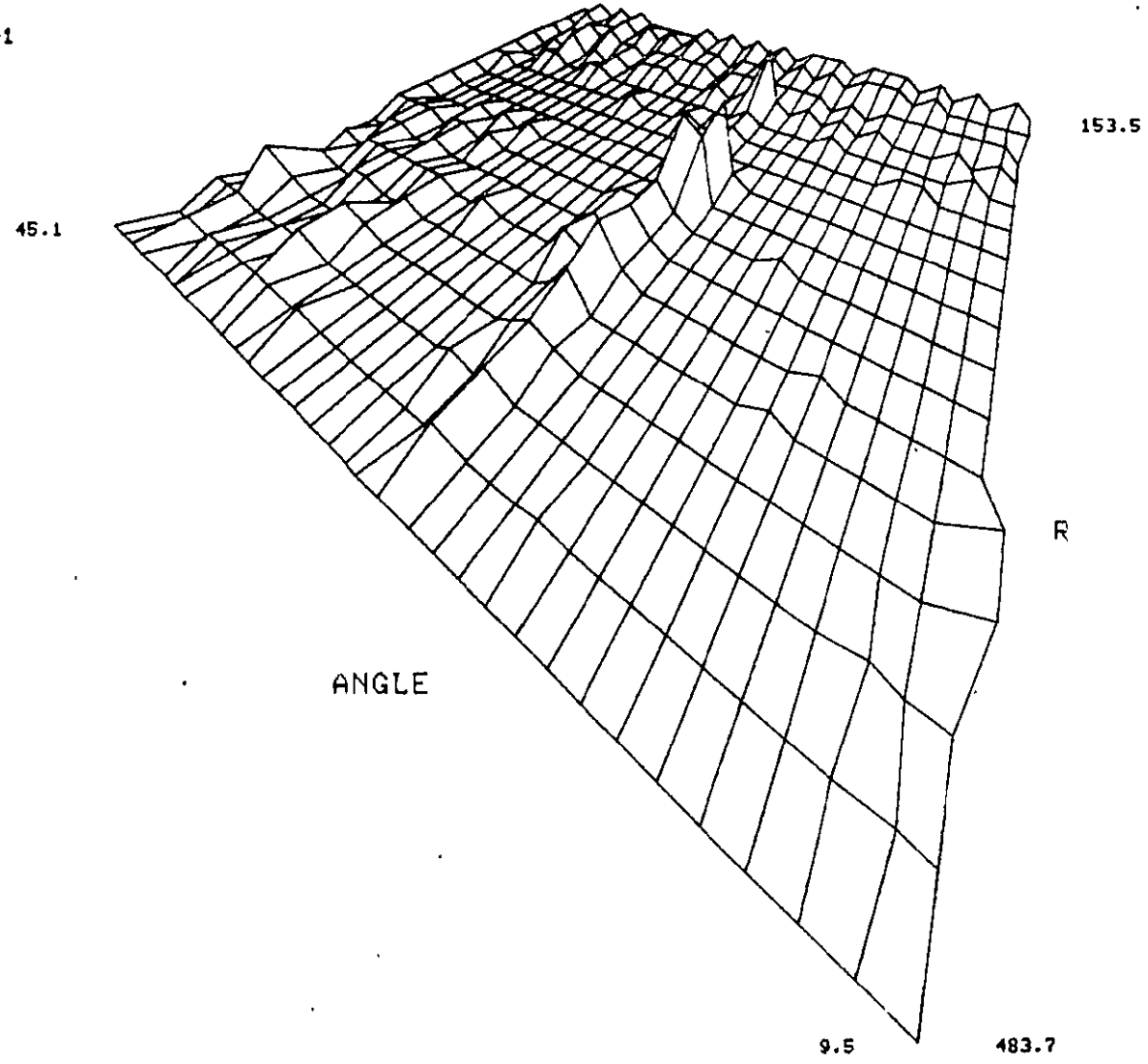
SCAN # 5 FRAME # 4395 ANGLE 2.950 TO FRAME # 5005 ANGLE 45.274 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM U = 7.0

AVERAGE U = 1.5

ANGLE	
1	9.5
2	9.8
3	10.4
4	11.2
5	12.3
6	13.3
7	14.4
8	15.6
9	16.8
10	18.0
11	19.2
12	20.3
13	21.4
14	22.6
15	23.8
16	24.9
17	26.0
18	27.3
19	28.5
20	29.6
21	30.8
22	32.0
23	33.1
24	34.3
25	35.4
26	36.6
27	37.7
28	38.9
29	40.0
30	41.2
31	42.4
32	43.5
33	44.5
34	45.1



	R
1	153.5
2	172.9
3	192.4
4	211.8
5	231.2
6	250.6
7	270.1
8	289.5
9	308.9
10	328.3
11	347.7
12	367.2
13	386.6
14	406.0
15	425.4
16	444.9
17	483.7

U, R, A DISPLAY (VELOCITY AT I_{MAX})

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 8110

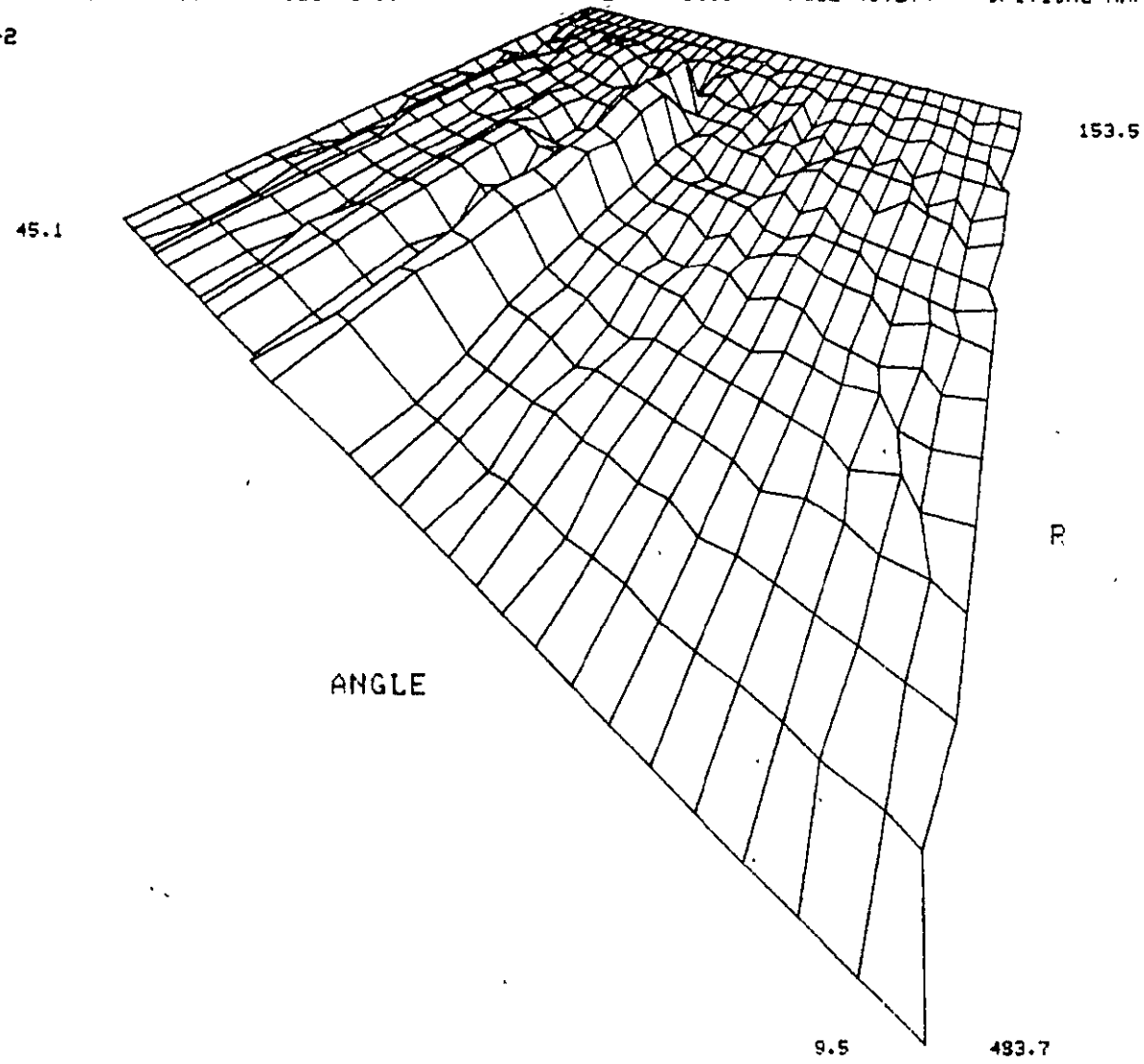
\# SCAN # 5 FRAME # 4395 ANGLE 3.950 TO FRAME # 5005 ANGLE 45.274 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V = 11.0

AVERAGE V = 3.5

	ANGLE
1	9.5
2	9.8
3	10.4
4	11.2
5	12.3
6	13.3
7	14.4
8	15.6
9	16.8
10	18.0
11	19.2
12	20.3
13	21.4
14	22.6
15	23.8
16	24.9
17	26.0
18	27.3
19	28.5
20	29.6
21	30.8
22	32.0
23	33.1
24	34.3
25	35.4
26	36.6
27	37.7
28	38.9
29	40.0
30	41.2
31	42.4
32	43.5
33	44.5
34	45.1



	R
1	153.5
2	172.9
3	192.4
4	211.8
5	231.2
6	250.6
7	270.1
8	289.5
9	303.9
10	328.3
11	347.7
12	367.2
13	386.6
14	406.0
15	425.4
16	444.9
17	483.7

V, R, A DISPLAY (VELOCITY AT IMAX)

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

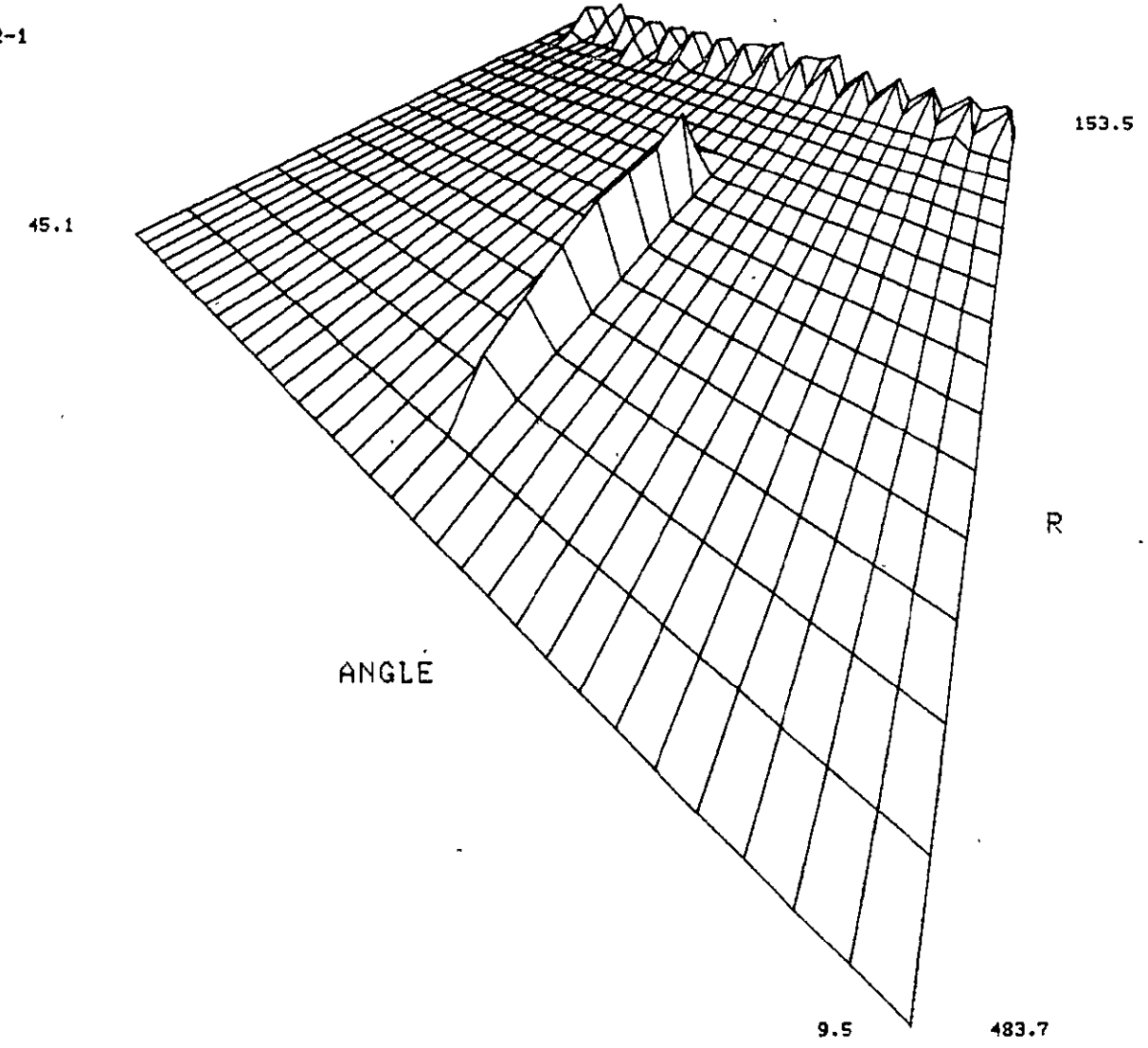
* SCAN # 5 FRAME # 4395 ANGLE 8.950 TO FRAME # 5005 ANGLE 45.274 CRITICAL AMP mT CELL 62

OPTION # 22-1

MAXIMUM V = 8.0

AVERAGE V = 1.2

ANGLE	
1	9.5
2	9.8
3	10.4
4	11.2
5	12.3
6	13.3
7	14.4
8	15.6
9	16.8
10	18.0
11	19.2
12	20.3
13	21.4
14	22.6
15	23.8
16	24.9
17	26.0
18	27.3
19	28.5
20	29.6
21	30.8
22	32.0
23	33.1
24	34.3
25	35.4
26	36.6
27	37.7
28	38.9
29	40.0
30	41.2
31	42.4
32	43.5
33	44.5
34	45.1



	R
1	153.5
2	172.9
3	192.4
4	211.8
5	231.2
6	250.6
7	270.1
8	289.5
9	308.9
10	328.3
11	347.7
12	367.2
13	386.6
14	406.0
15	425.4
16	444.9
17	483.7

ORIGINAL PAGE IS OF POOR QUALITY

VMAX, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 1 OF E- 5110

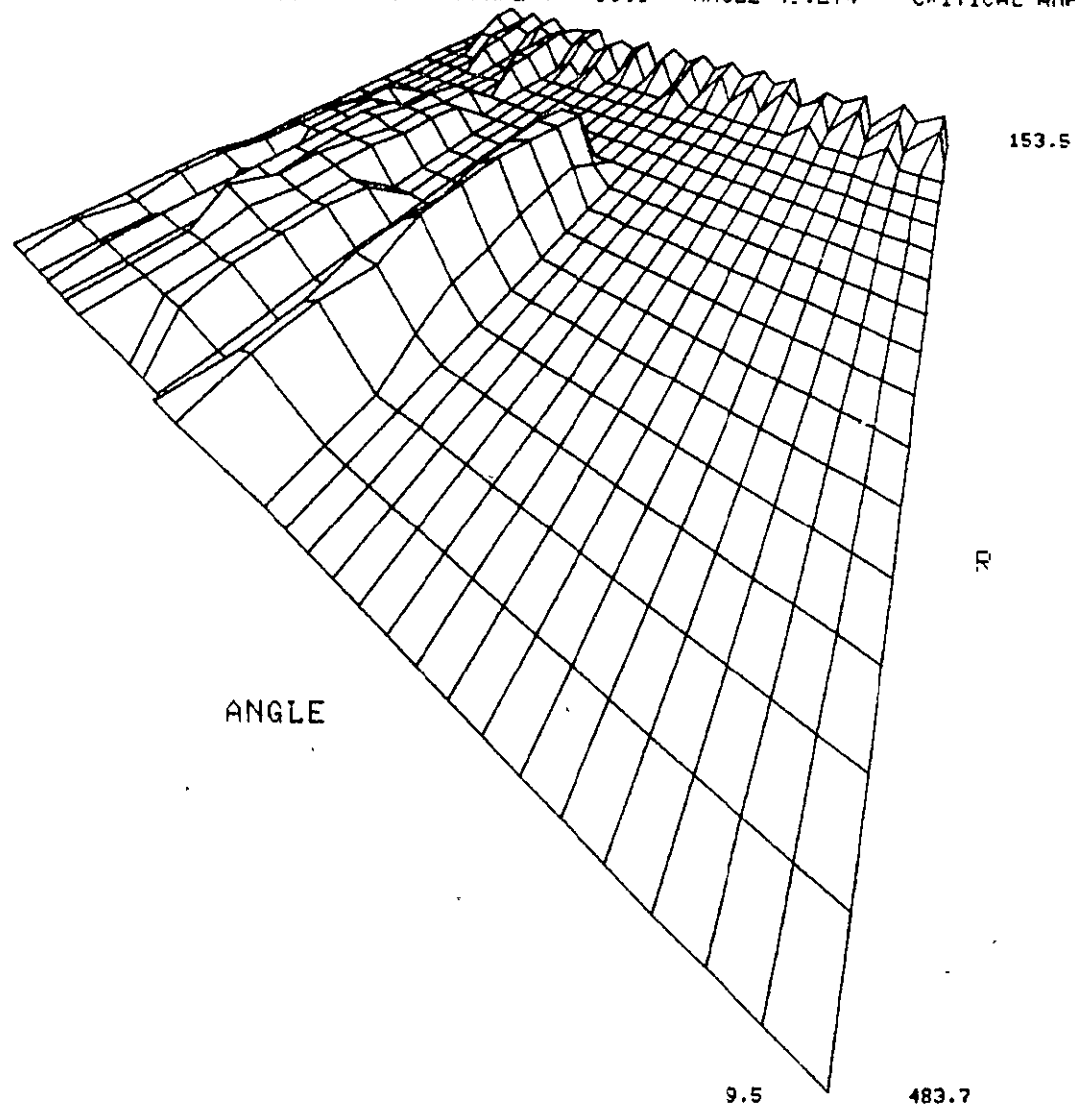
* SCAN # 5 FRAME # 4395 ANGLE 8.950 TO FRAME # 5005 ANGLE 45.274 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM V = 14.0

AVERAGE V = 2.6

	ANGLE
1	9.5
2	9.8
3	10.4
4	11.2
5	12.3
6	13.3
7	14.4
8	15.6
9	16.8
10	18.0
11	19.2
12	20.3
13	21.4
14	22.6
15	23.8
16	24.9
17	26.0
18	27.3
19	28.5
20	29.6
21	30.8
22	32.0
23	33.1
24	34.3
25	35.4
26	36.6
27	37.7
28	38.9
29	40.0
30	41.2
31	42.4
32	43.5
33	44.5
34	45.1



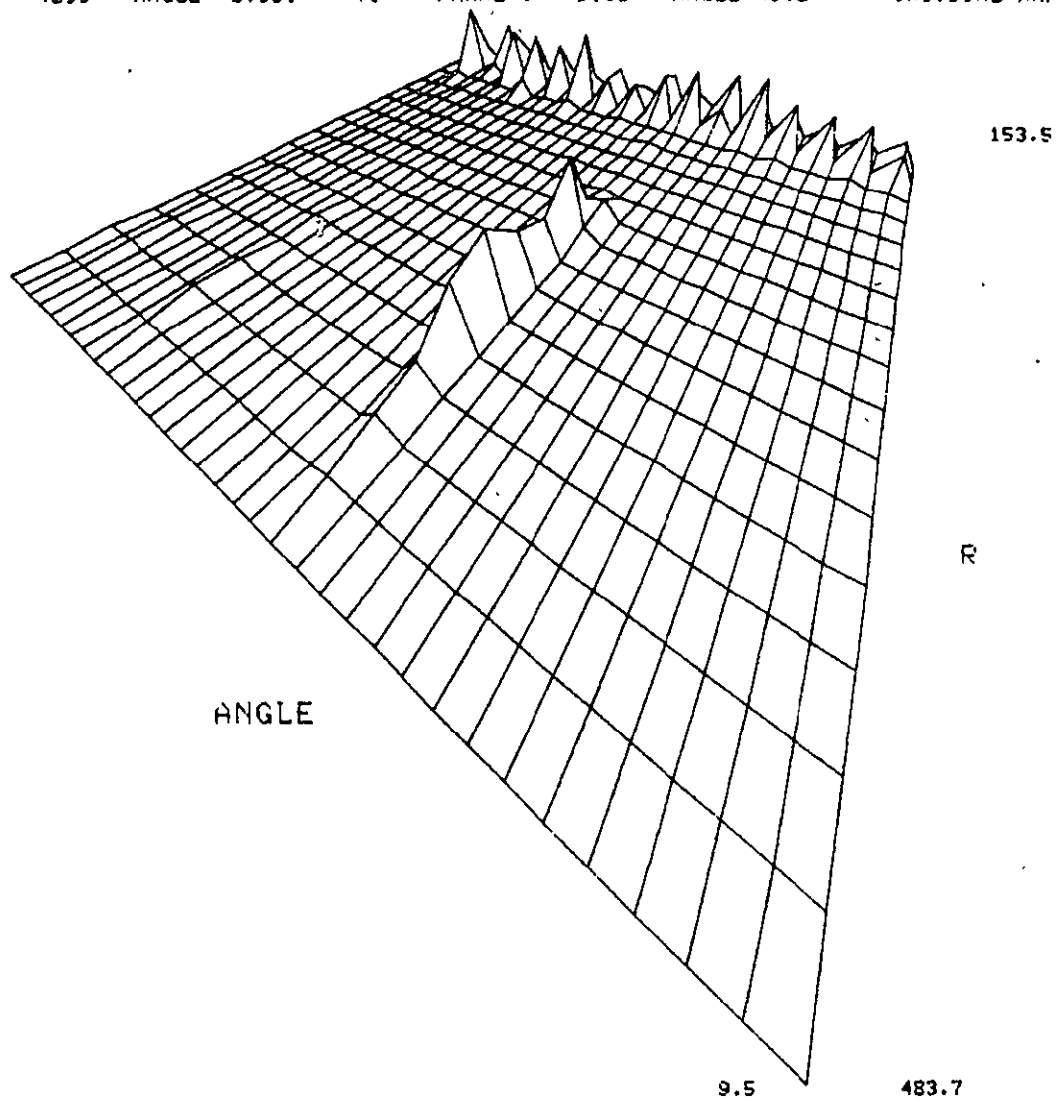
	R
1	153.5
2	172.9
3	192.4
4	211.8
5	231.2
6	250.6
7	270.1
8	289.5
9	308.9
10	328.3
11	347.7
12	367.2
13	386.6
14	406.0
15	425.4
16	444.9
17	483.7

V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 5 FRAME # 4395 ANGLE 8.950 TO FRAME # 5005 ANGLE 45.274 CRITICAL AMP AT CELL 62

OPTION # 31-1



	ANGLE
1	9.5
2	9.8
3	10.4
4	11.2
5	12.3
6	13.3
7	14.4
8	15.6
9	16.8
10	18.0
11	19.2
12	20.3
13	21.4
14	22.6
15	23.8
16	24.9
17	26.0
18	27.3
19	28.5
20	29.6
21	30.8
22	32.0
23	33.1
24	34.3
25	35.4
26	36.6
27	37.7
28	38.9
29	40.0
30	41.2
31	42.4
32	43.5
33	44.5
34	45.1

	R
1	153.5
2	172.9
3	192.4
4	211.8
5	231.2
6	250.6
7	270.1
8	289.5
9	308.9
10	328.3
11	347.7
12	367.2
13	386.6
14	406.0
15	425.4
16	444.9
17	483.7

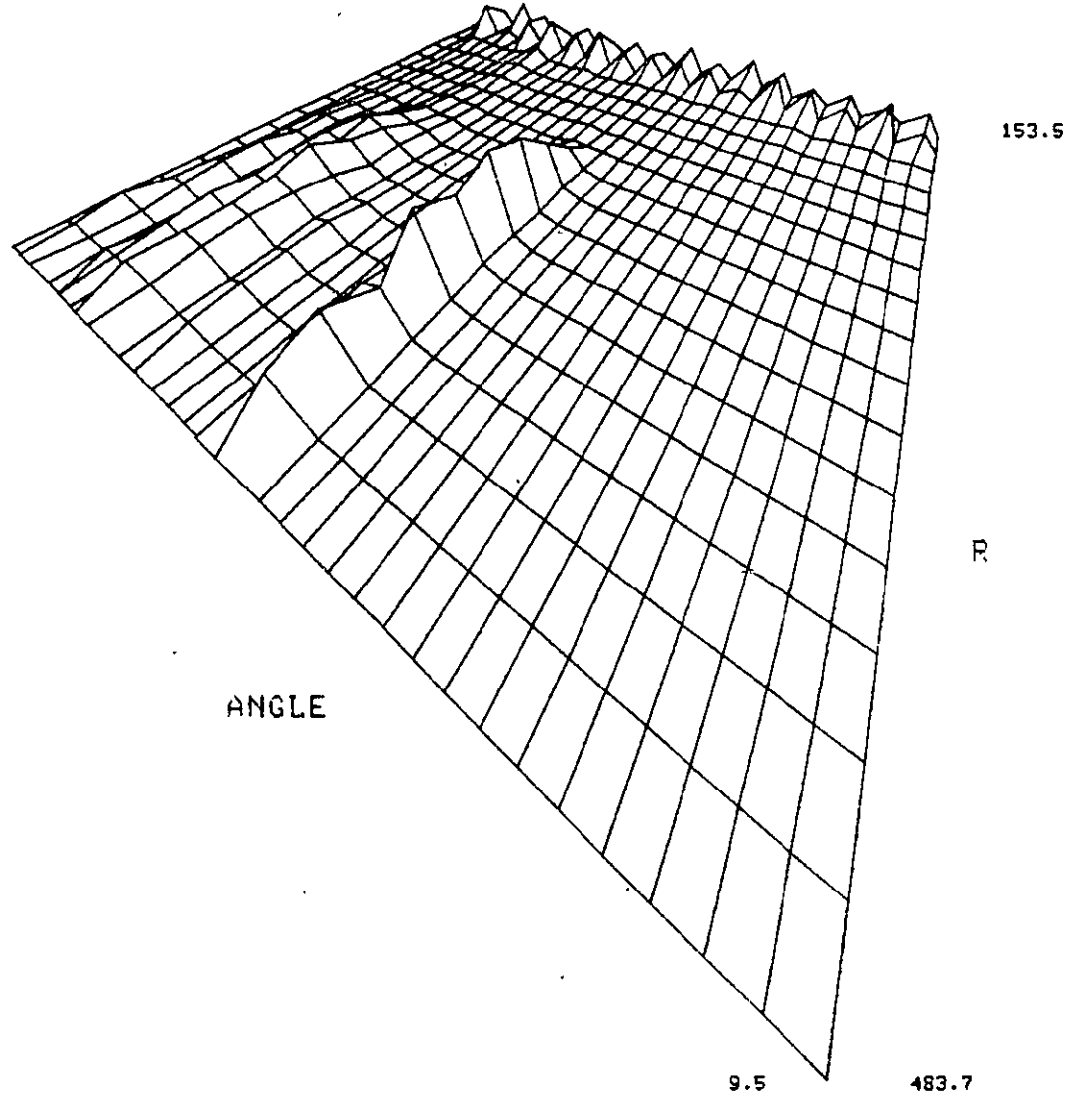
U * Imax, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 5110

* SCAN # 5 FRAME # 4395 ANGLE 8.950 TO FRAME # 5005 ANGLE 45.274 CRITICAL AMP AT CELL 62

OPTION # 31-2



	ANGLE
1	9.5
2	9.8
3	10.4
4	11.2
5	12.3
6	13.3
7	14.4
8	15.6
9	16.8
10	18.0
11	19.2
12	20.3
13	21.4
14	22.6
15	23.8
16	24.9
17	26.0
18	27.3
19	28.5
20	29.6
21	30.8
22	32.0
23	33.1
24	34.3
25	35.4
26	36.6
27	37.7
28	38.9
29	40.0
30	41.2
31	42.4
32	43.5
33	44.5
34	45.1

	R
1	153.5
2	172.9
3	192.4
4	211.8
5	231.2
6	250.6
7	270.1
8	289.5
9	308.9
10	328.3
11	347.7
12	367.2
13	386.6
14	406.0
15	425.4
16	444.9
17	483.7

U * Imax, R, A DISPLAY

ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

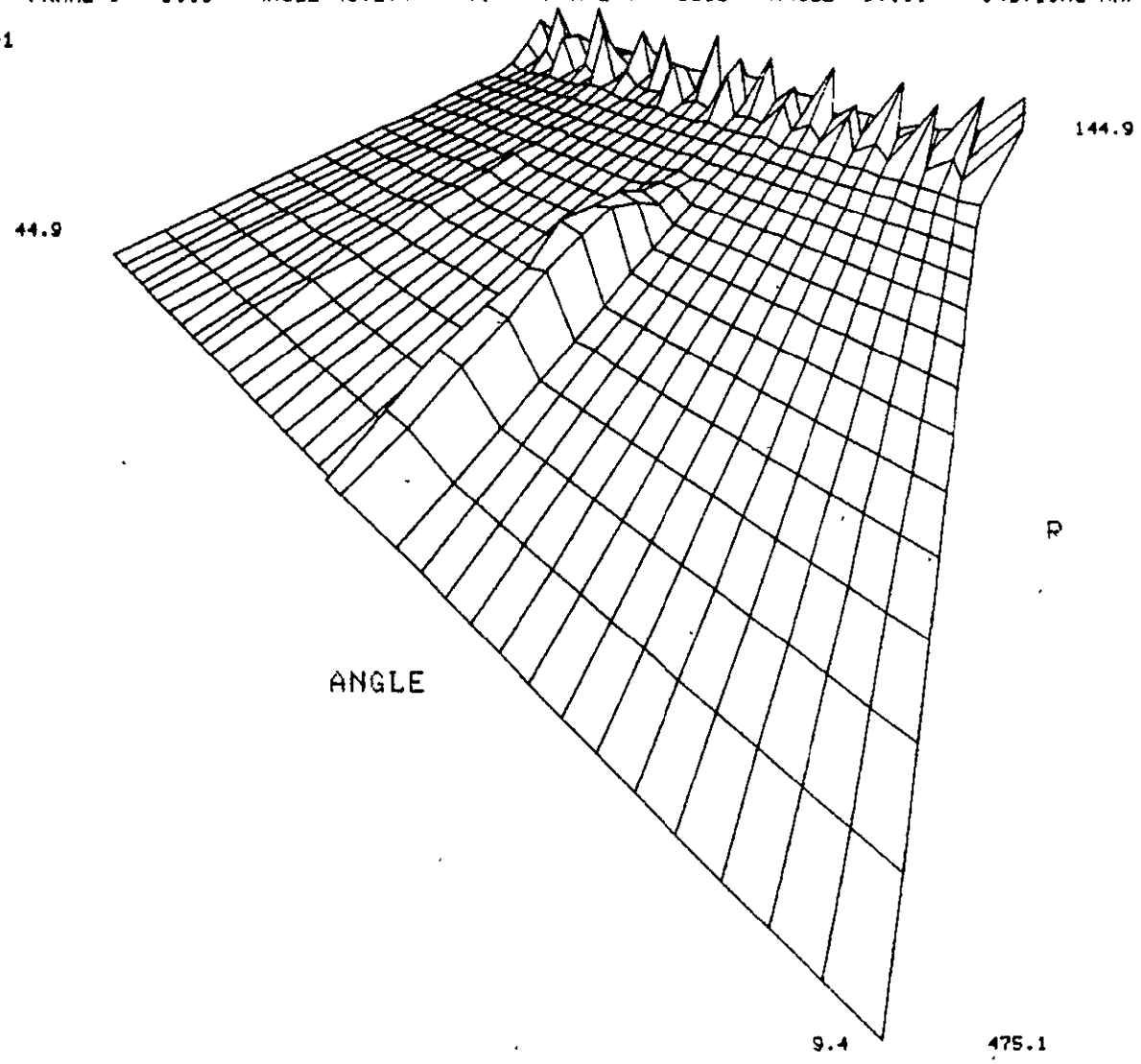
SCAN # 6 FRAME # 5005 ANGLE 45.274 TO FRAME # 5632 ANGLE 9.050 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 35.0

AVERAGE I = 2.5

ANGLE	
1	44.9
2	44.9
3	44.6
4	44.2
5	43.4
6	42.4
7	41.4
8	40.2
9	39.1
10	37.9
11	36.8
12	35.5
13	34.4
14	33.3
15	32.2
16	31.0
17	29.8
18	28.7
19	27.6
20	26.4
21	25.1
22	24.0
23	22.8
24	21.6
25	20.5
26	19.3
27	18.1
28	17.0
29	15.7
30	14.6
31	13.4
32	12.2
33	11.0
34	9.9
35	9.4



	R
1	144.9
2	164.4
3	183.8
4	203.2
5	222.6
6	242.0
7	261.5
8	280.9
9	300.3
10	319.7
11	339.1
12	358.6
13	378.0
14	397.4
15	416.9
16	436.2
17	475.1

I_{MAX}, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL · DAY 238 RUN # 4 TAPE 1 OF 3- 6110

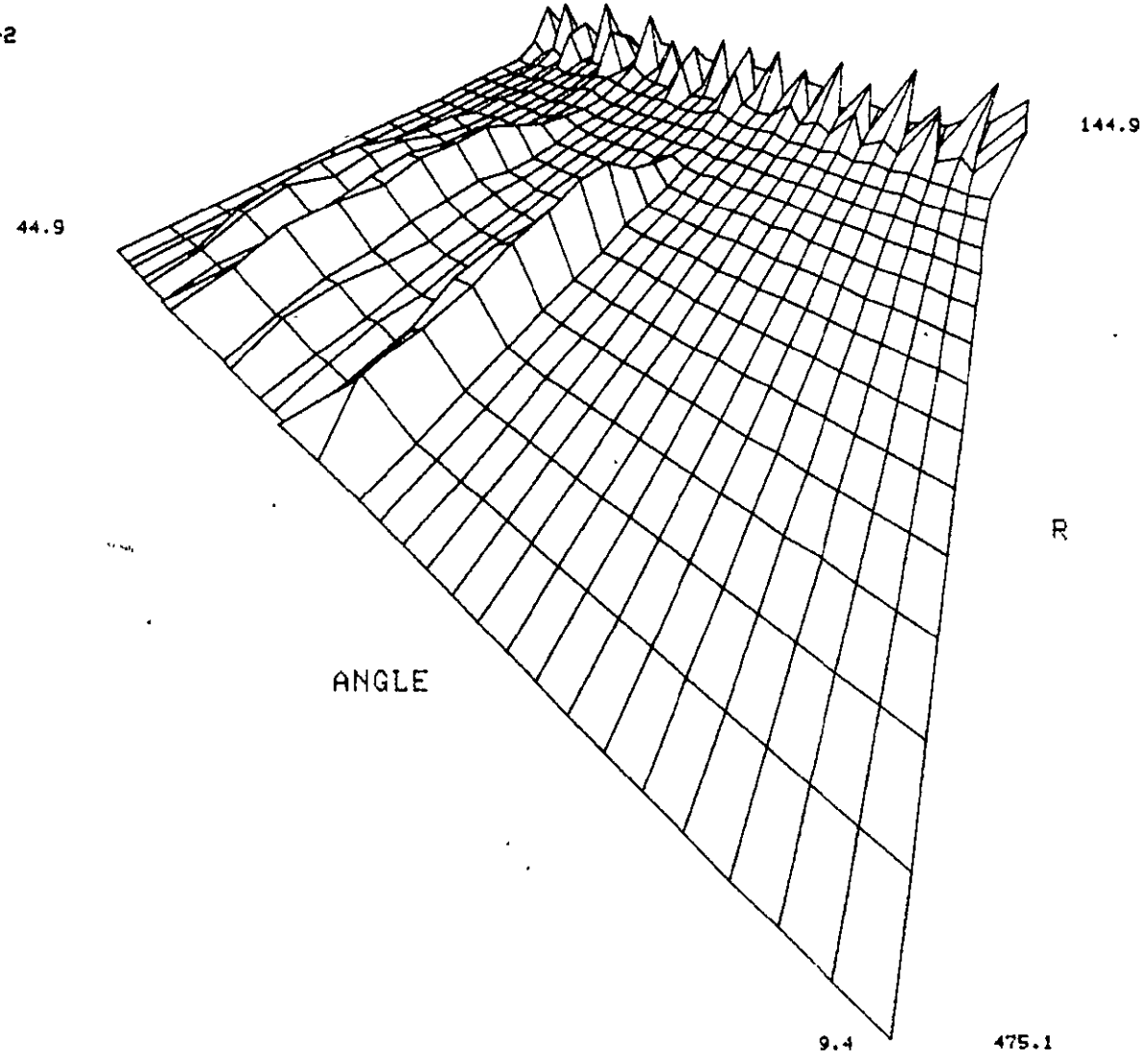
* SCAN # 6 FRAME # 5005 ANGLE 45.274 TO FRAME # 5632 ANGLE 9.050 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 61.0

AVERAGE I = 7.5

ANGLE	
1	44.9
2	44.9
3	44.6
4	44.2
5	43.4
6	42.4
7	41.4
8	40.2
9	39.1
10	37.9
11	36.8
12	35.5
13	34.4
14	33.3
15	32.2
16	31.0
17	29.8
18	28.7
19	27.6
20	26.4
21	25.1
22	24.0
23	22.8
24	21.6
25	20.5
26	19.3
27	18.1
28	17.0
29	15.7
30	14.6
31	13.4
32	12.2
33	11.0
34	9.9
35	9.4



	R
1	144.9
2	164.4
3	183.8
4	203.2
5	222.6
6	242.0
7	261.5
8	280.9
9	300.3
10	319.7
11	339.1
12	358.6
13	378.0
14	397.4
15	416.8
16	436.2
17	475.1

ORIGINAL PAGE IS OF POOR QUALITY

IMAX, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF E- 5110

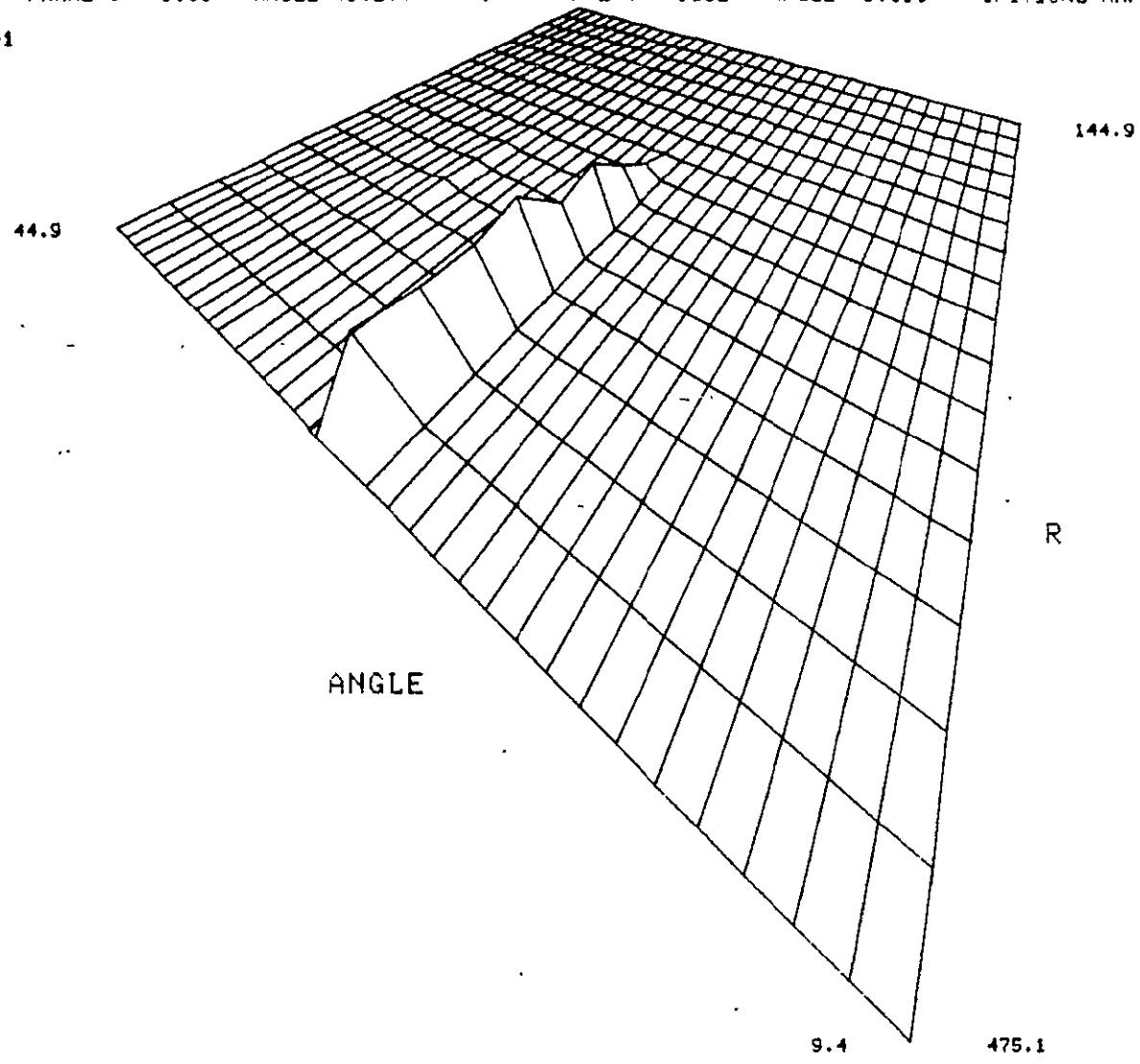
* SCAN # 6 FRAME # 5005 ANGLE 45.274 TO FRAME # 5632 ANGLE 9.050 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 47.0

AVERAGE I = 0.7

ANGLE	
1	44.9
2	44.9
3	44.6
4	44.2
5	43.4
6	42.4
7	41.4
8	40.2
9	39.1
10	37.9
11	36.8
12	35.5
13	34.4
14	33.3
15	32.2
16	31.0
17	29.8
18	28.7
19	27.6
20	26.4
21	25.1
22	24.0
23	22.8
24	21.6
25	20.5
26	19.3
27	18.1
28	17.0
29	15.7
30	14.6
31	13.4
32	12.2
33	11.0
34	9.9
35	9.4



	R
1	144.9
2	164.4
3	183.8
4	203.2
5	222.6
6	242.0
7	261.5
8	280.9
9	300.3
10	319.7
11	339.1
12	358.6
13	378.0
14	397.4
15	416.8
16	436.2
17	475.1

I, R, A DISPLAY AT VELOCITY CELL 62

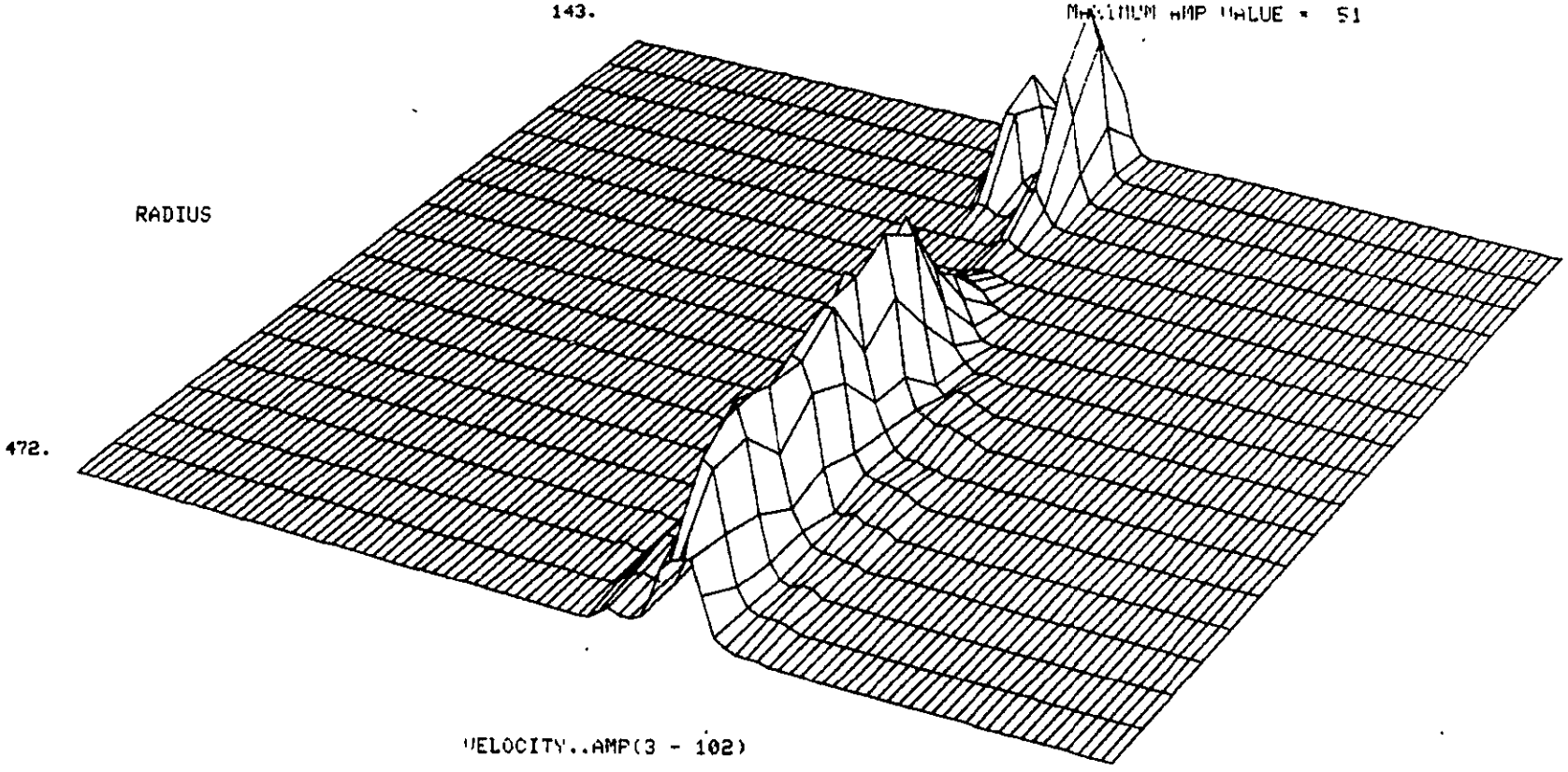
NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 6 FRAME # 5005 ANGLE 45.274 TO FRAME # 5632 ANGLE 9.050 CRITICAL AMP AT CELL 62

FRAME # 5324 TO 5342

ANGLE = 27.58

MAXIMUM AMP VALUE = 51



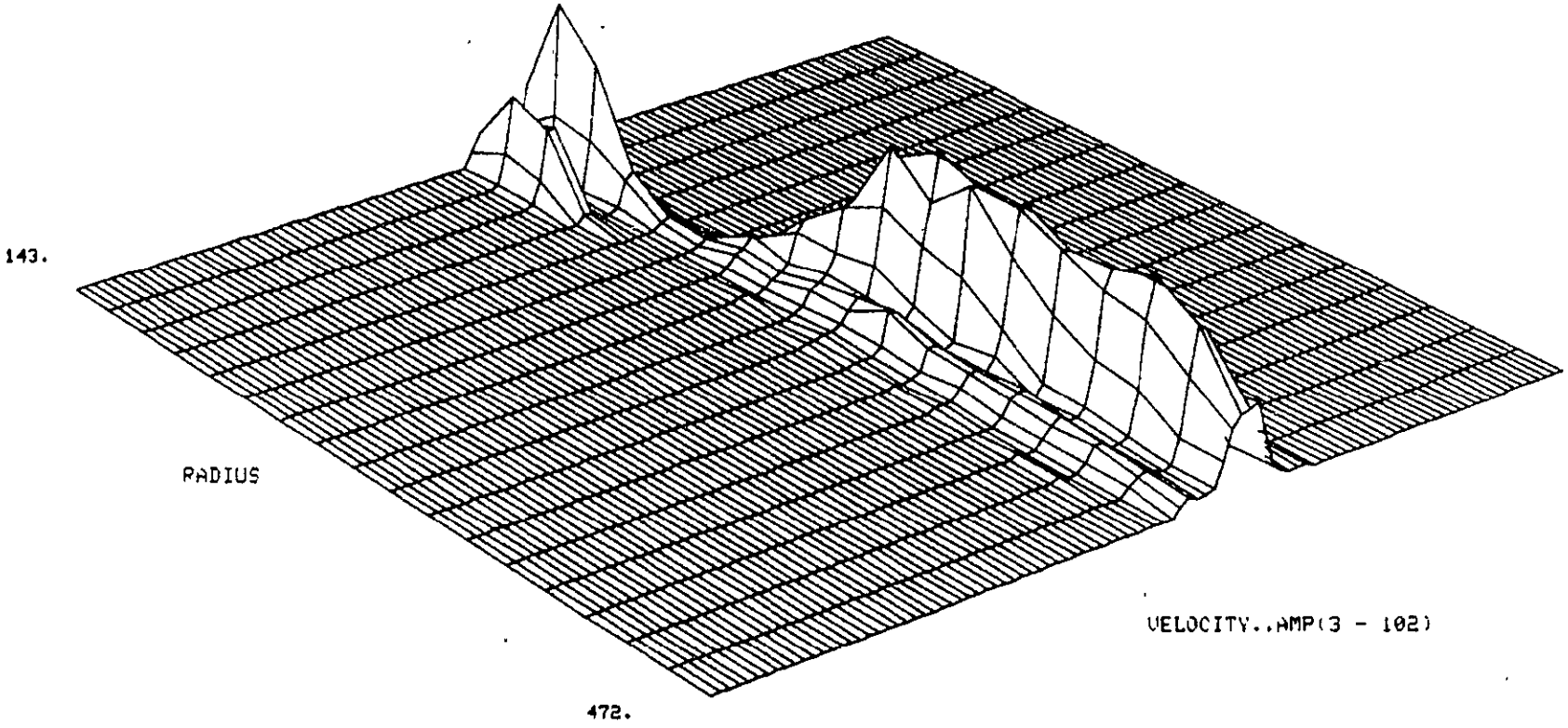
NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 6 FRAME # 5005 ANGLE 45.274 TO FRAME # 5632. ANGLE 9.050 CRITICAL AMP AT CELL 62

FRAME # 5324 TO 5342

ANGLE = 27.58

MAXIMUM AMP VALUE = 51



NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 1 OF 2- 5110

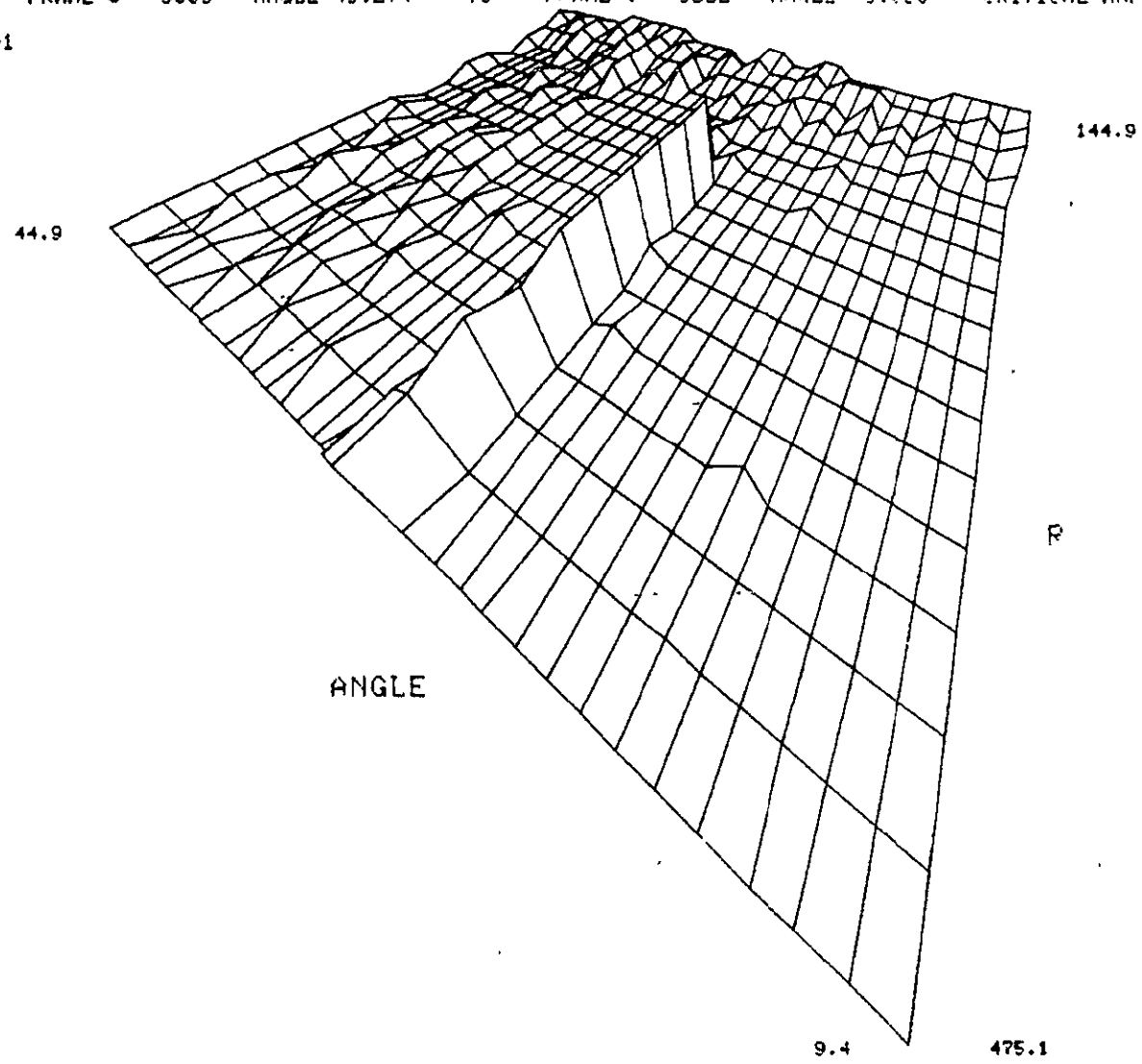
* SCAN # 6 FRAME # 5005 ANGLE 45.274 TO FRAME # 5632 ANGLE 9.050 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 7.0

AVERAGE V = 1.5

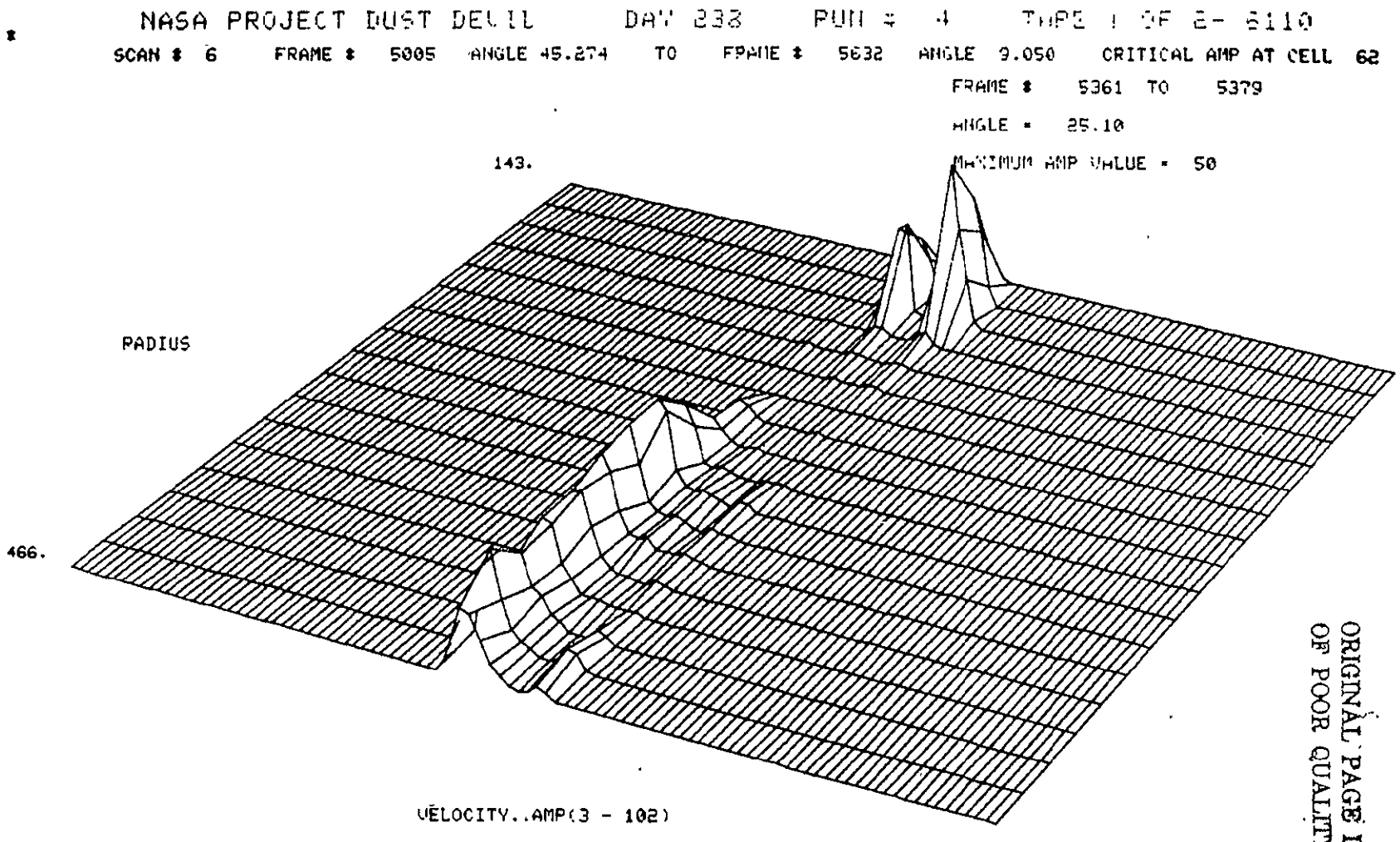
ANGLE	
1	44.9
2	44.9
3	44.6
4	44.2
5	43.4
6	42.4
7	41.4
8	40.2
9	39.1
10	37.9
11	36.8
12	35.5
13	34.4
14	33.3
15	32.2
16	31.0
17	29.8
18	28.7
19	27.6
20	26.4
21	25.1
22	24.0
23	22.8
24	21.6
25	20.5
26	19.3
27	18.1
28	17.0
29	15.7
30	14.6
31	13.4
32	12.2
33	11.0
34	9.9
35	9.4



	R
1	144.9
2	164.4
3	183.8
4	203.2
5	222.6
6	242.0
7	261.5
8	280.9
9	300.3
10	319.7
11	339.1
12	358.6
13	378.0
14	397.4
15	416.8
16	436.2
17	475.1

V, R, A DISPLAY (VELOCITY AT I_{MAX})

ORIGINAL PAGE IS OF POOR QUALITY



ORIGINAL PAGE IS
OF POOR QUALITY

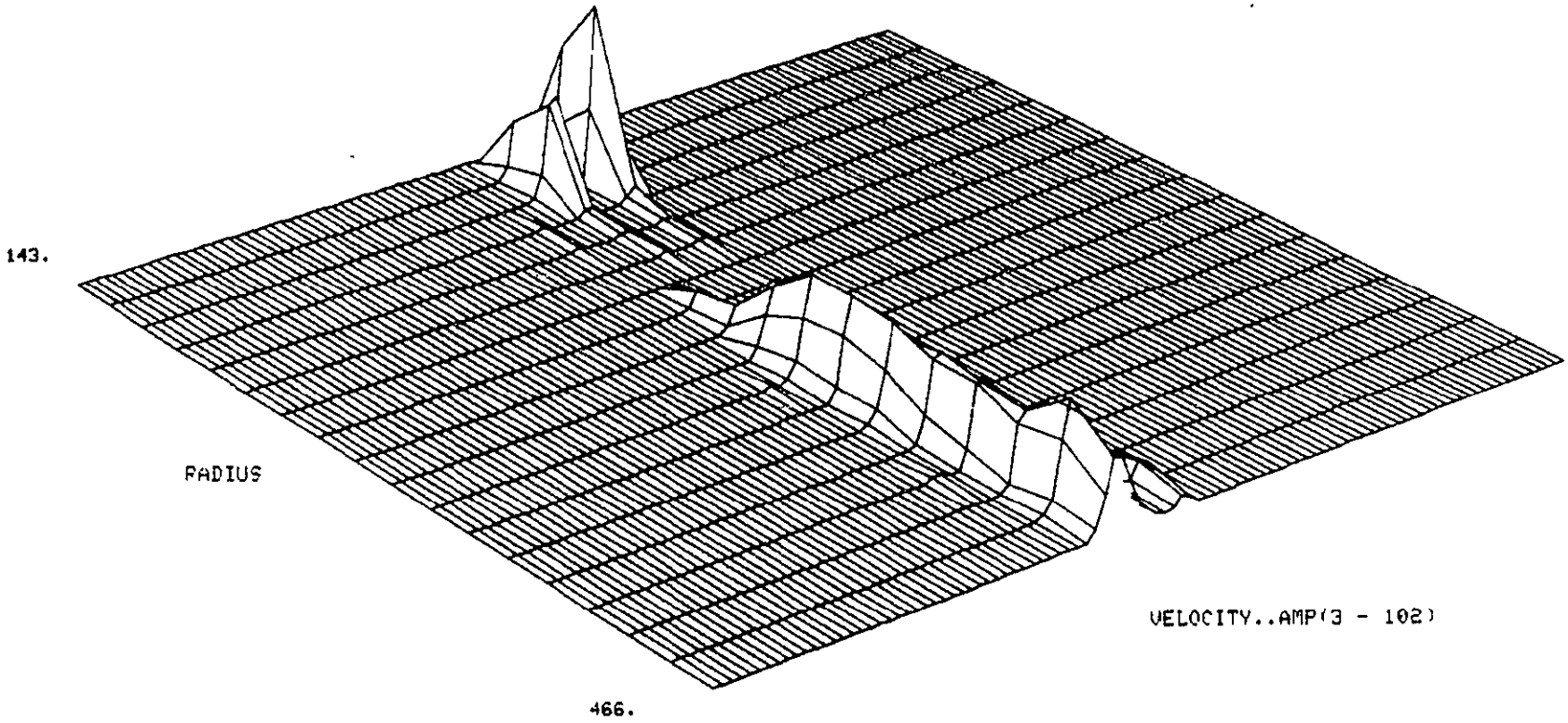
NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 6 FRAME # 5005 ANGLE 45.274 TO FRAME # 5632 ANGLE 9.050 CRITICAL AMP AT CELL 62

FRAME # 5361 TO 5379

ANGLE = 25.10

MAXIMUM AMP VALUE = 50



NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 1 OF 2- 6110

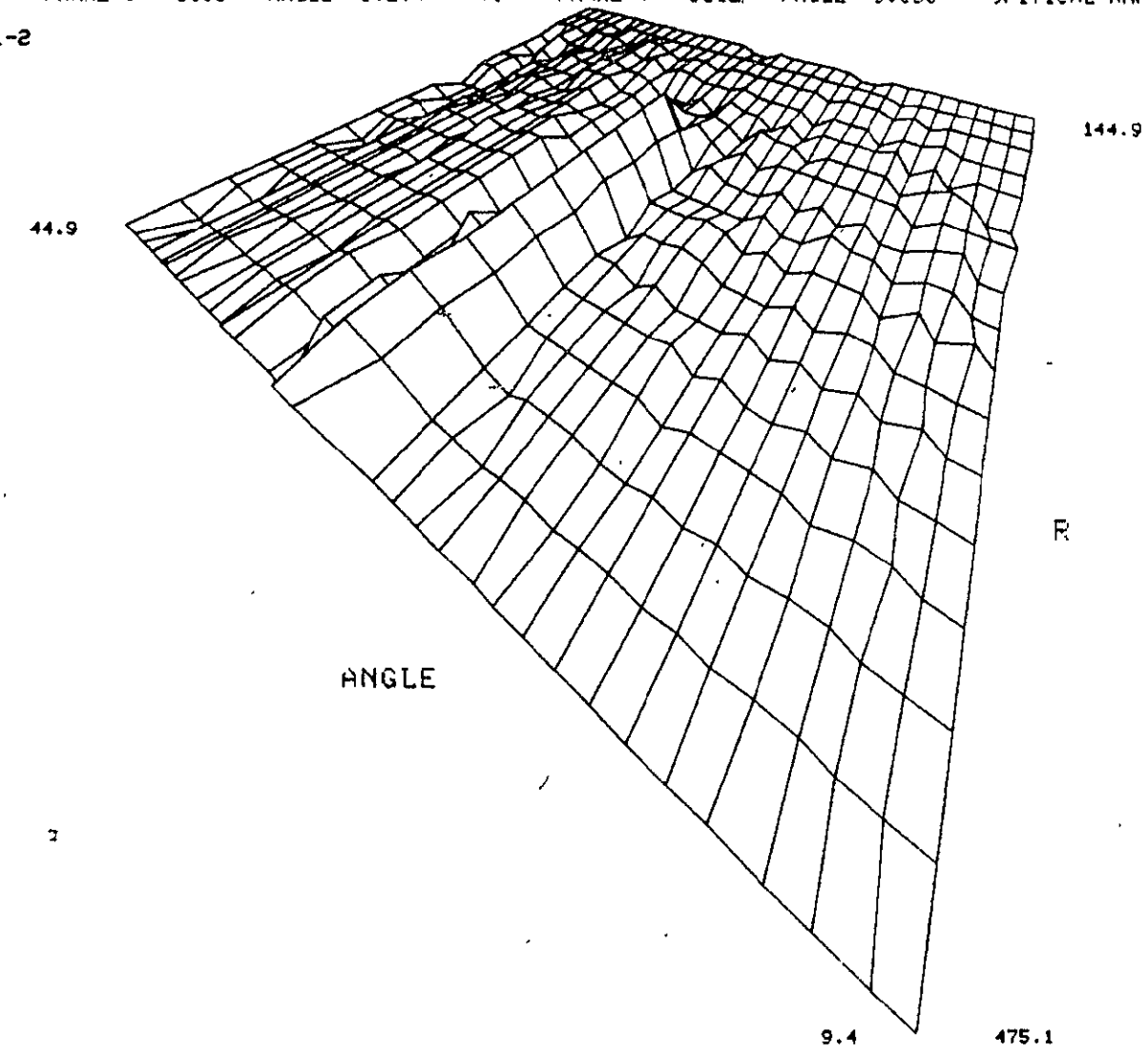
* SCAN # 6 FRAME # 5005 ANGLE 45.274 TO FRAME # 5632 ANGLE 3.050 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM U = 13.0

AVERAGE U = 3.3

ANGLE	
1	44.9
2	44.9
3	44.6
4	44.2
5	43.4
6	42.4
7	41.4
8	40.2
9	39.1
10	37.9
11	36.8
12	35.5
13	34.4
14	33.3
15	32.2
16	31.0
17	29.8
18	28.7
19	27.6
20	26.4
21	25.1
22	24.0
23	22.8
24	21.6
25	20.5
26	19.3
27	18.1
28	17.0
29	15.7
30	14.6
31	13.4
32	12.2
33	11.0
34	9.9
35	9.4



	R
1	144.9
2	164.4
3	183.8
4	203.2
5	222.6
6	242.0
7	261.5
8	280.9
9	300.3
10	319.7
11	339.1
12	358.6
13	378.0
14	397.4
15	416.8
16	436.2
17	475.1

U, R, A DISPLAY (VELOCITY AT I_{max})

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

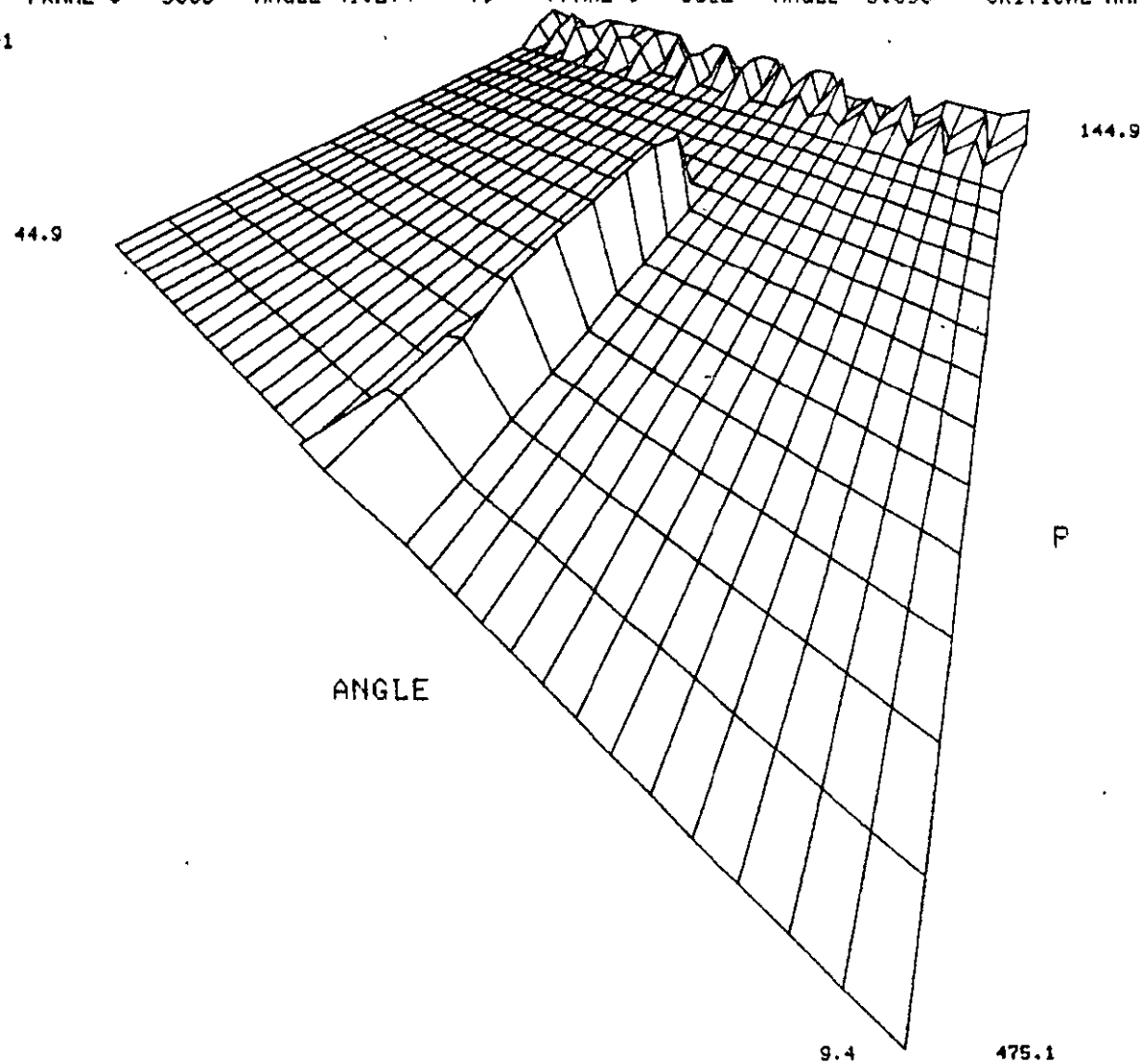
SCAN # 6 FRAME # 5005 ANGLE 45.274 TO FRAME # 5632 ANGLE 9.050 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 8.0

AVERAGE V = 1.4

ANGLE	
1	44.9
2	44.9
3	44.6
4	44.2
5	43.4
6	42.4
7	41.4
8	40.2
9	39.1
10	37.9
11	36.8
12	35.5
13	34.4
14	33.3
15	32.2
16	31.0
17	29.8
18	28.7
19	27.6
20	26.4
21	25.1
22	24.0
23	22.8
24	21.6
25	20.5
26	19.3
27	18.1
28	17.0
29	15.7
30	14.6
31	13.4
32	12.2
33	11.0
34	9.9
35	9.4



R	
1	144.9
2	164.4
3	183.8
4	203.2
5	222.6
6	242.0
7	261.5
8	280.9
9	300.3
10	319.7
11	339.1
12	358.6
13	378.0
14	397.4
15	416.8
16	436.2
17	475.1

ORIGINAL PAGE IS OF POOR QUALITY

Vmax, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

NASA PROJECT DUST DEVIL DAY 236 RUN # 4 TAPE 1 OF 2- 6110

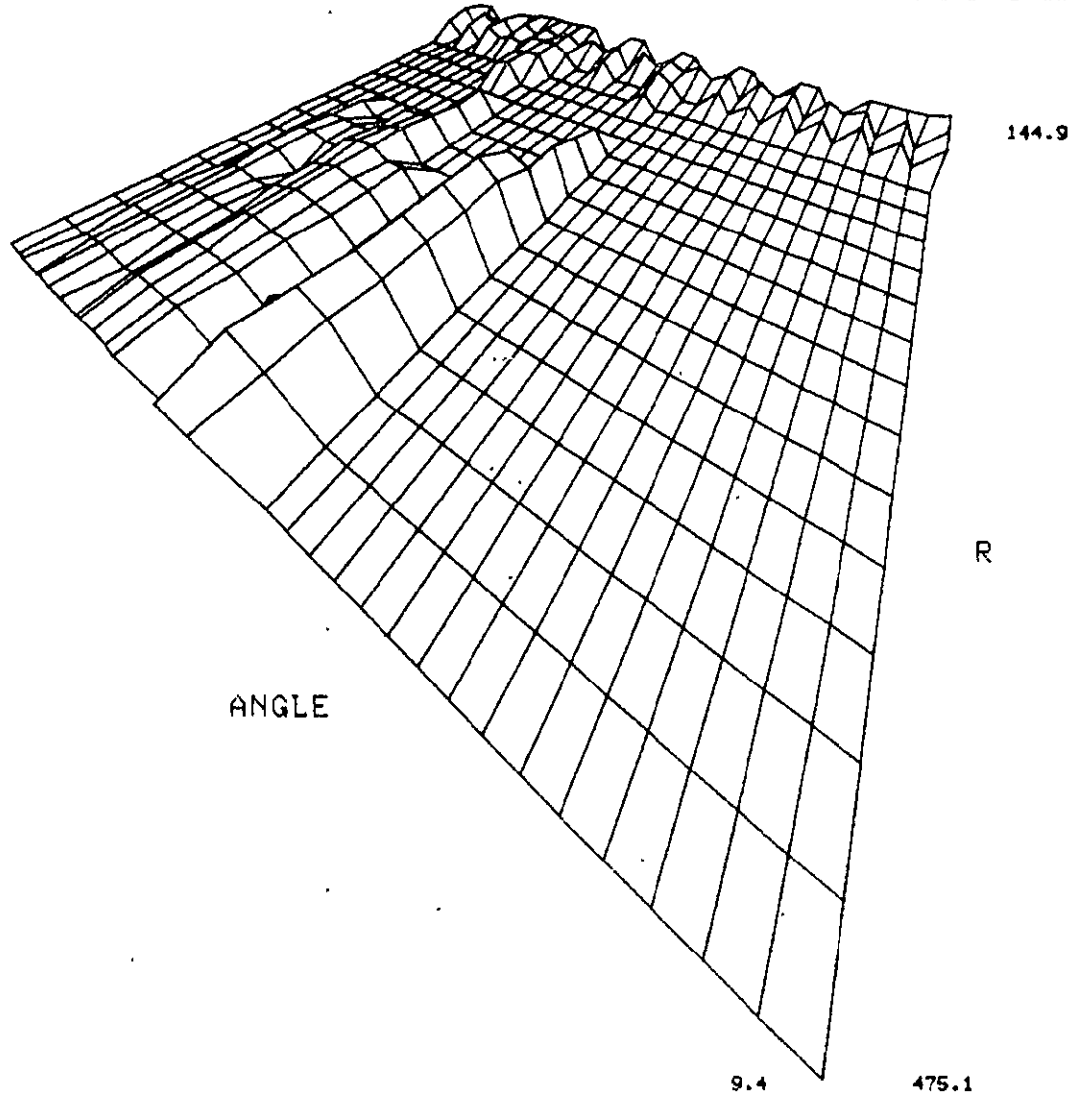
* SCAN # 6 FRAME # 5005 ANGLE 45.274 TO FRAME # 5632 ANGLE 9.050 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM V = 17.0

AVERAGE V = 2.6

ANGLE	
1	44.9
2	44.9
3	44.6
4	44.2
5	43.4
6	42.4
7	41.4
8	40.2
9	39.1
10	37.9
11	36.8
12	35.5
13	34.4
14	33.3
15	32.2
16	31.0
17	29.8
18	28.7
19	27.6
20	26.4
21	25.1
22	24.0
23	22.8
24	21.6
25	20.5
26	19.3
27	18.1
28	17.0
29	15.7
30	14.6
31	13.4
32	12.2
33	11.0
34	9.9
35	9.4



	R
1	144.9
2	164.4
3	183.8
4	203.2
5	222.6
6	242.0
7	261.5
8	280.9
9	300.3
10	319.7
11	339.1
12	353.6
13	378.0
14	397.4
15	416.8
16	436.2
17	475.1

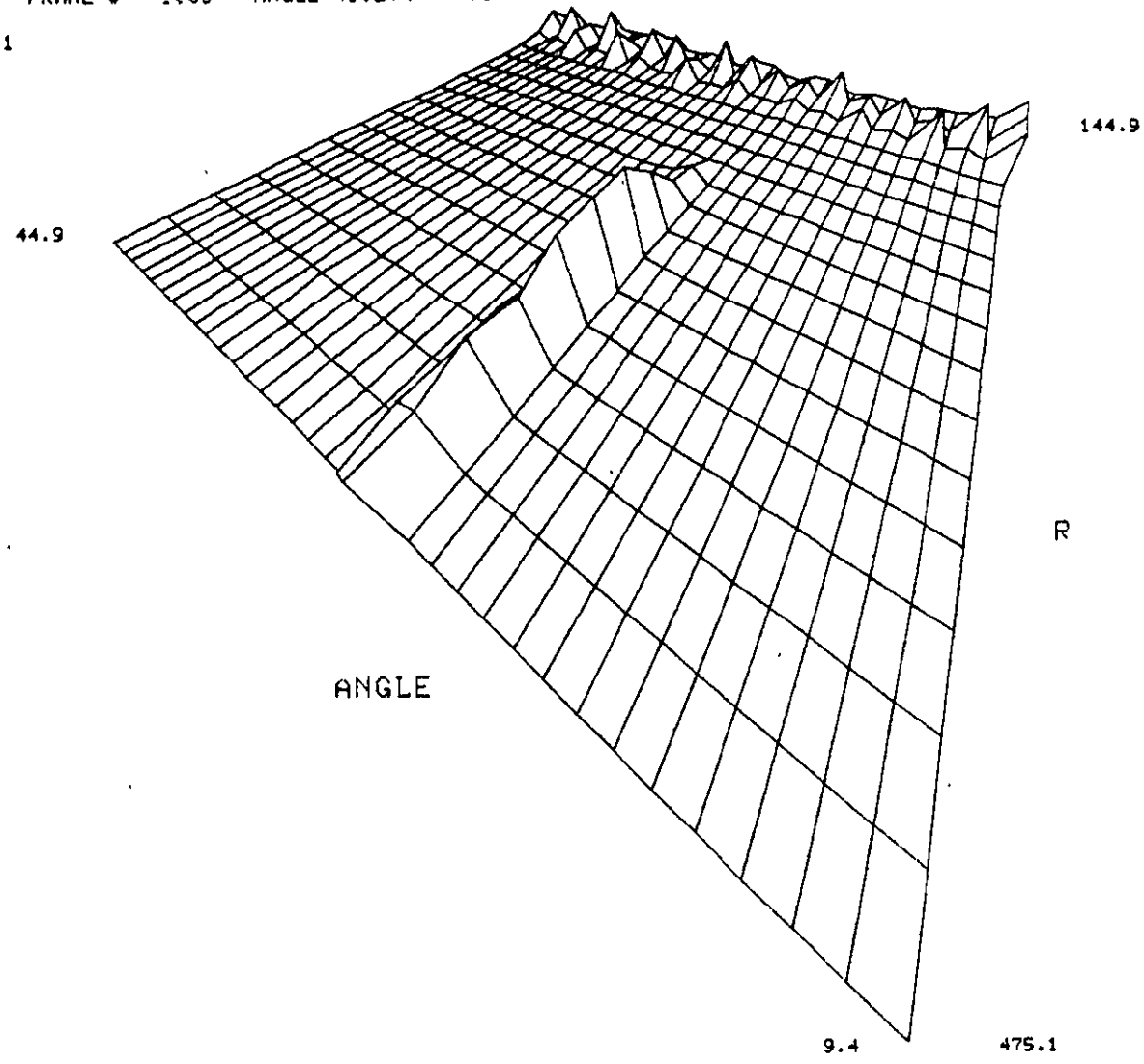
U_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 6 FRAME # 5005 ANGLE 45.274 TO FRAME # 5036 ANGLE 9.050 CRITICAL AMP AT CELL 62

OPTION # 31-1

ANGLE	
1	44.9
2	44.9
3	44.6
4	44.2
5	43.4
6	42.4
7	41.4
8	40.2
9	39.1
10	37.9
11	36.8
12	35.5
13	34.4
14	33.3
15	32.2
16	31.0
17	29.8
18	28.7
19	27.6
20	26.4
21	25.1
22	24.0
23	22.8
24	21.6
25	20.5
26	19.3
27	18.1
28	17.0
29	15.7
30	14.6
31	13.4
32	12.2
33	11.0
34	9.9
35	9.4



	R
1	144.9
2	164.4
3	183.8
4	203.2
5	222.6
6	242.0
7	261.5
8	280.9
9	300.3
10	319.7
11	339.1
12	358.6
13	378.0
14	397.4
15	416.8
16	436.2
17	475.1

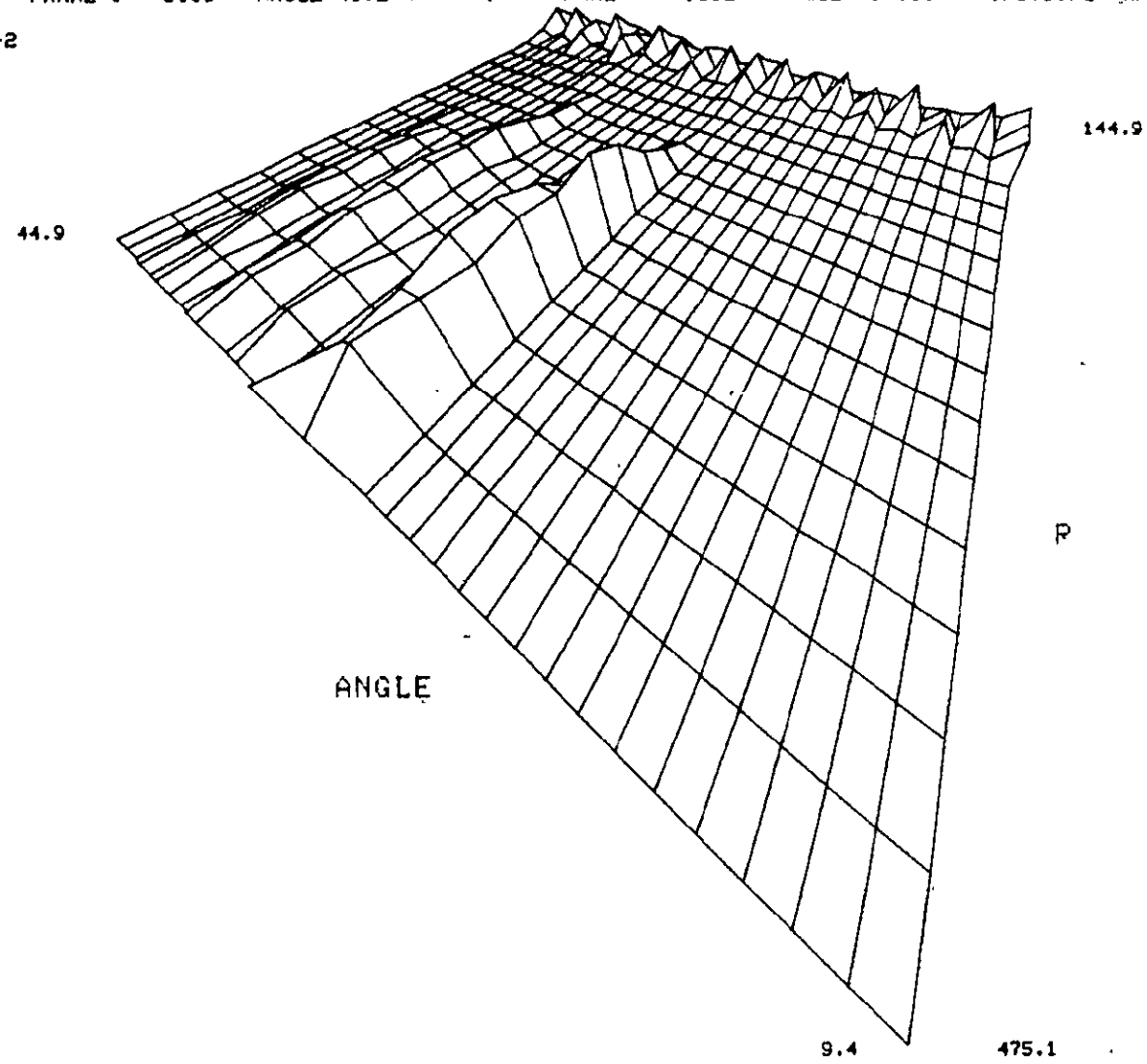
U * Imax, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 5110

SCAN # 6 FRAME # 5005 ANGLE 45.274 TO FRAME # 5632 ANGLE 9.050 CRITICAL AMP AT CELL 62

OPTION # 31-2

ANGLE	
1	44.9
2	44.9
3	44.6
4	44.2
5	43.4
6	42.4
7	41.4
8	40.2
9	39.1
10	37.9
11	36.8
12	35.5
13	34.4
14	33.3
15	32.2
16	31.0
17	29.8
18	28.7
19	27.6
20	26.4
21	25.1
22	24.0
23	22.8
24	21.6
25	20.5
26	19.3
27	18.1
28	17.0
29	15.7
30	14.6
31	13.4
32	12.2
33	11.0
34	9.9
35	9.4



	R
1	144.9
2	164.4
3	183.8
4	203.2
5	222.6
6	242.0
7	261.5
8	280.9
9	300.3
10	319.7
11	339.1
12	358.6
13	378.0
14	397.4
15	416.3
16	436.2
17	475.1

U * IMAX, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 208 RUN # 4 TAPE 1 OF 2- 6110

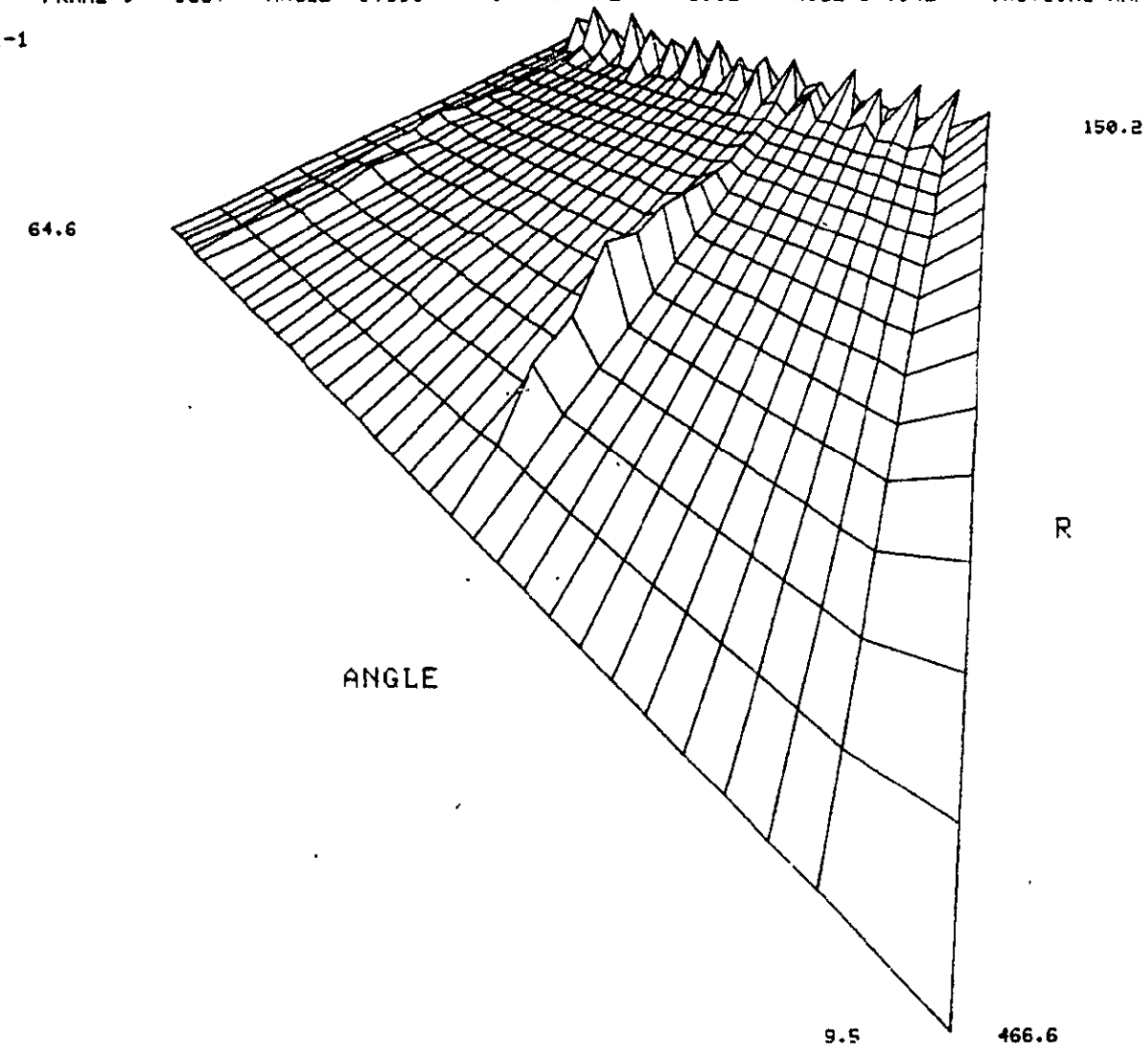
* SCAN # 7 FRAME # 5887 ANGLE 9.358 TO FRAME # 6502 ANGLE 64.942 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 43.0

AVERAGE I = 3.1

	ANGLE
1	9.5
2	10.0
3	10.6
4	11.7
5	13.2
6	14.7
7	16.5
8	18.3
9	20.0
10	21.7
11	23.5
12	25.2
13	27.0
14	28.8
15	30.6
16	32.2
17	34.0
18	35.8
19	37.5
20	39.2
21	40.9
22	42.7
23	44.4
24	46.1
25	47.7
26	49.5
27	51.2
28	53.0
29	54.7
30	56.3
31	58.1
32	59.9
33	61.8
34	63.5
35	64.6



	R
1	150.2
2	168.8
3	187.4
4	206.1
5	224.7
6	243.3
7	261.9
8	280.5
9	299.1
10	317.7
11	336.3
12	354.9
13	373.6
14	392.2
15	410.8
16	429.4
17	466.6

I_{MAX}, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

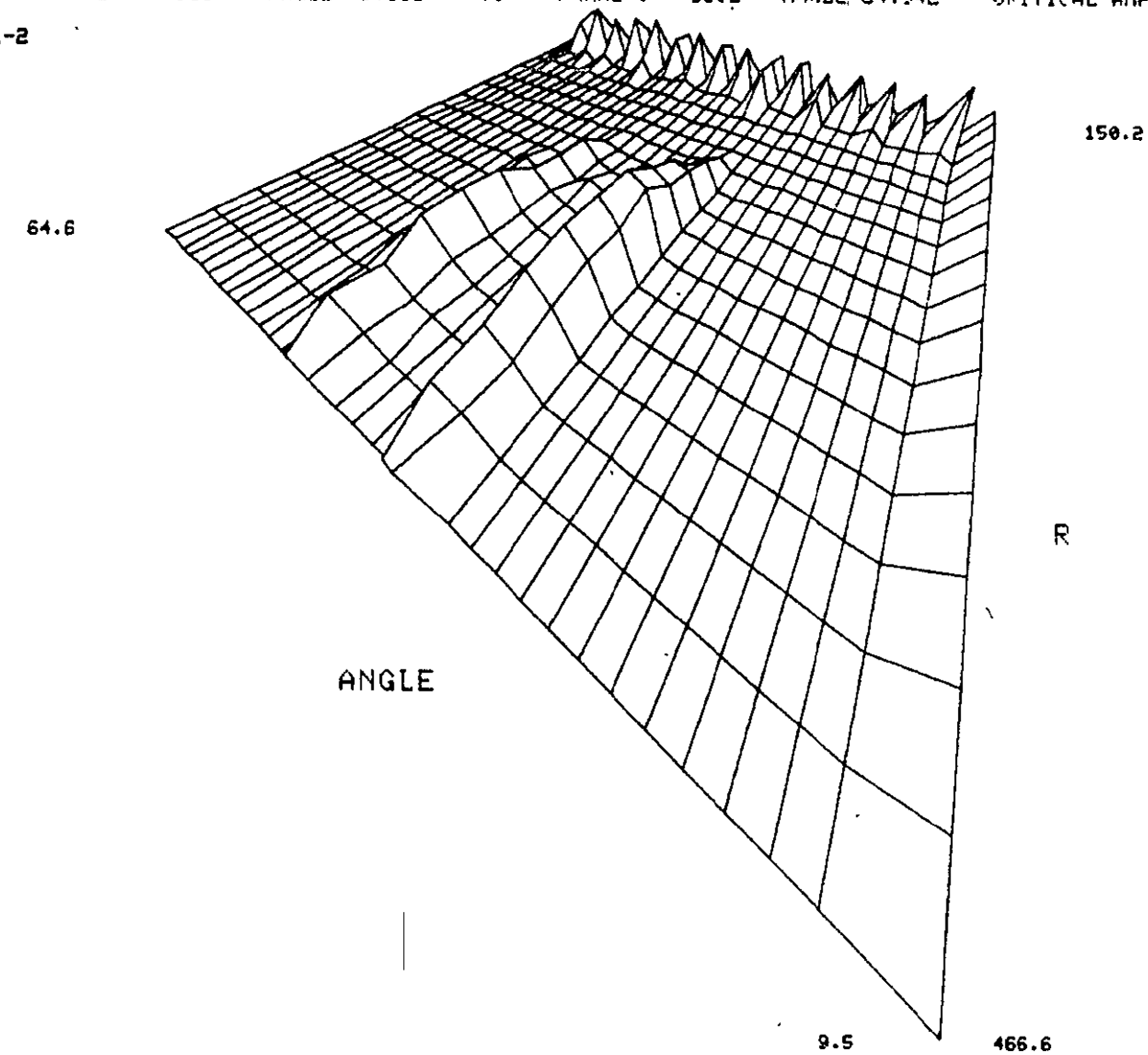
* SCAN # 7 FRAME # 5887 ANGLE 9.353 TO FRAME # 6502 ANGLE 64.942 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 66.0

AVERAGE I = 7.3

ANGLE	
1	9.5
2	10.0
3	10.6
4	11.7
5	13.2
6	14.7
7	16.5
8	18.3
9	20.0
10	21.7
11	23.5
12	25.2
13	27.0
14	28.8
15	30.6
16	32.2
17	34.0
18	35.8
19	37.5
20	39.2
21	40.9
22	42.7
23	44.4
24	46.1
25	47.7
26	49.5
27	51.2
28	53.0
29	54.7
30	56.3
31	58.1
32	59.9
33	61.8
34	63.5
35	64.6



	R
1	150.2
2	168.8
3	187.4
4	206.1
5	224.7
6	243.3
7	261.9
8	280.5
9	299.1
10	317.7
11	336.3
12	354.9
13	373.6
14	392.2
15	410.8
16	429.4
17	466.6

I_{MAX}, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

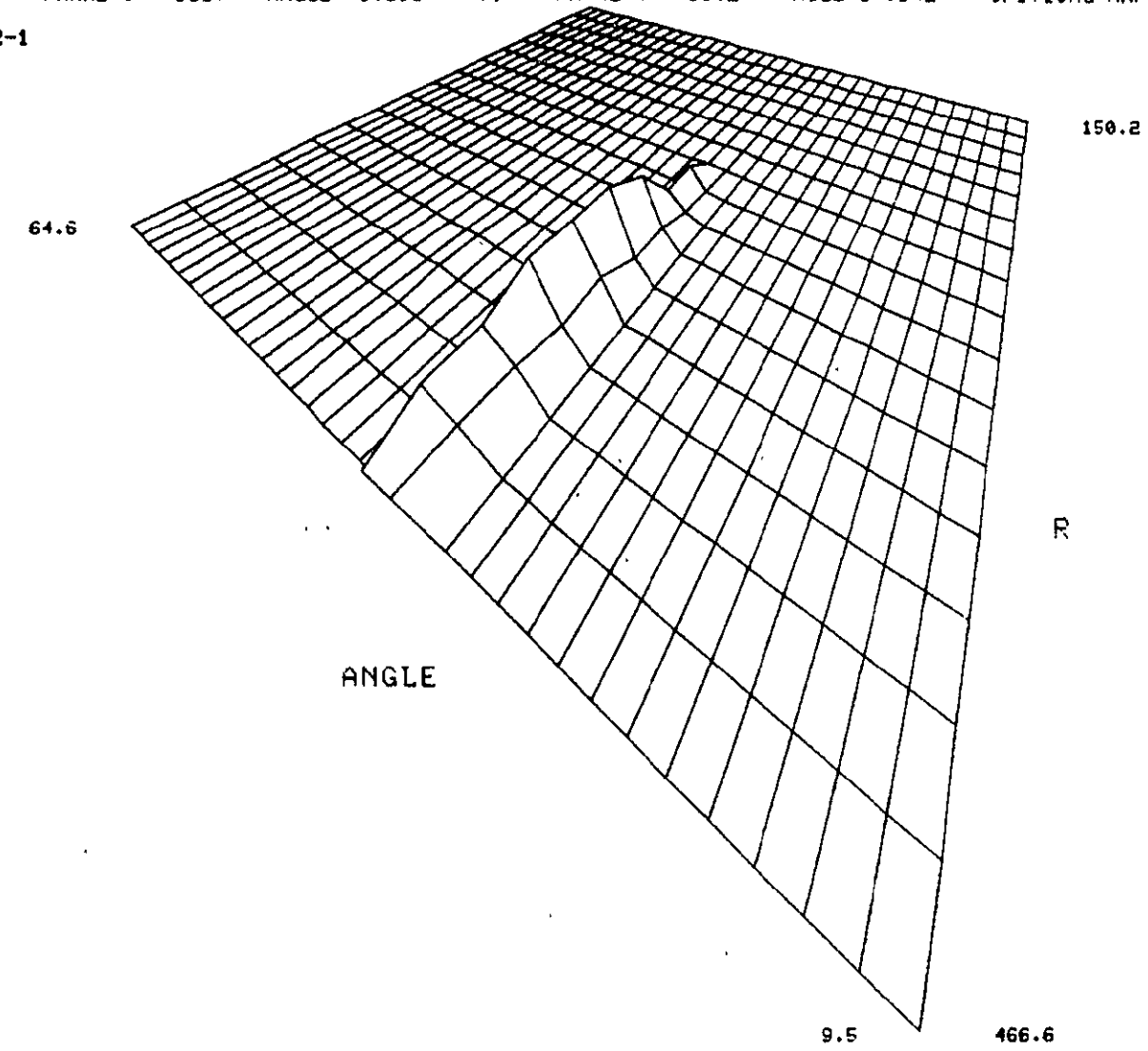
* SCAN # 7 FRAME # 5887 ANGLE 9.353 TO FRAME # 6502 ANGLE 64.942 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 54.0

AVERAGE I = 0.9

ANGLE	
1	9.5
2	10.0
3	10.6
4	11.7
5	13.2
6	14.7
7	16.5
8	18.3
9	20.0
10	21.7
11	23.5
12	25.2
13	27.0
14	28.8
15	30.6
16	32.2
17	34.0
18	35.8
19	37.5
20	39.2
21	40.9
22	42.7
23	44.4
24	46.1
25	47.7
26	49.5
27	51.2
28	53.0
29	54.7
30	56.3
31	58.1
32	59.9
33	61.8
34	63.5
35	64.6



	R
1	150.2
2	168.8
3	187.4
4	206.1
5	224.7
6	243.3
7	261.9
8	280.5
9	299.1
10	317.7
11	336.3
12	354.9
13	373.6
14	392.2
15	410.8
16	429.4
17	466.6

I, R, A DISPLAY AT VELOCITY CELL 62

ORIGINAL PAGE IS
OF POOR QUALITY

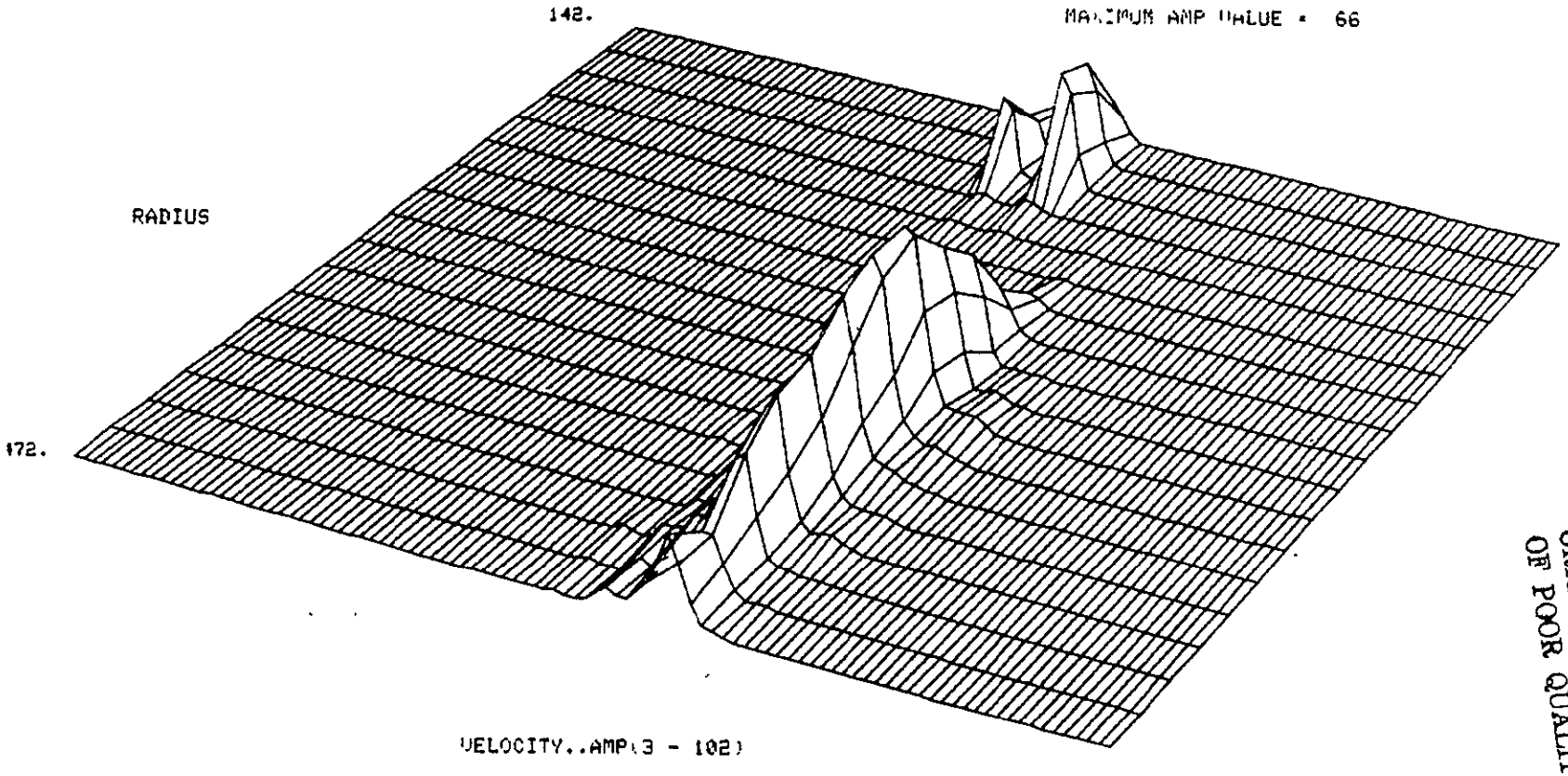
NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 7 FRAME # 5887 ANGLE 9.358 TO FRAME # 6502 ANGLE 64.942 CRITICAL AMP AT CELL 62

FRAME # 6126 TO 6144

ANGLE = 30.62

MAXIMUM AMP VALUE = 66



ORIGINAL PAGE IS
OF POOR QUALITY

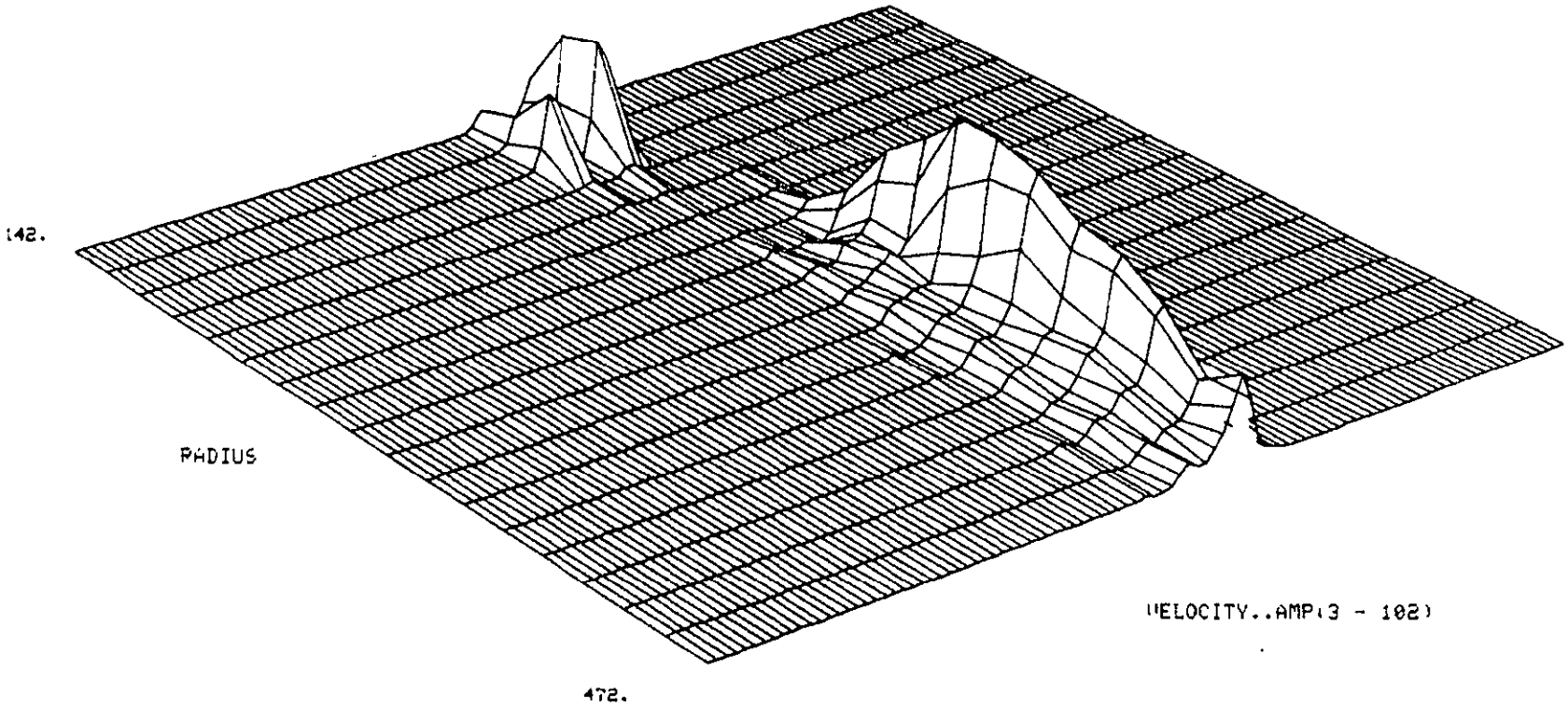
NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 7 FRAME # 5387 ANGLE 9.358 TO FRAME # 6502 ANGLE 64.942 CRITICAL AMP AT CELL 62

FRAME # 6126 TO 6144

ANGLE = 30.62

MAXIMUM AMP VALUE = 66



NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

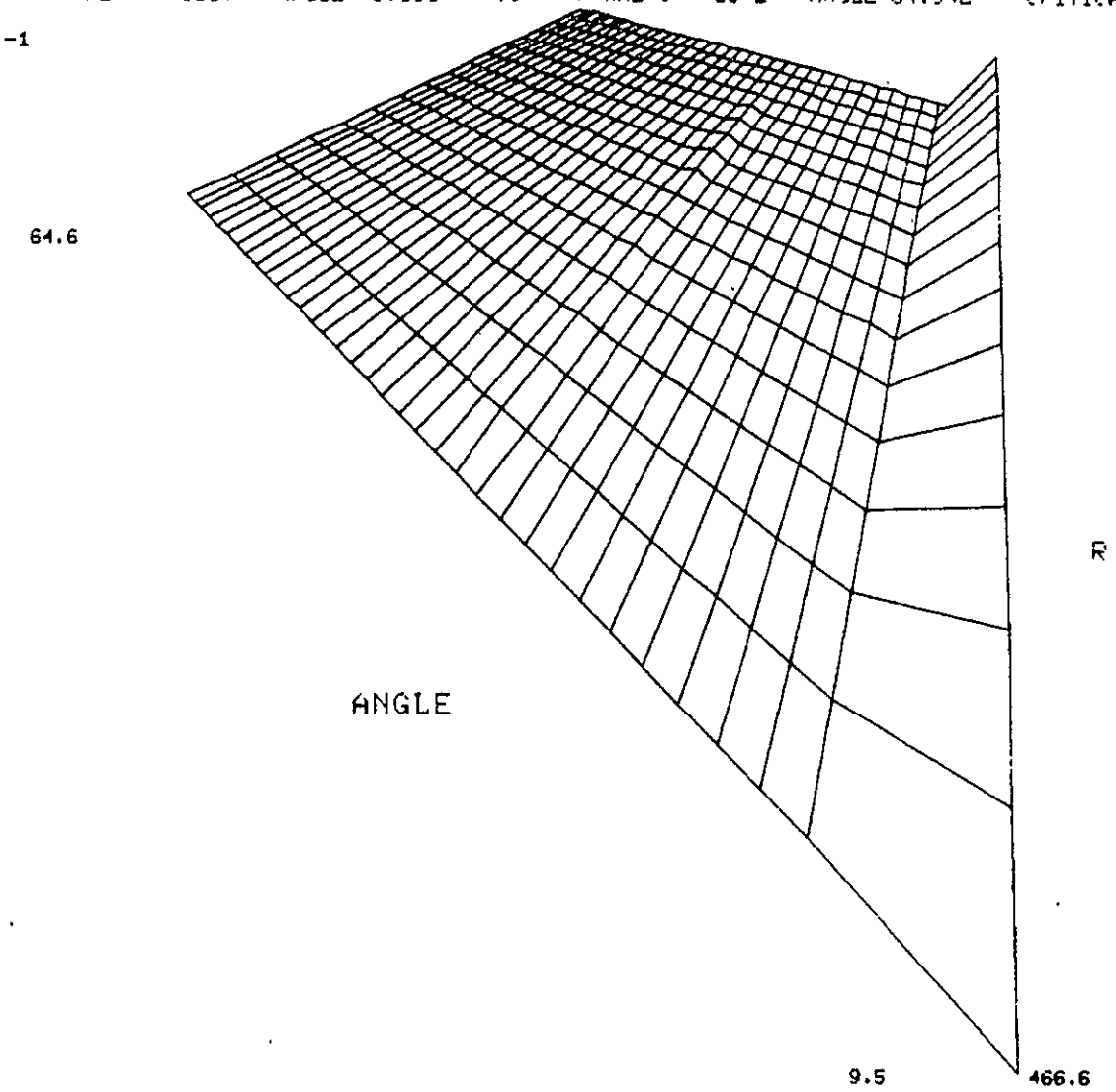
* SCAN # 7 FRAME # 5387 ANGLE 9.352 TO FRAME # 6502 ANGLE 64.942 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 55.0

AVERAGE V = 3.0

ANGLE	
1	9.5
2	10.0
3	10.6
4	11.7
5	13.2
6	14.7
7	16.5
8	18.3
9	20.0
10	21.7
11	23.5
12	25.2
13	27.0
14	28.8
15	30.6
16	32.2
17	34.0
18	35.8
19	37.5
20	39.2
21	40.9
22	42.7
23	44.4
24	46.1
25	47.7
26	49.5
27	51.2
28	53.0
29	54.7
30	56.3
31	58.1
32	59.9
33	61.8
34	63.5
35	64.6



	R
1	150.2
2	168.8
3	137.4
4	206.1
5	224.7
6	243.3
7	261.9
8	280.5
9	299.1
10	317.7
11	336.3
12	354.9
13	373.6
14	392.2
15	410.8
16	429.4
17	466.6

U, R, A DISPLAY (VELOCITY AT I_{MAX})

ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

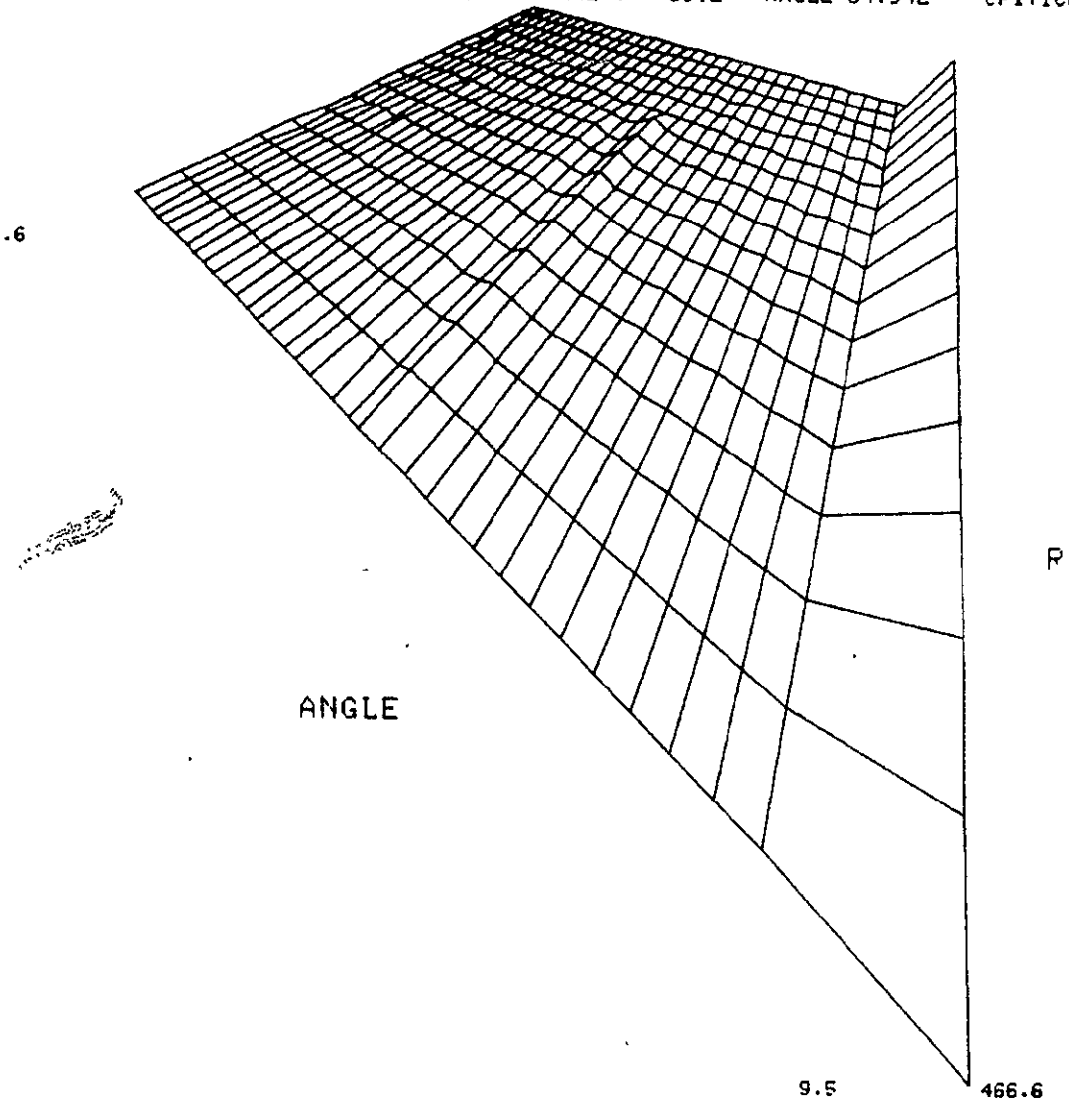
SCAN # 7 FRAME # 5887 ANGLE 9.350 TO FRAME # 6502 ANGLE 64.942 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V = 56.0

AVERAGE V = 4.7

	ANGLE
1	9.5
2	10.0
3	10.6
4	11.7
5	13.2
6	14.7
7	16.5
8	18.3
9	20.0
10	21.7
11	23.5
12	25.2
13	27.0
14	28.8
15	30.6
16	32.2
17	34.0
18	35.8
19	37.5
20	39.2
21	40.9
22	42.7
23	44.4
24	46.1
25	47.7
26	49.5
27	51.2
28	53.0
29	54.7
30	56.3
31	58.1
32	59.9
33	61.8
34	63.5
35	64.6



	R
1	150.2
2	168.8
3	187.4
4	206.1
5	224.7
6	243.3
7	261.9
8	280.5
9	299.1
10	317.7
11	336.3
12	354.9
13	373.6
14	392.2
15	410.8
16	429.4
17	466.6

ORIGINAL PAGE IS OF POOR QUALITY

U, R, A DISPLAY (VELOCITY AT IMAX)

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 3- 6110

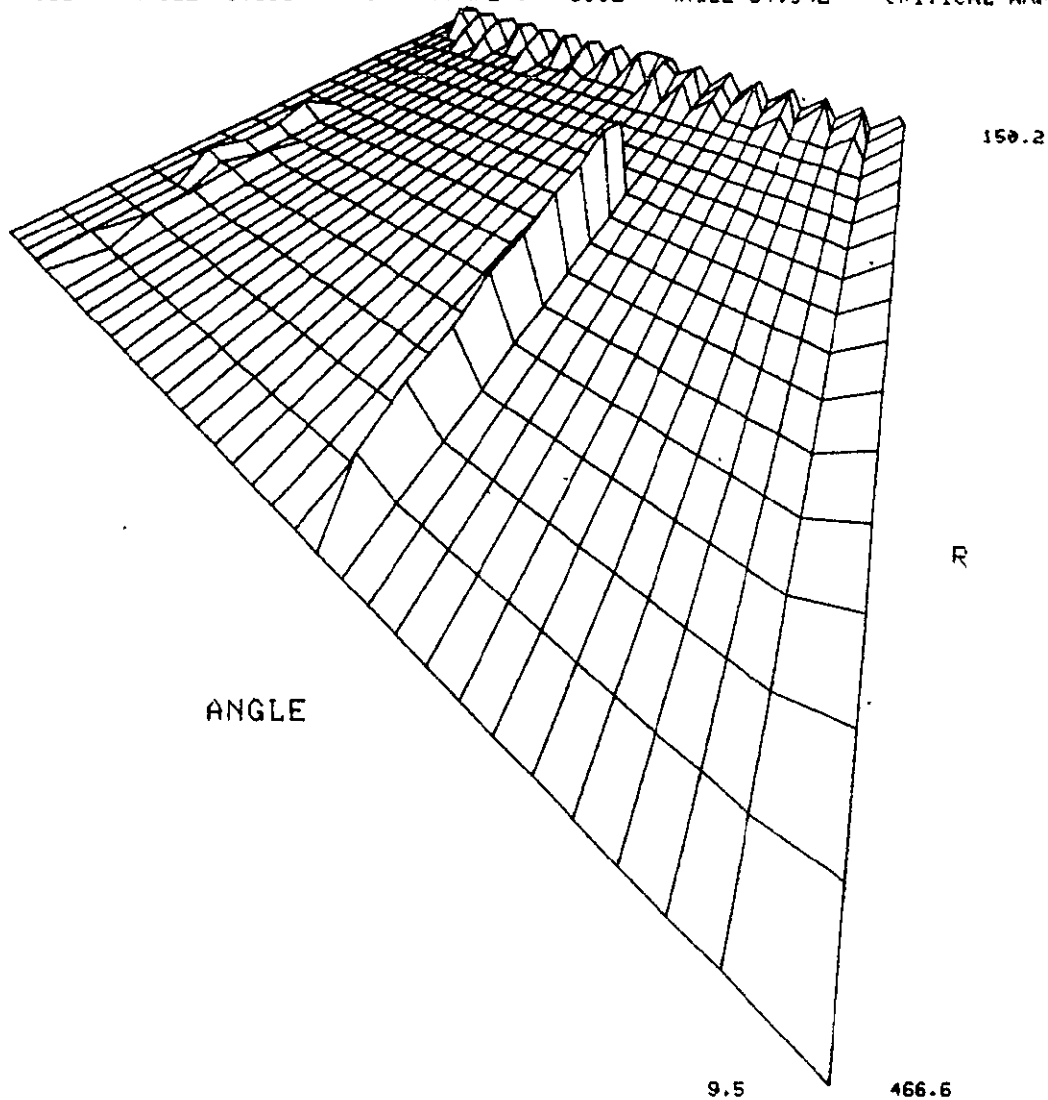
* SCAN # 7 FRAME # 5887 ANGLE 9.358 TO FRAME # 6502 ANGLE 64.942 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 9.0

AVERAGE V = 1.4

ANGLE	
1	9.5
2	10.0
3	10.6
4	11.7
5	13.2
6	14.7
7	16.5
8	18.3
9	20.0
10	21.7
11	23.5
12	25.2
13	27.0
14	28.8
15	30.6
16	32.2
17	34.0
18	35.8
19	37.5
20	39.2
21	40.9
22	42.7
23	44.4
24	46.1
25	47.7
26	49.5
27	51.2
28	53.0
29	54.7
30	56.3
31	58.1
32	59.9
33	61.8
34	63.5
35	64.6



	R
1	150.2
2	168.8
3	187.4
4	206.1
5	224.7
6	243.3
7	261.9
8	280.5
9	299.1
10	317.7
11	336.3
12	354.9
13	373.6
14	392.2
15	410.9
16	429.4
17	466.6

V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

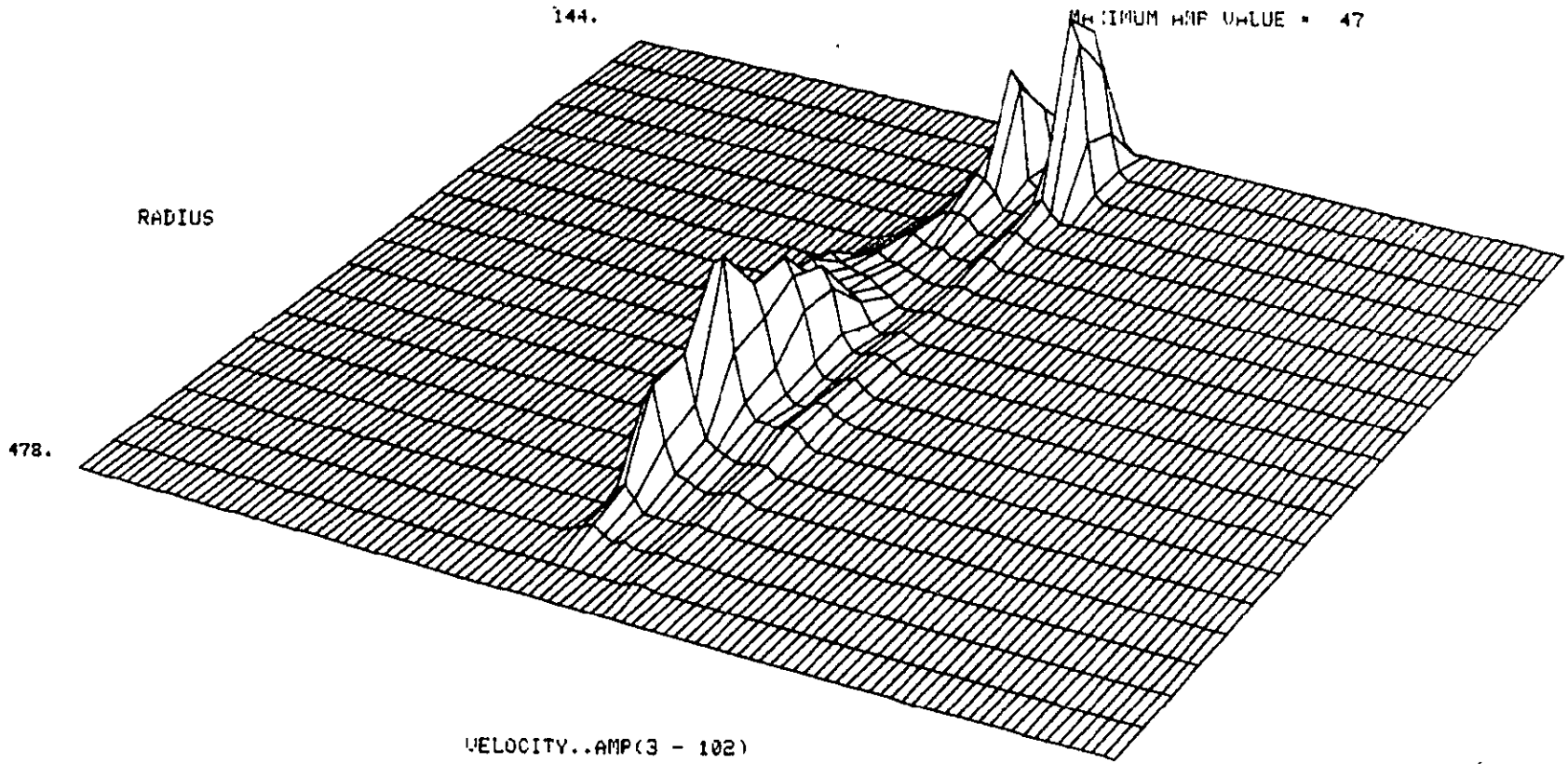
NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 3- 6110

SCAN # 7 FRAME # 5887 ANGLE 9.358 TO FRAME # 6502 ANGLE 64.942 CRITICAL AMP AT CELL 62

FRAME # 6039 TO 6108

ANGLE = 27.05

MAXIMUM AMP VALUE = 47



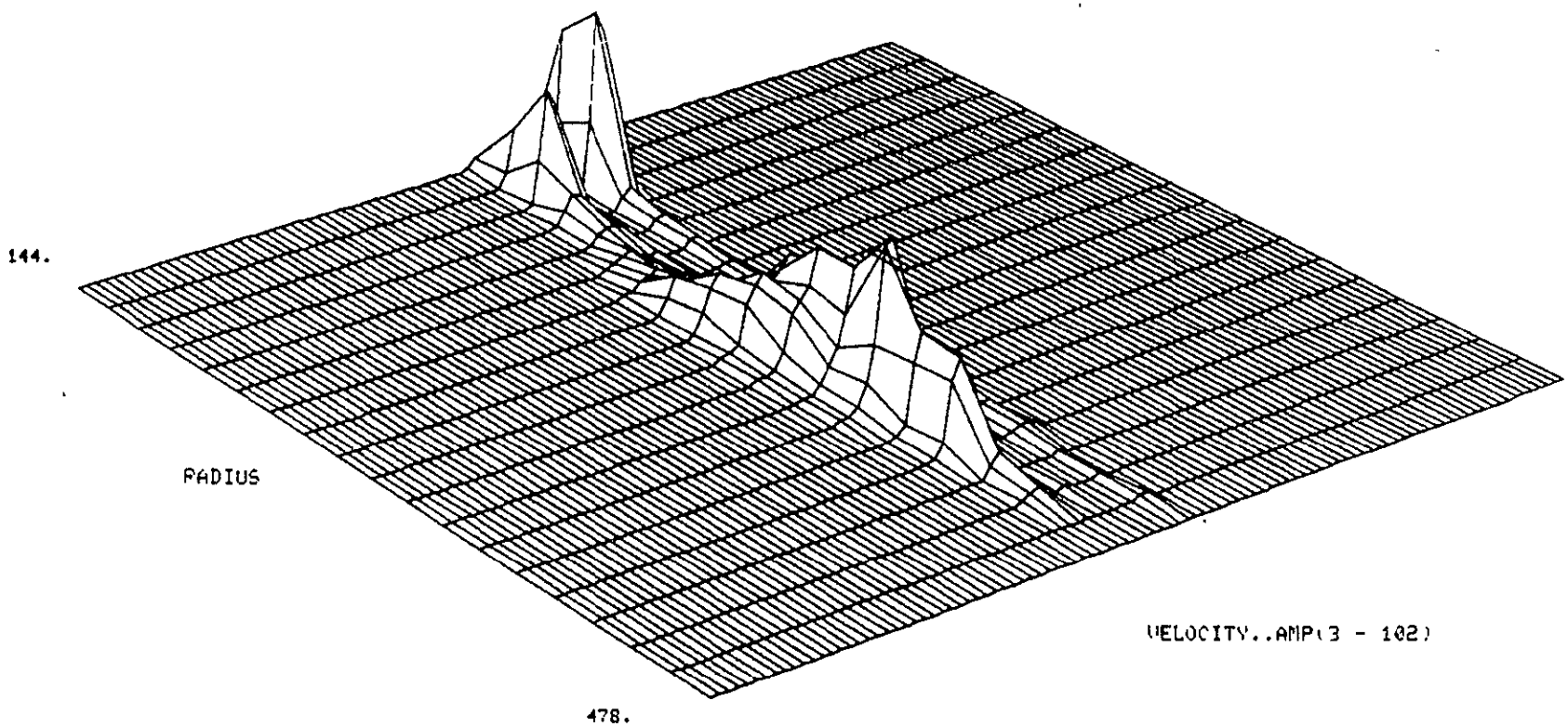
NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 3- 6110

SCAN # 7 FRAME # 5887 ANGLE 9.358 TO FRAME # 6502 ANGLE 64.942 CRITICAL AMP AT CELL 62

FRAME # 6089 TO 6108

ANGLE = 27.05

MAXIMUM AMP VALUE = 47



NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

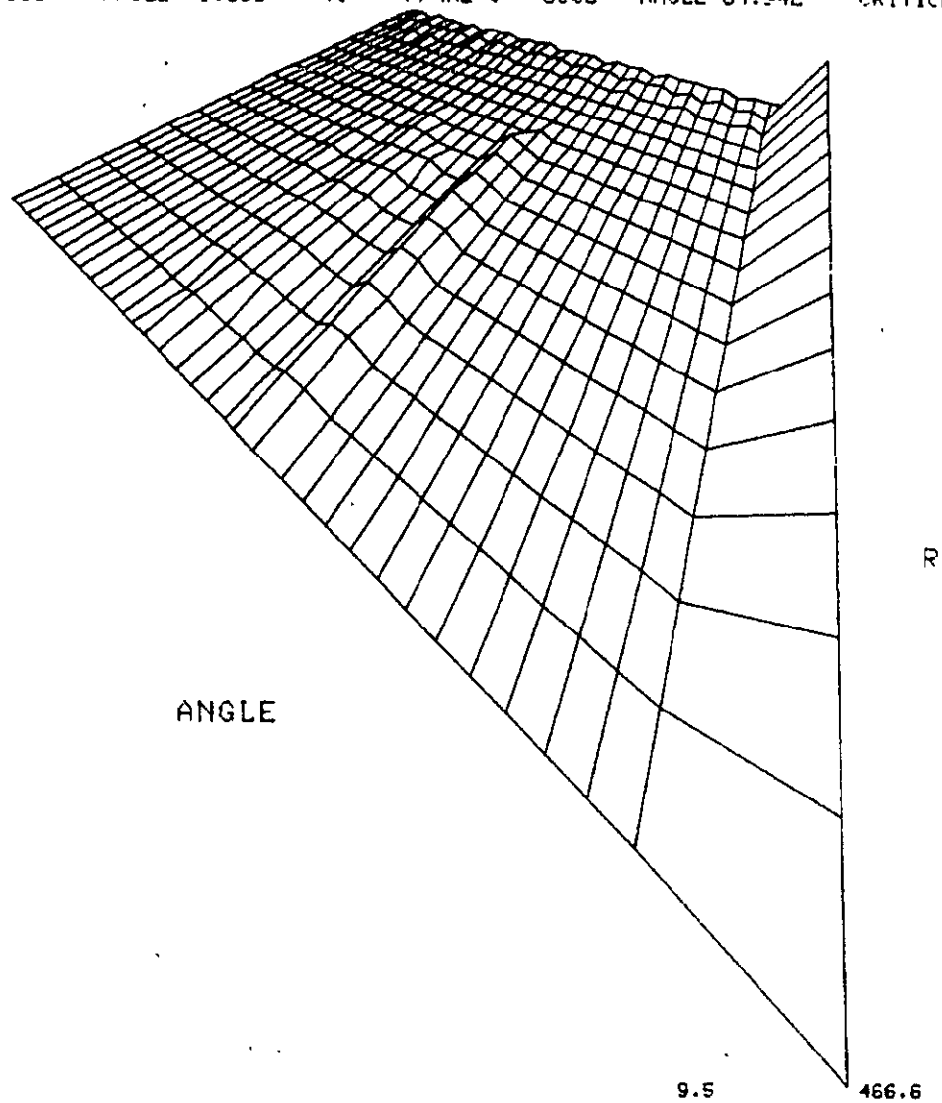
* SCAN # 7 FRAME # 5887 ANGLE 9.358 TO FRAME # 6502 ANGLE 64.942 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM V = 58.0

AVERAGE V = 3.7

	ANGLE
1	9.5
2	10.0
3	10.6
4	11.7
5	13.2
6	14.7
7	16.5
8	18.3
9	20.0
10	21.7
11	23.5
12	25.2
13	27.0
14	28.8
15	30.6
16	32.2
17	34.0
18	35.8
19	37.5
20	39.2
21	40.9
22	42.7
23	44.4
24	46.1
25	47.7
26	49.5
27	51.2
28	53.0
29	54.7
30	56.3
31	58.1
32	59.9
33	61.8
34	63.5
35	64.6



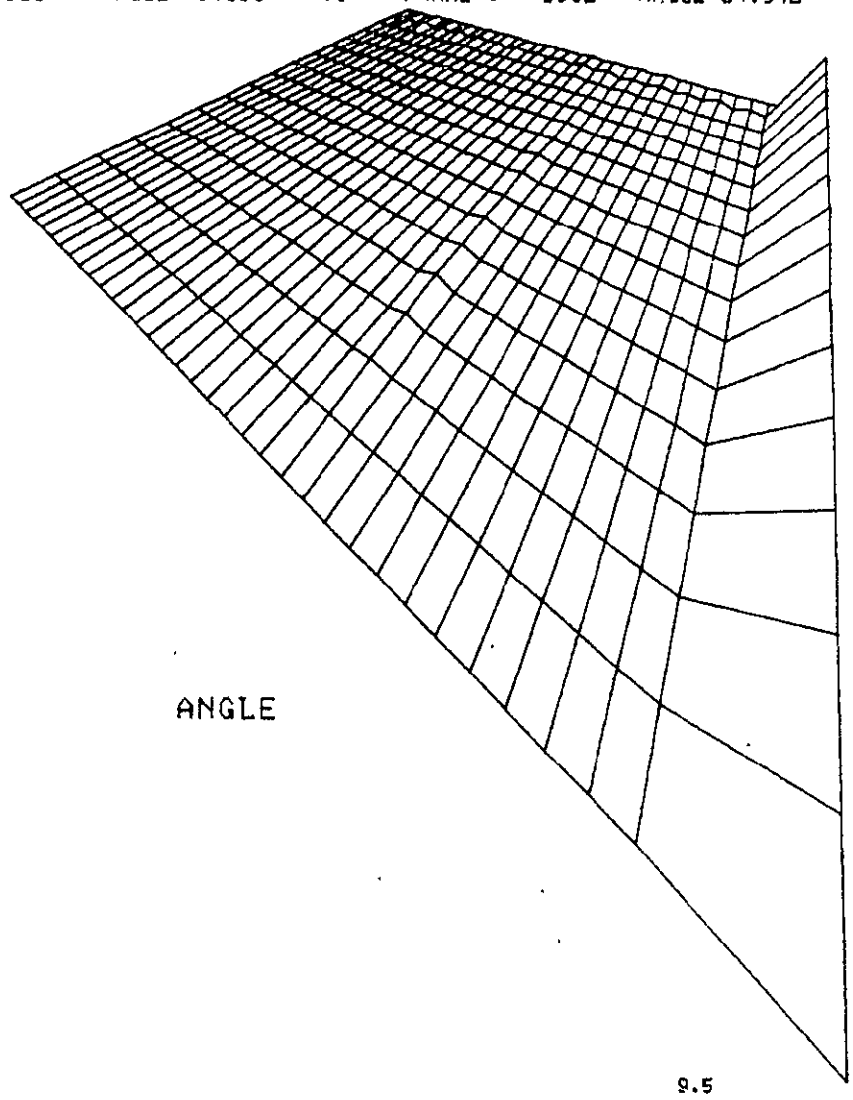
	R
1	150.2
2	168.8
3	187.4
4	206.1
5	224.7
6	243.3
7	261.9
8	280.5
9	299.1
10	317.7
11	336.3
12	354.9
13	373.6
14	392.2
15	410.8
16	429.4
17	466.6

V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

NASA PROJECT DUST DEVIL · DAY 233 RUN # 4 TAPE 1 OF 2- 6110

* SCAN # 7 FRAME # 5387 ANGLE 9.353 TO FRAME # 6502 ANGLE 64.342 CRITICAL AMP AT CELL 62

OPTION # 31-1



	ANGLE
1	9.5
2	10.0
3	10.6
4	11.7
5	13.2
6	14.7
7	16.5
8	18.3
9	20.0
10	21.7
11	23.5
12	25.2
13	27.0
14	28.8
15	30.6
16	32.2
17	34.0
18	35.8
19	37.5
20	39.2
21	40.9
22	42.7
23	44.4
24	46.1
25	47.7
26	49.5
27	51.2
28	53.0
29	54.7
30	56.3
31	58.1
32	59.9
33	61.8
34	63.5
35	64.6

64.6

	R
1	150.2
2	168.8
3	187.4
4	206.1
5	224.7
6	243.3
7	261.9
8	280.5
9	299.1
10	317.7
11	336.3
12	354.9
13	373.6
14	392.2
15	410.8
16	429.4
17	466.6

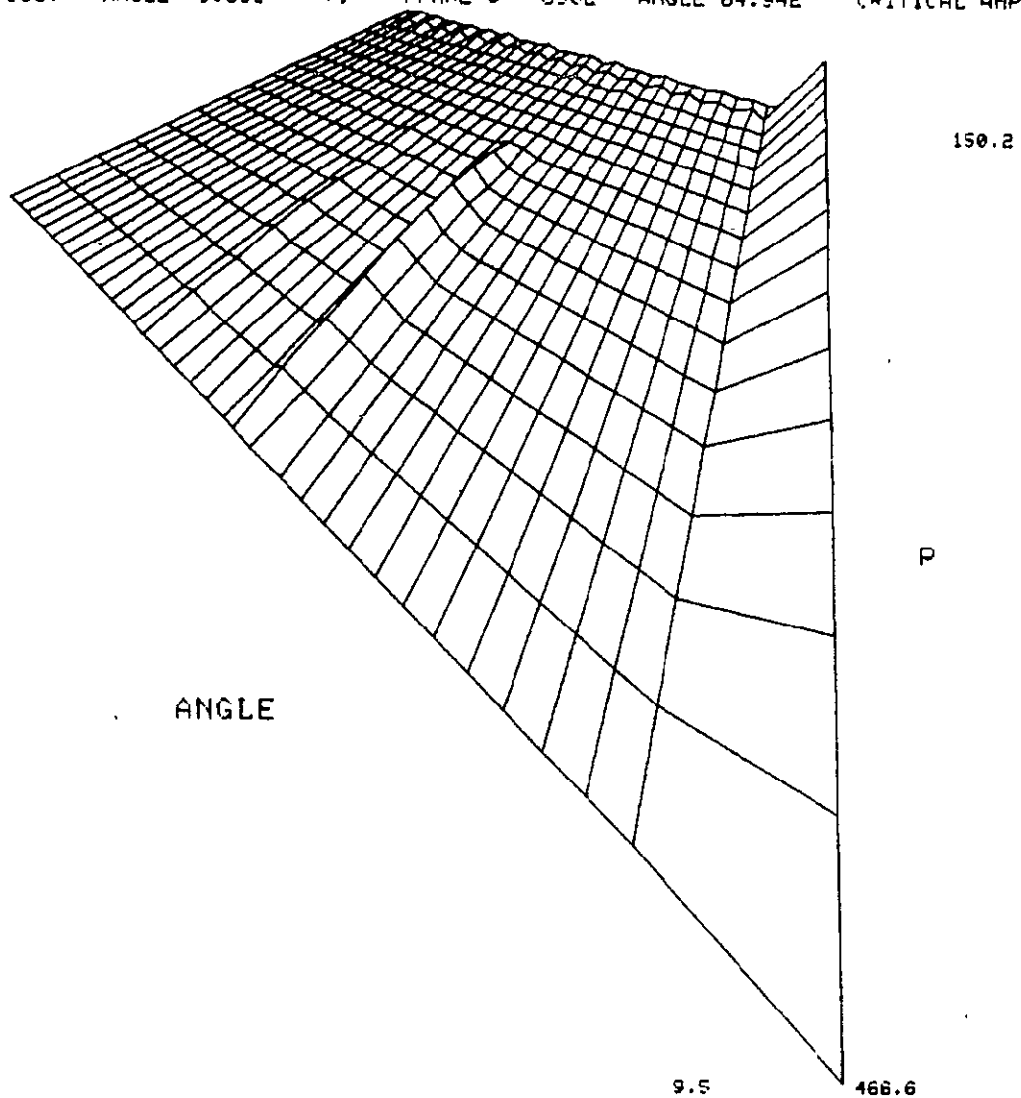
U * IMAX, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 255 RUN # 4 TAPE 1 OF 2- 6110

* SCAN # 7 FRAME # 5387 ANGLE 9.358 TO FRAME # 6502 ANGLE 64.942 CRITICAL AMP AT CELL 62

OPTION # 31-2



	ANGLE
1	9.5
2	10.0
3	10.6
4	11.7
5	13.2
6	14.7
7	16.5
8	18.3
9	20.0
10	21.7
11	23.5
12	25.2
13	27.0
14	28.8
15	30.6
16	32.2
17	34.0
18	35.8
19	37.5
20	39.2
21	40.9
22	42.7
23	44.4
24	46.1
25	47.7
26	49.5
27	51.2
28	53.0
29	54.7
30	56.3
31	58.1
32	59.9
33	61.8
34	63.5
35	64.6

	R
1	150.2
2	168.8
3	187.4
4	206.1
5	224.7
6	243.3
7	261.9
8	280.5
9	299.1
10	317.7
11	336.3
12	354.9
13	373.6
14	392.2
15	410.8
16	429.4
17	466.6

V * IMAX, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 1 OF E- 6110

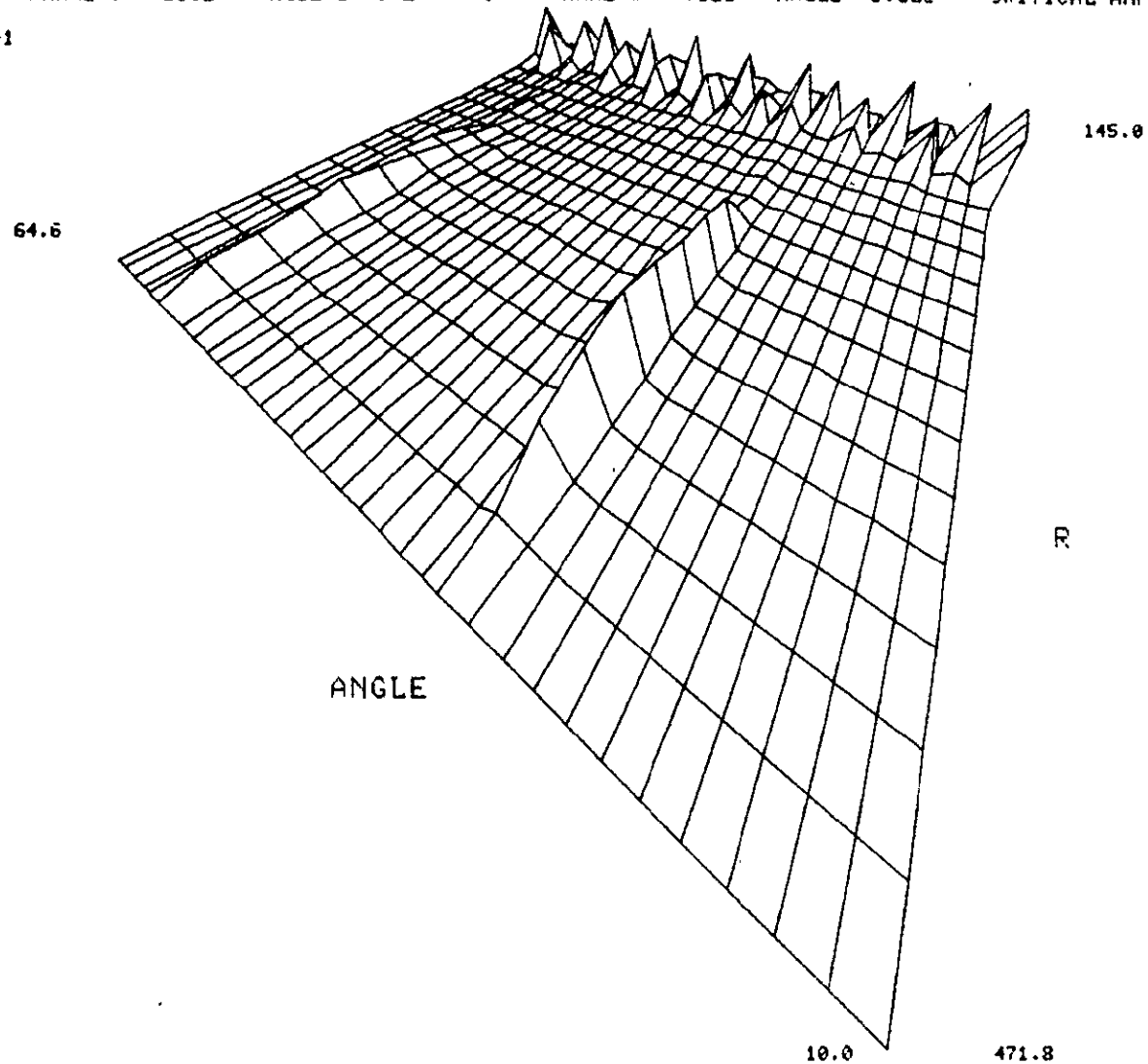
* SCAN # 8 FRAME # 6502 ANGLE 64.942 TO FRAME # 7126 ANGLE 9.326 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 41.0

AVERAGE I = 3.0

ANGLE	
1	64.6
2	64.6
3	64.0
4	63.0
5	61.8
6	60.1
7	58.3
8	56.6
9	54.8
10	53.0
11	51.3
12	49.6
13	47.9
14	46.2
15	44.5
16	42.9
17	41.1
18	39.4
19	37.7
20	35.9
21	34.1
22	32.4
23	30.7
24	28.9
25	27.2
26	25.3
27	23.6
28	21.8
29	20.0
30	18.3
31	16.5
32	14.8
33	12.9
34	11.2
35	10.0



	R
1	145.0
2	164.2
3	183.4
4	202.7
5	221.9
6	241.1
7	260.3
8	279.6
9	298.8
10	318.0
11	337.2
12	356.5
13	375.7
14	394.9
15	414.1
16	433.4
17	471.8

I_{MAX}, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

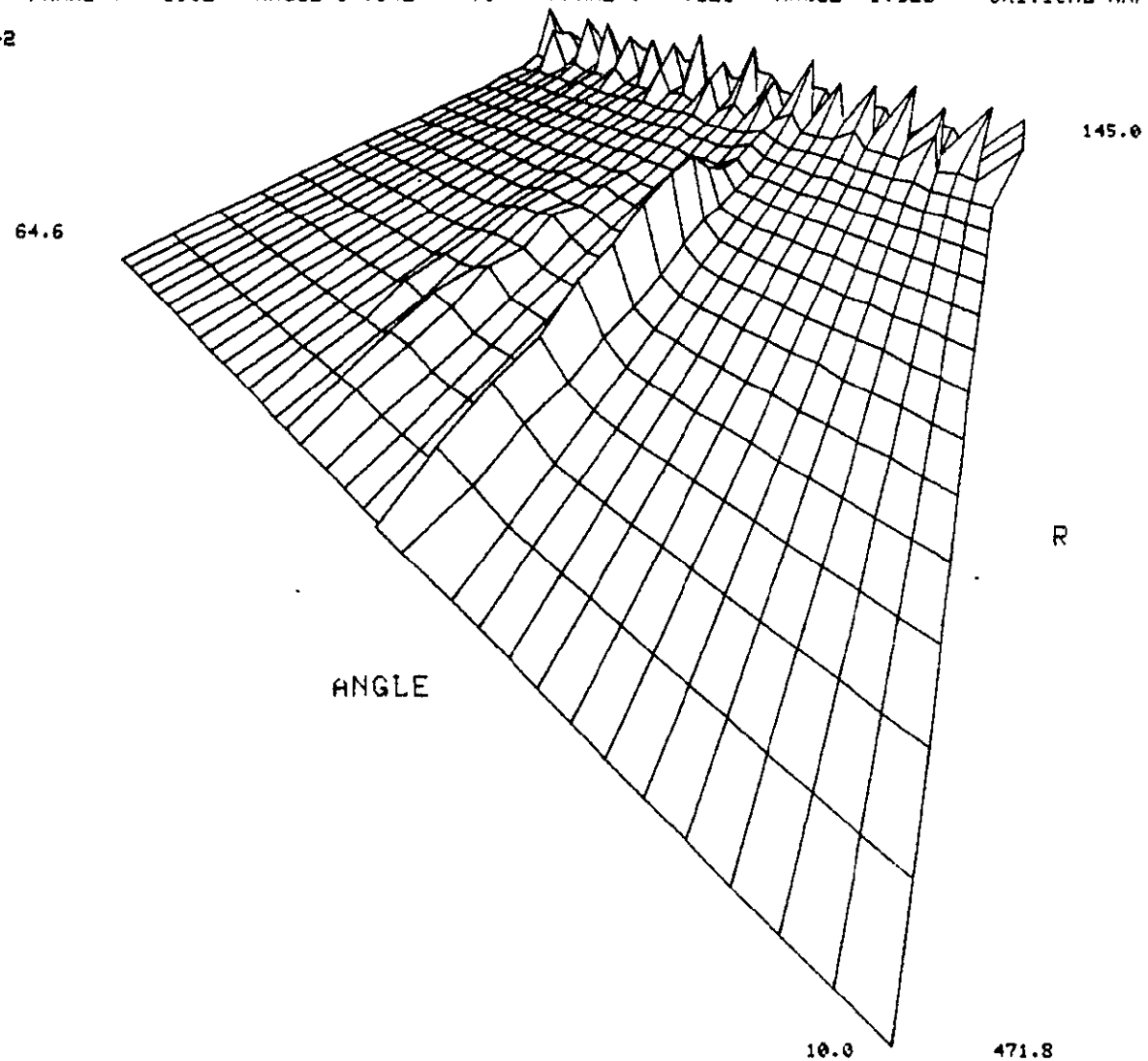
* SCAN # 8 FRAME # 6502 ANGLE 64.942 TO FRAME # 7126 ANGLE 9.326 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 71.0

AVERAGE I = 6.2

ANGLE	
1	64.6
2	64.6
3	64.0
4	63.0
5	61.8
6	60.1
7	58.3
8	56.6
9	54.8
10	53.0
11	51.3
12	49.6
13	47.9
14	46.2
15	44.5
16	42.9
17	41.1
18	39.4
19	37.7
20	35.9
21	34.1
22	32.4
23	30.7
24	28.9
25	27.2
26	25.3
27	23.6
28	21.8
29	20.0
30	18.3
31	16.5
32	14.8
33	12.9
34	11.2
35	10.0



	R
1	145.0
2	164.2
3	183.4
4	202.7
5	221.9
6	241.1
7	260.3
8	279.6
9	298.8
10	318.0
11	337.2
12	356.5
13	375.7
14	394.9
15	414.1
16	433.4
17	471.8

Imax, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

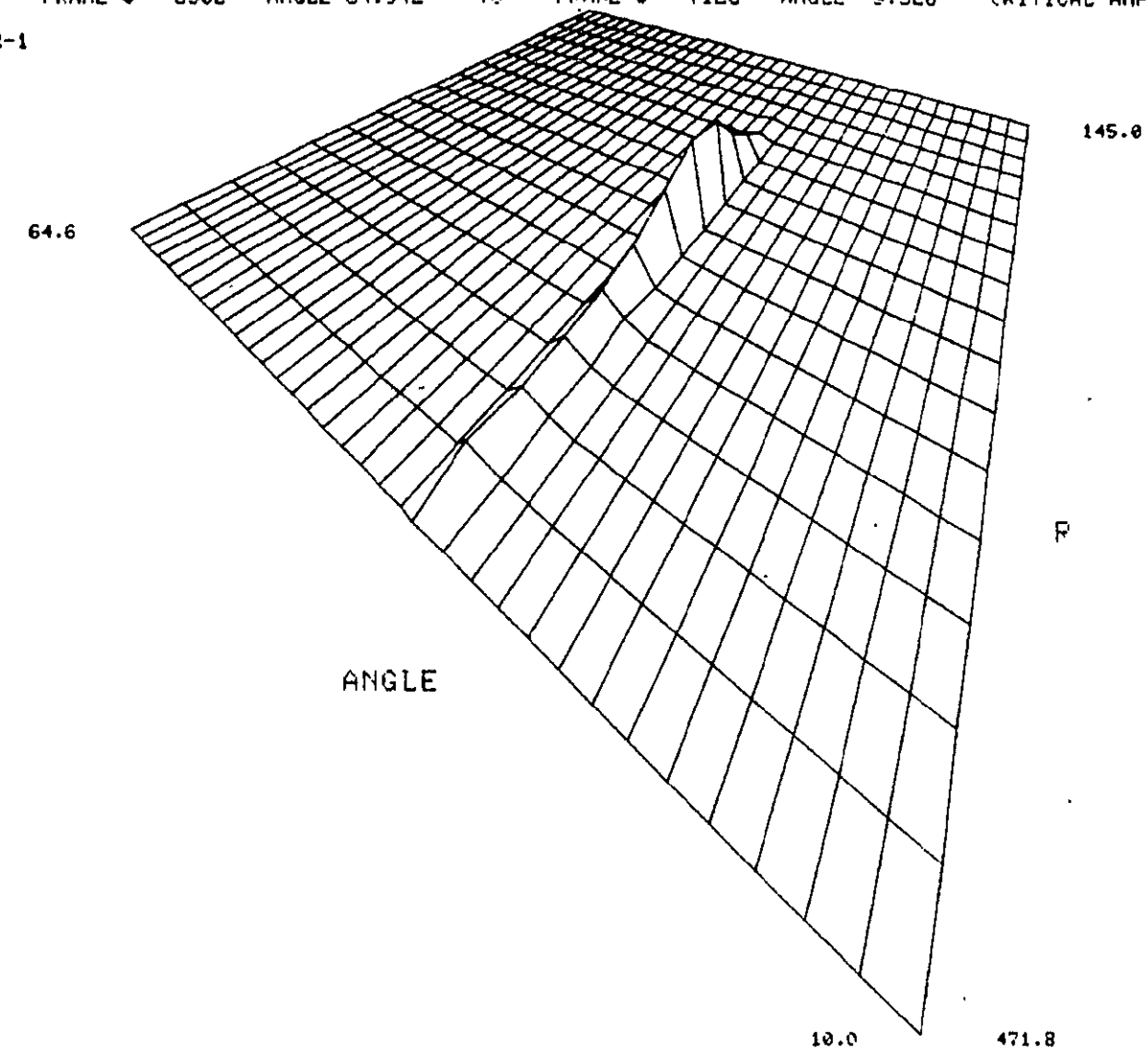
SCAN # 8 FRAME # 6502 ANGLE 64.942 TO FRAME # 7126 ANGLE 9.326 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 70.0

AVERAGE I = 0.7

	ANGLE
1	64.6
2	64.6
3	64.0
4	63.0
5	61.8
6	60.1
7	58.3
8	56.6
9	54.8
10	53.0
11	51.3
12	49.6
13	47.9
14	46.2
15	44.5
16	42.9
17	41.1
18	39.4
19	37.7
20	35.9
21	34.1
22	32.4
23	30.7
24	28.9
25	27.2
26	25.3
27	23.6
28	21.8
29	20.0
30	18.3
31	16.5
32	14.8
33	12.9
34	11.2
35	10.0



	R
1	145.0
2	164.2
3	183.4
4	202.7
5	221.9
6	241.1
7	260.3
8	279.6
9	298.8
10	318.0
11	337.2
12	356.5
13	375.7
14	394.9
15	414.1
16	433.4
17	471.8

I, R, A DISPLAY AT VELOCITY CELL 62

ORIGINAL PAGE IS
OF POOR QUALITY

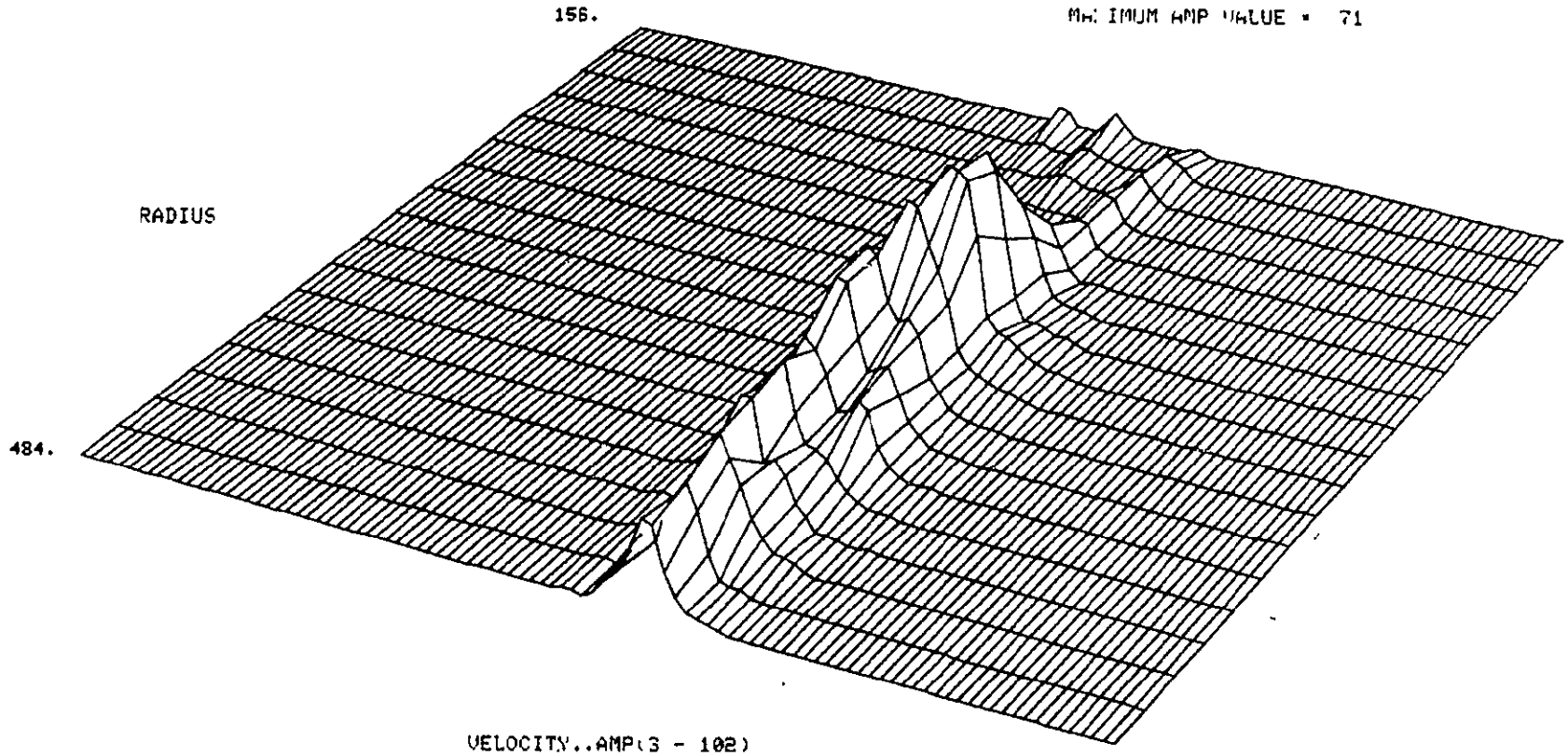
NASA PROJECT DUST DEVIL DAY 253 RUN # 1 TAPE 1 OF 2- 6110

SCAN # 8 FRAME # 6502 ANGLE 64.942 TO FRAME # 7126 ANGLE 9.326 CRITICAL AMP AT CELL 62

FRAME # 6873 TO 6891

ANGLE = 32.37

MAXIMUM AMP VALUE = 71



ORIGINAL PAGE IS
OF POOR QUALITY

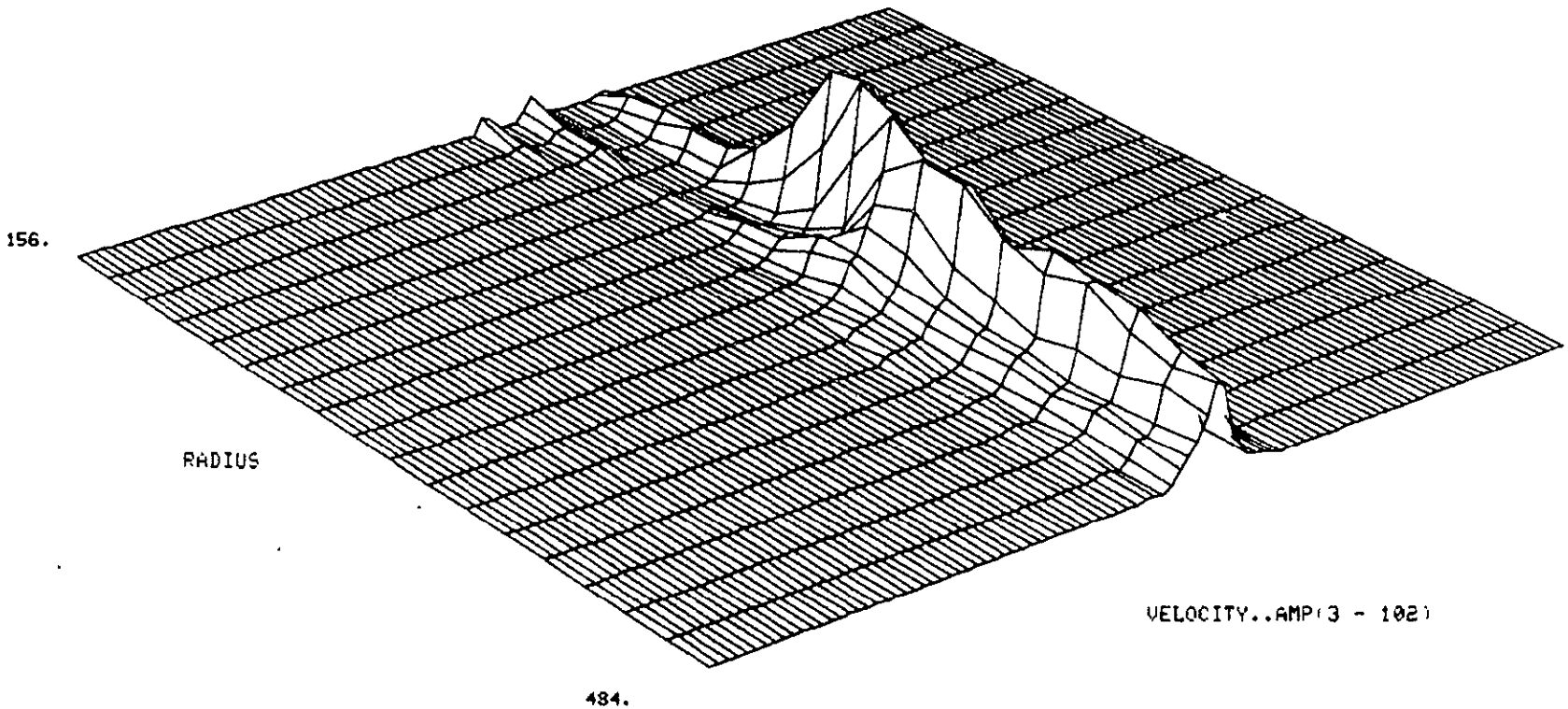
NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 8 FRAME # 6502 ANGLE 64.942 TO FRAME # 7126 ANGLE 9.326 CRITICAL AMP AT CELL 62

FRAME # 6873 TO 6891

ANGLE = 32.37

MAXINUM AMP VALUE = 71



ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 236 RUN # 4 TAPE 1 OF 2- 6110

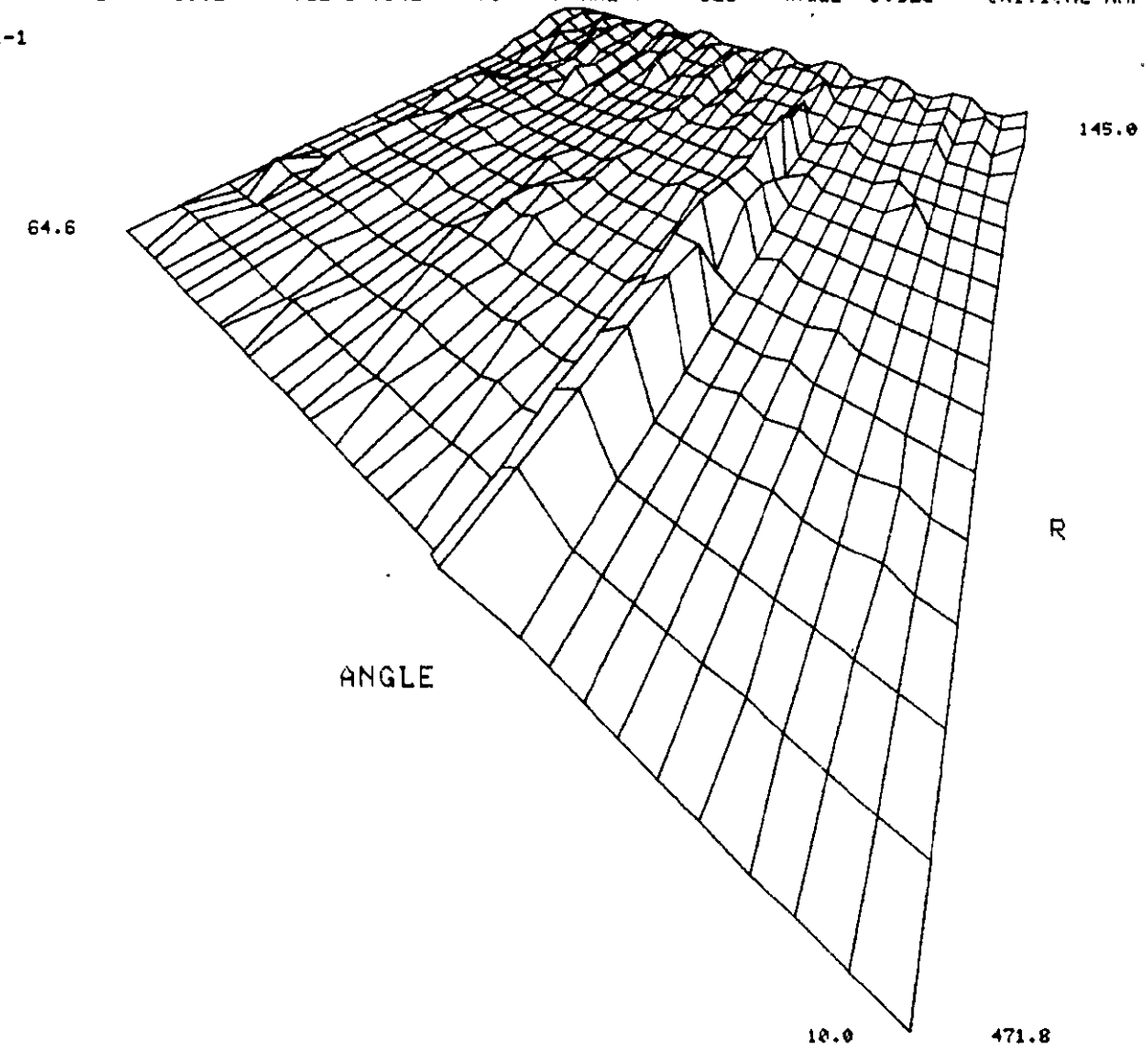
* SCAN # 8 FRAME # 6502 ANGLE 64.942 TO FRAME # 7126 ANGLE 9.326 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 9.0

AVERAGE V = 1.8

ANGLE	
1	64.6
2	64.6
3	64.0
4	63.0
5	61.8
6	60.1
7	58.3
8	56.6
9	54.8
10	53.0
11	51.3
12	49.6
13	47.9
14	46.2
15	44.5
16	42.9
17	41.1
18	39.4
19	37.7
20	35.9
21	34.1
22	32.4
23	30.7
24	28.9
25	27.2
26	25.3
27	23.6
28	21.8
29	20.0
30	18.3
31	16.5
32	14.8
33	12.9
34	11.2
35	10.0



	R
1	145.0
2	164.2
3	183.4
4	202.7
5	221.9
6	241.1
7	260.3
8	279.6
9	298.8
10	318.0
11	337.2
12	356.5
13	375.7
14	394.9
15	414.1
16	433.4
17	471.8

V, R, A DISPLAY (VELOCITY AT Imax)

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 3- 6110

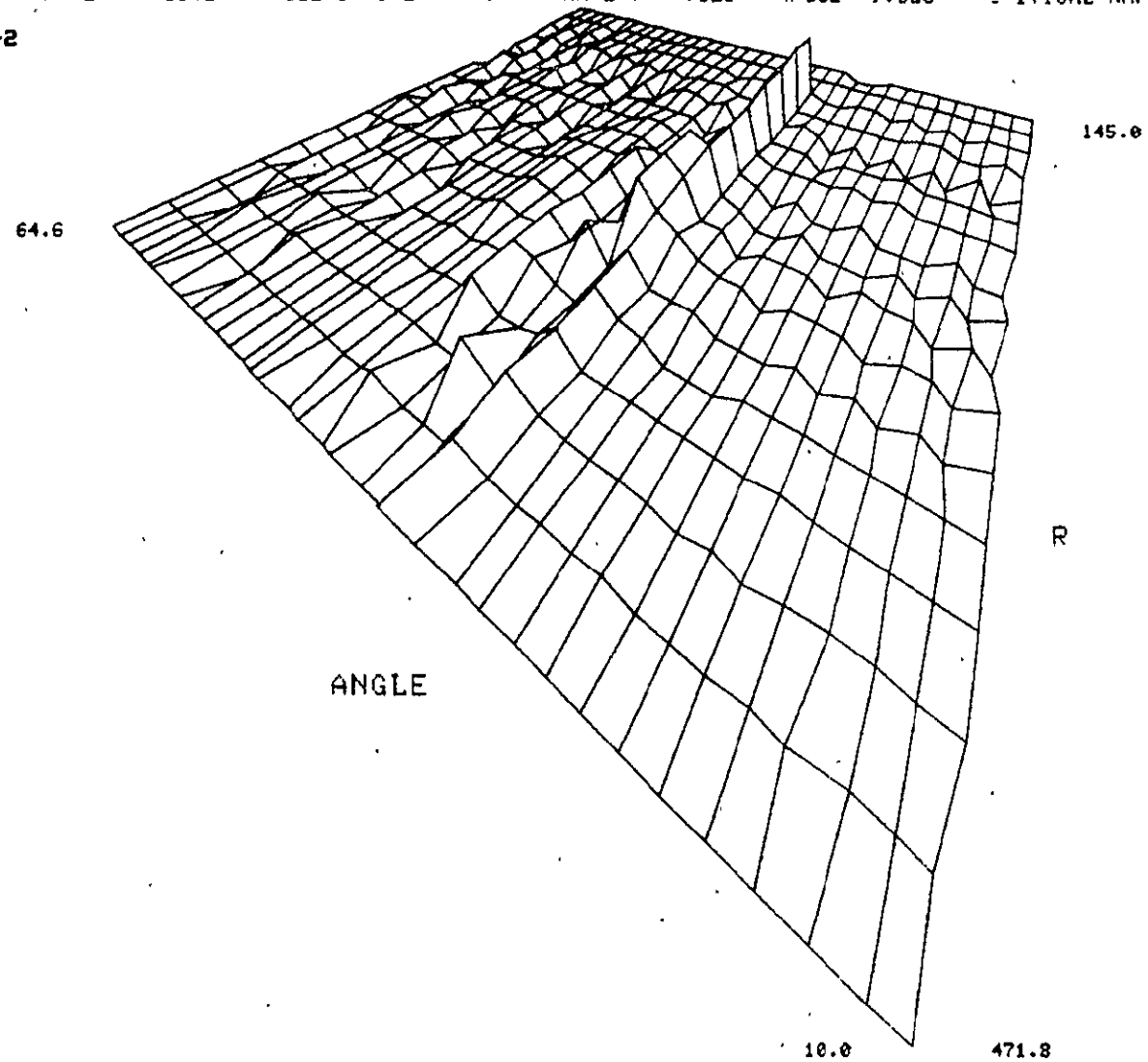
* SCAN # 8 FRAME # 6502 ANGLE 64.942 TO FRAME # 7126 ANGLE 9.326 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V = 12.0

AVERAGE V = 3.3

ANGLE	
1	64.6
2	64.6
3	64.0
4	63.0
5	61.8
6	60.1
7	58.3
8	56.6
9	54.8
10	53.0
11	51.3
12	49.6
13	47.9
14	46.2
15	44.5
16	42.9
17	41.1
18	39.4
19	37.7
20	35.9
21	34.1
22	32.4
23	30.7
24	28.9
25	27.2
26	25.3
27	23.6
28	21.8
29	20.0
30	18.3
31	16.5
32	14.8
33	12.9
34	11.2
35	10.0



	R
1	145.0
2	164.2
3	183.4
4	202.7
5	221.9
6	241.1
7	260.3
8	279.6
9	298.8
10	318.0
11	337.2
12	356.5
13	375.7
14	394.9
15	414.1
16	433.4
17	471.3

V, R, A DISPLAY (VELOCITY AT I_{MAX})

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

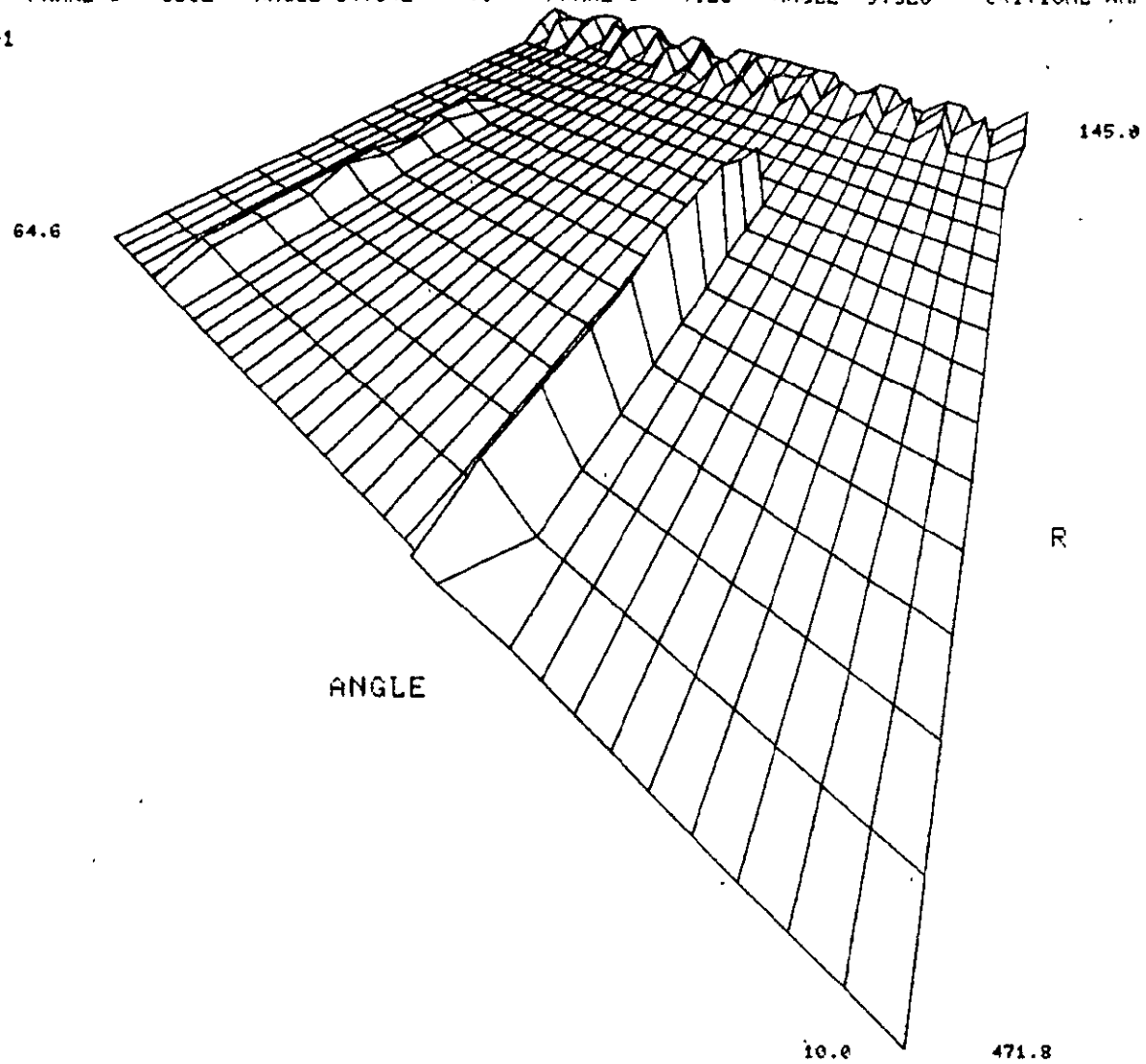
* SCAN # 8 FRAME # 6502 ANGLE 64.942 TO FRAME # 7126 ANGLE 9.326 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 10.0

AVERAGE V = 1.4

ANGLE	
1	64.6
2	64.6
3	64.0
4	63.0
5	61.8
6	60.1
7	58.3
8	56.6
9	54.8
10	53.0
11	51.3
12	49.6
13	47.9
14	46.2
15	44.5
16	42.9
17	41.1
18	39.4
19	37.7
20	35.9
21	34.1
22	32.4
23	30.7
24	28.9
25	27.2
26	25.3
27	23.6
28	21.8
29	20.0
30	18.3
31	16.5
32	14.8
33	12.9
34	11.2
35	10.0



	R
1	145.0
2	164.2
3	183.4
4	202.7
5	221.9
6	241.1
7	260.3
8	279.6
9	298.8
10	318.0
11	337.2
12	356.5
13	375.7
14	394.9
15	414.1
16	433.4
17	471.8

V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

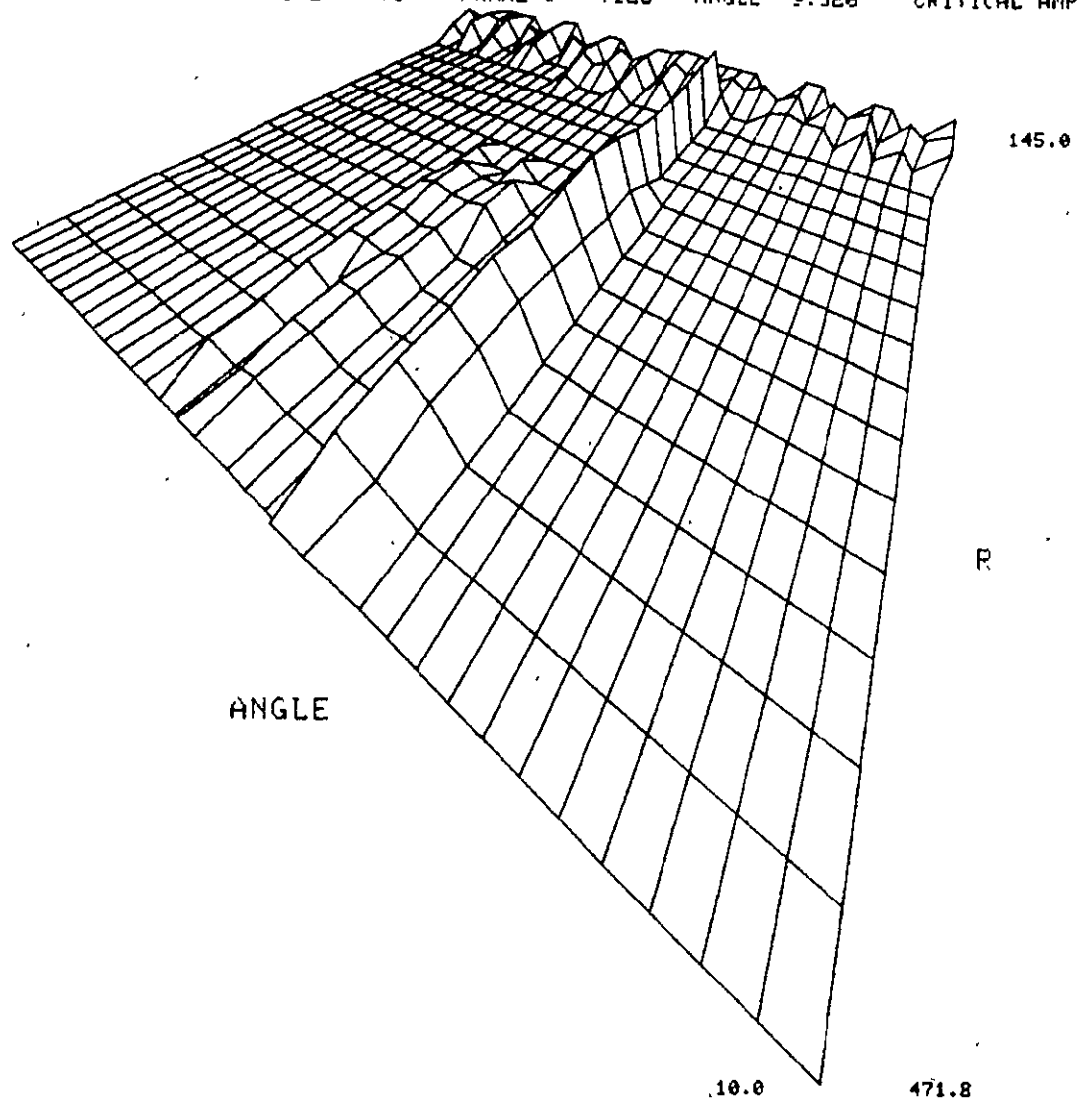
* SCAN # 8 FRAME # 6502 ANGLE 64.942 TO FRAME # 7126 ANGLE 9.326 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM V = 16.0

AVERAGE V = 2.2

	ANGLE
1	64.6
2	64.6
3	64.0
4	63.0
5	61.8
6	60.1
7	58.3
8	56.6
9	54.8
10	53.0
11	51.3
12	49.6
13	47.9
14	46.2
15	44.5
16	42.9
17	41.1
18	39.4
19	37.7
20	35.9
21	34.1
22	32.4
23	30.7
24	28.9
25	27.2
26	25.3
27	23.6
28	21.8
29	20.0
30	18.3
31	16.5
32	14.8
33	12.9
34	11.2
35	10.0



	R
1	145.0
2	164.2
3	183.4
4	202.7
5	221.9
6	241.1
7	260.3
8	279.6
9	298.8
10	318.0
11	337.2
12	356.5
13	375.7
14	394.9
15	414.1
16	433.4
17	471.8

U_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

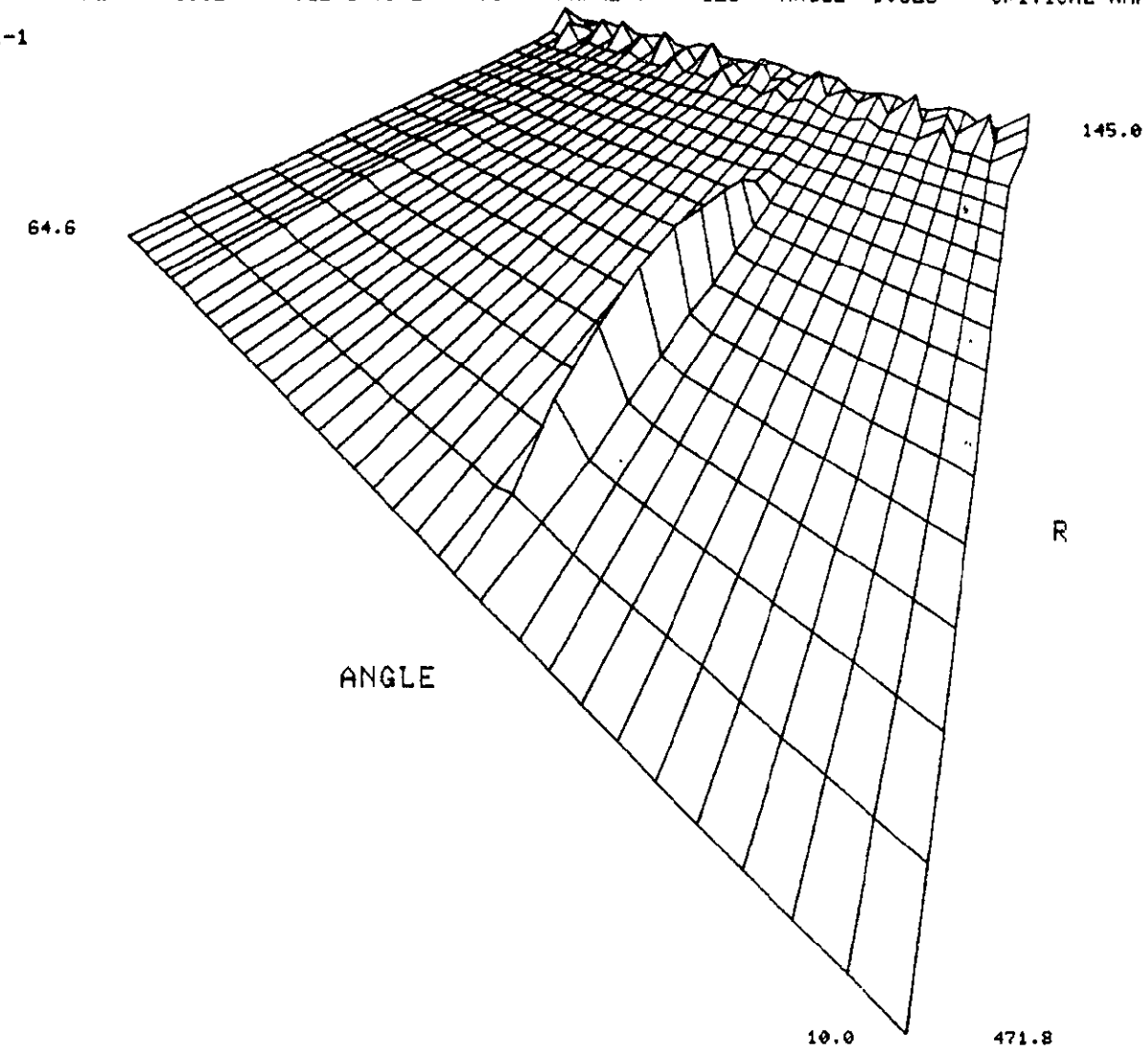
ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

* SCAN # 8 FRAME # 6502 ANGLE 64.942 TO FRAME # 7126 ANGLE 9.326 CRITICAL AMP AT CELL 62

OPTION # 31-1

ANGLE	
1	64.6
2	64.6
3	64.0
4	63.0
5	61.8
6	60.1
7	58.3
8	56.6
9	54.8
10	53.0
11	51.3
12	49.6
13	47.9
14	46.2
15	44.5
16	42.9
17	41.1
18	39.4
19	37.7
20	35.9
21	34.1
22	32.4
23	30.7
24	28.9
25	27.2
26	25.3
27	23.6
28	21.8
29	20.0
30	18.3
31	16.5
32	14.8
33	12.9
34	11.2
35	10.0



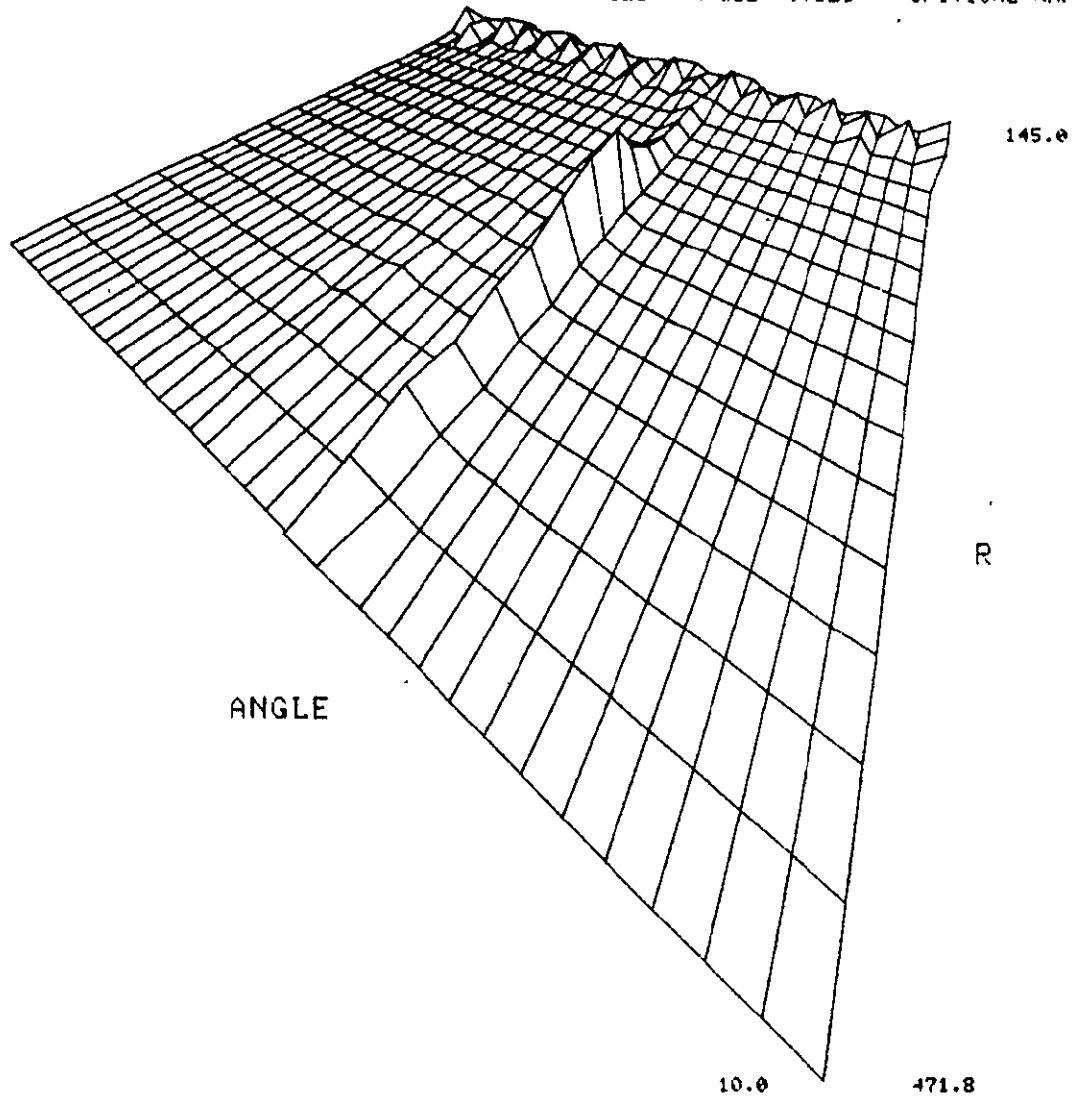
	R
1	145.0
2	164.2
3	183.4
4	202.7
5	221.9
6	241.1
7	260.3
8	279.6
9	298.8
10	318.0
11	337.2
12	356.5
13	375.7
14	394.9
15	414.1
16	433.4
17	471.8

U K Imax, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 203 RUN # 4 TAPE 1 OF 3- 3110

* SCAN # 8 FRAME # 6502 ANGLE 64.942 TO FRAME # 7126 ANGLE 9.326 CRITICAL AMP AT CELL 62

OPTION # 31-2



	ANGLE
1	64.6
2	64.6
3	64.0
4	63.0
5	61.8
6	60.1
7	58.3
8	56.6
9	54.8
10	53.0
11	51.3
12	49.6
13	47.9
14	46.2
15	44.5
16	42.9
17	41.1
18	39.4
19	37.7
20	35.9
21	34.1
22	32.4
23	30.7
24	28.9
25	27.2
26	25.3
27	23.6
28	21.8
29	20.0
30	18.3
31	16.5
32	14.8
33	12.9
34	11.2
35	10.0

	R
1	145.0
2	164.2
3	183.4
4	202.7
5	221.9
6	241.1
7	260.3
8	279.6
9	298.8
10	318.0
11	337.2
12	356.5
13	375.7
14	394.9
15	414.1
16	433.4
17	471.8

U * I_{max}, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

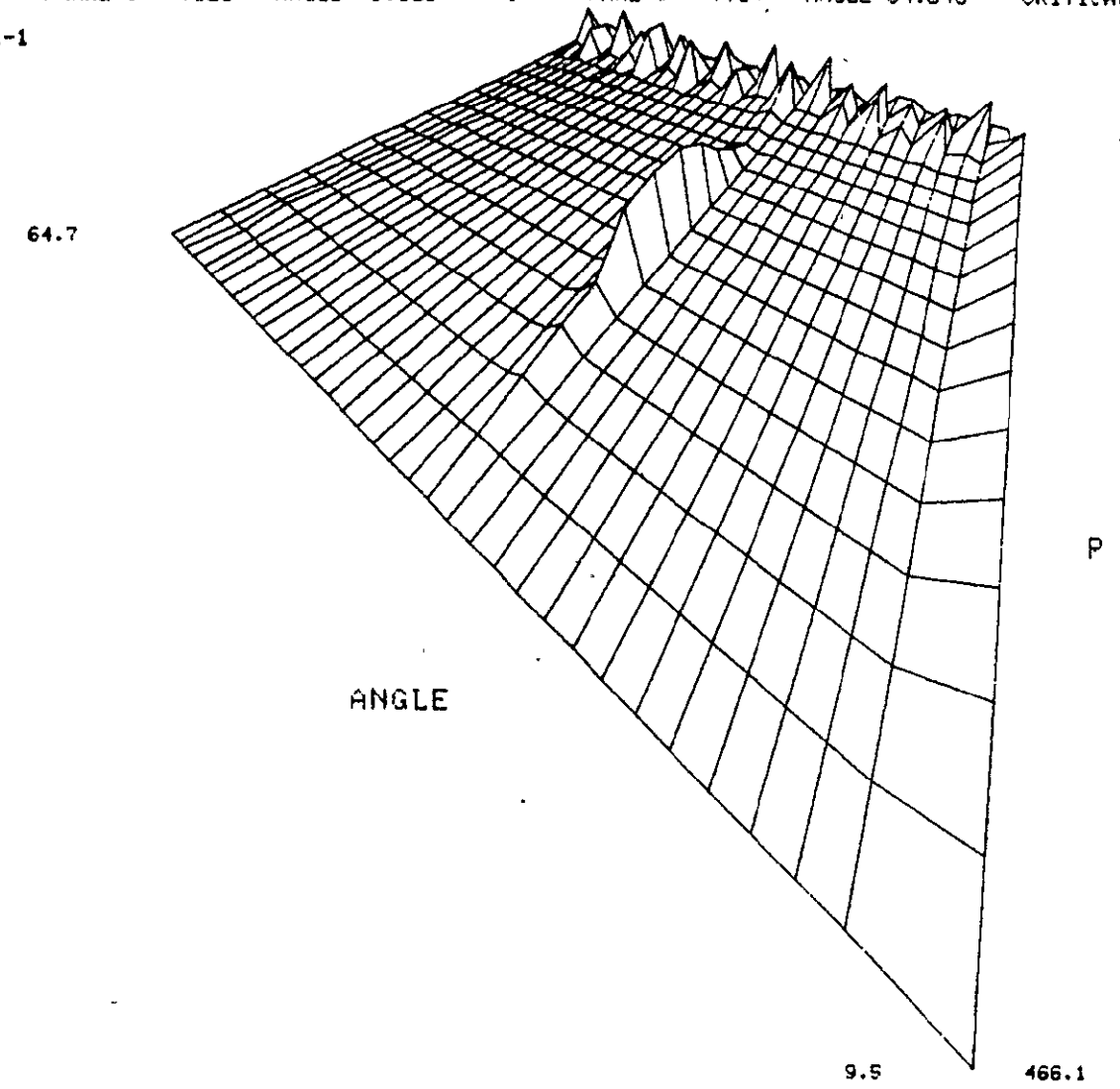
SCAN # 9 FRAME # 7126 ANGLE 9.326 TO FRAME # 7764 ANGLE 64.346 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 54.0

AVERAGE I = 3.5

ANGLE	
1	9.5
2	9.9
3	10.5
4	11.5
5	12.9
6	14.4
7	16.1
8	17.9
9	19.7
10	21.4
11	23.1
12	24.9
13	26.7
14	28.4
15	30.1
16	31.9
17	33.7
18	35.4
19	37.1
20	38.8
21	40.5
22	42.3
23	44.1
24	45.7
25	47.4
26	49.1
27	50.8
28	52.5
29	54.2
30	56.0
31	57.8
32	59.6
33	61.3
34	63.1
35	64.4
36	64.7



	R
1	143.3
2	162.3
3	181.3
4	200.3
5	219.2
6	238.2
7	257.2
8	276.2
9	295.2
10	314.2
11	333.2
12	352.1
13	371.1
14	390.1
15	409.1
16	428.1
17	466.1

I_{MAX}, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

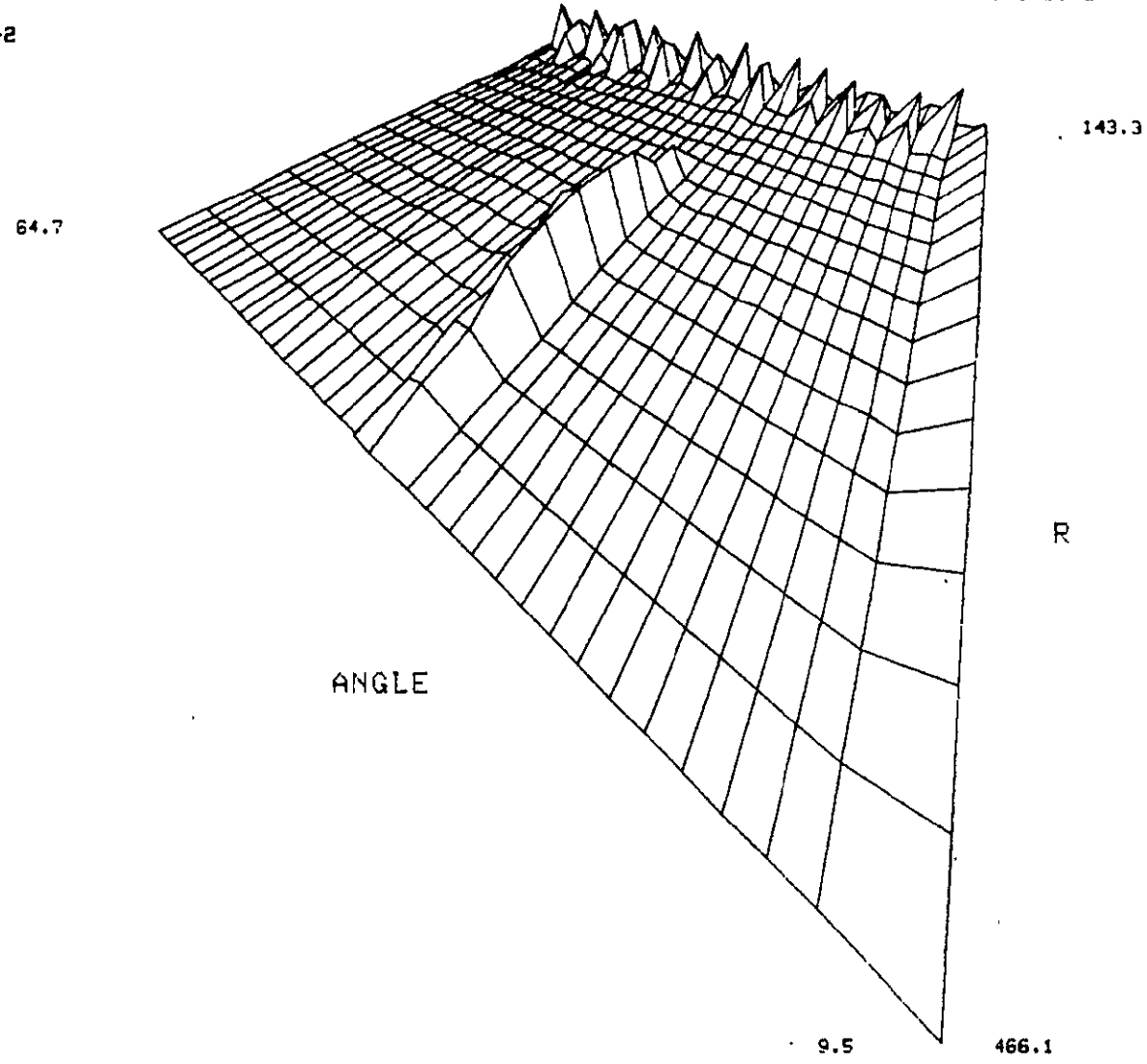
* SCAN # 9 FRAME # 7126 ANGLE 9.326 TO FRAME # 7754 ANGLE 64.346 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 74.0

AVERAGE I = 7.2

	ANGLE
1	9.5
2	9.9
3	10.5
4	11.5
5	12.9
6	14.4
7	16.1
8	17.9
9	19.7
10	21.4
11	23.1
12	24.9
13	26.7
14	28.4
15	30.1
16	31.9
17	33.7
18	35.4
19	37.1
20	38.8
21	40.5
22	42.3
23	44.1
24	45.7
25	47.4
26	49.1
27	50.8
28	52.5
29	54.2
30	56.0
31	57.8
32	59.6
33	61.3
34	63.1
35	64.4
36	64.7



	R
1	143.3
2	162.3
3	181.3
4	200.3
5	219.2
6	238.2
7	257.2
8	276.2
9	295.2
10	314.2
11	333.2
12	352.1
13	371.1
14	390.1
15	409.1
16	428.1
17	466.1

IMAX, P, A DISPLAY

ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 208 RUN # 4 TAPE 1 OF 2- 6110

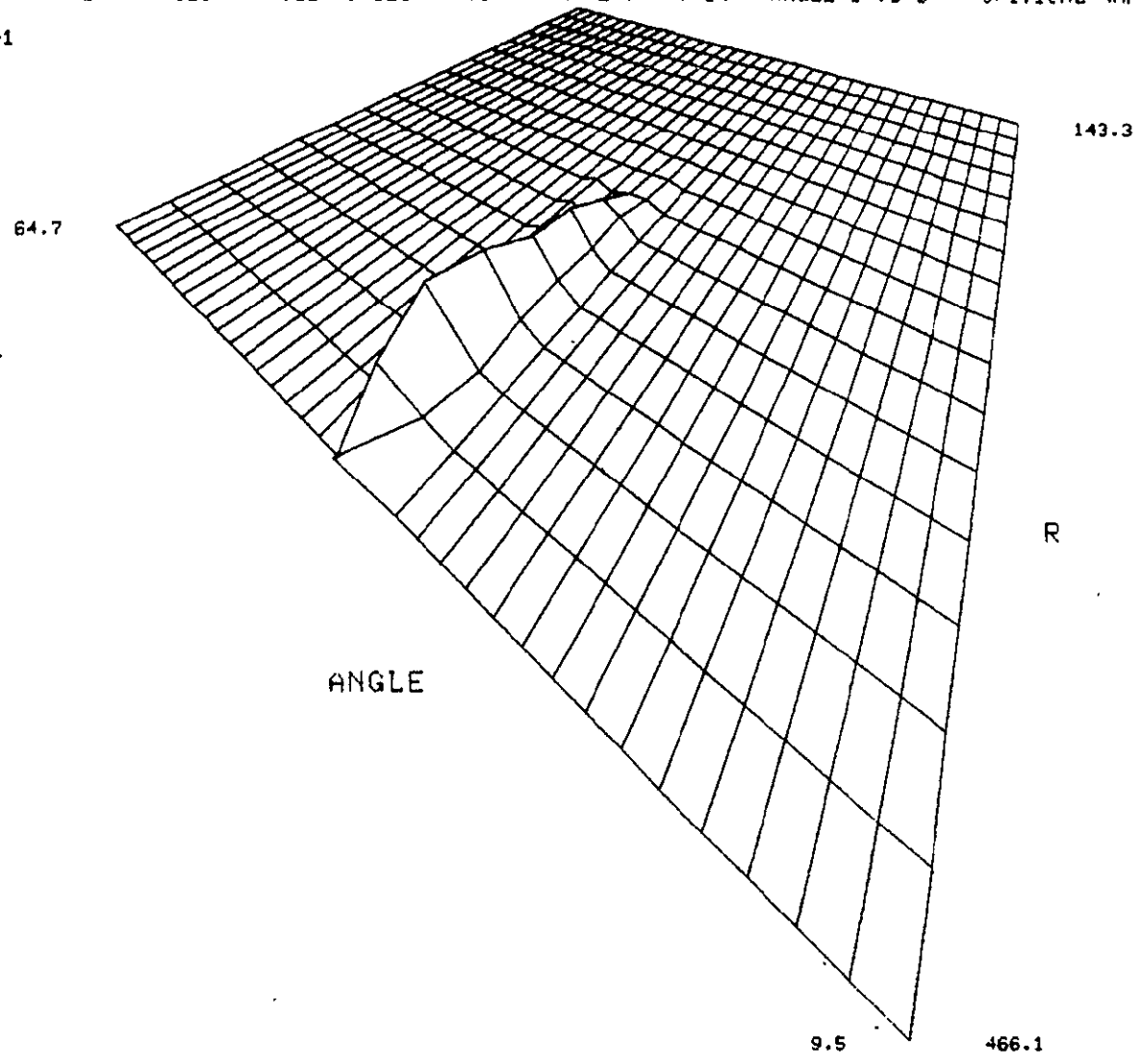
* SCAN # 9 FRAME # 7126 ANGLE 9.326 TO FRAME # 7754 ANGLE 64.546 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 39.0

AVERAGE I = 0.4

ANGLE	
1	9.5
2	9.9
3	10.5
4	11.5
5	12.9
6	14.4
7	16.1
8	17.9
9	19.7
10	21.4
11	23.1
12	24.9
13	26.7
14	28.4
15	30.1
16	31.9
17	33.7
18	35.4
19	37.1
20	38.8
21	40.5
22	42.3
23	44.1
24	45.7
25	47.4
26	49.1
27	50.8
28	52.5
29	54.2
30	56.0
31	57.8
32	59.6
33	61.3
34	63.1
35	64.4
36	64.7



	R
1	143.3
2	162.3
3	181.3
4	200.3
5	219.2
6	238.2
7	257.2
8	276.2
9	295.2
10	314.2
11	333.2
12	352.1
13	371.1
14	390.1
15	409.1
16	428.1
17	466.1

I, R, A DISPLAY AT VELOCITY CELL 62

ORIGINAL PAGE IS OF POOR QUALITY

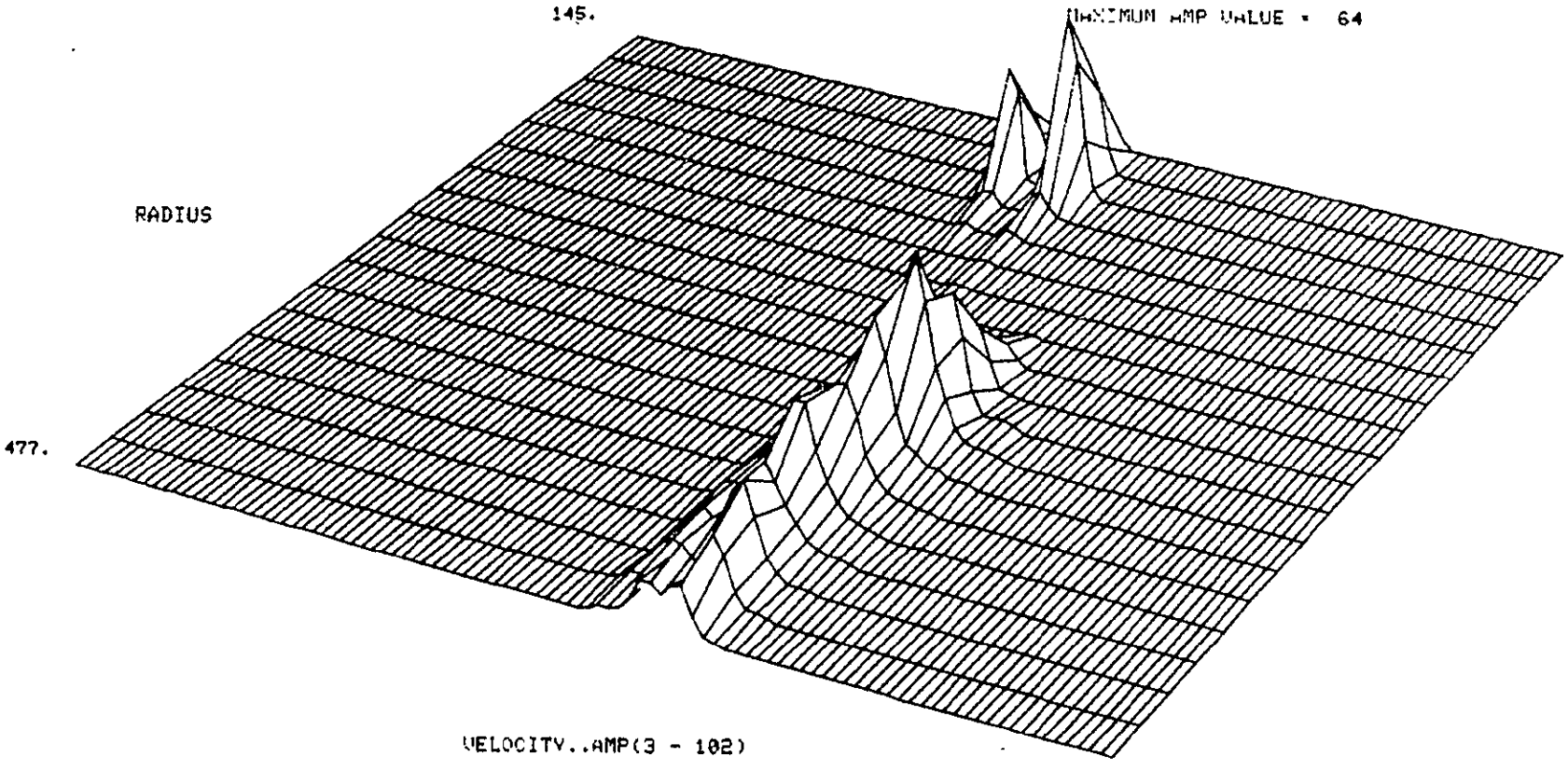
NASA PROJECT DUST DEVIL DAY 238. RUN # 4 TAPE 1 OF 3- 6110

SCAN # 9 FRAME # 7126 ANGLE 9.326 TO FRAME # 7764 ANGLE 64.346 CRITICAL AMP AT CELL 62

FRAME # 7401 TO 7420

ANGLE = 33.69

MAXIMUM AMP VALUE = 64



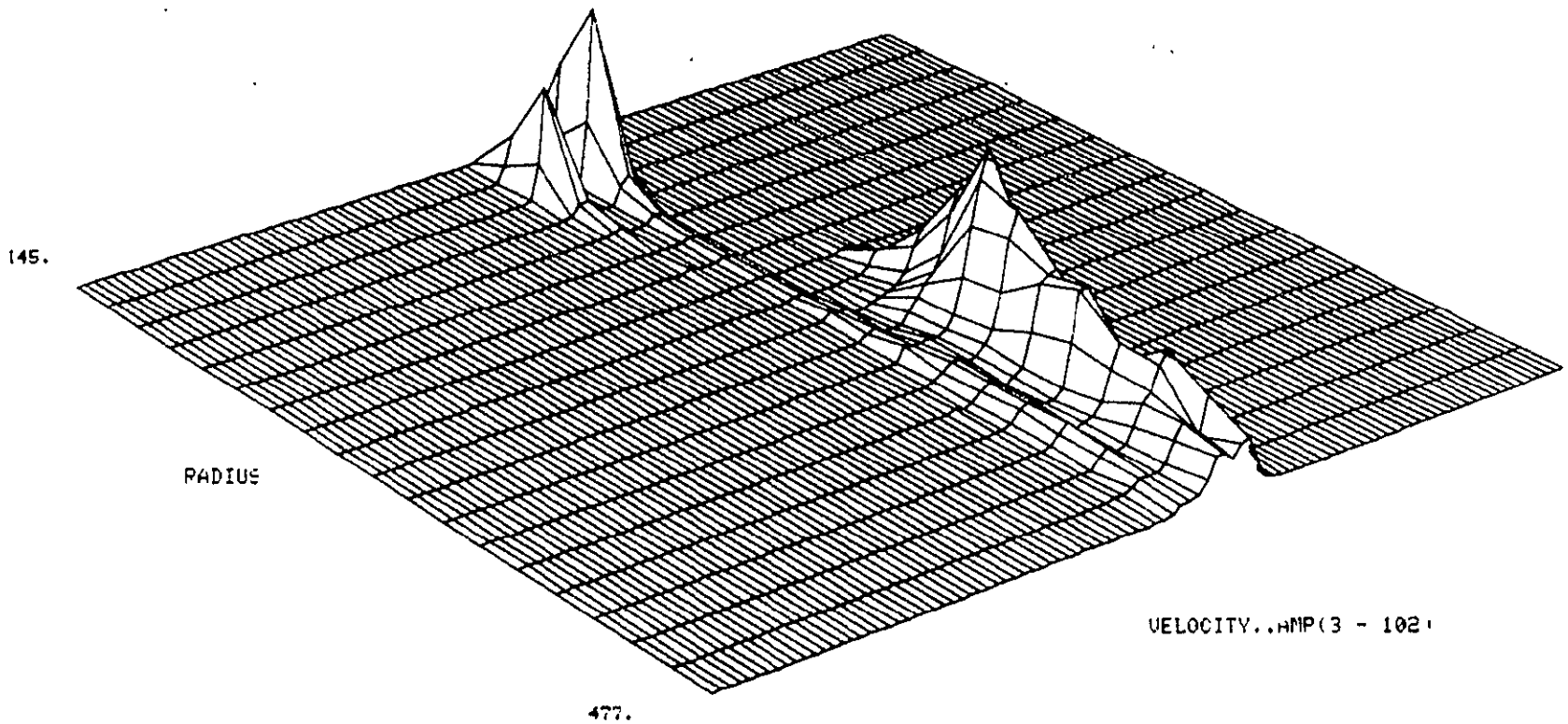
NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 9 FRAME # 7126 ANGLE 9.326 TO FRAME # 7764 ANGLE 64.846 CRITICAL AMP AT CELL 62

FRAME # 7401 TO 7420

ANGLE = 33.69

MAXIMUM AMP VALUE = 64



ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 328 RUN # 4 TAPE 1 OF 2- 6110

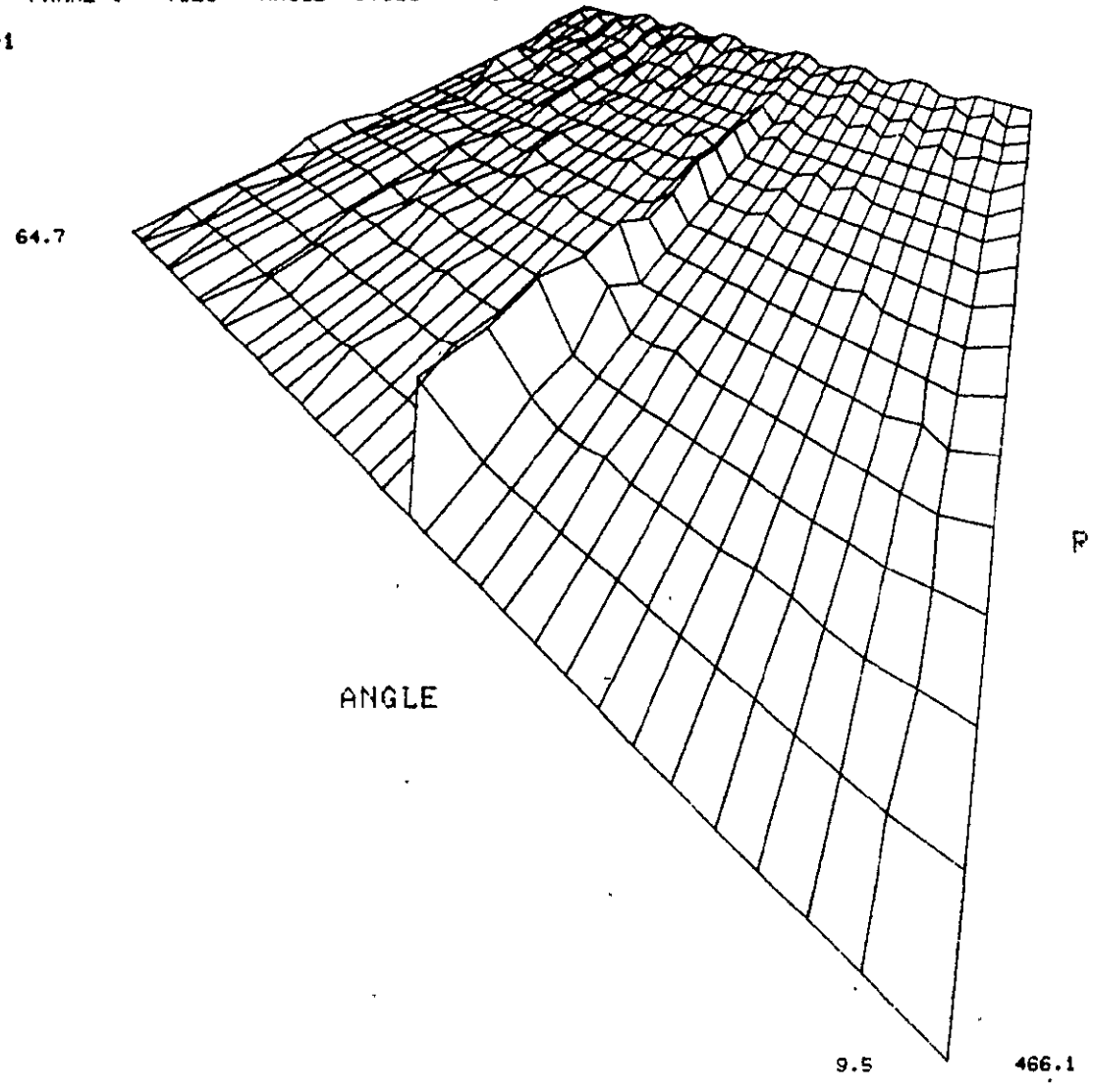
SCAN # 9 FRAME # 7126 ANGLE 9.326 TO FRAME # 7764 ANGLE 64.546 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 10.0

AVERAGE V = 1.6

ANGLE	
1	9.5
2	9.9
3	10.5
4	11.5
5	12.9
6	14.4
7	16.1
8	17.9
9	19.7
10	21.4
11	23.1
12	24.9
13	26.7
14	28.4
15	30.1
16	31.9
17	33.7
18	35.4
19	37.1
20	38.8
21	40.5
22	42.3
23	44.1
24	45.7
25	47.4
26	49.1
27	50.8
28	52.5
29	54.2
30	56.0
31	57.8
32	59.6
33	61.3
34	63.1
35	64.4
36	64.7



	R
1	143.3
2	162.3
3	181.3
4	200.3
5	219.2
6	238.2
7	257.2
8	276.2
9	295.2
10	314.2
11	333.2
12	352.1
13	371.1
14	390.1
15	409.1
16	428.1
17	466.1

V, R, A DISPLAY (VELOCITY AT I_{MAX})

ORIGINAL PAGE IS OF POOR QUALITY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

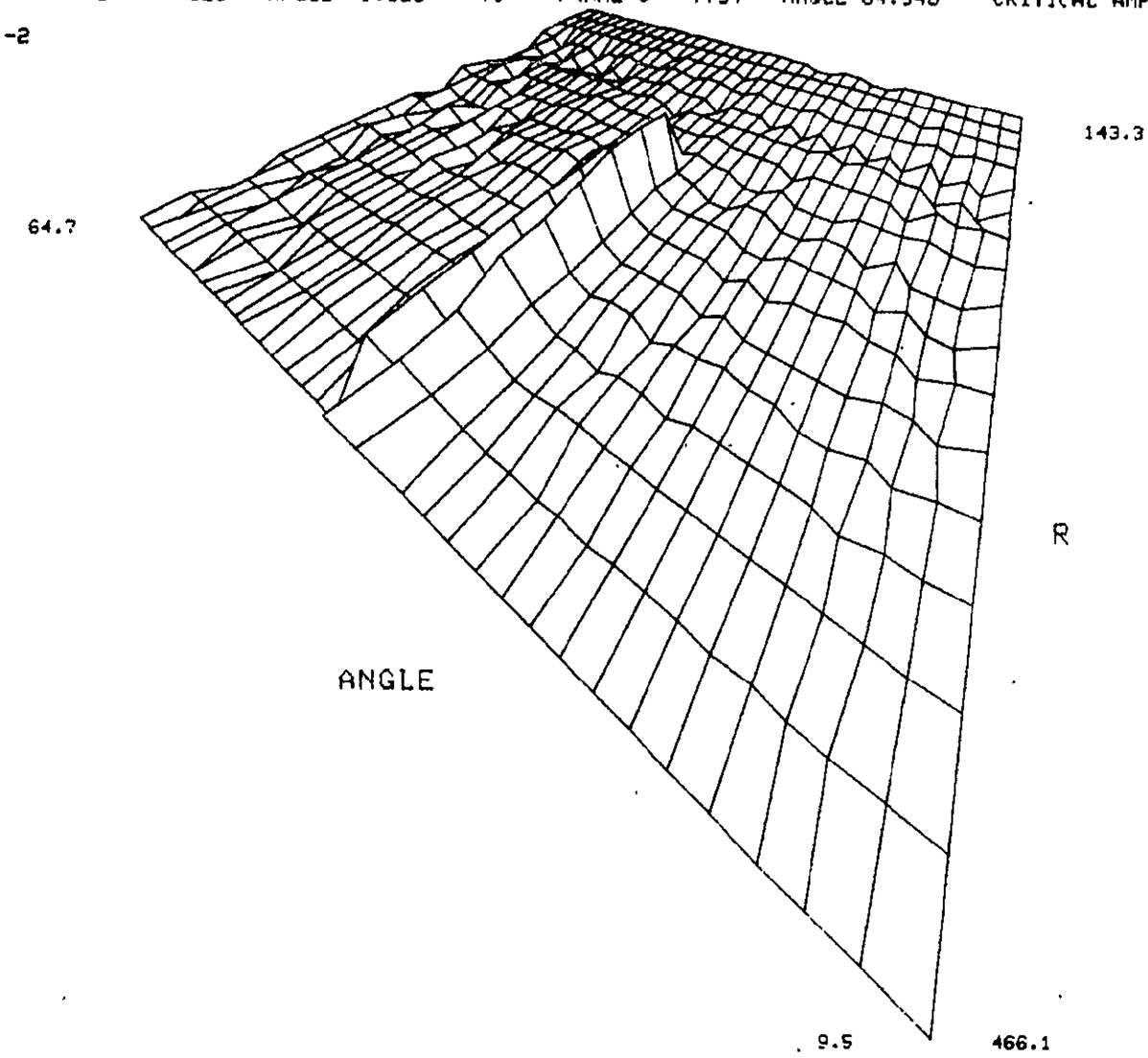
* SCAN # 9 FRAME # 7126 ANGLE 9.326 TO FRAME # 7764 ANGLE 64.346 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V = 14.0

AVERAGE V = 3.3

	ANGLE
1	9.5
2	9.9
3	10.5
4	11.5
5	12.9
6	14.4
7	16.1
8	17.9
9	19.7
10	21.4
11	23.1
12	24.9
13	26.7
14	28.4
15	30.1
16	31.9
17	33.7
18	35.4
19	37.1
20	38.8
21	40.5
22	42.3
23	44.1
24	45.7
25	47.4
26	49.1
27	50.8
28	52.5
29	54.2
30	56.0
31	57.8
32	59.6
33	61.3
34	63.1
35	64.4
36	64.7



	R
1	143.3
2	162.3
3	181.3
4	200.3
5	219.2
6	238.2
7	257.2
8	276.2
9	295.2
10	314.2
11	333.2
12	352.1
13	371.1
14	390.1
15	409.1
16	428.1
17	466.1

U, R, A DISPLAY (VELOCITY AT I_{max})

ORIGINAL PAGE IS
OF POOR QUALITY

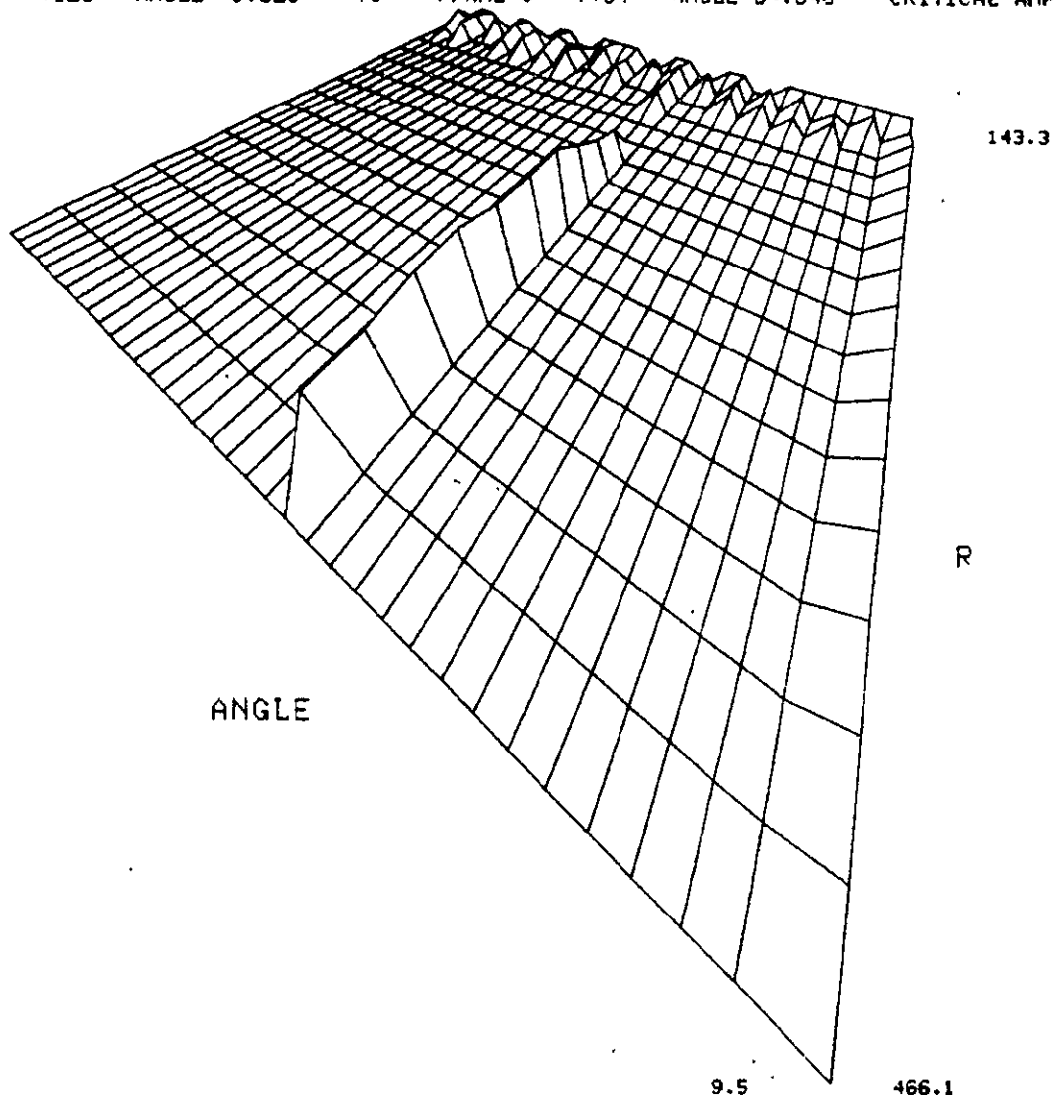
NASA PROJECT DUST DEVIL DAY 230 RUN # 4 TAPE 1 OF 2- 6110

* SCAN # 9 FRAME # 7126 ANGLE 9.326 TO FRAME # 7764 ANGLE 64.846 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 11.0

AVERAGE V = 1.4



	ANGLE
1	9.5
2	9.9
3	10.5
4	11.5
5	12.9
6	14.4
7	16.1
8	17.9
9	19.7
10	21.4
11	23.1
12	24.9
13	26.7
14	28.4
15	30.1
16	31.9
17	33.7
18	35.4
19	37.1
20	38.8
21	40.5
22	42.3
23	44.1
24	45.7
25	47.4
26	49.1
27	50.8
28	52.5
29	54.2
30	56.0
31	57.8
32	59.6
33	61.3
34	63.1
35	64.4
36	64.7

	R
1	143.3
2	162.3
3	181.3
4	200.3
5	219.2
6	238.2
7	257.2
8	276.2
9	295.2
10	314.2
11	333.2
12	352.1
13	371.1
14	390.1
15	409.1
16	428.1
17	466.1

U_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 PUN # 4 TAPE 1 OF 2- 6110

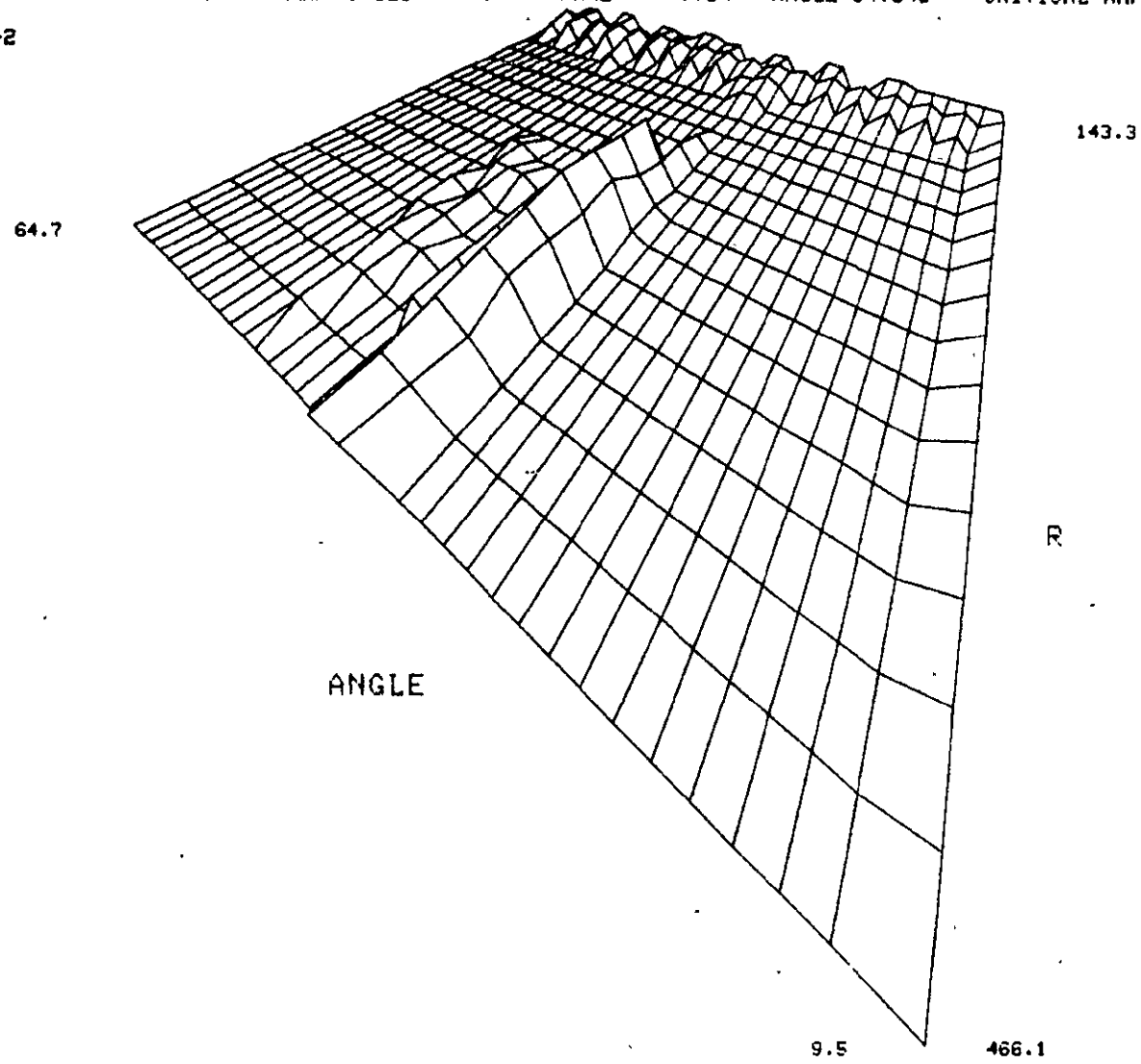
SCAN # 9 FRAME # 7126 ANGLE 9.326 TO FRAME # 7764 ANGLE 64.846 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM V = 17.0

AVERAGE V = 2.2

ANGLE	
1	9.5
2	9.9
3	10.5
4	11.5
5	12.9
6	14.4
7	16.1
8	17.9
9	19.7
10	21.4
11	23.1
12	24.9
13	26.7
14	28.4
15	30.1
16	31.9
17	33.7
18	35.4
19	37.1
20	38.8
21	40.5
22	42.3
23	44.1
24	45.7
25	47.4
26	49.1
27	50.8
28	52.5
29	54.2
30	56.0
31	57.8
32	59.6
33	61.3
34	63.1
35	64.4
36	64.7



	R
1	143.3
2	162.3
3	181.3
4	200.3
5	219.2
6	238.2
7	257.2
8	276.2
9	295.2
10	314.2
11	333.2
12	352.1
13	371.1
14	390.1
15	409.1
16	428.1
17	466.1

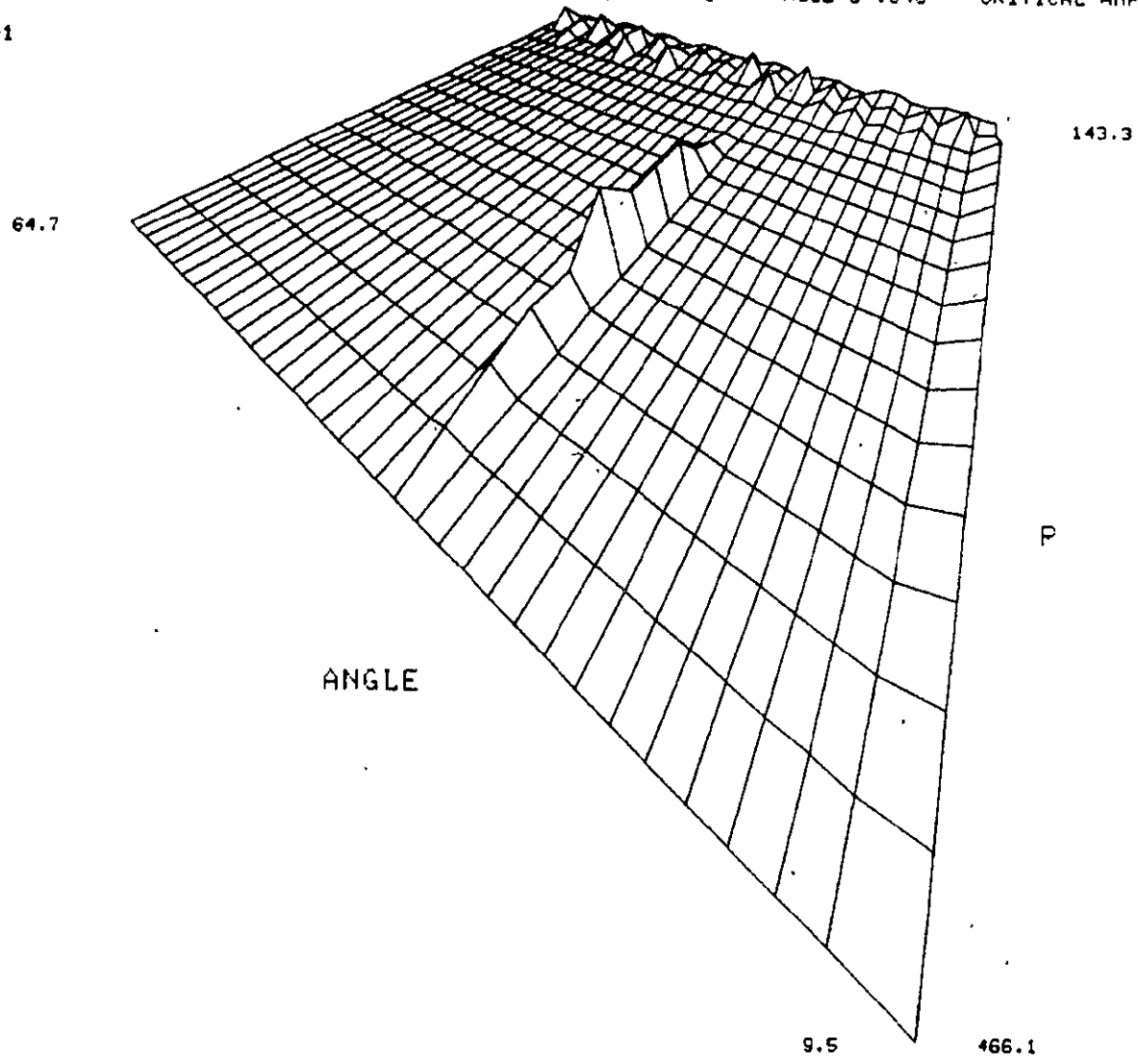
V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 3- 6110

SCAN # 9 FRAME # 7126 ANGLE 3.326 TO FRAME # 7764 ANGLE 64.846 CRITICAL AMP AT CELL 62

OPTION # 31-1



	ANGLE
1	9.5
2	9.9
3	10.5
4	11.5
5	12.9
6	14.4
7	16.1
8	17.9
9	19.7
10	21.4
11	23.1
12	24.9
13	26.7
14	28.4
15	30.1
16	31.9
17	33.7
18	35.4
19	37.1
20	38.8
21	40.5
22	42.3
23	44.1
24	45.7
25	47.4
26	49.1
27	50.8
28	52.5
29	54.2
30	56.0
31	57.8
32	59.6
33	61.3
34	63.1
35	64.4
36	64.7

	P
1	143.3
2	162.3
3	181.3
4	200.3
5	219.2
6	238.2
7	257.2
8	276.2
9	295.2
10	314.2
11	333.2
12	352.1
13	371.1
14	390.1
15	409.1
16	428.1
17	466.1

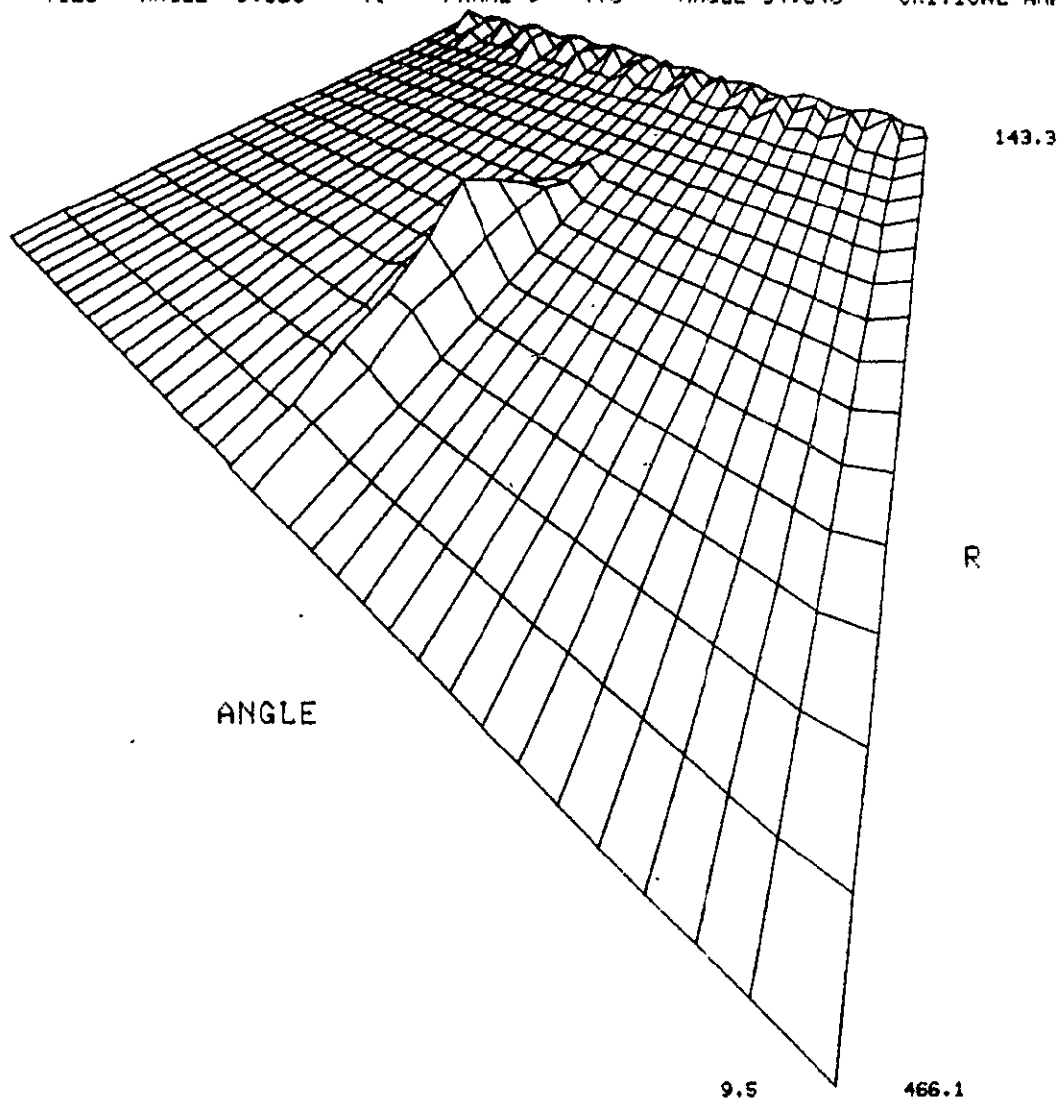
V * IMAX. R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

* SCAN # 9 FRAME # 7126 ANGLE 9.326 TO FRAME # 7764 ANGLE 54.846 CRITICAL AMP AT CELL 62

OPTION # 31-2



	ANGLE
1	9.5
2	9.9
3	10.5
4	11.5
5	12.9
6	14.4
7	16.1
8	17.9
9	19.7
10	21.4
11	23.1
12	24.9
13	26.7
14	28.4
15	30.1
16	31.9
17	33.7
18	35.4
19	37.1
20	38.8
21	40.5
22	42.3
23	44.1
24	45.7
25	47.4
26	49.1
27	50.8
28	52.5
29	54.2
30	56.0
31	57.8
32	59.6
33	61.3
34	63.1
35	64.4
36	64.7

	R
1	143.3
2	162.3
3	181.3
4	200.3
5	219.2
6	238.2
7	257.2
8	276.2
9	295.2
10	314.2
11	333.2
12	352.1
13	371.1
14	390.1
15	409.1
16	428.1
17	466.1

U X Imax, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

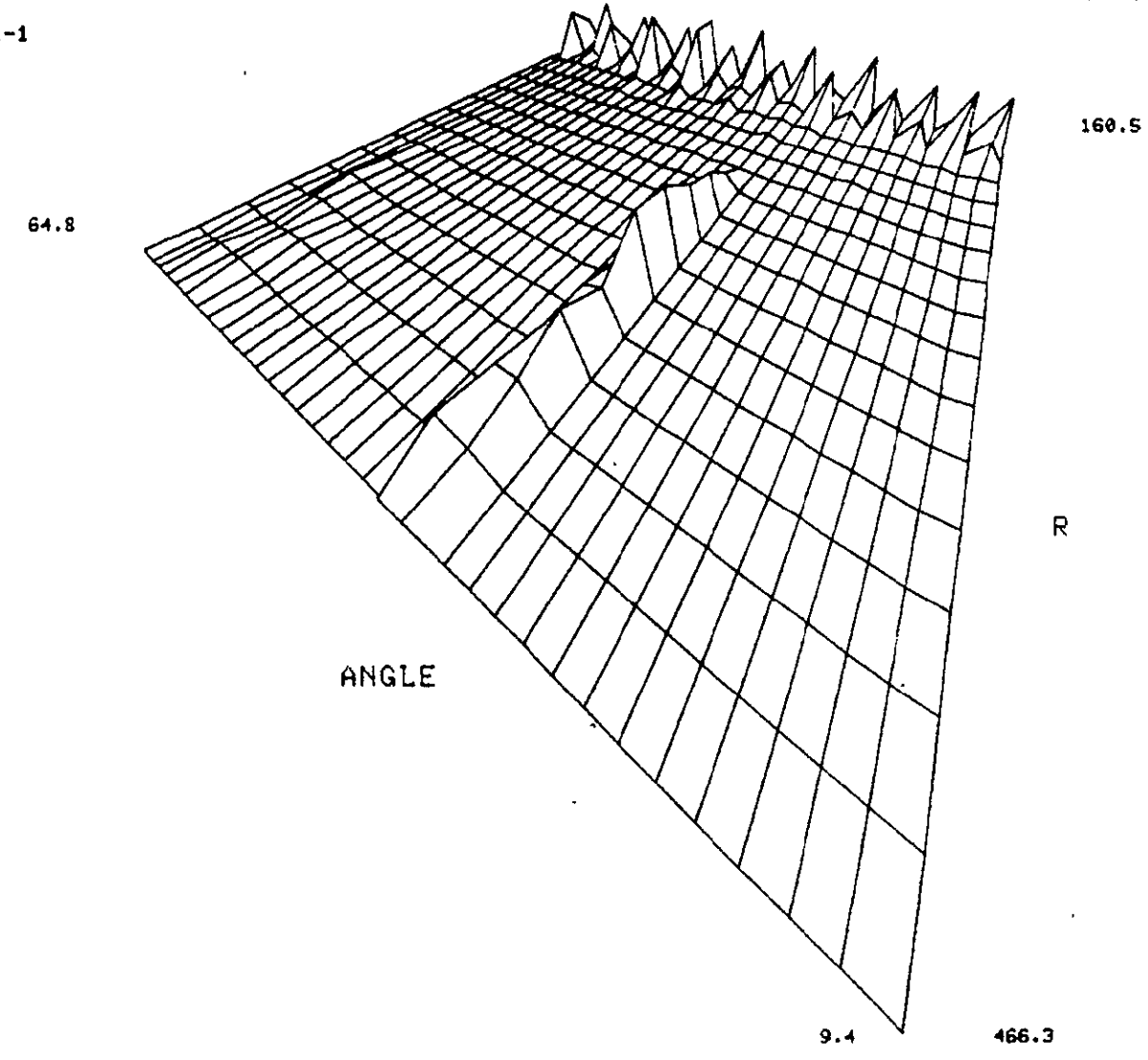
* SCAN # 10 FRAME # 7764 ANGLE 64.846 TO FRAME # 8369 ANGLE 9.232 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 38.0

AVERAGE I = 2.4

ANGLE	
1	64.8
2	64.3
3	63.3
4	62.1
5	60.5
6	58.8
7	57.0
8	55.3
9	53.5
10	51.7
11	50.0
12	48.3
13	46.6
14	44.9
15	43.2
16	41.5
17	39.7
18	38.0
19	36.2
20	34.5
21	32.8
22	31.0
23	29.2
24	27.6
25	25.8
26	24.0
27	22.2
28	20.5
29	18.7
30	17.0
31	15.1
32	13.3
33	11.6
34	10.2
35	9.4



	R
1	-160.5
2	179.6
3	198.7
4	217.8
5	236.9
6	256.1
7	275.2
8	294.3
9	313.4
10	332.5
11	351.6
12	370.8
13	389.9
14	409.0
15	428.1
16	466.3

Imax, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

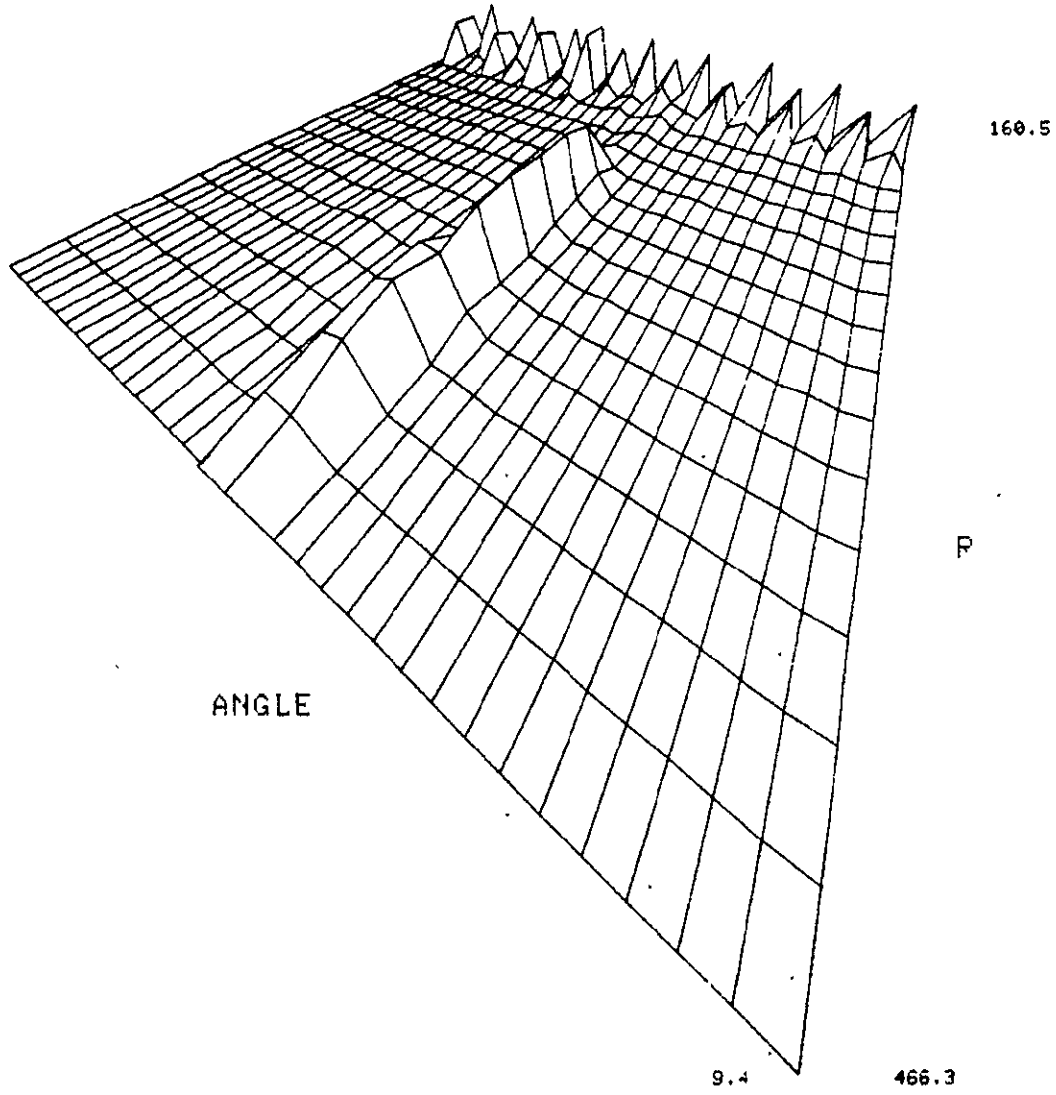
\# SCAN # 10 FRAME # 7764 ANGLE 64.346 TO FRAME # 3369 ANGLE 9.282 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 69.0

AVERAGE I = 6.0

ANGLE	
1	64.8
2	64.3
3	63.3
4	62.1
5	60.5
6	58.8
7	57.0
8	55.3
9	53.5
10	51.7
11	50.0
12	48.3
13	46.6
14	44.9
15	43.2
16	41.5
17	39.7
18	38.0
19	36.2
20	34.5
21	32.8
22	31.0
23	29.2
24	27.6
25	25.8
26	24.0
27	22.2
28	20.5
29	18.7
30	17.0
31	15.1
32	13.3
33	11.6
34	10.2
35	9.4



R	
1	160.5
2	179.6
3	198.7
4	217.3
5	236.9
6	256.1
7	275.2
8	294.3
9	313.4
10	332.5
11	351.6
12	370.3
13	389.9
14	409.0
15	428.1
16	466.3

I_{MAX}, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

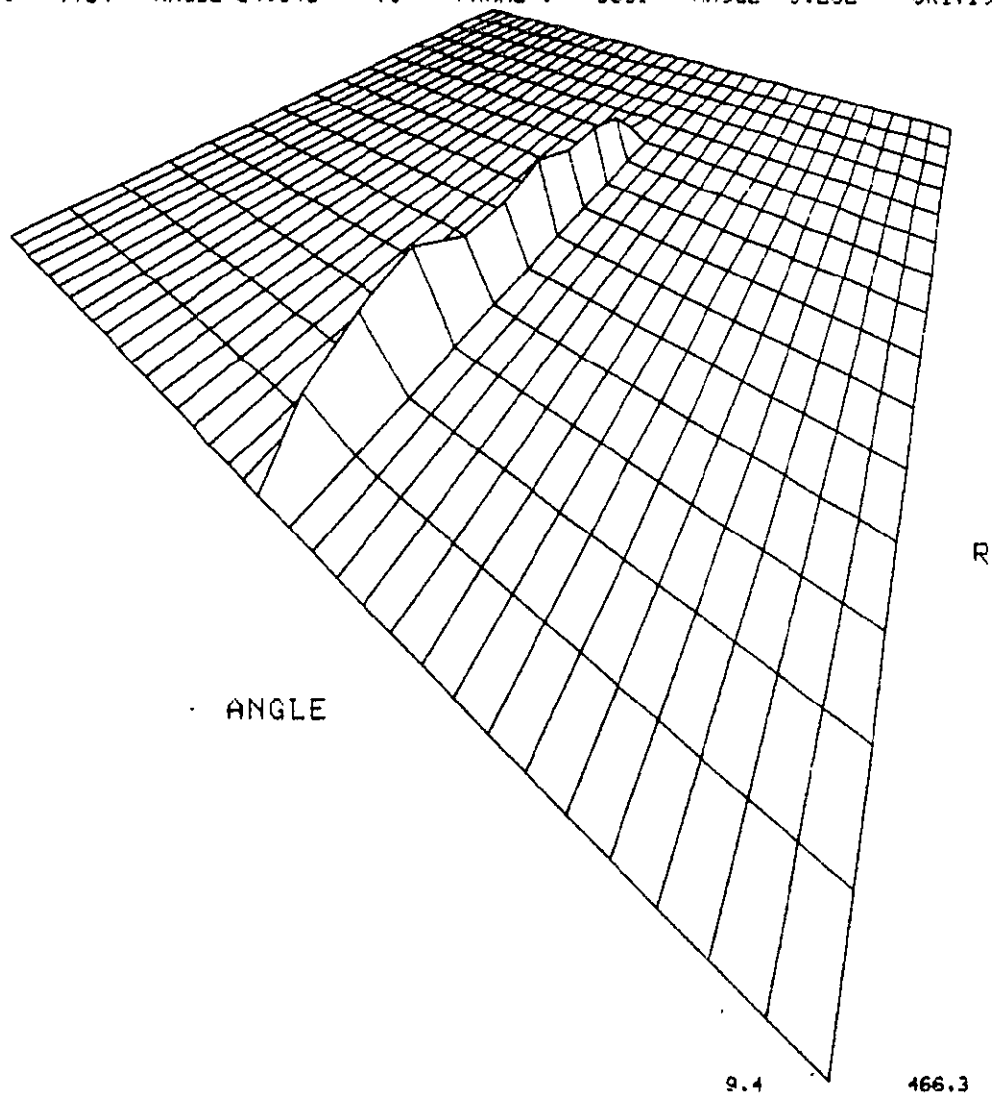
* SCAN # 10 FRAME # 7764 ANGLE 64.846 TO FRAME # 8369 ANGLE 9.282 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 66.0

AVERAGE I = 0.9

	ANGLE
1	64.8
2	64.3
3	63.3
4	62.1
5	60.5
6	58.8
7	57.0
8	55.3
9	53.5
10	51.7
11	50.0
12	48.3
13	46.6
14	44.9
15	43.2
16	41.5
17	39.7
18	38.0
19	36.2
20	34.5
21	32.8
22	31.0
23	29.2
24	27.6
25	25.8
26	24.0
27	22.2
28	20.5
29	18.7
30	17.0
31	15.1
32	13.3
33	11.6
34	10.2
35	9.4



	R
1	160.5
2	179.6
3	198.7
4	217.8
5	236.9
6	256.1
7	275.2
8	294.3
9	313.4
10	332.5
11	351.6
12	370.8
13	389.9
14	409.0
15	428.1
16	466.3

I, R, A DISPLAY AT VELOCITY CELL 62

ORIGINAL PAGE IS OF POOR QUALITY

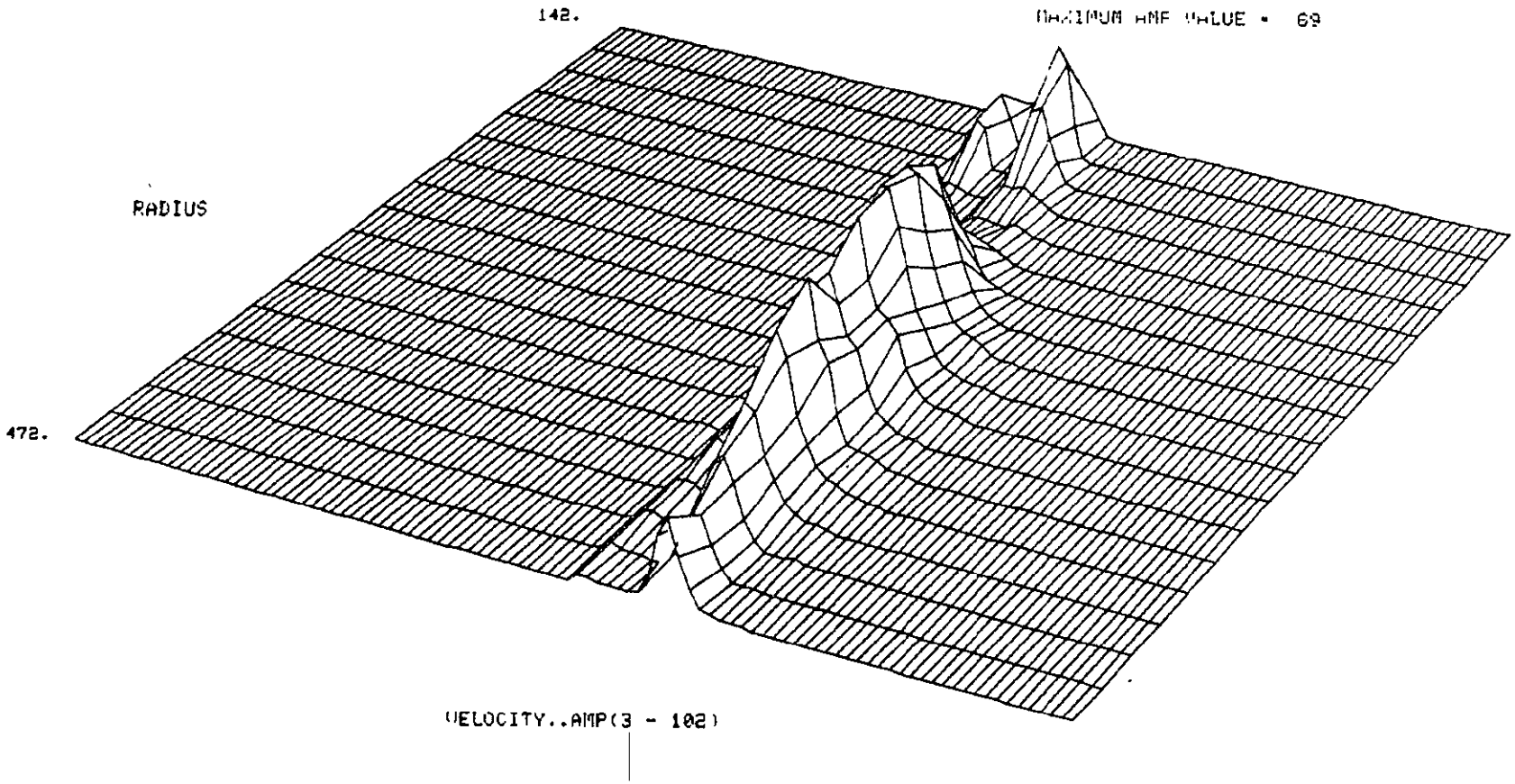
NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 5110

SCAN # 10 FRAME # 7764 ANGLE 64.846 TO FRAME # 8369 ANGLE 9.232 CRITICAL AMP AT CELL 62

FRAME # 9094 TO 8112

ANGLE = 34.49

MAXIMUM AMP VALUE = 69



ORIGINAL PAGE IS
OF POOR QUALITY

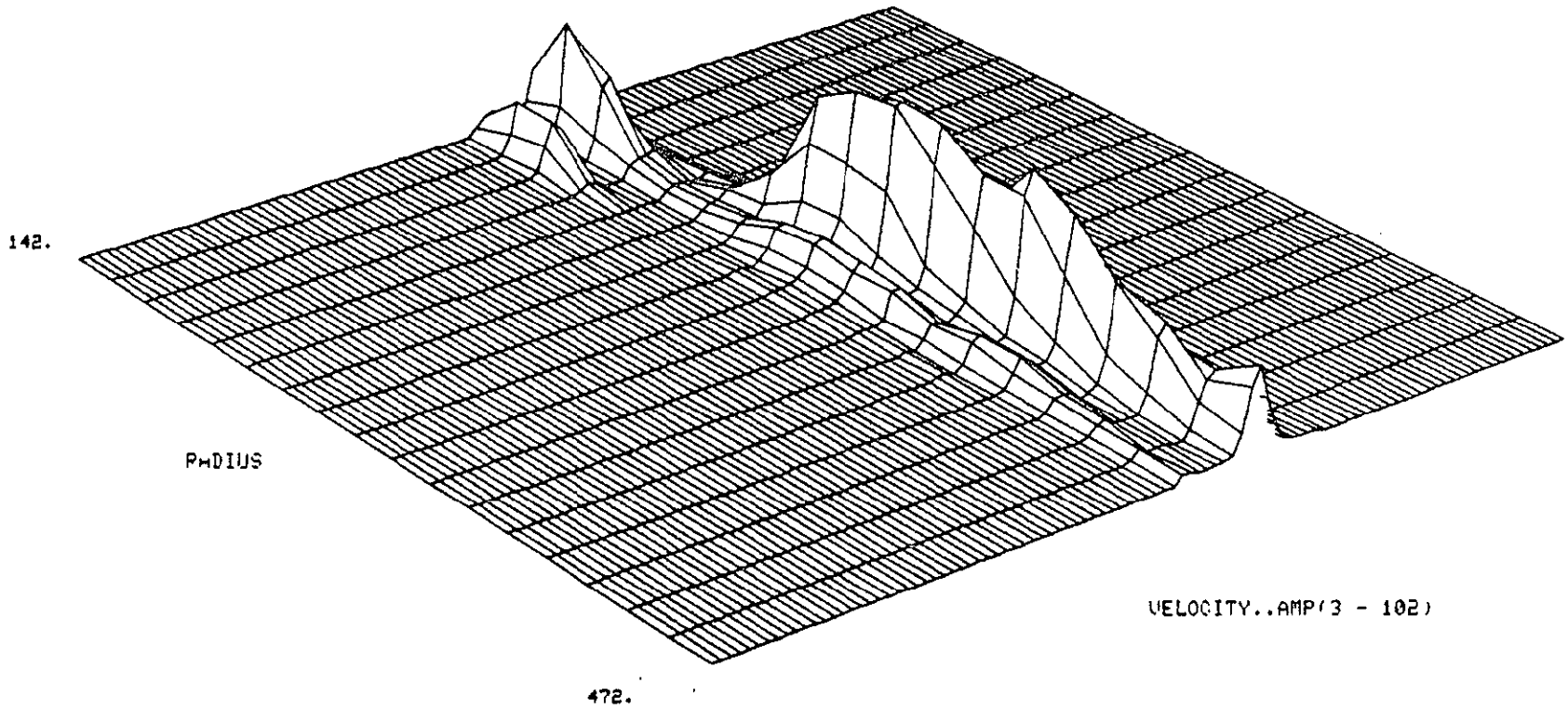
NASA PROJECT DUST DEVIL DAY 235 RUN # 4 TAPE 1 OF 2- 5110

SCAN # 10 FRAME # 7764 ANGLE 64.846 TO FRAME # 8369 ANGLE 9.282 CRITICAL AMP AT CELL 62

FRAME # 8094 TO 8112

ANGLE = 34.49

MAXIMUM AMP VALUE = 69



ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 .. TAPE 1 OF E- 6110

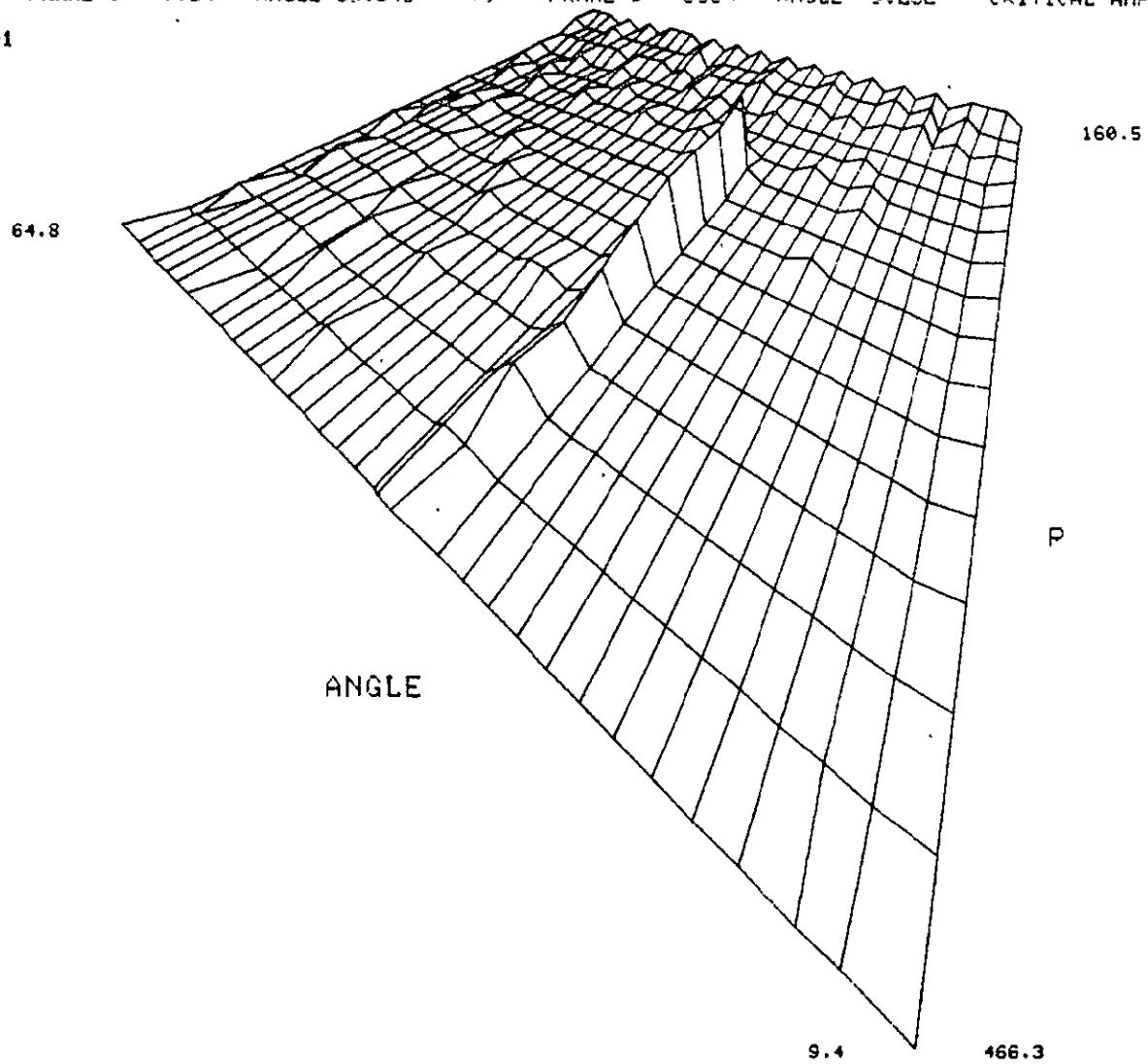
* SCAN # 10 FRAME # 7764 ANGLE 64.346 TO FRAME # 8363 ANGLE 9.222 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 8.0

AVERAGE V = 1.5

	ANGLE
1	64.8
2	64.3
3	63.3
4	62.1
5	60.5
6	58.8
7	57.0
8	55.3
9	53.5
10	51.7
11	50.0
12	48.3
13	46.6
14	44.9
15	43.2
16	41.5
17	39.7
18	38.0
19	36.2
20	34.5
21	32.8
22	31.0
23	29.2
24	27.6
25	25.8
26	24.0
27	22.2
28	20.5
29	18.7
30	17.0
31	15.1
32	13.3
33	11.6
34	10.2
35	9.4



	P
1	160.5
2	179.6
3	198.7
4	217.8
5	236.9
6	256.1
7	275.2
8	294.3
9	313.4
10	332.5
11	351.6
12	370.3
13	389.3
14	409.0
15	428.1
16	466.3

V, R, A DISPLAY (VELOCITY AT I_{MAX})

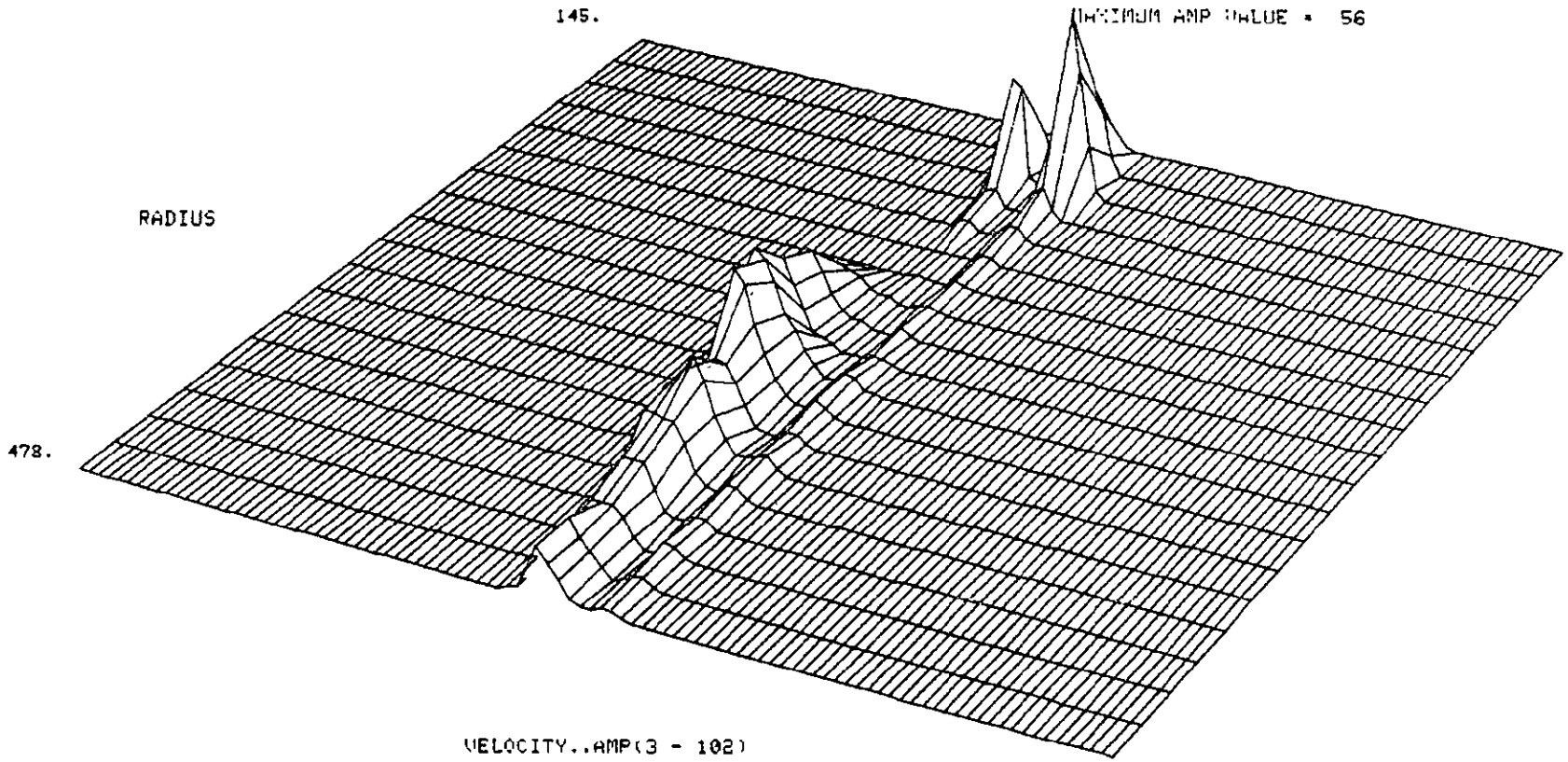
NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 8110

SCAN # 10 FRAME # 7764 ANGLE 64.846 TO FRAME # 8369 ANGLE 9.232 CRITICAL AMP AT CELL 62

FRAME # 8130 TO 8149

ANGLE = 30.94

MAXIMUM AMP VALUE = 56



ORIGINAL PAGE IS
OF POOR QUALITY

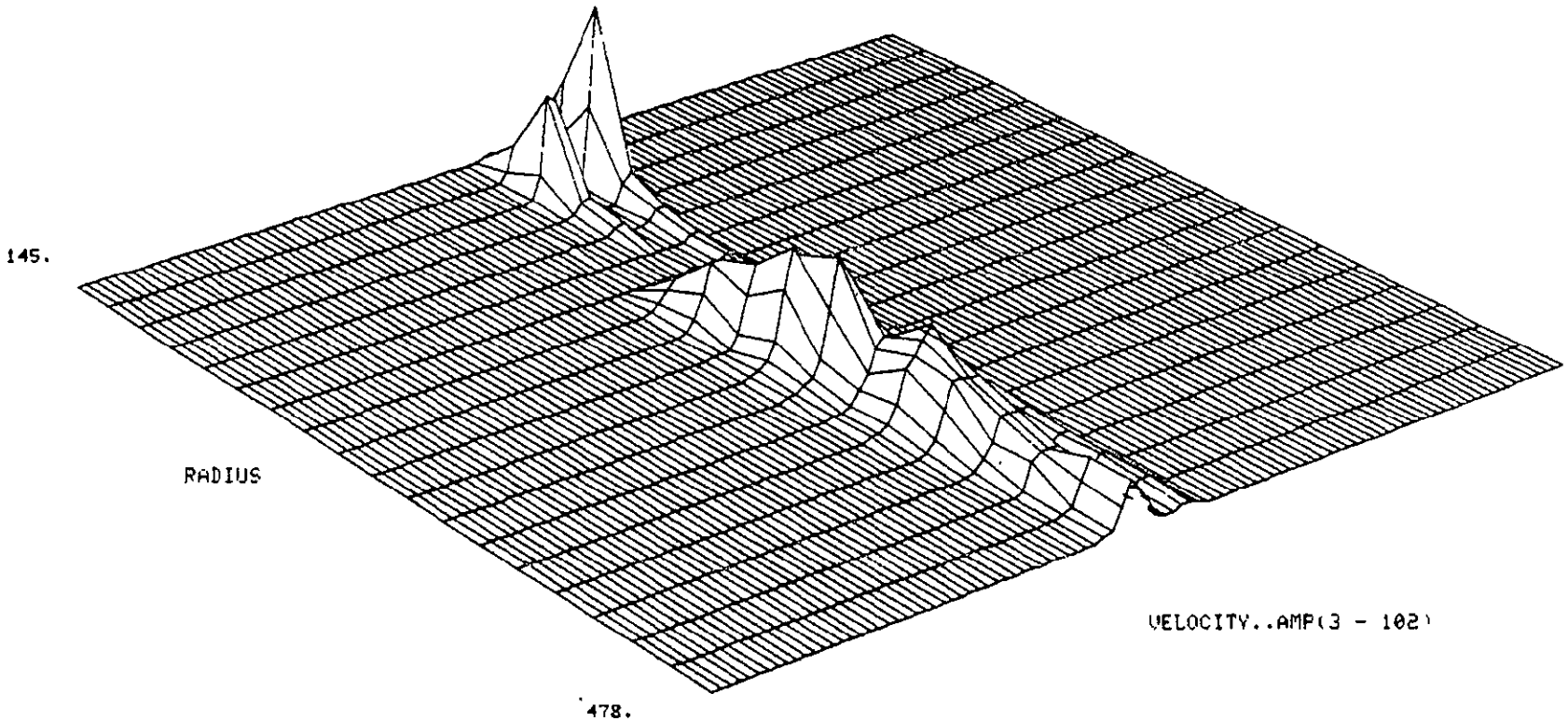
NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- E110

SCAN # 10 FRAME # 7764 ANGLE 64.846 TO FRAME # 8369 ANGLE 9.282 CRITICAL AMP AT CELL 62

FRAME # 8130 TO 8149

ANGLE = 30.94

MAXIMUM AMP VALUE = 56



ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

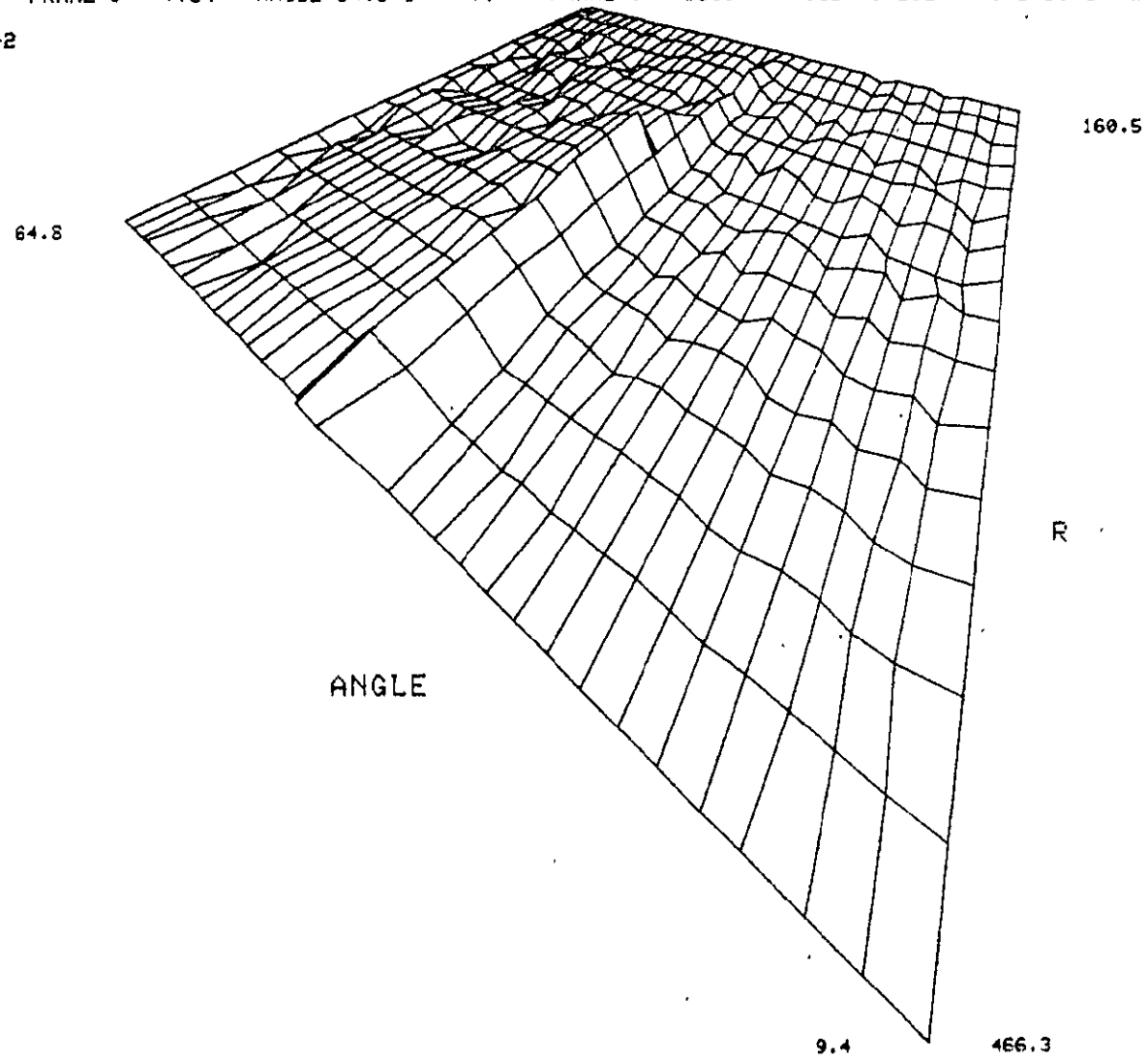
* SCAN # 10 FRAME # 7764 ANGLE 64.846 TO FRAME # 8369 ANGLE 9.282 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V = 14.0

AVERAGE V = 3.3

ANGLE	
1	64.8
2	64.3
3	63.3
4	62.1
5	60.5
6	58.8
7	57.0
8	55.3
9	53.5
10	51.7
11	50.0
12	48.3
13	46.6
14	44.9
15	43.2
16	41.5
17	39.7
18	38.0
19	36.2
20	34.5
21	32.8
22	31.0
23	29.2
24	27.6
25	25.8
26	24.0
27	22.2
28	20.5
29	18.7
30	17.0
31	15.1
32	13.3
33	11.6
34	10.2
35	9.4



R	
1	160.5
2	179.6
3	198.7
4	217.8
5	236.9
6	256.1
7	275.2
8	294.3
9	313.4
10	332.5
11	351.6
12	370.8
13	389.9
14	409.0
15	428.1
16	466.3

V, R, A DISPLAY (VELOCITY AT I_{MAX})

NASA PROJECT DUST DEVIL DAY 230 RUN # 4 TAPE 1 OF 2- 6110

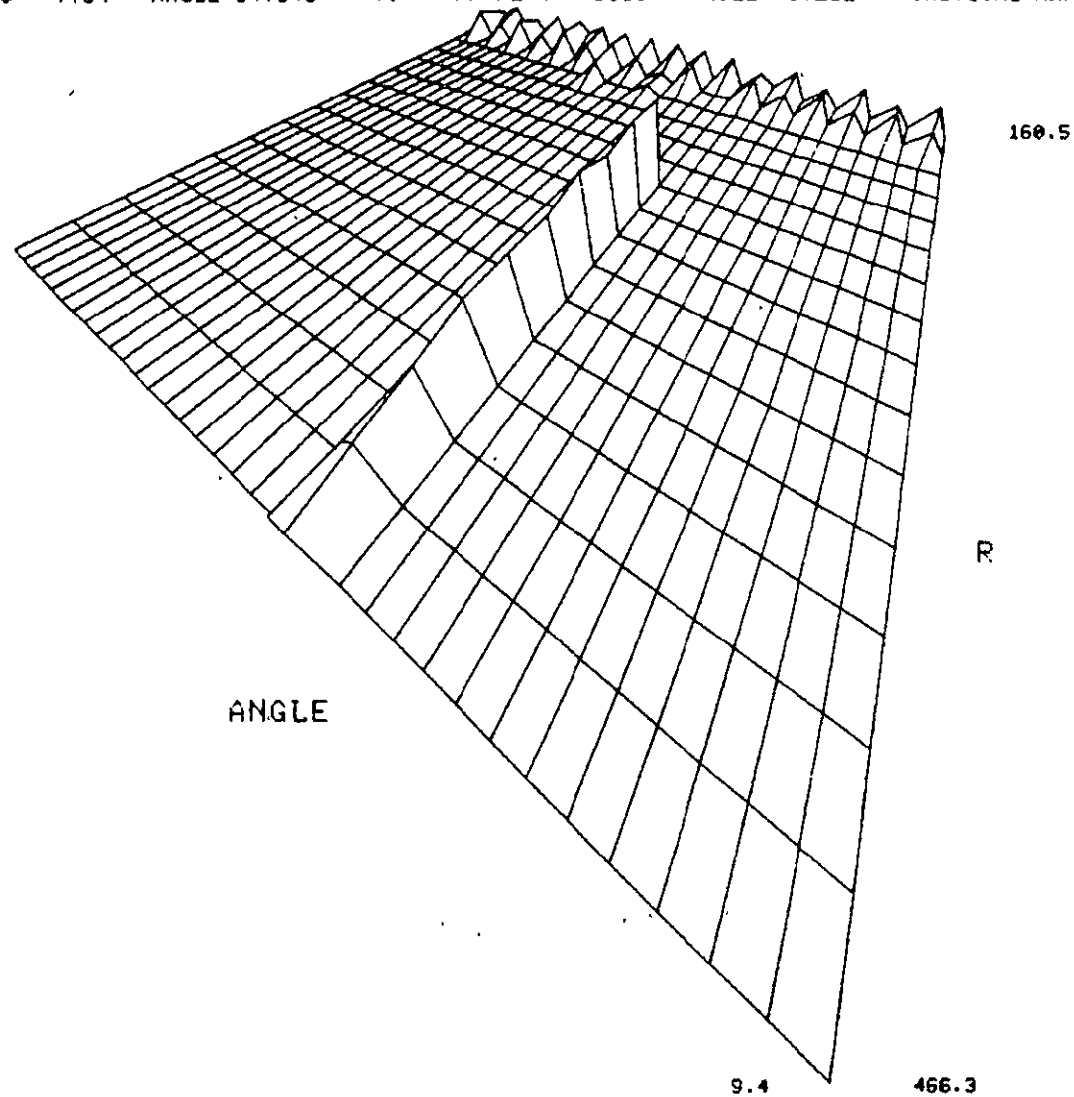
* SCAN # 10 FRAME # 7764 ANGLE 64.846 TO FRAME # 8369 ANGLE 9.232 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 9.0

AVERAGE V = 1.3

ANGLE	
1	64.8
2	64.3
3	63.3
4	62.1
5	60.5
6	58.8
7	57.0
8	55.3
9	53.5
10	51.7
11	50.0
12	48.3
13	46.6
14	44.9
15	43.2
16	41.5
17	39.7
18	38.0
19	36.2
20	34.5
21	32.8
22	31.0
23	29.2
24	27.6
25	25.8
26	24.0
27	22.2
28	20.5
29	18.7
30	17.0
31	15.1
32	13.3
33	11.6
34	10.2
35	9.4



R	
1	160.5
2	179.6
3	198.7
4	217.8
5	236.9
6	256.1
7	275.2
8	294.3
9	313.4
10	332.5
11	351.6
12	370.8
13	389.9
14	409.0
15	428.1
16	466.3

VMAX, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 3- 6110

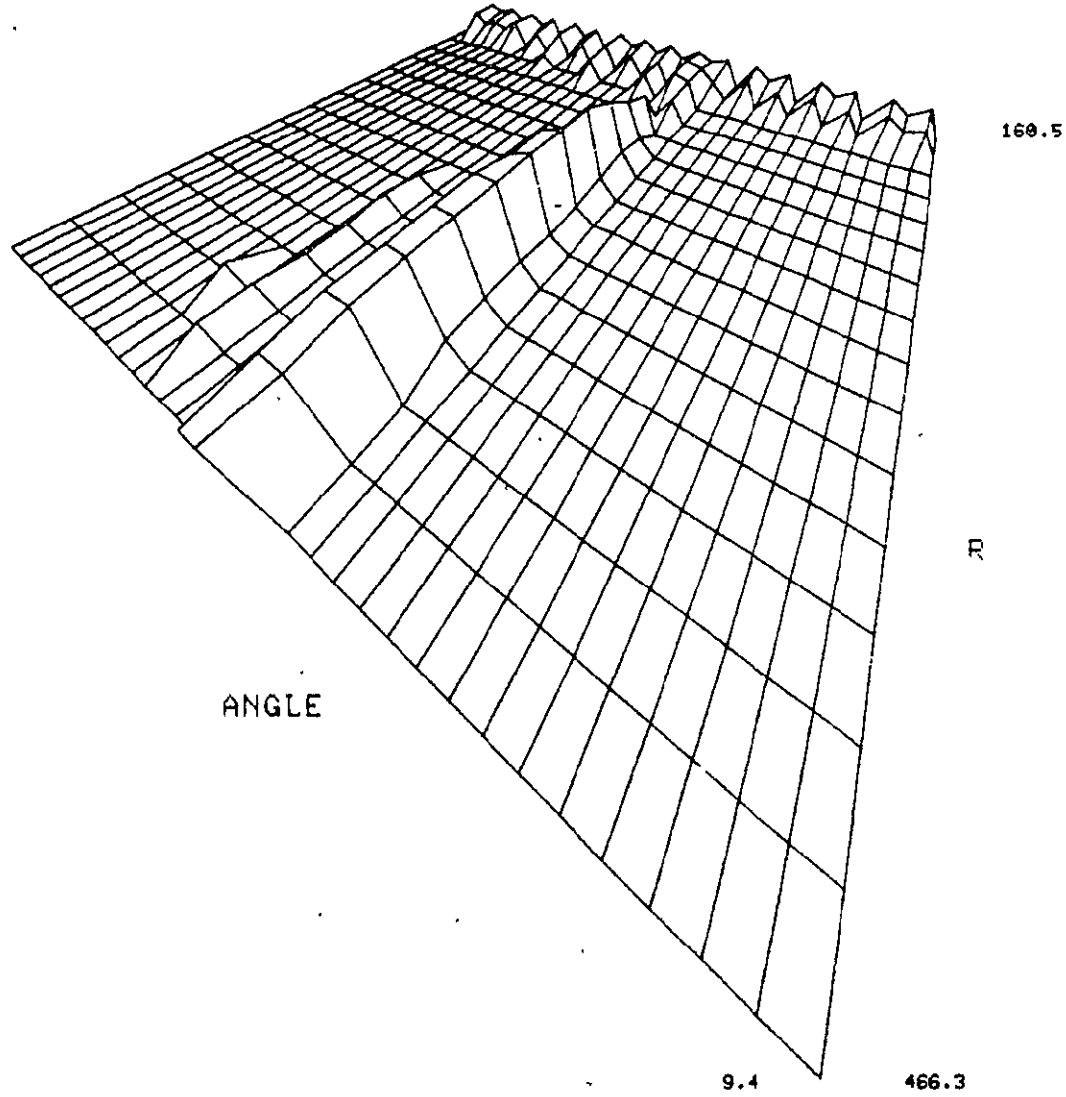
* SCAN # 10 FRAME # 7764 ANGLE 64.846 TO FRAME # 8369 ANGLE 9.282 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM V = 15.0

AVERAGE V = 2.0

ANGLE	
1	64.8
2	64.3
3	63.3
4	62.1
5	60.5
6	58.8
7	57.0
8	55.3
9	53.5
10	51.7
11	50.0
12	48.3
13	46.6
14	44.9
15	43.2
16	41.5
17	39.7
18	38.0
19	36.2
20	34.5
21	32.8
22	31.0
23	29.2
24	27.6
25	25.8
26	24.0
27	22.2
28	20.5
29	18.7
30	17.0
31	15.1
32	13.3
33	11.6
34	10.2
35	9.4



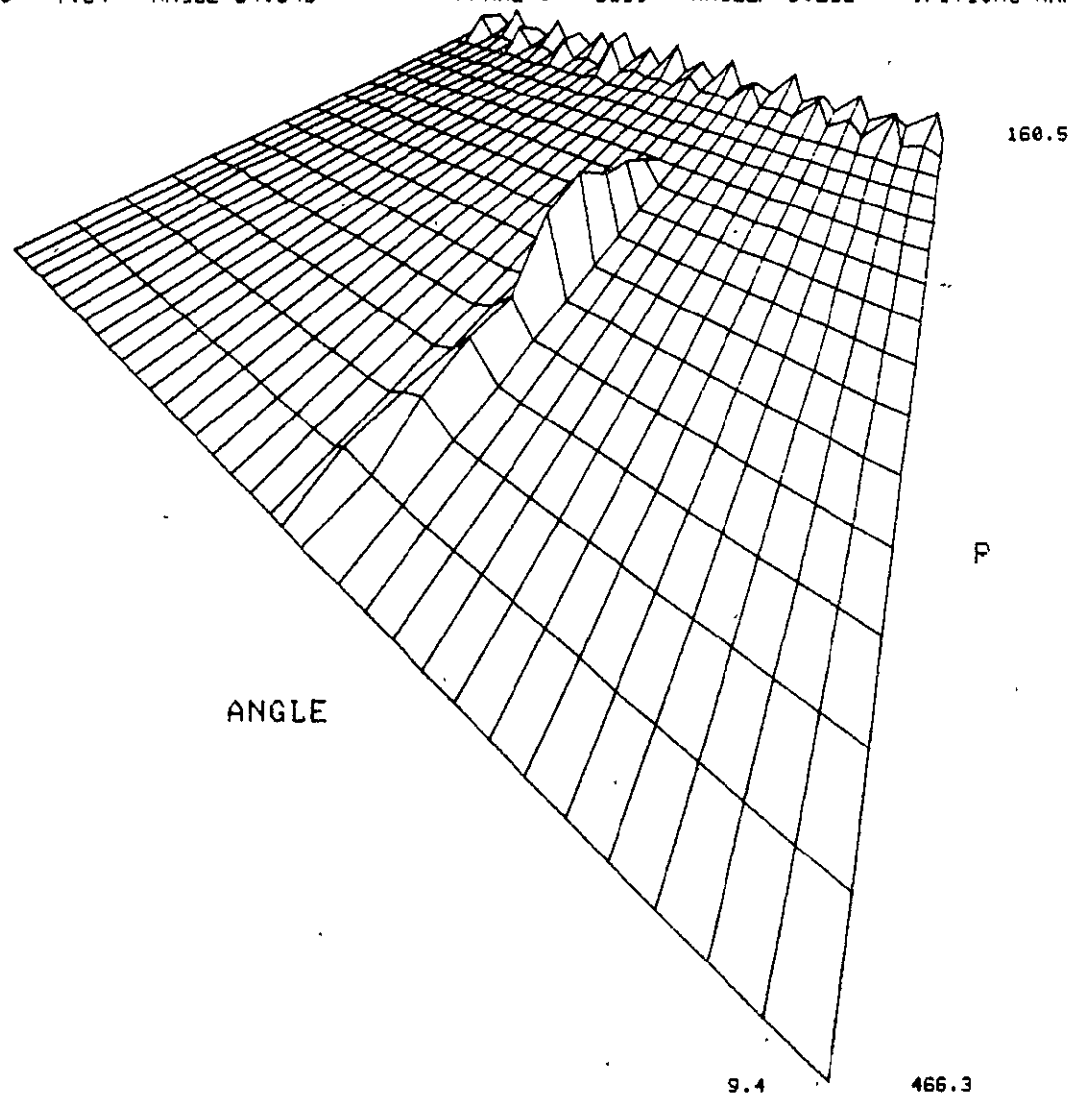
	R
1	160.5
2	179.6
3	198.7
4	217.8
5	236.9
6	256.1
7	275.2
8	294.3
9	313.4
10	332.5
11	351.6
12	370.3
13	389.9
14	409.0
15	428.1
16	466.3

Vmax, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

* SCAN # 10 FRAME # 7764 ANGLE 64.346 TO FRAME # 3369 ANGLE 9.232 CRITICAL AMP AT CELL 62

OPTION # 31-1



	ANGLE
1	64.8
2	64.3
3	63.3
4	62.1
5	60.5
6	58.8
7	57.0
8	55.3
9	53.5
10	51.7
11	50.0
12	48.3
13	46.6
14	44.9
15	43.2
16	41.5
17	39.7
18	38.0
19	36.2
20	34.5
21	32.8
22	31.0
23	29.2
24	27.6
25	25.8
26	24.0
27	22.2
28	20.5
29	18.7
30	17.0
31	15.1
32	13.3
33	11.6
34	10.2
35	9.4

	R
1	160.5
2	179.6
3	198.7
4	217.8
5	236.9
6	256.1
7	275.2
8	294.3
9	313.4
10	332.5
11	351.6
12	370.3
13	389.9
14	409.0
15	428.1
16	466.3

V * Imax, R, A DISPLAY

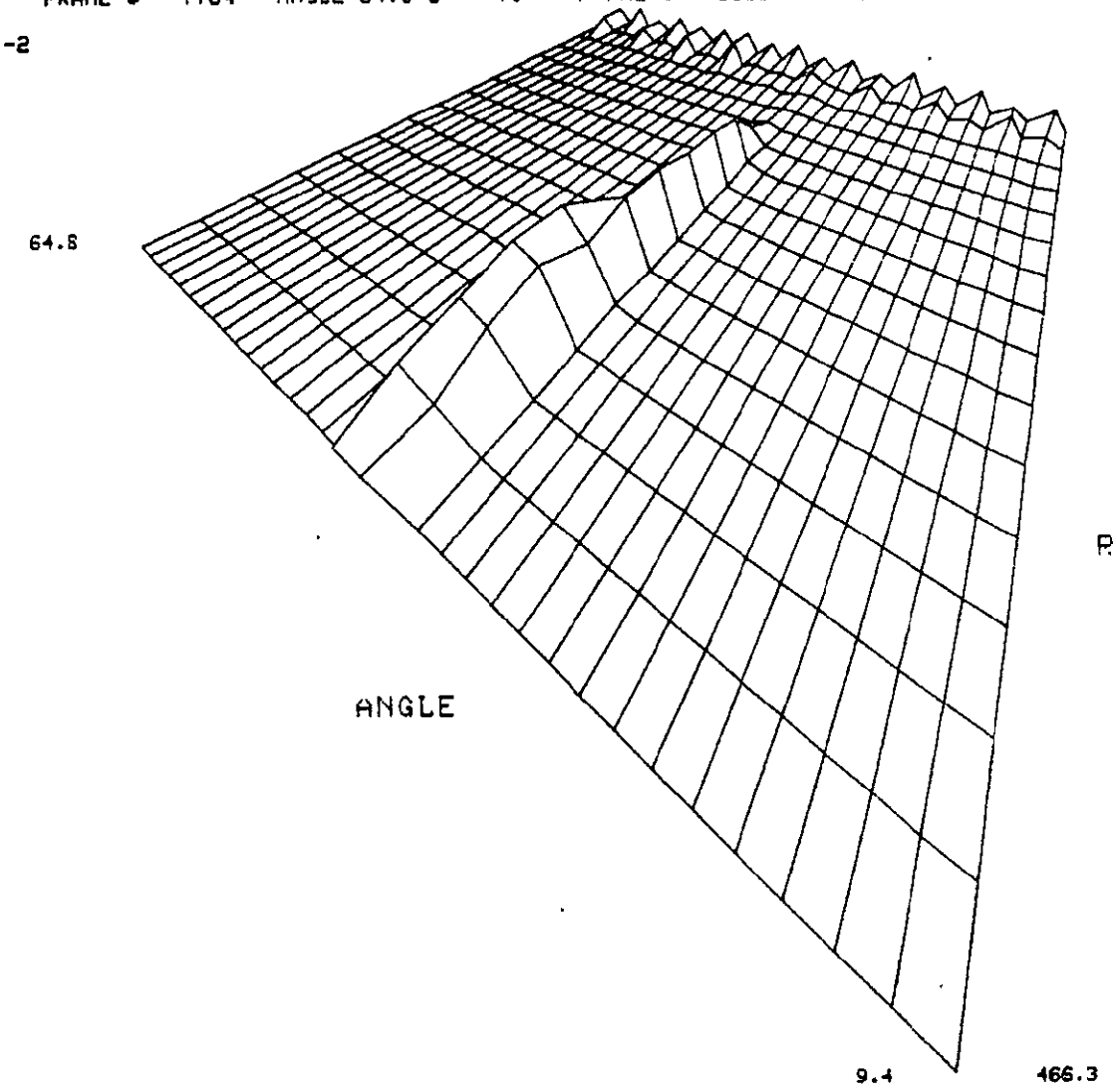
ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

* SCAN # 10 FRAME # 7764 ANGLE 64.846 TO FRAME # 8369 ANGLE 9.282 CRITICAL AMP AT CELL 62

OPTION # 31-2

ANGLE	
1	64.8
2	64.3
3	63.3
4	62.1
5	60.5
6	58.8
7	57.0
8	55.3
9	53.5
10	51.7
11	50.0
12	48.3
13	46.6
14	44.9
15	43.2
16	41.5
17	39.7
18	38.0
19	36.2
20	34.5
21	32.8
22	31.0
23	29.2
24	27.6
25	25.8
26	24.0
27	22.2
28	20.5
29	18.7
30	17.0
31	15.1
32	13.3
33	11.6
34	10.2
35	9.4



	R
1	160.5
2	179.6
3	198.7
4	217.8
5	236.9
6	256.1
7	275.2
8	294.3
9	313.4
10	332.5
11	351.6
12	370.8
13	389.9
14	409.0
15	428.1
16	466.3

V * Imax, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 8110

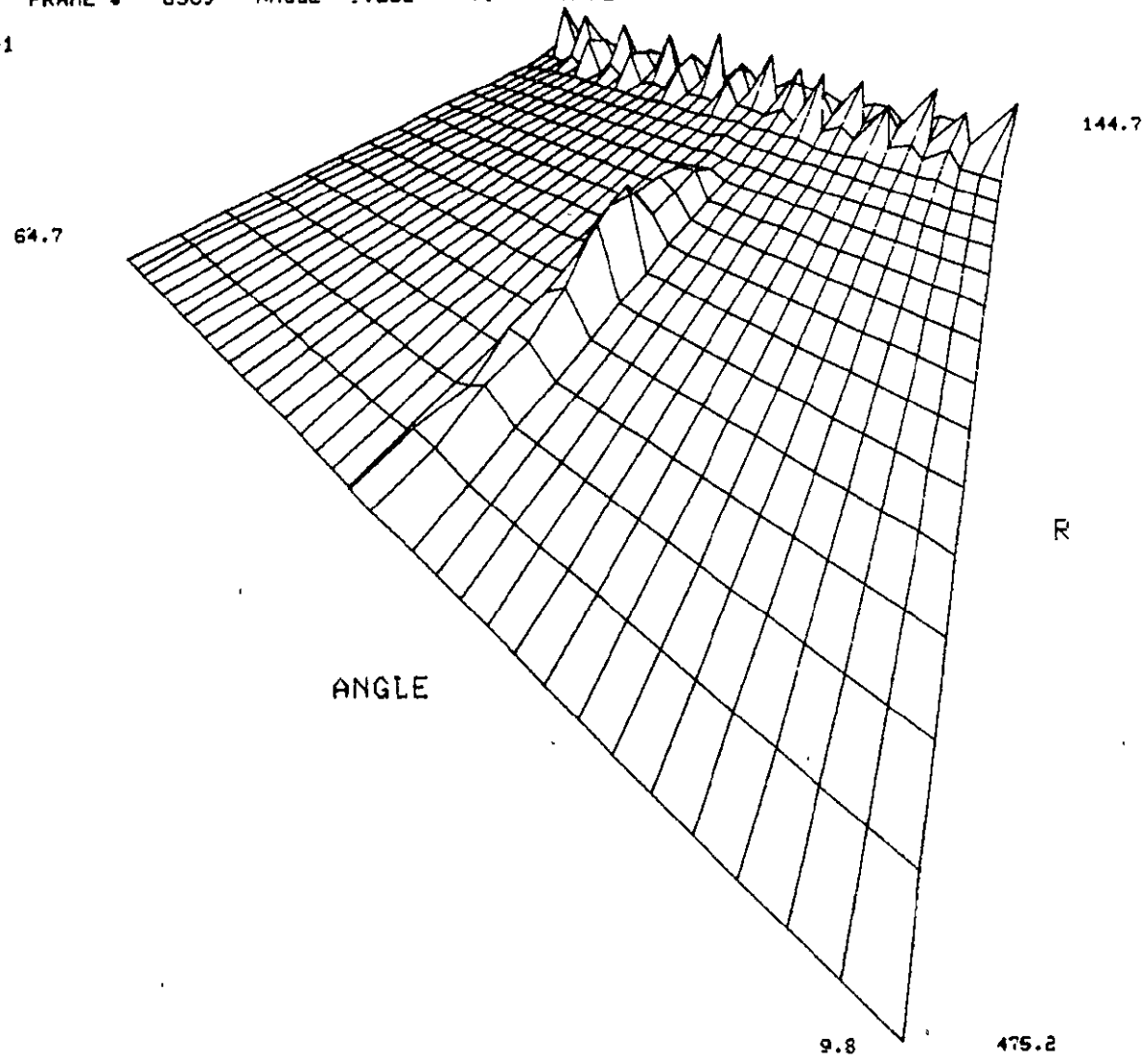
* SCAN # 11 FRAME # 8369 ANGLE 9.282 TO FRAME # 8997 ANGLE 65.042 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 44.0

AVERAGE I = 2.4

	ANGLE
1	9.8
2	10.3
3	11.2
4	12.5
5	14.0
6	15.8
7	17.6
8	19.2
9	20.9
10	22.7
11	24.5
12	26.3
13	28.0
14	29.7
15	31.5
16	33.3
17	35.0
18	36.7
19	38.4
20	40.2
21	42.0
22	43.7
23	45.3
24	47.0
25	48.7
26	50.4
27	52.1
28	53.9
29	55.7
30	57.3
31	59.1
32	60.9
33	62.7
34	64.3
35	64.7



	R
1	144.7
2	164.2
3	183.6
4	203.1
5	222.5
6	241.9
7	261.4
8	280.8
9	300.3
10	319.7
11	339.1
12	358.6
13	378.0
14	397.5
15	416.9
16	436.4
17	475.2

I_{MAX}, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 8110

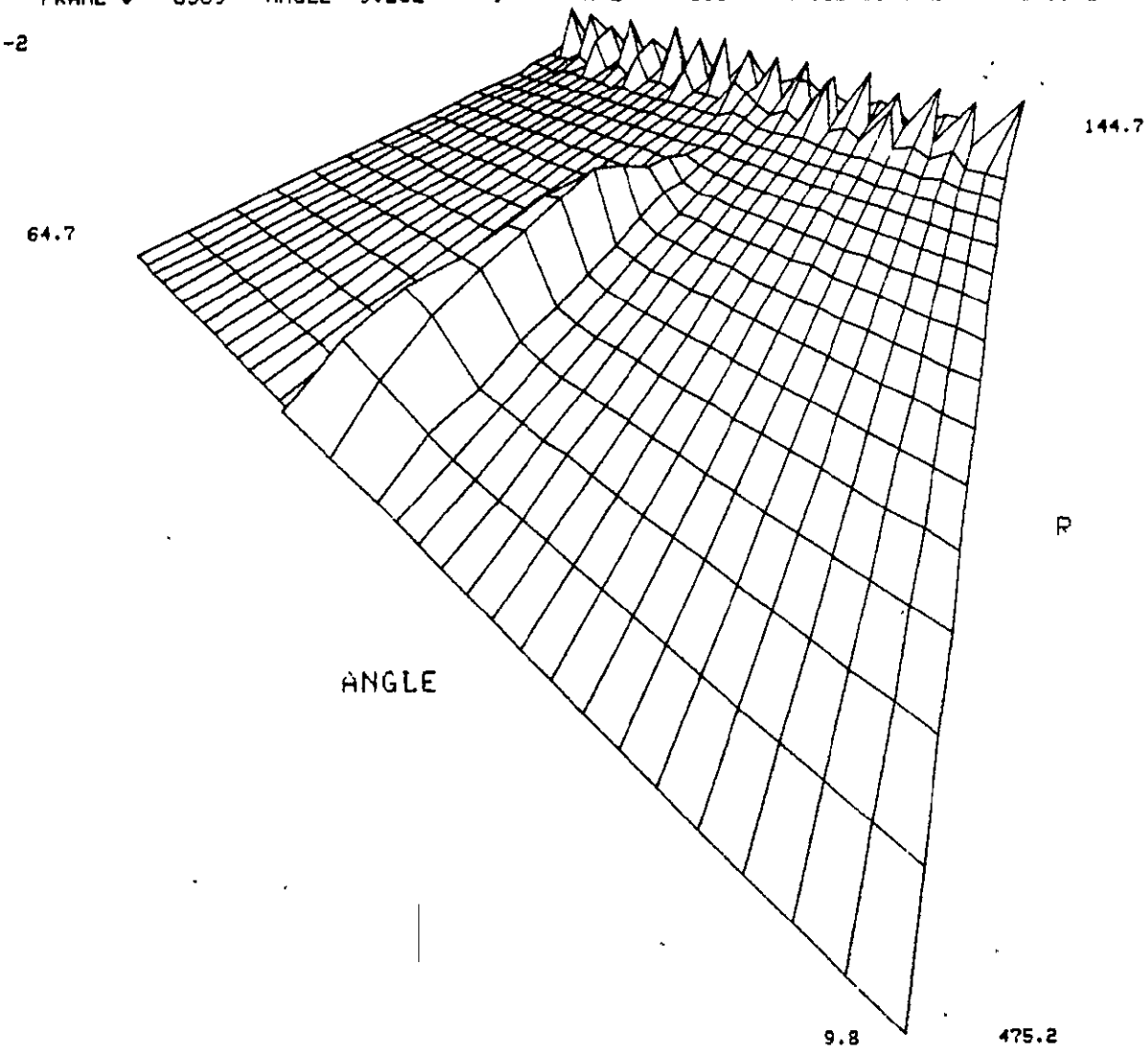
* SCAN # 11 FRAME # 8369 ANGLE 9.282 TO FRAME # 8997 ANGLE 65.042 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 68.0

AVERAGE I = 5.5

ANGLE	
1	9.8
2	10.3
3	11.2
4	12.5
5	14.0
6	15.8
7	17.6
8	19.2
9	20.9
10	22.7
11	24.5
12	26.3
13	28.0
14	29.7
15	31.5
16	33.3
17	35.0
18	36.7
19	38.4
20	40.2
21	42.0
22	43.7
23	45.3
24	47.0
25	48.7
26	50.4
27	52.1
28	53.9
29	55.7
30	57.3
31	59.1
32	60.9
33	62.7
34	64.3
35	64.7



	R
1	144.7
2	164.2
3	183.6
4	203.1
5	222.5
6	241.9
7	261.4
8	280.8
9	300.3
10	319.7
11	339.1
12	358.6
13	378.0
14	397.5
15	416.9
16	436.4
17	475.2

Imax, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

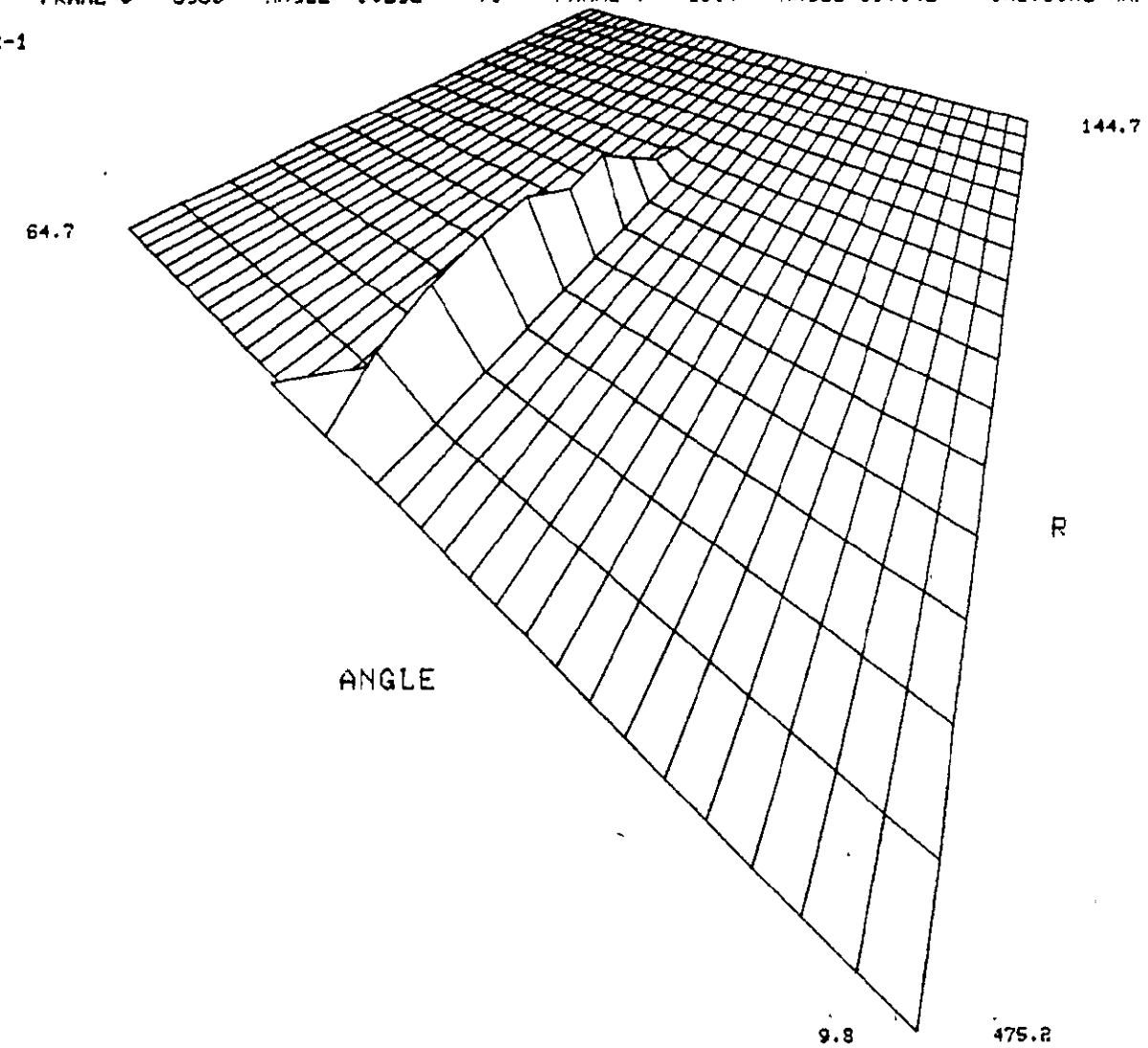
* SCAN # 11 FRAME # 8369 ANGLE 9.282 TO FRAME # 5997 ANGLE 65.042 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 63.0

AVERAGE I = 0.9

ANGLE	
1	9.8
2	10.3
3	11.2
4	12.5
5	14.0
6	15.8
7	17.6
8	19.2
9	20.9
10	22.7
11	24.5
12	26.3
13	28.0
14	29.7
15	31.5
16	33.3
17	35.0
18	36.7
19	38.4
20	40.2
21	42.0
22	43.7
23	45.3
24	47.0
25	48.7
26	50.4
27	52.1
28	53.9
29	55.7
30	57.3
31	59.1
32	60.9
33	62.7
34	64.3
35	64.7



	R
1	144.7
2	164.2
3	183.6
4	203.1
5	222.5
6	241.9
7	261.4
8	280.8
9	300.3
10	319.7
11	339.1
12	358.6
13	378.0
14	397.5
15	416.9
16	436.4
17	475.2

I, R, A DISPLAY AT VELOCITY CELL 62

ORIGINAL PAGE IS OF POOR QUALITY

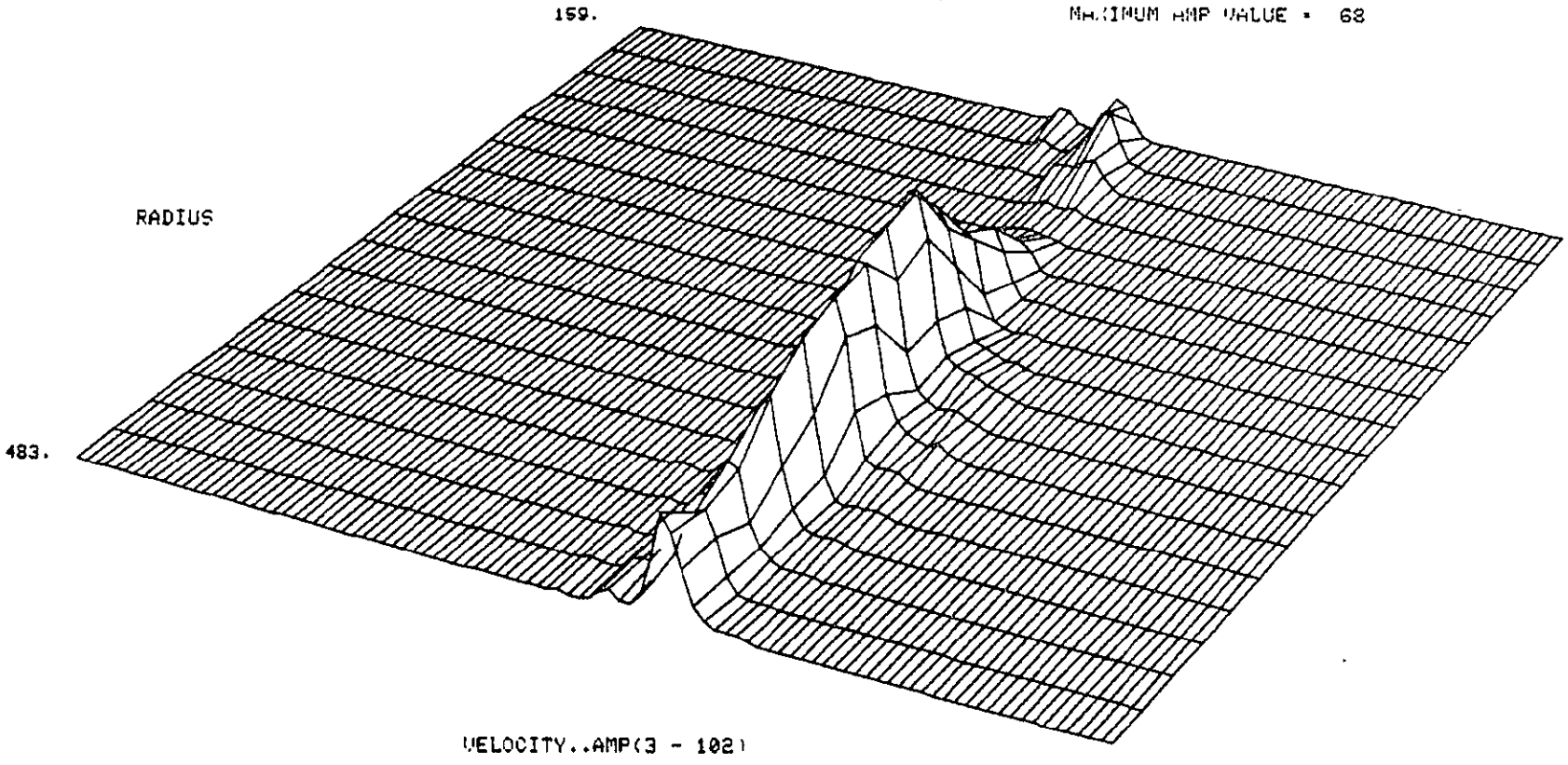
NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- E110

SCAN # 11 FRAME # 8369 ANGLE 9.232 TO FRAME # 8997 ANGLE 65.042 CRITICAL AMP AT CELL 62

FRAME # 8659 TO 8677

ANGLE = 35.01

MAXIMUM AMP VALUE = 68



ORIGINAL PAGE IS
OF POOR QUALITY

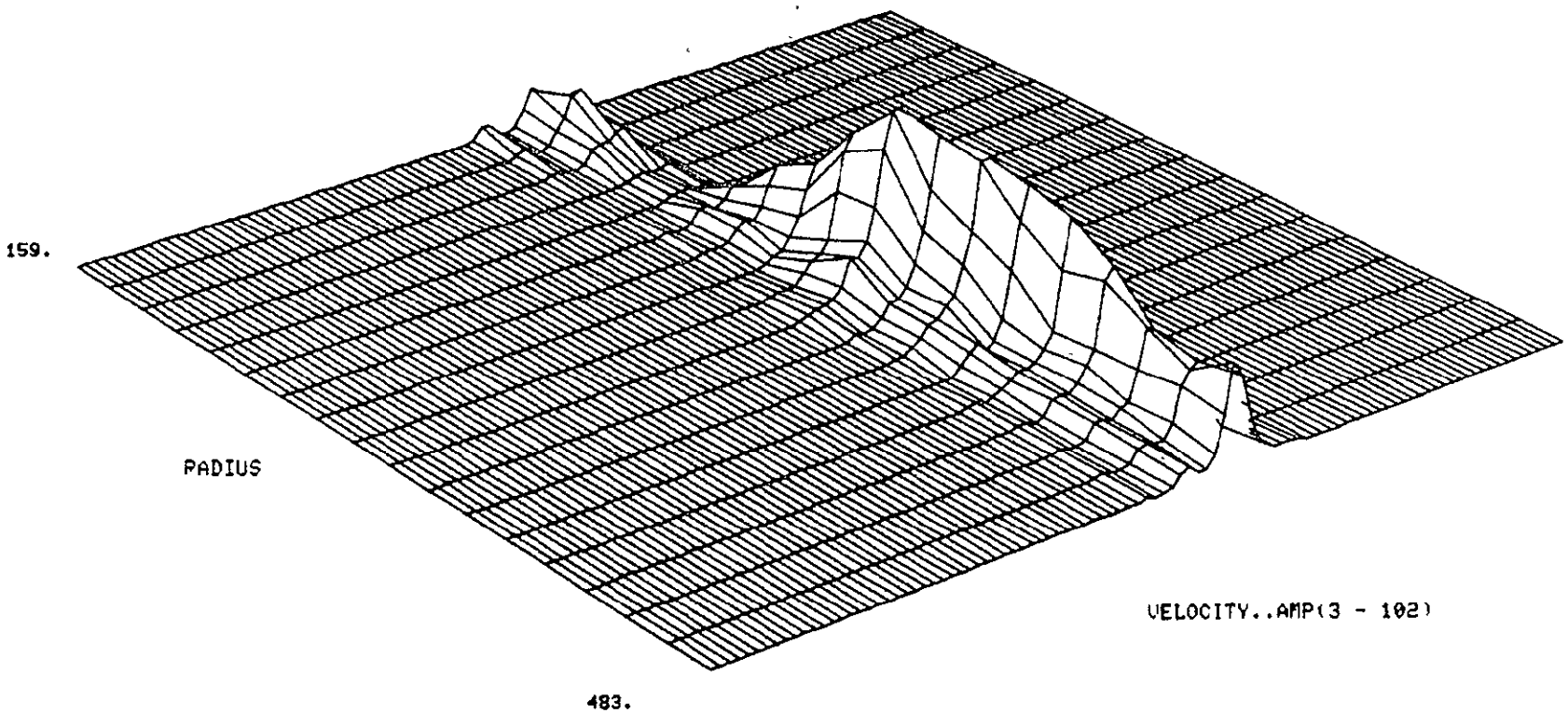
NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 11 FRAME # 8369 ANGLE 9.232 TO FRAME # 8997 ANGLE 65.042 CRITICAL AMP AT CELL 62

FRAME # 8659 TO 8677

ANGLE = 35.01

MAXIMUM AMP VALUE = 68



NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 3- 8110

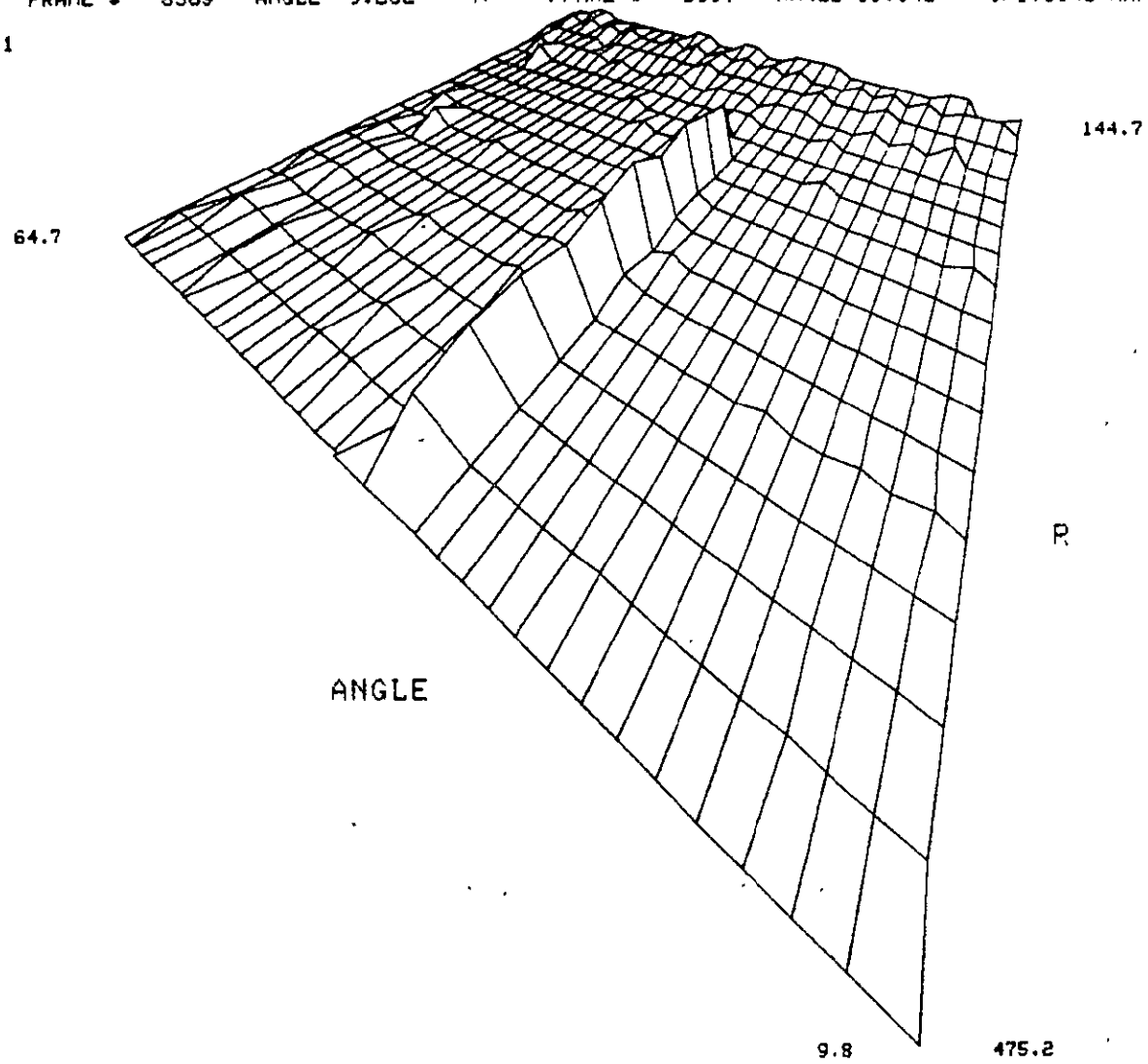
* SCAN # 11 FRAME # 3369 ANGLE 9.232 TO FRAME # 3997 ANGLE 65.042 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 10.0

AVERAGE V = 1.5

ANGLE	
1	9.8
2	10.3
3	11.2
4	12.5
5	14.0
6	15.8
7	17.6
8	19.2
9	20.9
10	22.7
11	24.5
12	26.3
13	28.0
14	29.7
15	31.5
16	33.3
17	35.0
18	36.7
19	38.4
20	40.2
21	42.0
22	43.7
23	45.3
24	47.0
25	48.7
26	50.4
27	52.1
28	53.9
29	55.7
30	57.3
31	59.1
32	60.9
33	62.7
34	64.3
35	64.7



	R
1	144.7
2	164.2
3	183.6
4	203.1
5	222.5
6	241.9
7	261.4
8	280.8
9	300.3
10	319.7
11	339.1
12	358.6
13	378.0
14	397.5
15	416.9
16	436.4
17	475.2

V, R, A DISPLAY (VELOCITY AT I_{MAX})

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

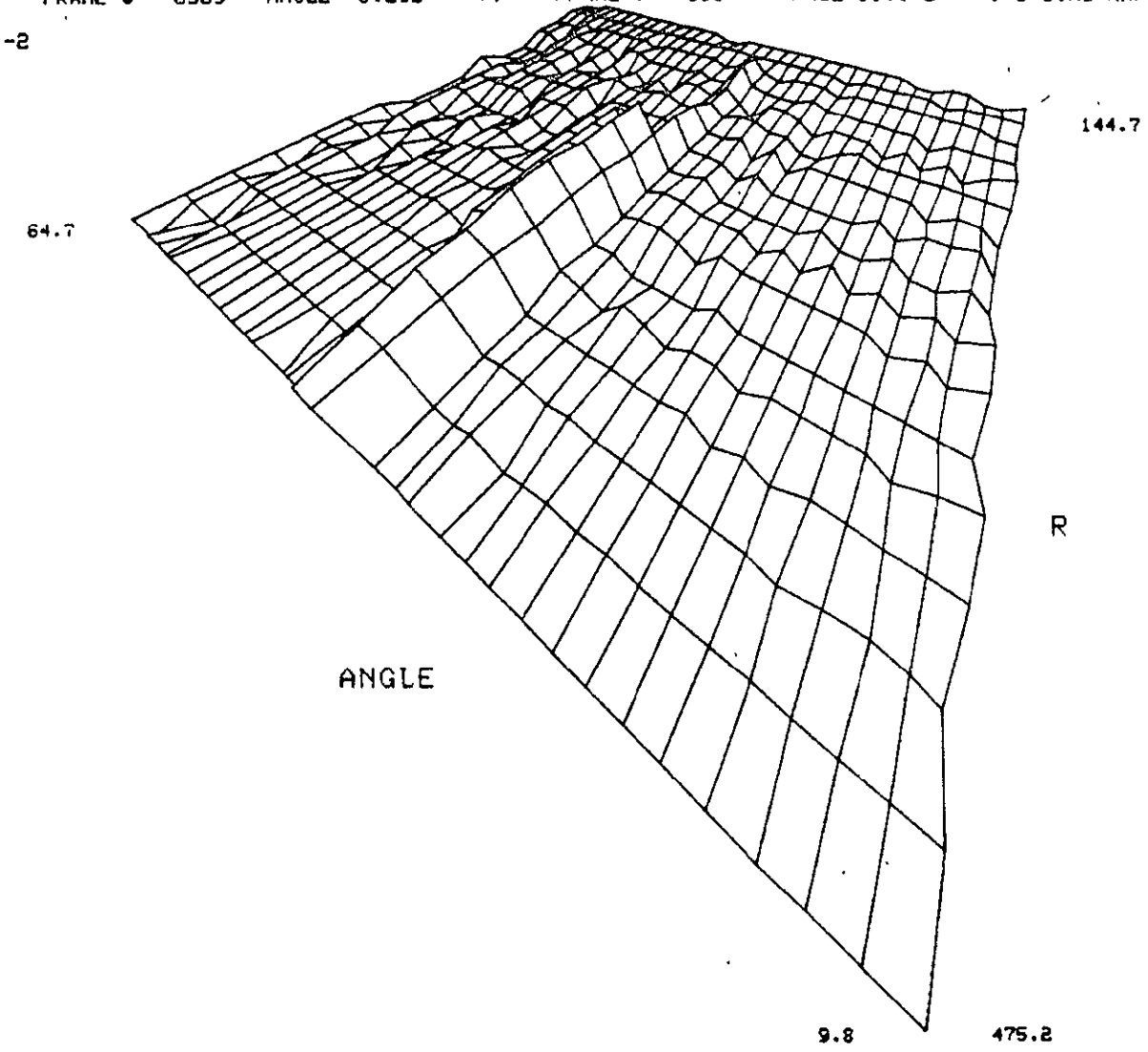
* SCAN # 11 FRAME # 8369 ANGLE 9.282 TO FRAME # 8997 ANGLE 65.042 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM U = 13.0

AVERAGE U = 3.2

	ANGLE
1	9.8
2	10.3
3	11.2
4	12.5
5	14.0
6	15.8
7	17.6
8	19.2
9	20.9
10	22.7
11	24.5
12	26.3
13	28.0
14	29.7
15	31.5
16	33.3
17	35.0
18	36.7
19	38.4
20	40.2
21	42.0
22	43.7
23	45.3
24	47.0
25	48.7
26	50.4
27	52.1
28	53.9
29	55.7
30	57.3
31	59.1
32	60.9
33	62.7
34	64.3
35	64.7



	R
1	144.7
2	164.2
3	183.6
4	203.1
5	222.5
6	241.9
7	261.4
8	280.8
9	300.3
10	319.7
11	339.1
12	358.6
13	378.0
14	397.5
15	416.9
16	436.4
17	475.2

U, R, A DISPLAY (VELOCITY AT I_{max})

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL . DAY 232 RUN # 4 TAPE 1 OF 2- 6110

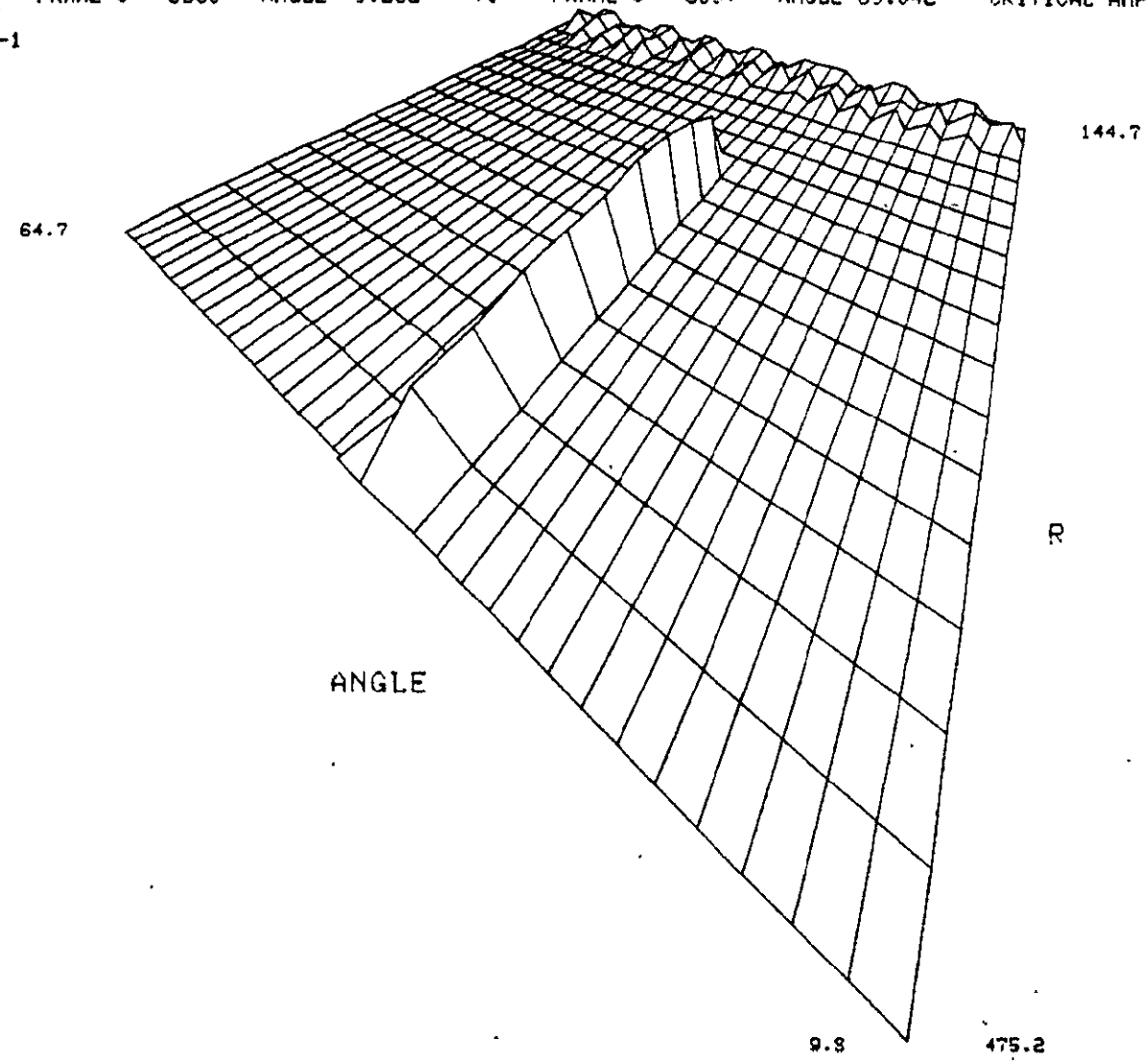
* SCAN # 11 FRAME # 8369 ANGLE 9.282 TO FRAME # 3997 ANGLE 65.042 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 13.0

AVERAGE V = 1.4

	ANGLE
1	9.8
2	10.3
3	11.2
4	12.5
5	14.0
6	15.8
7	17.6
8	19.2
9	20.9
10	22.7
11	24.5
12	26.3
13	28.0
14	29.7
15	31.5
16	33.3
17	35.0
18	36.7
19	38.4
20	40.2
21	42.0
22	43.7
23	45.3
24	47.0
25	48.7
26	50.4
27	52.1
28	53.9
29	55.7
30	57.3
31	59.1
32	60.9
33	62.7
34	64.3
35	64.7



	R
1	144.7
2	164.2
3	183.6
4	203.1
5	222.5
6	241.9
7	261.4
8	280.8
9	300.3
10	319.7
11	339.1
12	358.6
13	378.0
14	397.5
15	416.9
16	436.4
17	475.2

ORIGINAL PAGE IS OF POOR QUALITY

V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

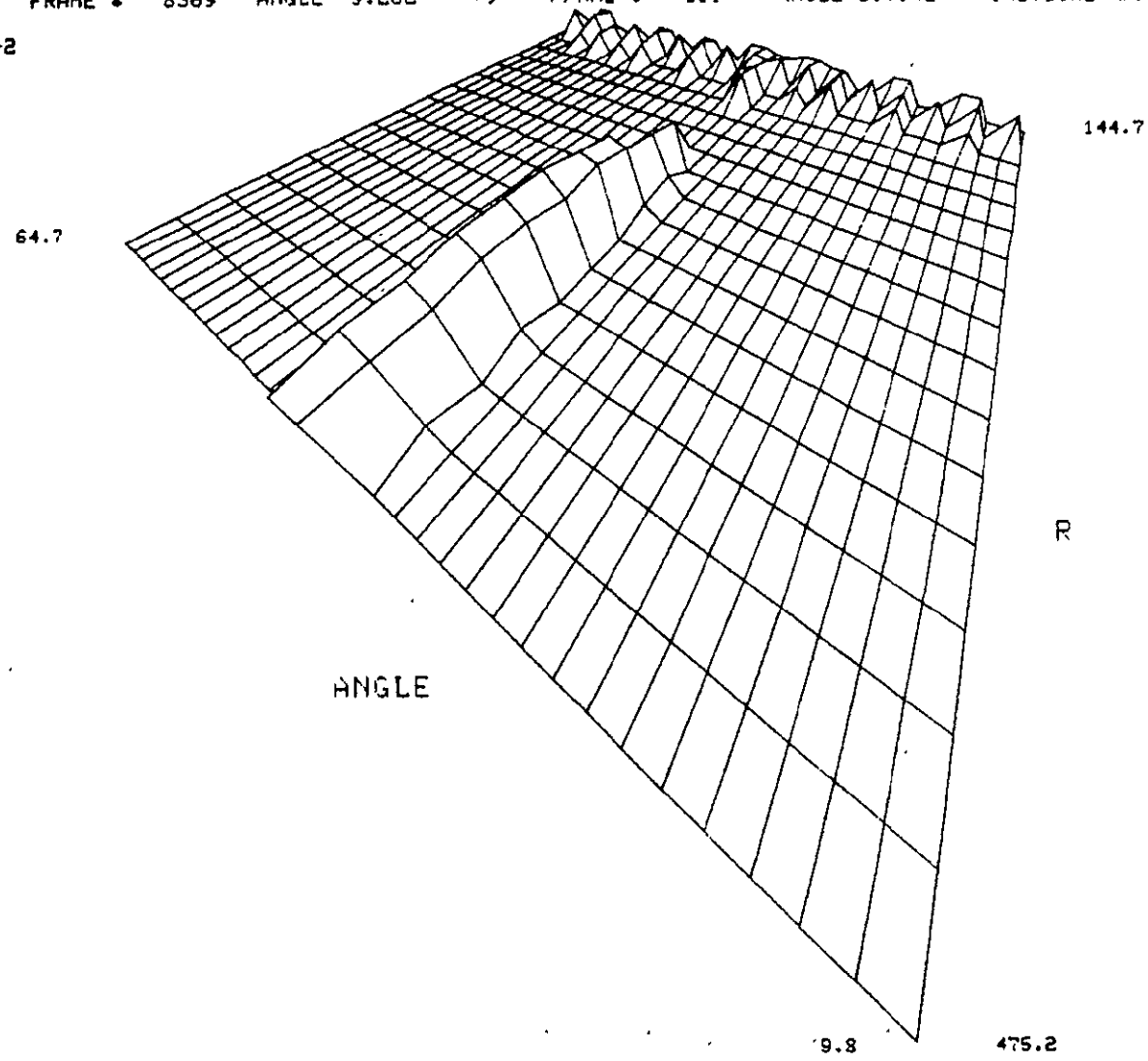
* SCAN # 11 FRAME # 8369 ANGLE 9.282 TO FRAME # 8997 ANGLE 65.042 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM V = 14.0

AVERAGE V = 1.7

ANGLE	
1	9.8
2	10.3
3	11.2
4	12.5
5	14.0
6	15.8
7	17.6
8	19.2
9	20.9
10	22.7
11	24.5
12	26.3
13	28.0
14	29.7
15	31.5
16	33.3
17	35.0
18	36.7
19	38.4
20	40.2
21	42.0
22	43.7
23	45.3
24	47.0
25	48.7
26	50.4
27	52.1
28	53.9
29	55.7
30	57.3
31	59.1
32	60.9
33	62.7
34	64.3
35	64.7



	R
1	144.7
2	164.2
3	183.6
4	203.1
5	222.5
6	241.9
7	261.4
8	280.3
9	300.3
10	319.7
11	339.1
12	358.6
13	378.0
14	397.5
15	416.9
16	436.4
17	475.2

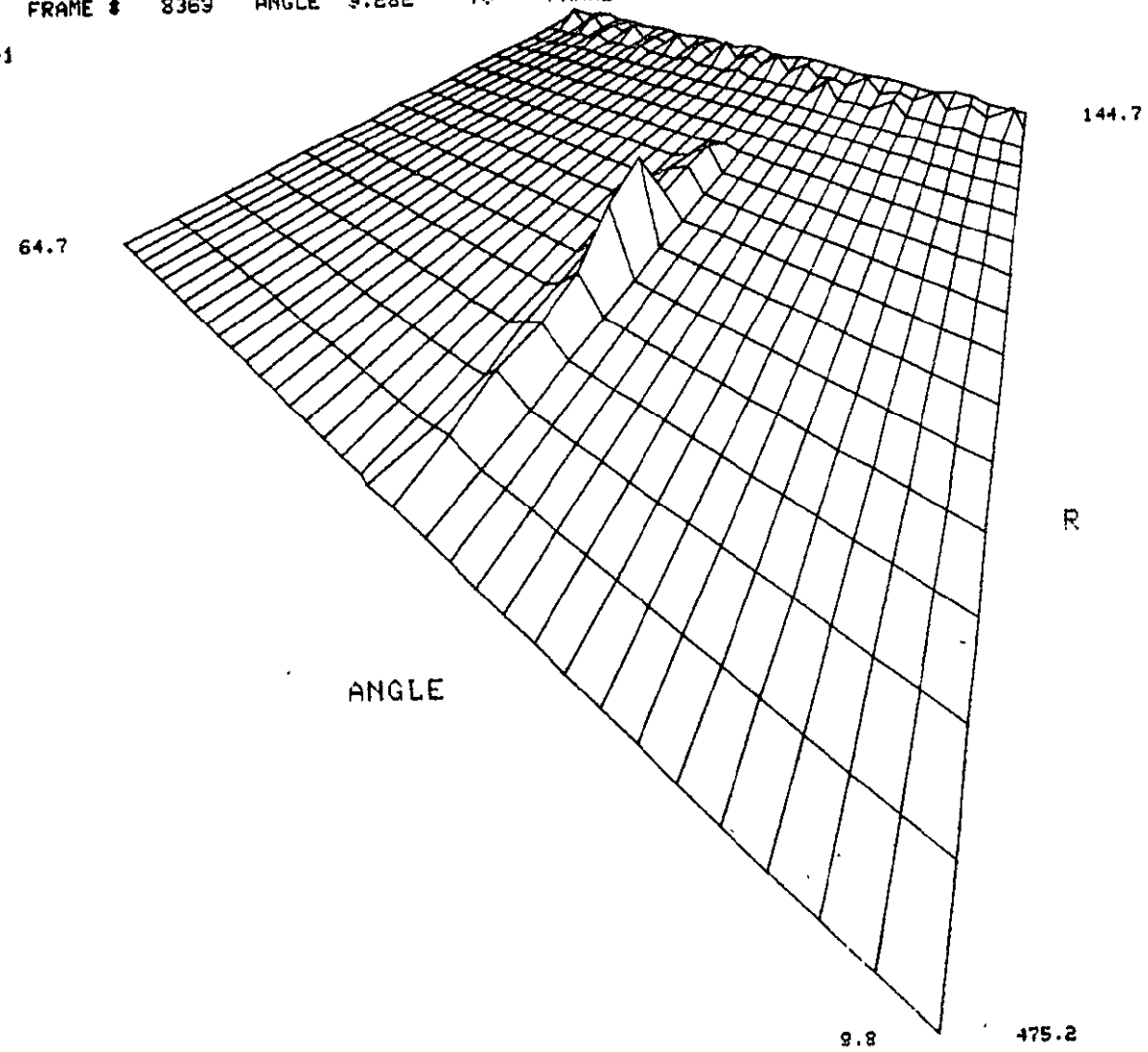
V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 8110

SCAN # 11 FRAME # 8369 ANGLE 9.282 TO FRAME # 8997 ANGLE 65.042 CRITICAL AMP AT CELL 62

OPTION # 31-1



ANGLE	
1	9.8
2	10.3
3	11.2
4	12.5
5	14.0
6	15.8
7	17.6
8	19.2
9	20.9
10	22.7
11	24.5
12	26.3
13	28.0
14	29.7
15	31.5
16	33.3
17	35.0
18	36.7
19	38.4
20	40.2
21	42.0
22	43.7
23	45.3
24	47.0
25	48.7
26	50.4
27	52.1
28	53.9
29	55.7
30	57.3
31	59.1
32	60.9
33	62.7
34	64.3
35	64.7

R	
1	144.7
2	164.2
3	183.6
4	203.1
5	222.5
6	241.9
7	261.4
8	280.8
9	300.3
10	319.7
11	339.1
12	358.6
13	378.0
14	397.5
15	416.9
16	436.4
17	475.2

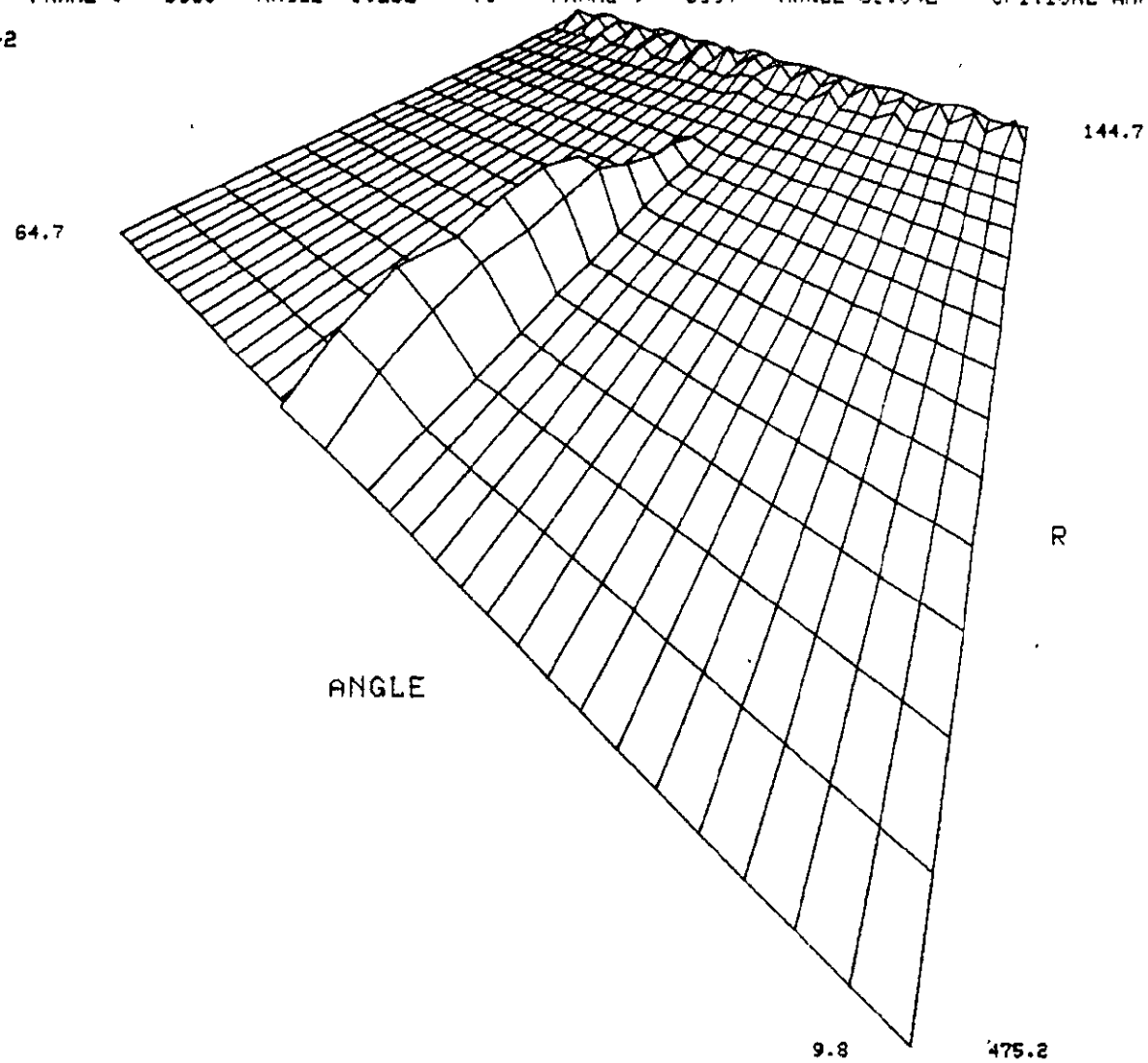
U * Imax, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

* SCAN # 11 FRAME # 8369 ANGLE 9.282 TO FRAME # 8997 ANGLE 65.042 CRITICAL AMP AT CELL 62

OPTION # 31-2

ANGLE	
1	9.8
2	10.3
3	11.2
4	12.5
5	14.0
6	15.8
7	17.6
8	19.2
9	20.9
10	22.7
11	24.5
12	26.3
13	28.0
14	29.7
15	31.5
16	33.3
17	35.0
18	36.7
19	38.4
20	40.2
21	42.0
22	43.7
23	45.3
24	47.0
25	48.7
26	50.4
27	52.1
28	53.9
29	55.7
30	57.3
31	59.1
32	60.9
33	62.7
34	64.3
35	64.7



	P
1	144.7
2	164.2
3	183.6
4	203.1
5	222.5
6	241.9
7	261.4
8	280.8
9	300.3
10	319.7
11	339.1
12	358.6
13	378.0
14	397.5
15	416.9
16	436.4
17	475.2

U * Imax, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

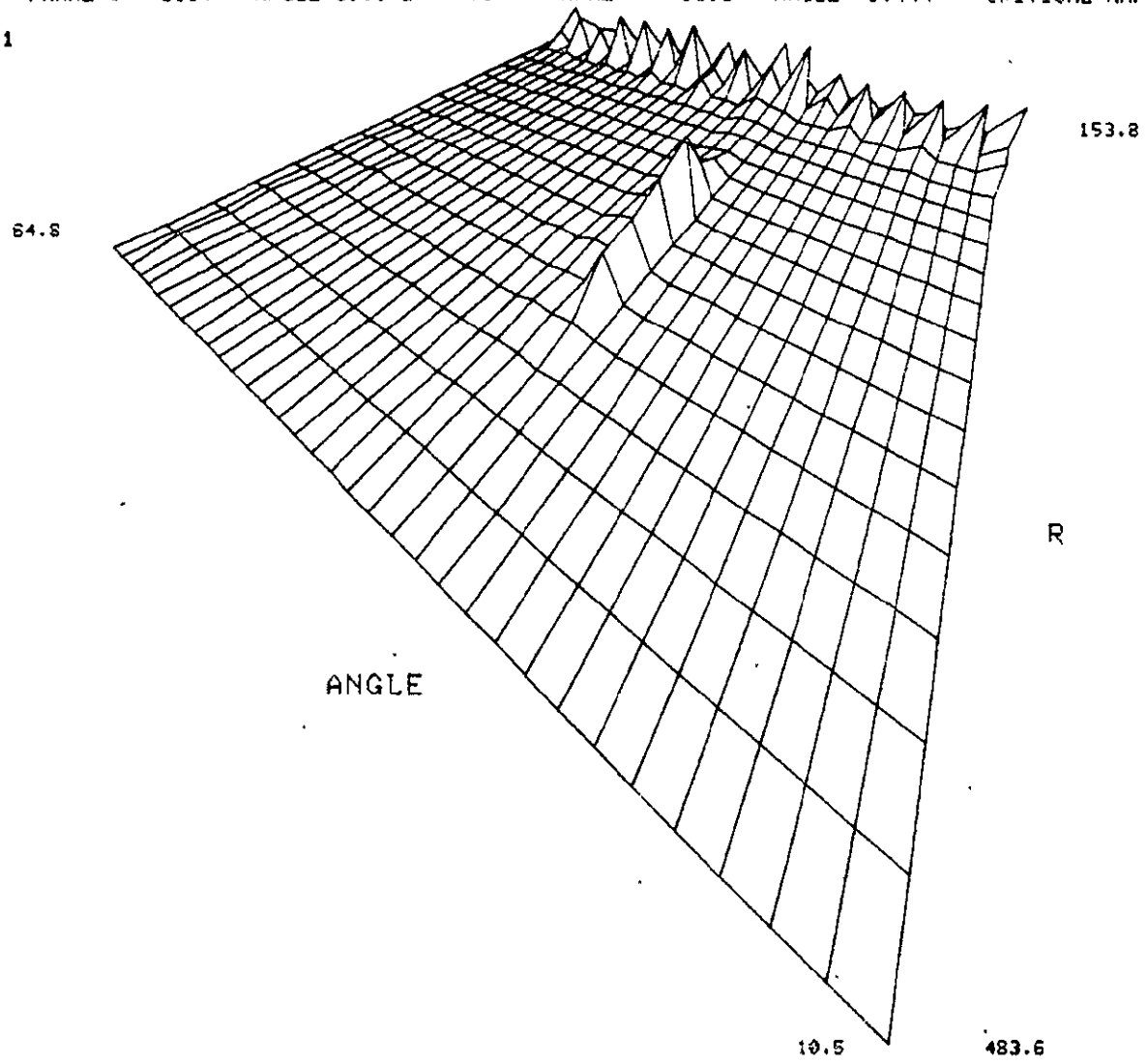
* SCAN # 12 FRAME # 8997 ANGLE 65.042 TO FRAME # 9606 ANGLE 9.444 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 41.0

AVERAGE I = 2.0

ANGLE	
1	64.8
2	64.4
3	63.5
4	62.3
5	60.9
6	59.2
7	57.4
8	55.6
9	53.8
10	52.1
11	50.4
12	48.7
13	47.0
14	45.4
15	43.7
16	42.0
17	40.2
18	38.4
19	36.7
20	35.0
21	33.2
22	31.4
23	29.7
24	28.0
25	26.2
26	24.4
27	22.6
28	20.9
29	19.1
30	17.4
31	15.6
32	13.7
33	12.0
34	10.5



	R
1	153.8
2	173.2
3	192.6
4	212.0
5	231.4
6	250.8
7	270.2
8	289.6
9	309.0
10	328.4
11	347.8
12	367.2
13	386.6
14	406.0
15	425.4
16	444.8
17	483.6

I_{max}, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 8110

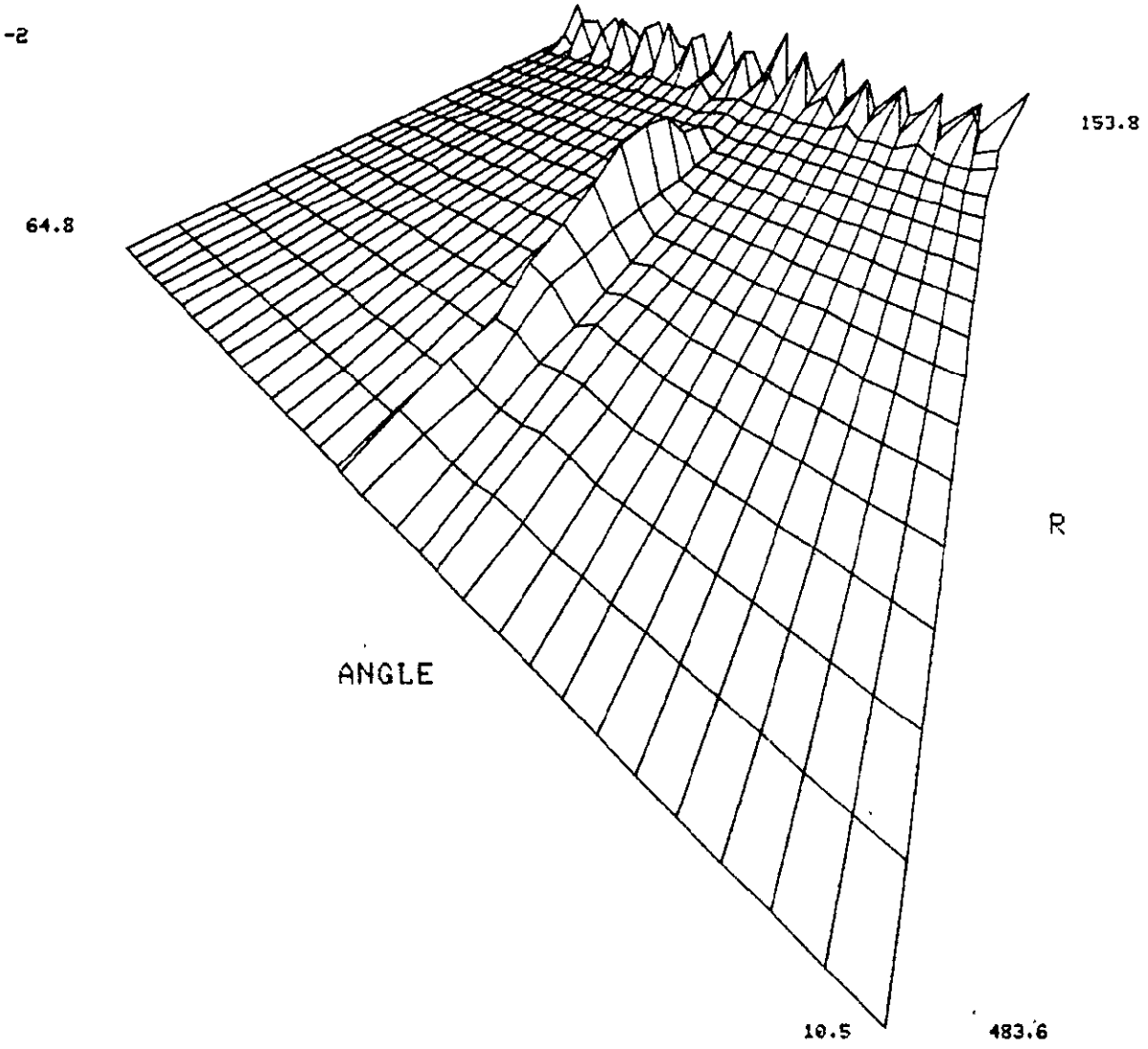
* SCAN # 12 FRAME # 8997 ANGLE 65.042 TO FRAME # 9606 ANGLE 9.444 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 65.0

AVERAGE I = 4.8

ANGLE	
1	64.8
2	64.4
3	63.5
4	62.3
5	60.9
6	59.2
7	57.4
8	55.6
9	53.8
10	52.1
11	50.4
12	48.7
13	47.0
14	45.4
15	43.7
16	42.0
17	40.2
18	38.4
19	36.7
20	35.0
21	33.2
22	31.4
23	29.7
24	28.0
25	26.2
26	24.4
27	22.6
28	20.9
29	19.1
30	17.4
31	15.6
32	13.7
33	12.0
34	10.5



	R
1	153.8
2	173.2
3	192.6
4	212.0
5	231.4
6	250.8
7	270.2
8	289.6
9	309.0
10	328.4
11	347.8
12	367.2
13	386.6
14	406.0
15	425.4
16	444.8
17	483.6

I_{MAX}, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 5110

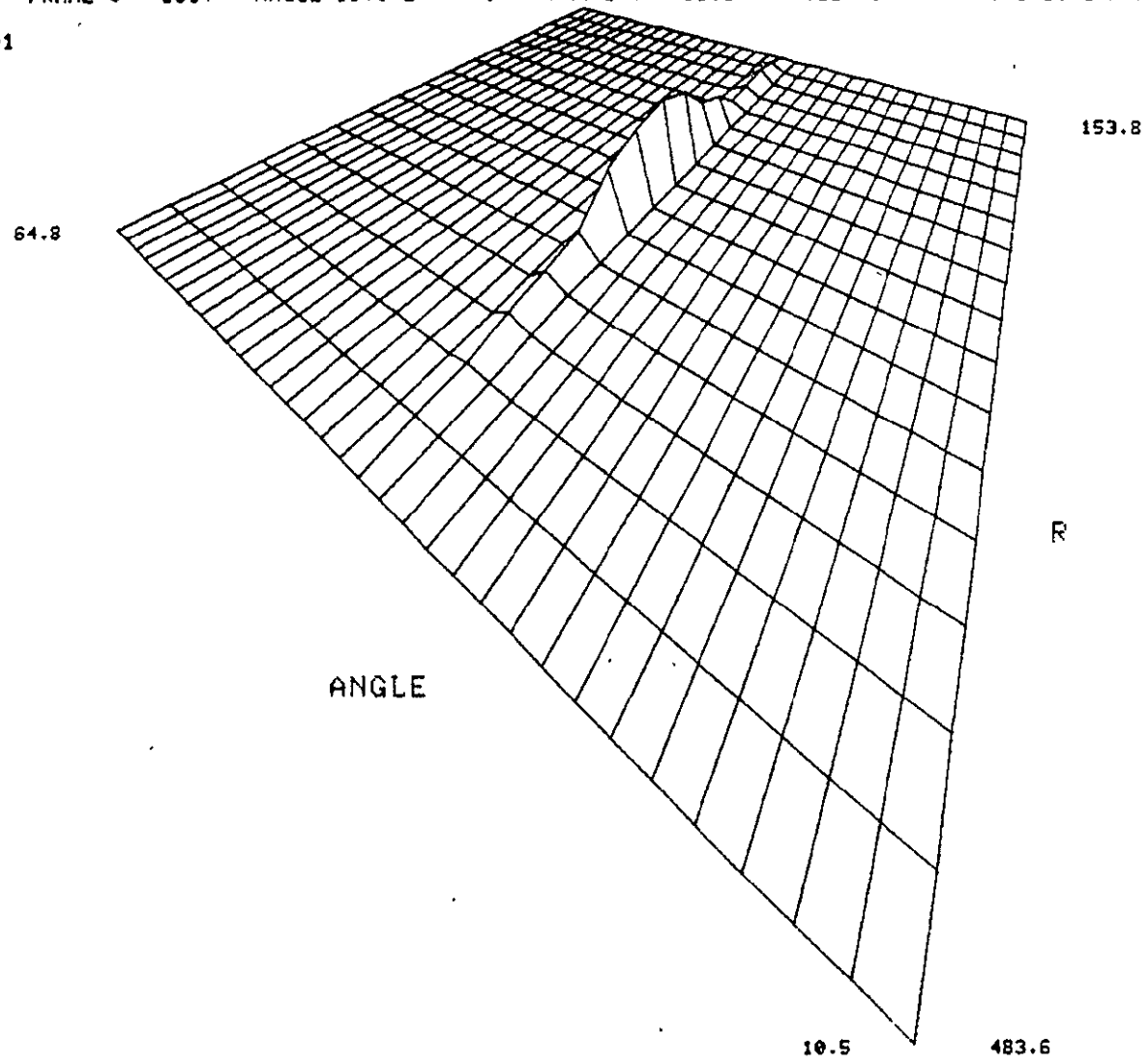
* SCAN # 12 FRAME # 3997 ANGLE 65.042 TO FRAME # 3606 ANGLE 9.444 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 50.0

AVERAGE I = 0.5

ANGLE	
1	64.8
2	64.4
3	63.5
4	62.3
5	60.9
6	59.2
7	57.4
8	55.6
9	53.8
10	52.1
11	50.4
12	48.7
13	47.0
14	45.4
15	43.7
16	42.0
17	40.2
18	38.4
19	36.7
20	35.0
21	33.2
22	31.4
23	29.7
24	28.0
25	26.2
26	24.4
27	22.6
28	20.9
29	19.1
30	17.4
31	15.6
32	13.7
33	12.0
34	10.5



	R
1	153.8
2	173.2
3	192.6
4	212.0
5	231.4
6	250.8
7	270.2
8	289.6
9	309.0
10	328.4
11	347.8
12	367.2
13	386.6
14	406.0
15	425.4
16	444.8
17	483.6

I, R, A DISPLAY AT VELOCITY CELL 62

ORIGINAL PAGE IS OF POOR QUALITY

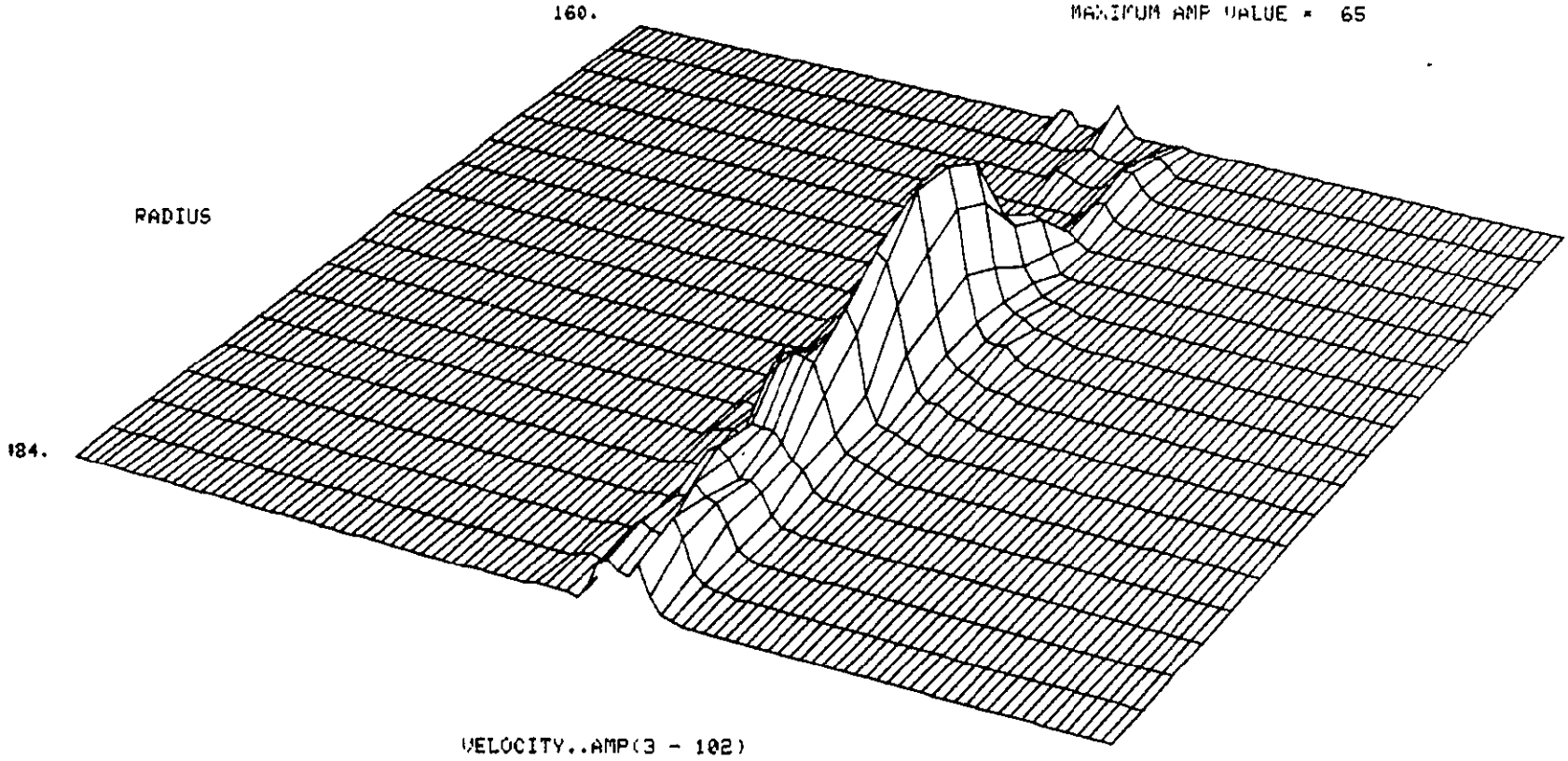
NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 12 FRAME # 8997 ANGLE 65.042 TO FRAME # 9606 ANGLE 9.444 CRITICAL AMP AT CELL 62

FRAME # 9315 TO 9333

ANGLE = 36.67

MAXIMUM AMP VALUE = 65



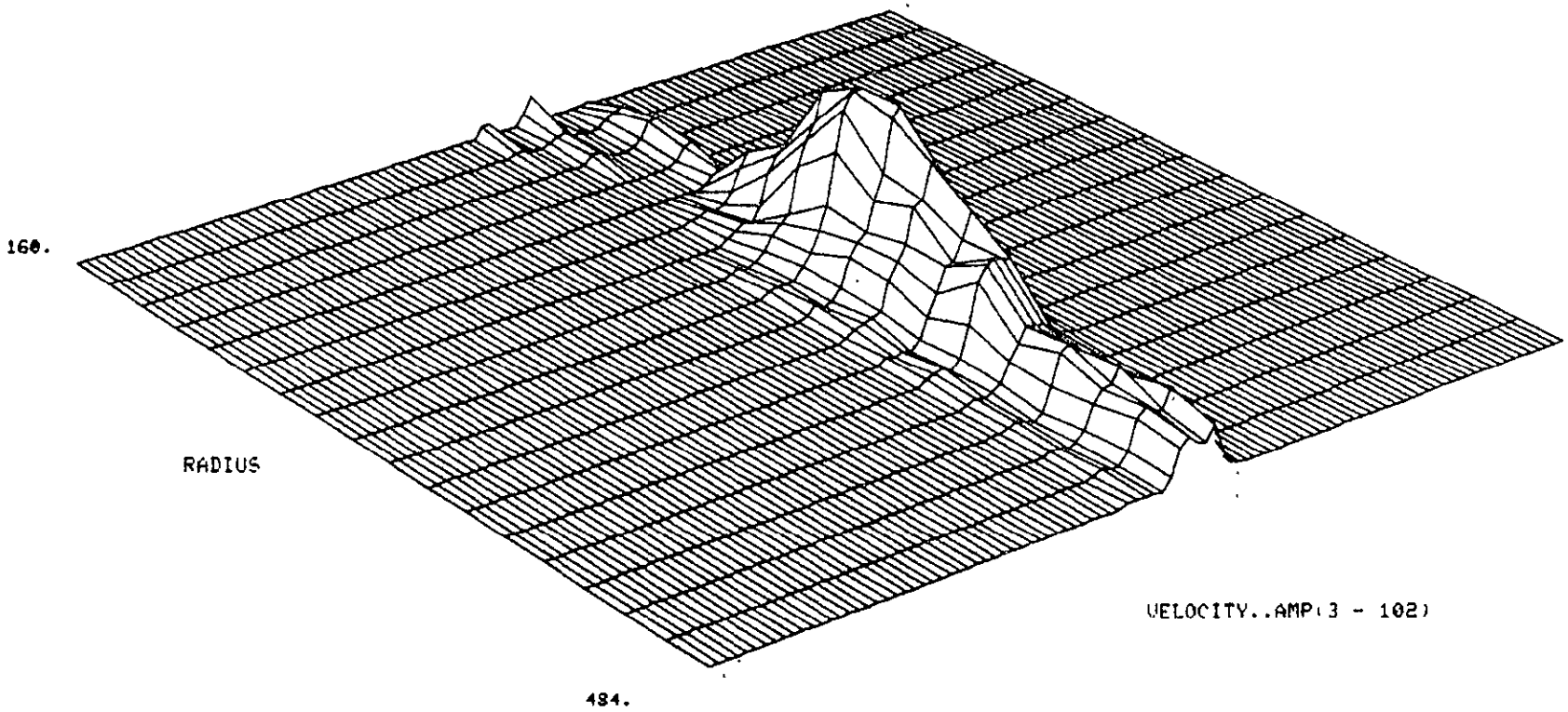
NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 12 FRAME # 8997 ANGLE 65.042 TO FRAME # 9606 ANGLE 9.444 CRITICAL AMP AT CELL 62

FRAME # 9315 TO 9333

ANGLE = 36.67

MAXIMUM AMP VALUE = 65



ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

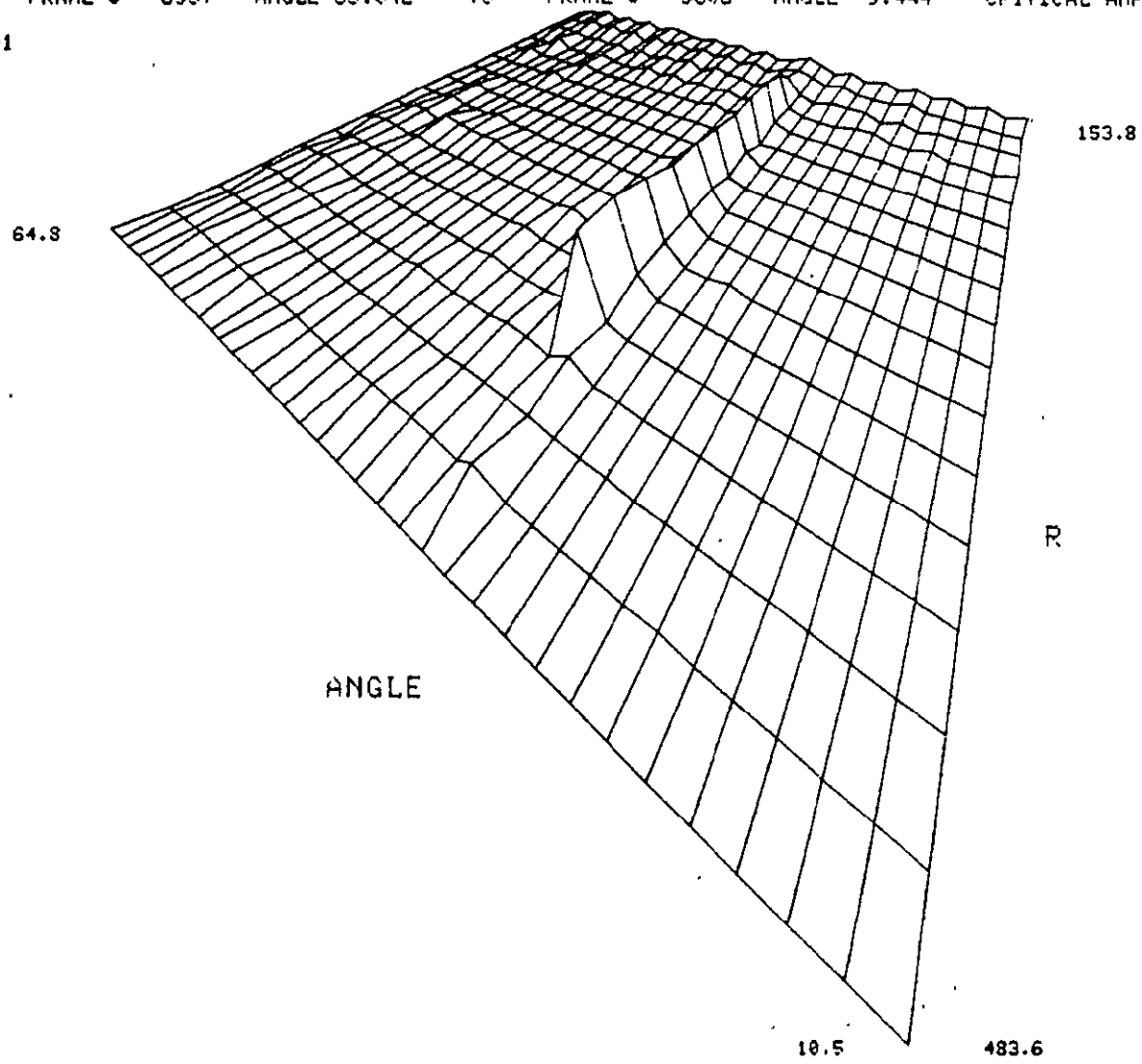
SCAN # 12 FRAME # 8997 ANGLE 65.042 TO FRAME # 9606 ANGLE 9.444 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 15.0

AVERAGE V = 1.6

ANGLE	
1	64.8
2	64.4
3	63.5
4	62.3
5	60.9
6	59.2
7	57.4
8	55.6
9	53.8
10	52.1
11	50.4
12	48.7
13	47.0
14	45.4
15	43.7
16	42.0
17	40.2
18	38.4
19	36.7
20	35.0
21	33.2
22	31.4
23	29.7
24	28.0
25	26.2
26	24.4
27	22.6
28	20.9
29	19.1
30	17.4
31	15.6
32	13.7
33	12.0
34	10.5



	R
1	153.8
2	173.2
3	192.6
4	212.0
5	231.4
6	250.8
7	270.2
8	289.6
9	309.0
10	328.4
11	347.8
12	367.2
13	336.6
14	406.0
15	425.4
16	444.8
17	483.6

V, R, A DISPLAY (VELOCITY AT Imax)

NASA PROJECT DUST DEVIL · DAY 232 RUN # 4 TAPE 1 OF 2- 6110

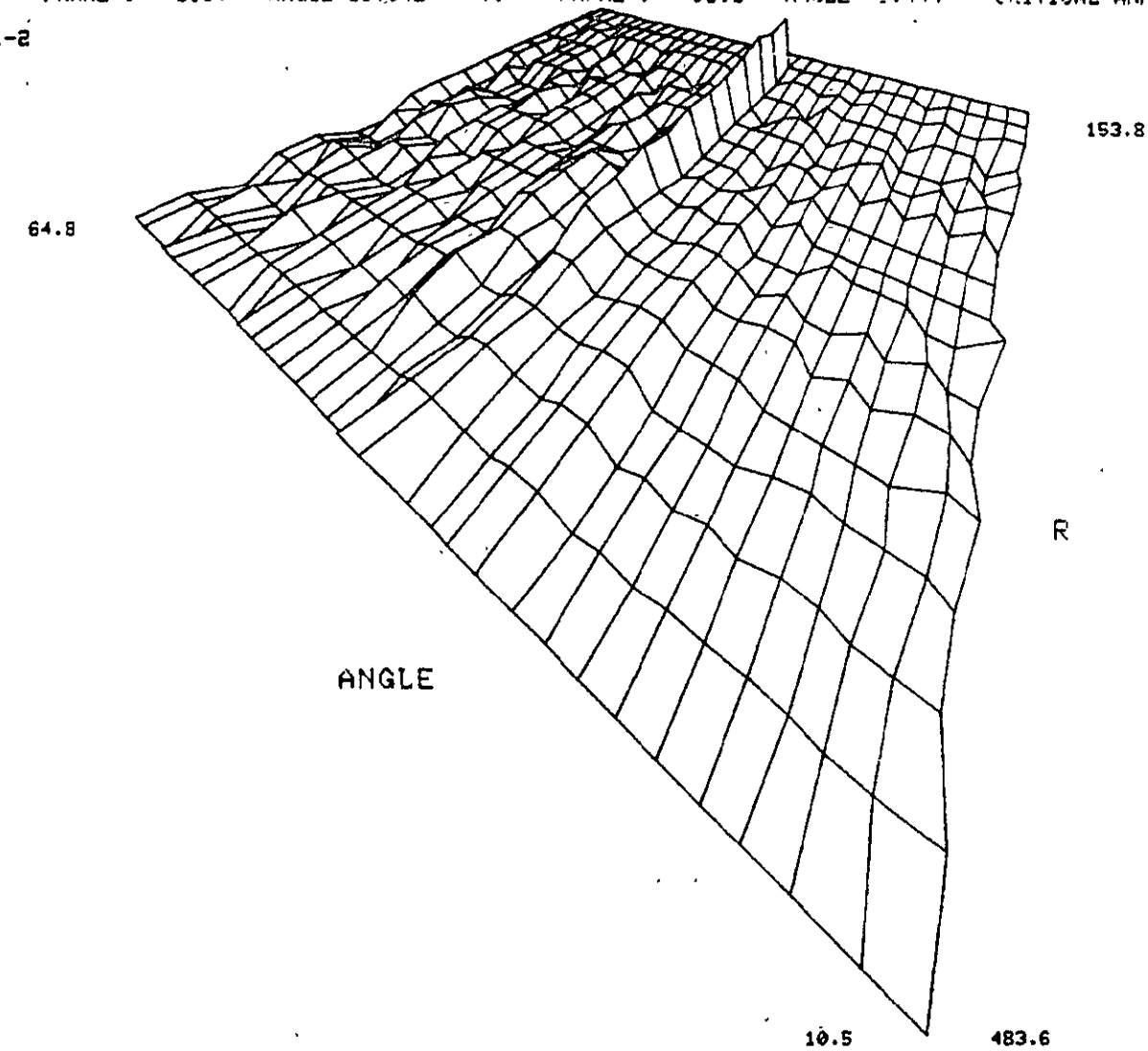
* SCAN # 12 FRAME # 8997 ANGLE 65.042 TO FRAME # 9606 ANGLE 3.444 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V = 11.0

AVERAGE V = 3.0

	ANGLE
1	64.8
2	64.4
3	63.5
4	62.3
5	60.9
6	59.2
7	57.4
8	55.6
9	53.8
10	52.1
11	50.4
12	48.7
13	47.0
14	45.4
15	43.7
16	42.0
17	40.2
18	38.4
19	36.7
20	35.0
21	33.2
22	31.4
23	29.7
24	28.0
25	26.2
26	24.4
27	22.6
28	20.9
29	19.1
30	17.4
31	15.6
32	13.7
33	12.0
34	10.5



	R
1	153.8
2	173.2
3	192.6
4	212.0
5	231.4
6	250.8
7	270.2
8	289.6
9	309.0
10	328.4
11	347.8
12	367.2
13	386.6
14	406.0
15	425.4
16	444.8
17	483.6

V, R, A DISPLAY (VELOCITY AT I_{MAX})

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

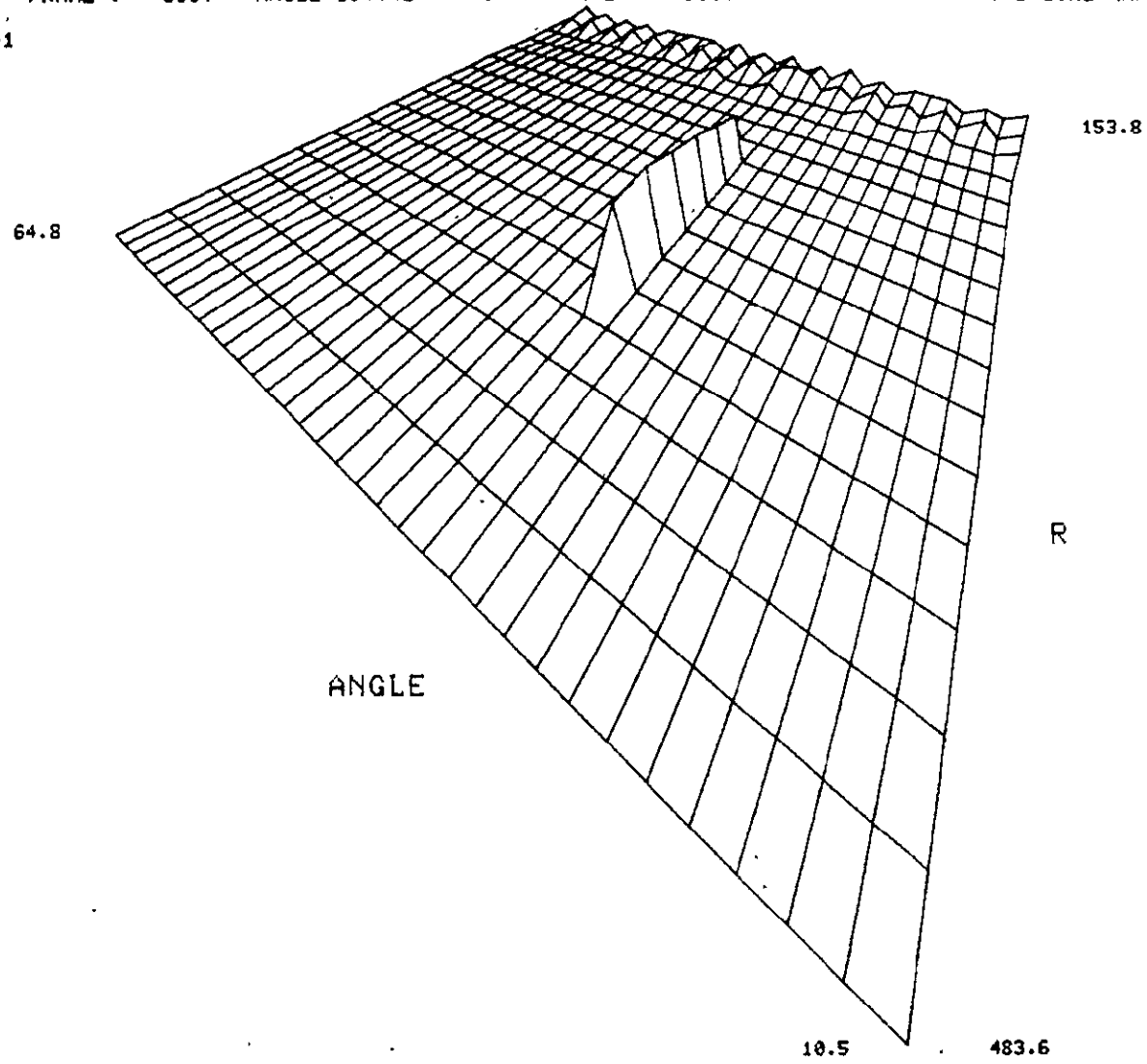
* SCAN # 12 FRAME # 8997 ANGLE 65.042 TO FRAME # 9606 ANGLE 9.444 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 17.0

AVERAGE V = 1.3

ANGLE	
1	64.8
2	64.4
3	63.5
4	62.3
5	60.9
6	59.2
7	57.4
8	55.6
9	53.8
10	52.1
11	50.4
12	48.7
13	47.0
14	45.4
15	43.7
16	42.0
17	40.2
18	38.4
19	36.7
20	35.0
21	33.2
22	31.4
23	29.7
24	28.0
25	26.2
26	24.4
27	22.6
28	20.9
29	19.1
30	17.4
31	15.6
32	13.7
33	12.0
34	10.5



	R
1	153.8
2	173.2
3	192.6
4	212.0
5	231.4
6	250.8
7	270.2
8	289.6
9	309.0
10	328.4
11	347.8
12	367.2
13	386.6
14	406.0
15	425.4
16	444.8
17	463.6

V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL . DAY 253 RUN # 4 TAPE 1 OF 2- 6110

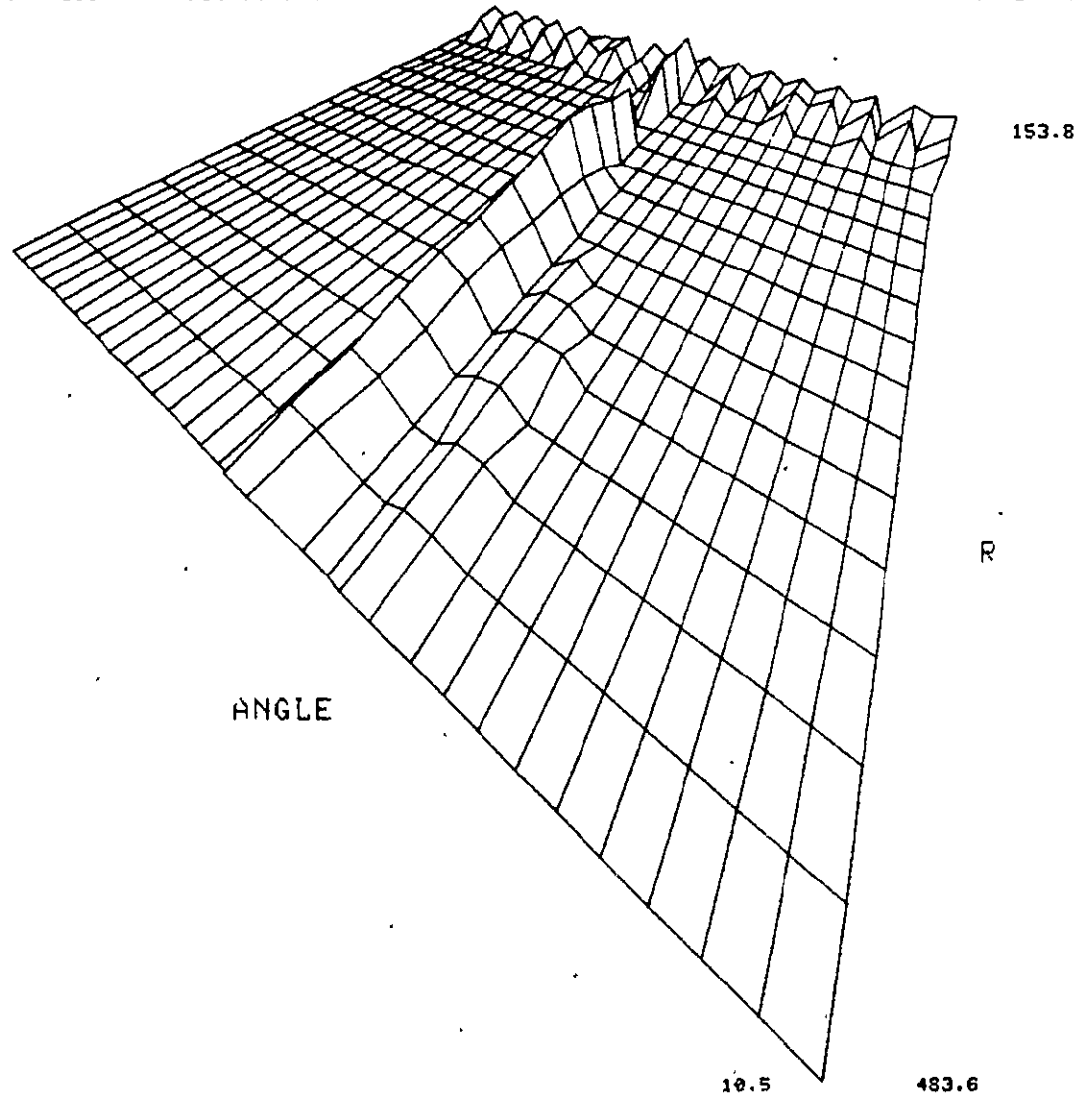
* SCAN # 12 FRAME # 8997 ANGLE 65.042 TO FRAME # 3606 ANGLE 9.444 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM V = 15.0

AVERAGE V = 1.9

ANGLE	
1	64.8
2	64.4
3	63.5
4	62.3
5	60.9
6	59.2
7	57.4
8	55.6
9	53.8
10	52.1
11	50.4
12	48.7
13	47.0
14	45.4
15	43.7
16	42.0
17	40.2
18	38.4
19	36.7
20	35.0
21	33.2
22	31.4
23	29.7
24	28.0
25	26.2
26	24.4
27	22.6
28	20.9
29	19.1
30	17.4
31	15.6
32	13.7
33	12.0
34	10.5



	R
1	153.8
2	173.2
3	192.6
4	212.0
5	231.4
6	250.8
7	270.2
8	289.6
9	309.0
10	328.4
11	347.8
12	367.2
13	386.6
14	406.0
15	425.4
16	444.8
17	483.6

V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

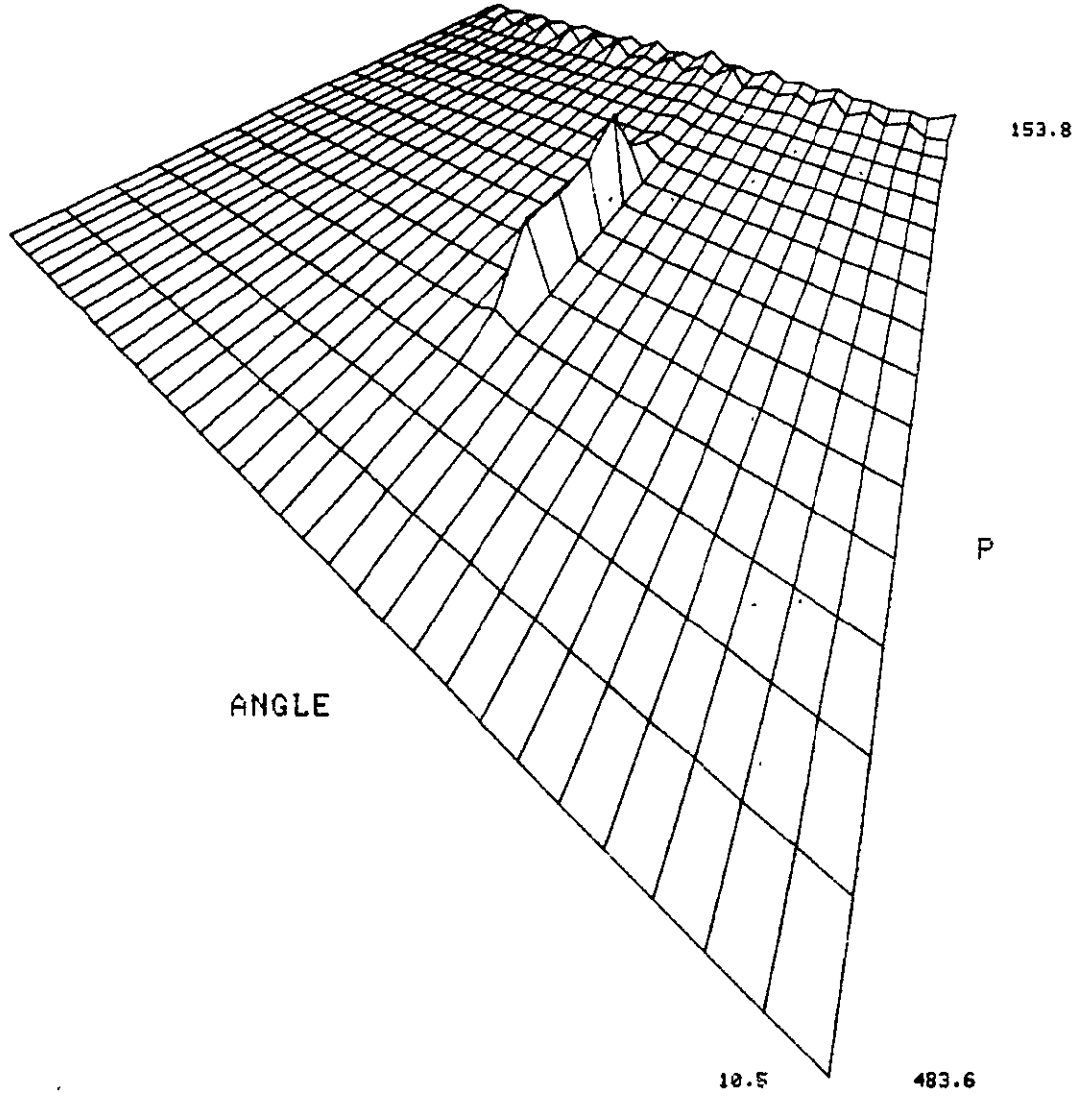
ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 12 FRAME # 8997 ANGLE 65.042 TO FRAME # 9606 ANGLE 3.444 CRITICAL AMP AT CELL 62

OPTION # 31-1

ANGLE	
1	64.8
2	64.4
3	63.5
4	62.3
5	60.9
6	59.2
7	57.4
8	55.6
9	53.8
10	52.1
11	50.4
12	48.7
13	47.0
14	45.4
15	43.7
16	42.0
17	40.2
18	38.4
19	36.7
20	35.0
21	33.2
22	31.4
23	29.7
24	28.0
25	26.2
26	24.4
27	22.6
28	20.9
29	19.1
30	17.4
31	15.6
32	13.7
33	12.0
34	10.5



	R
1	153.8
2	173.2
3	192.6
4	212.0
5	231.4
6	250.8
7	270.2
8	289.6
9	309.0
10	328.4
11	347.8
12	367.2
13	386.6
14	406.0
15	425.4
16	444.8
17	483.6

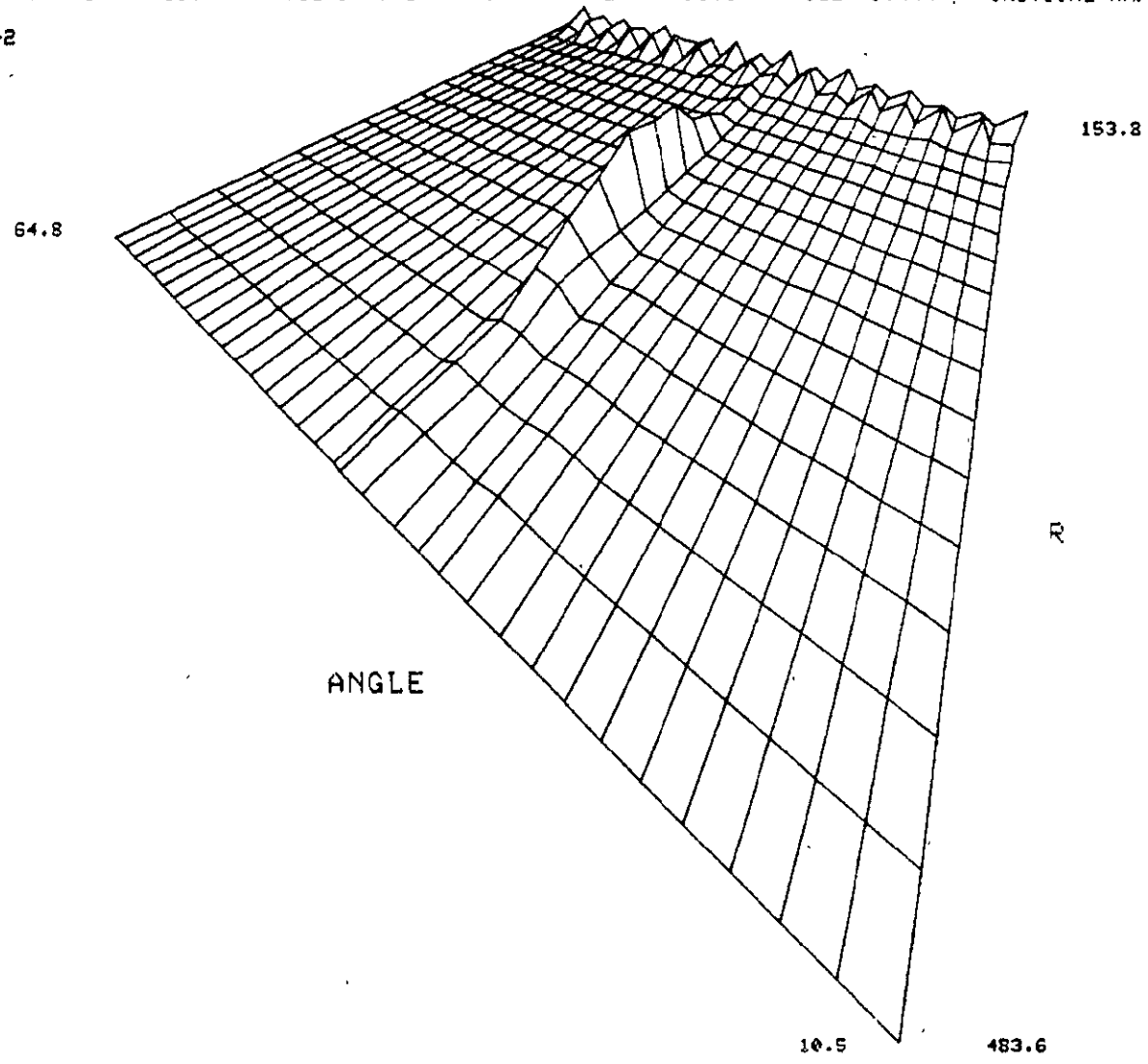
U * Imax, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 5110

SCAN # 12 FRAME # 8997 ANGLE 65.042 TO FRAME # 9606 ANGLE 9.444 CRITICAL AMP AT CELL .62

OPTION # 31-2

ANGLE	
1	64.8
2	64.4
3	63.5
4	62.3
5	60.9
6	59.2
7	57.4
8	55.6
9	53.8
10	52.1
11	50.4
12	48.7
13	47.0
14	45.4
15	43.7
16	42.0
17	40.2
18	38.4
19	36.7
20	35.0
21	33.2
22	31.4
23	29.7
24	28.0
25	26.2
26	24.4
27	22.6
28	20.9
29	19.1
30	17.4
31	15.6
32	13.7
33	12.0
34	10.5



R	
1	153.8
2	173.2
3	192.6
4	212.0
5	231.4
6	250.8
7	270.2
8	289.6
9	309.0
10	328.4
11	347.8
12	367.2
13	386.6
14	406.0
15	425.4
16	444.8
17	483.6

V * Imax, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

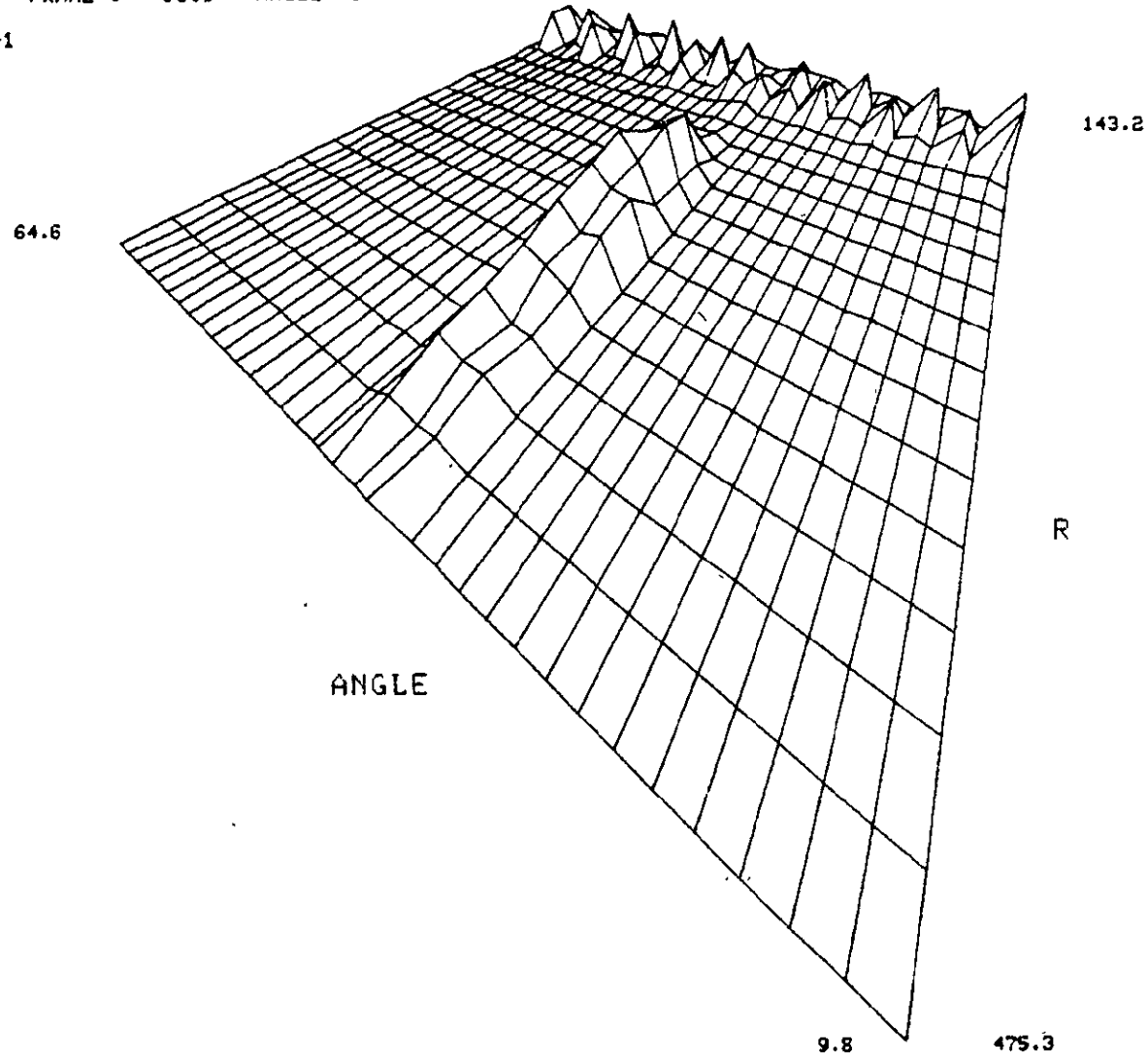
SCAN # 13 FRAME # 9606 ANGLE 9.444 TO FRAME # 10236 ANGLE 65.042 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 48.0

AVERAGE I = 3.1

ANGLE	
1	9.8
2	10.1
3	10.9
4	12.2
5	13.6
6	15.3
7	17.2
8	18.8
9	20.5
10	22.3
11	24.1
12	25.8
13	27.5
14	29.3
15	31.1
16	32.9
17	34.6
18	36.2
19	38.0
20	39.8
21	41.5
22	43.3
23	44.9
24	46.6
25	48.3
26	50.0
27	51.7
28	53.5
29	55.2
30	56.9
31	58.7
32	60.5
33	62.3
34	63.9
35	64.6



	R
1	143.2
2	162.7
3	182.3
4	201.8
5	221.4
6	240.9
7	260.4
8	280.0
9	299.5
10	319.0
11	338.6
12	358.1
13	377.6
14	397.2
15	416.7
16	436.3
17	475.3

I_{MAX}, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

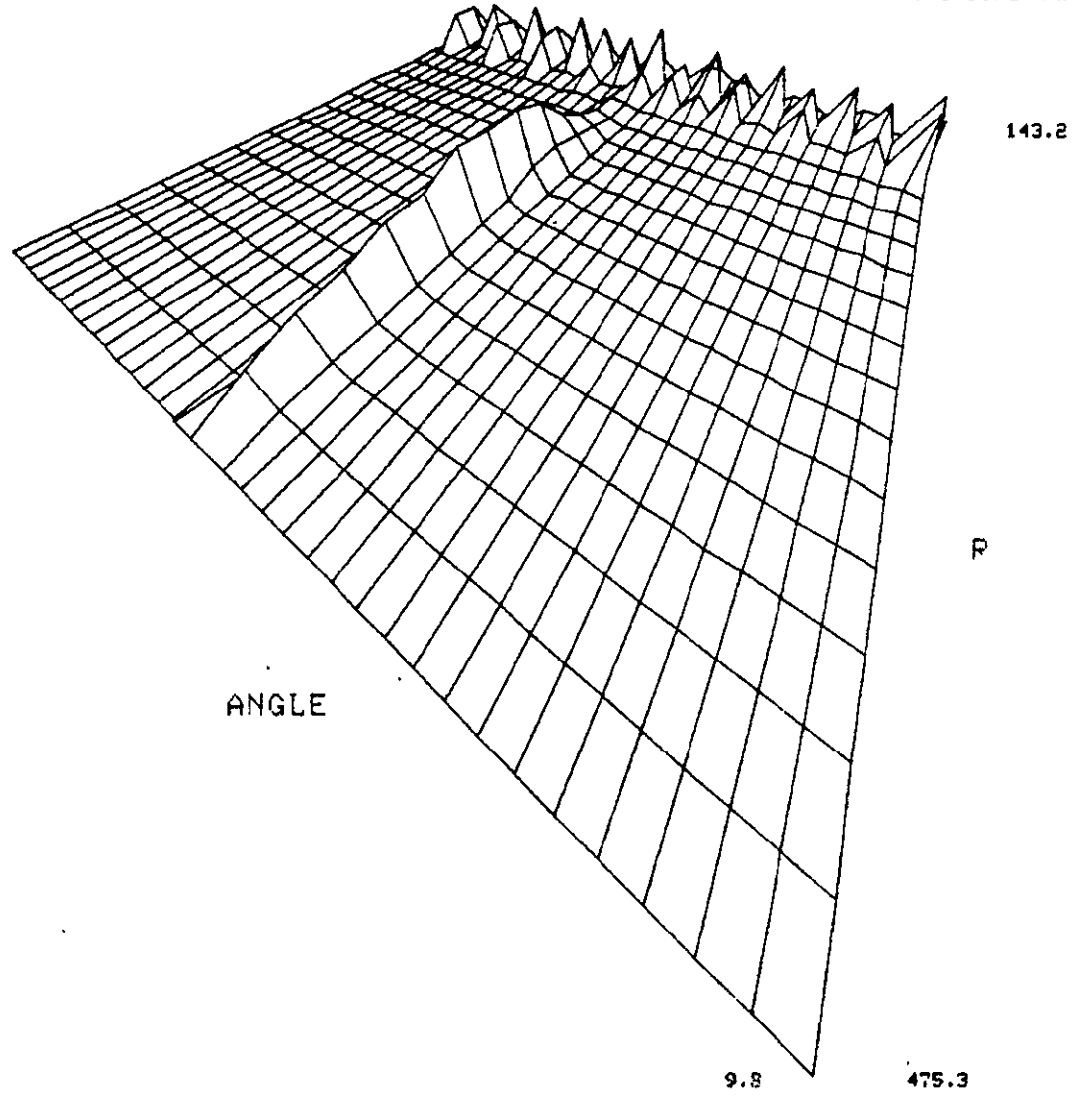
* SCAN # 13 FRAME # 9606 ANGLE 9.444 TO FRAME # 10236 ANGLE 65.042 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 70.0

AVERAGE I = 4.8

	ANGLE
1	9.8
2	10.1
3	10.9
4	12.2
5	13.6
6	15.3
7	17.2
8	18.8
9	20.5
10	22.3
11	24.1
12	25.8
13	27.5
14	29.3
15	31.1
16	32.9
17	34.6
18	36.2
19	38.0
20	39.8
21	41.5
22	43.3
23	44.9
24	46.6
25	48.3
26	50.0
27	51.7
28	53.5
29	55.2
30	56.9
31	58.7
32	60.5
33	62.3
34	63.9
35	64.6



	R
1	143.2
2	162.7
3	182.3
4	201.8
5	221.4
6	240.9
7	260.4
8	280.0
9	299.5
10	319.0
11	338.6
12	358.1
13	377.6
14	397.2
15	416.7
16	436.3
17	475.3

Imax, R, A DISPLAY

ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF E- 6110

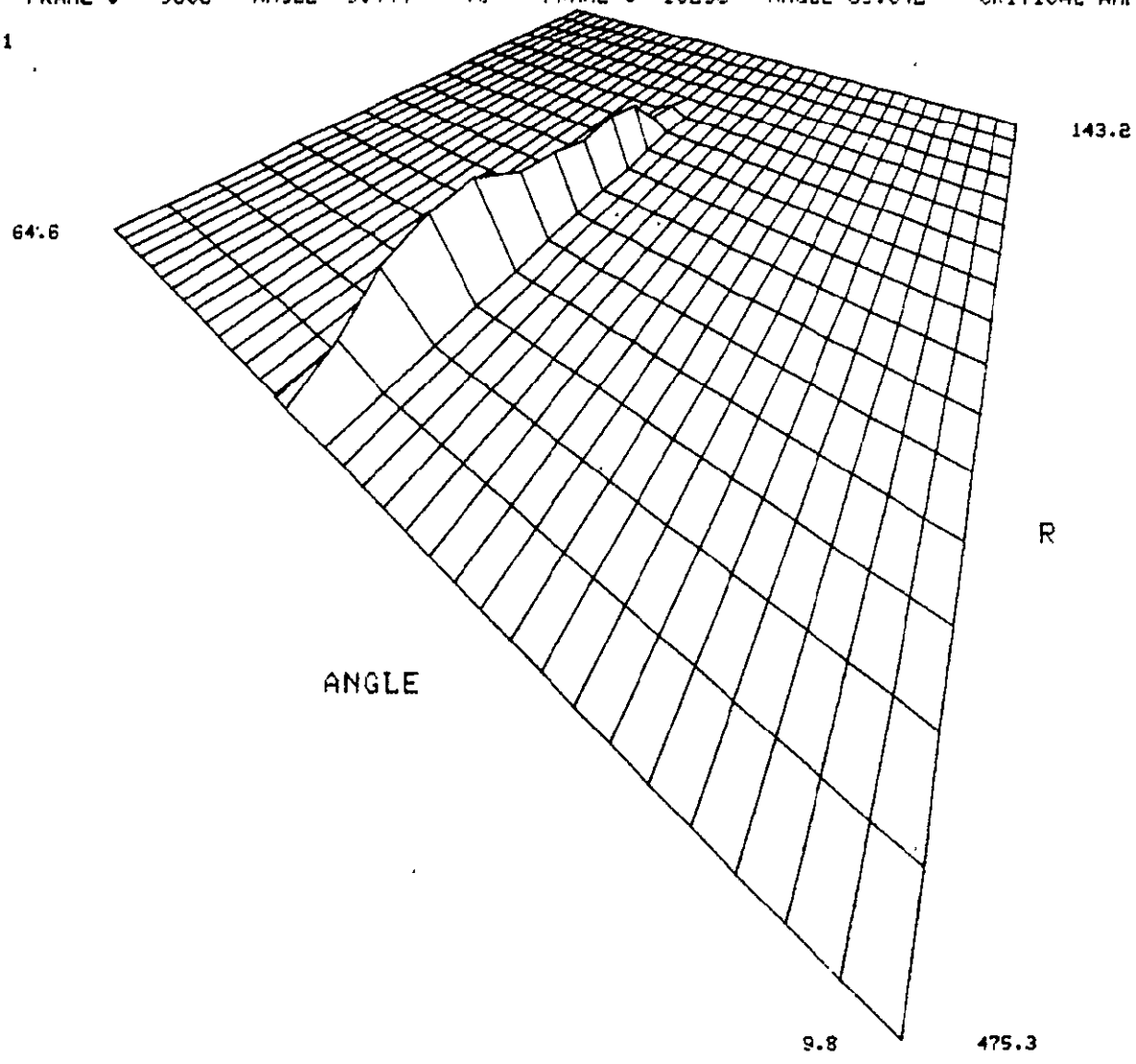
* SCAN # 13 FRAME # 9606 ANGLE 9.444 TO FRAME # 10236 ANGLE 65.042 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 33.0

AVERAGE I = 0.4

ANGLE	
1	9.8
2	10.1
3	10.9
4	12.2
5	13.6
6	15.3
7	17.2
8	18.8
9	20.5
10	22.3
11	24.1
12	25.8
13	27.5
14	29.3
15	31.1
16	32.9
17	34.6
18	36.2
19	38.0
20	39.8
21	41.5
22	43.3
23	44.9
24	46.6
25	48.3
26	50.0
27	51.7
28	53.5
29	55.2
30	56.9
31	58.7
32	60.5
33	62.3
34	63.9
35	64.6



	R
1	143.2
2	162.7
3	182.3
4	201.8
5	221.4
6	240.9
7	260.4
8	280.0
9	299.5
10	319.0
11	338.6
12	358.1
13	377.6
14	397.2
15	416.7
16	436.3
17	475.3

I, R, A DISPLAY AT VELOCITY CELL 62

ORIGINAL PAGE IS OF POOR QUALITY

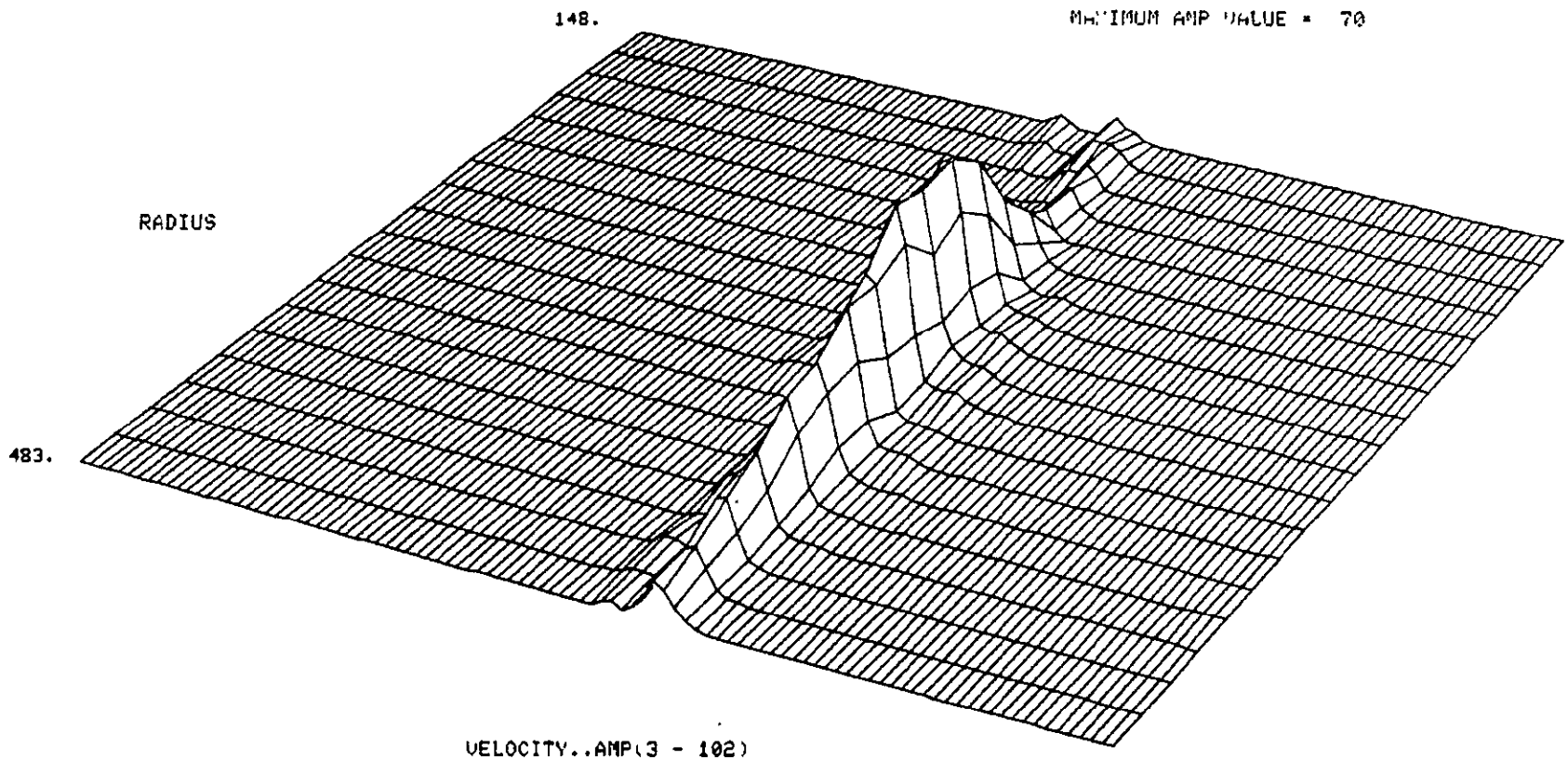
NASA PROJECT DUST DEVIL . DAY 238. .RUN # 4 TAPE 1 OF 2- 6110

SCAN # 13 FRAME # 9606 ANGLE 9.444 TO FRAME # 10236 ANGLE 65.042 CRITICAL AMP AT CELL 62

FRAME # 9934 TO 9953

ANGLE = 38.08

MAXIMUM AMP VALUE = 70



ORIGINAL PAGE IS
OF POOR QUALITY

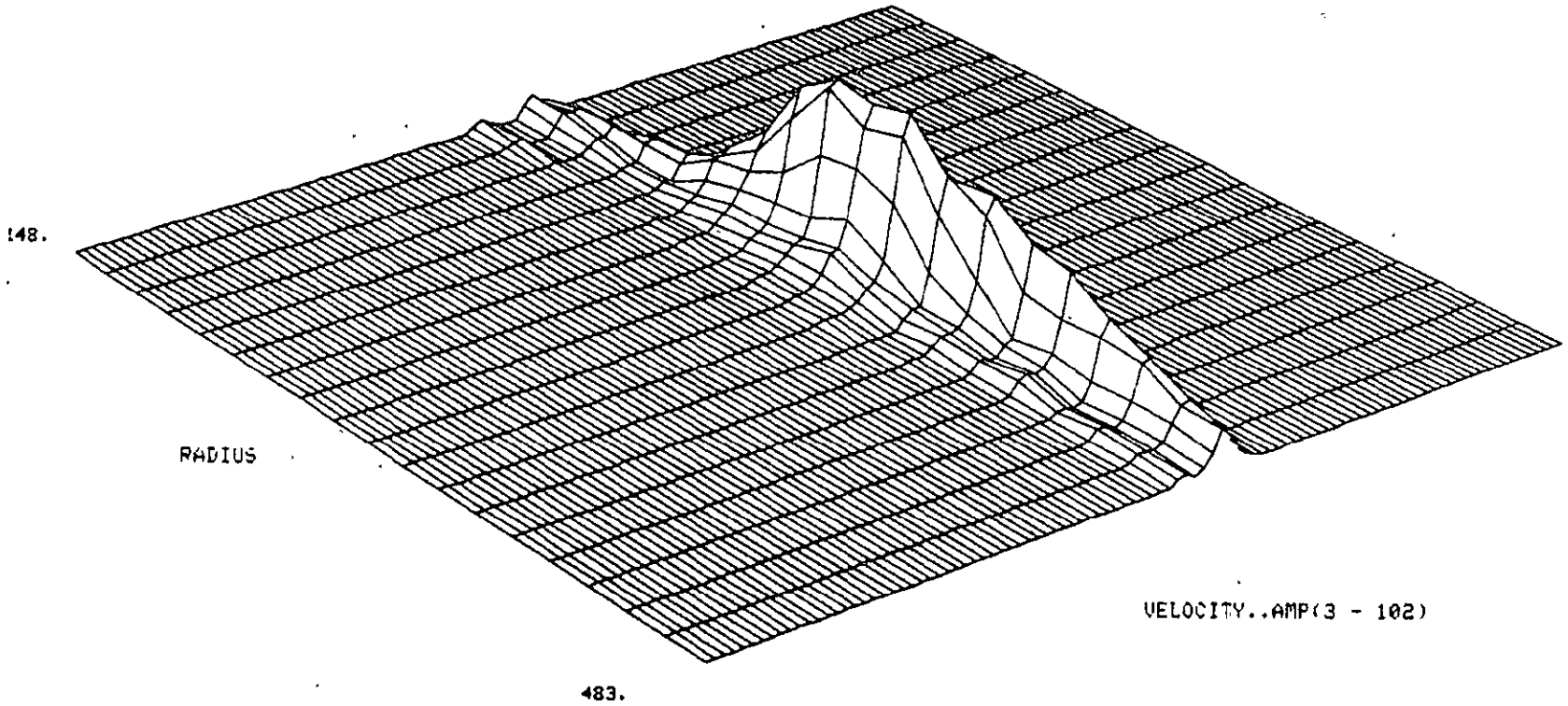
NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 13 FRAME # 9606 ANGLE 9.444 TO FRAME # 10236 ANGLE 65.042 CRITICAL AMP AT CELL 62

FRAME # 9934 TO 9953

ANGLE = 38.08

MAXIMUM AMP VALUE = 70



ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 1 OF 2- 6110

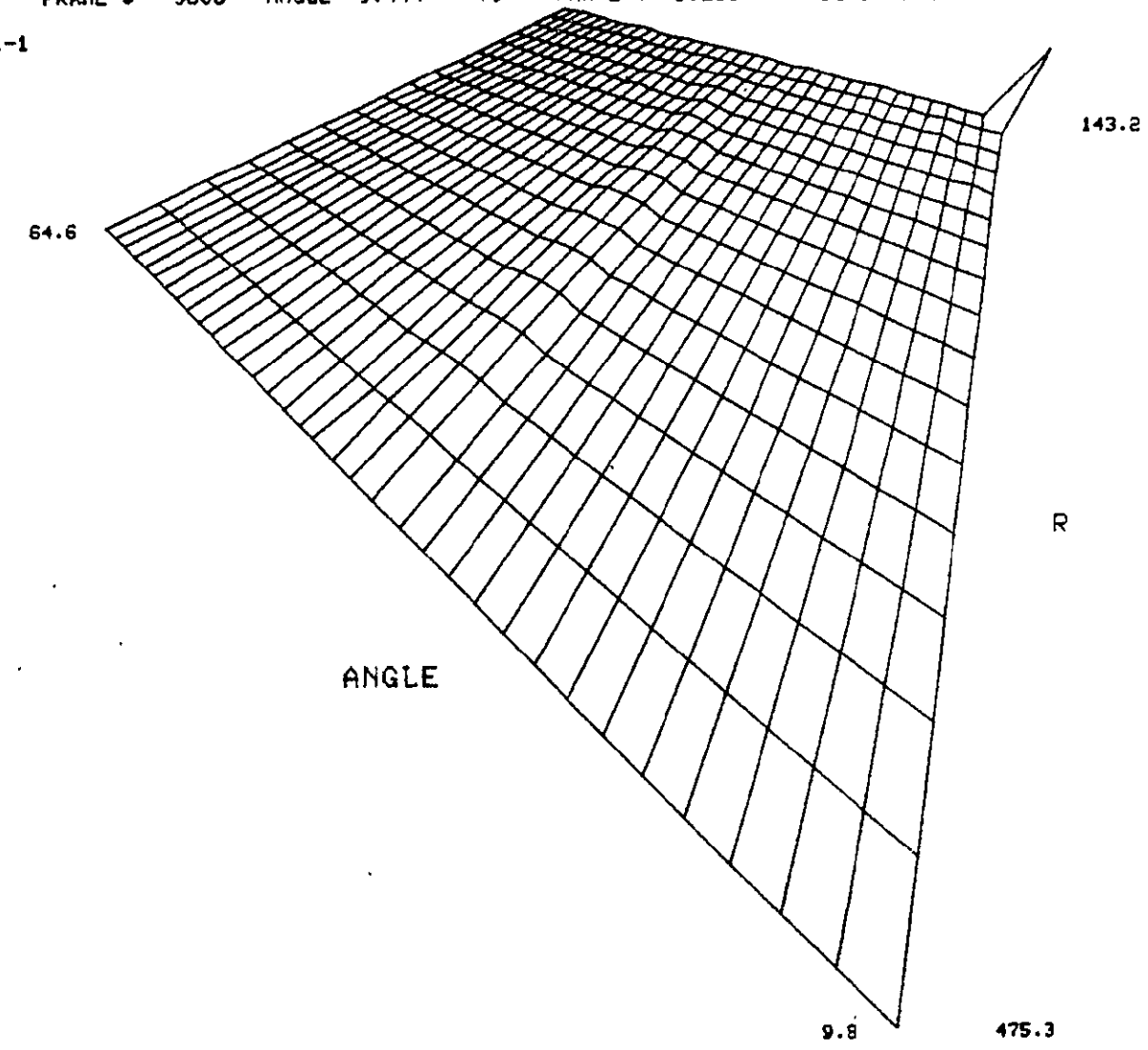
* SCAN # 13 FRAME # 9606 ANGLE 9.444 TO FRAME # 10236 ANGLE 65.042 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 55.0

AVERAGE V = 1.7

ANGLE	
1	9.8
2	10.1
3	10.9
4	12.2
5	13.6
6	15.3
7	17.2
8	18.8
9	20.5
10	22.3
11	24.1
12	25.8
13	27.5
14	29.3
15	31.1
16	32.9
17	34.6
18	36.2
19	38.0
20	39.8
21	41.5
22	43.3
23	44.9
24	46.6
25	48.3
26	50.0
27	51.7
28	53.5
29	55.2
30	56.9
31	58.7
32	60.5
33	62.3
34	63.9
35	64.6



	R
1	143.2
2	162.7
3	182.3
4	201.8
5	221.4
6	240.9
7	260.4
8	280.0
9	299.5
10	319.0
11	338.6
12	358.1
13	377.6
14	397.2
15	416.7
16	436.3
17	475.3

V, R, A DISPLAY (VELOCITY AT I_{MAX})

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

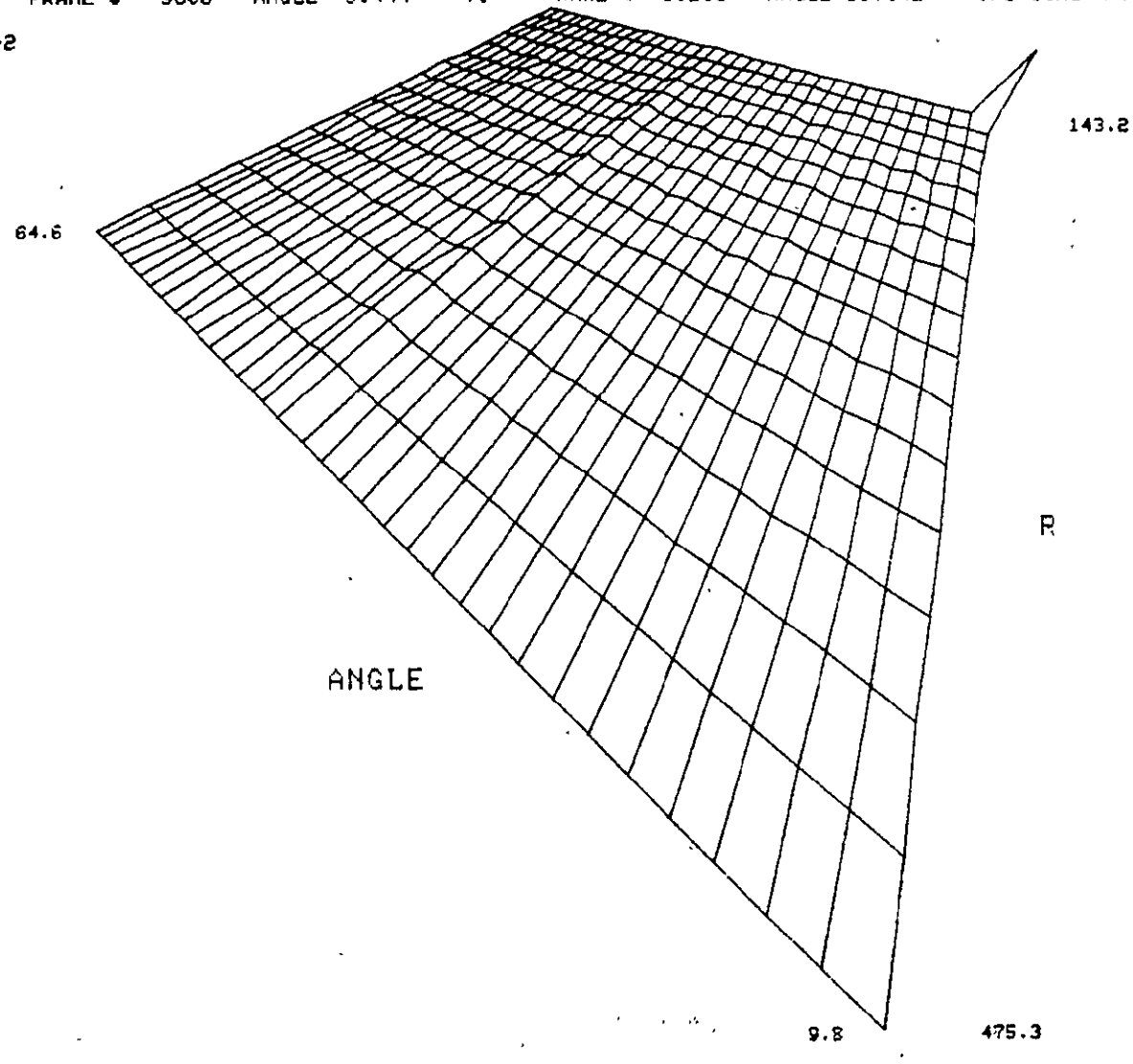
* SCAN # 13 FRAME # 9606 ANGLE 9.444 TO FRAME # 10236 ANGLE 65.042 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V = 56.0

AVERAGE V = 2.8

ANGLE	
1	9.8
2	10.1
3	10.9
4	12.2
5	13.6
6	15.3
7	17.2
8	18.8
9	20.5
10	22.3
11	24.1
12	25.8
13	27.5
14	29.3
15	31.1
16	32.9
17	34.6
18	36.2
19	38.0
20	39.8
21	41.5
22	43.3
23	44.9
24	46.6
25	48.3
26	50.0
27	51.7
28	53.5
29	55.2
30	56.9
31	58.7
32	60.5
33	62.3
34	63.9
35	64.6



	R
1	143.2
2	162.7
3	182.3
4	201.8
5	221.4
6	240.9
7	260.4
8	280.0
9	299.5
10	319.0
11	338.6
12	358.1
13	377.6
14	397.2
15	416.7
16	436.3
17	475.3

U, R, A DISPLAY (VELOCITY AT IMAX)

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

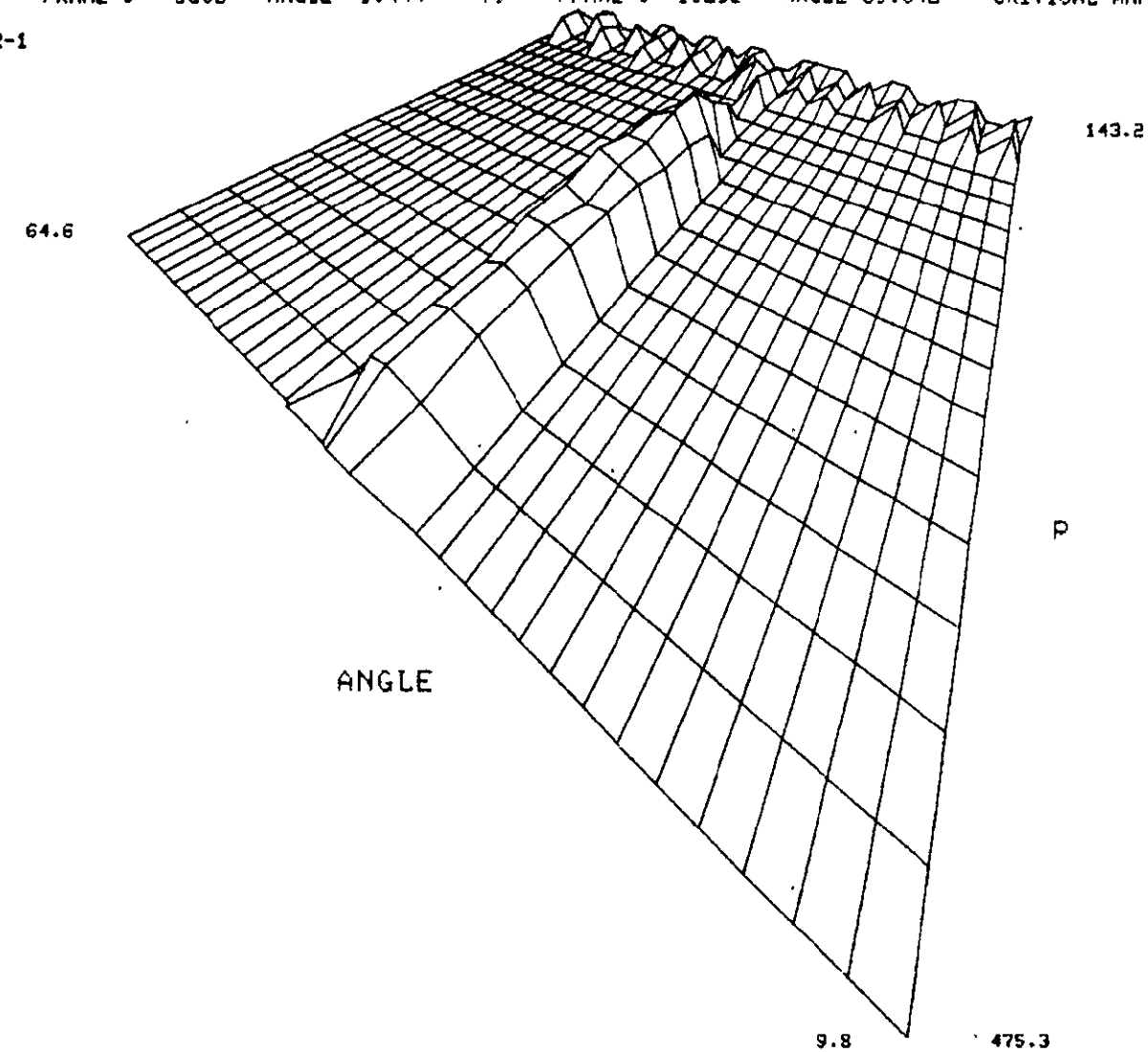
* SCAN # 13 FRAME # 9606 ANGLE 9.444 TO FRAME # 10236 ANGLE 65.042 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 10.0

AVERAGE V = 1.6

ANGLE	
1	9.8
2	10.1
3	10.9
4	12.2
5	13.6
6	15.3
7	17.2
8	18.8
9	20.5
10	22.3
11	24.1
12	25.8
13	27.5
14	29.3
15	31.1
16	32.9
17	34.6
18	36.2
19	38.0
20	39.8
21	41.5
22	43.3
23	44.9
24	46.6
25	48.3
26	50.0
27	51.7
28	53.5
29	55.2
30	56.9
31	58.7
32	60.5
33	62.3
34	63.9
35	64.6



R	
1	143.2
2	162.7
3	182.3
4	201.8
5	221.4
6	240.9
7	260.4
8	280.0
9	299.5
10	319.0
11	338.6
12	358.1
13	377.6
14	397.2
15	416.7
16	436.3
17	475.3

ORIGINAL PAGE IS OF POOR QUALITY

VMAX, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 5110

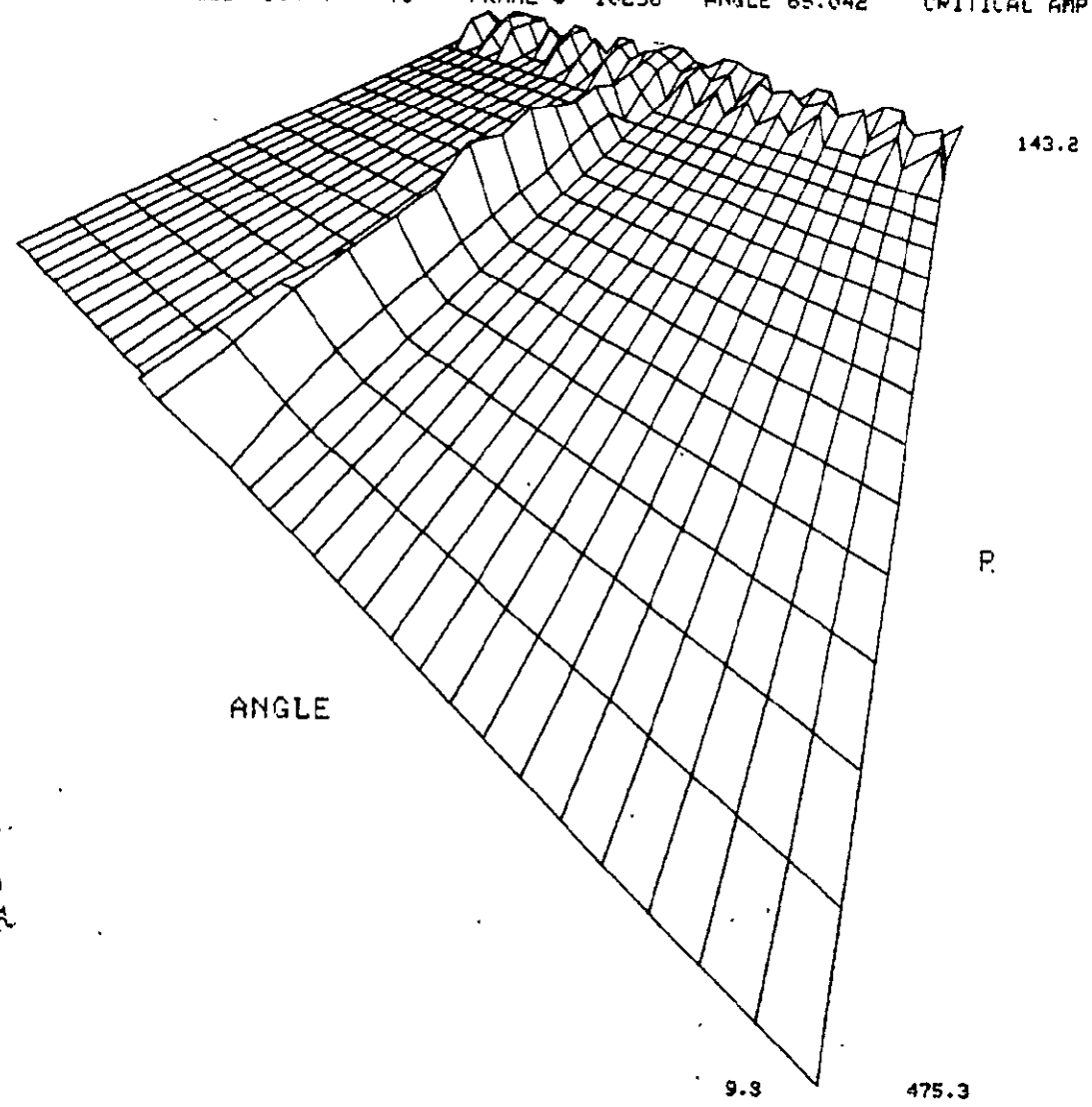
SCAN # 13 FRAME # 9606 ANGLE 9.444 TO FRAME # 10236 ANGLE 65.042 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM V = 14.0

AVERAGE V = 1.8

	ANGLE
1	9.8
2	10.1
3	10.9
4	12.2
5	13.6
6	15.3
7	17.2
8	18.8
9	20.5
10	22.3
11	24.1
12	25.8
13	27.5
14	29.3
15	31.1
16	32.9
17	34.6
18	36.2
19	38.0
20	39.8
21	41.5
22	43.3
23	44.9
24	46.6
25	48.3
26	50.0
27	51.7
28	53.5
29	55.2
30	56.9
31	58.7
32	60.5
33	62.3
34	63.9
35	64.6



	R
1	143.2
2	162.7
3	182.3
4	201.8
5	221.4
6	240.9
7	260.4
8	280.0
9	299.5
10	319.0
11	338.6
12	358.1
13	377.6
14	397.2
15	416.7
16	436.3
17	475.3

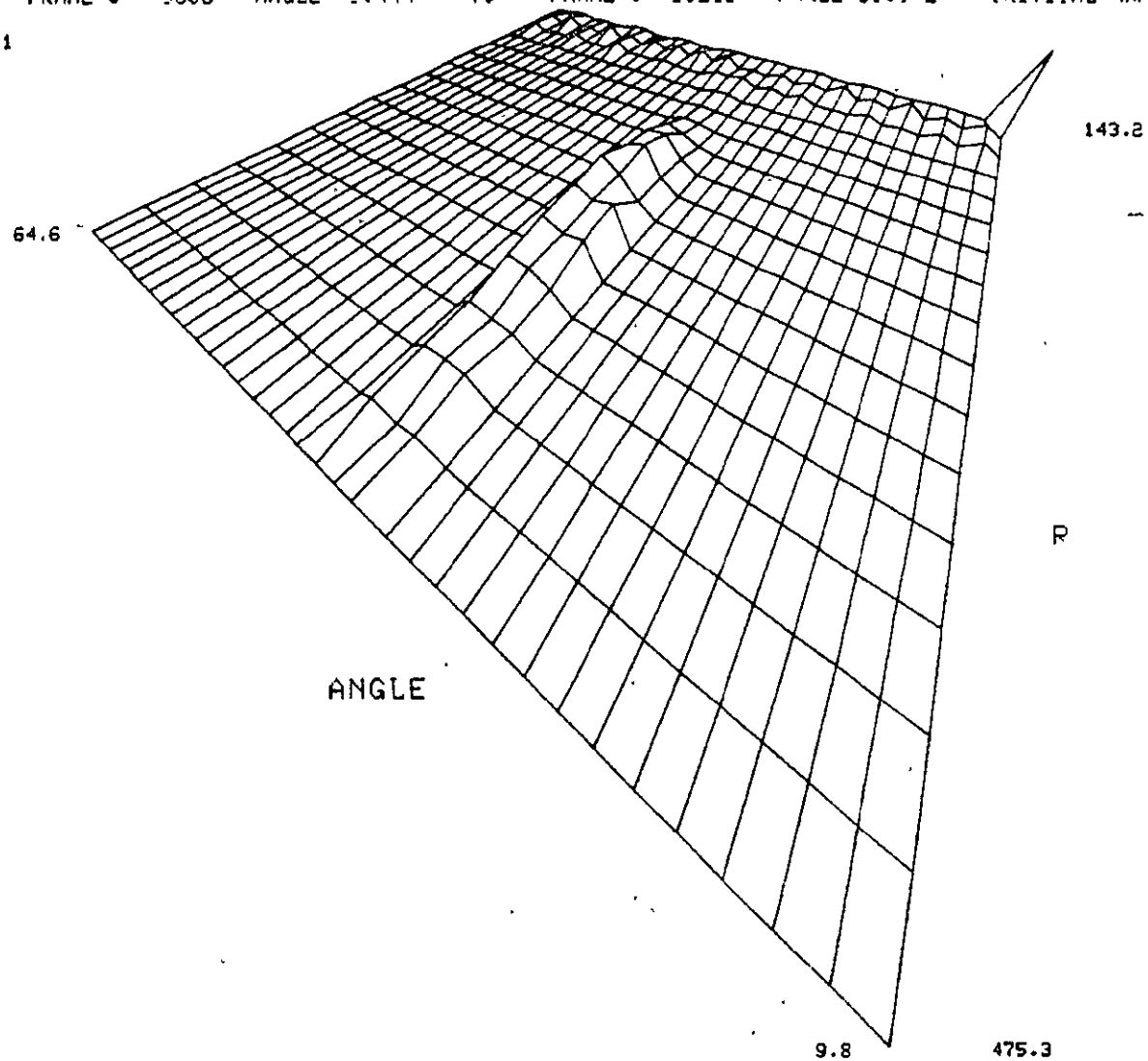
ORIGINAL PAGE IS OF POOR QUALITY

V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 13 FRAME # 9606 ANGLE 9.444 TO FRAME # 10236 ANGLE 65.042 CRITICAL AMP AT CELL 62

OPTION # 31-1



	ANGLE
1	9.8
2	10.1
3	10.9
4	12.2
5	13.6
6	15.3
7	17.2
8	18.8
9	20.5
10	22.3
11	24.1
12	25.8
13	27.5
14	29.3
15	31.1
16	32.9
17	34.6
18	36.2
19	38.0
20	39.8
21	41.5
22	43.3
23	44.9
24	46.6
25	48.3
26	50.0
27	51.7
28	53.5
29	55.2
30	56.9
31	58.7
32	60.5
33	62.3
34	63.9
35	64.6

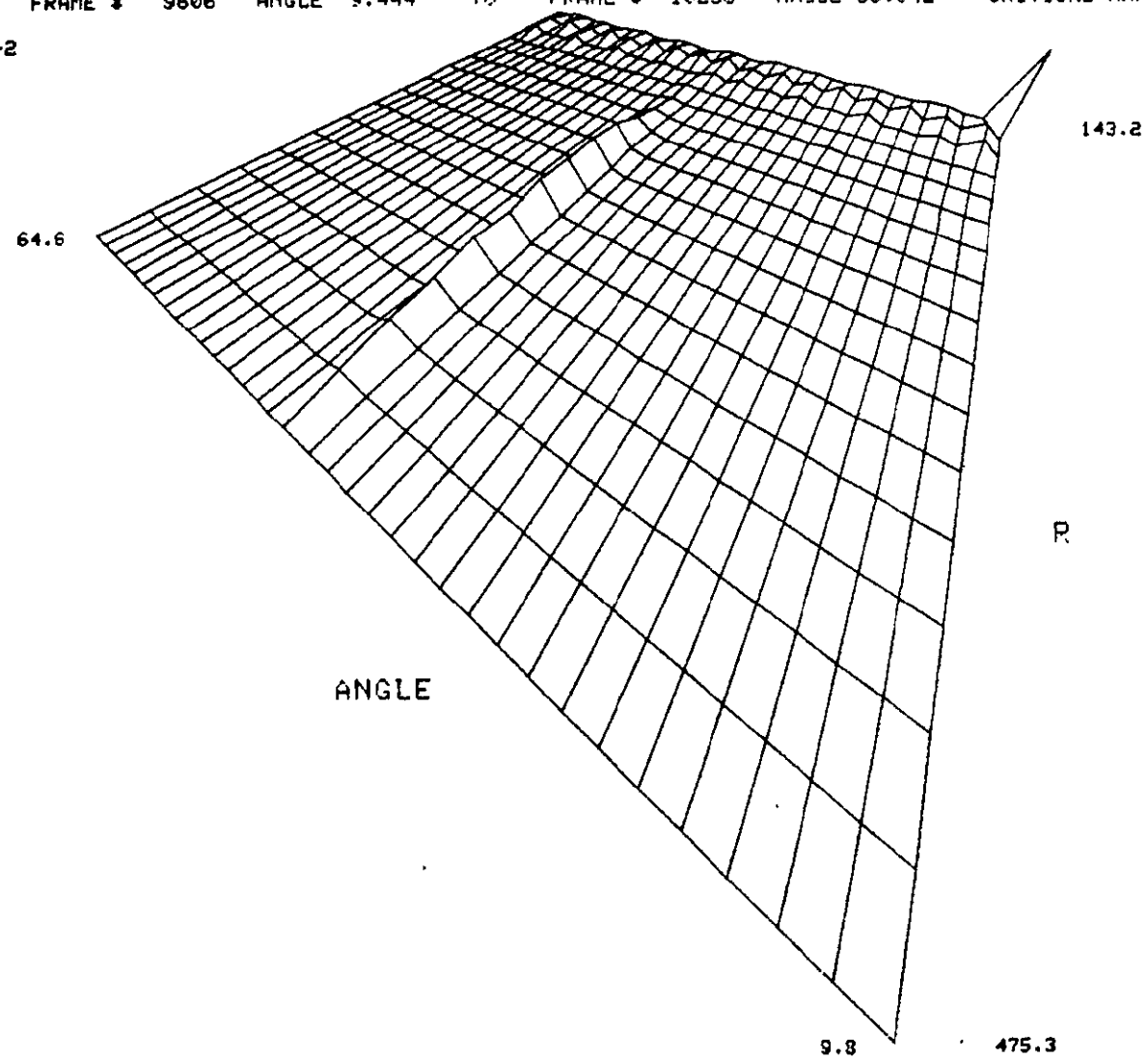
	R
1	143.2
2	162.7
3	182.3
4	201.8
5	221.4
6	240.9
7	260.4
8	280.0
9	299.5
10	319.0
11	338.6
12	358.1
13	377.6
14	397.2
15	416.7
16	436.3
17	475.3

V * IMAX, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 13 FRAME # 9606 ANGLE 9.444 TO FRAME # 10236 ANGLE 65.042 CRITICAL AMP AT CELL 62

OPTION # 31-2



	ANGLE
1	9.8
2	10.1
3	10.9
4	12.2
5	13.6
6	15.3
7	17.2
8	18.8
9	20.5
10	22.3
11	24.1
12	25.8
13	27.5
14	29.3
15	31.1
16	32.9
17	34.6
18	36.2
19	38.0
20	39.8
21	41.5
22	43.3
23	44.9
24	46.6
25	48.3
26	50.0
27	51.7
28	53.5
29	55.2
30	56.9
31	58.7
32	60.5
33	62.3
34	63.9
35	64.6

	R
1	143.2
2	162.7
3	182.3
4	201.8
5	221.4
6	240.9
7	260.4
8	280.0
9	299.5
10	319.0
11	338.6
12	358.1
13	377.6
14	397.2
15	416.7
16	436.3
17	475.3

U * IMAX, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 208 RUN # 4 TAPE 1 OF 2- 6110

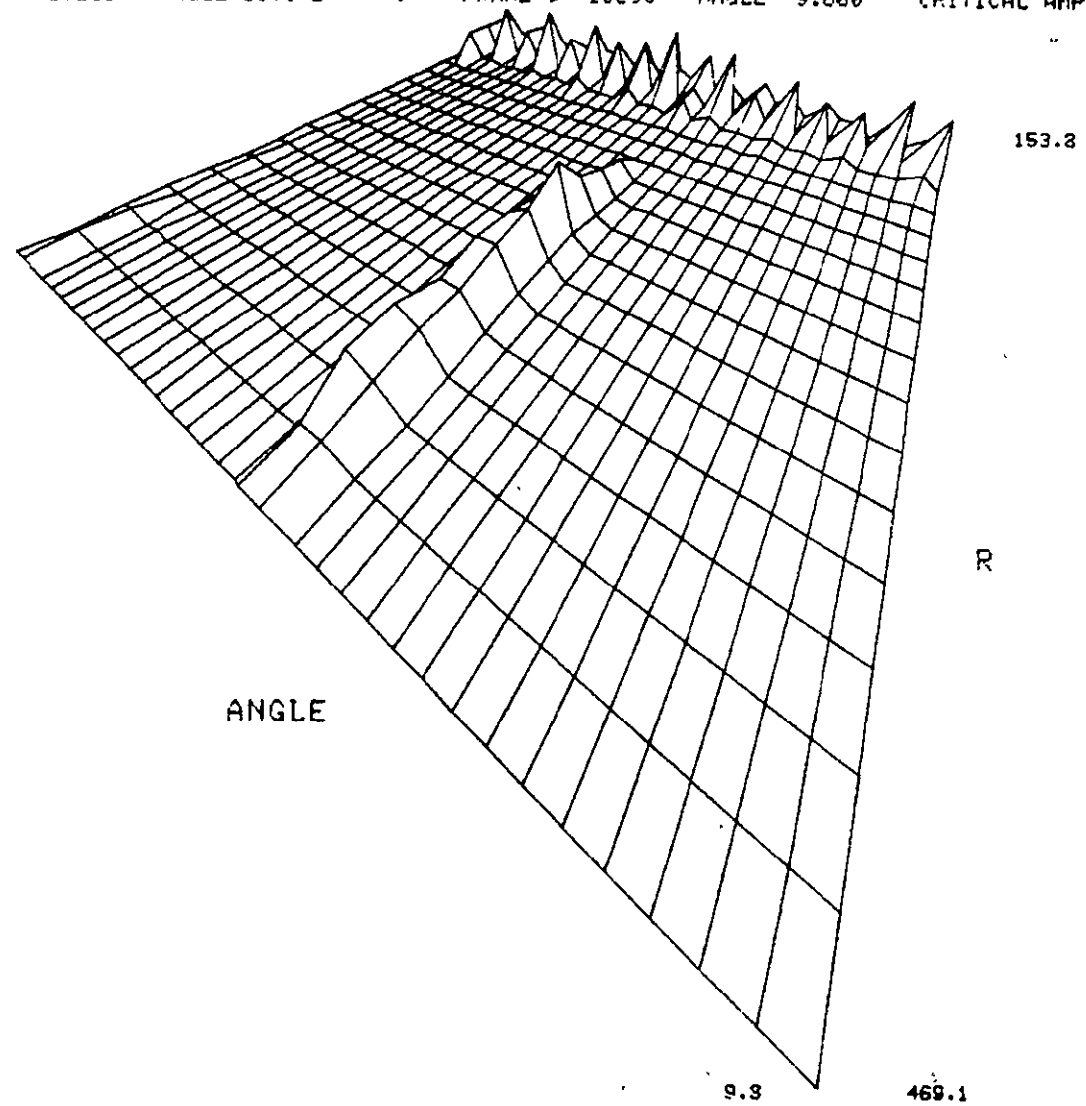
* SCAN # 14 FRAME # 10236 ANGLE 65.042 TO FRAME # 10850 ANGLE 9.660 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 36.0

AVERAGE I = 2.1

	ANGLE
1	64.9
2	64.5
3	63.8
4	62.6
5	61.3
6	59.7
7	57.8
8	56.0
9	54.3
10	52.5
11	50.8
12	49.1
13	47.4
14	45.7
15	44.1
16	42.4
17	40.6
18	38.9
19	37.1
20	35.4
21	33.6
22	31.9
23	30.1
24	28.4
25	26.7
26	24.8
27	23.0
28	21.3
29	19.5
30	17.8
31	15.9
32	14.2
33	12.5
34	10.8
35	9.8



	R
1	153.8
2	172.4
3	190.9
4	209.5
5	228.0
6	246.6
7	265.1
8	283.7
9	302.2
10	320.7
11	339.3
12	357.8
13	376.4
14	394.9
15	413.5
16	432.0
17	469.1

ORIGINAL PAGE IS
OF POOR QUALITY

I_{max}, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 338 RUN # 4 TAPE 1 OF 2- 6110

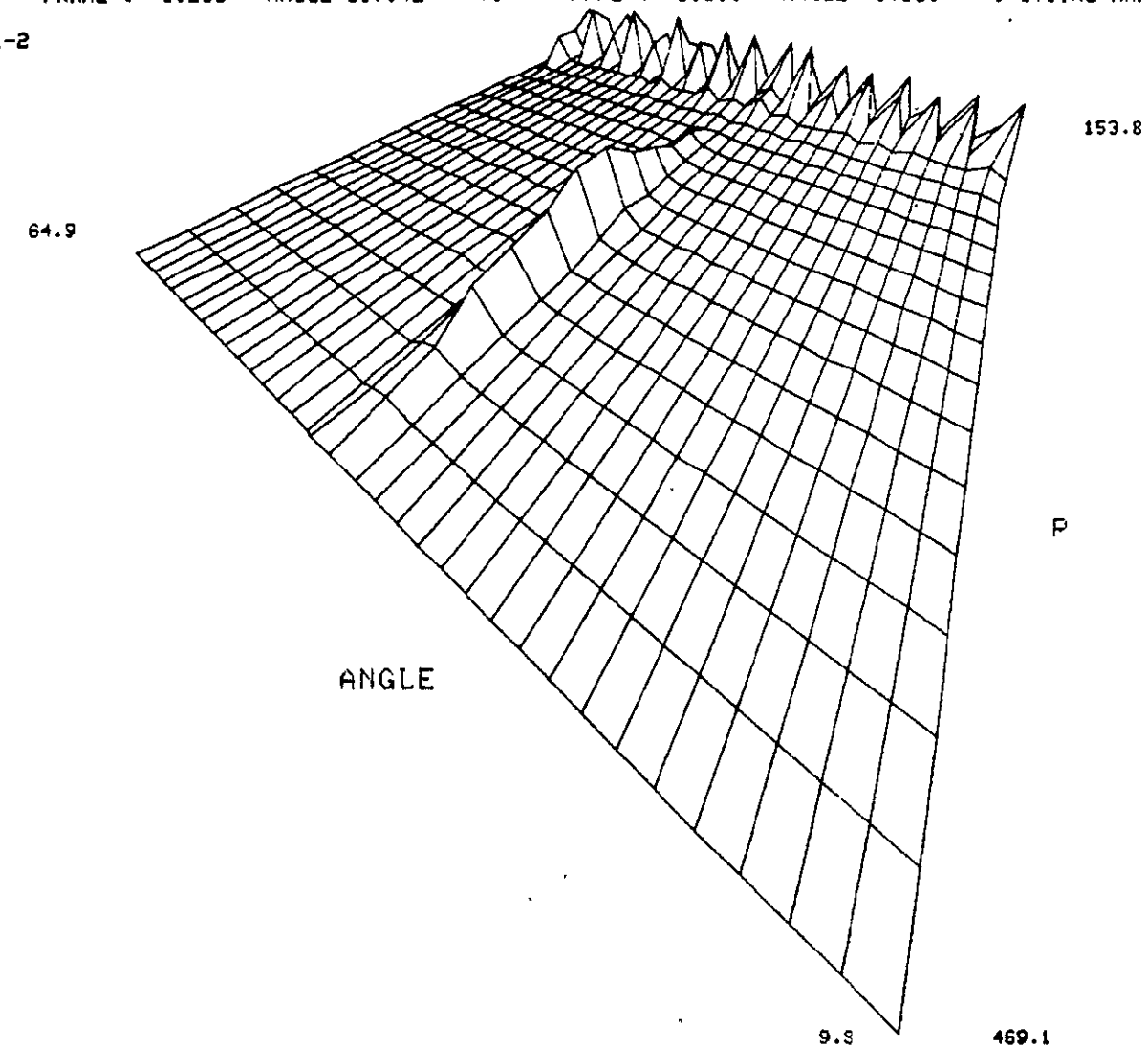
* SCAN # 14 FRAME # 10236 ANGLE 65.042 TO FRAME # 10850 ANGLE 9.660 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 55.0

AVERAGE I = 3.9

ANGLE	
1	64.9
2	64.5
3	63.8
4	62.6
5	61.3
6	59.7
7	57.8
8	56.0
9	54.3
10	52.5
11	50.8
12	49.1
13	47.4
14	45.7
15	44.1
16	42.4
17	40.6
18	38.9
19	37.1
20	35.4
21	33.6
22	31.9
23	30.1
24	28.4
25	26.7
26	24.8
27	23.0
28	21.3
29	19.5
30	17.8
31	15.9
32	14.2
33	12.5
34	10.8
35	9.2



R	
1	153.8
2	172.4
3	190.9
4	209.5
5	228.0
6	246.6
7	265.1
8	283.7
9	302.2
10	320.7
11	339.3
12	357.8
13	376.4
14	394.9
15	413.5
16	432.0
17	469.1

Imax, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

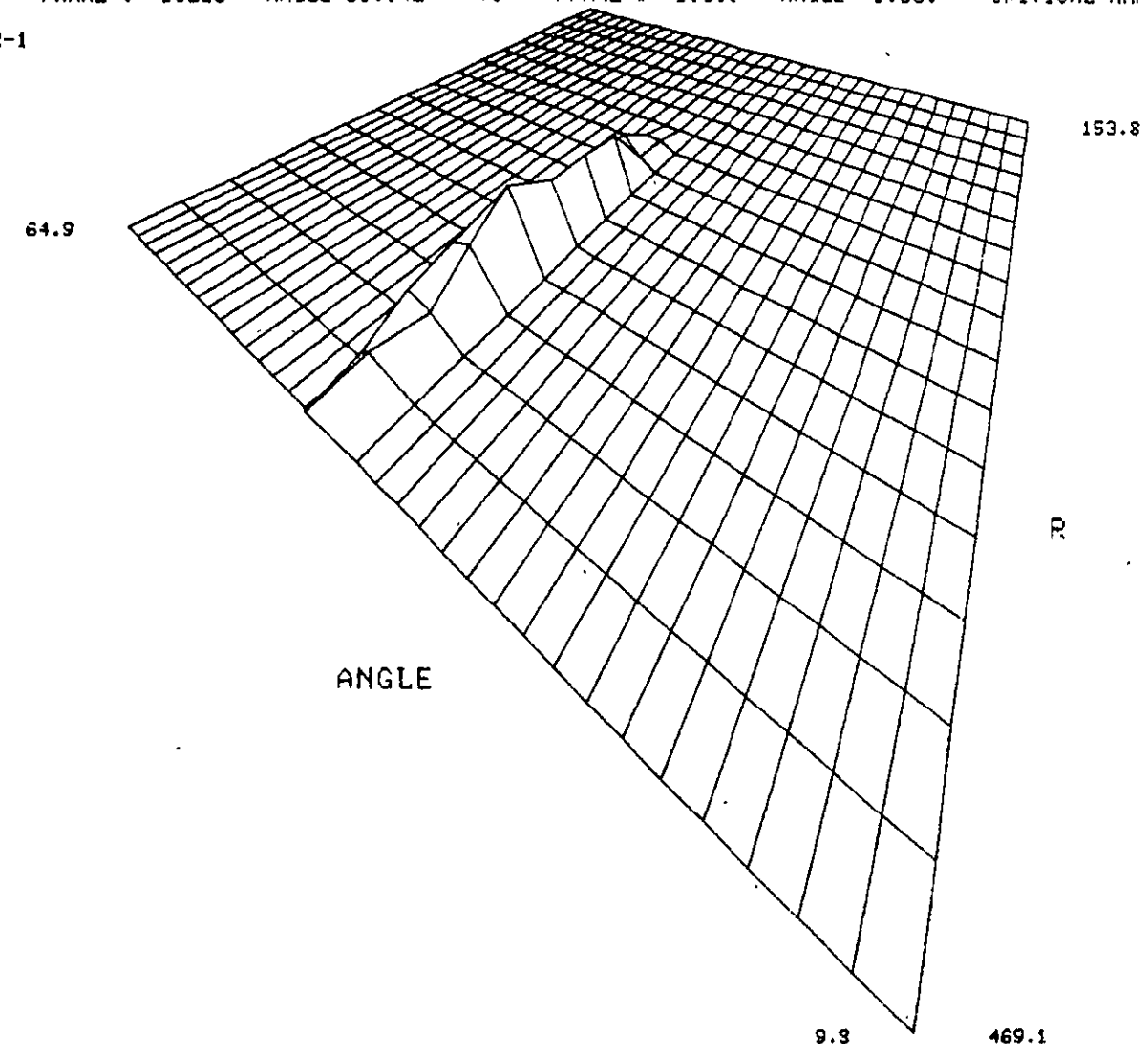
\# SCAN # 14 FRAME # 10236 ANGLE 65.048 TO FRAME # 10350 ANGLE 9.660 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 19.0

AVERAGE I = 0.3

ANGLE	
1	64.9
2	64.5
3	63.8
4	62.6
5	61.3
6	59.7
7	57.8
8	56.0
9	54.3
10	52.5
11	50.8
12	49.1
13	47.4
14	45.7
15	44.1
16	42.4
17	40.6
18	38.9
19	37.1
20	35.4
21	33.6
22	31.9
23	30.1
24	28.4
25	26.7
26	24.8
27	23.0
28	21.3
29	19.5
30	17.8
31	15.9
32	14.2
33	12.5
34	10.8
35	9.8



	R
1	153.8
2	172.4
3	190.9
4	209.5
5	228.0
6	246.6
7	265.1
8	283.7
9	302.2
10	320.7
11	339.3
12	357.8
13	376.4
14	394.9
15	413.5
16	432.0
17	469.1

I, R, A DISPLAY AT VELOCITY CELL 62

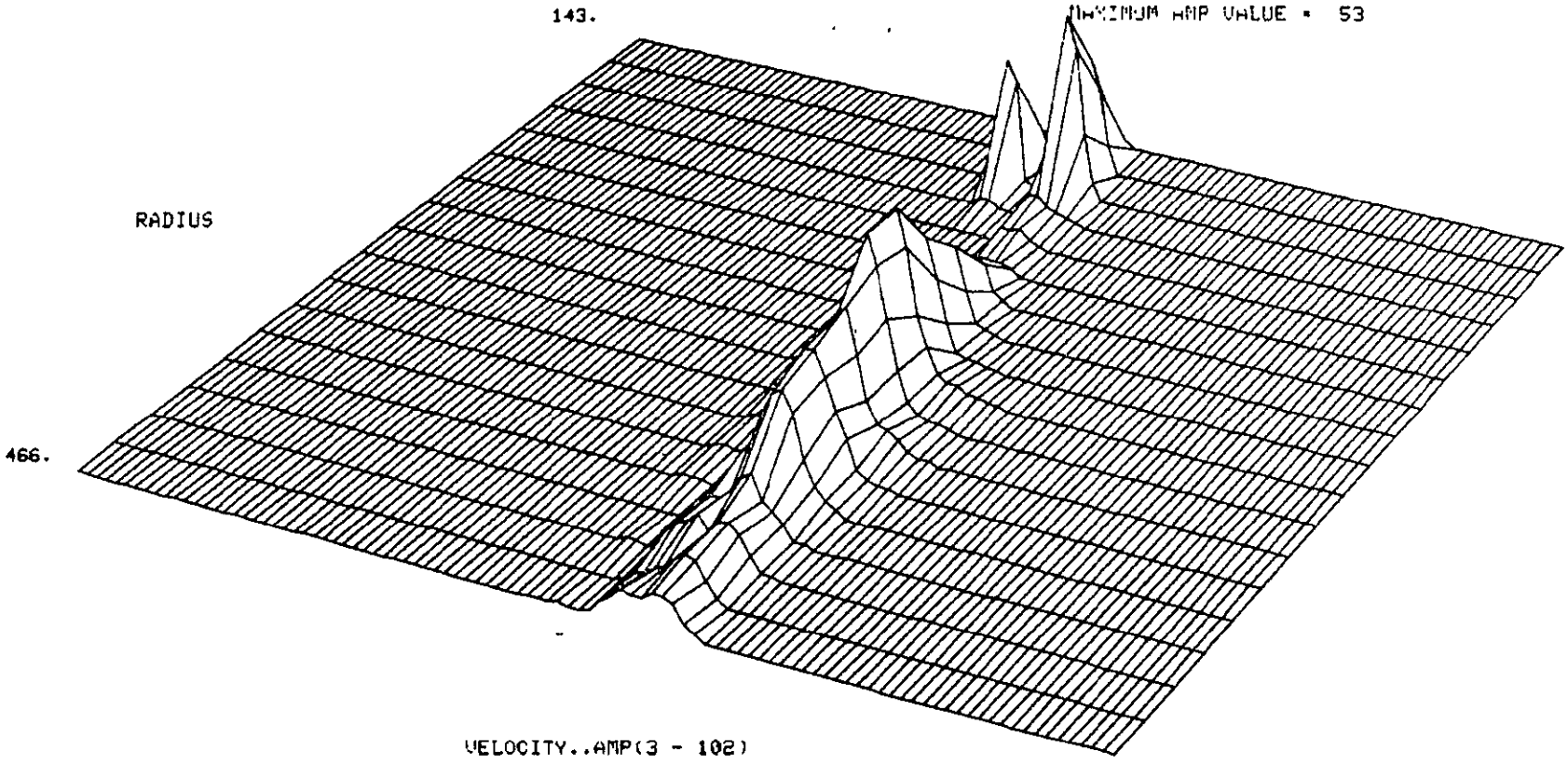
NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 14 FRAME # 10236 ANGLE 65.042 TO FRAME # 10850 ANGLE 9.660 CRITICAL AMP AT CELL 62

FRAME # 10536 TO 10554

ANGLE = 38.84

MAXIMUM AMP VALUE = 53



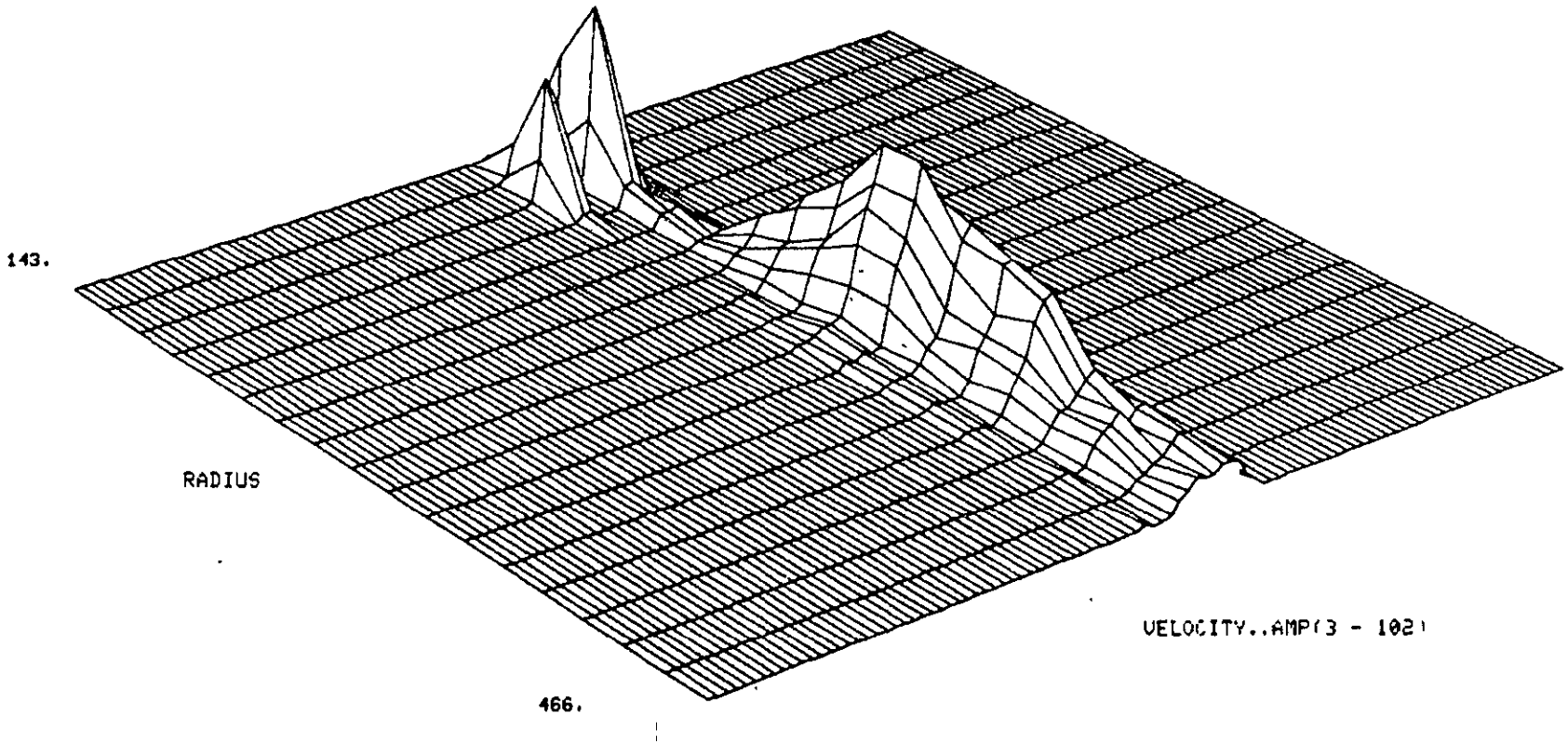
NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 14 FRAME # 10236 ANGLE 65.042 TO FRAME # 10850 ANGLE 9.660 CRITICAL AMP AT CELL 62

FRAME # 10536 TO 10554

ANGLE = 38.84

MAXIMUM AMP VALUE = 53



NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 8110

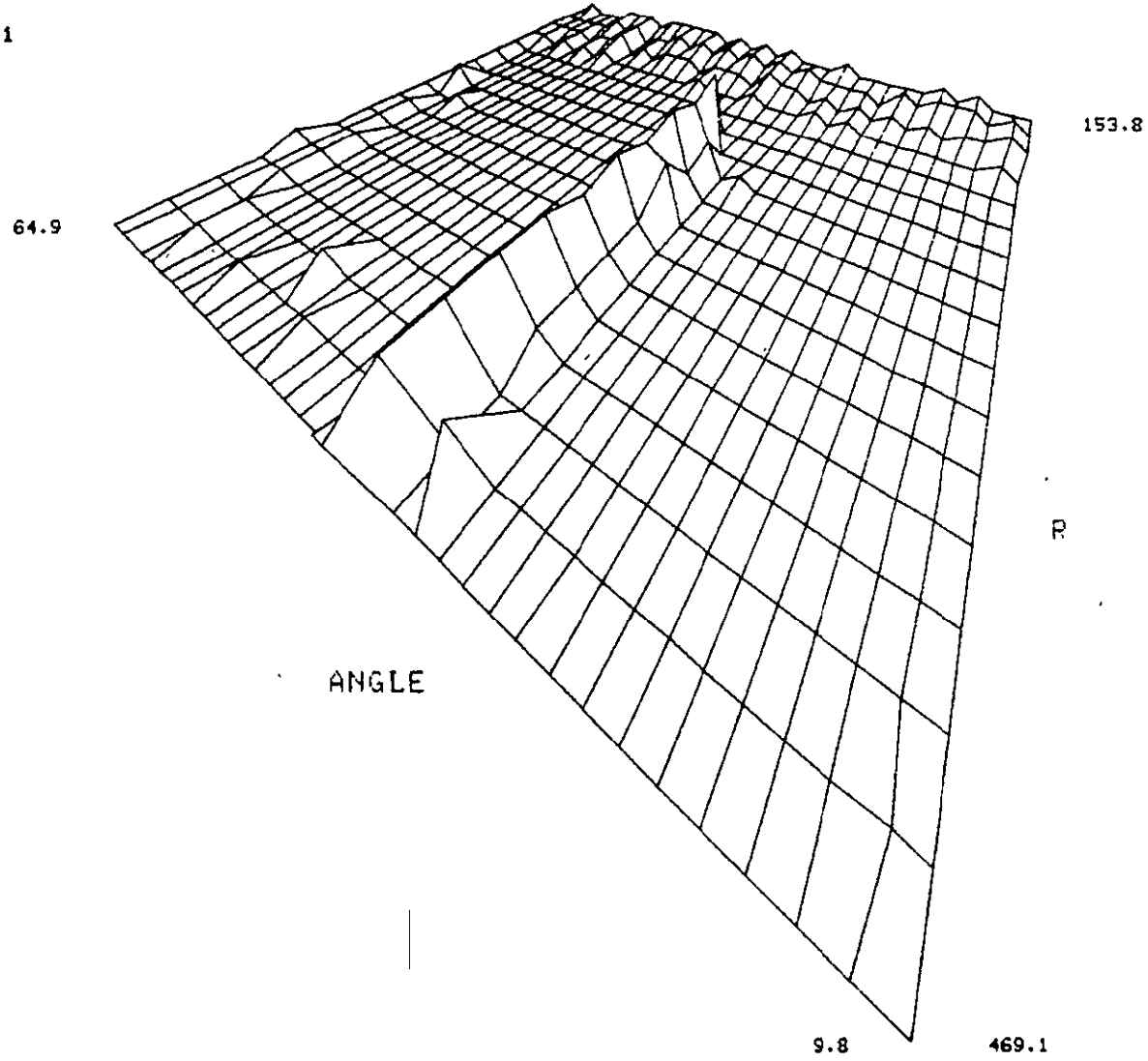
* SCAN # 14 FRAME # 10236 ANGLE 65.042 TO FRAME # 10250 ANGLE 9.560 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 8.0

AVERAGE V = 1.5

ANGLE	
1	64.9
2	64.5
3	63.8
4	62.6
5	61.3
6	59.7
7	57.8
8	56.0
9	54.3
10	52.5
11	50.8
12	49.1
13	47.4
14	45.7
15	44.1
16	42.4
17	40.6
18	38.9
19	37.1
20	35.4
21	33.6
22	31.9
23	30.1
24	28.4
25	26.7
26	24.8
27	23.0
28	21.3
29	19.5
30	17.8
31	15.9
32	14.2
33	12.5
34	10.8
35	9.8



	R
1	153.8
2	172.4
3	190.9
4	209.5
5	228.0
6	246.6
7	265.1
8	283.7
9	302.2
10	320.7
11	339.3
12	357.8
13	376.4
14	394.9
15	413.5
16	432.0
17	469.1

V, R, A DISPLAY (VELOCITY AT I_{MAX})

NASA PROJECT DUST DEVIL - DAY 238 RUN # 4 TAPE 1 OF 2- 6110

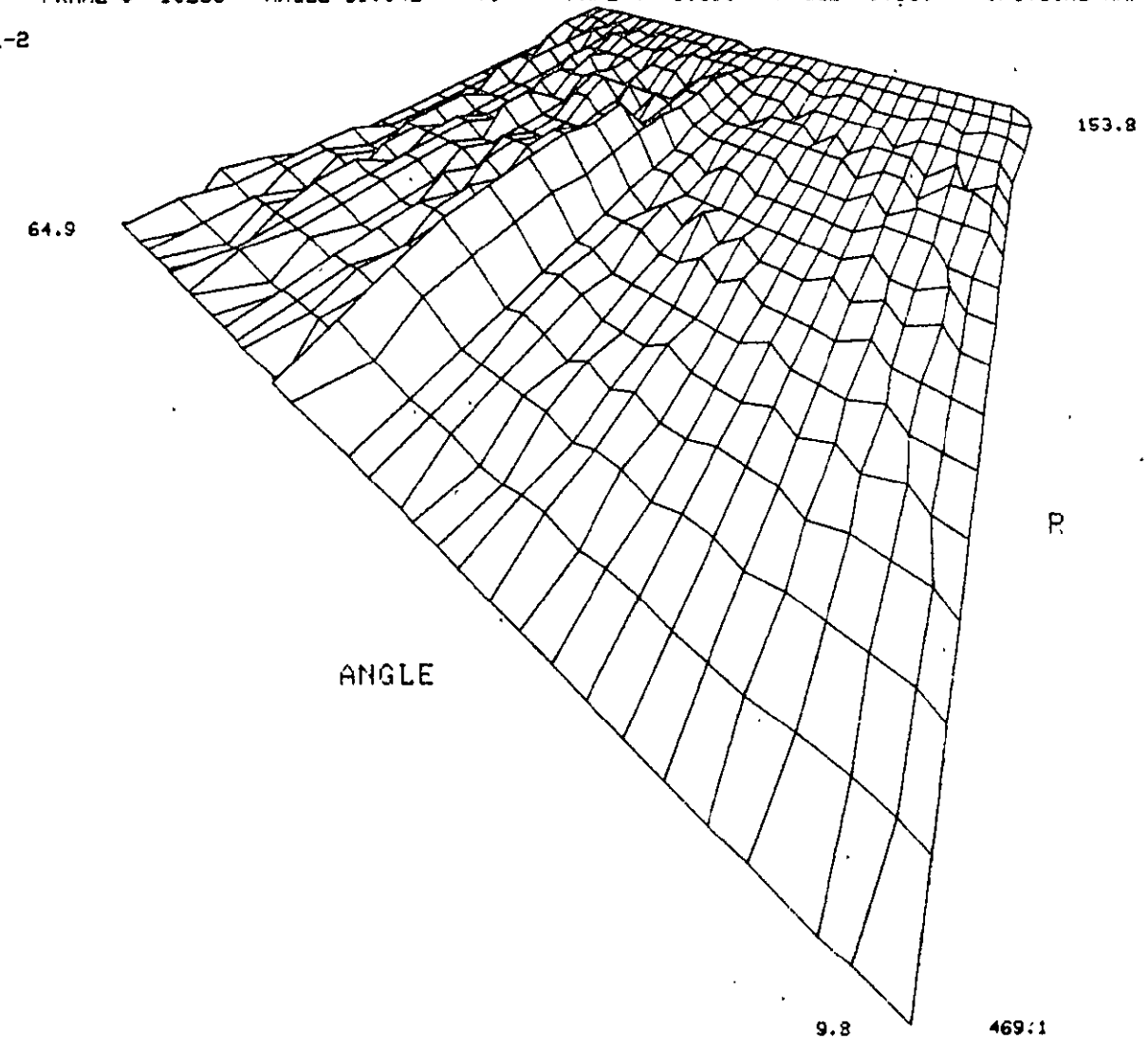
SCAN # 14 FRAME # 10236 ANGLE 65.042 TO FRAME # 10350 ANGLE 9.660 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V = 11.0

AVERAGE V = 2.7

ANGLE	
1	64.9
2	64.5
3	63.8
4	62.6
5	61.3
6	59.7
7	57.8
8	56.0
9	54.3
10	52.5
11	50.8
12	49.1
13	47.4
14	45.7
15	44.1
16	42.4
17	40.6
18	38.9
19	37.1
20	35.4
21	33.6
22	31.9
23	30.1
24	28.4
25	26.7
26	24.8
27	23.0
28	21.3
29	19.5
30	17.8
31	15.9
32	14.2
33	12.5
34	10.8
35	9.8



R	
1	153.8
2	172.4
3	190.9
4	209.5
5	228.0
6	246.6
7	265.1
8	283.7
9	302.2
10	320.7
11	339.3
12	357.8
13	376.4
14	394.9
15	413.5
16	432.0
17	469.1

V, R, A DISPLAY (VELOCITY AT IMAX)

ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

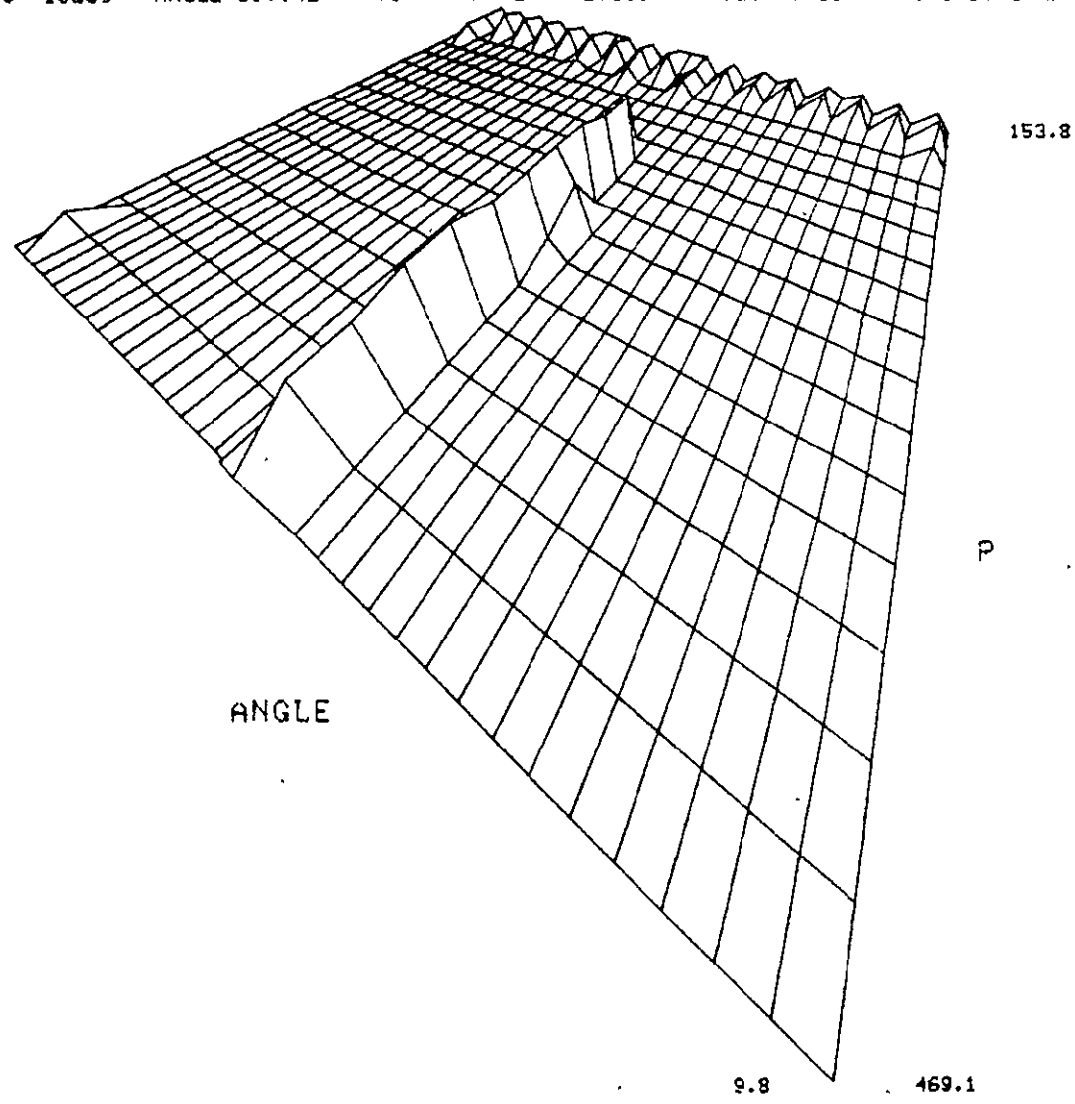
* SCAN # 14 FRAME # 10236 ANGLE 65.042 TO FRAME # 10650 ANGLE 9.660 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 10.0

AVERAGE V = 1.4

	ANGLE
1	64.9
2	64.5
3	63.8
4	62.6
5	61.3
6	59.7
7	57.8
8	56.0
9	54.3
10	52.5
11	50.8
12	49.1
13	47.4
14	45.7
15	44.1
16	42.4
17	40.6
18	38.9
19	37.1
20	35.4
21	33.6
22	31.9
23	30.1
24	28.4
25	26.7
26	24.8
27	23.0
28	21.3
29	19.5
30	17.8
31	15.9
32	14.2
33	12.5
34	10.8
35	9.8



	R
1	153.8
2	172.4
3	190.9
4	209.5
5	228.0
6	246.6
7	265.1
8	283.7
9	302.2
10	320.7
11	339.3
12	357.8
13	376.4
14	394.9
15	413.5
16	422.0
17	469.1

ORIGINAL PAGE IS OF POOR QUALITY

Vmax, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF E- 5110

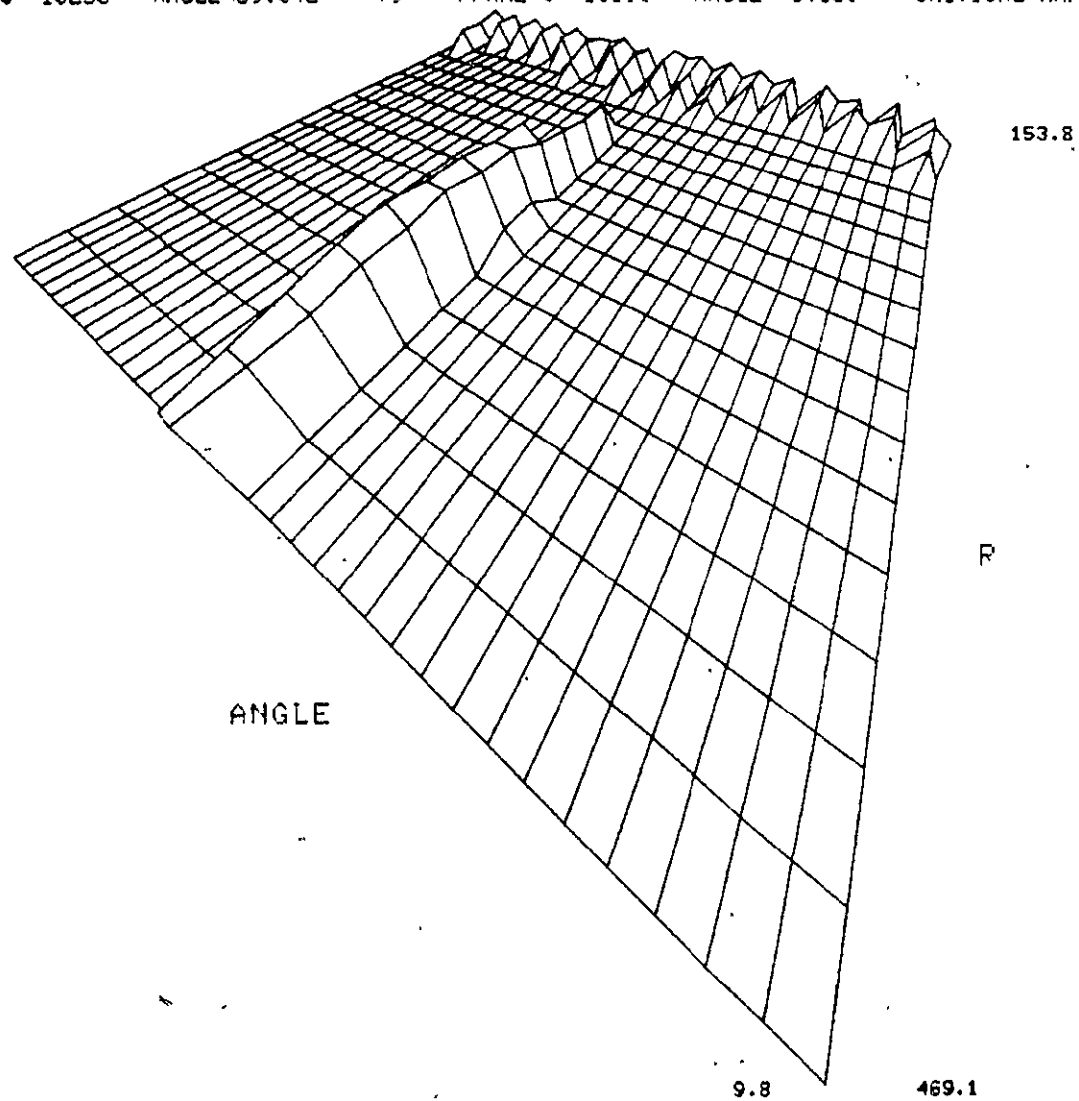
SCAN # 14 FRAME # 10236 ANGLE 65.042 TO FRAME # 10850 ANGLE 9.660 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM U = 13.0

AVERAGE U = 1.7

ANGLE	
1	64.9
2	64.5
3	63.8
4	62.6
5	61.3
6	59.7
7	57.8
8	56.0
9	54.3
10	52.5
11	50.8
12	49.1
13	47.4
14	45.7
15	44.1
16	42.4
17	40.6
18	38.9
19	37.1
20	35.4
21	33.6
22	31.9
23	30.1
24	28.4
25	26.7
26	24.8
27	23.0
28	21.3
29	19.5
30	17.8
31	15.9
32	14.2
33	12.5
34	10.8
35	9.8



	R
1	153.8
2	172.4
3	190.9
4	209.5
5	228.0
6	246.6
7	265.1
8	283.7
9	302.2
10	320.7
11	339.3
12	357.8
13	376.4
14	394.9
15	413.5
16	432.0
17	469.1

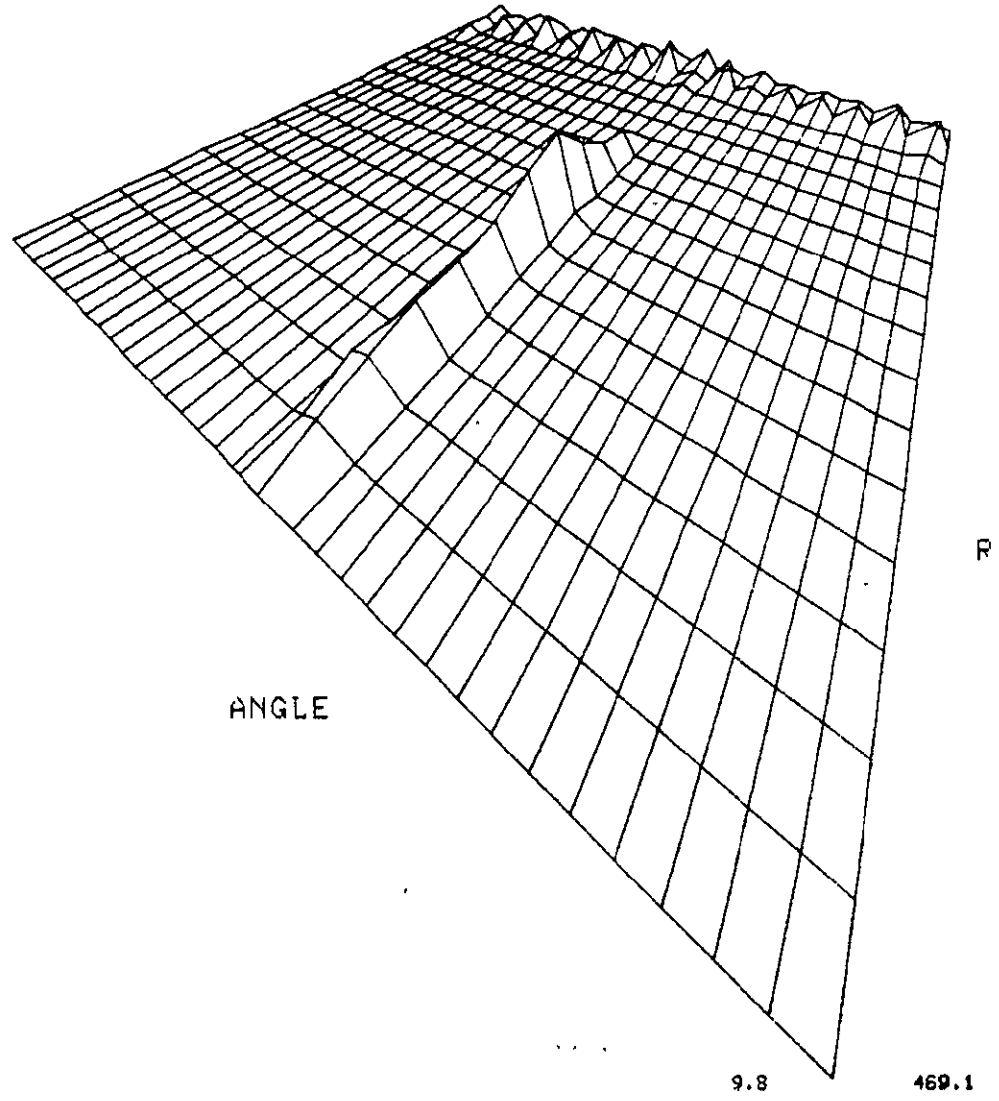
U_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 14 FRAME # 10236 ANGLE 65.042 TO FRAME # 10250 ANGLE 3.660 CRITICAL AMP AT CELL 62

OPTION # 31-1

ANGLE	
1	64.9
2	64.5
3	63.8
4	62.6
5	61.3
6	59.7
7	57.8
8	56.0
9	54.3
10	52.5
11	50.8
12	49.1
13	47.4
14	45.7
15	44.1
16	42.4
17	40.6
18	38.9
19	37.1
20	35.4
21	33.6
22	31.9
23	30.1
24	28.4
25	26.7
26	24.8
27	23.0
28	21.3
29	19.5
30	17.8
31	15.9
32	14.2
33	12.5
34	10.8
35	9.8



	R
1	153.8
2	172.4
3	190.9
4	209.5
5	228.0
6	246.6
7	265.1
8	283.7
9	302.2
10	320.7
11	339.3
12	357.8
13	376.4
14	394.9
15	413.5
16	432.0
17	469.1

ORIGINAL PAGE IS OF POOR QUALITY

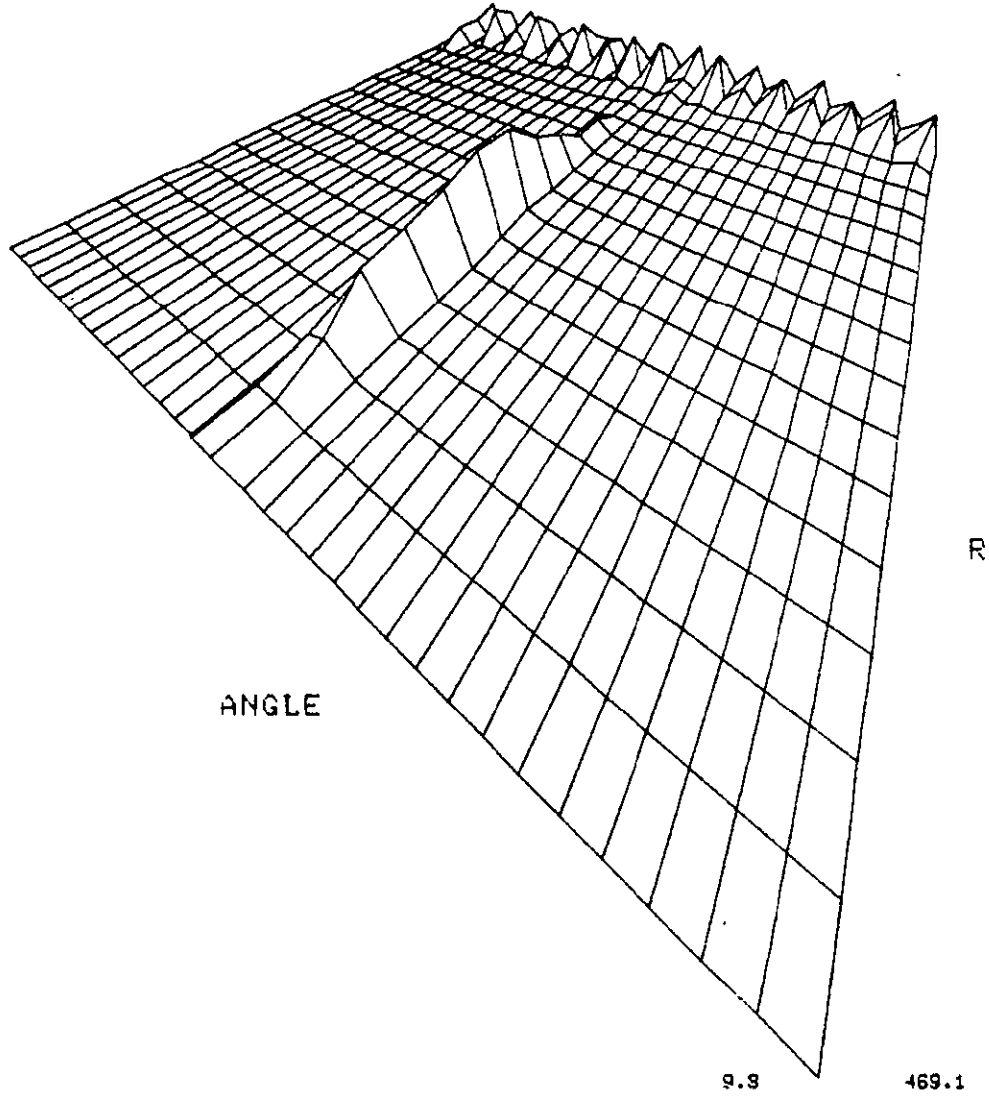
U * Imax, R, A DISPLAY

NASA PROJECT DUST DETAIL DAY 208 RUN # 4 TAPE 1 OF 3- 8110

SCAN # 14 FRAME # 10236 ANGLE 65.042 TO FRAME # 10350 ANGLE 9.660 CRITICAL AMP AT CELL 62

OPTION # 31-2

	ANGLE
1	64.9
2	64.5
3	63.8
4	62.6
5	61.3
6	59.7
7	57.8
8	56.0
9	54.3
10	52.5
11	50.8
12	49.1
13	47.4
14	45.7
15	44.1
16	42.4
17	40.6
18	38.9
19	37.1
20	35.4
21	33.6
22	31.9
23	30.1
24	28.4
25	26.7
26	24.8
27	23.0
28	21.3
29	19.5
30	17.8
31	15.9
32	14.2
33	12.5
34	10.8
35	9.8



	R
1	153.8
2	172.4
3	190.9
4	209.5
5	228.0
6	246.6
7	265.1
8	283.7
9	302.2
10	320.7
11	339.3
12	357.8
13	376.4
14	394.9
15	413.5
16	432.0
17	469.1

ORIGINAL PAGE IS OF POOR QUALITY

V * IMAX, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

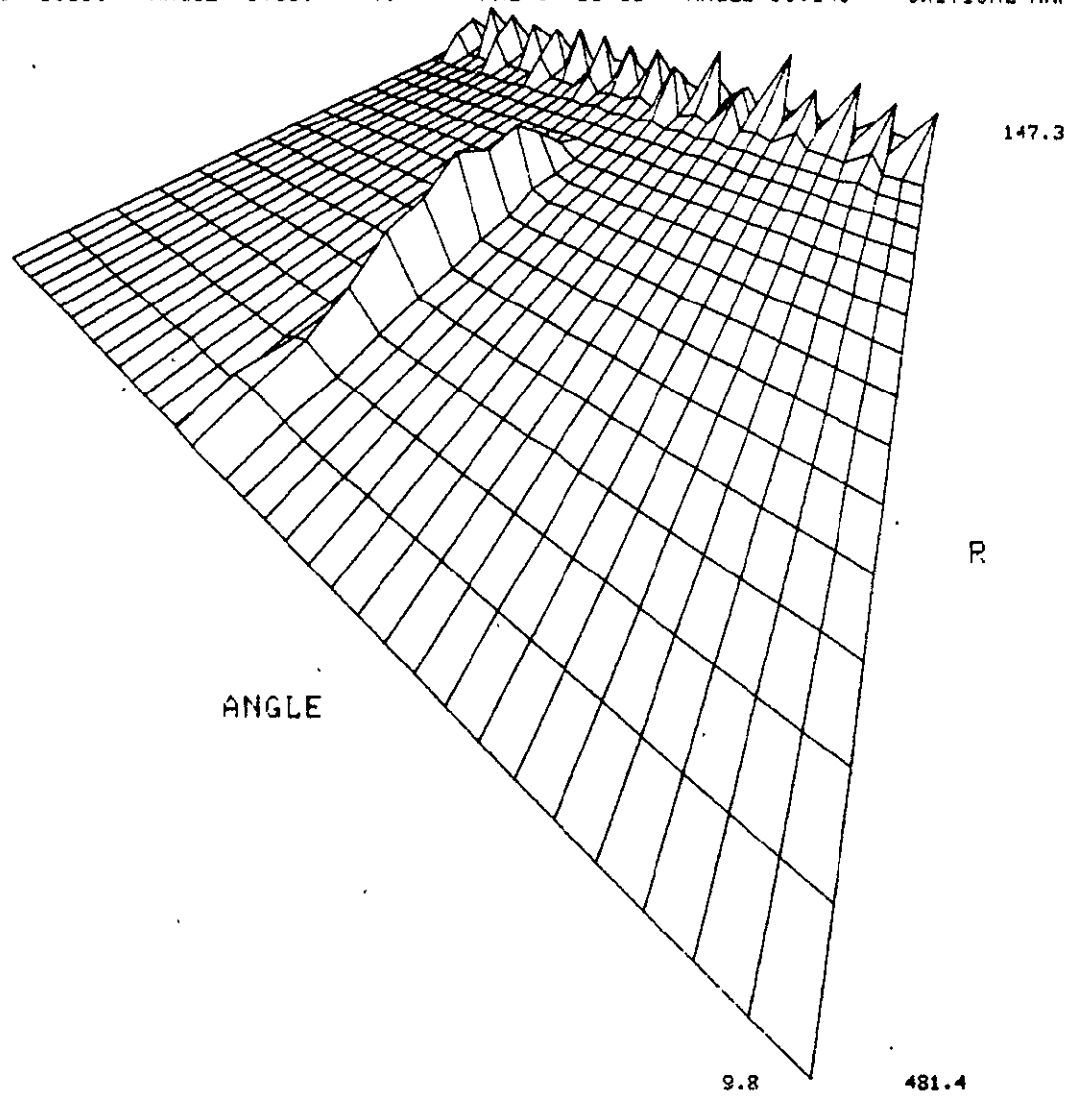
SCAN # 15 FRAME # 10850 ANGLE 9.660 TO FRAME # 11481 ANGLE 65.140 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 36.0

AVERAGE I = 1.8

	ANGLE
1	9.8
2	10.0
3	10.7
4	11.9
5	13.3
6	14.9
7	16.7
8	18.4
9	20.2
10	21.9
11	23.7
12	25.4
13	27.1
14	28.9
15	30.7
16	32.4
17	34.1
18	35.9
19	37.7
20	39.3
21	41.1
22	42.8
23	44.5
24	46.2
25	47.9
26	49.6
27	51.3
28	53.1
29	54.8
30	56.5
31	58.2
32	60.1
33	61.9
34	63.6
35	64.6



	R
1	147.3
2	167.0
3	186.7
4	206.3
5	226.0
6	245.6
7	265.3
8	284.9
9	304.6
10	324.2
11	343.9
12	363.5
13	383.2
14	402.8
15	422.5
16	442.1
17	481.4

Imax, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

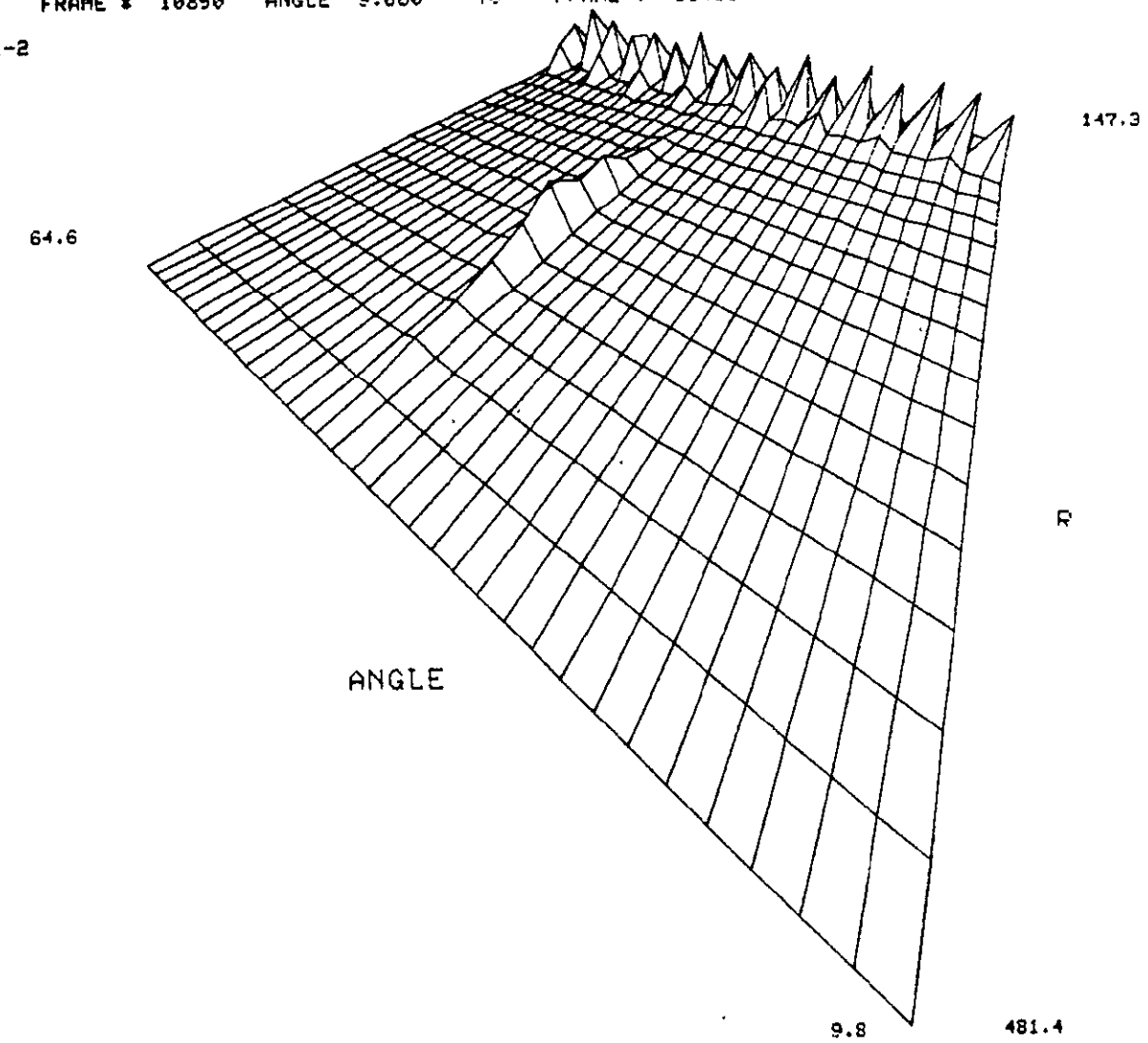
* SCAN # 15 FRAME # 10850 ANGLE 9.660 TO FRAME # 11401 ANGLE 65.140 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 55.0

AVERAGE I = 3.3

ANGLE	
1	9.8
2	10.0
3	10.7
4	11.9
5	13.3
6	14.9
7	16.7
8	18.4
9	20.2
10	21.9
11	23.7
12	25.4
13	27.1
14	28.9
15	30.7
16	32.4
17	34.1
18	35.9
19	37.7
20	39.3
21	41.1
22	42.8
23	44.5
24	46.2
25	47.9
26	49.6
27	51.3
28	53.1
29	54.8
30	56.5
31	58.2
32	60.1
33	61.9
34	63.6
35	64.6



	R
1	147.3
2	167.0
3	186.7
4	206.3
5	226.0
6	245.6
7	265.3
8	284.9
9	304.6
10	324.2
11	343.9
12	363.5
13	383.2
14	402.8
15	422.5
16	442.1
17	481.4

ORIGINAL PAGE IS OF POOR QUALITY

IMAX, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

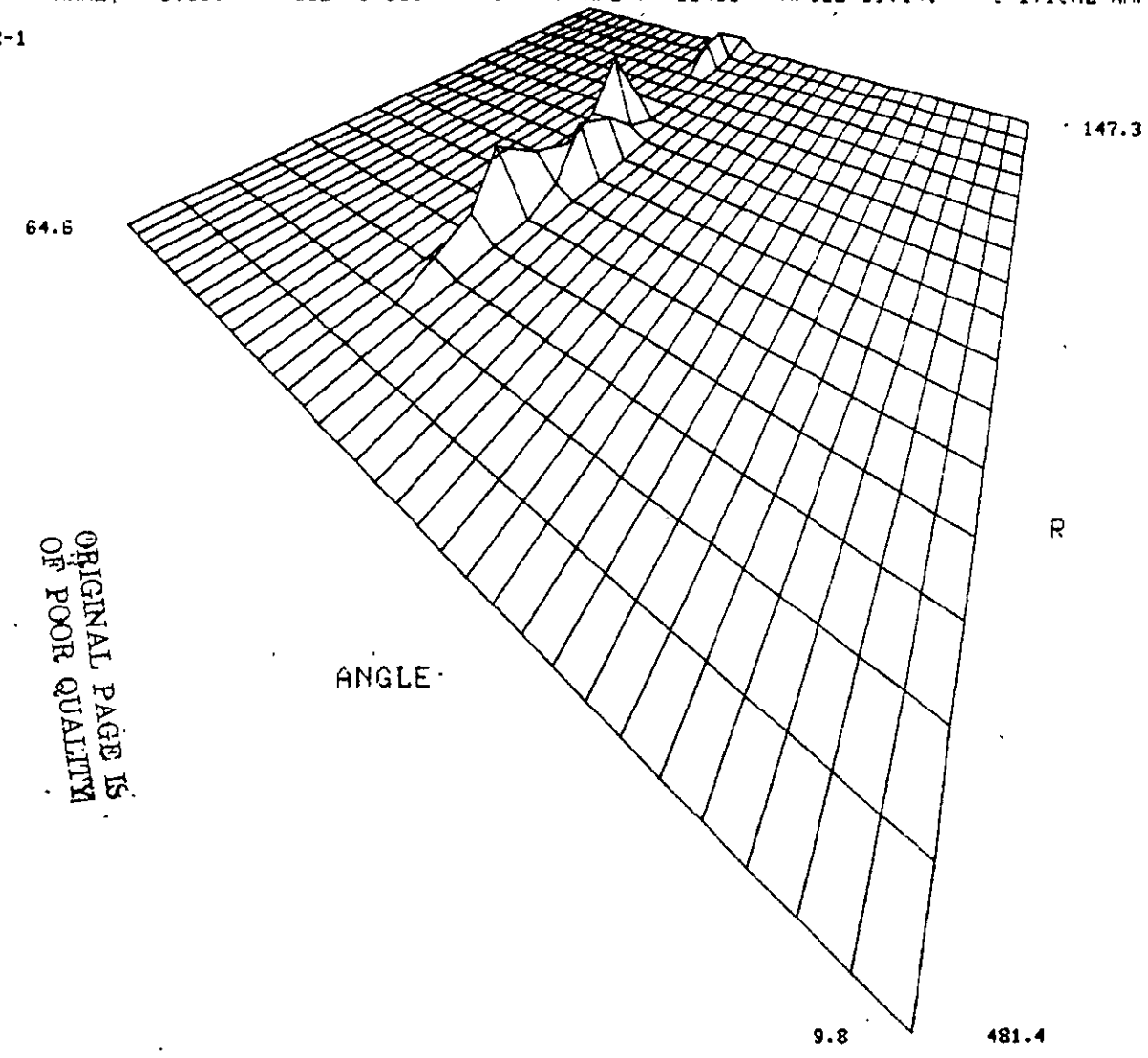
* SCAN # 15 FRAME # 10850 ANGLE 9.660 TO FRAME # 11431 ANGLE 65.140 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 6.0

AVERAGE I = 0.1

	ANGLE
1	9.8
2	10.0
3	10.7
4	11.9
5	13.3
6	14.9
7	16.7
8	18.4
9	20.2
10	21.9
11	23.7
12	25.4
13	27.1
14	28.9
15	30.7
16	32.4
17	34.1
18	35.9
19	37.7
20	39.3
21	41.1
22	42.8
23	44.5
24	46.2
25	47.9
26	49.6
27	51.3
28	53.1
29	54.8
30	56.5
31	58.2
32	60.1
33	61.9
34	63.6
35	64.6



	R
1	147.3
2	167.0
3	186.7
4	206.3
5	226.0
6	245.6
7	265.3
8	284.9
9	304.6
10	324.2
11	343.9
12	363.5
13	383.2
14	402.8
15	422.5
16	442.1
17	481.4

ORIGINAL PAGE IS
OF POOR QUALITY

I, R, A DISPLAY AT VELOCITY CELL 62

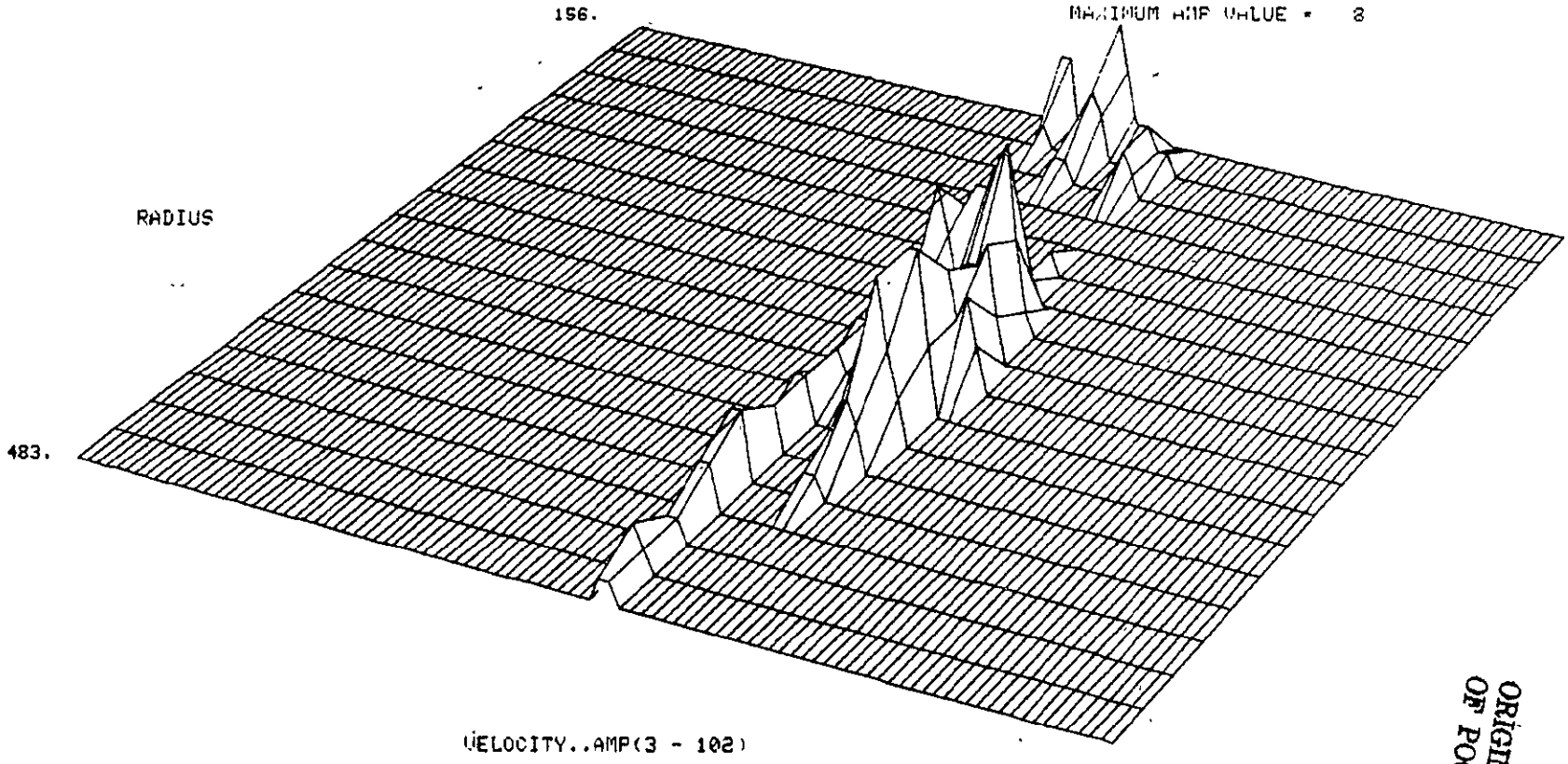
NASA PROJECT DUST DEVIL DAY 238 . RUN # 4 TAPE 1 OF 3- E110

SCAN # 15 FRAME # 10850 ANGLE 9.660 TO FRAME # 11481 ANGLE 65.140 CRITICAL AMP AT CELL 62

FRAME # 11210 TO 11223

ANGLE = 41.13

MAXIMUM AMP VALUE = 8



ORIGINAL PAGE IS
OF POOR QUALITY

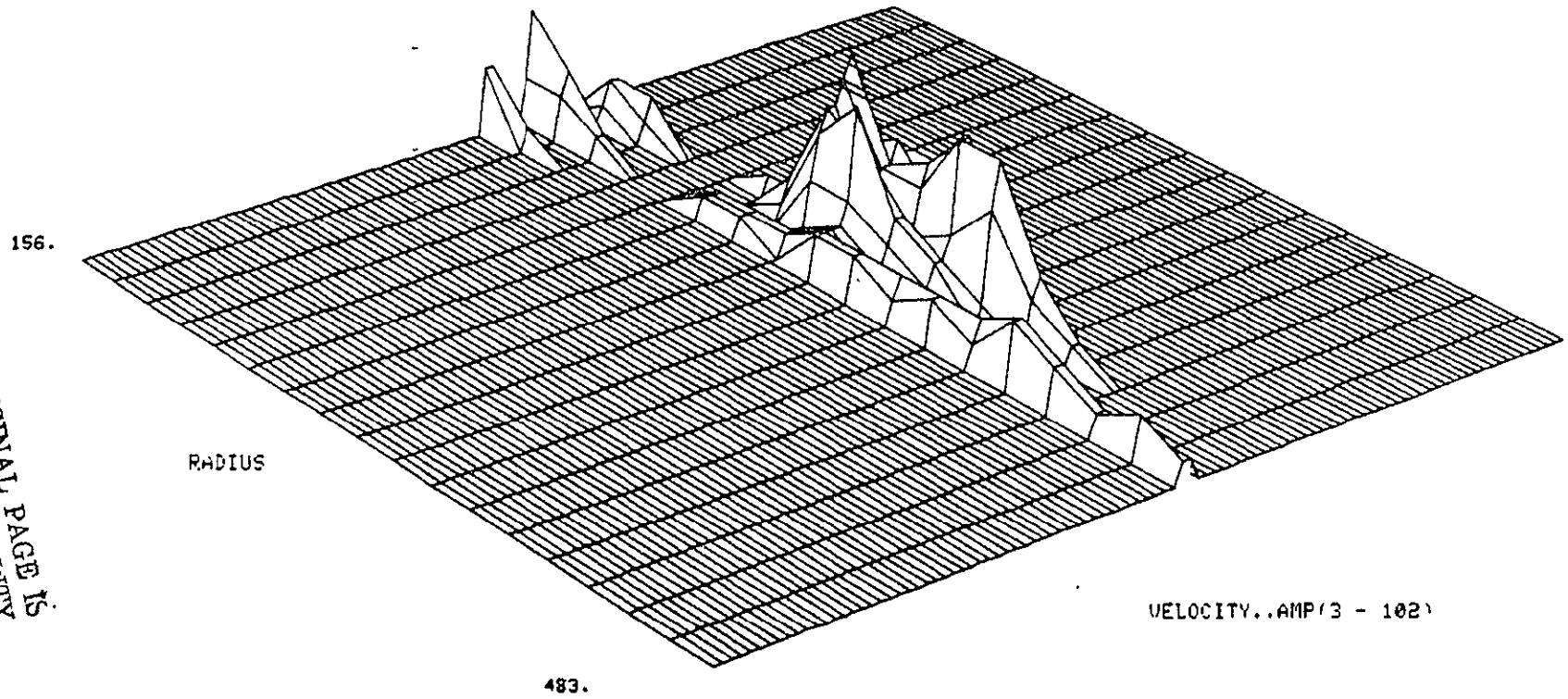
NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 15 FRAME # 10850 ANGLE 9.660 TO FRAME # 11481 ANGLE 65.140 CRITICAL AMP AT CELL 62

FRAME # 11210 TO 11228

ANGLE = 41.13

MAXIMUM AMP VALUE = 8



ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST.DEVIL DAY 232 RUN # 4 TAPE 1 OF 2-.6110

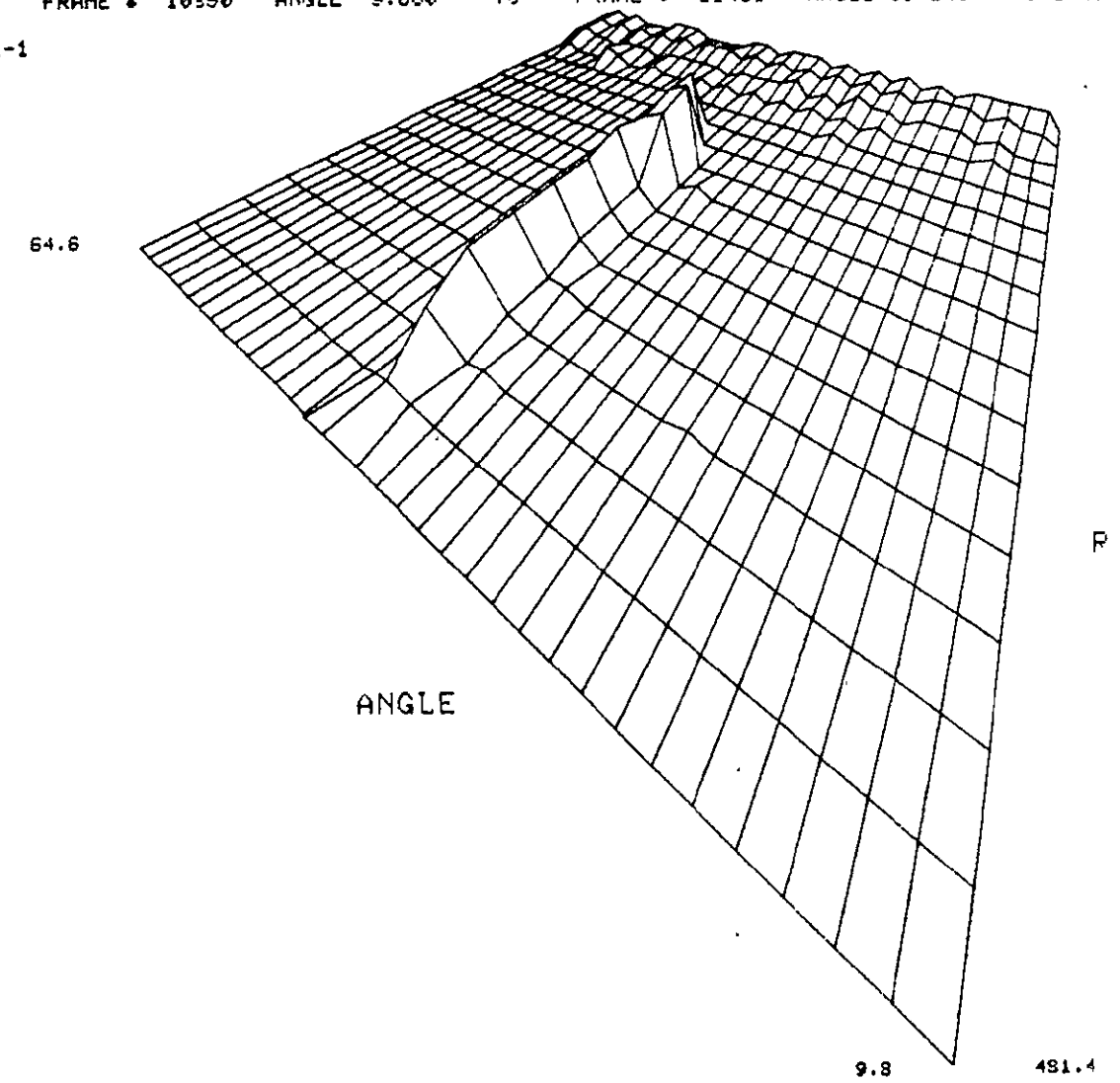
* SCAN # 15 FRAME # 10950 ANGLE 9.660 TO FRAME # 11451 ANGLE 65.140 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 10.0

AVERAGE V = 1.4

ANGLE	
1	9.8
2	10.0
3	10.7
4	11.9
5	13.3
6	14.9
7	16.7
8	18.4
9	20.2
10	21.9
11	23.7
12	25.4
13	27.1
14	28.9
15	30.7
16	32.4
17	34.1
18	35.9
19	37.7
20	39.3
21	41.1
22	42.8
23	44.5
24	46.2
25	47.9
26	49.6
27	51.3
28	53.1
29	54.8
30	56.5
31	58.2
32	60.1
33	61.9
34	63.6
35	64.6



	R
1	147.3
2	167.0
3	186.7
4	206.3
5	226.0
6	245.6
7	265.3
8	284.9
9	304.6
10	324.2
11	343.9
12	363.5
13	383.2
14	402.8
15	422.5
16	442.1
17	461.4

V, R, A DISPLAY (VELOCITY AT I_{MAX})

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 232 FUN # 4 TAPE 1 OF 3- 8110

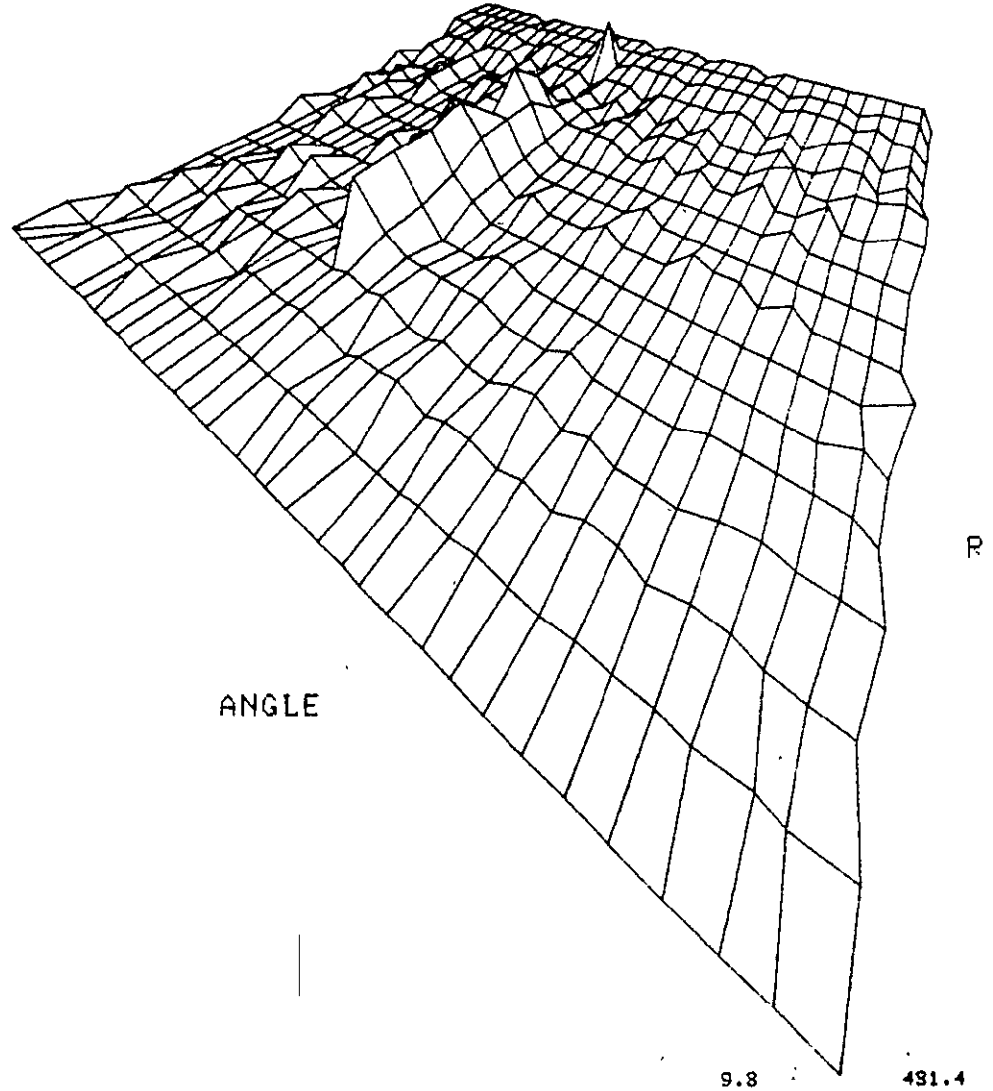
* SCAN # 15 FRAME # 10850 ANGLE 9.660 TO FRAME # 11481 ANGLE 65.140 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V = 12.0

AVERAGE V = 2.5

	ANGLE
1	9.8
2	10.0
3	10.7
4	11.9
5	13.3
6	14.9
7	16.7
8	18.4
9	20.2
10	21.9
11	23.7
12	25.4
13	27.1
14	28.9
15	30.7
16	32.4
17	34.1
18	35.9
19	37.7
20	39.3
21	41.1
22	42.8
23	44.5
24	46.2
25	47.9
26	49.6
27	51.3
28	53.1
29	54.8
30	56.5
31	58.2
32	60.1
33	61.9
34	63.6
35	64.6



	R
1	147.3
2	167.0
3	186.7
4	206.3
5	226.0
6	245.6
7	265.3
8	284.9
9	304.6
10	324.2
11	343.9
12	363.5
13	383.2
14	402.8
15	422.5
16	442.1
17	431.4

ORIGINAL PAGE IS OF POOR QUALITY

V, R, A DISPLAY (VELOCITY AT I_{max})

NASA PROJECT. DUST DEVIL · DAY 252 RUN # 4 TAPE 1 OF 2- 6110

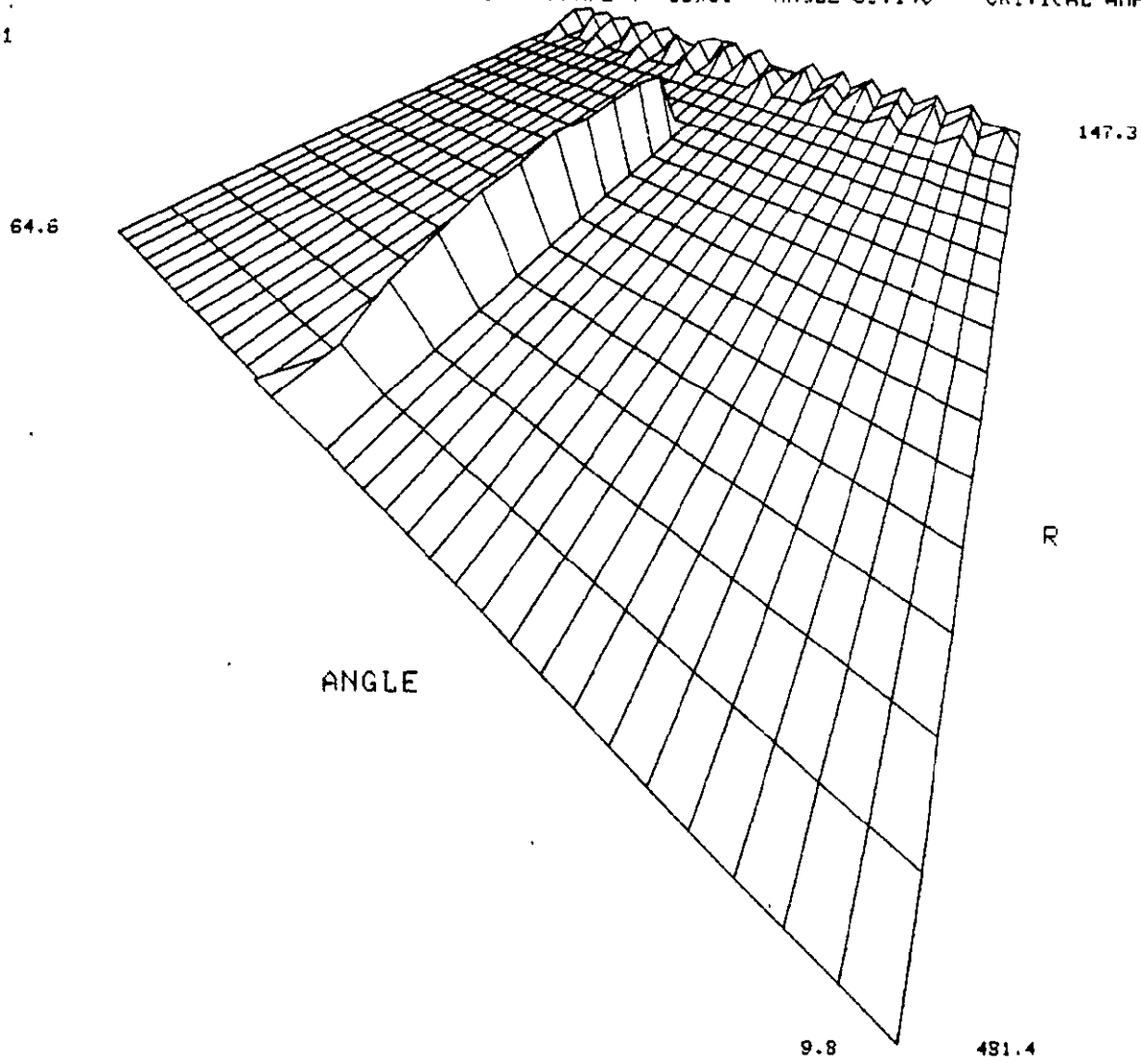
* SCAN # 15 FRAME # 10850 ANGLE 9.660 TO FRAME # 11451 ANGLE 65.140 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 11.0

AVERAGE V = 1.3

	ANGLE
1	9.8
2	10.0
3	10.7
4	11.9
5	13.3
6	14.9
7	16.7
8	18.4
9	20.2
10	21.9
11	23.7
12	25.4
13	27.1
14	28.9
15	30.7
16	32.4
17	34.1
18	35.9
19	37.7
20	39.3
21	41.1
22	42.8
23	44.5
24	46.2
25	47.9
26	49.6
27	51.3
28	53.1
29	54.8
30	56.5
31	58.2
32	60.1
33	61.9
34	63.6
35	64.6



	R
1	147.3
2	167.0
3	186.7
4	206.3
5	226.0
6	245.6
7	265.3
8	284.9
9	304.6
10	324.2
11	343.9
12	363.5
13	383.2
14	402.8
15	422.5
16	442.1
17	461.4

V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = .5

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 236 RUN # 4 TAPE 1 OF E- 6110

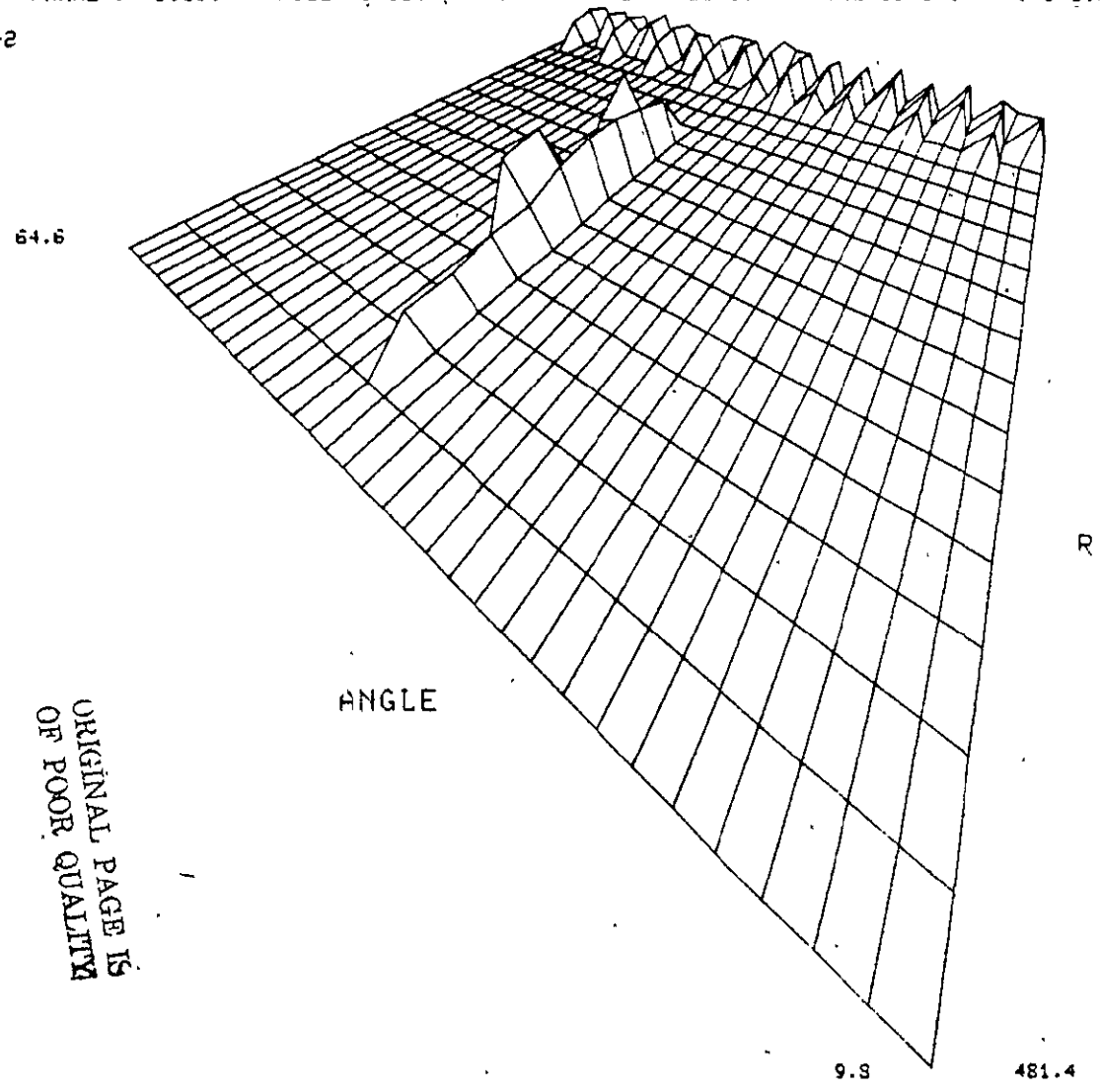
\# SCAN # 15 FRAME # 10850 ANGLE 9.660 TO FRAME # 11431 ANGLE 65.140 CRITICAL AMP HT CELL 62

OPTION # 22-2

MAXIMUM U = 12.0

AVERAGE U = 1.5

ANGLE	
1	9.8
2	10.0
3	10.7
4	11.9
5	13.3
6	14.9
7	16.7
8	18.4
9	20.2
10	21.9
11	23.7
12	25.4
13	27.1
14	28.9
15	30.7
16	32.4
17	34.1
18	35.9
19	37.7
20	39.3
21	41.1
22	42.8
23	44.5
24	46.2
25	47.9
26	49.6
27	51.3
28	53.1
29	54.8
30	56.5
31	58.2
32	60.1
33	61.9
34	63.6
35	64.6



	R
1	147.3
2	167.0
3	186.7
4	206.3
5	226.0
6	245.6
7	265.3
8	284.9
9	304.6
10	324.2
11	343.9
12	363.5
13	383.2
14	402.0
15	422.5
16	442.1
17	461.4

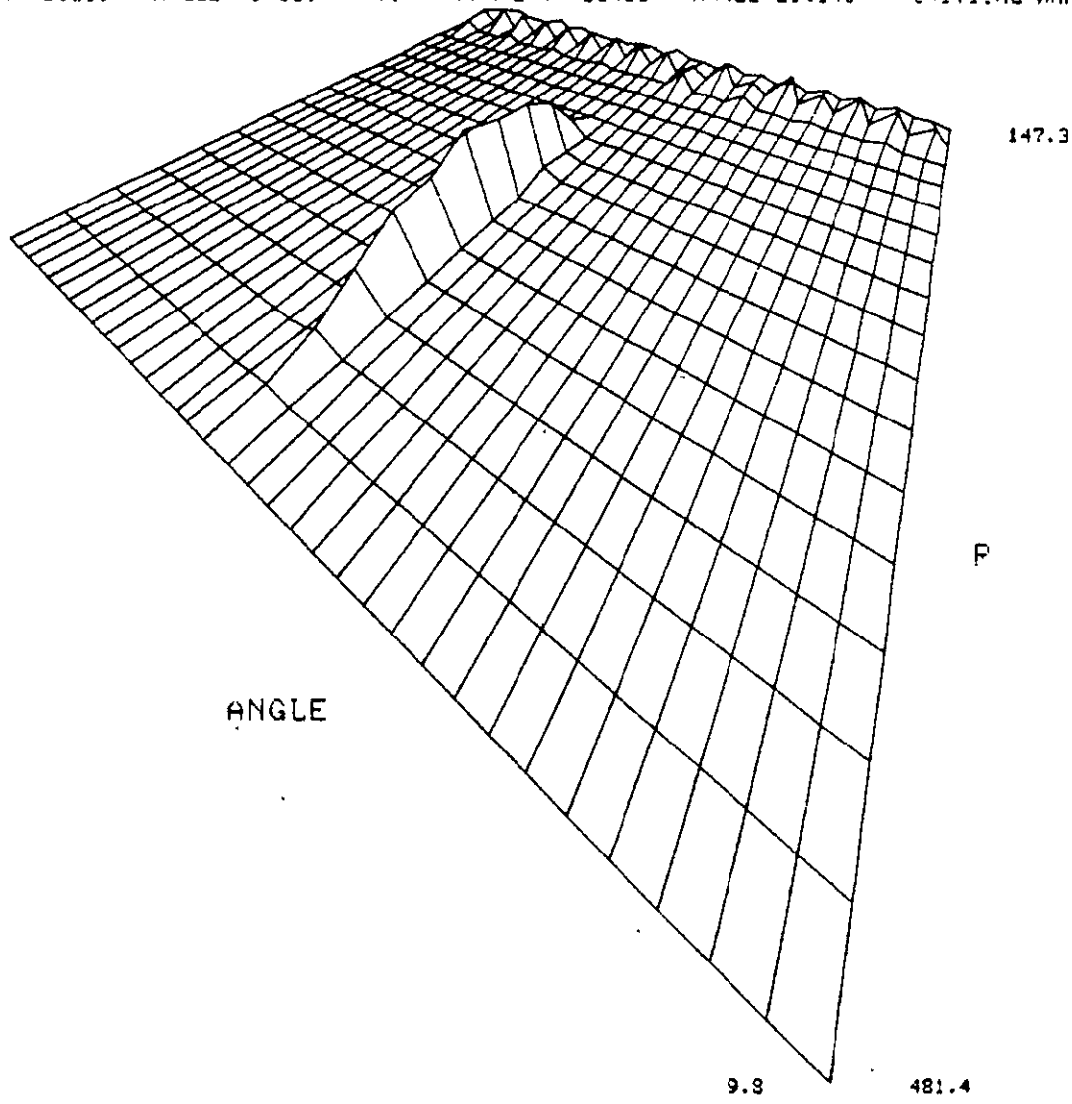
ORIGINAL PAGE IS OF POOR QUALITY

Umax, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 3- 6110

SCAN # 15 FRAME # 10850 ANGLE 9.660 TO FRAME # 11431 ANGLE 65.140 CRITICAL AMP AT CELL 62

OPTION # 31-1



	ANGLE
1	9.8
2	10.0
3	10.7
4	11.9
5	13.3
6	14.9
7	16.7
8	18.4
9	20.2
10	21.9
11	23.7
12	25.4
13	27.1
14	28.9
15	30.7
16	32.4
17	34.1
18	35.9
19	37.7
20	39.3
21	41.1
22	42.8
23	44.5
24	46.2
25	47.9
26	49.6
27	51.3
28	53.1
29	54.8
30	56.5
31	58.2
32	60.1
33	61.9
34	63.6
35	64.6

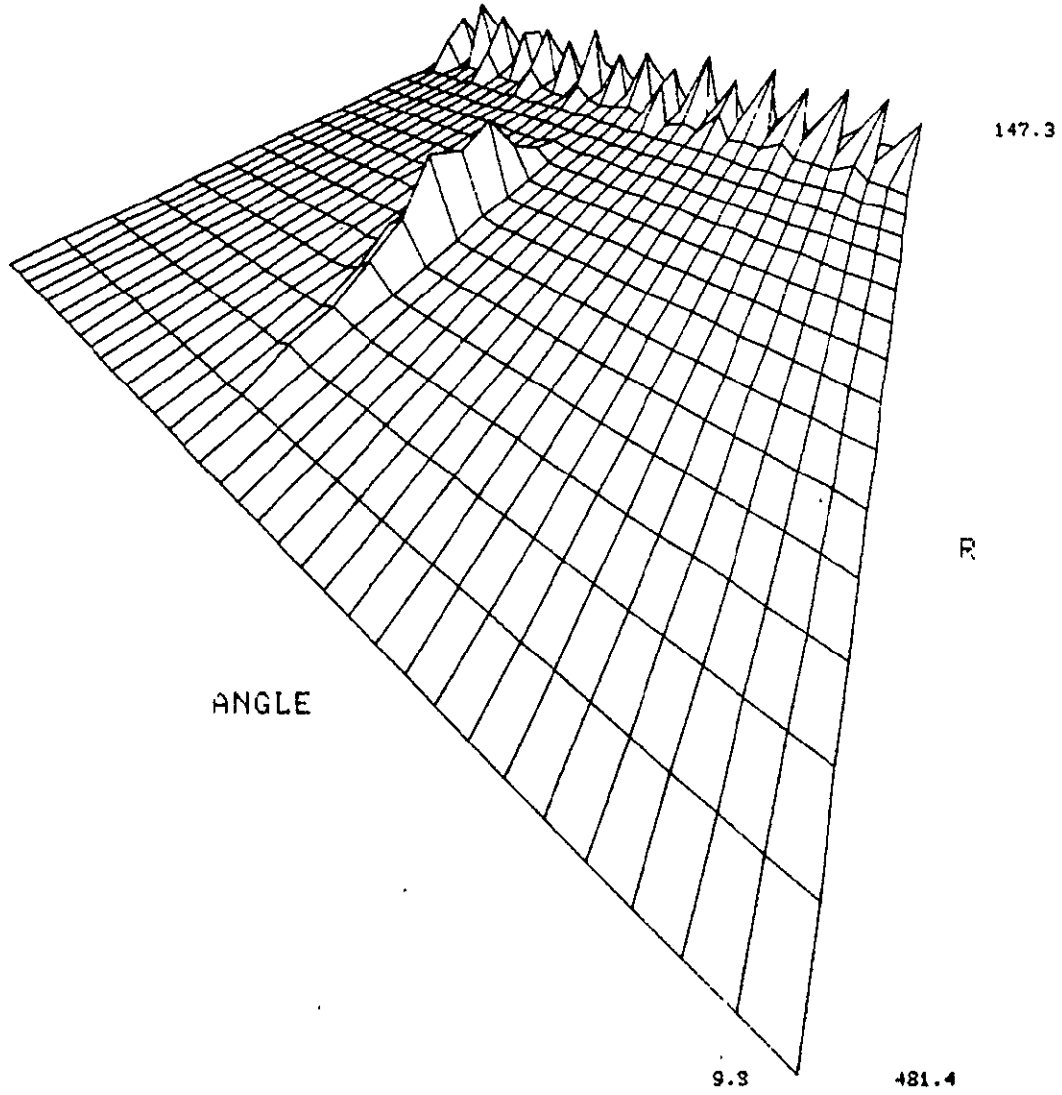
	R
1	147.3
2	167.0
3	186.7
4	206.3
5	226.0
6	245.6
7	265.3
8	284.9
9	304.6
10	324.2
11	343.9
12	363.5
13	383.2
14	402.8
15	422.5
16	442.1
17	481.4

U * Imax, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 2110

SCAN # 15 FRAME # 10850 ANGLE 9.660 TO FRAME # 11481 ANGLE 65.140 CRITICAL AMP AT CELL 62

OPTION # 31-2



	ANGLE
1	9.8
2	10.0
3	10.7
4	11.9
5	13.3
6	14.9
7	16.7
8	18.4
9	20.2
10	21.9
11	23.7
12	25.4
13	27.1
14	28.9
15	30.7
16	32.4
17	34.1
18	35.9
19	37.7
20	39.3
21	41.1
22	42.8
23	44.5
24	46.2
25	47.9
26	49.6
27	51.3
28	53.1
29	54.8
30	56.5
31	58.2
32	60.1
33	61.9
34	63.6
35	64.6

	R
1	147.3
2	167.0
3	186.7
4	206.3
5	226.0
6	245.6
7	265.3
8	284.9
9	304.6
10	324.2
11	343.9
12	363.5
13	383.2
14	402.5
15	422.5
16	442.1
17	461.4

U * IMAX, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

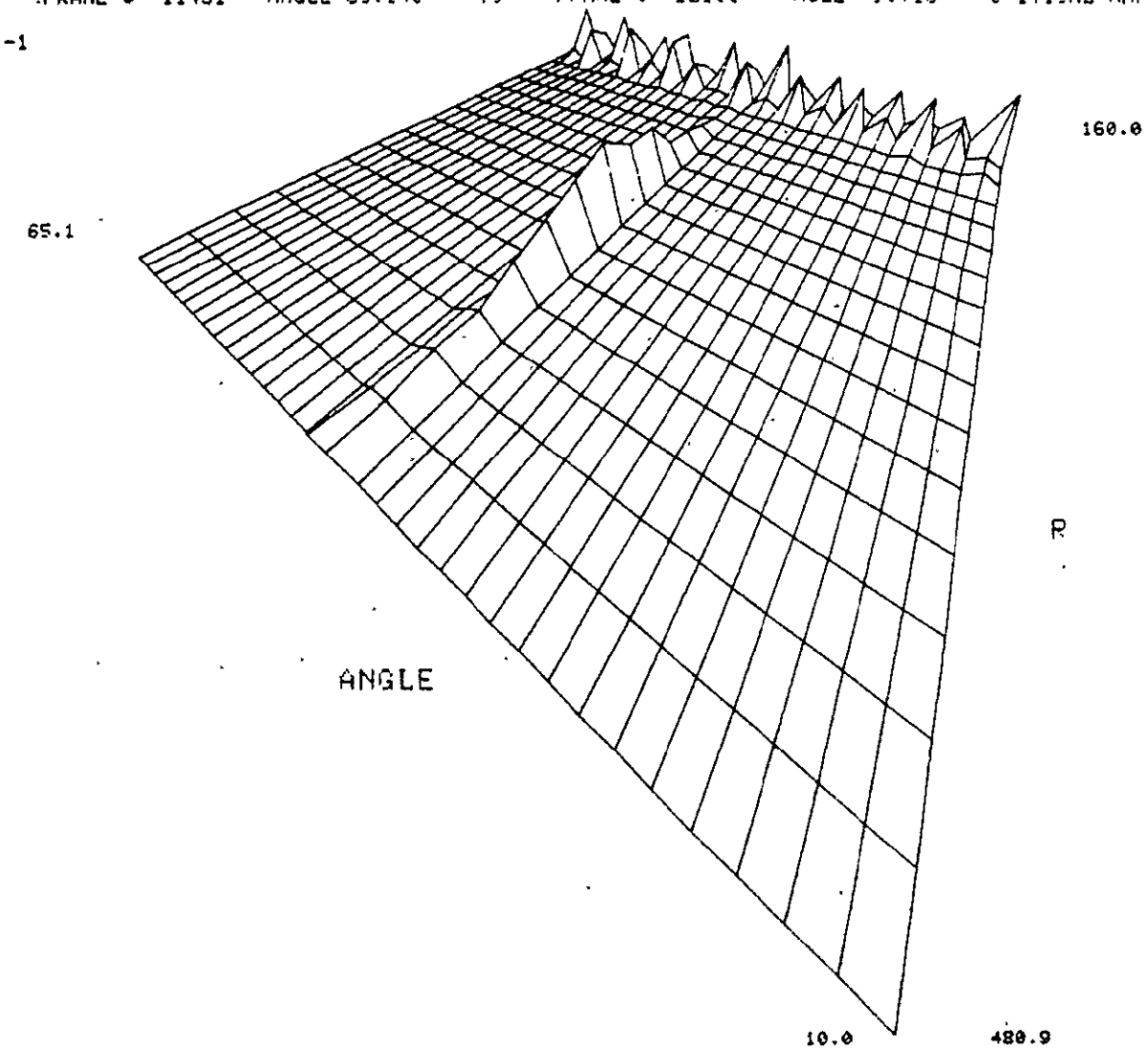
SCAN # 16 FRAME # 11481 ANGLE 65.140 TO FRAME # 12100 ANGLE 9.718 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 40.0

AVERAGE I = 1.7

	ANGLE
1	65.1
2	64.6
3	64.0
4	63.0
5	61.7
6	60.0
7	58.3
8	56.4
9	54.7
10	53.0
11	51.2
12	49.5
13	47.8
14	46.2
15	44.4
16	42.7
17	41.0
18	39.3
19	37.5
20	35.8
21	34.0
22	32.3
23	30.6
24	28.9
25	27.1
26	25.2
27	23.4
28	21.7
29	19.9
30	18.2
31	16.4
32	14.6
33	12.9
34	11.1
35	10.0



	R
1	160.0
2	178.9
3	197.8
4	216.6
5	235.5
6	254.4
7	273.3
8	292.2
9	311.0
10	329.9
11	348.8
12	367.7
13	386.6
14	405.4
15	424.3
16	443.2
17	480.9

I_{MAX}, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

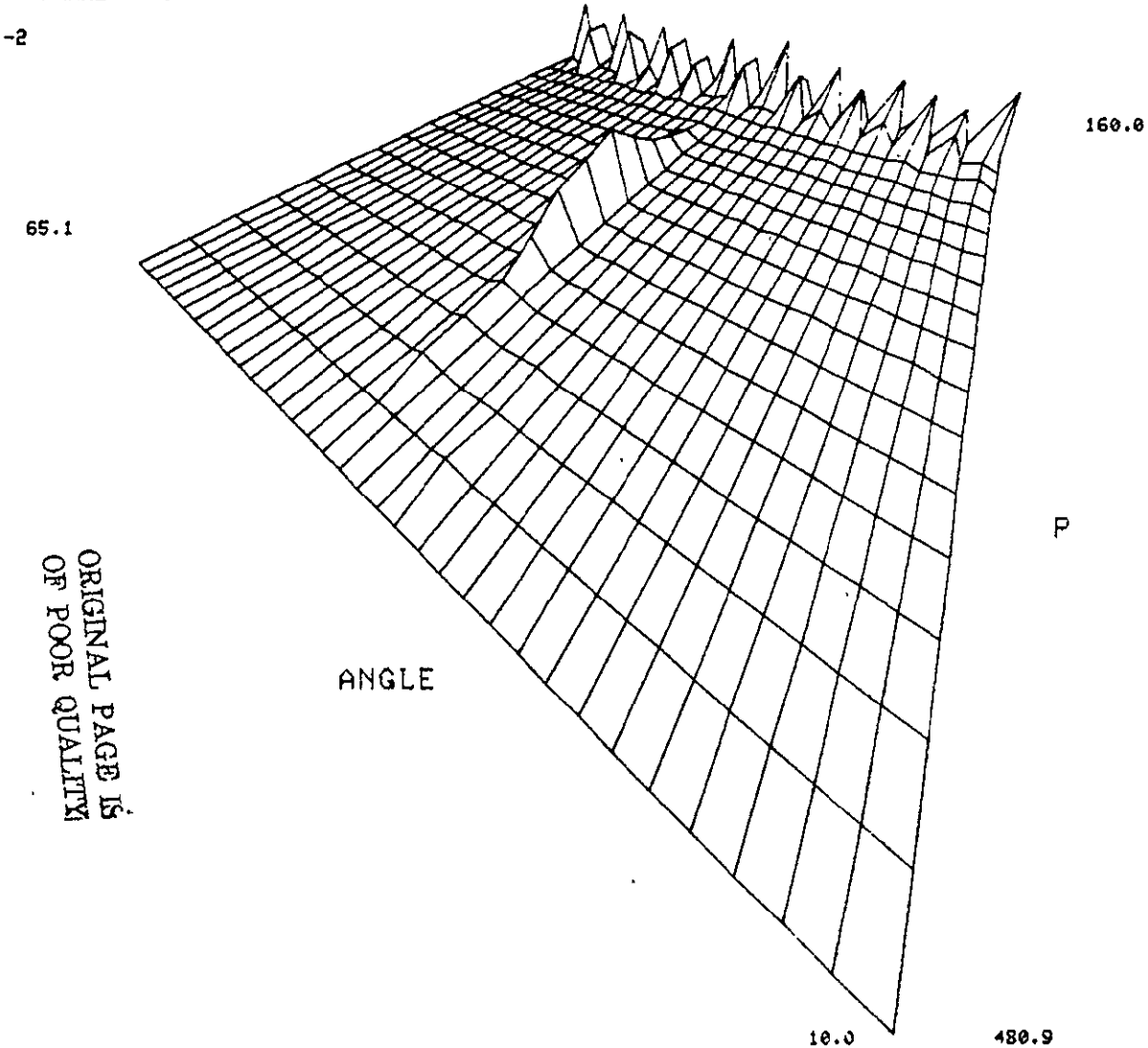
* SCAN # 16 FRAME # 11481 ANGLE 65.140 TO FRAME # 12100 ANGLE 9.718 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 56.0

AVERAGE I = 3.1

ANGLE	
1	65.1
2	64.6
3	64.0
4	63.0
5	61.7
6	60.0
7	58.3
8	56.4
9	54.7
10	53.0
11	51.2
12	49.5
13	47.8
14	46.2
15	44.4
16	42.7
17	41.0
18	39.3
19	37.5
20	35.8
21	34.0
22	32.3
23	30.6
24	28.9
25	27.1
26	25.2
27	23.4
28	21.7
29	19.9
30	18.2
31	16.4
32	14.6
33	12.9
34	11.1
35	10.0



R	
1	160.0
2	178.9
3	197.8
4	216.6
5	235.5
6	254.4
7	273.3
8	292.2
9	311.0
10	329.9
11	348.8
12	367.7
13	386.6
14	405.4
15	424.3
16	443.2
17	480.9

ORIGINAL PAGE IS OF POOR QUALITY

I_{max}, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 · RUN # 4 TAPE 1 OF 2- 6110

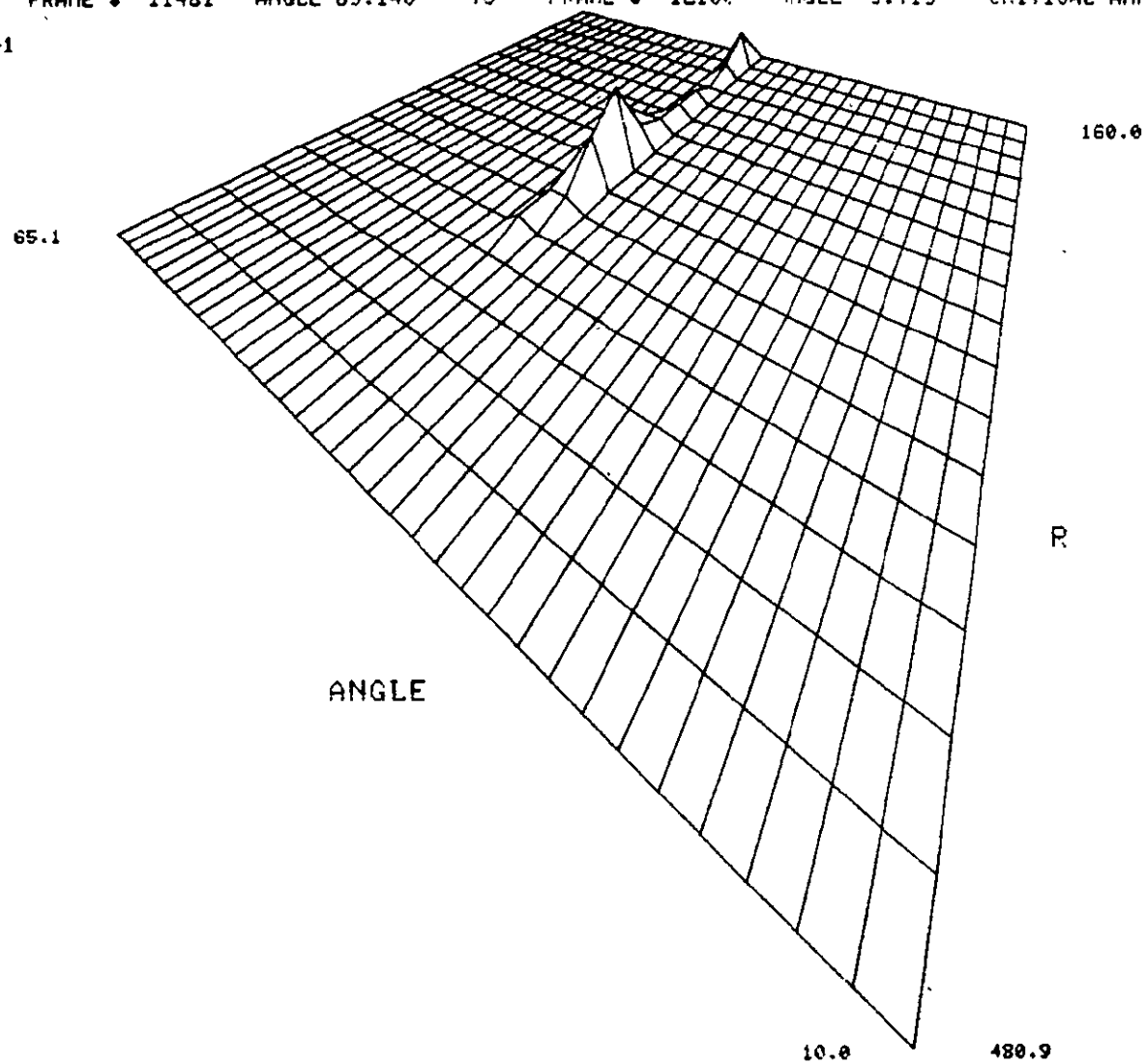
* SCAN # 16 FRAME # 11481 ANGLE 65.140 TO FRAME # 12100 ANGLE 9.719 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 6.0

AVERAGE I = 0.1

	ANGLE
1	65.1
2	64.6
3	64.0
4	63.0
5	61.7
6	60.0
7	58.3
8	56.4
9	54.7
10	53.0
11	51.2
12	49.5
13	47.8
14	46.2
15	44.4
16	42.7
17	41.0
18	39.3
19	37.5
20	35.8
21	34.0
22	32.3
23	30.6
24	28.9
25	27.1
26	25.2
27	23.4
28	21.7
29	19.9
30	18.2
31	16.4
32	14.6
33	12.9
34	11.1
35	10.0



	R
1	160.0
2	178.9
3	197.8
4	216.6
5	235.5
6	254.4
7	273.3
8	292.2
9	311.0
10	329.9
11	348.8
12	367.7
13	386.6
14	405.4
15	424.3
16	443.2
17	480.9

I, R, A DISPLAY AT VELOCITY CELL 62

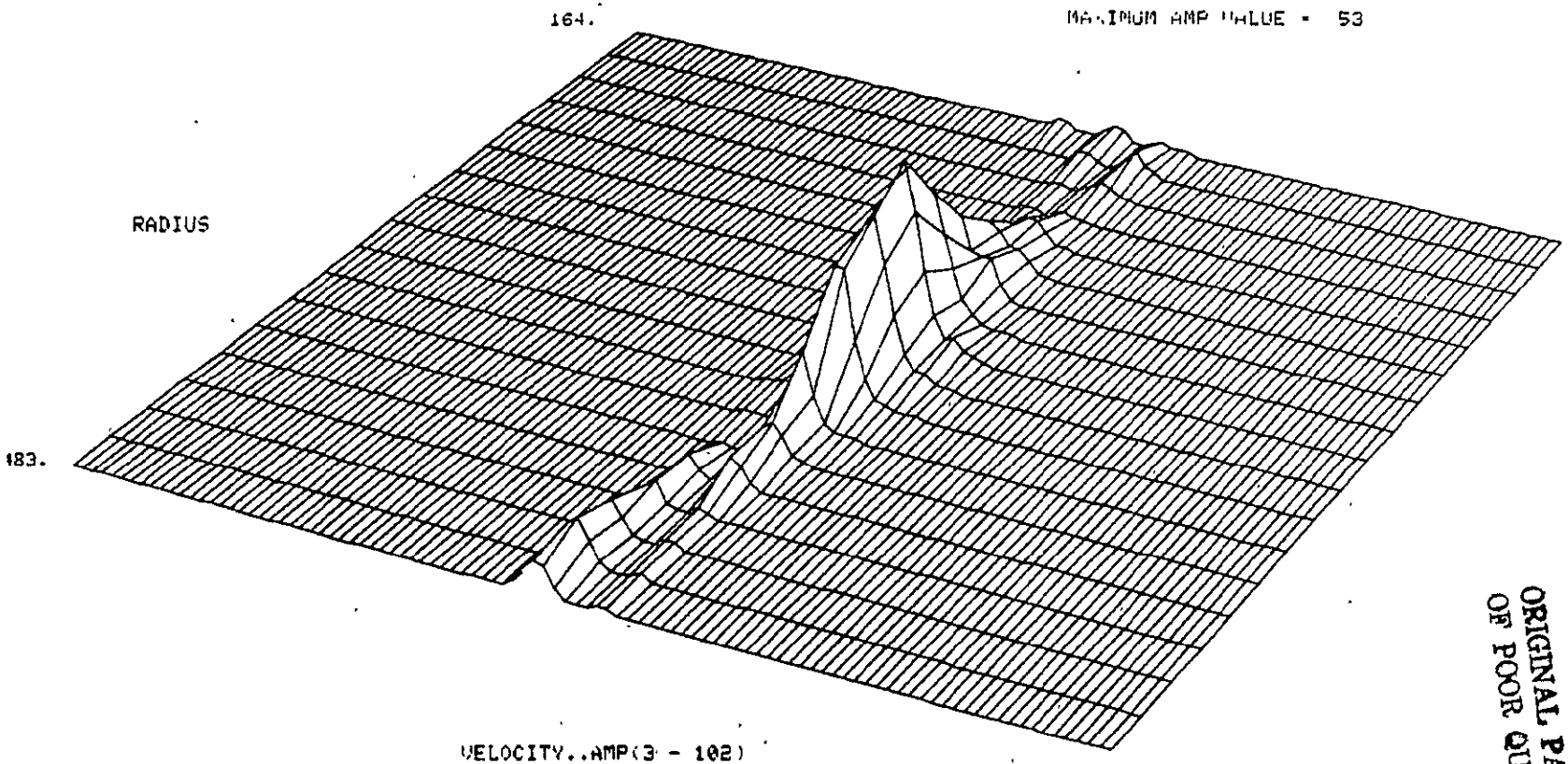
NASA PROJECT DUST DEVIL , DAY 238 , RUN # 4 TAPE 1 OF 2- E110

SCAN # 16 FRAME # 11481 ANGLE 65.140 TO FRAME # 12100 ANGLE 9.718 CRITICAL AMP AT CELL 62

FRAME # 11757 TO 11775

ANGLE = 40.96

MAXIMUM AMP VALUE = 53



ORIGINAL PAGE IS
OF POOR QUALITY

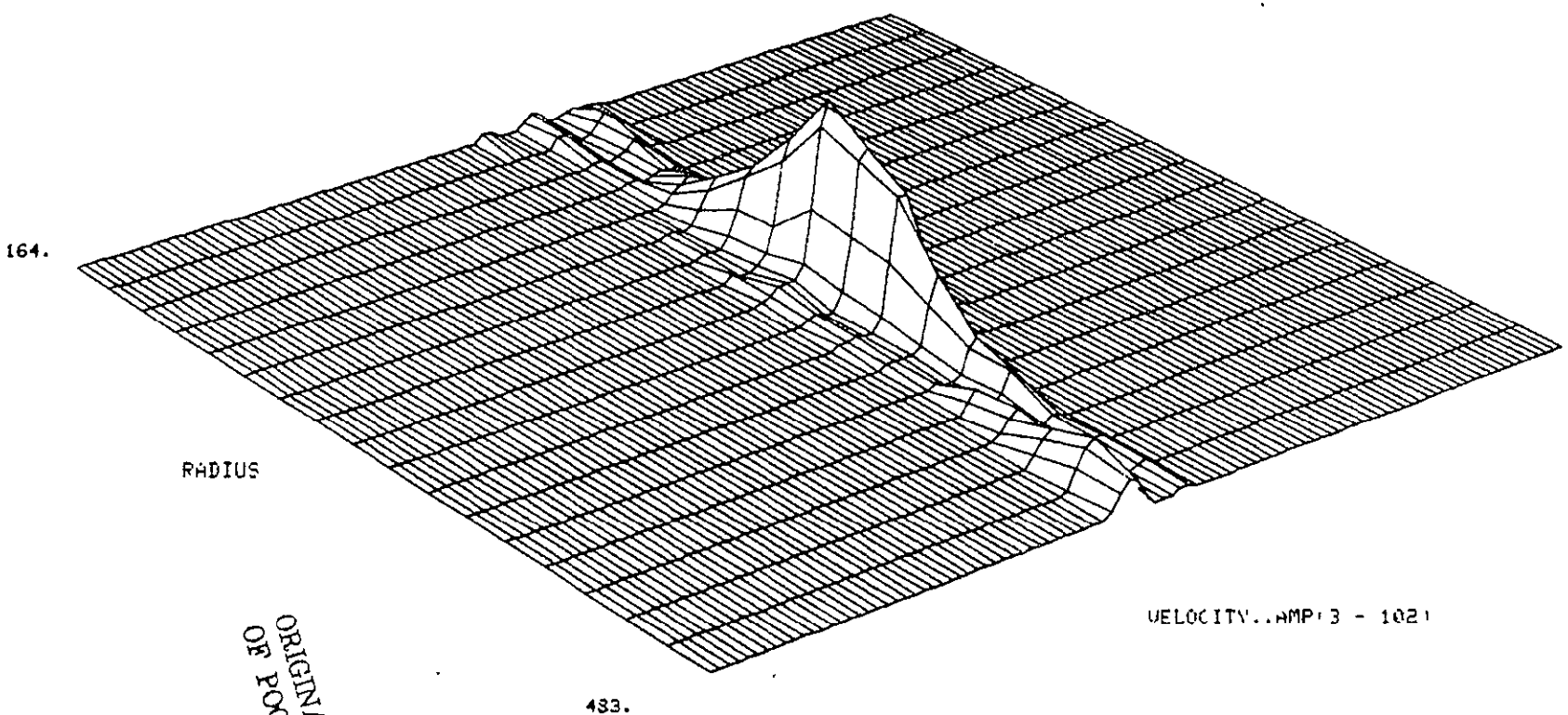
NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF E- E110

SCAN # 16 FRAME # 11481 ANGLE 65.140 TO FRAME # 12100 ANGLE 9.713 CRITICAL AMP AT CELL 62

FRAME # 11757 TO 11775

ANGLE = 40.96

MAXIMUM AMP VALUE = 53



ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 8110

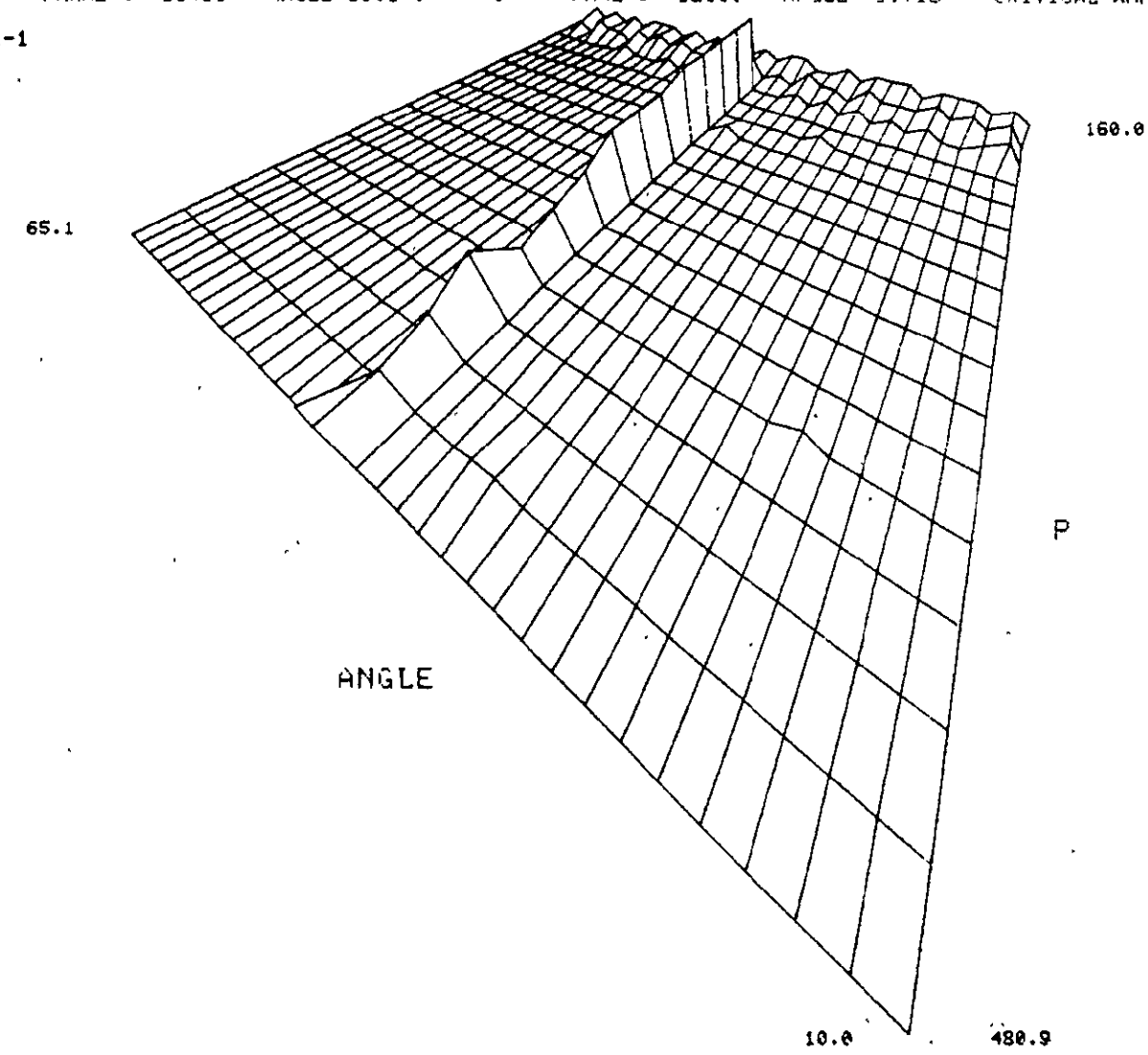
* SCAN # 16 FRAME # 11481 ANGLE 65.140 TO FRAME # 12100 ANGLE 9.718 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 9.0

AVERAGE V = 1.4

	ANGLE
1	65.1
2	64.6
3	64.0
4	63.0
5	61.7
6	60.0
7	58.3
8	56.4
9	54.7
10	53.0
11	51.2
12	49.5
13	47.8
14	46.2
15	44.4
16	42.7
17	41.0
18	39.3
19	37.5
20	35.8
21	34.0
22	32.3
23	30.6
24	28.9
25	27.1
26	25.2
27	23.4
28	21.7
29	19.9
30	18.2
31	16.4
32	14.6
33	12.9
34	11.1
35	10.0



	R
1	160.0
2	178.9
3	197.8
4	216.6
5	235.5
6	254.4
7	273.3
8	292.2
9	311.0
10	329.9
11	348.8
12	367.7
13	386.6
14	405.4
15	424.3
16	443.2
17	480.9

V, R, A DISPLAY (VELOCITY AT I_{MAX})

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 5110

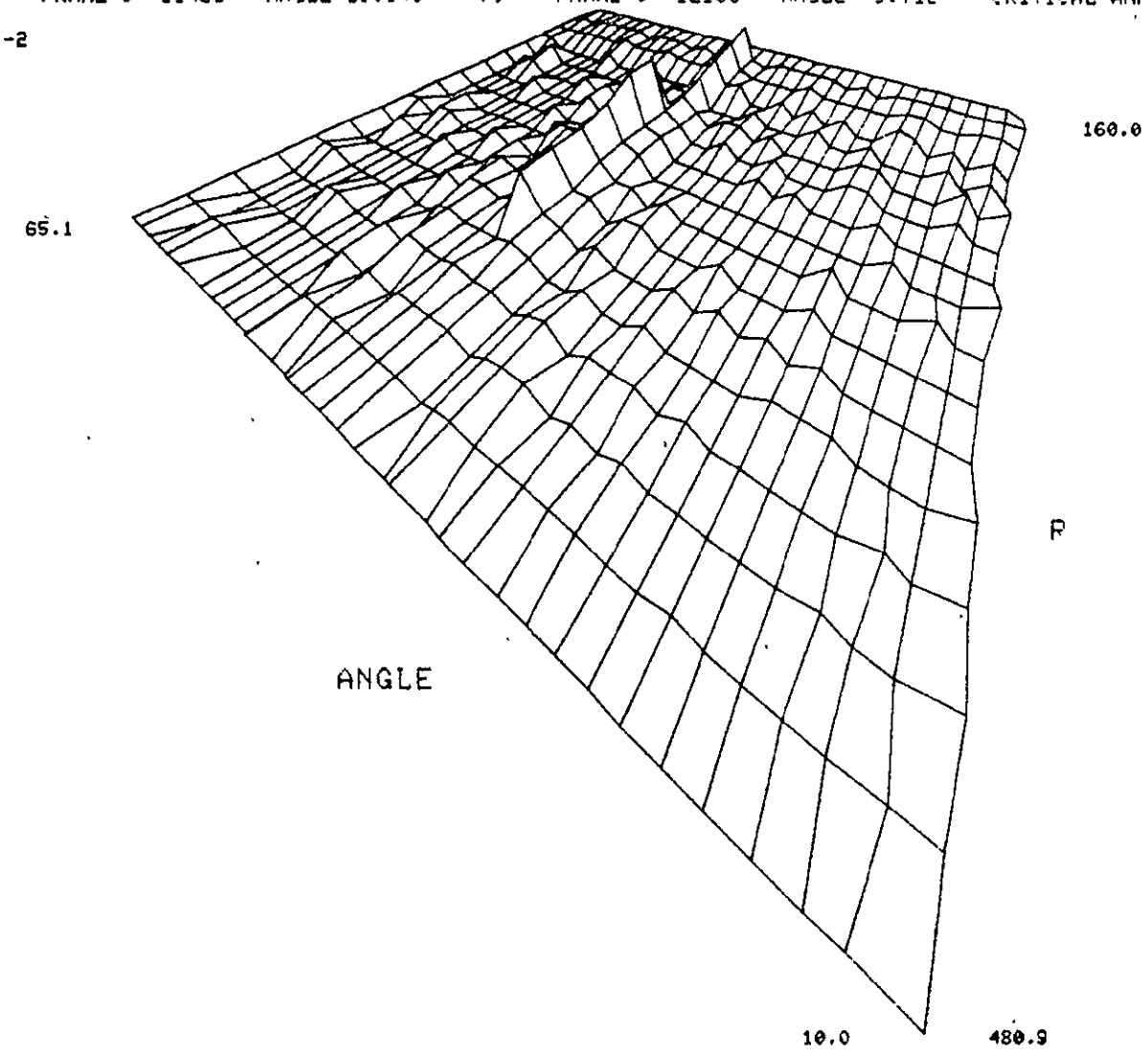
* SCAN # 16 FRAME # 11481 ANGLE 65.140 TO FRAME # 12100 ANGLE 9.712 CRITICAL AMP AT CELL. 62

OPTION # 21-2

MAXIMUM V = 12.0

AVERAGE V = 2.3

	ANGLE
1	65.1
2	64.6
3	64.0
4	63.0
5	61.7
6	60.0
7	58.3
8	56.4
9	54.7
10	53.0
11	51.2
12	49.5
13	47.8
14	46.2
15	44.4
16	42.7
17	41.0
18	39.3
19	37.5
20	35.8
21	34.0
22	32.3
23	30.6
24	28.9
25	27.1
26	25.2
27	23.4
28	21.7
29	19.9
30	18.2
31	16.4
32	14.6
33	12.9
34	11.1
35	10.0



	R
1	160.0
2	178.9
3	197.8
4	216.6
5	235.5
6	254.4
7	273.3
8	292.2
9	311.0
10	329.9
11	348.8
12	367.7
13	386.6
14	405.4
15	424.3
16	443.2
17	480.9

V, R, A DISPLAY (VELOCITY AT I_{MAX})

NASA PROJECT DUST DEVIL . DAY 232 RUN # 4 TAPE 1 OF 2- 6110

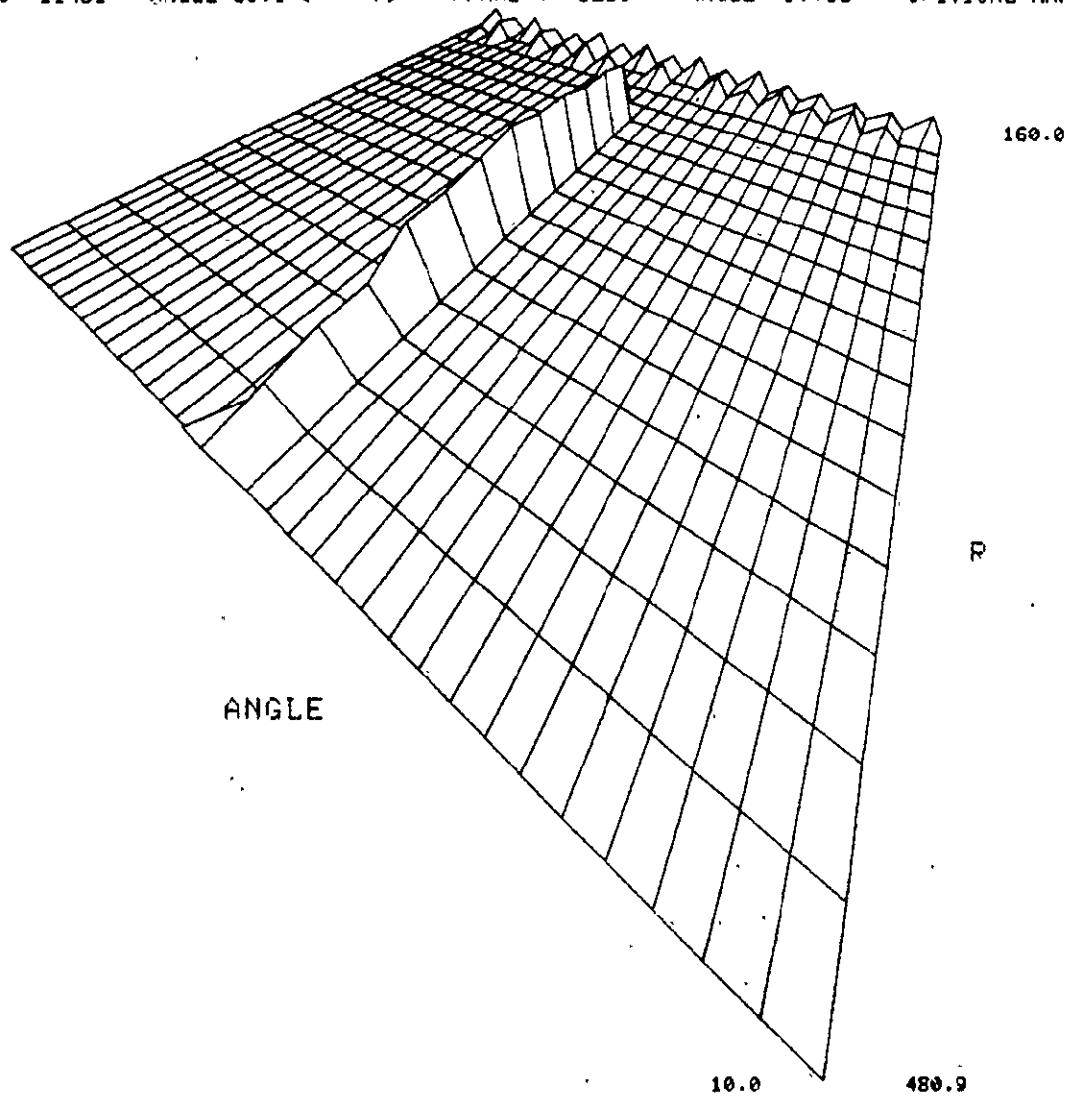
* SCAN # 16 FRAME # 11481 ANGLE 65.140 TO FRAME # 12100 ANGLE 9.718 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 12.0

AVERAGE V = 1.3

ANGLE	
1	65.1
2	64.6
3	64.0
4	63.0
5	61.7
6	60.0
7	58.3
8	56.4
9	54.7
10	53.0
11	51.2
12	49.5
13	47.8
14	46.2
15	44.4
16	42.7
17	41.0
18	39.3
19	37.5
20	35.8
21	34.0
22	32.3
23	30.6
24	28.9
25	27.1
26	25.2
27	23.4
28	21.7
29	19.9
30	18.2
31	16.4
32	14.6
33	12.9
34	11.1
35	10.0



	R
1	160.0
2	178.9
3	197.8
4	216.6
5	235.5
6	254.4
7	273.3
8	292.2
9	311.0
10	329.9
11	348.8
12	367.7
13	386.6
14	405.4
15	424.3
16	443.2
17	480.9

V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

C-3

NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 1 OF 2- 6110

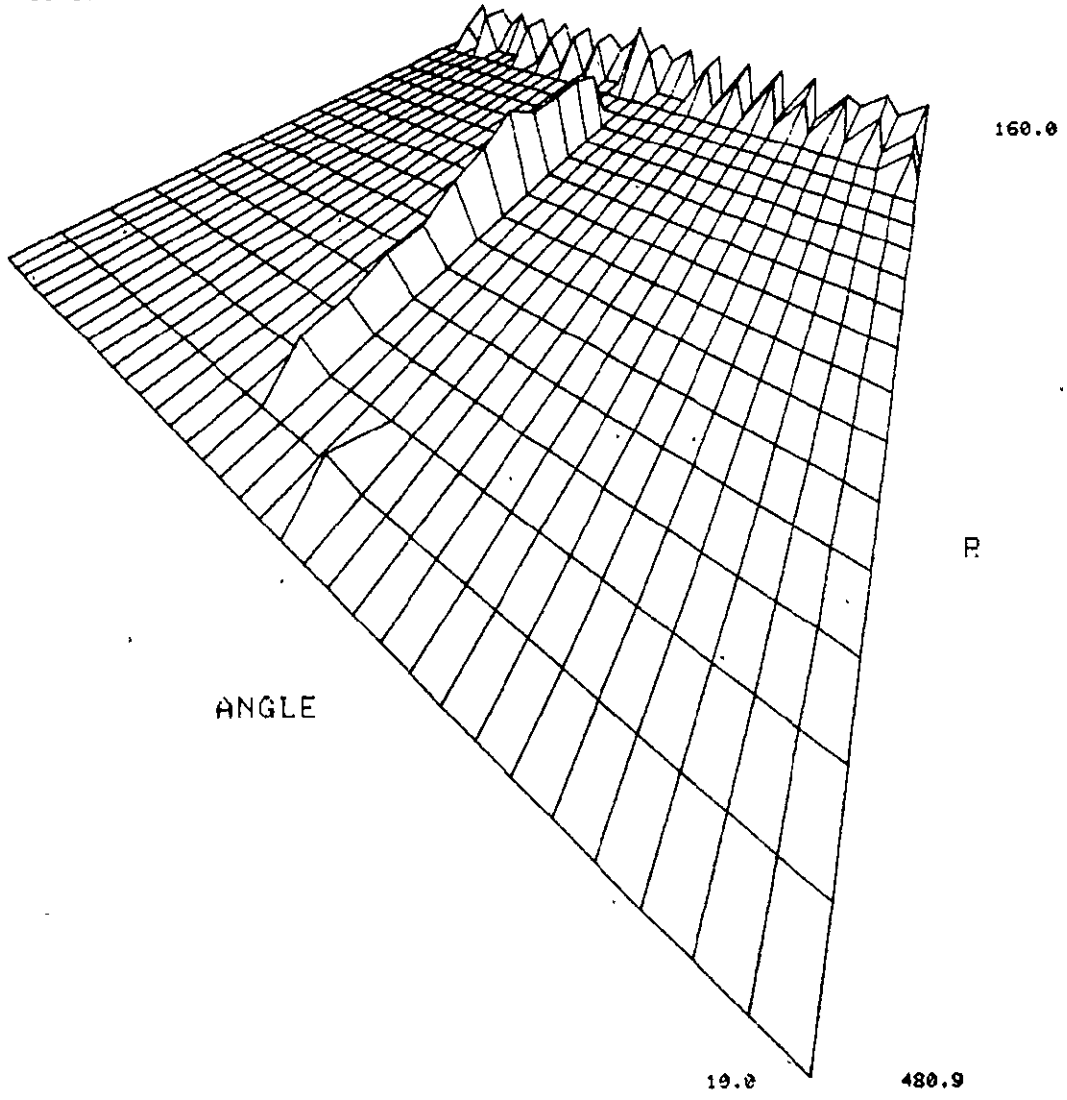
* SCAN # 16 FRAME # 11481 ANGLE 65.140 TO FRAME # 12100 ANGLE 9.712 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM V = 10.0

AVERAGE V = 1.4

ANGLE	
1	65.1
2	64.6
3	64.0
4	63.0
5	61.7
6	60.0
7	58.3
8	56.4
9	54.7
10	53.0
11	51.2
12	49.5
13	47.8
14	46.2
15	44.4
16	42.7
17	41.0
18	39.3
19	37.5
20	35.8
21	34.0
22	32.3
23	30.6
24	28.9
25	27.1
26	25.2
27	23.4
28	21.7
29	19.9
30	18.2
31	16.4
32	14.6
33	12.9
34	11.1
35	10.0



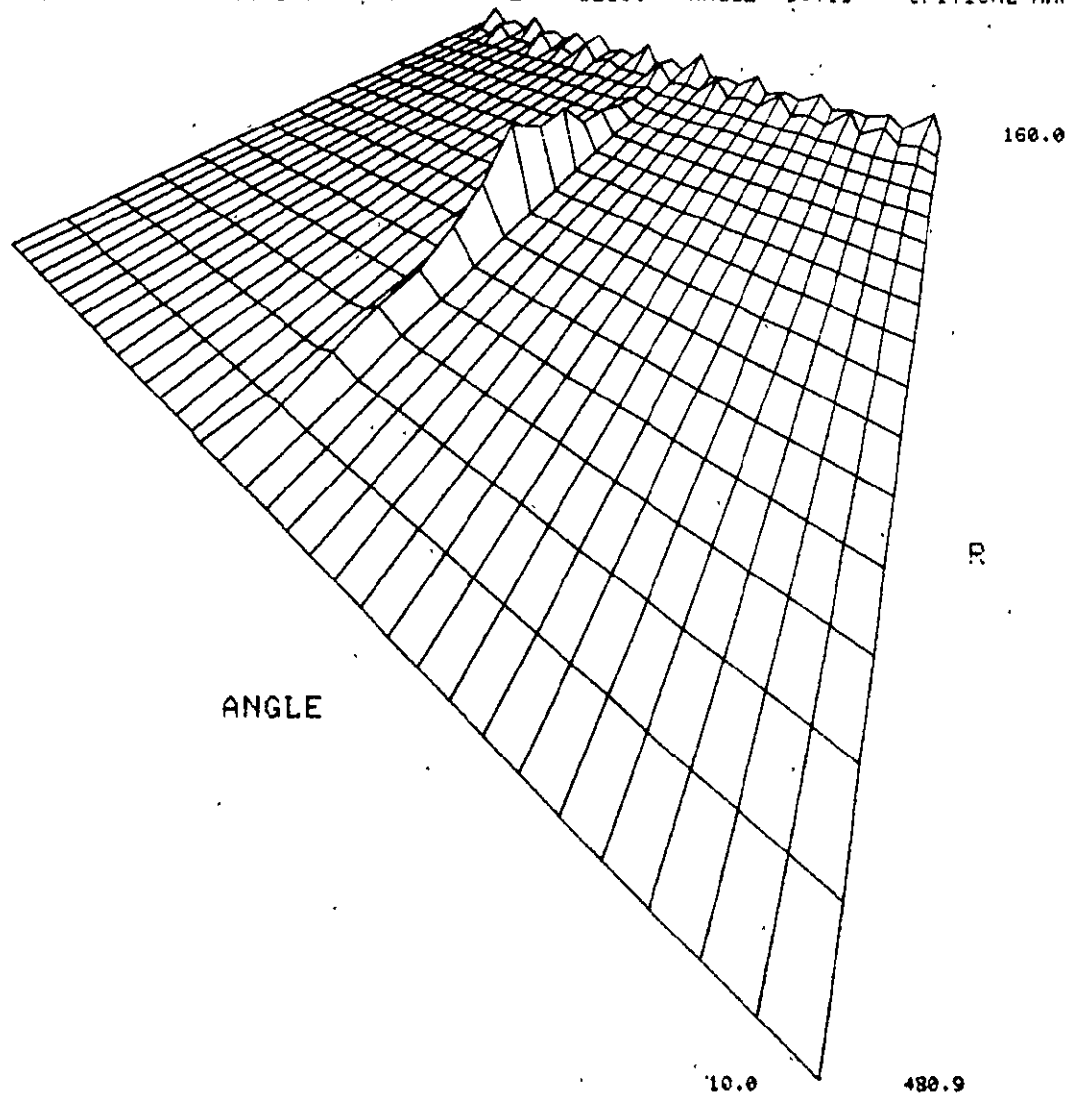
	R
1	160.0
2	178.9
3	197.8
4	216.6
5	235.5
6	254.4
7	273.3
8	292.2
9	311.0
10	329.9
11	348.8
12	367.7
13	386.6
14	405.4
15	424.3
16	443.2
17	480.9

V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

NASA PROJECT DUST DEVIL DAY 208 RUN # 4 TAPE 1 OF 3- 8110

SCAN # 16 FRAME # 11481 ANGLE 65.140 TO FRAME # 12100 ANGLE 9.713 CRITICAL AMP AT CELL 62

OPTION # 31-1



	ANGLE
1	65.1
2	64.6
3	64.0
4	63.0
5	61.7
6	60.0
7	58.3
8	56.4
9	54.7
10	53.0
11	51.2
12	49.5
13	47.8
14	46.2
15	44.4
16	42.7
17	41.0
18	39.3
19	37.5
20	35.8
21	34.0
22	32.3
23	30.6
24	28.9
25	27.1
26	25.2
27	23.4
28	21.7
29	19.9
30	18.2
31	16.4
32	14.6
33	12.9
34	11.1
35	10.0

	R
1	160.0
2	178.9
3	197.8
4	216.6
5	235.5
6	254.4
7	273.3
8	292.2
9	311.0
10	329.9
11	348.8
12	367.7
13	386.6
14	405.4
15	424.3
16	443.2
17	460.9

V & Imax, R, A DISPLAY

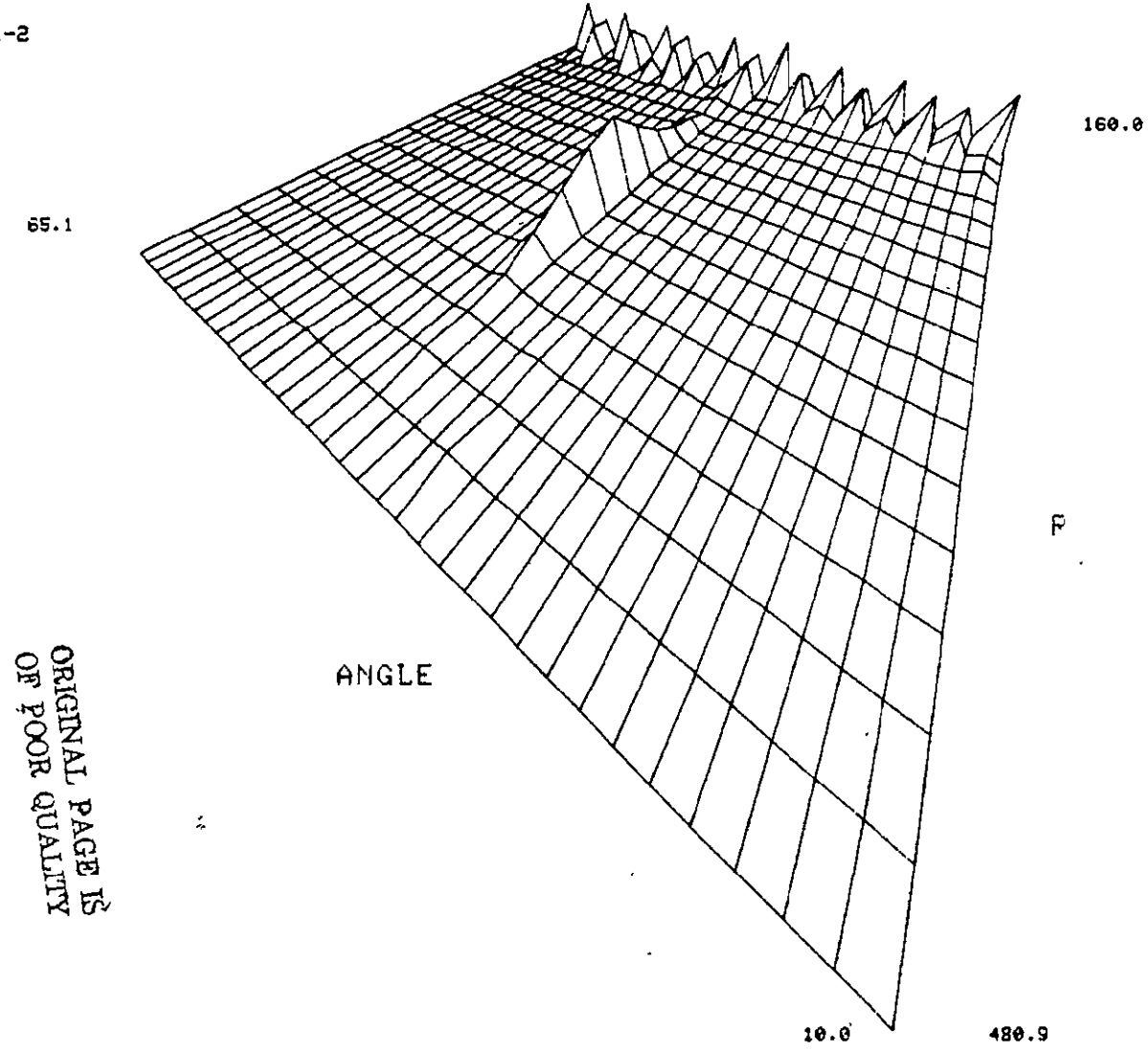
ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

* SCAN # 16 FRAME # 11481 ANGLE 65.140 TO FRAME # 12100 ANGLE 9.713 CRITICAL AMP AT CELL 62

OPTION # 31-2

ANGLE	
1	65.1
2	64.6
3	64.0
4	63.0
5	61.7
6	60.0
7	58.3
8	56.4
9	54.7
10	53.0
11	51.2
12	49.5
13	47.8
14	46.2
15	44.4
16	42.7
17	41.0
18	39.3
19	37.5
20	35.8
21	34.0
22	32.3
23	30.6
24	28.9
25	27.1
26	25.2
27	23.4
28	21.7
29	19.9
30	18.2
31	16.4
32	14.6
33	12.9
34	11.1
35	10.0



	R
1	160.0
2	178.9
3	197.8
4	216.6
5	235.5
6	254.4
7	273.3
8	292.2
9	311.0
10	329.9
11	348.8
12	367.7
13	386.6
14	405.4
15	424.3
16	443.2
17	480.9

ORIGINAL PAGE IS OF POOR QUALITY

U * Imax, R, A DISPLAY

NASA PROJECT DUST DEVIL - DAY 232 RUN # 4 TAPE 1 OF E- 8110

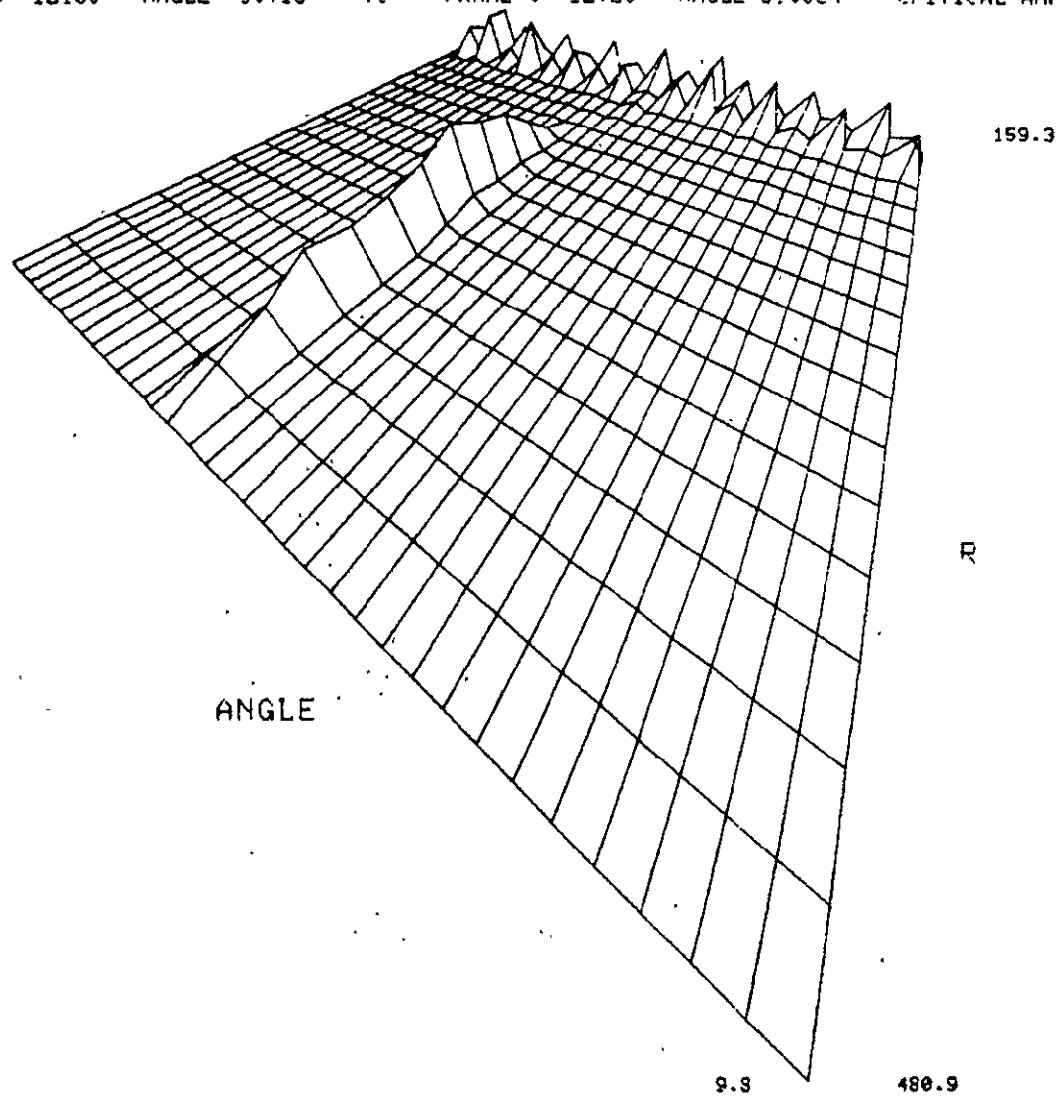
* SCAN # 17 FRAME # 12100 ANGLE 9.718 TO FRAME # 12720 ANGLE 65.054 OPTICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 42.0

AVERAGE I = 1.8

ANGLE	
1	9.8
2	9.9
3	10.5
4	11.5
5	12.9
6	14.6
7	16.2
8	18.0
9	19.8
10	21.5
11	23.2
12	25.0
13	26.8
14	28.5
15	30.3
16	32.0
17	33.8
18	35.5
19	37.3
20	39.0
21	40.7
22	42.4
23	44.1
24	45.8
25	47.5
26	49.1
27	50.8
28	52.6
29	54.4
30	56.1
31	57.8
32	59.6
33	61.5
34	63.3
35	64.4



	R
1	159.3
2	178.2
3	197.2
4	216.1
5	235.0
6	253.9
7	272.8
8	291.7
9	310.7
10	329.6
11	348.5
12	367.4
13	386.3
14	405.2
15	424.2
16	443.1
17	480.9

I_{max}, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 2110

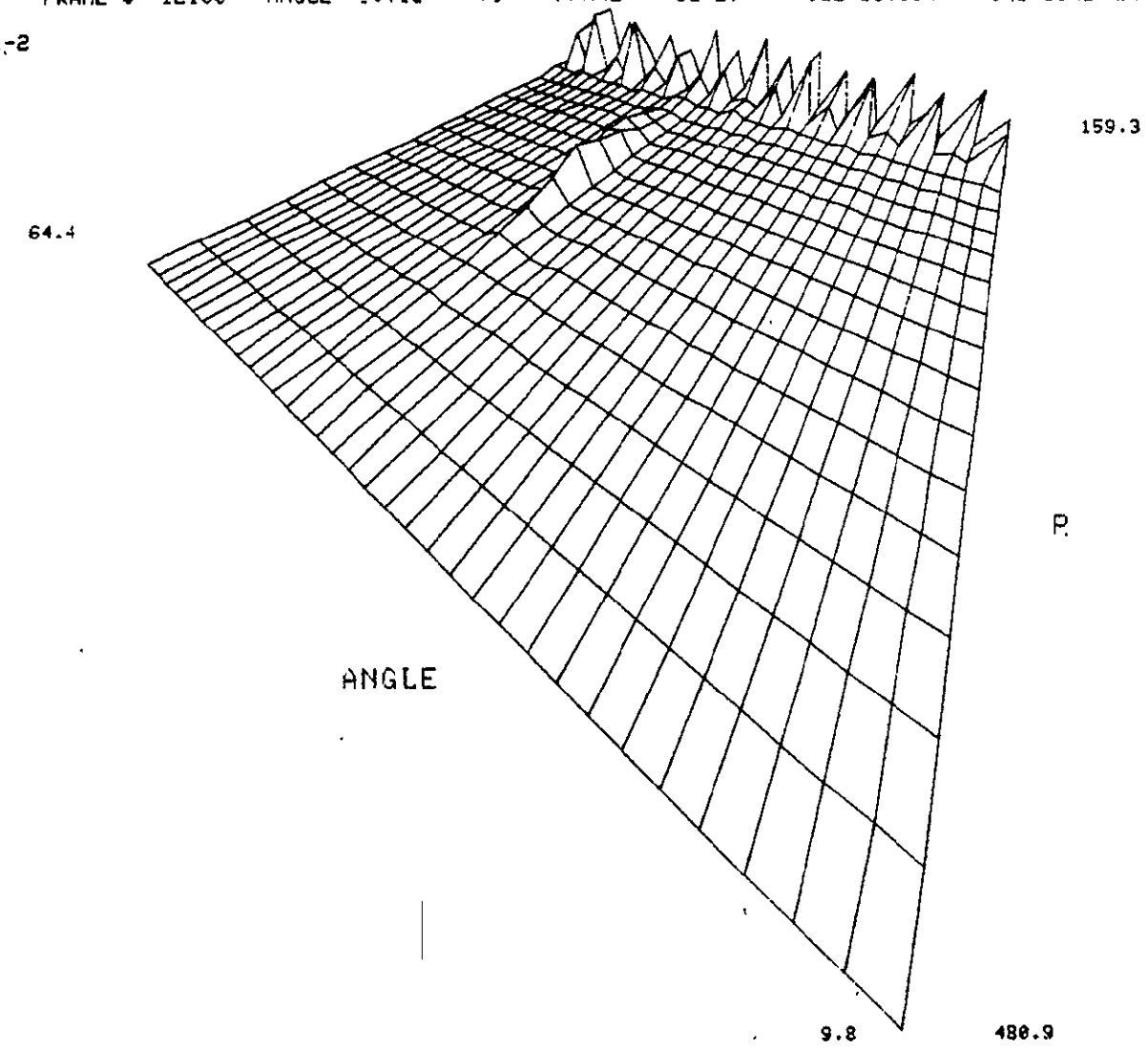
* SCAN # 17 FRAME # 12100 ANGLE 3.718 TO FRAME # 12720 ANGLE 65.054 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 50.0

AVERAGE I = 3.1

ANGLE	
1	9.8
2	9.9
3	10.5
4	11.5
5	12.9
6	14.6
7	16.2
8	18.0
9	19.8
10	21.5
11	23.2
12	25.0
13	26.8
14	28.5
15	30.3
16	32.0
17	33.8
18	35.5
19	37.3
20	39.0
21	40.7
22	42.4
23	44.1
24	45.8
25	47.5
26	49.1
27	50.8
28	52.6
29	54.4
30	56.1
31	57.8
32	59.6
33	61.5
34	63.3
35	64.4



	R
1	159.3
2	178.2
3	197.2
4	216.1
5	235.0
6	253.9
7	272.8
8	291.7
9	310.7
10	329.6
11	348.5
12	367.4
13	386.3
14	405.2
15	424.2
16	443.1
17	480.9

ORIGINAL PAGE IS OF POOR QUALITY

Imax, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

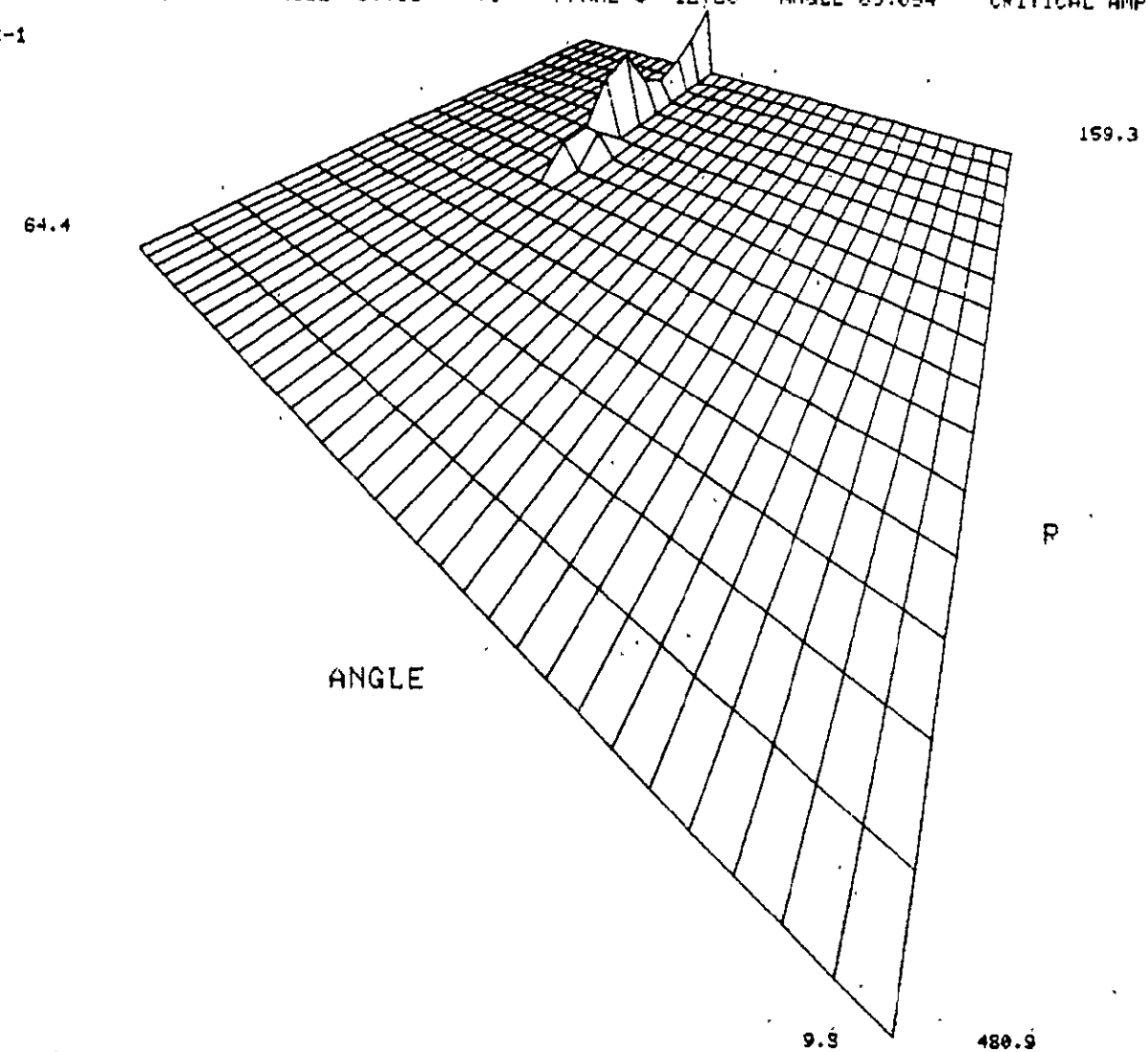
* SCAN # 17 FRAME # 12100 ANGLE 9.713 TO FRAME # 12720 ANGLE 65.054 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 6.0

AVERAGE I = 0.1

	ANGLE
1	9.8
2	9.9
3	10.5
4	11.5
5	12.9
6	14.6
7	16.2
8	18.0
9	19.8
10	21.5
11	23.2
12	25.0
13	26.8
14	28.5
15	30.3
16	32.0
17	33.8
18	35.5
19	37.3
20	39.0
21	40.7
22	42.4
23	44.1
24	45.8
25	47.5
26	49.1
27	50.8
28	52.6
29	54.4
30	56.1
31	57.8
32	59.6
33	61.5
34	63.3
35	64.4



	R
1	159.3
2	178.2
3	197.2
4	216.1
5	235.0
6	253.9
7	272.8
8	291.7
9	310.7
10	329.6
11	348.5
12	367.4
13	386.3
14	405.2
15	424.2
16	443.1
17	480.9

I, R, A DISPLAY AT VELOCITY CELL 62

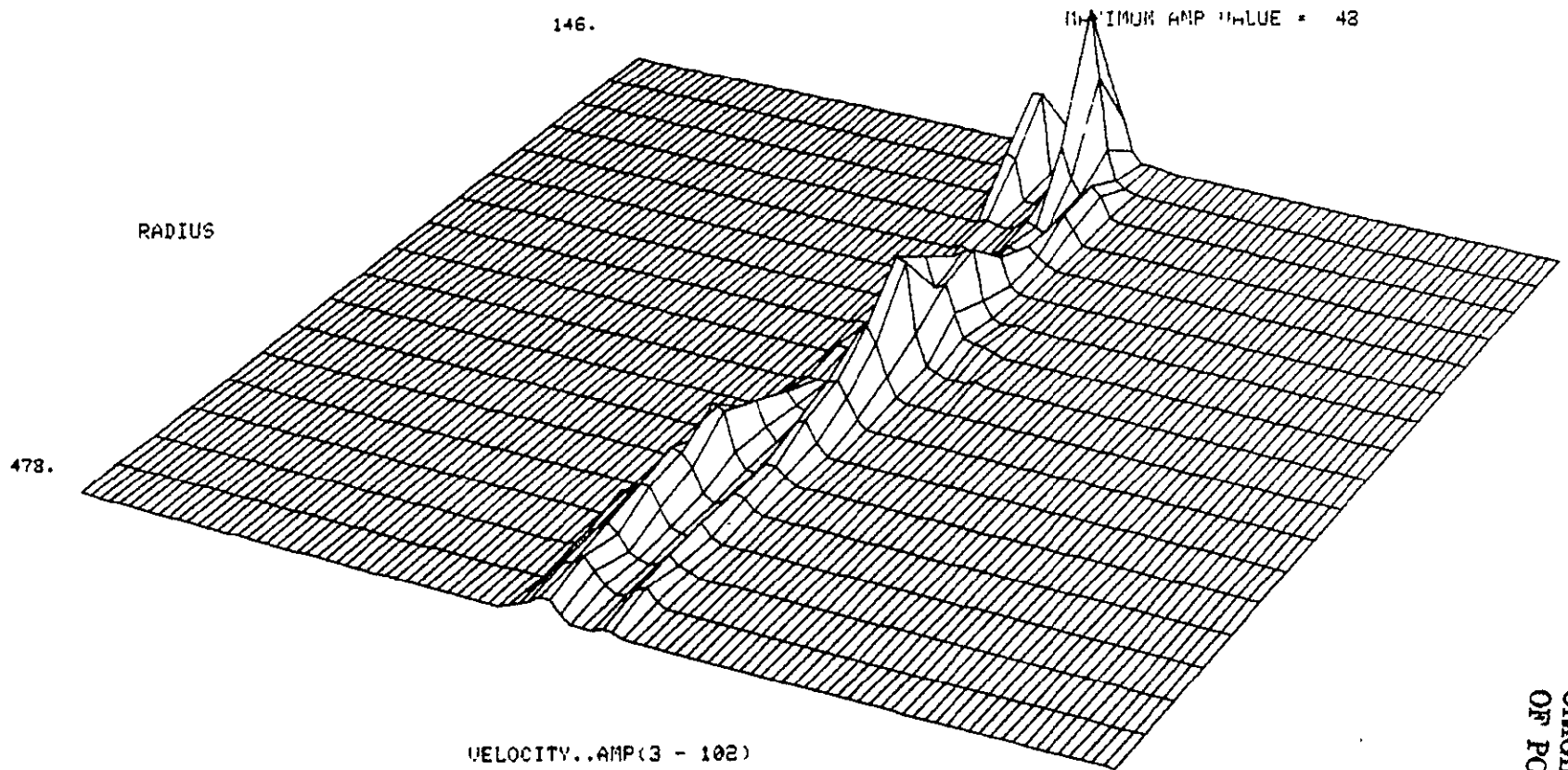
NASA PROJECT DUST DEVIL DAY 253 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 17 FRAME # 12100 ANGLE 9.713 TO FRAME # 12720 ANGLE 65.054 CRITICAL AMP AT CELL 62

FRAME # 12467 TO 12485

ANGLE = 42.48

MAXIMUM AMP VALUE = 48



ORIGINAL PAGE IS OF POOR QUALITY

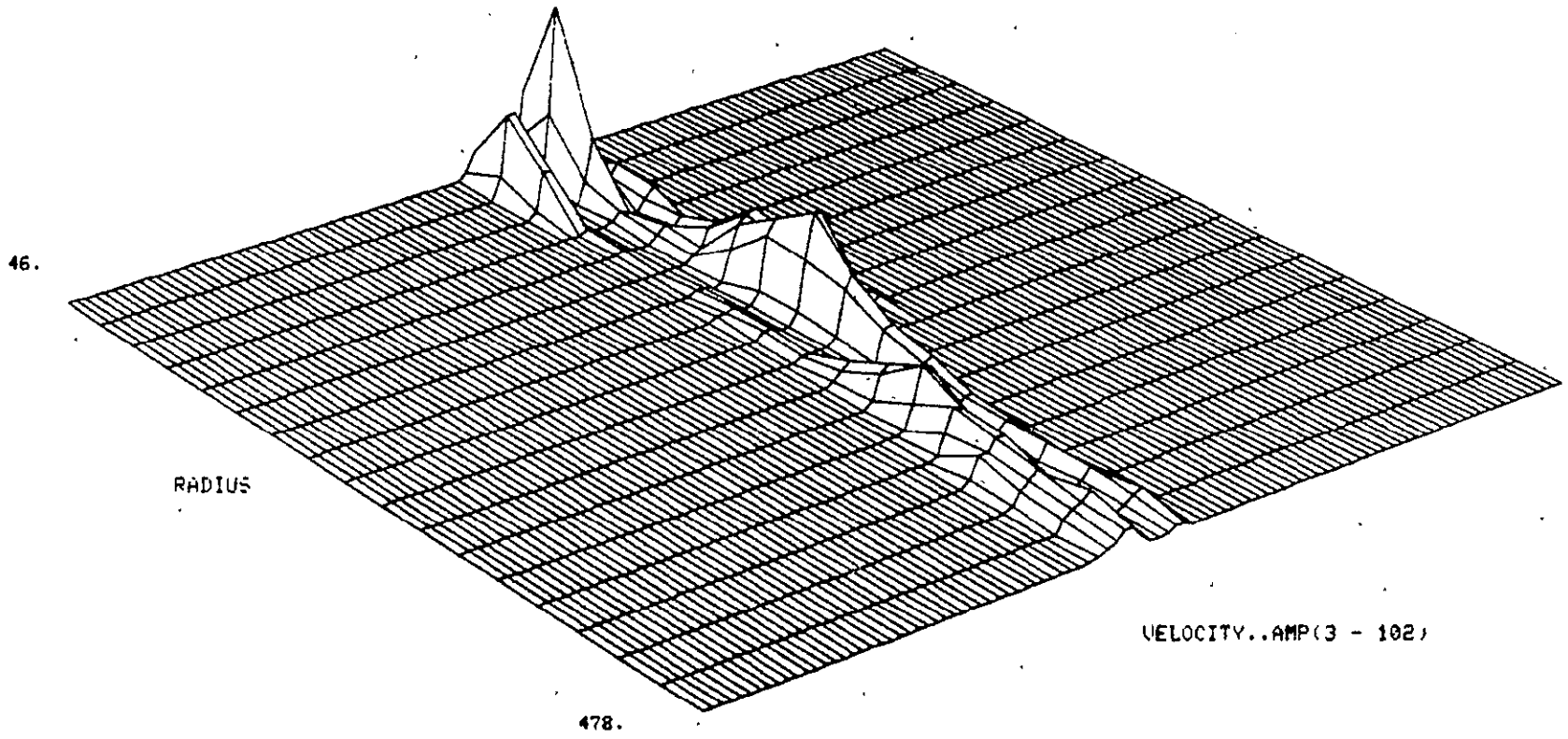
NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 17 FRAME # 12100 ANGLE 9.718 TO FRAME # 12720 ANGLE 65.054 CRITICAL AMP AT CELL 62

FRAME # 12467 TO 12485

ANGLE = 42.48

MAXIMUM AMP VALUE = 48



ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 1 OF 2- E110

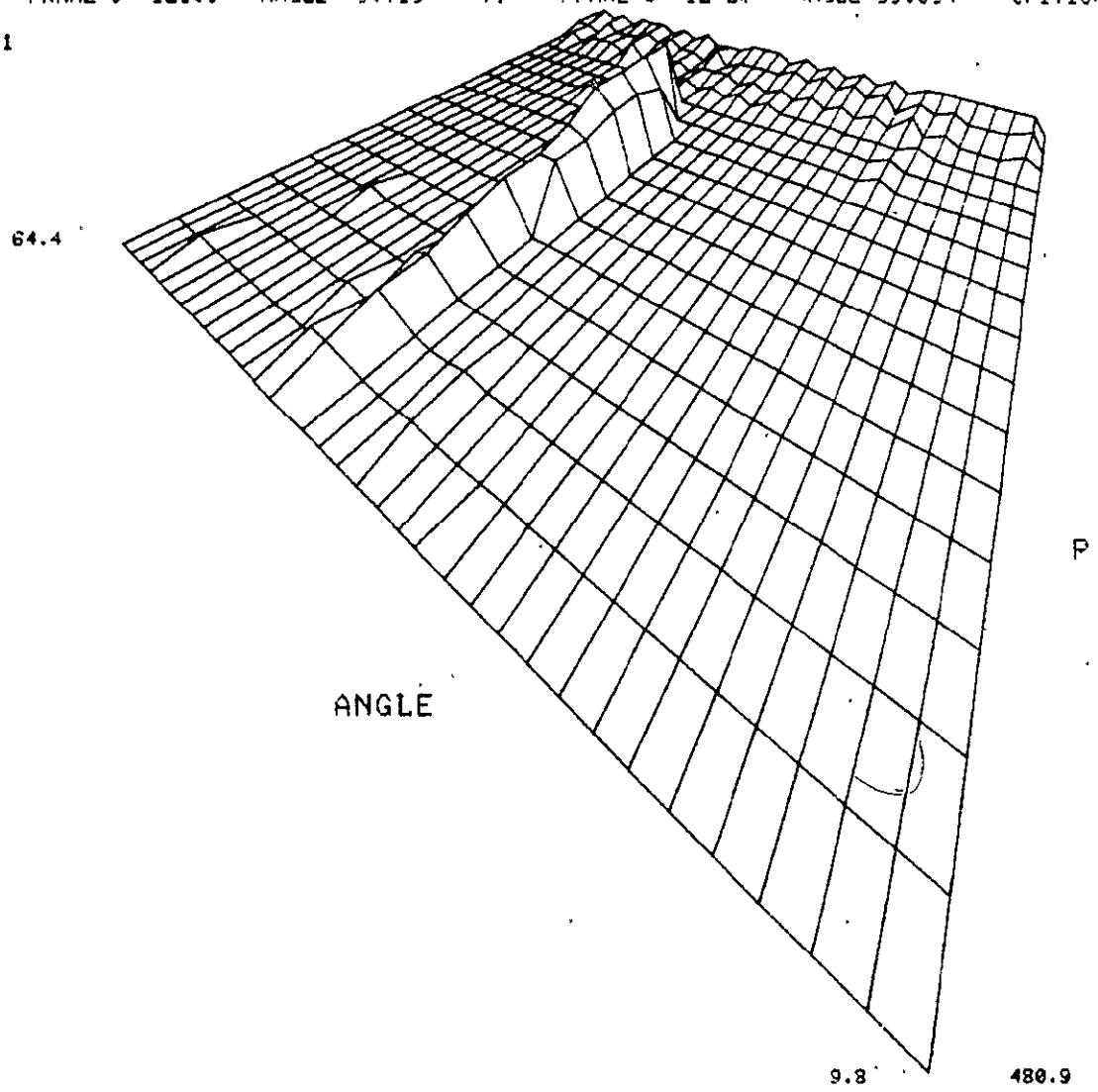
* SCAN # 17 FRAME # 12100 ANGLE 9.718 TO FRAME # 12720 ANGLE 65.054 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 10.0

AVERAGE V = 1.4

ANGLE	
1	9.8
2	9.9
3	10.5
4	11.5
5	12.9
6	14.6
7	16.2
8	18.0
9	19.8
10	21.5
11	23.2
12	25.0
13	26.8
14	28.5
15	30.3
16	32.0
17	33.8
18	35.5
19	37.3
20	39.0
21	40.7
22	42.4
23	44.1
24	45.8
25	47.5
26	49.1
27	50.8
28	52.6
29	54.4
30	56.1
31	57.8
32	59.6
33	61.5
34	63.3
35	64.4



	R
1	159.3
2	178.2
3	197.2
4	216.1
5	235.0
6	253.9
7	272.8
8	291.7
9	310.7
10	329.6
11	348.5
12	367.4
13	386.3
14	405.2
15	424.2
16	443.1
17	480.9

V, R, A DISPLAY (VELOCITY AT Imax)

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

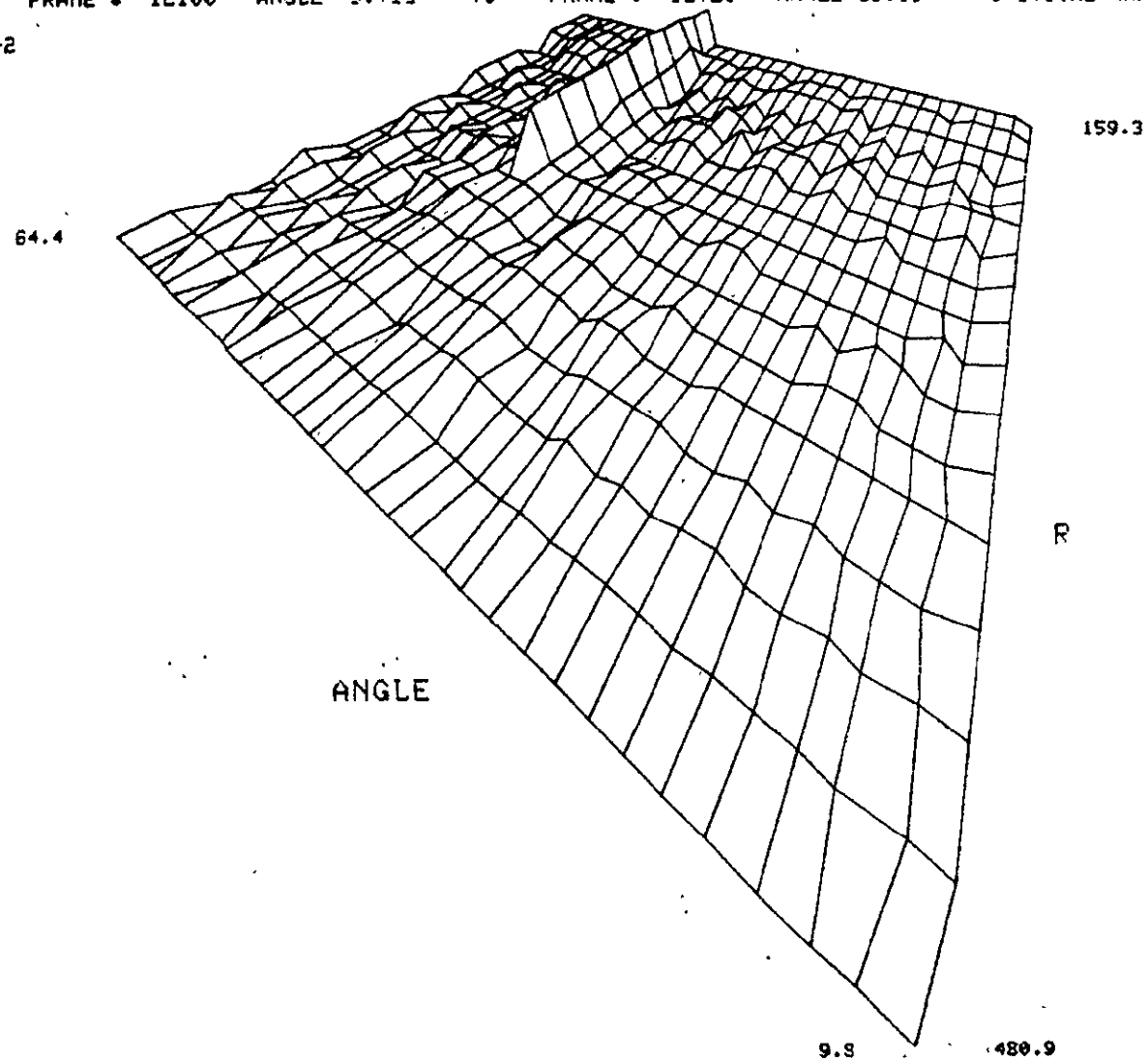
* SCAN # 17 FRAME # 12100 ANGLE 9.713 TO FRAME # 12720 ANGLE 65.054 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V = 12.0

AVERAGE V = 2.6

	ANGLE
1	9.8
2	9.9
3	10.5
4	11.5
5	12.9
6	14.6
7	16.2
8	18.0
9	19.8
10	21.5
11	23.2
12	25.0
13	26.8
14	28.5
15	30.3
16	32.0
17	33.8
18	35.5
19	37.3
20	39.0
21	40.7
22	42.4
23	44.1
24	45.8
25	47.5
26	49.1
27	50.8
28	52.6
29	54.4
30	56.1
31	57.8
32	59.6
33	61.5
34	63.3
35	64.4



	R
1	159.3
2	178.2
3	197.2
4	216.1
5	235.0
6	253.9
7	272.8
8	291.7
9	310.7
10	329.6
11	342.5
12	367.4
13	386.3
14	405.2
15	424.2
16	443.1
17	480.9

U, R, A DISPLAY (VELOCITY AT Imax)

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 5110

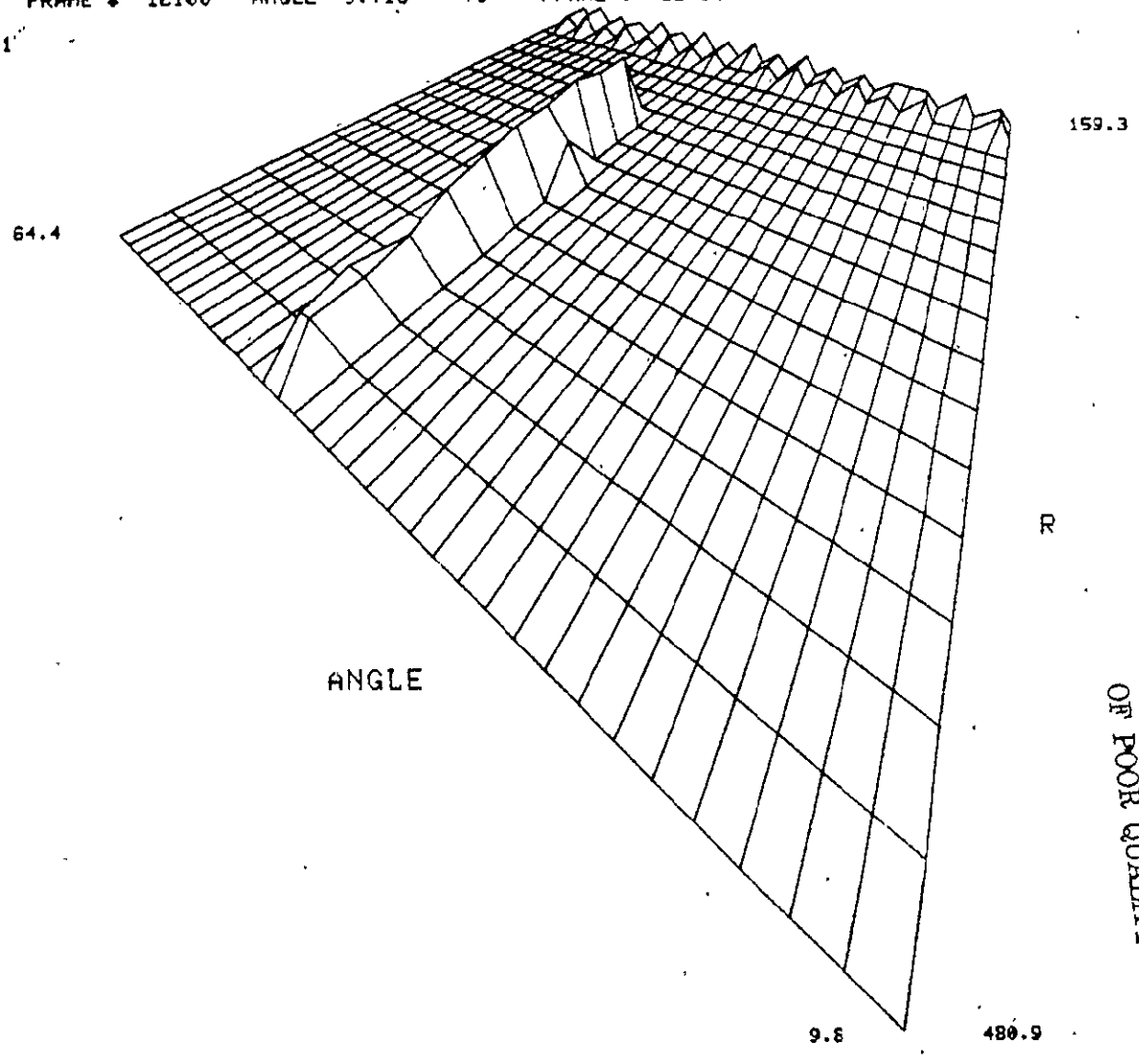
* SCAN # 17 FRAME # 12100 ANGLE 9.718 TO FRAME # 12720 ANGLE 65.054 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 12.0

AVERAGE V = 1.3

	ANGLE
1	9.8
2	9.9
3	10.5
4	11.5
5	12.9
6	14.6
7	16.2
8	18.0
9	19.8
10	21.5
11	23.2
12	25.0
13	26.8
14	28.5
15	30.3
16	32.0
17	33.8
18	35.5
19	37.3
20	39.0
21	40.7
22	42.4
23	44.1
24	45.8
25	47.5
26	49.1
27	50.8
28	52.6
29	54.4
30	56.1
31	57.8
32	59.6
33	61.5
34	63.3
35	64.4



	R
1	159.3
2	178.2
3	197.2
4	216.1
5	235.0
6	253.9
7	272.8
8	291.7
9	310.7
10	329.6
11	348.5
12	367.4
13	386.3
14	405.2
15	424.2
16	443.1
17	420.9

ORIGINAL PAGE IS OF POOR QUALITY

Vmax, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

NASA PROJECT DUST DEVIL DAY 238 , RUN # 4 TAPE 1 OF 2- 8110

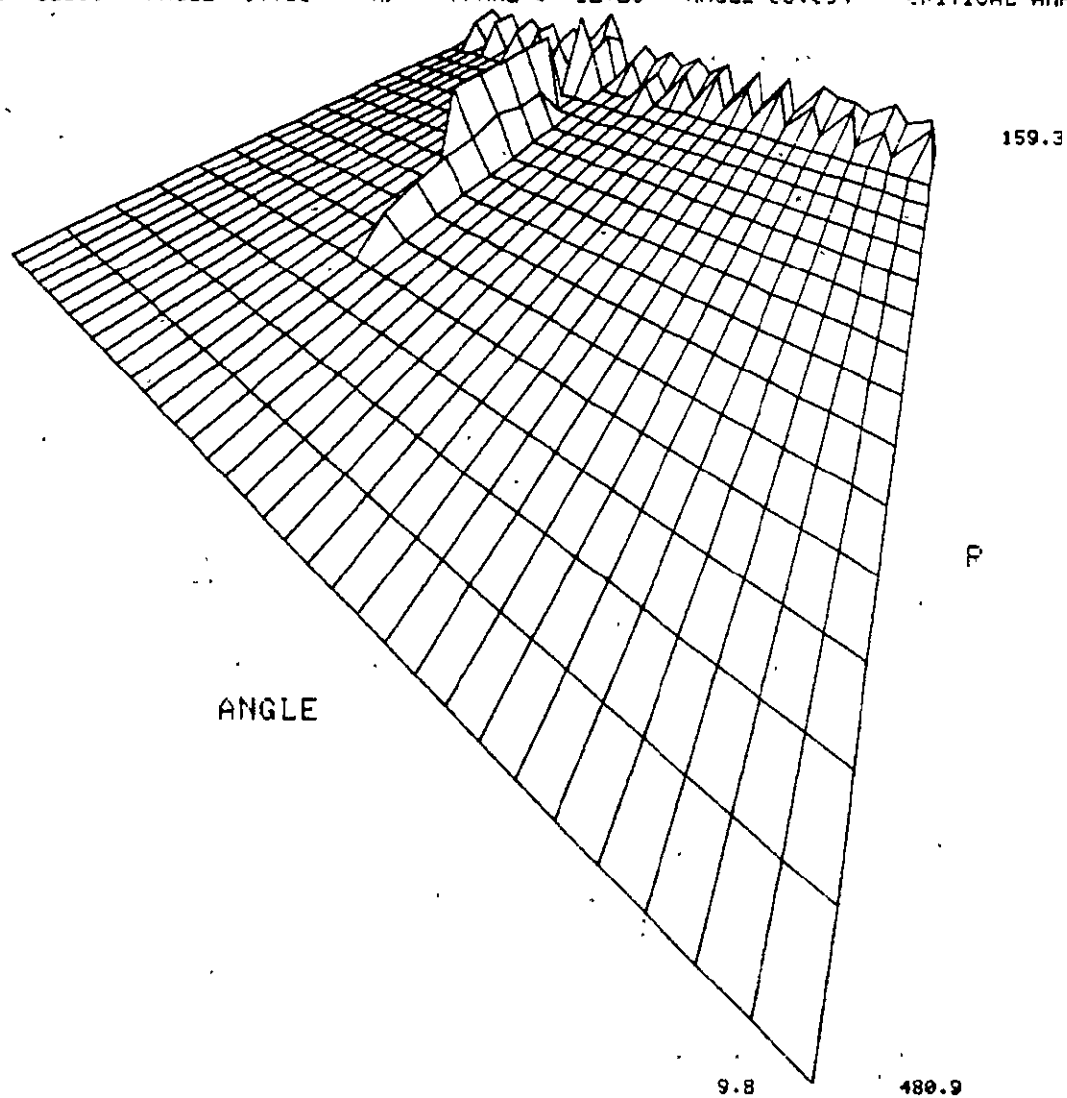
SCAN # 17 FRAME # 12100 ANGLE 9.718 TO FRAME # 12720 ANGLE 65.054 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM U = 12.0

AVERAGE U = 1.5

ANGLE	
1	9.8
2	9.9
3	10.5
4	11.5
5	12.9
6	14.6
7	16.2
8	18.0
9	19.8
10	21.5
11	23.2
12	25.0
13	26.8
14	28.5
15	30.3
16	32.0
17	33.8
18	35.5
19	37.3
20	39.0
21	40.7
22	42.4
23	44.1
24	45.8
25	47.5
26	49.1
27	50.8
28	52.6
29	54.4
30	56.1
31	57.8
32	59.6
33	61.5
34	63.3
35	64.4



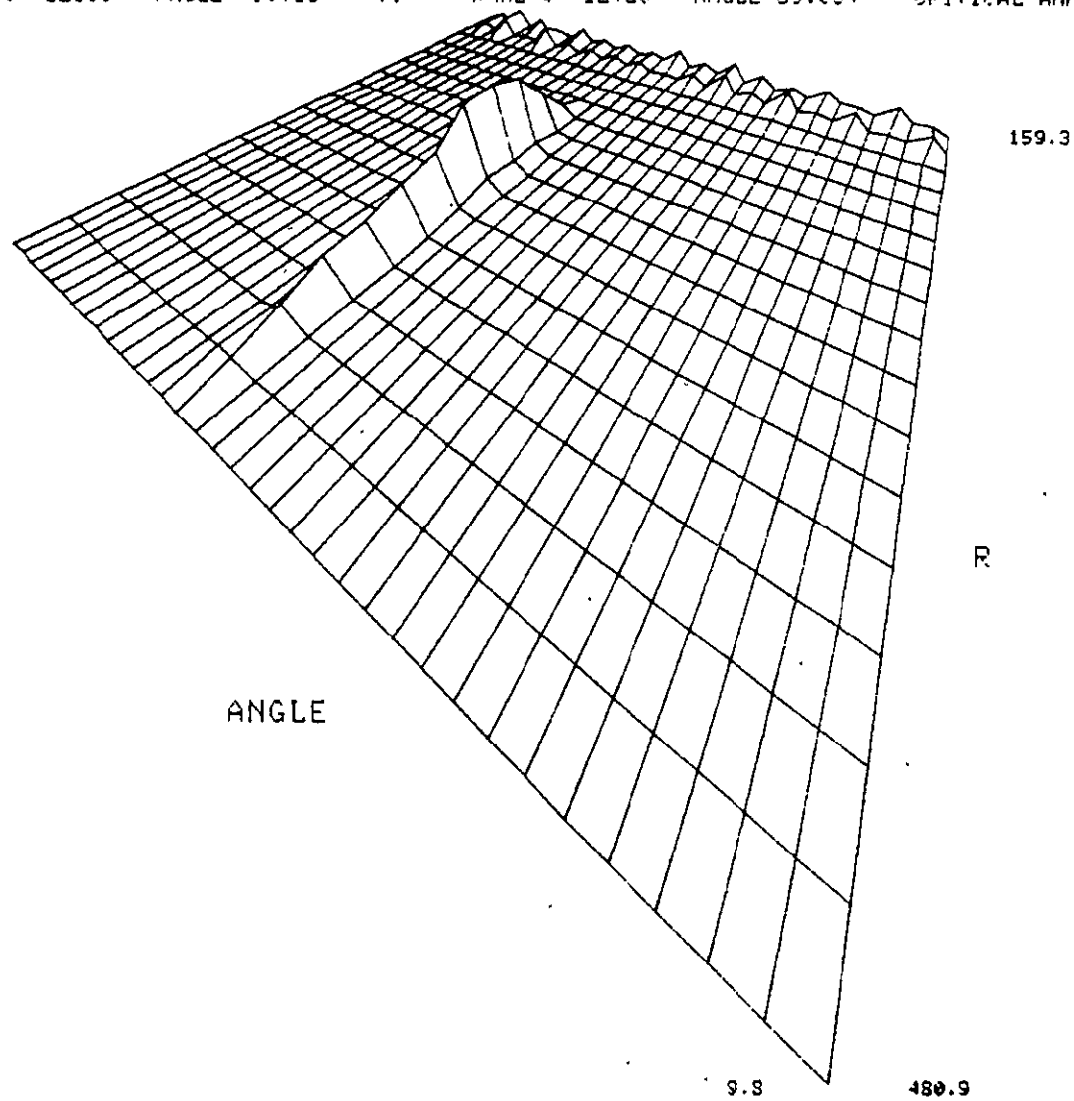
R	
1	159.3
2	178.2
3	197.2
4	216.1
5	235.0
6	253.9
7	272.8
8	291.7
9	310.7
10	329.6
11	348.5
12	367.4
13	386.3
14	405.2
15	424.2
16	443.1
17	480.9

U_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- E110

* SCAN # 17 FRAME # 12100 ANGLE 9.713 TO FRAME # 12720 ANGLE 65.054 CRITICAL AMP AT CELL 62

OPTION # 31-1



ANGLE	
1	9.8
2	9.9
3	10.5
4	11.5
5	12.9
6	14.6
7	16.2
8	18.0
9	19.8
10	21.5
11	23.2
12	25.0
13	26.8
14	28.5
15	30.3
16	32.0
17	33.8
18	35.5
19	37.3
20	39.0
21	40.7
22	42.4
23	44.1
24	45.8
25	47.5
26	49.1
27	50.8
28	52.6
29	54.4
30	56.1
31	57.8
32	59.6
33	61.5
34	63.3
35	64.4

R	
1	159.3
2	178.2
3	197.2
4	216.1
5	235.0
6	253.9
7	272.8
8	291.7
9	310.7
10	329.6
11	348.5
12	367.4
13	386.3
14	405.2
15	424.2
16	443.1
17	480.9

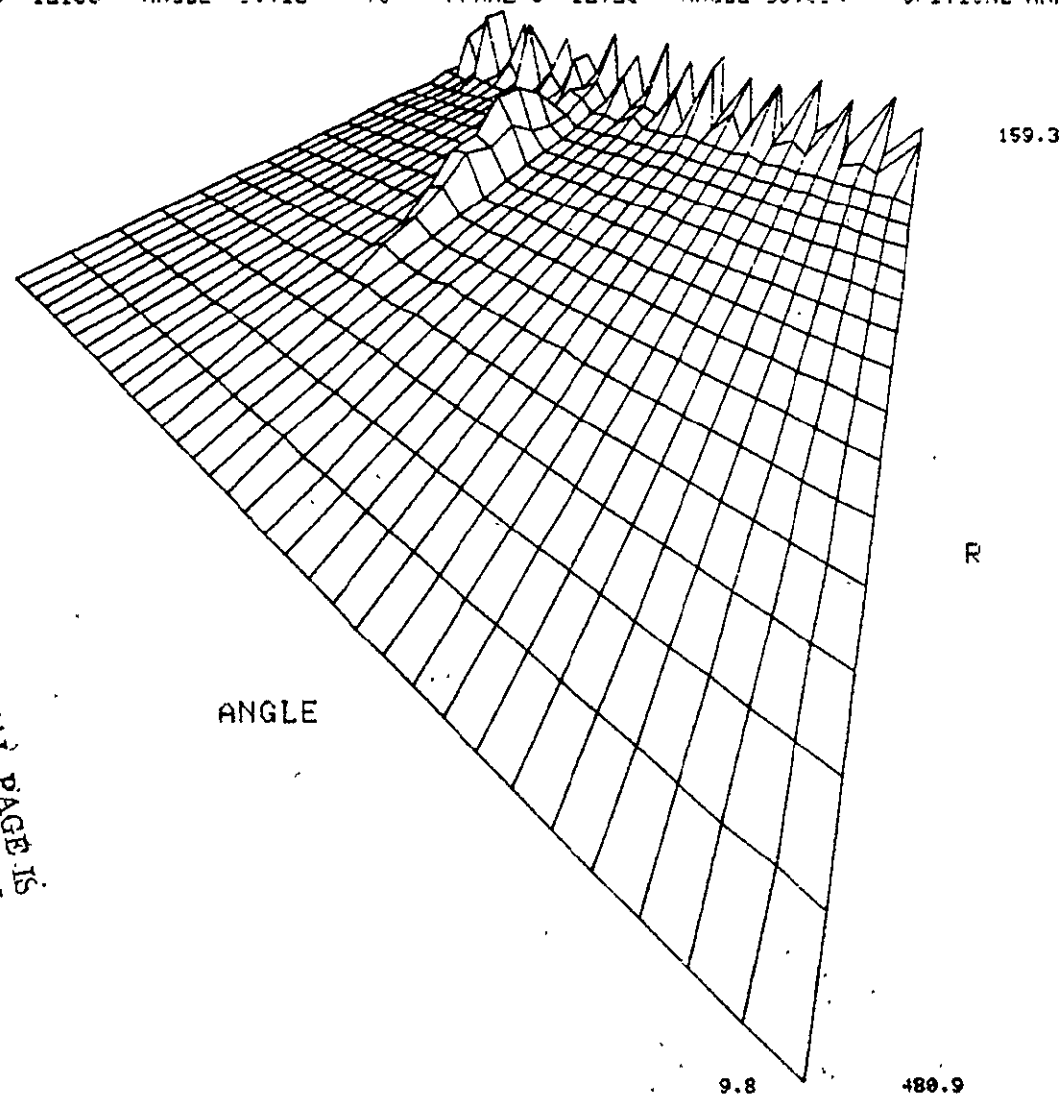
V * IMAX, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 17 FRAME # 12100 ANGLE 9.718 TO FRAME # 12720 ANGLE 65.054 CRITICAL AMP AT CELL 62

OPTION # 31-2



	ANGLE
1	9.8
2	9.9
3	10.5
4	11.5
5	12.9
6	14.6
7	16.2
8	18.0
9	19.8
10	21.5
11	23.2
12	25.0
13	26.8
14	28.5
15	30.3
16	32.0
17	33.8
18	35.5
19	37.3
20	39.0
21	40.7
22	42.4
23	44.1
24	45.8
25	47.5
26	49.1
27	50.8
28	52.6
29	54.4
30	56.1
31	57.8
32	59.6
33	61.5
34	63.3
35	64.4

	R
1	159.3
2	178.2
3	197.2
4	216.1
5	235.0
6	253.9
7	272.8
8	291.7
9	310.7
10	329.6
11	348.5
12	367.4
13	386.3
14	405.2
15	424.2
16	443.1
17	480.9

ORIGINAL PAGE IS
OF POOR QUALITY

V * IMAX, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 23 . RUN # 4 TAPE 1 OF 2- 6110 .

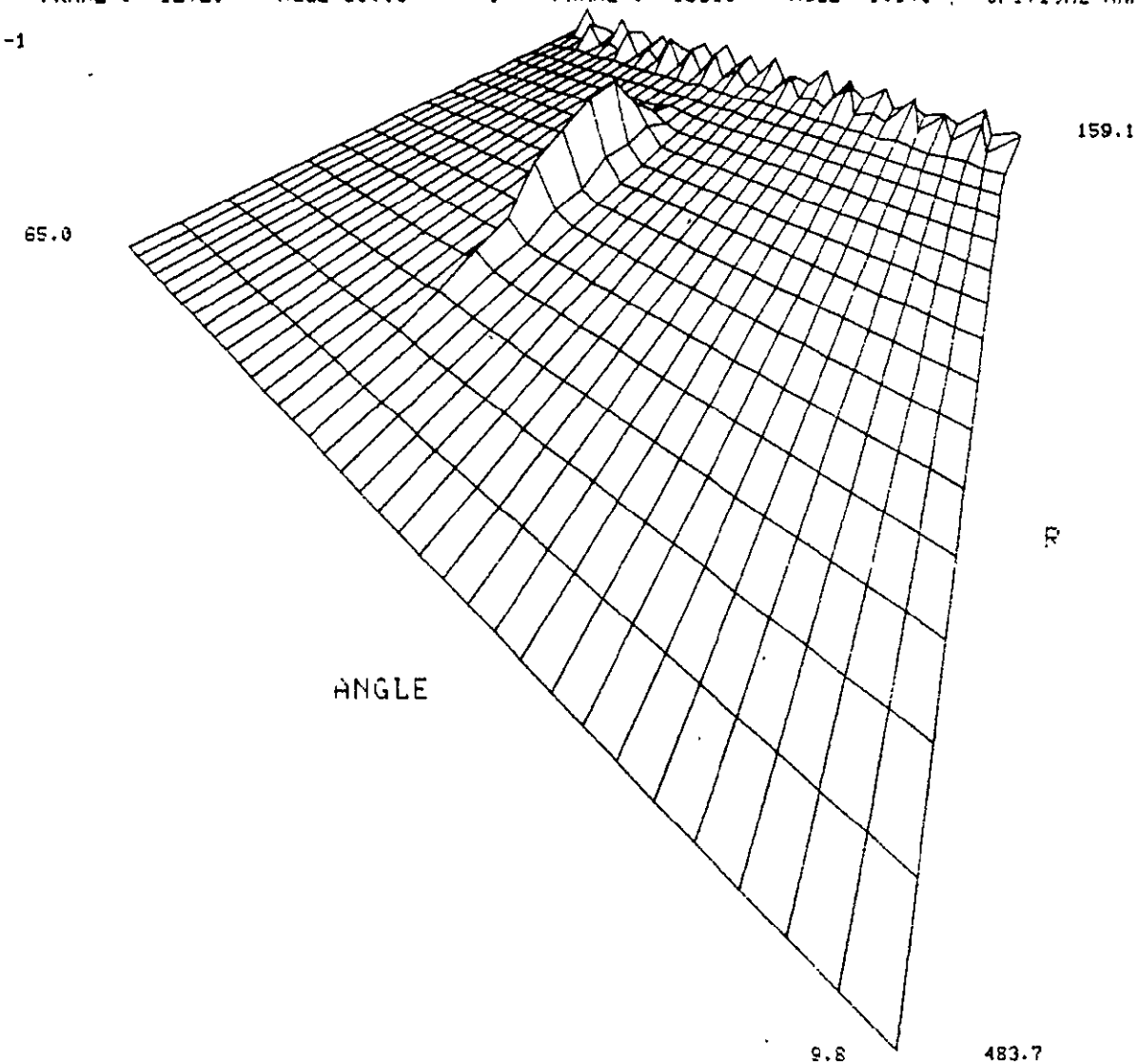
* SCAN # 18 FRAME # 12720 ANGLE 65.054 TO FRAME # 13360 ANGLE 9.570 . CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 62.0

AVERAGE I = 1.7

ANGLE	
1	65.0
2	64.8
3	64.2
4	63.2
5	62.0
6	60.4
7	58.7
8	56.8
9	55.1
10	53.4
11	51.6
12	49.9
13	48.2
14	46.5
15	44.8
16	43.1
17	41.4
18	39.7
19	37.9
20	36.2
21	34.4
22	32.7
23	31.0
24	29.2
25	27.5
26	25.7
27	23.9
28	22.2
29	20.4
30	18.6
31	16.8
32	15.0
33	13.3
34	11.5
35	10.1
36	9.8



	R
1	159.1
2	178.2
3	197.3
4	216.4
5	235.5
6	254.6
7	273.7
8	292.7
9	311.8
10	330.9
11	350.0
12	369.1
13	388.2
14	407.3
15	426.4
16	445.5
17	483.7

IMAX, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 228 RUN # 4 TAPE 1 OF 2- 6110

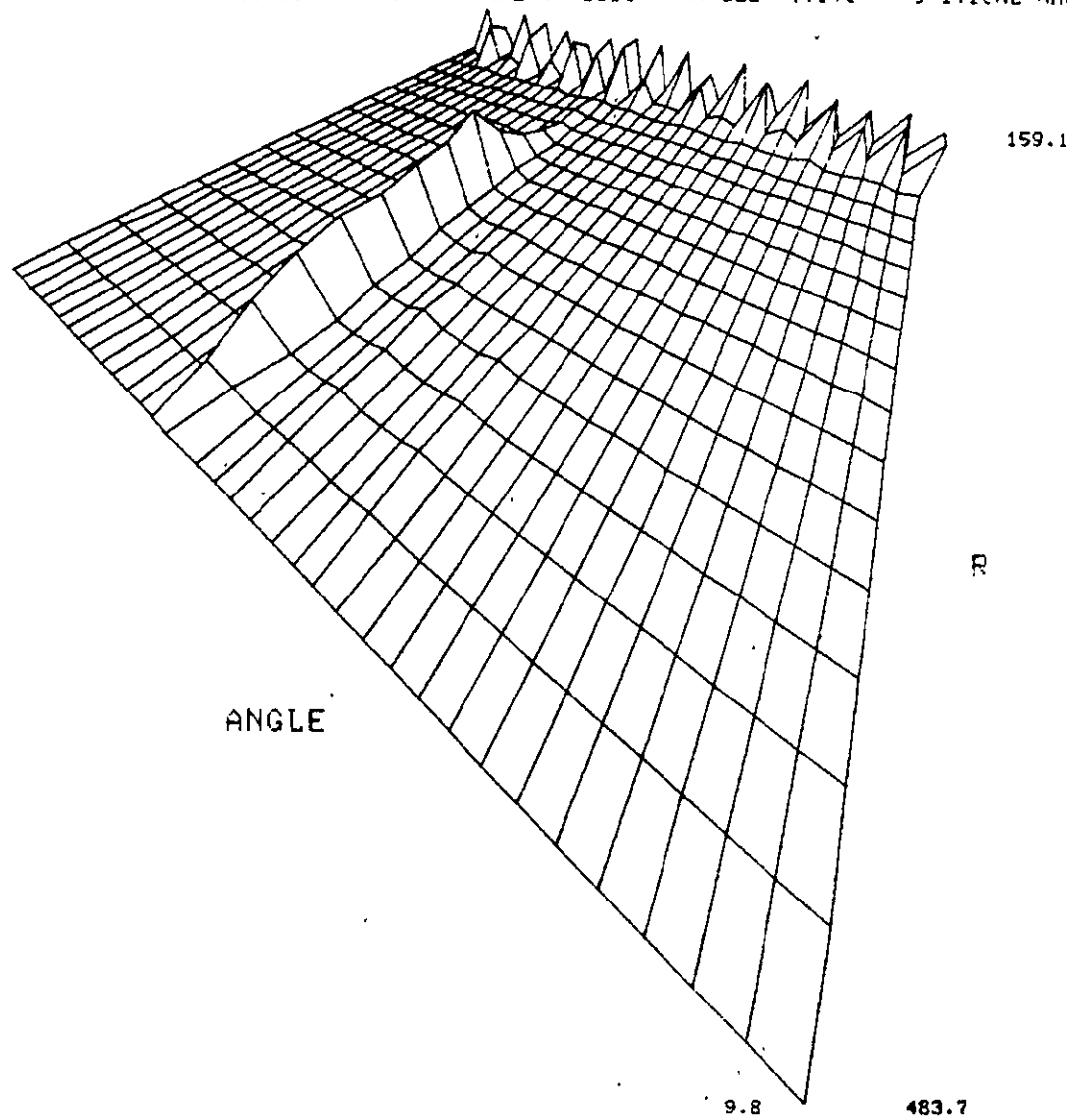
* SCAN # 18 FRAME # 12720 ANGLE 65.054 TO FRAME # 13360 ANGLE 9.570 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 61.0

AVERAGE I = 3.5

ANGLE	
1	65.0
2	64.8
3	64.2
4	63.2
5	62.0
6	60.4
7	58.7
8	56.8
9	55.1
10	53.4
11	51.6
12	49.9
13	48.2
14	46.5
15	44.8
16	43.1
17	41.4
18	39.7
19	37.9
20	36.2
21	34.4
22	32.7
23	31.0
24	29.2
25	27.5
26	25.7
27	23.9
28	22.2
29	20.4
30	18.6
31	16.8
32	15.0
33	13.3
34	11.5
35	10.1
36	9.8



	R
1	159.1
2	178.2
3	197.3
4	216.4
5	235.5
6	254.6
7	273.7
8	292.7
9	311.8
10	330.9
11	350.0
12	369.1
13	388.2
14	407.3
15	426.4
16	445.5
17	483.7

I_{MAX}, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

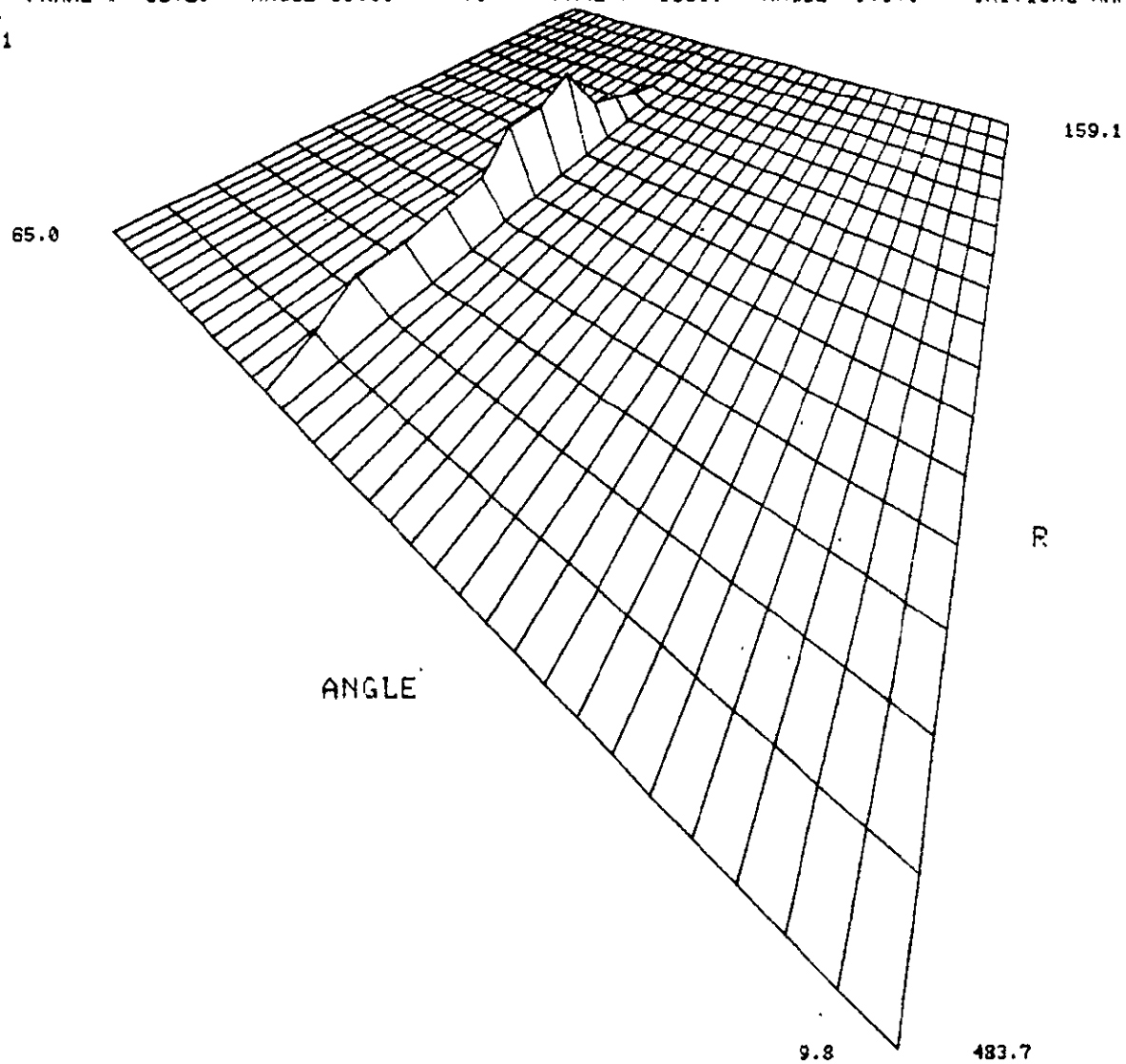
* SCAN # 18 FRAME # 12720 ANGLE 65.054 TO FRAME # 13360 ANGLE 9.570 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 61.0

AVERAGE I = 0.6

ANGLE	
1	65.0
2	64.8
3	64.2
4	63.2
5	62.0
6	60.4
7	58.7
8	56.8
9	55.1
10	53.4
11	51.6
12	49.9
13	48.2
14	46.5
15	44.8
16	43.1
17	41.4
18	39.7
19	37.9
20	36.2
21	34.4
22	32.7
23	31.0
24	29.2
25	27.5
26	25.7
27	23.9
28	22.2
29	20.4
30	18.6
31	16.8
32	15.0
33	13.3
34	11.5
35	10.1
36	9.8



	R
1.	159.1
2	178.2
3	197.3
4	216.4
5	235.5
6	254.6
7	273.7
8	292.7
9	311.8
10	330.9
11	350.0
12	369.1
13	388.2
14	407.3
15	426.4
16	445.5
17	483.7

I, R, A DISPLAY AT VELOCITY CELL 62

ORIGINAL PAGE IS OF POOR QUALITY

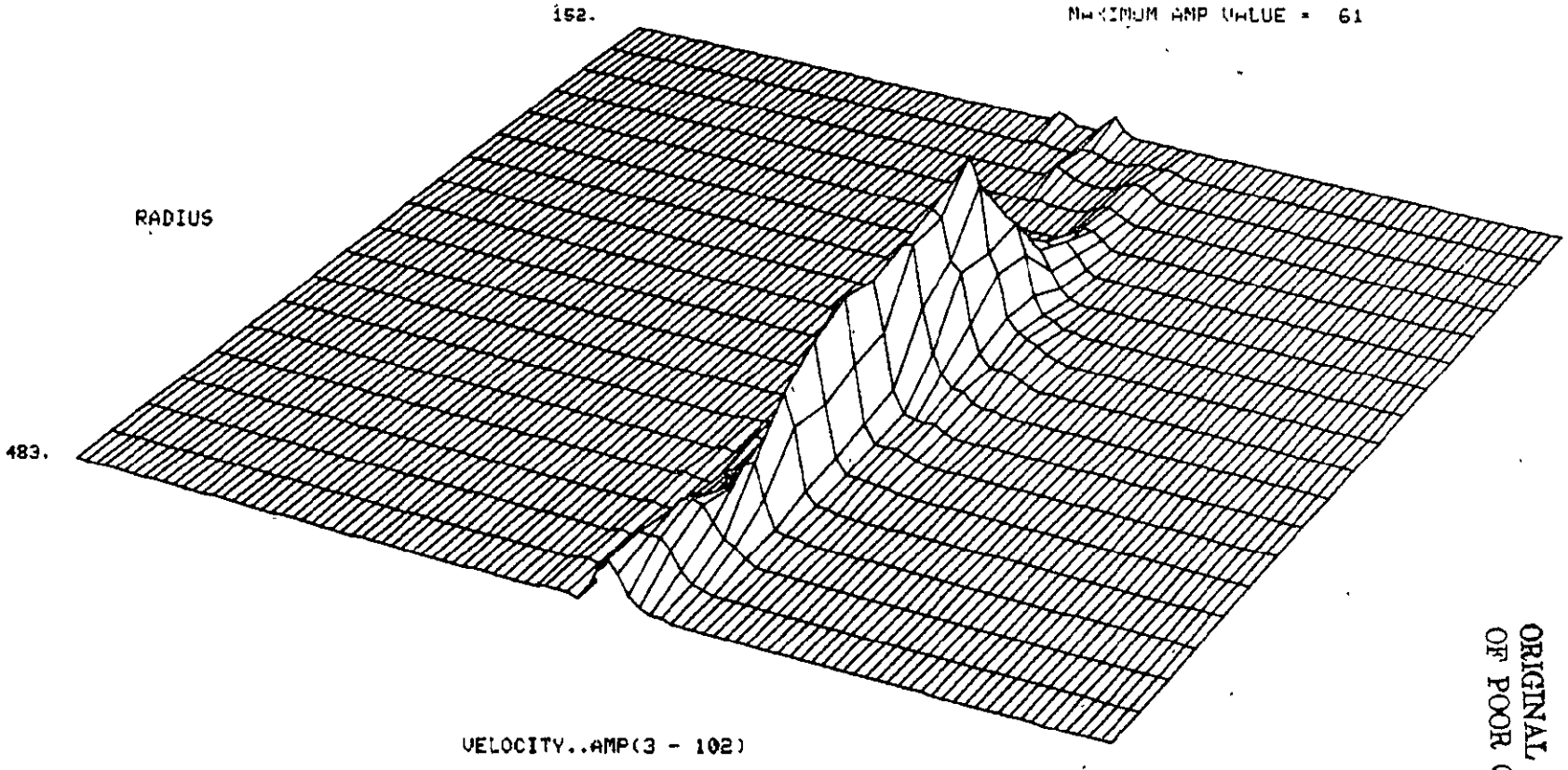
NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 18 FRAME # 12720 ANGLE 65.054 TO. FRAME # 13360 ANGLE 9.570 CRITICAL AMP AT CELL 62

FRAME # 12959 TO 12978

ANGLE = 44.32

MAXIMUM AMP VALUE = 61



ORIGINAL PAGE IS
OF POOR QUALITY

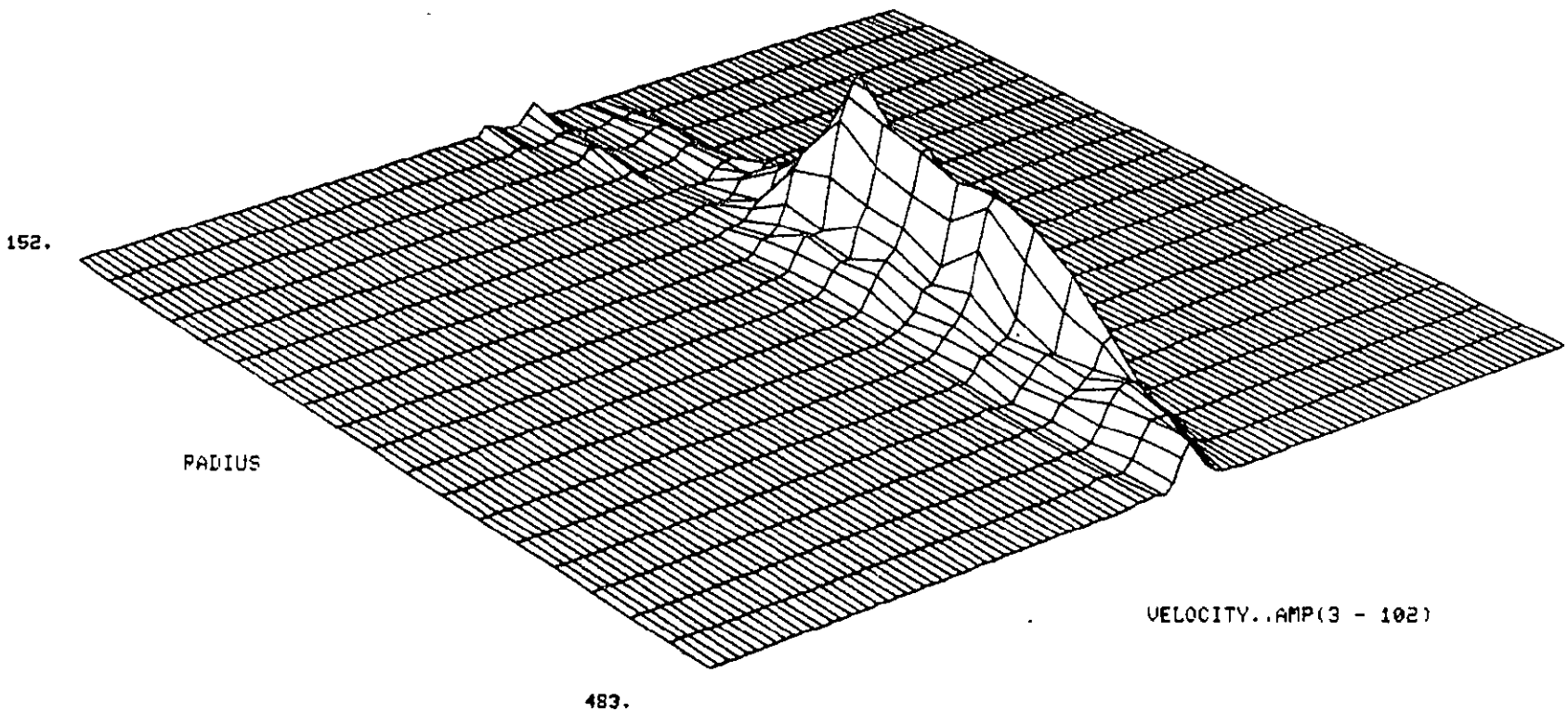
NASA PROJECT DUST DEVIL DAY 238 FUN # 4 TAPE 1 OF 2- 6110

SCAN # 18 FRAME # 12720 ANGLE 65.054 TO FRAME # 13360 ANGLE 9.570 CRITICAL AMP AT CELL 62

FRAME # 12959 TO 12978

ANGLE = 44.82

MAXIMUM AMP VALUE = 61



NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 6- 6110

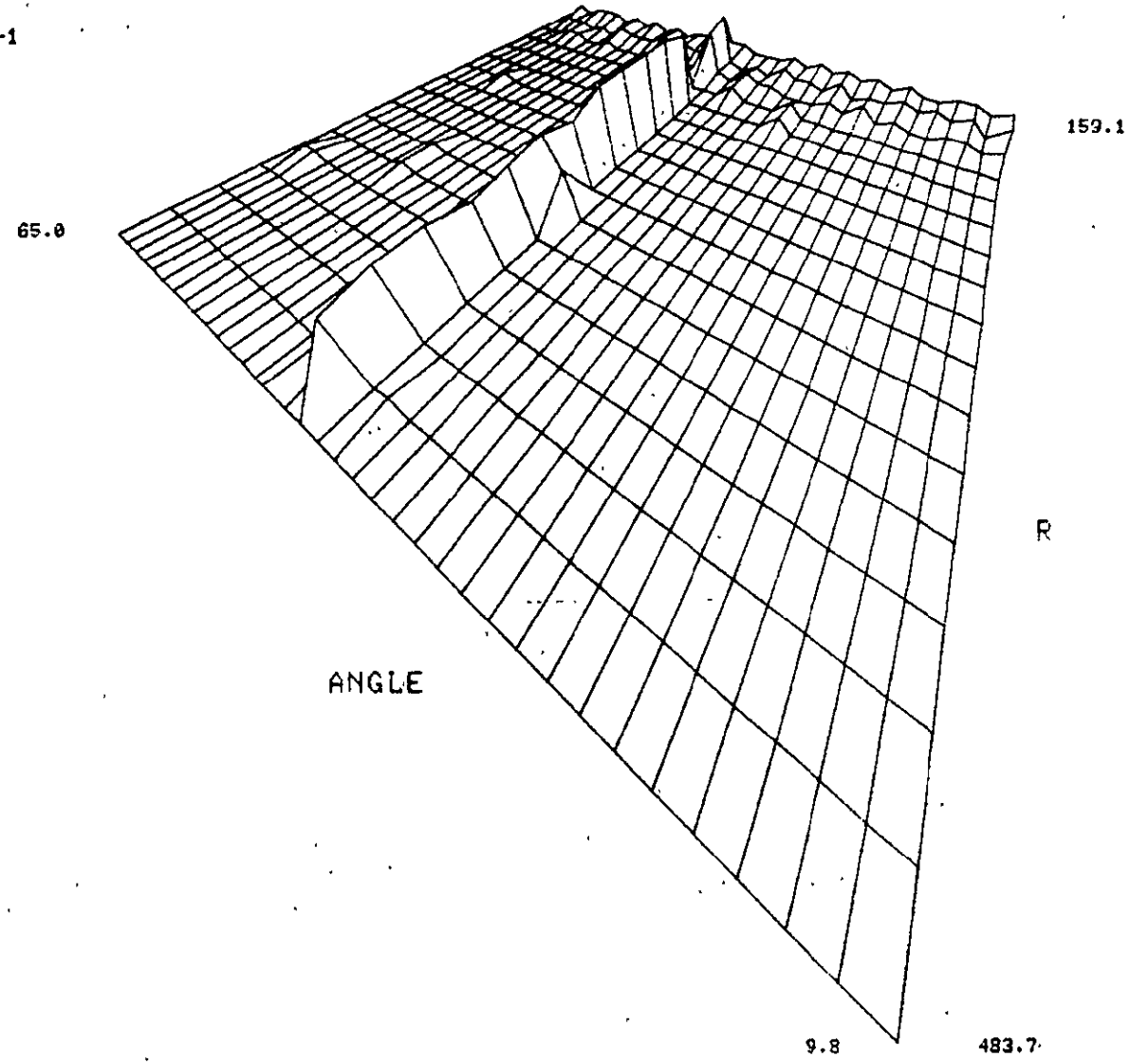
* SCAN # 18 FRAME # 12720 ANGLE 65.054 TO FRAME # 13360 ANGLE 9.570 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 12.0

AVERAGE V = 1.5

ANGLE	
1	65.0
2	64.8
3	64.2
4	63.2
5	62.0
6	60.4
7	58.7
8	56.8
9	55.1
10	53.4
11	51.6
12	49.9
13	48.2
14	46.5
15	44.8
16	43.1
17	41.4
18	39.7
19	37.9
20	36.2
21	34.4
22	32.7
23	31.0
24	29.2
25	27.5
26	25.7
27	23.9
28	22.2
29	20.4
30	18.6
31	16.8
32	15.0
33	13.3
34	11.5
35	10.1
36	9.8



	R
1	159.1
2	178.2
3	197.3
4	216.4
5	235.5
6	254.6
7	273.7
8	292.7
9	311.3
10	330.9
11	350.0
12	369.1
13	388.2
14	407.3
15	426.4
16	445.5
17	483.7

V, R, A DISPLAY (VELOCITY AT I_{MAX})

ORIGINAL PAGE IS
POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

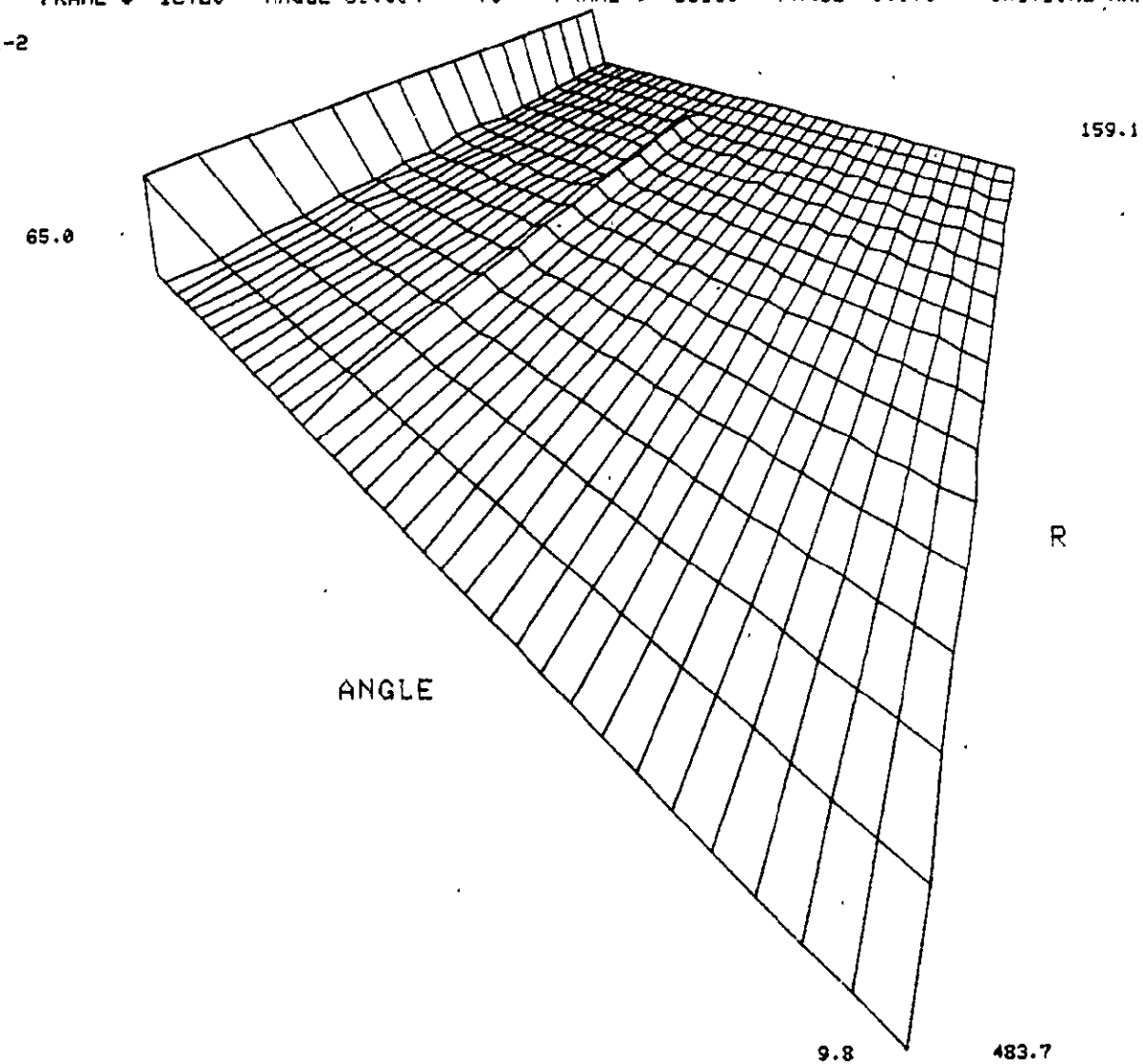
* SCAN # 18 FRAME # 12720 ANGLE 65.054 TO FRAME # 13360 ANGLE 9.570 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V = 55.0

AVERAGE V = 3.8

ANGLE	
1	65.0
2	64.8
3	64.2
4	63.2
5	62.0
6	60.4
7	58.7
8	56.8
9	55.1
10	53.4
11	51.6
12	49.9
13	48.2
14	46.5
15	44.8
16	43.1
17	41.4
18	39.7
19	37.9
20	36.2
21	34.4
22	32.7
23	31.0
24	29.2
25	27.5
26	25.7
27	23.9
28	22.2
29	20.4
30	18.6
31	16.8
32	15.0
33	13.3
34	11.5
35	10.1
36	9.8



	R
1	159.1
2	178.2
3	197.3
4	216.4
5	235.5
6	254.6
7	273.7
8	292.7
9	311.8
10	330.9
11	350.0
12	369.1
13	388.2
14	407.3
15	426.4
16	445.5
17	483.7

U, R, A DISPLAY (VELOCITY AT Imax)

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 1 OF 2- 6110

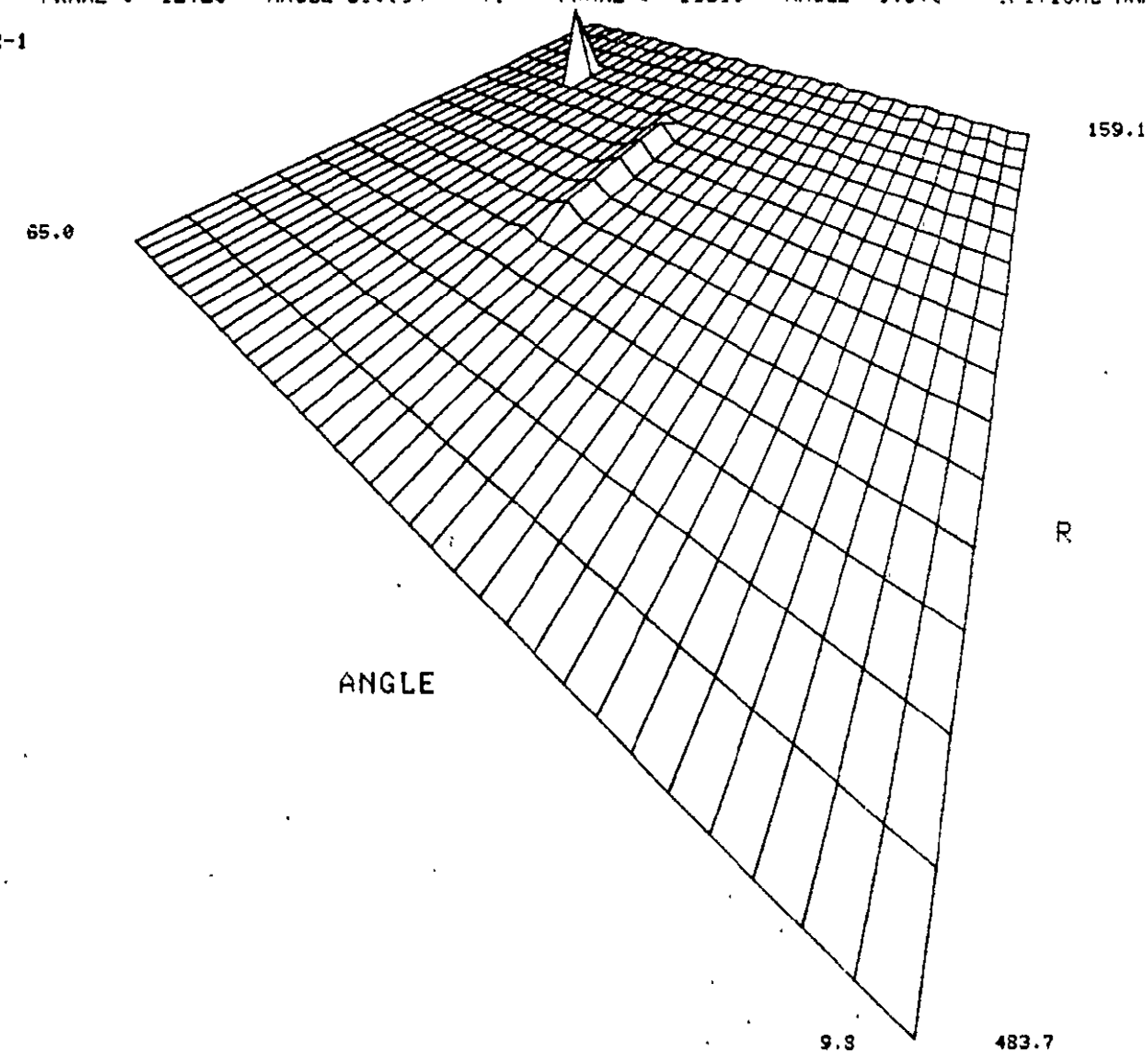
* SCAN # 18. FRAME # 12720 ANGLE 65.054 TO FRAME # 13360 ANGLE 3.570 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 57.0

AVERAGE V = 1.4

ANGLE	
1	65.0
2	64.8
3	64.2
4	63.2
5	62.0
6	60.4
7	58.7
8	56.8
9	55.1
10	53.4
11	51.6
12	49.9
13	48.2
14	46.5
15	44.8
16	43.1
17	41.4
18	39.7
19	37.9
20	36.2
21	34.4
22	32.7
23	31.0
24	29.2
25	27.5
26	25.7
27	23.9
28	22.2
29	20.4
30	18.6
31	16.8
32	15.0
33	13.3
34	11.5
35	10.1
36	9.8



	R
1	159.1
2	178.2
3	197.3
4	216.4
5	235.5
6	254.6
7	273.7
8	292.7
9	311.8
10	330.9
11	350.0
12	369.1
13	388.2
14	407.3
15	426.4
16	445.5
17	483.7

V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 1 OF 2- 6110

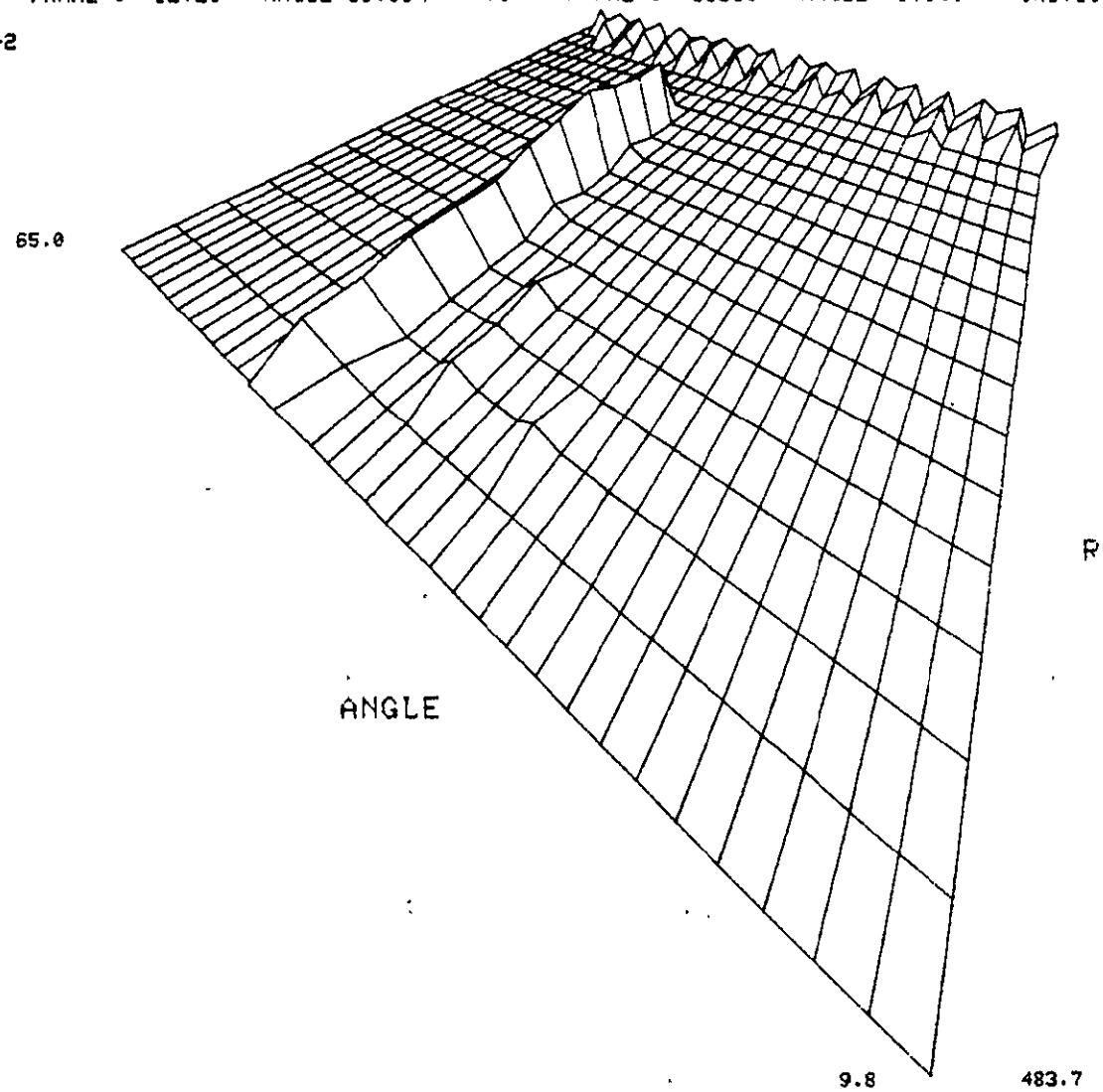
* SCAN # 18 FRAME # 12720 ANGLE 65.054 TO FRAME # 13360 ANGLE 9.570 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM V = 16.0

AVERAGE V = 1.6

ANGLE	
1	65.0
2	64.8
3	64.2
4	63.2
5	62.0
6	60.4
7	58.7
8	56.8
9	55.1
10	53.4
11	51.6
12	49.9
13	48.2
14	46.5
15	44.9
16	43.1
17	41.4
18	39.7
19	37.9
20	36.2
21	34.4
22	32.7
23	31.0
24	29.2
25	27.5
26	25.7
27	23.9
28	22.2
29	20.4
30	18.6
31	16.8
32	15.0
33	13.3
34	11.5
35	10.1
36	9.2



	R
1	159.1
2	178.2
3	197.3
4	216.4
5	235.5
6	254.6
7	273.7
8	292.7
9	311.8
10	330.9
11	350.0
12	369.1
13	388.2
14	407.3
15	426.4
16	445.5
17	463.7

V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

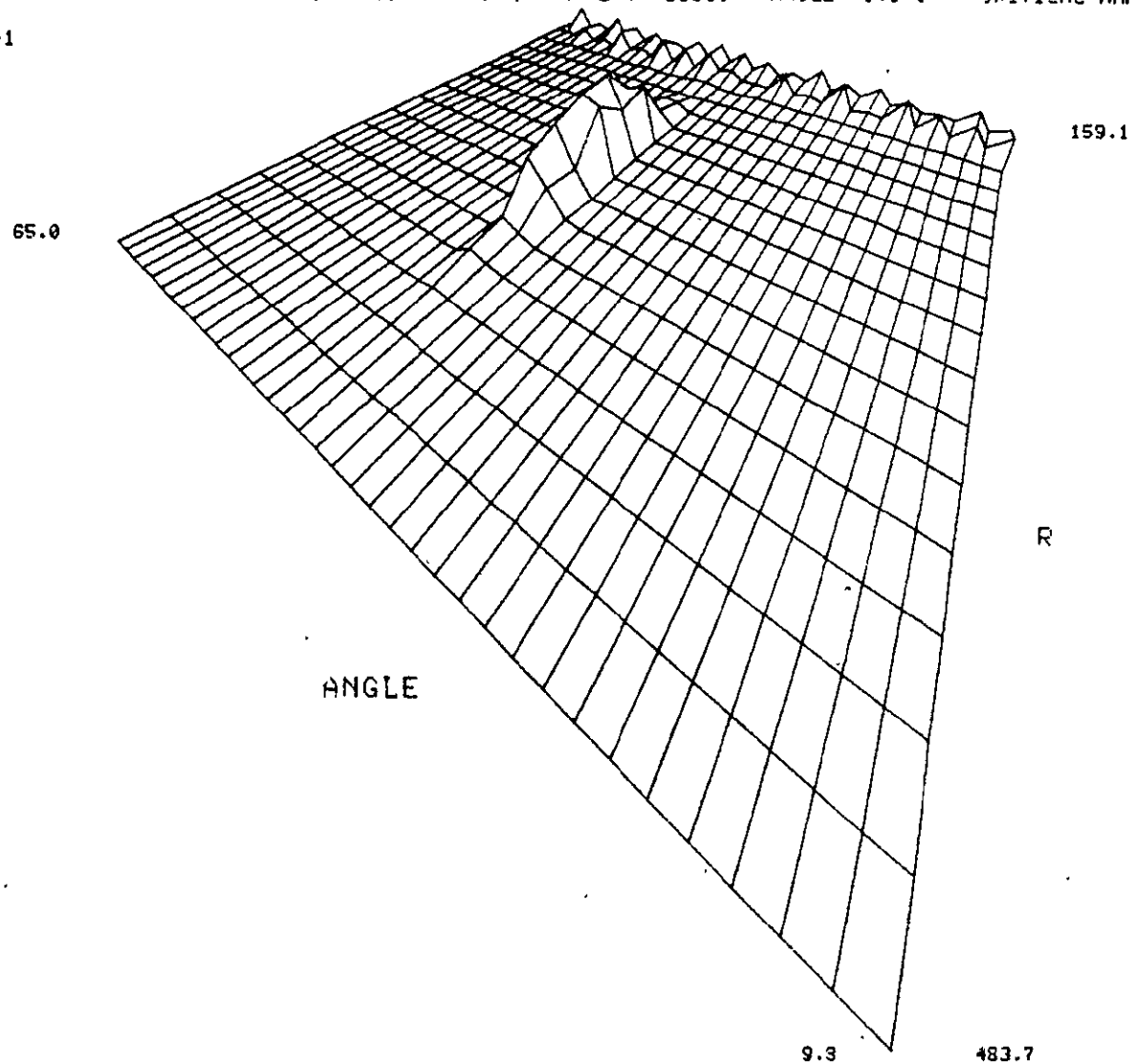
ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

* SCAN # 18 FRAME # 12720 ANGLE 65.054 TO FRAME # 13360 ANGLE 9.570 CRITICAL AMP AT CELL 62

OPTION # 31-1

ANGLE	
1	65.0
2	64.8
3	64.2
4	63.2
5	62.0
6	60.4
7	58.7
8	56.8
9	55.1
10	53.4
11	51.6
12	49.9
13	48.2
14	46.5
15	44.8
16	43.1
17	41.4
18	39.7
19	37.9
20	36.2
21	34.4
22	32.7
23	31.0
24	29.2
25	27.5
26	25.7
27	23.9
28	22.2
29	20.4
30	18.6
31	16.8
32	15.0
33	13.3
34	11.5
35	10.1
36	9.8



	R
1	159.1
2	178.2
3	197.3
4	216.4
5	235.5
6	254.6
7	273.7
8	292.7
9	311.8
10	330.9
11	350.0
12	369.1
13	388.2
14	407.3
15	426.4
16	445.5
17	483.7

U & IMAX, R, A DISPLAY

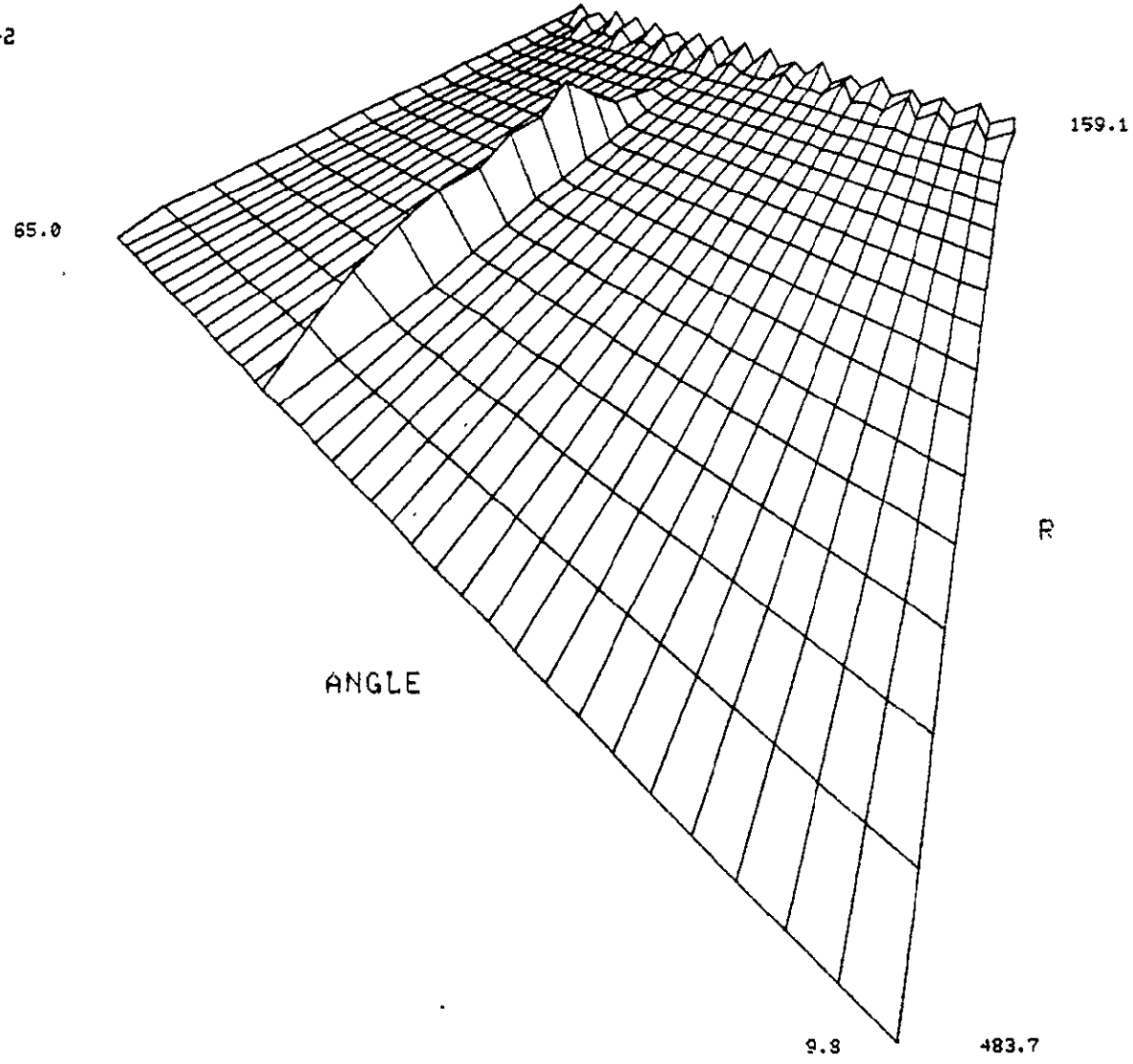
ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

* SCAN # 18 FRAME # 12720 ANGLE 65.054 TO FRAME # 12360 ANGLE 9.570 CRITICAL AMP AT CELL 62

OPTION # 31-2

	ANGLE
1	65.0
2	64.8
3	64.2
4	63.2
5	62.0
6	60.4
7	58.7
8	56.8
9	55.1
10	53.4
11	51.6
12	49.9
13	48.2
14	46.5
15	44.8
16	43.1
17	41.4
18	39.7
19	37.9
20	36.2
21	34.4
22	32.7
23	31.0
24	29.2
25	27.5
26	25.7
27	23.9
28	22.2
29	20.4
30	18.6
31	16.8
32	15.0
33	13.3
34	11.5
35	10.1
36	9.8



	R
1	159.1
2	178.2
3	197.3
4	216.4
5	235.5
6	254.6
7	273.7
8	292.7
9	311.8
10	330.9
11	350.0
12	369.1
13	388.2
14	407.3
15	426.4
16	445.5
17	483.7

U * Imax, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

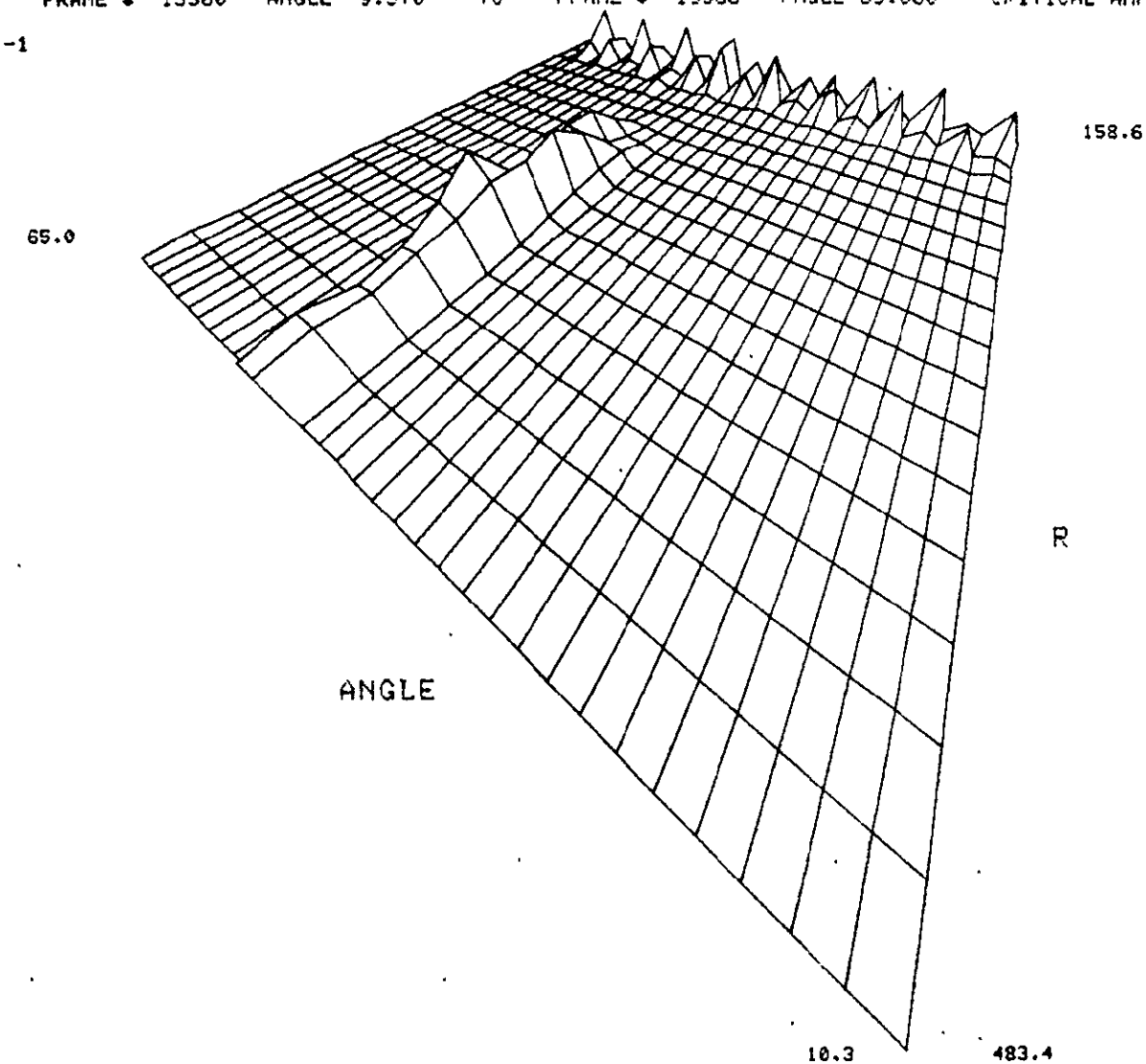
\# SCAN # 19 FRAME # 13360 ANGLE 9.570 TO FRAME # 13968 ANGLE 65.060 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 39.0

AVERAGE I = 1.8

ANGLE	
1	10.3
2	11.3
3	12.7
4	14.1
5	15.8
6	17.6
7	19.4
8	21.1
9	22.8
10	24.6
11	26.4
12	28.1
13	29.8
14	31.6
15	33.3
16	35.1
17	36.8
18	38.5
19	40.3
20	42.1
21	43.8
22	45.5
23	47.1
24	48.8
25	50.5
26	52.3
27	53.9
28	55.7
29	57.4
30	59.3
31	61.1
32	62.8
33	64.3
34	65.0



	R
1	158.6
2	177.7
3	196.8
4	215.9
5	235.1
6	254.2
7	273.3
8	292.4
9	311.5
10	330.6
11	349.7
12	368.8
13	387.9
14	407.0
15	426.1
16	445.2
17	483.4

Imax, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

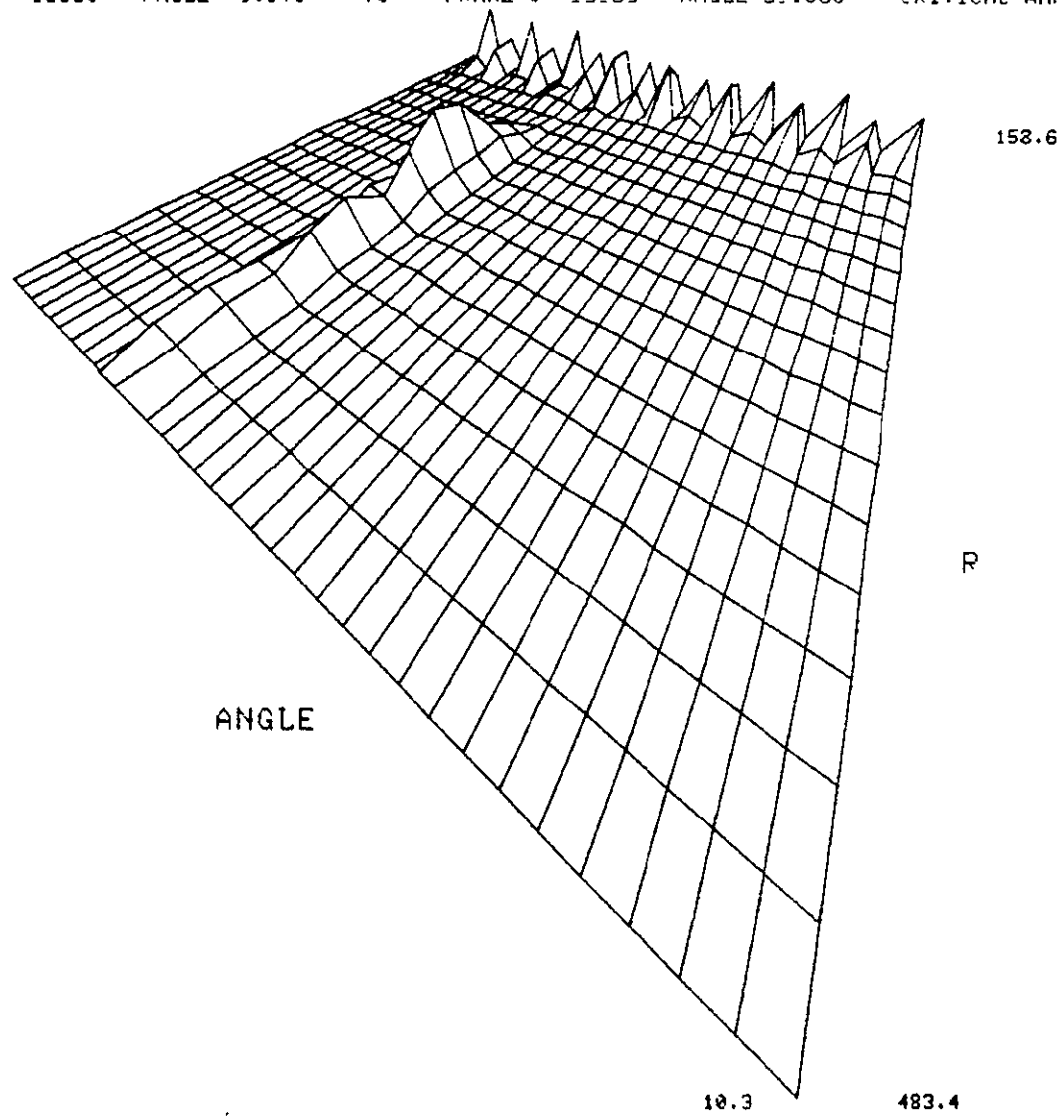
* SCAN # 19 FRAME # 13360 ANGLE 9.570 TO FRAME # 13966 ANGLE 65.060 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 58.0

AVERAGE I = 3.3

	ANGLE
1	10.3
2	11.3
3	12.7
4	14.1
5	15.8
6	17.6
7	19.4
8	21.1
9	22.8
10	24.6
11	26.4
12	28.1
13	29.8
14	31.6
15	33.3
16	35.1
17	36.8
18	38.5
19	40.3
20	42.1
21	43.8
22	45.5
23	47.1
24	48.8
25	50.5
26	52.3
27	53.9
28	55.7
29	57.4
30	59.3
31	61.1
32	62.8
33	64.3
34	65.0



	R
1	158.6
2	177.7
3	196.8
4	215.9
5	235.1
6	254.2
7	273.3
8	292.4
9	311.5
10	330.6
11	349.7
12	368.3
13	387.9
14	407.0
15	426.1
16	445.2
17	483.4

I_{MAX}, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 1 OF 2- 6110

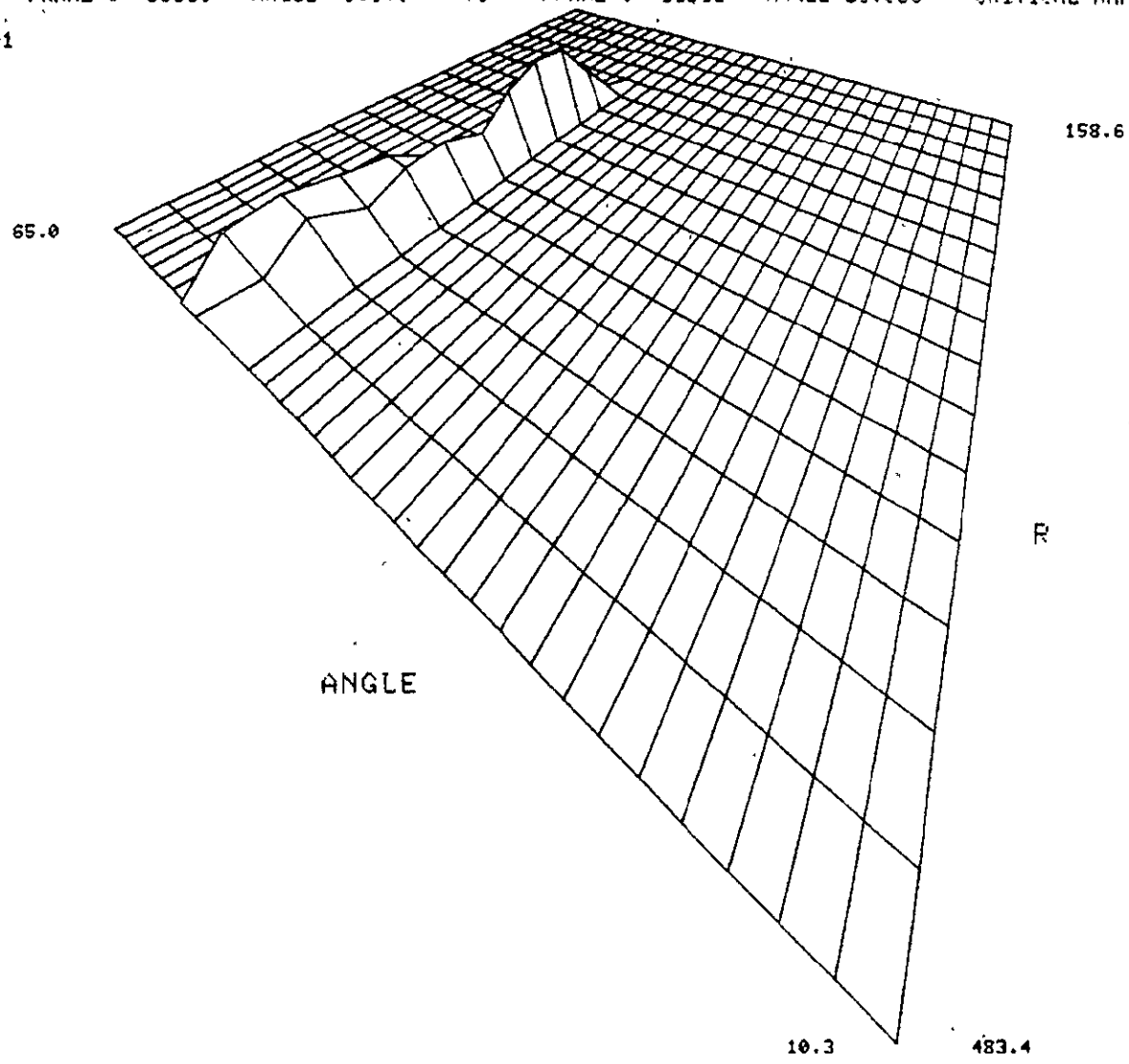
* SCAN # 19 FRAME # 13360 ANGLE 9.570 TO FRAME # 13966 ANGLE 65.060 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 26.0

AVERAGE I = 0.5

ANGLE	
1	10.3
2	11.3
3	12.7
4	14.1
5	15.8
6	17.6
7	19.4
8	21.1
9	22.8
10	24.6
11	26.4
12	28.1
13	29.8
14	31.6
15	33.3
16	35.1
17	36.8
18	38.5
19	40.3
20	42.1
21	43.8
22	45.5
23	47.1
24	48.8
25	50.5
26	52.3
27	53.9
28	55.7
29	57.4
30	59.3
31	61.1
32	62.8
33	64.3
34	65.0



	R
1	158.6
2	177.7
3	196.8
4	215.9
5	235.1
6	254.2
7	273.3
8	292.4
9	311.5
10	330.6
11	349.7
12	368.8
13	387.9
14	407.0
15	426.1
16	445.2
17	483.4

I, R, A DISPLAY AT VELOCITY CELL 62

ORIGINAL PAGE IS OF POOR QUALITY

ORIGINAL PAGE IS
OF POOR QUALITY

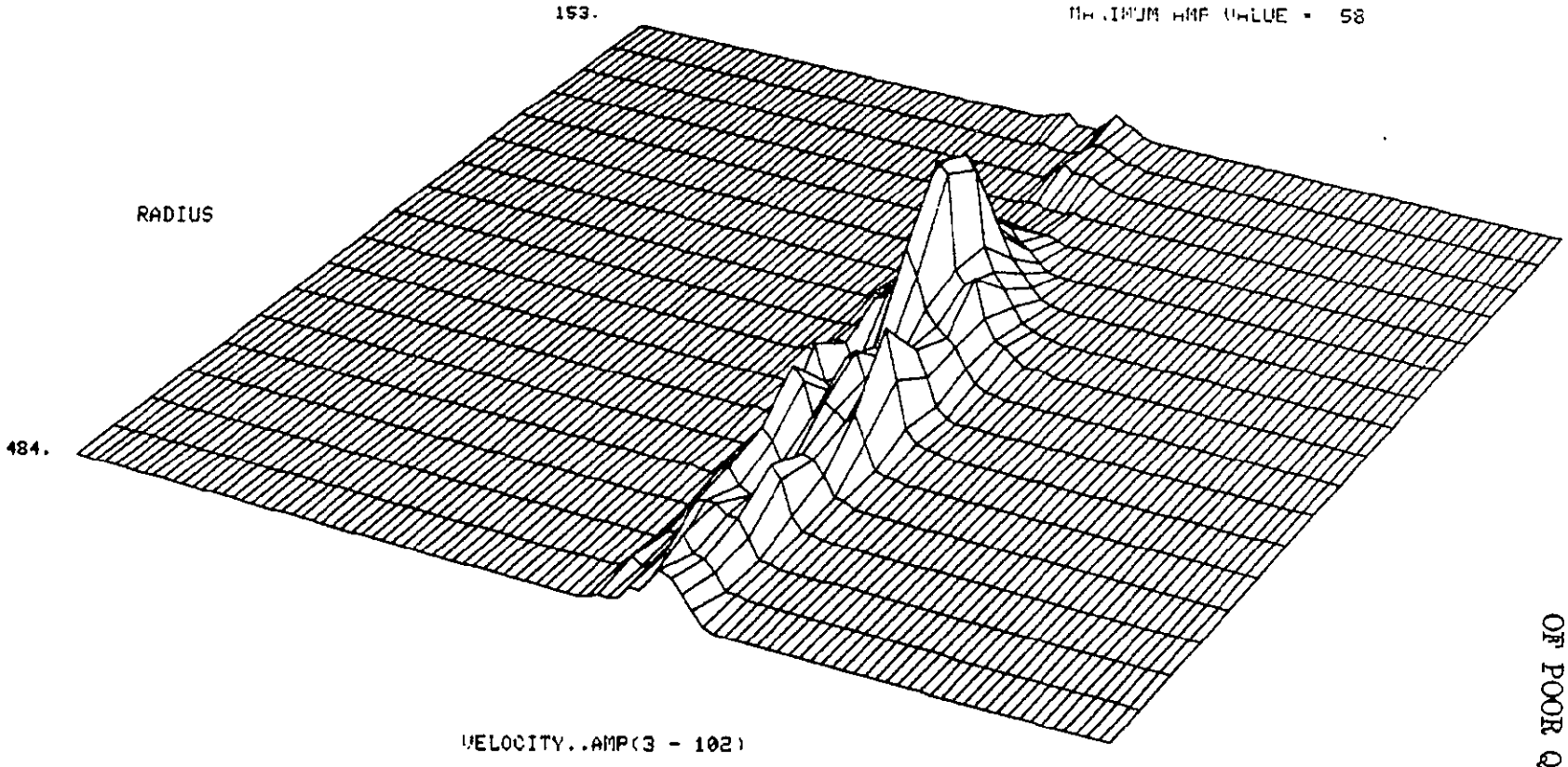
NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 1 OF 3- 6110

SCAN # 19 FRAME # 13360 ANGLE 9.570 TO FRAME # 13966 ANGLE 65.060 CRITICAL AMP AT CELL 62

FRAME # 13761 TO 13779

ANGLE = 47.16

MAXIMUM AMP VALUE = 58



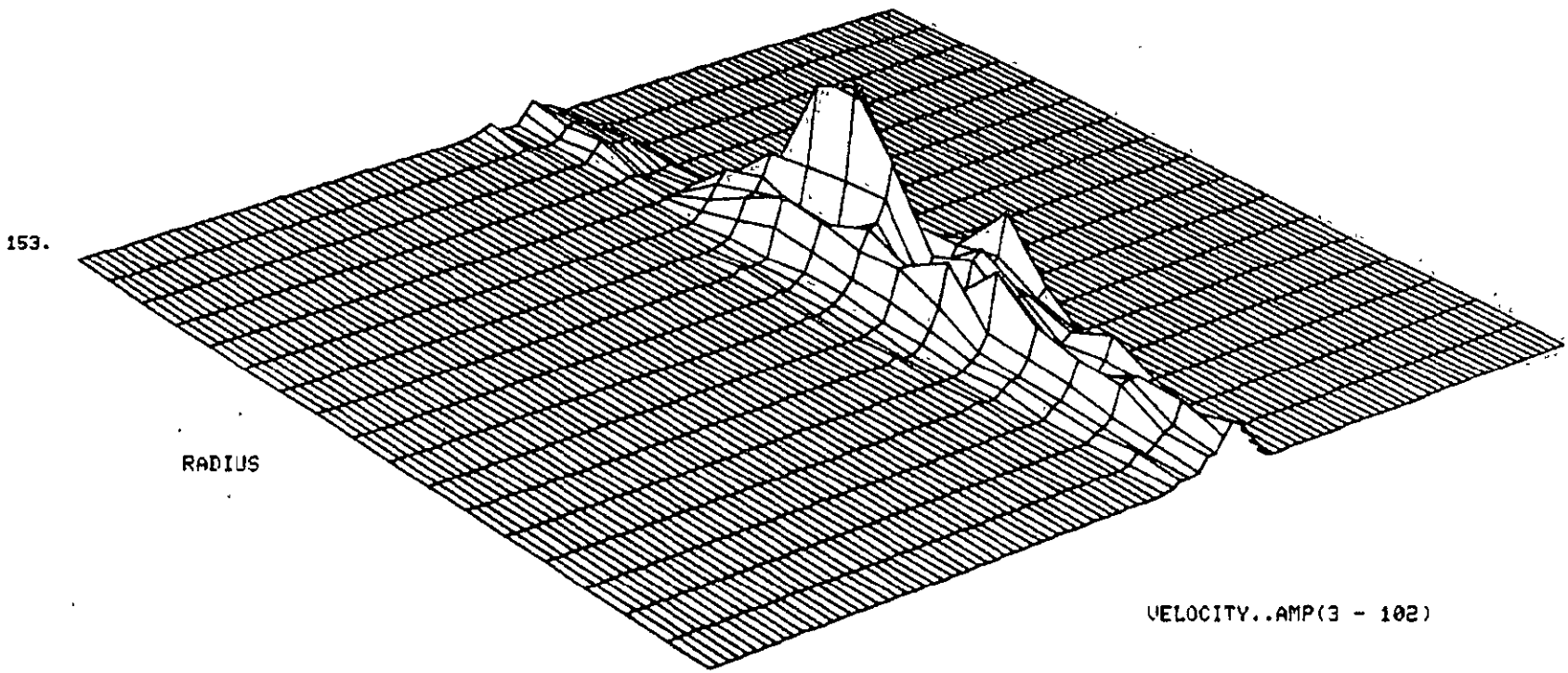
NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 19 FRAME # 13360 ANGLE 9.570 TO FRAME # 13966 ANGLE 65.060 CRITICAL AMP AT CELL 62

FRAME # 13761 TO 13779

ANGLE = 47.16

MAXIMUM AMP VALUE = 58



NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

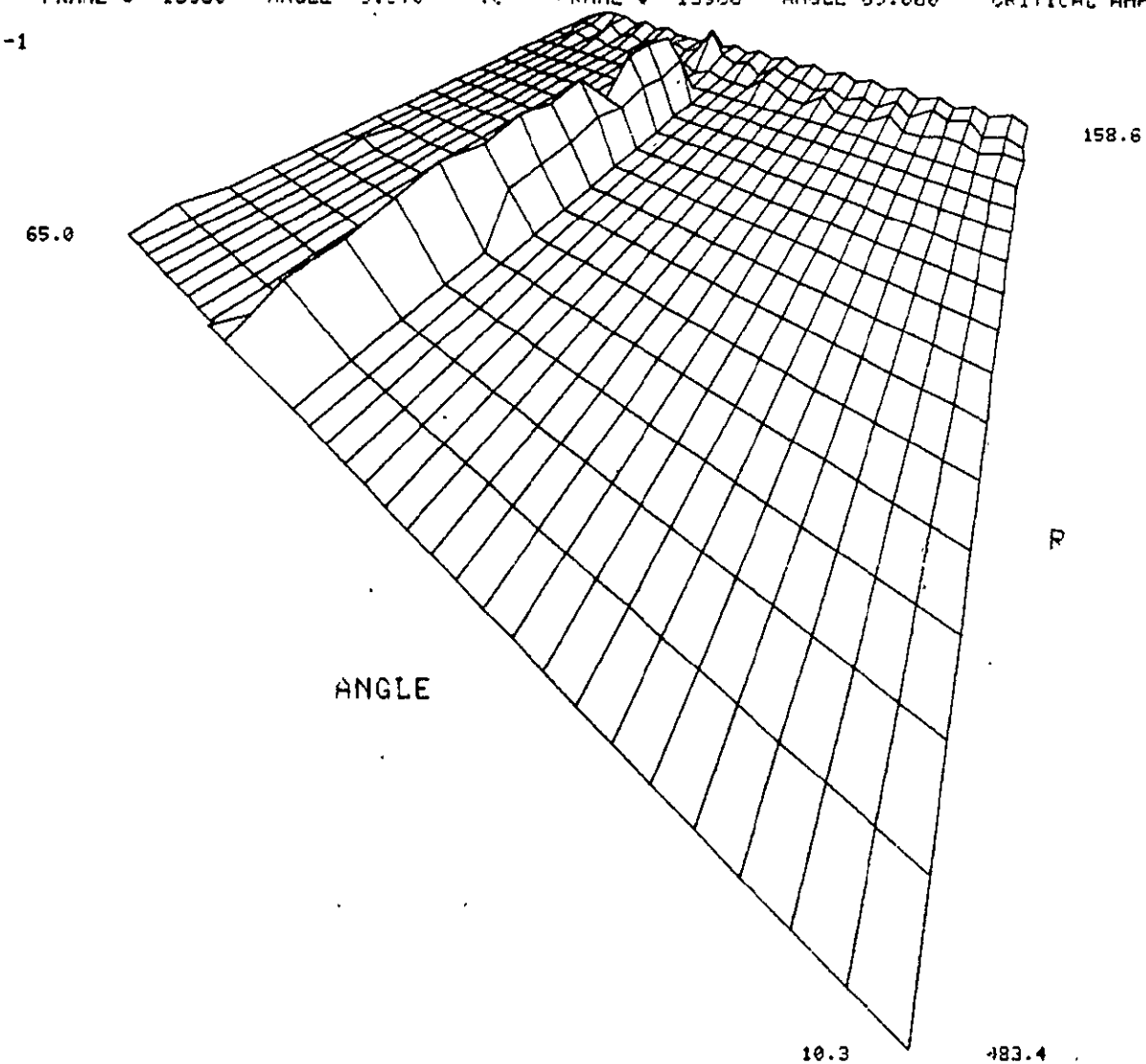
* SCAN # 19 FRAME # 13360 ANGLE 9.570 TO FRAME # 13366 ANGLE 65.060 CRITICAL AMP HT CELL 62

OPTION # 21-1

MAXIMUM V = 13.0

AVERAGE V = 1.6

	ANGLE
1	10.3
2	11.3
3	12.7
4	14.1
5	15.8
6	17.6
7	19.4
8	21.1
9	22.8
10	24.6
11	26.4
12	28.1
13	29.8
14	31.6
15	33.3
16	35.1
17	36.8
18	38.5
19	40.3
20	42.1
21	43.8
22	45.5
23	47.1
24	48.8
25	50.5
26	52.3
27	53.9
28	55.7
29	57.4
30	59.3
31	61.1
32	62.8
33	64.3
34	65.0



	R
1	158.6
2	177.7
3	196.8
4	215.9
5	235.1
6	254.2
7	273.3
8	292.4
9	311.5
10	330.6
11	349.7
12	368.8
13	387.9
14	407.0
15	426.1
16	445.2
17	483.4

ORIGINAL PAGE IS OF POOR QUALITY

V, R, A DISPLAY (VELOCITY AT I_{MAX})

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

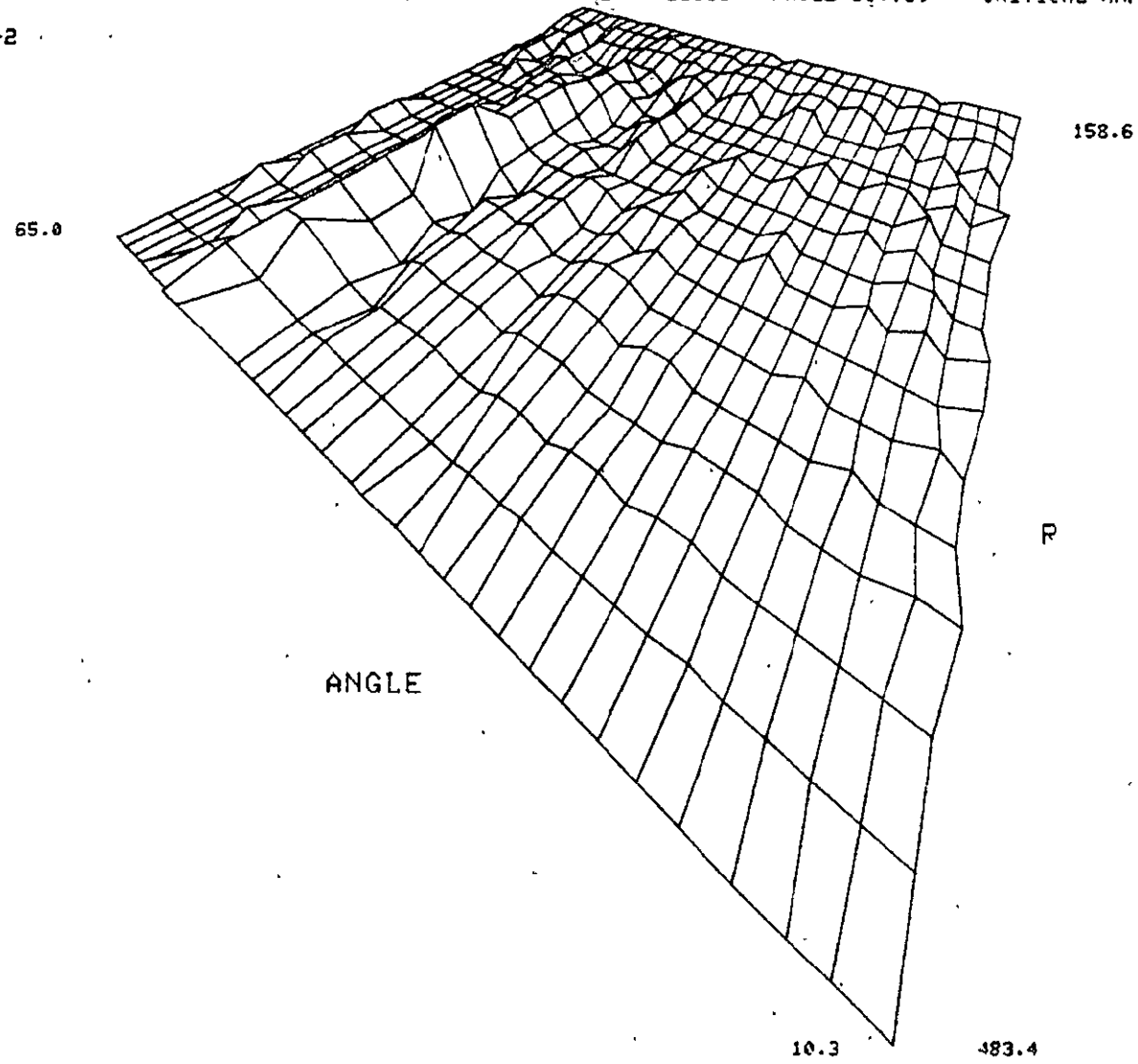
* SCAN # 19 FRAME # 13360 ANGLE 9.570 TO FRAME # 13966 ANGLE 65.060 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V = 12.0

AVERAGE V = 2.4

	ANGLE
1	10.3
2	11.3
3	12.7
4	14.1
5	15.8
6	17.6
7	19.4
8	21.1
9	22.8
10	24.6
11	26.4
12	28.1
13	29.8
14	31.6
15	33.3
16	35.1
17	36.8
18	38.5
19	40.3
20	42.1
21	43.8
22	45.5
23	47.1
24	48.8
25	50.5
26	52.3
27	53.9
28	55.7
29	57.4
30	59.3
31	61.1
32	62.8
33	64.3
34	65.0



	R
1	158.6
2	177.7
3	196.8
4	215.9
5	235.1
6	254.2
7	273.3
8	292.4
9	311.5
10	330.6
11	349.7
12	368.8
13	387.9
14	407.0
15	426.1
16	445.2
17	483.4

V, R, A DISPLAY (VELOCITY AT I_{MAX})

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- E110

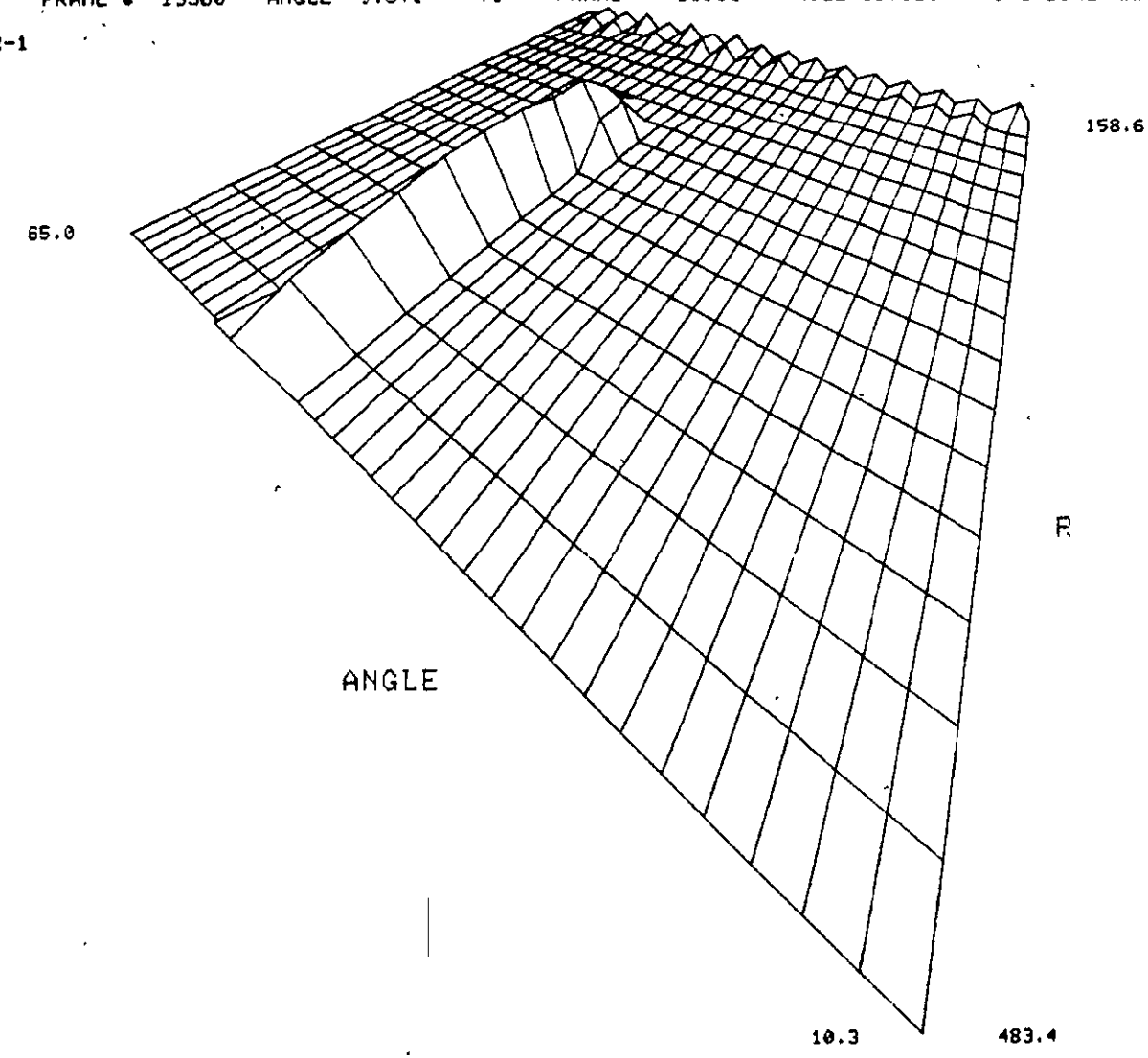
SCAN # 19 FRAME # 13360 ANGLE 9.570 TO FRAME # 13966 ANGLE 65.060 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 15.0

AVERAGE V = 1.5

ANGLE	
1	10.3
2	11.3
3	12.7
4	14.1
5	15.8
6	17.6
7	19.4
8	21.1
9	22.8
10	24.6
11	26.4
12	28.1
13	29.8
14	31.6
15	33.3
16	35.1
17	36.8
18	38.5
19	40.3
20	42.1
21	43.8
22	45.5
23	47.1
24	48.8
25	50.5
26	52.3
27	53.9
28	55.7
29	57.4
30	59.3
31	61.1
32	62.8
33	64.3
34	65.0



	R
1	158.6
2	177.7
3	196.8
4	215.9
5	235.1
6	254.2
7	273.3
8	292.4
9	311.5
10	330.6
11	349.7
12	368.8
13	387.9
14	407.0
15	426.1
16	445.2
17	483.4

V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 3- 6110

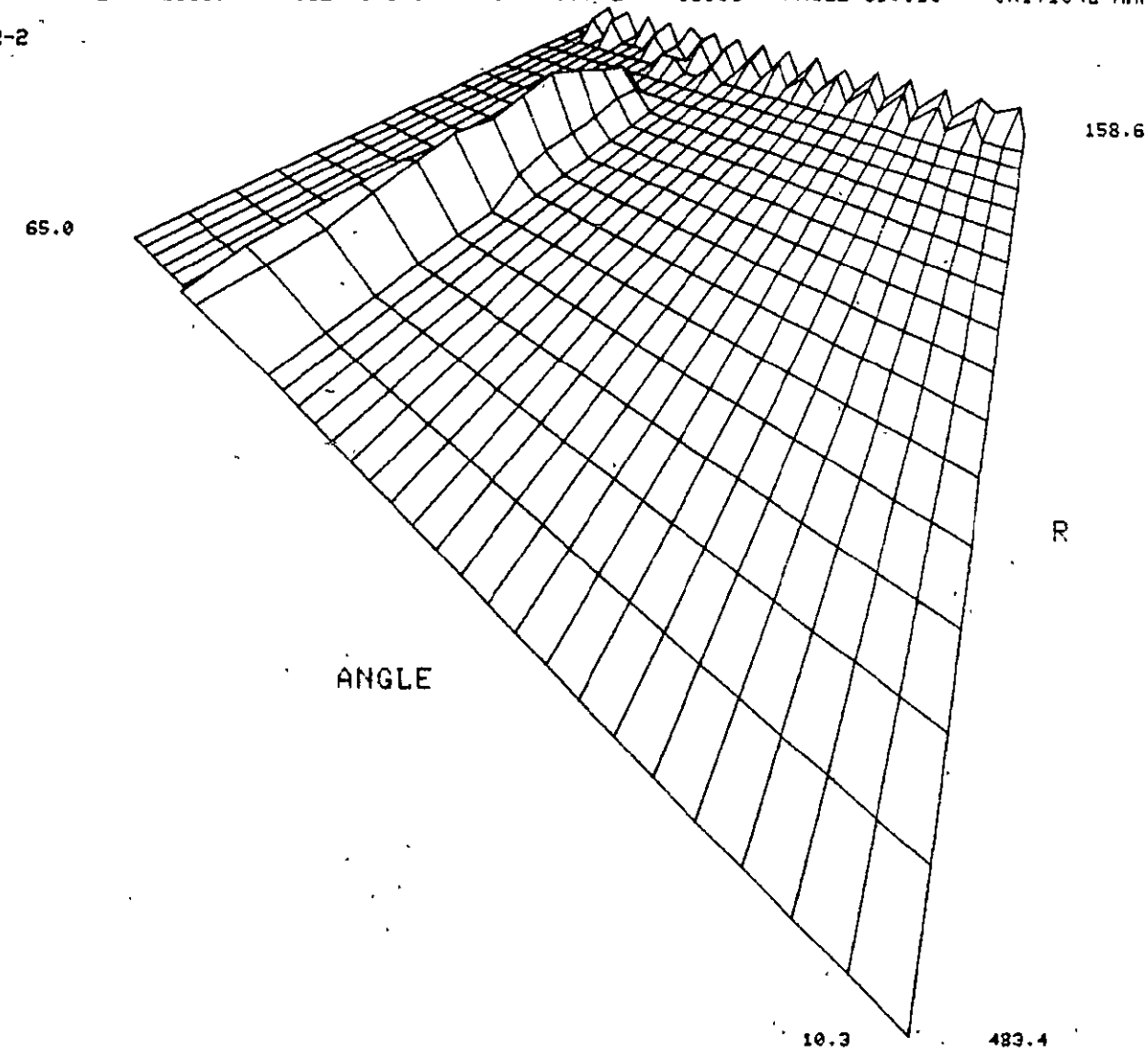
* SCAN # 19 FRAME # 13360 ANGLE 9.570 TO FRAME # 13966 ANGLE 65.060 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM V = 15.0

AVERAGE V = 1.7

ANGLE	
1	10.3
2	11.3
3	12.7
4	14.1
5	15.8
6	17.6
7	19.4
8	21.1
9	22.8
10	24.6
11	26.4
12	28.1
13	29.8
14	31.6
15	33.3
16	35.1
17	36.8
18	38.5
19	40.3
20	42.1
21	43.8
22	45.5
23	47.1
24	48.8
25	50.5
26	52.3
27	53.9
28	55.7
29	57.4
30	59.3
31	61.1
32	62.8
33	64.3
34	65.0



R	
1	158.6
2	177.7
3	196.8
4	215.9
5	235.1
6	254.2
7	273.3
8	292.4
9	311.5
10	330.6
11	349.7
12	368.3
13	387.9
14	407.0
15	426.1
16	445.2
17	423.4

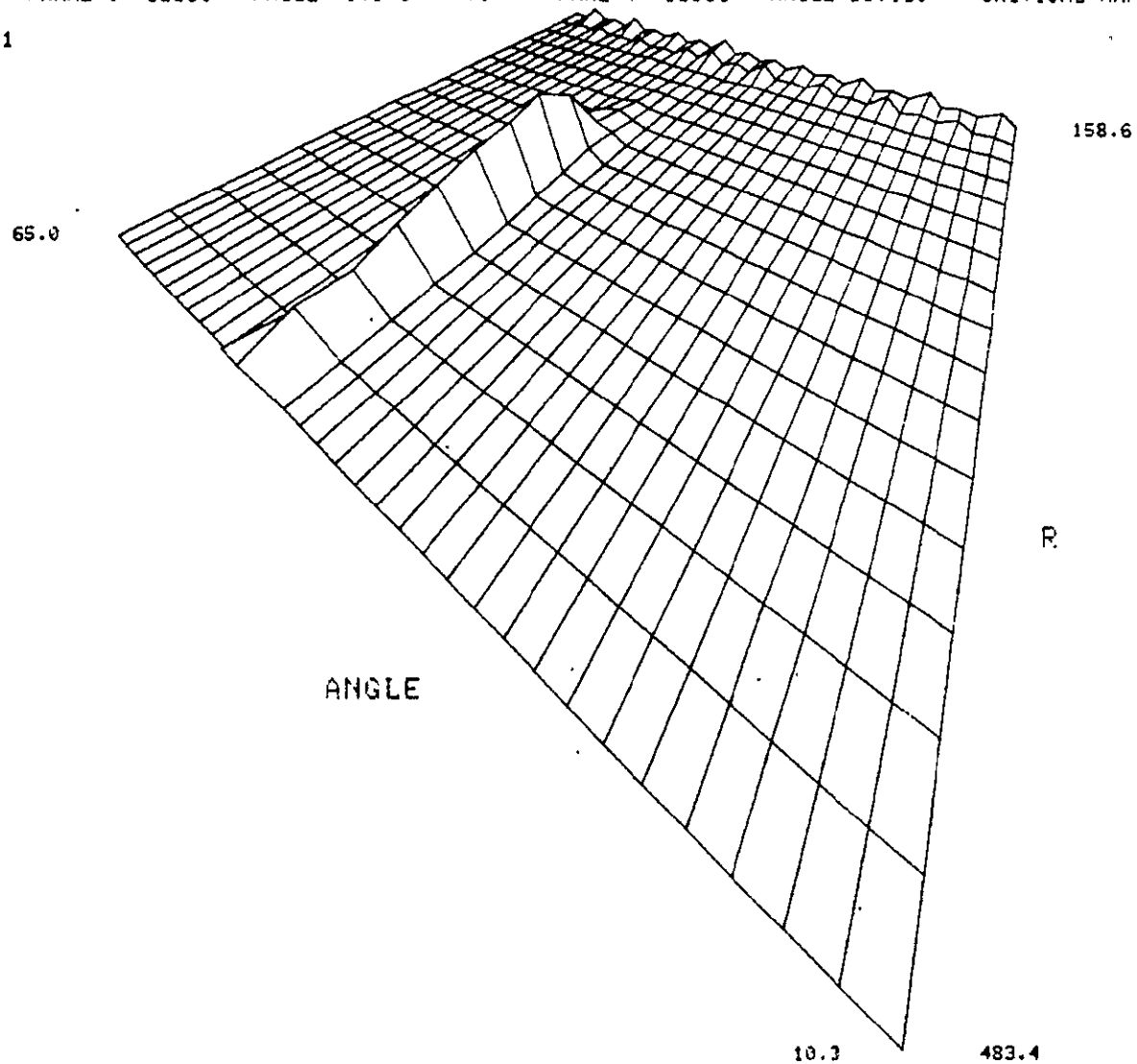
U_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 19 FRAME # 13360 ANGLE 9.570 TO FRAME # 13966 ANGLE 65.060 CRITICAL AMP AT CELL 62

OPTION # 31-1

ANGLE	
1	10.3
2	11.3
3	12.7
4	14.1
5	15.8
6	17.6
7	19.4
8	21.1
9	22.8
10	24.6
11	26.4
12	28.1
13	29.8
14	31.6
15	33.3
16	35.1
17	36.8
18	38.5
19	40.3
20	42.1
21	43.8
22	45.5
23	47.1
24	48.8
25	50.5
26	52.3
27	53.9
28	55.7
29	57.4
30	59.3
31	61.1
32	62.8
33	64.3
34	65.0



	R
1	158.6
2	177.7
3	196.8
4	215.9
5	235.1
6	254.2
7	273.3
8	292.4
9	311.5
10	330.6
11	349.7
12	368.3
13	387.9
14	407.0
15	426.1
16	445.2
17	483.4

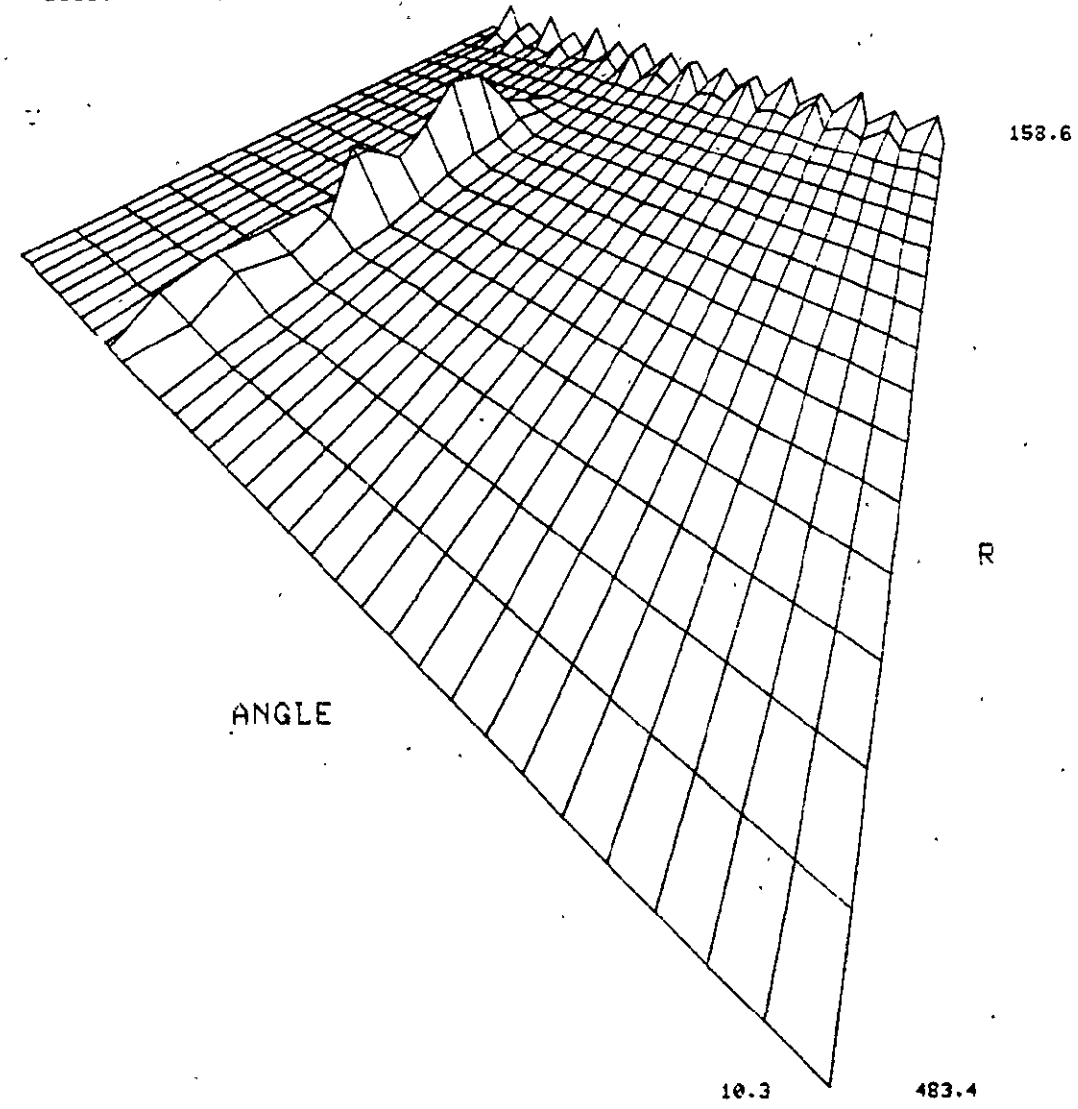
U * Imax, R, A DISPLAY

ALL PAGE IS POOR QUALITY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

* SCAN # 19 FRAME # 13360 ANGLE 9.570 TO FRAME # 13966 ANGLE 65.060 CRITICAL AMP AT CELL 62

OPTION # 31-2



ANGLE	
1	10.3
2	11.3
3	12.7
4	14.1
5	15.8
6	17.6
7	19.4
8	21.1
9	22.8
10	24.6
11	26.4
12	28.1
13	29.8
14	31.6
15	33.3
16	35.1
17	36.8
18	38.5
19	40.3
20	42.1
21	43.8
22	45.5
23	47.1
24	48.8
25	50.5
26	52.3
27	53.9
28	55.7
29	57.4
30	59.3
31	61.1
32	62.8
33	64.3
34	65.0

	R
1	158.6
2	177.7
3	196.8
4	215.9
5	235.1
6	254.2
7	273.3
8	292.4
9	311.5
10	330.6
11	349.7
12	362.8
13	337.9
14	407.0
15	426.1
16	445.2
17	483.4

ORIGINAL PAGE IS OF POOR QUALITY

V * Imax, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 833 RUN # 4 TAPE 1 OF 2- 6110

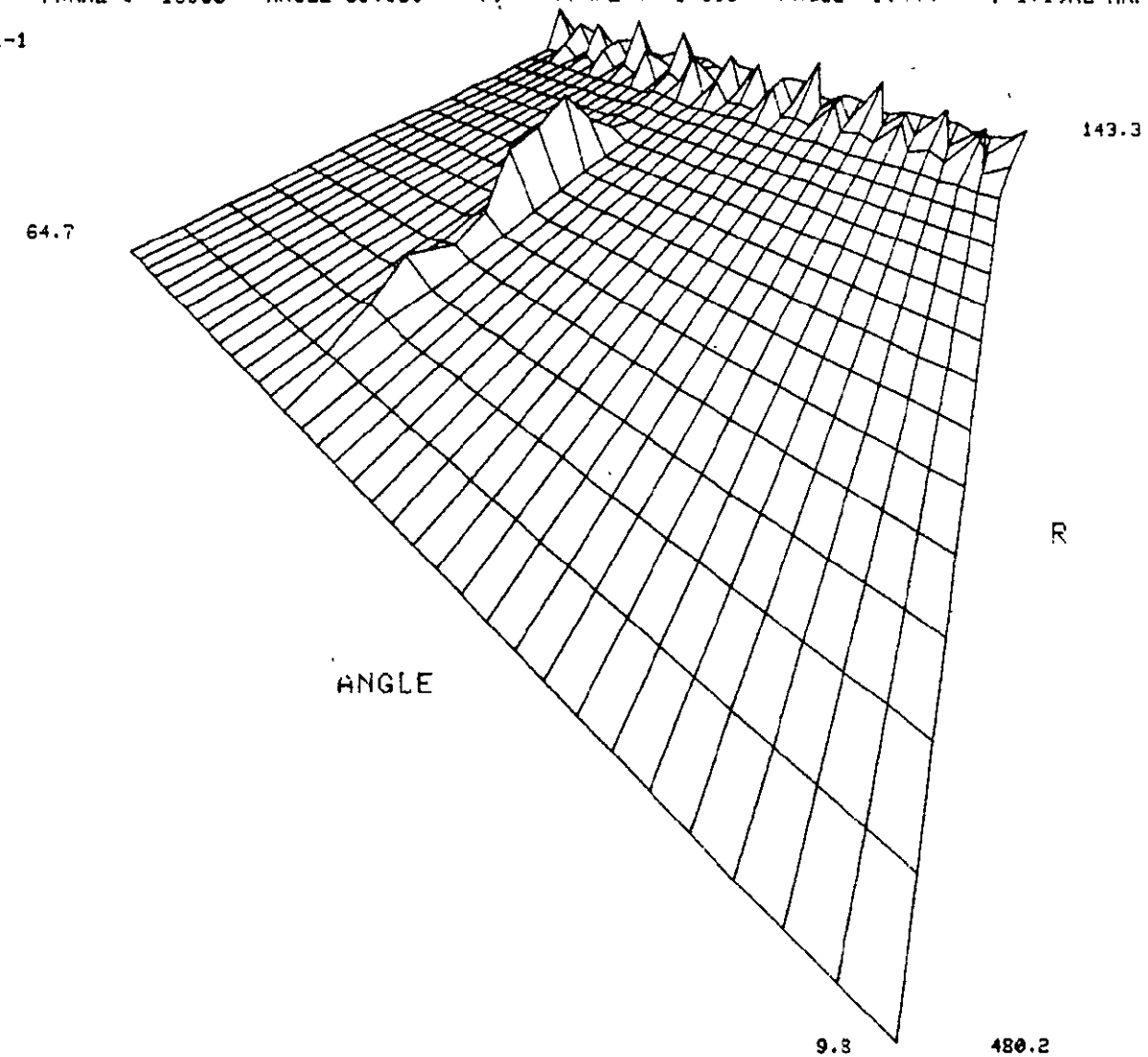
* SCAN # 20 FRAME # 13966 ANGLE 65.060 TO FRAME # 14599 ANGLE 3.444 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 40.0

AVERAGE I = 1.6

ANGLE	
1	64.7
2	64.4
3	63.5
4	62.3
5	60.8
6	59.1
7	57.2
8	55.5
9	53.7
10	51.9
11	50.3
12	48.6
13	47.0
14	45.2
15	43.5
16	41.9
17	40.1
18	38.3
19	36.5
20	34.8
21	33.1
22	31.3
23	29.6
24	27.9
25	26.1
26	24.3
27	22.5
28	20.7
29	19.0
30	17.2
31	15.5
32	13.7
33	11.9
34	10.4
35	9.8



	R
1	143.3
2	163.1
3	182.9
4	202.8
5	222.6
6	242.4
7	262.2
8	282.0
9	301.8
10	321.6
11	341.5
12	361.3
13	381.1
14	400.9
15	420.7
16	440.5
17	480.2

I_{MAX}, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 8110

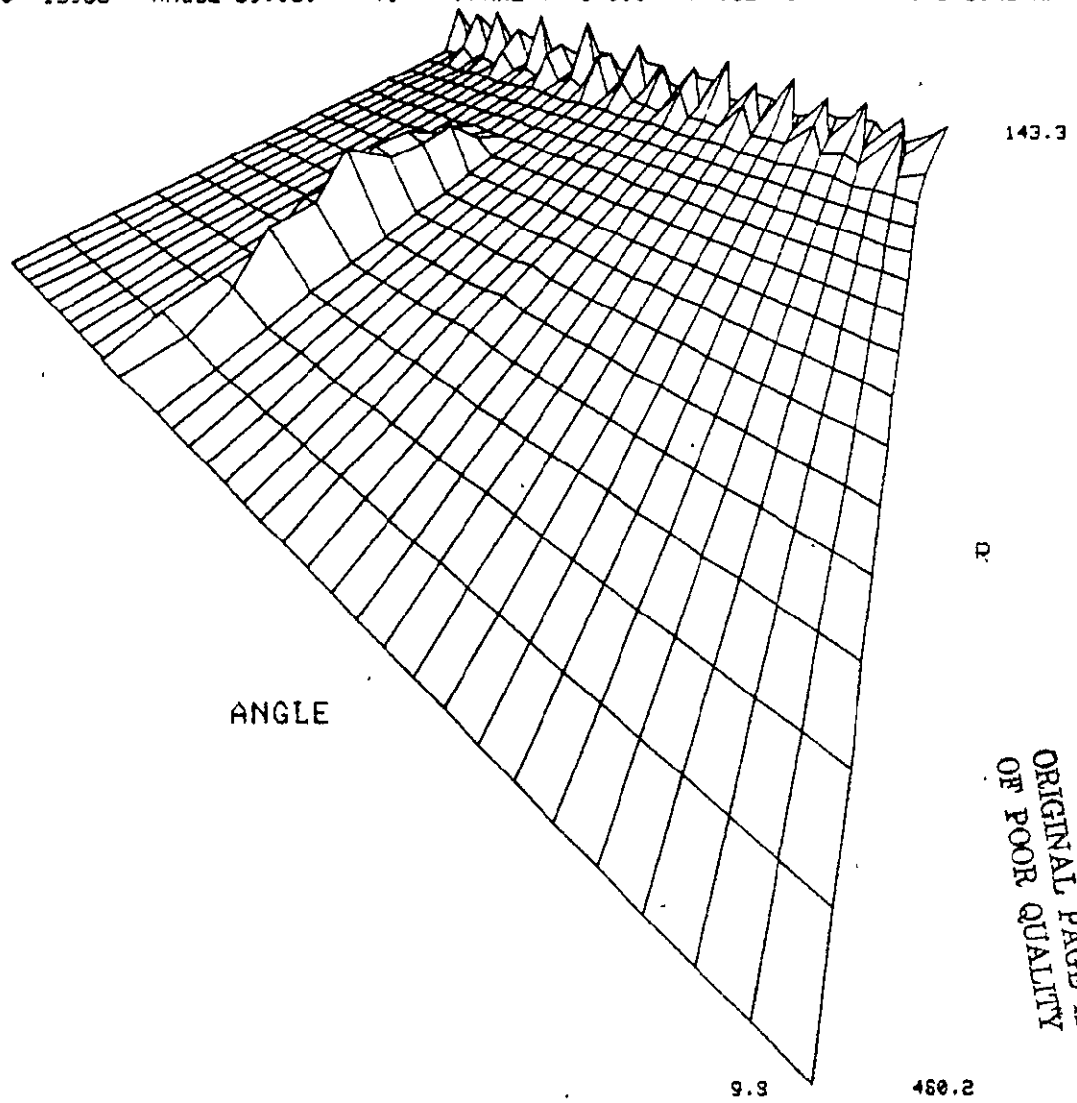
\# SCAN # 20 FRAME # 13966 ANGLE 65.060 TO FRAME # 14599 ANGLE 3.444 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 65.0

AVERAGE I = 4.0

ANGLE	
1	64.7
2	64.4
3	63.5
4	62.3
5	60.8
6	59.1
7	57.2
8	55.5
9	53.7
10	51.9
11	50.3
12	48.6
13	47.0
14	45.2
15	43.5
16	41.9
17	40.1
18	38.3
19	36.5
20	34.8
21	33.1
22	31.3
23	29.6
24	27.9
25	26.1
26	24.3
27	22.5
28	20.7
29	19.0
30	17.2
31	15.5
32	13.7
33	11.9
34	10.4
35	9.8



	R
1	143.3
2	163.1
3	182.9
4	202.8
5	222.6
6	242.4
7	262.2
8	282.0
9	301.8
10	321.6
11	341.5
12	361.3
13	381.1
14	400.9
15	420.7
16	440.5
17	460.2

ORIGINAL PAGE IS OF POOR QUALITY

I_{MAX}, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 5110

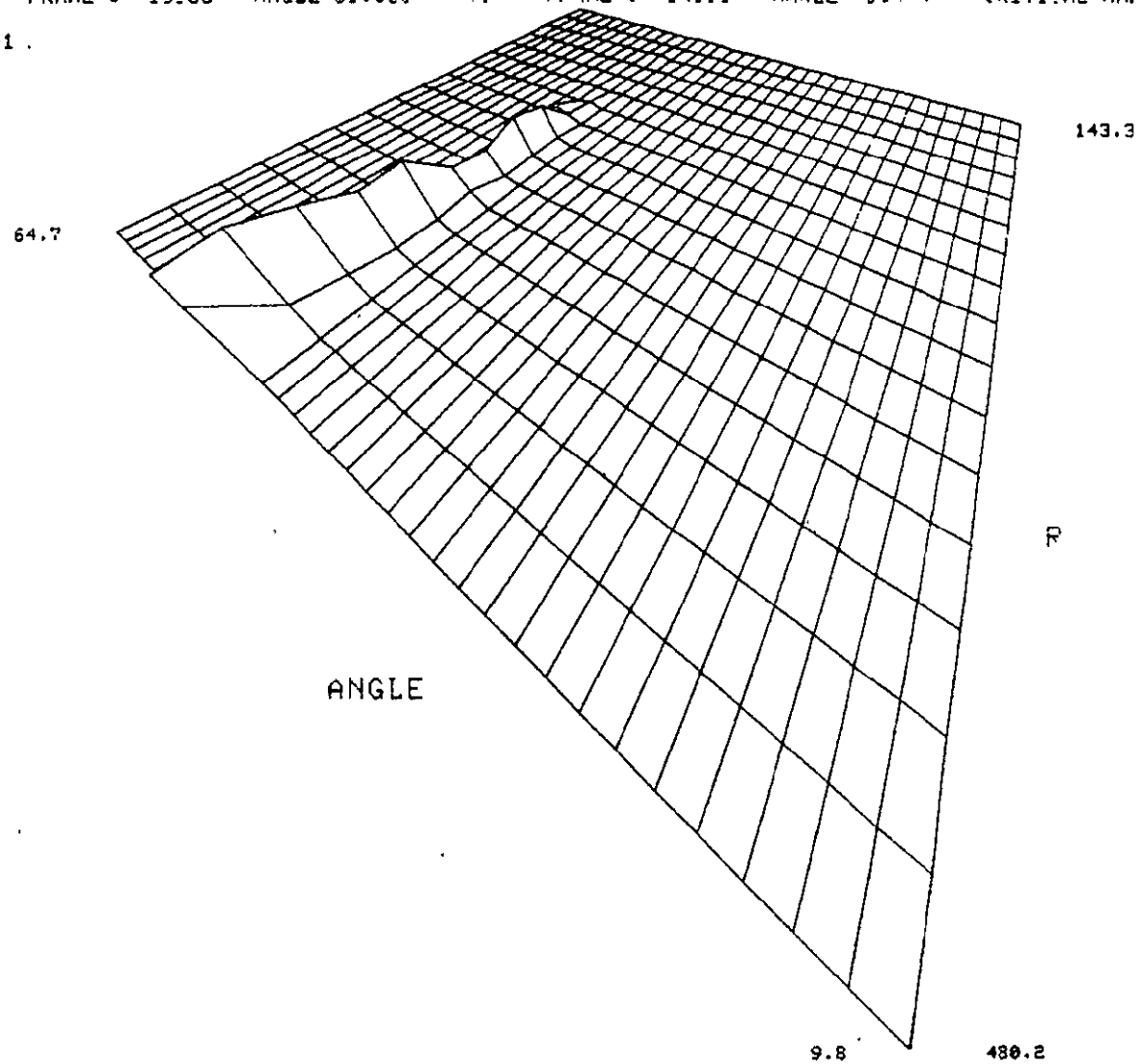
* SCAN # 20 FRAME # 13966 ANGLE 65.060 TO FRAME # 14599 ANGLE 9.444 CRITICAL AMP AT CELL 62

OPTION # 12-1 .

MAXIMUM I = 22.0

AVERAGE I = 0.3

	ANGLE
1	64.7
2	64.4
3	63.5
4	62.3
5	60.8
6	59.1
7	57.2
8	55.5
9	53.7
10	51.9
11	50.3
12	48.6
13	47.0
14	45.2
15	43.5
16	41.9
17	40.1
18	38.3
19	36.5
20	34.8
21	33.1
22	31.3
23	29.6
24	27.9
25	26.1
26	24.3
27	22.5
28	20.7
29	19.0
30	17.2
31	15.5
32	13.7
33	11.9
34	10.4
35	9.8



	P
1	143.3
2	163.1
3	182.9
4	202.8
5	222.6
6	242.4
7	262.2
8	282.0
9	301.8
10	321.6
11	341.5
12	361.3
13	381.1
14	400.9
15	420.7
16	440.5
17	430.2

I, R, A DISPLAY AT VELOCITY CELL 62

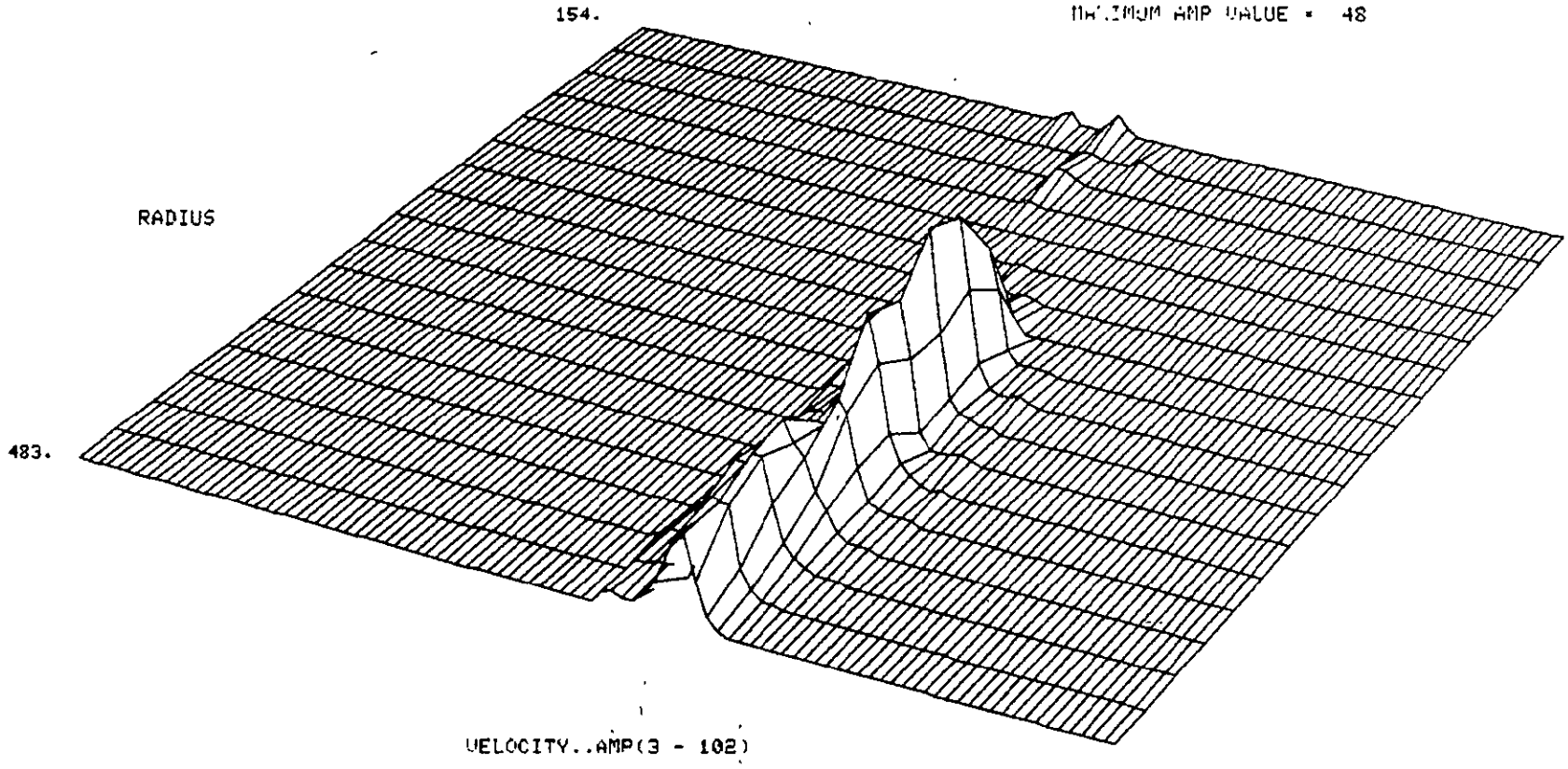
NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 20 FRAME # 13966 ANGLE 65.060 TO FRAME # 14599 ANGLE 9.444 CRITICAL AMP AT CELL 62

FRAME # 14162 TO 14180

ANGLE = 48.56

MAXIMUM AMP VALUE = 48



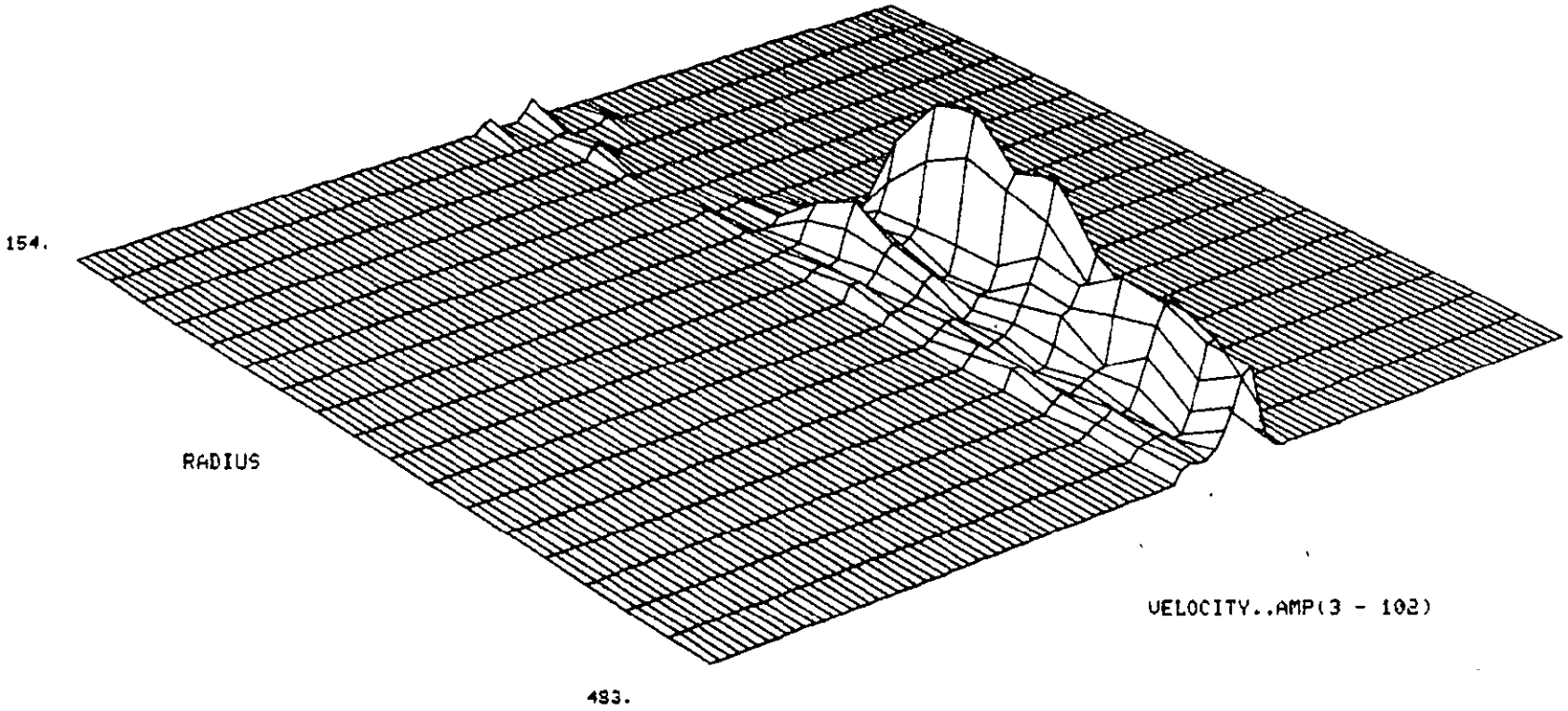
NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 20 FRAME # 13966 ANGLE 65.060 TO FRAME # 14599 ANGLE 9.444 CRITICAL AMP AT CELL 62

FRAME # 14162 TO 14180

ANGLE = 48.56

MAXIMUM AMP VALUE = 48



ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

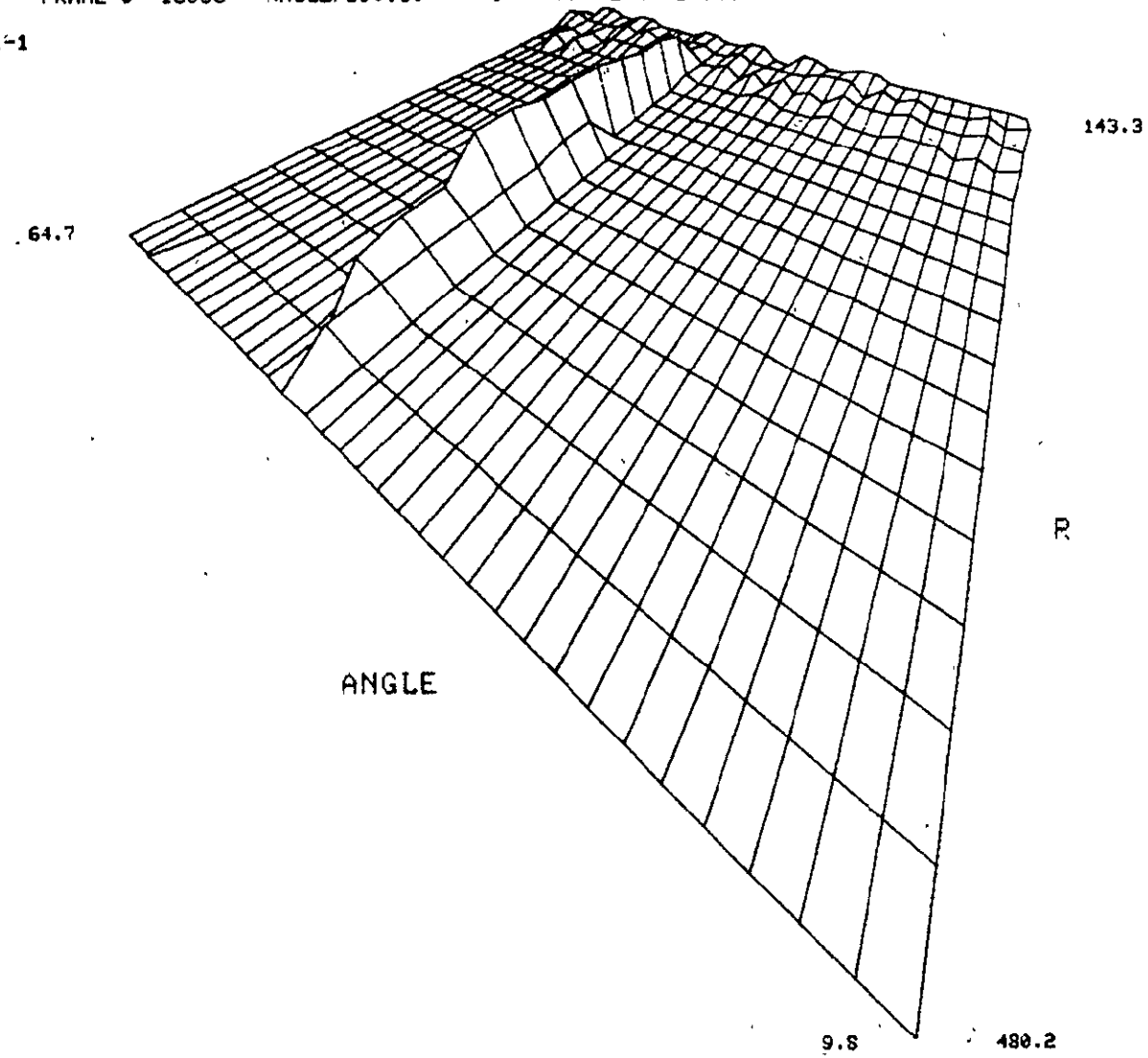
SCAN # 20 FRAME # 13966 ANGLE 65.060 TO FRAME # 14599 ANGLE 9.444 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 12.0

AVERAGE V = 1.5

ANGLE	
1	64.7
2	64.4
3	63.5
4	62.3
5	60.8
6	59.1
7	57.2
8	55.5
9	53.7
10	51.9
11	50.3
12	48.6
13	47.0
14	45.2
15	43.5
16	41.9
17	40.1
18	38.3
19	36.5
20	34.8
21	33.1
22	31.3
23	29.6
24	27.9
25	26.1
26	24.3
27	22.5
28	20.7
29	19.0
30	17.2
31	15.5
32	13.7
33	11.9
34	10.4
35	9.8



R	
1	143.3
2	163.1
3	182.9
4	202.8
5	222.6
6	242.4
7	262.2
8	282.0
9	301.8
10	321.6
11	341.5
12	361.3
13	381.1
14	400.9
15	420.7
16	440.5
17	480.2

ORIGINAL PAGE IS OF POOR QUALITY

V, R, A DISPLAY (VELOCITY AT I_{MAX})

NASA PROJECT DUST DEVIL. DAY 233 RUN # 4 TAPE 1 OF 2- 6110

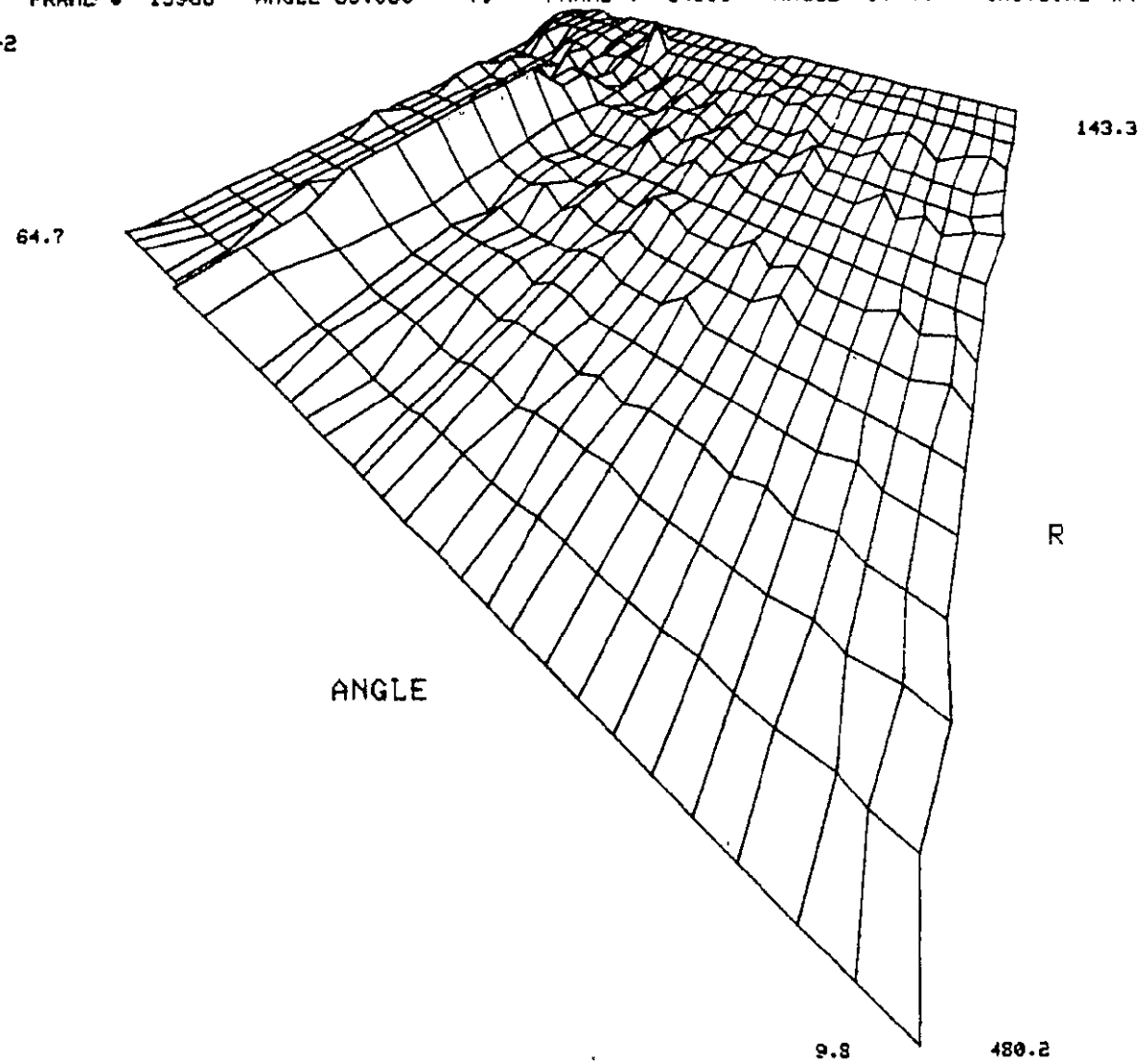
* SCAN # 20 FRAME # 13966 ANGLE 65.060 TO FRAME # 14599 ANGLE 9.444 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V = 13.0

AVERAGE V = 2.5

ANGLE	
1	64.7
2	64.4
3	63.5
4	62.3
5	60.8
6	59.1
7	57.2
8	55.5
9	53.7
10	51.9
11	50.3
12	48.6
13	47.0
14	45.2
15	43.5
16	41.9
17	40.1
18	38.3
19	36.5
20	34.8
21	33.1
22	31.3
23	29.6
24	27.9
25	26.1
26	24.3
27	22.5
28	20.7
29	19.0
30	17.2
31	15.5
32	13.7
33	11.9
34	10.4
35	9.8



	R
1	143.3
2	163.1
3	182.9
4	202.8
5	222.6
6	242.4
7	262.2
8	282.0
9	301.8
10	321.6
11	341.5
12	361.3
13	381.1
14	400.9
15	420.7
16	440.5
17	480.2

V, R, A DISPLAY (VELOCITY AT I_{MAX})

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

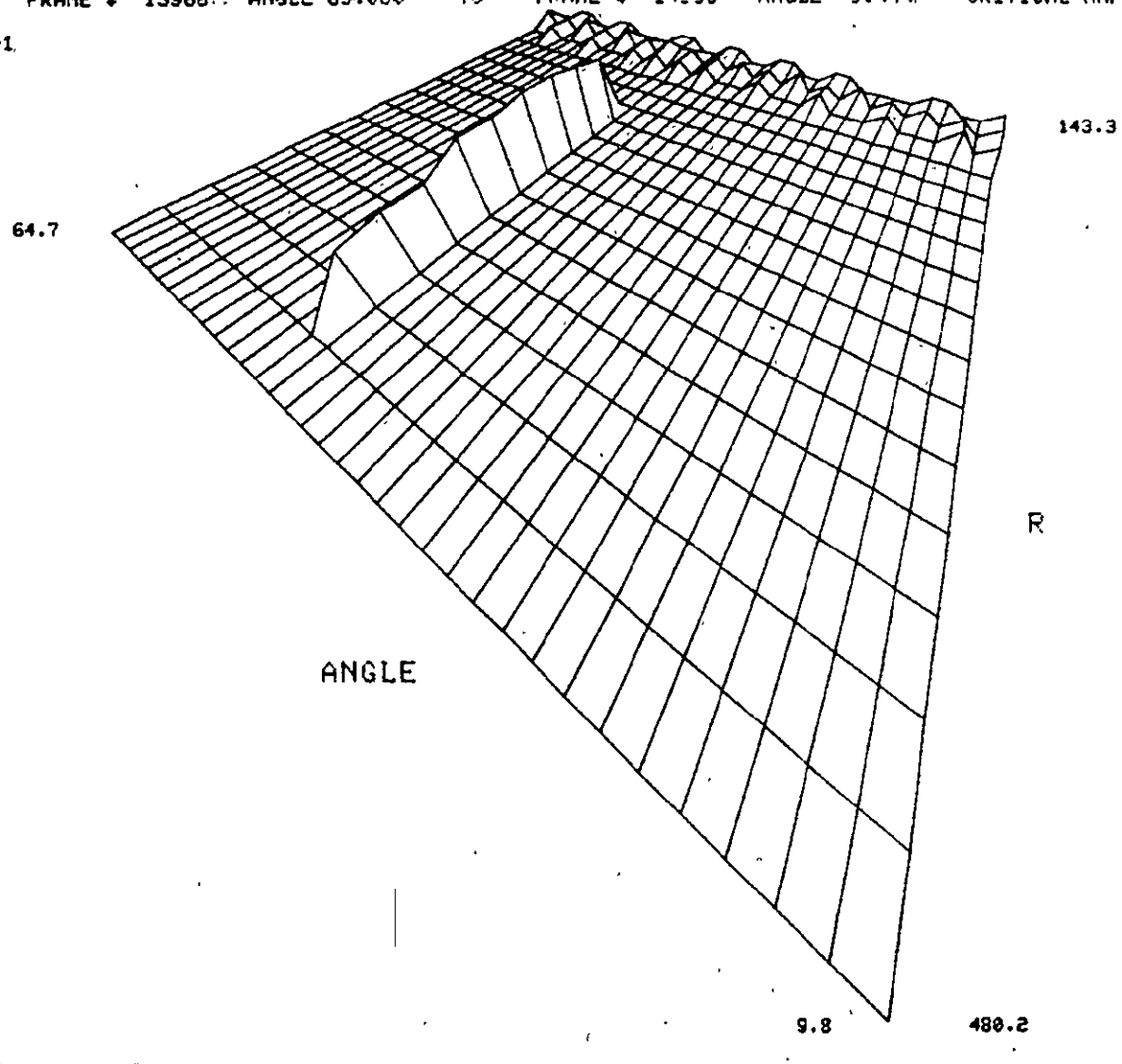
SCAN # 20 FRAME # 13966 ANGLE 65.060 TO FRAME # 14599 ANGLE 9.444 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 13.0

AVERAGE V = 1.3

ANGLE	
1	64.7
2	64.4
3	63.5
4	62.3
5	60.8
6	59.1
7	57.2
8	55.5
9	53.7
10	51.9
11	50.3
12	48.6
13	47.0
14	45.2
15	43.5
16	41.9
17	40.1
18	38.3
19	36.5
20	34.8
21	33.1
22	31.3
23	29.6
24	27.9
25	26.1
26	24.3
27	22.5
28	20.7
29	19.0
30	17.2
31	15.5
32	13.7
33	11.9
34	10.4
35	9.8



R	
1	143.3
2	163.1
3	182.9
4	202.8
5	222.6
6	242.4
7	262.2
8	282.0
9	301.8
10	321.6
11	341.5
12	361.3
13	381.1
14	400.9
15	420.7
16	440.5
17	480.2

V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = .5

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 233 , RUN # 4 TAPE 1 OF 2- 6110

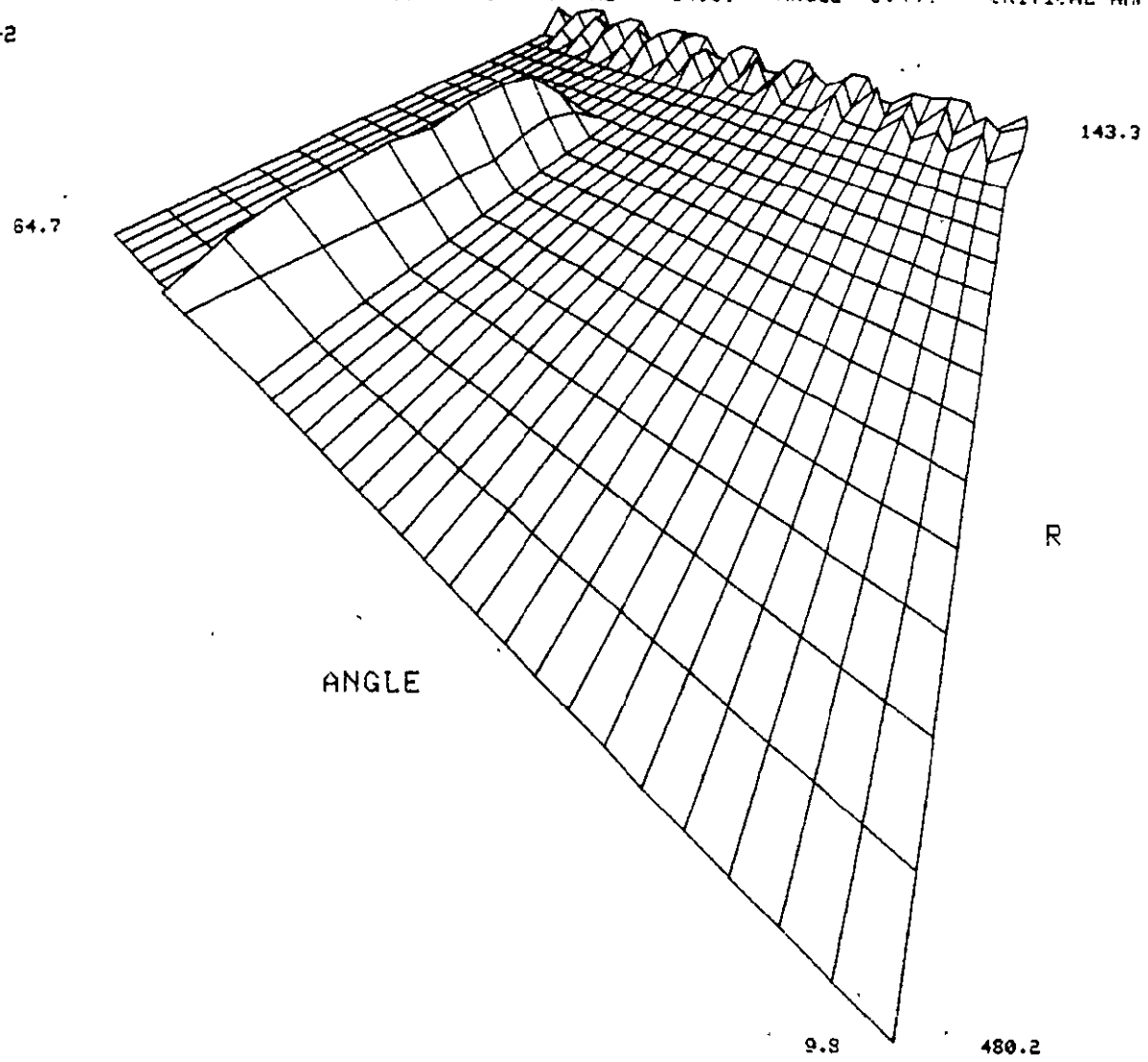
* SCAN # 20 FRAME # 13966 ANGLE 65.060 TO FRAME # 14599 ANGLE 9.444 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM V = 15.0

AVERAGE V = 1.8

	ANGLE
1	64.7
2	64.4
3	63.5
4	62.3
5	60.8
6	59.1
7	57.2
8	55.5
9	53.7
10	51.9
11	50.3
12	48.6
13	47.0
14	45.2
15	43.5
16	41.9
17	40.1
18	38.3
19	36.5
20	34.8
21	33.1
22	31.3
23	29.6
24	27.9
25	26.1
26	24.3
27	22.5
28	20.7
29	19.0
30	17.2
31	15.5
32	13.7
33	11.9
34	10.4
35	9.8



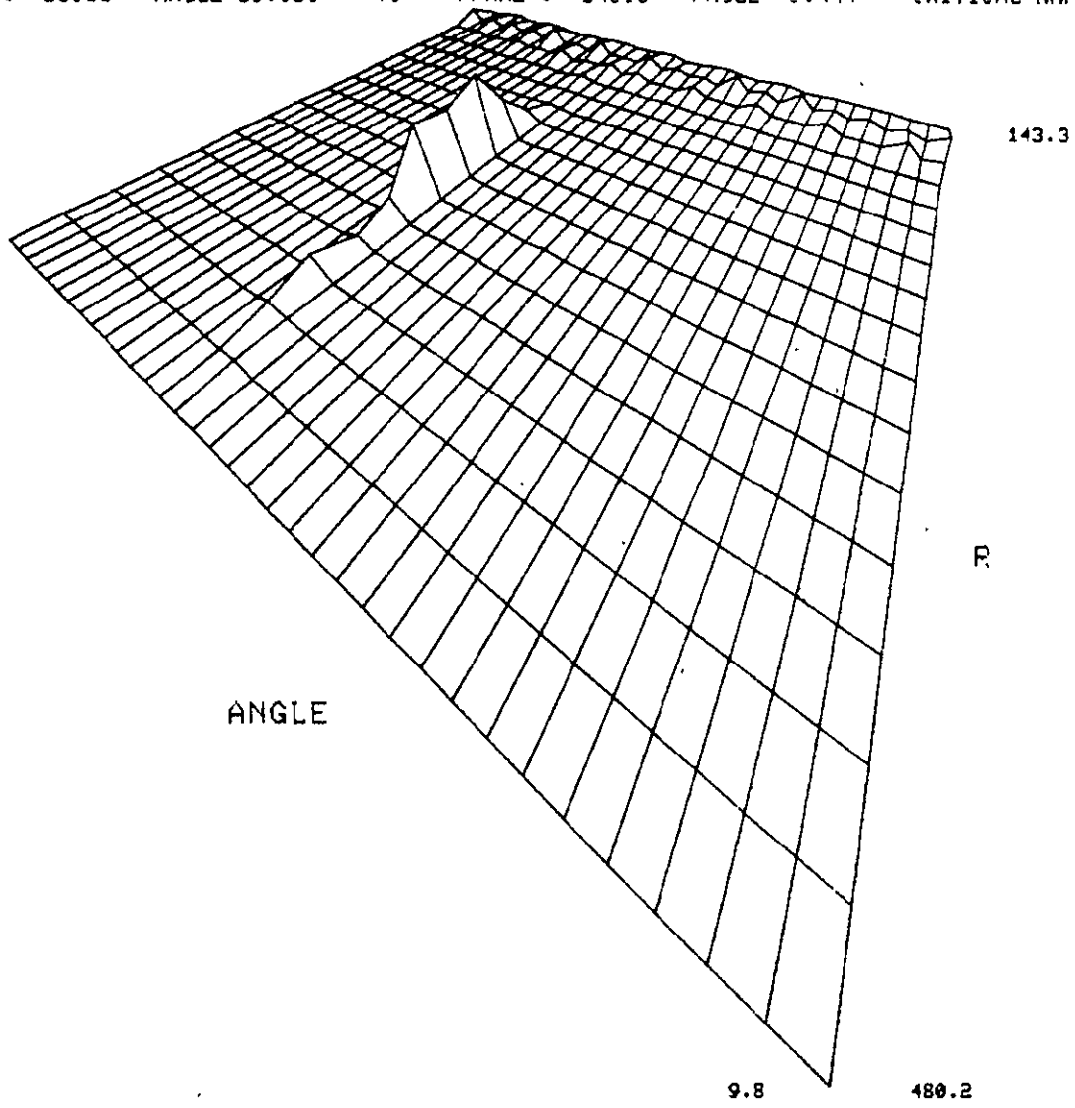
	R
1	143.3
2	163.1
3	182.9
4	202.8
5	222.6
6	242.4
7	262.2
8	282.0
9	301.8
10	321.6
11	341.5
12	361.3
13	381.1
14	400.9
15	420.7
16	440.5
17	460.2

VMAX, P, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

NASA PROJECT DUST DEVIL DAY 235 RUN # 4 TAPE 1 OF 2- 6110

* SCAN # 20 FRAME # 13966 ANGLE 65.060 TO FRAME # 14539 ANGLE 9.444 CRITICAL AMP AT CELL 62

OPTION # 31-1



ANGLE	
1	64.7
2	64.4
3	63.5
4	62.3
5	60.8
6	59.1
7	57.2
8	55.5
9	53.7
10	51.9
11	50.3
12	48.6
13	47.0
14	45.2
15	43.5
16	41.9
17	40.1
18	38.3
19	36.5
20	34.8
21	33.1
22	31.3
23	29.6
24	27.9
25	26.1
26	24.3
27	22.5
28	20.7
29	19.0
30	17.2
31	15.5
32	13.7
33	11.9
34	10.4
35	9.8

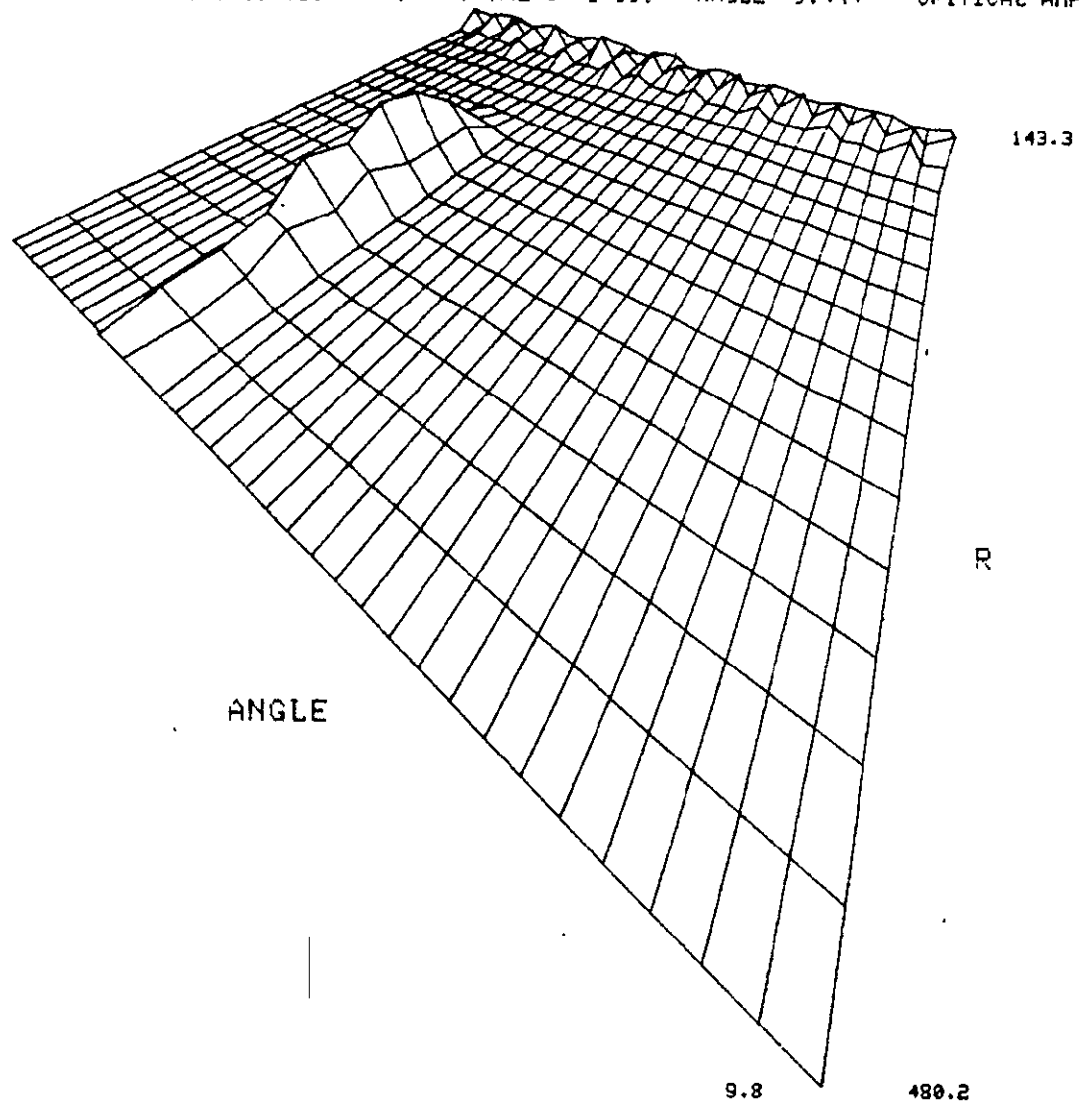
R	
1	143.3
2	163.1
3	182.9
4	202.8
5	222.6
6	242.4
7	262.2
8	282.0
9	301.8
10	321.6
11	341.5
12	361.3
13	381.1
14	400.9
15	420.7
16	440.5
17	480.2

V * I_{MAX}, R, A DISPLAY

NASA PROJECT DUST DEVIL . DAY 238 RUN #. 4 TAPE 1 OF 2- 8110

* SCAN # 20 FRAME # 13966 ANGLE 65.060 TO FRAME # 14599 ANGLE 9.444 CRITICAL AMP AT CELL 62

OPTION # 31-2



	ANGLE
1	64.7
2	64.4
3	63.5
4	62.3
5	60.8
6	59.1
7	57.2
8	55.5
9	53.7
10	51.9
11	50.3
12	48.6
13	47.0
14	45.2
15	43.5
16	41.9
17	40.1
18	38.3
19	36.5
20	34.8
21	33.1
22	31.3
23	29.6
24	27.9
25	26.1
26	24.3
27	22.5
28	20.7
29	19.0
30	17.2
31	15.5
32	13.7
33	11.9
34	10.4
35	9.8

	R
1	143.3
2	163.1
3	182.9
4	202.8
5	222.6
6	242.4
7	262.2
8	282.0
9	301.8
10	321.6
11	341.5
12	361.3
13	381.1
14	400.9
15	420.7
16	440.5
17	480.2

V * Imax, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

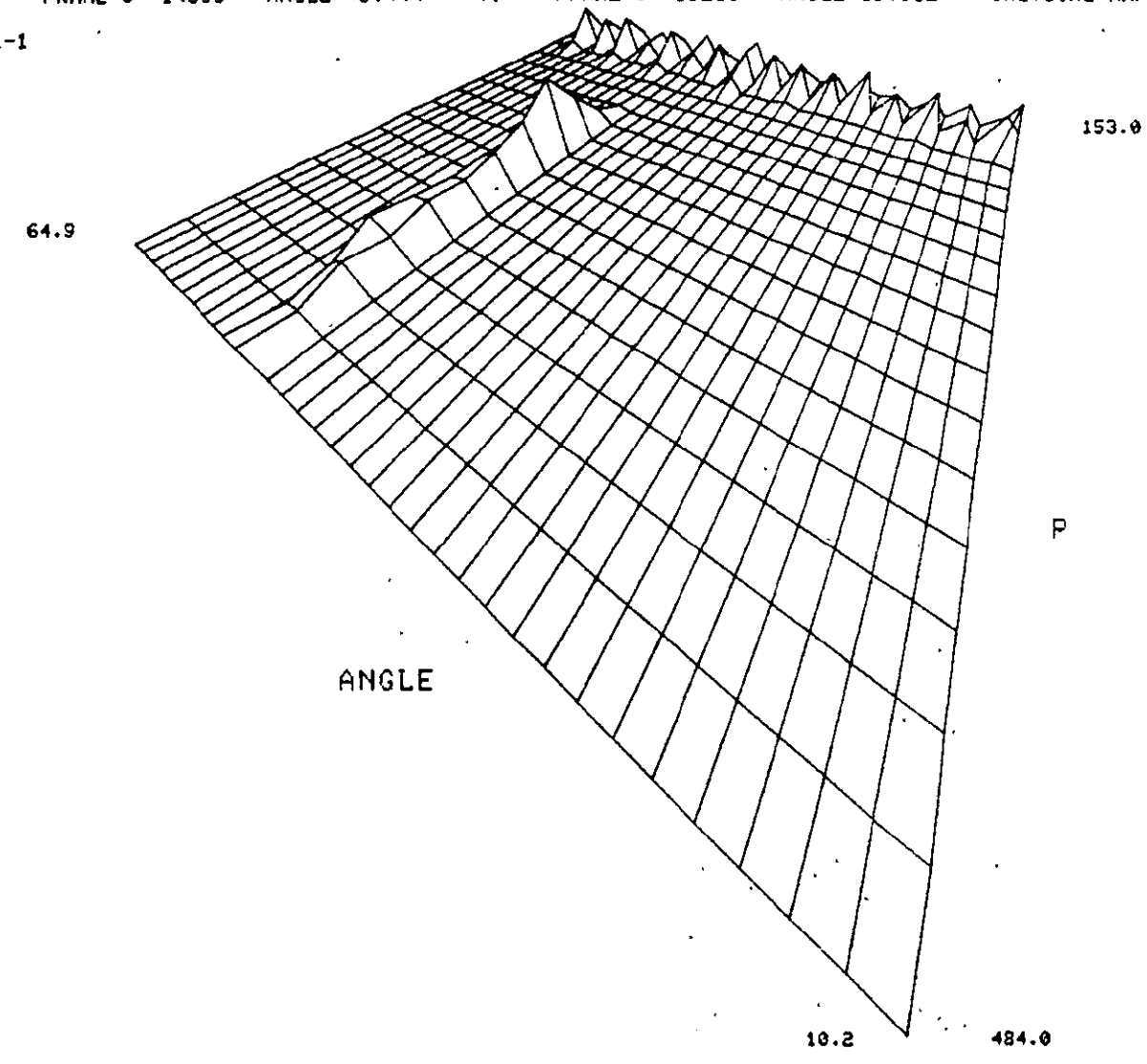
SCAN # 21 FRAME # 14599 ANGLE 9.444 TO FRAME # 15210 ANGLE 65.012 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 44.0

AVERAGE I = 1.6

ANGLE	
1	10.2
2	11.1
3	12.3
4	13.7
5	15.4
6	17.2
7	19.0
8	20.7
9	22.4
10	24.2
11	26.0
12	27.7
13	29.4
14	31.2
15	32.9
16	34.7
17	36.4
18	38.2
19	39.9
20	41.7
21	43.4
22	45.0
23	46.8
24	48.4
25	50.2
26	51.9
27	53.6
28	55.4
29	57.1
30	58.9
31	60.7
32	62.4
33	64.1
34	64.9



R	
1	153.0
2	172.5
3	192.0
4	211.5
5	230.9
6	250.4
7	269.9
8	289.3
9	308.8
10	328.3
11	347.7
12	367.2
13	386.7
14	406.1
15	425.6
16	445.1
17	464.0

I_{MAX}, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

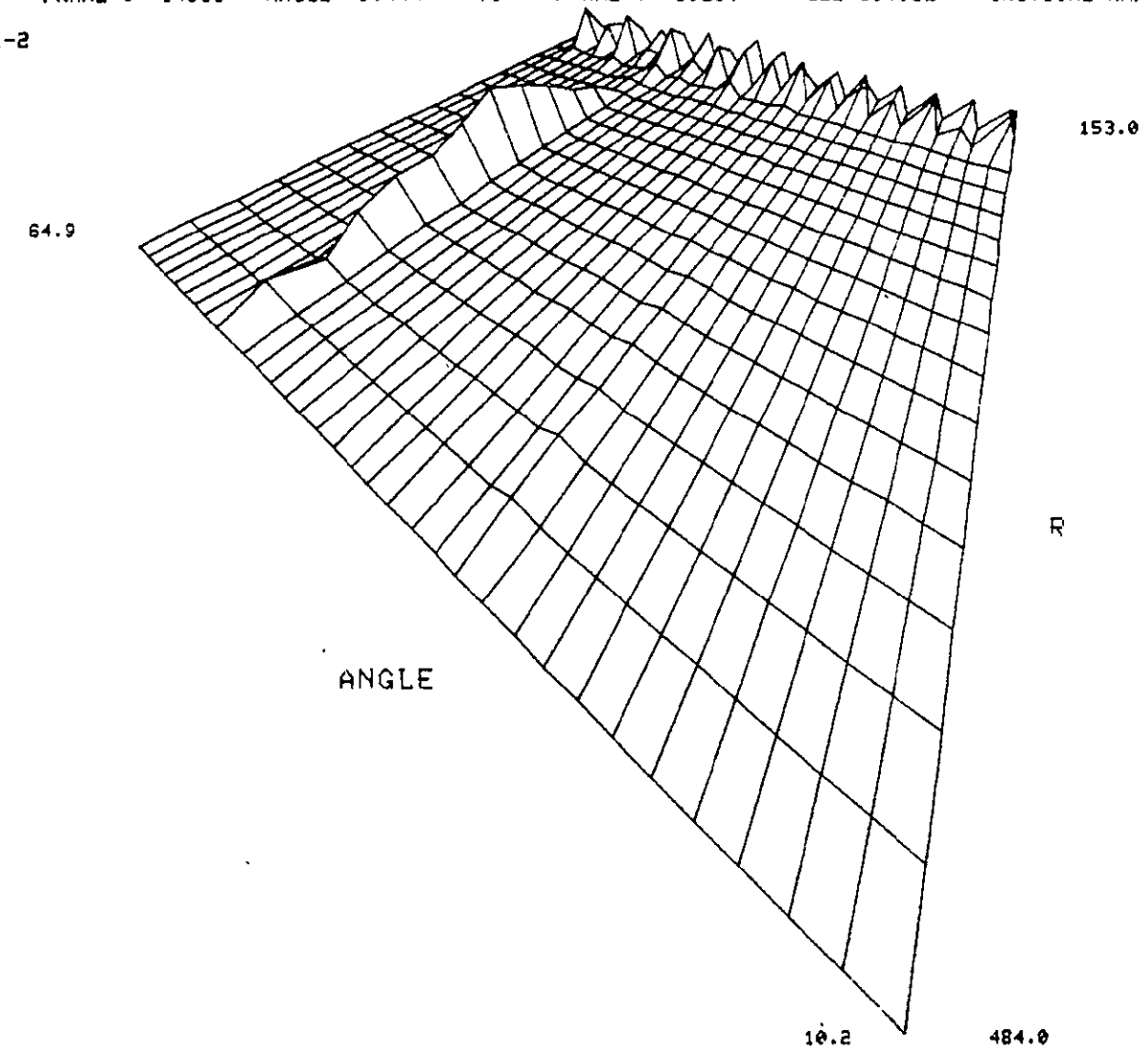
SCAN # 21 FRAME # 14599 ANGLE 9.444 TO FRAME # 15210 ANGLE 65.012 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 71.0

AVERAGE I = 3.6

ANGLE	
1	10.2
2	11.1
3	12.3
4	13.7
5	15.4
6	17.2
7	19.0
8	20.7
9	22.4
10	24.2
11	26.0
12	27.7
13	29.4
14	31.2
15	32.9
16	34.7
17	36.4
18	38.2
19	39.9
20	41.7
21	43.4
22	45.0
23	46.8
24	48.4
25	50.2
26	51.9
27	53.6
28	55.4
29	57.1
30	58.9
31	60.7
32	62.4
33	64.1
34	64.9



	R
1	153.0
2	172.5
3	192.0
4	211.5
5	230.3
6	250.4
7	269.9
8	289.3
9	308.8
10	328.3
11	347.7
12	367.2
13	386.7
14	406.1
15	425.6
16	445.1
17	464.0

Imax, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 1 OF E- 6110

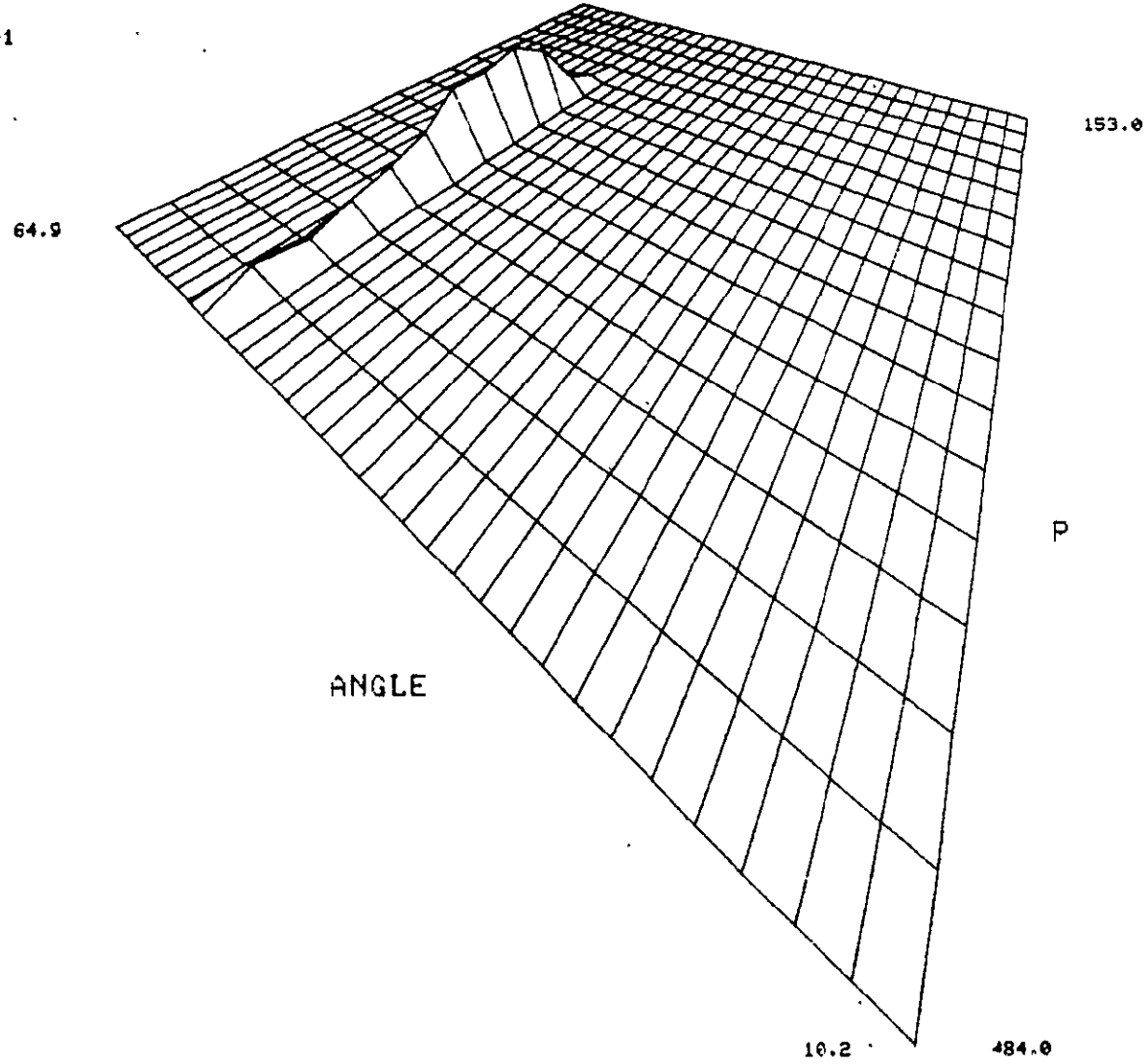
SCAN # 21 FRAME # 14599 ANGLE 9.444 TO FRAME # 15210 ANGLE 65.012 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 61.0

AVERAGE I = 0.8

ANGLE	
1	10.2
2	11.1
3	12.3
4	13.7
5	15.4
6	17.2
7	19.0
8	20.7
9	22.4
10	24.2
11	26.0
12	27.7
13	29.4
14	31.2
15	32.9
16	34.7
17	36.4
18	38.2
19	39.9
20	41.7
21	43.4
22	45.0
23	46.8
24	48.4
25	50.2
26	51.9
27	53.6
28	55.4
29	57.1
30	58.9
31	60.7
32	62.4
33	64.1
34	64.9



R	
1	153.0
2	172.5
3	192.0
4	211.5
5	230.9
6	250.4
7	269.9
8	289.3
9	308.8
10	328.3
11	347.7
12	367.2
13	386.7
14	406.1
15	425.6
16	445.1
17	464.0

I, R, A DISPLAY AT VELOCITY CELL 62

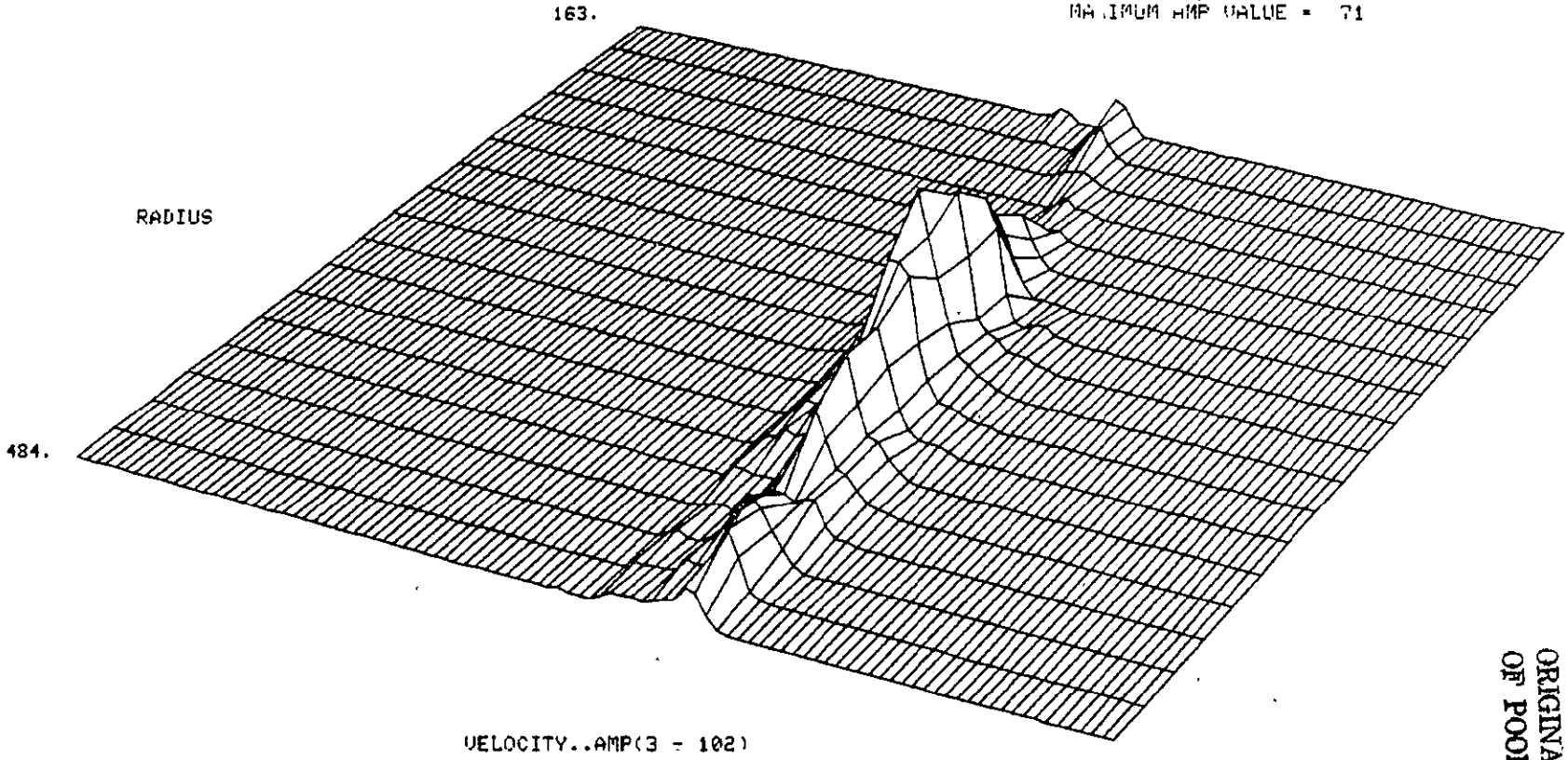
NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 21 FRAME # 14599 ANGLE 9.444 TO FRAME # 15210 ANGLE 65.012 CRITICAL AMP AT CELL 62

FRAME # 15037 TO 15055

ANGLE = 50.25

MAXIMUM AMP VALUE = 71



ORIGINAL PAGE IS
OF POOR QUALITY

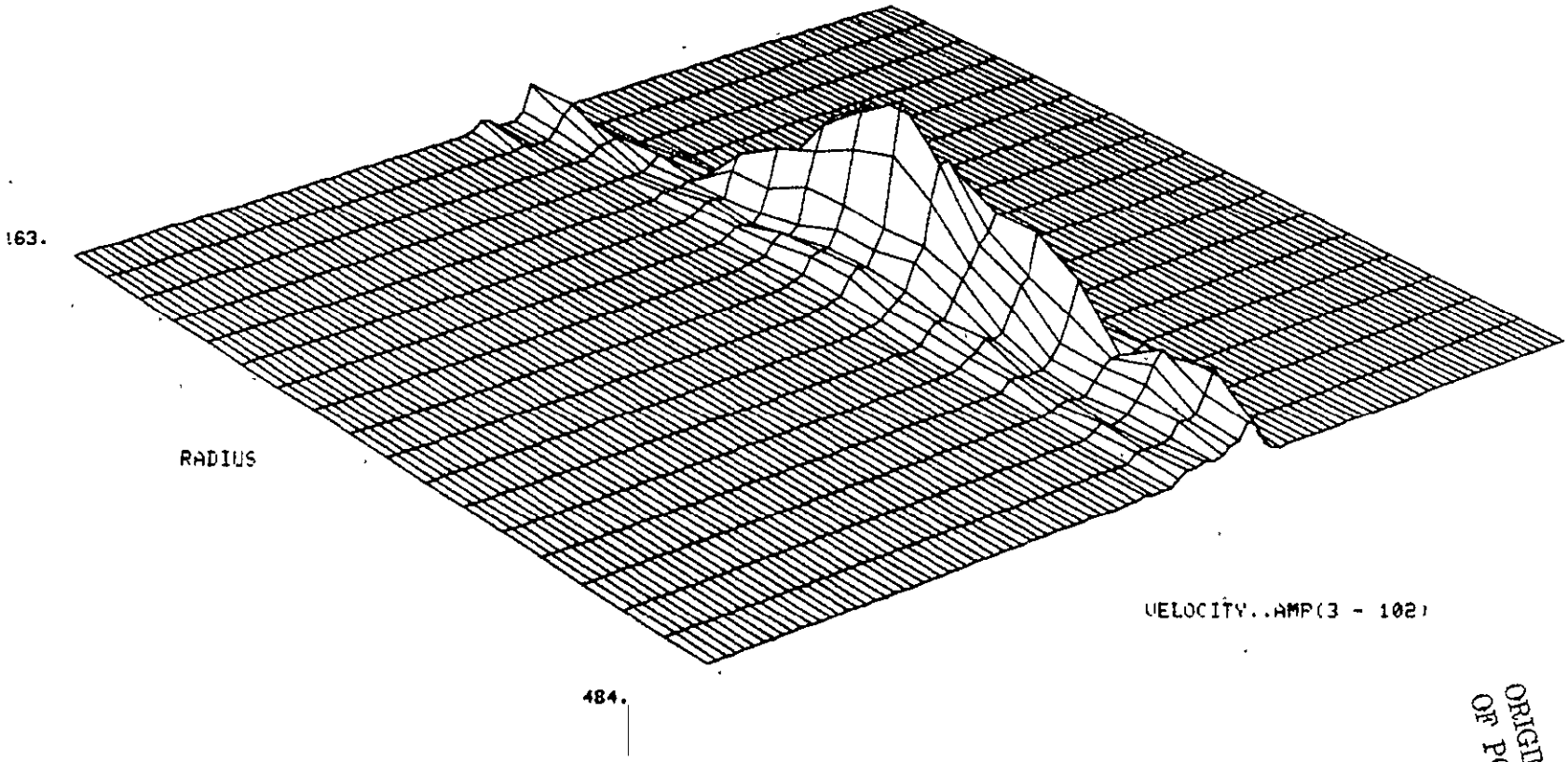
NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 21 FRAME # 14599 ANGLE 9.444 TO FRAME # 15210 ANGLE 65.012 CRITICAL AMP AT CELL 62

FRAME # 15037 TO 15055

ANGLE = 50.25

MAXIMUM AMP VALUE = 71



ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

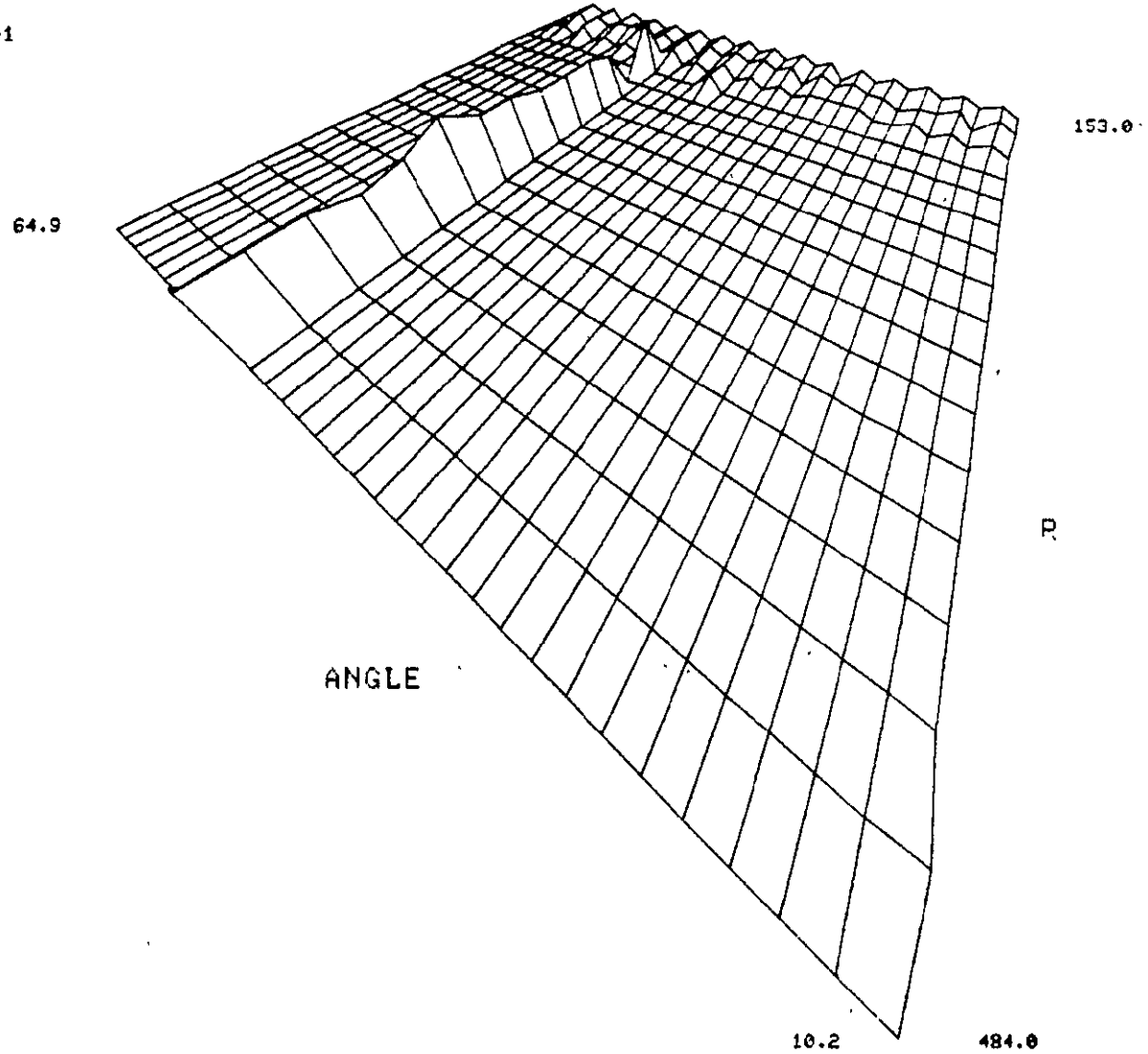
* SCAN # 21 FRAME # 14599 ANGLE 3.444 TO FRAME # 15210 ANGLE 65.012 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 10.0

AVERAGE V = 1.4

ANGLE	
1	10.2
2	11.1
3	12.3
4	13.7
5	15.4
6	17.2
7	19.0
8	20.7
9	22.4
10	24.2
11	26.0
12	27.7
13	29.4
14	31.2
15	32.9
16	34.7
17	36.4
18	38.2
19	39.9
20	41.7
21	43.4
22	45.0
23	46.8
24	48.4
25	50.2
26	51.9
27	53.6
28	55.4
29	57.1
30	58.9
31	60.7
32	62.4
33	64.1
34	64.9



	R
1	153.0
2	172.5
3	192.0
4	211.5
5	230.9
6	250.4
7	269.9
8	289.3
9	308.8
10	328.3
11	347.7
12	367.2
13	386.7
14	406.1
15	425.6
16	445.1
17	484.0

V, R, A DISPLAY (VELOCITY AT I_{MAX})

NASA PROJECT DUST DEVIL · DAY 238 · RUN # 4 TAPE 1 OF 2- 6110

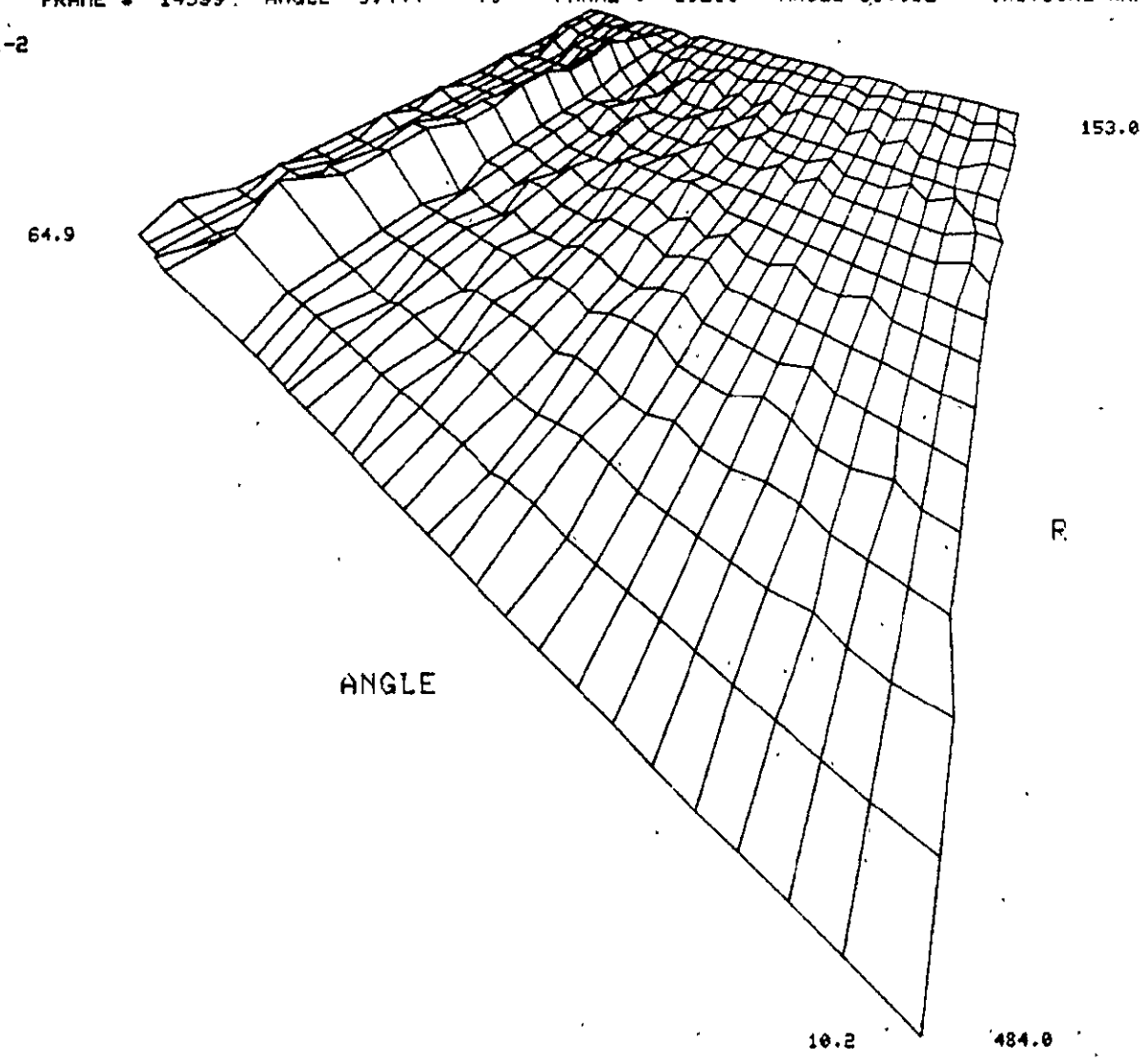
* SCAN # 21 FRAME # 14599. ANGLE 9.444 TO FRAME # 15210 ANGLE 65.012 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V = 14.0

AVERAGE V = 2.5

	ANGLE
1	10.2
2	11.1
3	12.3
4	13.7
5	15.4
6	17.2
7	19.0
8	20.7
9	22.4
10	24.2
11	26.0
12	27.7
13	29.4
14	31.2
15	32.9
16	34.7
17	36.4
18	38.2
19	39.9
20	41.7
21	43.4
22	45.0
23	46.8
24	48.4
25	50.2
26	51.9
27	53.6
28	55.4
29	57.1
30	58.9
31	60.7
32	62.4
33	64.1
34	64.9



	R
1	153.0
2	172.5
3	192.0
4	211.5
5	230.9
6	250.4
7	269.9
8	289.3
9	308.8
10	328.3
11	347.7
12	367.2
13	386.7
14	406.1
15	425.6
16	445.1
17	484.0

ORIGINAL PAGE IS OF POOR QUALITY

V, R, A DISPLAY (VELOCITY AT I_{MAX})

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

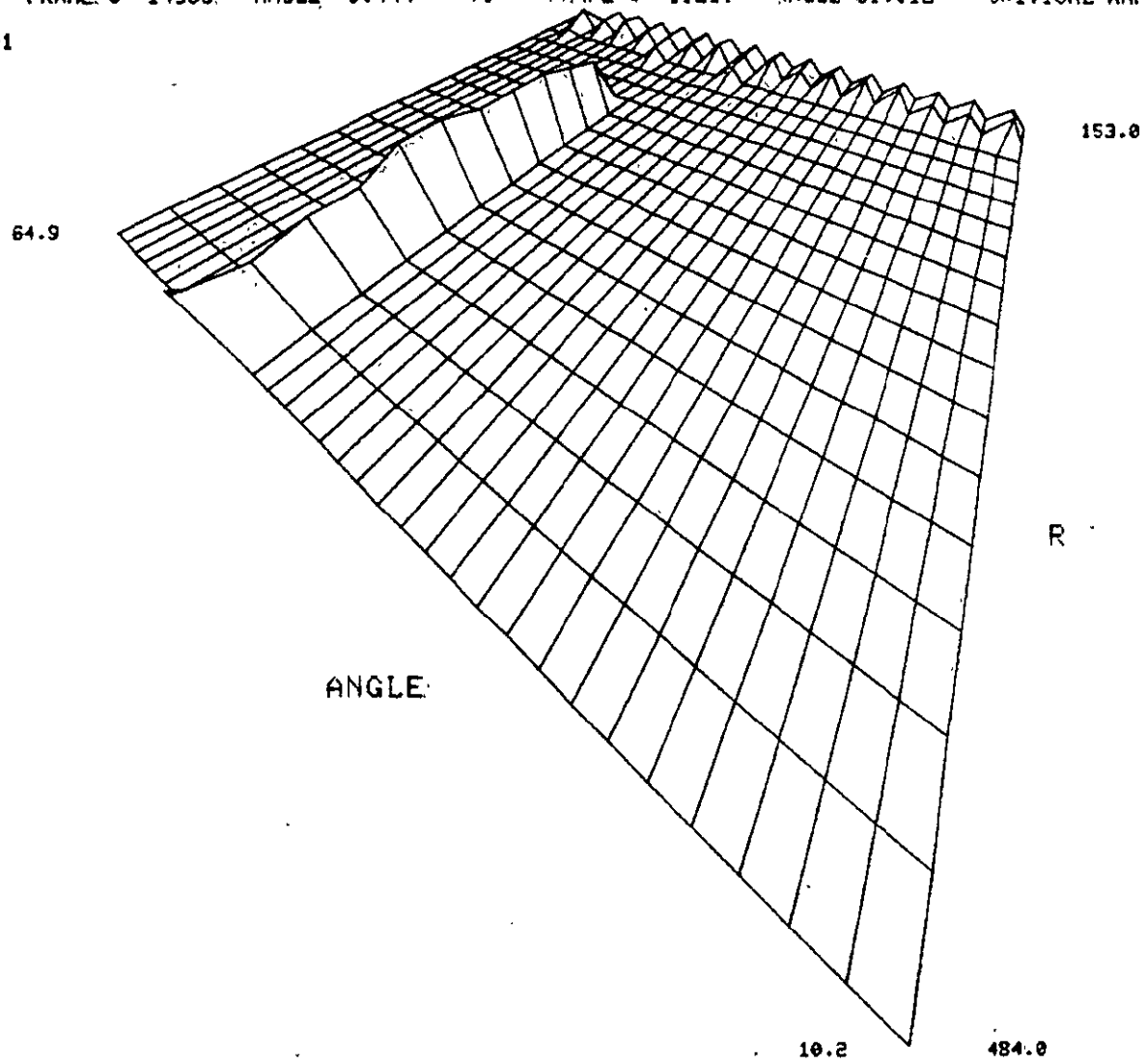
* SCAN # 21 FRAME # 14599 ANGLE 9.444 TO FRAME # 15210 ANGLE 65.012 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 11.0

AVERAGE V = 1.4

	ANGLE
1	10.2
2	11.1
3	12.3
4	13.7
5	15.4
6	17.2
7	19.0
8	20.7
9	22.4
10	24.2
11	26.0
12	27.7
13	29.4
14	31.2
15	32.9
16	34.7
17	36.4
18	38.2
19	39.9
20	41.7
21	43.4
22	45.0
23	46.8
24	48.4
25	50.2
26	51.9
27	53.6
28	55.4
29	57.1
30	58.9
31	60.7
32	62.4
33	64.1
34	64.9



	R
1	153.0
2	172.5
3	192.0
4	211.5
5	230.9
6	250.4
7	269.9
8	289.3
9	308.8
10	328.3
11	347.7
12	367.2
13	386.7
14	406.1
15	425.6
16	445.1
17	484.0

V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL - DAY 238 PUN # 4 TAPE 1 OF 2- 2110

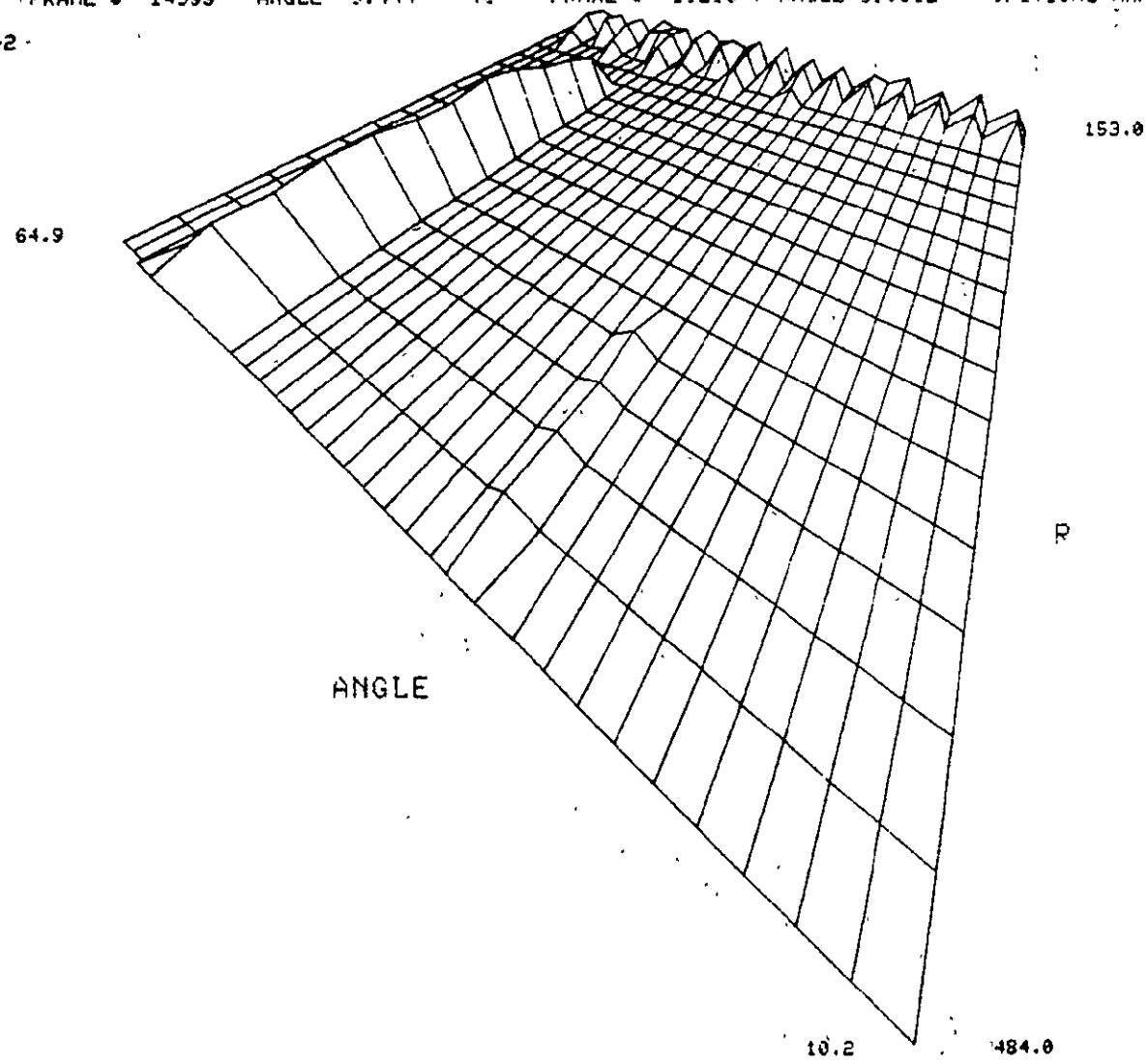
SCAN # 21 FRAME # 14599 ANGLE 3.444 TO FRAME # 15210 ANGLE 65.012 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM V = 15.0

AVERAGE V = 1.8

ANGLE	
1	10.2
2	11.1
3	12.3
4	13.7
5	15.4
6	17.2
7	19.0
8	20.7
9	22.4
10	24.2
11	26.0
12	27.7
13	29.4
14	31.2
15	32.9
16	34.7
17	36.4
18	38.2
19	39.9
20	41.7
21	43.4
22	45.0
23	46.8
24	48.4
25	50.2
26	51.9
27	53.6
28	55.4
29	57.1
30	58.9
31	60.7
32	62.4
33	64.1
34	64.9



	R
1	153.0
2	172.5
3	192.0
4	211.5
5	230.9
6	250.4
7	269.9
8	289.3
9	303.6
10	328.3
11	347.7
12	367.2
13	386.7
14	406.1
15	425.6
16	445.1
17	464.0

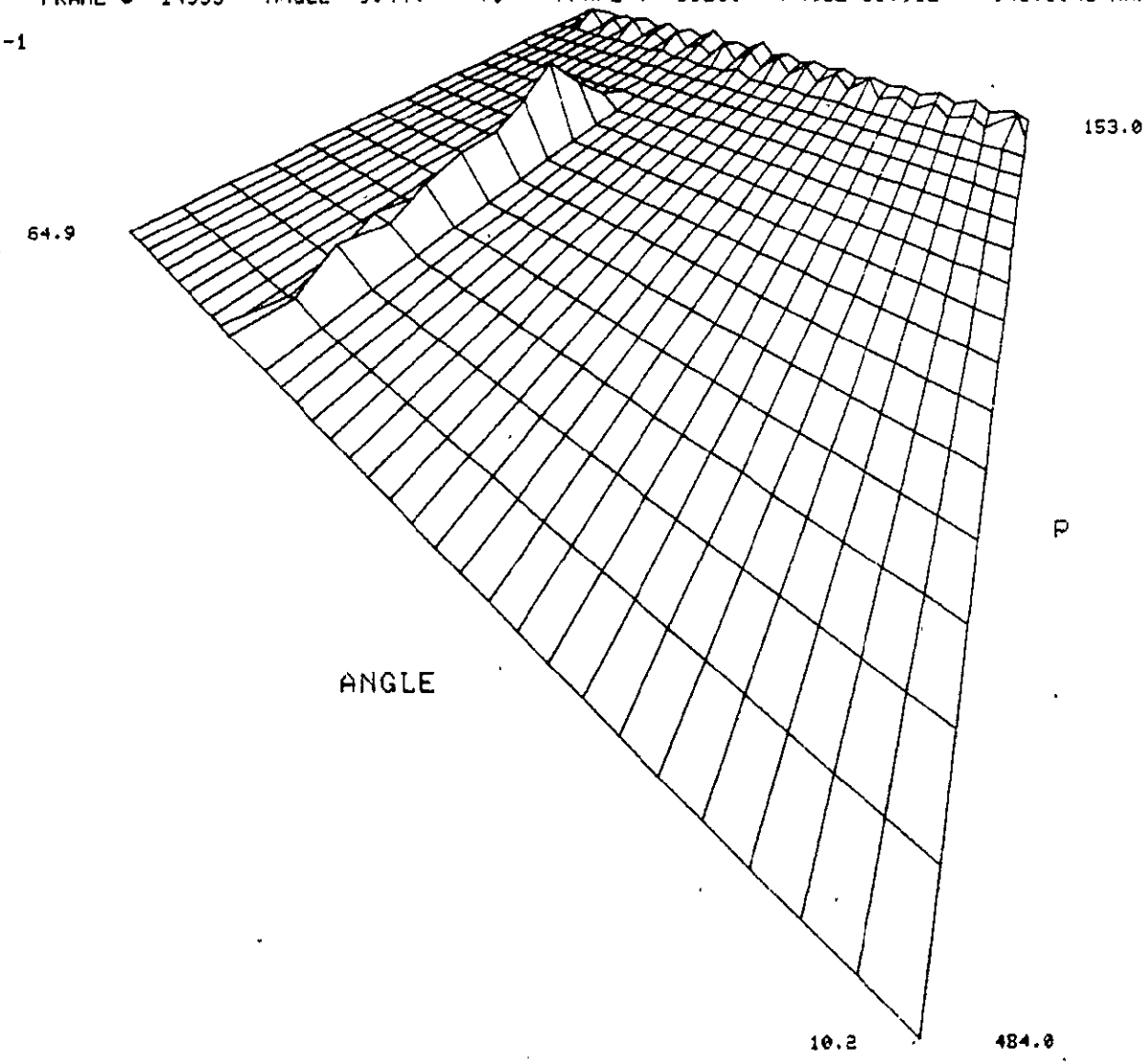
U_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 1 OF 3- 3110

* SCAN # 21 FRAME # 14599 ANGLE 9.444 TO FRAME # 15210 ANGLE 65.012 CRITICAL AMP AT CELL 62

OPTION # 31-1

ANGLE	
1	10.2
2	11.1
3	12.3
4	13.7
5	15.4
6	17.2
7	19.0
8	20.7
9	22.4
10	24.2
11	26.0
12	27.7
13	29.4
14	31.2
15	32.9
16	34.7
17	36.4
18	38.2
19	39.9
20	41.7
21	43.4
22	45.0
23	46.8
24	48.4
25	50.2
26	51.9
27	53.6
28	55.4
29	57.1
30	58.9
31	60.7
32	62.4
33	64.1
34	64.9



R	
1	153.0
2	172.5
3	192.0
4	211.5
5	230.9
6	250.4
7	269.9
8	289.3
9	308.8
10	328.3
11	347.7
12	367.2
13	386.7
14	406.1
15	425.6
16	445.1
17	464.0

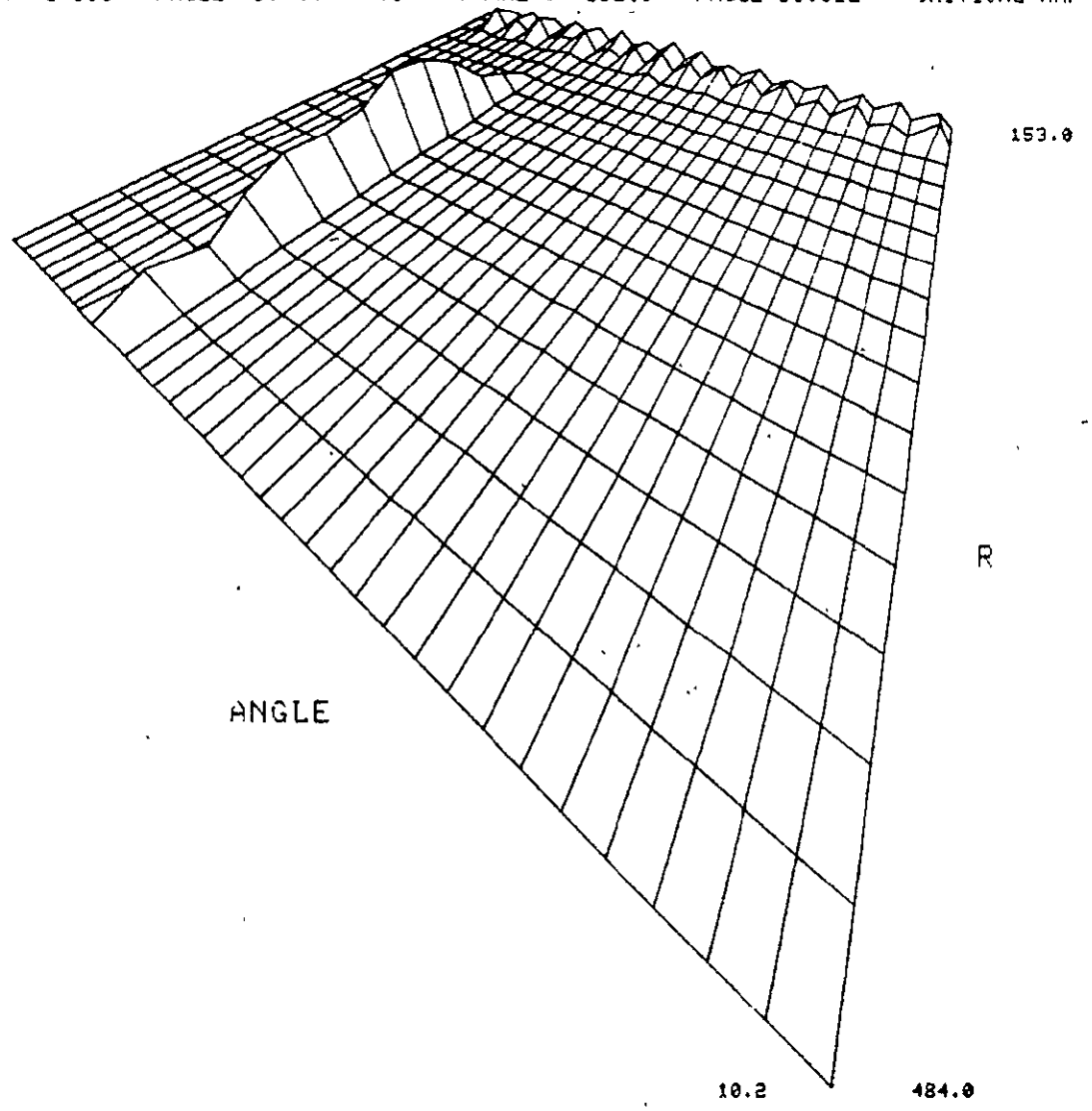
V * Imax, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 21 FRAME # 14599 ANGLE 9.444 TO FRAME # 15210 ANGLE 65.012 CRITICAL AMP AT CELL 62

OPTION # 31-2



	ANGLE
1	10.2
2	11.1
3	12.3
4	13.7
5	15.4
6	17.2
7	19.0
8	20.7
9	22.4
10	24.2
11	26.0
12	27.7
13	29.4
14	31.2
15	32.9
16	34.7
17	36.4
18	38.2
19	39.9
20	41.7
21	43.4
22	45.0
23	46.8
24	48.4
25	50.2
26	51.9
27	53.6
28	55.4
29	57.1
30	58.9
31	60.7
32	62.4
33	64.1
34	64.9

	R
1	153.0
2	172.5
3	192.0
4	211.5
5	230.9
6	250.4
7	269.9
8	289.3
9	308.8
10	328.3
11	347.7
12	367.2
13	386.7
14	406.1
15	425.6
16	445.1
17	484.0

ORIGINAL PAGE IS OF POOR QUALITY

U * IMAX, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

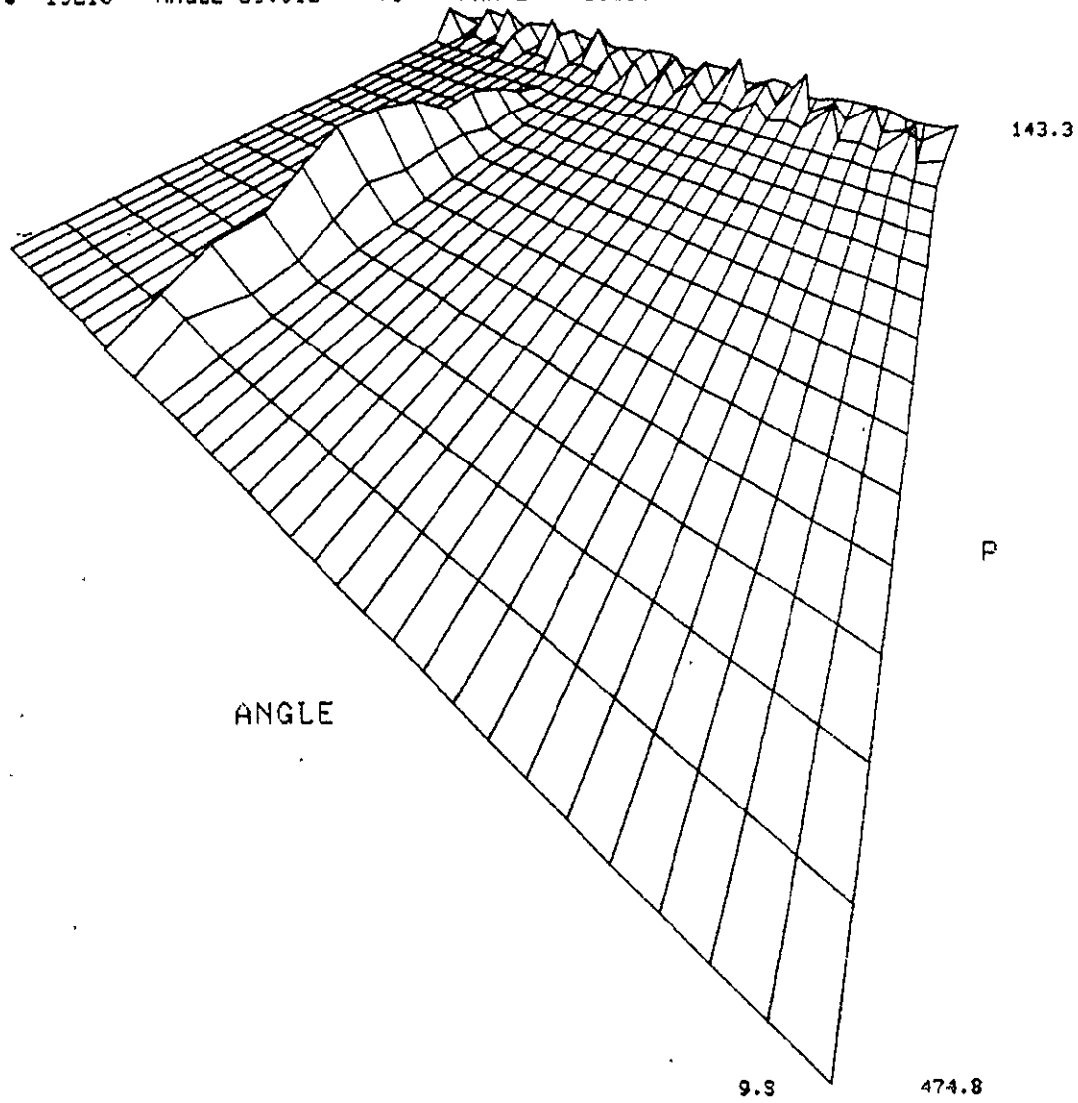
* SCAN # 22 FRAME # 15210 ANGLE 65.012 TO FRAME # 15833 ANGLE 9.404 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 48.0

AVERAGE I = 1.9

ANGLE	
1	64.7
2	64.4
3	63.7
4	62.6
5	61.2
6	59.5
7	57.8
8	55.9
9	54.2
10	52.4
11	50.7
12	49.1
13	47.3
14	45.6
15	43.9
16	42.3
17	40.6
18	38.8
19	37.0
20	35.2
21	33.6
22	31.8
23	30.1
24	28.3
25	26.5
26	24.8
27	22.9
28	21.2
29	19.4
30	17.7
31	15.9
32	14.1
33	12.3
34	10.7
35	9.8



R	
1	143.3
2	162.8
3	182.3
4	201.8
5	221.3
6	240.8
7	260.3
8	279.8
9	299.3
10	318.8
11	338.3
12	357.8
13	377.3
14	396.8
15	416.3
16	435.8
17	474.3

Imax, P, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL . DAY 238 RUN # 4 TAPE 1 OF 2- 8110

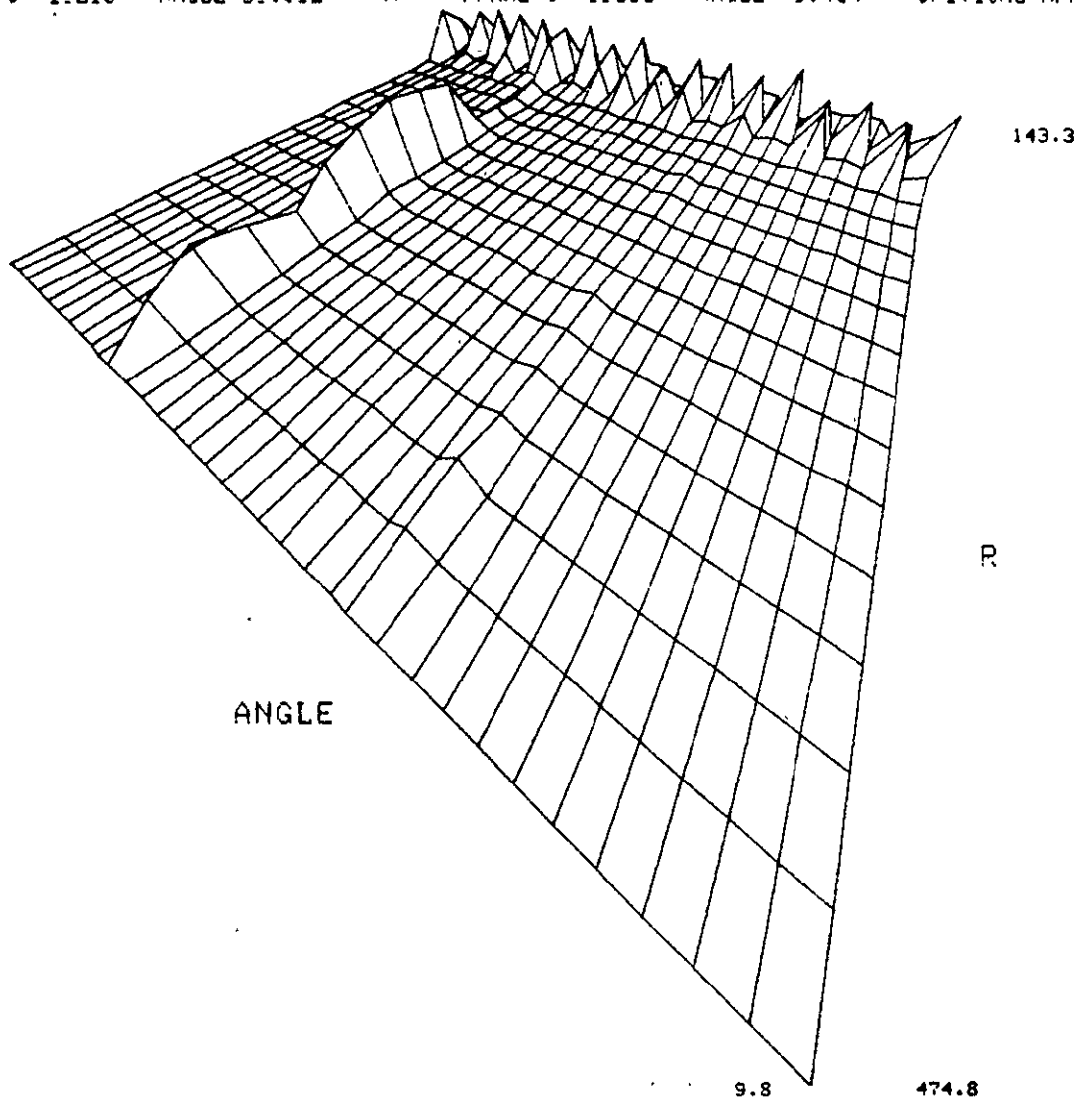
* SCAN # 22 FRAME # 15210 ANGLE 65.012 TO FRAME # 15833 ANGLE 9.404 OPTICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 52.0

AVERAGE I = 3.5

ANGLE	
1	64.7
2	64.4
3	63.7
4	62.6
5	61.2
6	59.5
7	57.8
8	55.9
9	54.2
10	52.4
11	50.7
12	49.1
13	47.3
14	45.6
15	43.9
16	42.3
17	40.6
18	38.8
19	37.0
20	35.2
21	33.6
22	31.8
23	30.1
24	28.3
25	26.5
26	24.8
27	22.9
28	21.2
29	19.4
30	17.7
31	15.9
32	14.1
33	12.3
34	10.7
35	9.8



	R
1	143.3
2	162.8
3	182.3
4	201.8
5	221.3
6	240.8
7	260.3
8	279.8
9	299.3
10	318.8
11	338.3
12	357.8
13	377.3
14	396.8
15	416.3
16	435.8
17	474.8

Imax, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 1 OF 2- 8110

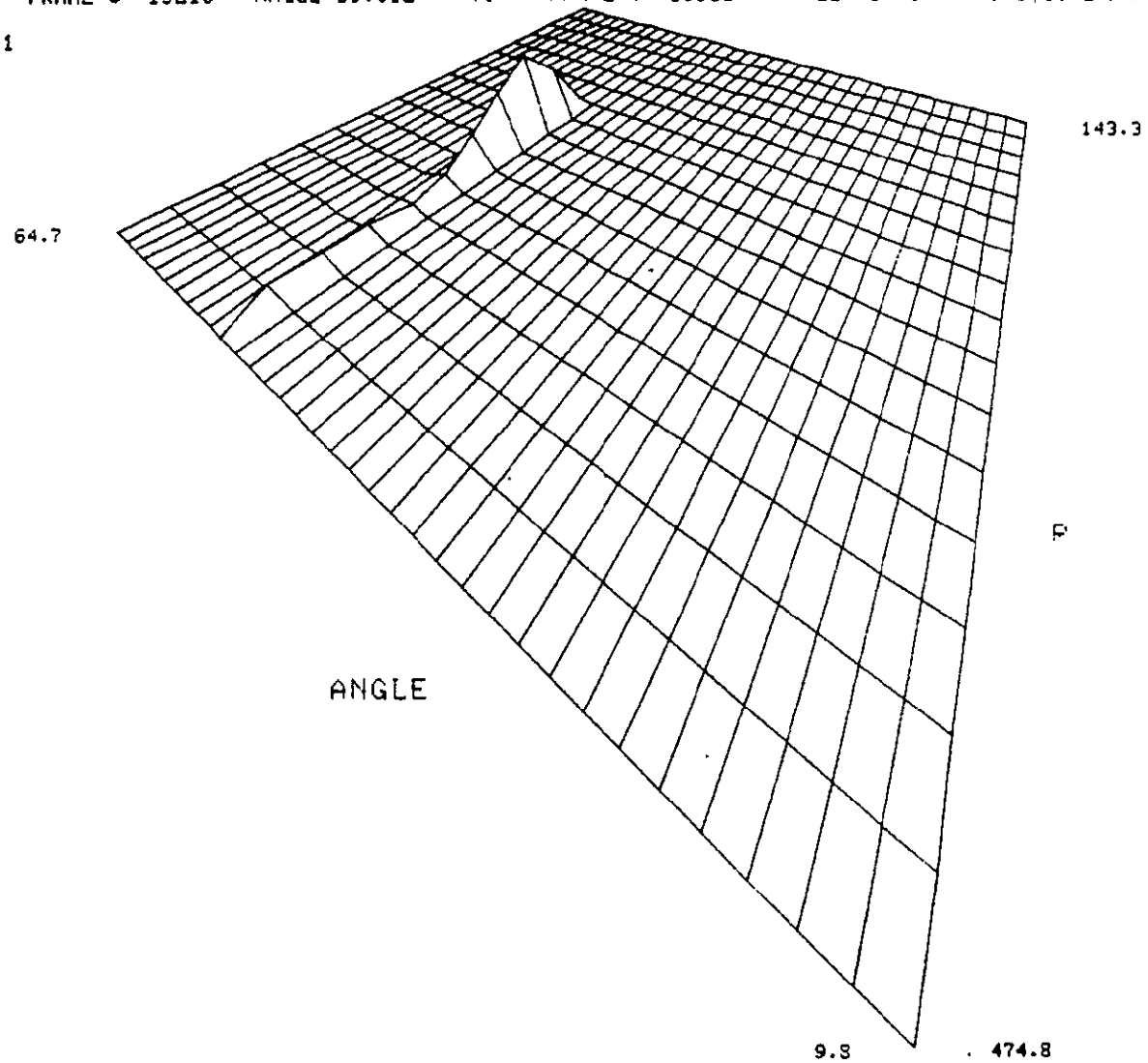
* SCAN # 22 FRAME # 15210 ANGLE 65.012 TO FRAME # 15232 ANGLE 3.404 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 39.0

AVERAGE I = 0.3

ANGLE	
1	64.7
2	64.4
3	63.7
4	62.6
5	61.2
6	59.5
7	57.8
8	55.9
9	54.2
10	52.4
11	50.7
12	49.1
13	47.3
14	45.6
15	43.9
16	42.3
17	40.6
18	38.8
19	37.0
20	35.2
21	33.6
22	31.8
23	30.1
24	28.3
25	26.5
26	24.8
27	22.9
28	21.2
29	19.4
30	17.7
31	15.9
32	14.1
33	12.3
34	10.7
35	9.8



	R
1	143.3
2	162.8
3	182.3
4	201.8
5	221.3
6	240.8
7	260.3
8	279.8
9	299.3
10	318.8
11	338.3
12	357.8
13	377.3
14	396.8
15	416.3
16	435.2
17	474.8

I, R, A DISPLAY AT VELOCITY CELL 62

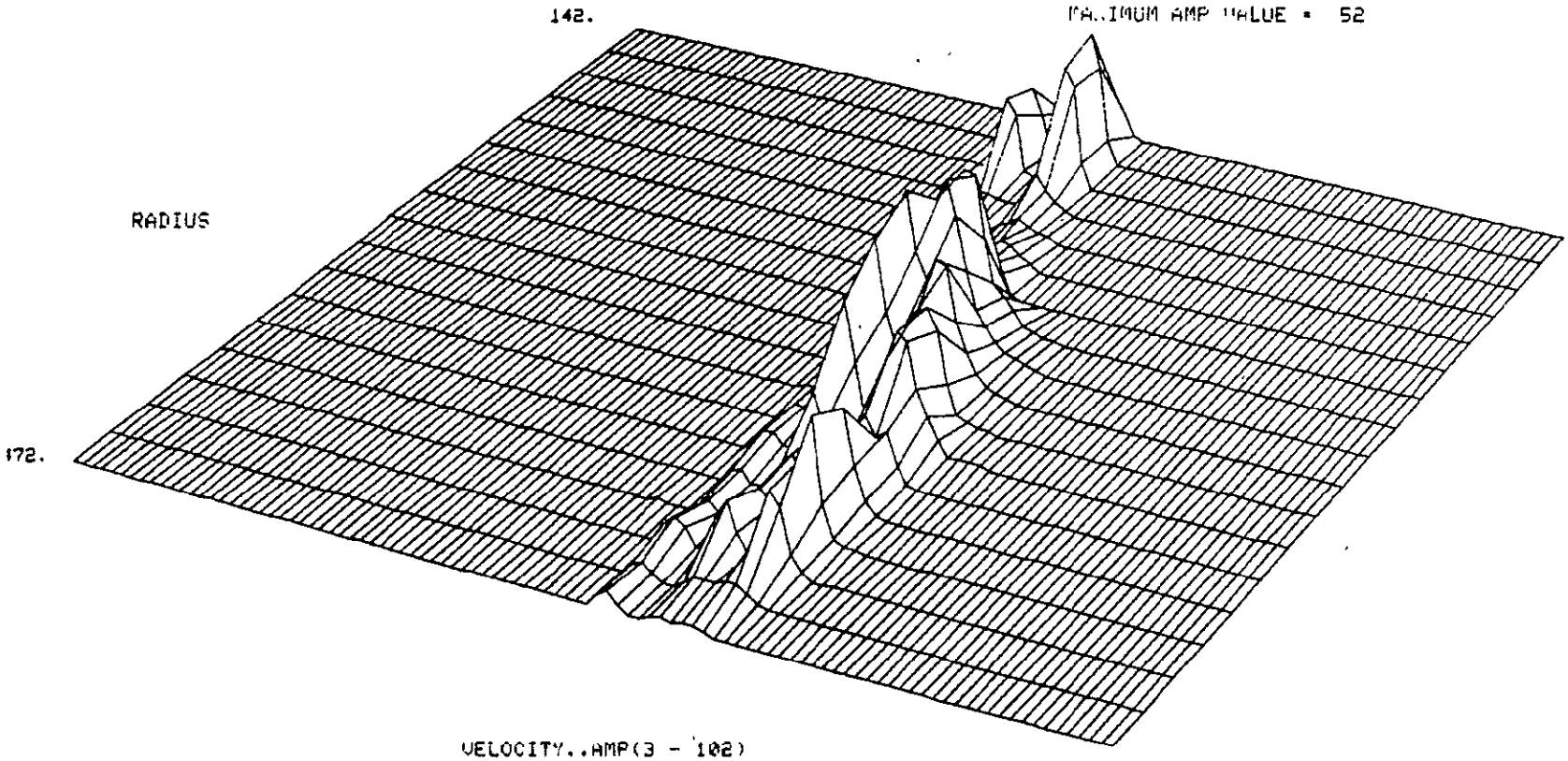
NASA PROJECT DUST DEVIL DAY 330 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 22 FRAME # 15210 ANGLE 65.012 TO FRAME # 15338 ANGLE 9.404 . CRITICAL AMP AT CELL 62

FRAME # 15383 TO 15401

ANGLE = 50.63

MAXIMUM AMP VALUE = 52



TCC

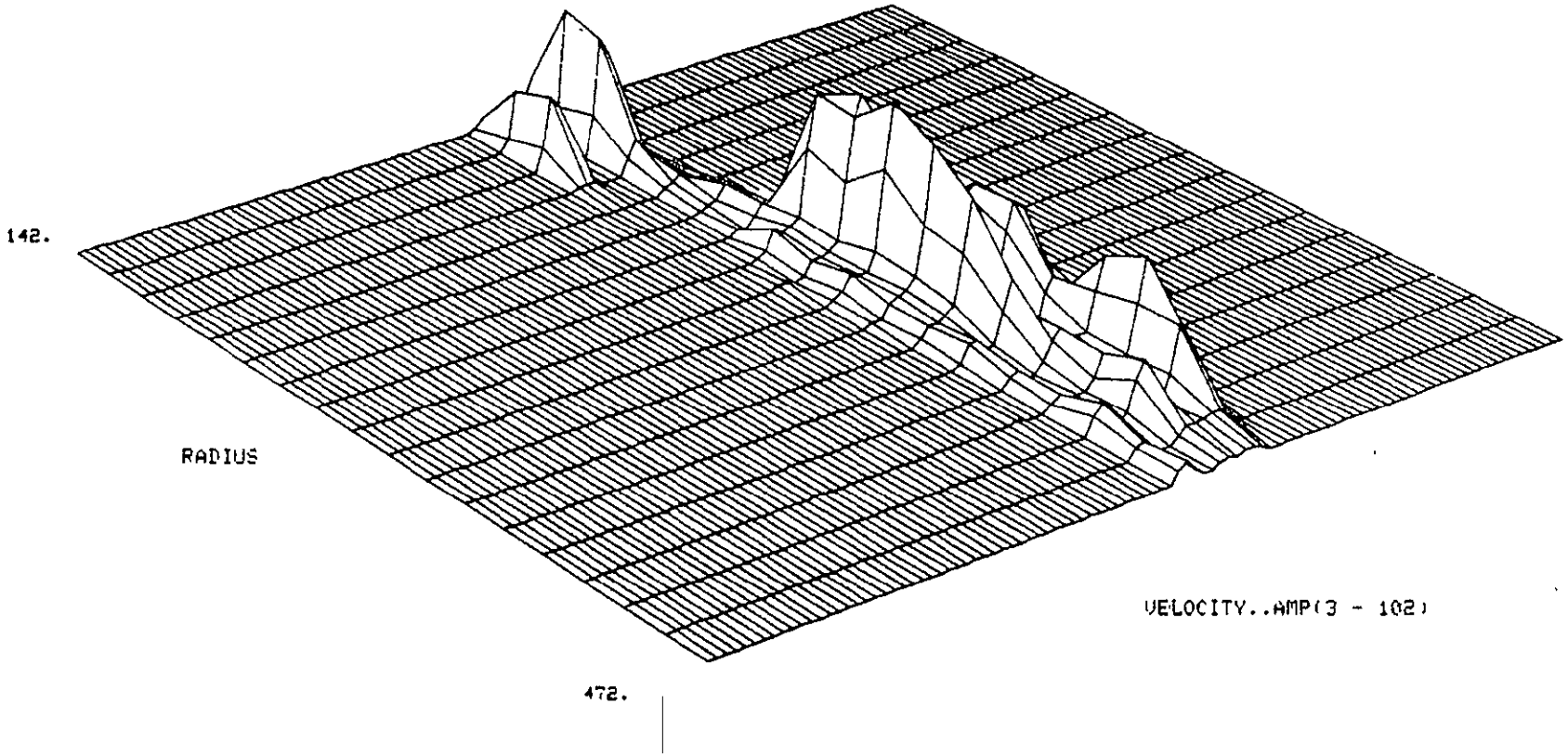
NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 5110

SCAN # 22 FRAME # 15210 ANGLE 65.012 TO FRAME # 15838 ANGLE 9.404 CRITICAL AMP AT CELL 62

FRAME # 15383 TO 15401

ANGLE = 50.63

MAXIMUM AMP VALUE = 52



ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

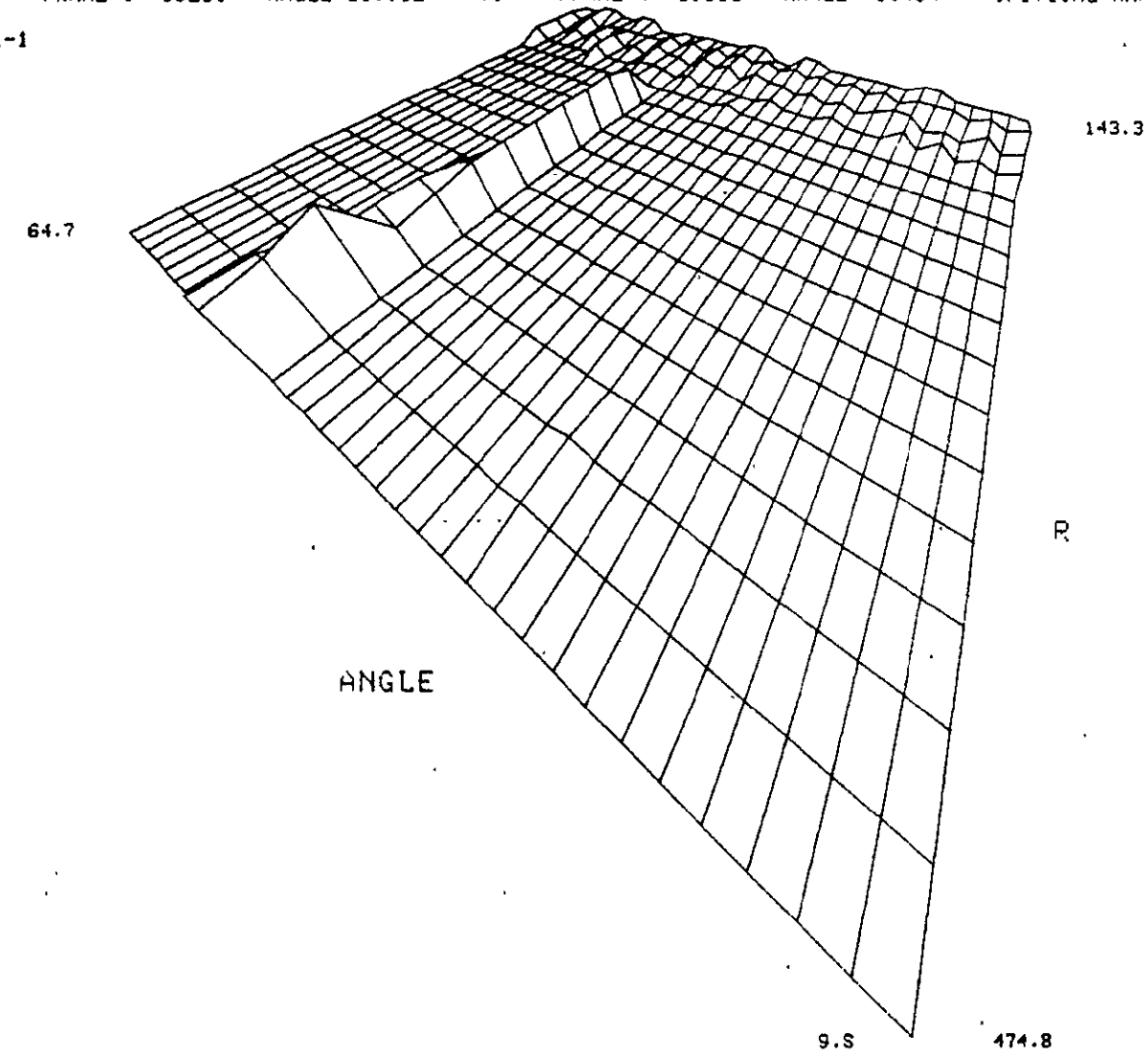
* SCAN # 22 FRAME # 15210 ANGLE 65.012 TO FRAME # 15833 ANGLE 3.404 OPTICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 12.0

AVERAGE V = 1.5

ANGLE	
1	64.7
2	64.4
3	63.7
4	62.6
5	61.2
6	59.5
7	57.8
8	55.9
9	54.2
10	52.4
11	50.7
12	49.1
13	47.3
14	45.6
15	43.9
16	42.3
17	40.6
18	38.8
19	37.0
20	35.2
21	33.6
22	31.8
23	30.1
24	28.3
25	26.5
26	24.8
27	22.9
28	21.2
29	19.4
30	17.7
31	15.9
32	14.1
33	12.3
34	10.7
35	9.8



	R
1	143.3
2	162.8
3	182.3
4	201.8
5	221.3
6	240.8
7	260.3
8	279.8
9	299.3
10	318.8
11	338.3
12	357.8
13	377.3
14	396.8
15	416.3
16	435.8
17	474.8

ORIGINAL PAGE IS OF POOR QUALITY

V, R, A DISPLAY (VELOCITY AT I_{MAX})

NASA PROJECT DUST DEVIL ' ' DAY 238 ' RUN # 4 TAPE 1 OF 2- 5110

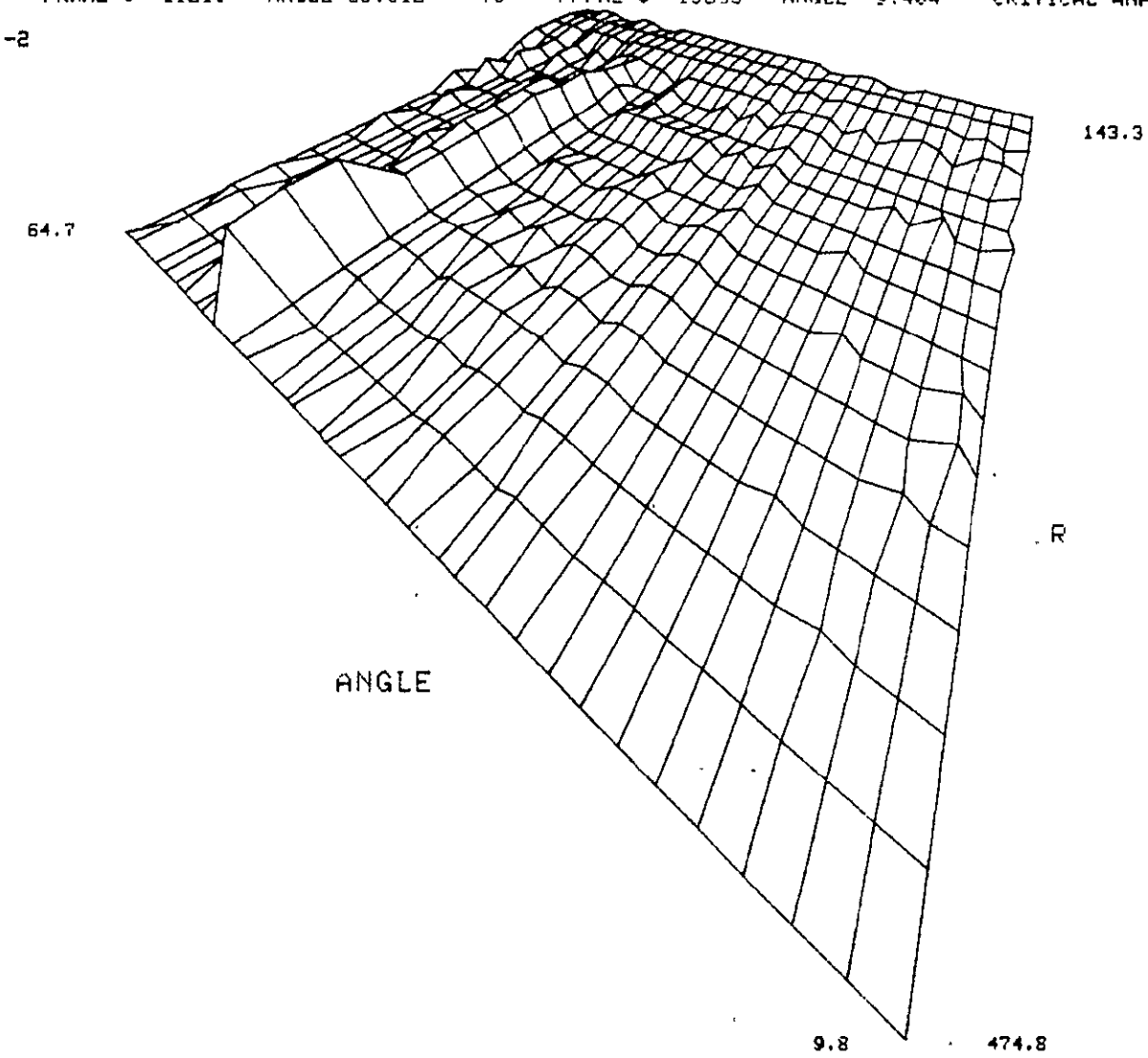
* SCAN # 22 FRAME # 15210 ANGLE 65.012 TO FRAME # 15833 ANGLE 3.404 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V = 14.0

AVERAGE V = 2.3

	ANGLE
1	64.7
2	64.4
3	63.7
4	62.6
5	61.2
6	59.5
7	57.8
8	55.9
9	54.2
10	52.4
11	50.7
12	49.1
13	47.3
14	45.6
15	43.9
16	42.3
17	40.6
18	38.8
19	37.0
20	35.2
21	33.6
22	31.8
23	30.1
24	28.3
25	26.5
26	24.8
27	22.9
28	21.2
29	19.4
30	17.7
31	15.9
32	14.1
33	12.3
34	10.7
35	9.8



	R
1	143.3
2	162.8
3	182.3
4	201.8
5	221.3
6	240.8
7	260.3
8	279.8
9	299.3
10	318.8
11	338.3
12	357.8
13	377.3
14	396.8
15	416.3
16	435.8
17	474.8

V, R, A DISPLAY (VELOCITY AT I_{MAX})

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

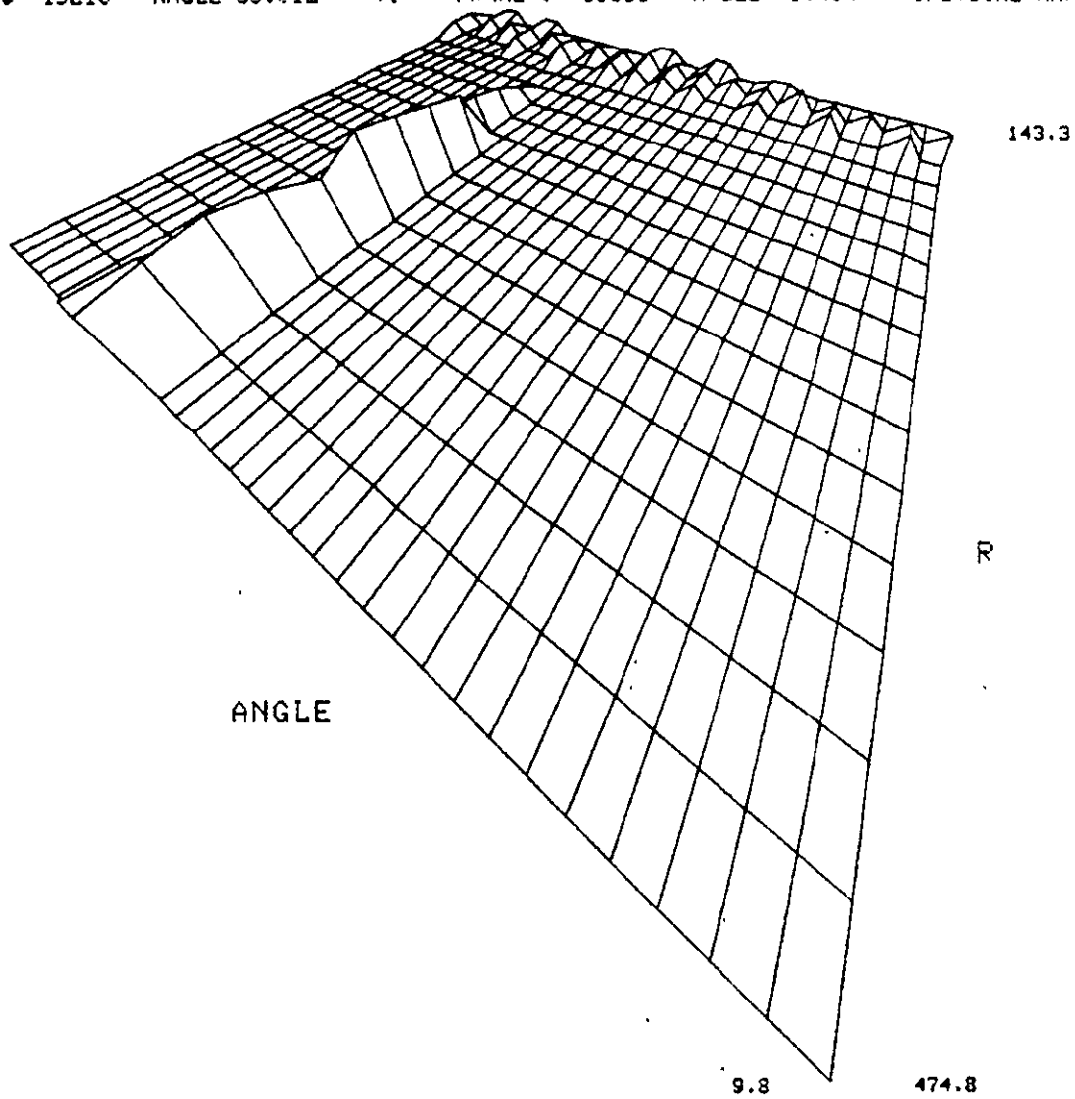
SCAN # 22 FRAME # 15210 ANGLE 65.012 TO FRAME # 15838 ANGLE 9.404 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM U = 12.0

AVERAGE U = 1.4

ANGLE	
1	64.7
2	64.4
3	63.7
4	62.6
5	61.2
6	59.5
7	57.8
8	55.9
9	54.2
10	52.4
11	50.7
12	49.1
13	47.3
14	45.6
15	43.9
16	42.3
17	40.6
18	38.8
19	37.0
20	35.2
21	33.6
22	31.8
23	30.1
24	28.3
25	26.5
26	24.8
27	22.9
28	21.2
29	19.4
30	17.7
31	15.9
32	14.1
33	12.3
34	10.7
35	9.8



	R
1	143.3
2	162.8
3	182.3
4	201.8
5	221.3
6	240.8
7	260.3
8	279.8
9	299.3
10	318.8
11	338.3
12	357.8
13	377.3
14	396.8
15	416.3
16	435.8
17	474.8

U_{max}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 3- 6110

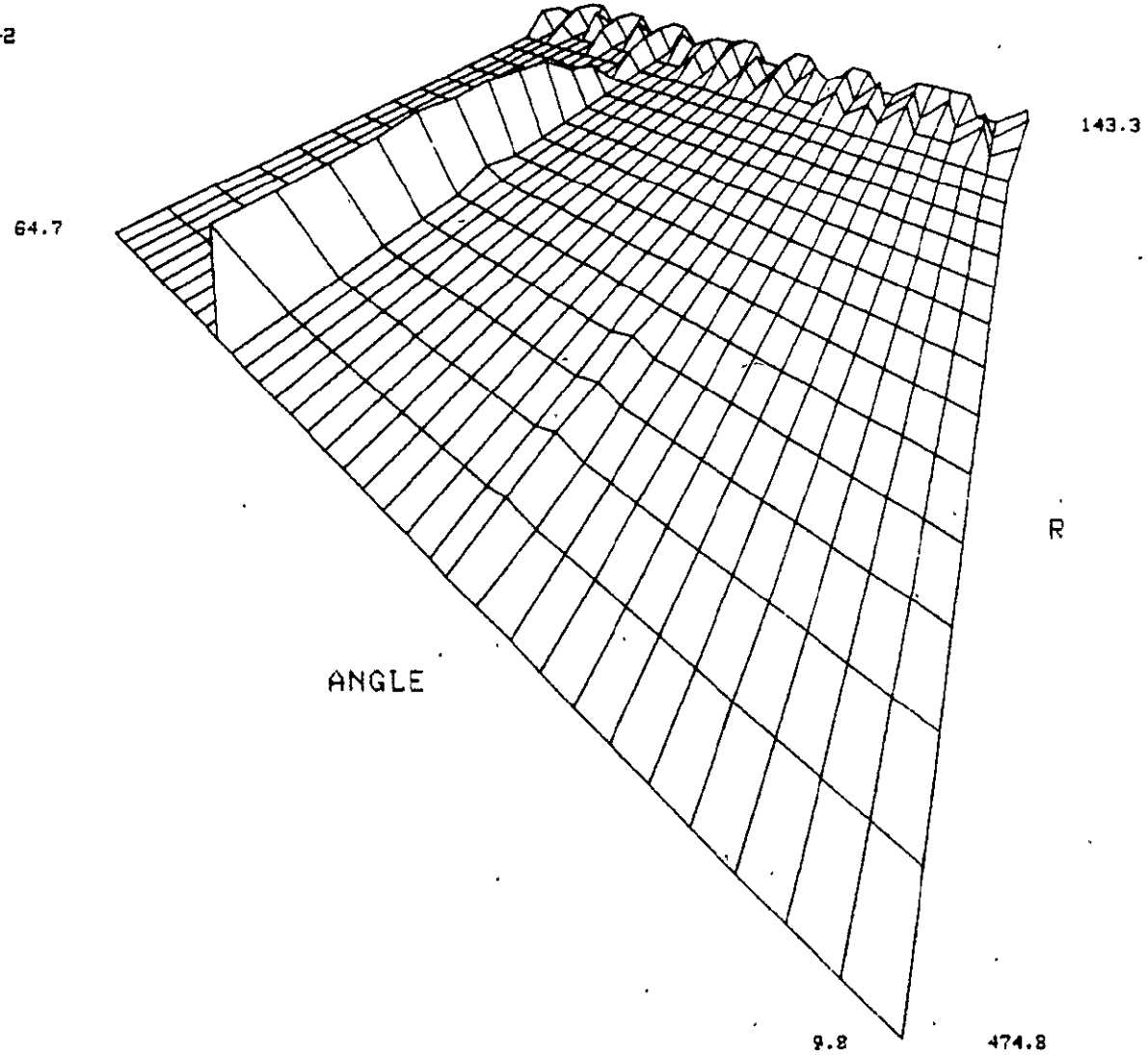
* SCAN # 22 FRAME # 15210 ANGLE 65.012 TO FRAME # 15333 ANGLE 9.404 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM V = 16.0

AVERAGE V = 1.7

ANGLE	
1	64.7
2	64.4
3	63.7
4	62.6
5	61.2
6	59.5
7	57.8
8	55.9
9	54.2
10	52.4
11	50.7
12	49.1
13	47.3
14	45.6
15	43.9
16	42.3
17	40.6
18	38.8
19	37.0
20	35.2
21	33.6
22	31.8
23	30.1
24	28.3
25	26.5
26	24.8
27	22.9
28	21.2
29	19.4
30	17.7
31	15.9
32	14.1
33	12.3
34	10.7
35	9.8



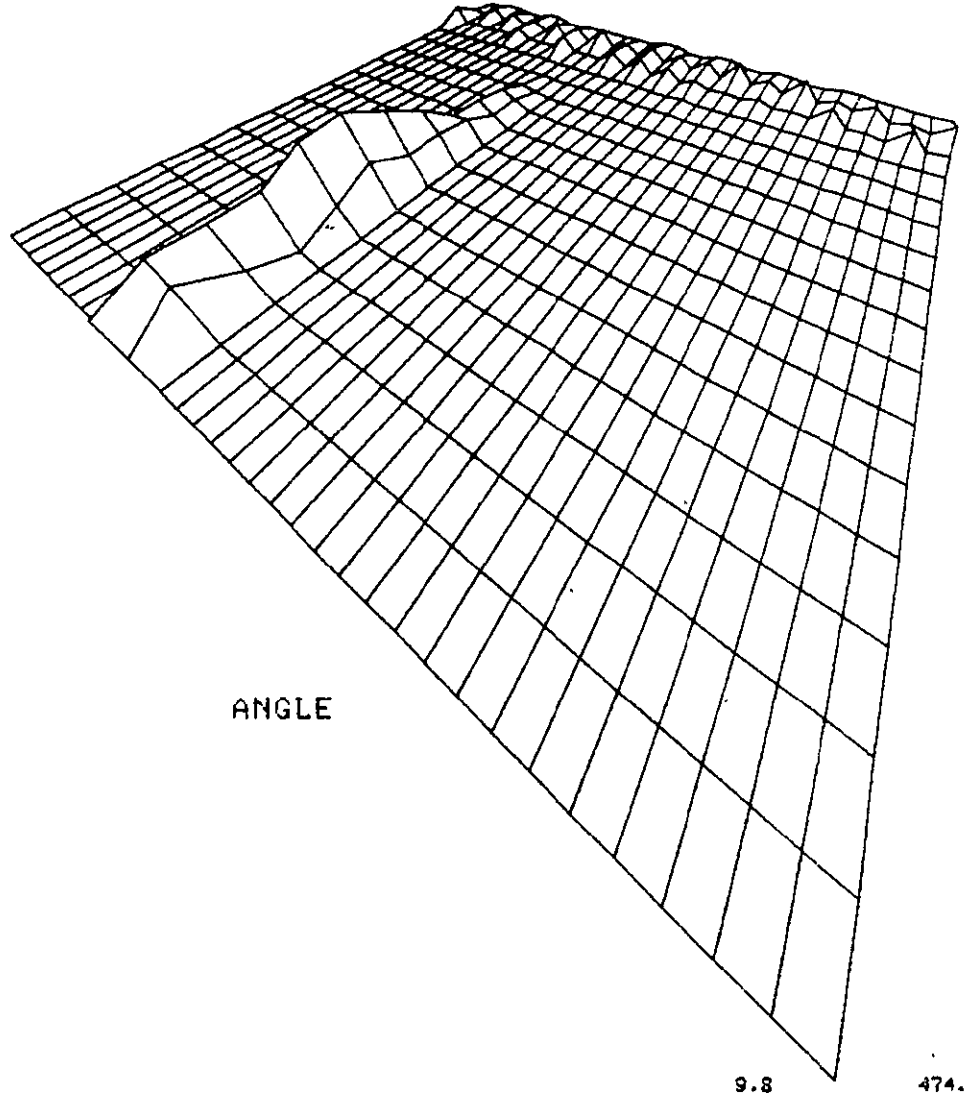
	R
1	143.3
2	162.8
3	182.3
4	201.8
5	221.3
6	240.8
7	260.3
8	279.8
9	299.3
10	318.8
11	338.3
12	357.8
13	377.3
14	396.8
15	416.3
16	435.8
17	474.8

V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 22 FRAME # 15210 ANGLE 65.012 TO FRAME # 15838 ANGLE 9.404 CRITICAL AMP AT CELL 62

OPTION # 31-1



	ANGLE
1	64.7
2	64.4
3	63.7
4	62.6
5	61.2
6	59.5
7	57.8
8	55.9
9	54.2
10	52.4
11	50.7
12	49.1
13	47.3
14	45.6
15	43.9
16	42.3
17	40.6
18	38.8
19	37.0
20	35.2
21	33.6
22	31.8
23	30.1
24	28.3
25	26.5
26	24.8
27	22.9
28	21.2
29	19.4
30	17.7
31	15.9
32	14.1
33	12.3
34	10.7
35	9.8

	R
1	143.3
2	162.8
3	182.3
4	201.8
5	221.3
6	240.8
7	260.3
8	279.8
9	299.3
10	318.8
11	338.3
12	357.8
13	377.3
14	396.8
15	416.3
16	435.8
17	474.8

U & Imax, P, A DISPLAY

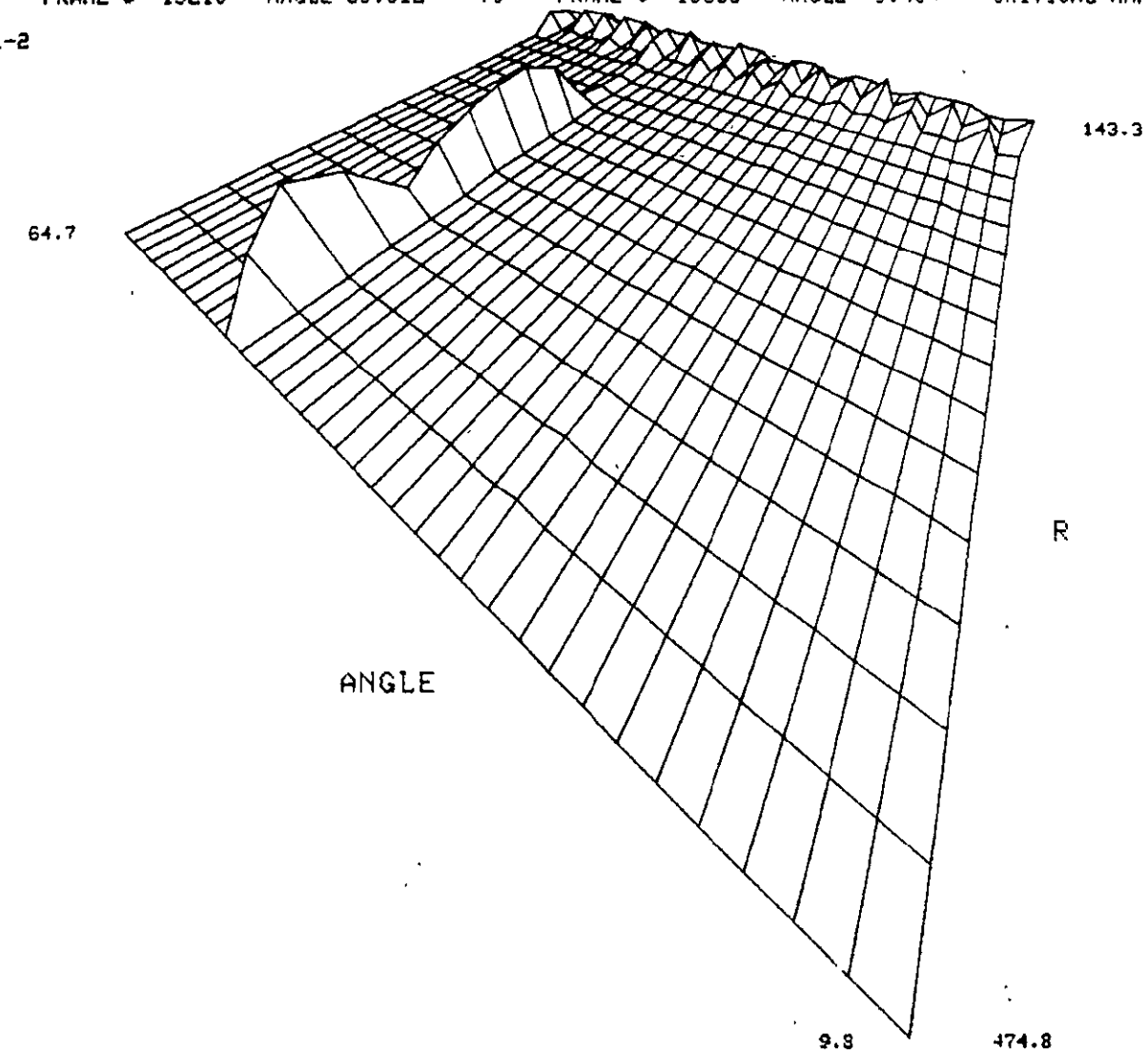
ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

* SCAN # 22 FRAME # 15210 ANGLE 65.012 TO FRAME # 15838 ANGLE 9.404 CRITICAL AMP AT CELL 62

OPTION # 31-2

	ANGLE
1	64.7
2	64.4
3	63.7
4	62.6
5	61.2
6	59.5
7	57.8
8	55.9
9	54.2
10	52.4
11	50.7
12	49.1
13	47.3
14	45.6
15	43.9
16	42.3
17	40.6
18	38.8
19	37.0
20	35.2
21	33.6
22	31.8
23	30.1
24	28.3
25	26.5
26	24.8
27	22.9
28	21.2
29	19.4
30	17.7
31	15.9
32	14.1
33	12.3
34	10.7
35	9.8



	P
1	143.3
2	162.8
3	182.3
4	201.8
5	221.3
6	240.8
7	260.3
8	279.8
9	299.3
10	318.8
11	338.3
12	357.8
13	377.3
14	396.8
15	416.3
16	435.8
17	474.8

V * IMAX, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

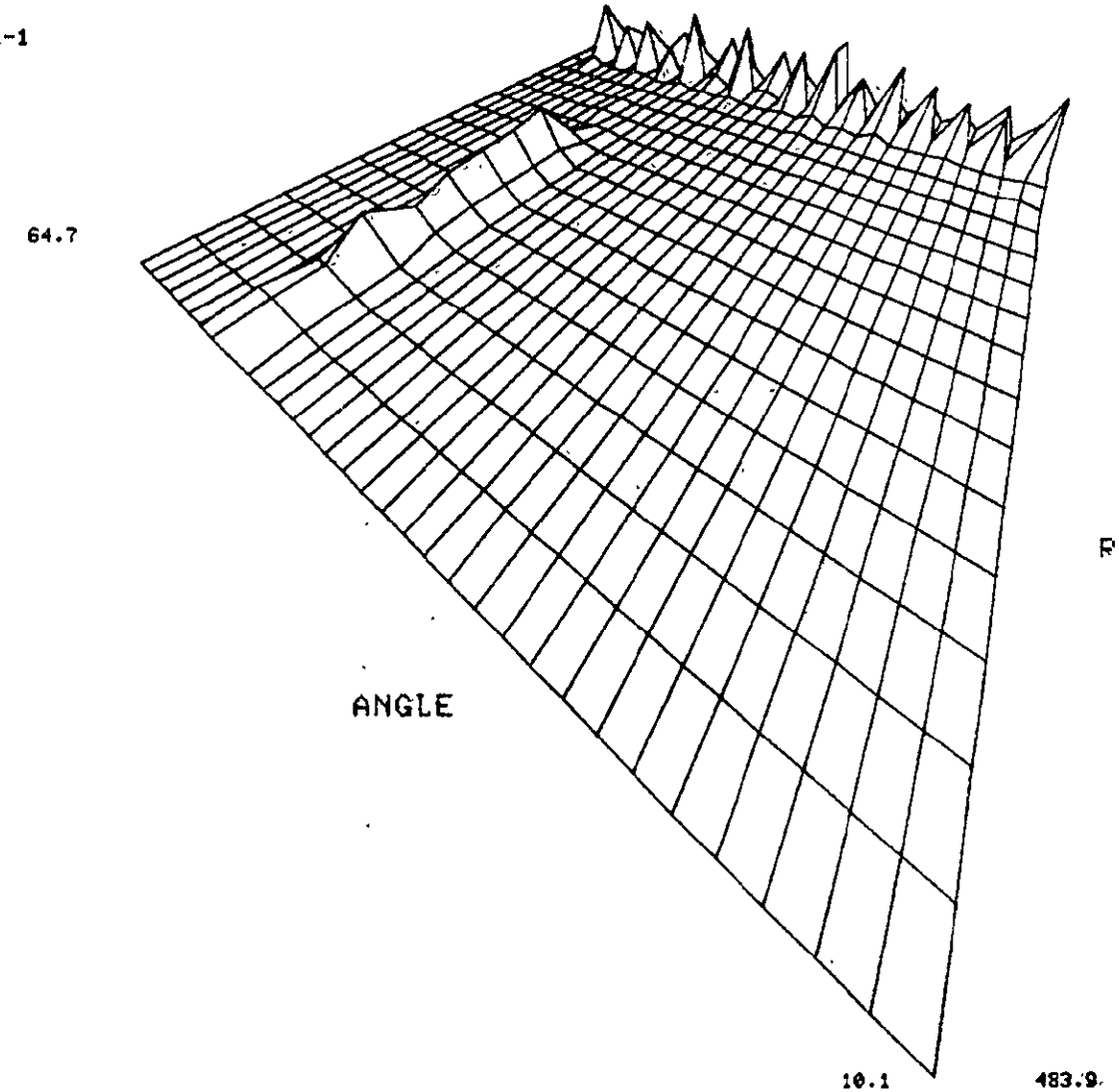
* SCAN # 23 FRAME # 15838 ANGLE 9.404 TO FRAME # 16446 ANGLE 64.384 CRITICAL AMP AT CELL. 62.

OPTION # 11-1

MAXIMUM I = 26.0

AVERAGE I = 1.2

ANGLE	
1	10.1
2	10.8
3	11.9
4	13.4
5	15.0
6	16.8
7	18.6
8	20.3
9	22.0
10	23.8
11	25.6
12	27.3
13	29.0
14	30.8
15	32.5
16	34.3
17	36.0
18	37.7
19	39.4
20	41.3
21	43.0
22	44.6
23	46.3
24	48.1
25	49.8
26	51.5
27	53.2
28	55.0
29	56.7
30	58.5
31	60.2
32	62.1
33	63.7
34	64.7



	R
1	156.5
2	175.7
3	195.0
4	214.3
5	233.5
6	252.8
7	272.0
8	291.3
9	310.6
10	329.8
11	349.1
12	362.3
13	387.6
14	406.9
15	426.1
16	445.4
17	483.9

I_{max}, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

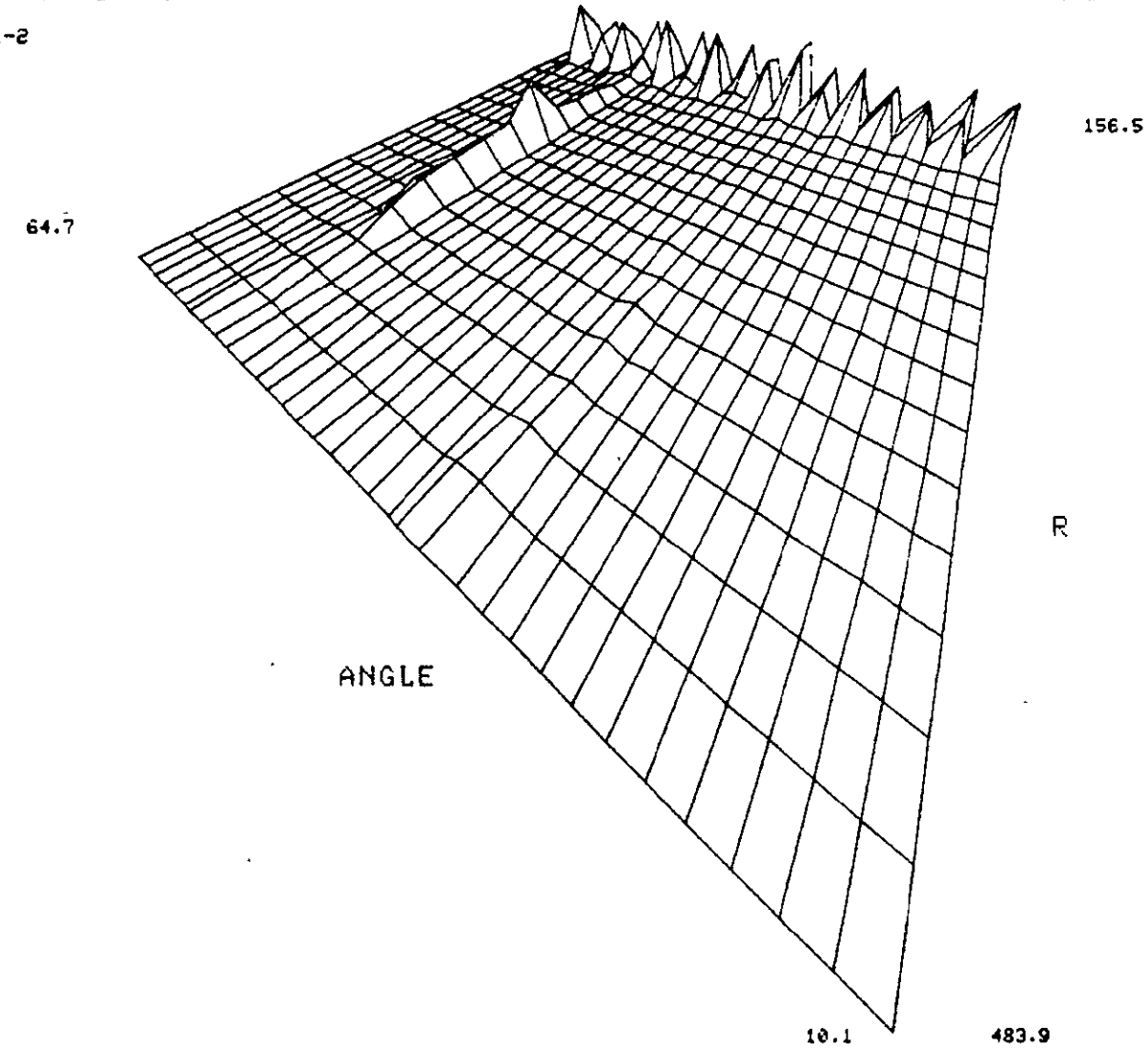
SCAN # 23 FRAME # 15838 ANGLE 9.404 TO FRAME # 16446 ANGLE 64.834 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 45.0

AVERAGE I = 2.7

ANGLE	
1	10.1
2	10.8
3	11.9
4	13.4
5	15.0
6	16.8
7	18.6
8	20.3
9	22.0
10	23.8
11	25.6
12	27.3
13	29.0
14	30.8
15	32.5
16	34.3
17	36.0
18	37.7
19	39.4
20	41.3
21	43.0
22	44.6
23	46.3
24	48.1
25	49.8
26	51.5
27	53.2
28	55.0
29	56.7
30	58.5
31	60.2
32	62.1
33	63.7
34	64.7



	R
1	156.5
2	175.7
3	195.0
4	214.3
5	233.5
6	252.8
7	272.0
8	291.3
9	310.6
10	329.8
11	349.1
12	368.3
13	387.6
14	406.9
15	426.1
16	445.4
17	483.9

I_{max}, R, A. DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

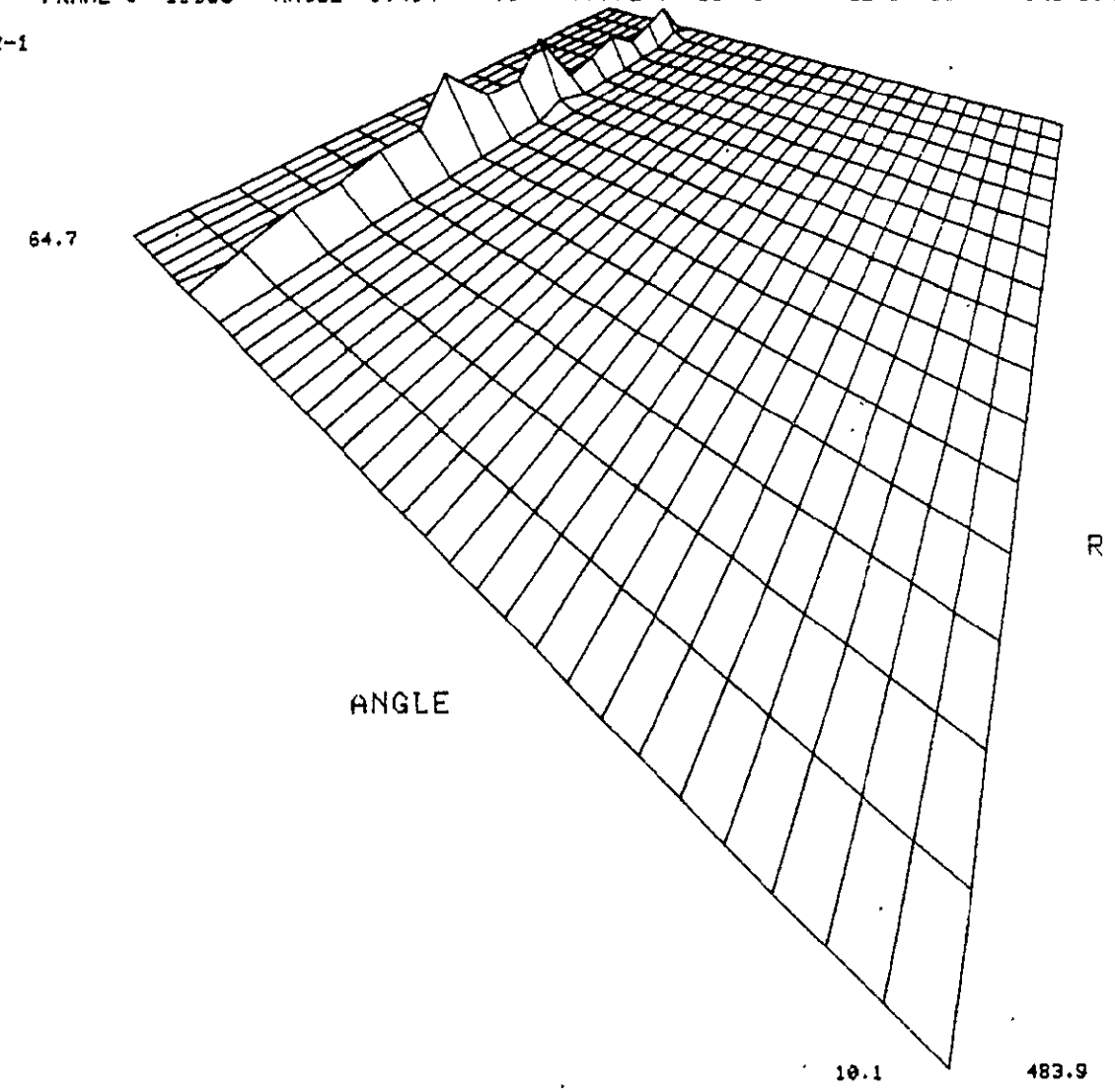
* SCAN # 23 FRAME # 15938 ANGLE 9.404 TO FRAME # 16446 ANGLE 64.584 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 9.0

AVERAGE I = 0.1

	ANGLE
1	10.1
2	10.8
3	11.9
4	13.4
5	15.0
6	16.8
7	18.6
8	20.3
9	22.0
10	23.8
11	25.6
12	27.3
13	29.0
14	30.8
15	32.5
16	34.3
17	36.0
18	37.7
19	39.4
20	41.3
21	43.0
22	44.6
23	46.3
24	48.1
25	49.8
26	51.5
27	53.2
28	55.0
29	56.7
30	58.5
31	60.2
32	62.1
33	63.7
34	64.7



	P
1	156.5
2	175.7
3	195.0
4	214.3
5	233.5
6	252.8
7	272.0
8	291.3
9	310.6
10	329.8
11	349.1
12	363.3
13	387.6
14	406.9
15	426.1
16	445.4
17	433.9

I, R, A DISPLAY AT VELOCITY CELL 62

ORIGINAL PAGE IS OF POOR QUALITY

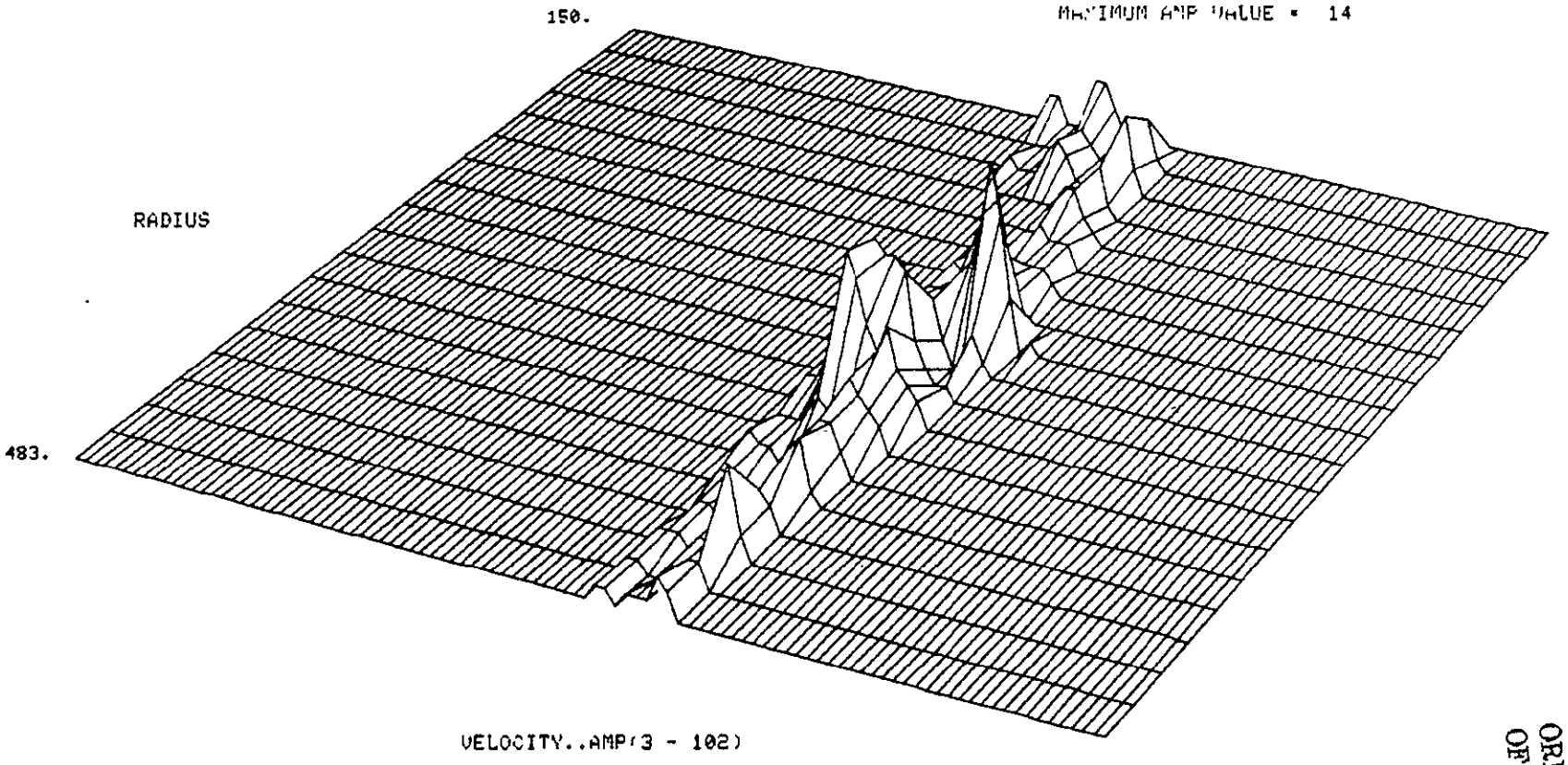
NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF E- 3110

SCAN # 23 FRAME # 15835 ANGLE 9.404 TO FRAME # 16446 ANGLE 64.334 CRITICAL AMP AT CELL 62

FRAME # 16312 TO 16331

ANGLE = 53.29

MAXIMUM AMP VALUE = 14



ORIGINAL PAGE IS
OF POOR QUALITY

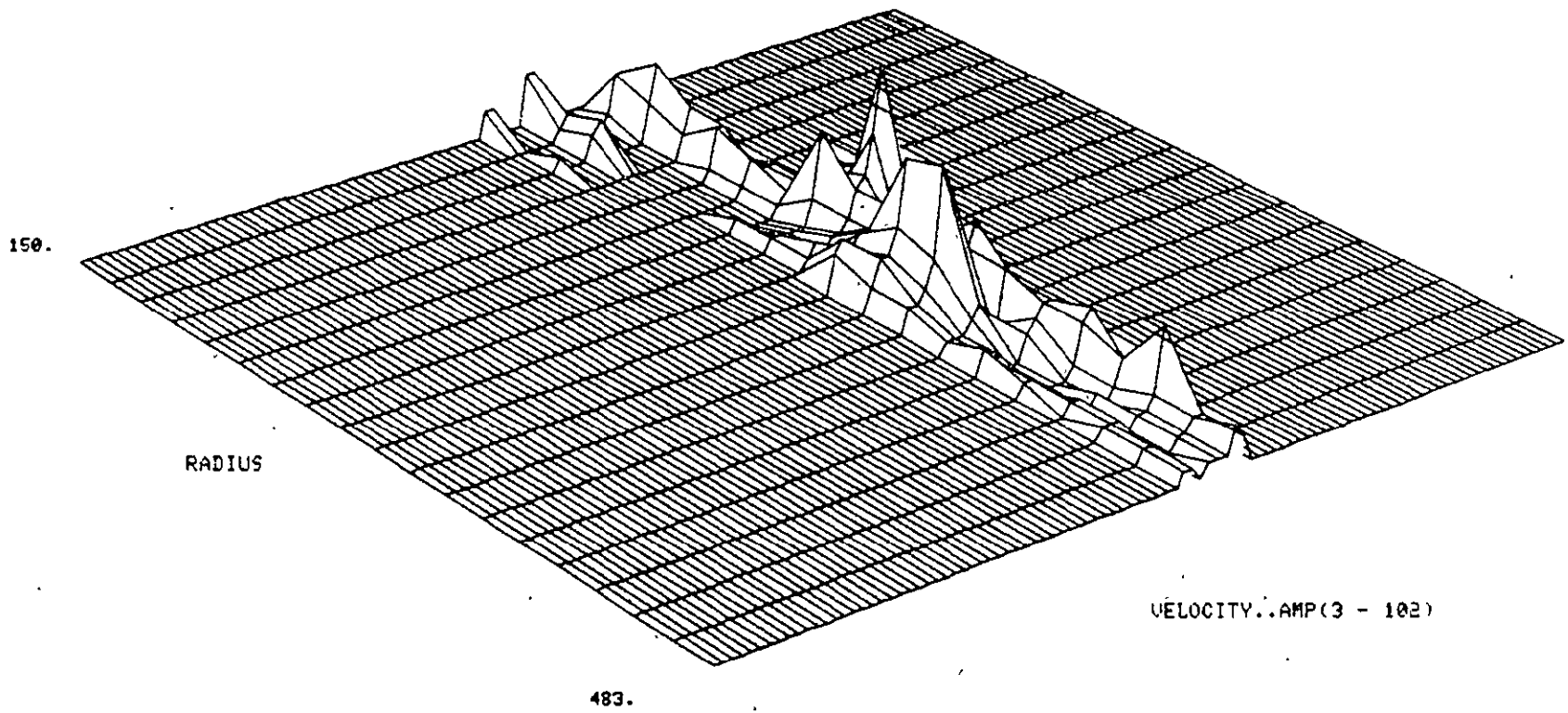
NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 23 FRAME # 15836 ANGLE 9.404 TO FRAME # 16446 ANGLE 64.834 CRITICAL AMP AT CELL 62

FRAME # 16312 TO 16331

ANGLE = 53.29

MAXIMUM AMP VALUE = 14



NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 5110

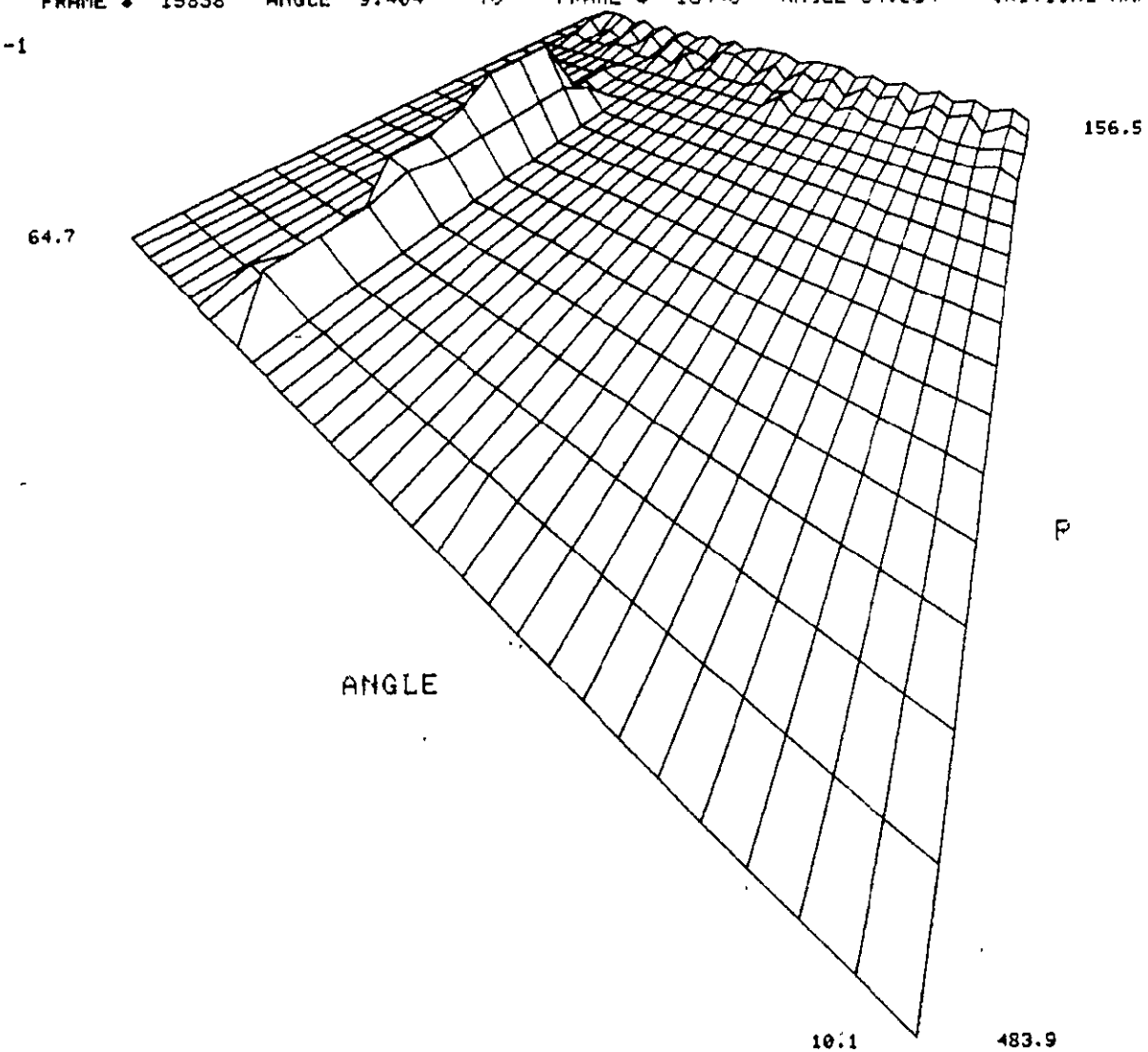
SCAN # 23 FRAME # 15838 ANGLE 9.404 TO FRAME # 16446 ANGLE 64.224 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 11.0

AVERAGE V = 1.4

	ANGLE
1	10.1
2	10.8
3	11.9
4	13.4
5	15.0
6	16.8
7	18.6
8	20.3
9	22.0
10	23.8
11	25.6
12	27.3
13	29.0
14	30.8
15	32.5
16	34.3
17	36.0
18	37.7
19	39.4
20	41.3
21	43.0
22	44.6
23	46.3
24	48.1
25	49.8
26	51.5
27	53.2
28	55.0
29	56.7
30	58.5
31	60.2
32	62.1
33	63.7
34	64.7



	R
1	156.5
2	175.7
3	195.0
4	214.3
5	233.5
6	252.8
7	272.0
8	291.3
9	310.6
10	329.3
11	349.1
12	368.3
13	387.6
14	406.9
15	426.1
16	445.4
17	483.9

V, R, A DISPLAY (VELOCITY AT I_{MAX})

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

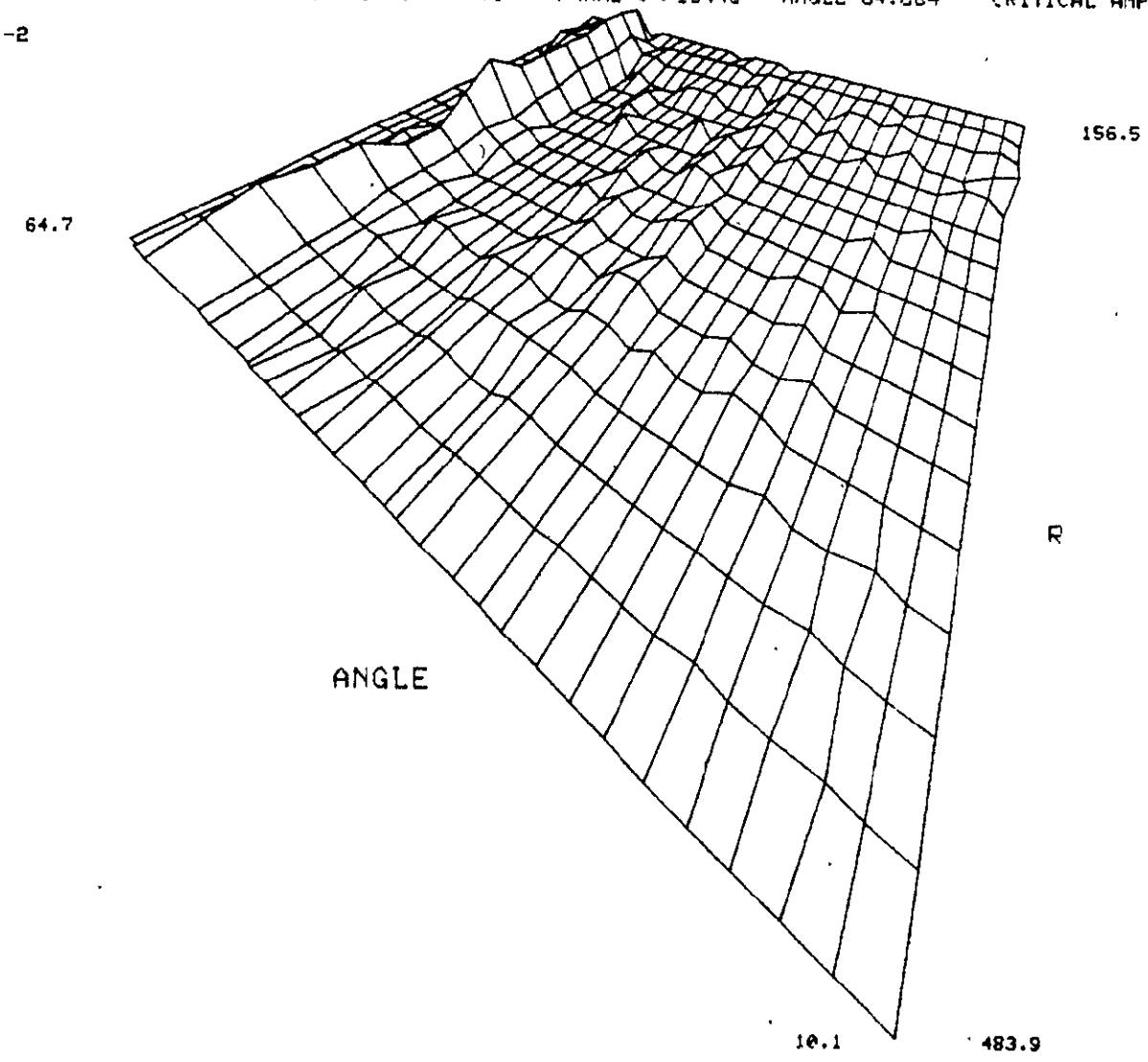
* SCAN # 23 FRAME # 15838 ANGLE 9.404 TO FRAME # 16446 ANGLE 64.284 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V = 13.0

AVERAGE V = 2.3

ANGLE	
1	10.1
2	10.8
3	11.9
4	13.4
5	15.0
6	16.8
7	18.6
8	20.3
9	22.0
10	23.8
11	25.6
12	27.3
13	29.0
14	30.8
15	32.5
16	34.3
17	36.0
18	37.7
19	39.4
20	41.3
21	43.0
22	44.6
23	46.3
24	48.1
25	49.8
26	51.5
27	53.2
28	55.0
29	56.7
30	58.5
31	60.2
32	62.1
33	63.7
34	64.7



	R
1	156.5
2	175.7
3	195.0
4	214.3
5	233.5
6	252.8
7	272.0
8	291.3
9	310.6
10	329.8
11	349.1
12	368.3
13	387.6
14	406.9
15	426.1
16	445.4
17	483.9

V, R, A DISPLAY (VELOCITY AT I_{MAX})

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 1 OF 2- 6110

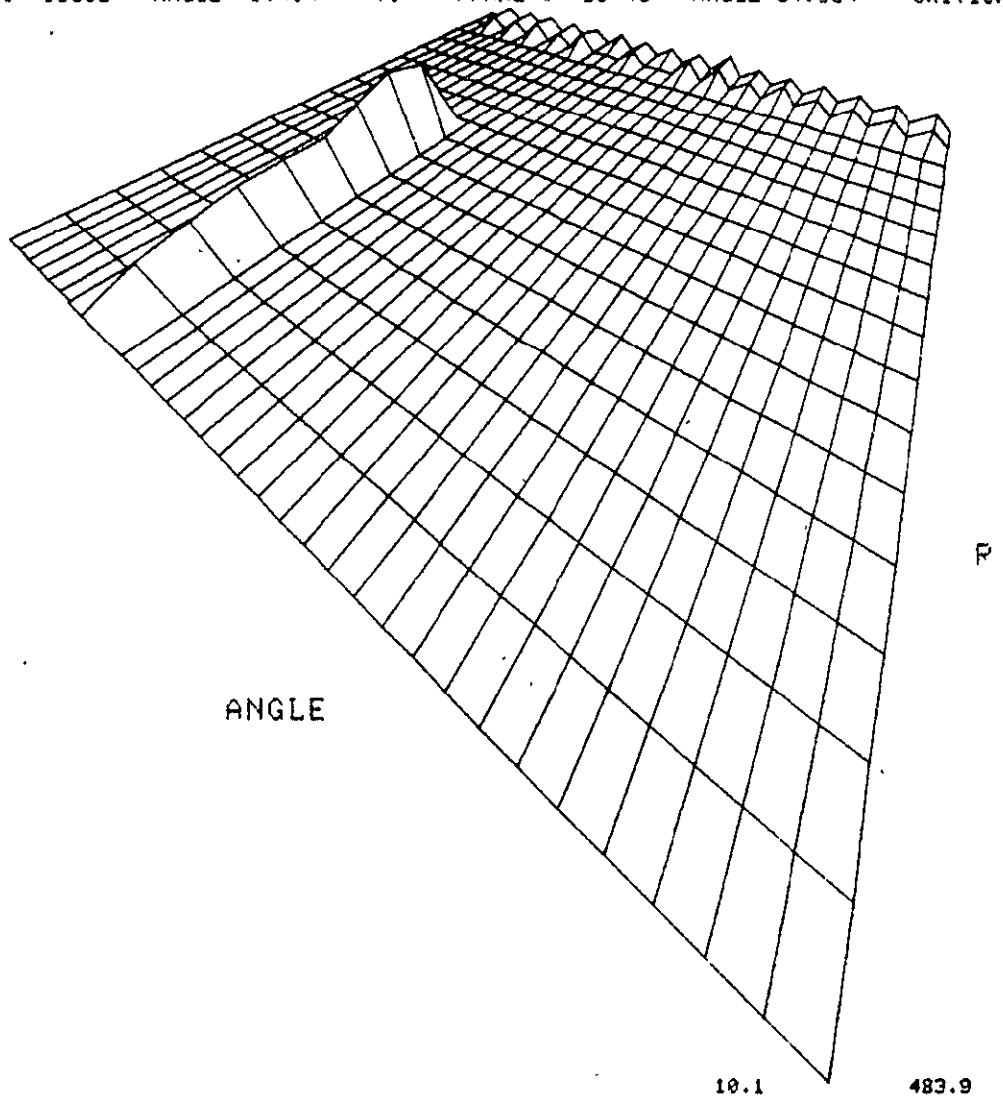
SCAN # 23 FRAME # 15838 ANGLE 9.404 TO FRAME # 16446 ANGLE 64.384 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 13.0

AVERAGE V = 1.3

ANGLE	
1	10.1
2	10.8
3	11.9
4	13.4
5	15.0
6	16.8
7	18.6
8	20.3
9	22.0
10	23.8
11	25.6
12	27.3
13	29.0
14	30.8
15	32.5
16	34.3
17	36.0
18	37.7
19	39.4
20	41.3
21	43.0
22	44.6
23	46.3
24	48.1
25	49.8
26	51.5
27	53.2
28	55.0
29	56.7
30	58.5
31	60.2
32	62.1
33	63.7
34	64.7



	R
1	156.5
2	175.7
3	195.0
4	214.3
5	233.5
6	252.8
7	272.0
8	291.3
9	310.6
10	329.8
11	349.1
12	368.3
13	387.6
14	406.9
15	426.1
16	445.4
17	483.9

V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5.

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

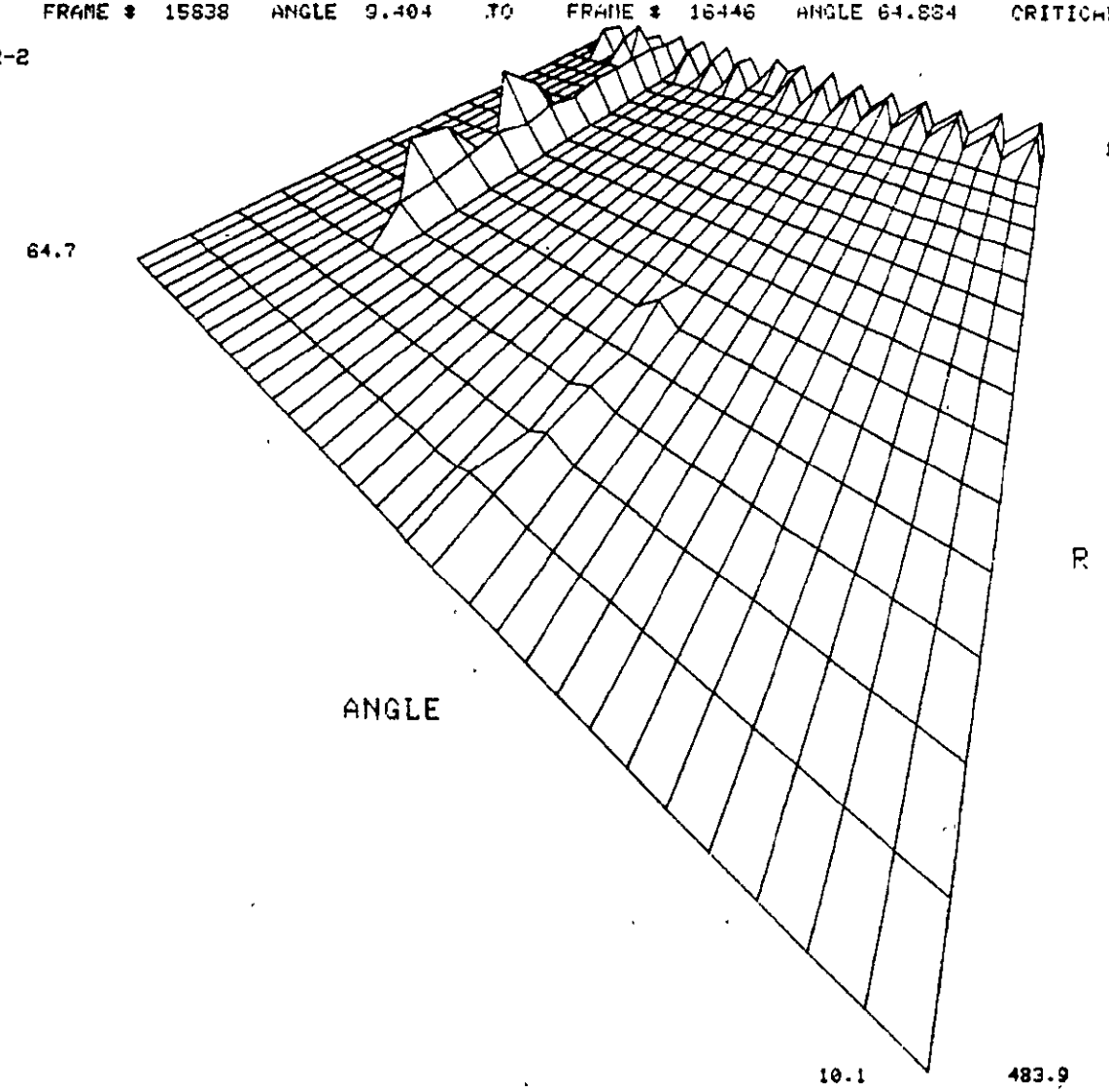
* SCAN # 23 FRAME # 15838 ANGLE 9.404 TO FRAME # 16446 ANGLE 64.834 CRITICAL ANP AT CELL 62

OPTION # 22-2

MAXIMUM V = 14.0

AVERAGE V = 1.5

ANGLE	
1	10.1
2	10.8
3	11.9
4	13.4
5	15.0
6	16.8
7	18.6
8	20.3
9	22.0
10	23.8
11	25.6
12	27.3
13	29.0
14	30.8
15	32.5
16	34.3
17	36.0
18	37.7
19	39.4
20	41.3
21	43.0
22	44.6
23	46.3
24	48.1
25	49.8
26	51.5
27	53.2
28	55.0
29	56.7
30	58.5
31	60.2
32	62.1
33	63.7
34	64.7



	R
1	156.5
2	175.7
3	195.0
4	214.3
5	233.5
6	252.8
7	272.0
8	291.3
9	310.6
10	329.3
11	349.1
12	368.3
13	387.6
14	406.9
15	426.1
16	445.4
17	483.9

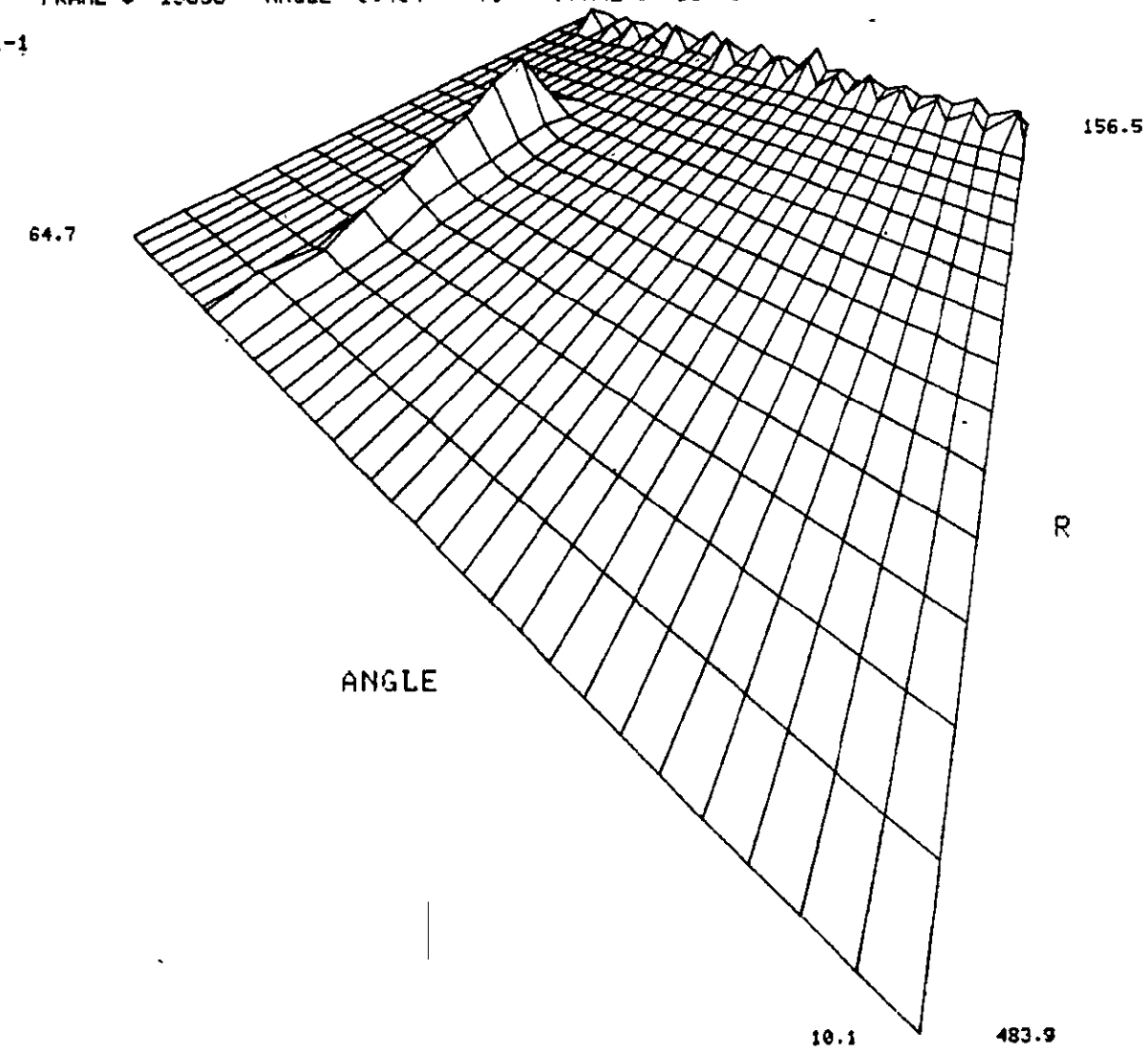
Umax, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

* SCAN # 23 FRAME # 15338 ANGLE 9.404 TO FRAME # 16446 ANGLE 64.824 CRITICAL AMP AT CELL 62

OPTION # 31-1

ANGLE	
1	10.1
2	10.8
3	11.9
4	13.4
5	15.0
6	16.8
7	18.6
8	20.3
9	22.0
10	23.8
11	25.6
12	27.3
13	29.0
14	30.8
15	32.5
16	34.3
17	36.0
18	37.7
19	39.4
20	41.3
21	43.0
22	44.6
23	46.3
24	48.1
25	49.8
26	51.5
27	53.2
28	55.0
29	56.7
30	58.5
31	60.2
32	62.1
33	63.7
34	64.7



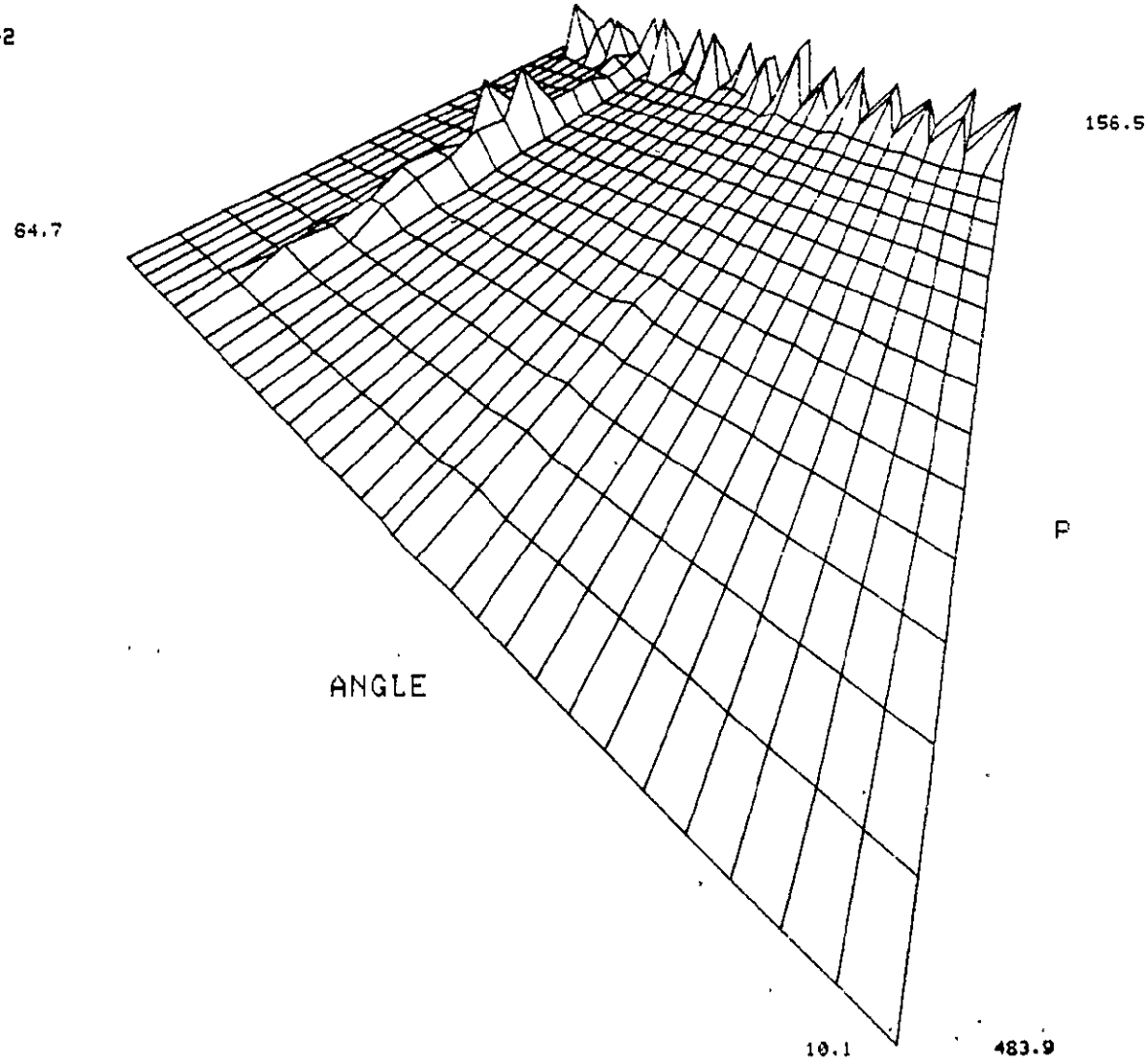
	R
1	156.5
2	175.7
3	195.0
4	214.3
5	233.5
6	252.8
7	272.0
8	291.3
9	310.6
10	329.8
11	349.1
12	368.3
13	387.6
14	406.9
15	426.1
16	445.4
17	483.9

U * IMAX, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 1 OF 2- 6110

SCAN # 23 FRAME # 15838 ANGLE 9.404 TO FRAME # 16446 ANGLE 64.384 CRITICAL AMP AT CELL 62

OPTION # 31-2



	ANGLE
1	10.1
2	10.8
3	11.9
4	13.4
5	15.0
6	16.8
7	18.6
8	20.3
9	22.0
10	23.8
11	25.6
12	27.3
13	29.0
14	30.8
15	32.5
16	34.3
17	36.0
18	37.7
19	39.4
20	41.3
21	43.0
22	44.6
23	46.3
24	48.1
25	49.8
26	51.5
27	53.2
28	55.0
29	56.7
30	58.5
31	60.2
32	62.1
33	63.7
34	64.7

	R
1	156.5
2	175.7
3	195.0
4	214.3
5	233.5
6	252.3
7	272.0
8	291.3
9	310.6
10	329.5
11	349.1
12	368.3
13	387.6
14	406.3
15	426.1
16	445.4
17	483.9

V X Imax, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF 2-29226

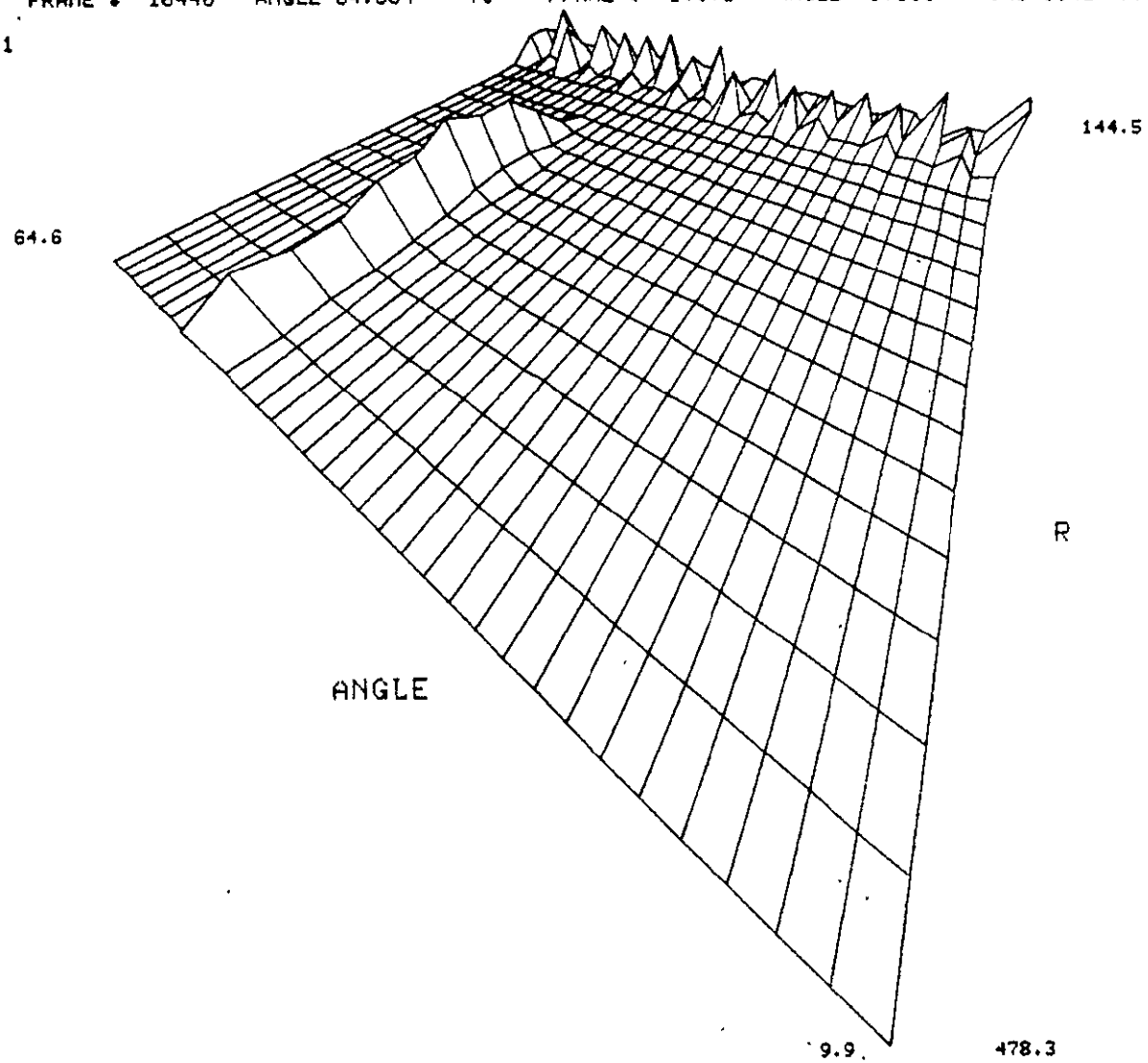
* SCAN # 24 FRAME # 16446 ANGLE 64.584 TO FRAME # 17076 ANGLE 9.316 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 31.0

AVERAGE I = 1.5

ANGLE	
1	64.6
2	64.6
3	64.0
4	62.9
5	61.5
6	59.9
7	58.2
8	56.3
9	54.5
10	52.8
11	51.1
12	49.3
13	47.7
14	46.0
15	44.3
16	42.7
17	40.9
18	39.2
19	37.4
20	35.7
21	33.9
22	32.1
23	30.4
24	28.7
25	26.9
26	25.1
27	23.4
28	21.6
29	19.9
30	18.1
31	16.3
32	14.5
33	12.8
34	11.0
35	9.9



	R
1	144.5
2	164.2
3	183.8
4	203.4
5	223.1
6	242.7
7	262.3
8	232.0
9	301.6
10	321.2
11	340.8
12	360.5
13	380.1
14	399.7
15	419.4
16	439.0
17	478.3

ORIGINAL PAGE IS OF POOR QUALITY

I_{MAX}, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF 2-29226

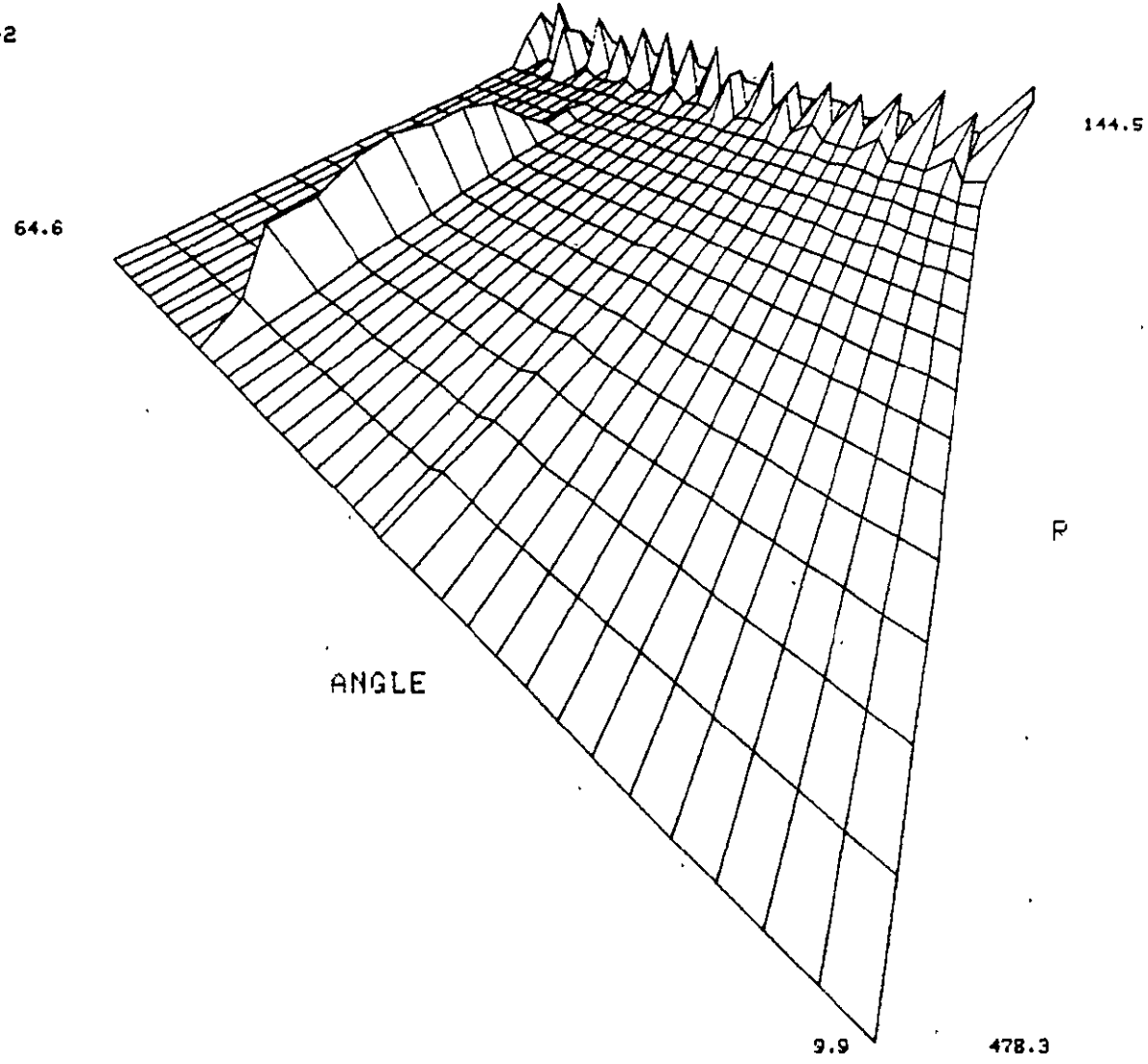
SCAN # 24 FRAME # 16446 ANGLE 64.384 TO FRAME # 17076 ANGLE 9.316 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 48.0

AVERAGE I = 3.2

ANGLE	
1	64.6
2	64.6
3	64.0
4	62.9
5	61.5
6	59.9
7	58.2
8	56.3
9	54.5
10	52.8
11	51.1
12	49.3
13	47.7
14	46.0
15	44.3
16	42.7
17	40.9
18	39.2
19	37.4
20	35.7
21	33.9
22	32.1
23	30.4
24	28.7
25	26.9
26	25.1
27	23.4
28	21.6
29	19.9
30	18.1
31	16.3
32	14.5
33	12.8
34	11.0
35	9.9



	R
1	144.5
2	164.2
3	183.8
4	203.4
5	223.1
6	242.7
7	262.3
8	282.0
9	301.6
10	321.2
11	340.3
12	360.5
13	380.1
14	399.7
15	419.4
16	439.0
17	478.3

I_{max}, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 235 RUN # 4 TAPE 2 OF 2-29226

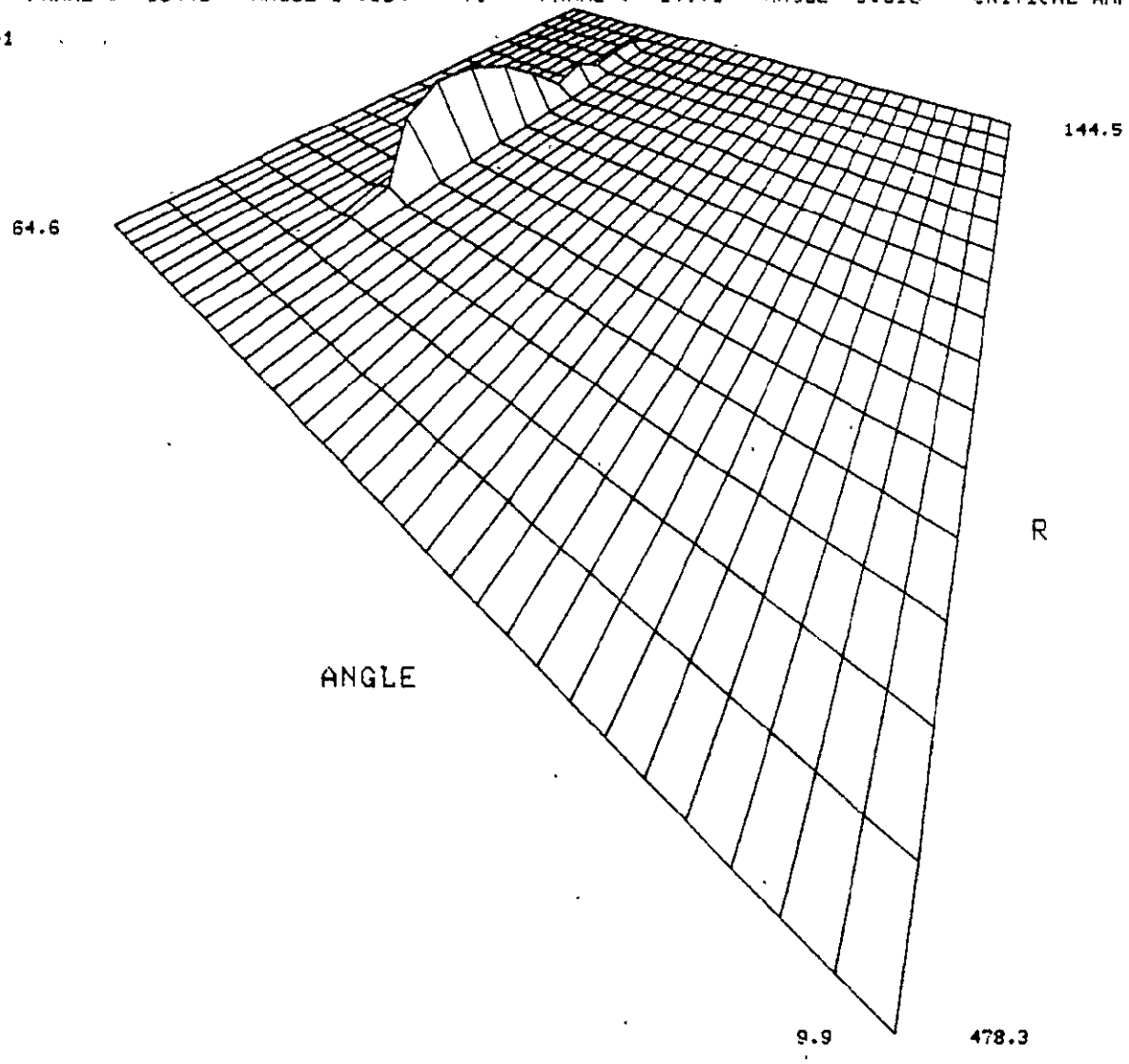
* SCAN # 24 FRAME # 16446 ANGLE 64.884 TO FRAME # 17076 ANGLE 9.316 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 24.0

AVERAGE I = 0.3

ANGLE	
1	64.6
2	64.6
3	64.0
4	62.9
5	61.5
6	59.9
7	58.2
8	56.3
9	54.5
10	52.8
11	51.1
12	49.3
13	47.7
14	46.0
15	44.3
16	42.7
17	40.9
18	39.2
19	37.4
20	35.7
21	33.9
22	32.1
23	30.4
24	28.7
25	26.9
26	25.1
27	23.4
28	21.6
29	19.9
30	18.1
31	16.3
32	14.5
33	12.8
34	11.0
35	9.9



	R
1	144.5
2	164.2
3	183.8
4	203.4
5	223.1
6	242.7
7	262.3
8	282.0
9	301.6
10	321.2
11	340.8
12	360.5
13	380.1
14	399.7
15	419.4
16	439.0
17	478.3

I, R, A DISPLAY AT VELOCITY CELL 62

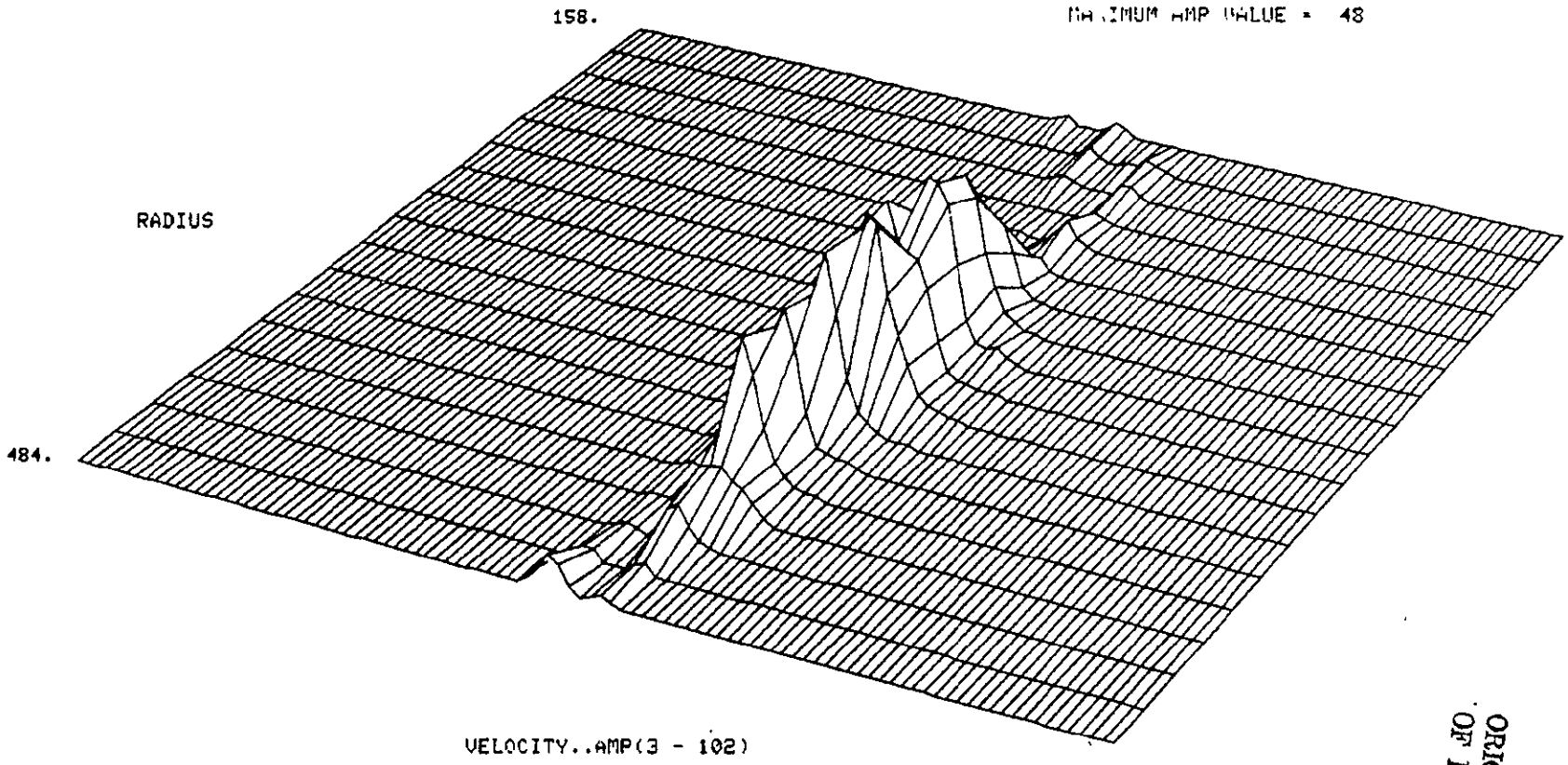
NASA PROJECT DUST DEVIL DAY 233 , PLN # 4 TAPE 2 OF 2-29226

SCAN # 24 FRAME # 16446 ANGLE 64.854 TO FRAME # 17078 ANGLE 9.316 CRITICAL AMP AT CELL 62

FRAME # 16604 TO 16622

ANGLE = 52.78

MAXIMUM AMP VALUE = 48



ORIGINAL PAGE IS OF POOR QUALITY

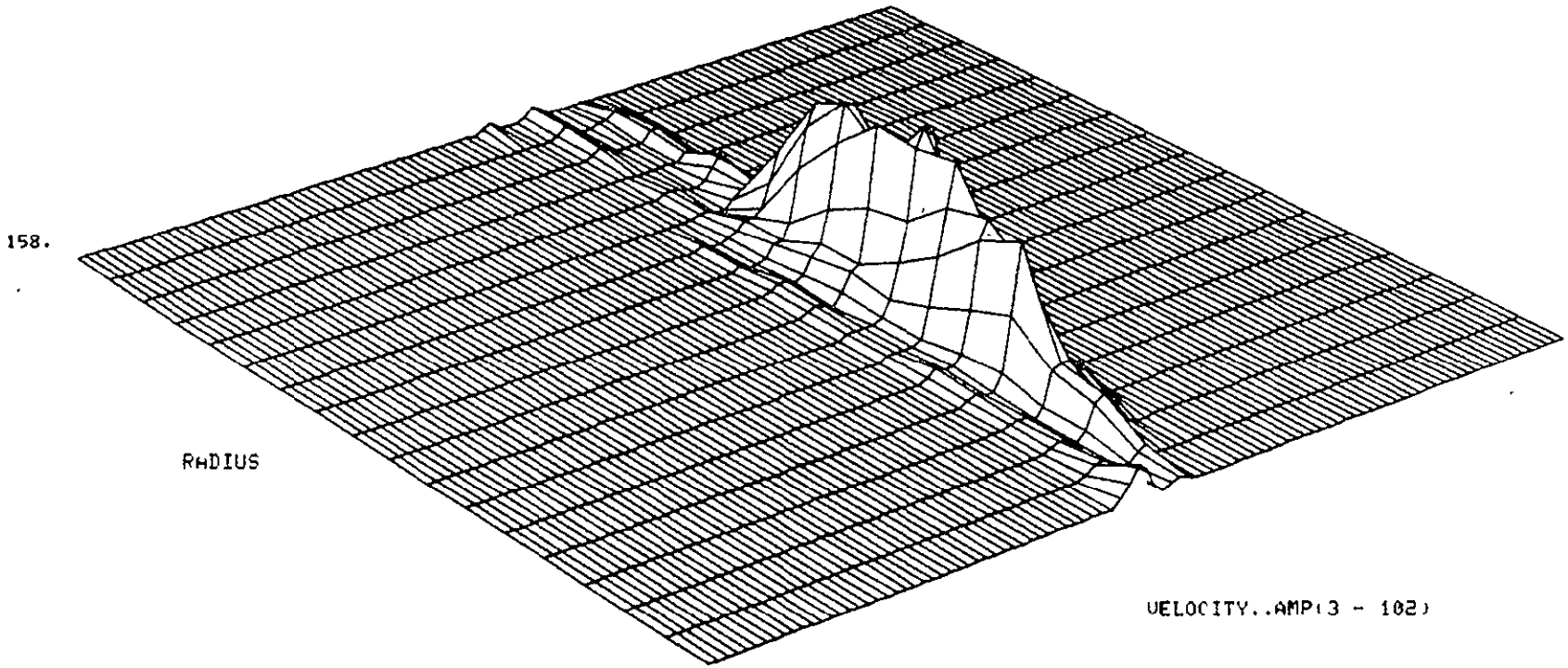
NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 2 OF 2-29226

SCAN # 24 FRAME # 16446 ANGLE 64.834 TO FRAME # 17076 ANGLE 9.316 CRITICAL AMP AT CELL 62

FRAME # 16604 TO 16622

ANGLE = 52.78

MAXIMUM AMP VALUE = 48



ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 230 RUN # 4 TAPE 2 OF 2-29226

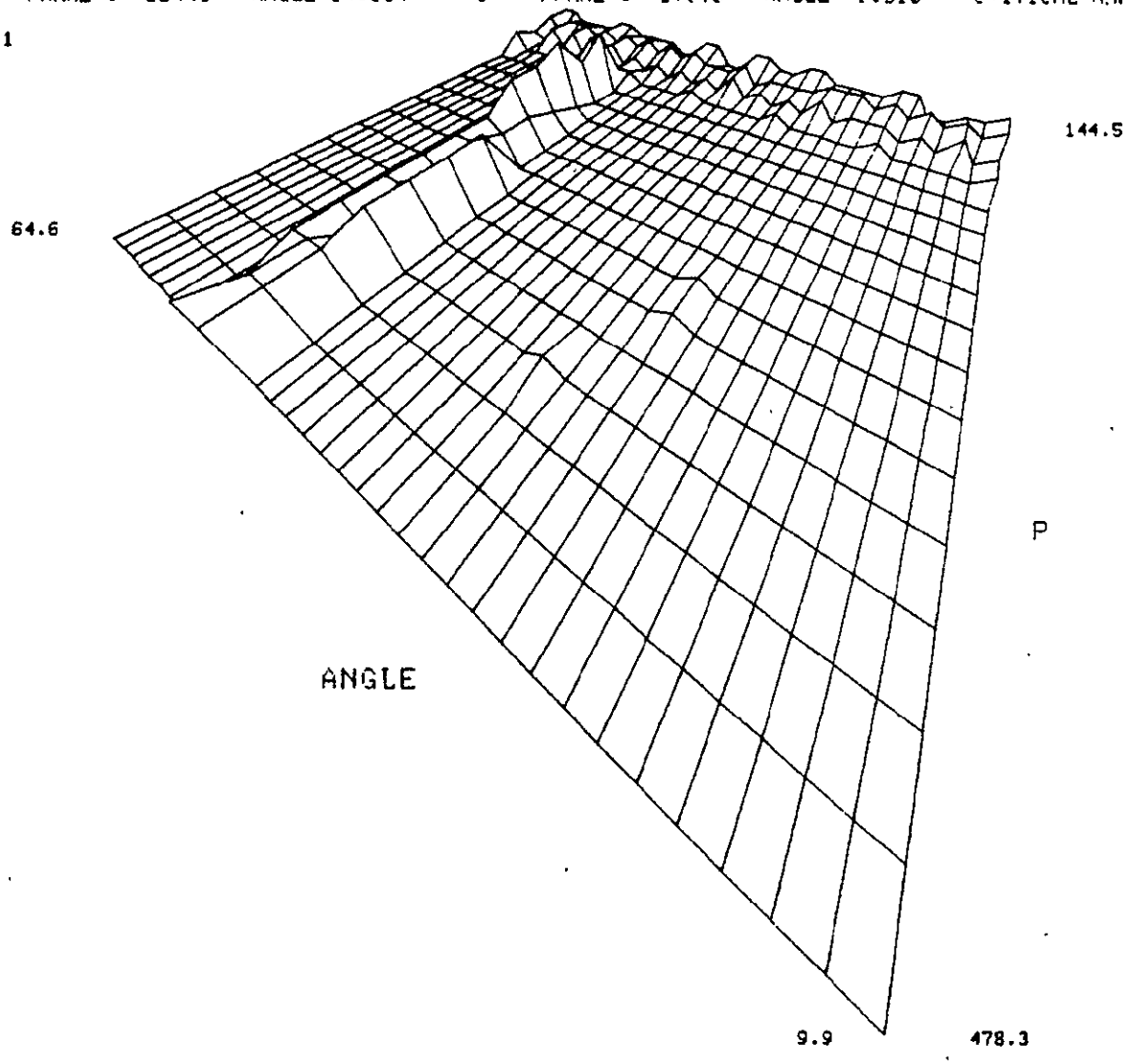
* SCAN # 24 FRAME # 16446 ANGLE 64.384 TO FRAME # 17076 ANGLE 9.316 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 8.0

AVERAGE V = 1.4

	ANGLE
1	64.6
2	64.6
3	64.0
4	62.9
5	61.5
6	59.9
7	58.2
8	56.3
9	54.5
10	52.8
11	51.1
12	49.3
13	47.7
14	46.0
15	44.3
16	42.7
17	40.9
18	39.2
19	37.4
20	35.7
21	33.9
22	32.1
23	30.4
24	28.7
25	26.9
26	25.1
27	23.4
28	21.6
29	19.9
30	18.1
31	16.3
32	14.5
33	12.8
34	11.0
35	9.9



	R
1	144.5
2	164.2
3	183.8
4	203.4
5	223.1
6	242.7
7	262.3
8	282.0
9	301.6
10	321.2
11	340.8
12	360.5
13	380.1
14	399.7
15	419.4
16	439.0
17	478.3

U, R, A DISPLAY (VELOCITY AT IMAX)

NASA PROJECT DUST DEVIL · DAY 232 RUN # 4 TAPE 2 OF 2-23226

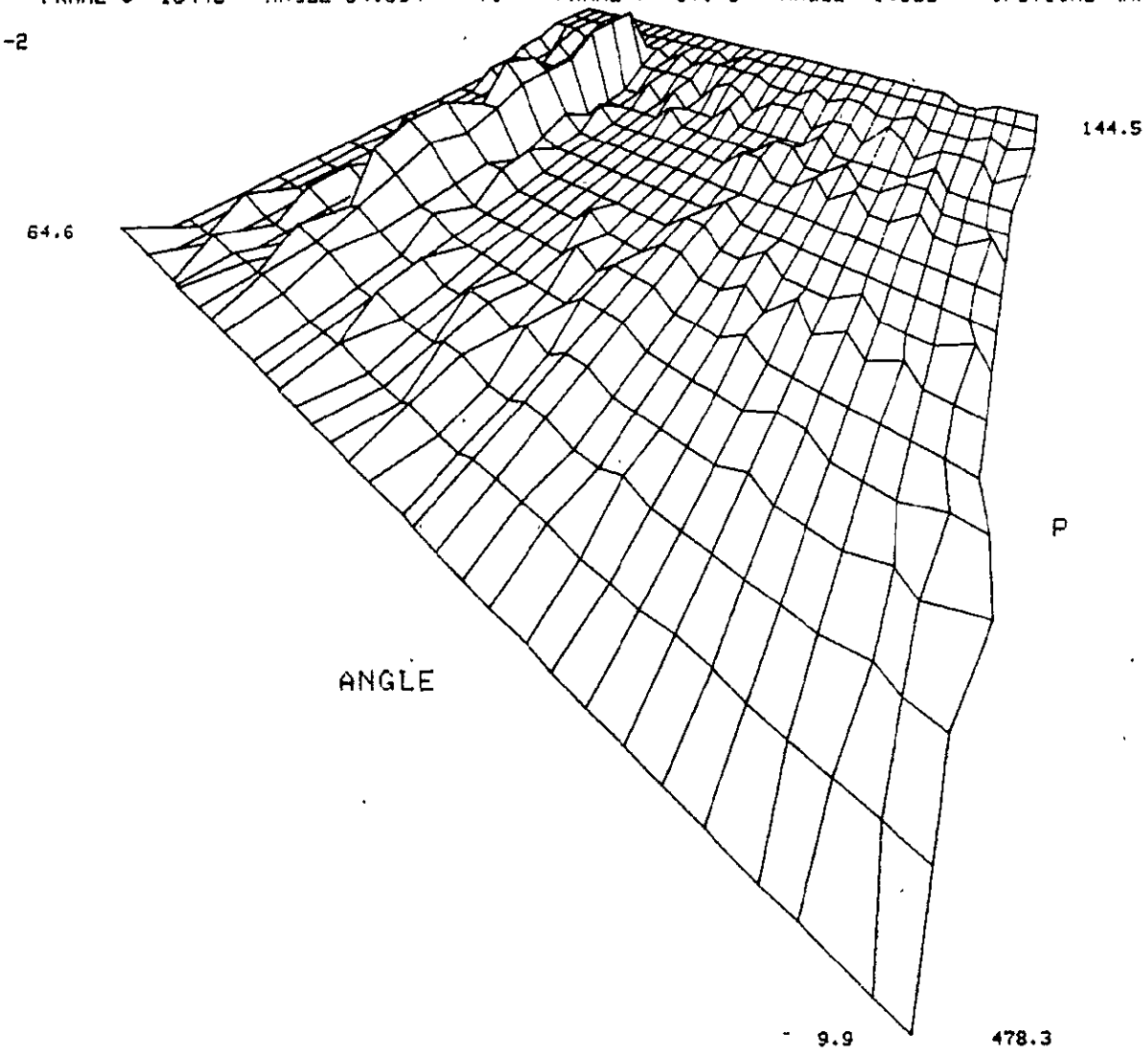
* SCAN # 24 FRAME # 16446 ANGLE 64.834 TO FRAME # 17076 ANGLE 9.316 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V = 10.0

AVERAGE V = 2.2

ANGLE	
1	64.6
2	64.6
3	64.0
4	62.9
5	61.5
6	59.9
7	58.2
8	56.3
9	54.5
10	52.8
11	51.1
12	49.3
13	47.7
14	46.0
15	44.3
16	42.7
17	40.9
18	39.2
19	37.4
20	35.7
21	33.9
22	32.1
23	30.4
24	28.7
25	26.9
26	25.1
27	23.4
28	21.6
29	19.9
30	18.1
31	16.3
32	14.5
33	12.8
34	11.0
35	9.9



	R
1	144.5
2	164.2
3	183.8
4	203.4
5	223.1
6	242.7
7	262.3
8	282.0
9	301.6
10	321.2
11	340.8
12	360.5
13	380.1
14	399.7
15	419.4
16	439.0
17	478.3

V, R, A DISPLAY (VELOCITY AT I_{MAX})

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF 2-23226

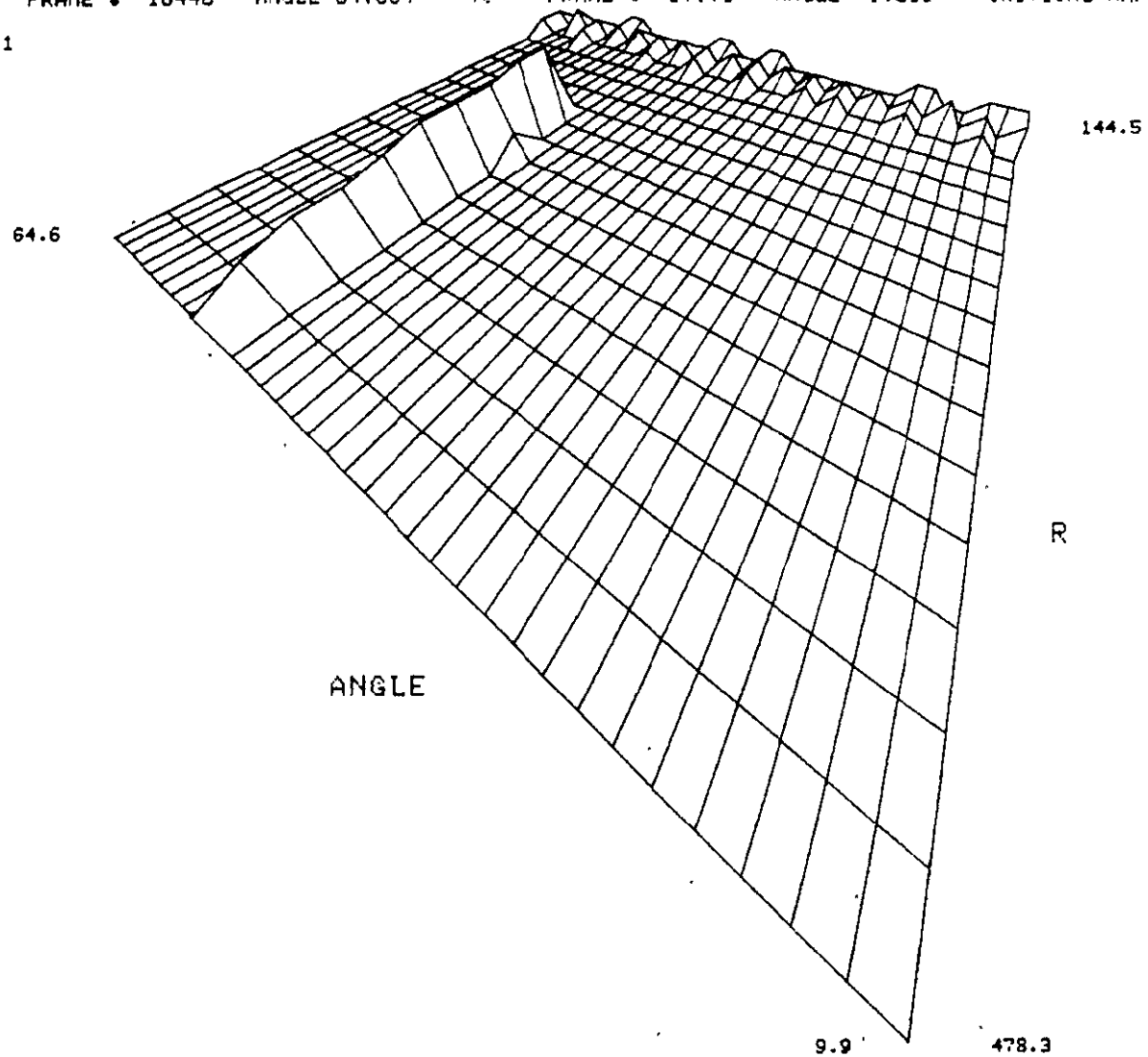
* SCAN # 24 FRAME # 16446 ANGLE 64.884 TO FRAME # 17076 ANGLE 9.316 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM U = 10.0

AVERAGE U = 1.3

ANGLE	
1	64.6
2	64.6
3	64.0
4	62.9
5	61.5
6	59.9
7	58.2
8	56.3
9	54.5
10	52.8
11	51.1
12	49.3
13	47.7
14	46.0
15	44.3
16	42.7
17	40.9
18	39.2
19	37.4
20	35.7
21	33.9
22	32.1
23	30.4
24	28.7
25	26.9
26	25.1
27	23.4
28	21.6
29	19.9
30	18.1
31	16.3
32	14.5
33	12.8
34	11.0
35	9.9



	R
1	144.5
2	164.2
3	183.8
4	203.4
5	223.1
6	242.7
7	262.3
8	282.0
9	301.6
10	321.2
11	340.8
12	360.5
13	380.1
14	399.7
15	419.4
16	439.0
17	478.3

Vmax, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 2 OF 2-29226

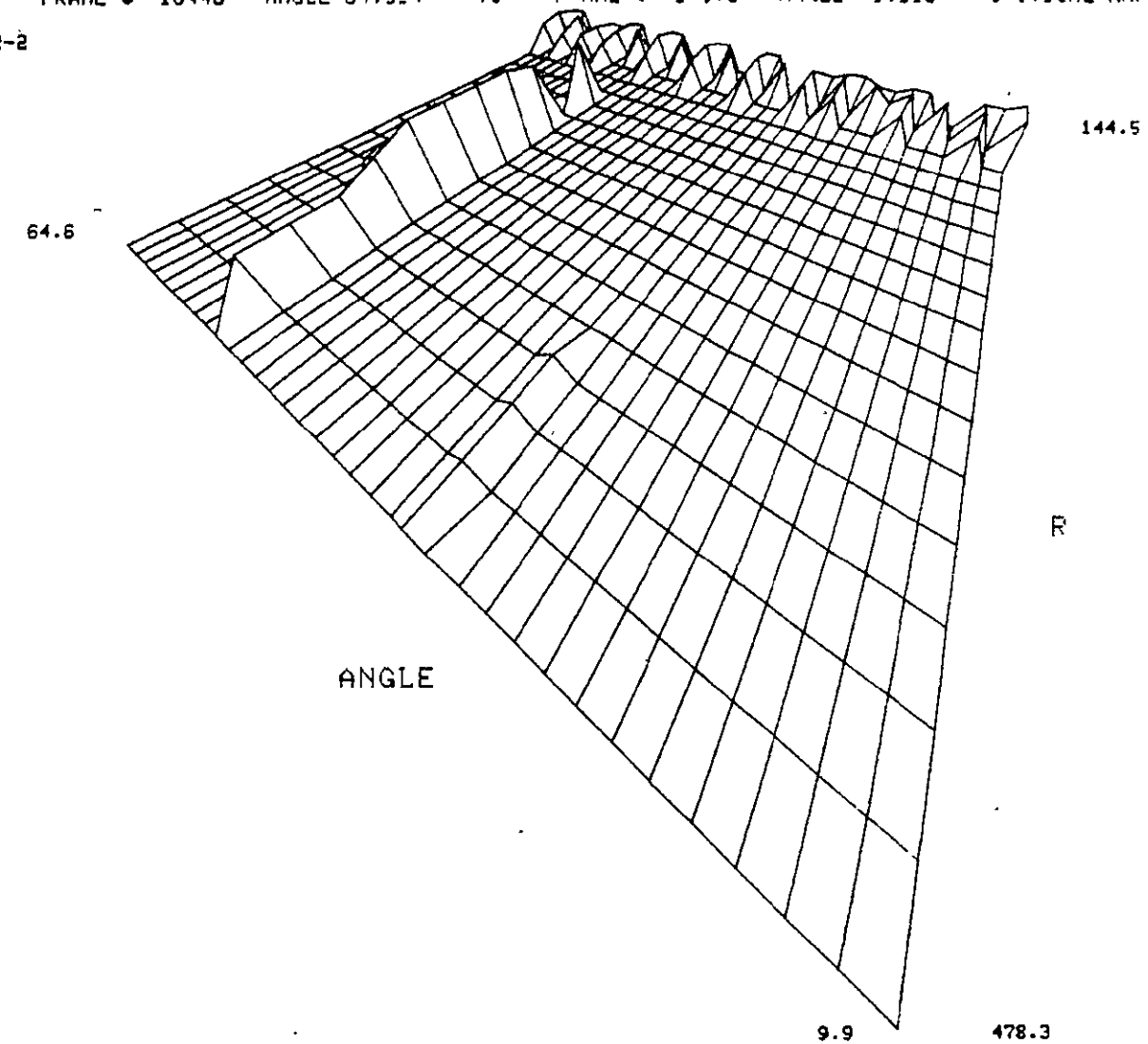
* SCAN # 24 FRAME # 16446 ANGLE 64.394 TO FRAME # 17076 ANGLE 9.316 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM U = 11.0

AVERAGE U = 1.6

	ANGLE
1	64.6
2	64.6
3	64.0
4	62.9
5	61.5
6	59.9
7	58.2
8	56.3
9	54.5
10	52.8
11	51.1
12	49.3
13	47.7
14	46.0
15	44.3
16	42.7
17	40.9
18	39.2
19	37.4
20	35.7
21	33.9
22	32.1
23	30.4
24	28.7
25	26.9
26	25.1
27	23.4
28	21.6
29	19.9
30	18.1
31	16.3
32	14.5
33	12.8
34	11.0
35	9.9



	R
1	144.5
2	164.2
3	183.8
4	203.4
5	223.1
6	242.7
7	262.3
8	282.0
9	301.6
10	321.2
11	340.8
12	360.5
13	380.1
14	399.7
15	419.4
16	439.0
17	478.3

Umax, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

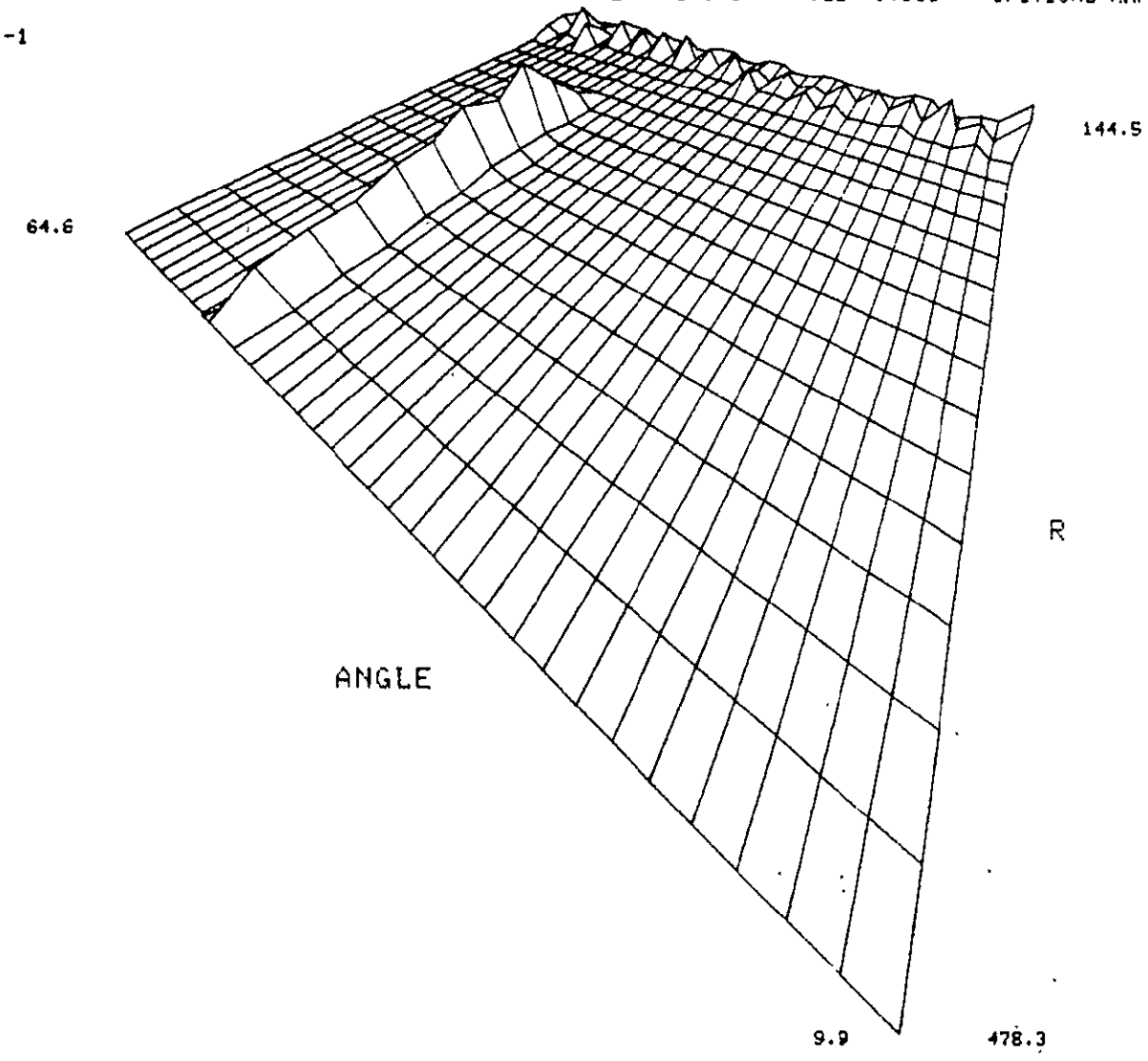
ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF 2-29226

* SCAN # 24 FRAME # 16446 ANGLE 64.884 TO FRAME # 17076 ANGLE 9.316 CRITICAL AMP AT CELL 62

OPTION # 31-1

ANGLE	
1	64.6
2	64.6
3	64.0
4	62.9
5	61.5
6	59.9
7	58.2
8	56.3
9	54.5
10	52.8
11	51.1
12	49.3
13	47.7
14	46.0
15	44.3
16	42.7
17	40.9
18	39.2
19	37.4
20	35.7
21	33.9
22	32.1
23	30.4
24	28.7
25	26.9
26	25.1
27	23.4
28	21.6
29	19.9
30	18.1
31	16.3
32	14.5
33	12.8
34	11.0
35	9.9



R	
1	144.5
2	164.2
3	183.8
4	203.4
5	223.1
6	242.7
7	262.3
8	282.0
9	301.6
10	321.2
11	340.8
12	360.5
13	380.1
14	399.7
15	419.4
16	439.0
17	478.3

V # IMAX, R, A DISPLAY

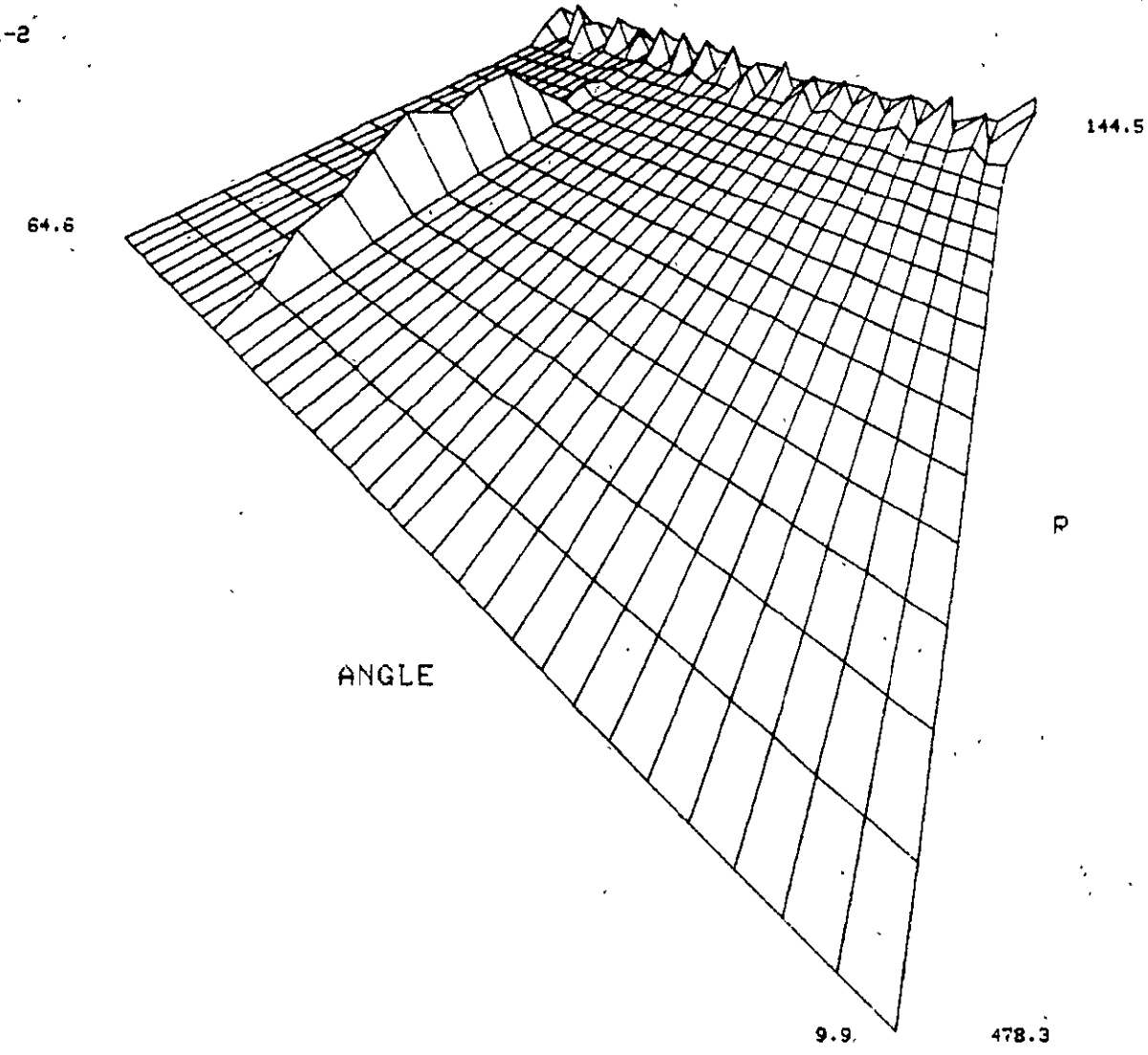
ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL . DAY 333 RUN # 4. TAPE 2 OF 2-29226

* SCAN # 24 FRAME # 16446 ANGLE 64.384 TO FRAME # 17076 ANGLE 9.316 OPITICAL AMP AT CELL 62

OPTION # 31-2

ANGLE	
1	64.6
2	64.6
3	64.0
4	62.9
5	61.5
6	59.9
7	58.2
8	56.3
9	54.5
10	52.8
11	51.1
12	49.3
13	47.7
14	46.0
15	44.3
16	42.7
17	40.9
18	39.2
19	37.4
20	35.7
21	33.9
22	32.1
23	30.4
24	28.7
25	26.9
26	25.1
27	23.4
28	21.6
29	19.9
30	18.1
31	16.3
32	14.5
33	12.8
34	11.0
35	9.9



	R
1	144.5
2	164.2
3	183.8
4	203.4
5	223.1
6	242.7
7	262.3
8	282.0
9	301.6
10	321.2
11	340.8
12	360.5
13	380.1
14	399.7
15	419.4
16	439.0
17	478.3

U * IMAX, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 1 TAPE 2 OF 2-29226

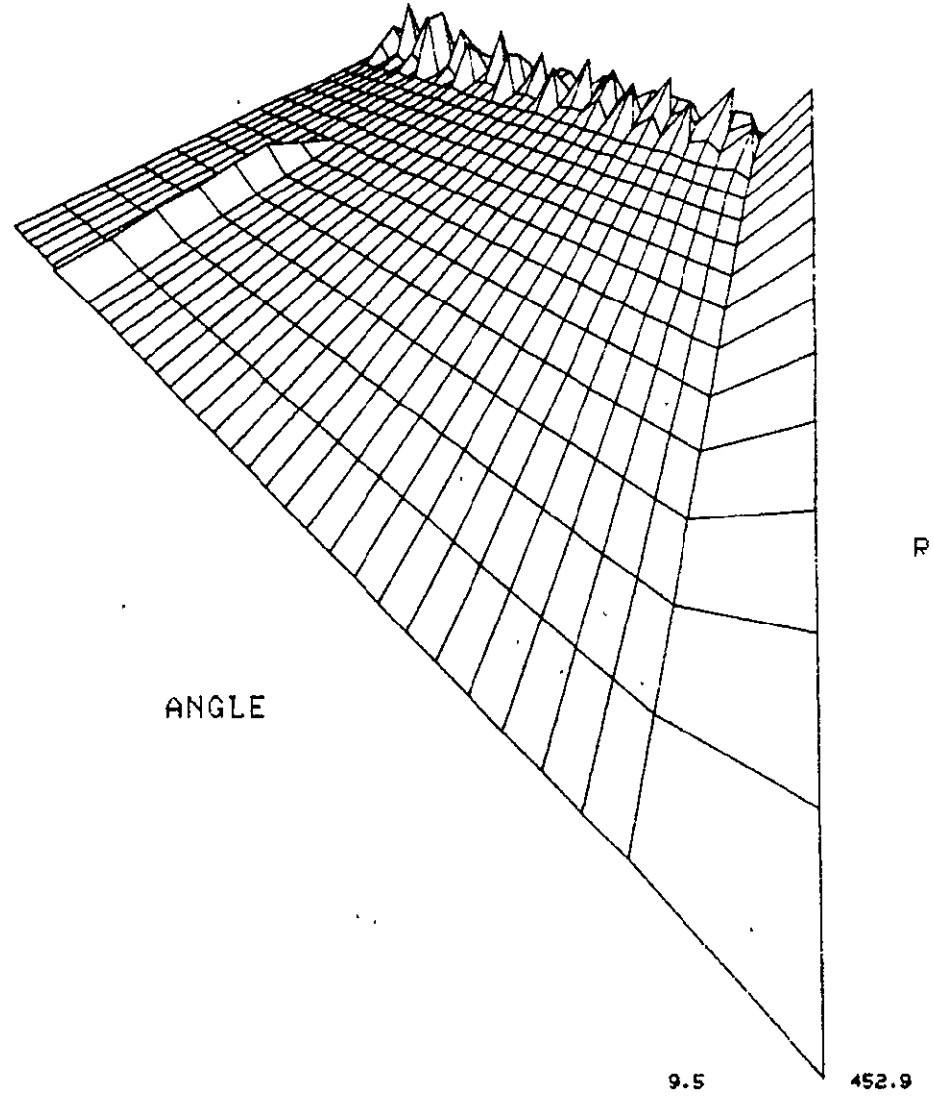
\# SCAN # 25 FRAME # 17076 ANGLE 9.316 TO FRAME # 17701 ANGLE 64.916 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 25.0

AVERAGE I = 1.8

	ANGLE
1	9.5
2	10.0
3	10.6
4	11.6
5	13.0
6	14.7
7	16.4
8	18.2
9	19.9
10	21.6
11	23.4
12	25.1
13	26.9
14	28.6
15	30.4
16	32.1
17	33.9
18	35.6
19	37.4
20	39.2
21	40.8
22	42.6
23	44.3
24	46.0
25	47.6
26	49.3
27	51.0
28	52.8
29	54.5
30	56.2
31	58.0
32	59.7
33	61.6
34	63.4
35	64.6
36	64.6



	R
1	143.2
2	162.6
3	181.9
4	201.3
5	220.6
6	240.0
7	259.3
8	278.7
9	298.0
10	317.4
11	336.7
12	356.1
13	375.4
14	394.8
15	414.1
16	452.9

Imax, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY-238 RUN # 4 TAPE 2 OF 2-29226

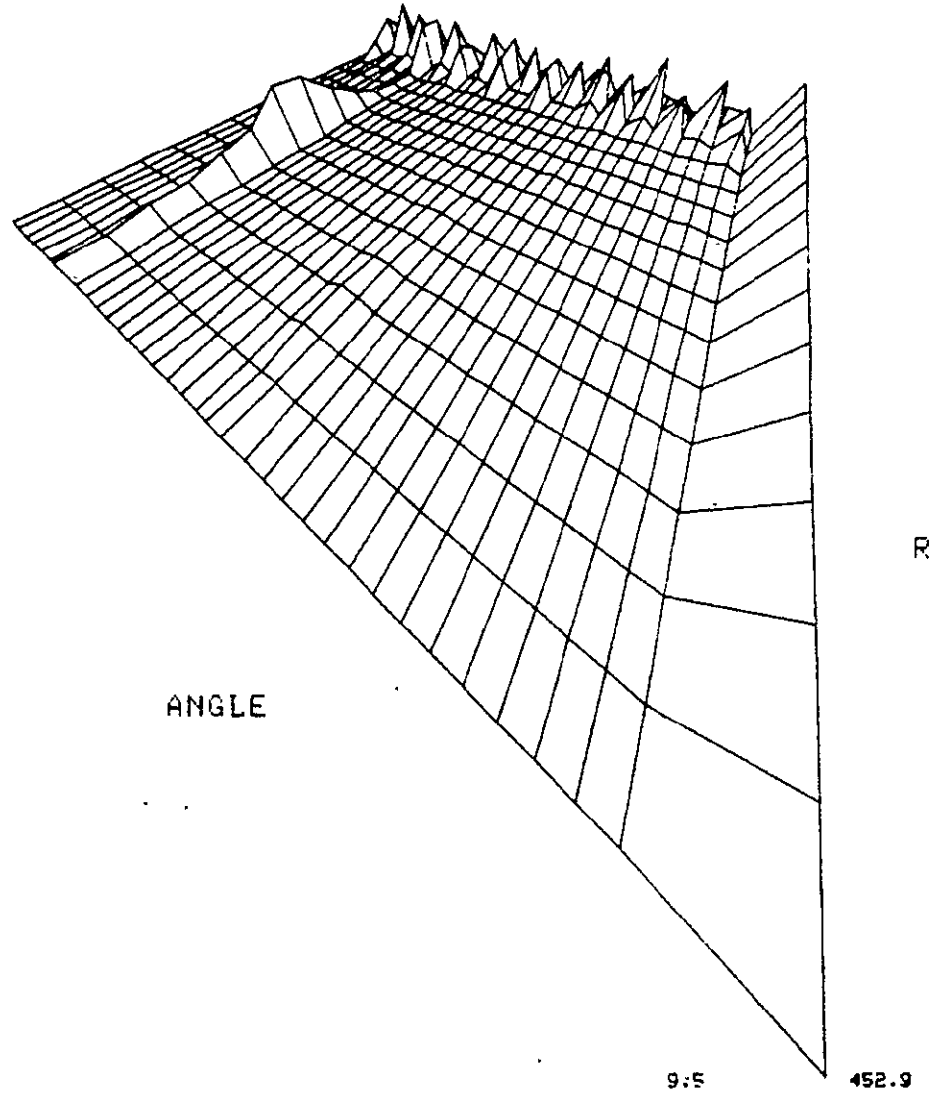
* SCAN # 25 FRAME # 17076 ANGLE 9.316 TO FRAME # 17701 ANGLE 64.916 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 48.0

AVERAGE I = 4.1

ANGLE	
1	9.5
2	10.0
3	10.6
4	11.6
5	13.0
6	14.7
7	16.4
8	18.2
9	19.9
10	21.6
11	23.4
12	25.1
13	26.9
14	28.6
15	30.4
16	32.1
17	33.9
18	35.6
19	37.4
20	39.2
21	40.8
22	42.6
23	44.3
24	46.0
25	47.6
26	49.3
27	51.0
28	52.8
29	54.5
30	56.2
31	58.0
32	59.7
33	61.6
34	63.4
35	64.6
36	64.6



	R
1	143.2
2	162.6
3	181.9
4	201.3
5	220.6
6	240.0
7	259.3
8	278.7
9	298.0
10	317.4
11	336.7
12	356.1
13	375.4
14	394.3
15	414.1
16	452.9

I_{MAX}, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 2 OF 2-29226

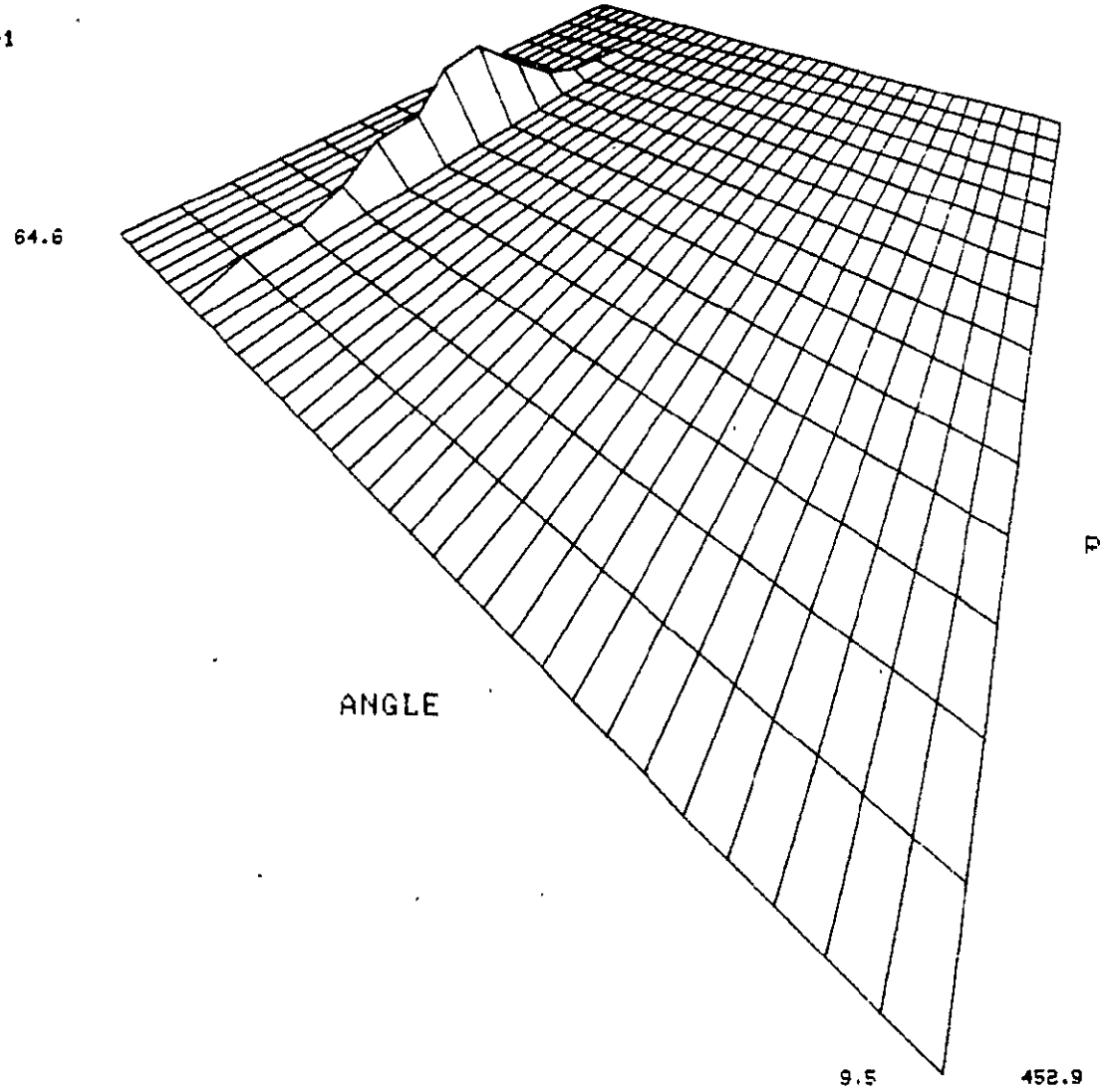
* SCAN # 25 FRAME # 17076 ANGLE 9.316 TO FRAME # 17701 ANGLE 64.316 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 39.0

AVERAGE I = 0.3

	ANGLE
1	9.5
2	10.0
3	10.6
4	11.6
5	13.0
6	14.7
7	16.4
8	18.2
9	19.9
10	21.6
11	23.4
12	25.1
13	26.9
14	28.6
15	30.4
16	32.1
17	33.9
18	35.6
19	37.4
20	39.2
21	40.8
22	42.6
23	44.3
24	46.0
25	47.6
26	49.3
27	51.0
28	52.8
29	54.5
30	56.2
31	58.0
32	59.7
33	61.6
34	63.4
35	64.6
36	64.6



	R
1	143.2
2	162.6
3	181.9
4	201.3
5	220.6
6	240.0
7	259.3
8	278.7
9	298.0
10	317.4
11	336.7
12	356.1
13	375.4
14	394.8
15	414.1
16	452.9

I, R, A DISPLAY AT VELOCITY CELL 62

ORIGINAL PAGE IS OF POOR QUALITY

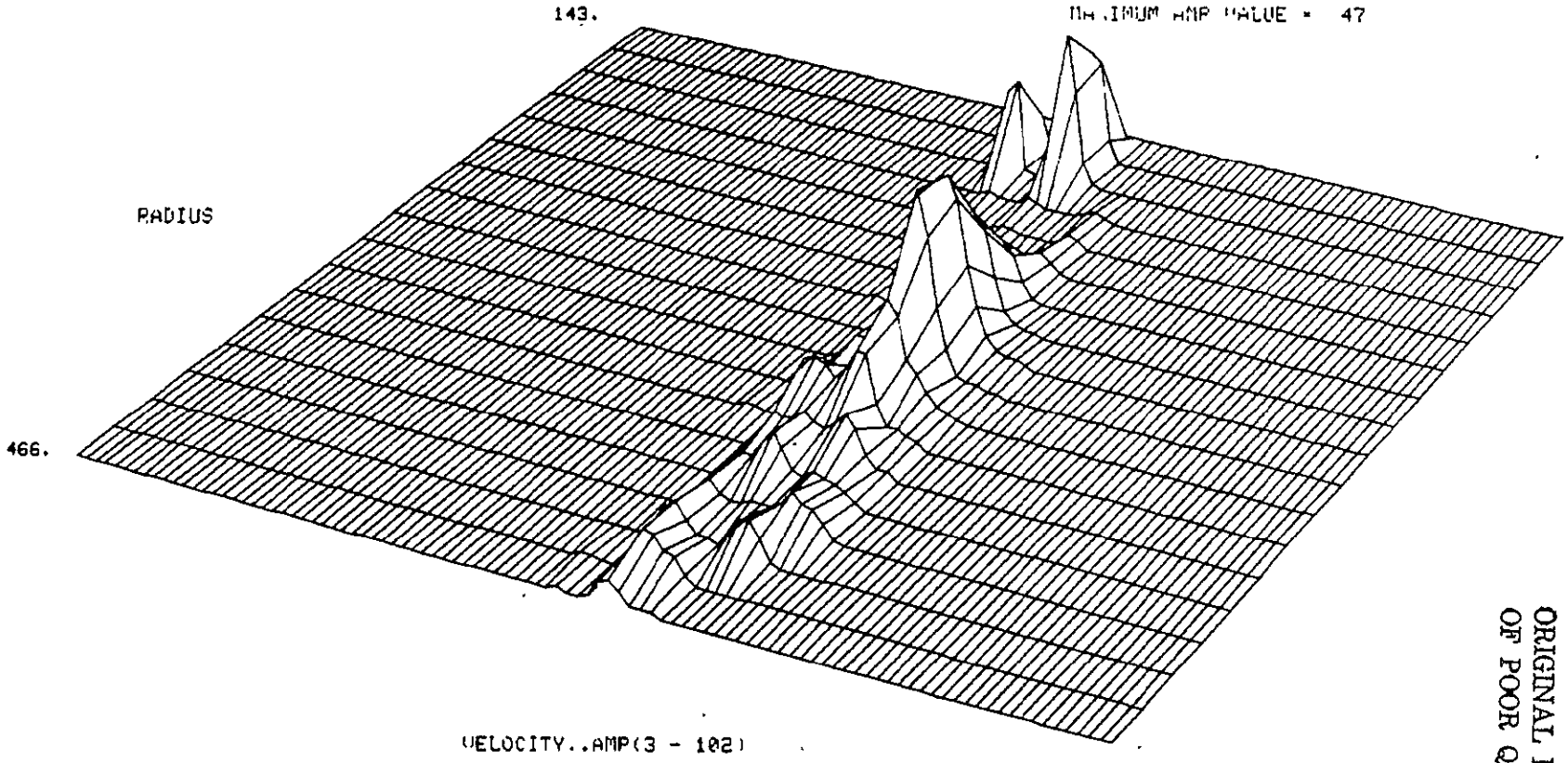
NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 2 OF 2-23236

SCAN # 25 FRAME # 17076 ANGLE 9.316 TO FRAME # 17701 ANGLE 64.916 CRITICAL AMP AT CELL 62

FRAME # 17570 TO 17583

ANGLE = 54.57

MAXIMUM AMP VALUE = 47



ORIGINAL PAGE IS
OF POOR QUALITY

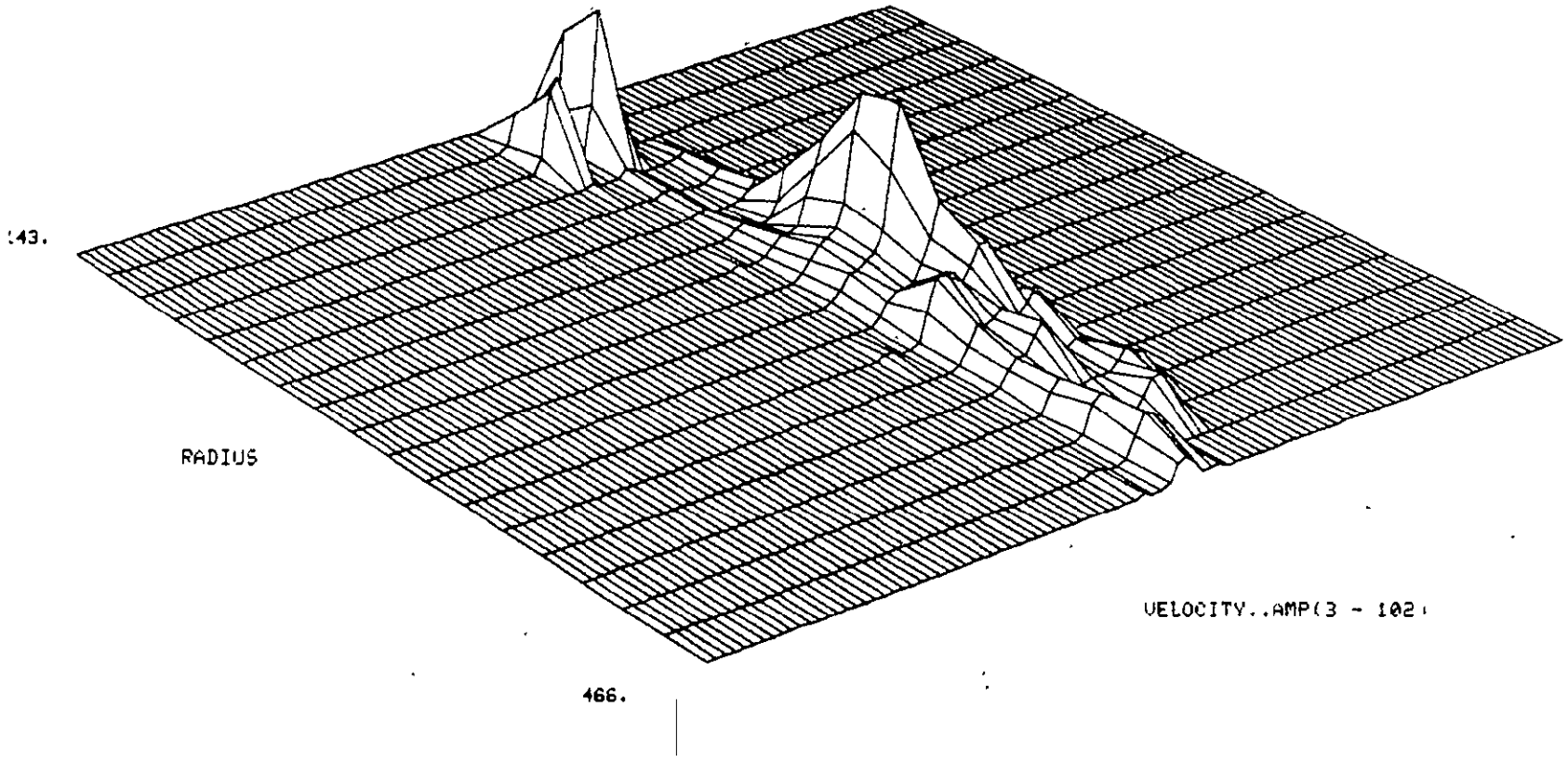
NASA PROJECT DUST DEVIL - DAY 238 RUN # 4 TAPE 2 OF 2-29226

SCAN # 25 FRAME # 17076 ANGLE 9.316 TO FRAME # 17701 ANGLE 64.916 CRITICAL AMP AT CELL 62

FRAME # 17570 TO 17588

ANGLE = 54.57

MAXIMUM AMP VALUE = 47



NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF 2-29226

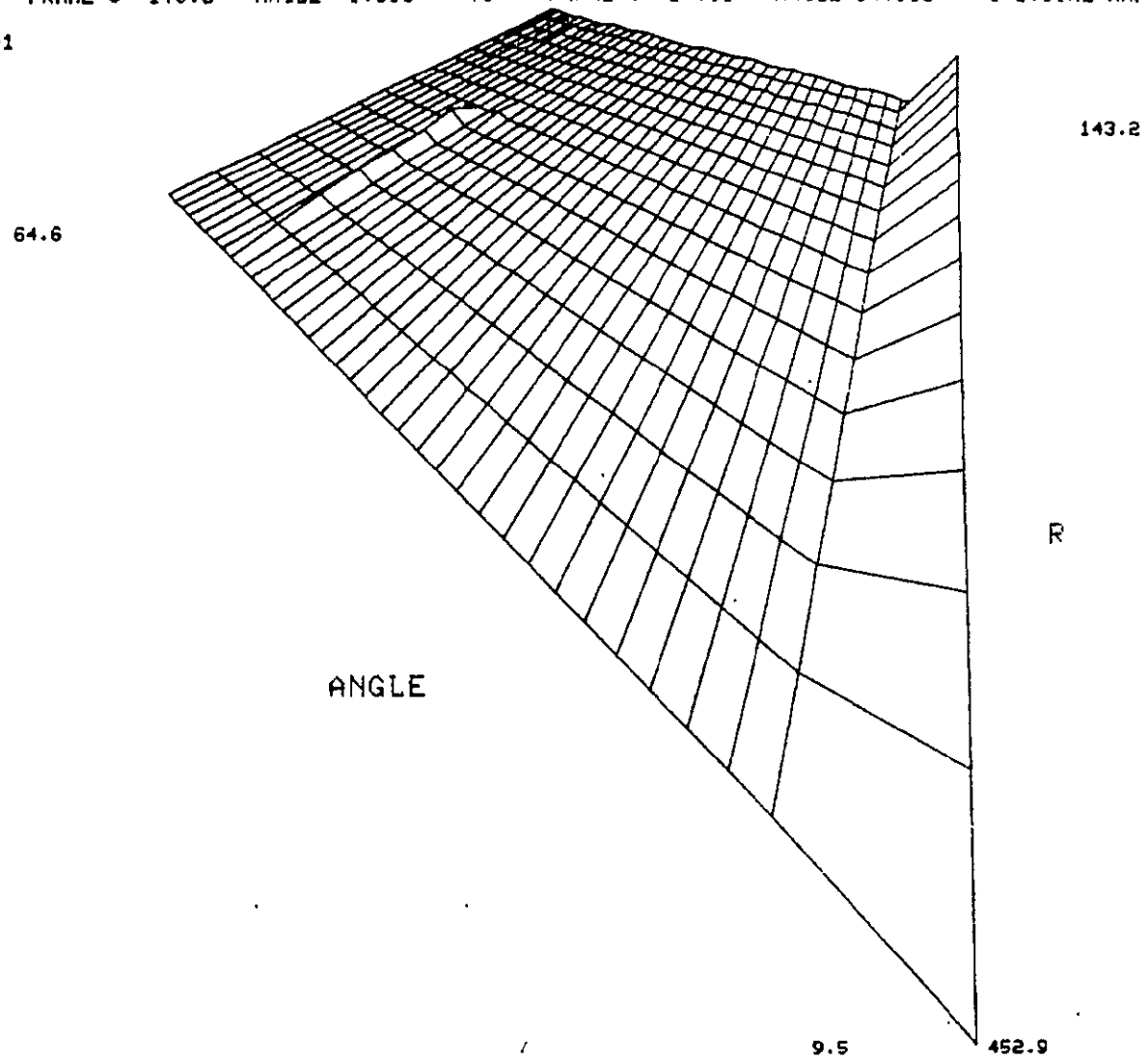
* SCAN # 25 FRAME # 17076 ANGLE 9.316 TO FRAME # 17701 ANGLE 64.916 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 55.0

AVERAGE V = 2.7

ANGLE	
1	9.5
2	10.0
3	10.6
4	11.6
5	13.0
6	14.7
7	16.4
8	18.2
9	19.9
10	21.6
11	23.4
12	25.1
13	26.9
14	28.6
15	30.4
16	32.1
17	33.9
18	35.6
19	37.4
20	39.2
21	40.8
22	42.6
23	44.3
24	46.0
25	47.6
26	49.3
27	51.0
28	52.8
29	54.5
30	56.2
31	58.0
32	59.7
33	61.6
34	63.4
35	64.6
36	64.6



	R
1	143.2
2	162.6
3	181.9
4	201.3
5	220.6
6	240.0
7	259.3
8	278.7
9	298.0
10	317.4
11	336.7
12	356.1
13	375.4
14	394.8
15	414.1
16	452.9

V, R, A DISPLAY (VELOCITY AT I_{max})

ORIGINAL PAGE IS OF POOR QUALITY

a-4

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF 2-23226

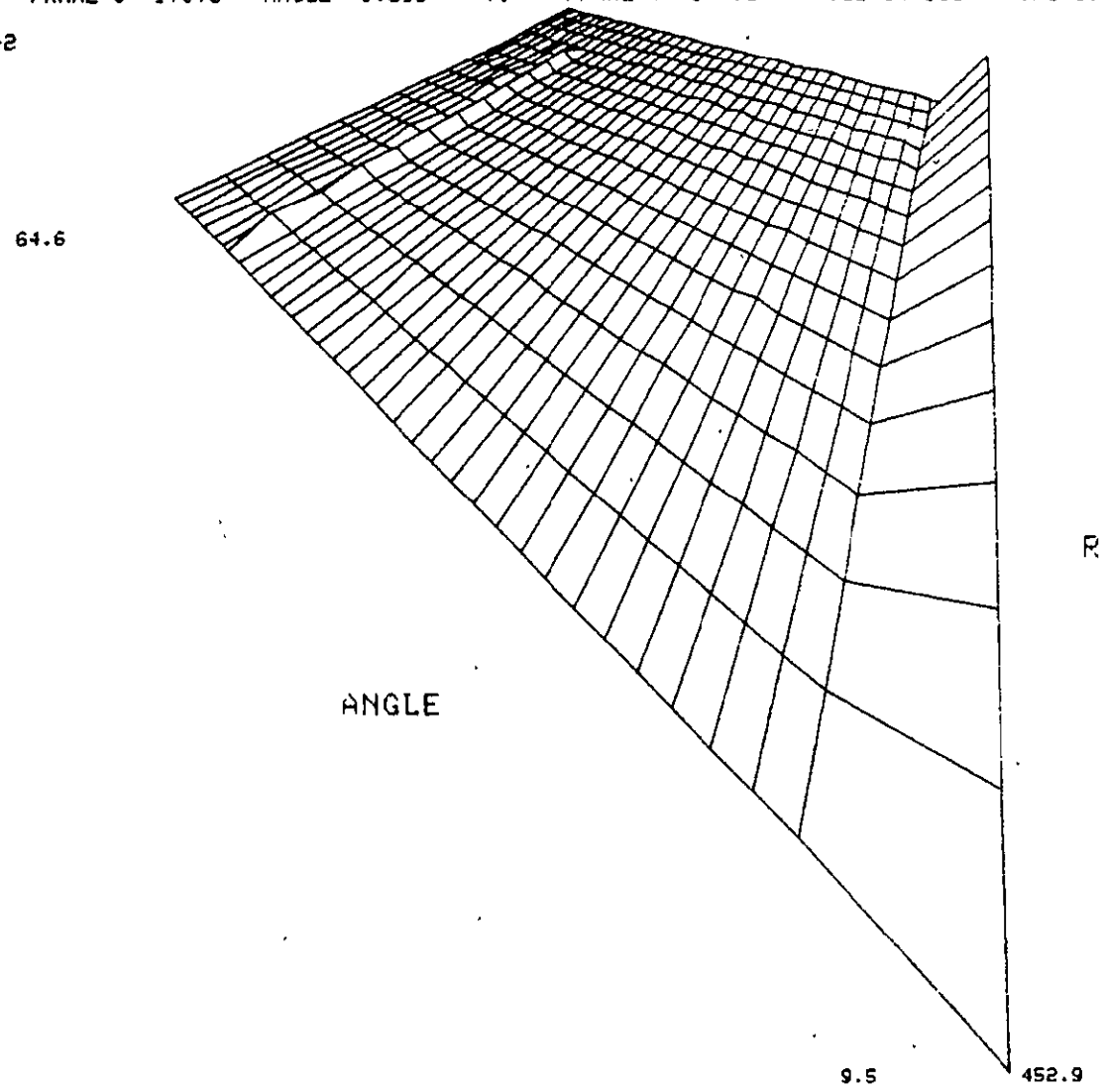
* SCAN # 25 FRAME # 17076 ANGLE 9.316 TO FRAME # 17701 ANGLE 64.916 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V = 56.0

AVERAGE V = 3.5

	ANGLE
1	9.5
2	10.0
3	10.6
4	11.6
5	13.0
6	14.7
7	16.4
8	18.2
9	19.9
10	21.6
11	23.4
12	25.1
13	26.9
14	28.6
15	30.4
16	32.1
17	33.9
18	35.6
19	37.4
20	39.2
21	40.8
22	42.6
23	44.3
24	46.0
25	47.6
26	49.3
27	51.0
28	52.8
29	54.5
30	56.2
31	58.0
32	59.7
33	61.6
34	63.4
35	64.6
36	64.6



	R
1	143.2
2	162.6
3	181.9
4	201.3
5	220.6
6	240.0
7	259.3
8	278.7
9	298.0
10	317.4
11	336.7
12	356.1
13	375.4
14	394.3
15	414.1
16	452.9

U, R, A DISPLAY (VELOCITY AT IMAX)

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 2 OF E-29226

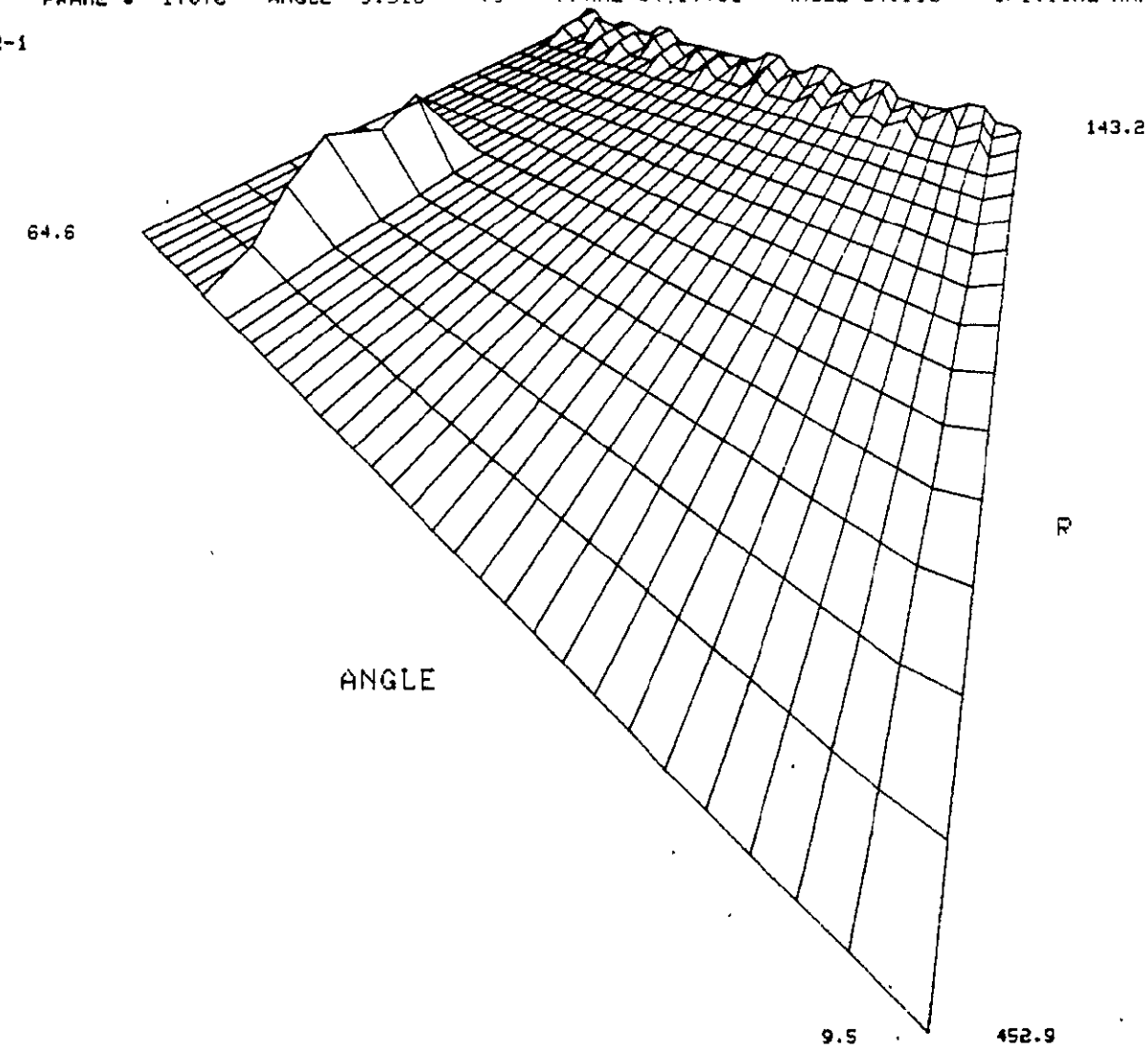
* SCAN # 25 FRAME # 17076 ANGLE 9.316 TO FRAME # 17701 ANGLE 64.916 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM U = 12.0

AVERAGE U = 1.3

	ANGLE
1	9.5
2	10.0
3	10.6
4	11.6
5	13.0
6	14.7
7	16.4
8	18.2
9	19.9
10	21.6
11	23.4
12	25.1
13	26.9
14	28.6
15	30.4
16	32.1
17	33.9
18	35.6
19	37.4
20	39.2
21	40.8
22	42.6
23	44.3
24	46.0
25	47.6
26	49.3
27	51.0
28	52.8
29	54.5
30	56.2
31	58.0
32	59.7
33	61.6
34	63.4
35	64.6
36	64.6



	R
1	143.2
2	162.6
3	181.9
4	201.3
5	220.6
6	240.0
7	259.3
8	278.7
9	292.0
10	317.4
11	336.7
12	356.1
13	375.4
14	394.8
15	414.1
16	452.9

U_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4. TAPE 2 OF E-29226

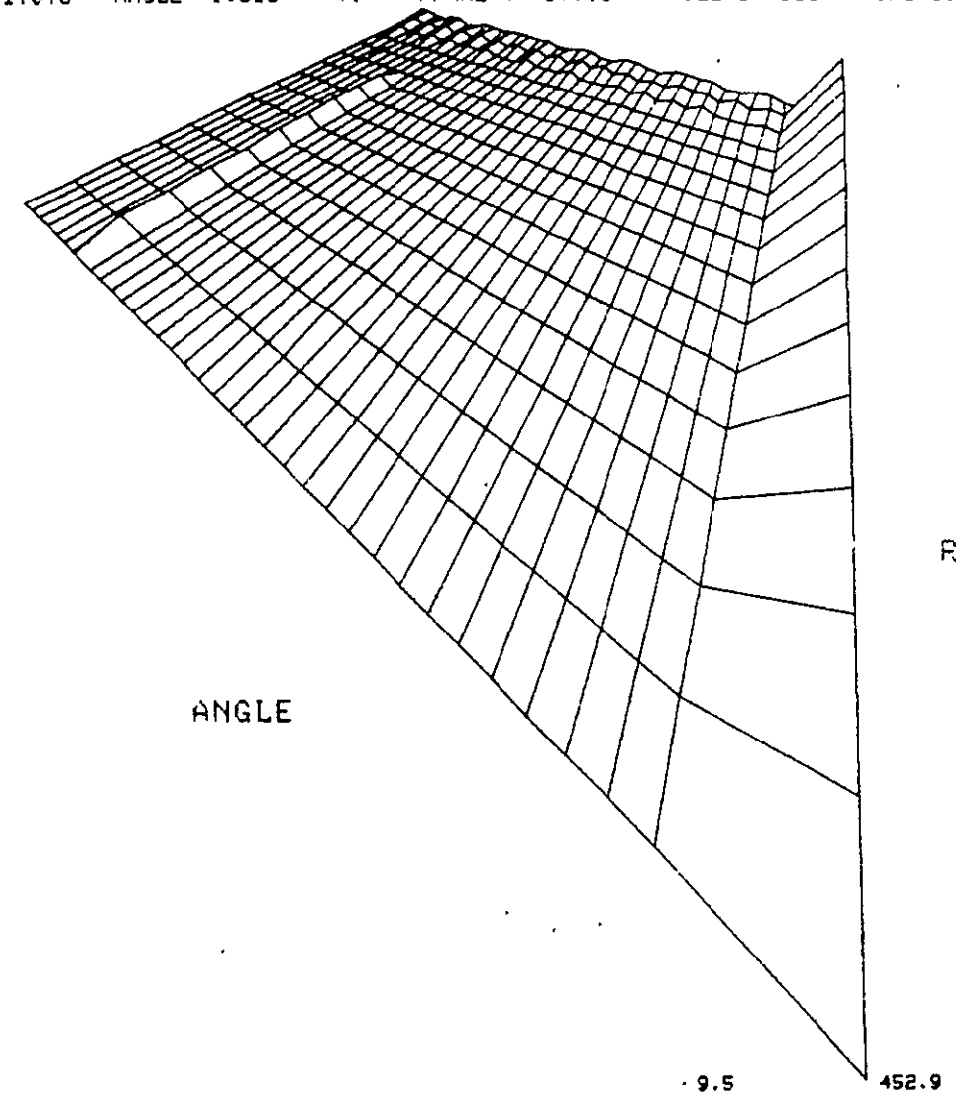
\# SCAN # 25 FRAME # 17076 ANGLE 9.316 TO FRAME # 17701 ANGLE 64.916 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM V = 58.0

AVERAGE V = 3.1

	ANGLE
1	9.5
2	10.0
3	10.6
4	11.6
5	13.0
6	14.7
7	16.4
8	18.2
9	19.9
10	21.6
11	23.4
12	25.1
13	26.9
14	28.6
15	30.4
16	32.1
17	33.9
18	35.6
19	37.4
20	39.2
21	40.8
22	42.6
23	44.3
24	46.0
25	47.6
26	49.3
27	51.0
28	52.8
29	54.5
30	56.2
31	58.0
32	59.7
33	61.6
34	63.4
35	64.6
36	64.6



	R
1	143.2
2	162.6
3	181.9
4	201.3
5	220.6
6	240.0
7	259.3
8	278.7
9	298.0
10	317.4
11	336.7
12	356.1
13	375.4
14	394.3
15	414.1
16	452.9

Vmax, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

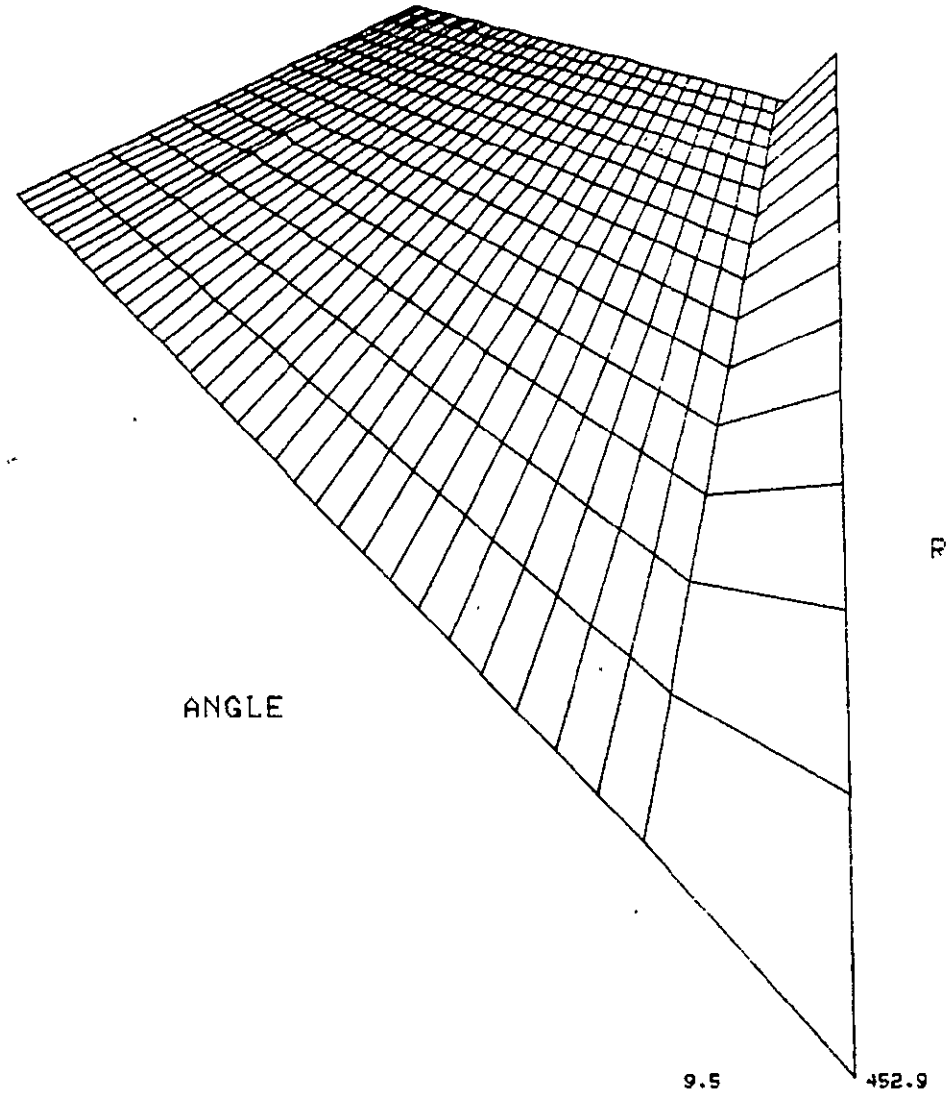
ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 3 OF 3-29226

SCAN # 25 FRAME # 17076 ANGLE 9.316 TO FRAME # 17701 ANGLE 64.216 CRITICAL AMP AT CELL 62

OPTION # 31-1

ANGLE	
1	9.5
2	10.0
3	10.6
4	11.6
5	13.0
6	14.7
7	16.4
8	18.2
9	19.9
10	21.6
11	23.4
12	25.1
13	26.9
14	28.6
15	30.4
16	32.1
17	33.9
18	35.6
19	37.4
20	39.2
21	40.8
22	42.6
23	44.3
24	46.0
25	47.6
26	49.3
27	51.0
28	52.8
29	54.5
30	56.2
31	58.0
32	59.7
33	61.6
34	63.4
35	64.6
36	64.6



	P
1	143.2
2	162.6
3	181.9
4	201.3
5	220.6
6	240.0
7	259.3
8	278.7
9	298.0
10	317.4
11	336.7
12	356.1
13	375.4
14	394.8
15	414.1
16	452.9

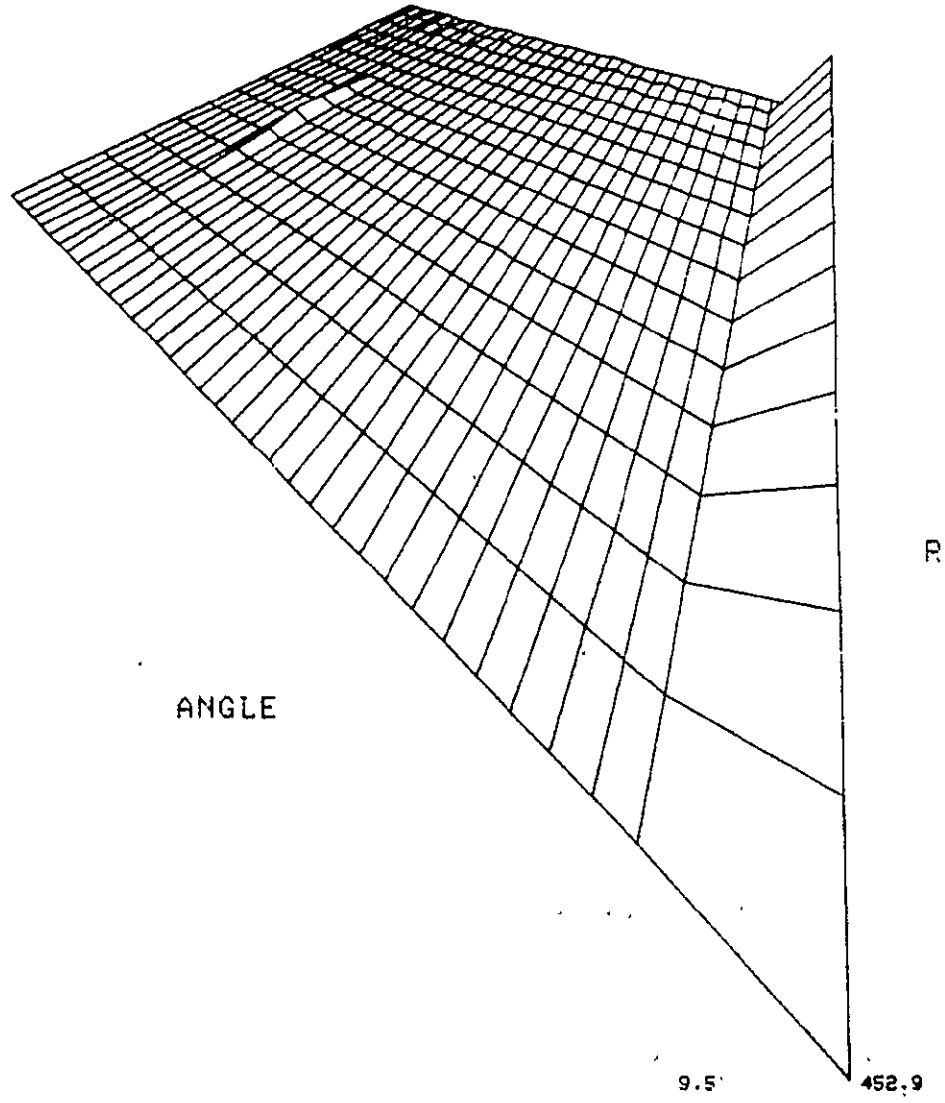
U * Imax, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF 2-29226

SCAN # 25 FRAME # 17076 ANGLE 9.316 TO FRAME # 17701 ANGLE 64.916 CRITICAL AMP AT CELL 62

OPTION # 31-2



	ANGLE
1	9.5
2	10.0
3	10.6
4	11.6
5	13.0
6	14.7
7	16.4
8	18.2
9	19.9
10	21.6
11	23.4
12	25.1
13	26.9
14	28.6
15	30.4
16	32.1
17	33.9
18	35.6
19	37.4
20	39.2
21	40.8
22	42.6
23	44.3
24	46.0
25	47.6
26	49.3
27	51.0
28	52.8
29	54.5
30	56.2
31	58.0
32	59.7
33	61.6
34	63.4
35	64.6
36	64.6

	R
1	143.2
2	162.6
3	181.9
4	201.3
5	220.6
6	240.0
7	259.3
8	278.7
9	298.0
10	317.4
11	336.7
12	356.1
13	375.4
14	394.8
15	414.1
16	452.9

V * Imax, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 2 OF 2-29226

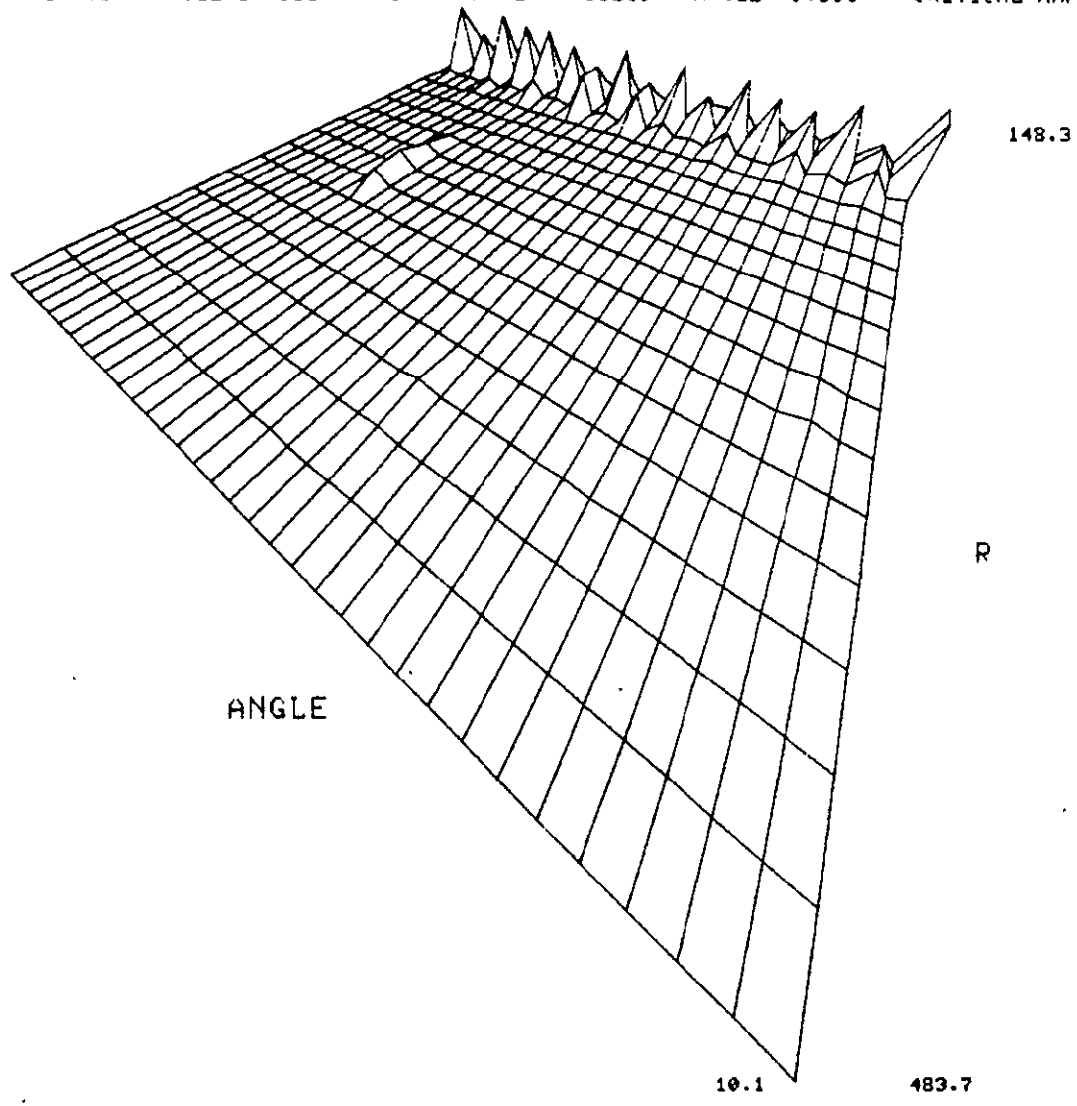
* SCAN # 26 FRAME # 17701 ANGLE 64.916 TO FRAME # 18315 ANGLE 9.350 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 25.0

AVERAGE I = 1.0

ANGLE	
1	64.8
2	64.1
3	63.1
4	61.9
5	60.3
6	58.6
7	56.7
8	55.0
9	53.2
10	51.5
11	49.8
12	48.1
13	46.5
14	44.8
15	43.1
16	41.3
17	39.5
18	37.9
19	36.0
20	34.3
21	32.6
22	30.8
23	29.1
24	27.4
25	25.6
26	23.7
27	22.0
28	20.2
29	18.5
30	16.8
31	14.9
32	13.1
33	11.4
34	10.1



	R
1	148.3
2	168.0
3	187.7
4	207.5
5	227.2
6	246.9
7	266.7
8	286.4
9	306.1
10	325.9
11	345.6
12	365.3
13	385.1
14	404.8
15	424.5
16	444.3
17	463.7

I_{MAX}, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF 2-29226

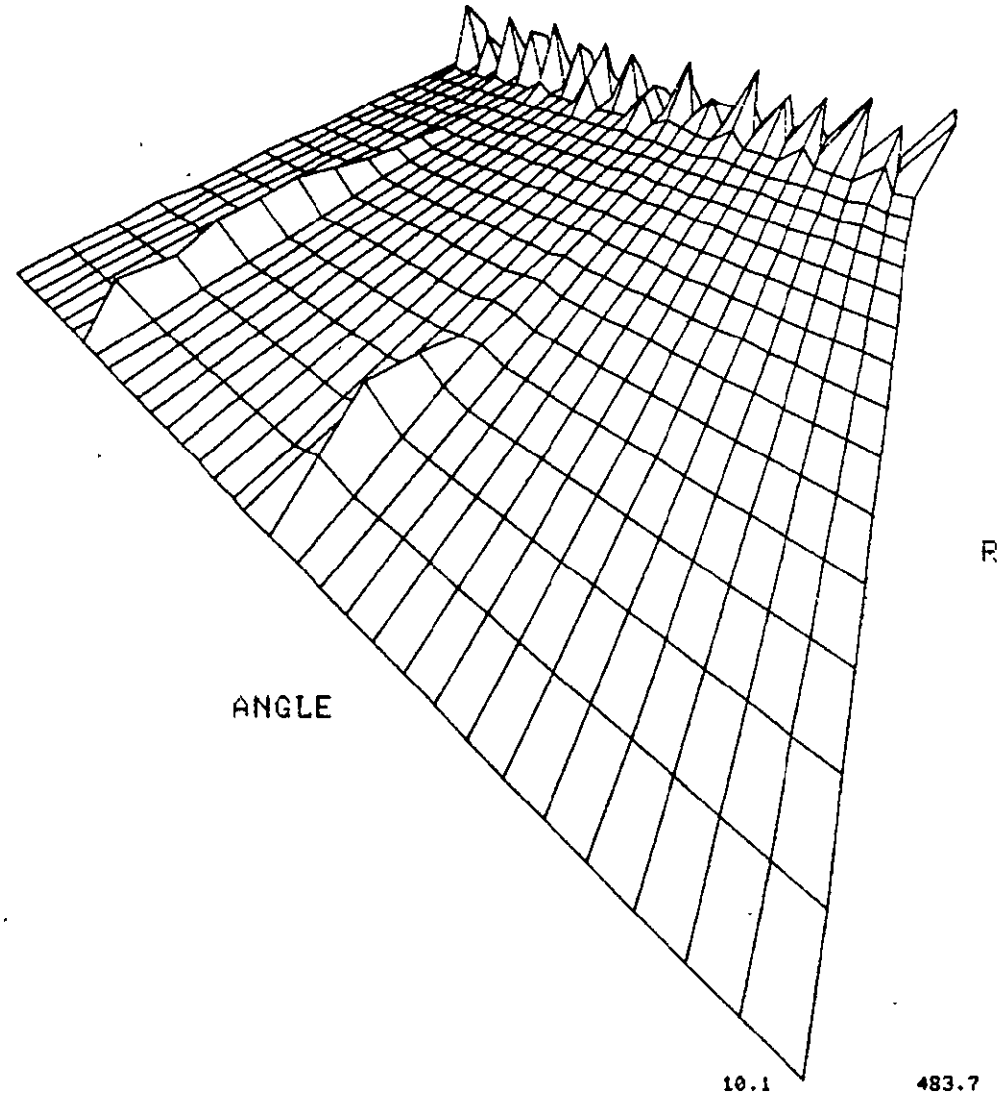
* SCAN # 26 FRAME # 17701 ANGLE 64.916 TO FRAME # 18315 ANGLE 9.350 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 46.0

AVERAGE I = 2.7

ANGLE	
1	64.8
2	64.1
3	63.1
4	61.9
5	60.3
6	58.6
7	56.7
8	55.0
9	53.2
10	51.5
11	49.8
12	48.1
13	46.5
14	44.8
15	43.1
16	41.3
17	39.5
18	37.9
19	36.0
20	34.3
21	32.6
22	30.8
23	29.1
24	27.4
25	25.6
26	23.7
27	22.0
28	20.2
29	18.5
30	16.8
31	14.9
32	13.1
33	11.4
34	10.1



	R
1	148.3
2	168.0
3	187.7
4	207.5
5	227.2
6	246.9
7	266.7
8	286.4
9	306.1
10	325.9
11	345.6
12	365.3
13	385.1
14	404.8
15	424.5
16	444.3
17	483.7

I_{MAX}, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF 2-29226

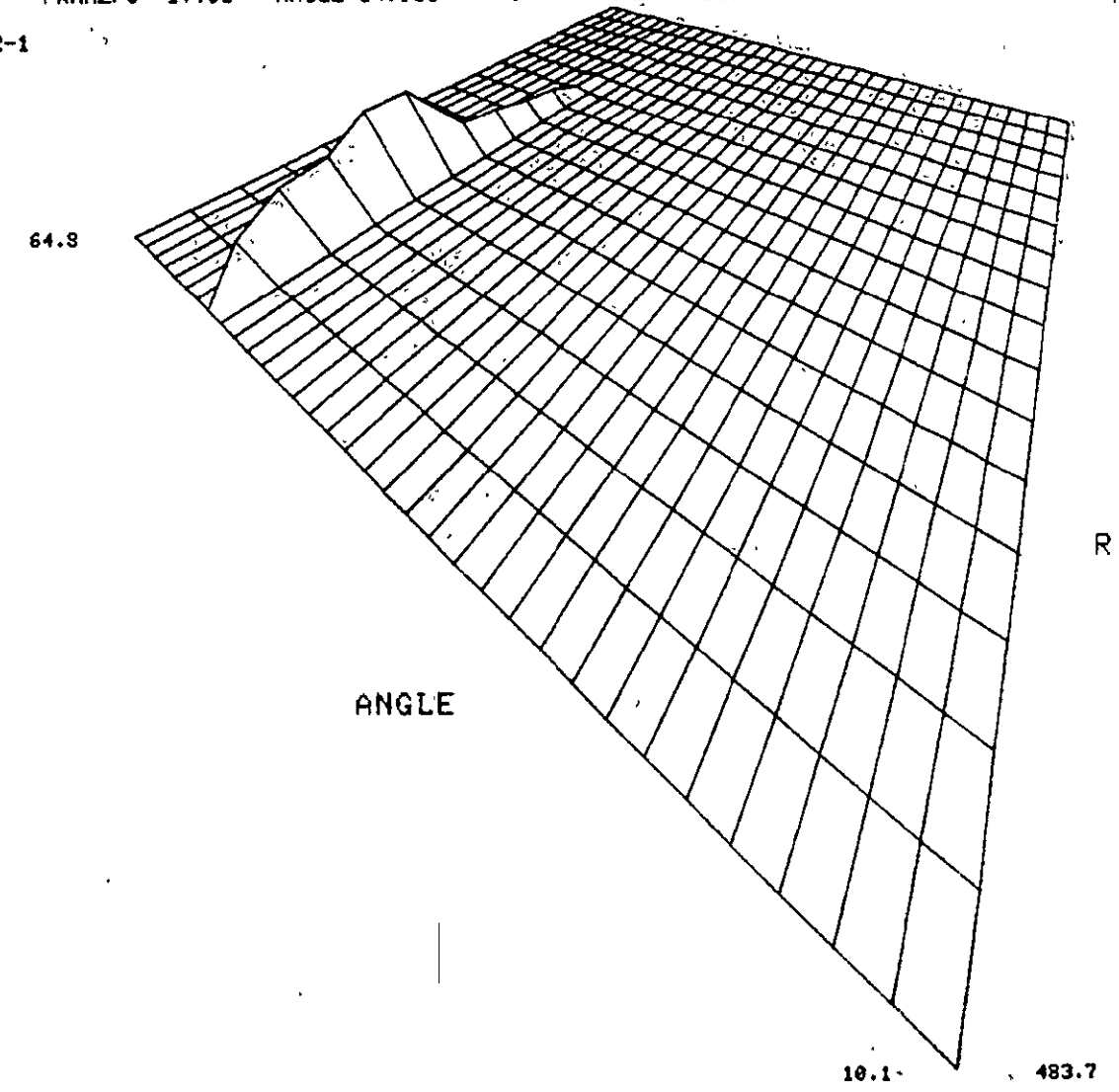
SCAN # 26 FRAME # 17701 ANGLE 64.916 TO FRAME # 18315 ANGLE 9.350 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 20.0

AVERAGE I = 0.2

	ANGLE
1	64.8
2	64.1
3	63.1
4	61.9
5	60.3
6	58.6
7	56.7
8	55.0
9	53.2
10	51.5
11	49.8
12	48.1
13	46.5
14	44.8
15	43.1
16	41.3
17	39.5
18	37.9
19	36.0
20	34.3
21	32.6
22	30.8
23	29.1
24	27.4
25	25.6
26	23.7
27	22.0
28	20.2
29	18.5
30	16.8
31	14.9
32	13.1
33	11.4
34	10.1



	R
1	148.3
2	168.0
3	187.7
4	207.5
5	227.2
6	246.9
7	266.7
8	286.4
9	306.1
10	325.9
11	345.6
12	365.3
13	385.1
14	404.8
15	424.5
16	444.3
17	483.7

I, R, A DISPLAY AT VELOCITY CELL 62

ORIGINAL PAGE IS OF POOR QUALITY

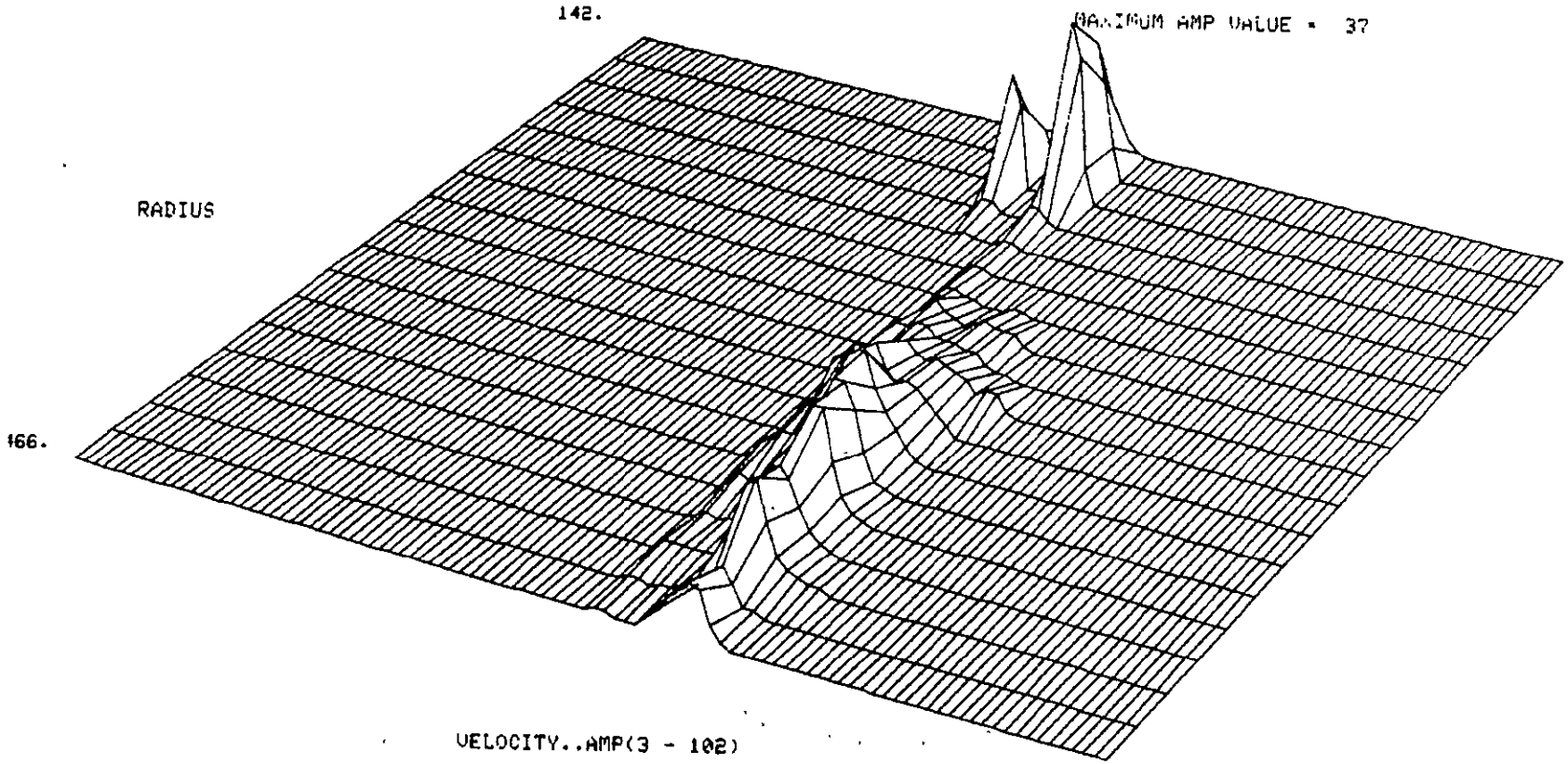
NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF 2-39326

SCAN # 26 FRAME # 17701 ANGLE 64.916 TO FRAME # 18315 ANGLE 9.350 CRITICAL AMP AT CELL 62

FRAME # 17825 TO 17843

ANGLE = 54.97

MAXIMUM AMP VALUE = 37



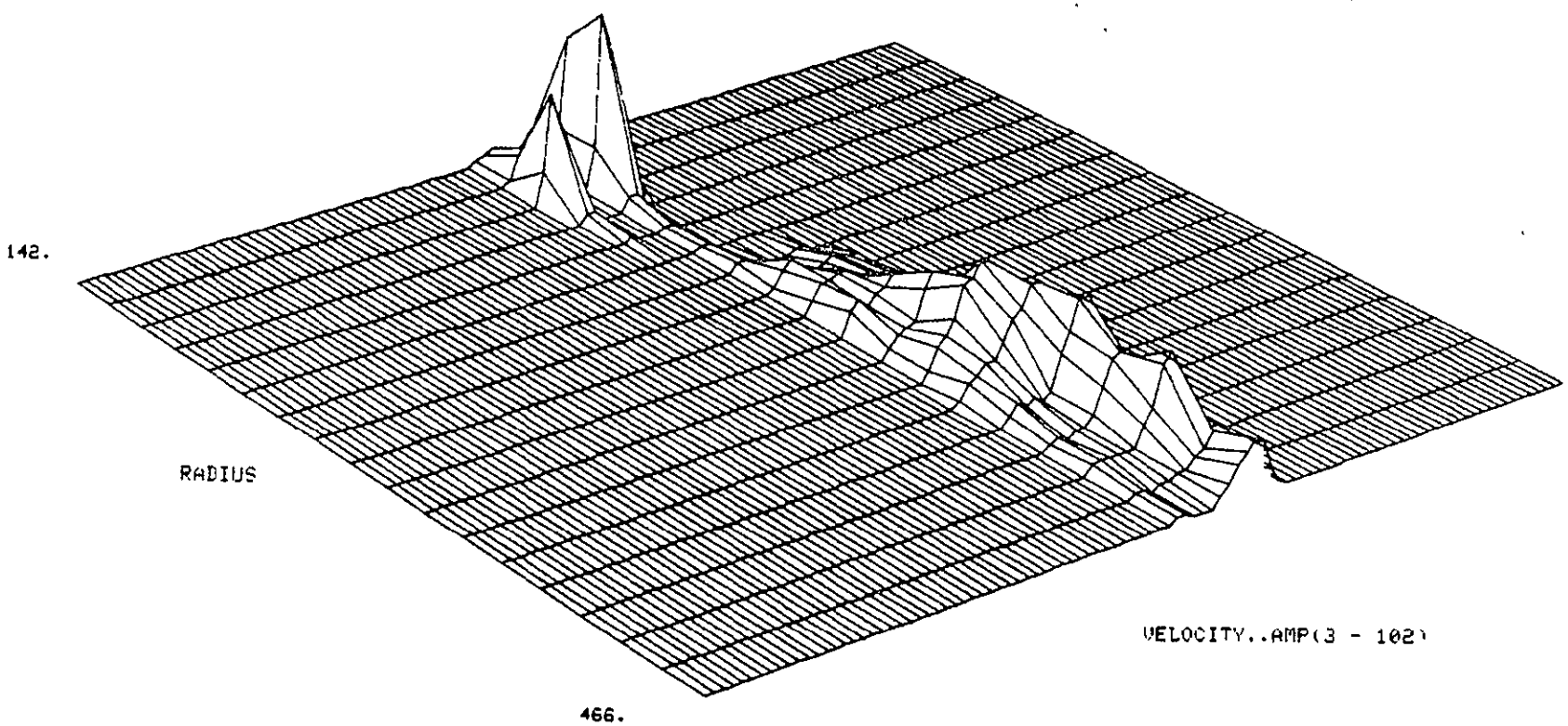
NASA PROJECT DUST DEVIL DAY 230 RUN # 4 TAPE 2 OF 2-23326

SCAN # 26 FRAME # 17701 ANGLE 64.916 TO FRAME # 18315 ANGLE 9.350 CRITICAL AMP AT CELL 62

FRAME # 17825 TO 17843

ANGLE = 54.97

MAXIMUM AMP VALUE = 37



ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 233. RUN # 4 TAPE 2 OF 2-29226

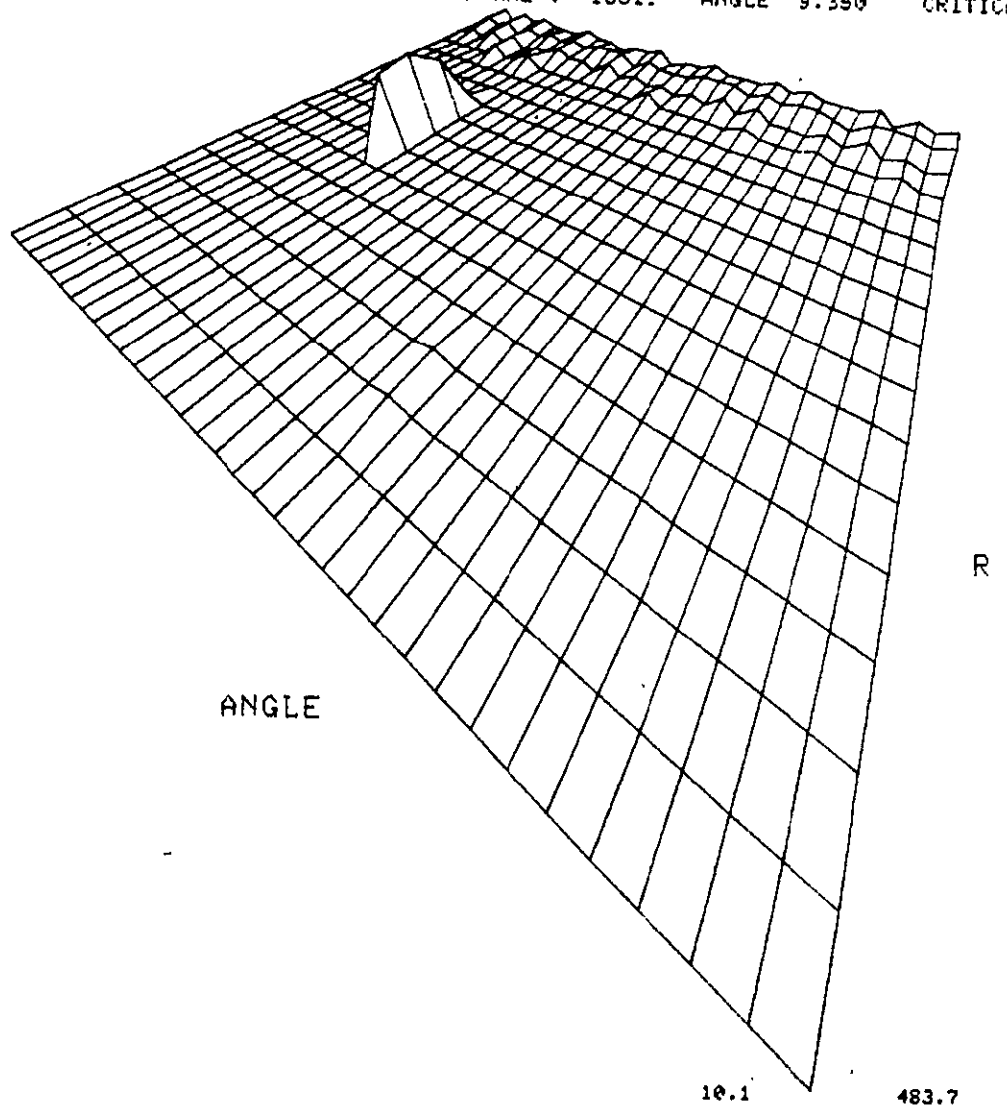
SCAN # 26 FRAME # 17701 ANGLE 64.916 TO FRAME # 18315 ANGLE 9.350 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 13.0

AVERAGE V = 1.3

	ANGLE
1	64.8
2	64.1
3	63.1
4	61.9
5	60.3
6	58.6
7	56.7
8	55.0
9	53.2
10	51.5
11	49.8
12	48.1
13	46.5
14	44.8
15	43.1
16	41.3
17	39.5
18	37.9
19	36.0
20	34.3
21	32.6
22	30.8
23	29.1
24	27.4
25	25.6
26	23.7
27	22.0
28	20.2
29	18.5
30	16.8
31	14.9
32	13.1
33	11.4
34	10.1



	R
1	148.3
2	168.0
3	187.7
4	207.5
5	227.2
6	246.9
7	266.7
8	286.4
9	306.1
10	325.9
11	345.6
12	365.3
13	385.1
14	404.8
15	424.5
16	444.3
17	483.7

V, R, A DISPLAY (VELOCITY AT I_{MAX})

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF 2-29226

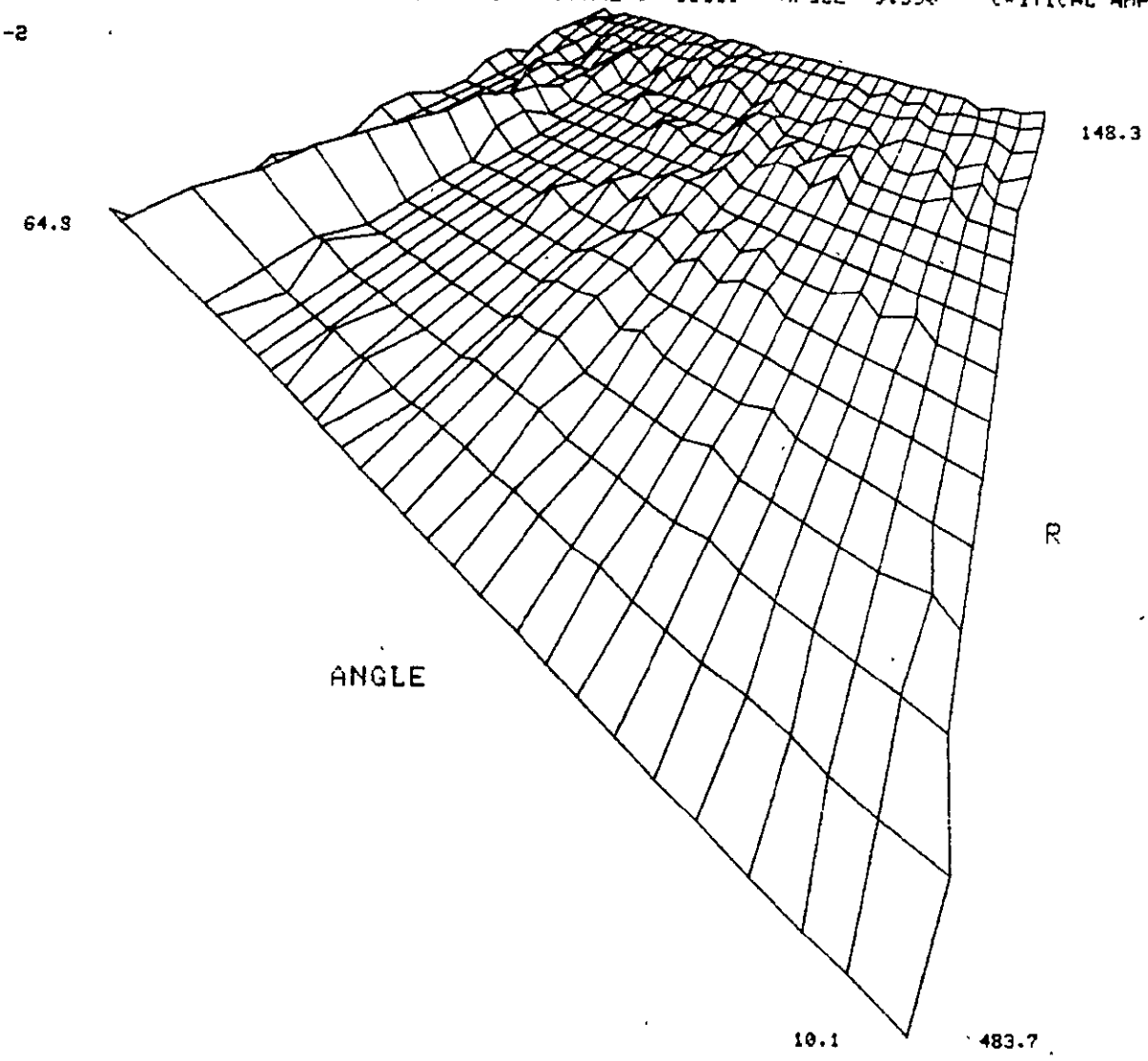
* SCAN # 26 FRAME # 17701 ANGLE 64.916 TO FRAME # 18315 ANGLE 9.350 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V = 12.0

AVERAGE V = 2.2

ANGLE	
1	64.8
2	64.1
3	63.1
4	61.9
5	60.3
6	58.6
7	56.7
8	55.0
9	53.2
10	51.5
11	49.8
12	48.1
13	46.5
14	44.8
15	43.1
16	41.3
17	39.5
18	37.9
19	36.0
20	34.3
21	32.6
22	30.8
23	29.1
24	27.4
25	25.6
26	23.7
27	22.0
28	20.2
29	18.5
30	16.8
31	14.9
32	13.1
33	11.4
34	10.1



	R
1	148.3
2	168.0
3	187.7
4	207.5
5	227.2
6	246.9
7	266.7
8	286.4
9	306.1
10	325.9
11	345.6
12	365.3
13	385.1
14	404.8
15	424.5
16	444.3
17	483.7

U, R, A DISPLAY (VELOCITY AT Imax)

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF 2-29226

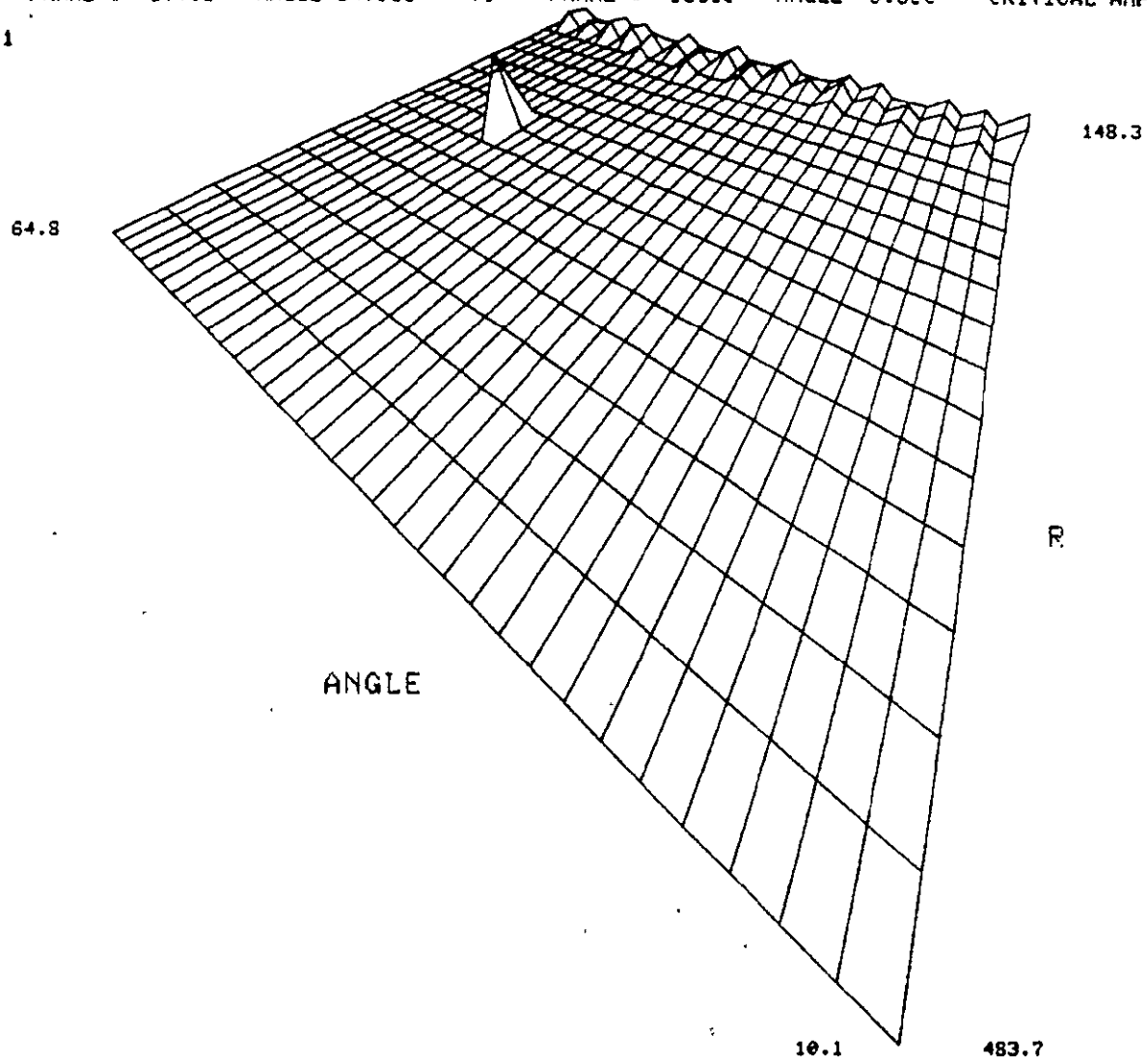
* SCAN # 26 FRAME # 17701 ANGLE 64.916 TO FRAME # 18315 ANGLE 9.350 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 13.0

AVERAGE V = 1.2

ANGLE	
1	64.8
2	64.1
3	63.1
4	61.9
5	60.3
6	58.6
7	56.7
8	55.0
9	53.2
10	51.5
11	49.8
12	48.1
13	46.5
14	44.8
15	43.1
16	41.3
17	39.5
18	37.9
19	36.0
20	34.3
21	32.6
22	30.8
23	29.1
24	27.4
25	25.6
26	23.7
27	22.0
28	20.2
29	18.5
30	16.8
31	14.9
32	13.1
33	11.4
34	10.1



	R
1	148.3
2	168.0
3	187.7
4	207.5
5	227.2
6	246.9
7	266.7
8	286.4
9	306.1
10	325.9
11	345.6
12	365.3
13	385.1
14	404.8
15	424.5
16	444.3
17	483.7

V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 3 OF 3-39226

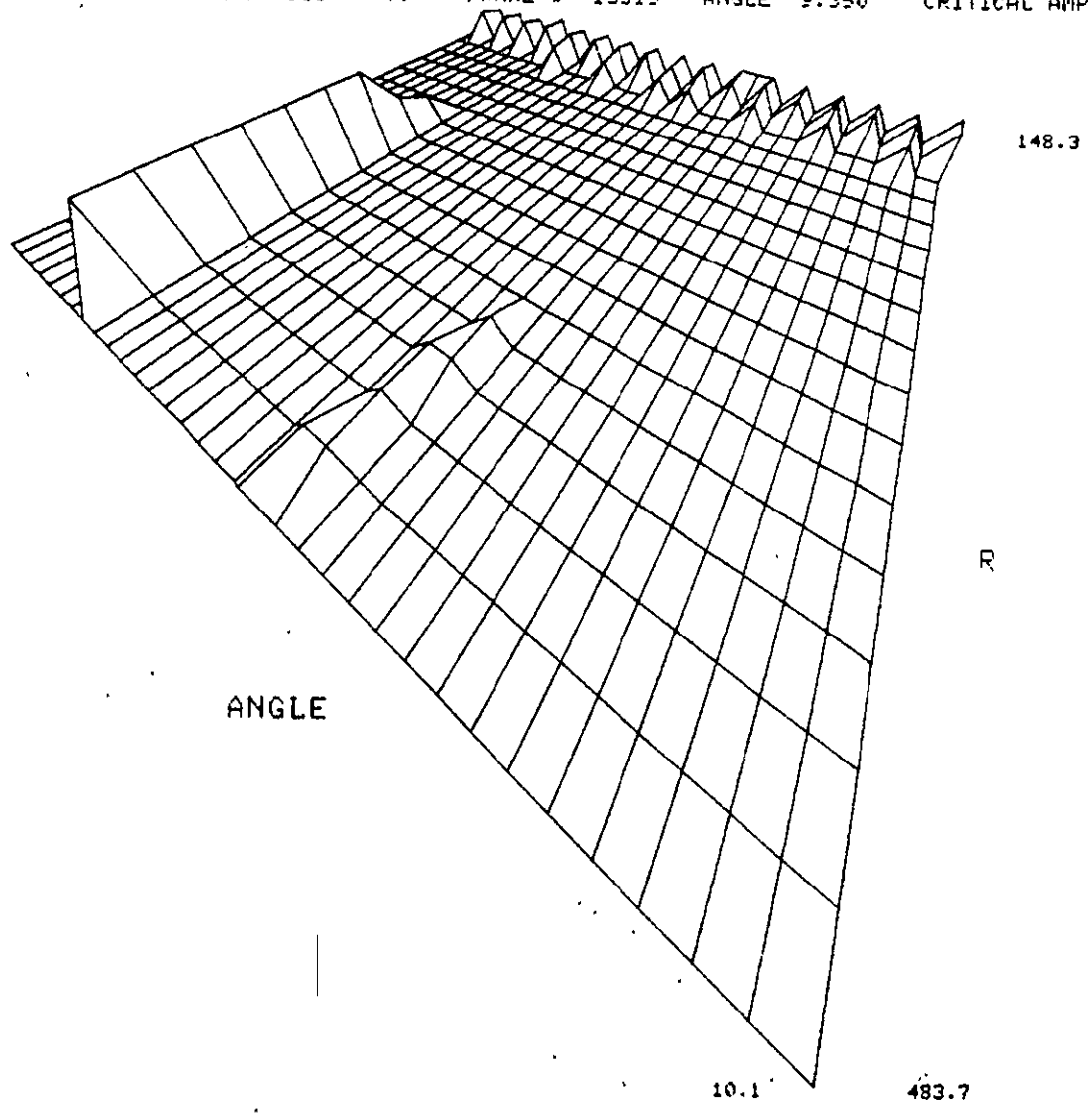
* SCAN # 26 FRAME # 17701 ANGLE 64.916 TO FRAME # 19315 ANGLE 9.350 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM V = 13.0

AVERAGE V = 1.5

ANGLE	
1	64.8
2	64.1
3	63.1
4	61.9
5	60.3
6	58.6
7	56.7
8	55.0
9	53.2
10	51.5
11	49.8
12	48.1
13	46.5
14	44.8
15	43.1
16	41.3
17	39.5
18	37.9
19	36.0
20	34.3
21	32.6
22	30.8
23	29.1
24	27.4
25	25.6
26	23.7
27	22.0
28	20.2
29	18.5
30	16.8
31	14.9
32	13.1
33	11.4
34	10.1



	R
1	148.3
2	168.0
3	187.7
4	207.5
5	227.2
6	246.9
7	266.7
8	286.4
9	306.1
10	325.9
11	345.6
12	365.3
13	385.1
14	404.3
15	424.5
16	444.3
17	483.7

U_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

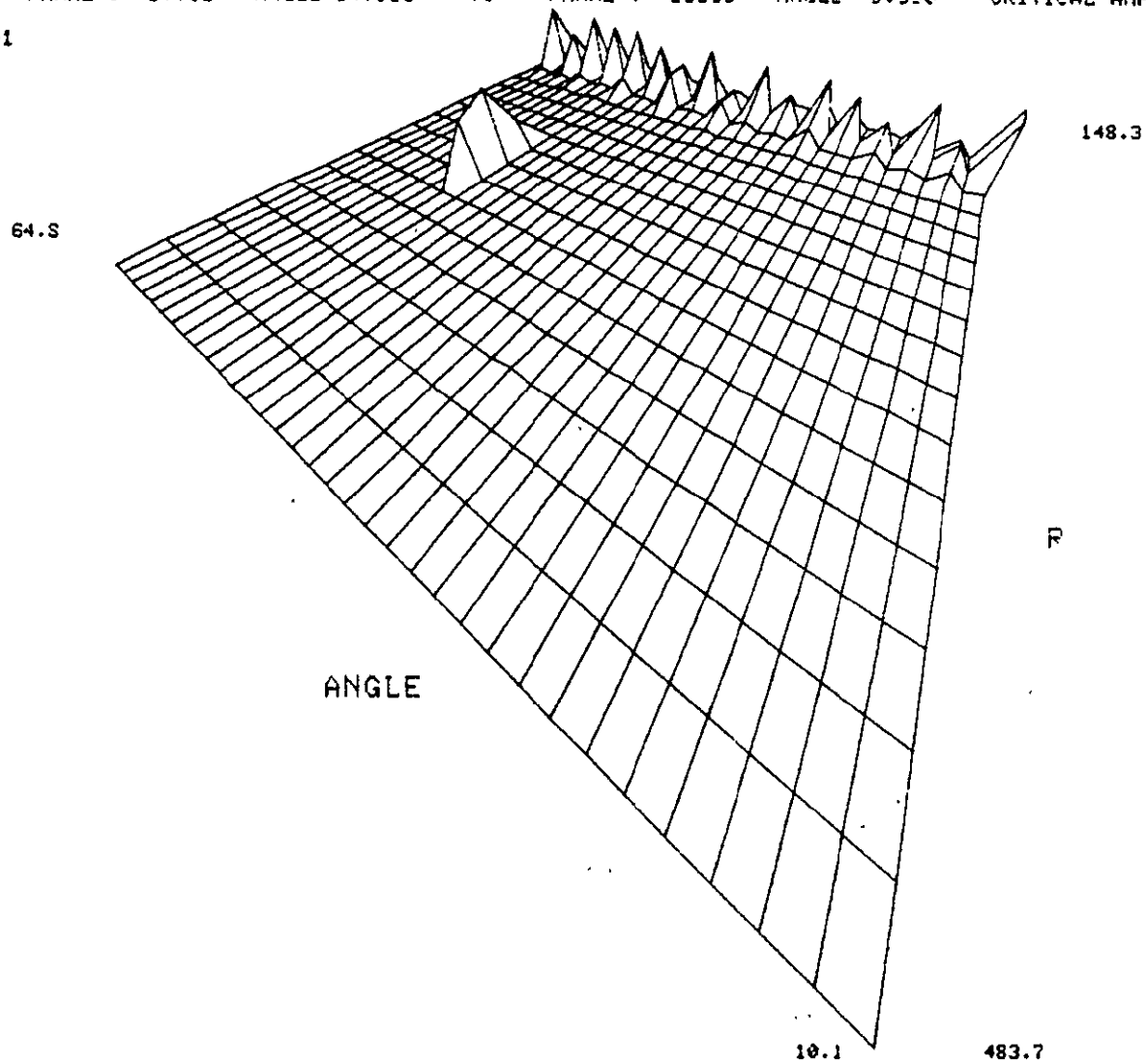
ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF 2-29226

SCAN # 26 FRAME # 17701 ANGLE 64.916 TO FRAME # 18315 ANGLE 9.350 CRITICAL AMP AT CELL 62

OPTION # 31-1

ANGLE	
1	64.8
2	64.1
3	63.1
4	61.9
5	60.3
6	58.6
7	56.7
8	55.0
9	53.2
10	51.5
11	49.8
12	48.1
13	46.5
14	44.8
15	43.1
16	41.3
17	39.5
18	37.9
19	36.0
20	34.3
21	32.6
22	30.8
23	29.1
24	27.4
25	25.6
26	23.7
27	22.0
28	20.2
29	18.5
30	16.8
31	14.9
32	13.1
33	11.4
34	10.1



	R
1	148.3
2	168.0
3	187.7
4	207.5
5	227.2
6	246.9
7	266.7
8	286.4
9	306.1
10	325.9
11	345.6
12	365.3
13	385.1
14	404.8
15	424.5
16	444.3
17	483.7

V * IMAX, R, A DISPLAY

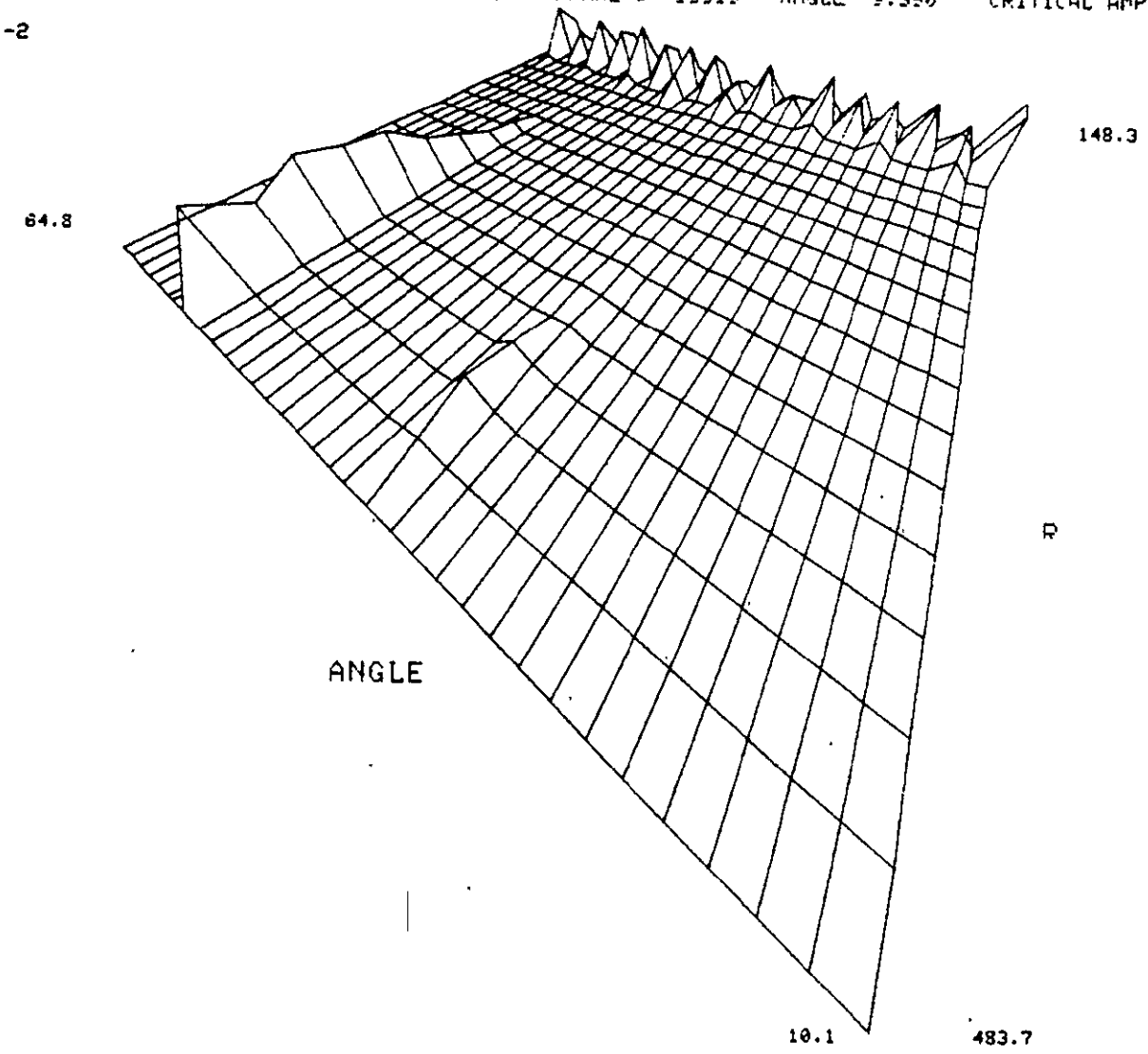
ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 FUN # 4 TAPE 2 OF 3-29226

SCAN # 26 FRAME # 17701 ANGLE 64.916 TO FRAME # 13315 ANGLE 9.350 CRITICAL AMP AT CELL 62

OPTION # 31-2

	ANGLE
1	64.8
2	64.1
3	63.1
4	61.9
5	60.3
6	58.6
7	56.7
8	55.0
9	53.2
10	51.5
11	49.8
12	48.1
13	46.5
14	44.8
15	43.1
16	41.3
17	39.5
18	37.9
19	36.0
20	34.3
21	32.6
22	30.8
23	29.1
24	27.4
25	25.6
26	23.7
27	22.0
28	20.2
29	18.5
30	16.8
31	14.9
32	13.1
33	11.4
34	10.1



	R
1	148.3
2	168.0
3	187.7
4	207.5
5	227.2
6	246.9
7	266.7
8	286.4
9	306.1
10	325.9
11	345.6
12	365.3
13	335.1
14	404.3
15	424.5
16	444.3
17	433.7

U * Imax, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 232. RUN # 4 TAPE 3 OF 3-29226

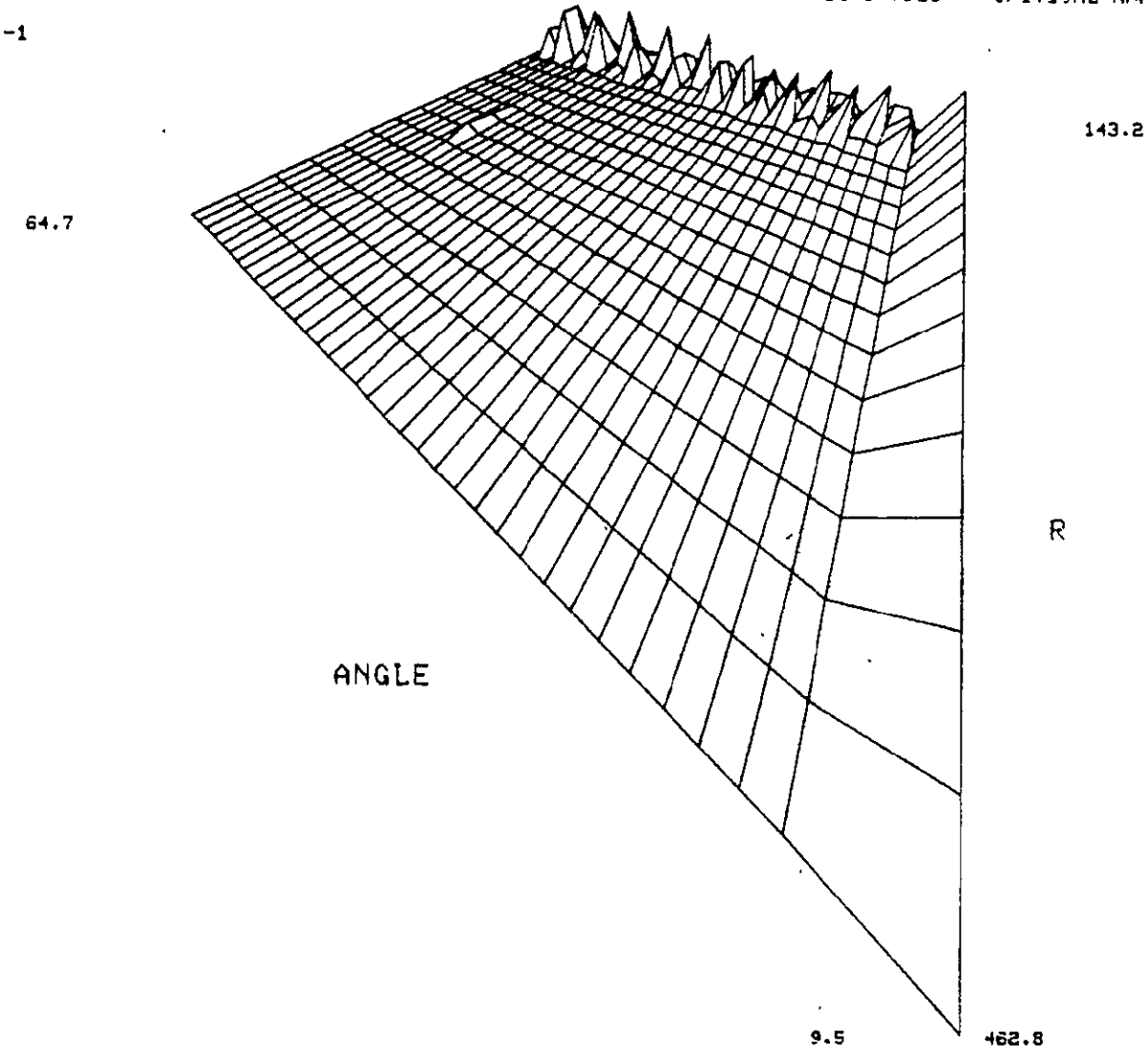
* SCAN # 27 FRAME # 18315 ANGLE 9.350 TO FRAME # 18950 ANGLE 64.956 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 23.0

AVERAGE I = 1.6

ANGLE	
1	9.5
2	9.9
3	10.4
4	11.4
5	12.8
6	14.2
7	16.0
8	17.7
9	19.5
10	21.2
11	22.9
12	24.7
13	26.4
14	28.2
15	30.0
16	31.7
17	33.4
18	35.2
19	36.9
20	38.7
21	40.4
22	42.2
23	43.9
24	45.6
25	47.2
26	48.9
27	50.6
28	52.3
29	54.1
30	55.8
31	57.6
32	59.3
33	61.2
34	63.0
35	64.4
36	64.7



	R
1	143.2
2	162.0
3	180.8
4	199.6
5	218.4
6	237.2
7	256.0
8	274.8
9	293.6
10	312.4
11	331.2
12	350.0
13	363.6
14	387.6
15	406.4
16	425.2
17	462.8

I_{MAX}, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DE.TL DAY 238 RUN # 4 TAPE 2 OF 2-29226

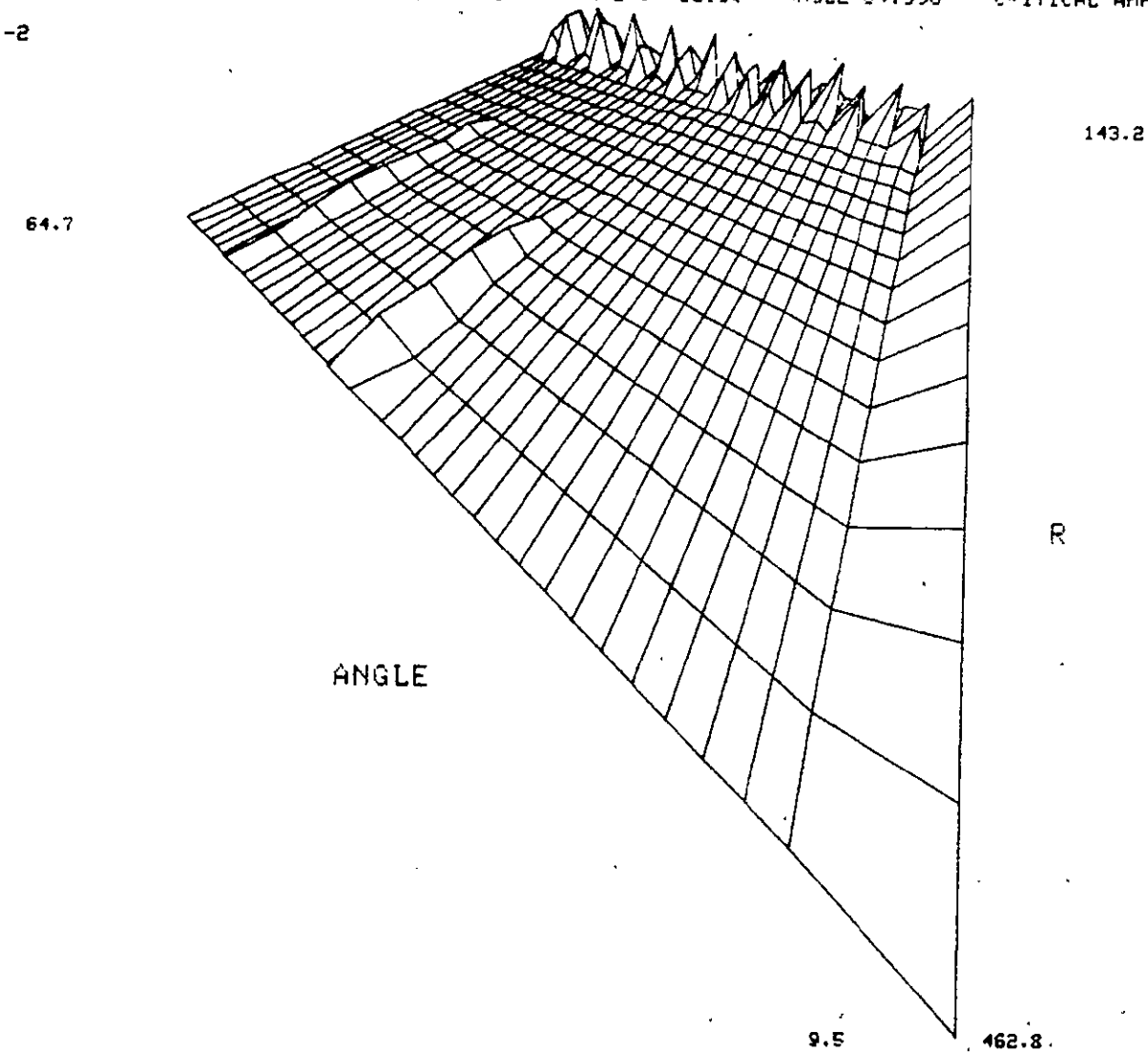
* SCAN # 27 FRAME # 18315 ANGLE -9.350 TO FRAME # 12950 ANGLE 64.956 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 43.0

AVERAGE I = 3.6

ANGLE	
1	9.5
2	9.9
3	10.4
4	11.4
5	12.8
6	14.2
7	16.0
8	17.7
9	19.5
10	21.2
11	22.9
12	24.7
13	26.4
14	28.2
15	30.0
16	31.7
17	33.4
18	35.2
19	36.9
20	38.7
21	40.4
22	42.2
23	43.9
24	45.6
25	47.2
26	48.9
27	50.6
28	52.3
29	54.1
30	55.8
31	57.6
32	59.3
33	61.2
34	63.0
35	64.4
36	64.7



	R
1	143.2
2	162.0
3	180.8
4	199.6
5	218.4
6	237.2
7	256.0
8	274.3
9	293.6
10	312.4
11	331.2
12	350.0
13	368.3
14	387.6
15	406.4
16	425.2
17	462.3

IMAX, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 3 OF 3-29226

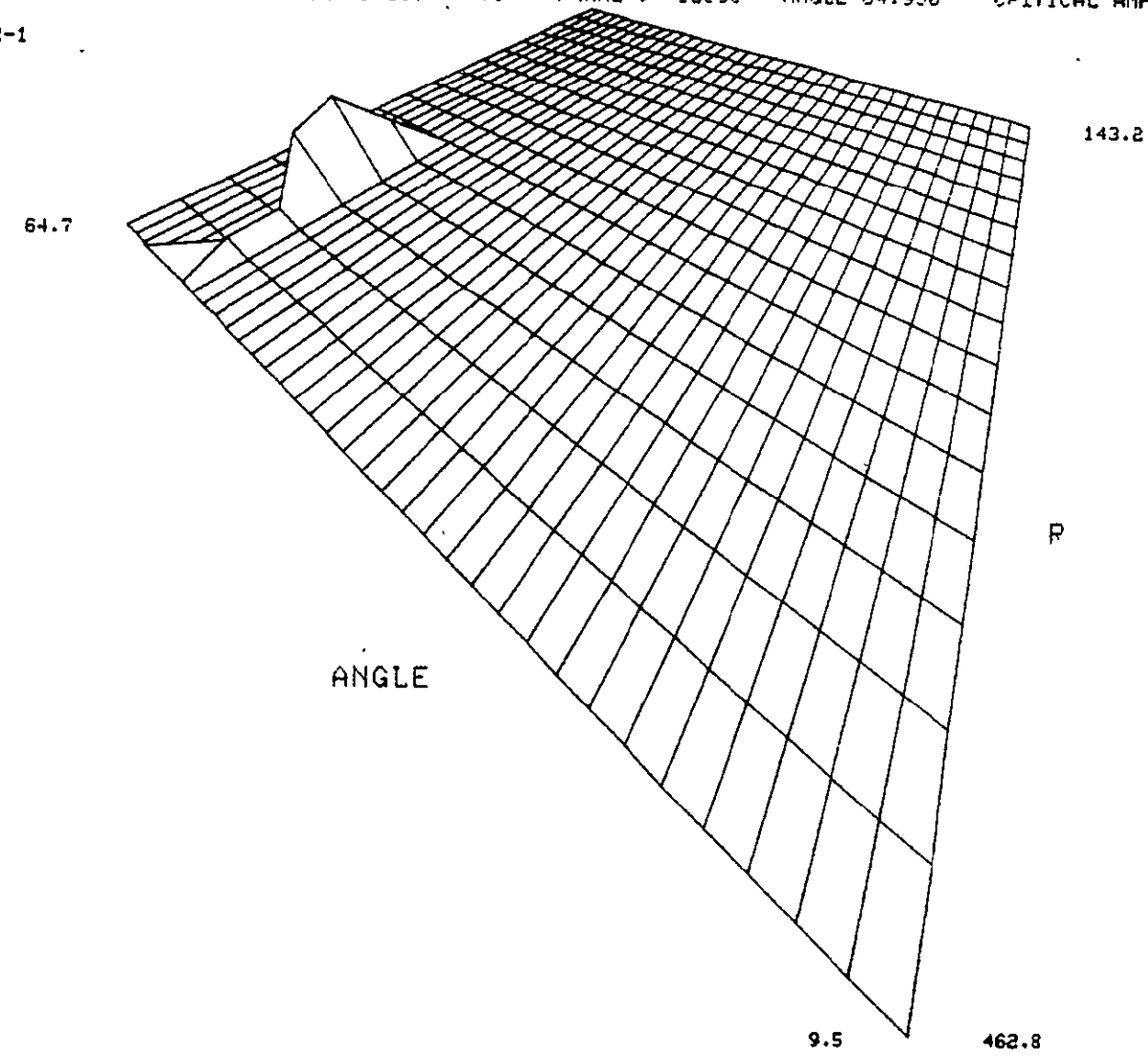
* SCAN # 27 FRAME # 18315 ANGLE 9.350 TO FRAME # 18350 ANGLE 64.956 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 6.0

AVERAGE I = 0.0

	ANGLE
1	9.5
2	9.9
3	10.4
4	11.4
5	12.8
6	14.2
7	16.0
8	17.7
9	19.5
10	21.2
11	22.9
12	24.7
13	26.4
14	28.2
15	30.0
16	31.7
17	33.4
18	35.2
19	36.9
20	38.7
21	40.4
22	42.2
23	43.9
24	45.6
25	47.2
26	48.9
27	50.6
28	52.3
29	54.1
30	55.8
31	57.6
32	59.3
33	61.2
34	63.0
35	64.4
36	64.7



	R
1	143.2
2	162.0
3	180.8
4	199.6
5	218.4
6	237.2
7	256.0
8	274.8
9	293.6
10	312.4
11	331.2
12	350.0
13	368.8
14	387.6
15	406.4
16	425.2
17	462.8

I, R, A DISPLAY AT VELOCITY CELL 62

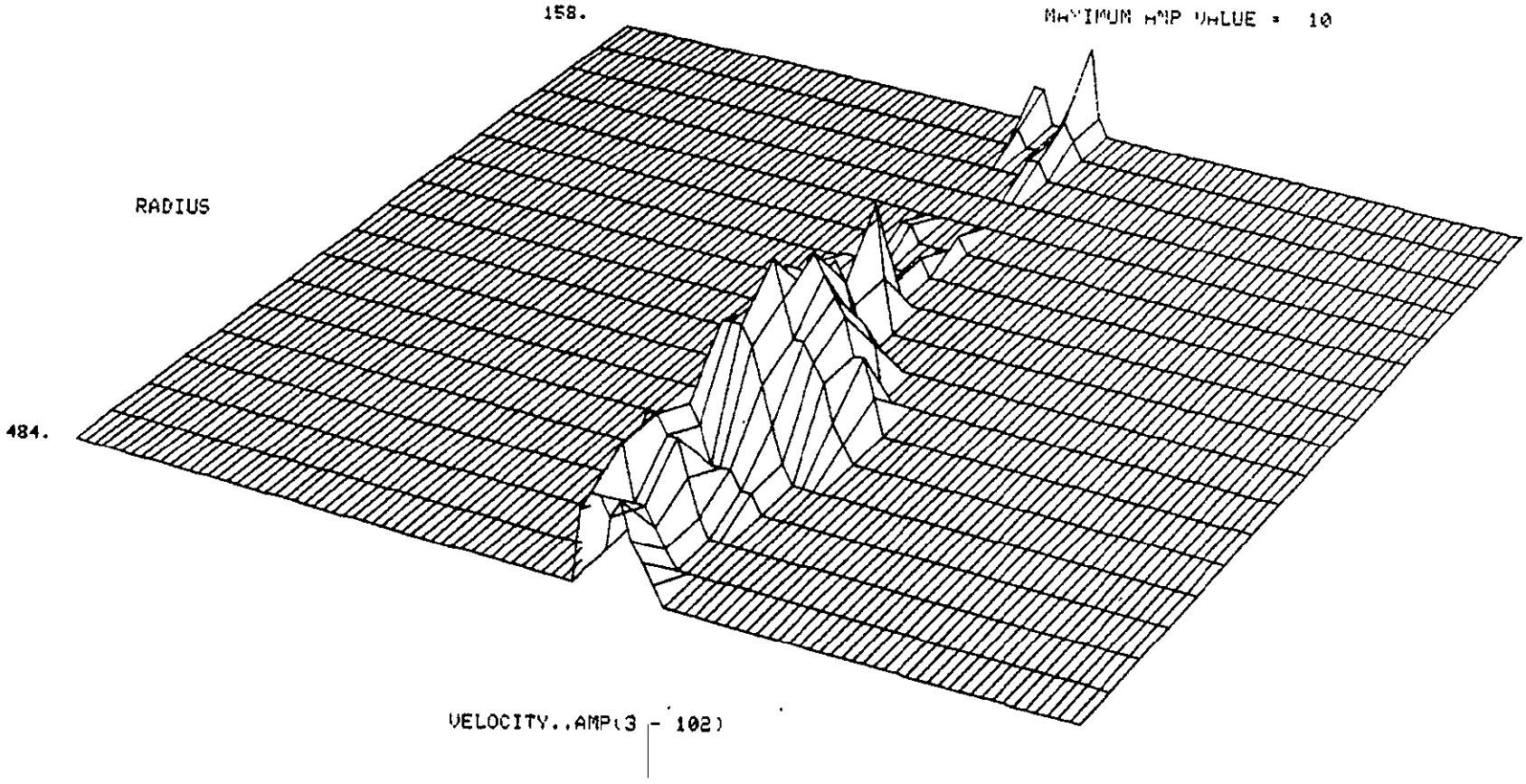
NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 2 OF 2-23226

SCAN # 27 FRAME # 18315 ANGLE 9.350 TO FRAME # 13950 ANGLE 64.956 CRITICAL AMP AT CELL 62

FRAME # 18327 TO 18345

ANGLE = 55.86

MAXIMUM AMP VALUE = 10



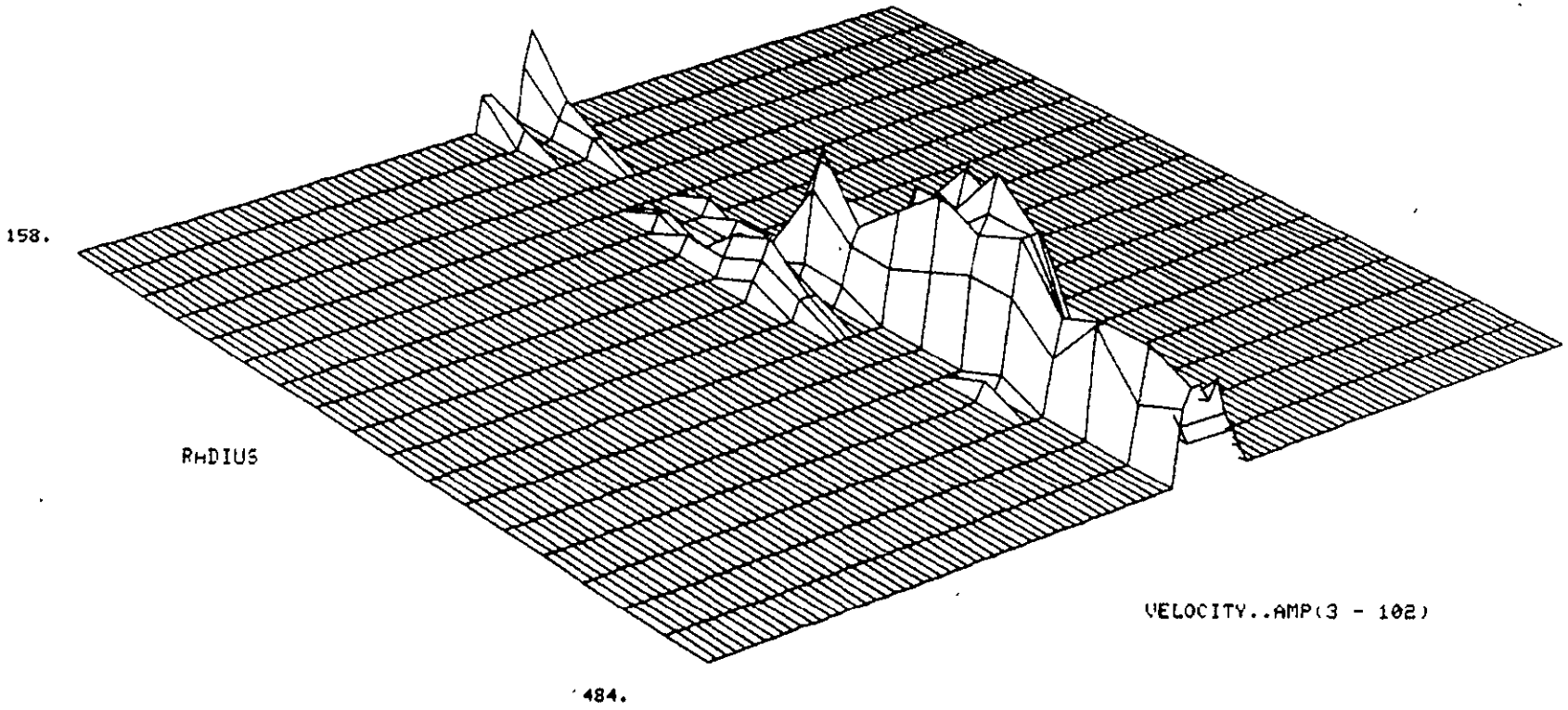
NASA PROJECT DUST DEVIL DAY 238. RUN # 4 TAPE 2 OF 2-29326

SCAN # 27 FRAME # 18315 ANGLE 9.350 TO: FRAME # 18950 ANGLE 64.956 CRITICAL AMP AT CELL 62

FRAME # 18827 TO 18845

ANGLE = 55.96

MAXIMUM AMP VALUE = 10



ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF 2-29226

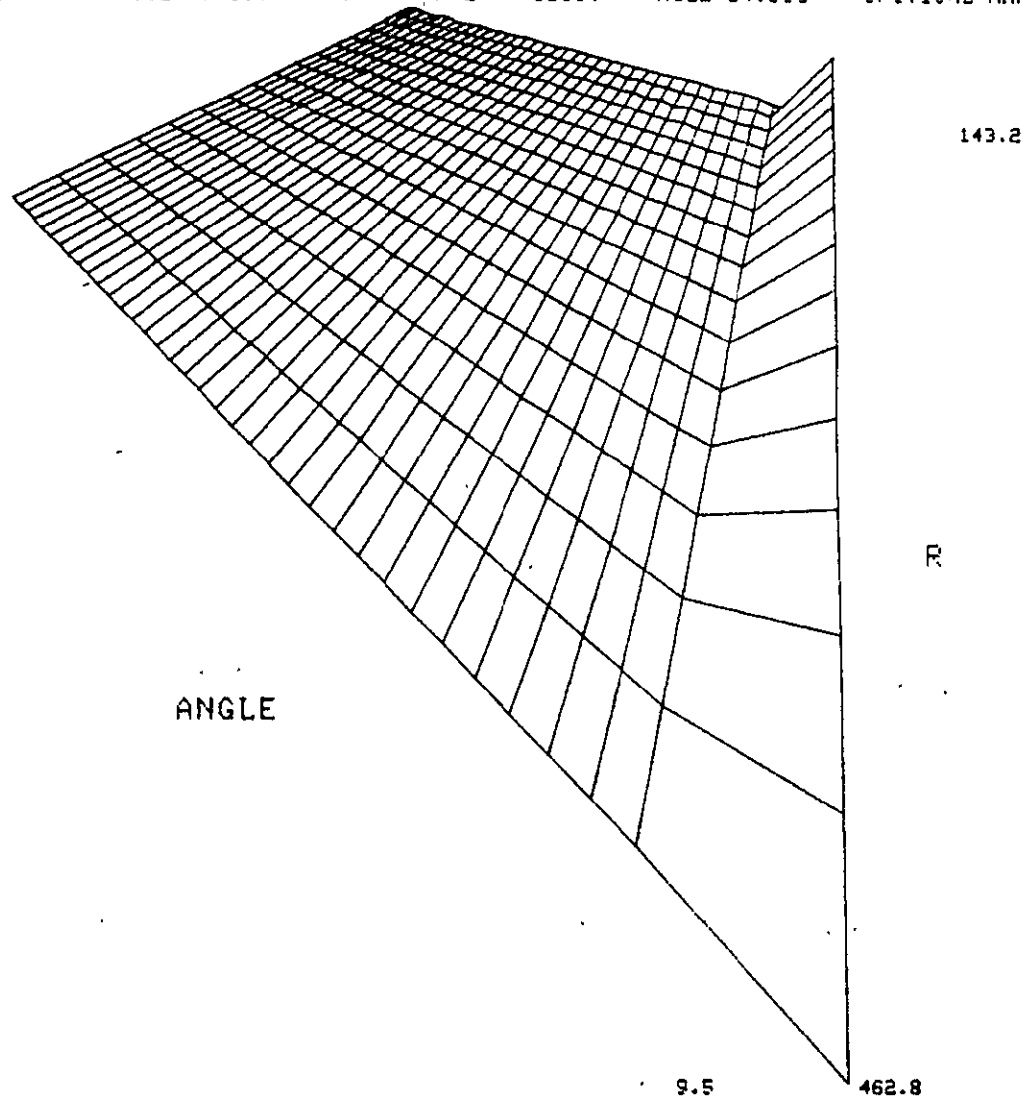
* SCAN # 27 FRAME # 13315 ANGLE 9.350 TO FRAME # 13950 ANGLE 64.956 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 55.0

AVERAGE V = 2.6

ANGLE	
1	9.5
2	9.9
3	10.4
4	11.4
5	12.8
6	14.2
7	16.0
8	17.7
9	19.5
10	21.2
11	22.9
12	24.7
13	26.4
14	28.2
15	30.0
16	31.7
17	33.4
18	35.2
19	36.9
20	38.7
21	40.4
22	42.2
23	43.9
24	45.6
25	47.2
26	48.9
27	50.6
28	52.3
29	54.1
30	55.8
31	57.6
32	59.3
33	61.2
34	63.0
35	64.4
36	64.7



R	
1	143.2
2	162.0
3	180.8
4	199.6
5	218.4
6	237.2
7	256.0
8	274.8
9	293.6
10	312.4
11	331.2
12	350.0
13	368.8
14	387.6
15	406.4
16	425.2
17	462.8

U, R, A DISPLAY (VELOCITY AT I_{MAX})

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL . DAY 233 RUN # 4 TAPE 2 OF 2-29226

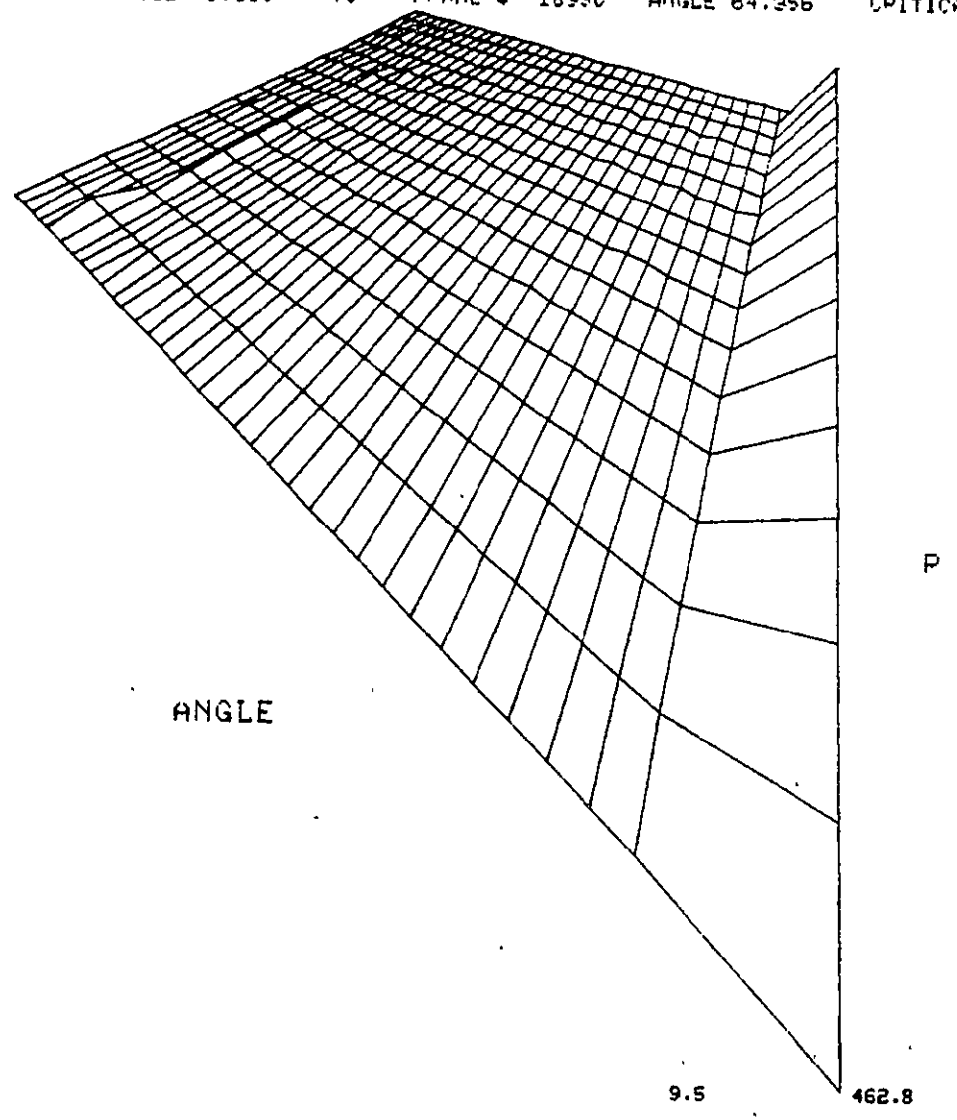
* SCAN # 27 FRAME # 18315 ANGLE 9.350 TO FRAME # 18350 ANGLE 64.356 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM U = 57.0

AVERAGE U = 3.5

ANGLE	
1	9.5
2	9.9
3	10.4
4	11.4
5	12.8
6	14.2
7	16.0
8	17.7
9	19.5
10	21.2
11	22.9
12	24.7
13	26.4
14	28.2
15	30.0
16	31.7
17	33.4
18	35.2
19	36.9
20	38.7
21	40.4
22	42.2
23	43.9
24	45.6
25	47.2
26	48.9
27	50.6
28	52.3
29	54.1
30	55.8
31	57.6
32	59.3
33	61.2
34	63.0
35	64.4
36	64.7



	R
1	143.2
2	162.0
3	180.8
4	199.6
5	218.4
6	237.2
7	256.0
8	274.8
9	293.6
10	312.4
11	331.2
12	350.0
13	368.8
14	387.6
15	406.4
16	425.2
17	462.8

U, R, A DISPLAY (VELOCITY AT I_{MAX})

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 2 OF 2-29226

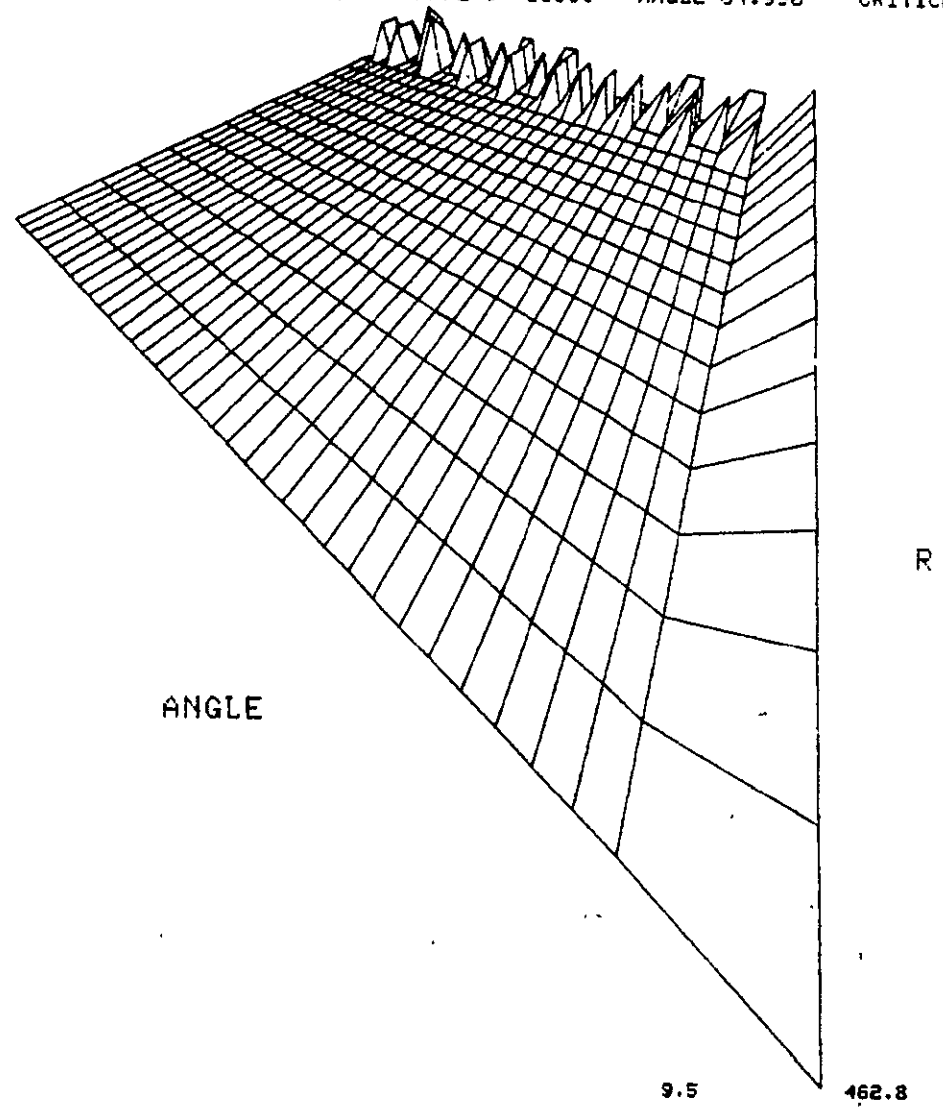
* SCAN # 27 FRAME # 18315 ANGLE 9.350 TO FRAME # 18950 ANGLE 64.956 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 4.0

AVERAGE V = 1.2

	ANGLE
1	9.5
2	9.9
3	10.4
4	11.4
5	12.8
6	14.2
7	16.0
8	17.7
9	19.5
10	21.2
11	22.9
12	24.7
13	26.4
14	28.2
15	30.0
16	31.7
17	33.4
18	35.2
19	36.9
20	38.7
21	40.4
22	42.2
23	43.9
24	45.6
25	47.2
26	48.9
27	50.6
28	52.3
29	54.1
30	55.8
31	57.6
32	59.3
33	61.2
34	63.0
35	64.4
36	64.7



	R
1	143.2
2	162.0
3	180.8
4	199.6
5	218.4
6	237.2
7	256.0
8	274.8
9	293.6
10	312.4
11	331.2
12	350.0
13	368.8
14	387.6
15	406.4
16	425.2
17	462.8

V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF 2-29226

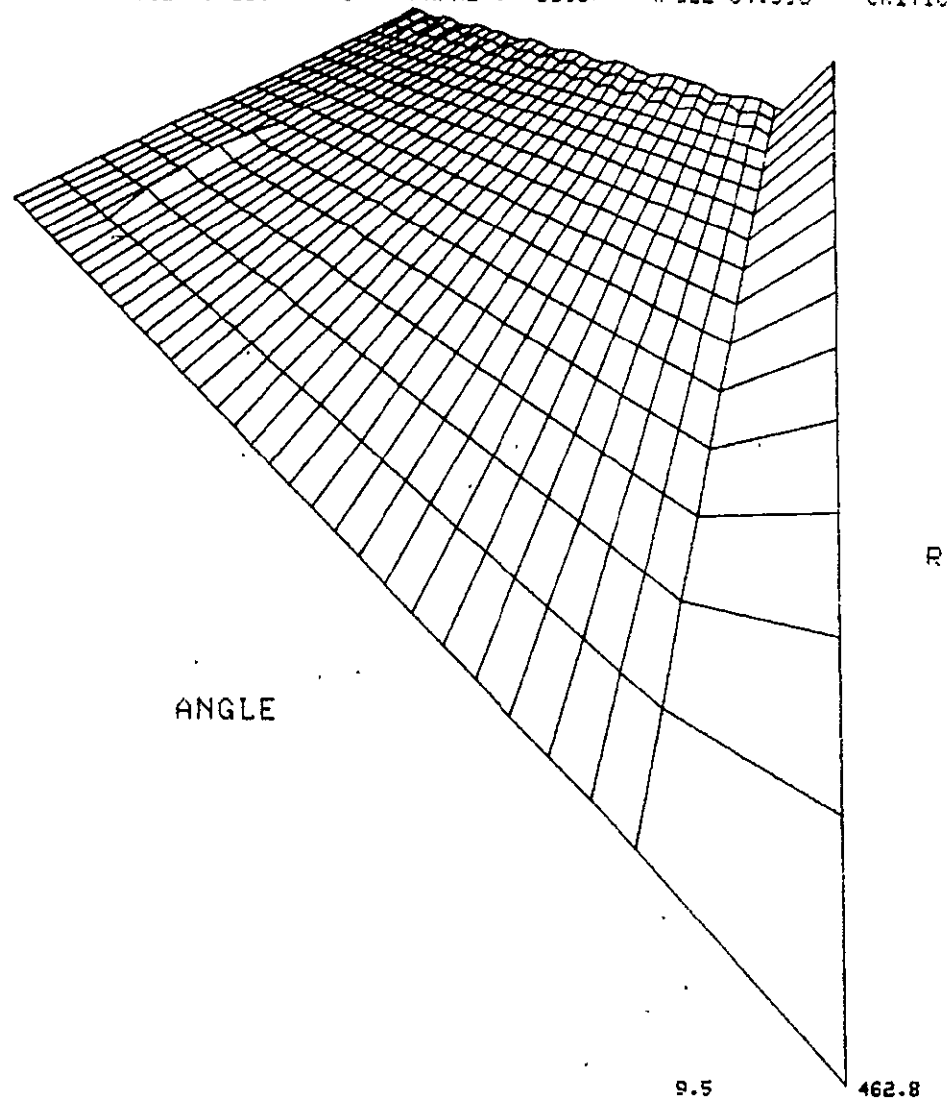
* SCAN # 27 FRAME # 18315 ANGLE 9.350 TO FRAME # 18950 ANGLE 64.956 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM V = 58.0

AVERAGE V = 2.9

ANGLE	
1	9.5
2	9.9
3	10.4
4	11.4
5	12.8
6	14.2
7	16.0
8	17.7
9	19.5
10	21.2
11	22.9
12	24.7
13	26.4
14	28.2
15	30.0
16	31.7
17	33.4
18	35.2
19	36.9
20	38.7
21	40.4
22	42.2
23	43.9
24	45.6
25	47.2
26	48.9
27	50.6
28	52.3
29	54.1
30	55.8
31	57.6
32	59.3
33	61.2
34	63.0
35	64.4
36	64.7



	R
1	143.2
2	162.0
3	180.8
4	199.6
5	218.4
6	237.2
7	256.0
8	274.8
9	293.6
10	312.4
11	331.2
12	350.0
13	368.8
14	387.6
15	406.4
16	425.2
17	462.8

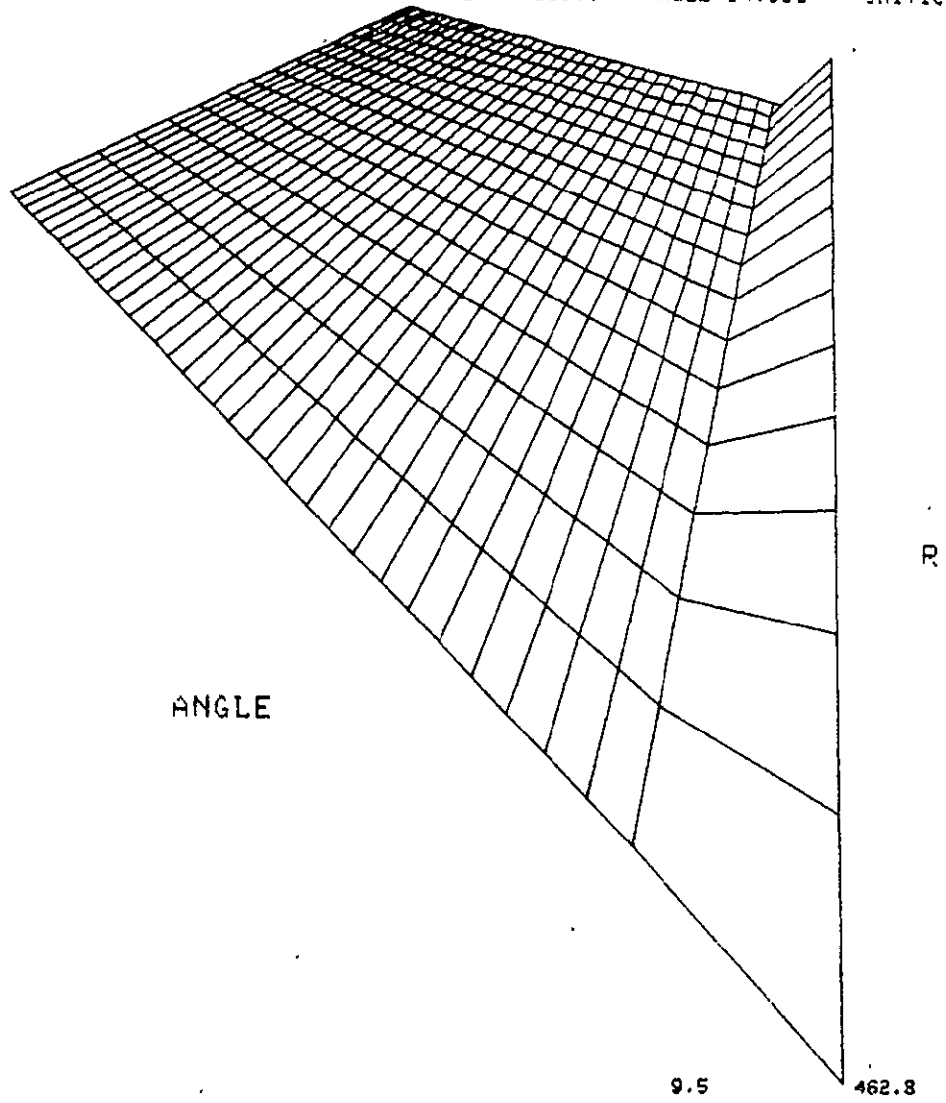
V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF 2-29236

SCAN # 27 FRAME # 18315 ANGLE 9.350 TO FRAME # 18950 ANGLE 64.956 CRITICAL AMP AT CELL 62

OPTION # 31-1



	ANGLE
1	9.5
2	9.9
3	10.4
4	11.4
5	12.8
6	14.2
7	16.0
8	17.7
9	19.5
10	21.2
11	22.9
12	24.7
13	26.4
14	28.2
15	30.0
16	31.7
17	33.4
18	35.2
19	36.9
20	38.7
21	40.4
22	42.2
23	43.9
24	45.6
25	47.2
26	48.9
27	50.6
28	52.3
29	54.1
30	55.8
31	57.6
32	59.3
33	61.2
34	63.0
35	64.4
36	64.7

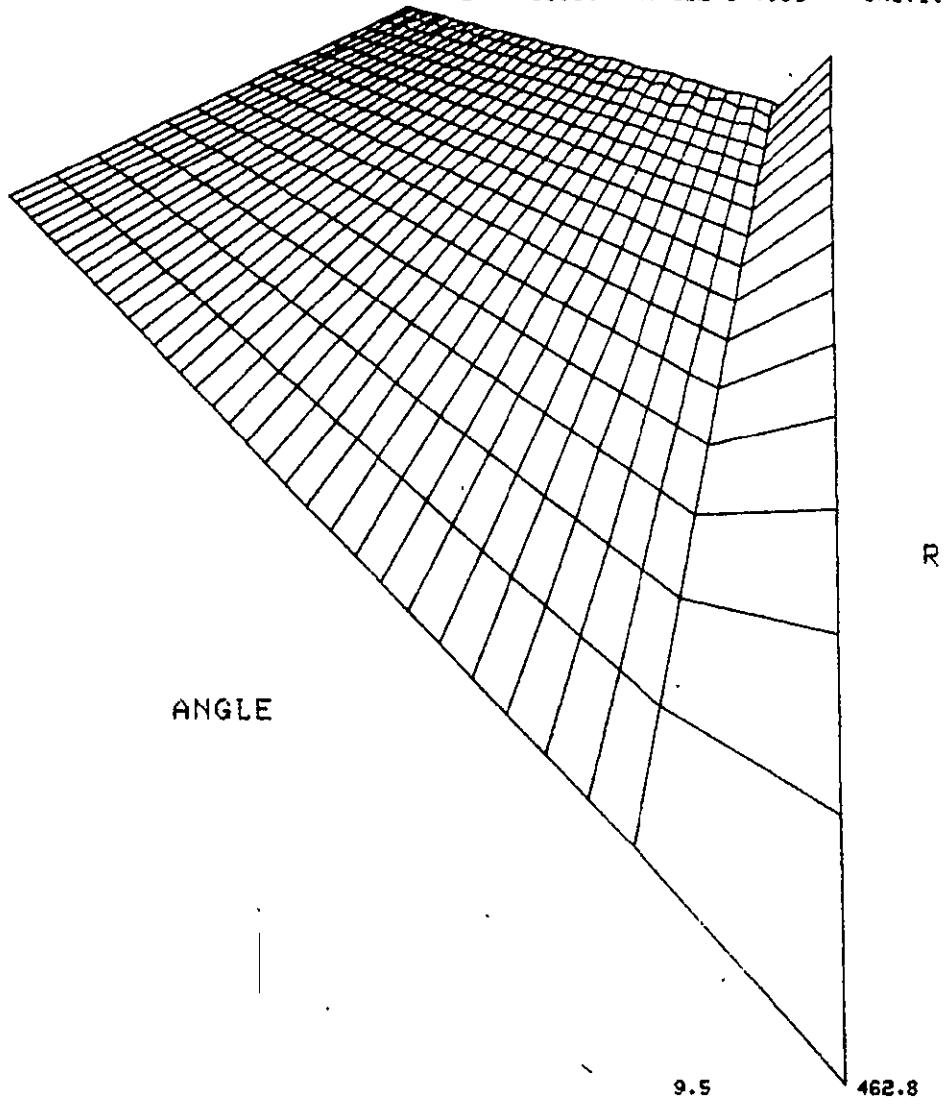
	R
1	143.2
2	162.0
3	180.8
4	199.6
5	218.4
6	237.2
7	256.0
8	274.2
9	293.6
10	312.4
11	331.2
12	350.0
13	368.8
14	387.6
15	406.4
16	425.2
17	462.8

U * Imax, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 3 OF 3-29226

SCAN # 27 FRAME # 18315 ANGLE 9.350 TO FRAME # 18350 ANGLE 64.956 CRITICAL AMP AT CELL 62

OPTION # 31-2



	ANGLE
1	9.5
2	9.9
3	10.4
4	11.4
5	12.8
6	14.2
7	16.0
8	17.7
9	19.5
10	21.2
11	22.9
12	24.7
13	26.4
14	28.2
15	30.0
16	31.7
17	33.4
18	35.2
19	36.9
20	38.7
21	40.4
22	42.2
23	43.9
24	45.6
25	47.2
26	48.9
27	50.6
28	52.3
29	54.1
30	55.8
31	57.6
32	59.3
33	61.2
34	63.0
35	64.4
36	64.7

	R
1	143.2
2	162.0
3	180.8
4	199.6
5	218.4
6	237.2
7	256.0
8	274.8
9	293.6
10	312.4
11	331.2
12	350.0
13	368.8
14	387.6
15	406.4
16	425.2
17	462.8

U * IMAX, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL · DAY 238 · RUN # 4 TAPE 2 OF 2-23226

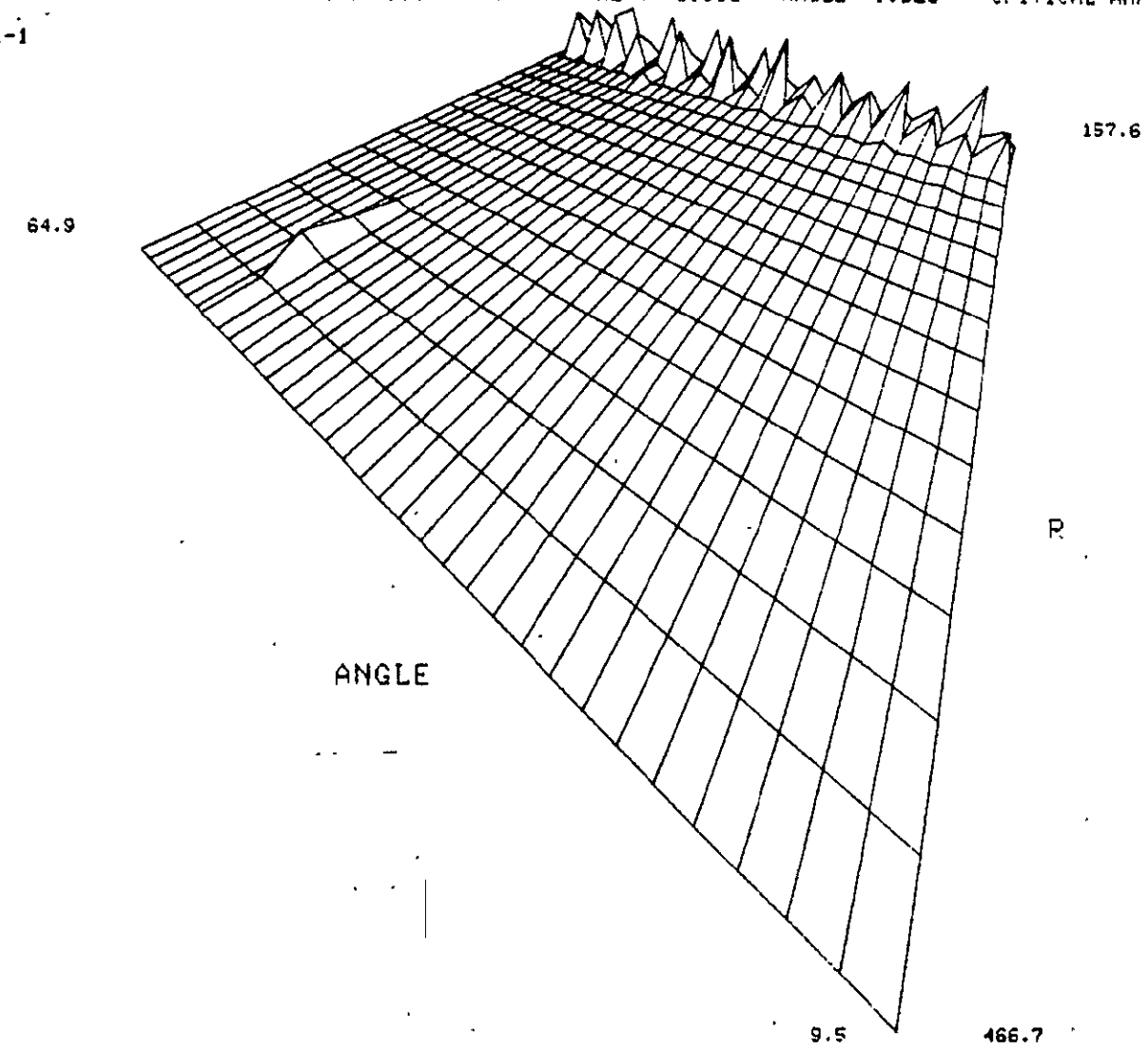
* SCAN # 28 FRAME # 18950 ANGLE 64.956 TO FRAME # 13553 ANGLE 3.326 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 27.0

AVERAGE I = 0.9

	ANGLE
1	64.9
2	64.3
3	63.4
4	62.2
5	60.7
6	59.0
7	57.2
8	55.4
9	53.7
10	52.0
11	50.2
12	48.5
13	46.8
14	45.2
15	43.4
16	41.6
17	39.9
18	38.3
19	36.4
20	34.7
21	33.0
22	31.3
23	29.5
24	27.7
25	25.9
26	24.2
27	22.4
28	20.6
29	18.9
30	17.1
31	15.3
32	13.6
33	11.8
34	10.3
35	9.5



	R
1	157.6
2	176.9
3	196.2
4	215.5
5	234.9
6	254.2
7	273.5
8	292.8
9	312.2
10	331.5
11	350.3
12	370.1
13	389.4
14	408.8
15	428.1
16	466.7

ORIGINAL PAGE IS OF POOR QUALITY

I_{MAX}, R, A DISPLAY

NASA PROJECT DUST DEVIL . DAY 238 RUN # 4 TAPE 2 OF 3-29226

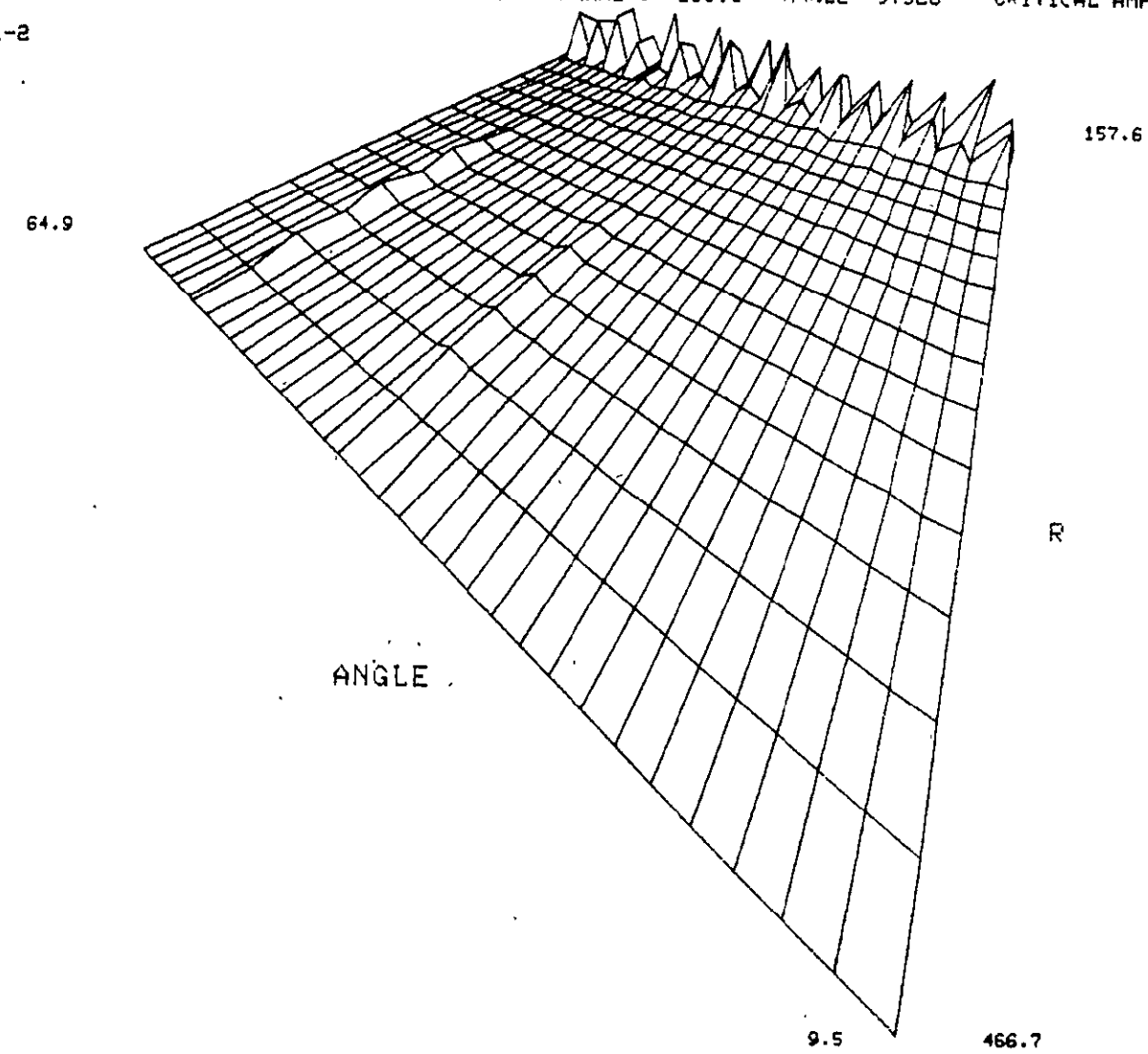
* SCAN # 28 FRAME # 18950 ANGLE 64.956 TO FRAME # 19558 ANGLE 9.326 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 47.0

AVERAGE I = 2.5

ANGLE	
1	64.9
2	64.3
3	63.4
4	62.2
5	60.7
6	59.0
7	57.2
8	55.4
9	53.7
10	52.0
11	50.2
12	48.5
13	46.8
14	45.2
15	43.4
16	41.6
17	39.9
18	38.3
19	36.4
20	34.7
21	33.0
22	31.3
23	29.5
24	27.7
25	25.9
26	24.2
27	22.4
28	20.6
29	18.9
30	17.1
31	15.3
32	13.6
33	11.8
34	10.3
35	9.5



R	
1	157.6
2	176.9
3	196.2
4	215.5
5	234.9
6	254.2
7	273.5
8	292.8
9	312.2
10	331.5
11	350.8
12	370.1
13	389.4
14	408.8
15	428.1
16	466.7

I_{MAX}, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 2 OF 2-29226

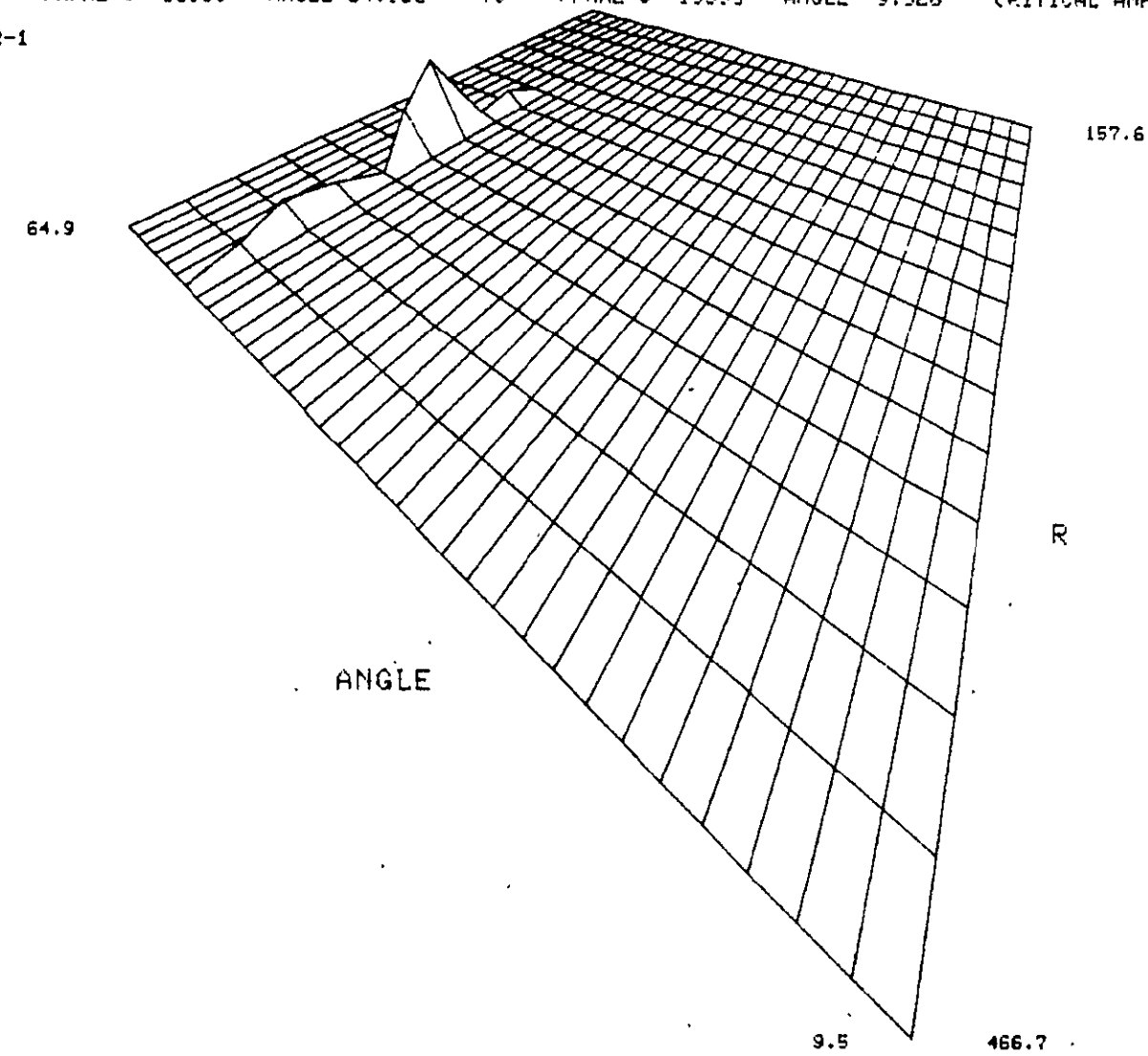
* SCAN # 28 FRAME # 18950 ANGLE 64.956 TO FRAME # 19558 ANGLE 9.326 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 10.0

AVERAGE I = 0.0

ANGLE	
1	64.9
2	64.3
3	63.4
4	62.2
5	60.7
6	59.0
7	57.2
8	55.4
9	53.7
10	52.0
11	50.2
12	48.5
13	46.8
14	45.2
15	43.4
16	41.6
17	39.9
18	38.3
19	36.4
20	34.7
21	33.0
22	31.3
23	29.5
24	27.7
25	25.9
26	24.2
27	22.4
28	20.6
29	18.9
30	17.1
31	15.3
32	13.6
33	11.8
34	10.3
35	9.5



	R
1	157.6
2	176.9
3	196.2
4	215.5
5	234.9
6	254.2
7	273.5
8	292.8
9	312.2
10	331.5
11	350.2
12	370.1
13	389.4
14	408.8
15	428.1
16	466.7

I, R, A DISPLAY AT VELOCITY CELL 62

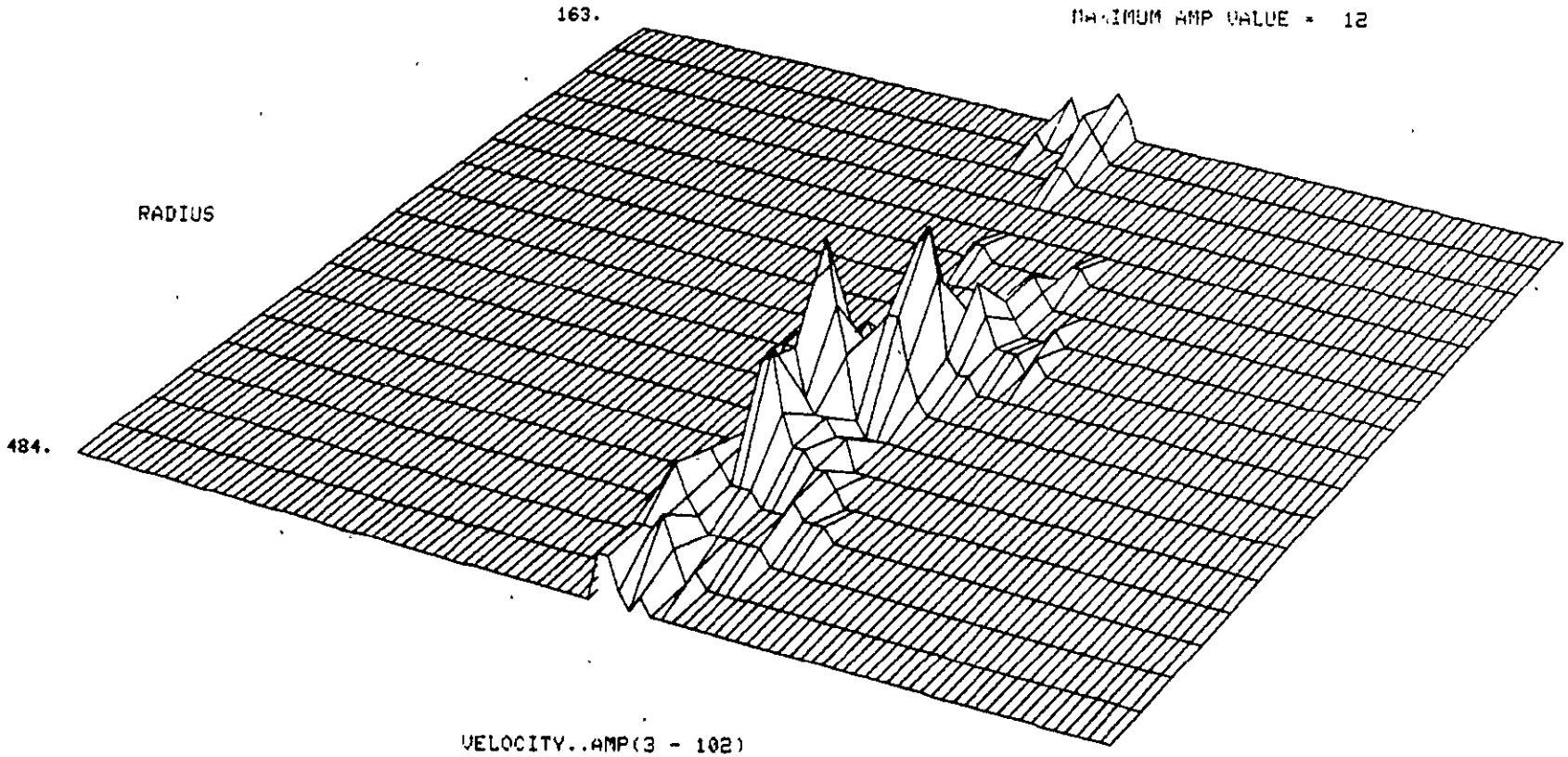
NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 2 OF 2-29236

SCAN # 28 FRAME # 18950 ANGLE 64.956 TO FRAME # 19558 ANGLE 9.326 CRITICAL AMP AT CELL 62

FRAME # 19046 TO 19064

ANGLE = 57.14

MAXIMUM AMP VALUE = 12



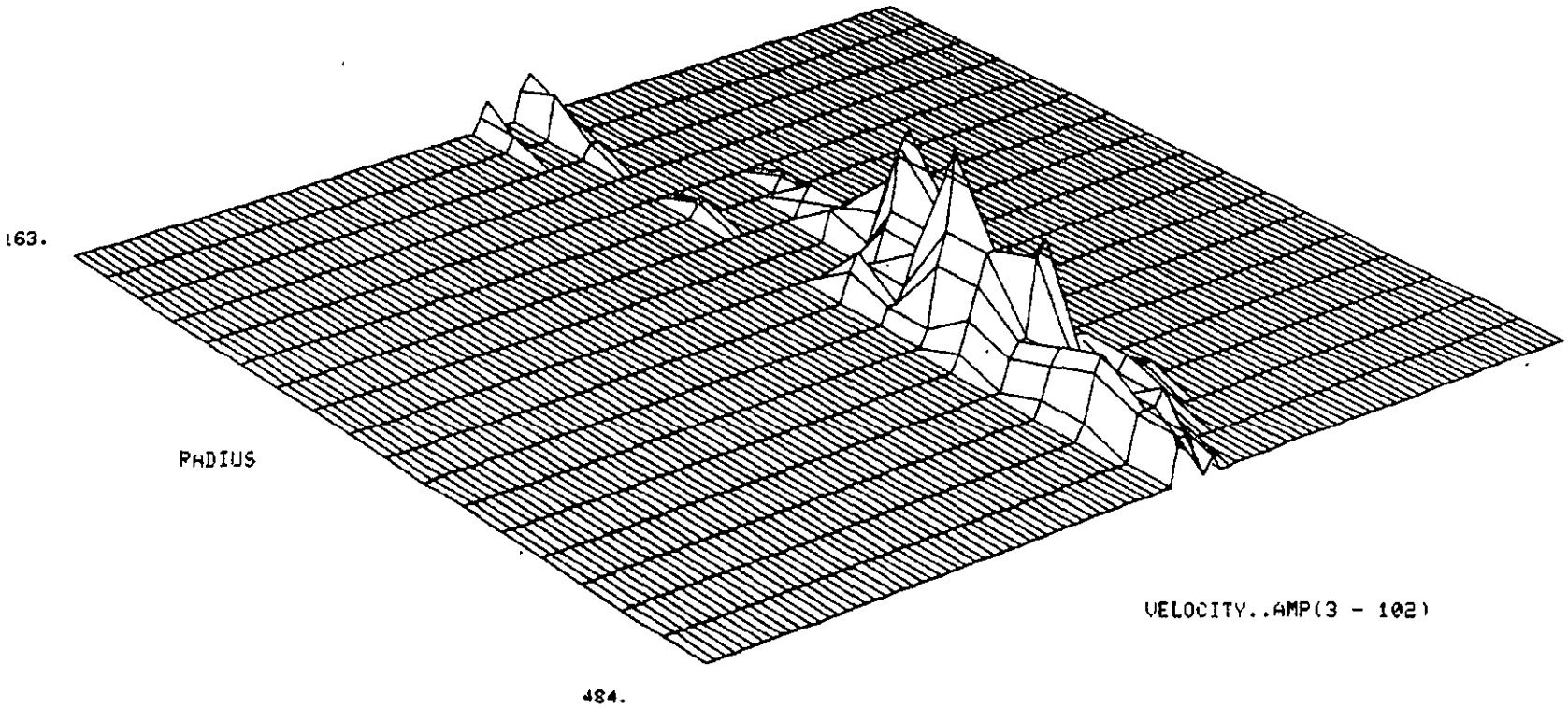
NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF 2-39226

SCAN # 28 FRAME # 18950 ANGLE 64.956 TO FRAME # 19558 ANGLE 9.326 CRITICAL AMP AT CELL 62

FRAME # 19046 TO 19064

ANGLE = 57.14

MAXIMUM AMP VALUE = 12



NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF 2-29226

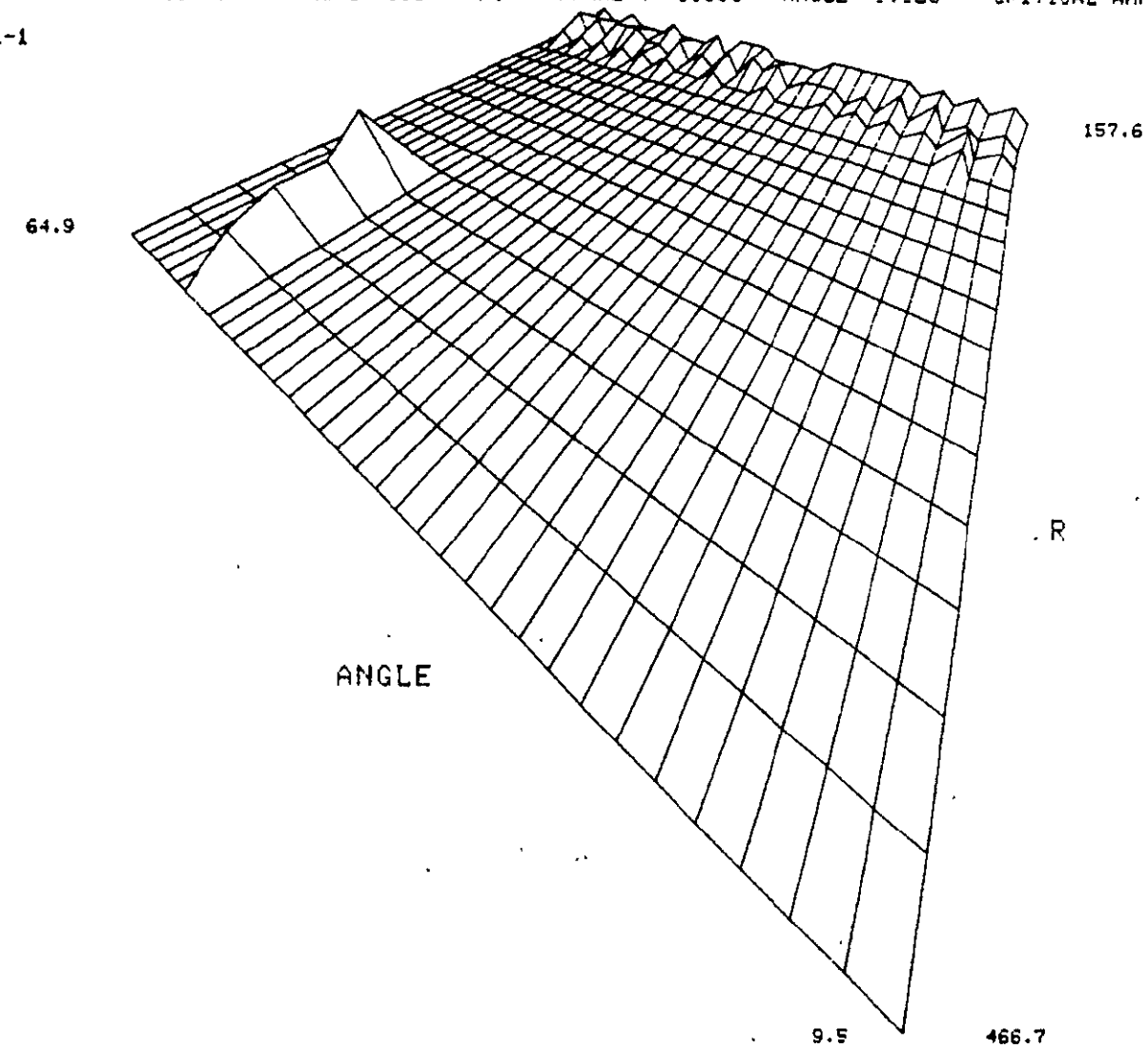
* SCAN # 28 FRAME # 18950 ANGLE 64.956 TO FRAME # 19558 ANGLE 9.326 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 7.0

AVERAGE V = 1.2

ANGLE	
1	64.9
2	64.3
3	63.4
4	62.2
5	60.7
6	59.0
7	57.2
8	55.4
9	53.7
10	52.0
11	50.2
12	48.5
13	46.8
14	45.2
15	43.4
16	41.6
17	39.9
18	38.3
19	36.4
20	34.7
21	33.0
22	31.3
23	29.5
24	27.7
25	25.9
26	24.2
27	22.4
28	20.6
29	18.9
30	17.1
31	15.3
32	13.6
33	11.8
34	10.3
35	9.5



	R
1	157.6
2	176.9
3	196.2
4	215.5
5	234.9
6	254.2
7	273.5
8	292.8
9	312.2
10	331.5
11	350.5
12	370.1
13	389.4
14	408.3
15	428.1
16	466.7

V, P, A DISPLAY (VELOCITY AT I_{MAX})

ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF 2-29226

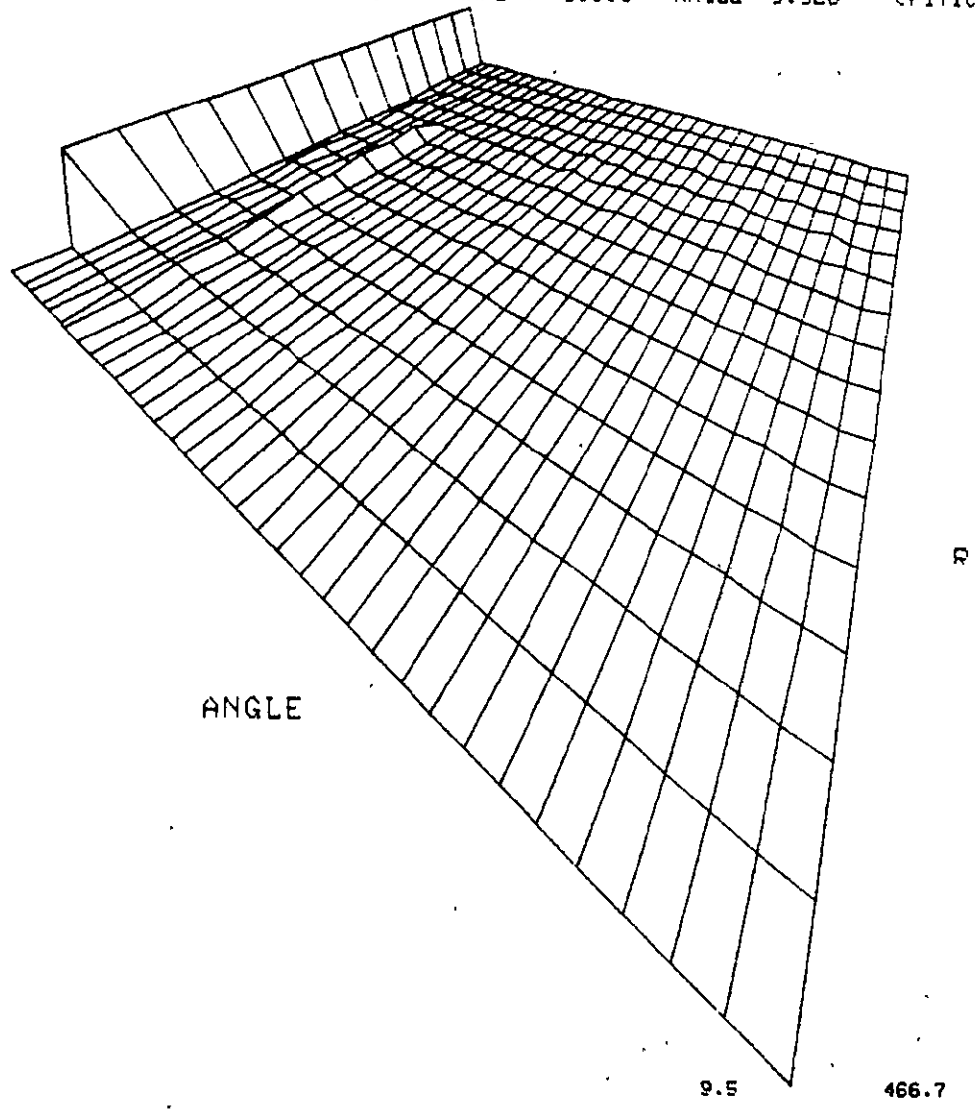
* SCAN # 28 FRAME # 18950 ANGLE 64.996 TO FRAME # 19558 ANGLE 9.326 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V = 55.0

AVERAGE V = 3.5

ANGLE	
1	64.9
2	64.3
3	63.4
4	62.2
5	60.7
6	59.0
7	57.2
8	55.4
9	53.7
10	52.0
11	50.2
12	48.5
13	46.8
14	45.2
15	43.4
16	41.6
17	39.9
18	38.3
19	36.4
20	34.7
21	33.0
22	31.3
23	29.5
24	27.7
25	25.9
26	24.2
27	22.4
28	20.6
29	18.9
30	17.1
31	15.3
32	13.6
33	11.8
34	10.3
35	9.5



	R
1	157.6
2	176.9
3	196.2
4	215.5
5	234.9
6	254.2
7	273.5
8	292.8
9	312.2
10	331.5
11	350.8
12	370.1
13	389.4
14	408.8
15	428.1
16	466.7

V, R, A DISPLAY (VELOCITY AT I_{MAX})

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF 2-29226

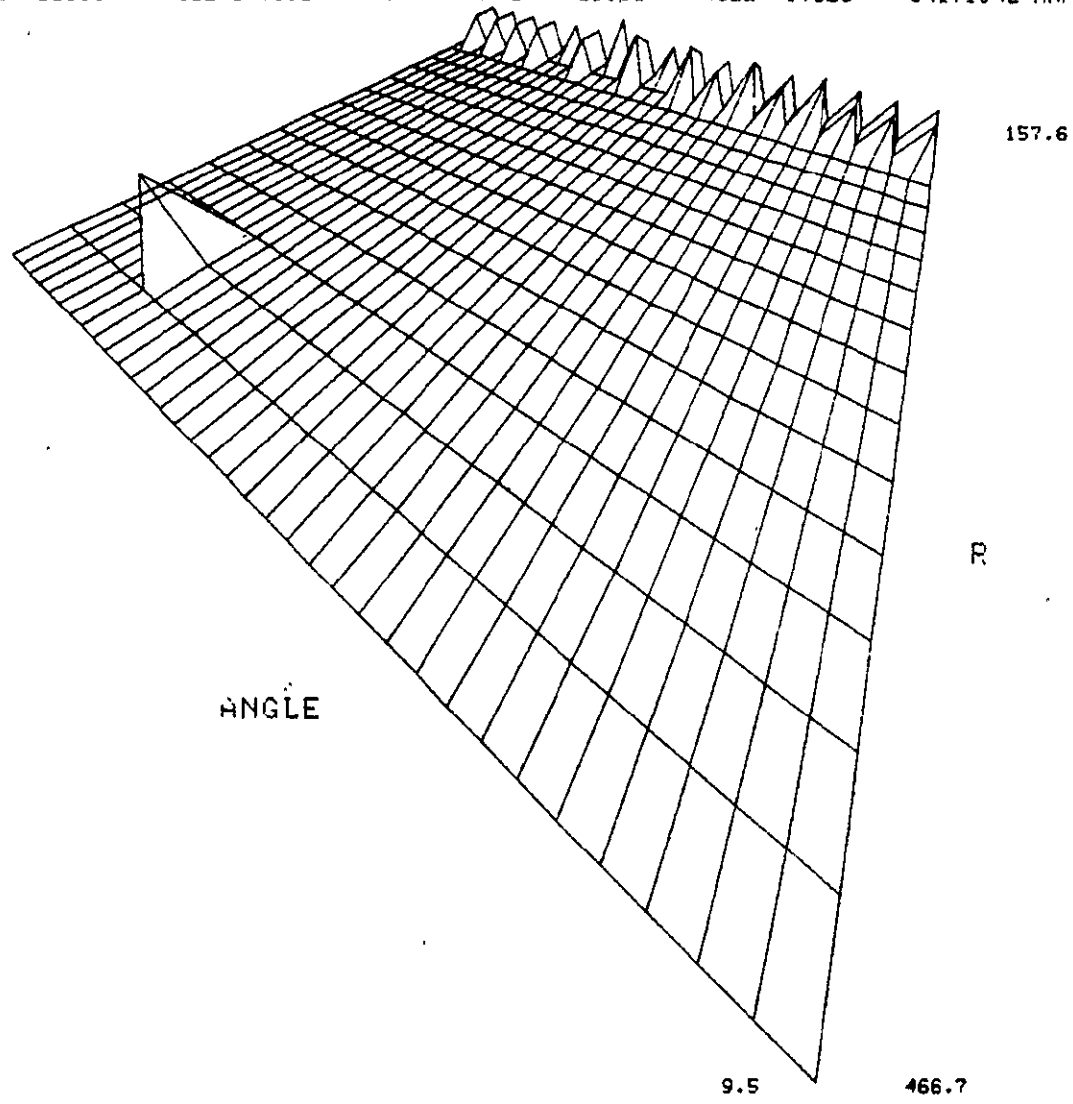
* SCAN # 28 FRAME # 18950 ANGLE 64.956 TO FRAME # 19556 ANGLE 9.326 CRITICAL AMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 5.0

AVERAGE V = 1.1

ANGLE	
1	64.9
2	64.3
3	63.4
4	62.2
5	60.7
6	59.0
7	57.2
8	55.4
9	53.7
10	52.0
11	50.2
12	48.5
13	46.8
14	45.2
15	43.4
16	41.6
17	39.9
18	38.3
19	36.4
20	34.7
21	33.0
22	31.3
23	29.5
24	27.7
25	25.9
26	24.2
27	22.4
28	20.6
29	18.9
30	17.1
31	15.3
32	13.6
33	11.8
34	10.3
35	9.5



	R
1	157.6
2	176.9
3	196.2
4	215.5
5	234.9
6	254.2
7	273.5
8	292.8
9	312.2
10	331.5
11	350.3
12	370.1
13	389.4
14	408.8
15	428.1
16	466.7

VMAX, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5.

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF E-29226

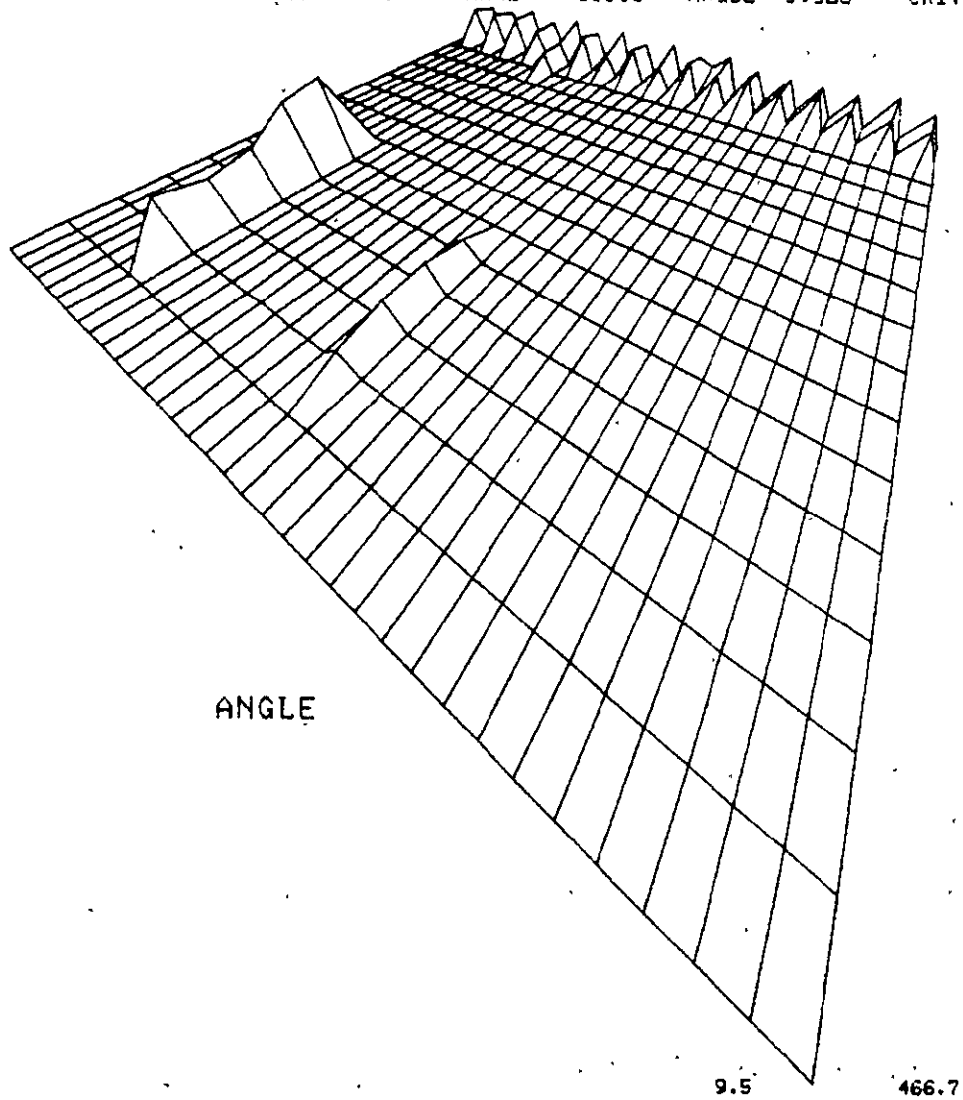
* SCAN # 28 FRAME # 18950 ANGLE 64.956 TO FRAME # 19558 ANGLE 9.326 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM V = 11.0

AVERAGE V = 1.4

ANGLE	
1	64.9
2	64.3
3	63.4
4	62.2
5	60.7
6	59.0
7	57.2
8	55.4
9	53.7
10	52.0
11	50.2
12	48.5
13	46.8
14	45.2
15	43.4
16	41.6
17	39.9
18	38.3
19	36.4
20	34.7
21	33.0
22	31.3
23	29.5
24	27.7
25	25.9
26	24.2
27	22.4
28	20.6
29	18.9
30	17.1
31	15.3
32	13.6
33	11.8
34	10.3
35	9.5



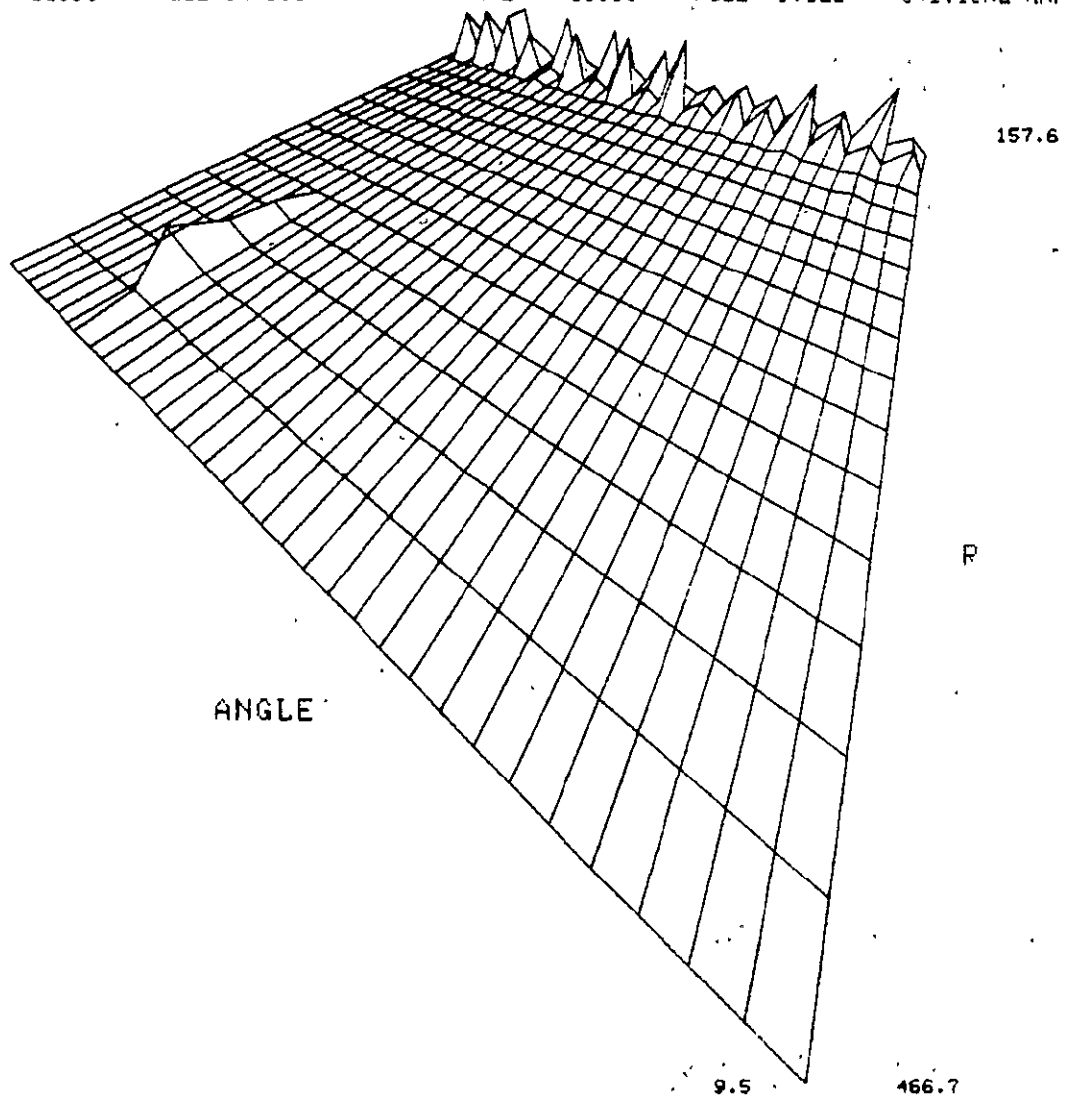
	R
1	157.6
2	176.9
3	196.2
4	215.5
5	234.9
6	254.2
7	273.5
8	292.8
9	312.2
10	331.5
11	350.8
12	370.1
13	389.4
14	408.8
15	428.1
16	466.7

VMAX, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 2 OF 3-39226

* SCAN # 28 FRAME # 18950 ANGLE 64.956 TO FRAME # 19558 ANGLE 9.326 CRITICAL AMP AT CELL 62

OPTION # 31-1



	ANGLE
1	64.9
2	64.3
3	63.4
4	62.2
5	60.7
6	59.0
7	57.2
8	55.4
9	53.7
10	52.0
11	50.2
12	48.5
13	46.8
14	45.2
15	43.4
16	41.6
17	39.9
18	38.3
19	36.4
20	34.7
21	33.0
22	31.3
23	29.5
24	27.7
25	25.9
26	24.2
27	22.4
28	20.6
29	18.9
30	17.1
31	15.3
32	13.6
33	11.8
34	10.3
35	9.5

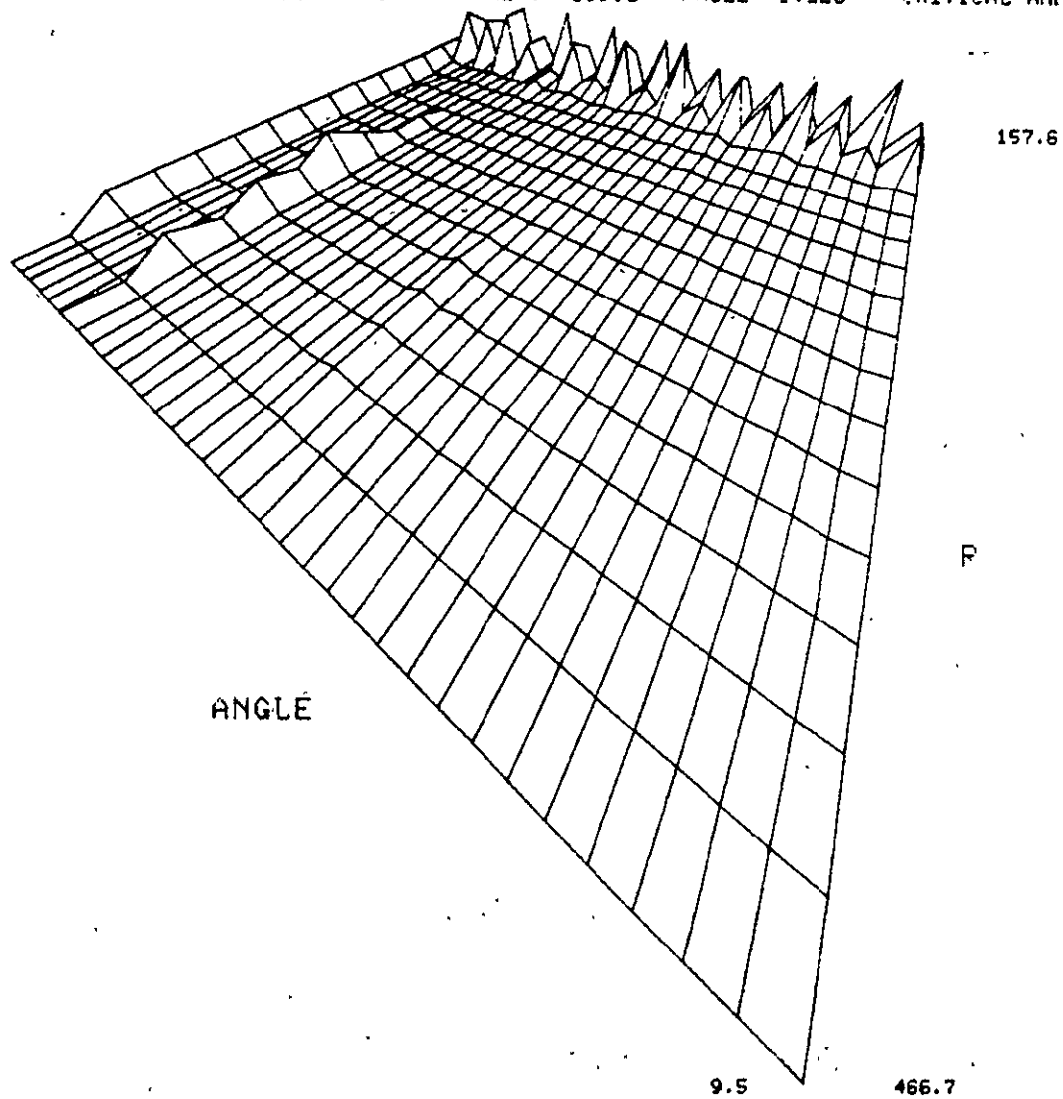
	R
1	157.6
2	176.9
3	196.2
4	215.5
5	234.9
6	254.2
7	273.5
8	292.8
9	312.2
10	331.5
11	350.8
12	370.1
13	389.4
14	408.8
15	428.1
16	466.7

U * IMAX, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF 2-29226.

SCAN # 28 FRAME # 18950 ANGLE 64.956 TO FRAME # 19558 ANGLE 3.326 CRITICAL AMP AT CELL 62

OPTION # 31-2



	ANGLE
1	64.9
2	64.3
3	63.4
4	62.2
5	60.7
6	59.0
7	57.2
8	55.4
9	53.7
10	52.0
11	50.2
12	48.5
13	46.8
14	45.2
15	43.4
16	41.6
17	39.9
18	38.3
19	36.4
20	34.7
21	33.0
22	31.3
23	29.5
24	27.7
25	25.9
26	24.2
27	22.4
28	20.6
29	18.9
30	17.1
31	15.3
32	13.6
33	11.8
34	10.3
35	9.5

	R
1	157.6
2	176.9
3	196.2
4	215.5
5	234.9
6	254.2
7	273.5
8	292.8
9	312.2
10	331.5
11	350.8
12	370.1
13	389.4
14	408.8
15	428.1
16	466.7

V * Imax, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 203 RUN # 4 TAPE 2 OF 2-29226

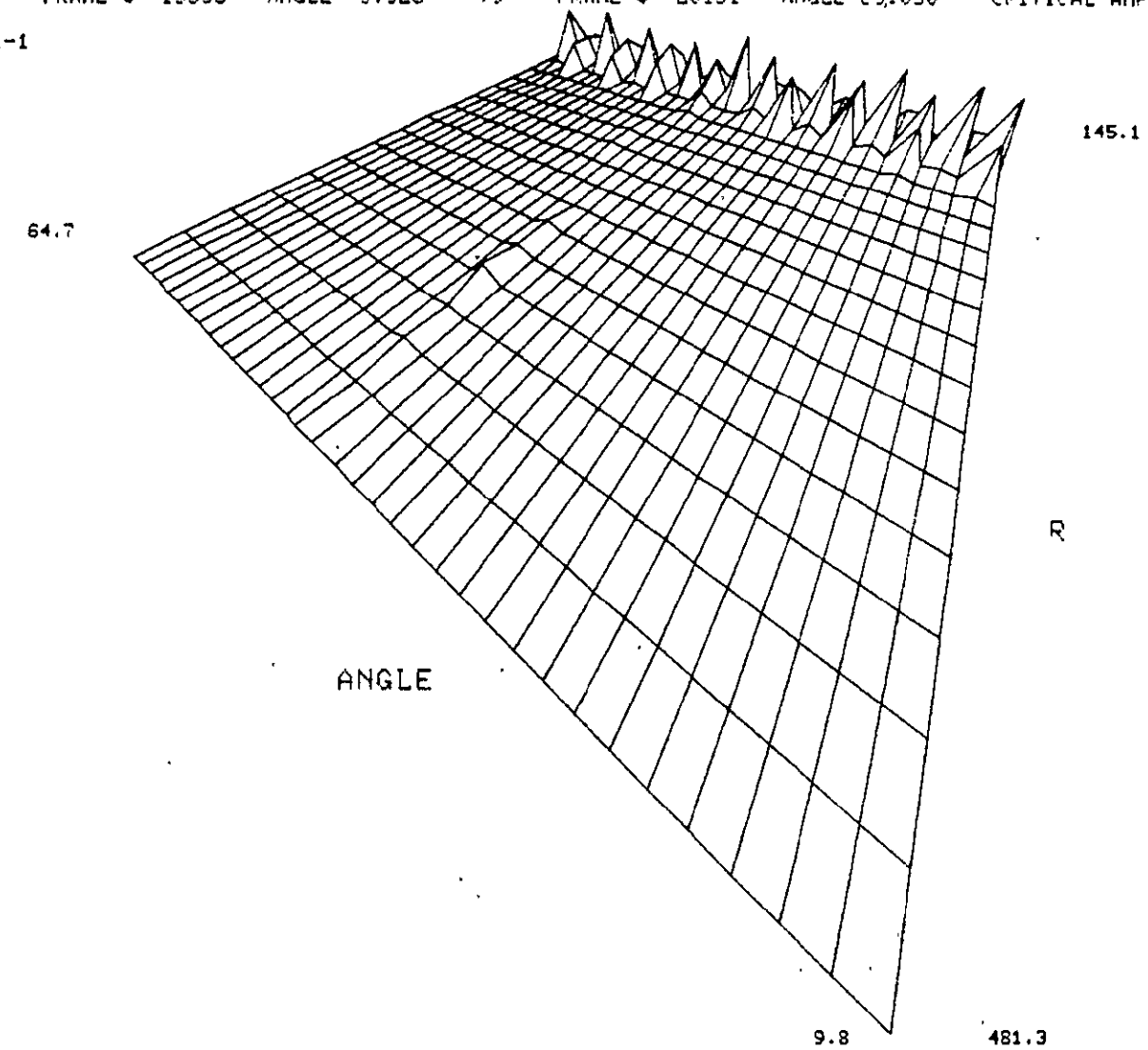
* SCAN # 29 FRAME # 19558 ANGLE 9.326 TO FRAME # 20191 ANGLE 65.030 CRITICAL AMP AT CELL 62

OPTION # 11-1

MAXIMUM I = 20.0

AVERAGE I = 0.8

ANGLE	
1	9.8
2	10.2
3	11.1
4	12.4
5	13.8
6	15.5
7	17.3
8	19.1
9	20.8
10	22.5
11	24.2
12	26.0
13	27.9
14	29.6
15	31.3
16	33.0
17	34.8
18	36.5
19	38.2
20	40.0
21	41.7
22	43.4
23	45.2
24	46.8
25	48.5
26	50.3
27	52.0
28	53.7
29	55.5
30	57.2
31	59.0
32	60.8
33	62.5
34	64.0
35	64.7



	R
1	145.1
2	164.9
3	184.7
4	204.5
5	224.2
6	244.0
7	263.8
8	283.6
9	303.3
10	323.1
11	342.9
12	362.7
13	382.4
14	402.2
15	422.0
16	441.8
17	461.3

I_{max}, R, A DISPLAY

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF 2-29226

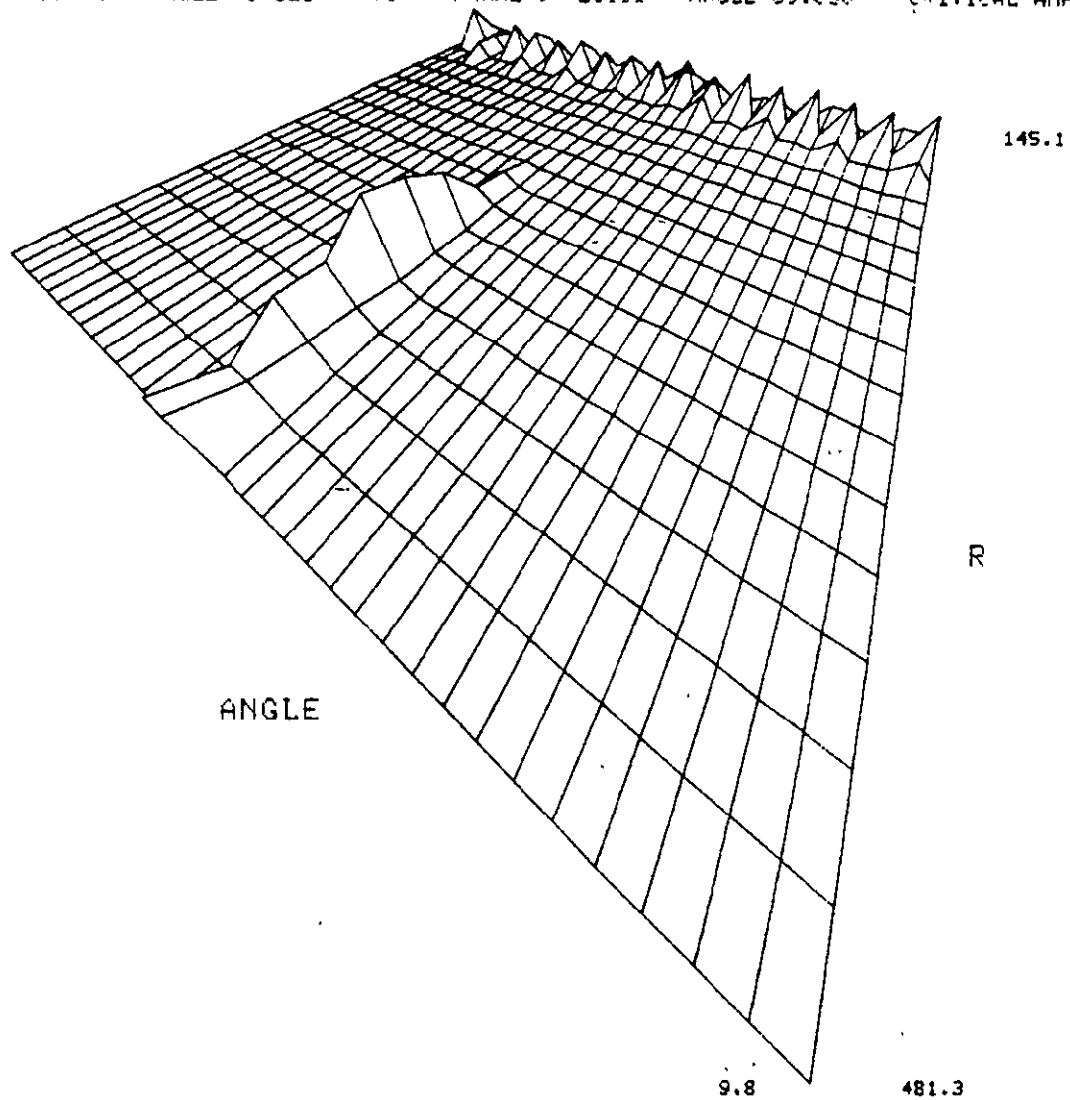
* SCAN # 29 FRAME # 19558 ANGLE 9.326 TO FRAME # 20191 ANGLE 65.030 CRITICAL AMP AT CELL 62

OPTION # 11-2

MAXIMUM I = 64.0

AVERAGE I = 2.6

	ANGLE
1	9.8
2	10.2
3	11.1
4	12.4
5	13.8
6	15.5
7	17.3
8	19.1
9	20.8
10	22.5
11	24.2
12	26.0
13	27.9
14	29.6
15	31.3
16	33.0
17	34.8
18	36.5
19	38.2
20	40.0
21	41.7
22	43.4
23	45.2
24	46.8
25	48.5
26	50.3
27	52.0
28	53.7
29	55.5
30	57.2
31	59.0
32	60.8
33	62.5
34	64.0
35	64.7



	R
1	145.1
2	164.9
3	184.7
4	204.5
5	224.2
6	244.0
7	263.8
8	283.6
9	303.3
10	323.1
11	342.9
12	362.7
13	382.4
14	402.2
15	422.0
16	441.8
17	481.3

Imax, R, A DISPLAY

NASA PROJECT DUST DEVIL DAY 235 RUN # 4 TAPE 2 OF 2-29226

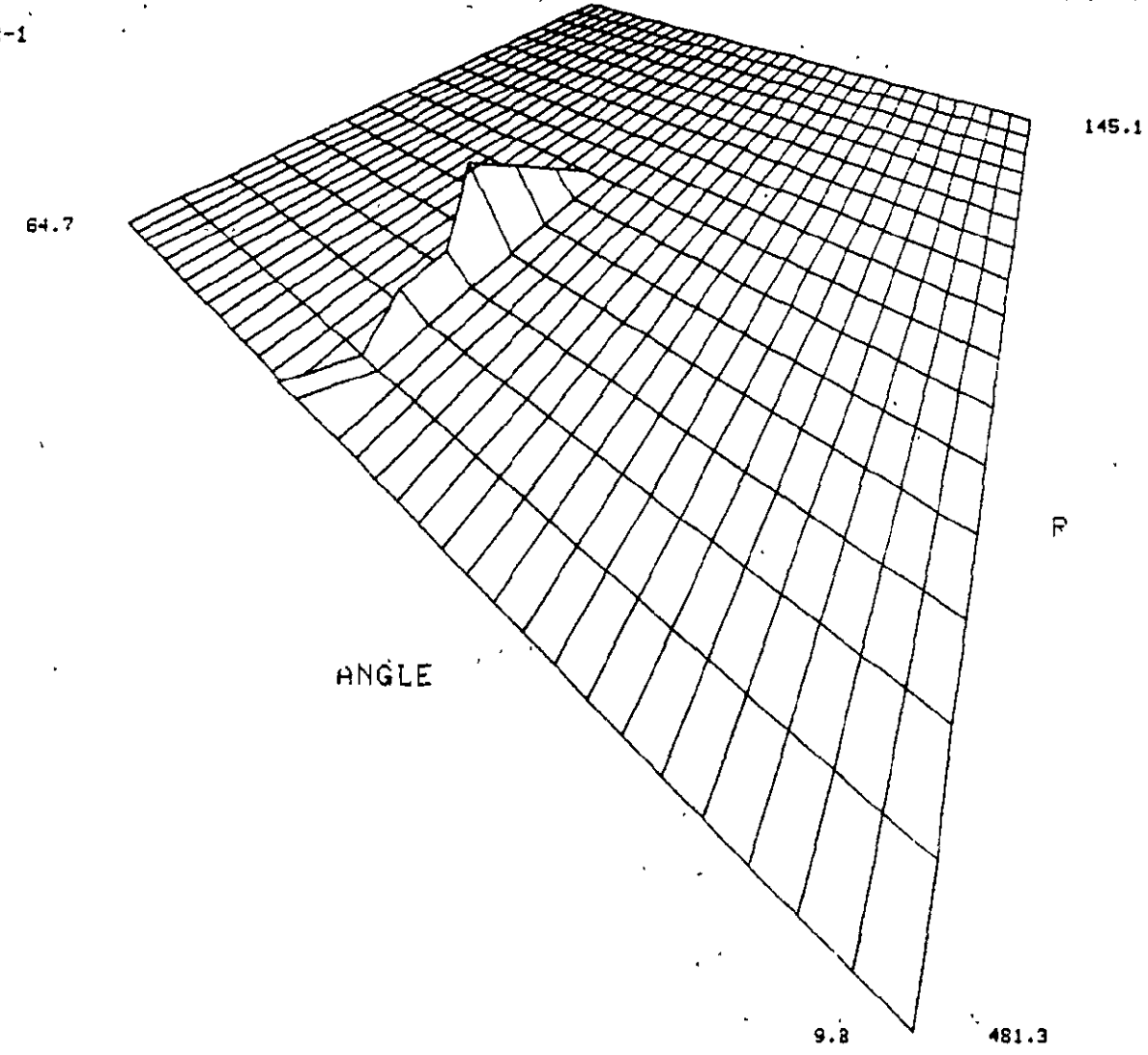
* SCAN # 29 FRAME # 19558 ANGLE 9.326 TO FRAME # 20191 ANGLE 85.030 CRITICAL AMP AT CELL 62

OPTION # 12-1

MAXIMUM I = 3.0

AVERAGE I = 0.0

	ANGLE
1	9.8
2	10.2
3	11.1
4	12.4
5	13.8
6	15.5
7	17.3
8	19.1
9	20.8
10	22.5
11	24.2
12	26.0
13	27.9
14	29.6
15	31.3
16	33.0
17	34.8
18	36.5
19	38.2
20	40.0
21	41.7
22	43.4
23	45.2
24	46.8
25	48.5
26	50.3
27	52.0
28	53.7
29	55.5
30	57.2
31	59.0
32	60.8
33	62.5
34	64.0
35	64.7



	R
1	145.1
2	164.9
3	184.7
4	204.5
5	224.2
6	244.0
7	263.8
8	283.6
9	303.3
10	323.1
11	342.9
12	362.7
13	382.4
14	402.2
15	422.0
16	441.8
17	461.3

I, R, A DISPLAY AT VELOCITY CELL 62

ORIGINAL PAGE IS OF POOR QUALITY

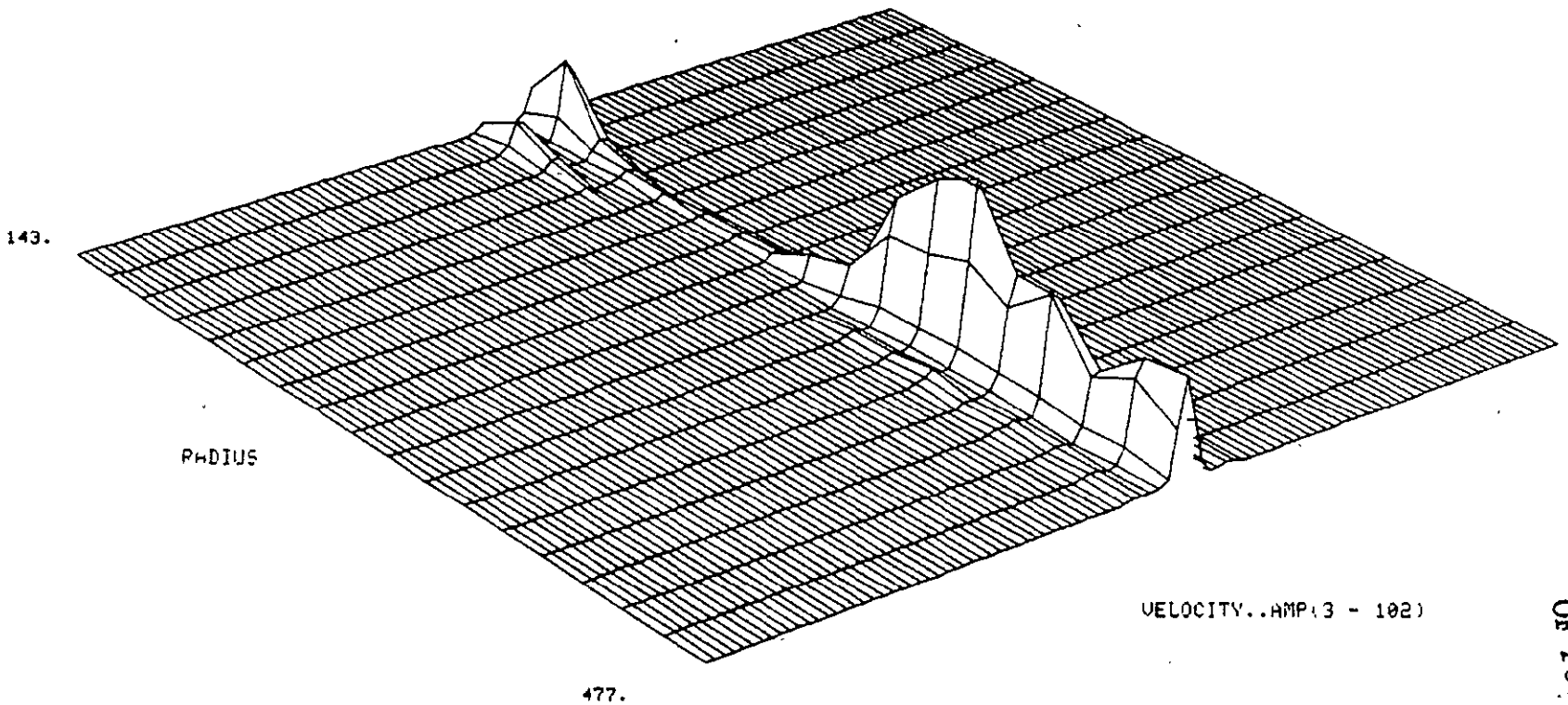
NASA PROJECT DUST DEVIL · DAY 233 RUN # 1 TAPE 2 OF 2-23226

SCAN # 29 FRAME #. 19555 ANGLE 9:326 TO FRAME # 20131 ANGLE 65.030 CRITICAL AMP AT CELL 62

FRAME # 19902 TO 19920

ANGLE = 40.04

MAXIMUM AMP VALUE = 64



ORIGINAL PAGE IS OF POOR QUALITY

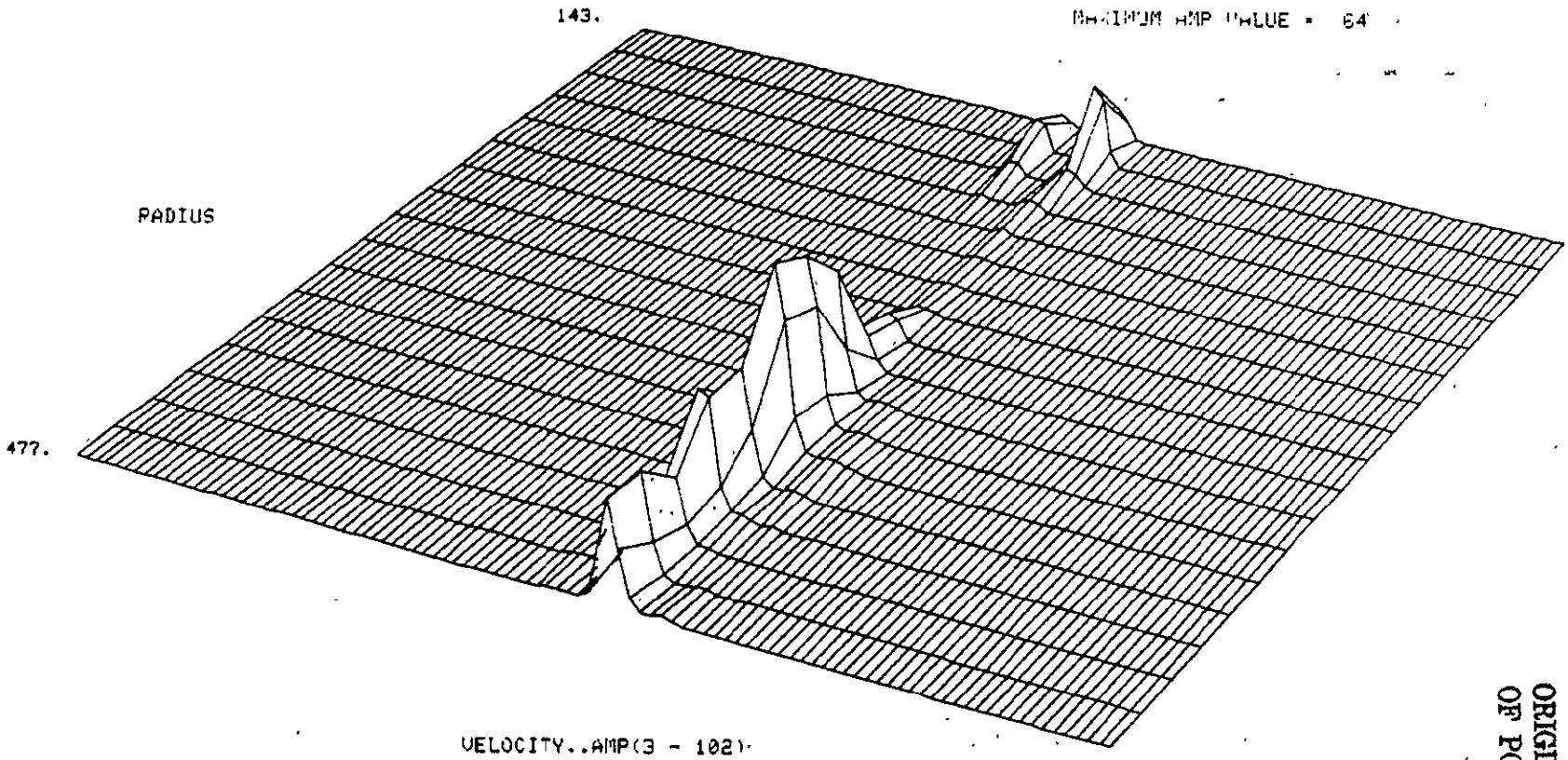
NASA PROJECT DUST DEVIL DAY 238 . RUN #. 4 TAPE 2 OF 2-23236

SCAN # 29 FRAME # 19558 ANGLE. 9.326 TO FRAME # 20191 ANGLE 65.030 CRITICAL AMP AT CELL 62

FRAME # 19902 TO 19920

ANGLE = 40.04

MAXIMUM AMP VALUE = 64



ORIGINAL PAGE IS
OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF 2-29226

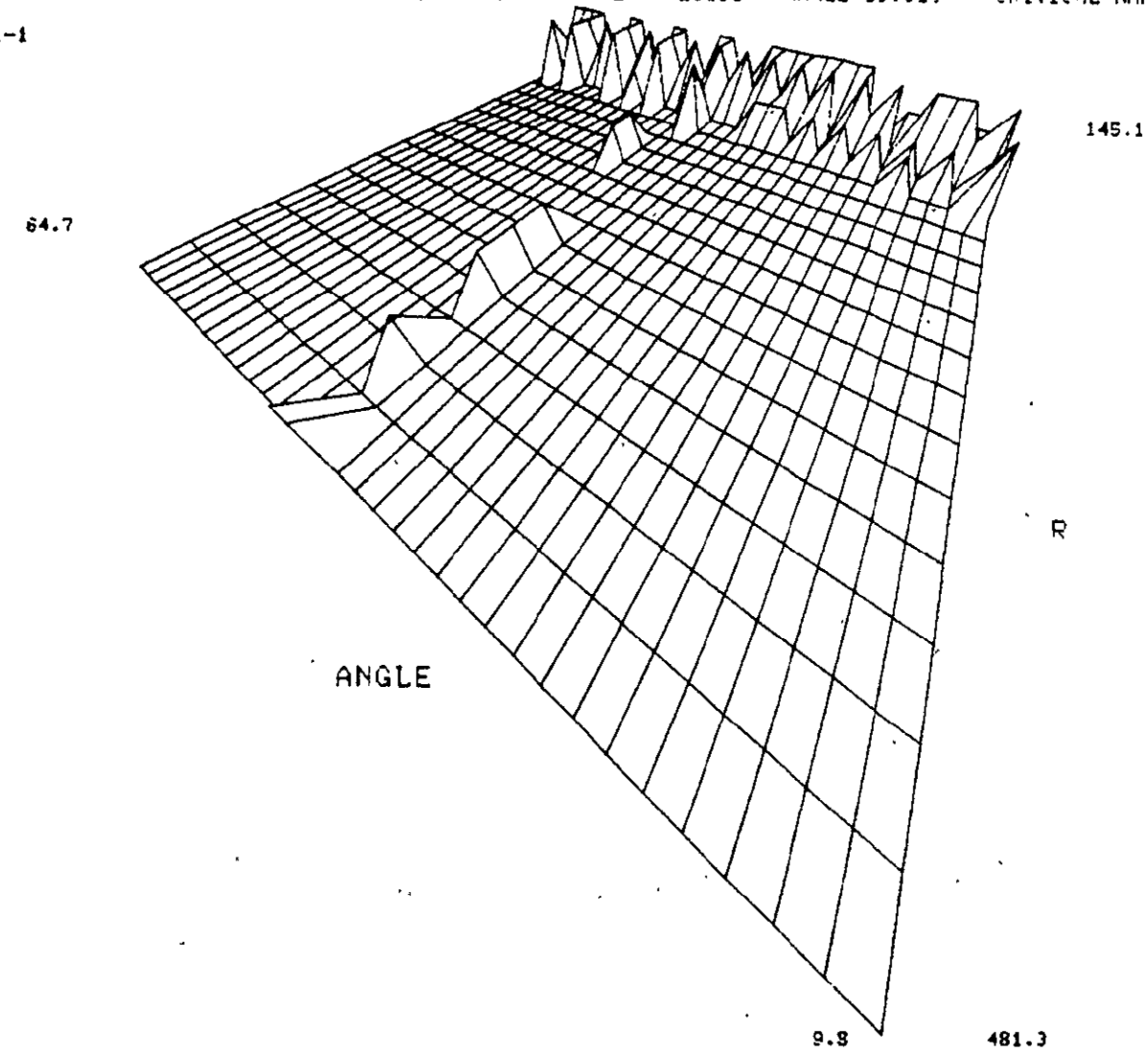
* SCAN # 29 FRAME # 19558 ANGLE 9.326 TO FRAME # 20191 ANGLE 65.020 CRITICAL AMP AT CELL 62

OPTION # 21-1

MAXIMUM V = 3.0

AVERAGE V = 1.2

ANGLE	
1	9.8
2	10.2
3	11.1
4	12.4
5	13.8
6	15.5
7	17.3
8	19.1
9	20.8
10	22.5
11	24.2
12	26.0
13	27.9
14	29.6
15	31.3
16	33.0
17	34.8
18	36.5
19	38.2
20	40.0
21	41.7
22	43.4
23	45.2
24	46.8
25	48.5
26	50.3
27	52.0
28	53.7
29	55.5
30	57.2
31	59.0
32	60.8
33	62.5
34	64.0
35	64.7



R	
1	145.1
2	164.9
3	184.7
4	204.5
5	224.2
6	244.0
7	263.8
8	283.6
9	303.3
10	323.1
11	342.9
12	362.7
13	382.4
14	402.2
15	422.0
16	441.8
17	461.3

V, R, A DISPLAY (VELOCITY AT IMAX)

NASA PROJECT DUST DEVIL : DAY 232 RUN # 4 TAPE 2 OF 2-29226

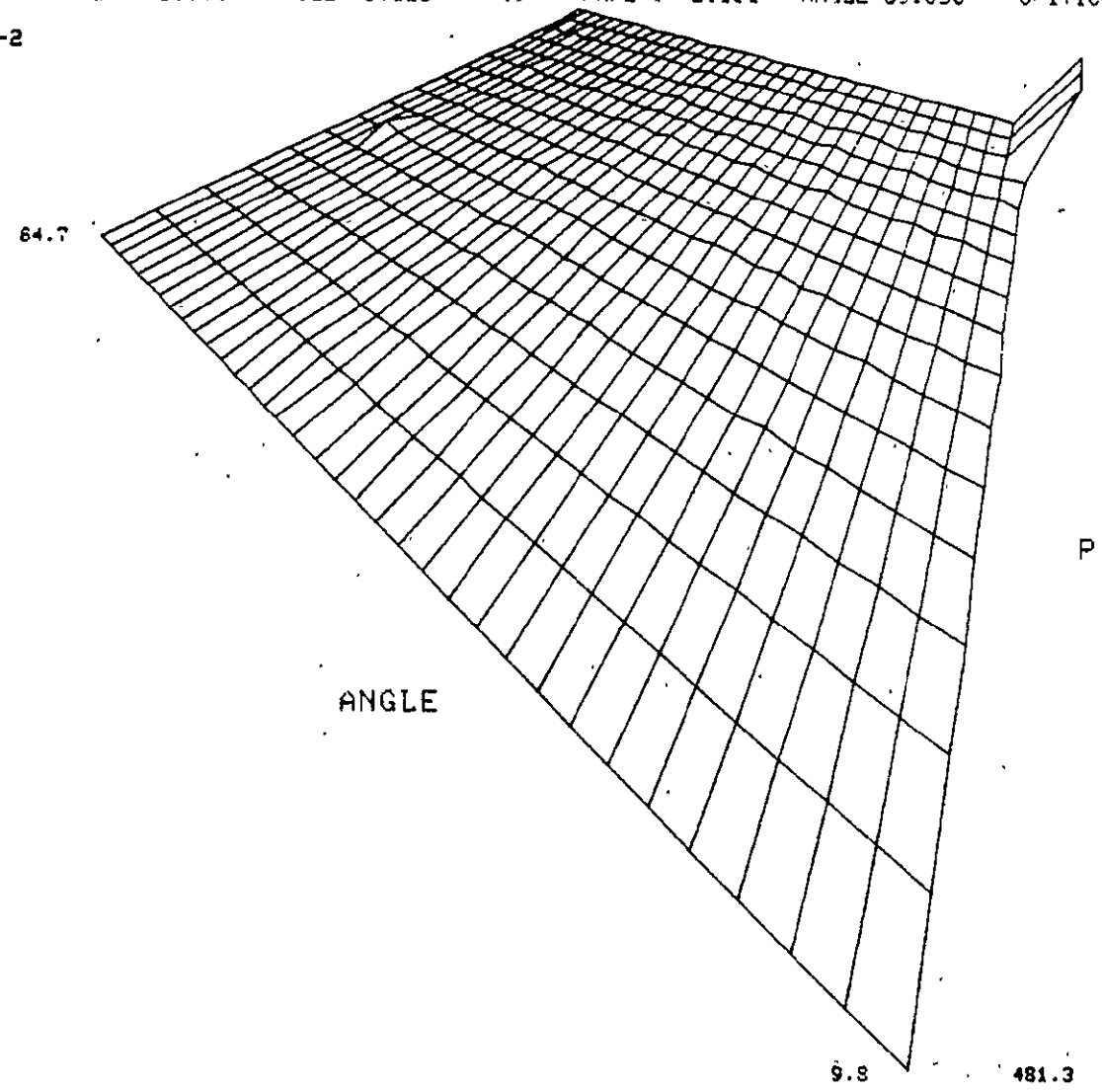
* SCAN # 29 FRAME # 19558 ANGLE 9.326 TO FRAME # 20191 ANGLE 65.030 CRITICAL AMP AT CELL 62

OPTION # 21-2

MAXIMUM V - 56.0

AVERAGE V - 2.1

ANGLE	
1	9.8
2	10.2
3	11.1
4	12.4
5	13.8
6	15.5
7	17.3
8	19.1
9	20.8
10	22.5
11	24.2
12	26.0
13	27.9
14	29.6
15	31.3
16	33.0
17	34.8
18	36.5
19	38.2
20	40.0
21	41.7
22	43.4
23	45.2
24	46.8
25	48.5
26	50.3
27	52.0
28	53.7
29	55.5
30	57.2
31	59.0
32	60.8
33	62.5
34	64.0
35	64.7



	R
1	145.1
2	164.9
3	184.7
4	204.5
5	224.2
6	244.0
7	263.8
8	283.6
9	303.3
10	323.1
11	342.9
12	362.7
13	382.4
14	402.2
15	422.0
16	441.8
17	461.3

U, R, A DISPLAY (VELOCITY AT IMAX)

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL . DAY 238 RUN # 4 TAPE 2 OF 2-29226

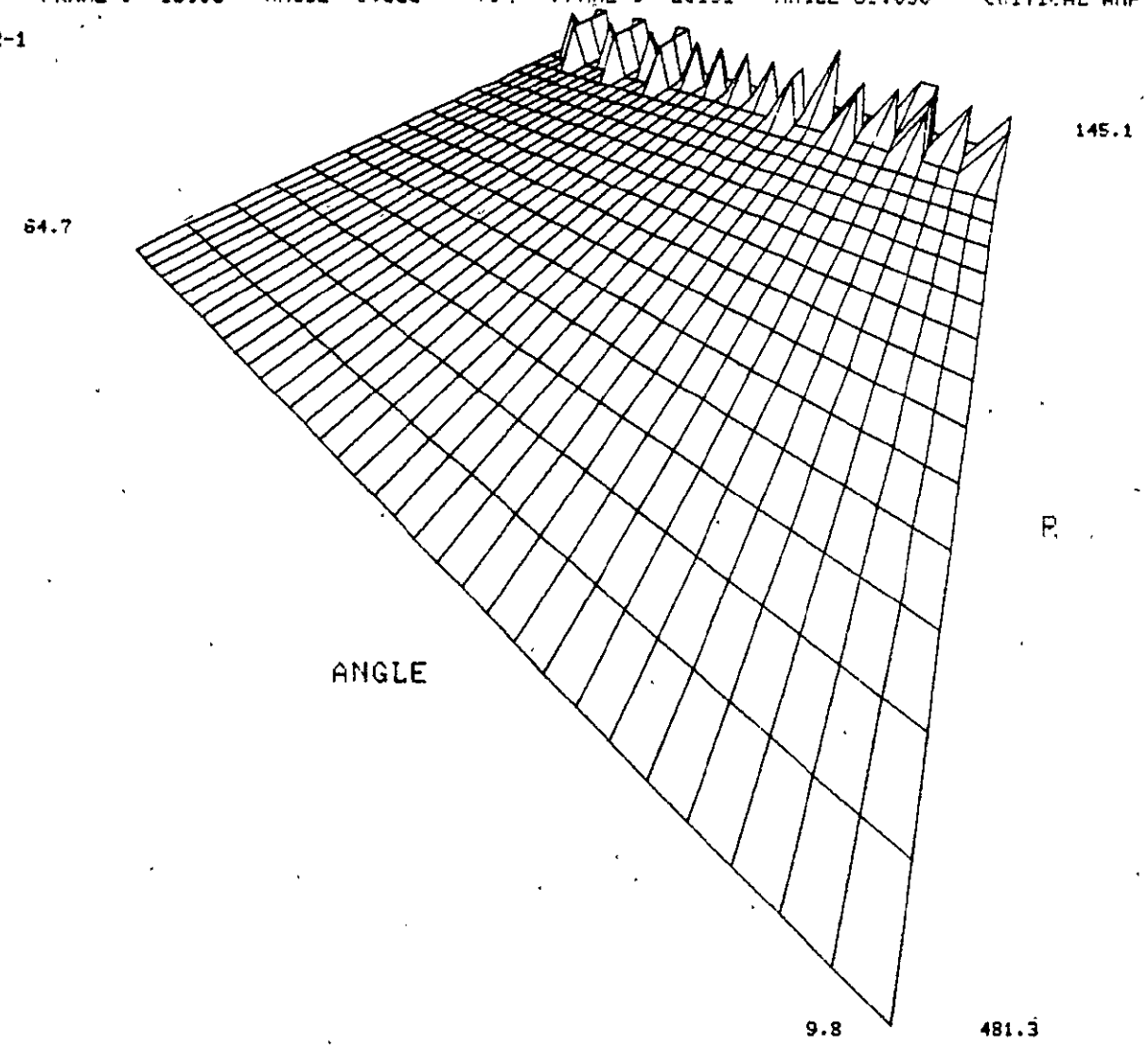
SCAN # 29 FRAME # 19558 ANGLE 9.326 TO . FRAME # 20191 ANGLE 65.030 CRITICAL WMP AT CELL 62

OPTION # 22-1

MAXIMUM V = 4.0

AVERAGE V = 1.1

	ANGLE
1	9.8
2	10.2
3	11.1
4	12.4
5	13.8
6	15.5
7	17.3
8	19.1
9	20.8
10	22.5
11	24.2
12	26.0
13	27.9
14	29.6
15	31.3
16	33.0
17	34.3
18	36.5
19	38.2
20	40.0
21	41.7
22	43.4
23	45.2
24	46.8
25	48.5
26	50.3
27	52.0
28	53.7
29	55.5
30	57.2
31	59.0
32	60.8
33	62.5
34	64.0
35	64.7



	R
1	145.1
2	164.9
3	184.7
4	204.5
5	224.2
6	244.0
7	263.8
8	283.6
9	303.3
10	323.1
11	342.9
12	362.7
13	382.4
14	402.2
15	422.0
16	441.8
17	461.5

V_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 5

ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 233 RUN # 4 TAPE 2 OF 2-29226

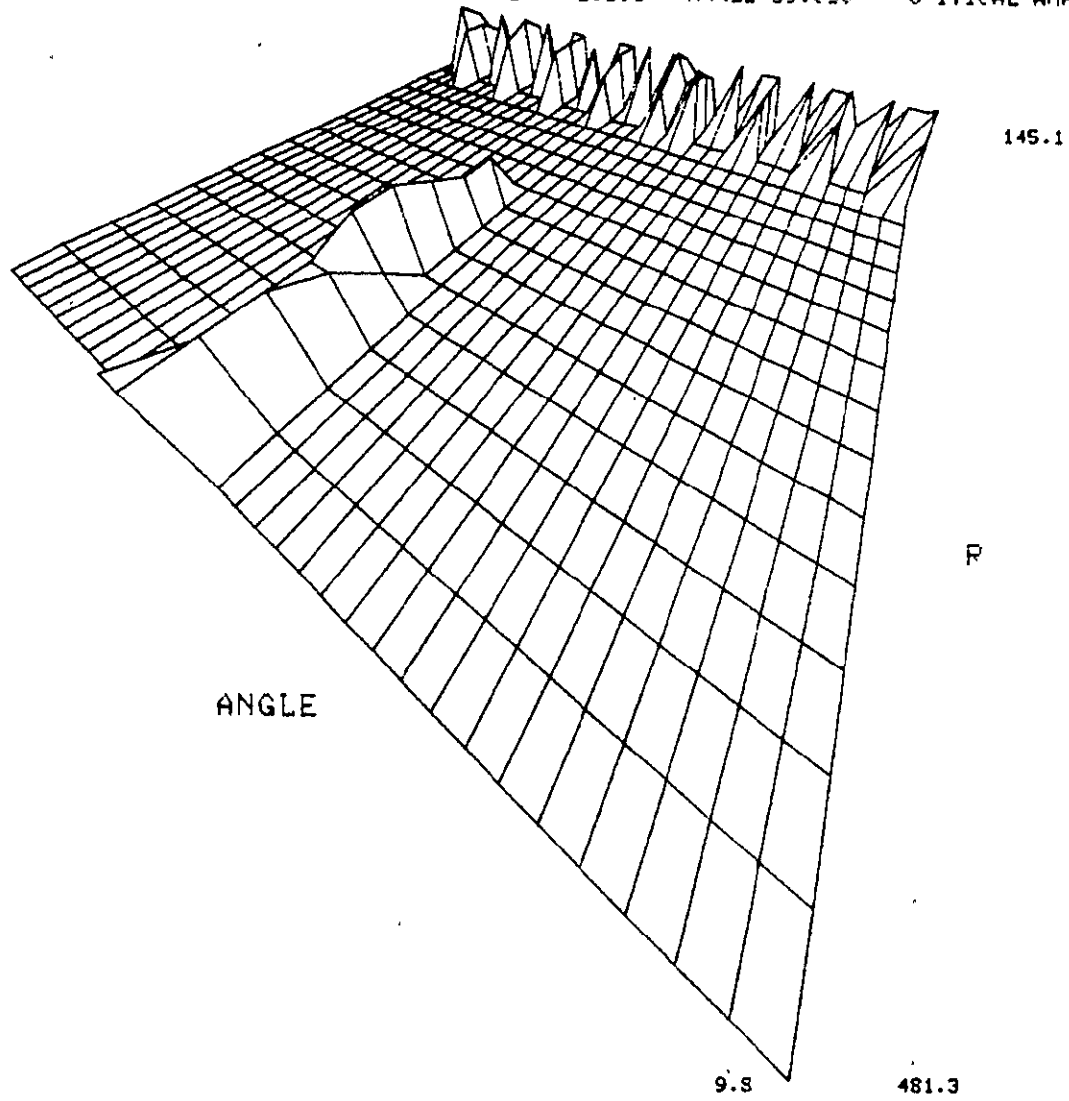
SCAN # 29 FRAME # 19558 ANGLE 9.326 TO FRAME # 20131 ANGLE 65.030 CRITICAL AMP AT CELL 62

OPTION # 22-2

MAXIMUM U = 6.0

AVERAGE U = 1.4

ANGLE	
1	9.8
2	10.2
3	11.1
4	12.4
5	13.8
6	15.5
7	17.3
8	19.1
9	20.8
10	22.5
11	24.2
12	26.0
13	27.9
14	29.6
15	31.3
16	33.0
17	34.8
18	36.5
19	38.2
20	40.0
21	41.7
22	43.4
23	45.2
24	46.8
25	48.5
26	50.3
27	52.0
28	53.7
29	55.5
30	57.2
31	59.0
32	60.8
33	62.5
34	64.0
35	64.7



	R
1	145.1
2	164.9
3	184.7
4	204.5
5	224.2
6	244.0
7	263.2
8	283.6
9	303.3
10	323.1
11	342.9
12	362.7
13	382.4
14	402.2
15	422.0
16	441.8
17	481.3

U_{MAX}, R, A DISPLAY AMPLITUDE THRESHOLD AT I = 10

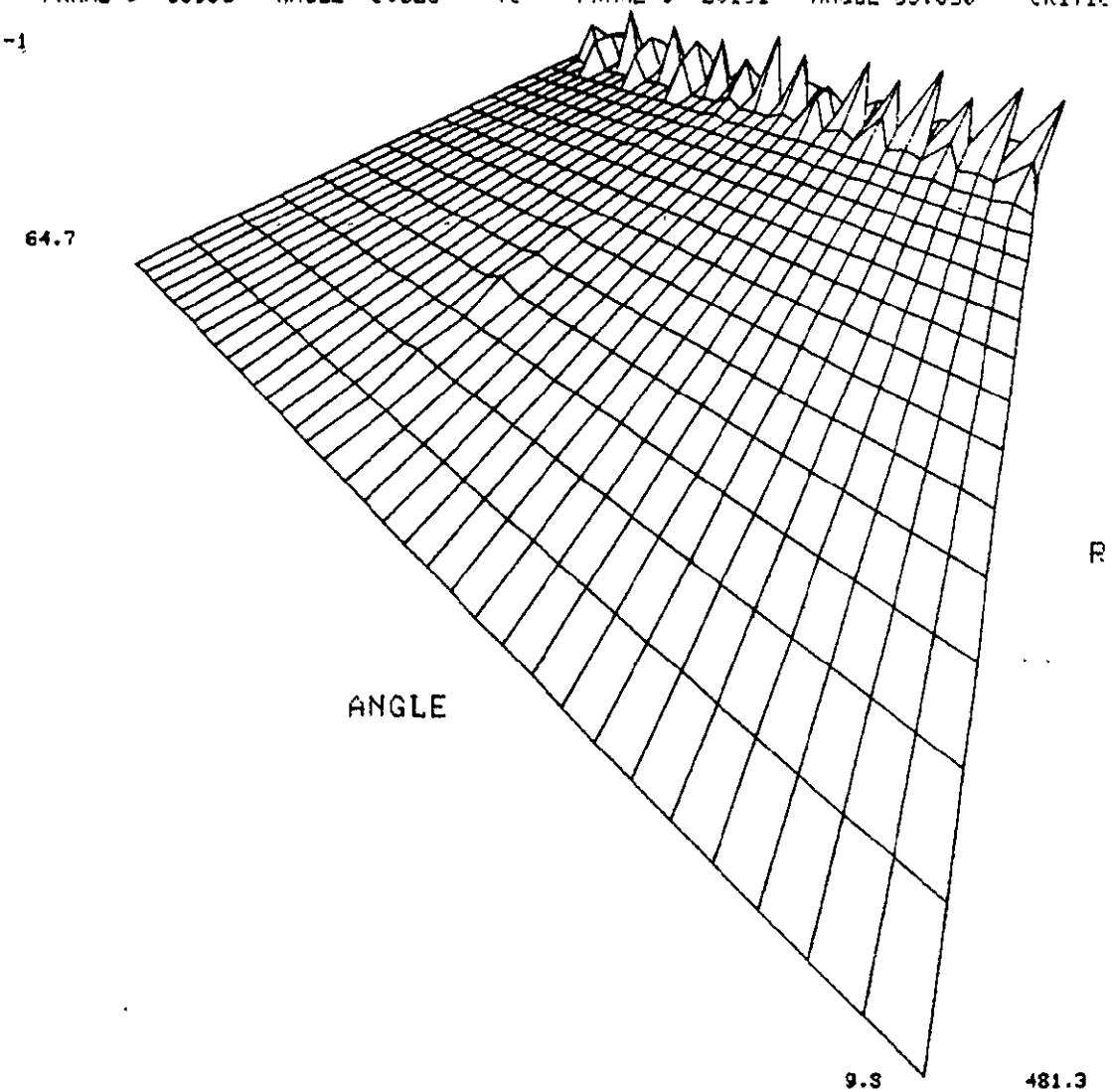
ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 232 RUN # 4 TAPE 2 OF 2-29226

SCAN # 29 FRAME # 19558 ANGLE 9.326 TO FRAME # 20191 ANGLE 55.030 CRITICAL AMP AT CELL 62

OPTION # 31-1

ANGLE	
1	9.8
2	10.2
3	11.1
4	12.4
5	13.8
6	15.5
7	17.3
8	19.1
9	20.8
10	22.5
11	24.2
12	26.0
13	27.9
14	29.6
15	31.3
16	33.0
17	34.8
18	36.5
19	38.2
20	40.0
21	41.7
22	43.4
23	45.2
24	46.8
25	48.5
26	50.3
27	52.0
28	53.7
29	55.5
30	57.2
31	59.0
32	60.8
33	62.5
34	64.0
35	64.7



	R
1	145.1
2	164.9
3	184.7
4	204.5
5	224.2
6	244.0
7	263.8
8	283.6
9	303.3
10	323.1
11	342.9
12	362.7
13	382.4
14	402.2
15	422.0
16	441.8
17	461.3

U * IMAX, R, A DISPLAY

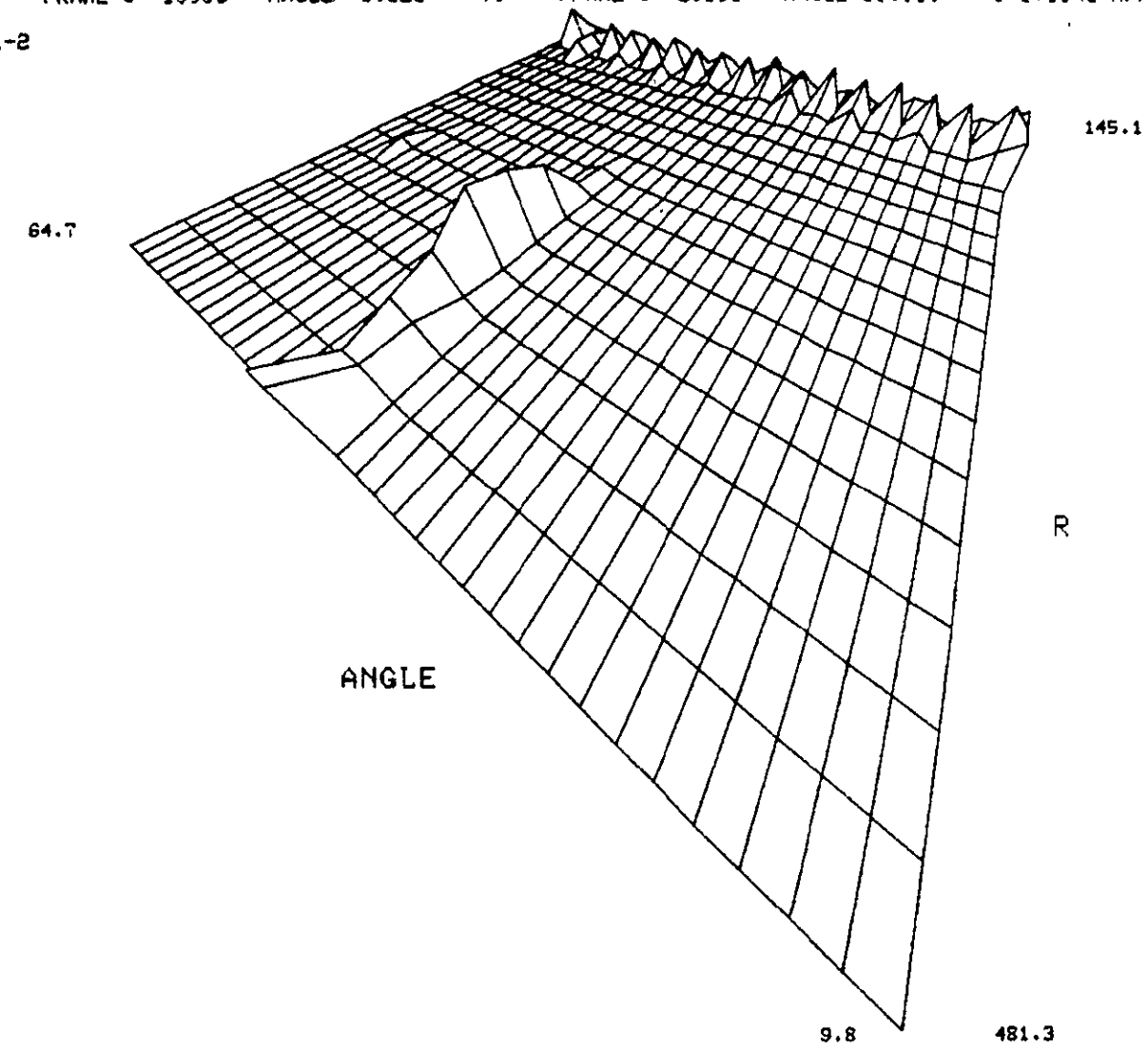
ORIGINAL PAGE IS OF POOR QUALITY

NASA PROJECT DUST DEVIL DAY 238 RUN # 4 TAPE 2 OF 2-29226

SCAN # 29 FRAME # 19558 ANGLE 9.326 TO FRAME # 20191 ANGLE 65.030 CRITICAL AMP AT CELL 62

OPTION # 31-2

ANGLE	
1	9.8
2	10.2
3	11.1
4	12.4
5	13.8
6	15.5
7	17.3
8	19.1
9	20.8
10	22.5
11	24.2
12	26.0
13	27.9
14	29.6
15	31.3
16	33.0
17	34.8
18	36.5
19	38.2
20	40.0
21	41.7
22	43.4
23	45.2
24	46.8
25	48.5
26	50.3
27	52.0
28	53.7
29	55.5
30	57.2
31	59.0
32	60.8
33	62.5
34	64.0
35	64.7



	R
1	145.1
2	164.9
3	184.7
4	204.5
5	224.2
6	244.0
7	263.8
8	283.6
9	303.3
10	323.1
11	342.9
12	362.7
13	382.4
14	402.2
15	422.0
16	441.8
17	481.3

V * IMAX, R, A DISPLAY