UCID- 19953 Vol. 2

COYOTE SERIES DATA REPORT LLNL/NWC 1981 LNG SPILL TESTS DISPERSION, VAPOR BURN, AND RAPID-PHASE-TRANSITION

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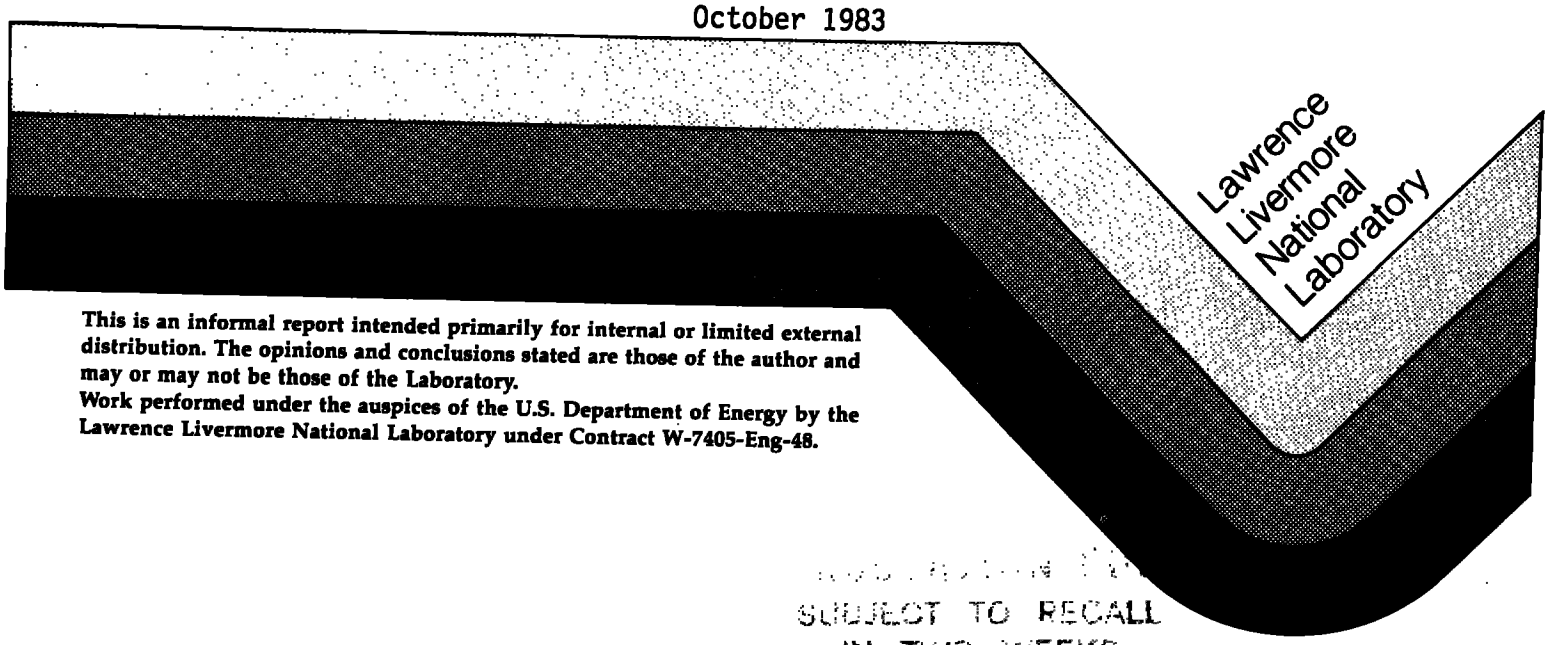
October 1983



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SUBJECT TO RECALL
IN TWO WEEKS

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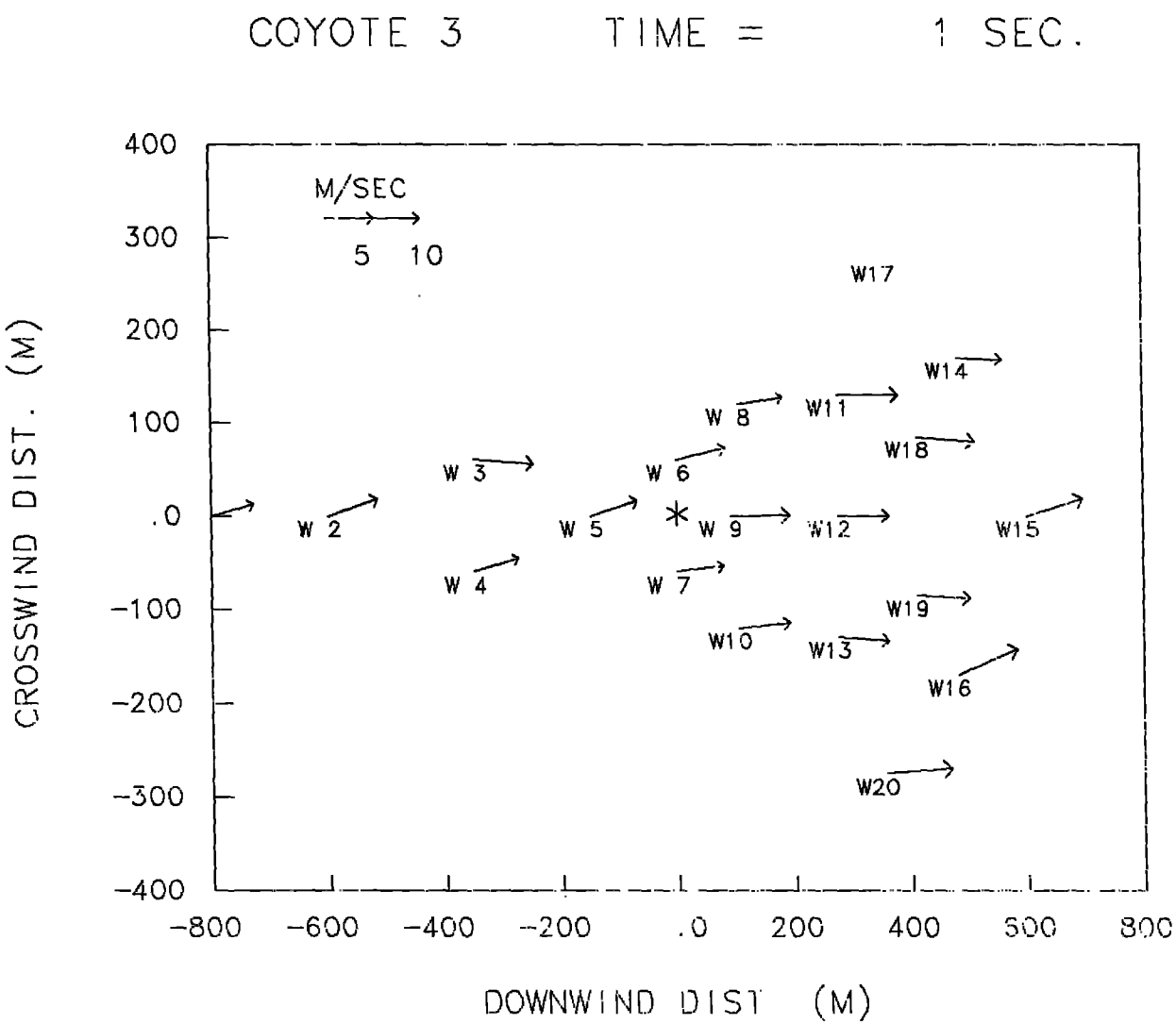
APPENDIX I: WIND FIELD DATA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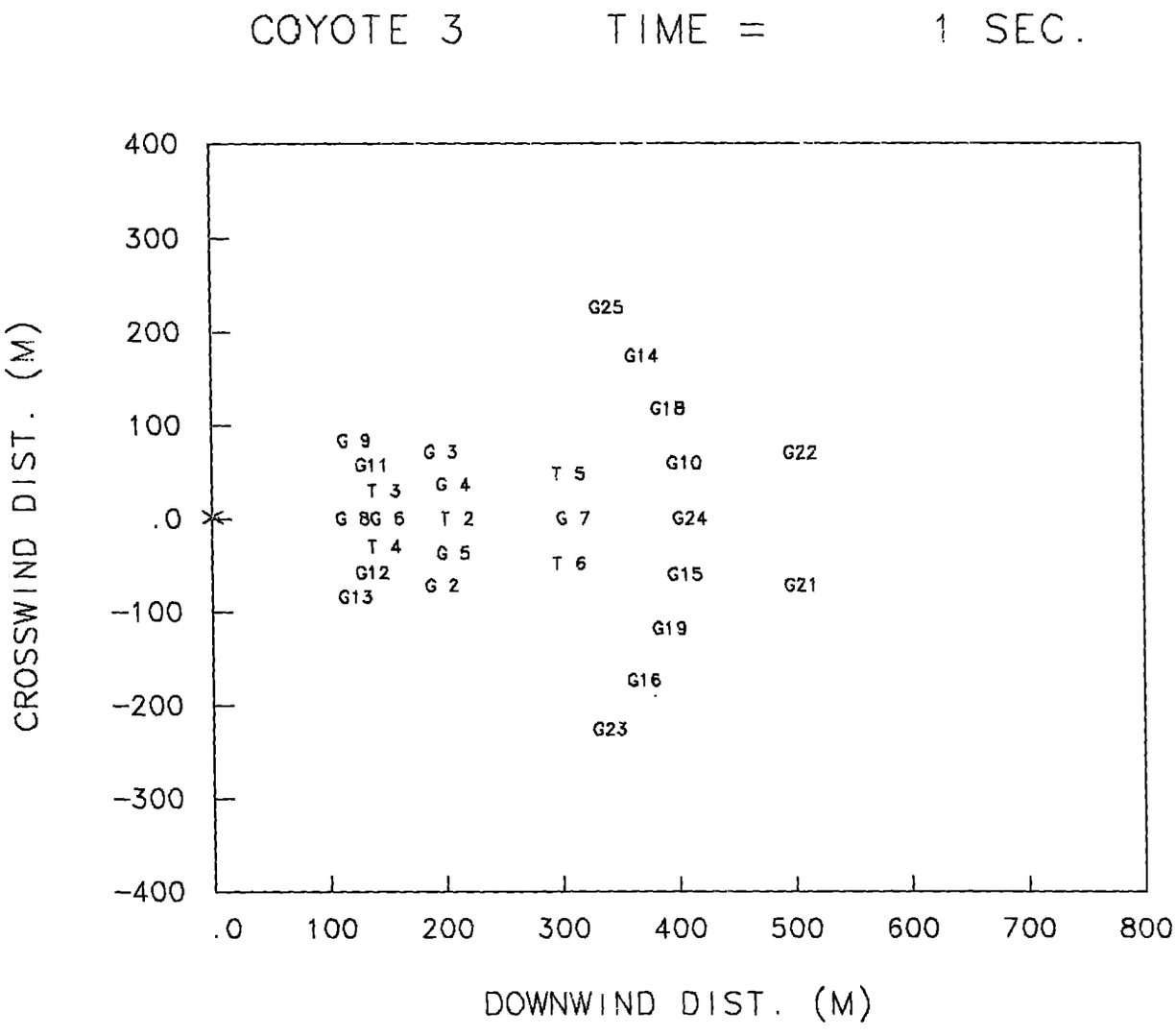
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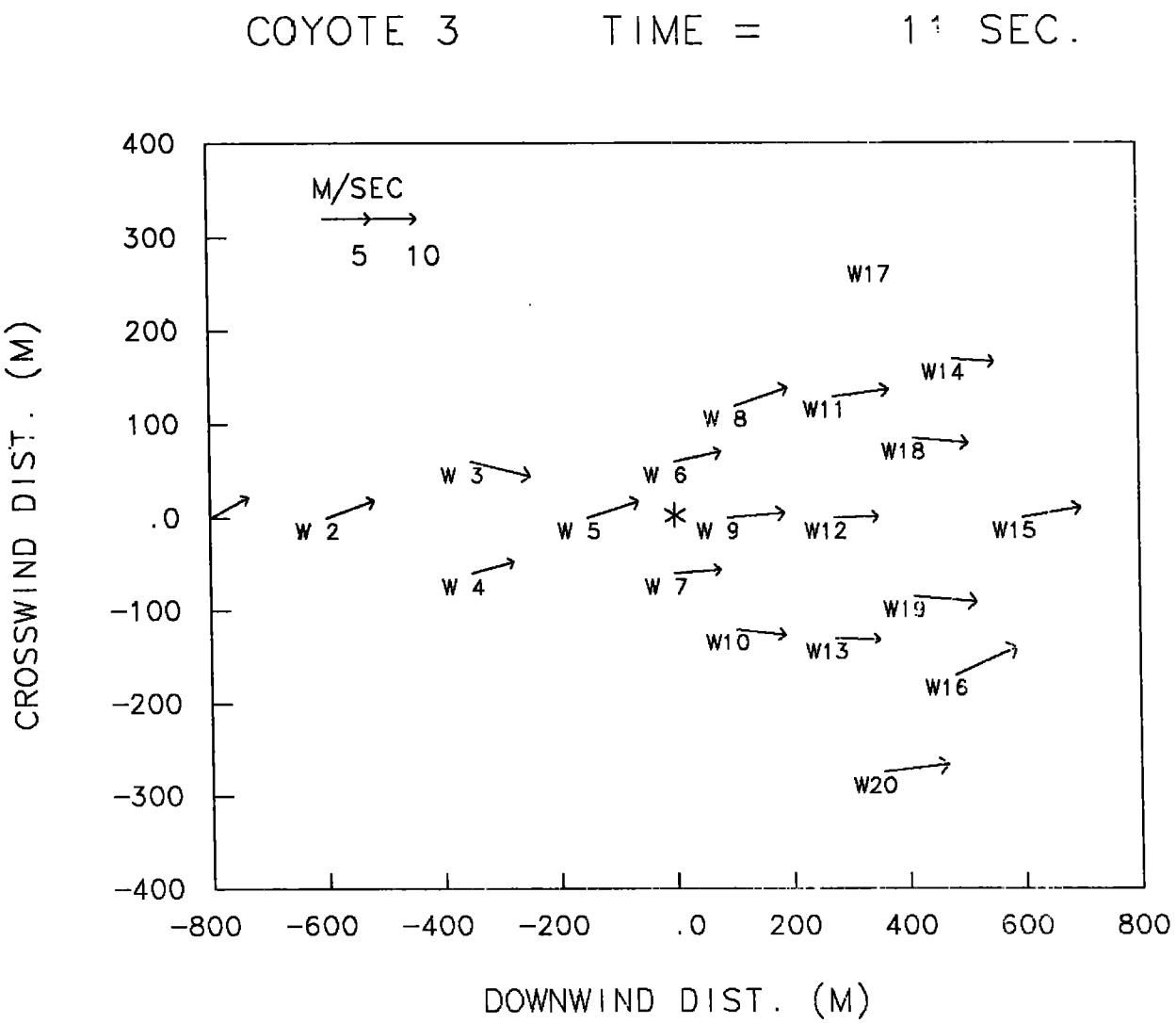
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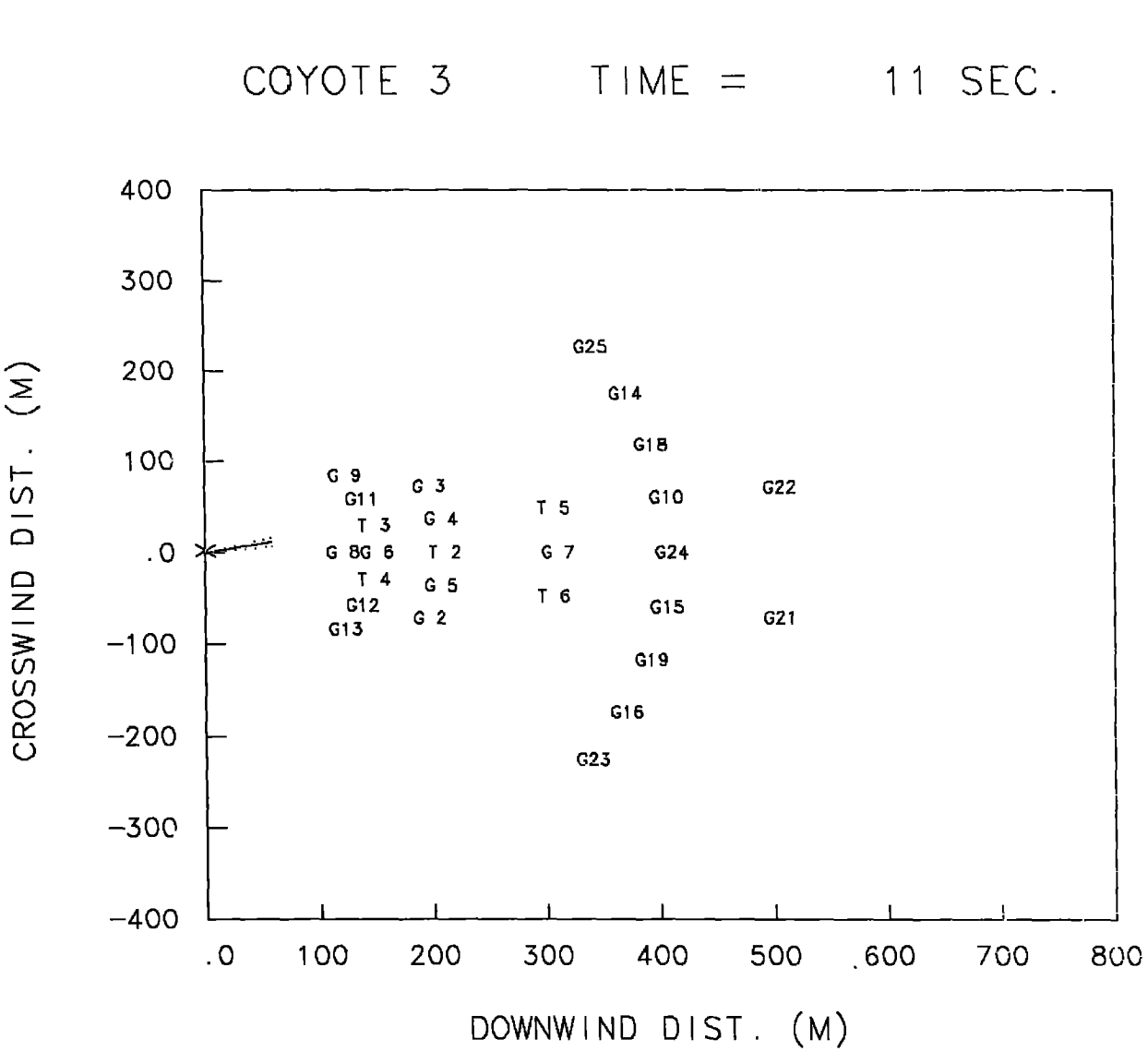
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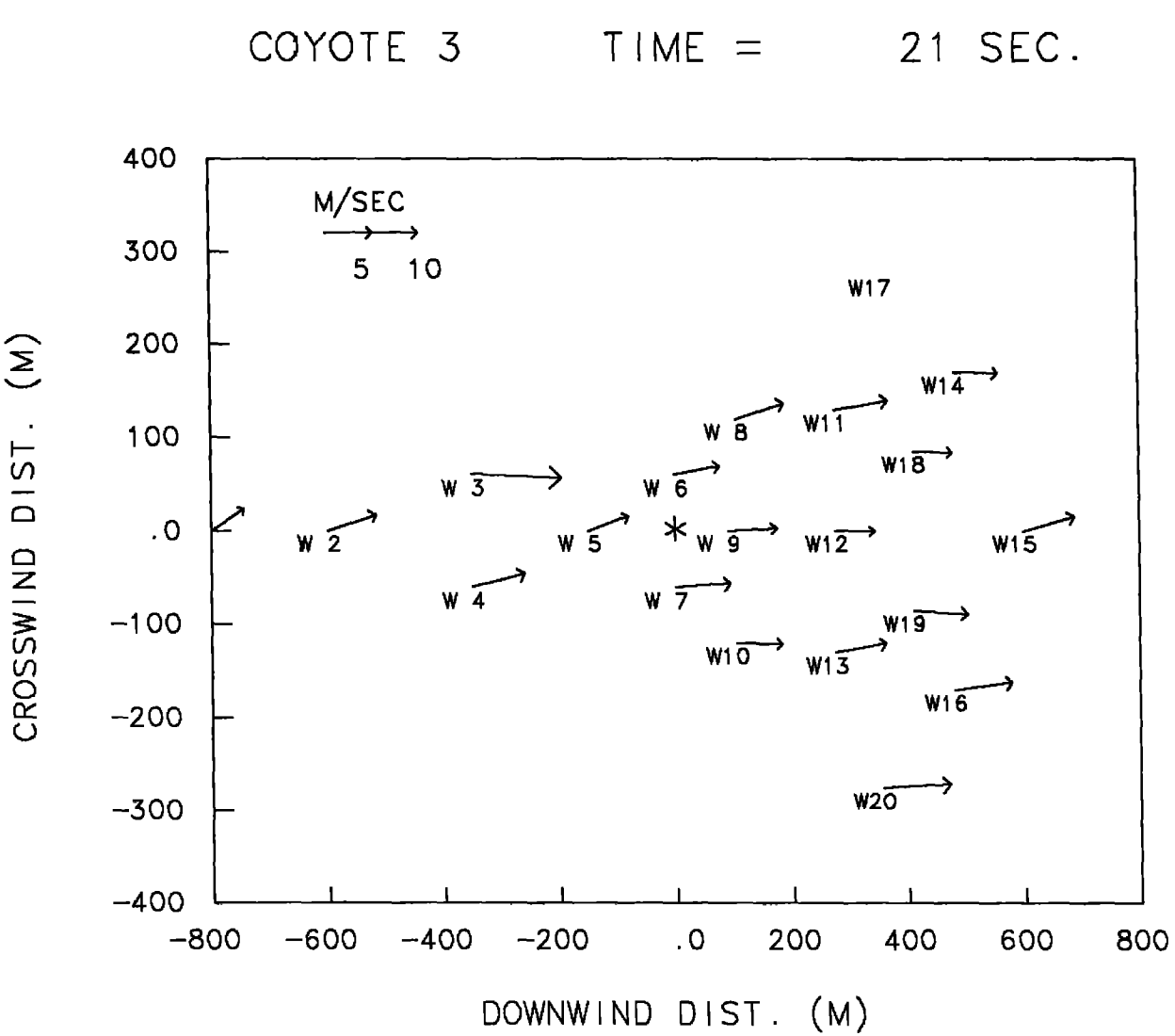
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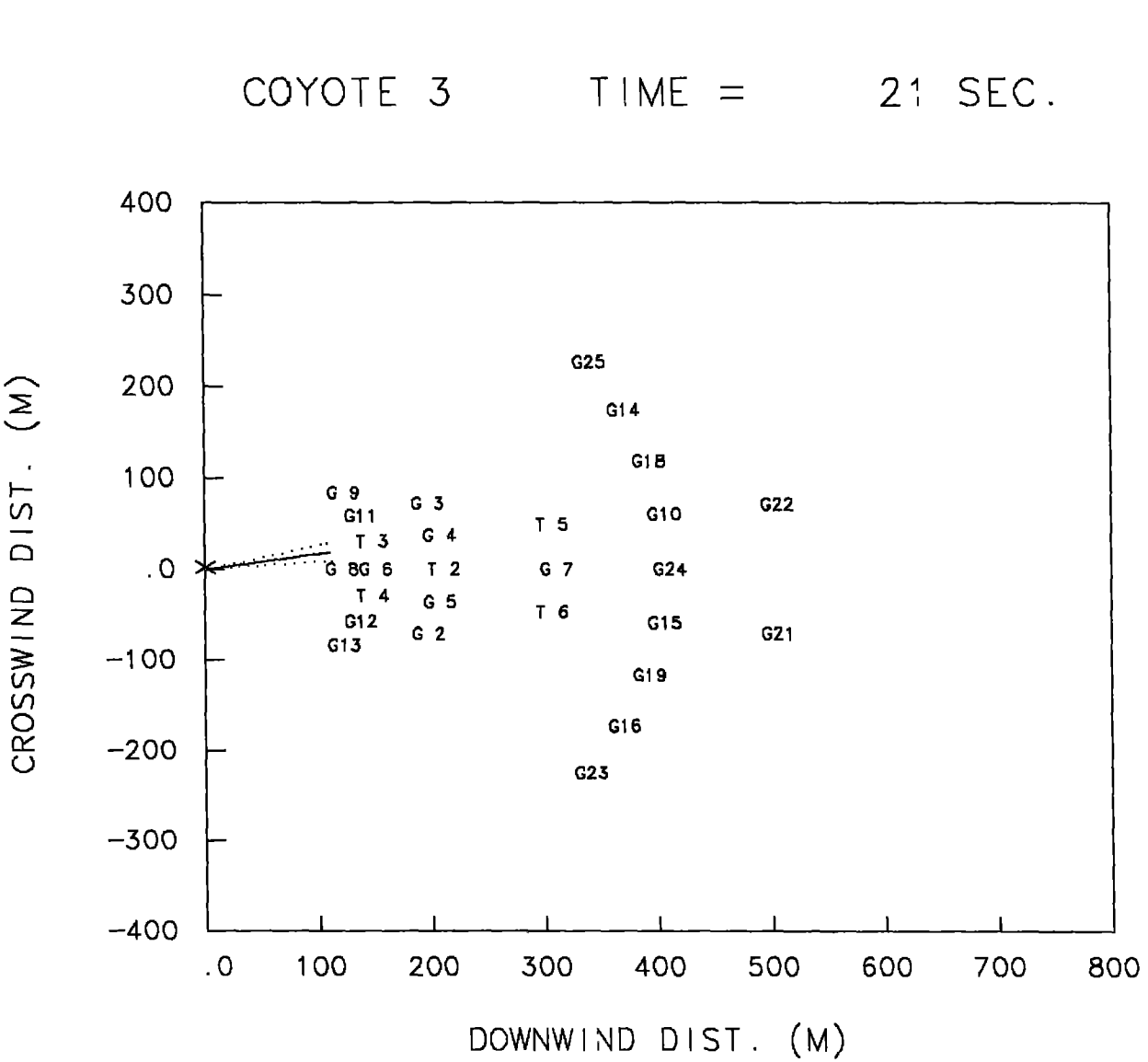
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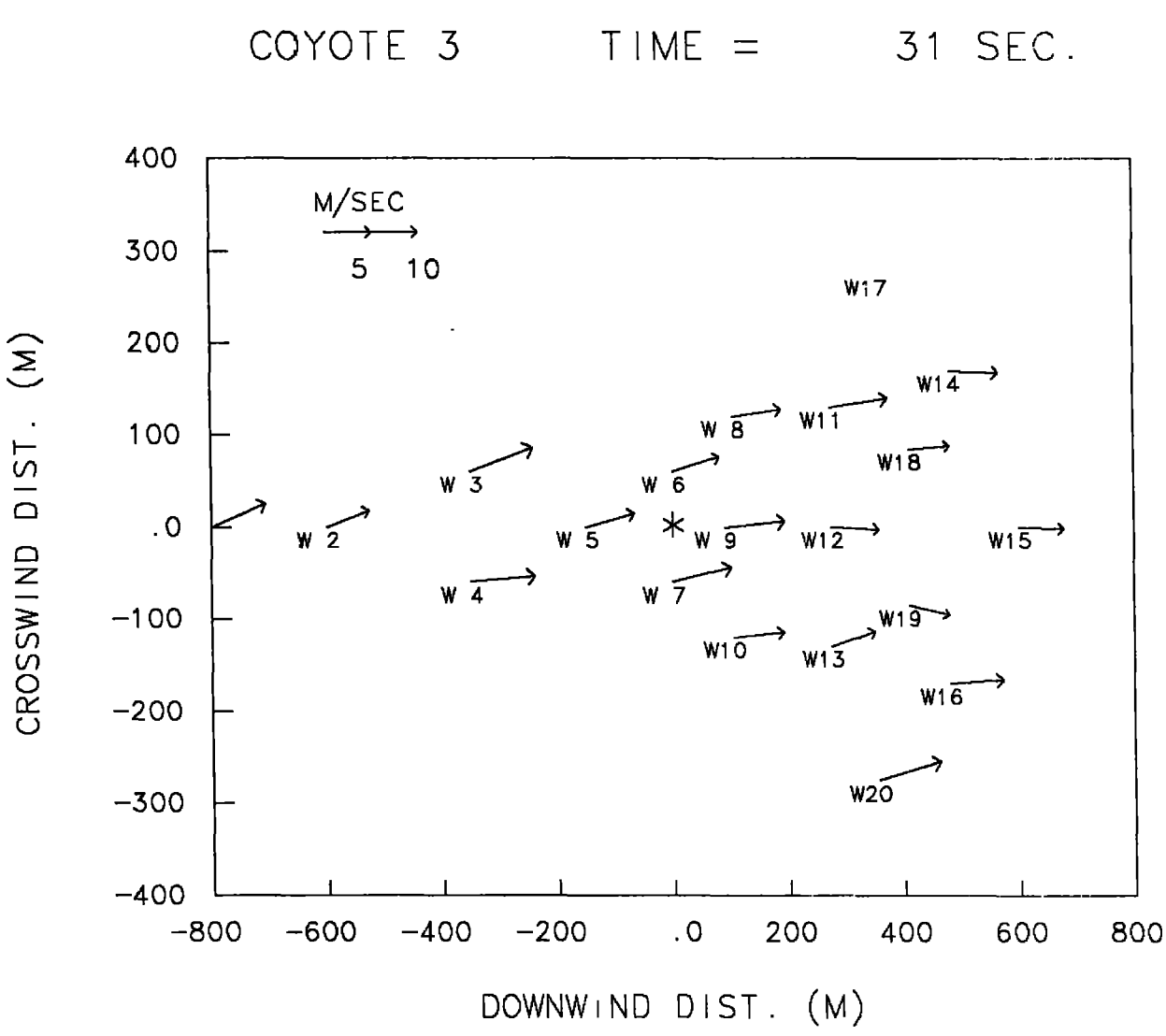
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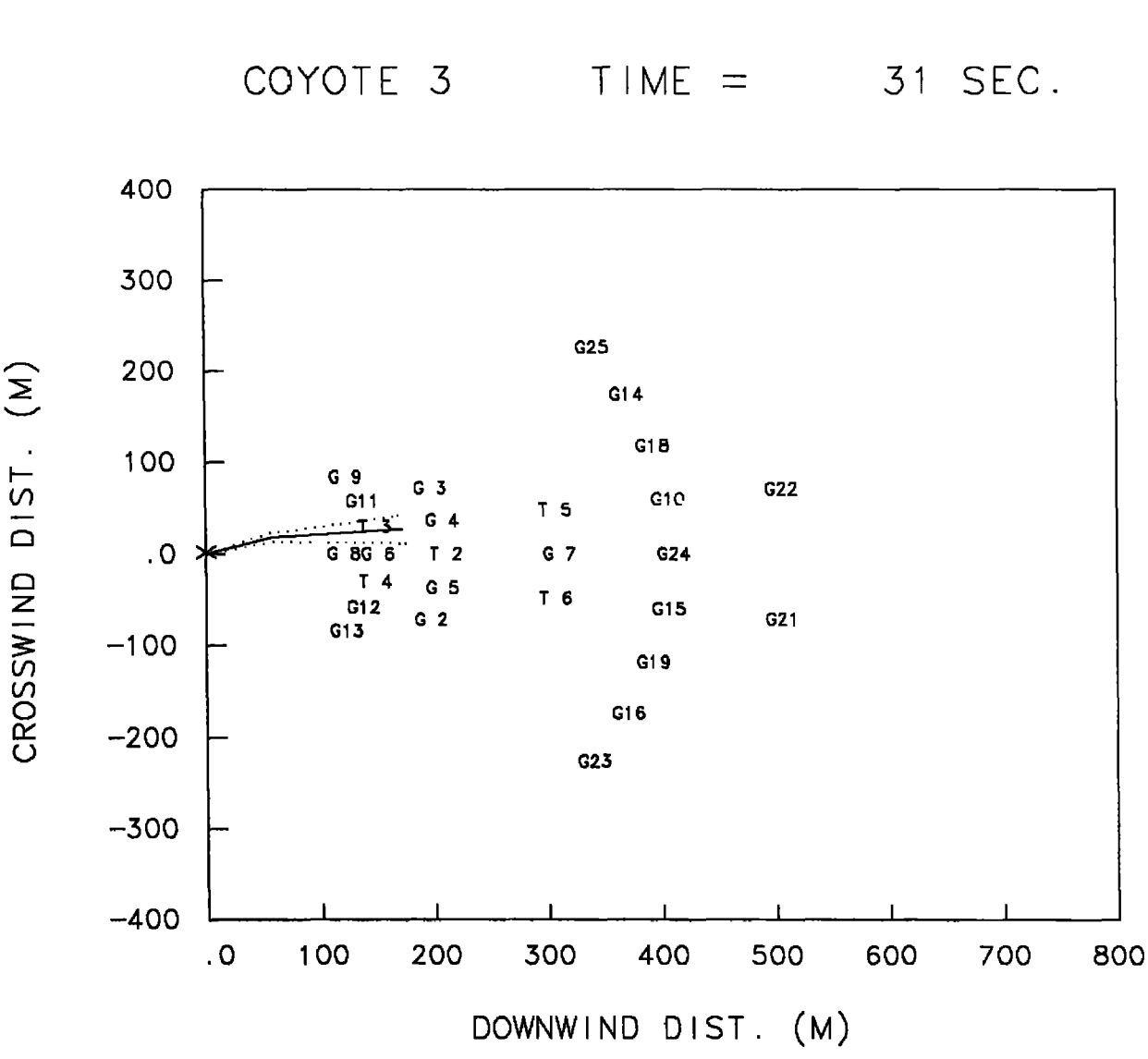
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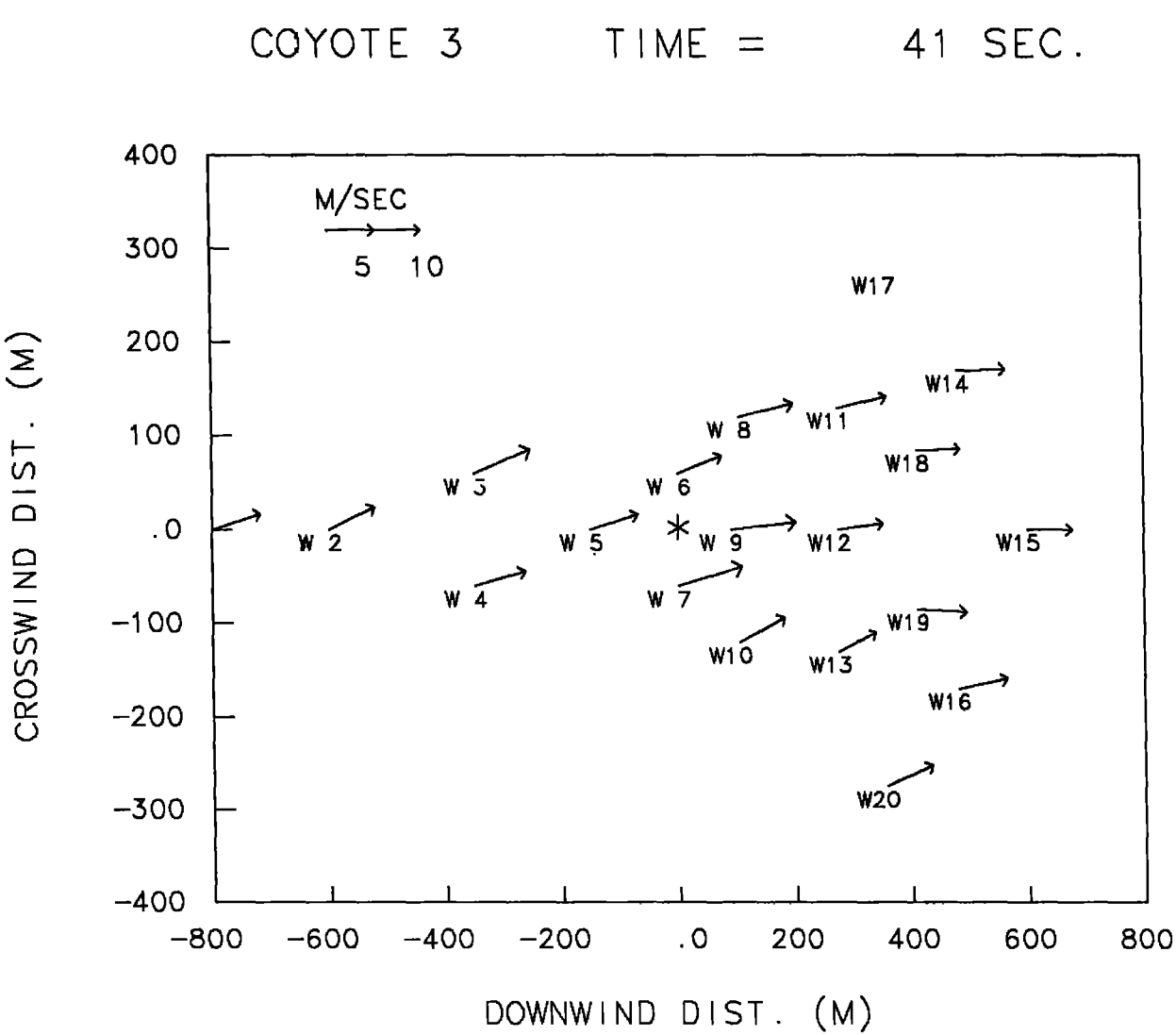
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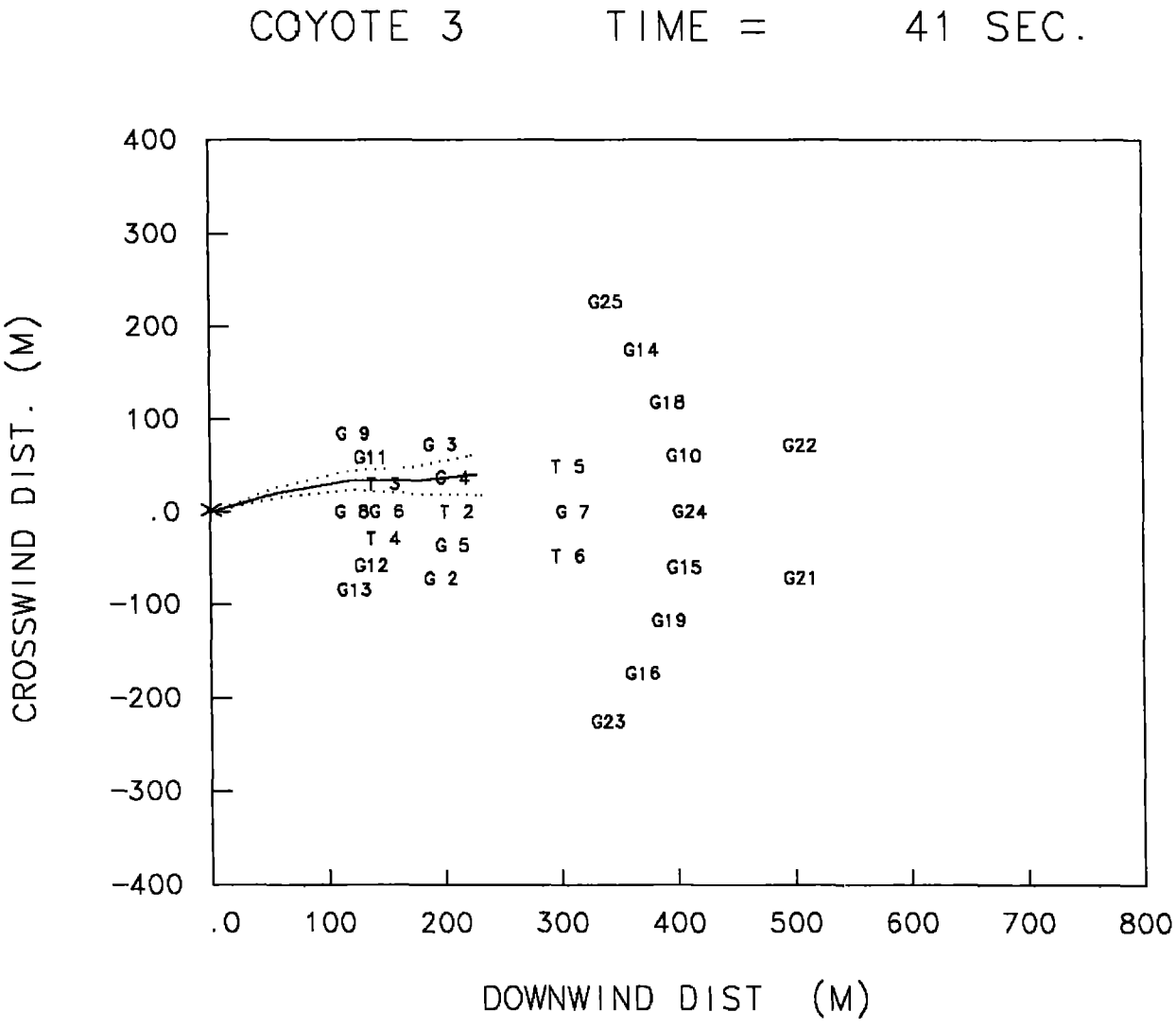
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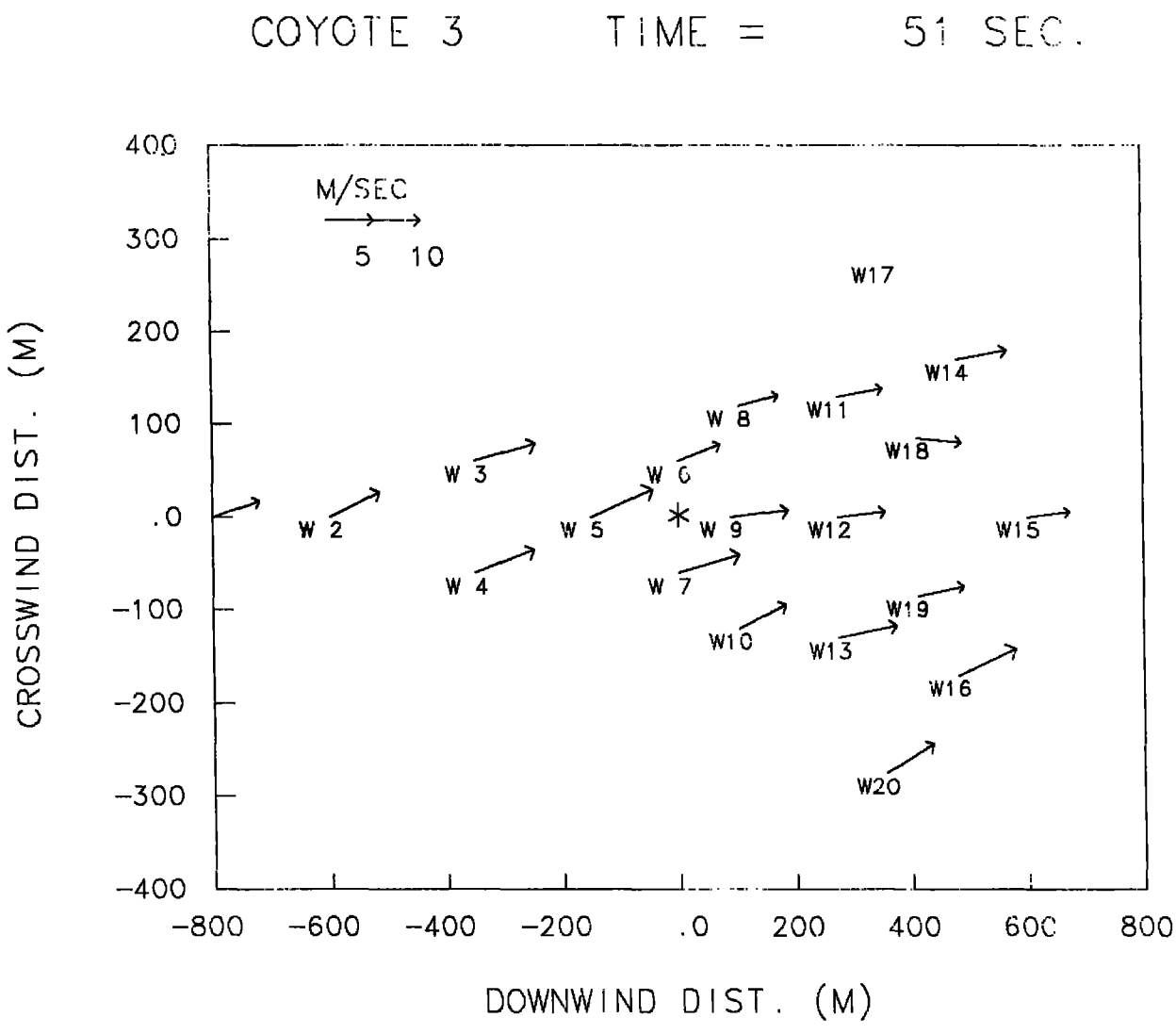
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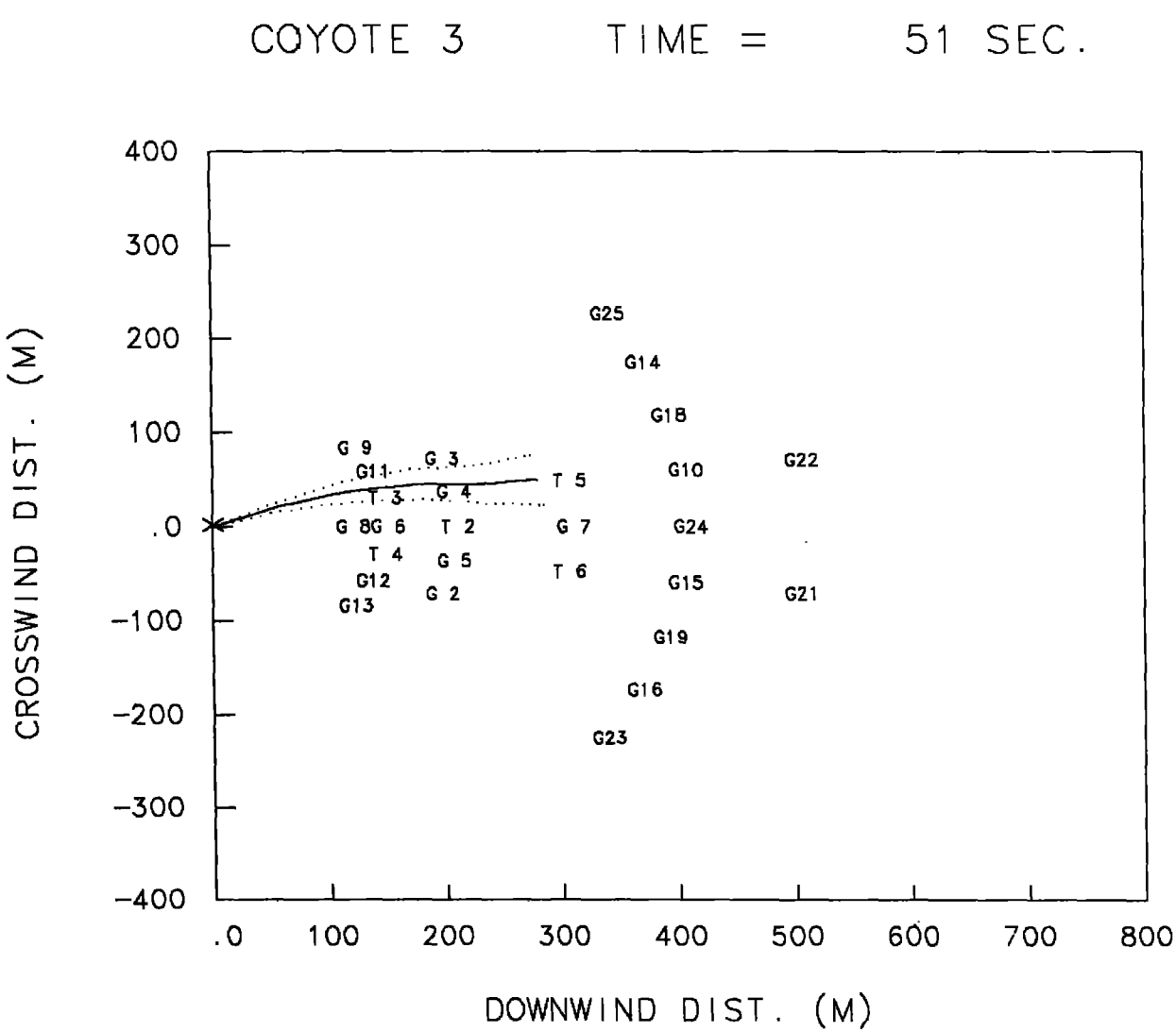
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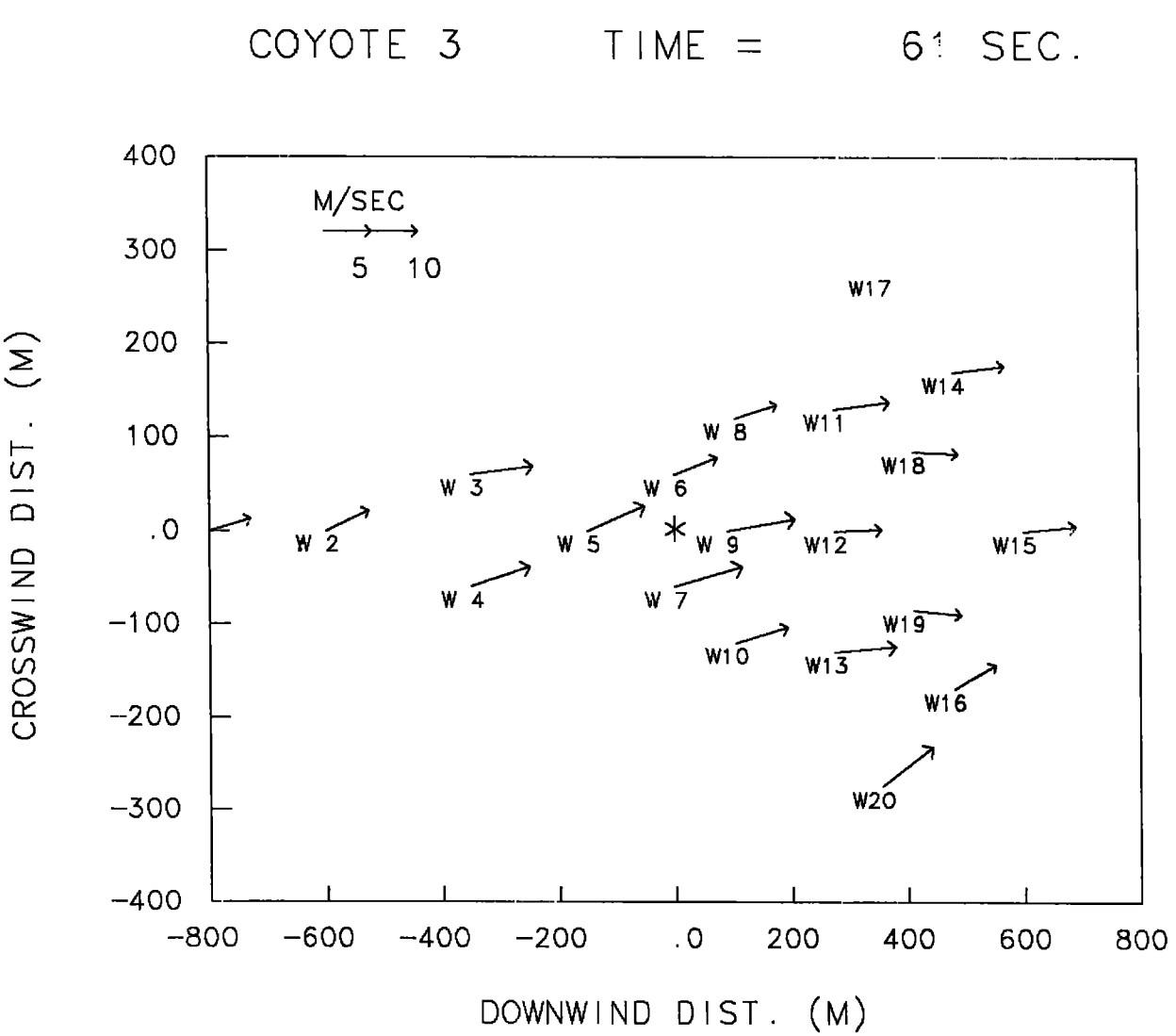
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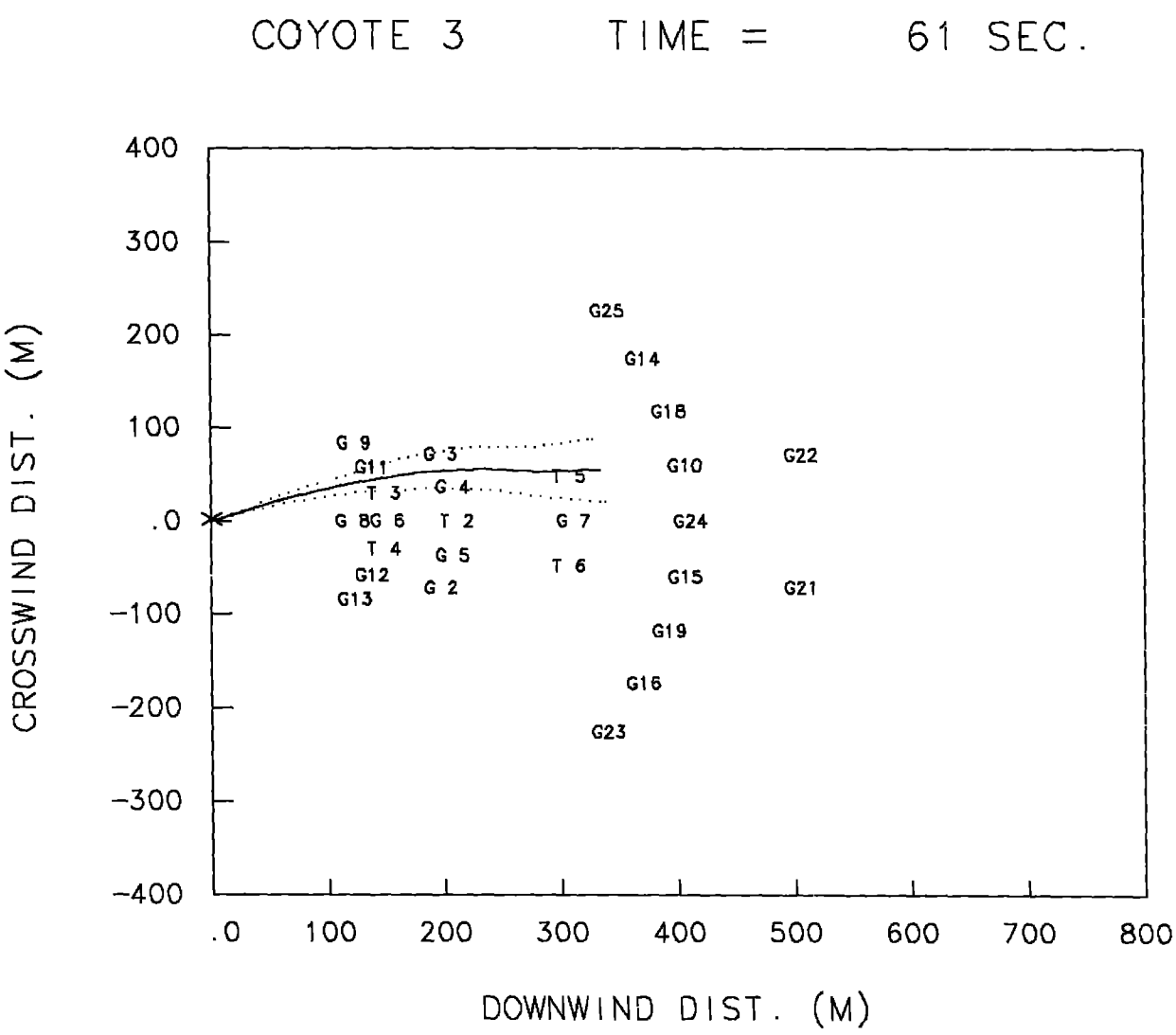
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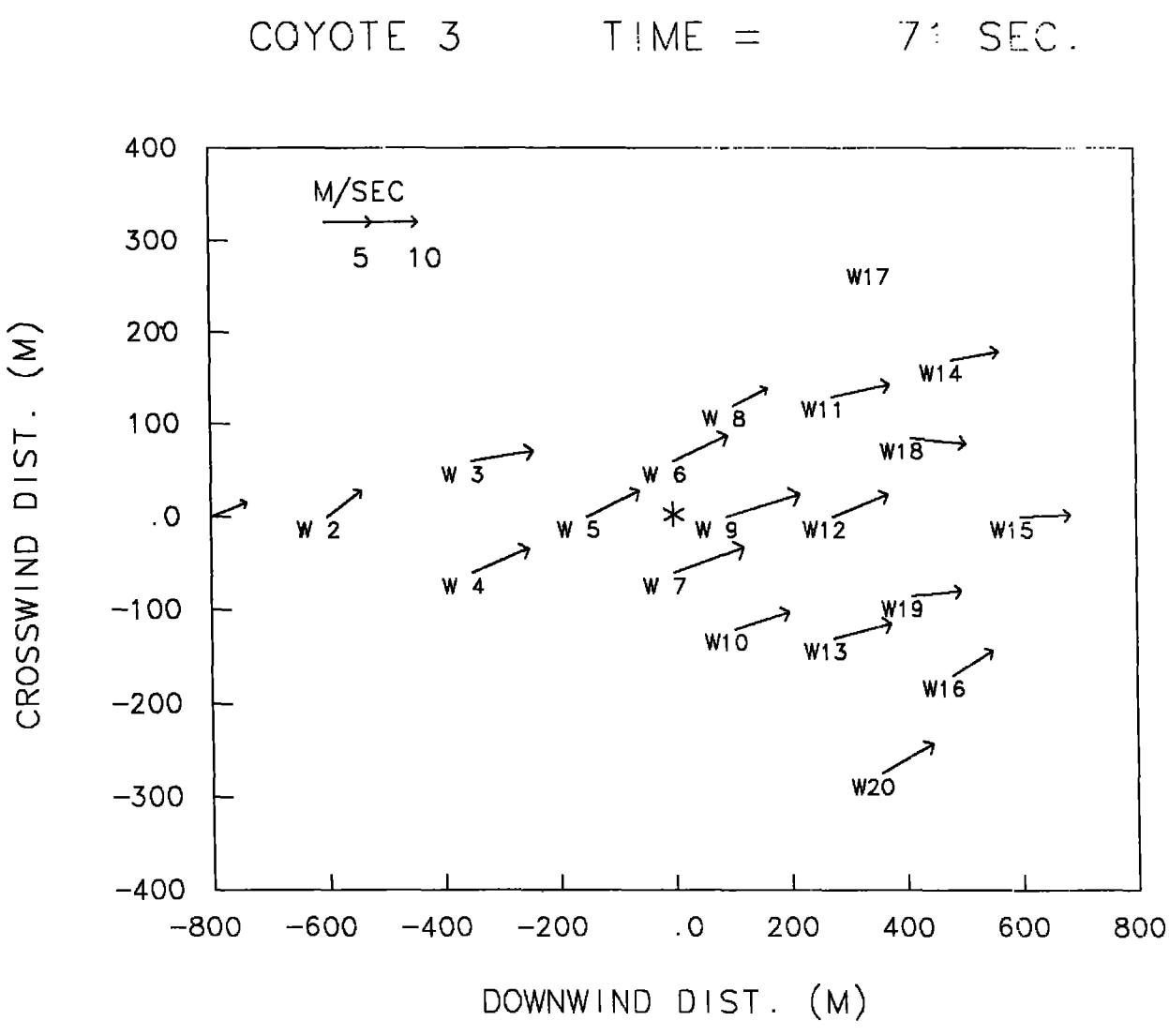
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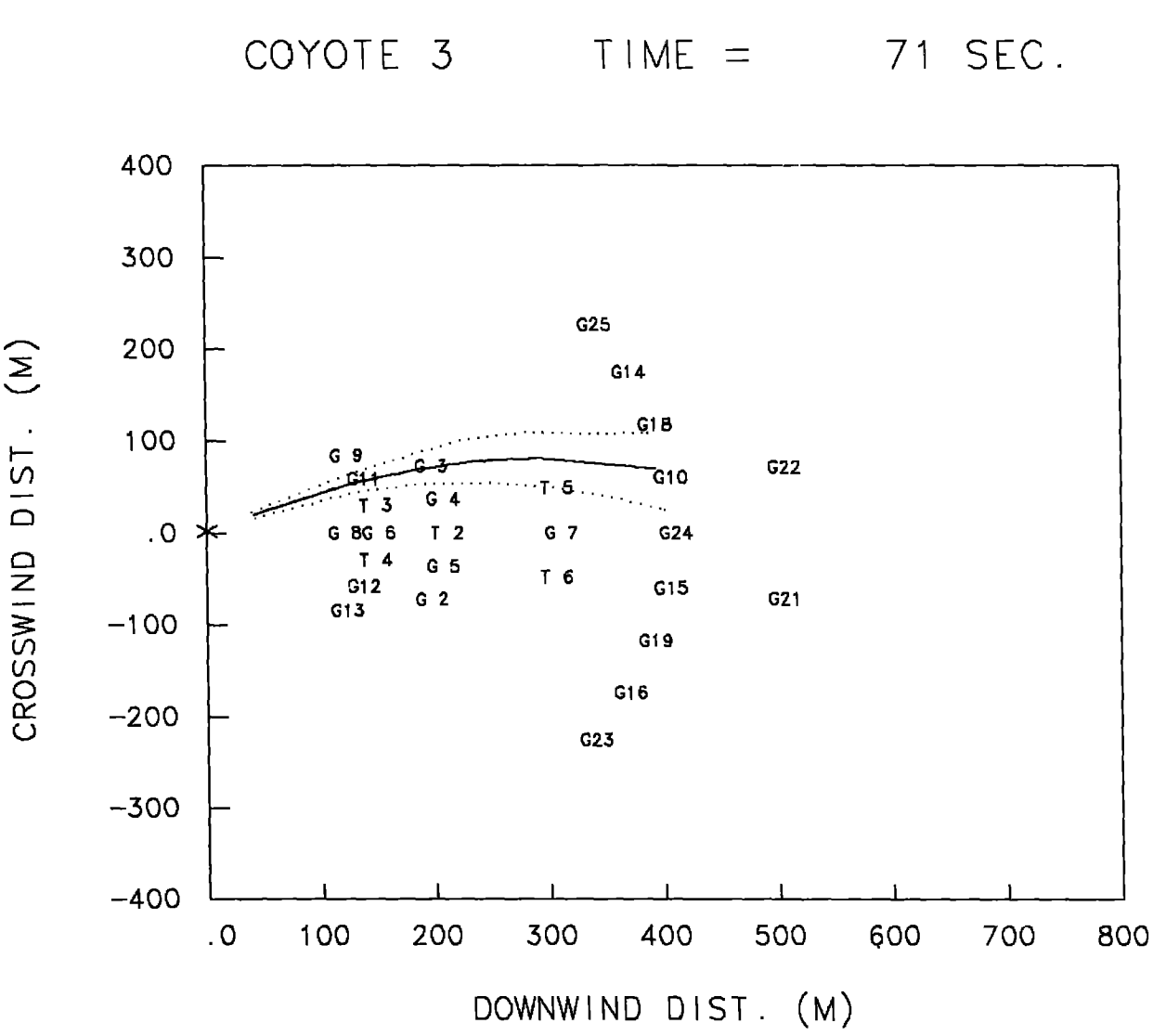
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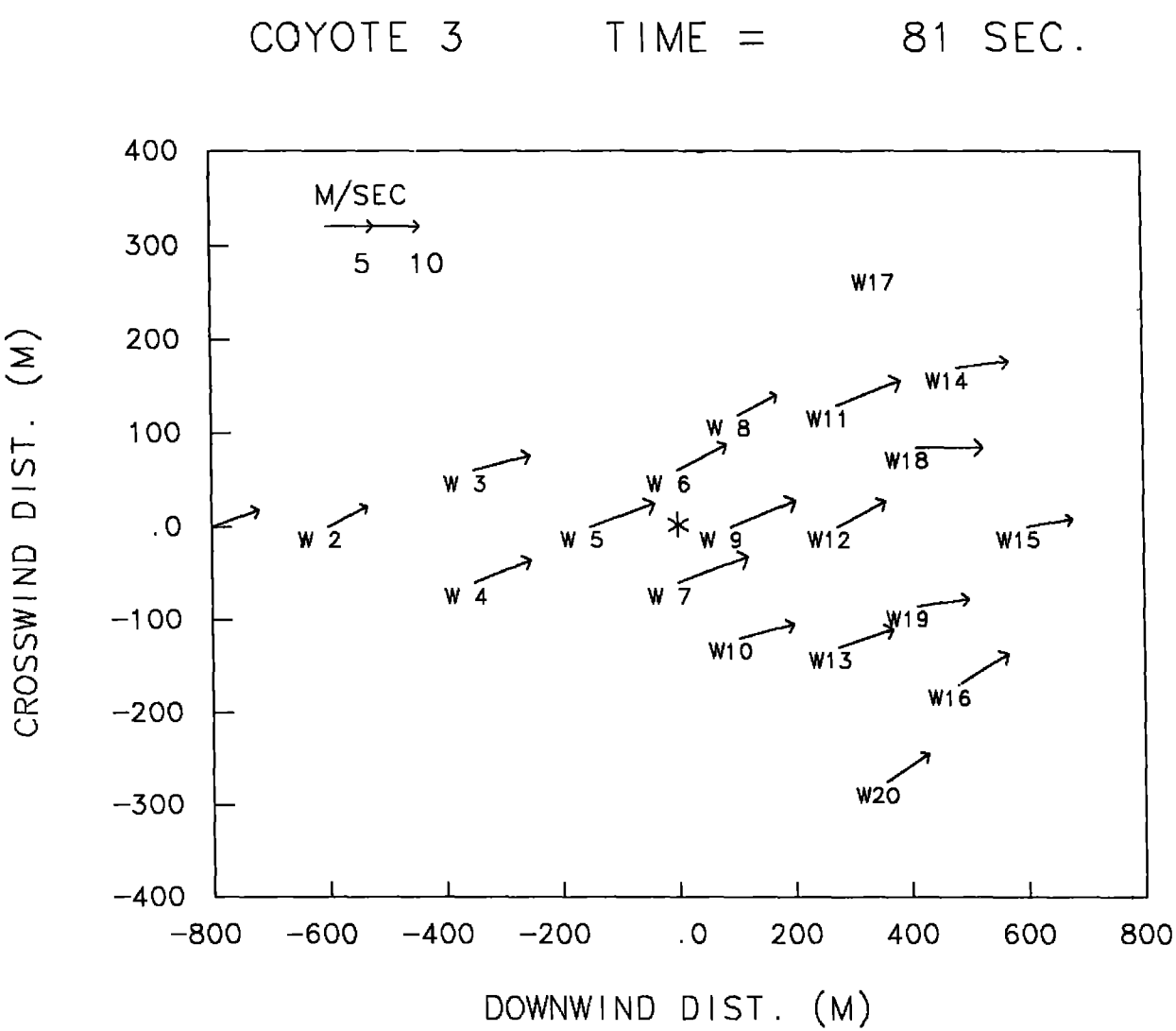
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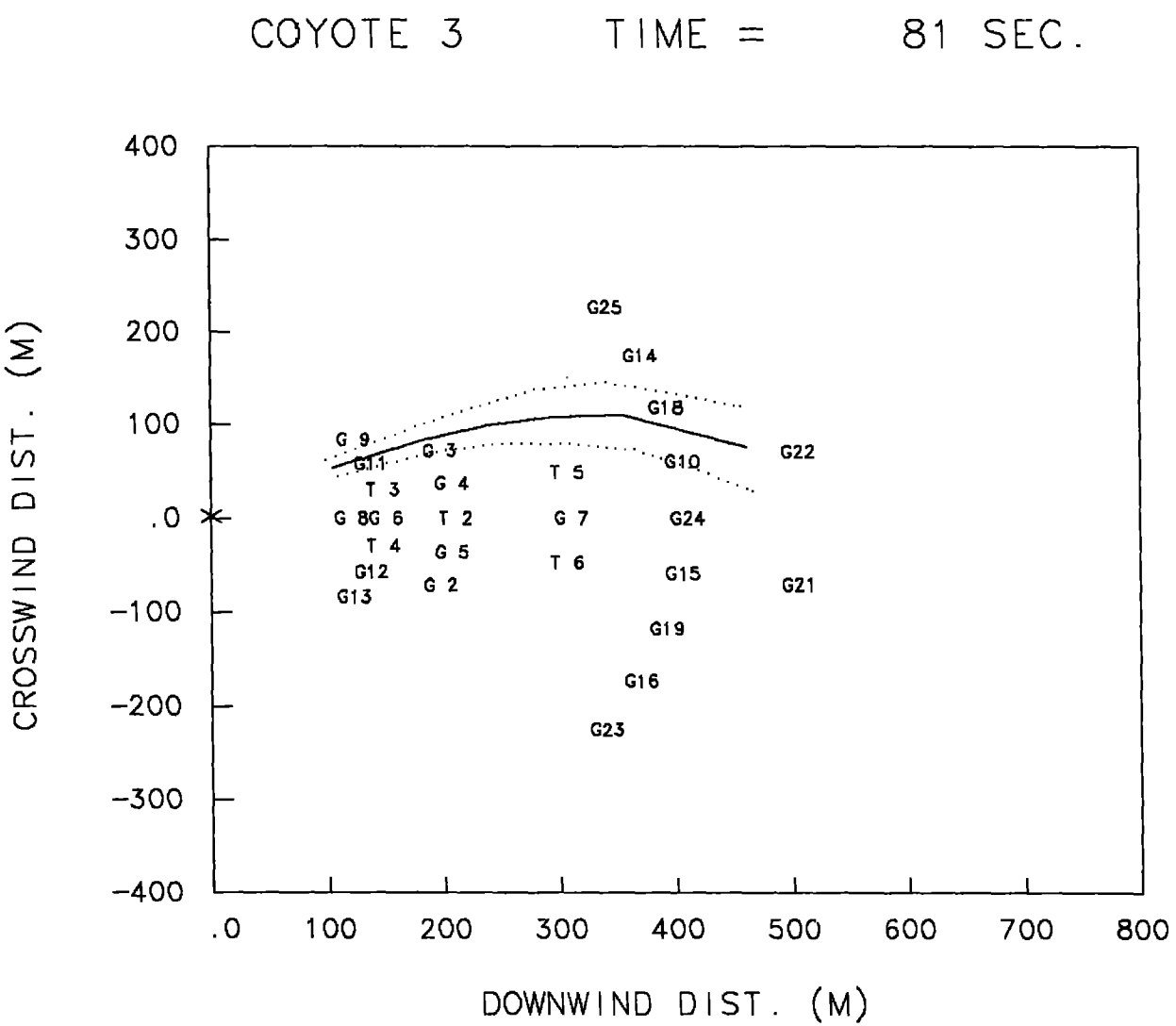
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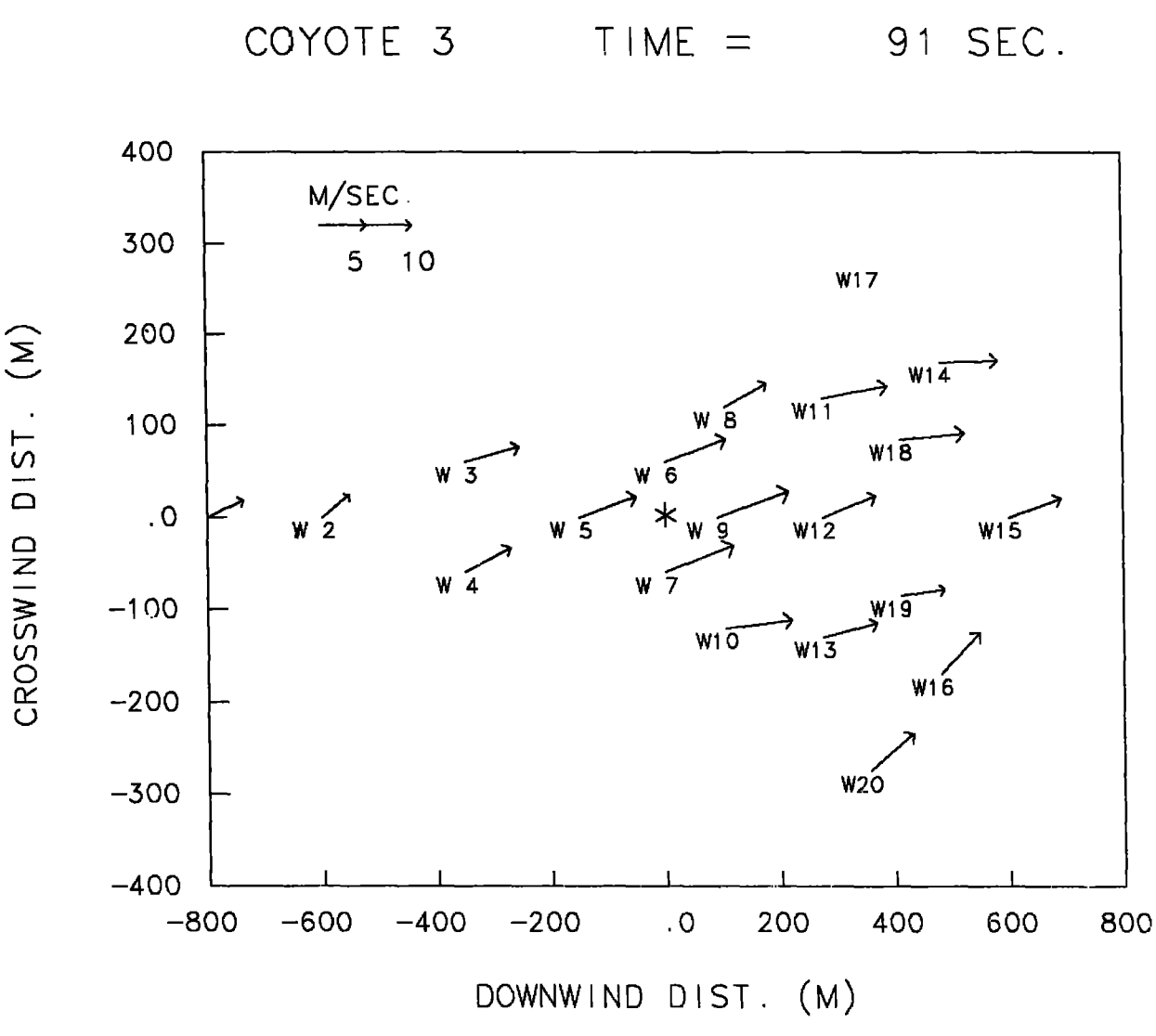
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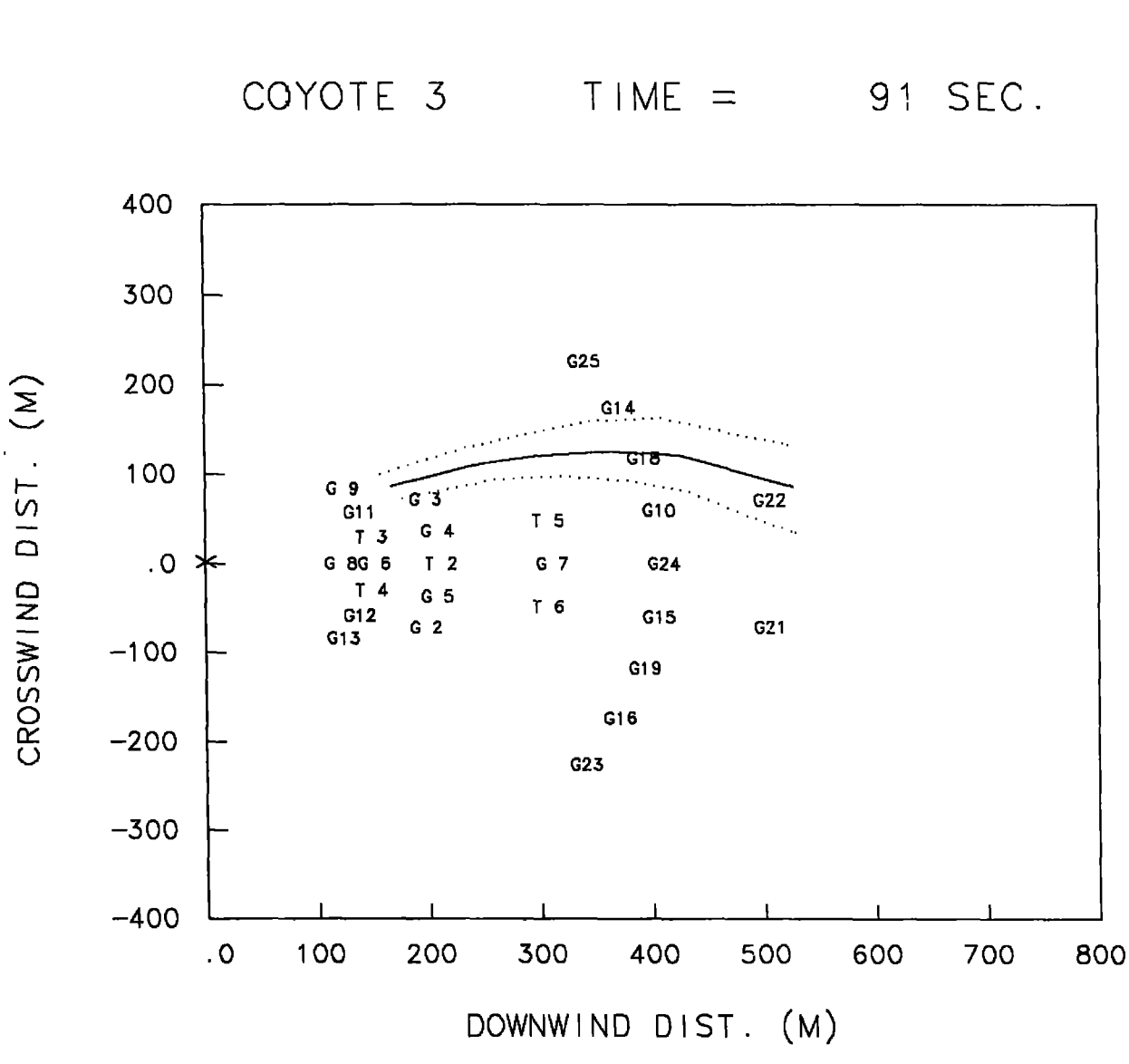
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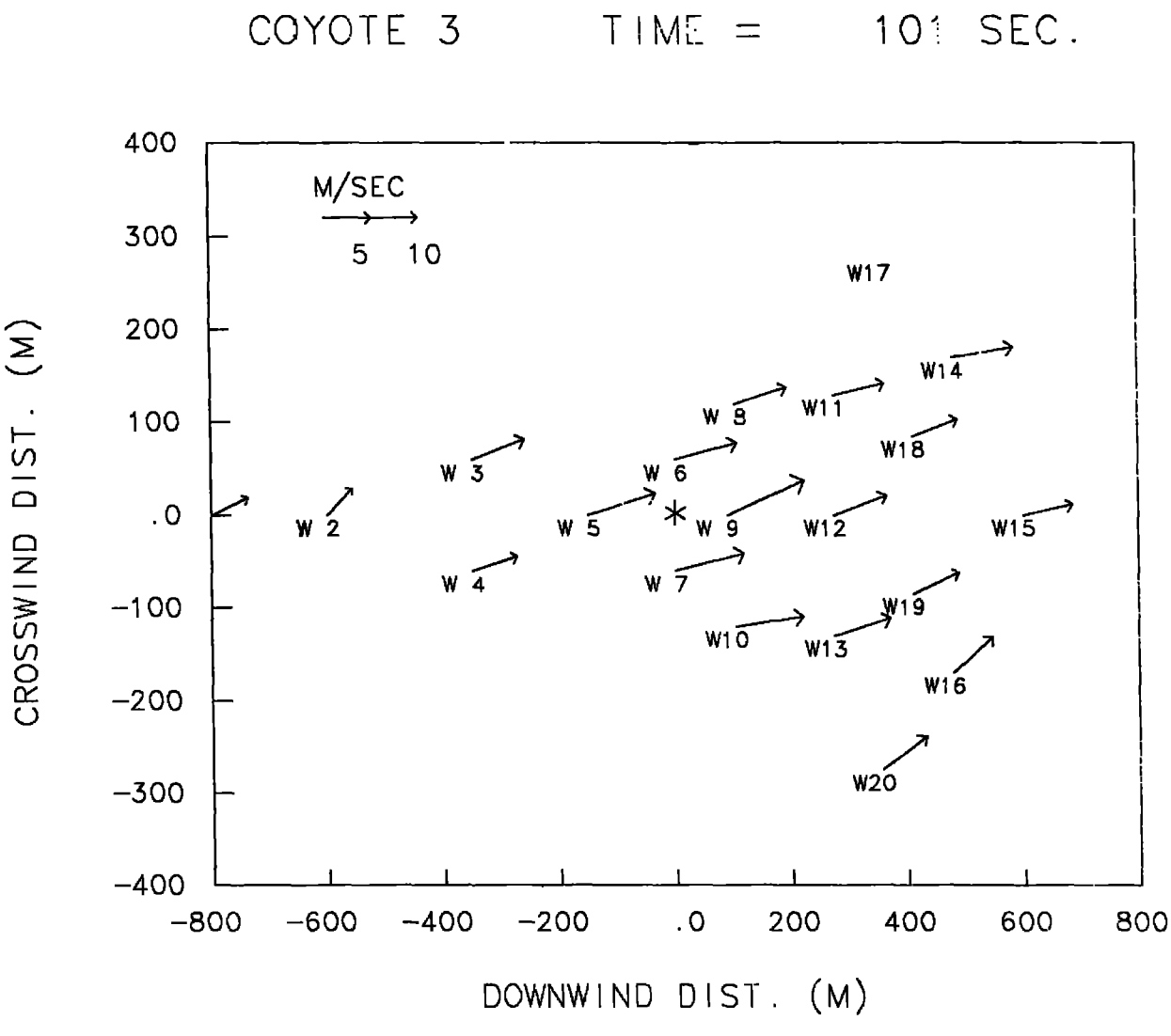
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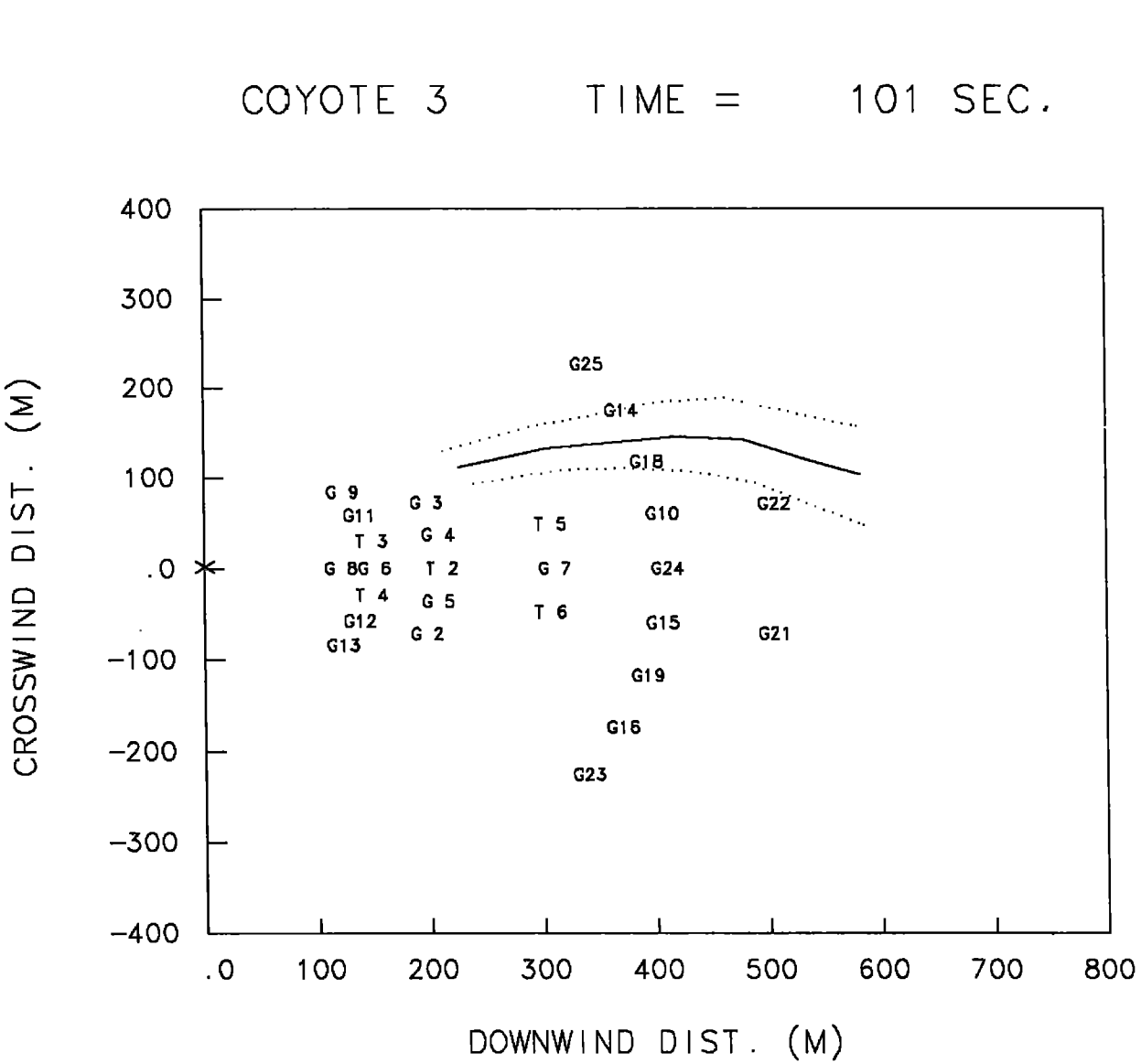
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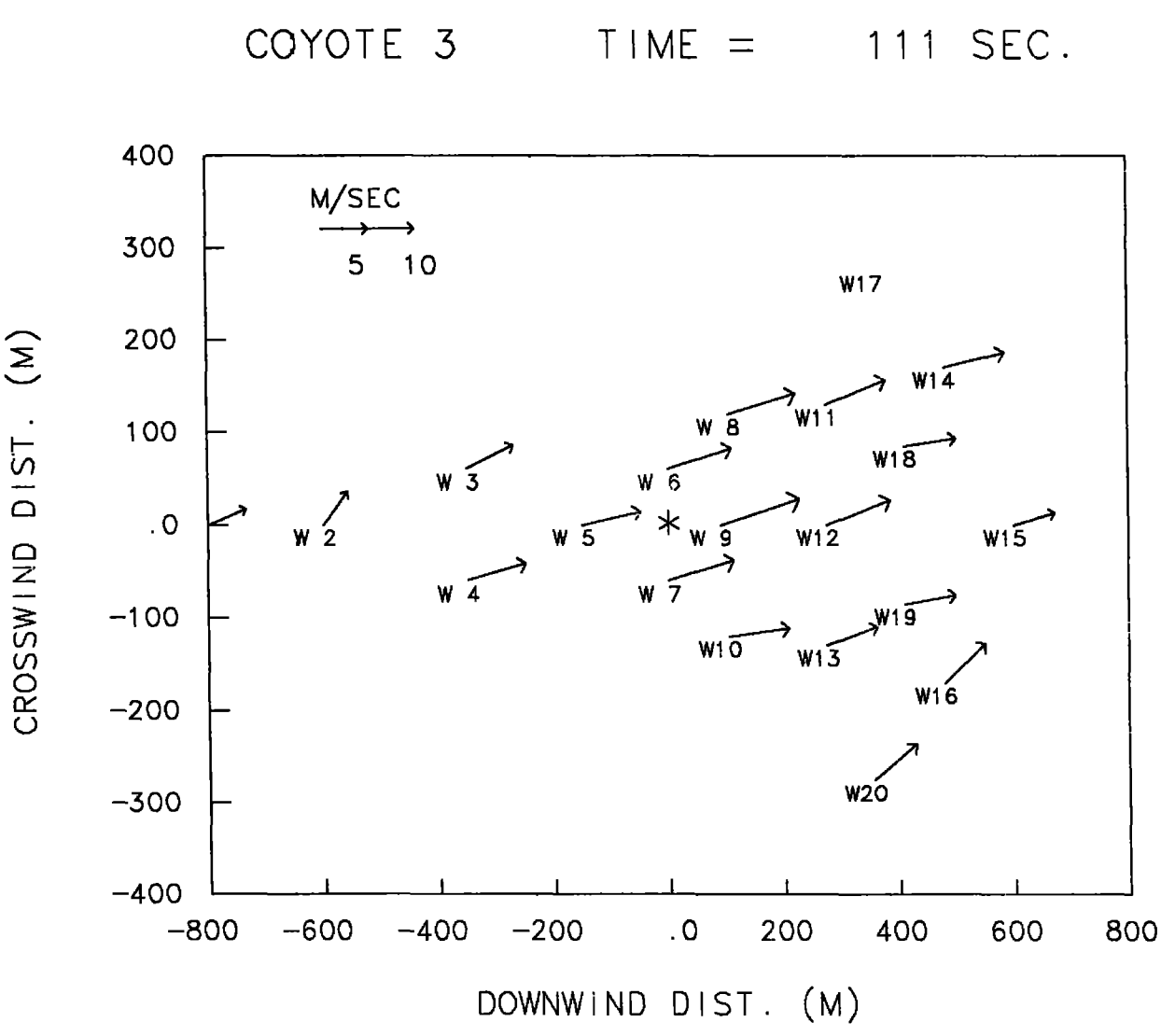
COYOTE 3 TIME = 111 SEC.
M/SEC
5 10
W17
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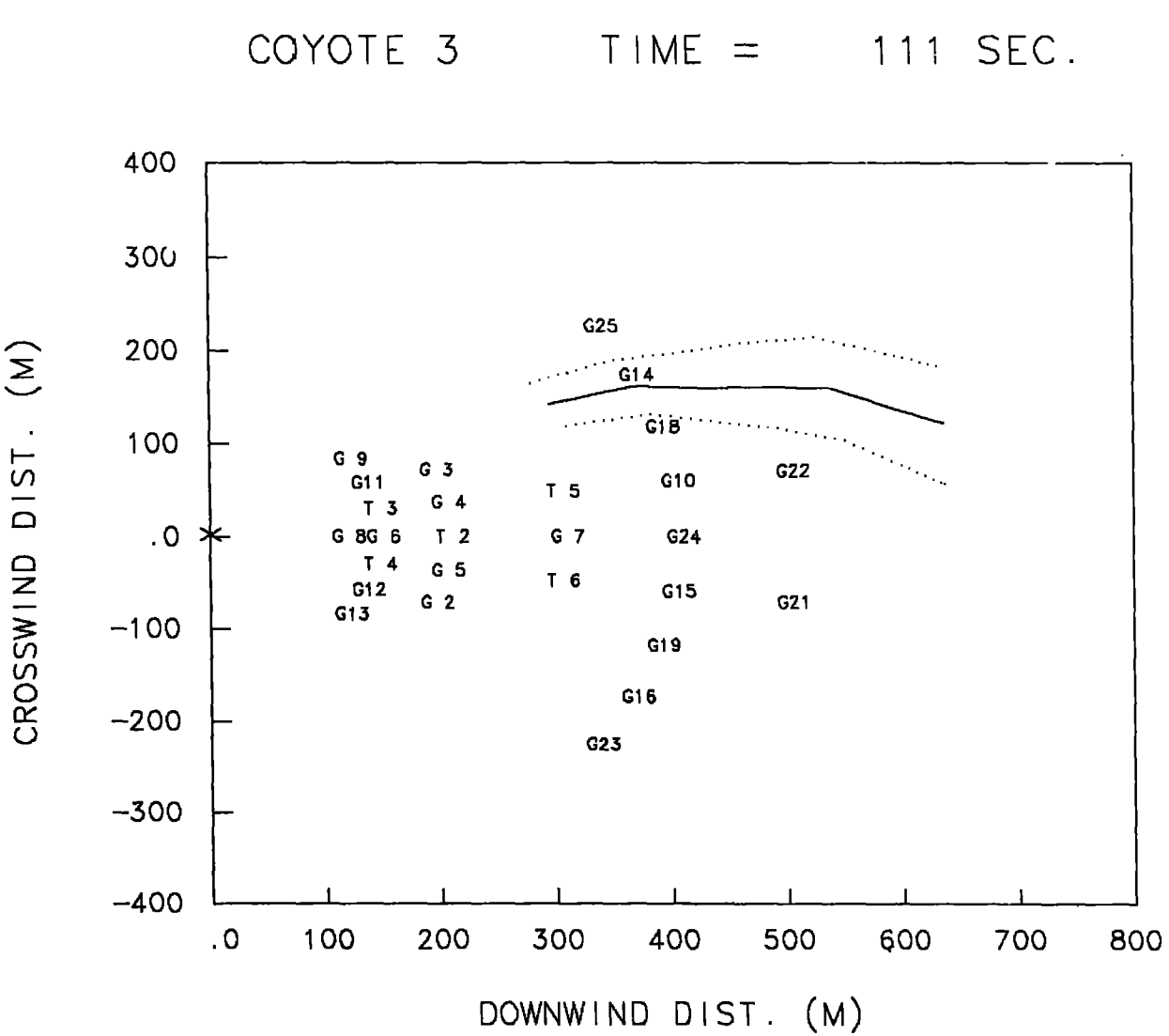
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 3 TIME = 111 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
400
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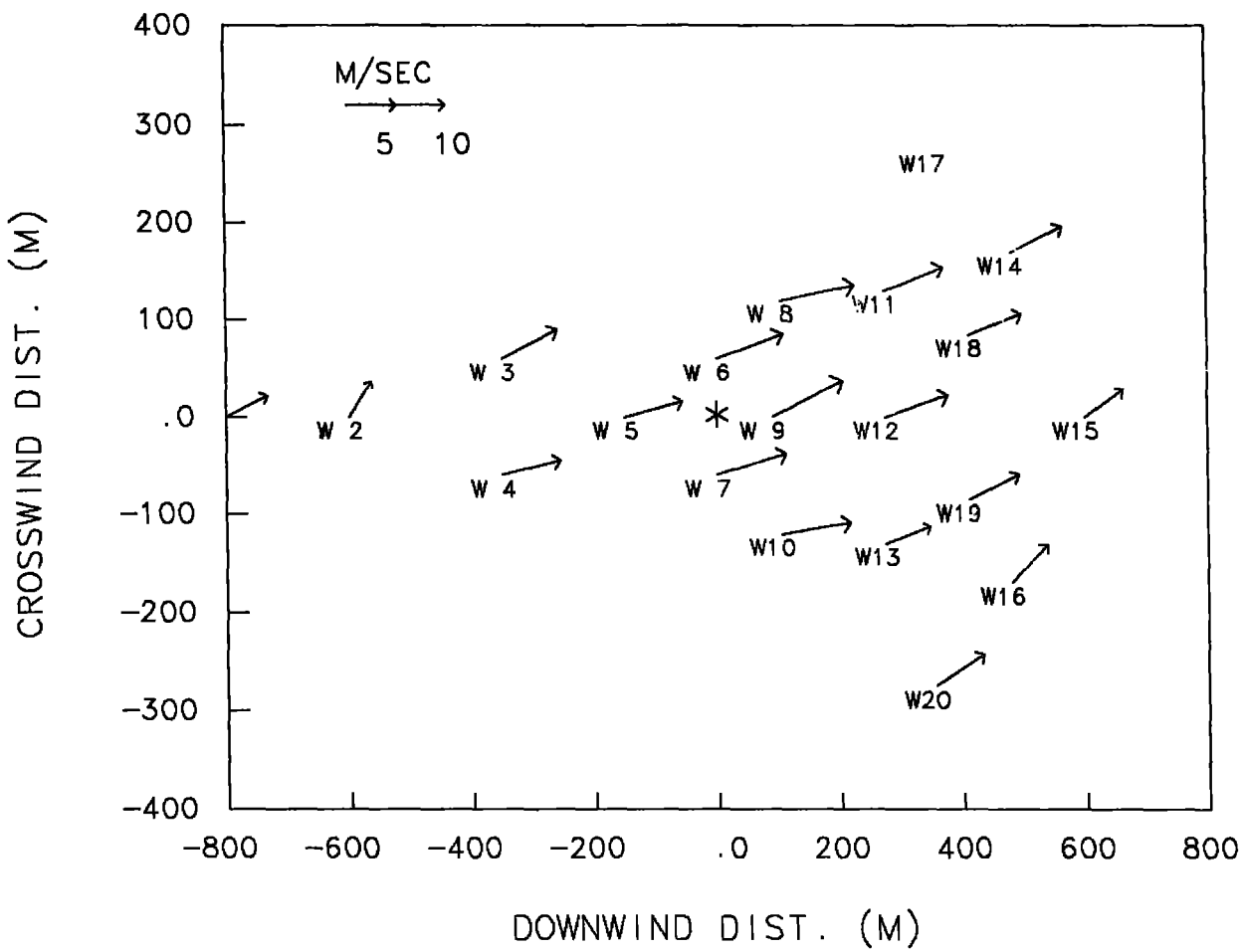
COYOTE 3 TIME = 121 SEC.
M/SEC
5 10
W17
W14
W11
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W 3
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W 5
W 9
W12
W15
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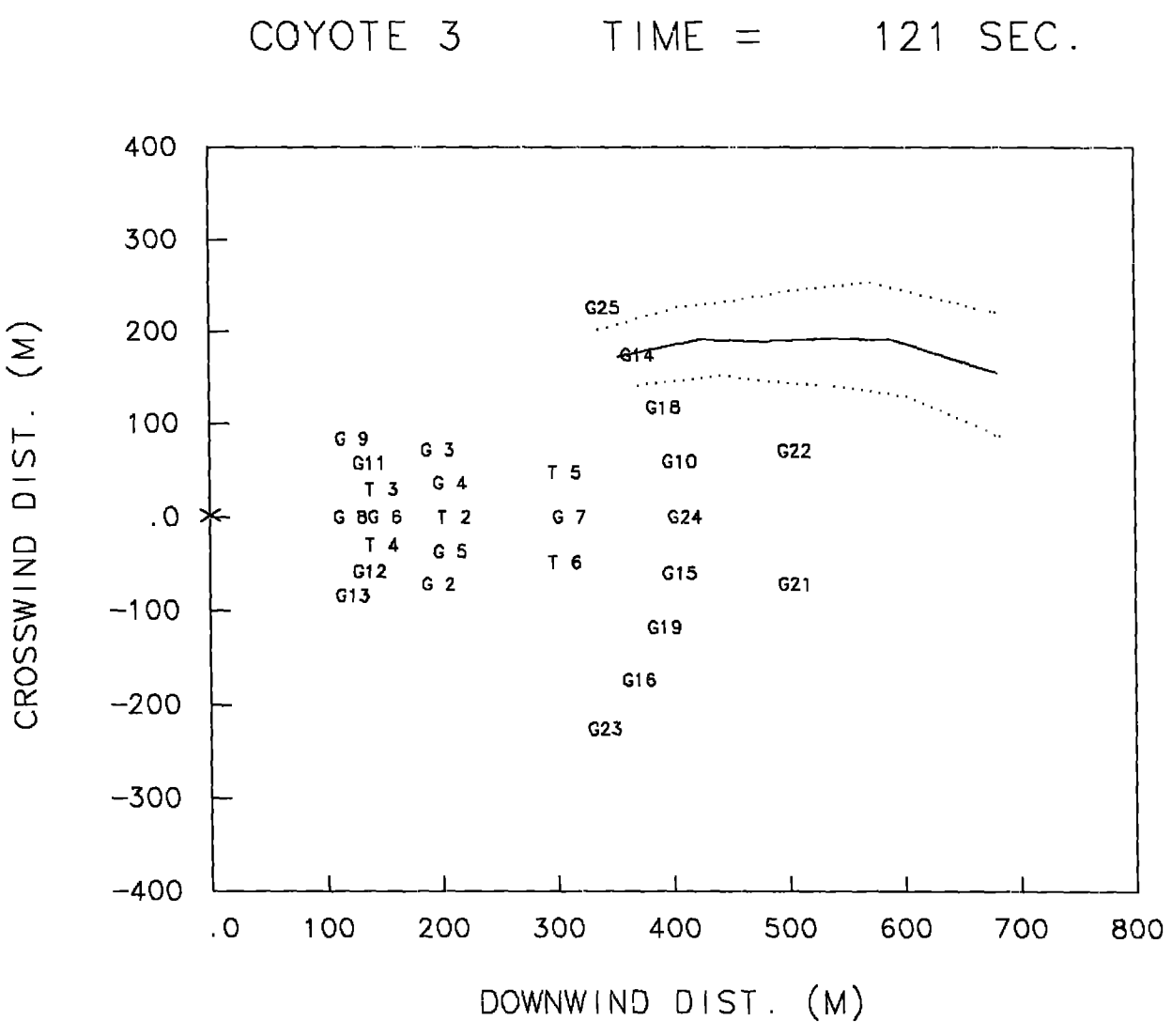
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 3 TIME = 121 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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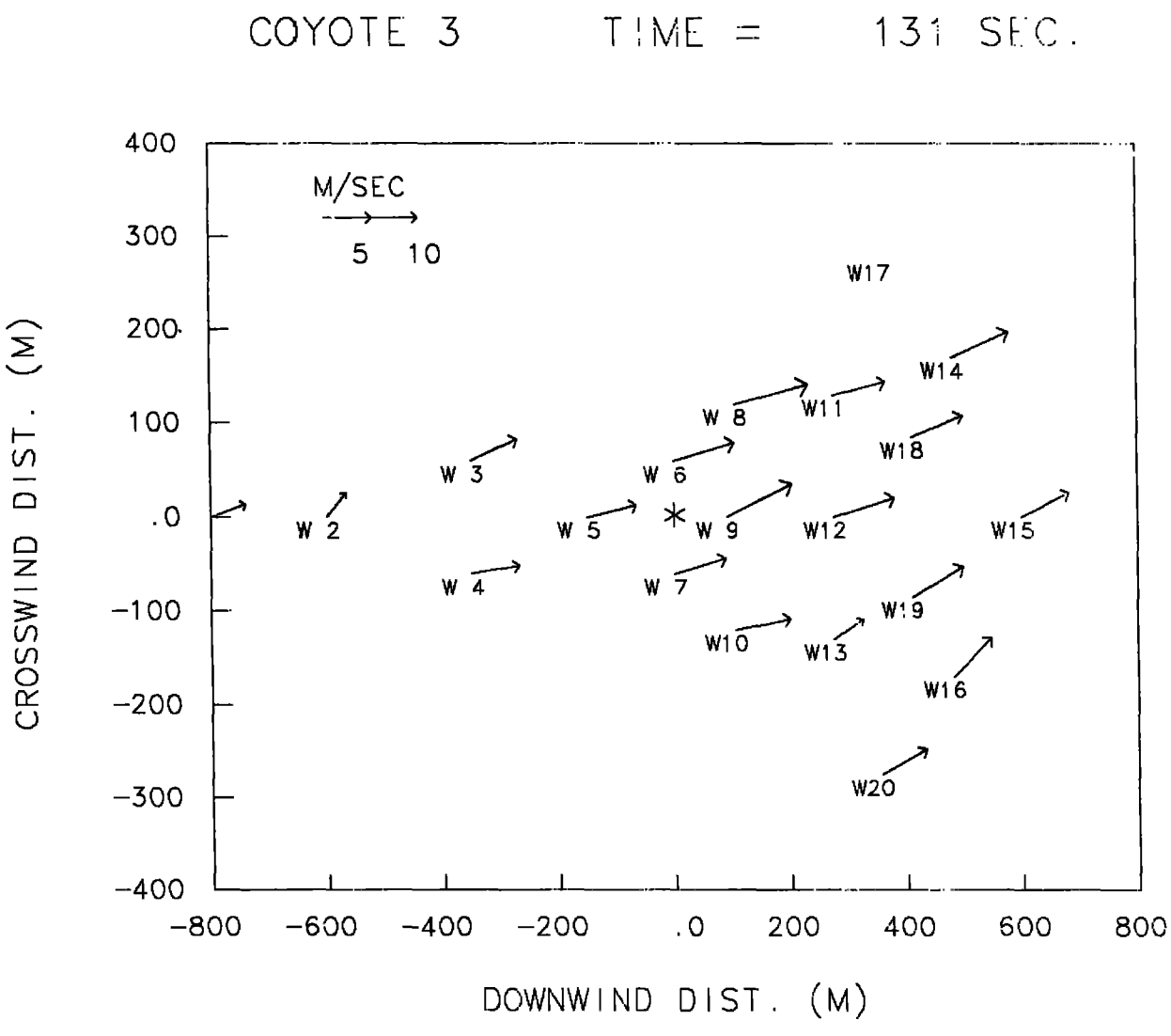
COYOTE 3 TIME = 131 SEC.
M/SEC
5 10
W17
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W 3
W 6
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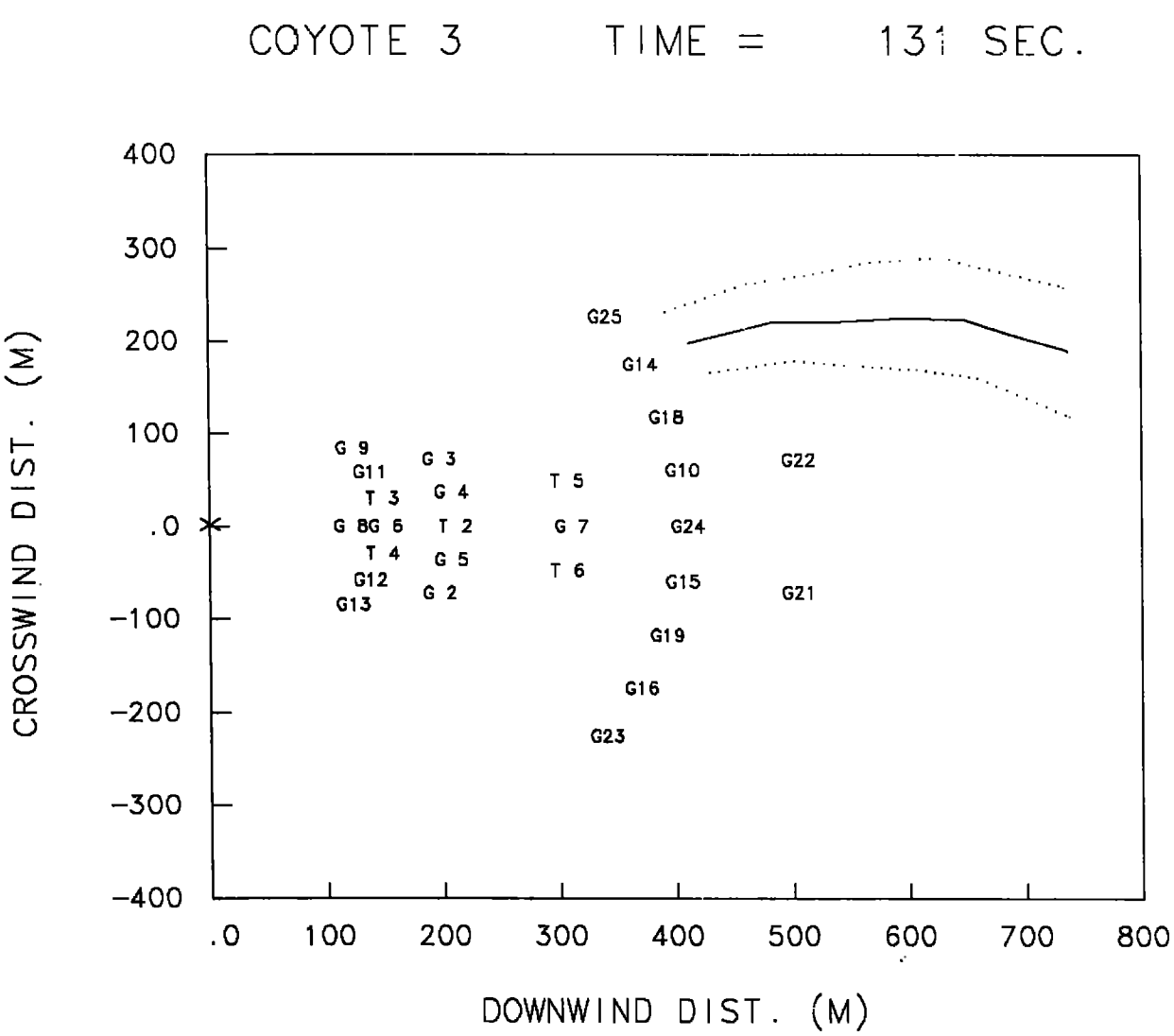
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 3 TIME = 131 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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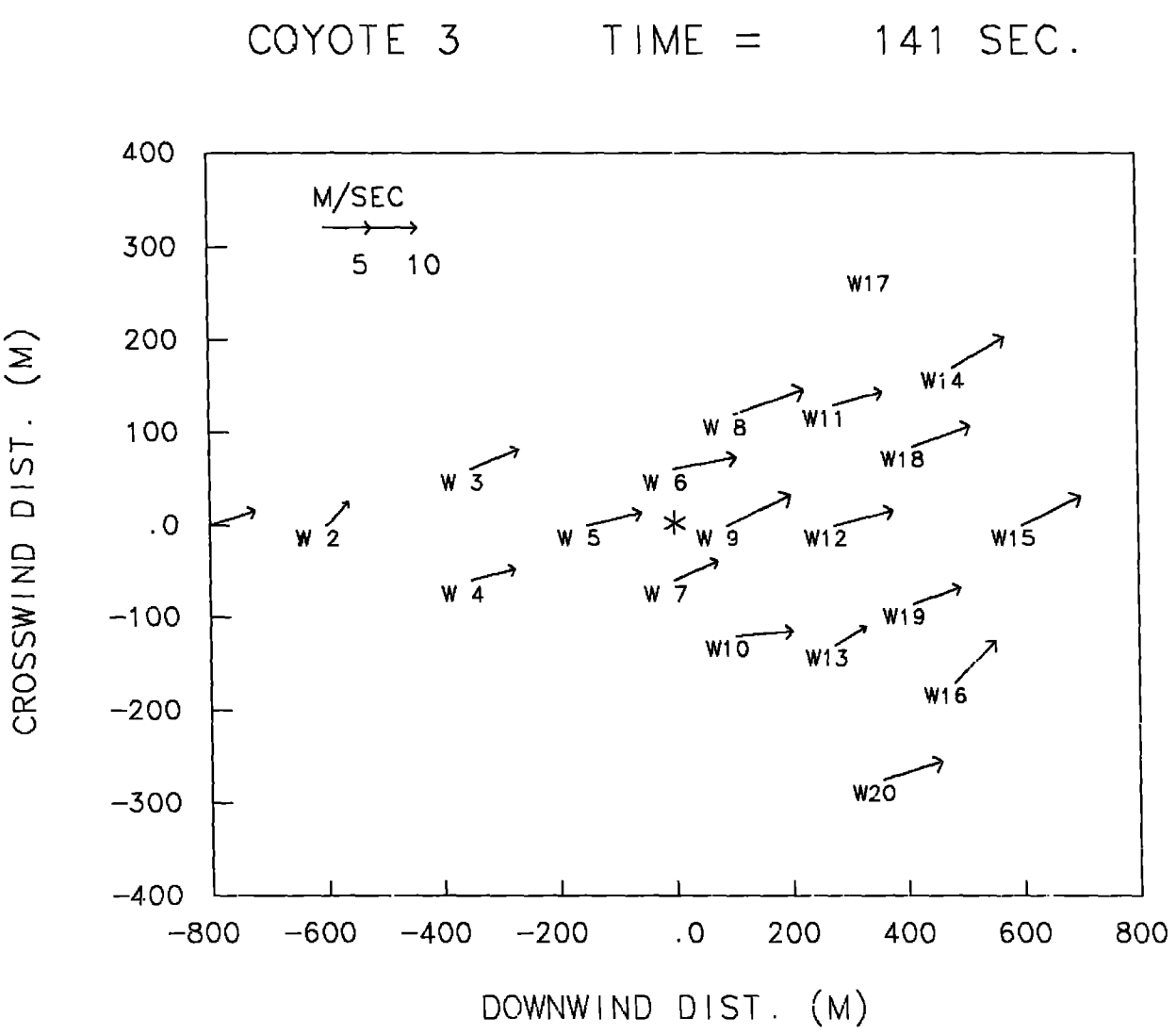
COYOTE 3 TIME = 141 SEC.
M/SEC
5 10
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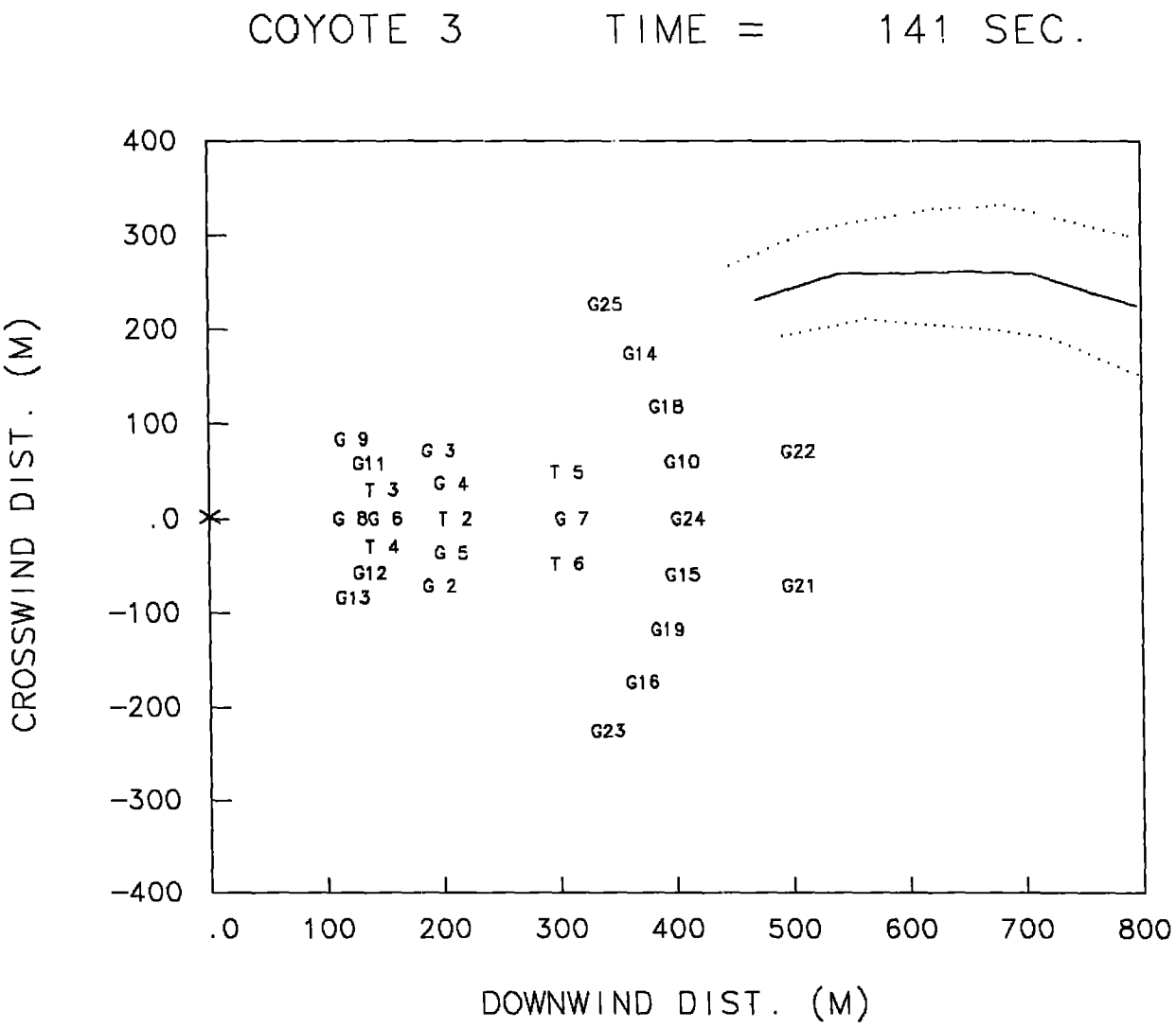
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 3 TIME = 141 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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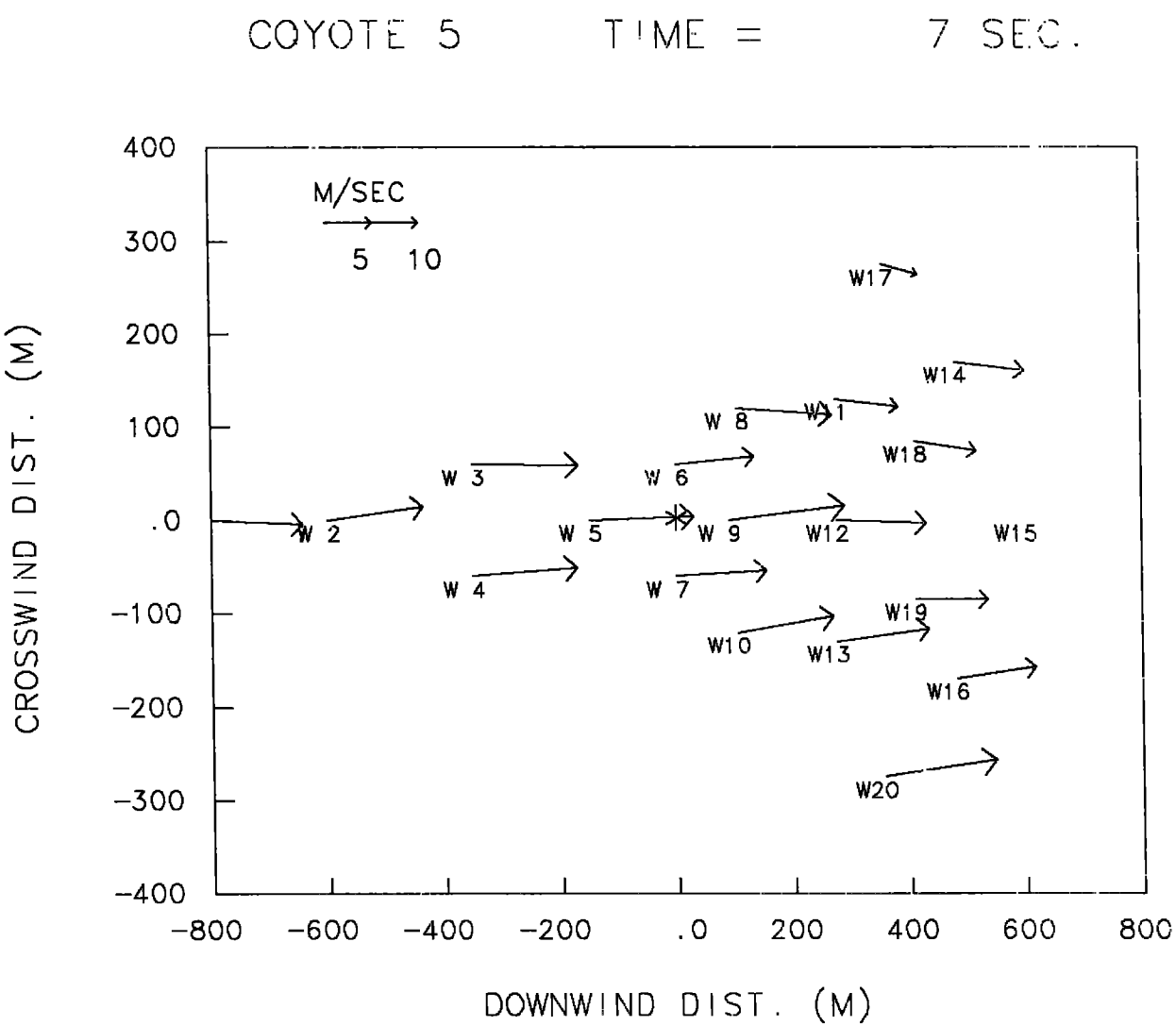
COYOTE 5 TIME = 7 SEC.
M/SEC
5 10
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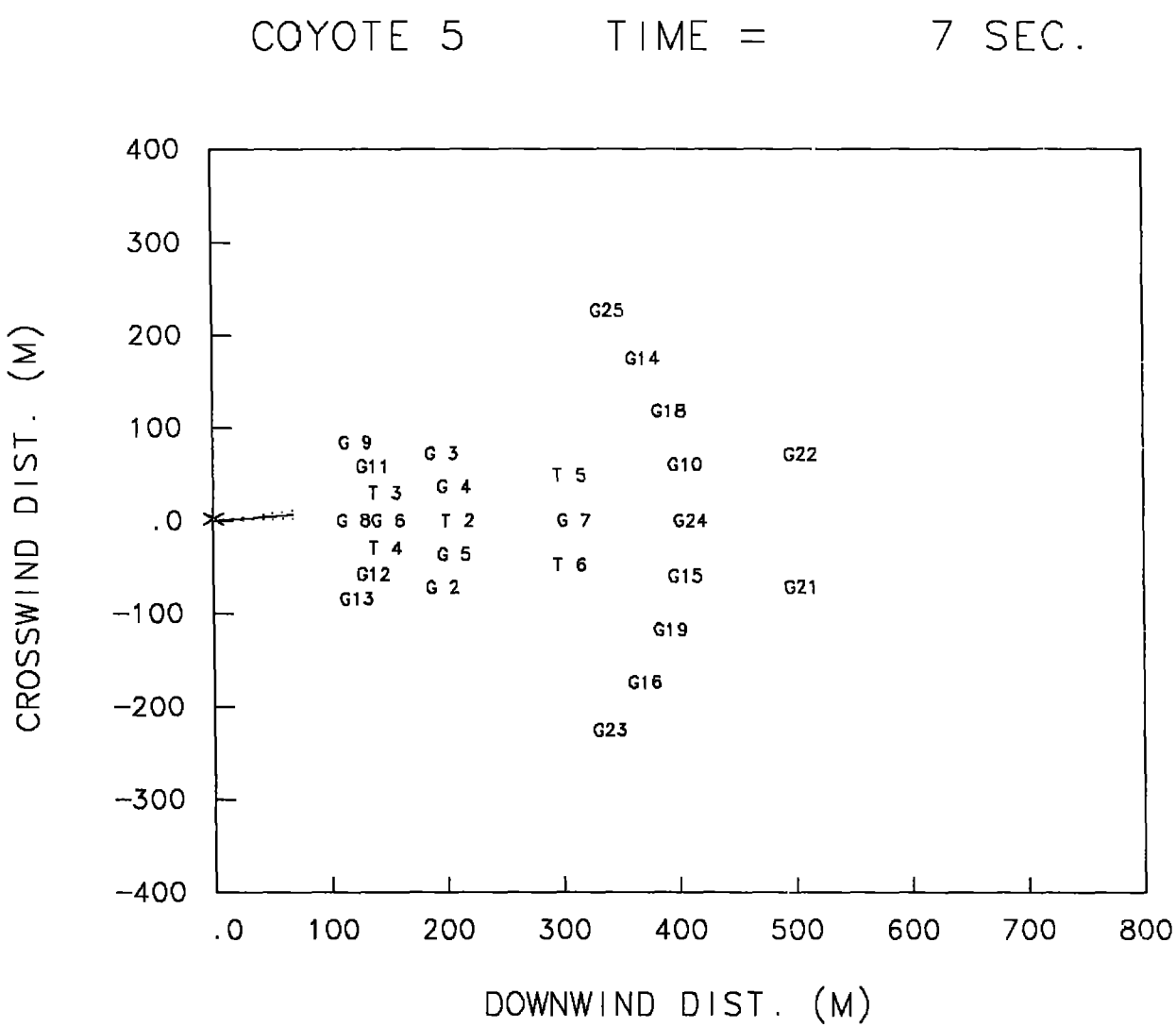
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 5 TIME = 7 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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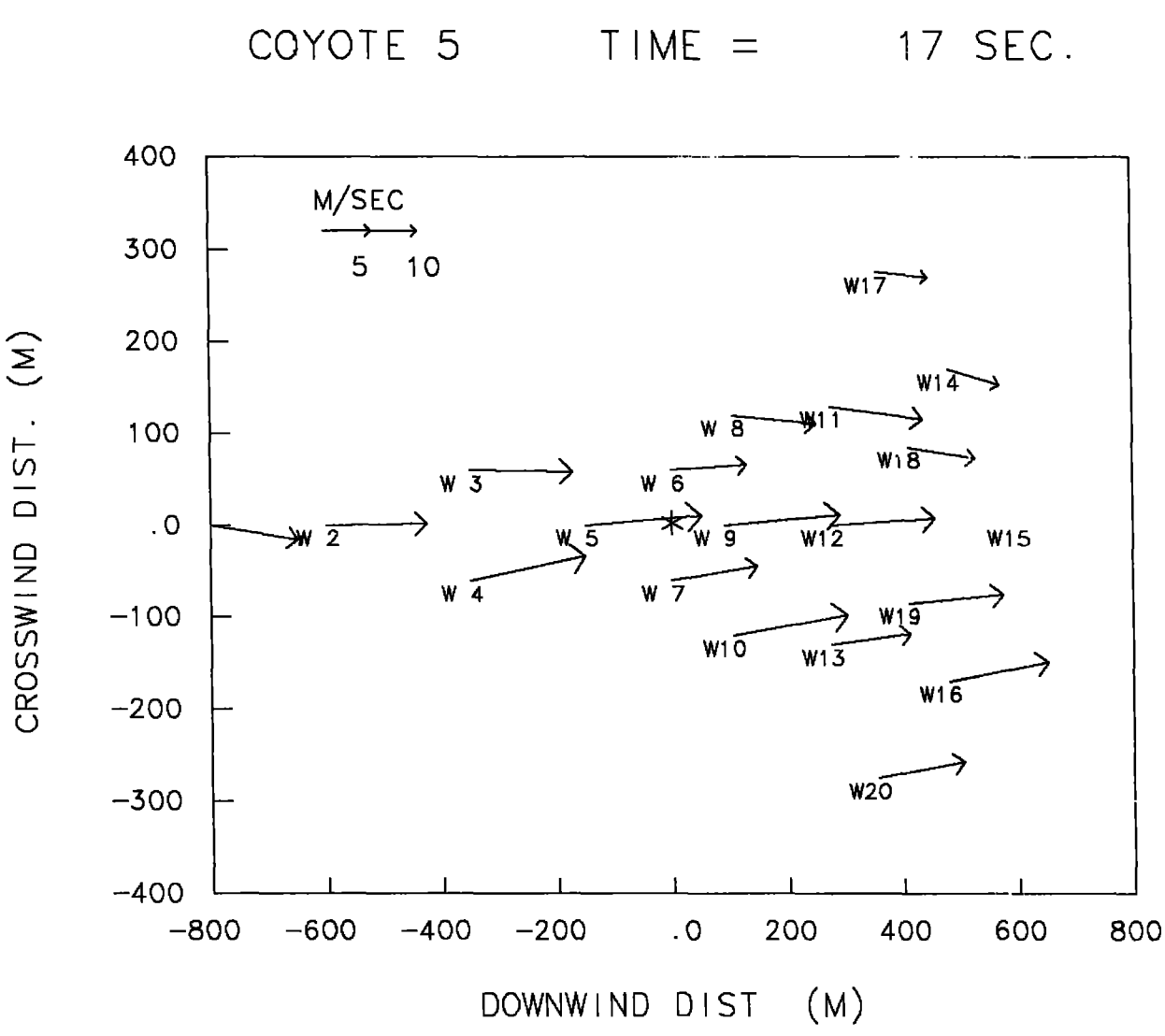
COYOTE 5 TIME = 17 SEC.
M/SEC
5 10
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W12
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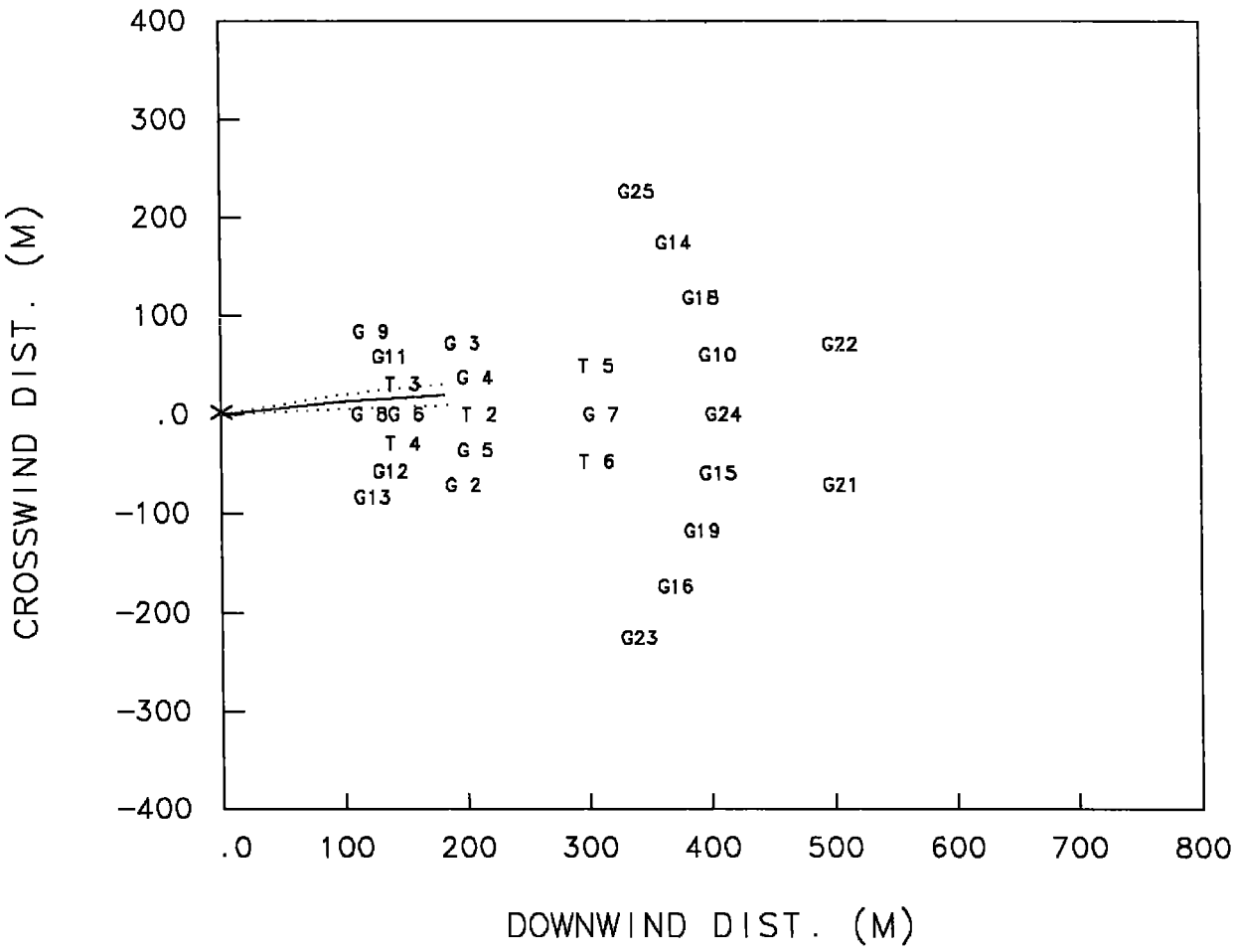
CROSSWIND DIST. (M)
DOWNWIND DIST (M)


COYOTE 5 TIME = 17 SEC.
CROSSWIND DIST. (M)
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DOWNWIND DIST. (M)
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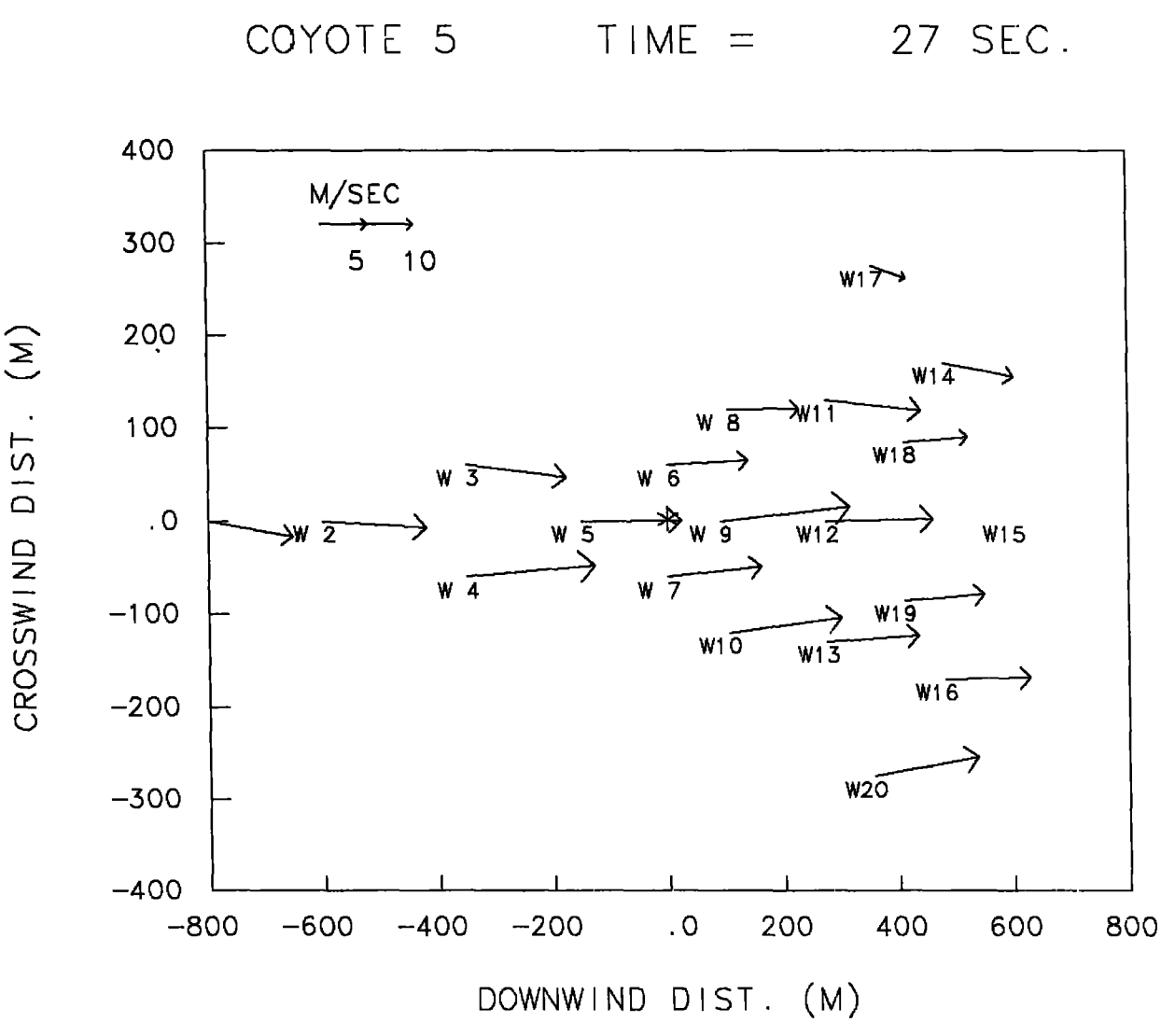
COYOTE 5 TIME = 27 SEC.
M/SEC
5 10
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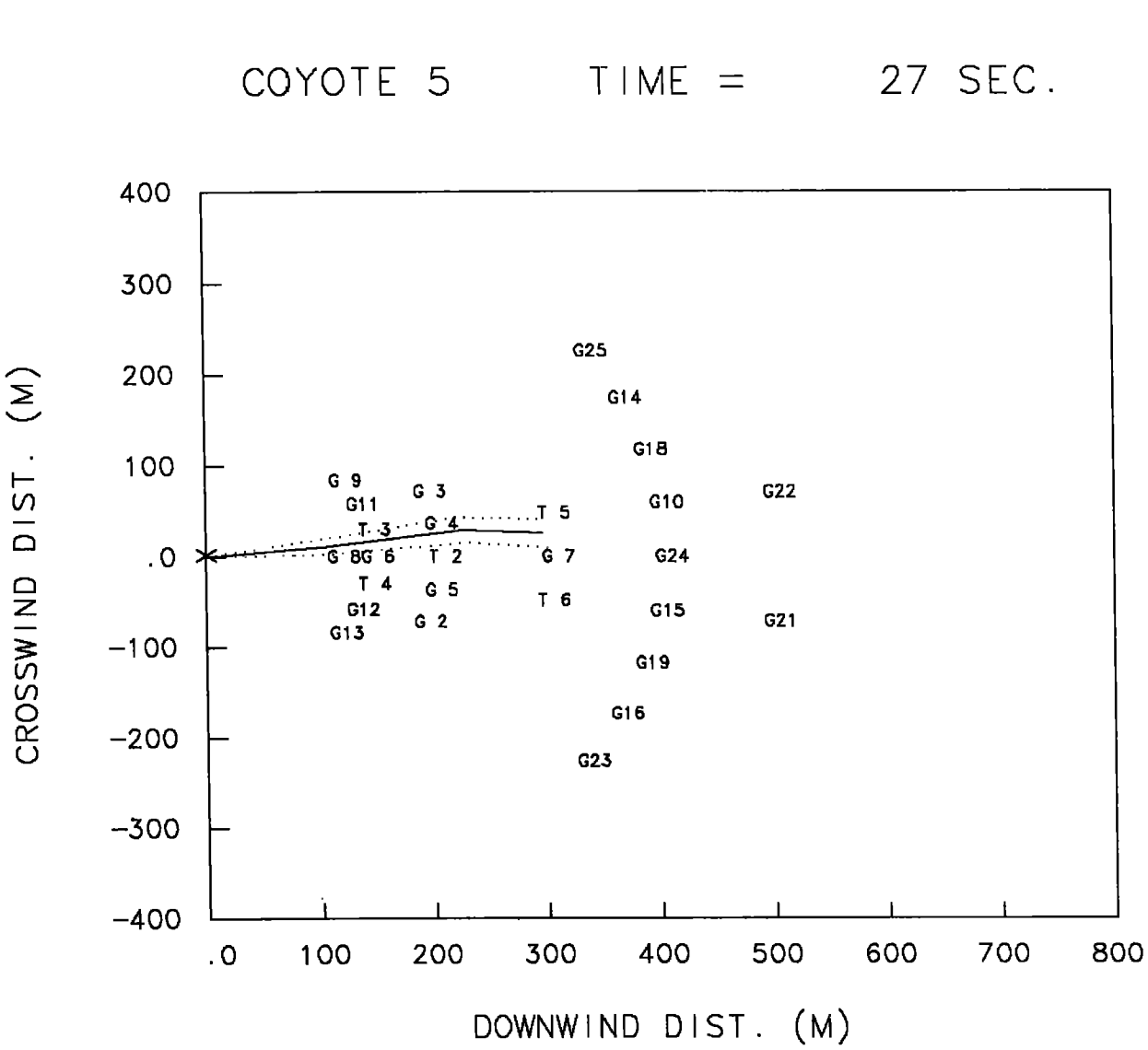
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 5 TIME = 27 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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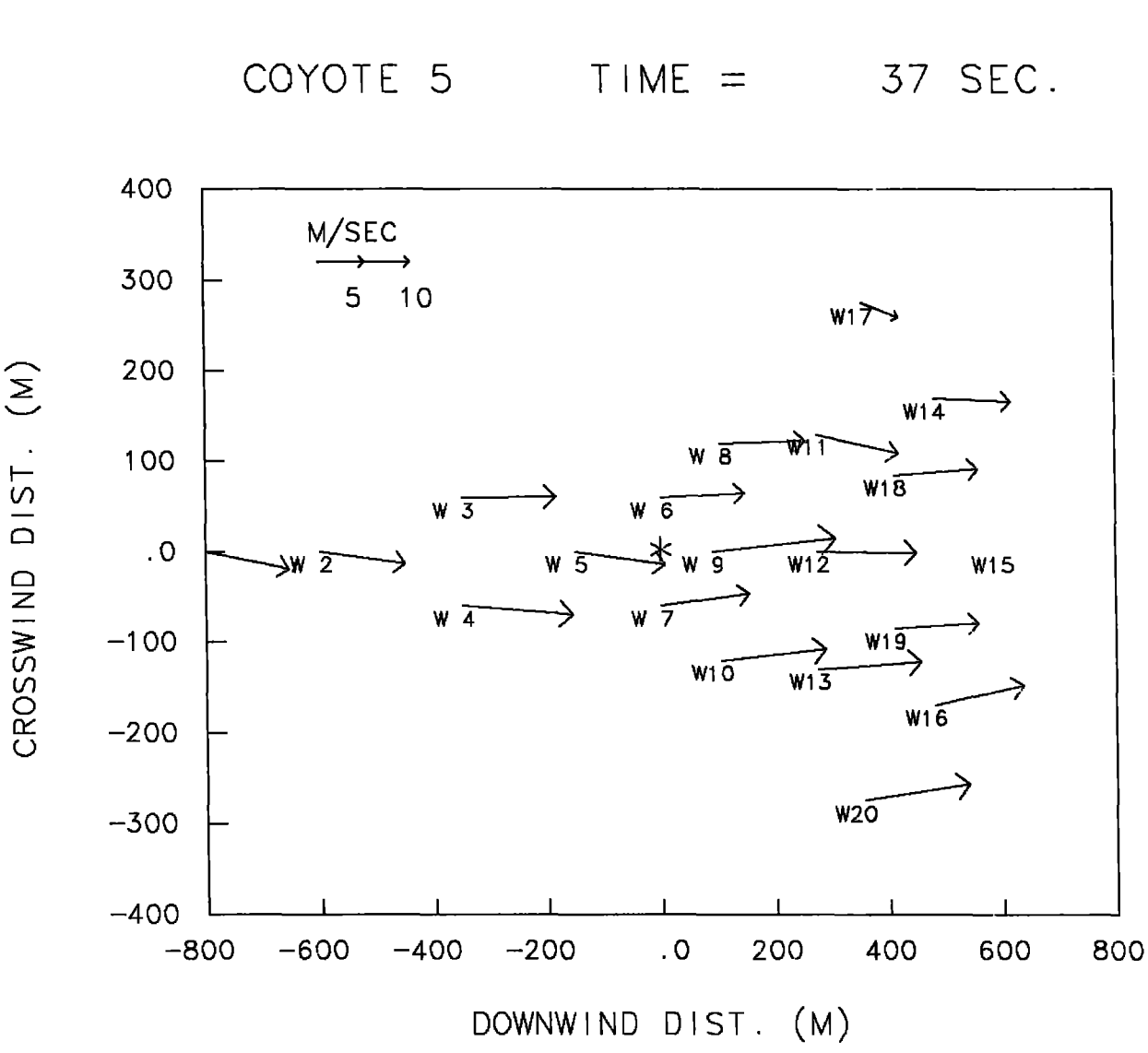
COYOTE 5 TIME = 37 SEC.
M/SEC
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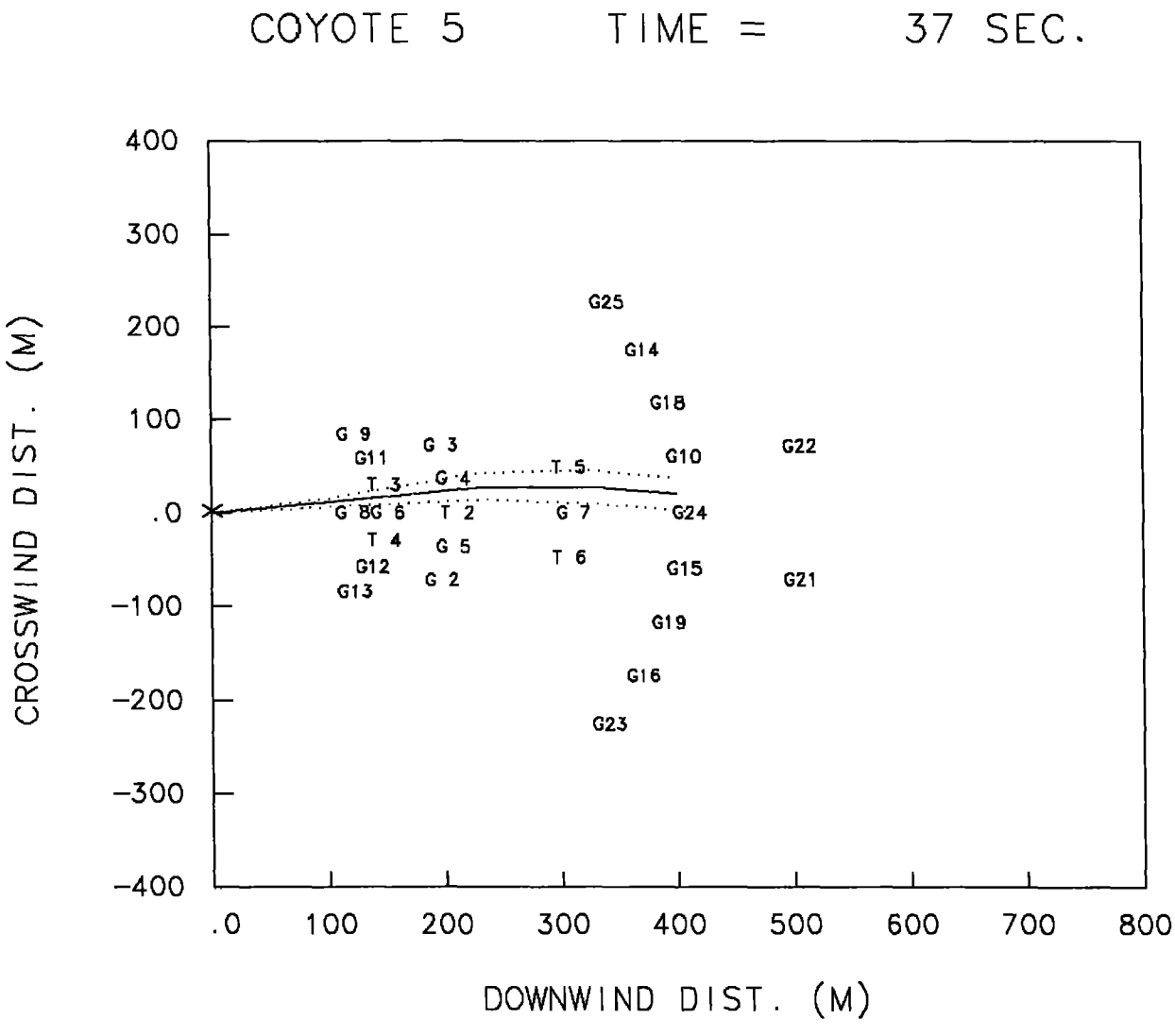
-800 -600 -400 -200 .0 200 400 600 800
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 5 TIME = 37 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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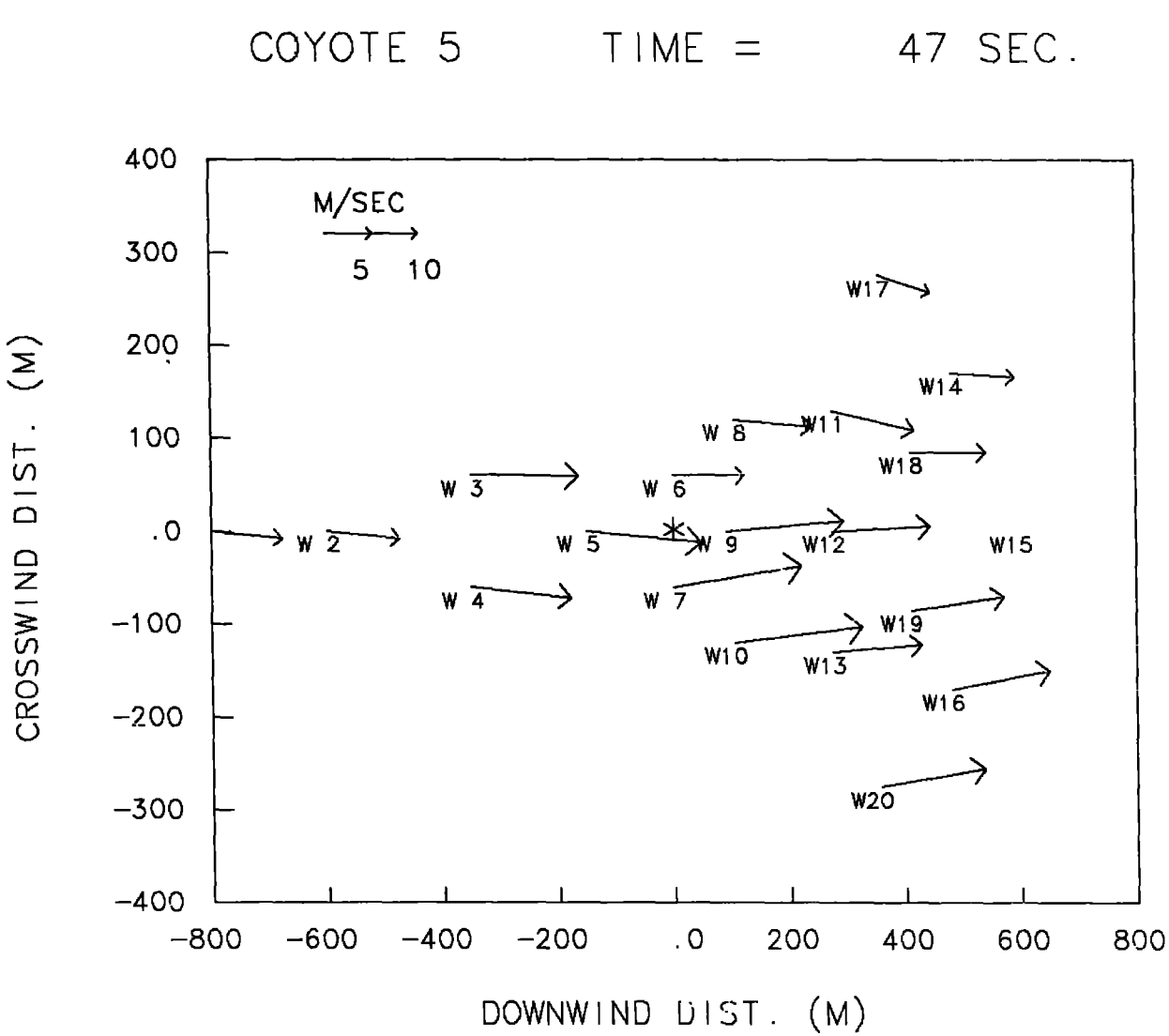
COYOTE 5 TIME = 47 SEC.
M/SEC
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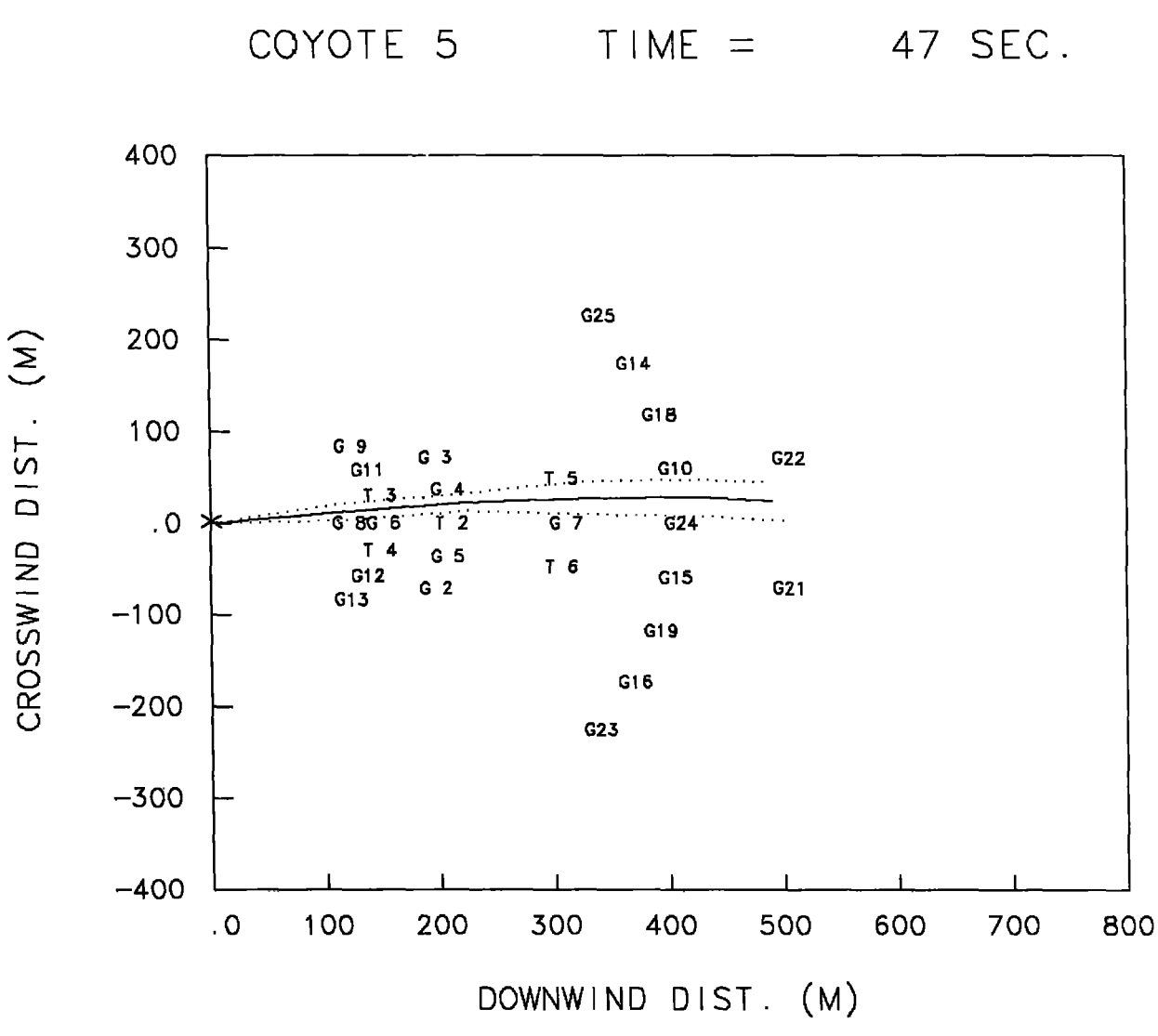
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 5 TIME = 47 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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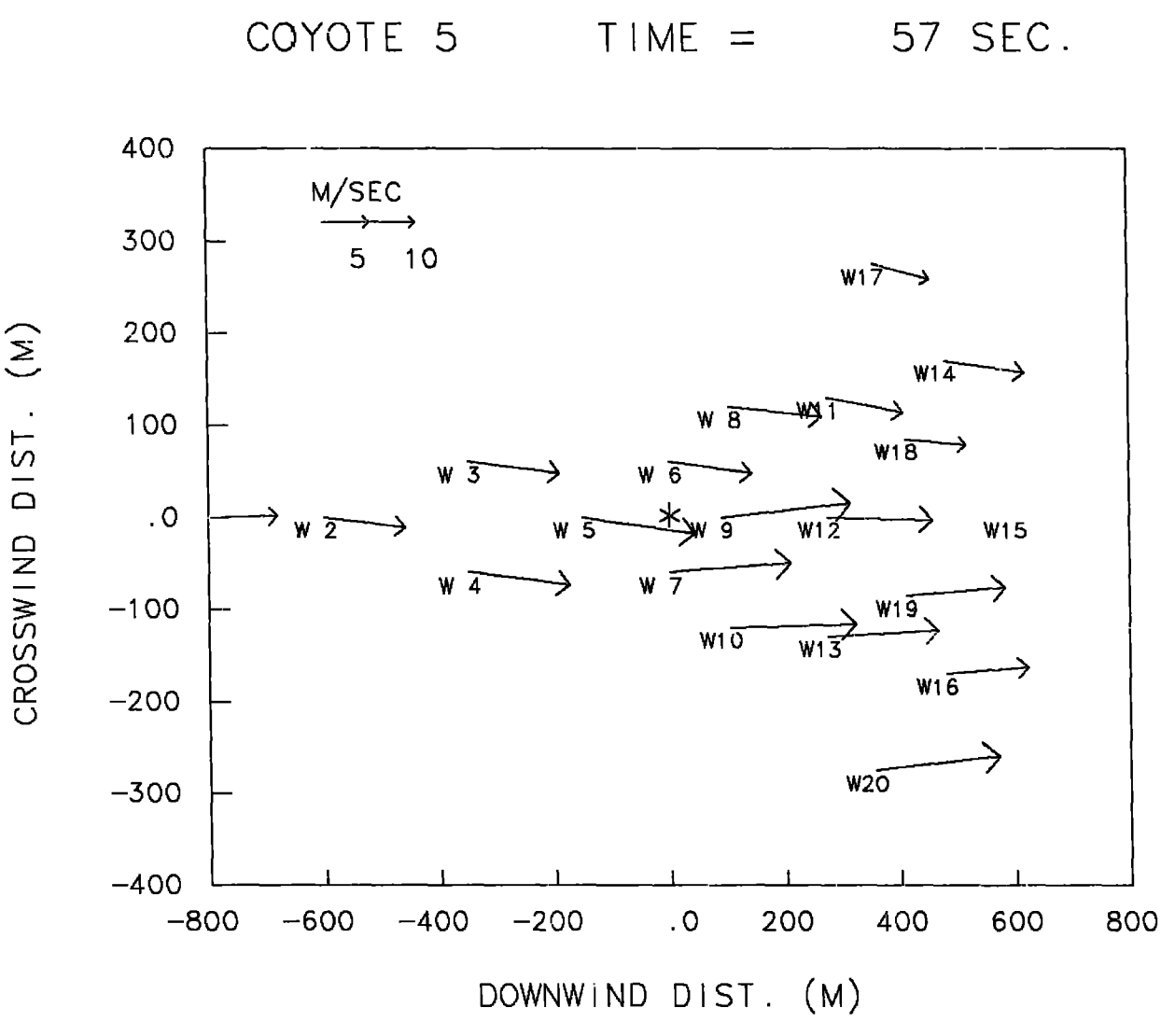
COYOTE 5 TIME = 57 SEC.
M/SEC
5 10
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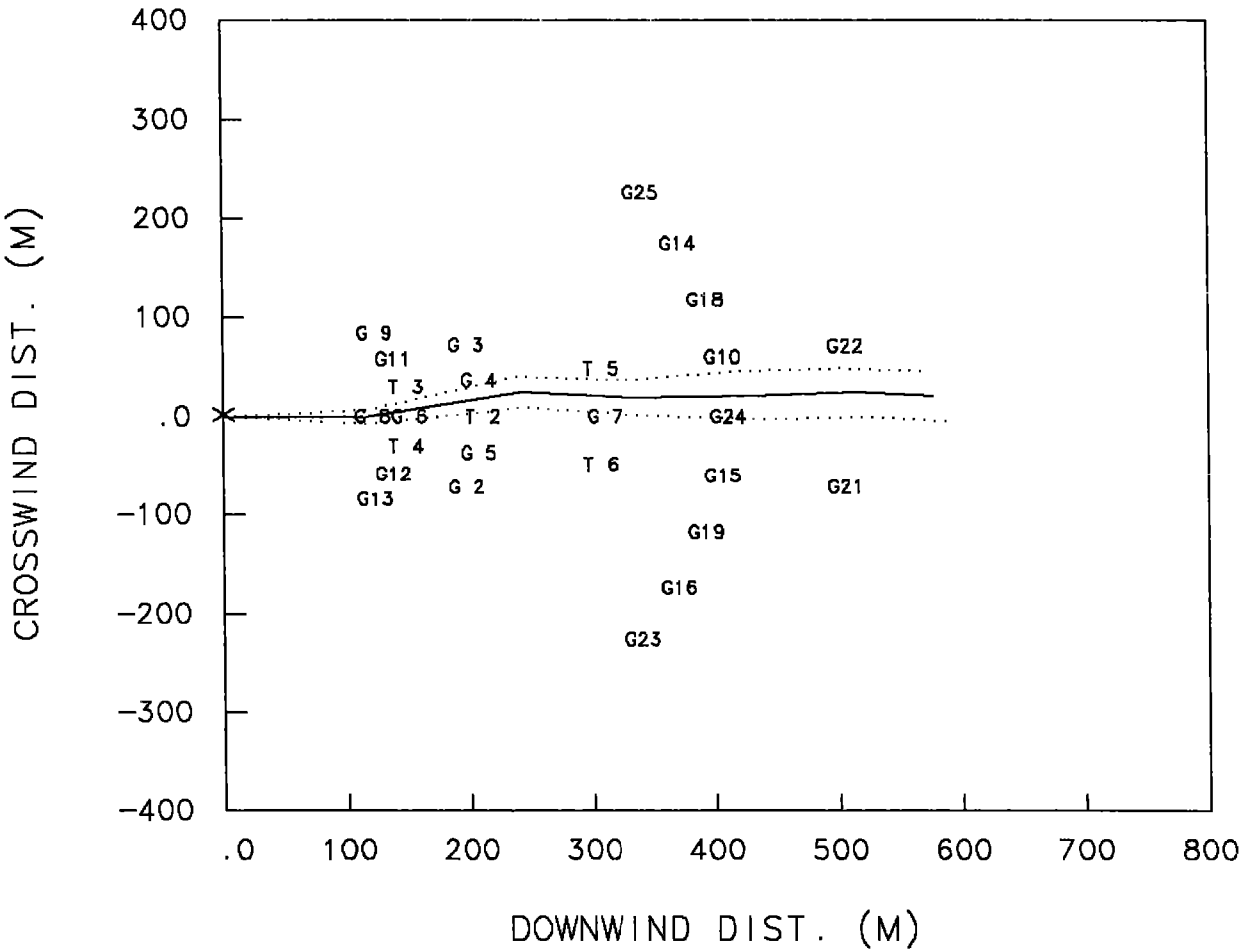
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 5 TIME = 57 SEC.
CROSSWIND DIST. (M)
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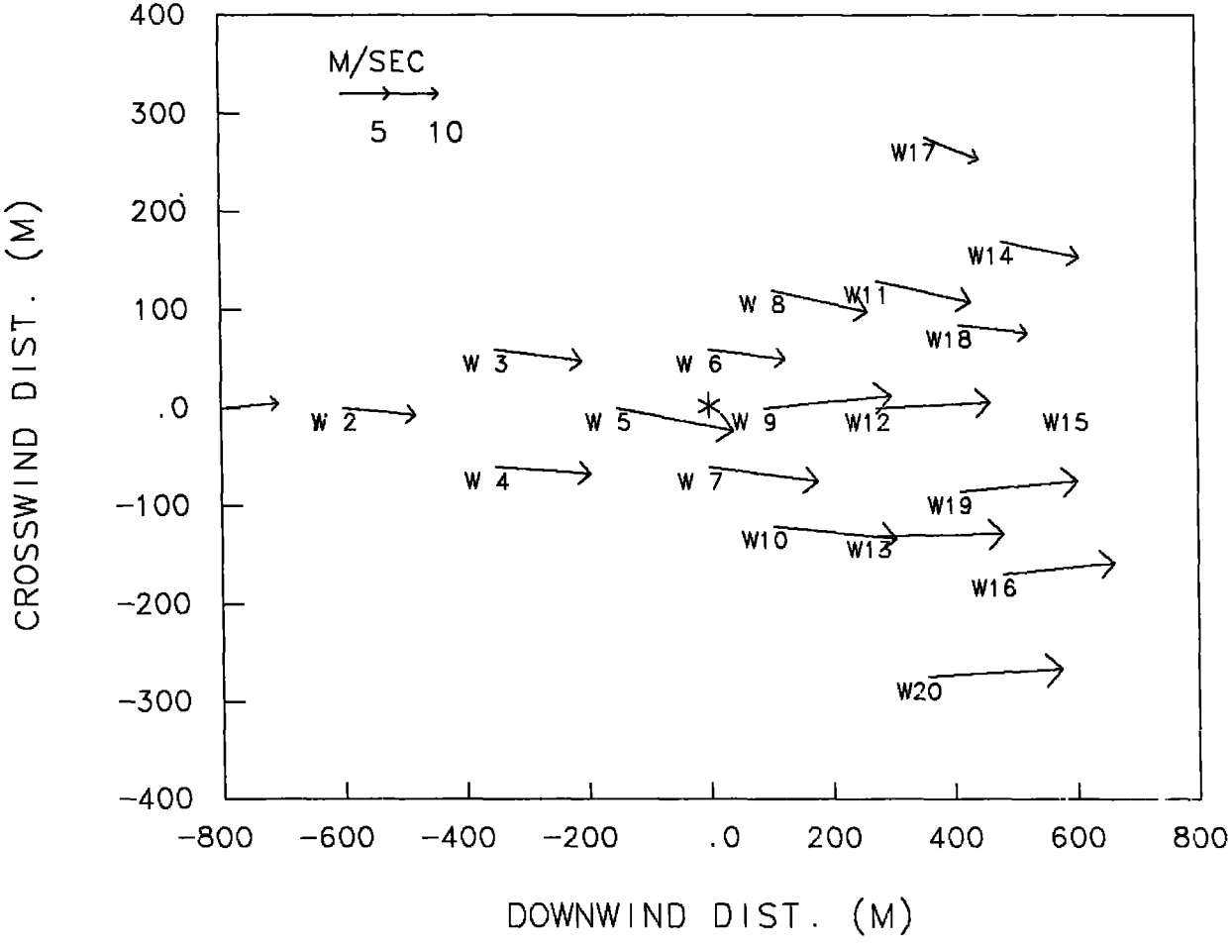
COYOTE 5 TIME = 67 SEC.
M/SEC
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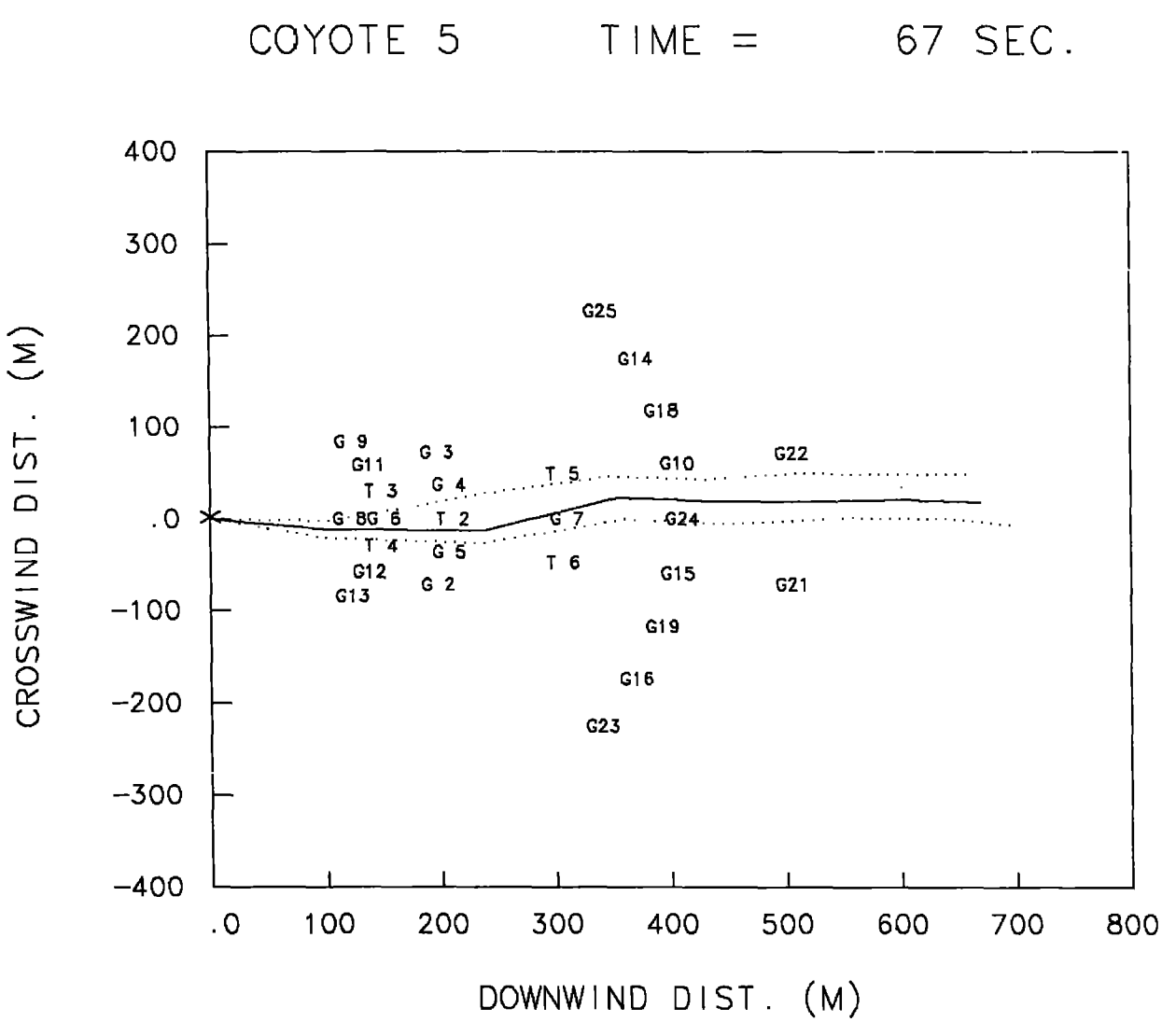
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 5 TIME = 67 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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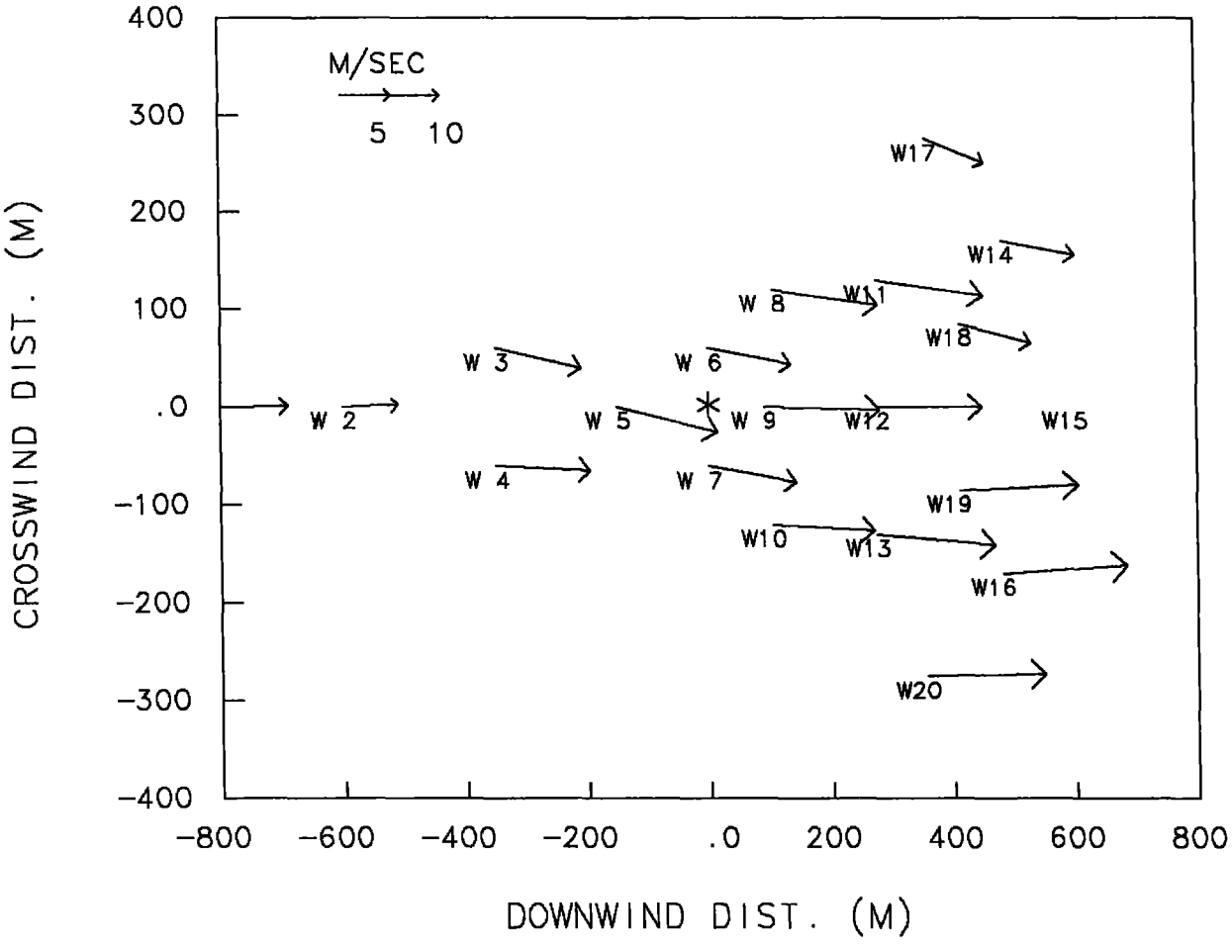
COYOTE 5 TIME = 77 SEC.
M/SEC
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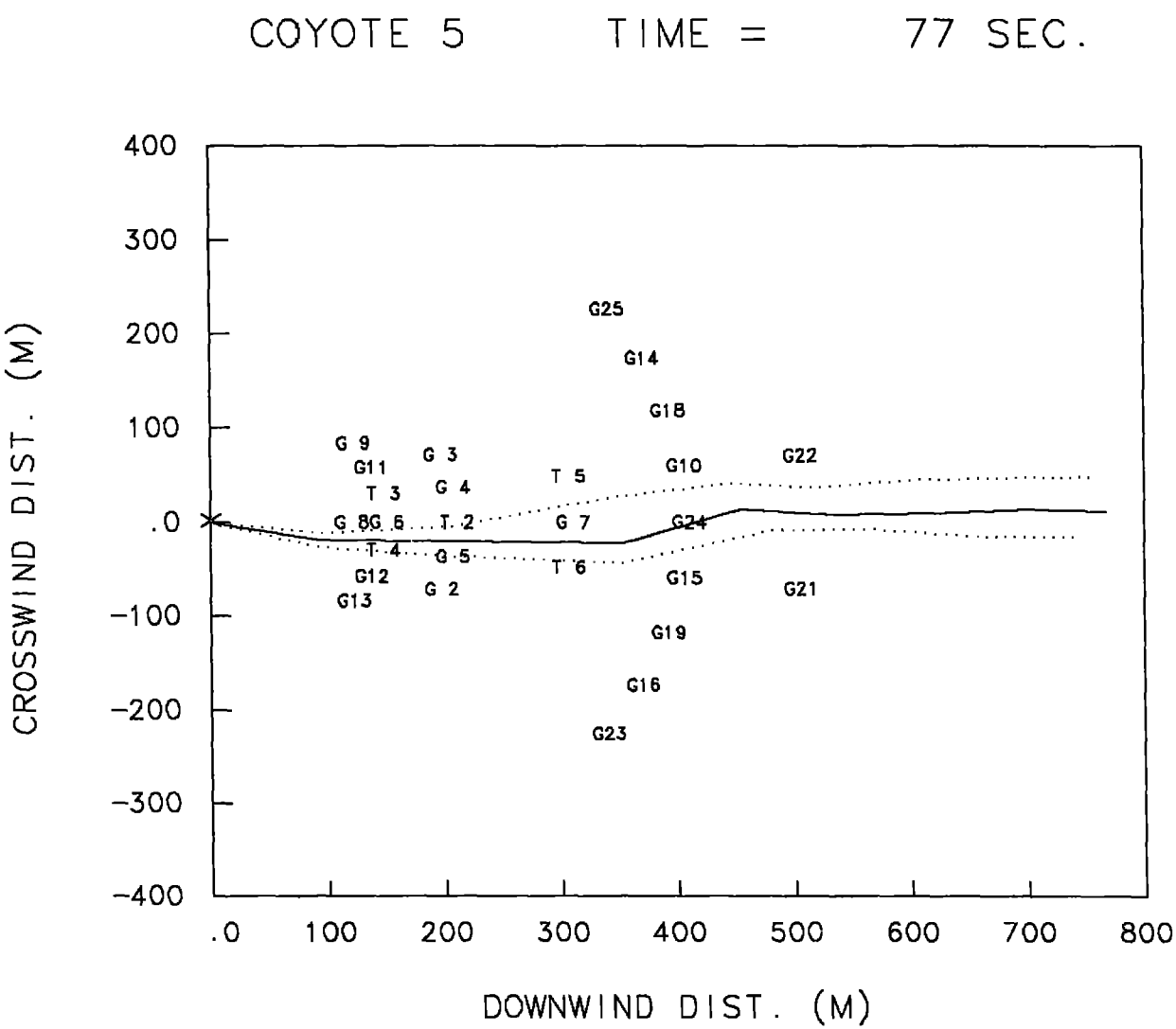
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 5 TIME = 77 SEC.
CROSSWIND DIST. (M)
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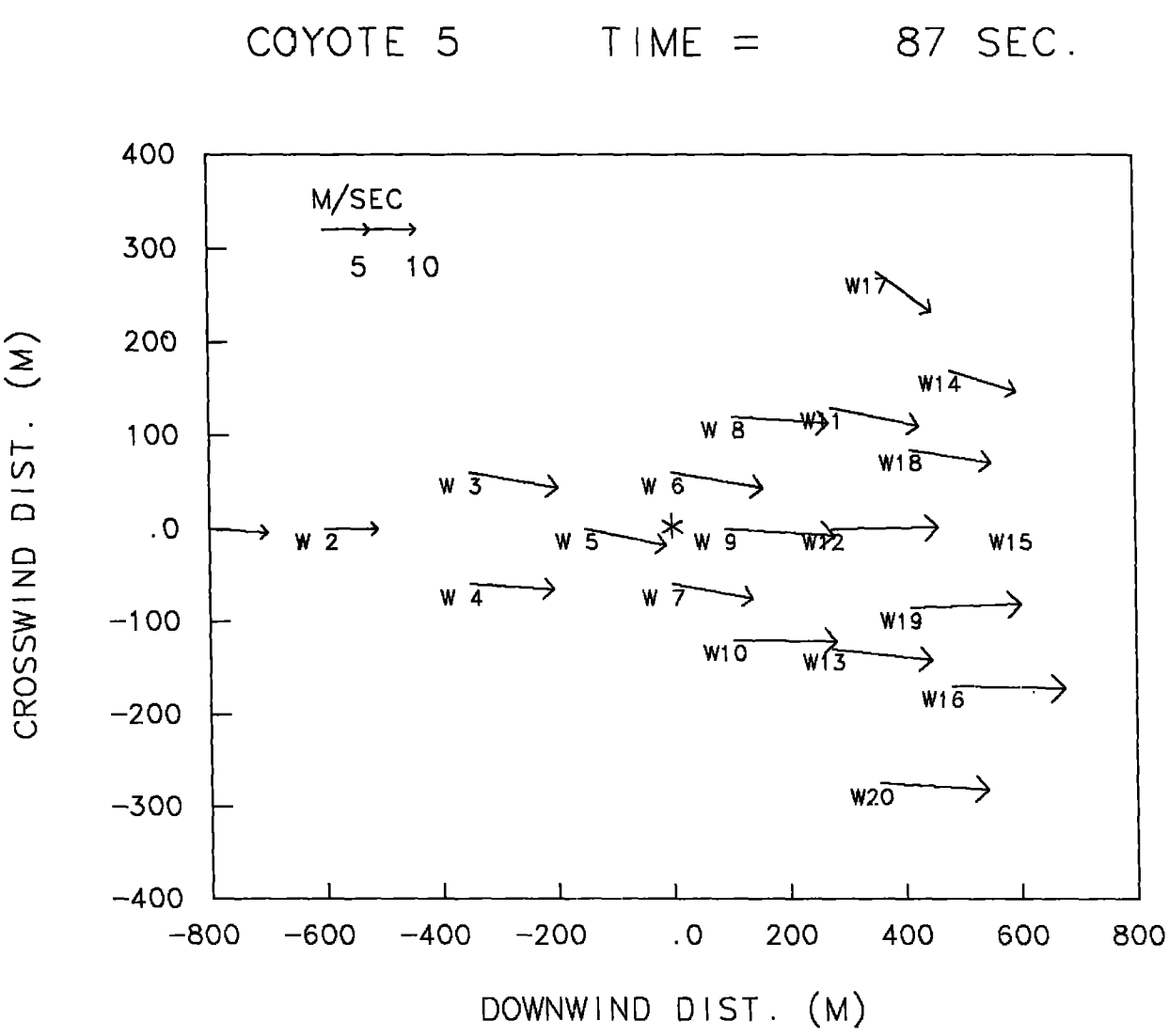
COYOTE 5 TIME = 87 SEC.
M/SEC
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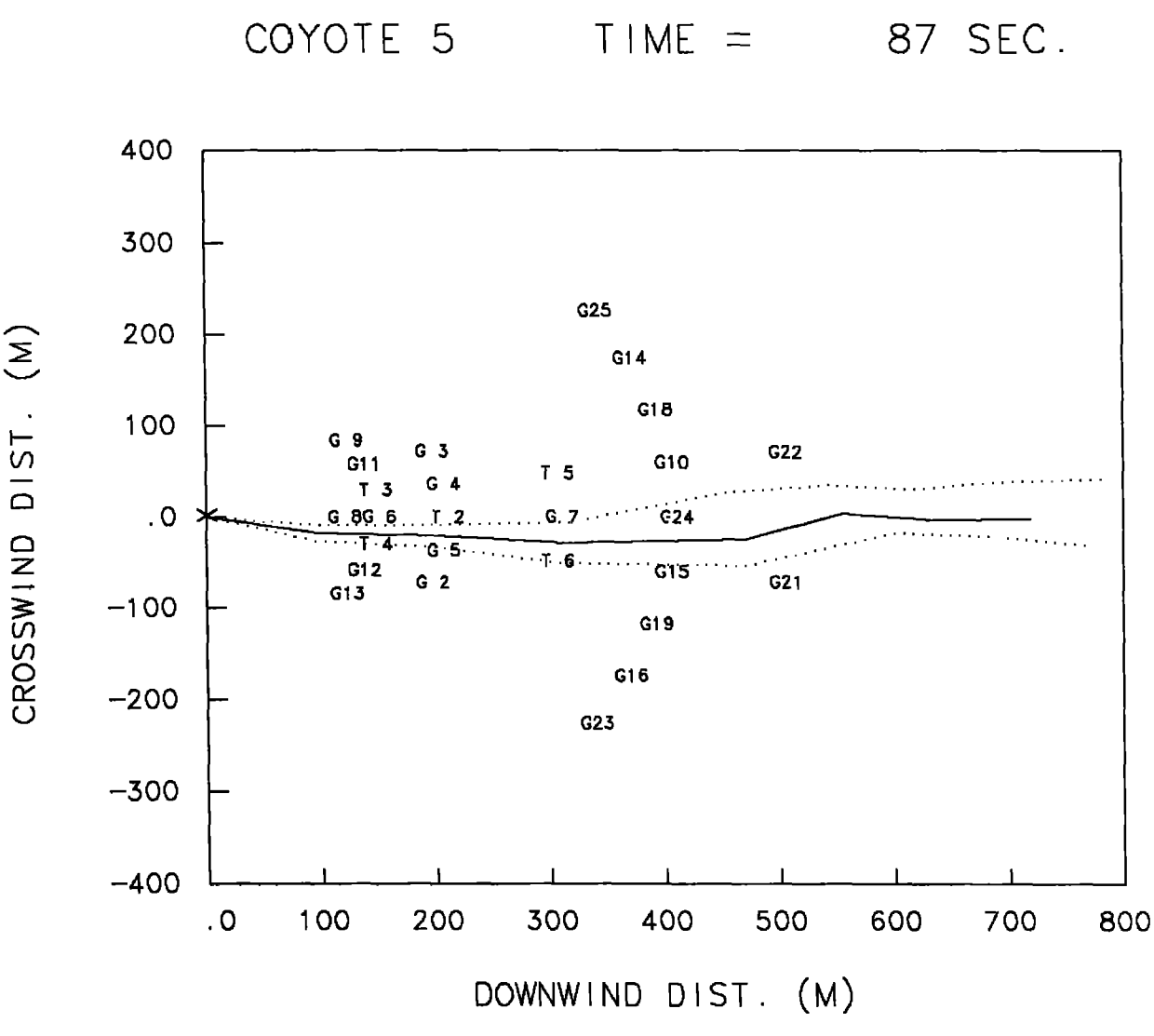
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 5 TIME = 87 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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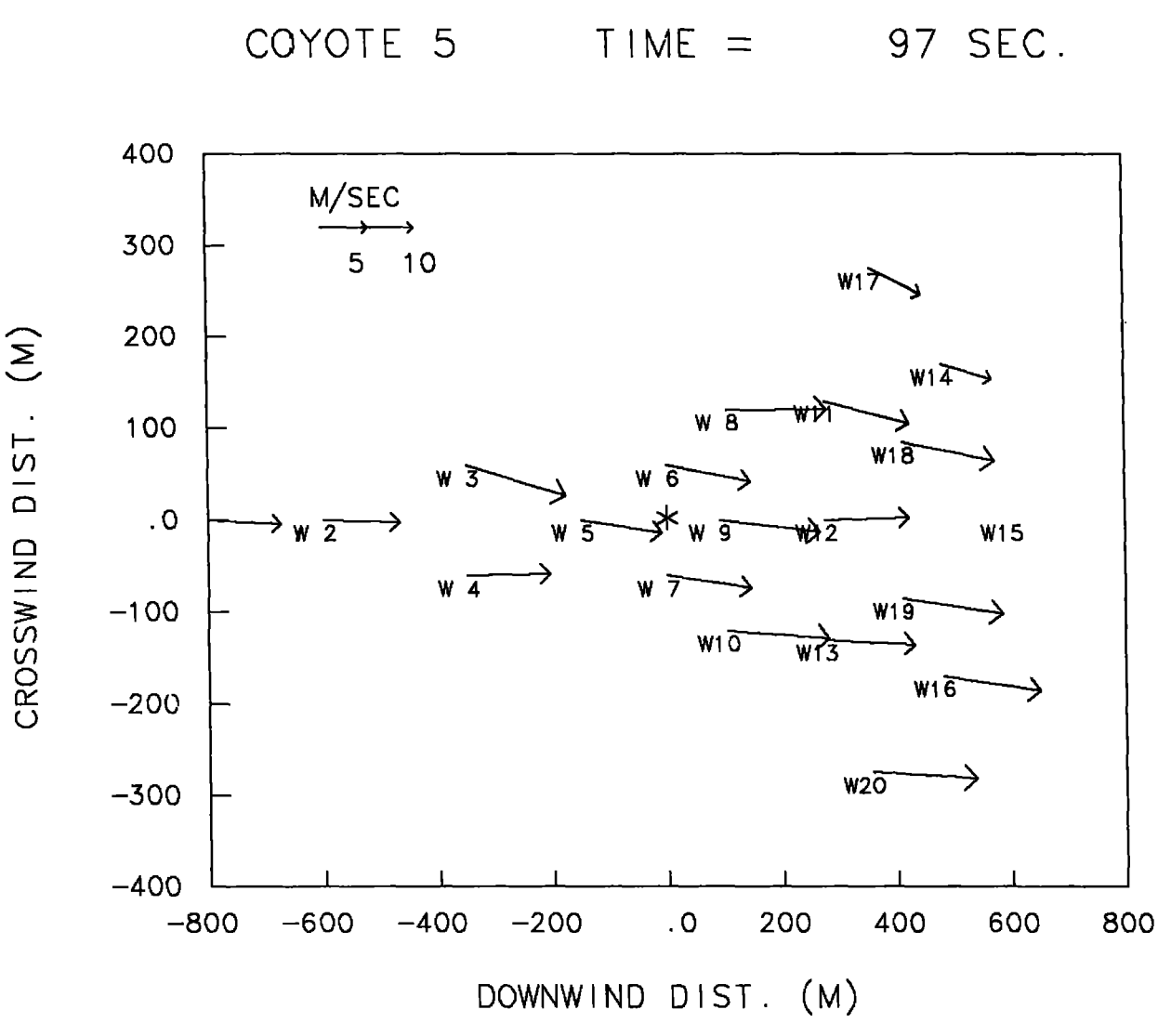
COYOTE 5 TIME = 97 SEC.
M/SEC
5 10
W17
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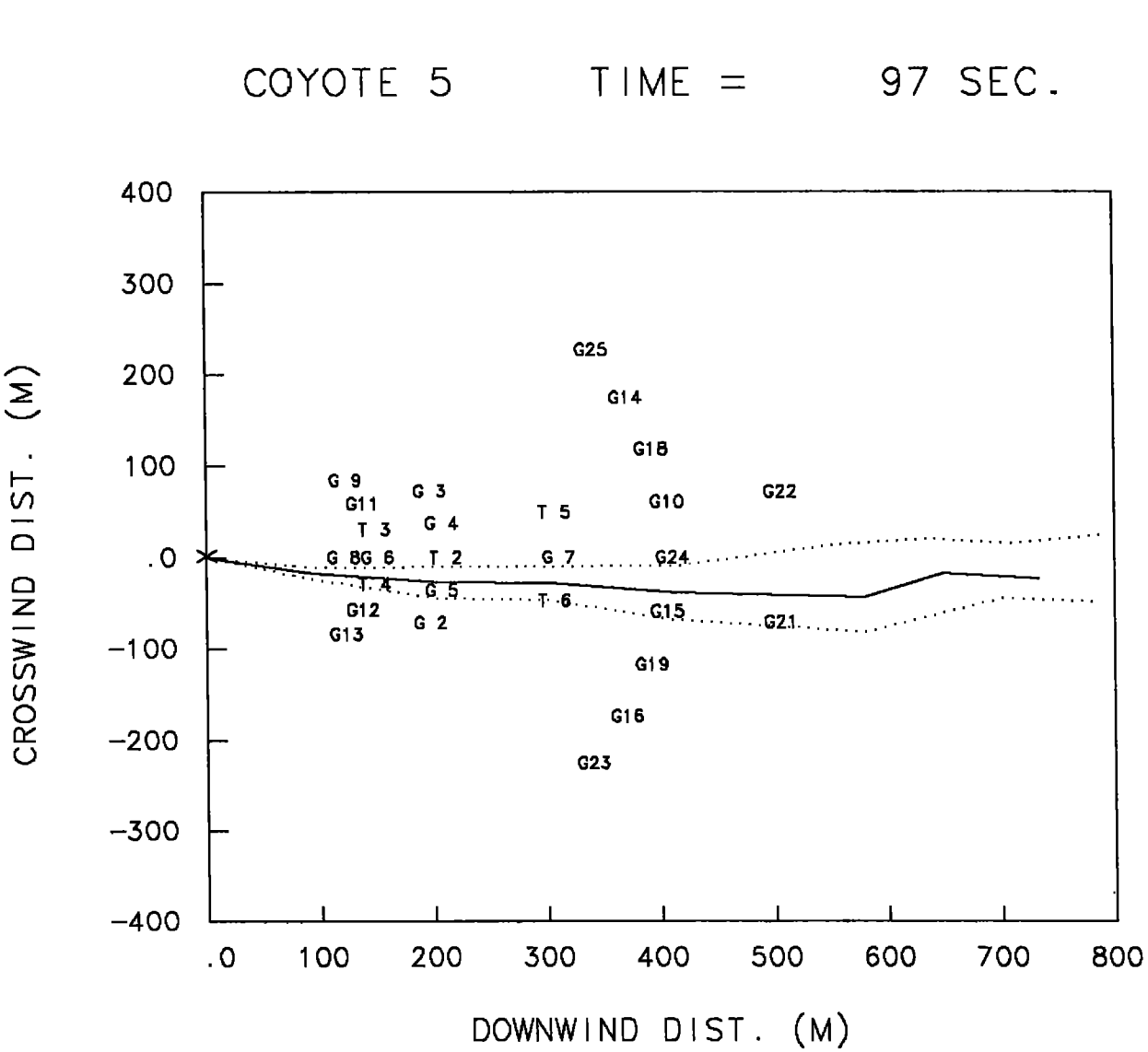
-800 -600 -400 -200 .0 200 400 600 800
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 5 TIME = 97 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
400
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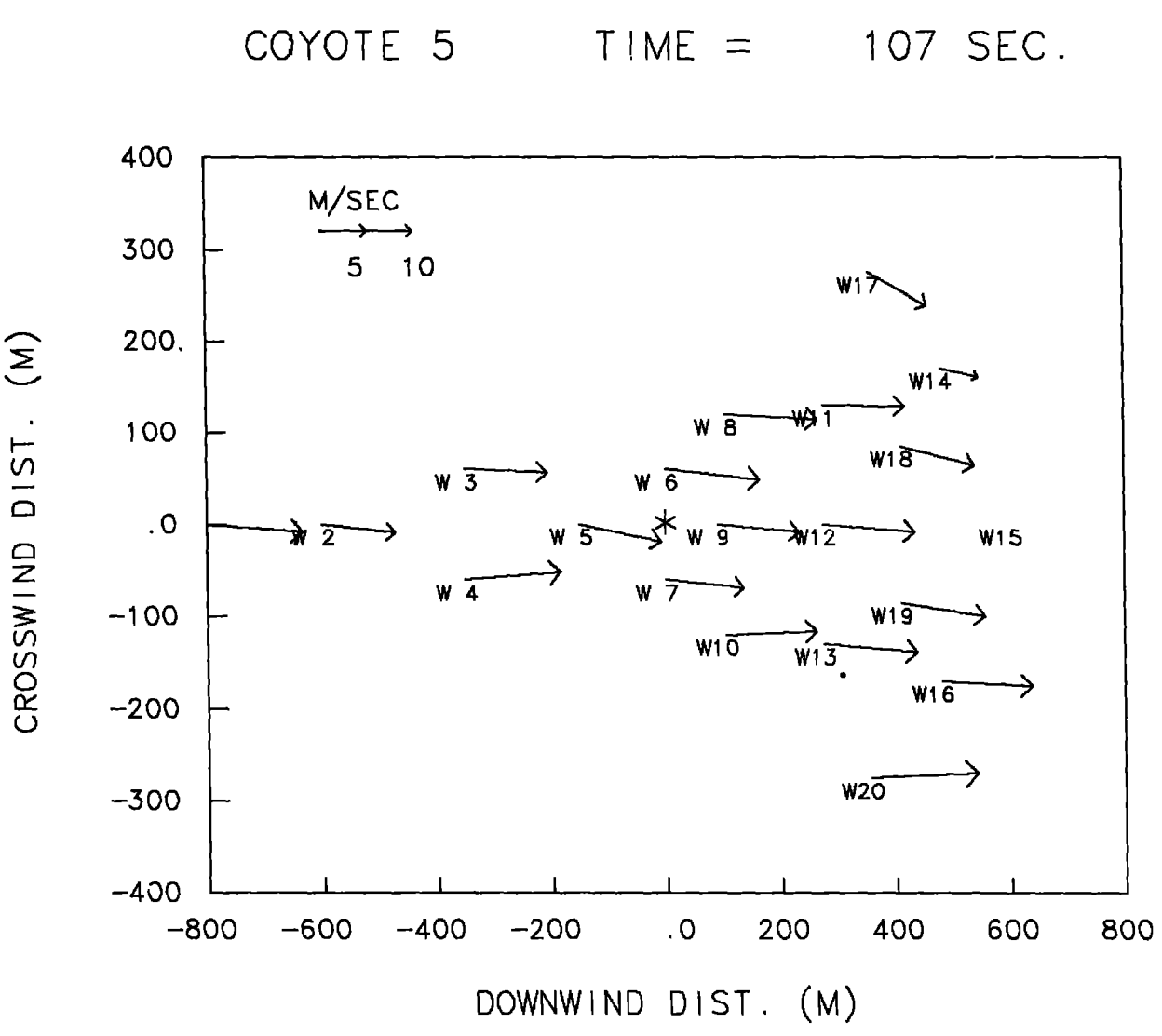
COYOTE 5 TIME = 107 SEC.
M/SEC
5 10
W17
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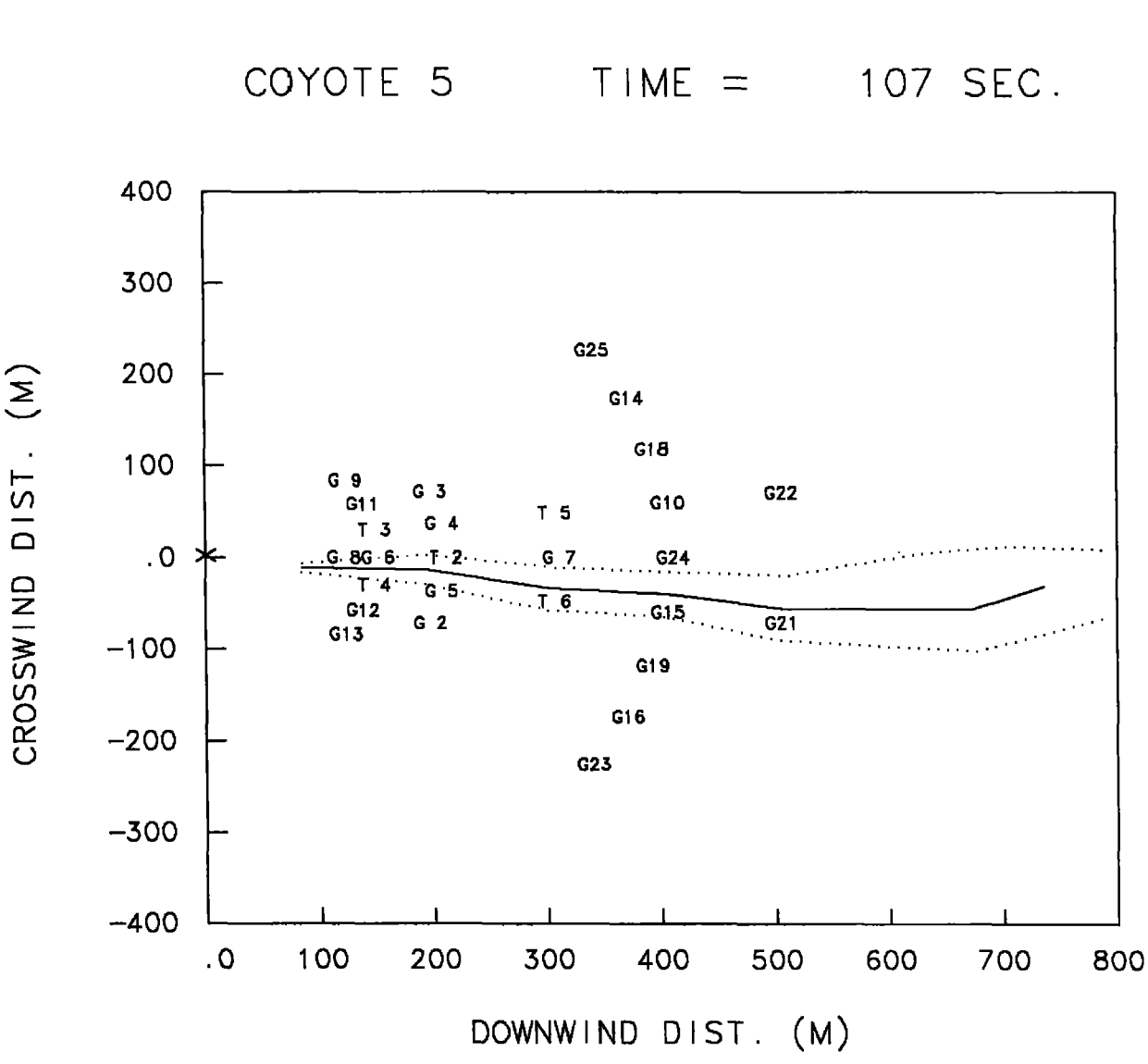
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 5 TIME = 107 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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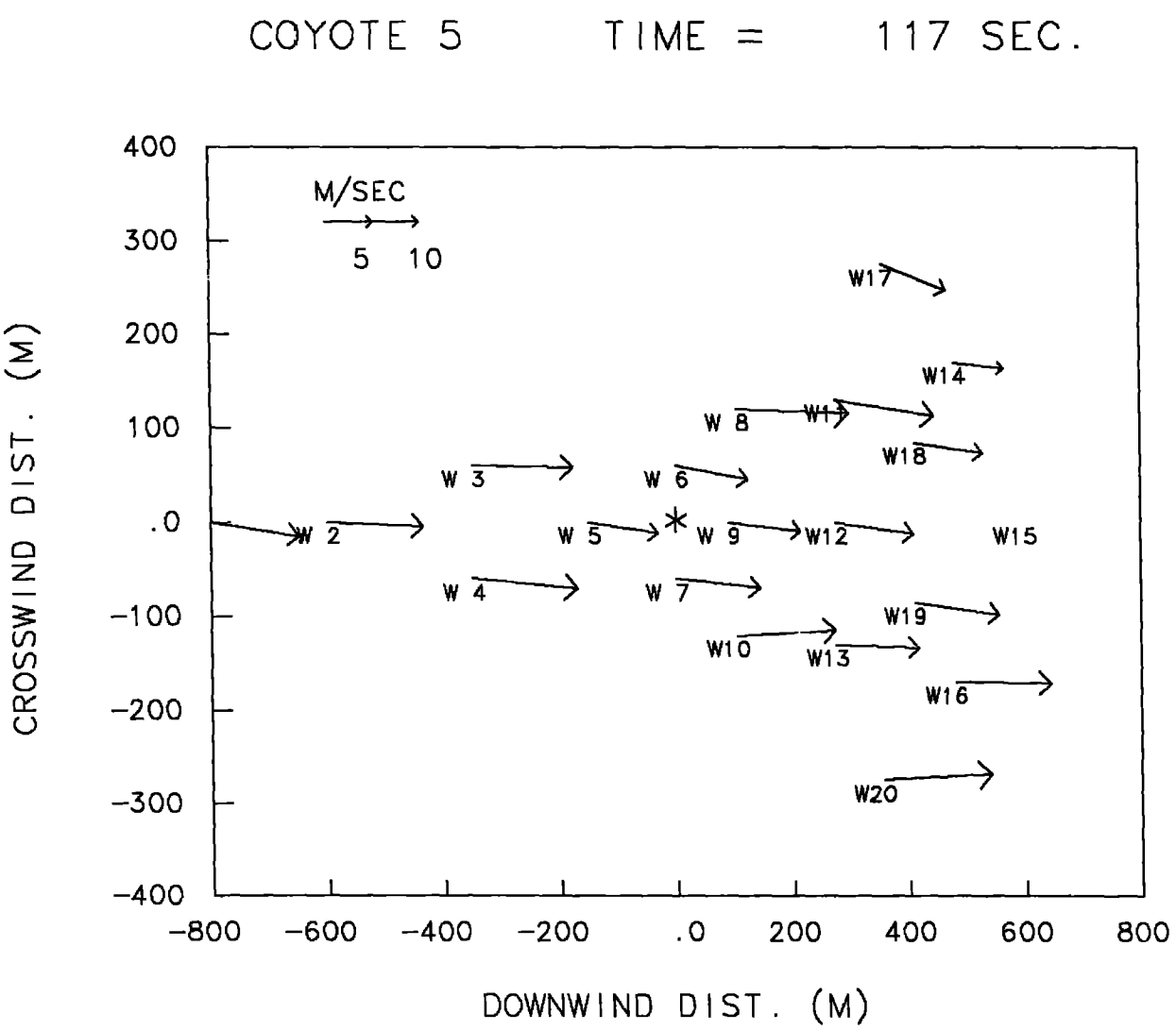
COYOTE 5 TIME = 117 SEC.
M/SEC
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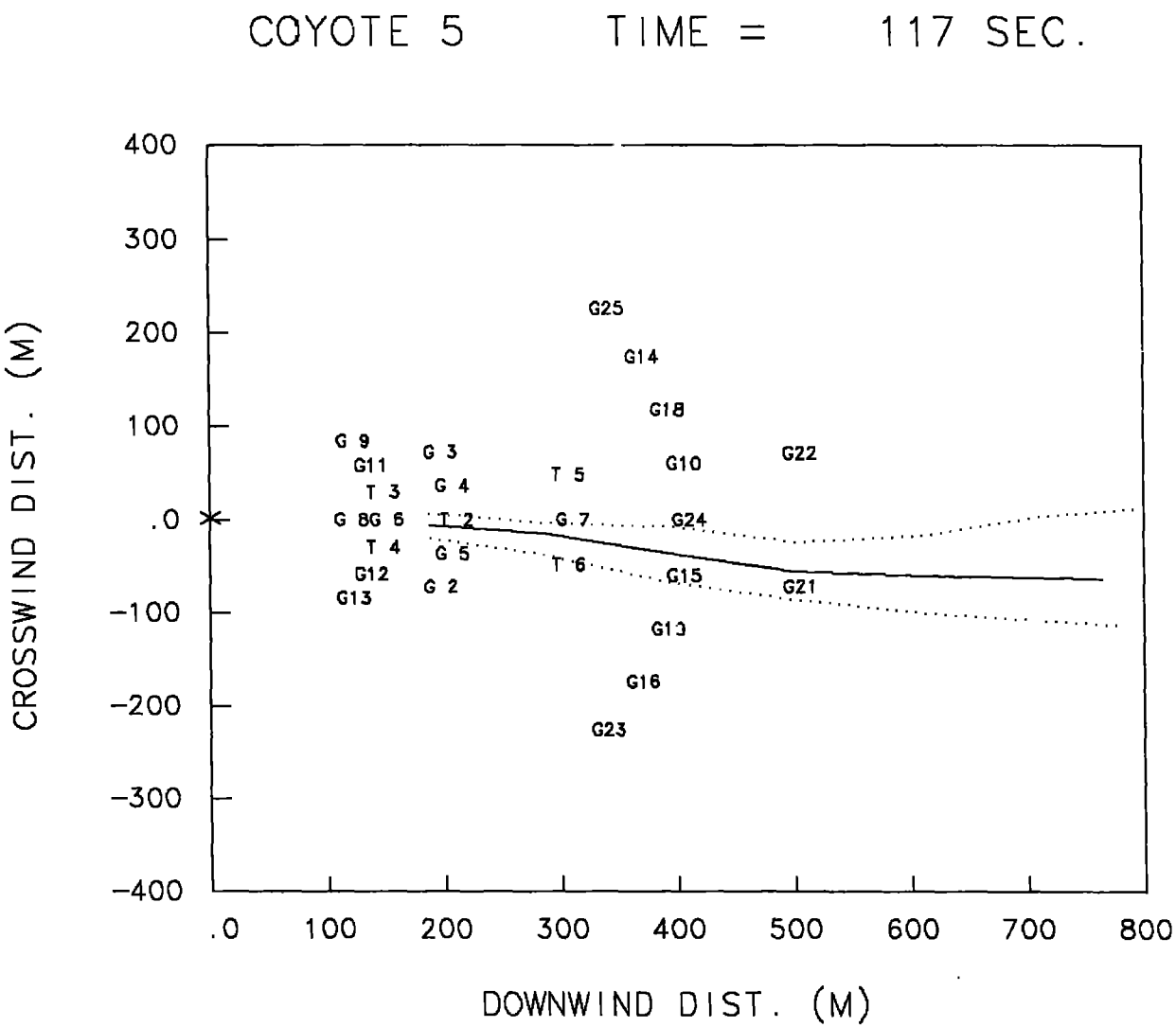
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 5 TIME = 117 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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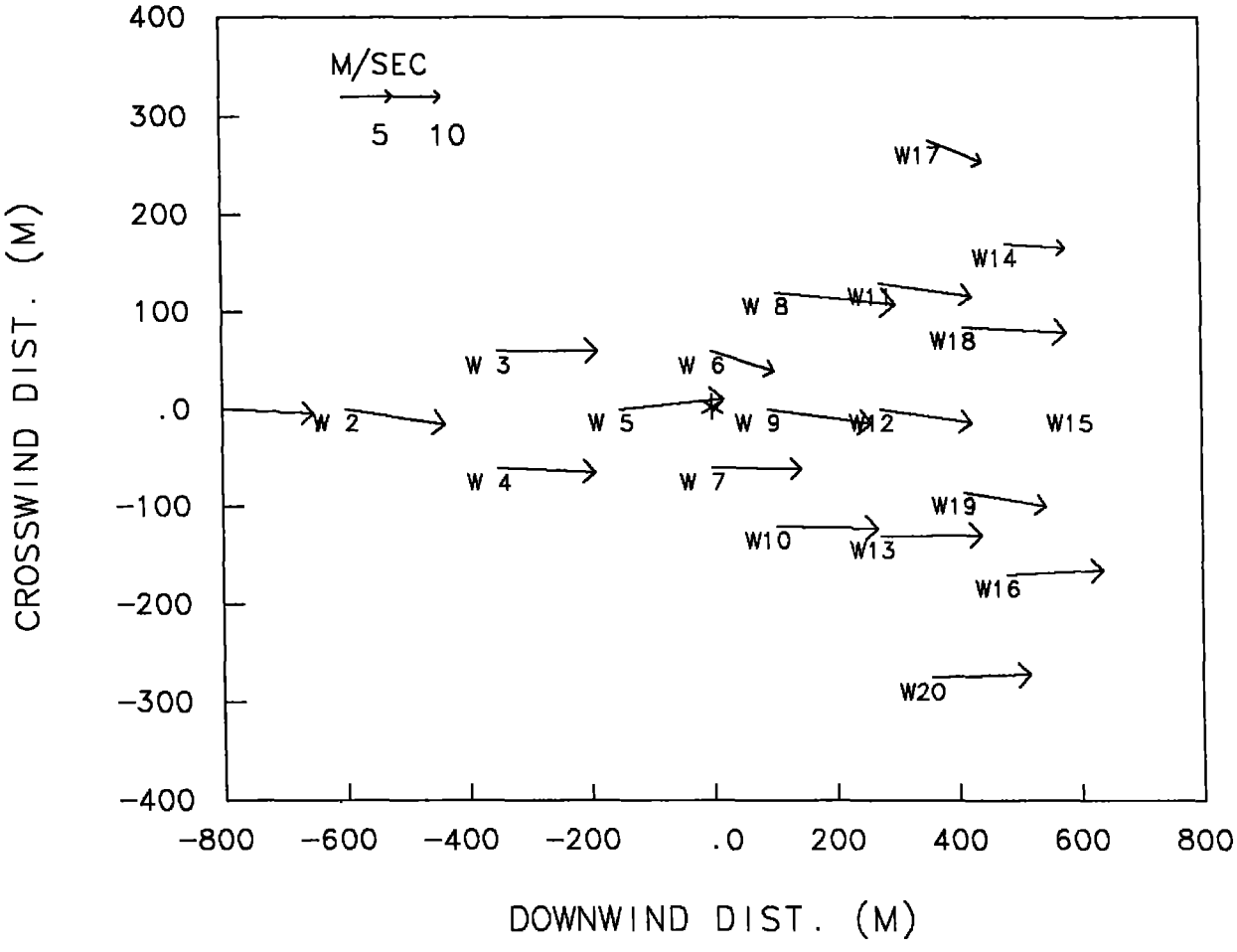
COYOTE 5 TIME = 127 SEC.
M/SEC
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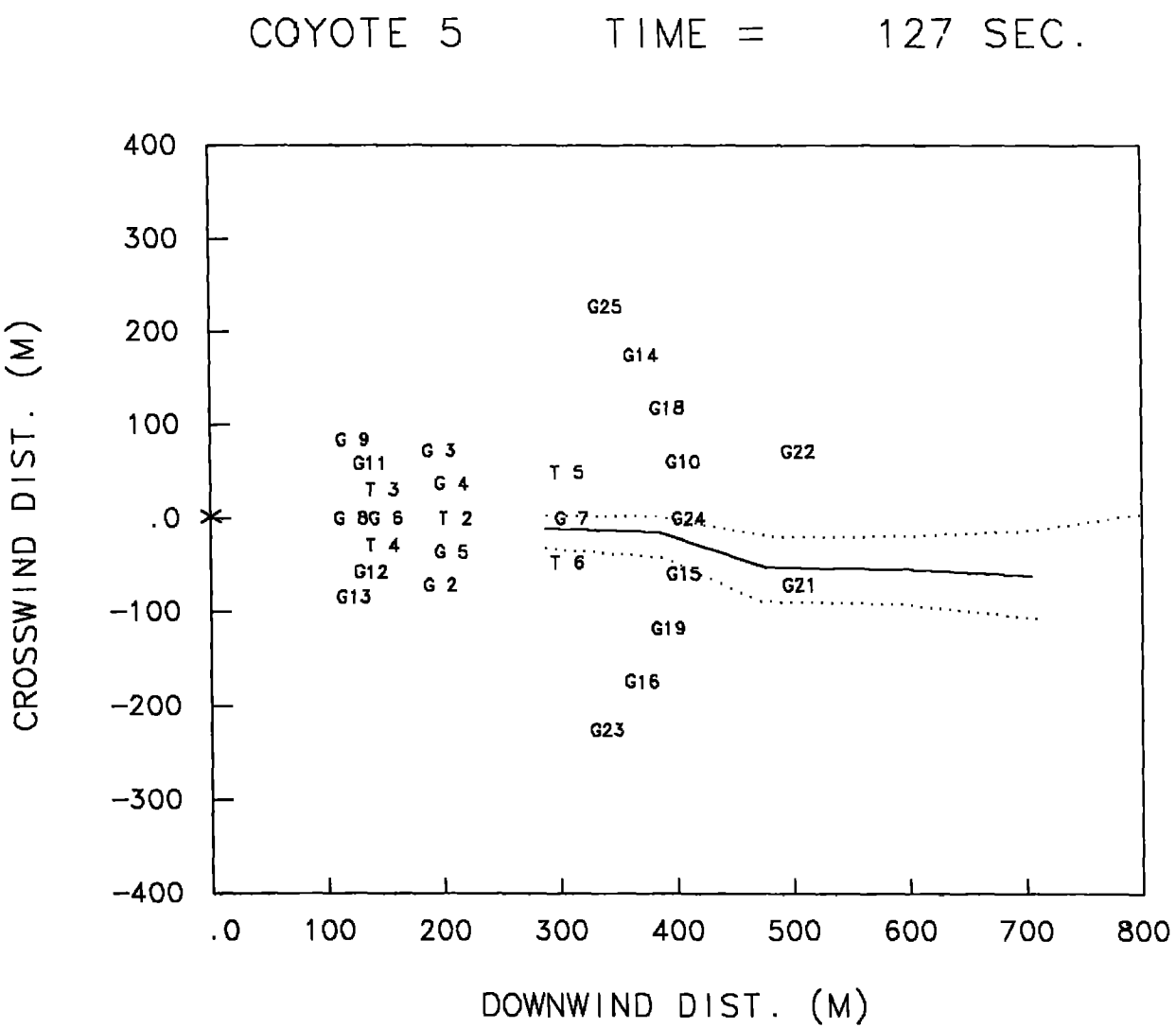
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 5 TIME = 127 SEC.
CROSSWIND DIST. (M)
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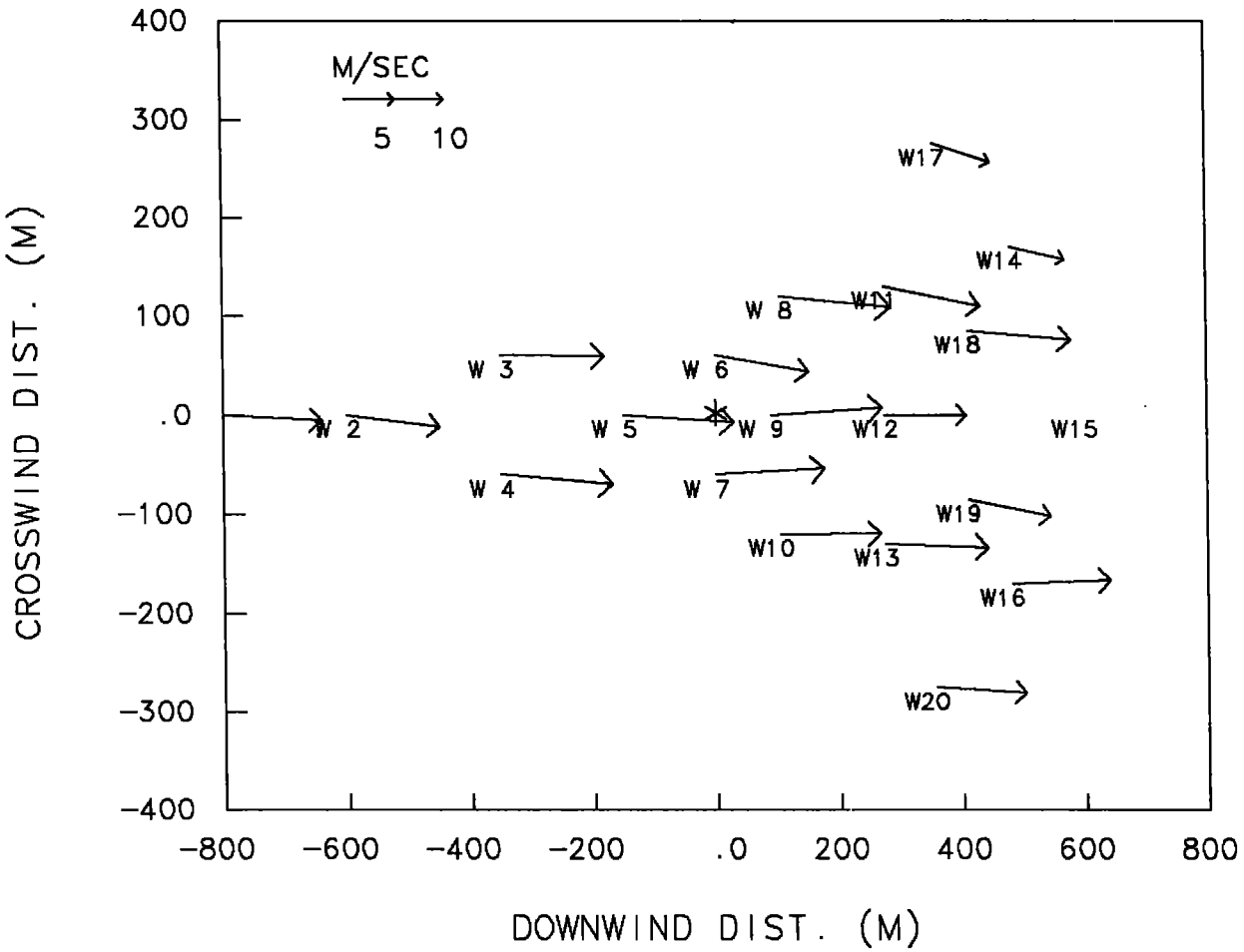
COYOTE 5 TIME = 137 SEC.
M/SEC
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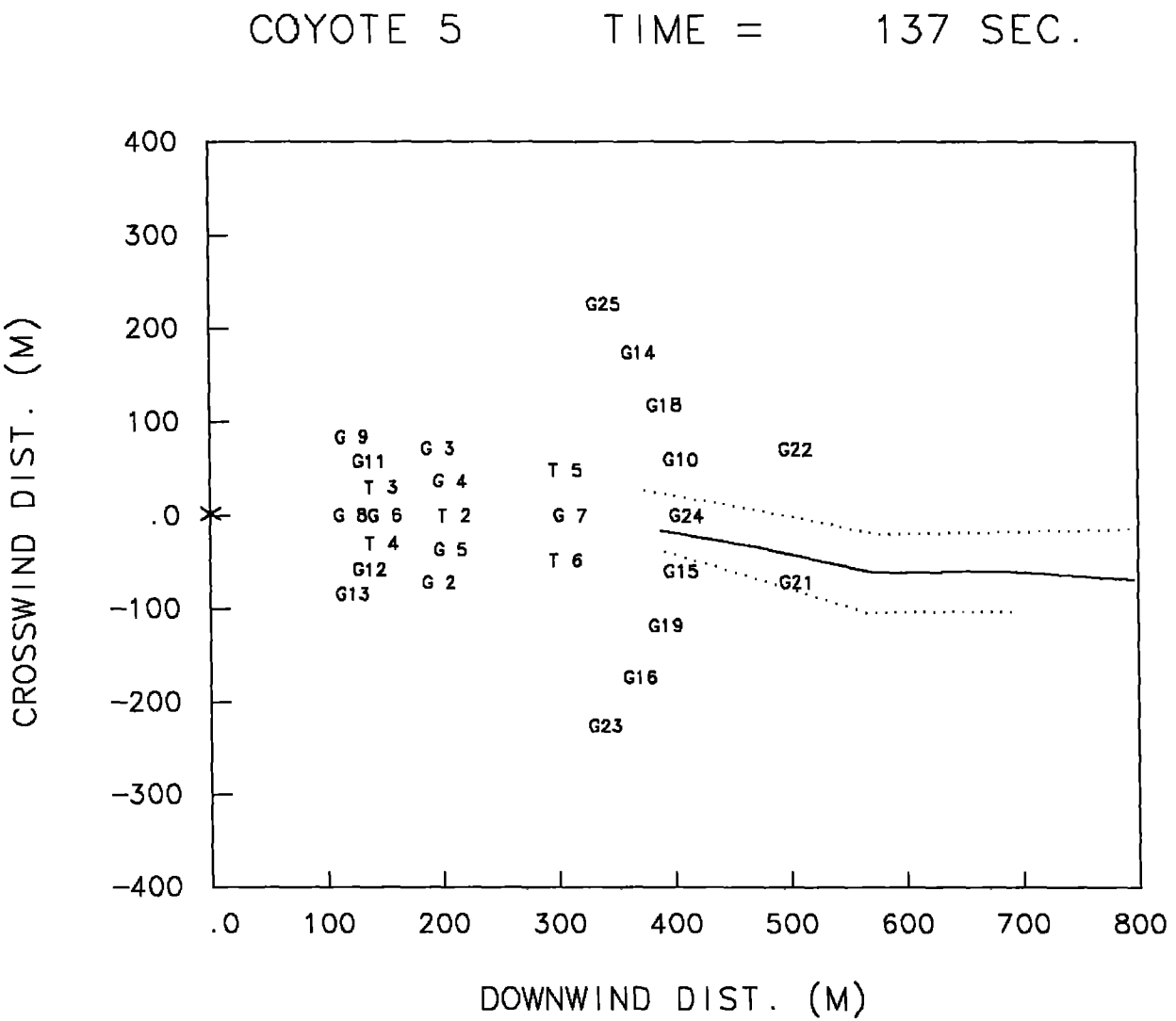
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 5 TIME = 137 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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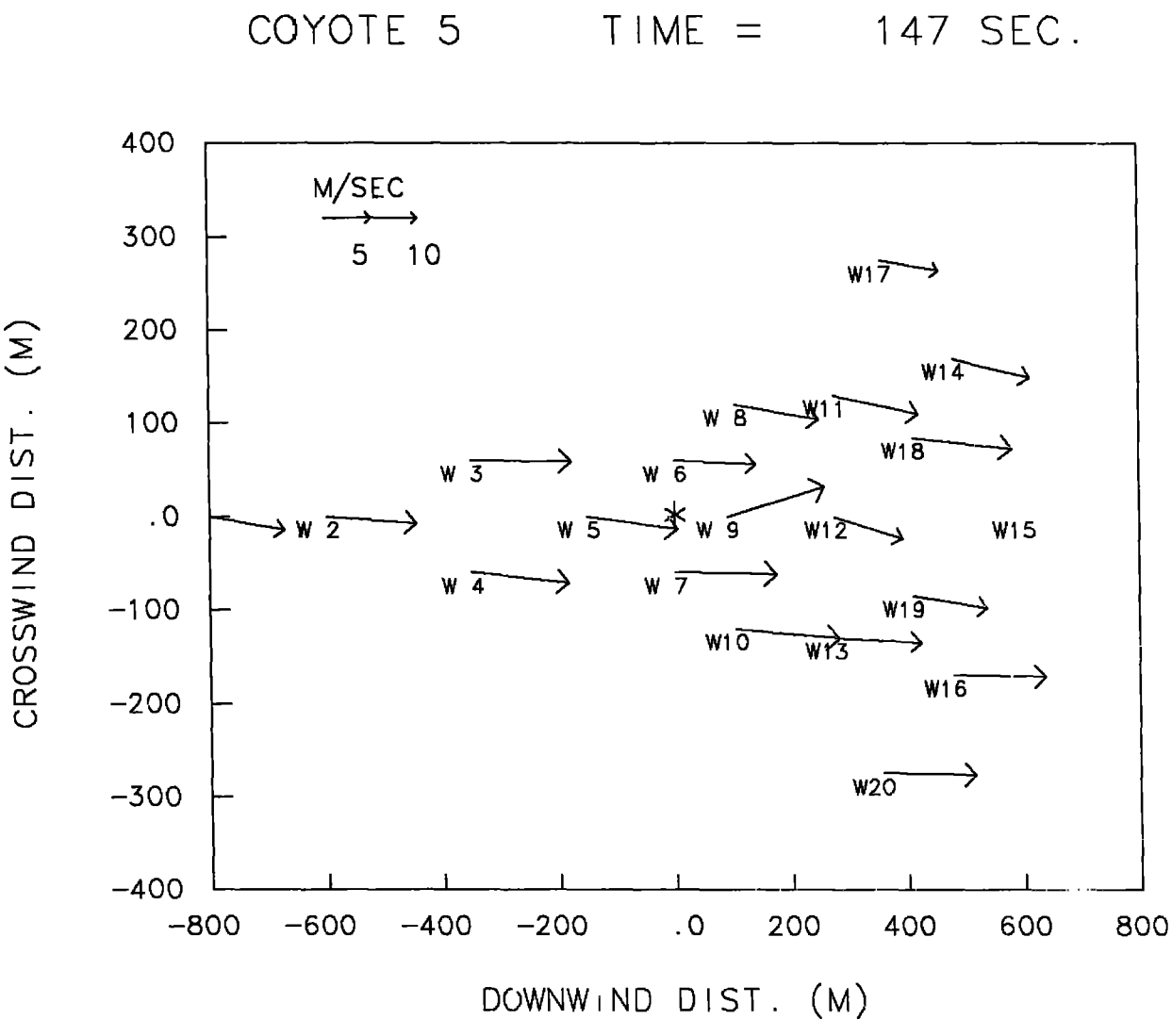
COYOTE 5 TIME = 147 SEC.
M/SEC
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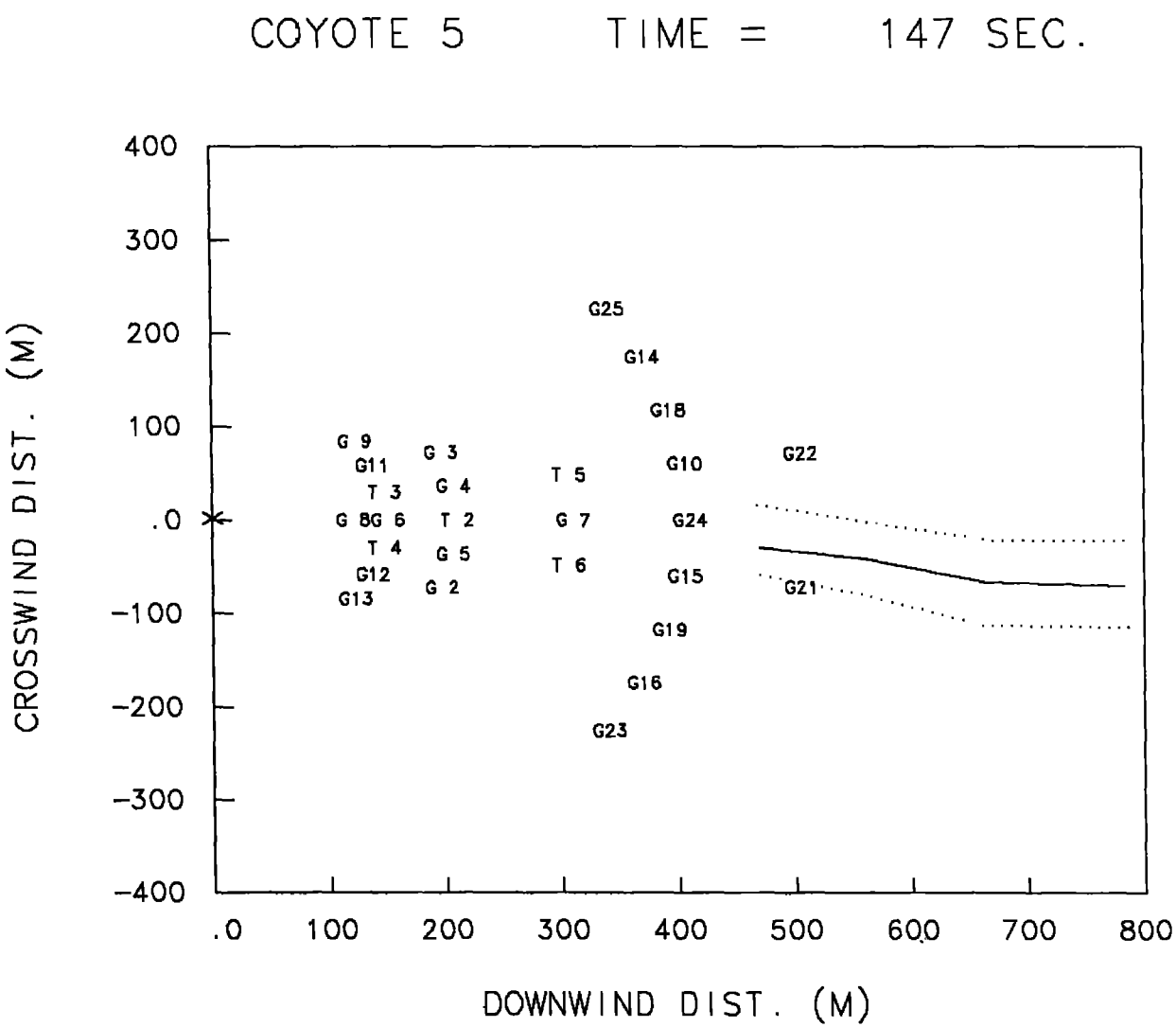
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 5 TIME = 147 SEC.
CROSSWIND DIST. (M)
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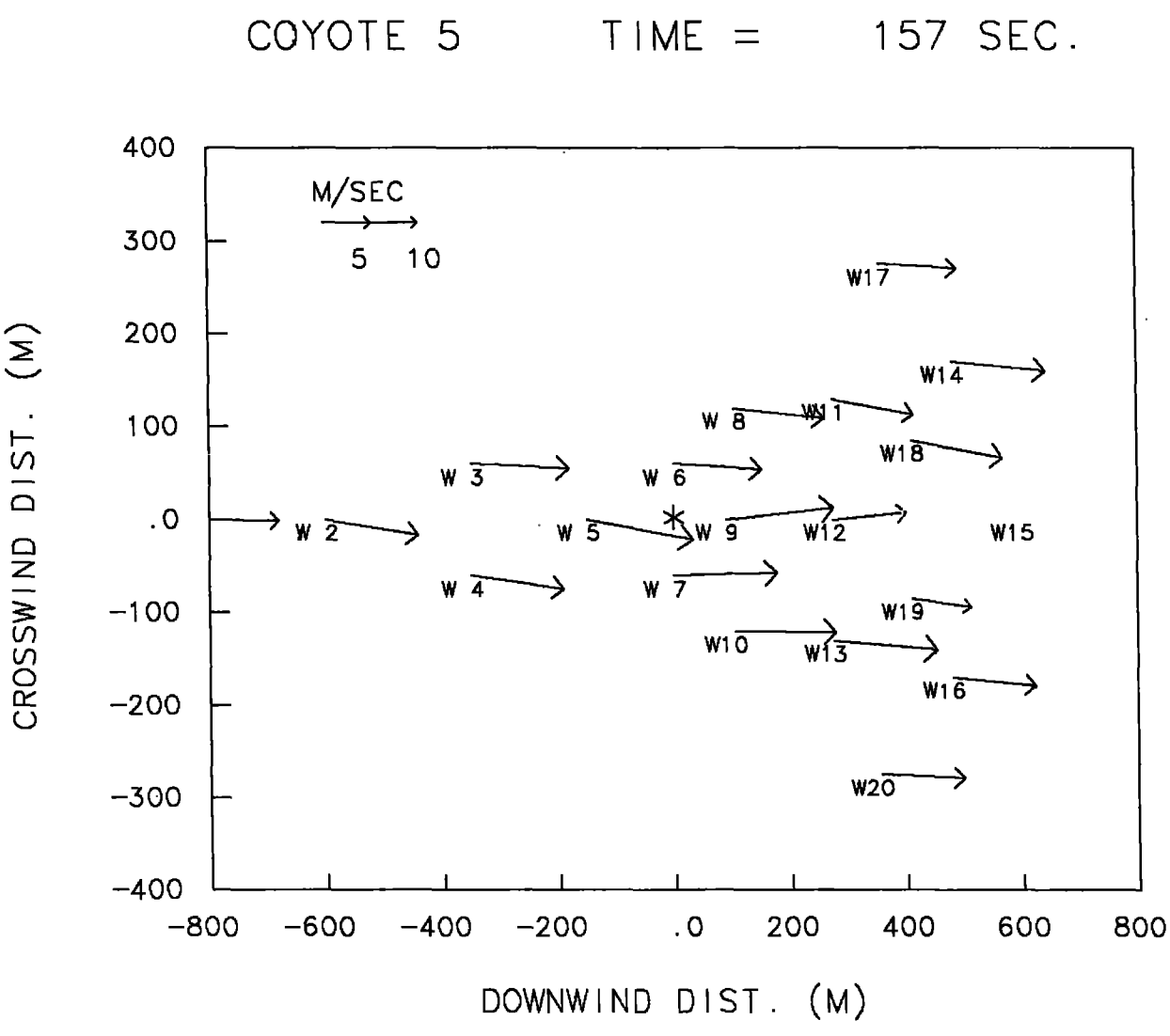
COYOTE 5 TIME = 157 SEC.
M/SEC
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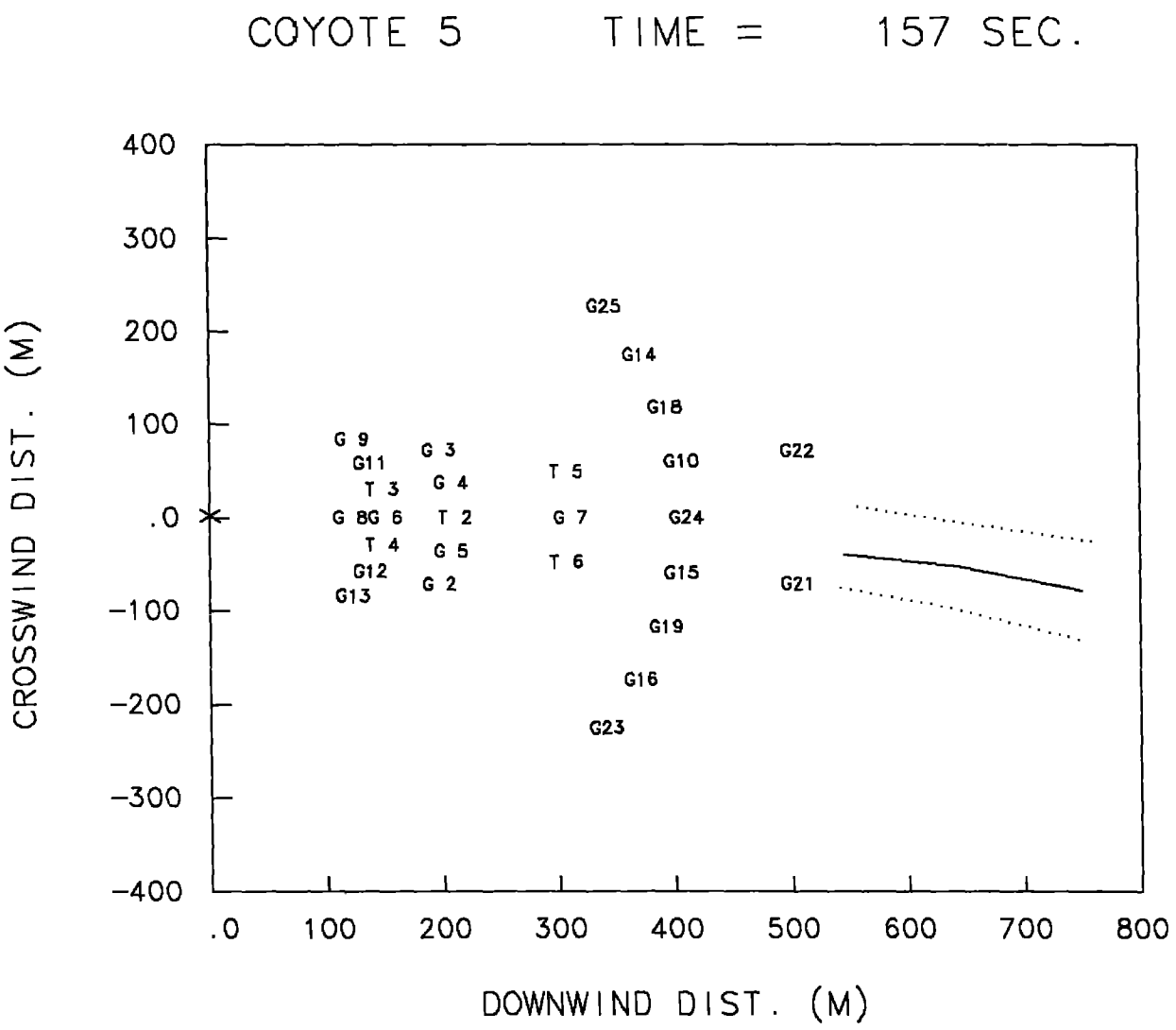
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 5 TIME = 157 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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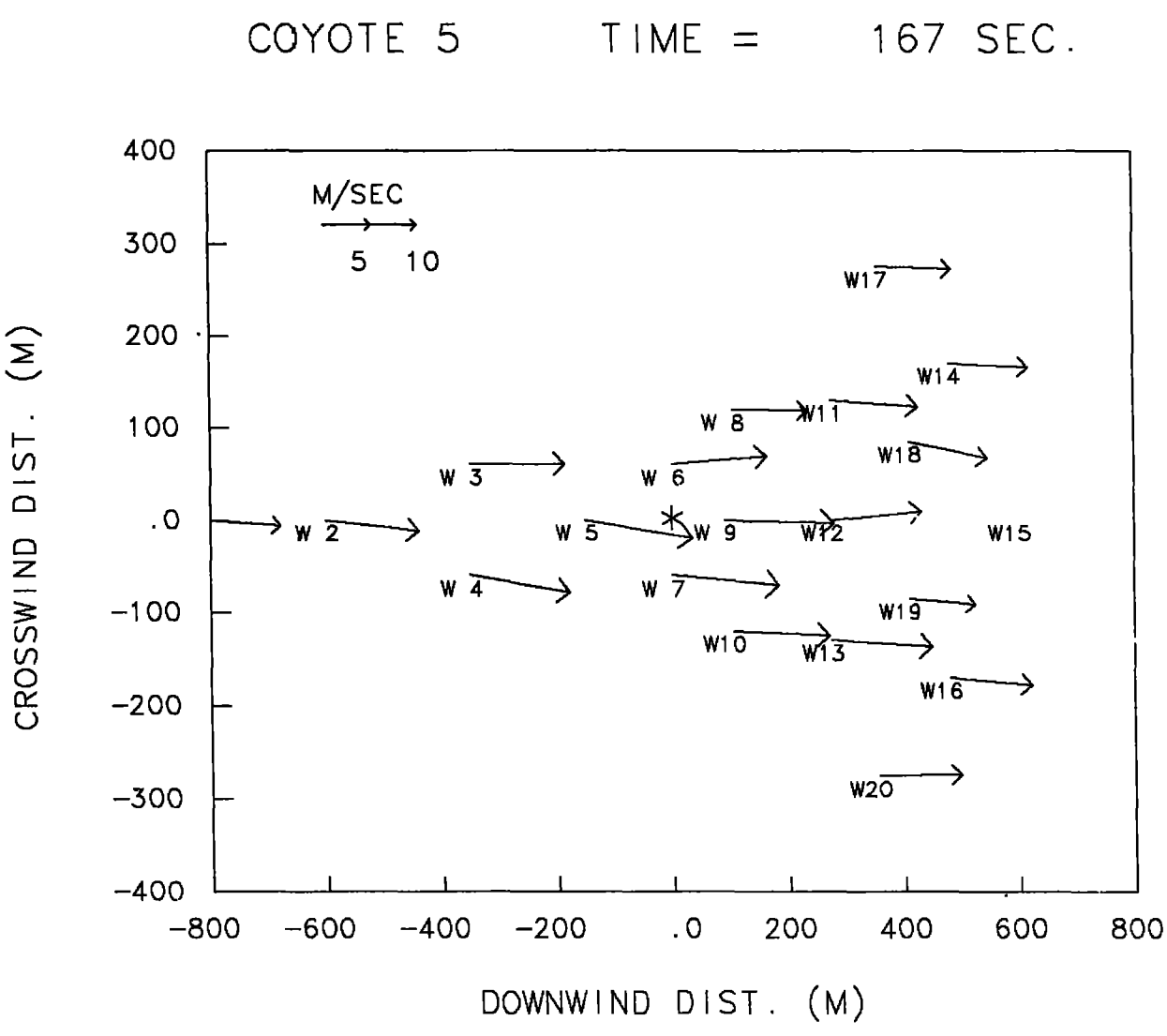
COYOTE 5 TIME = 167 SEC.
M/SEC
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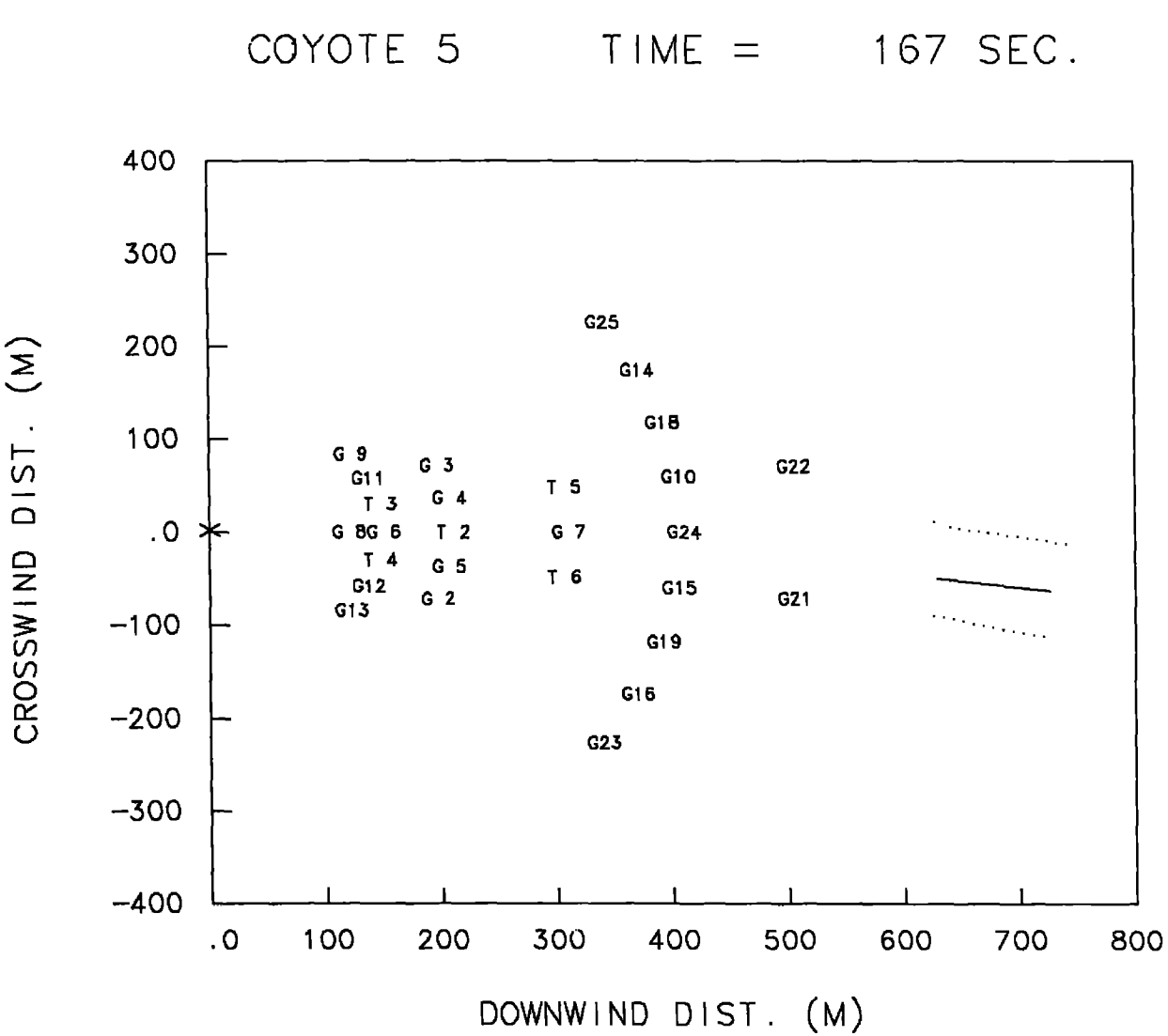
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 5 TIME = 167 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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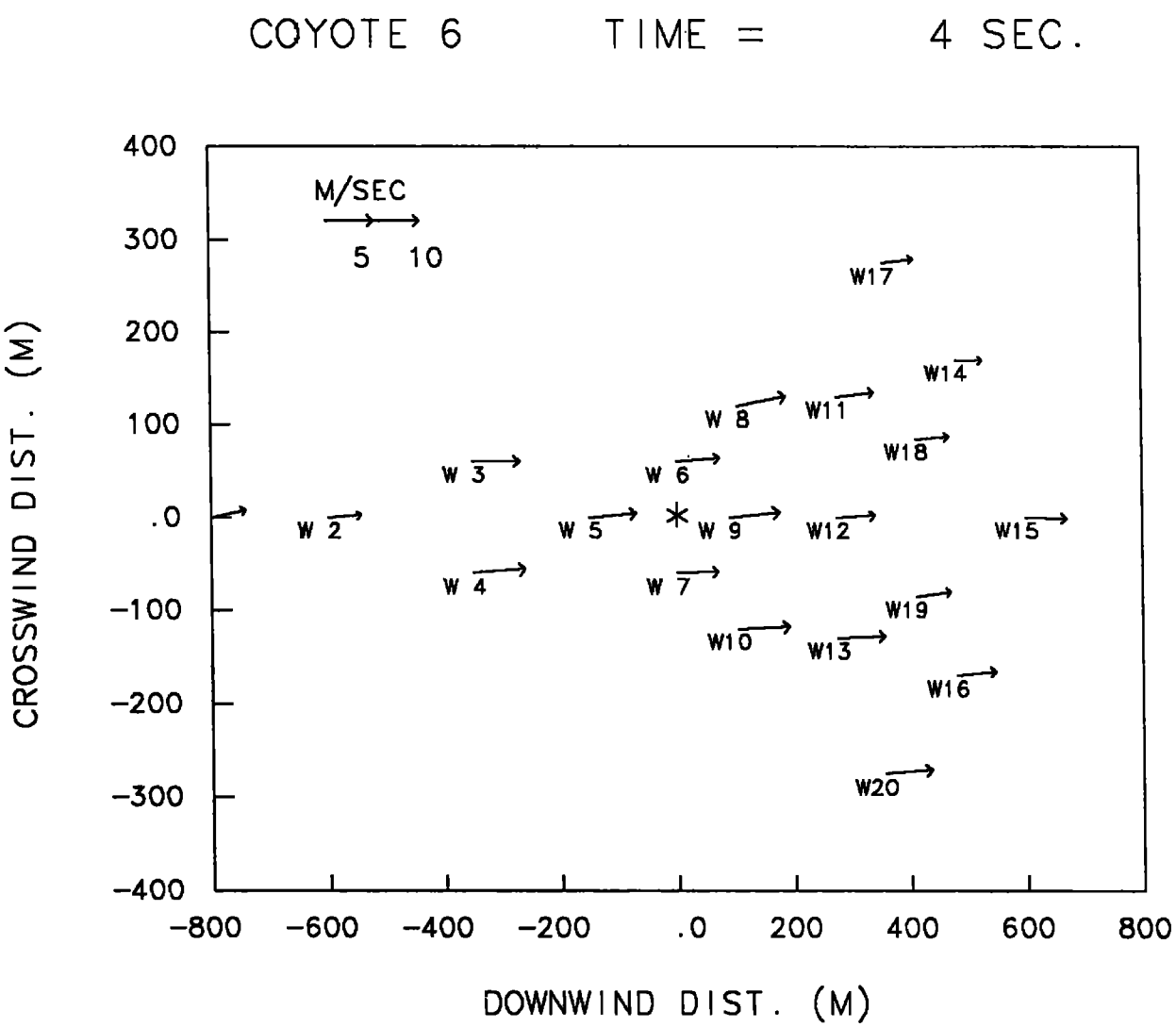
COYOTE 6 TIME = 4 SEC.
M/SEC
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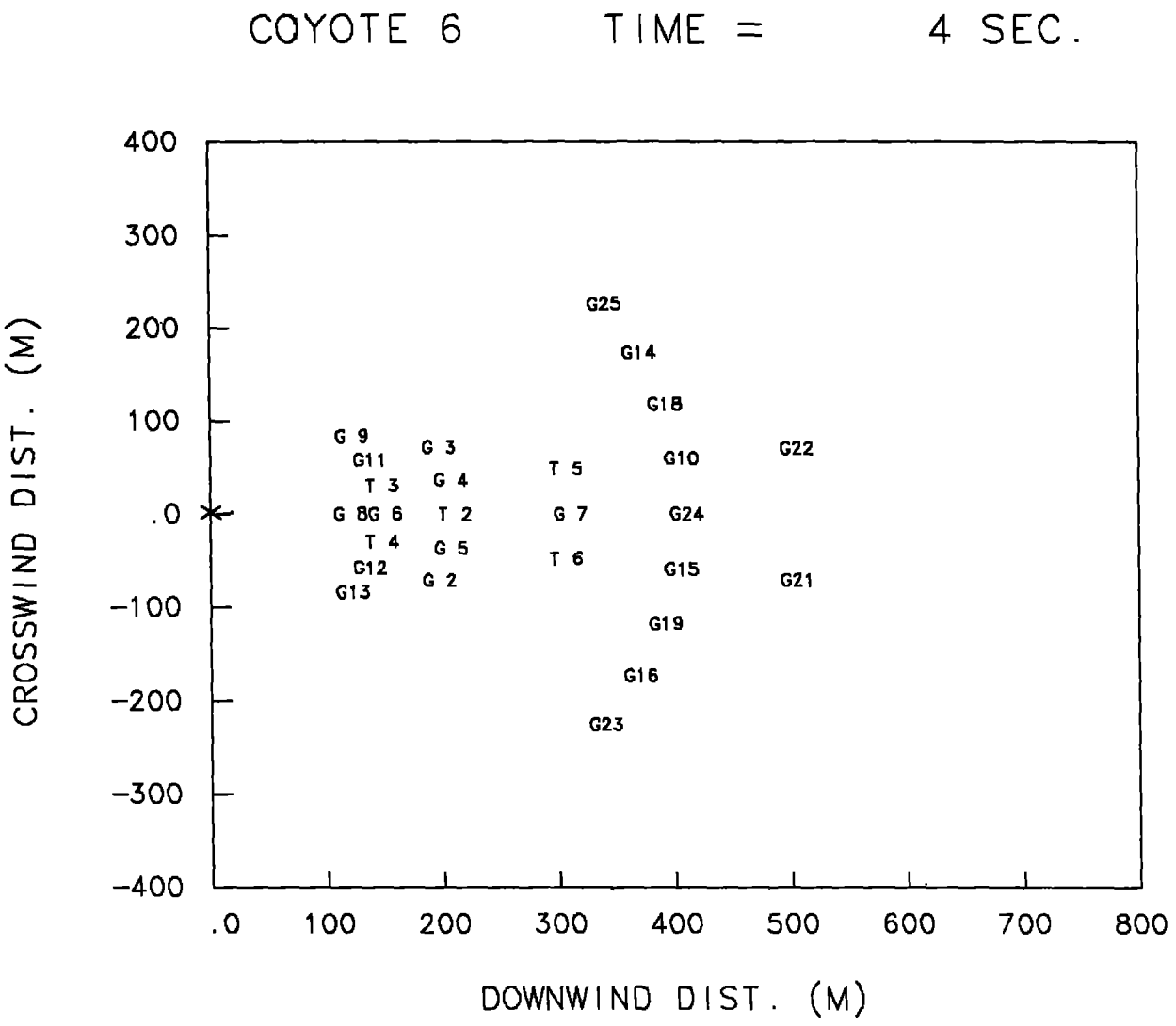
-800 -600 -400 -200 .0 200 400 600 800
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 6 TIME = 4 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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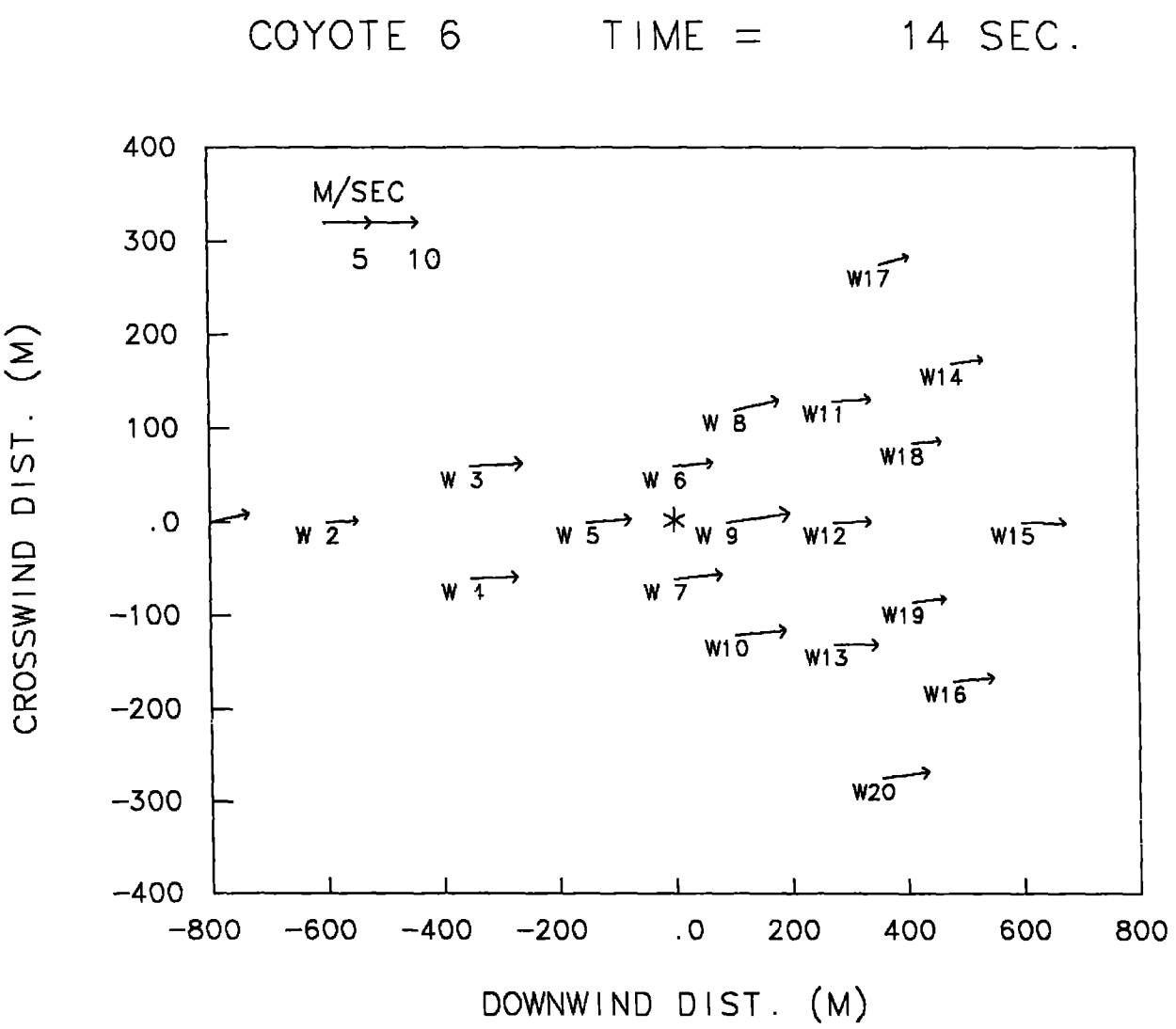
COYOTE 6 TIME = 14 SEC.
M/SEC
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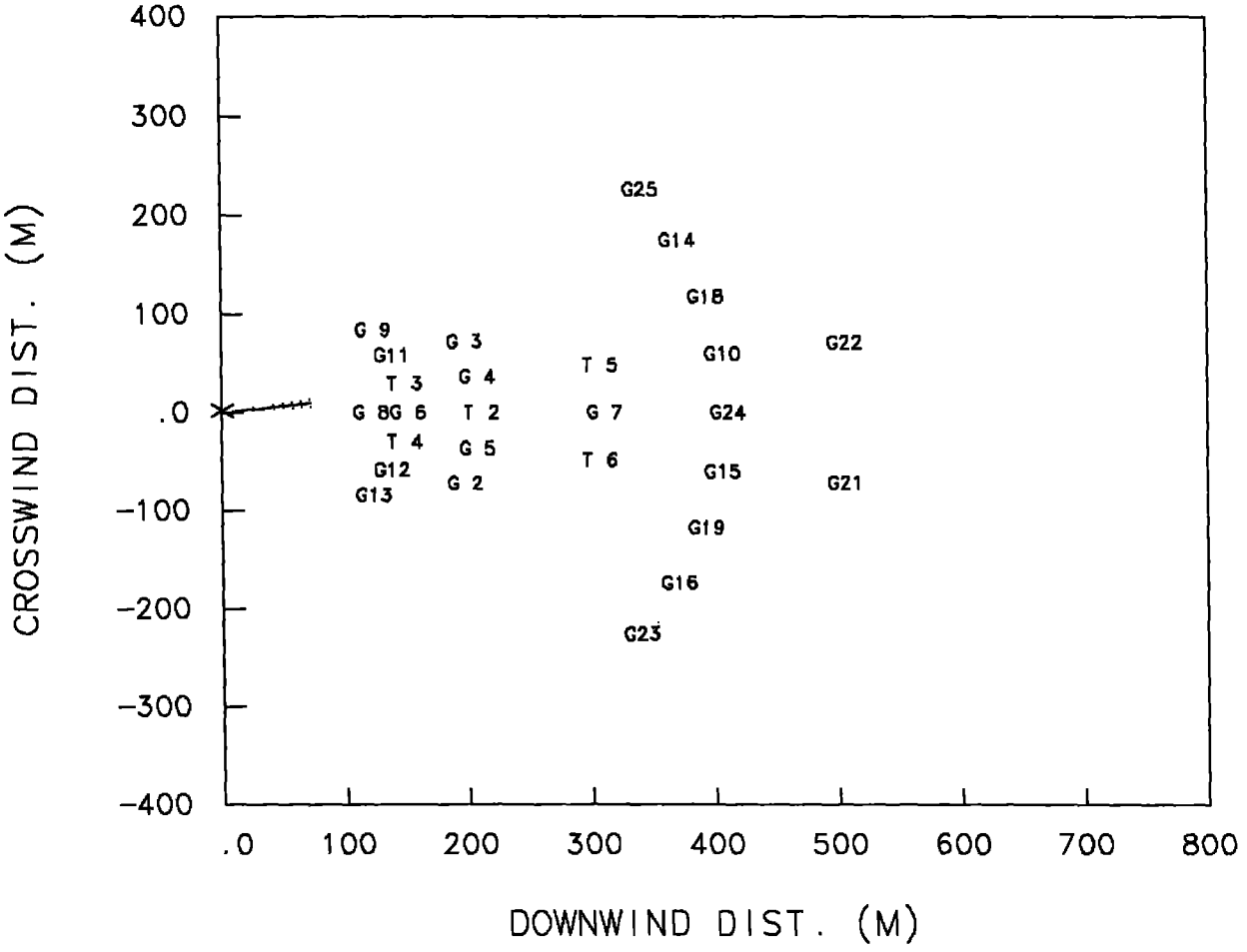
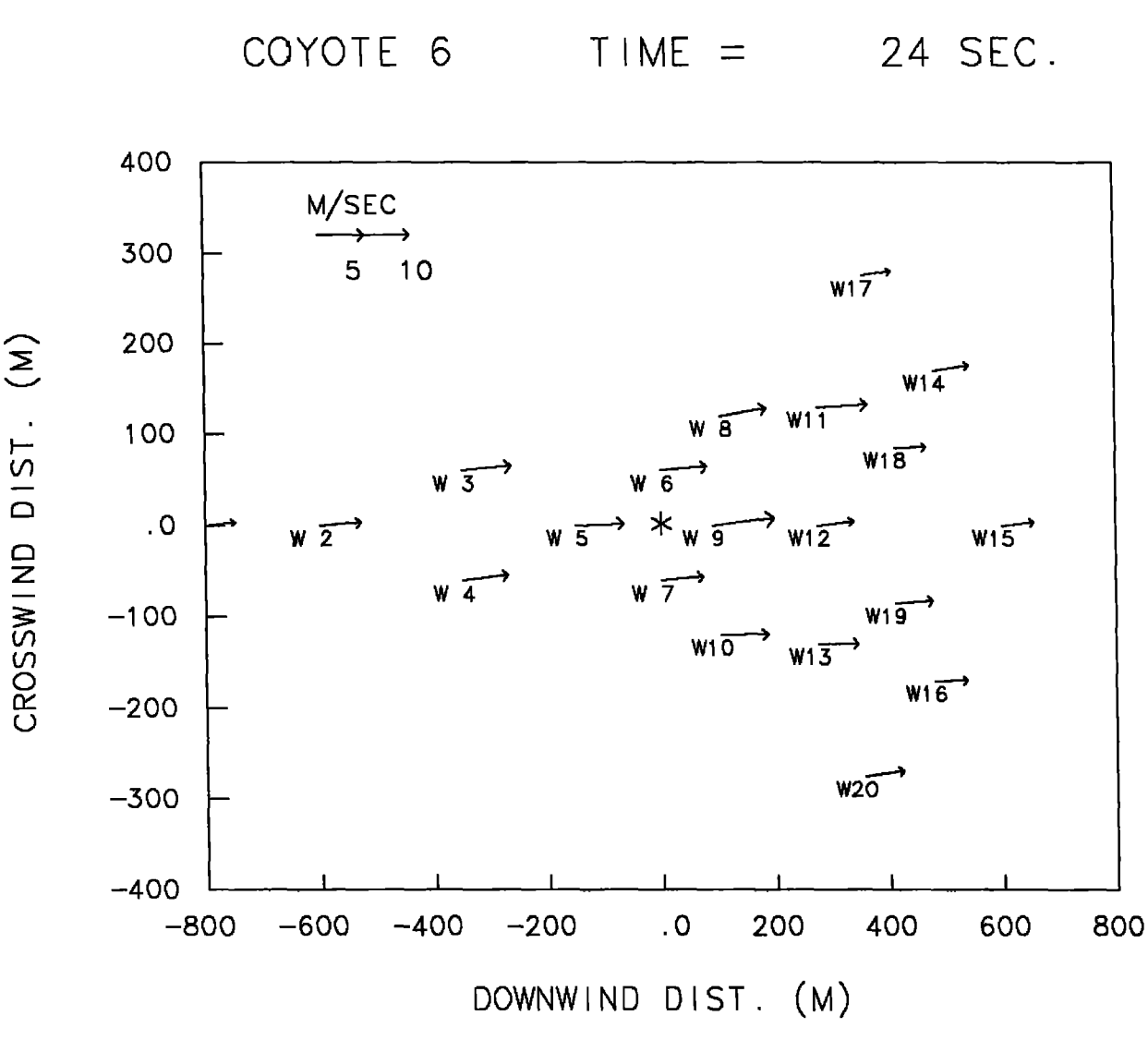
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)

COYOTE 6 TIME = 14 SEC.




COYOTE 6 TIME = 24 SEC.
M/SEC
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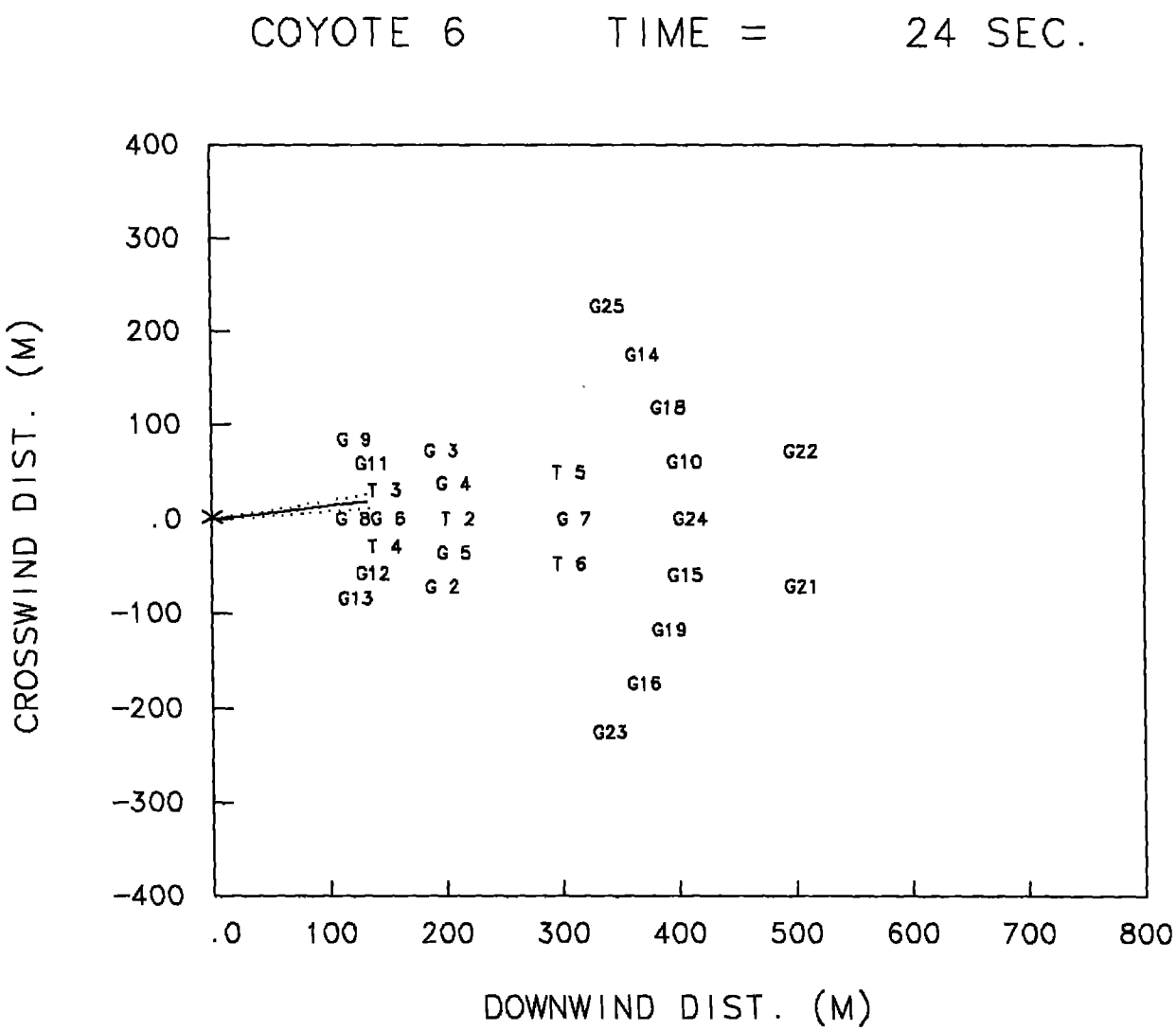
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 6 TIME = 24 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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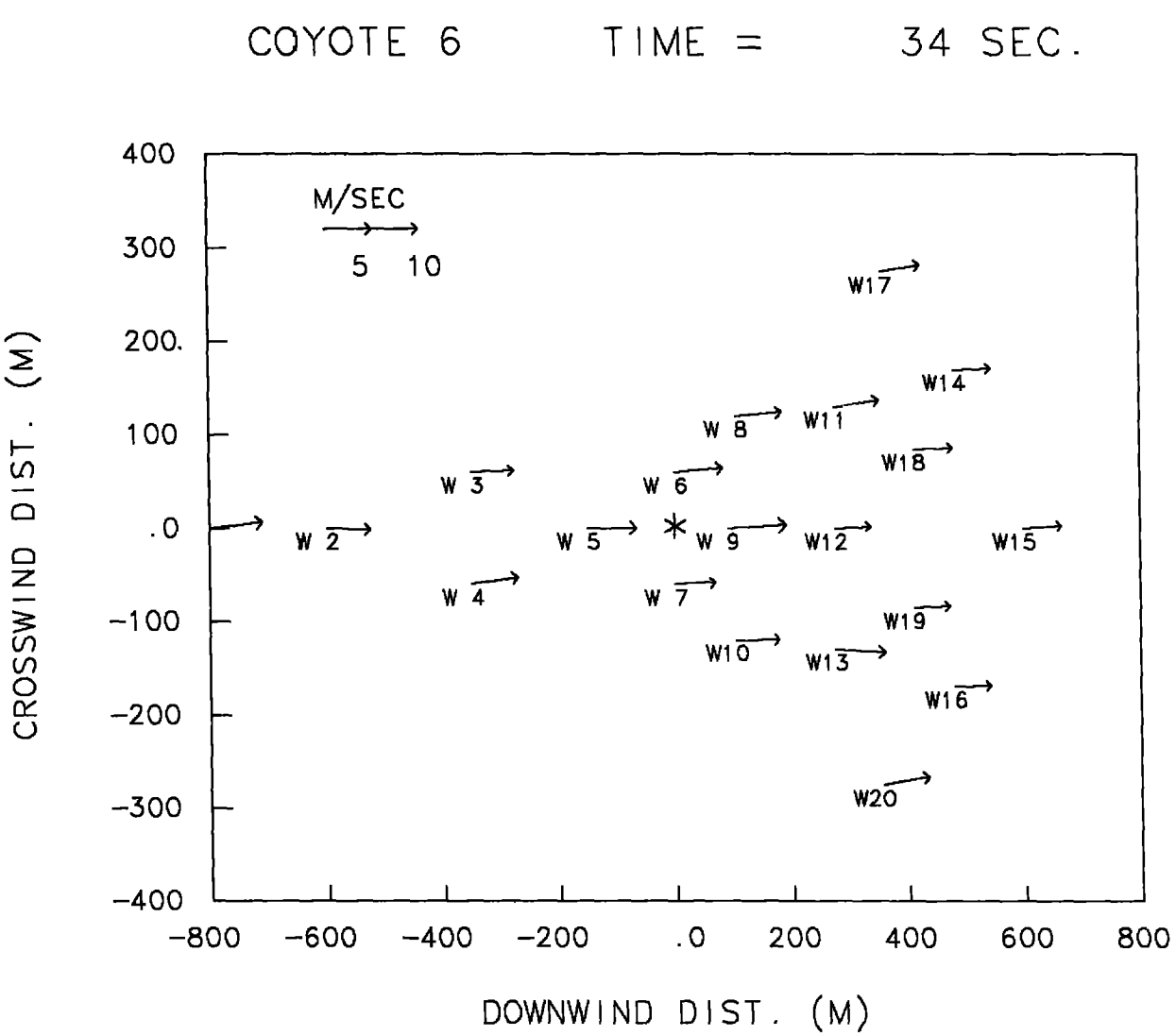
COYOTE 6 TIME = 34 SEC.
M/SEC
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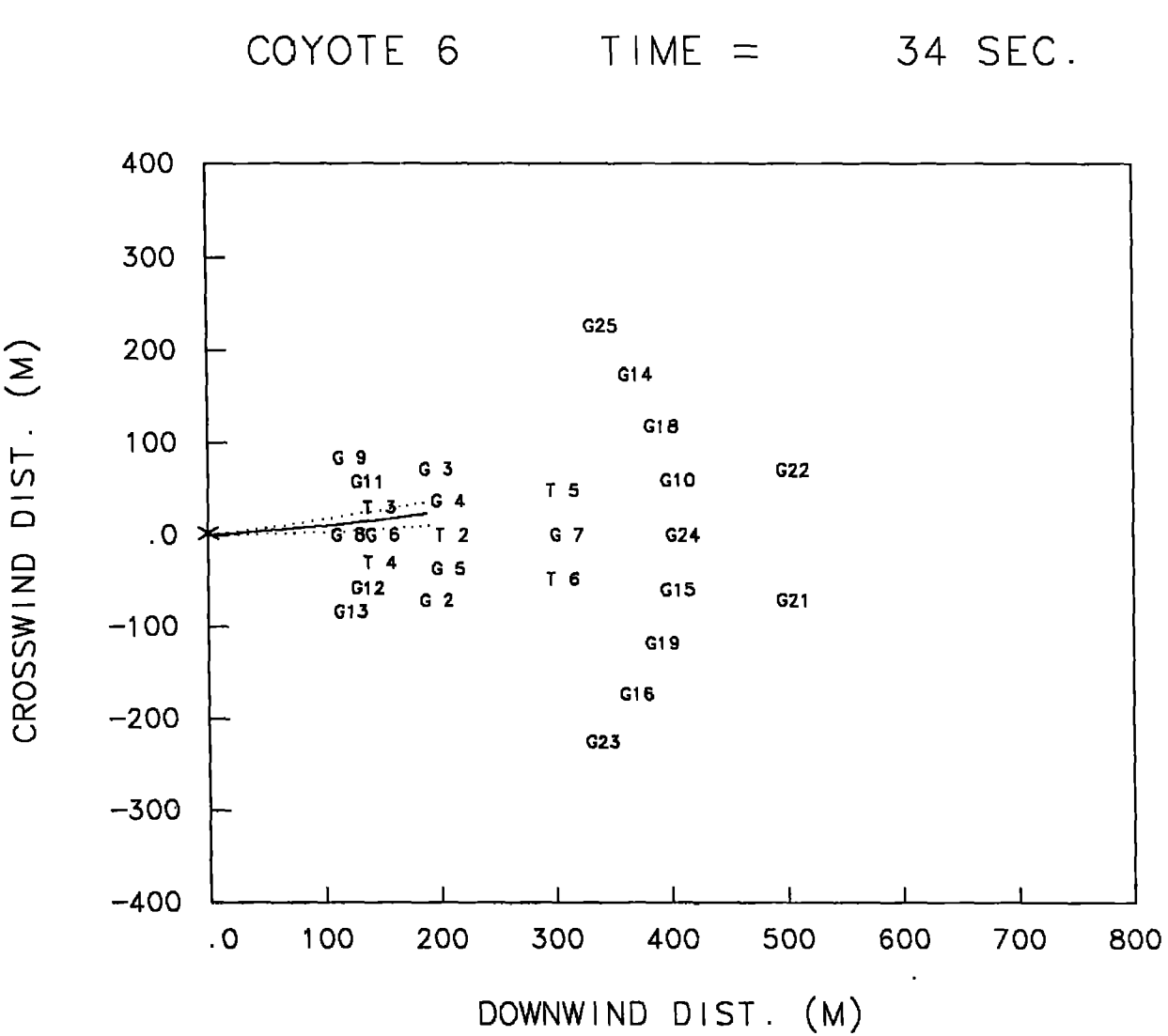
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 6 TIME = 34 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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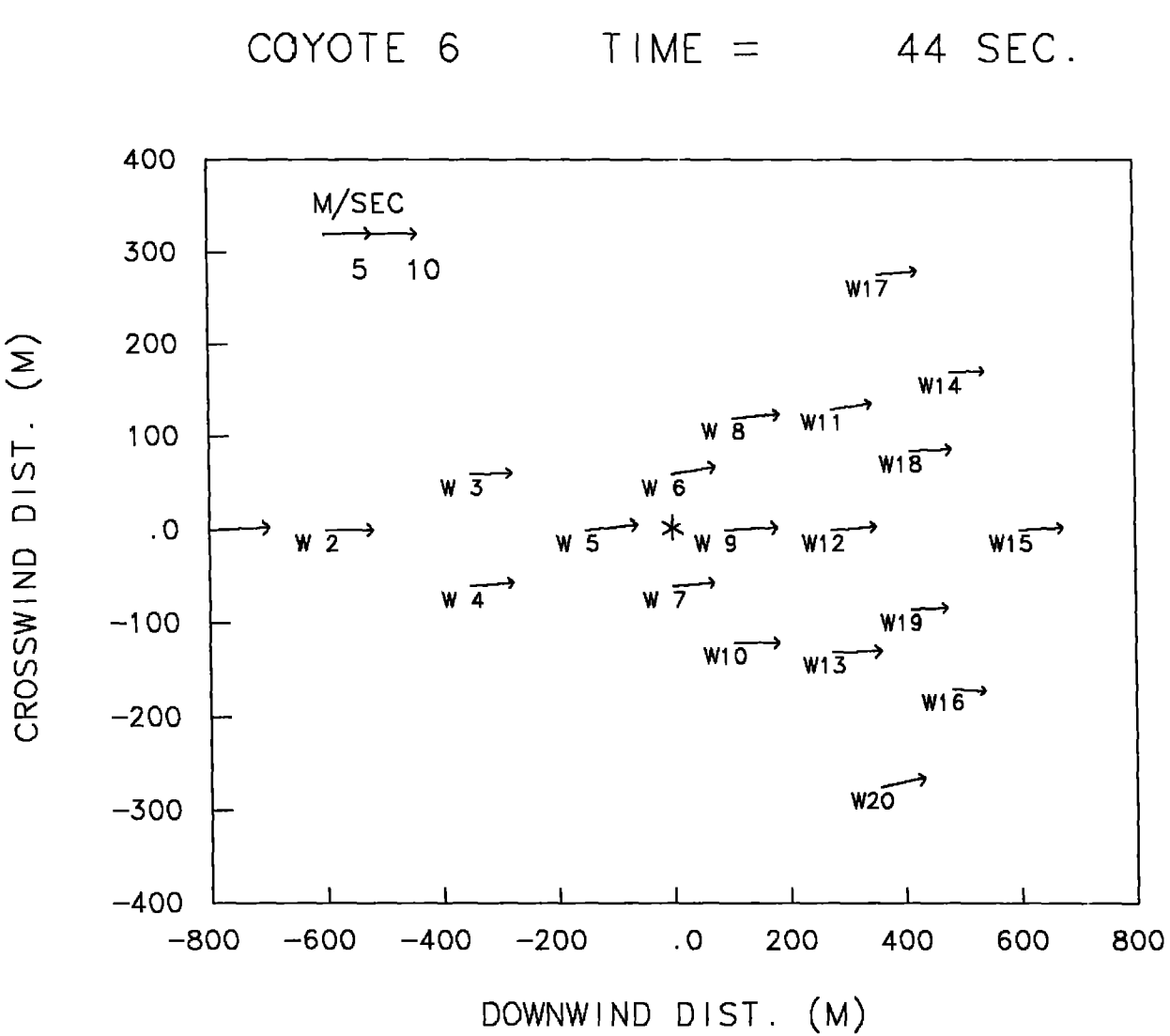
COYOTE 6 TIME = 44 SEC.
M/SEC
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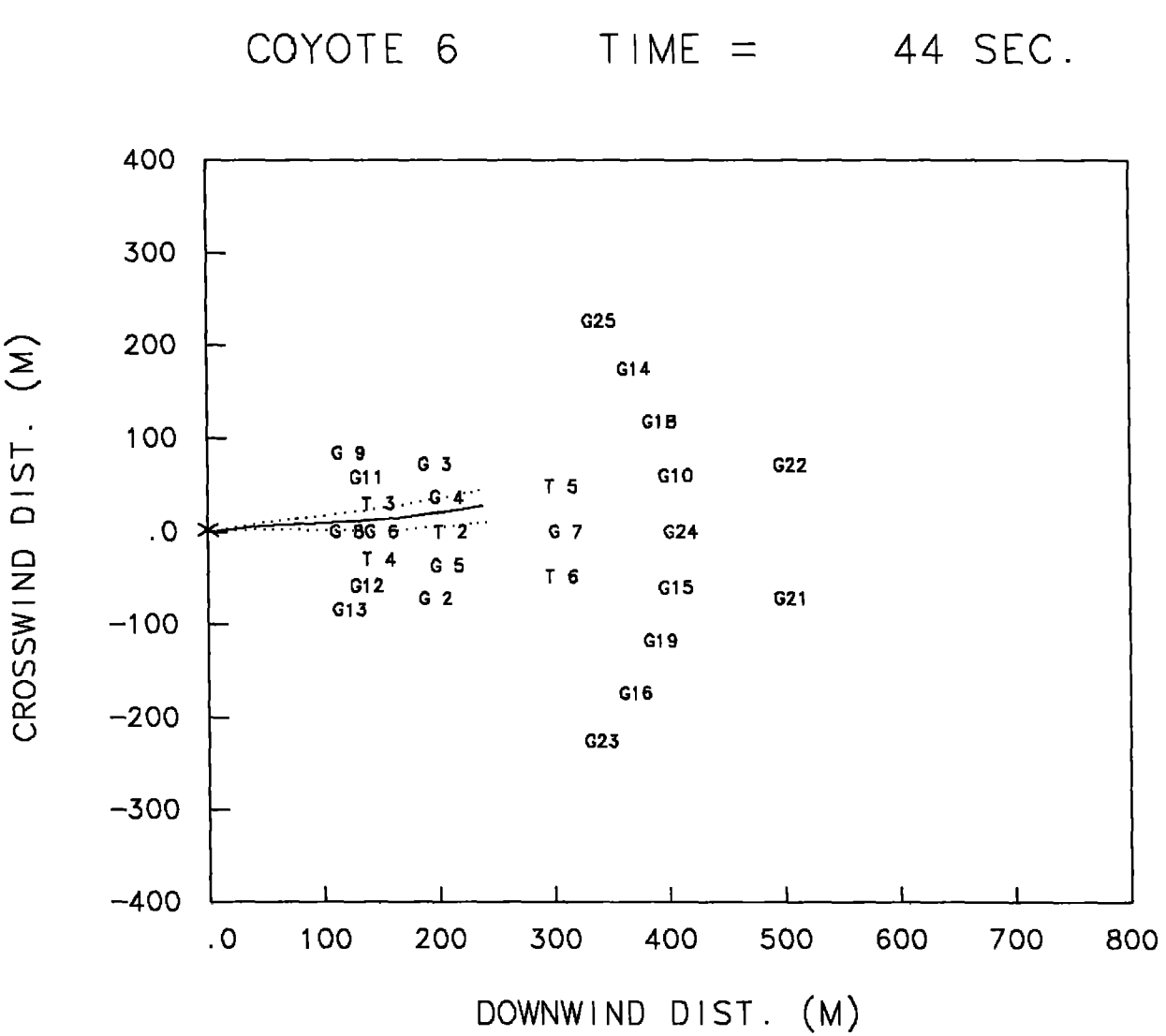
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 6 TIME = 44 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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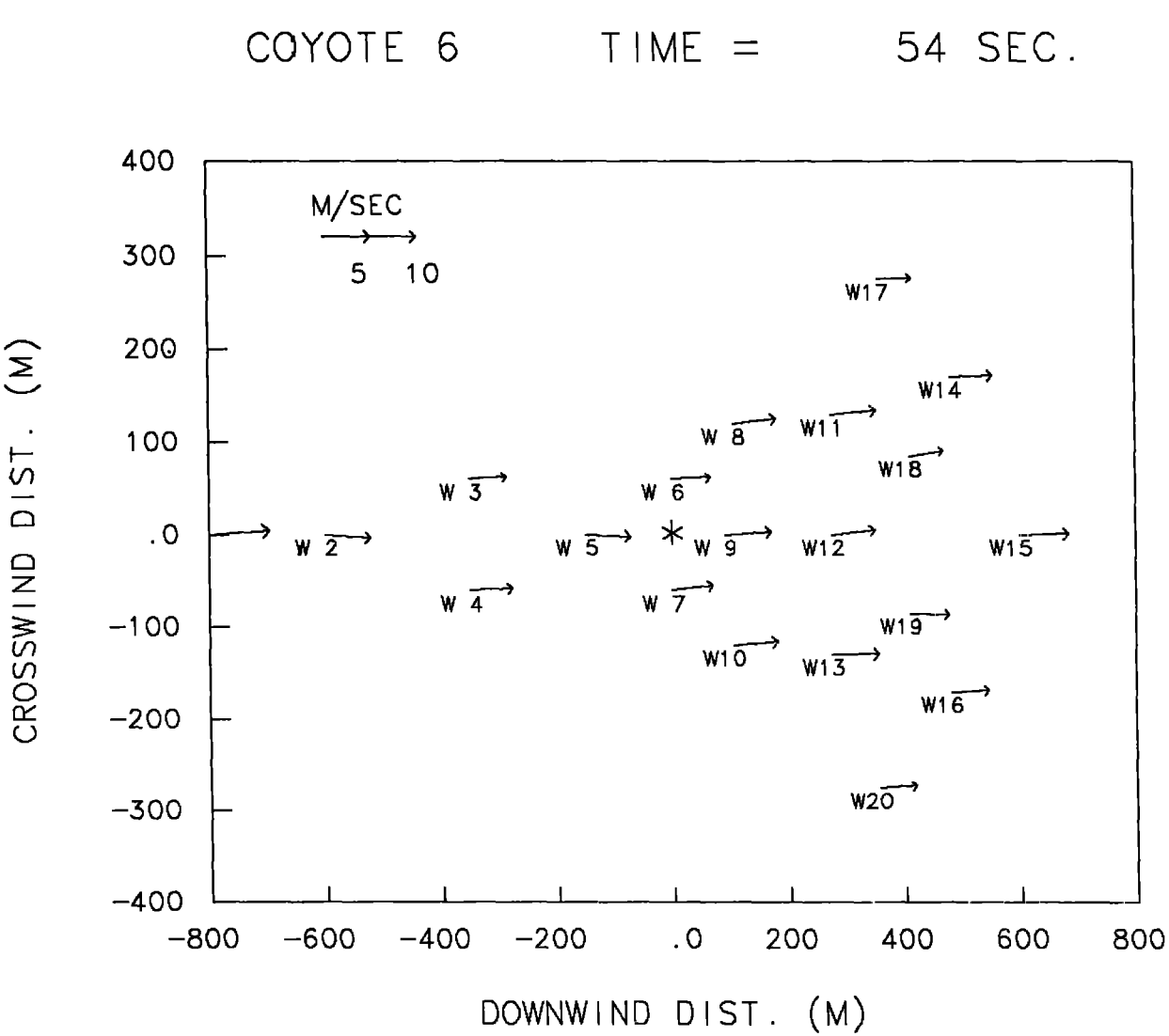
COYOTE 6 TIME = 54 SEC.
M/SEC
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400
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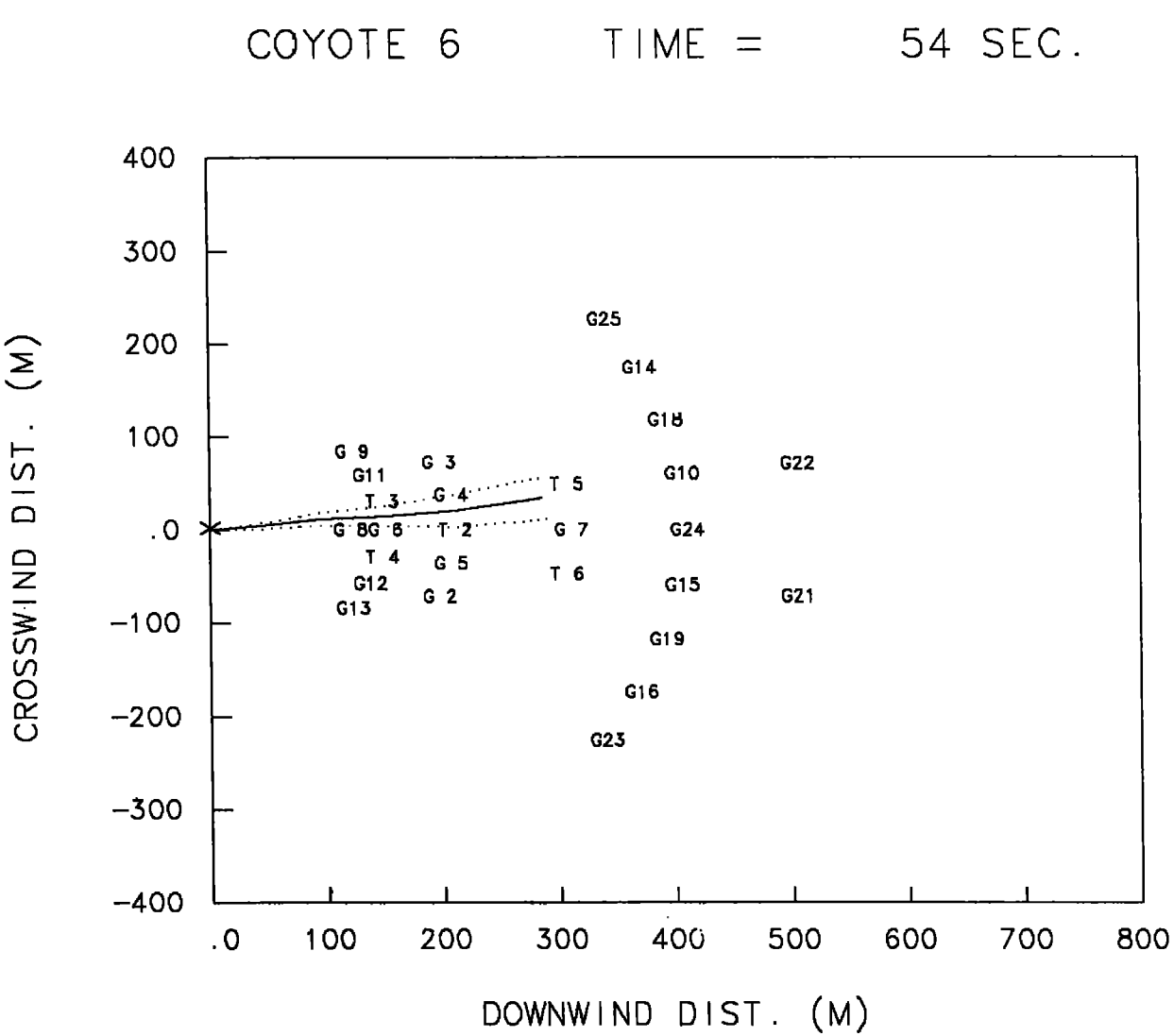
-100
-200
-300
-400
-800 -600 -400 -200 .0 200 400 600 800
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 6 TIME = 54 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
400
300
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100
.0
-100
-200
-300
-400
100
200
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400
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700
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G25
G14
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G23
G 9
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G 3
T 3
G 4
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G 8
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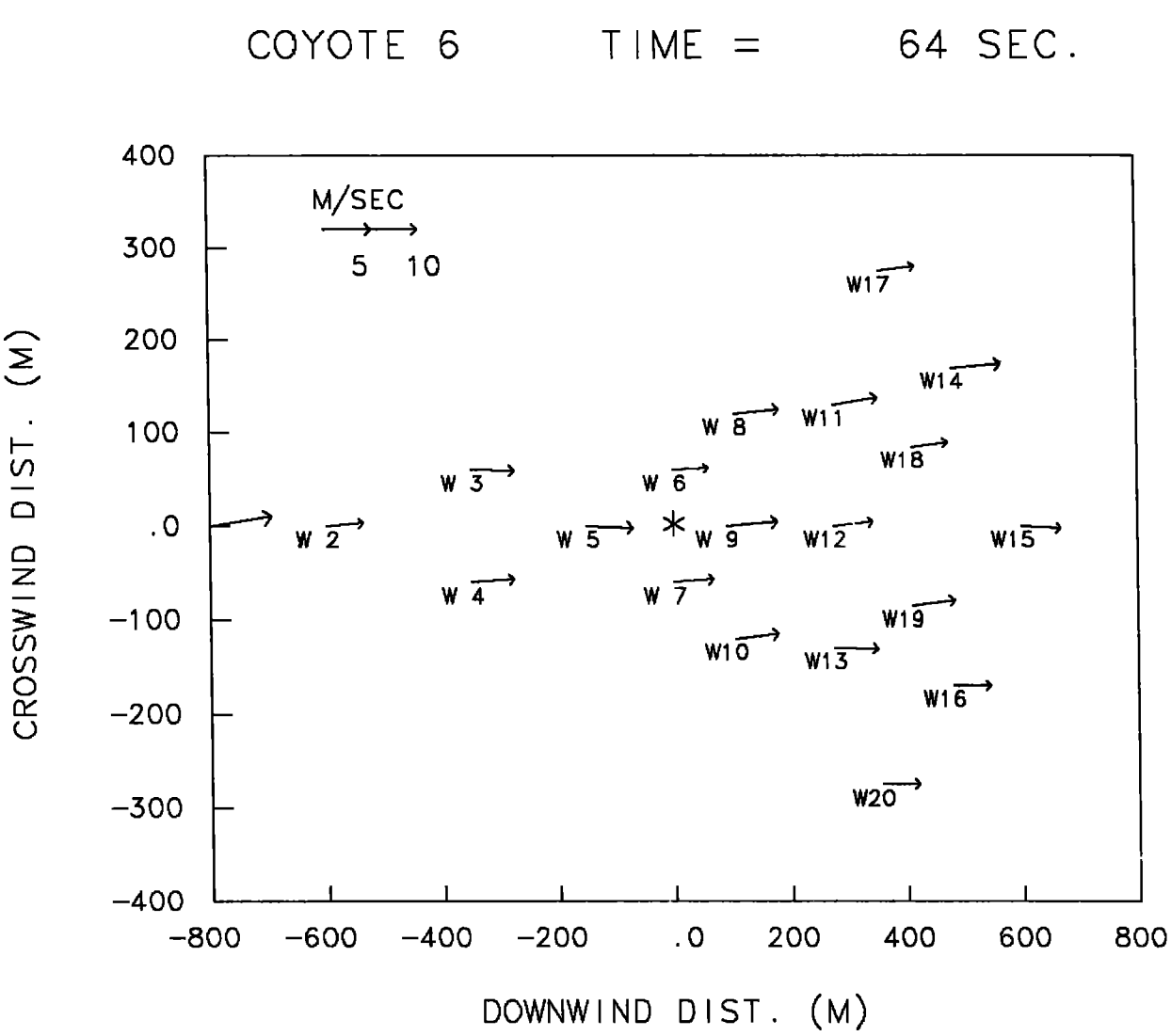
G 7
T 4
G 5
T 6
G12
G13
G 2


COYOTE 6 TIME = 64 SEC.
M/SEC
5 10
W 1
W 2
W 3
W 4
W 5
W 6
W 7
W 8
W 9
W10
W11
W12
W13
W14
W15
W16
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W19
W20
400
300
200
100
.0
-100
-200
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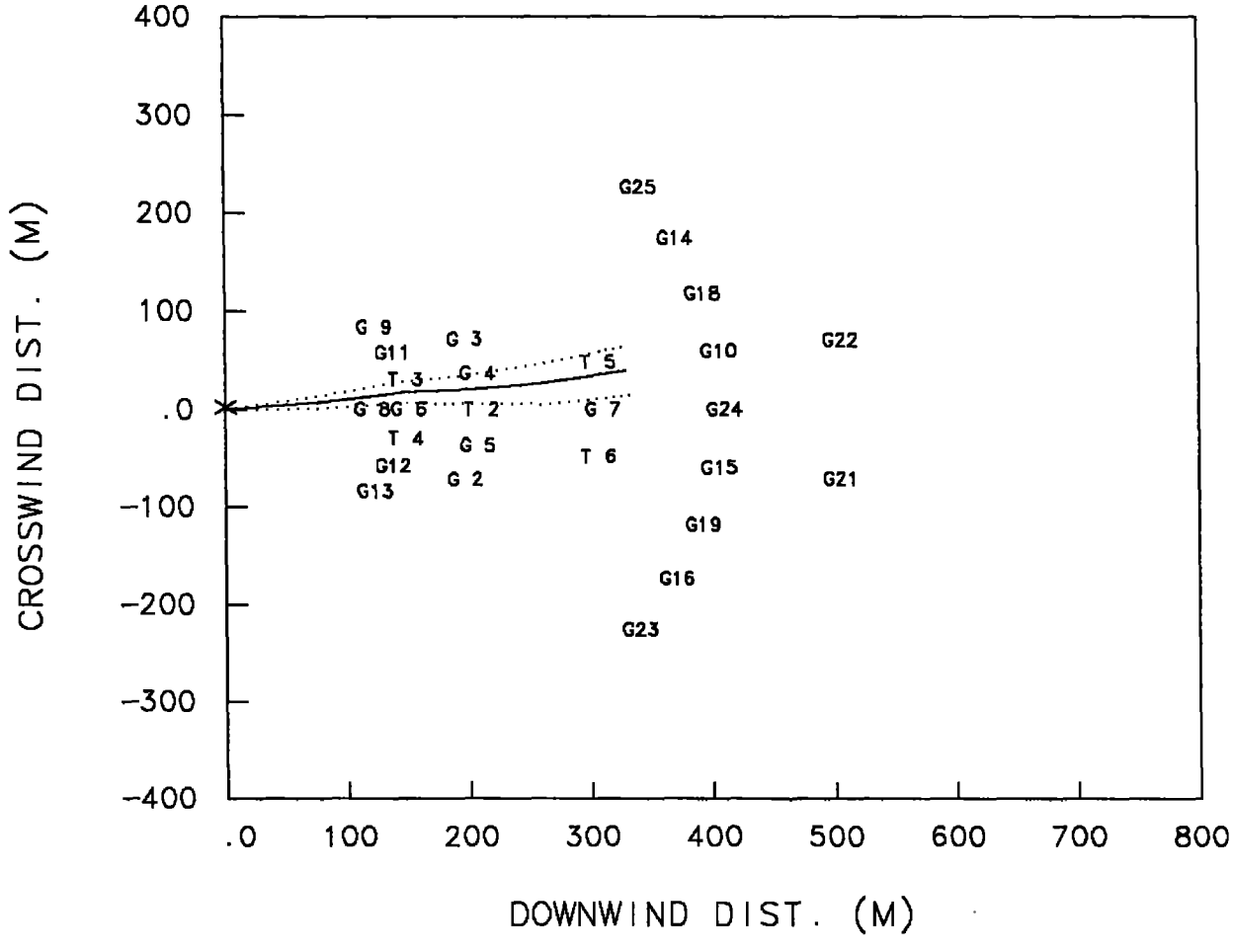
-400
-800
-600
-400
-200
.0
200
400
600
800
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 6 TIME = 64 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
400
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-400
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G25
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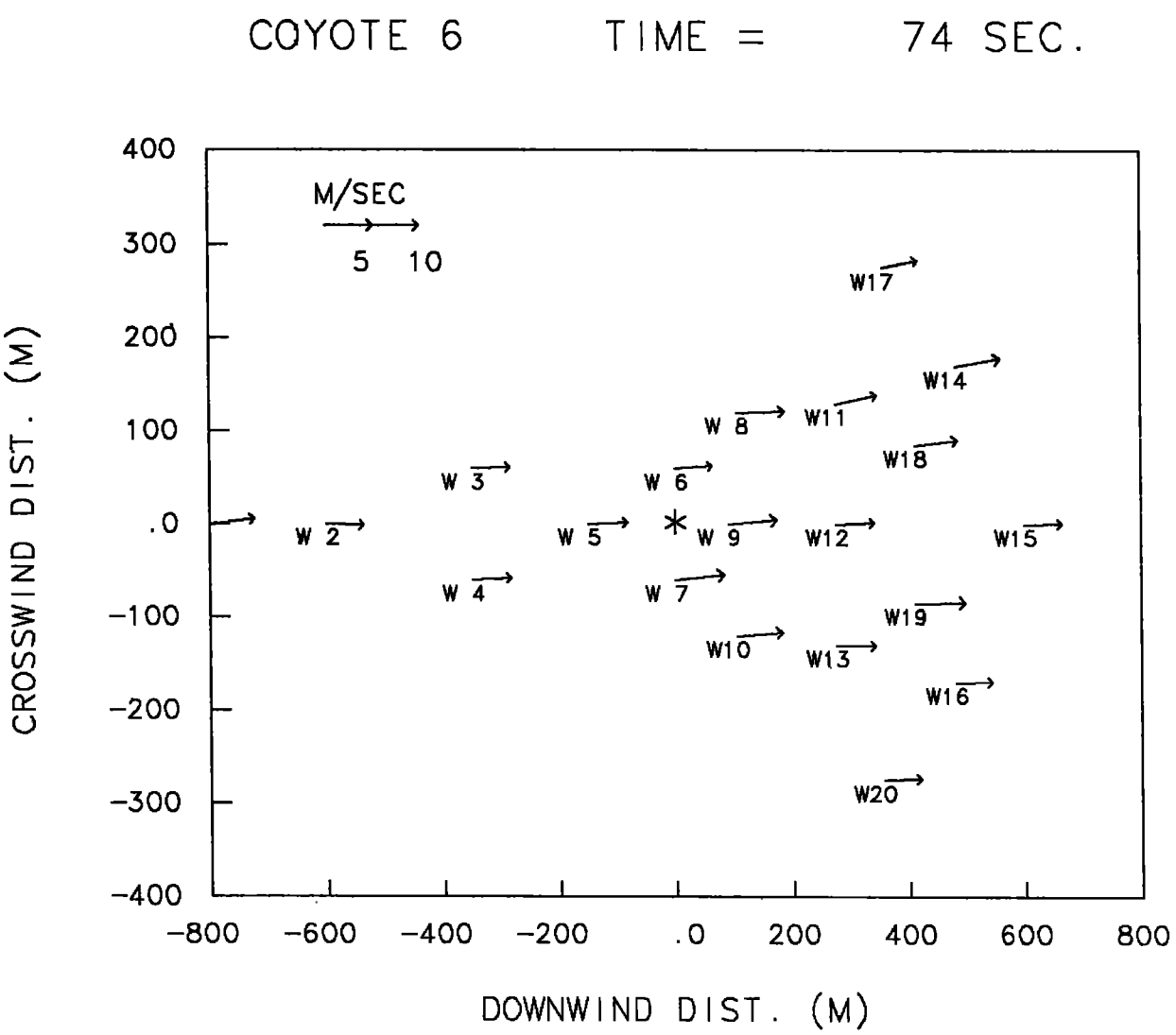
G 2
G13


COYOTE 6 TIME = 74 SEC.
M/SEC
5 10
W17
W14
W 8
W11
W18
W 3
W 6
W 2
W 5
W 9
W12
W15
W 4
W 7
W19
W10
W13
W16
W20
400
300
200
100
.0
-100
-200
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-400
-800
-600
-400
-200
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200
400
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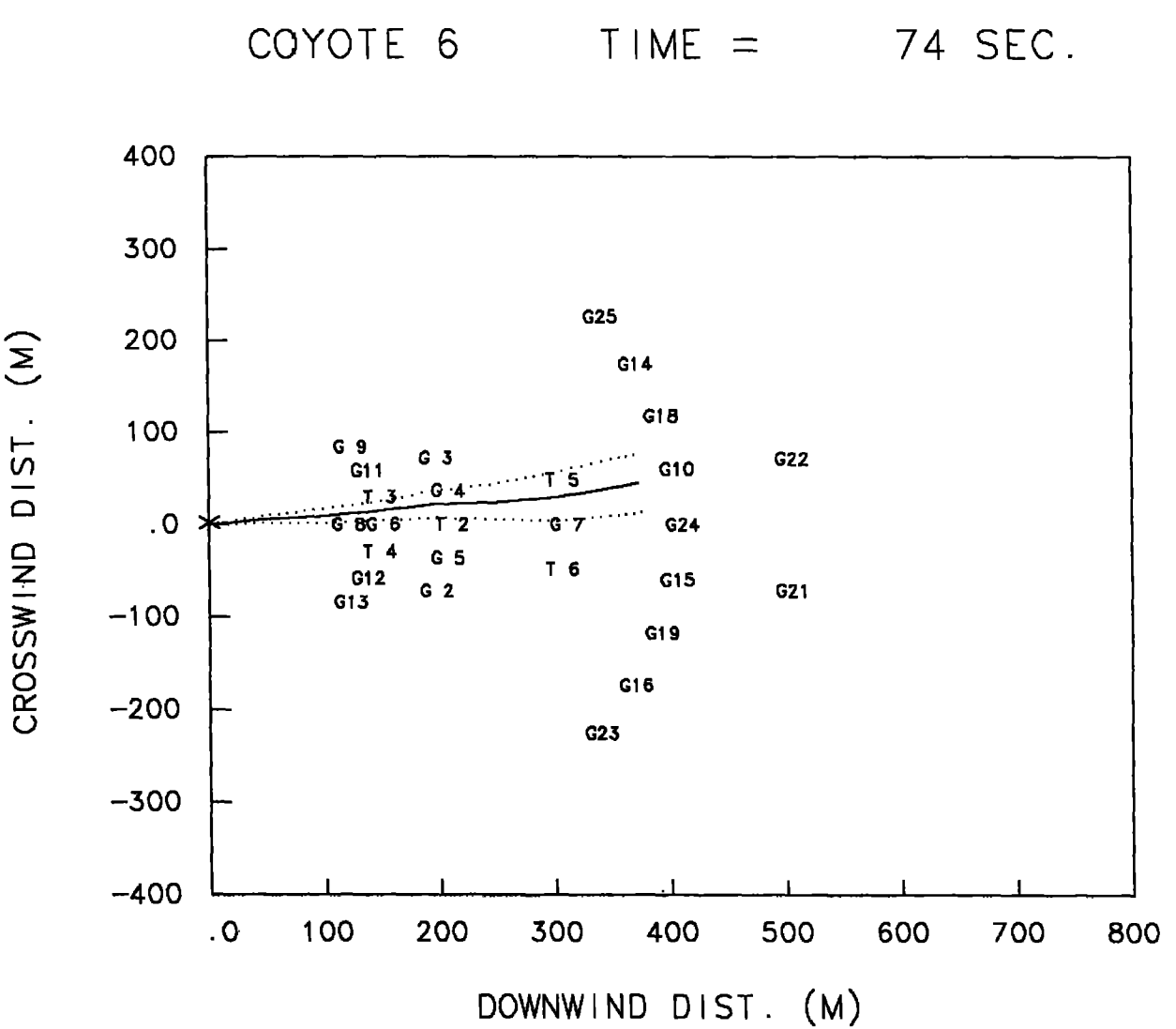
800
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 6 TIME = 74 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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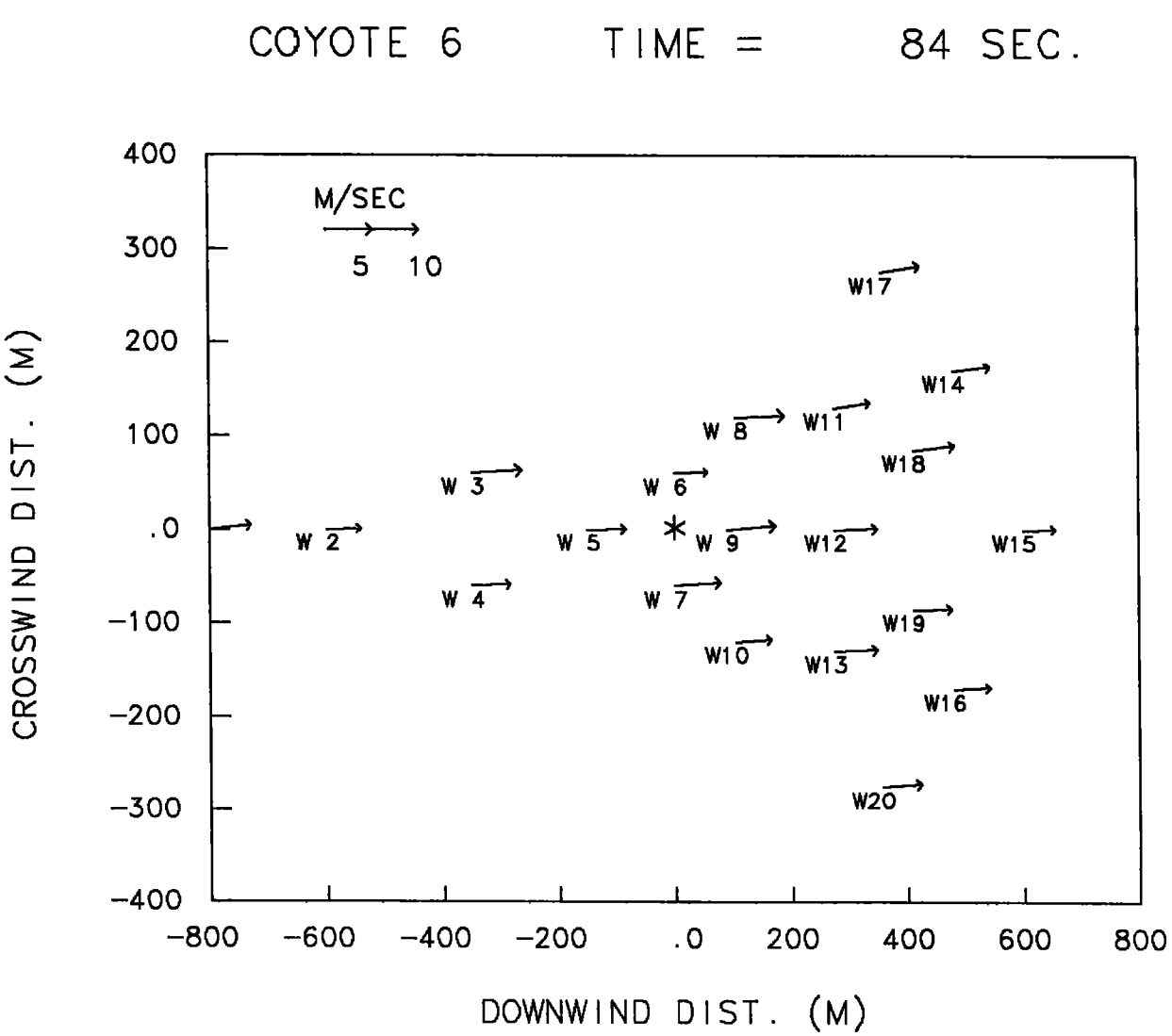
COYOTE 6 TIME = 84 SEC.
M/SEC
5 10
W 1
W 2
W 3
W 4
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W11
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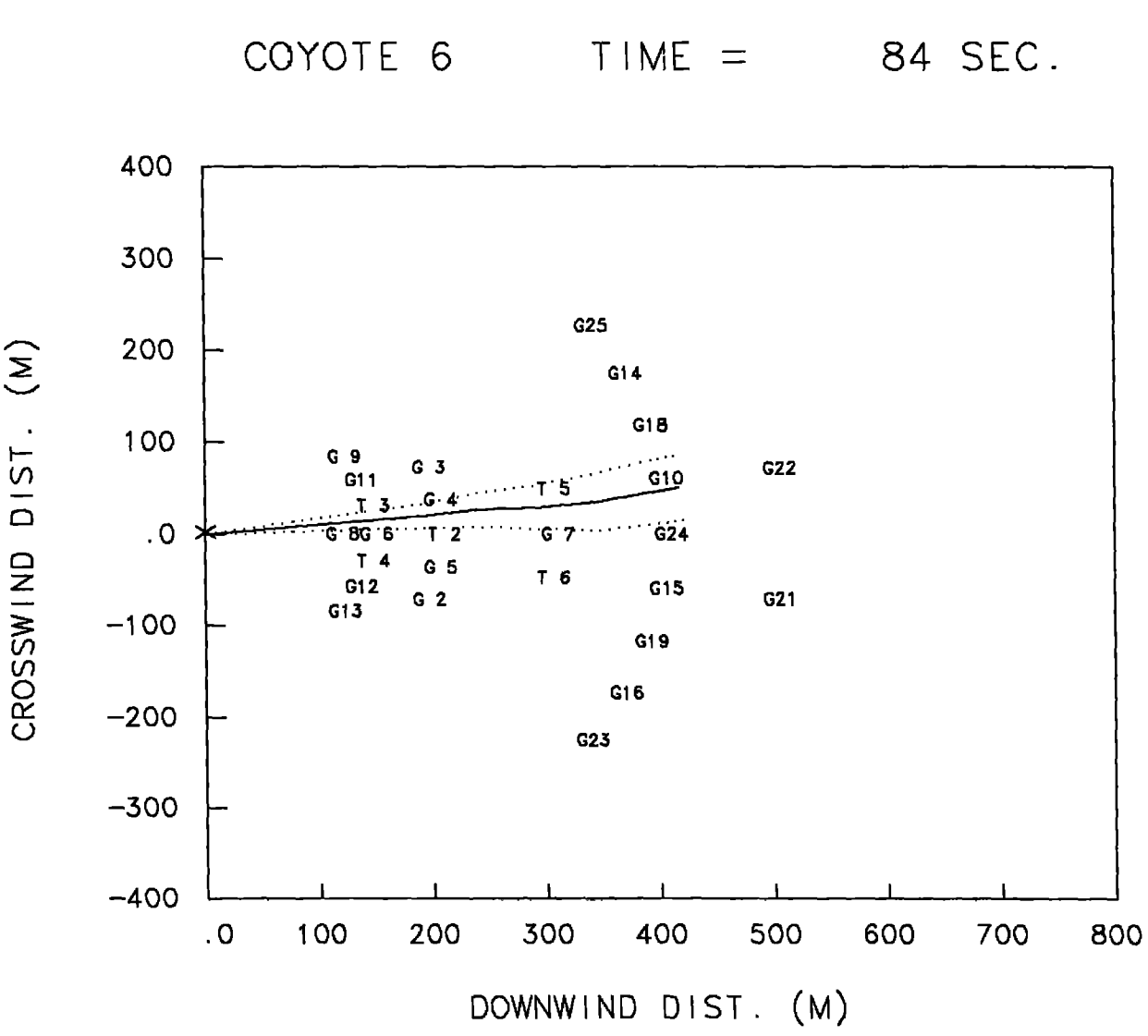
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 6 TIME = 84 SEC.
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CROSSWIND DIST. (M)
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DOWNWIND DIST. (M)
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G24
T 4
G 5
T 6
G12
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G21
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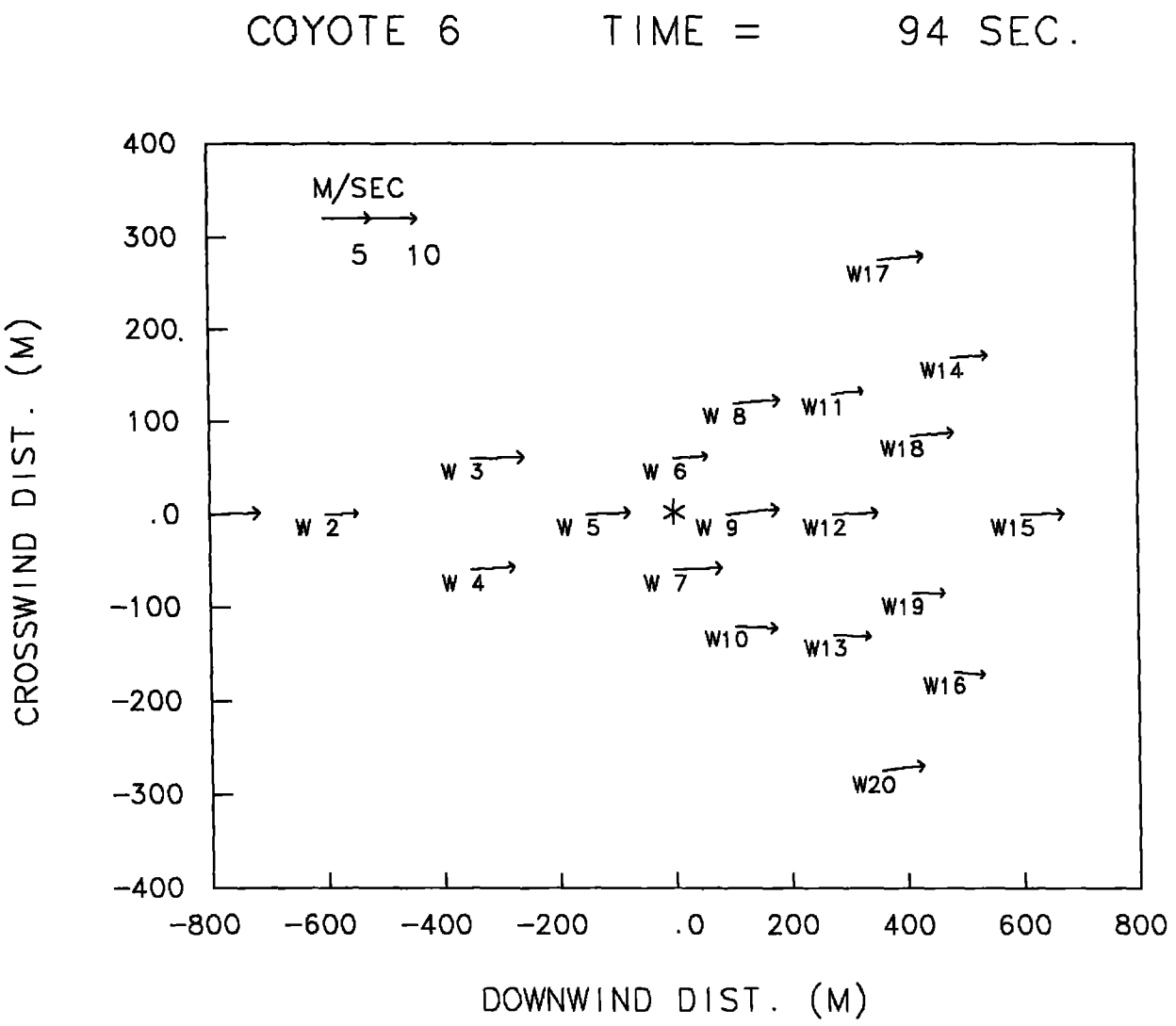
G16
G23


COYOTE 6 TIME = 94 SEC.
M/SEC
5 10
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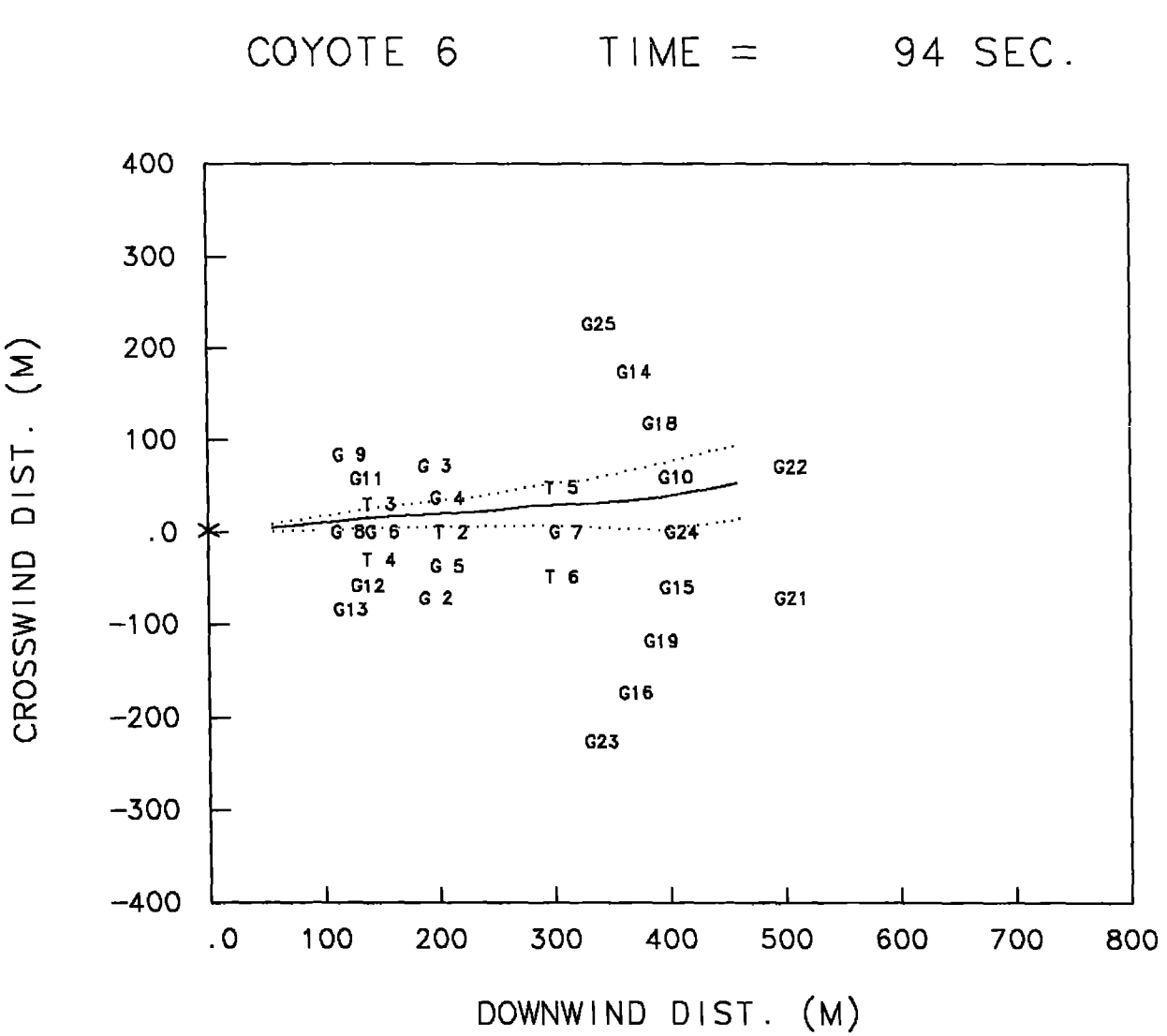
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 6 TIME = 94 SEC.
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CROSSWIND DIST. (M)
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DOWNWIND DIST. (M)
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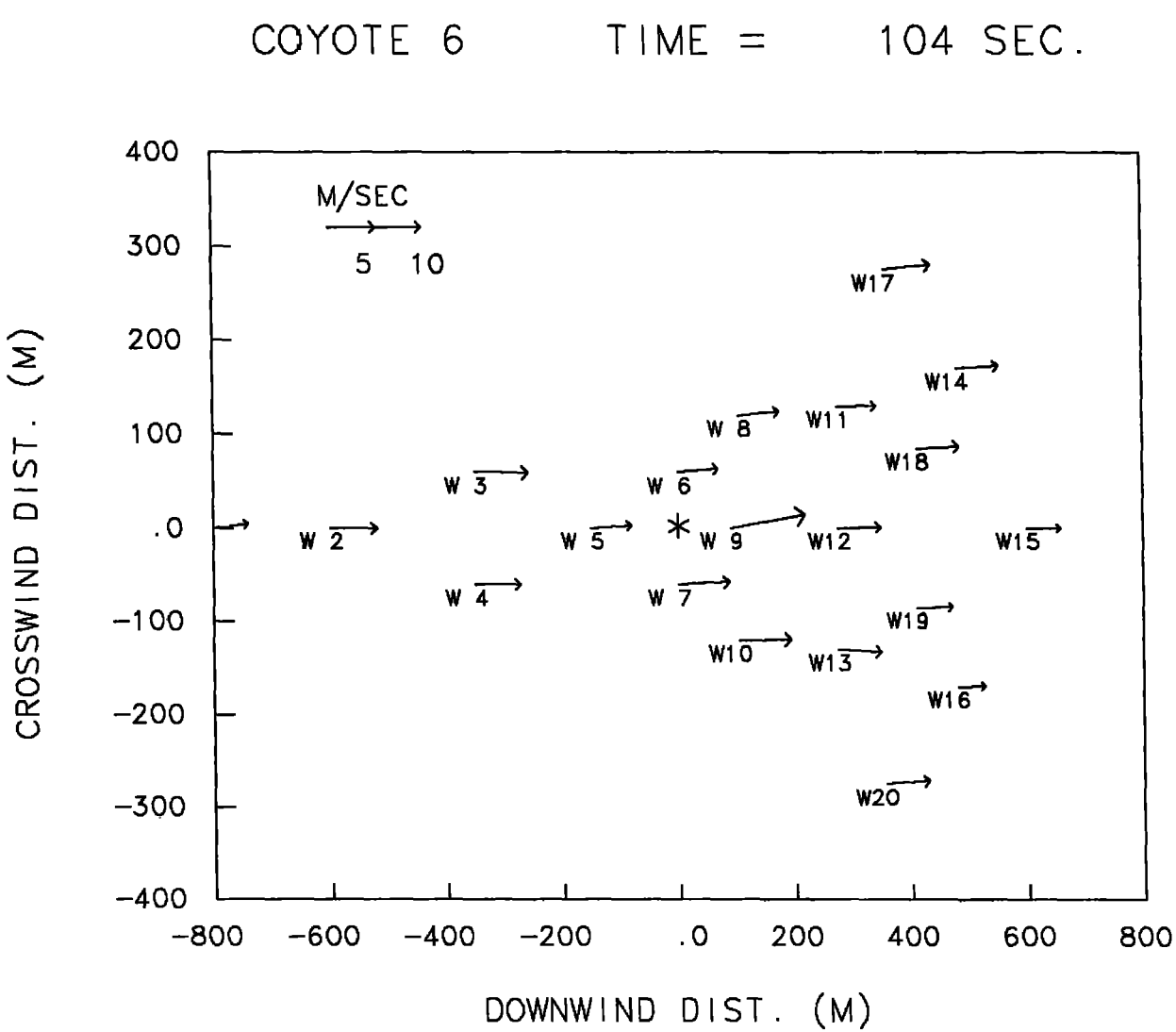
COYOTE 6 TIME = 104 SEC.
M/SEC
5 10
W 1
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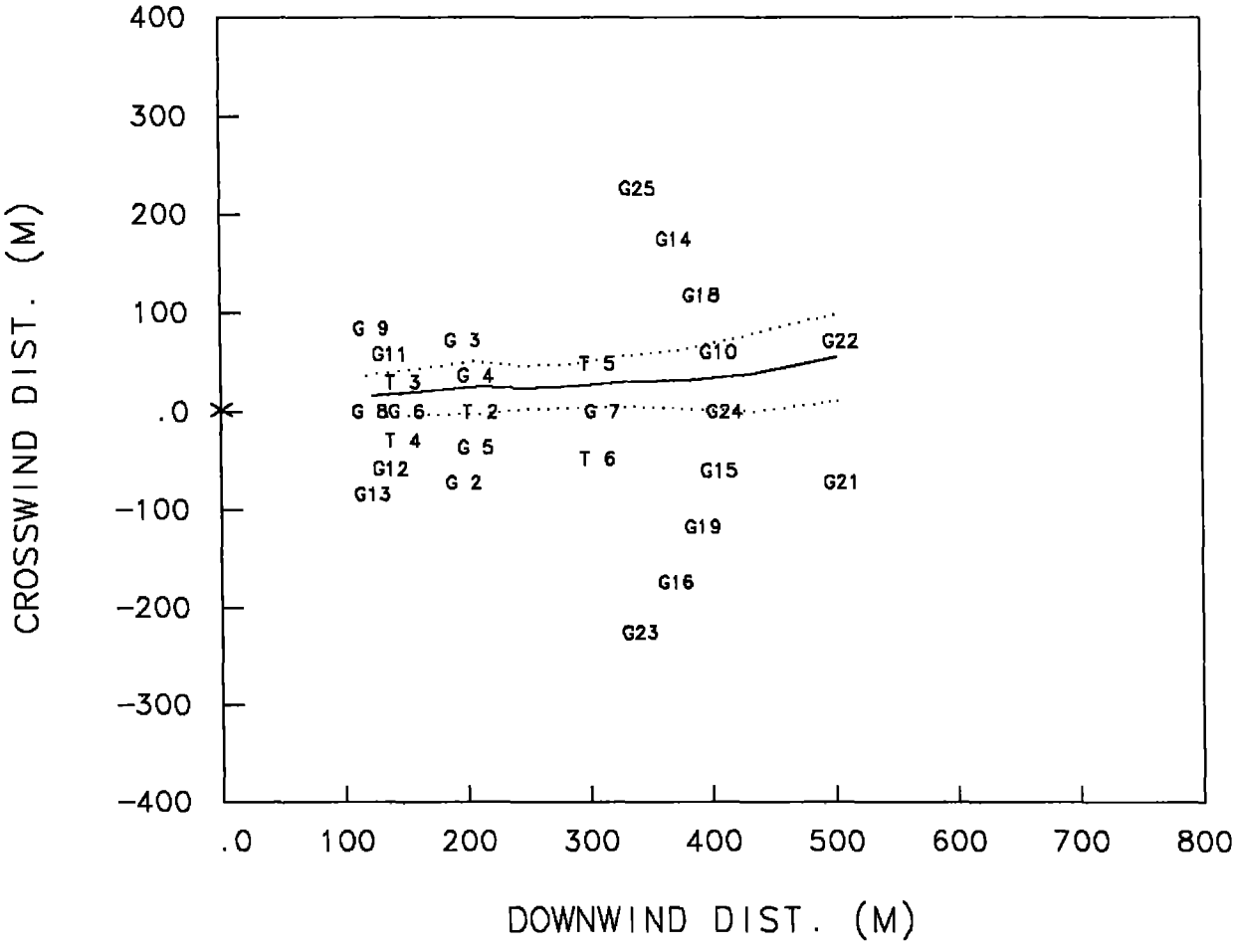
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 6 TIME = 104 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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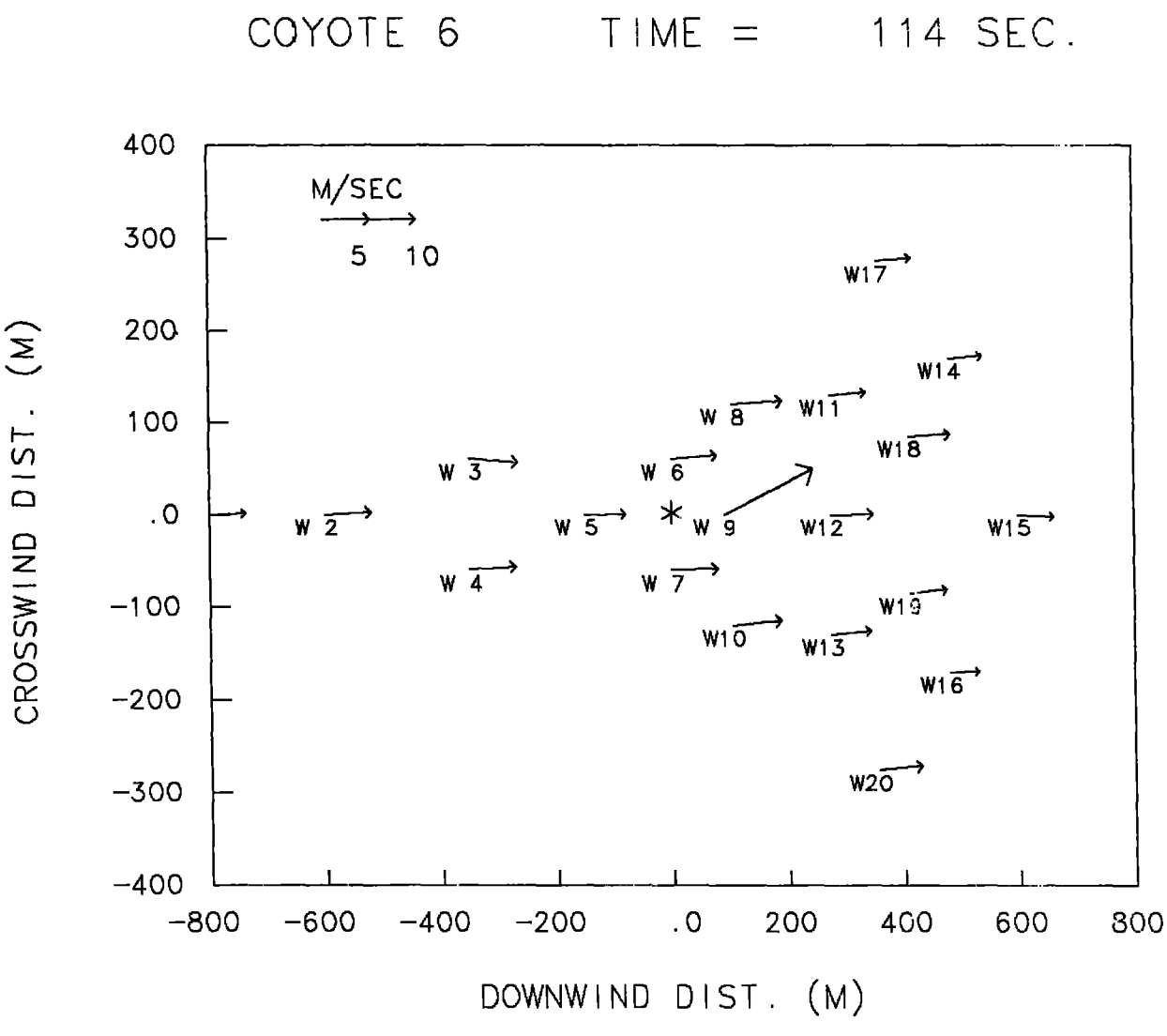
COYOTE 6 TIME = 114 SEC.
M/SEC
5 10
W 1
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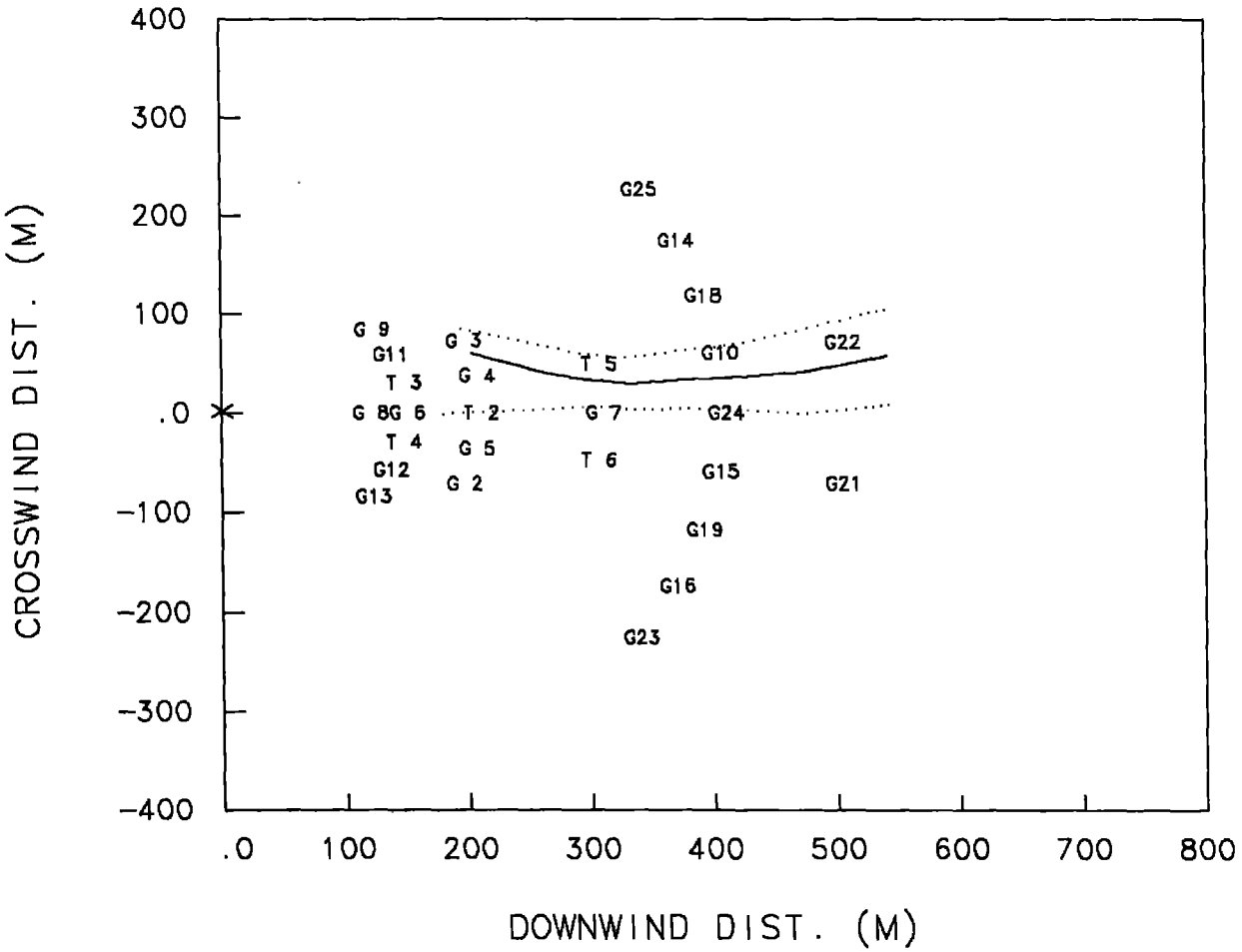
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 6 TIME = 114 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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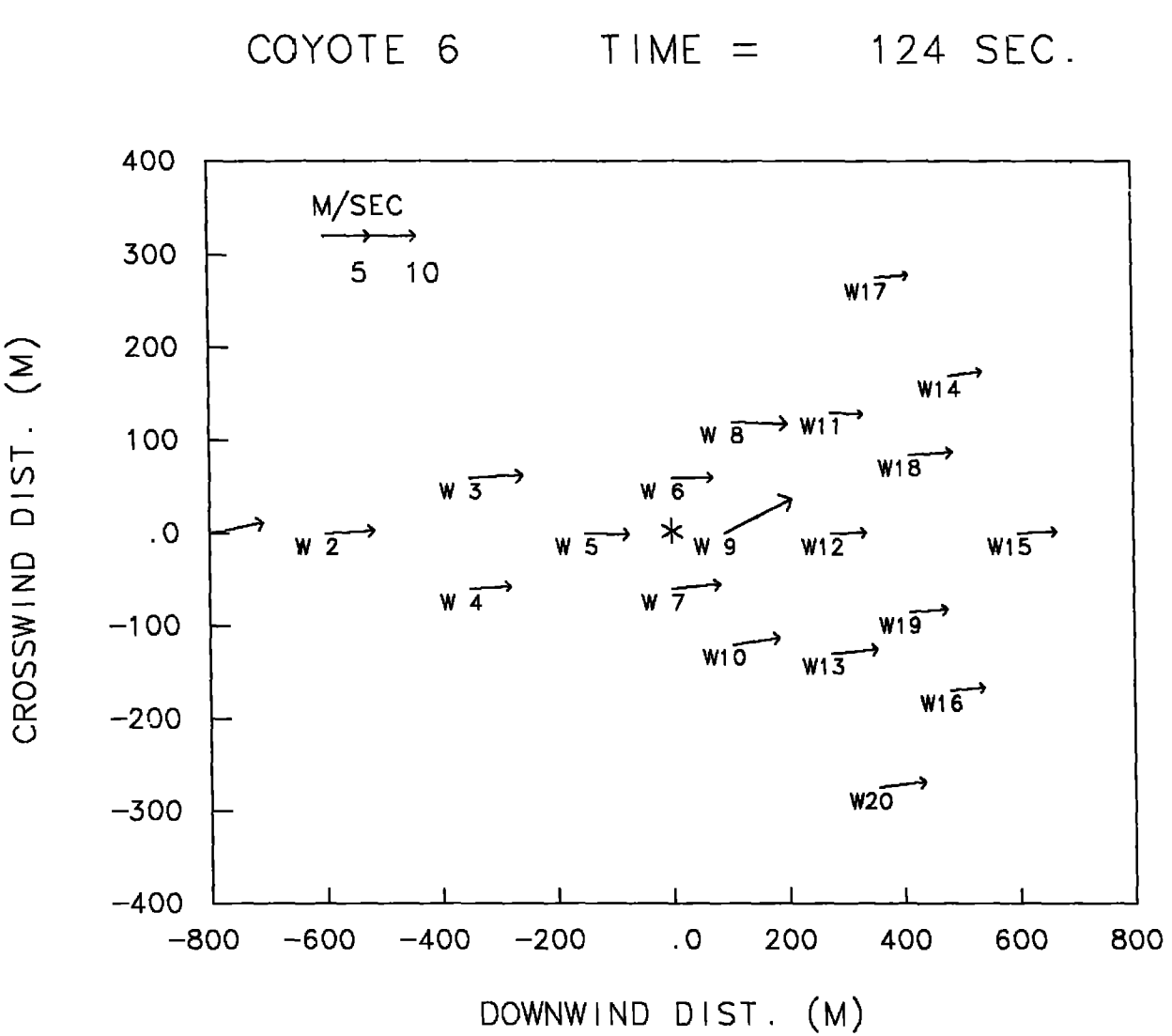
COYOTE 6 TIME = 124 SEC.
M/SEC
5 10
W 1
W 2
W 3
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W11
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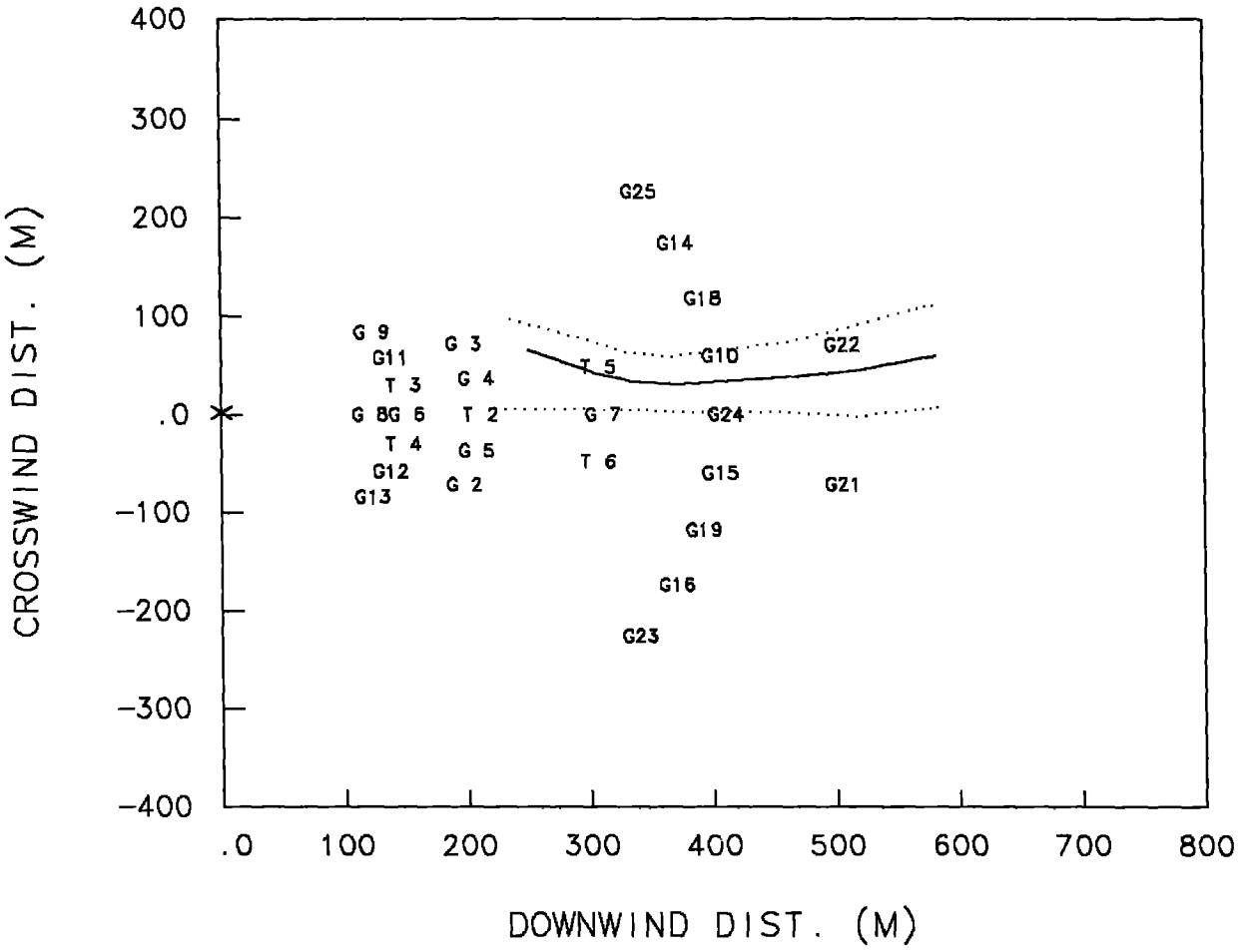
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 6 TIME = 124 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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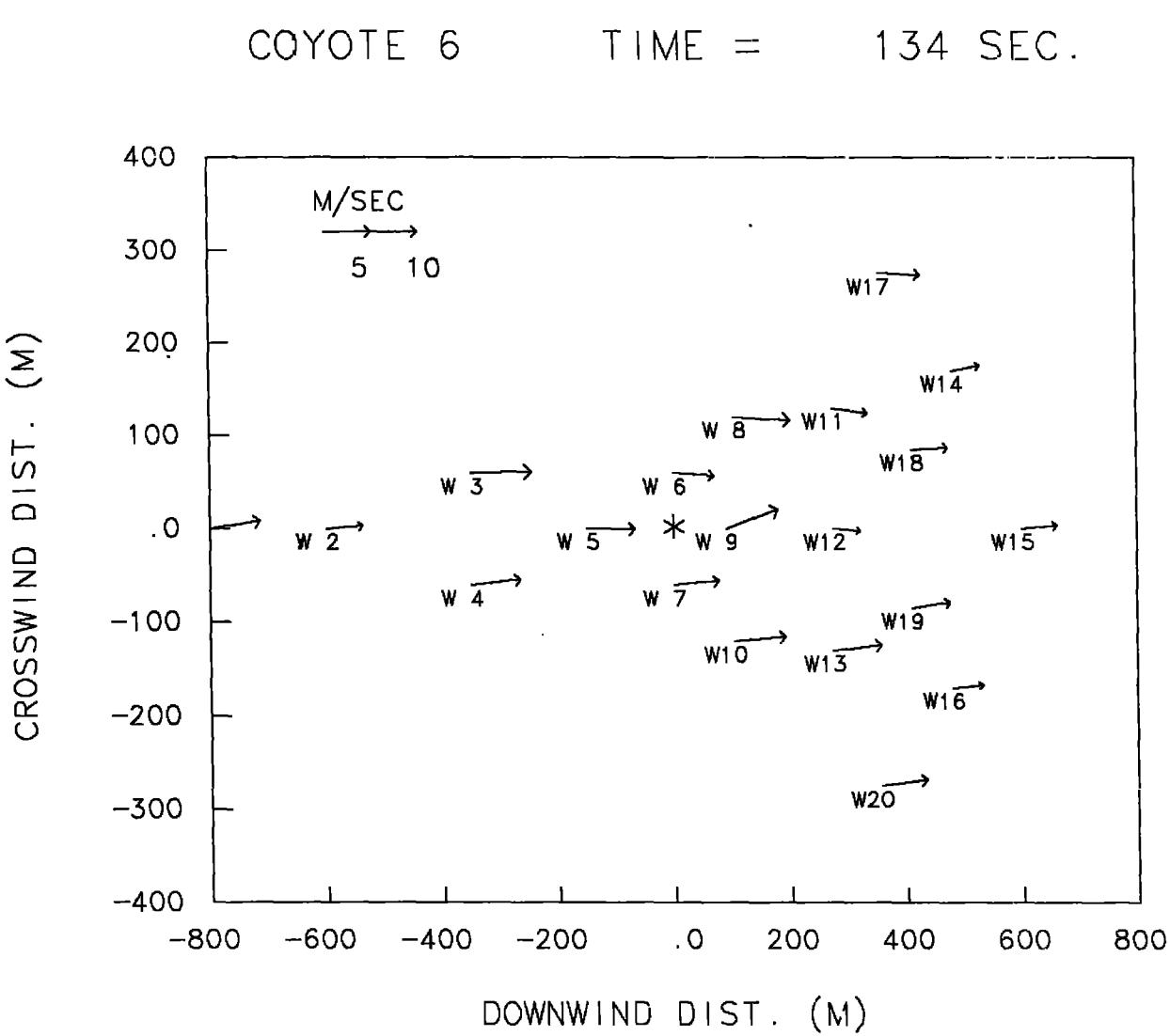
COYOTE 6 TIME = 134 SEC.
M/SEC
5 10
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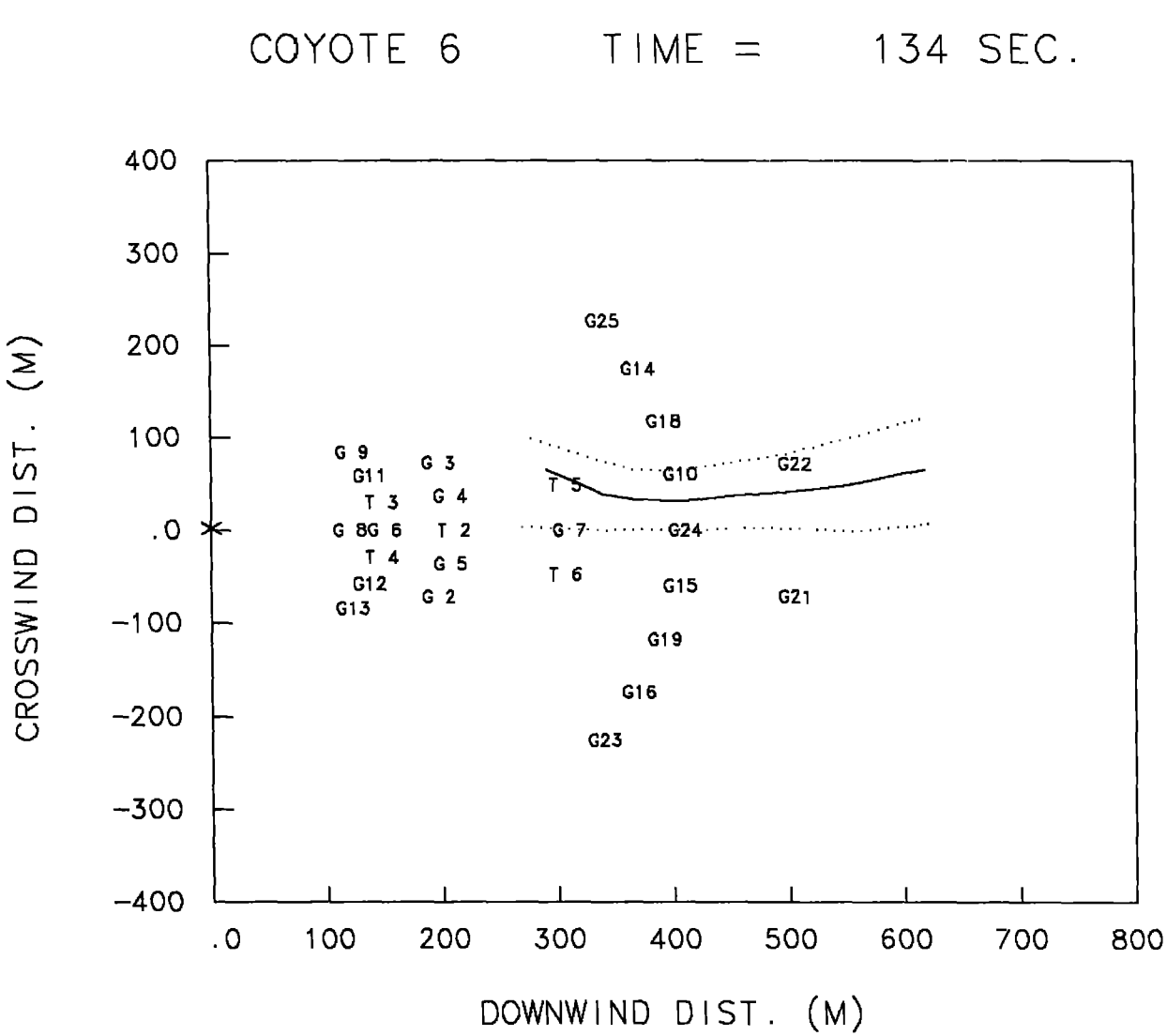
-800 -600 -400 -200 .0 200 400 600 800
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 6 TIME = 134 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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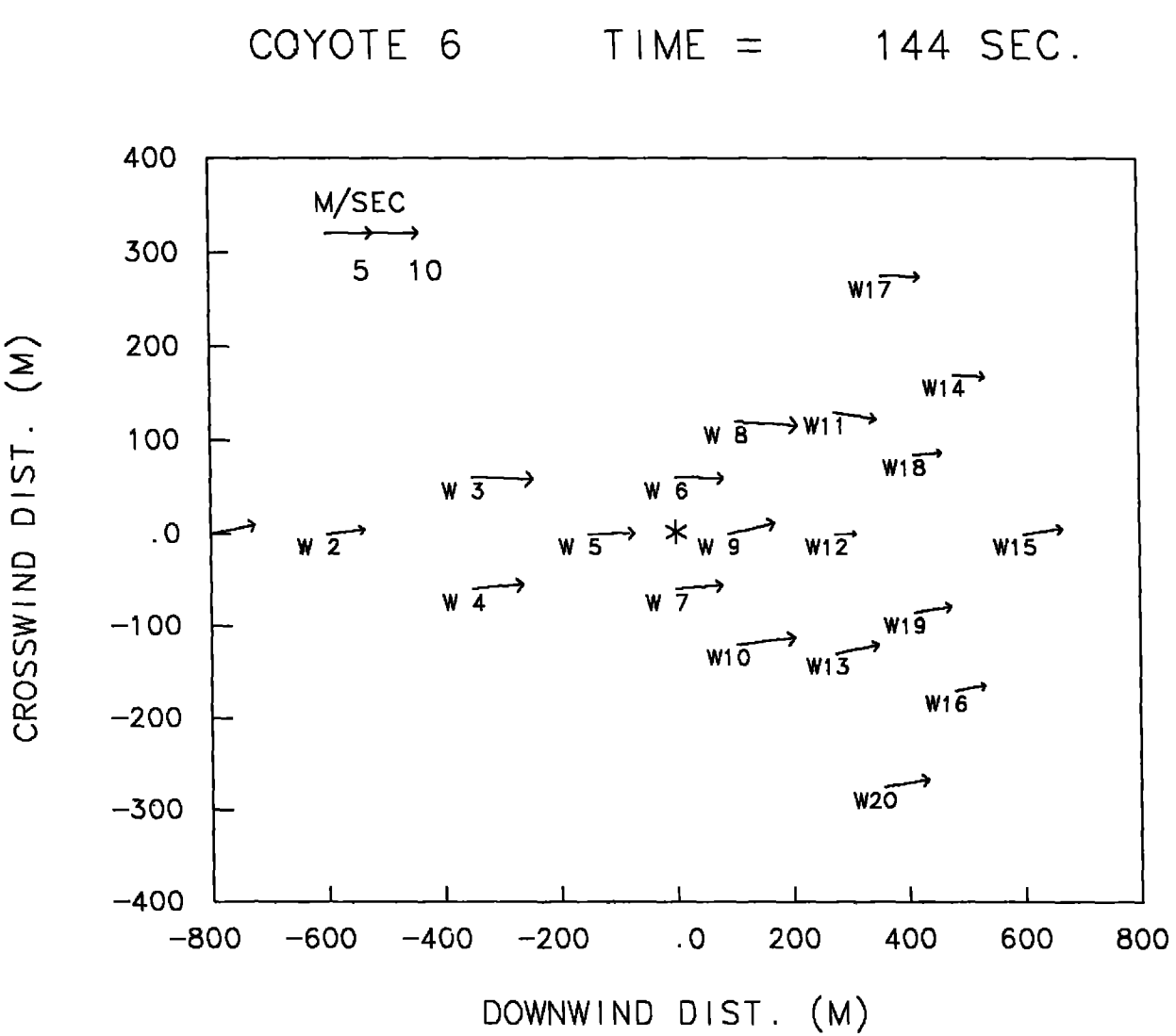
COYOTE 6 TIME = 144 SEC.
M/SEC
5 10
W17
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W 6
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W 9
W12
W15
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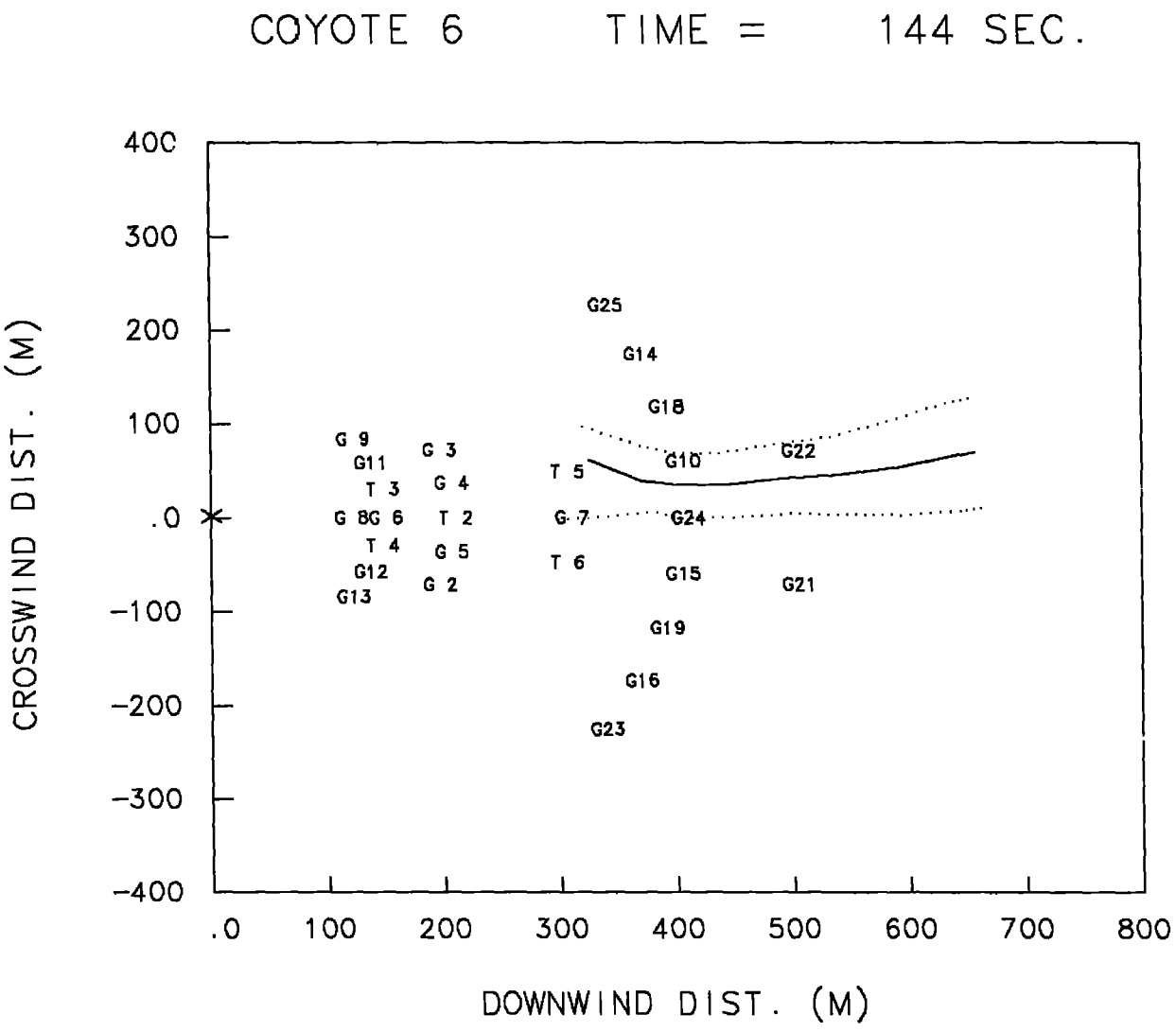
-800 -600 -400 -200 .0 200 400 600 800
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 6 TIME = 144 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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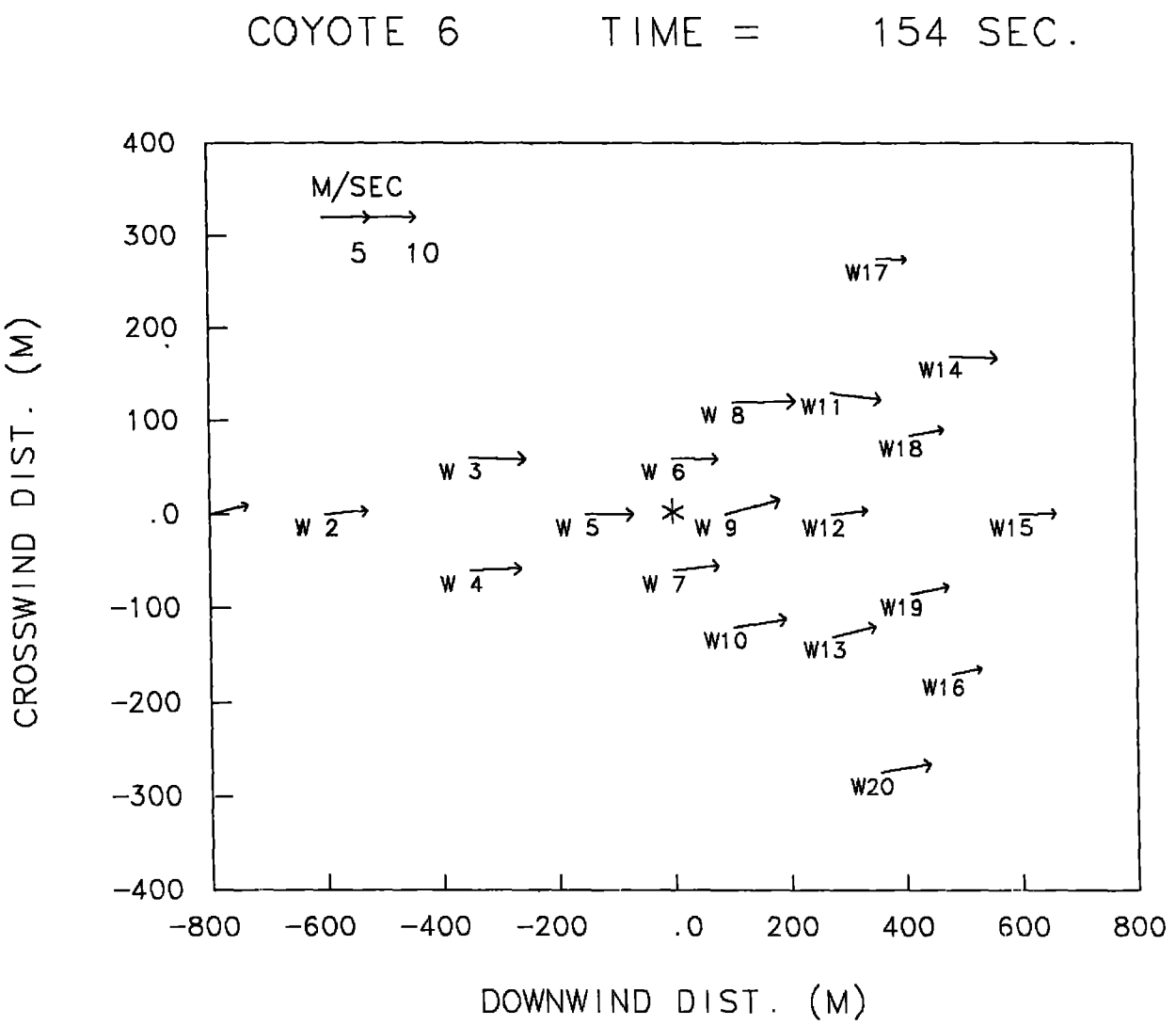
COYOTE 6 TIME = 154 SEC.
M/SEC
5 10
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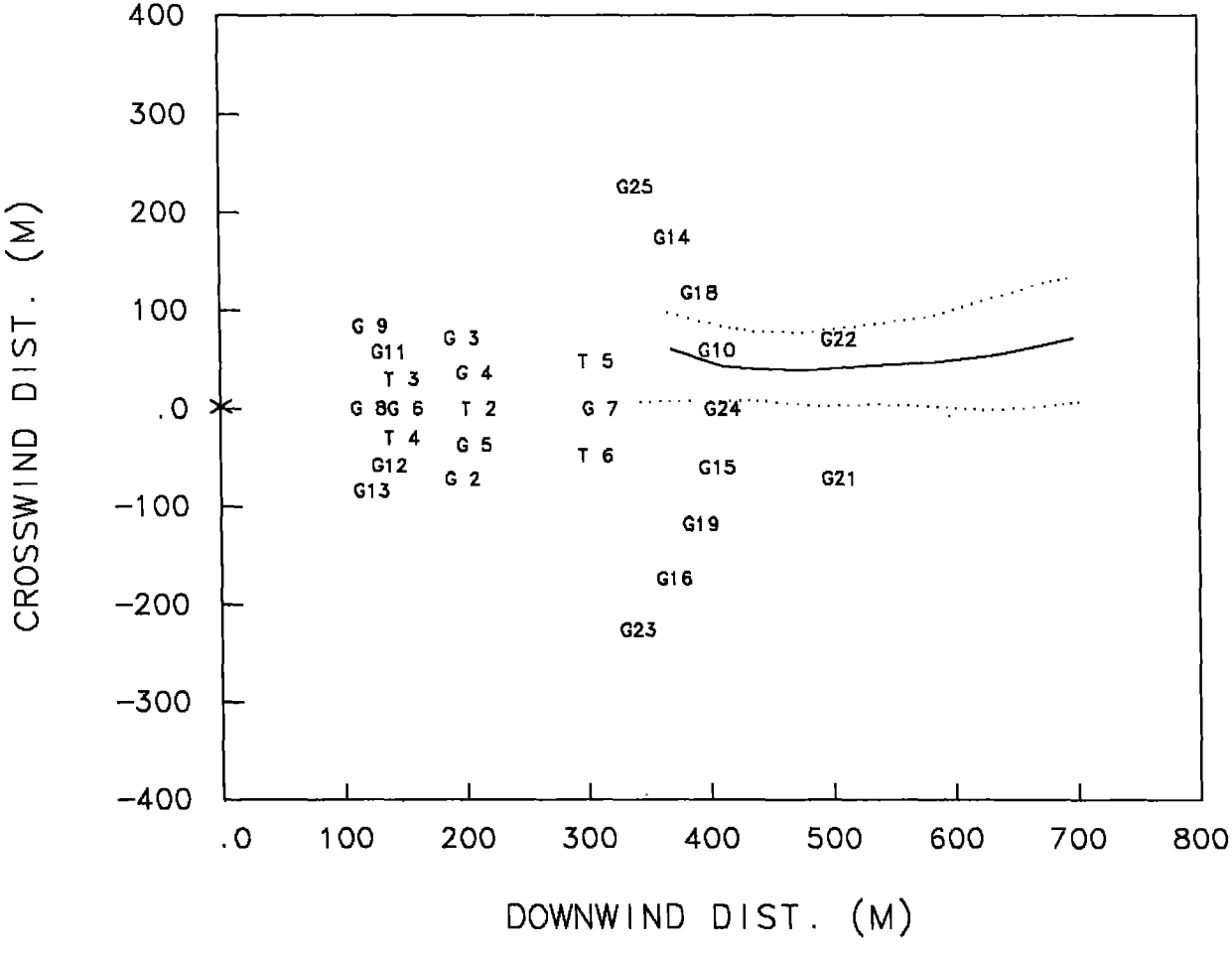
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 6 TIME = 155 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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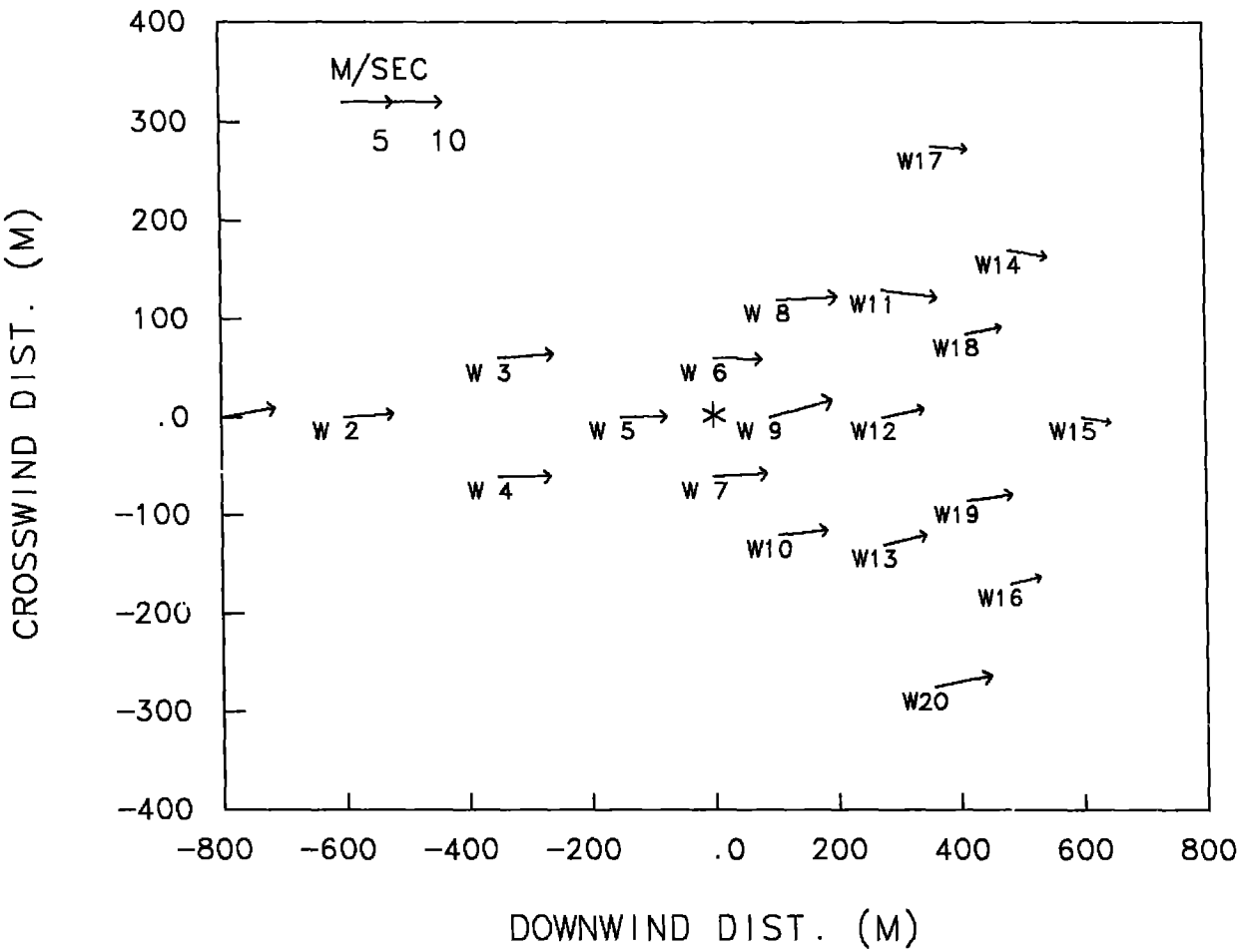
COYOTE 6 TIME = 164 SEC.
M/SEC
5 10
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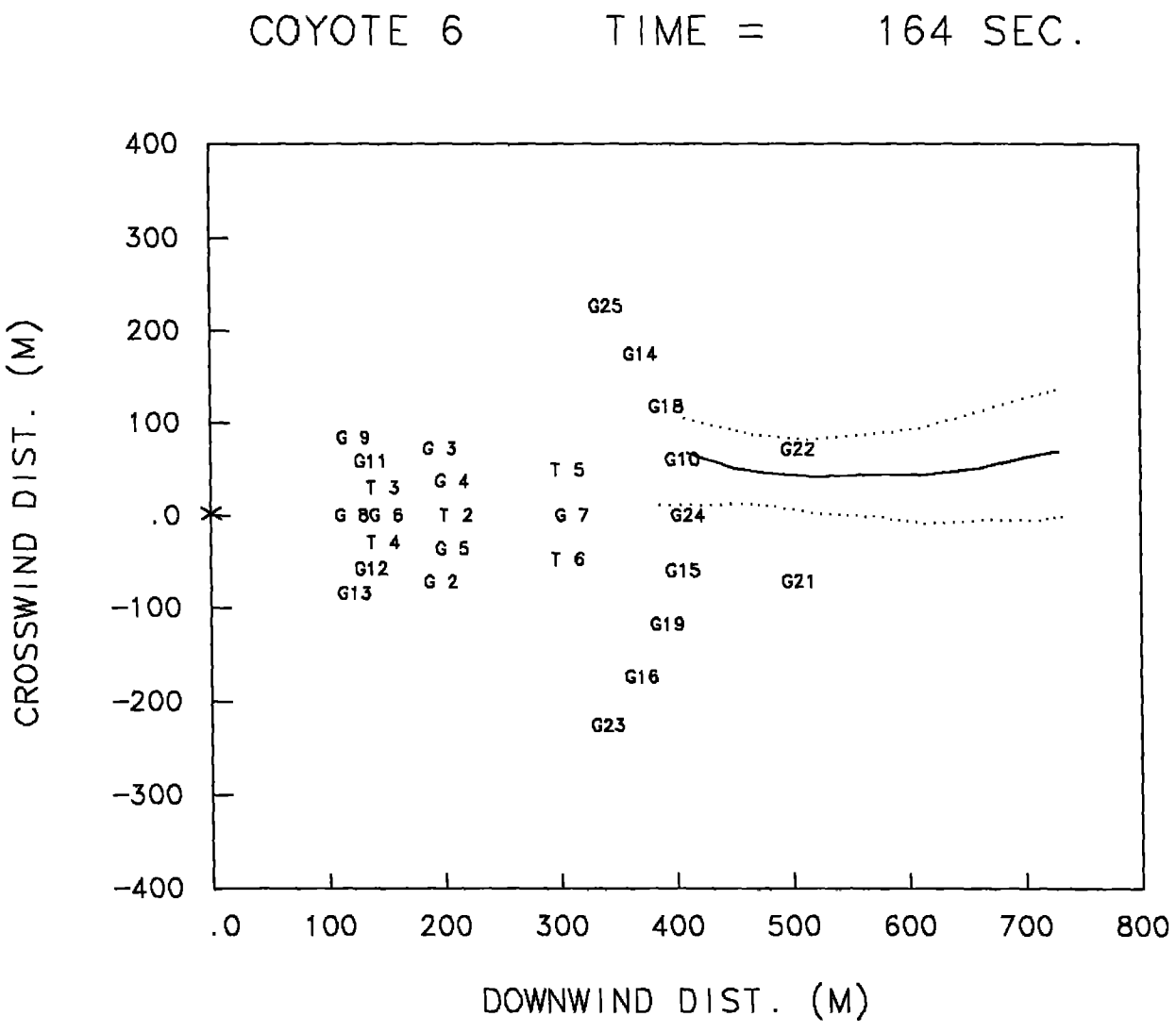
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 6 TIME = 164 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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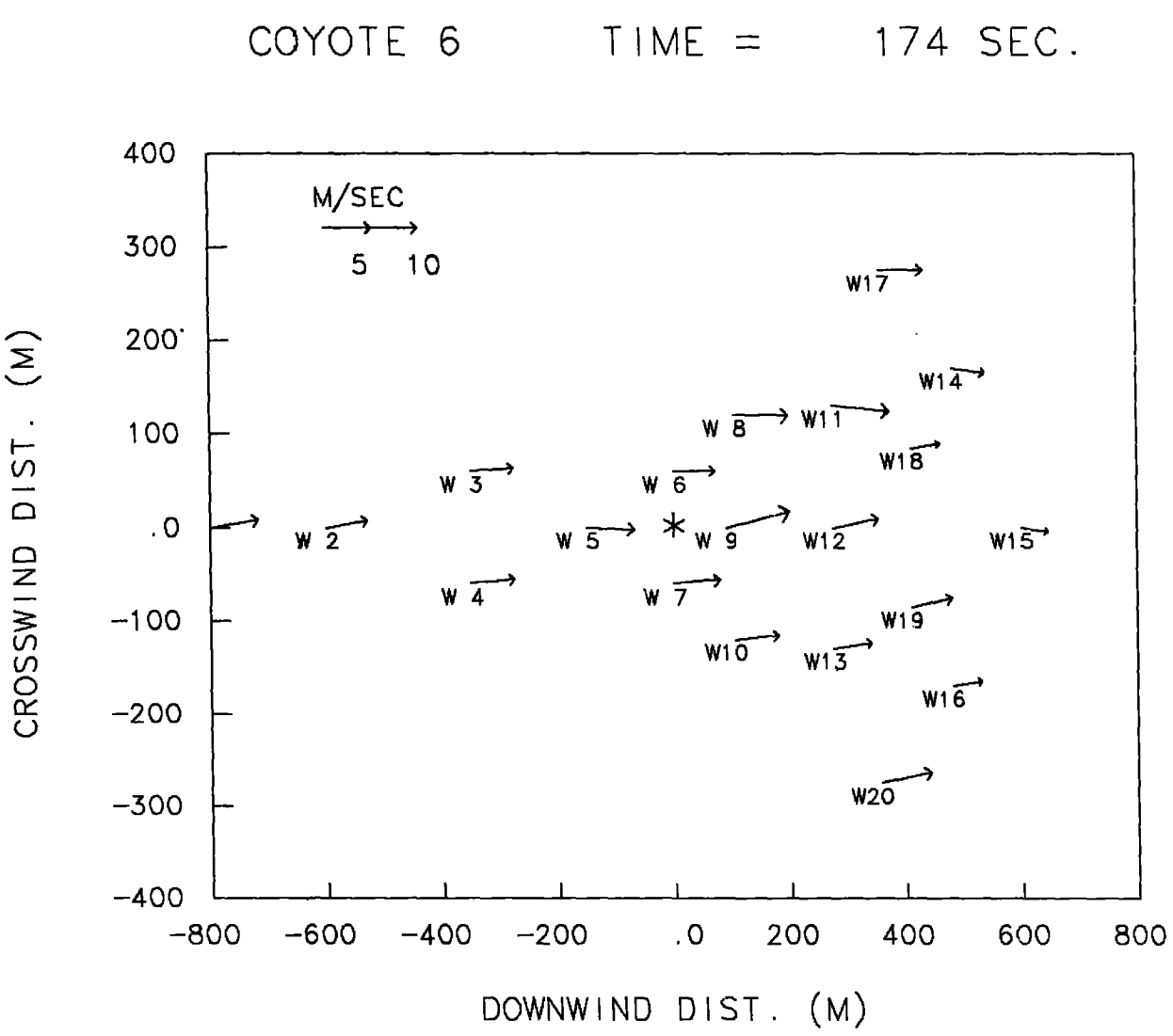
COYOTE 6 TIME = 174 SEC.
M/SEC
5 10
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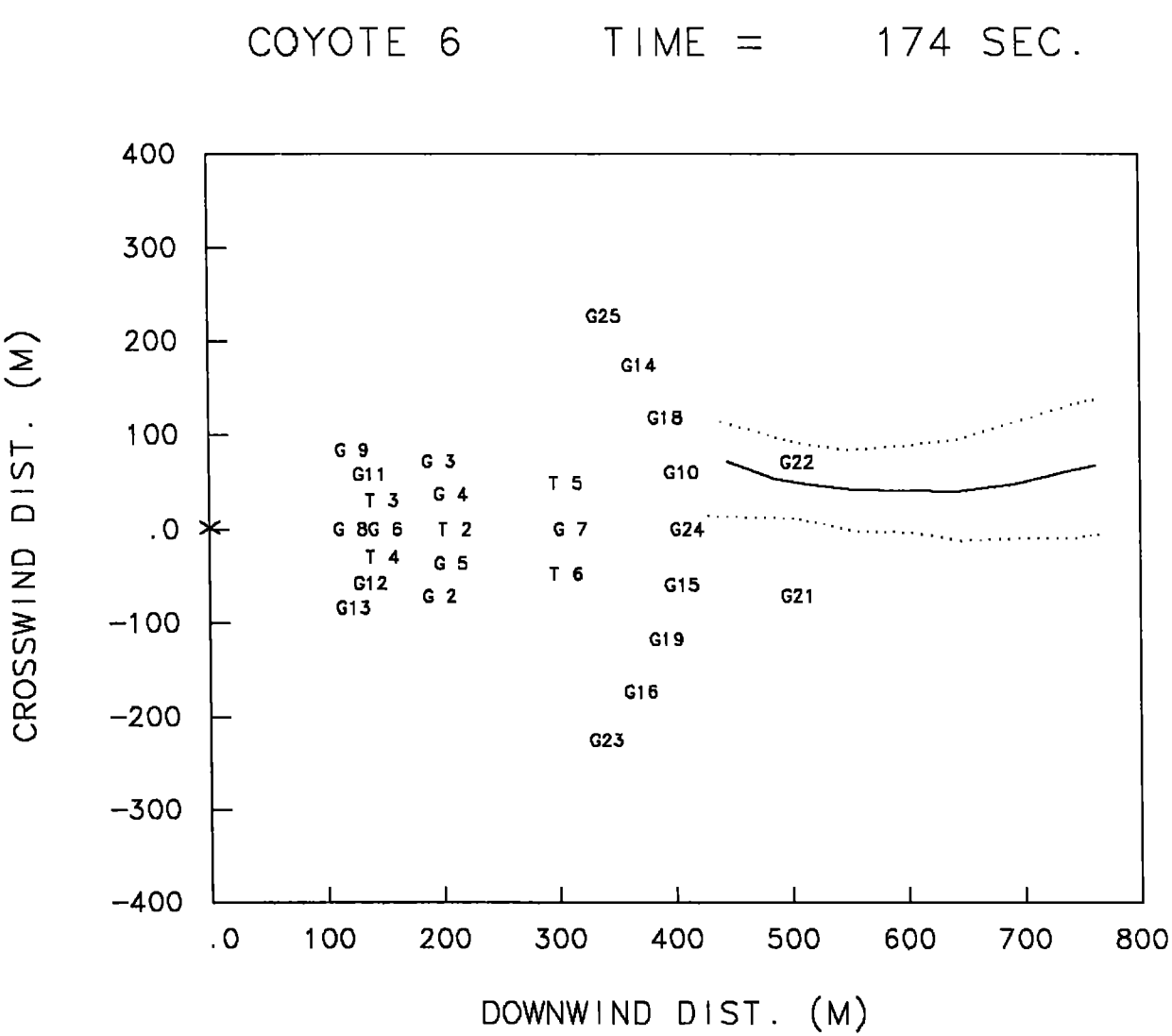
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 6 TIME = 174 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
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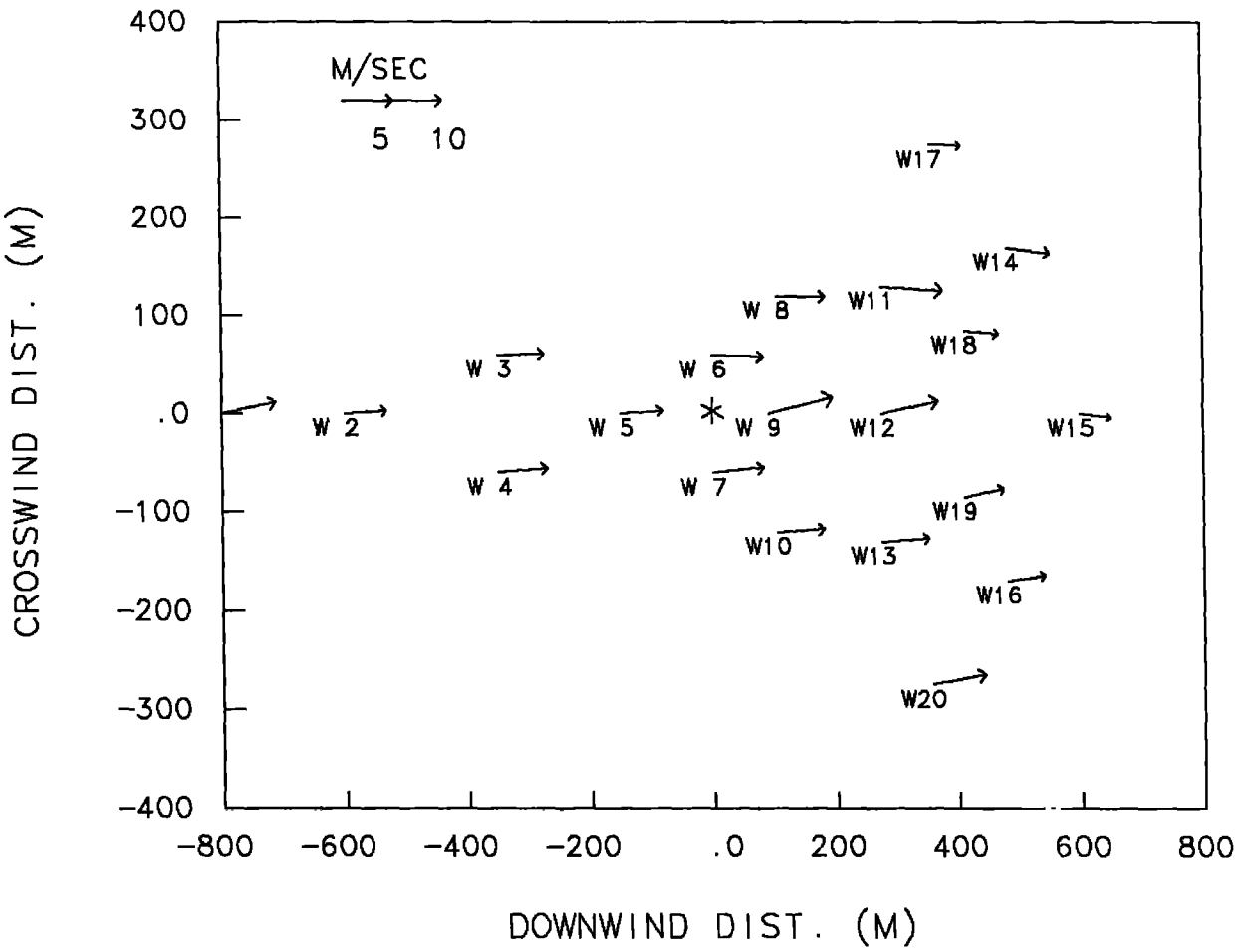
COYOTE 6 TIME = 184 SEC.
M/SEC
5 10
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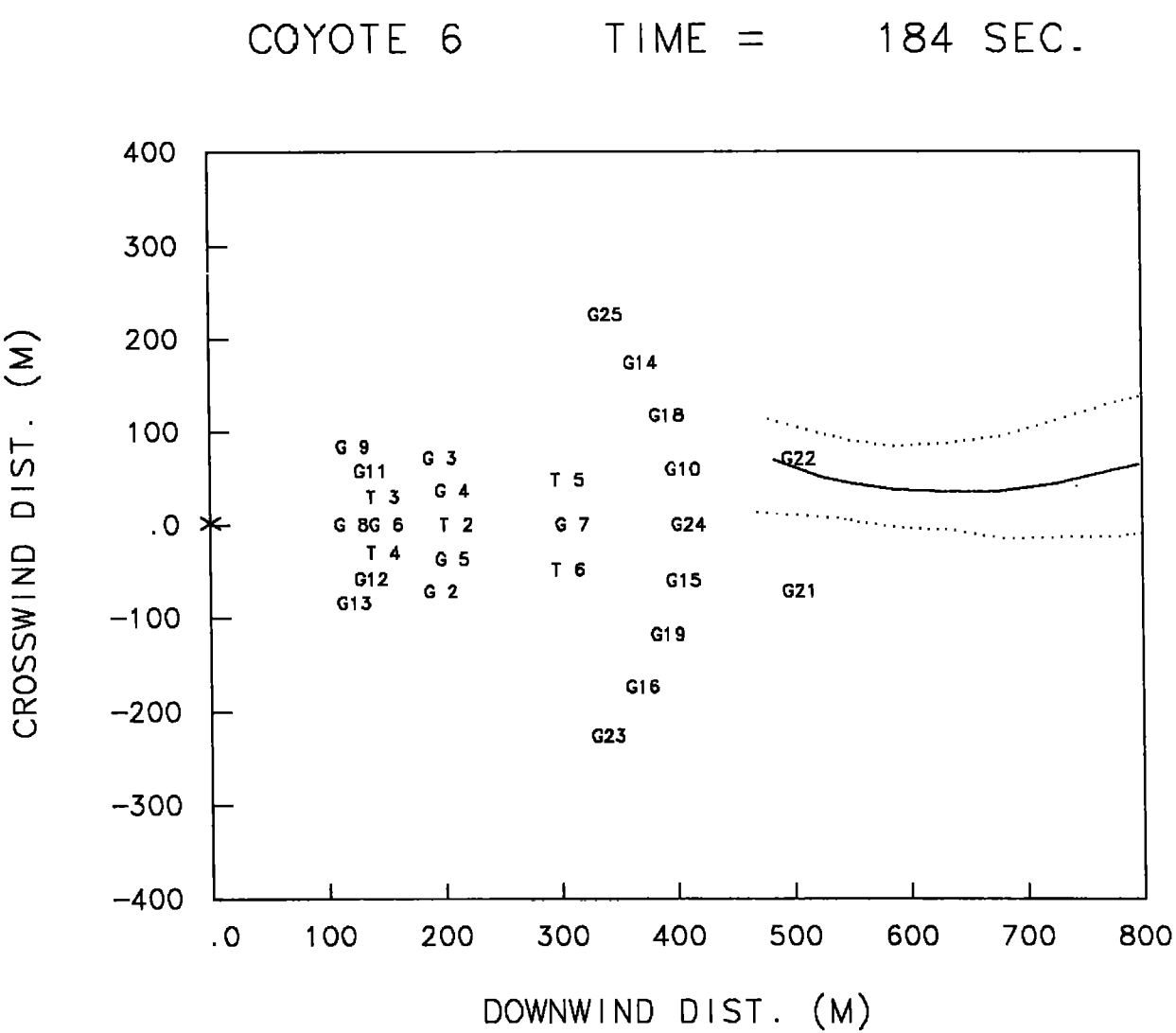
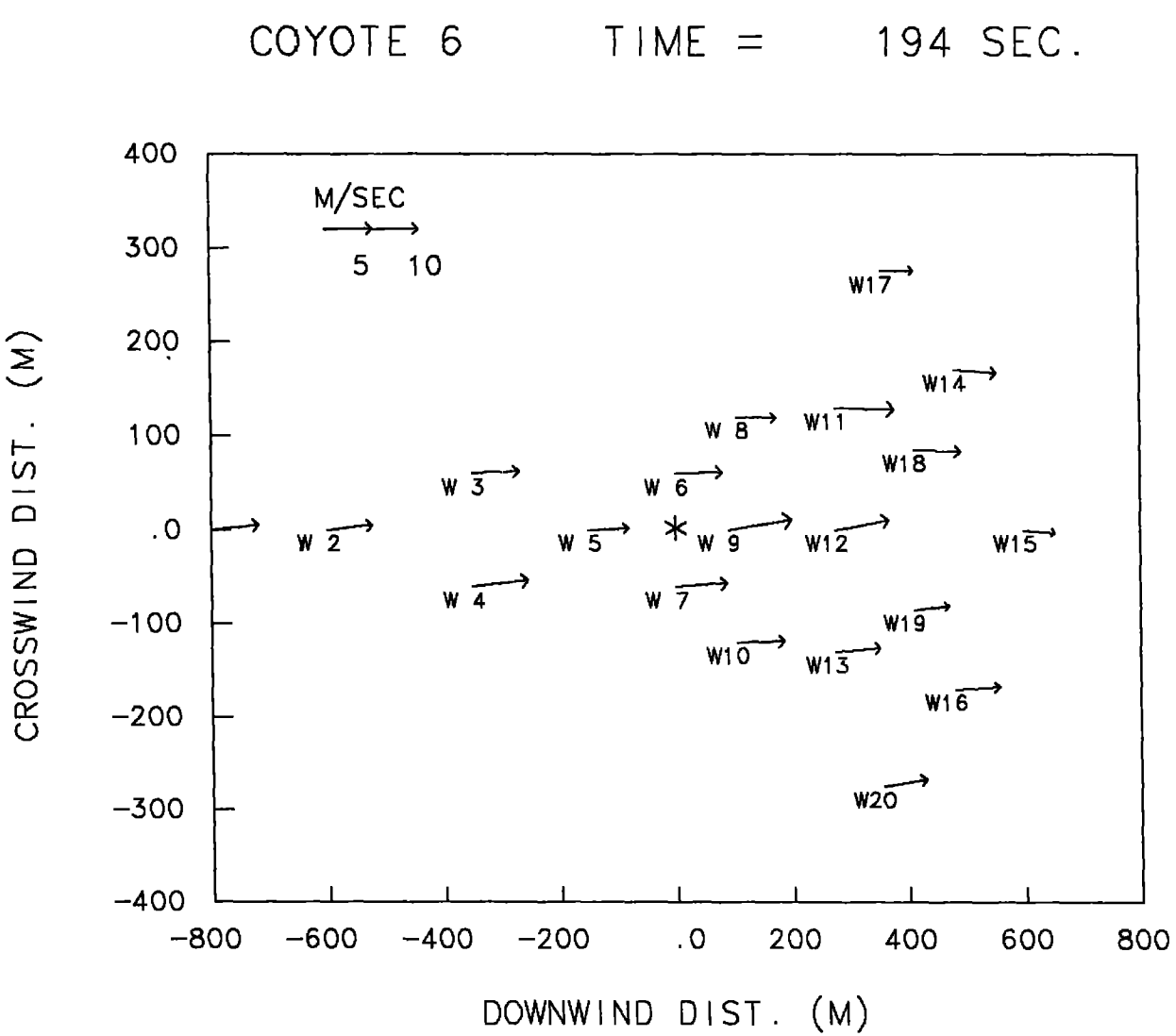
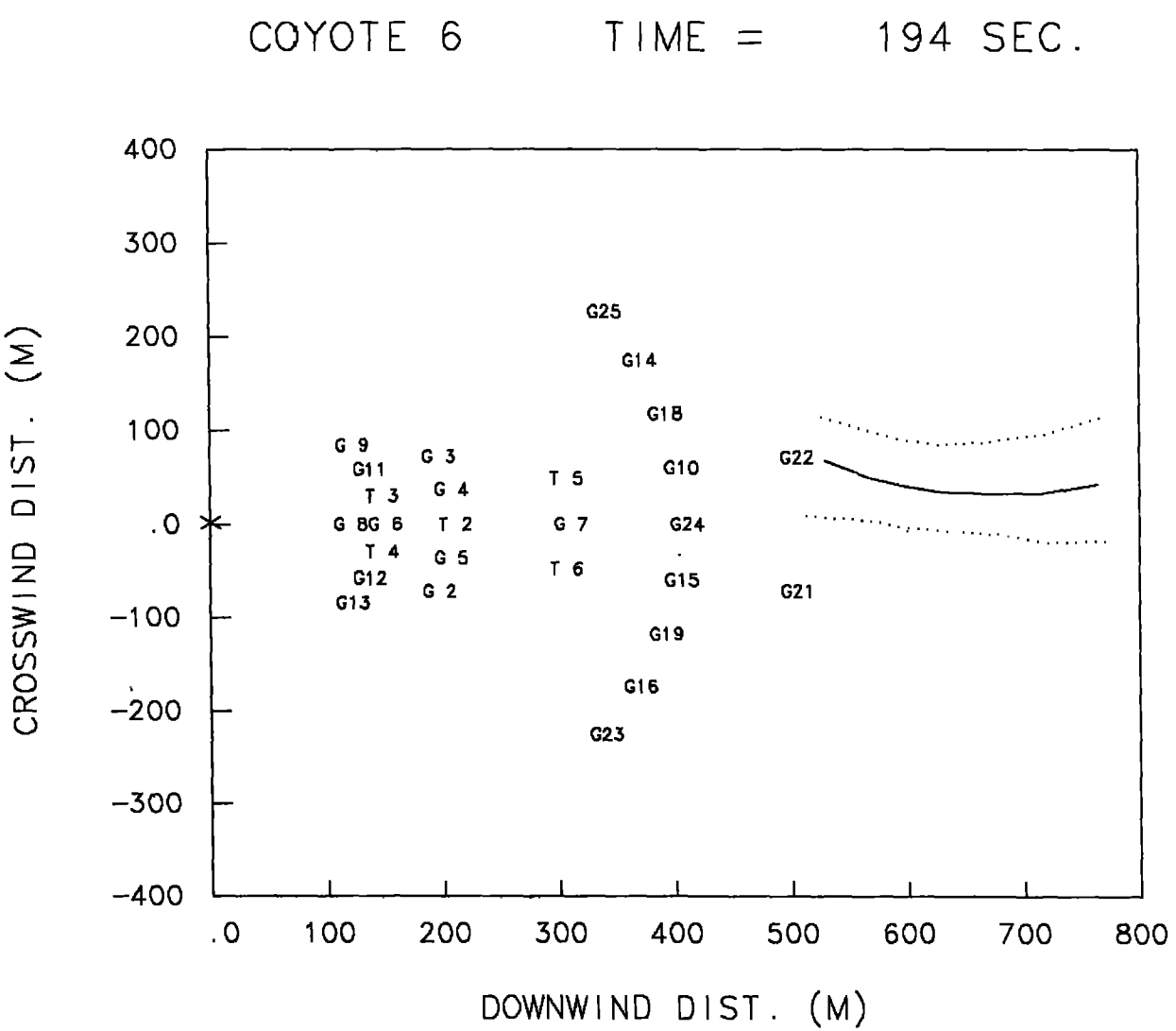
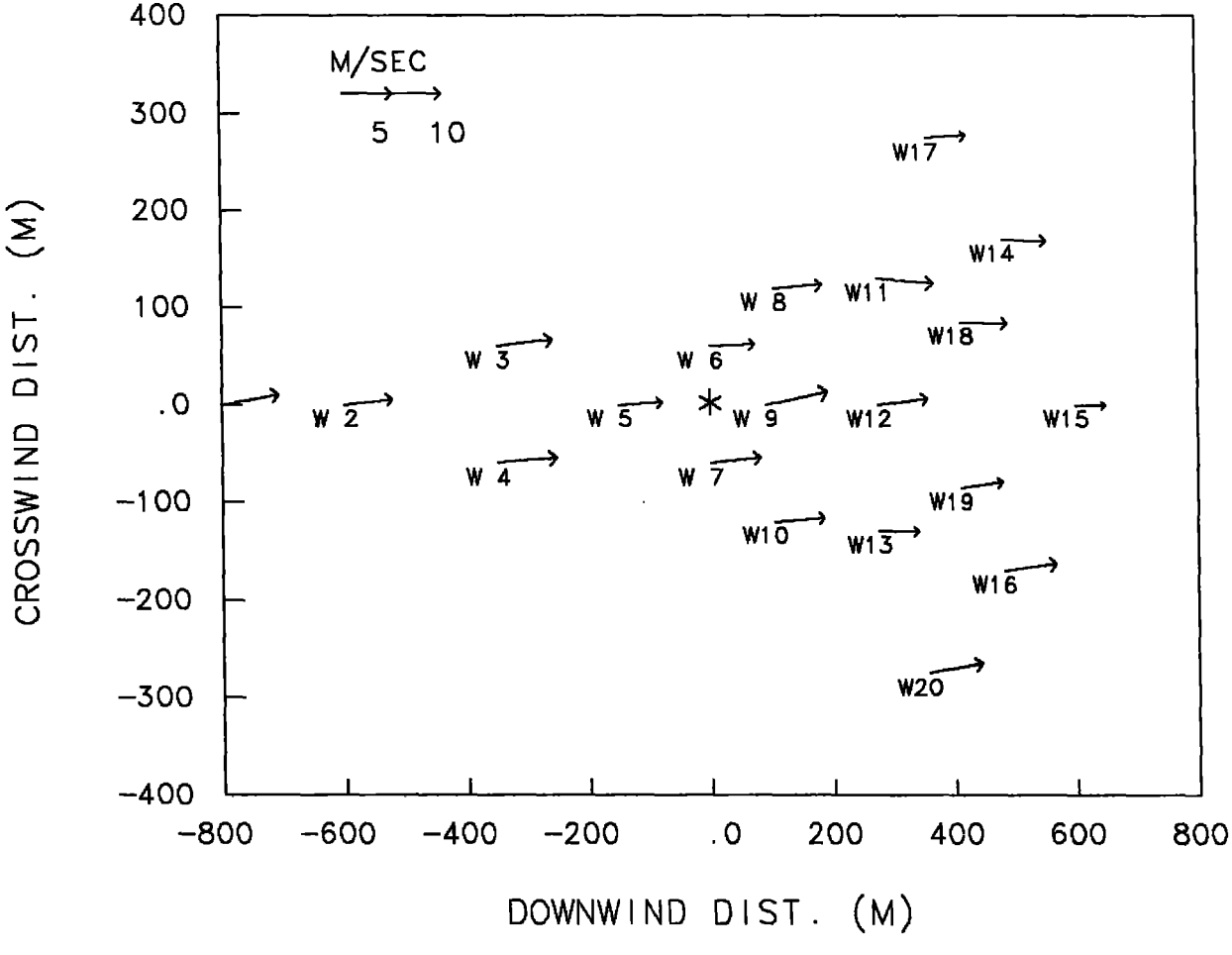
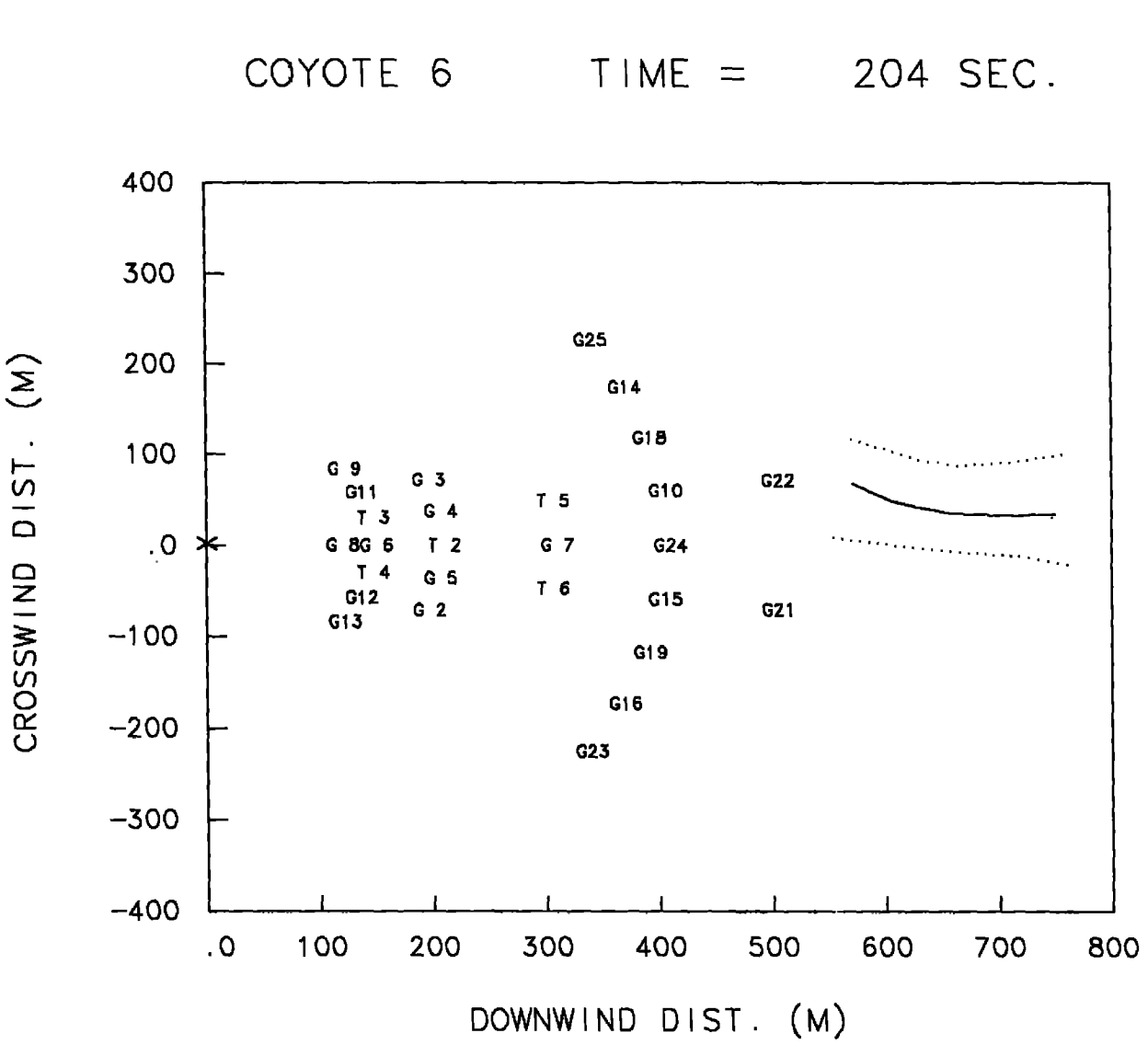
W 5
W 9
W12
W15
W 4
W 7
W19
W10
W13
W16
W20
400
300
200
100
.0
-100
-200
-300
-400
-800
-600
-400
-200
.0
200
400
600
800
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 6 TIME = 184 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
400
300
200
100
.0
-100
-200
-300
-400
100
200
300
400
500
600
700
800
G 9
G11
G 3
T 3
G 4
G 8
G 6
T 2
T 4
G 5
G12
G 2
G13
T 5
G 7
T 6
G25
G14
G18
G10
G22
G24
G15
G21
G19
G16
G23


COYOTE 6 TIME = 194 SEC.
M/SEC
5 10
W17
W14
W 8
W11
W18
W 3
W 6
W 2
W 5
W 9
W12
W15
W 4
W 7
W19
W10
W13
W16
W20
400
300
200
100
.0
-100
-200
-300
-400
-800
-600
-400
-200
.0
200
400
600
800
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 6 TIME = 194 SEC.
400
300
200
100
.0
-100
-200
-300
-400
CROSSWIND DIST. (M)
.0
100
200
300
400
500
600
700
800
DOWNWIND DIST. (M)
G 9
G11
T 3
G BG 6
T 4
G12
G13
G 3
G 4
T 2
G 5
G 2
T 5
G 7
T 6
G25
G14
G18
G10
G24
G15
G19
G16
G23
G22
G21


COYOTE 6 TIME = 204 SEC.
M/SEC
5 10
W17
W14
W 8
W11
W18
W 3
W 6
W 2
W 5
W 9
W12
W15
W 4
W 7
W19
W10
W13
W16
W20
400
300
200
100
.0
-100
-200
-300
-400
-800
-600
-400
-200
.0
200
400
600
800
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 6 TIME = 204 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
400
300
200
100
.0
-100
-200
-300
-400
100
200
300
400
500
600
700
800
G 9
G11
T 3
G 8
G 6
T 4
G12
G13
G 3
G 4
T 2
G 5
G 2
T 5
G 7
T 6
G25
G14
G18
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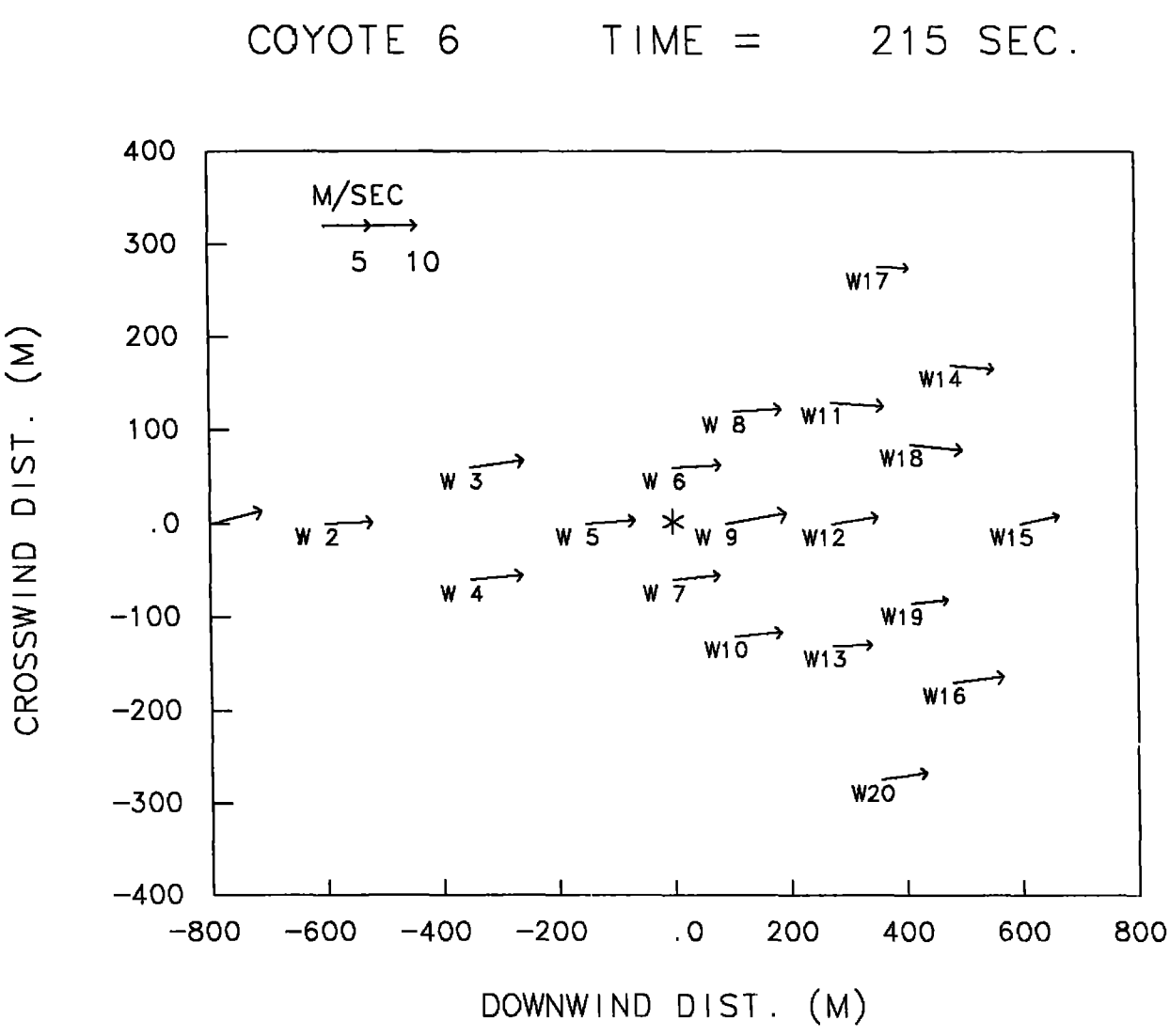
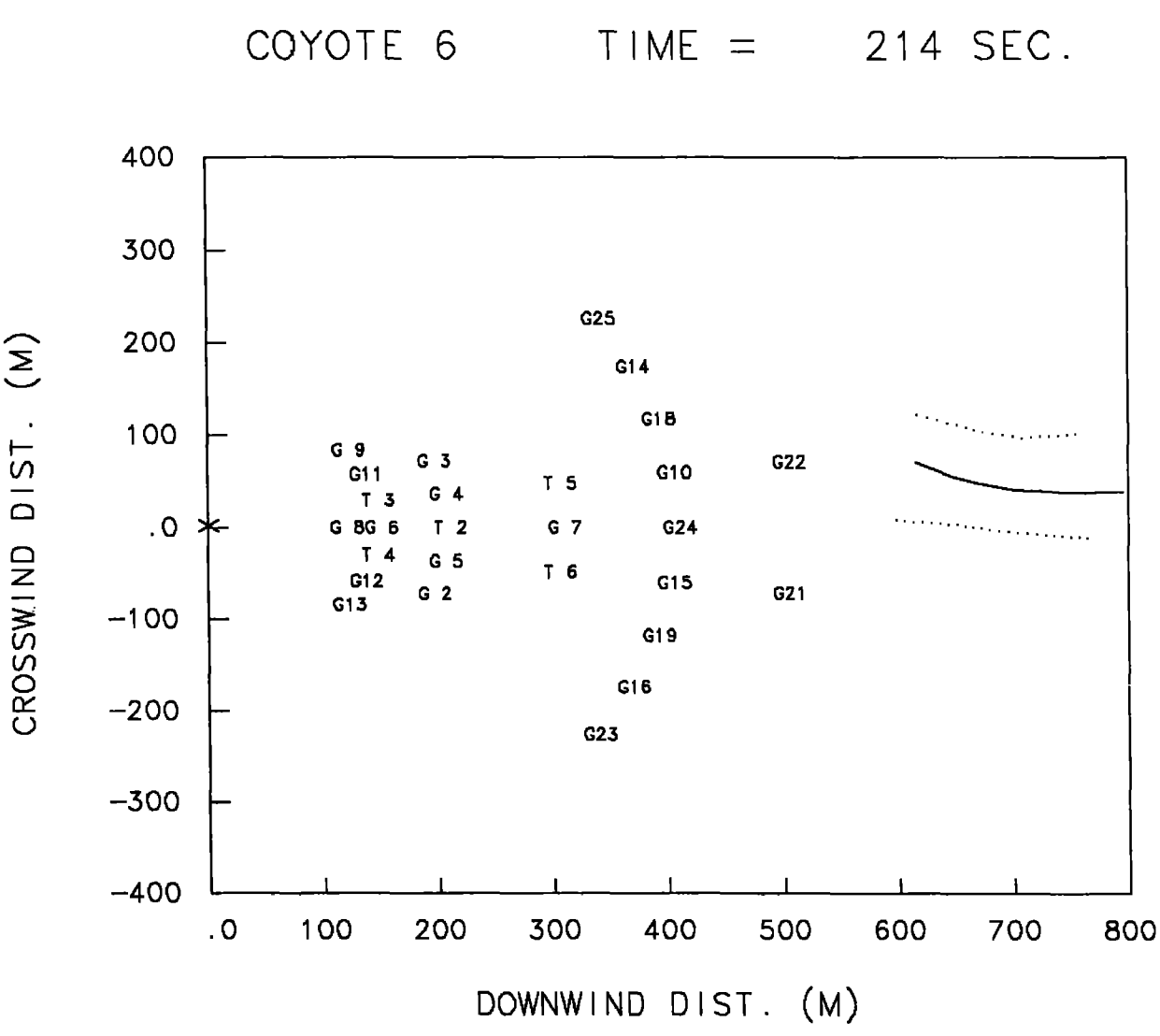
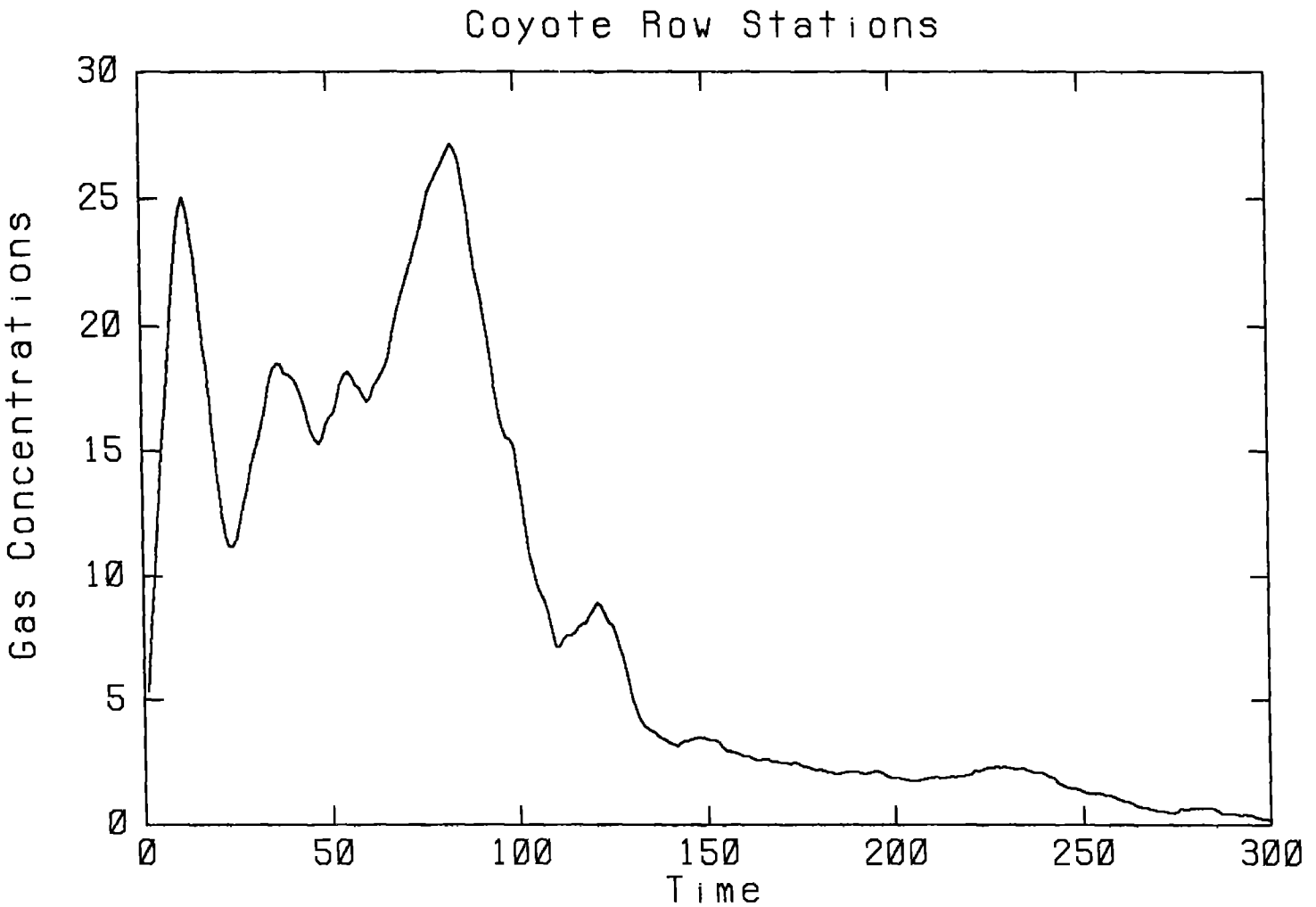
G19
G16
G23
G22
G21

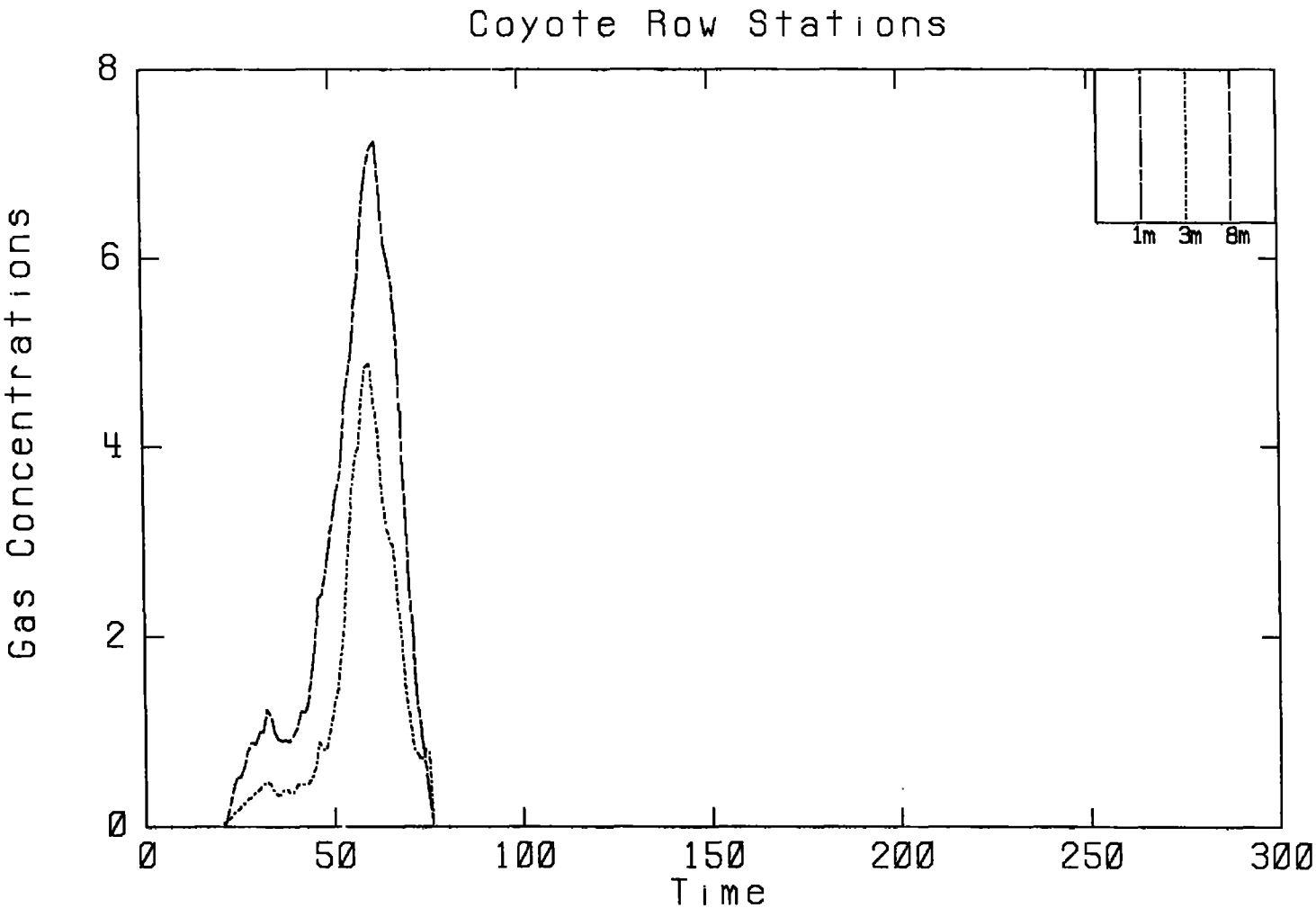

COYOTE 6 TIME = 215 SEC.
M/SEC
5 10
W 1
W 2
W 3
W 4
W 5
W 6
W 7
W 8
W 9
W10
W11
W12
W13
W14
W15
W16
W17
W18
W19
W20
400
300
200
100
.0
-100
-200
-300
-400
-800
-600
-400
-200
.0
200
400
600
800
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)


COYOTE 6 TIME = 214 SEC.
CROSSWIND DIST. (M)
DOWNWIND DIST. (M)
400
300
200
100
.0
-100
-200
-300
-400
100
200
300
400
500
600
700
800
G25
G14
G18
G 9
G11
G 3
T 3
G 4
G 8
G 6
T 2
T 4
G 5
G12
G 2
G13
T 5
G 7
T 6
G10
G22
G24
G15
G21
G19
G16
G23

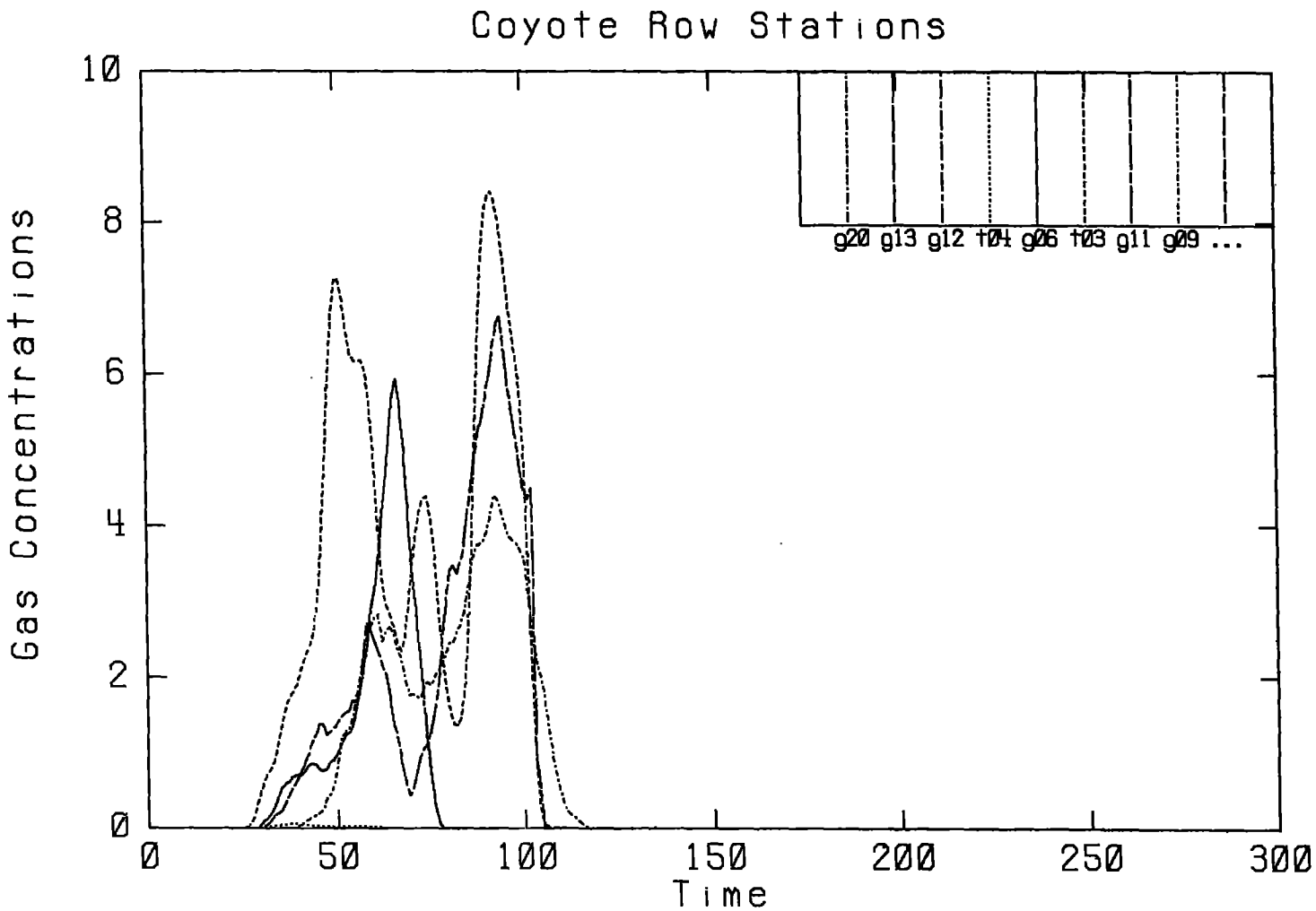
APPENDIX 2.: GAS-CONCENTRATION TIME HISTORIES



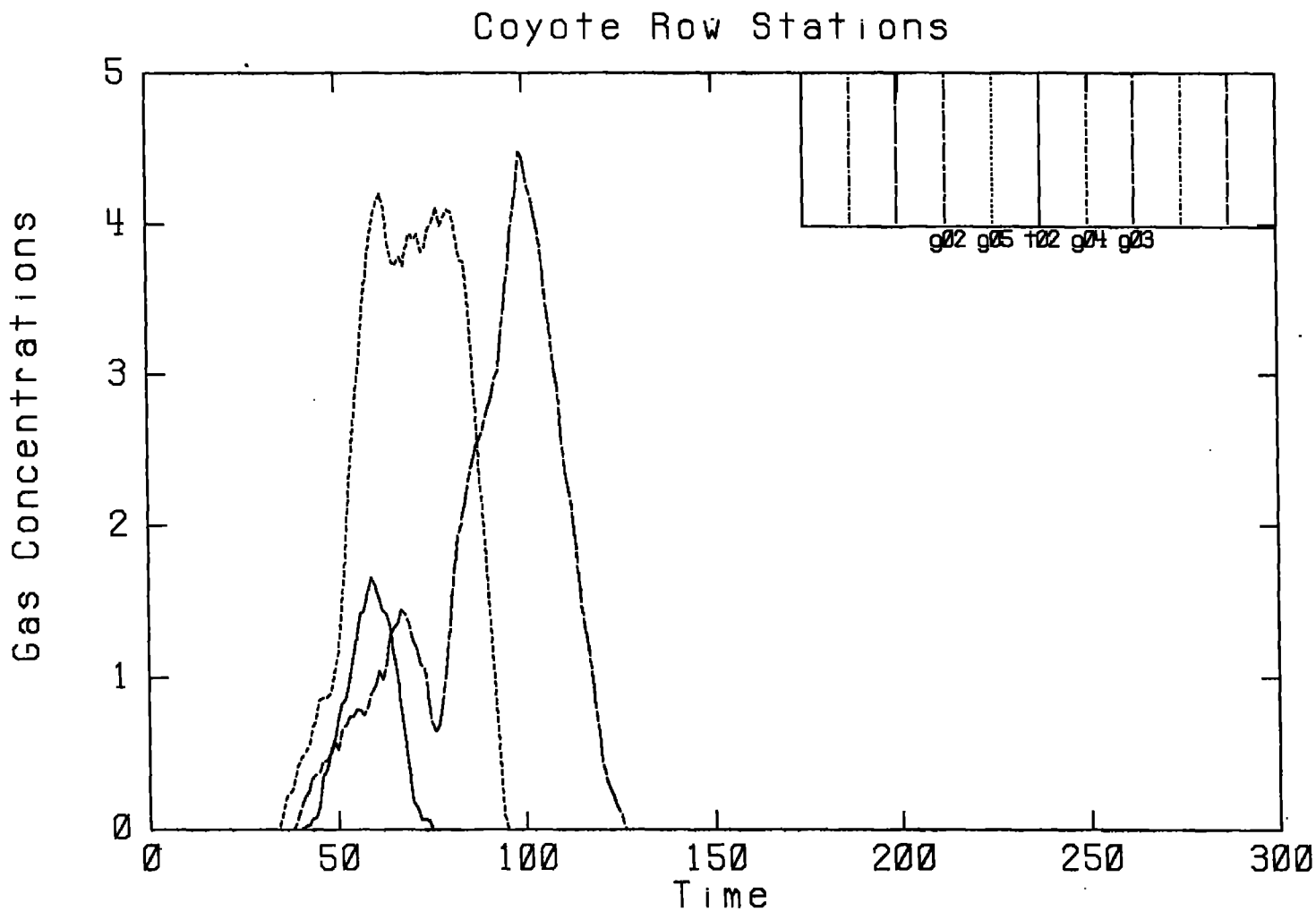
Coyote 3. Source



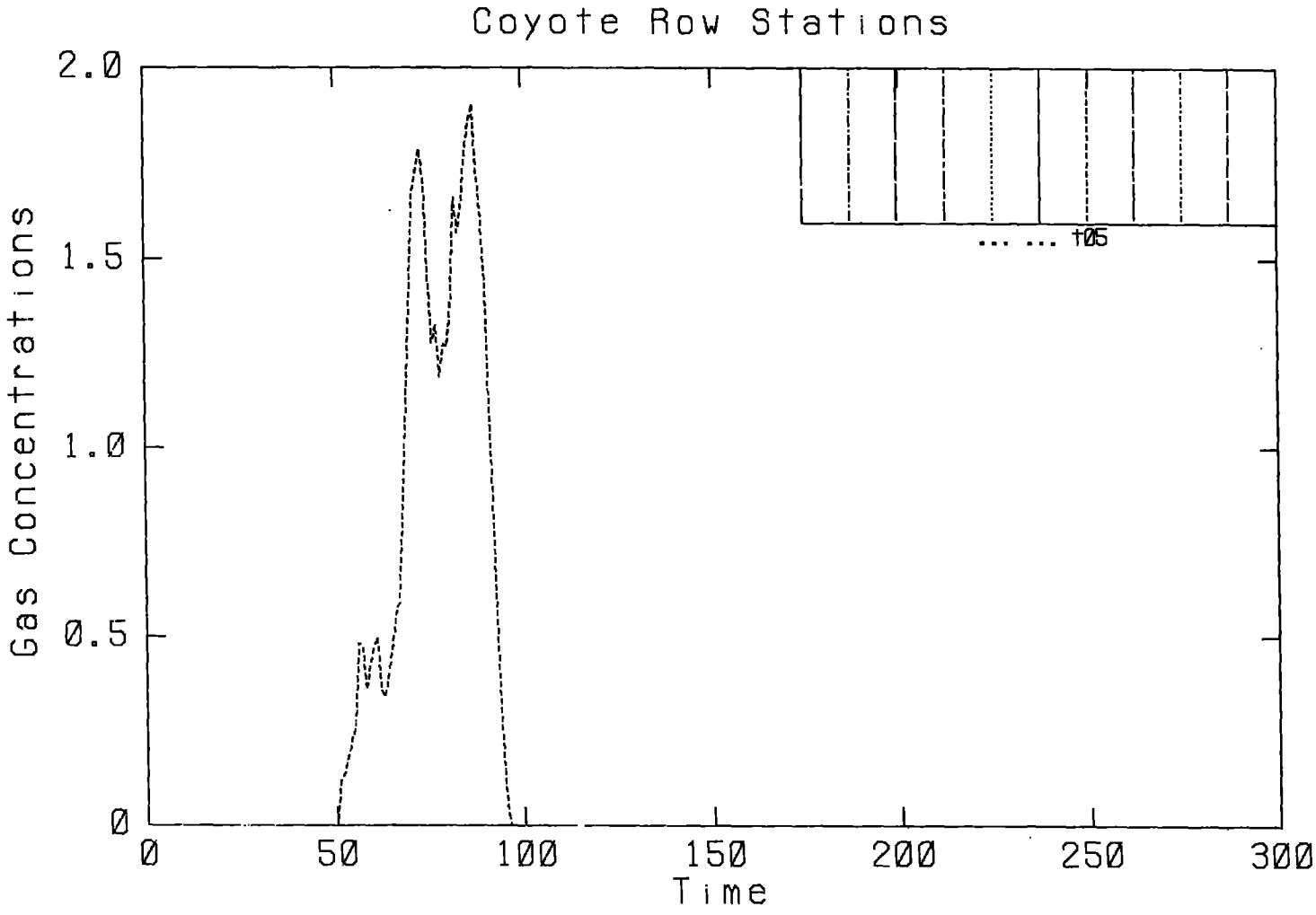
Coyote 3. 110 M. Row



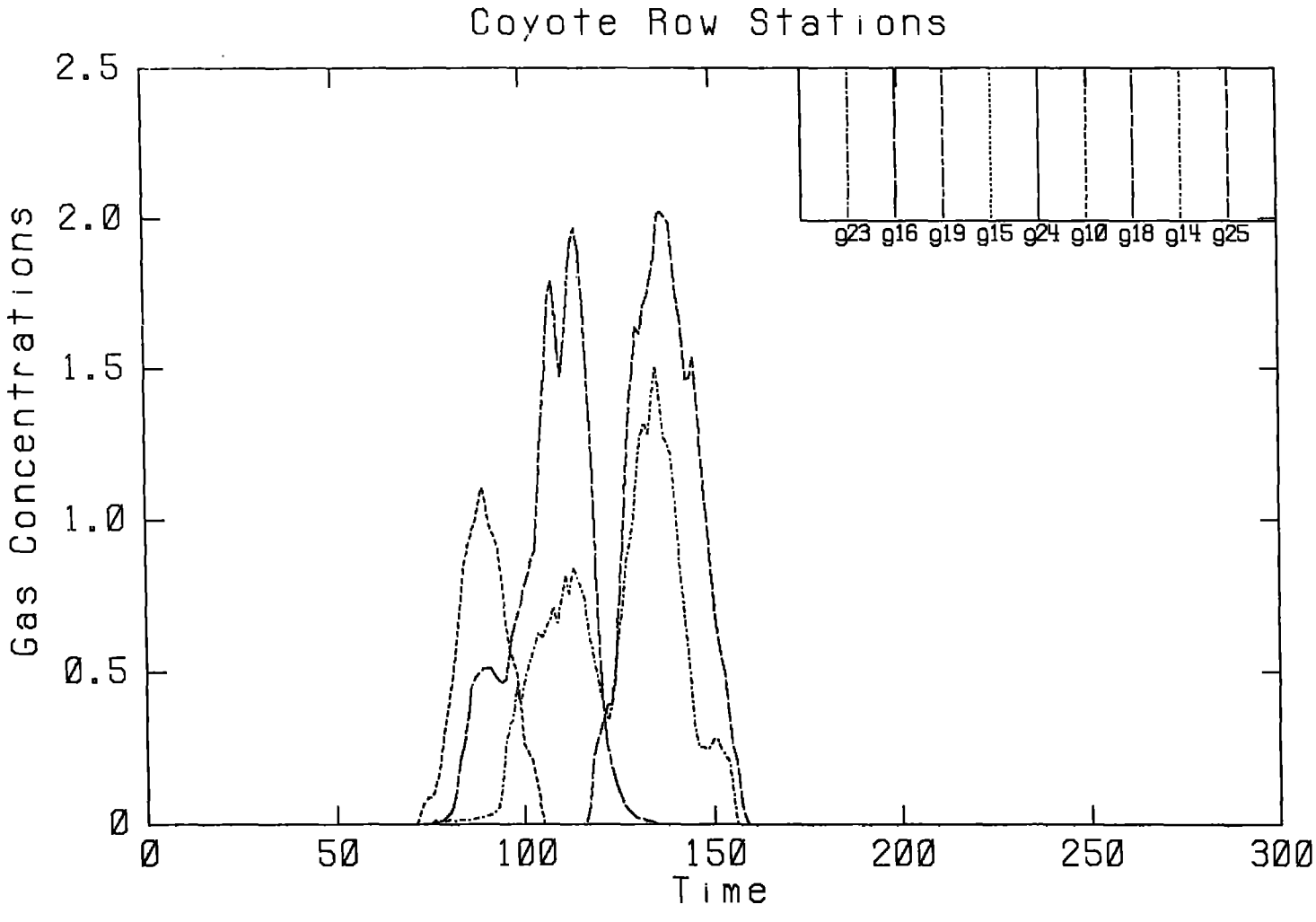
Coyote 3. Height 1. M. Row: 140 M.



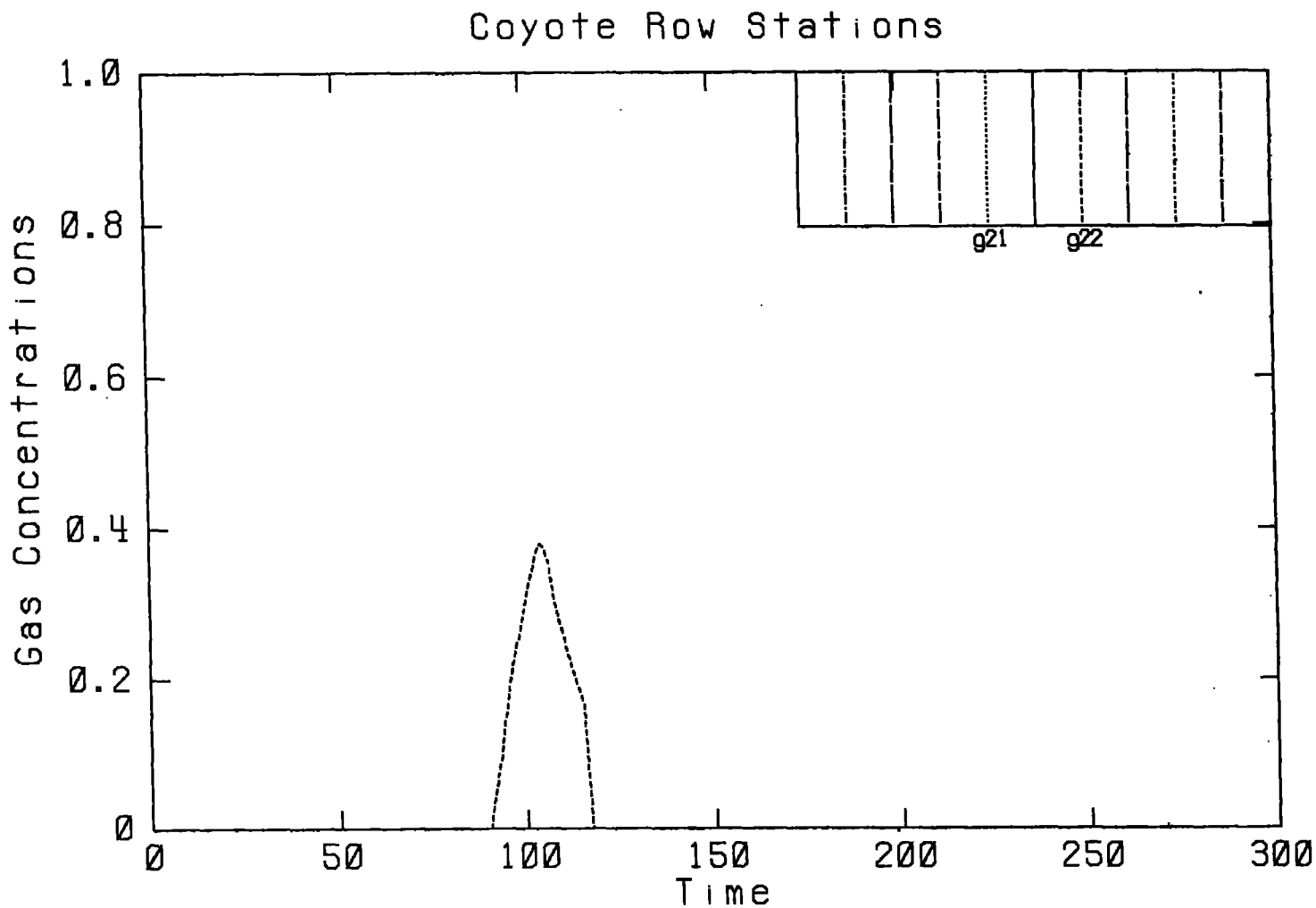
Coyote 3. Height 1. M. Row: 200 M.



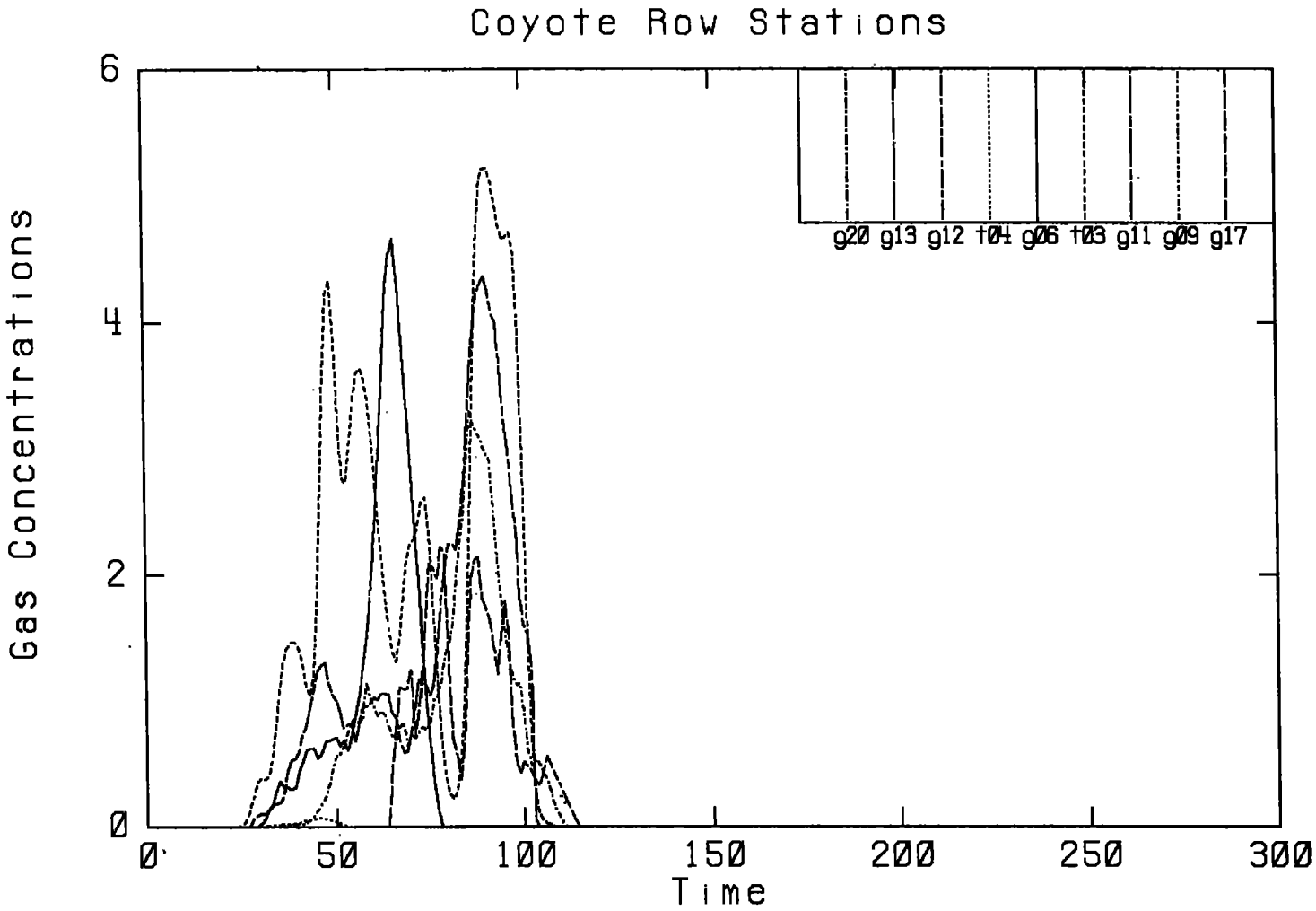
Coyote 3. Height 1. M. Row: 300 M.



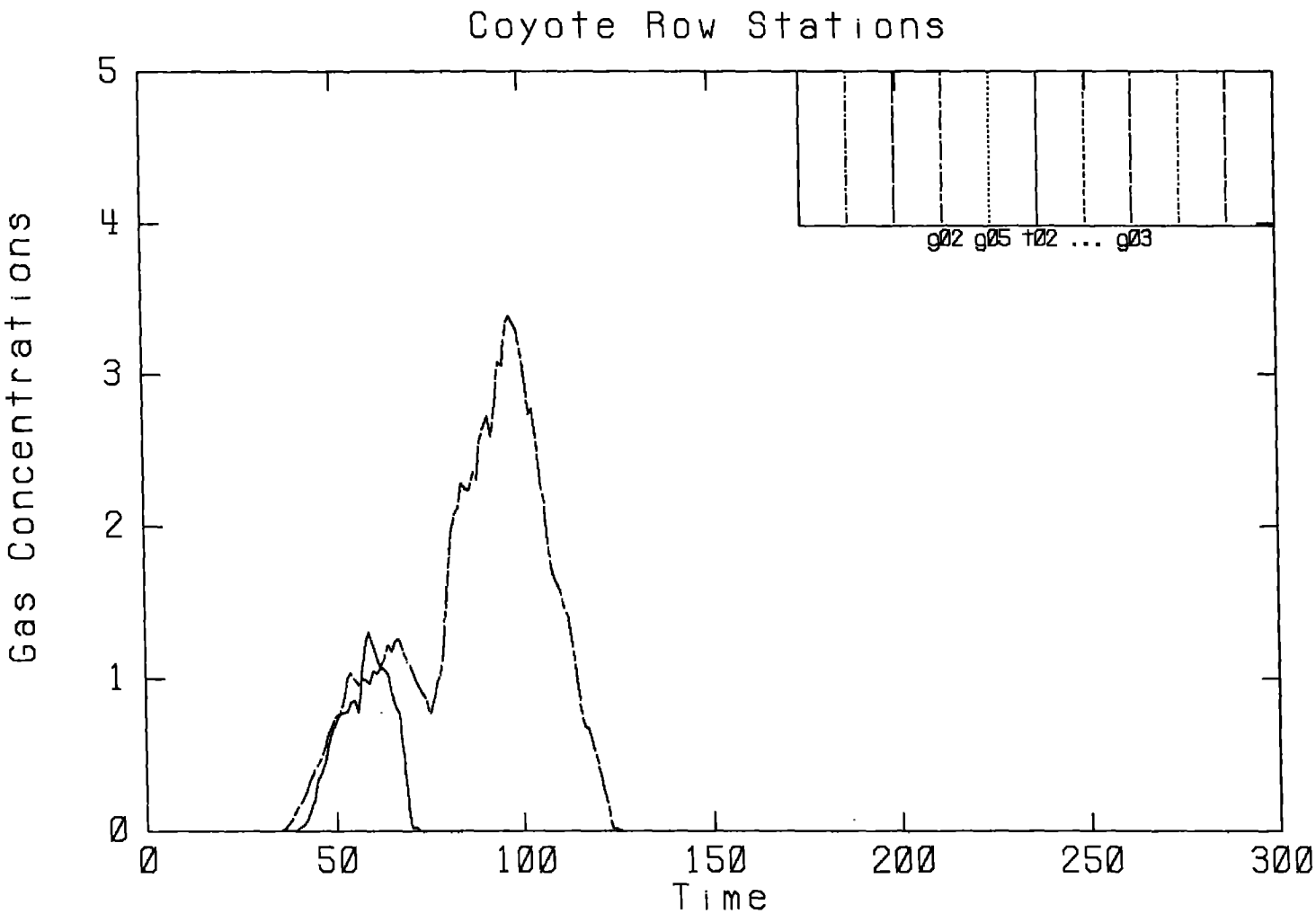
Coyote 3. Height 1. M. Row: 400 M.



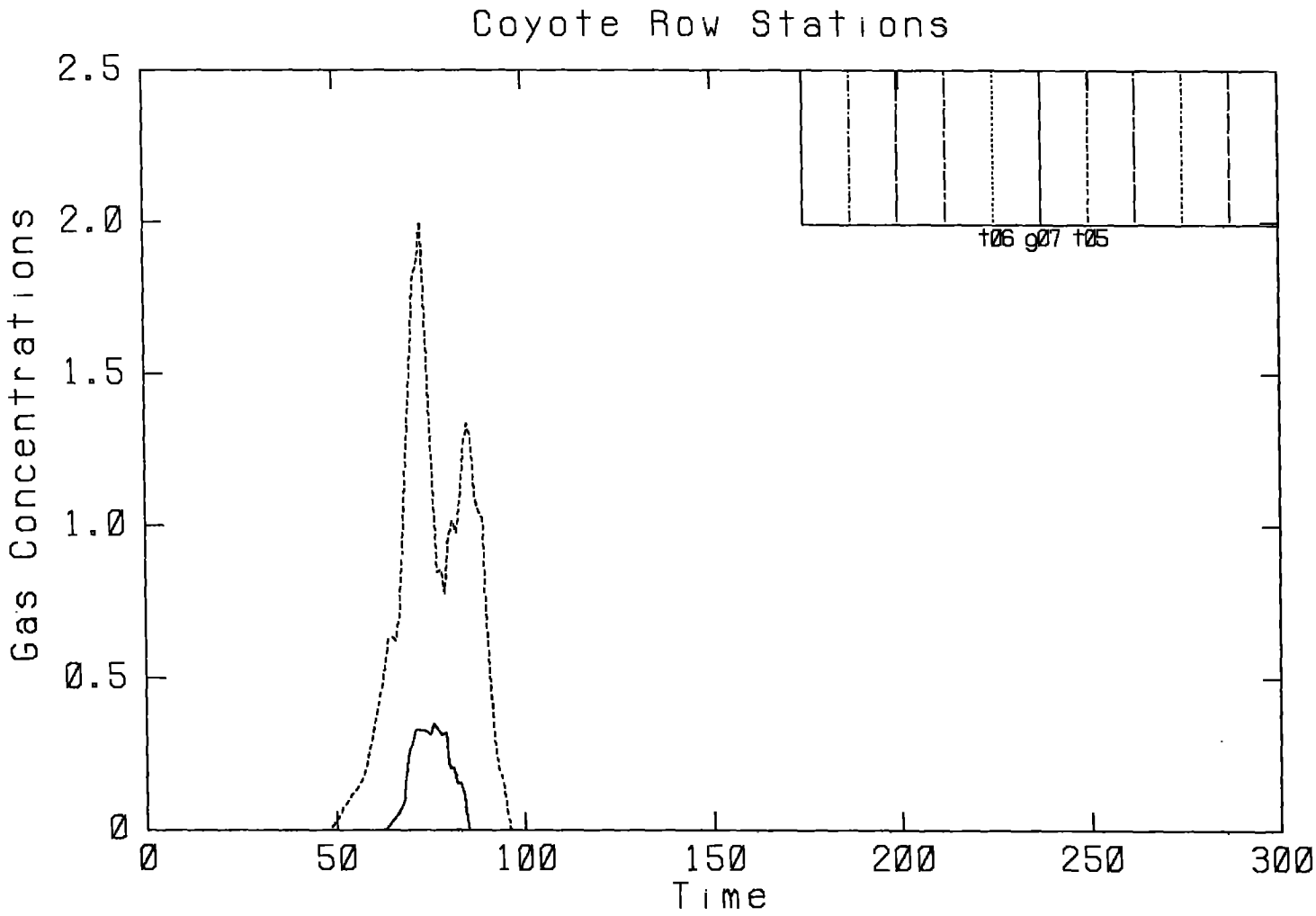
Coyote 3. Height 1. M. Row: 500 M.



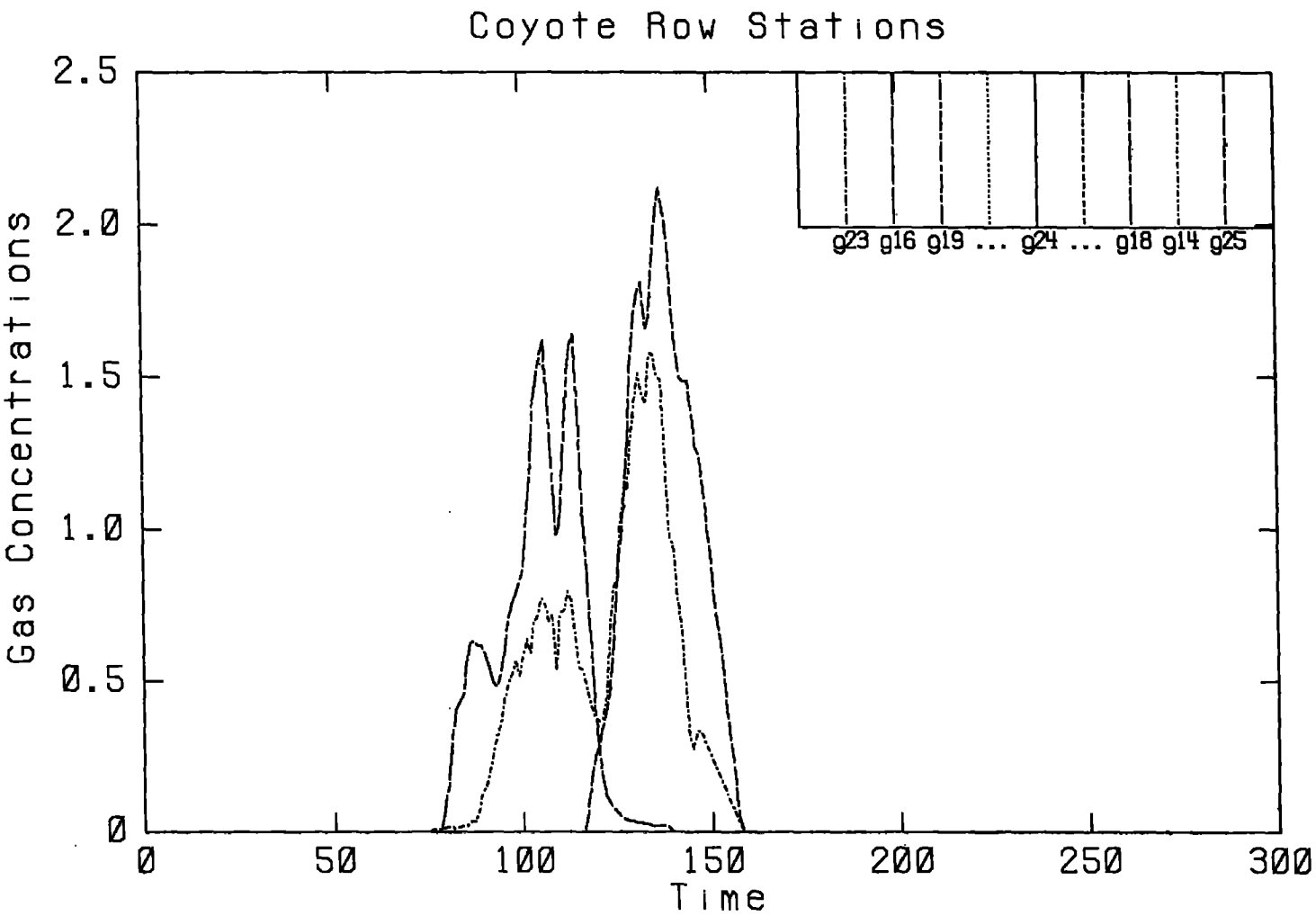
Coyote 3. Height 3. M. Row: 140 M.



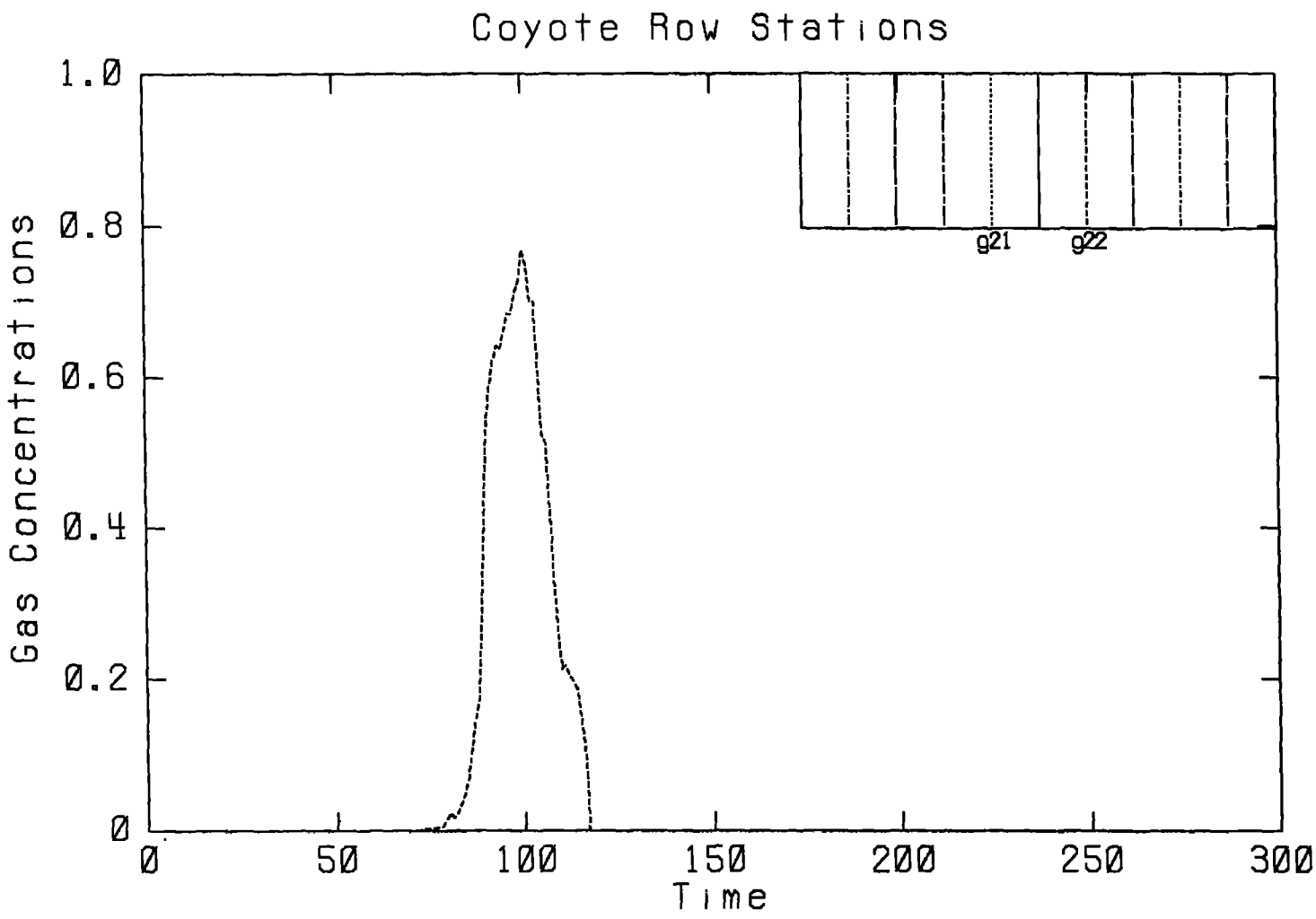
Coyote 3. Height 3. M. Row: 200 M.



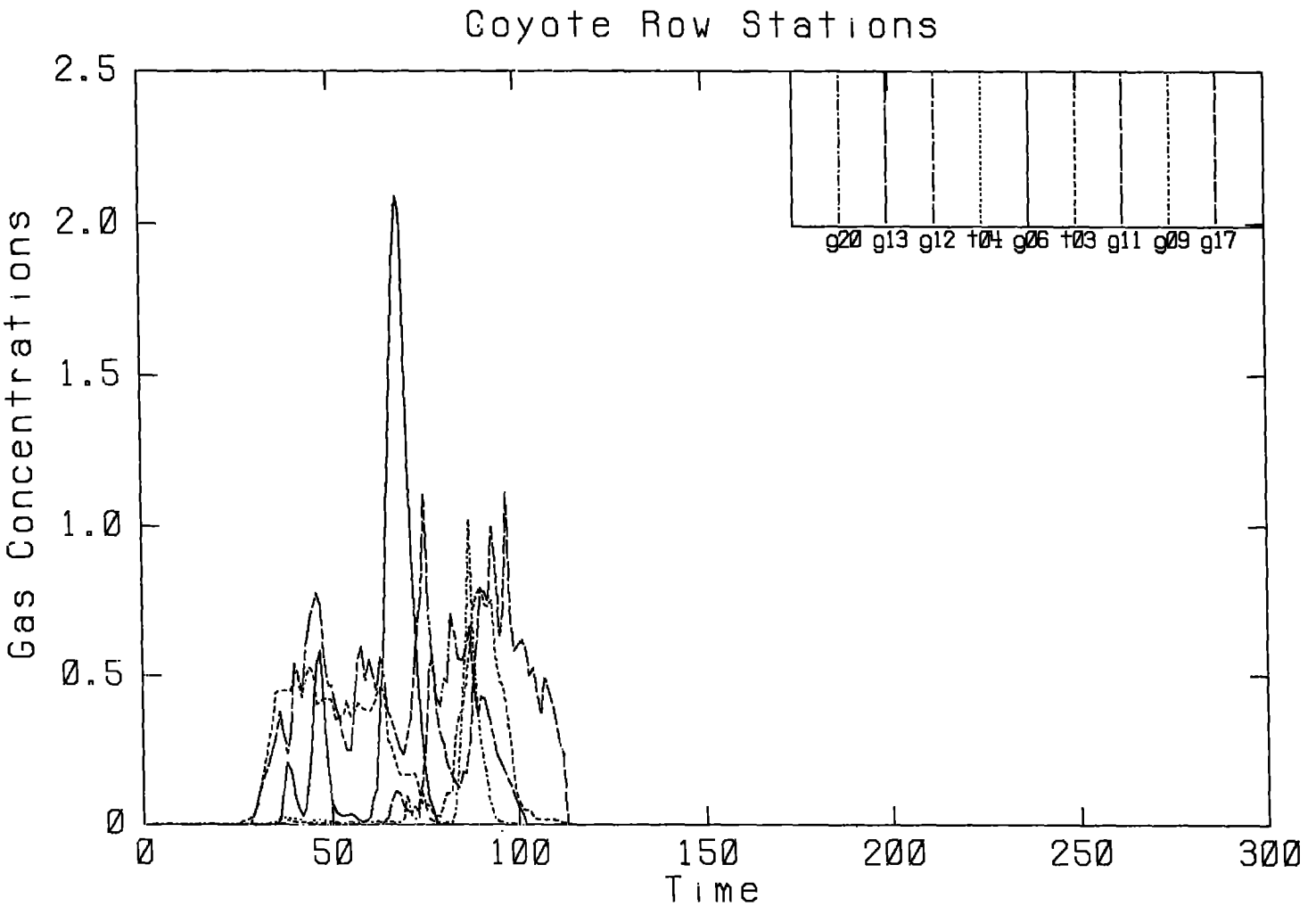
Coyote 3. Height 3. M. Row: 300 M.



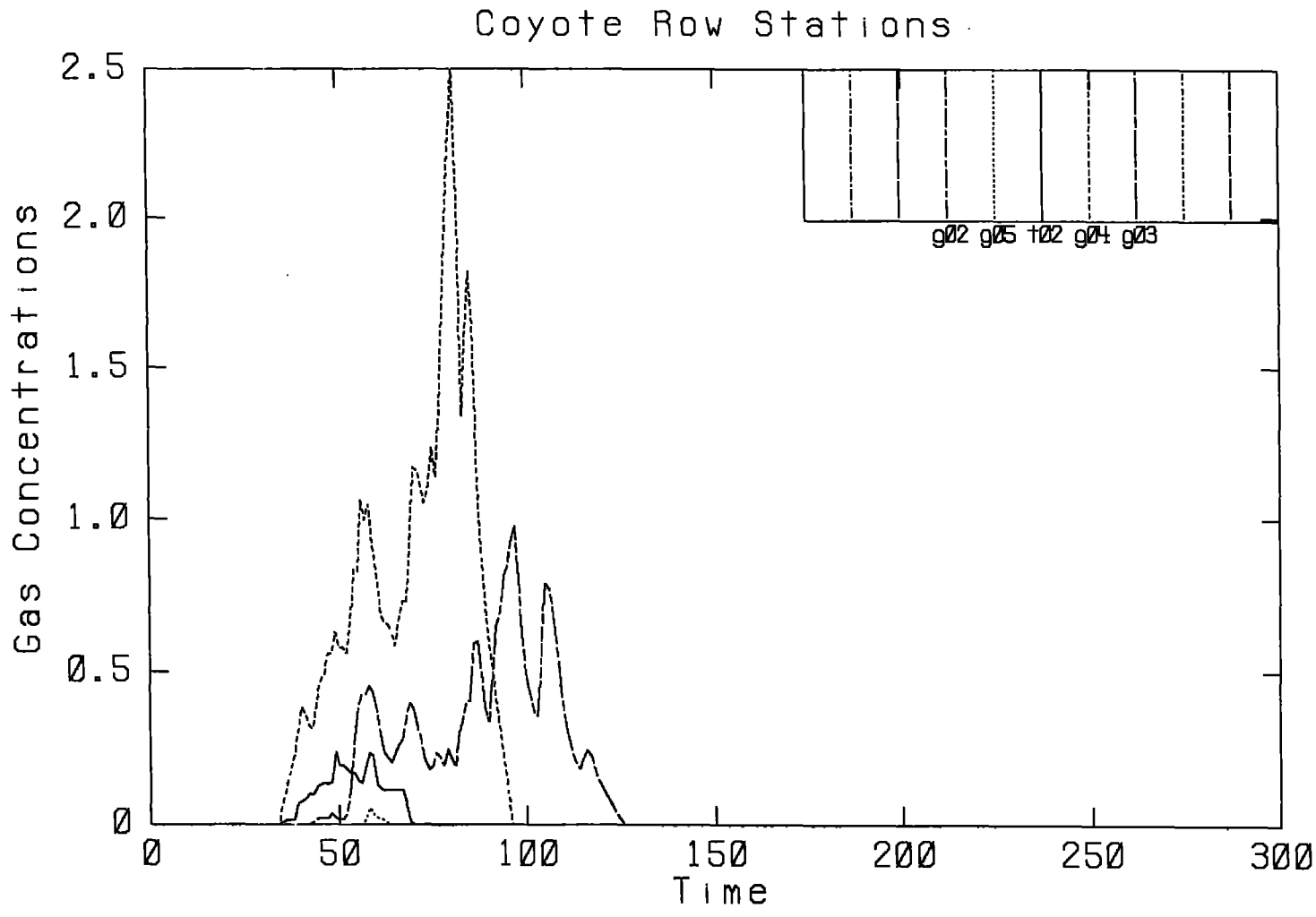
Coyote 3. Height 3. M. Row: 400 M.



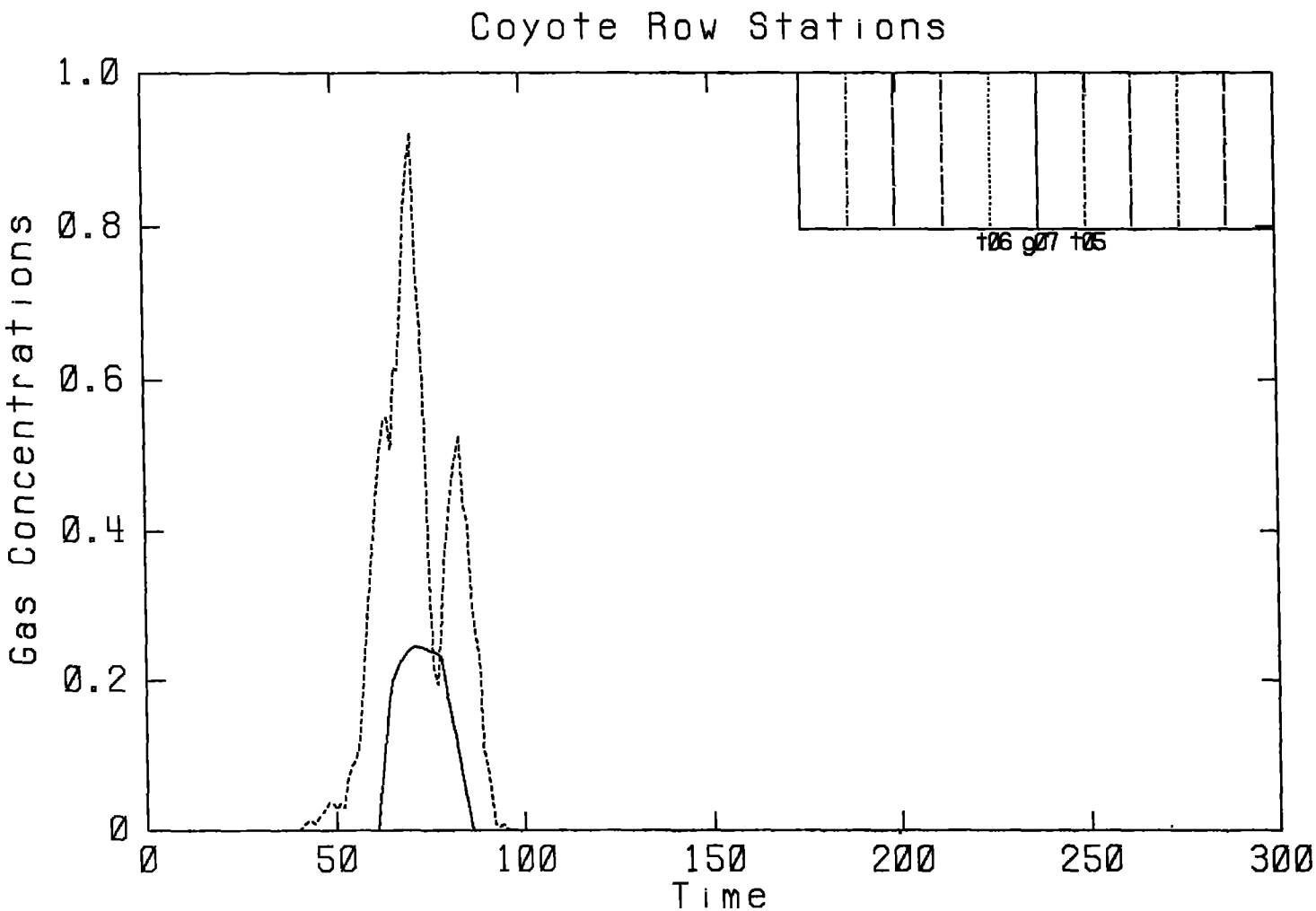
Coyote 3. Height 3. M. Row: 500 M.



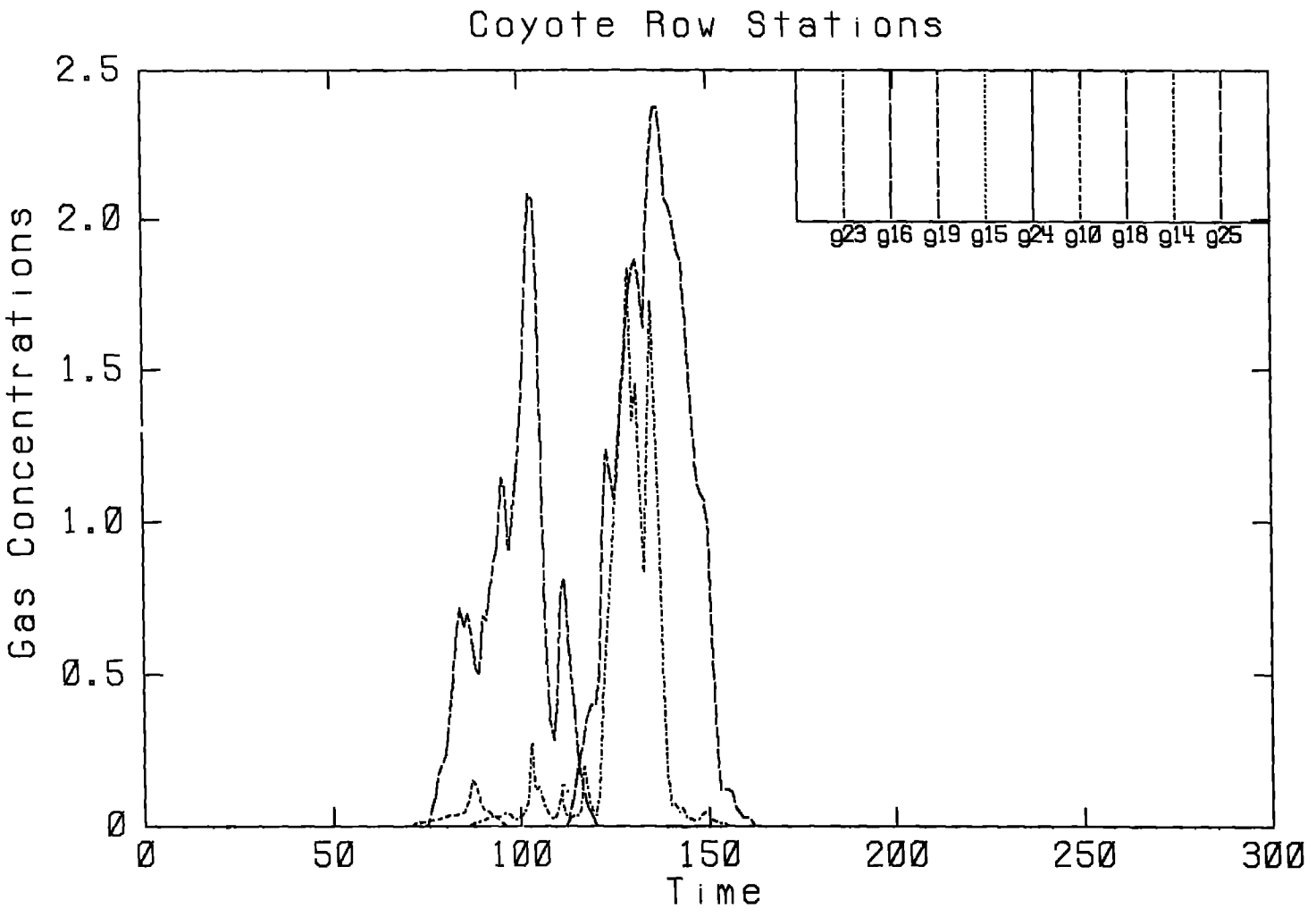
Coyote 3. Height 8. M. Row: 140 M.



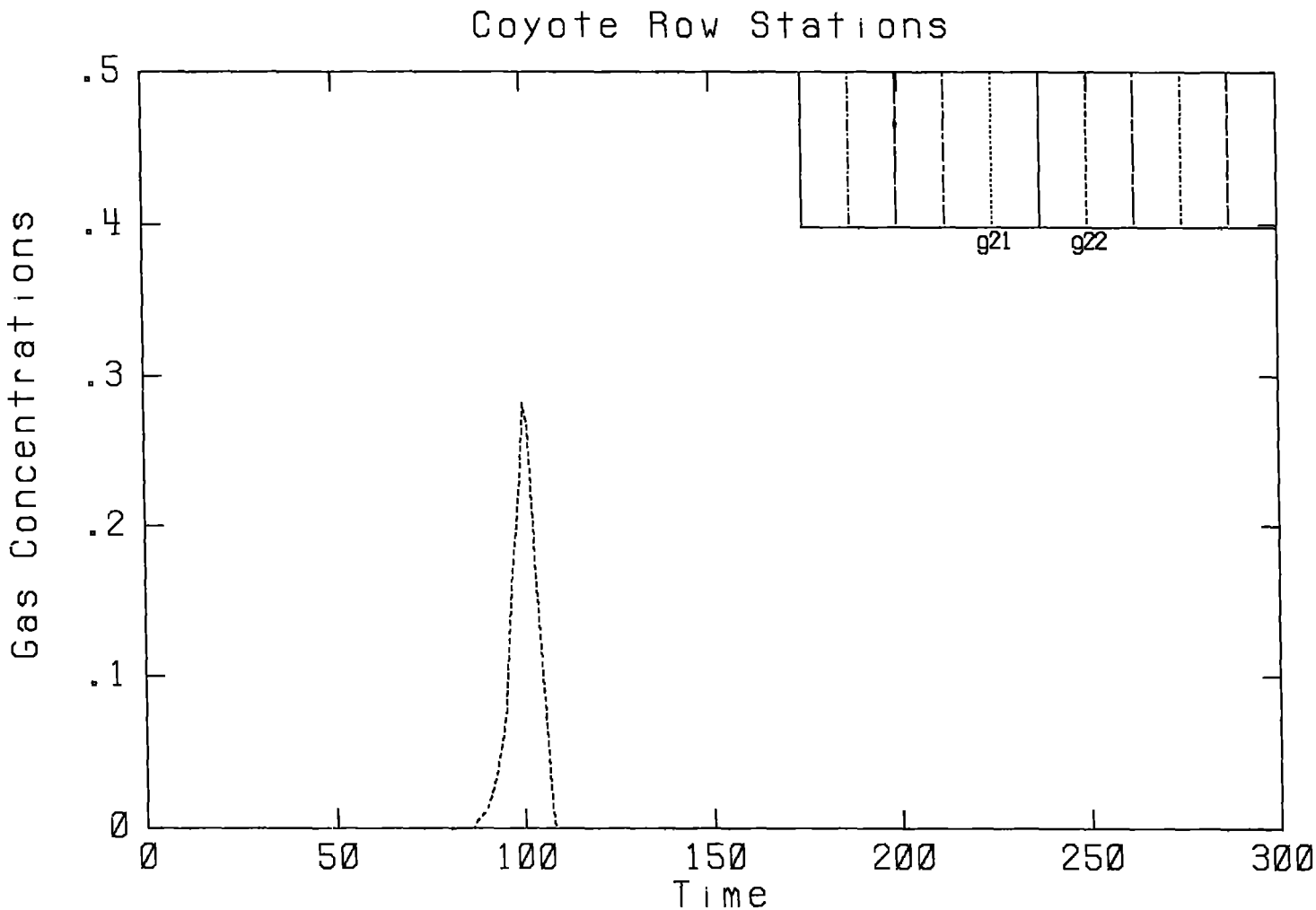
Coyote 3. Height 8. M. Row: 200 M.



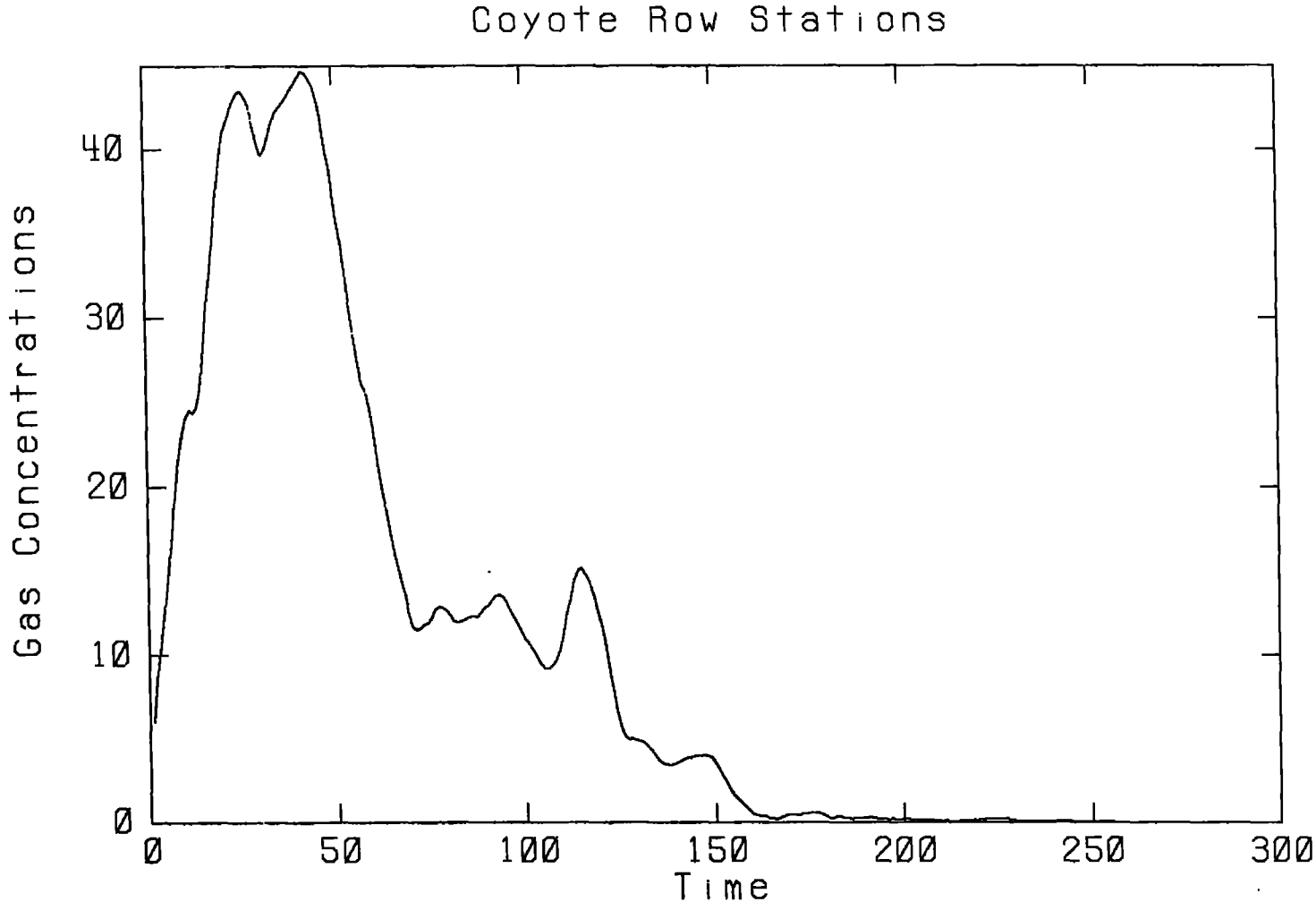
Coyote 3. Height 8. M. Row: 300 M.



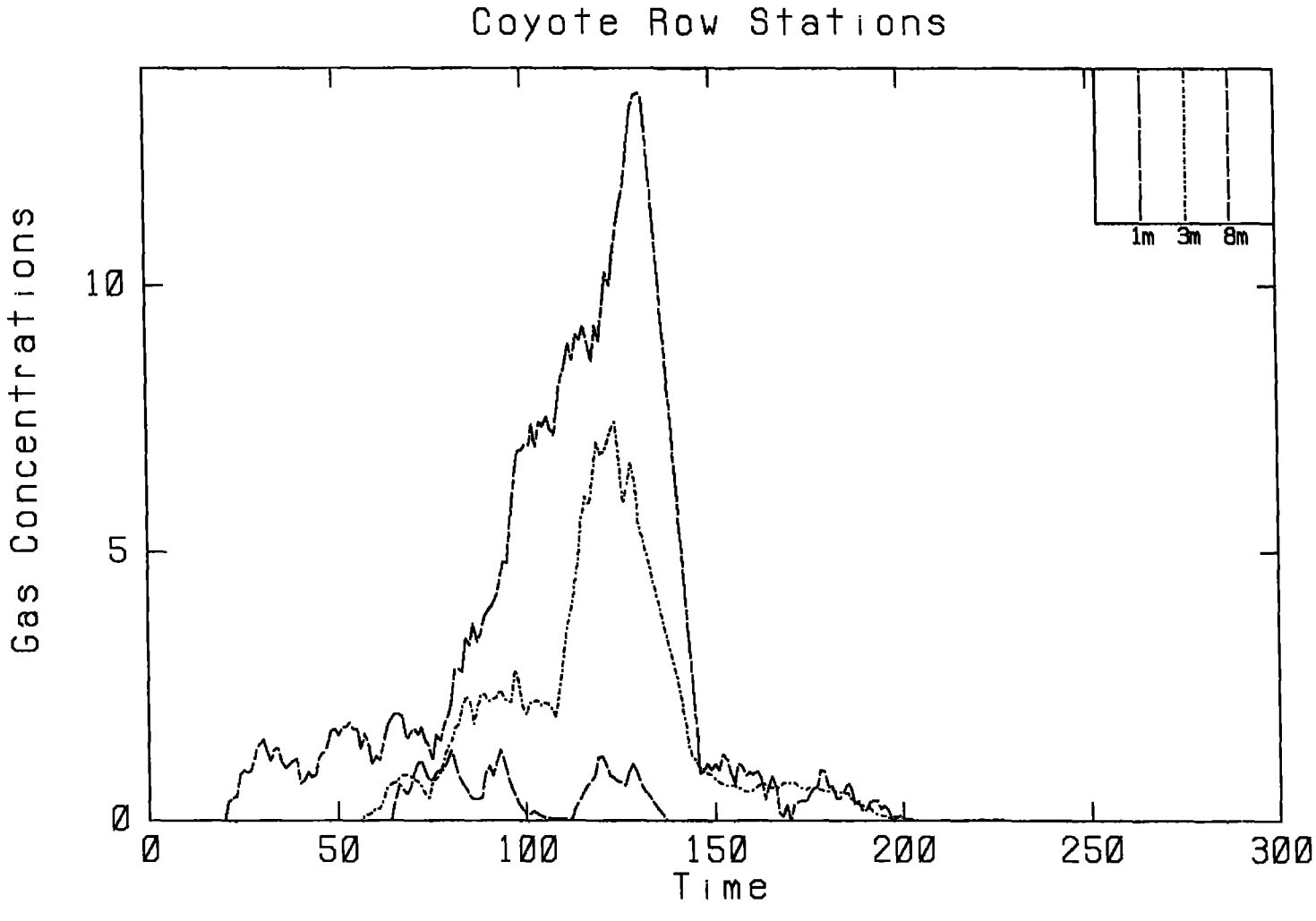
Coyote 3. Height 8. M. Row: 400 M.



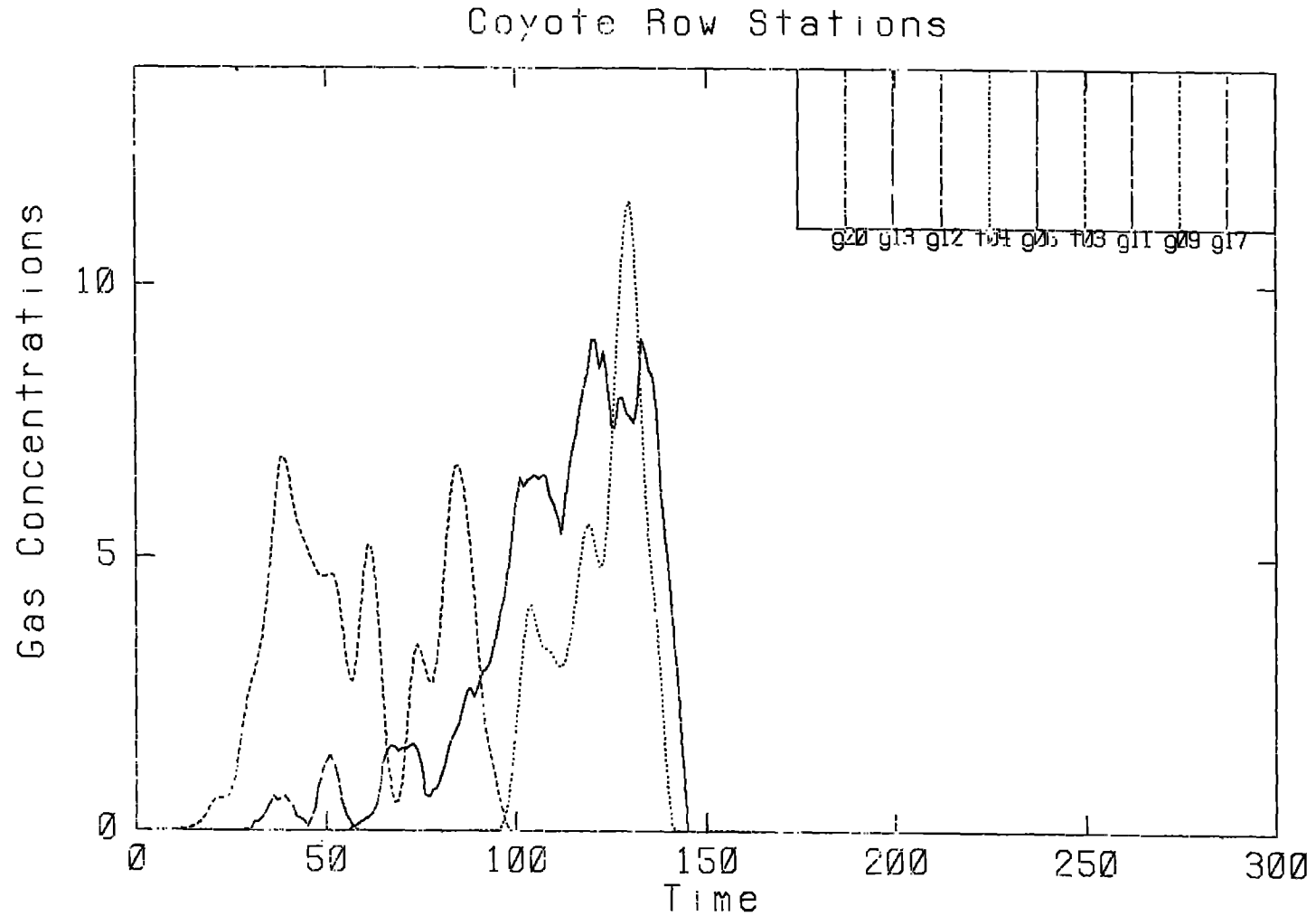
Coyote 3. Height 8. M. Row: 500 M.



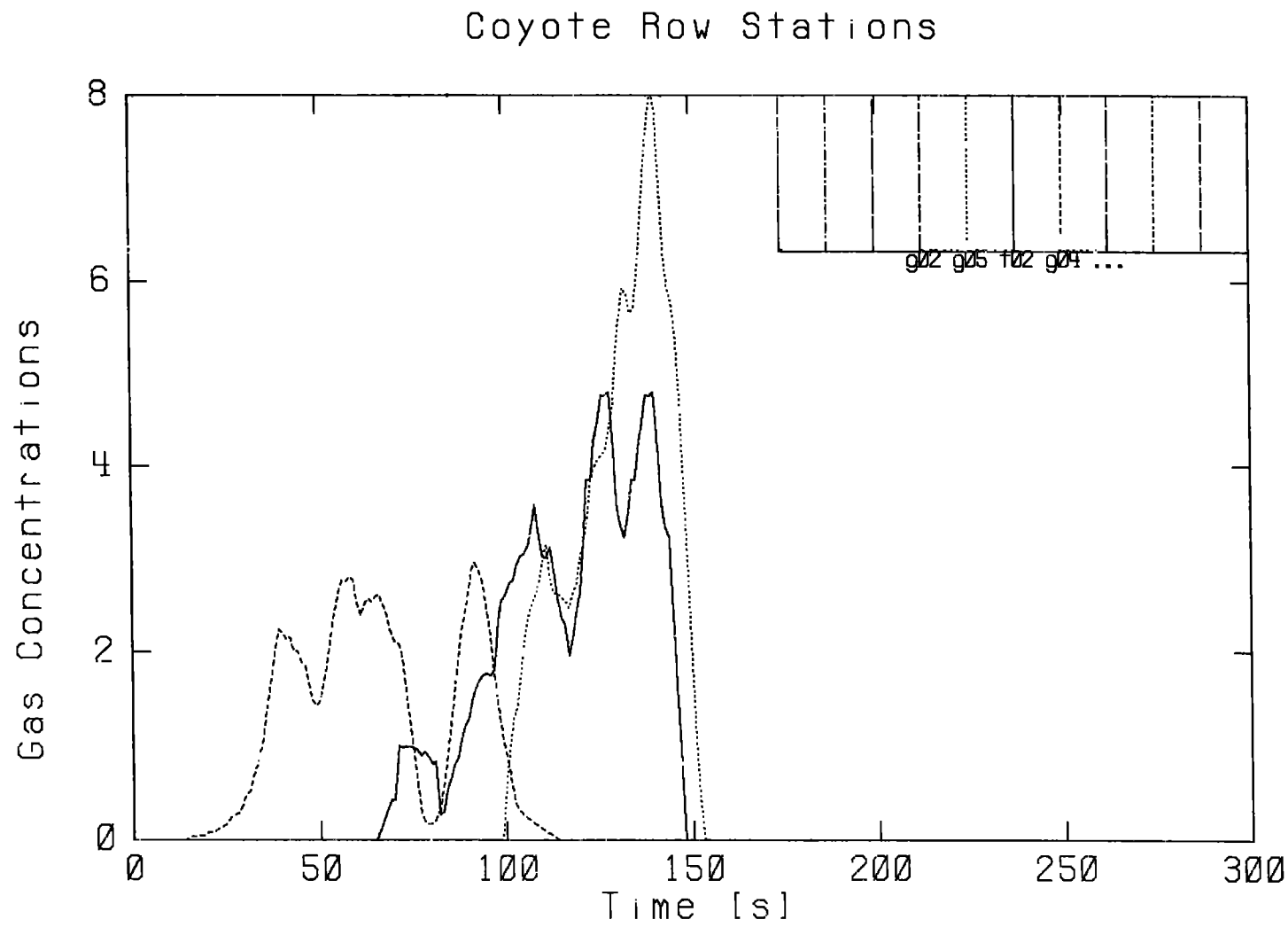
Coyote 5. Source



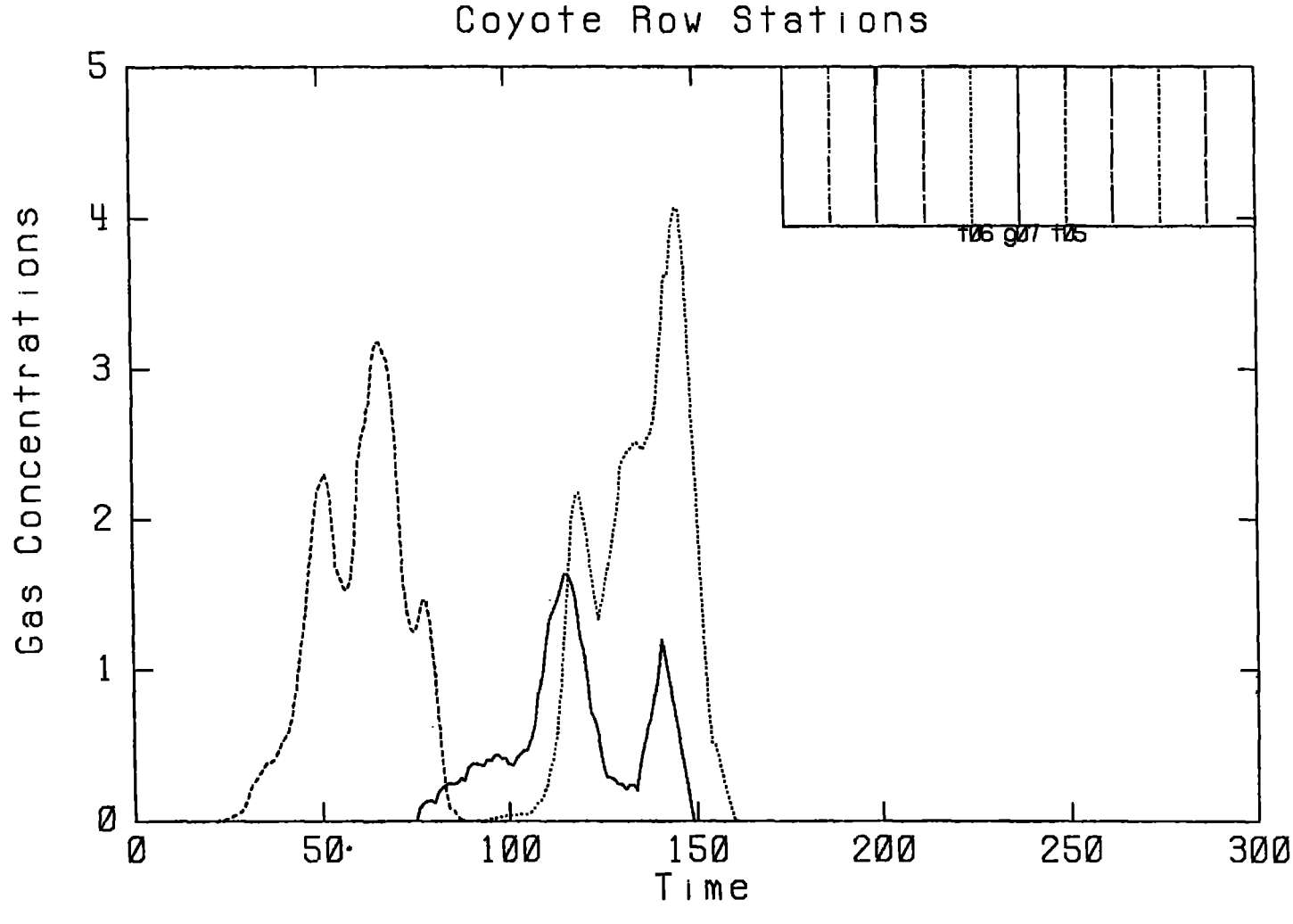
Coyote 5. 110 M. Row



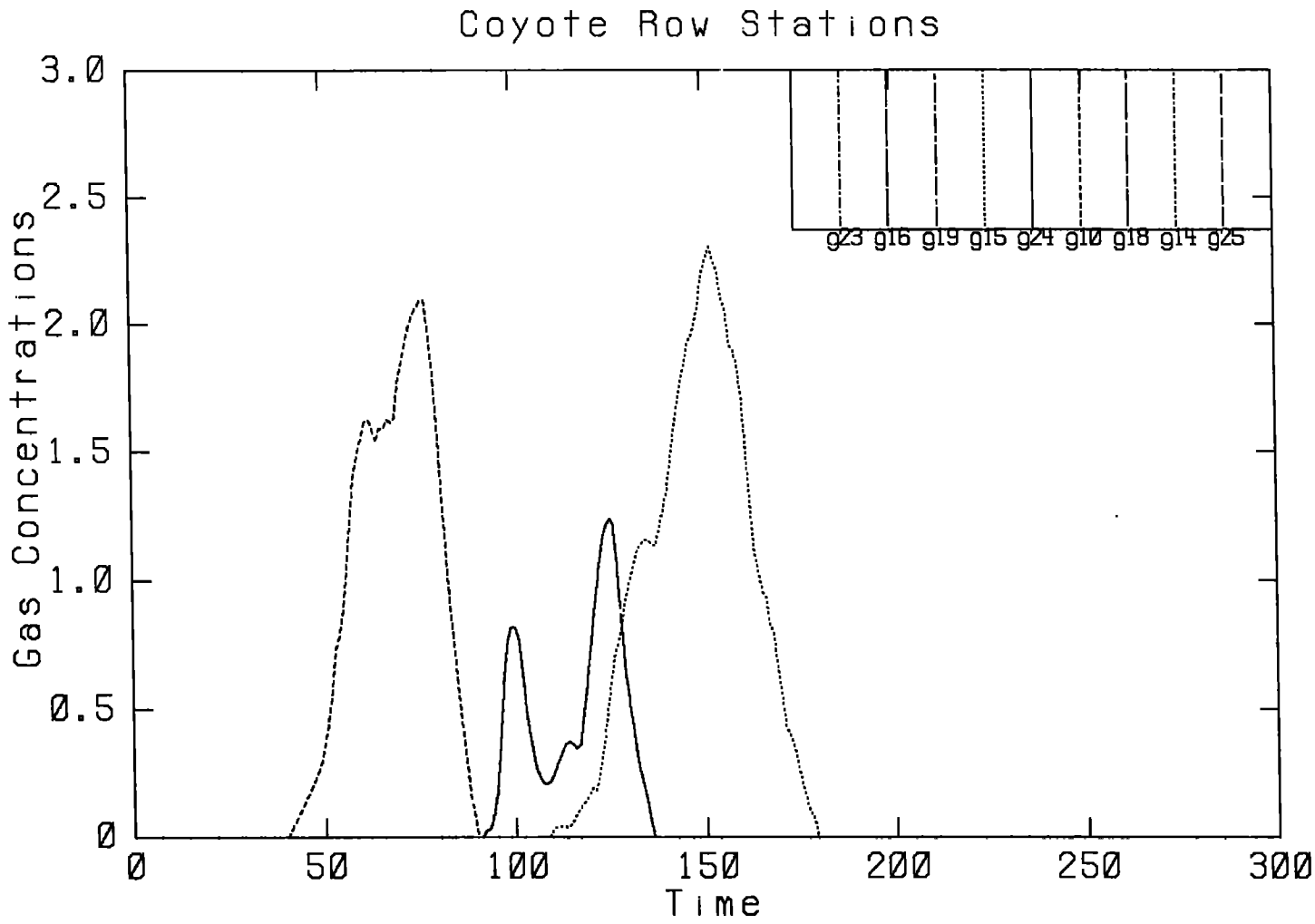
Coyote 5. Height 1. M. Row: 140 M.



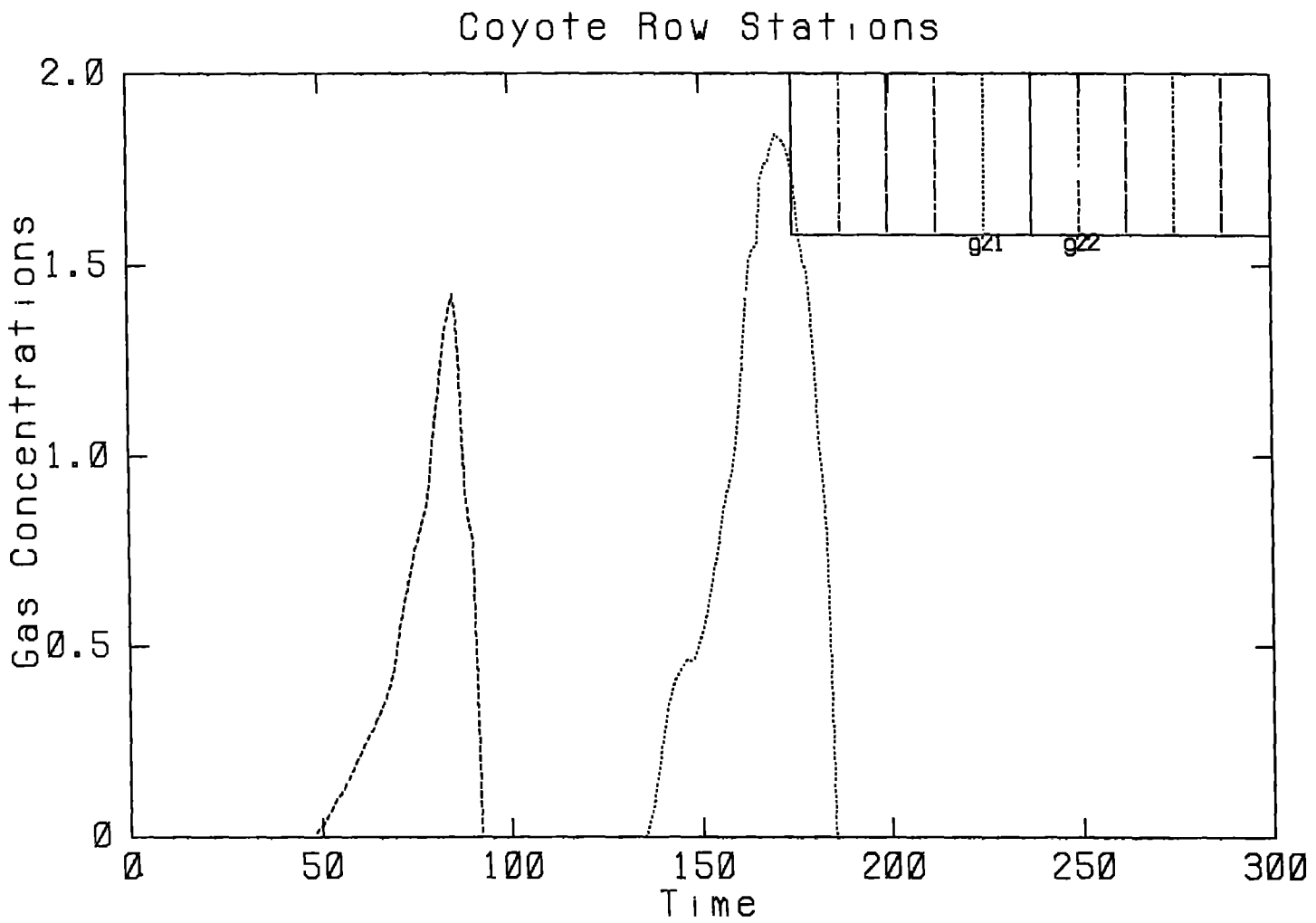
Coyote 5. Height 1. M. Row: 200 M.



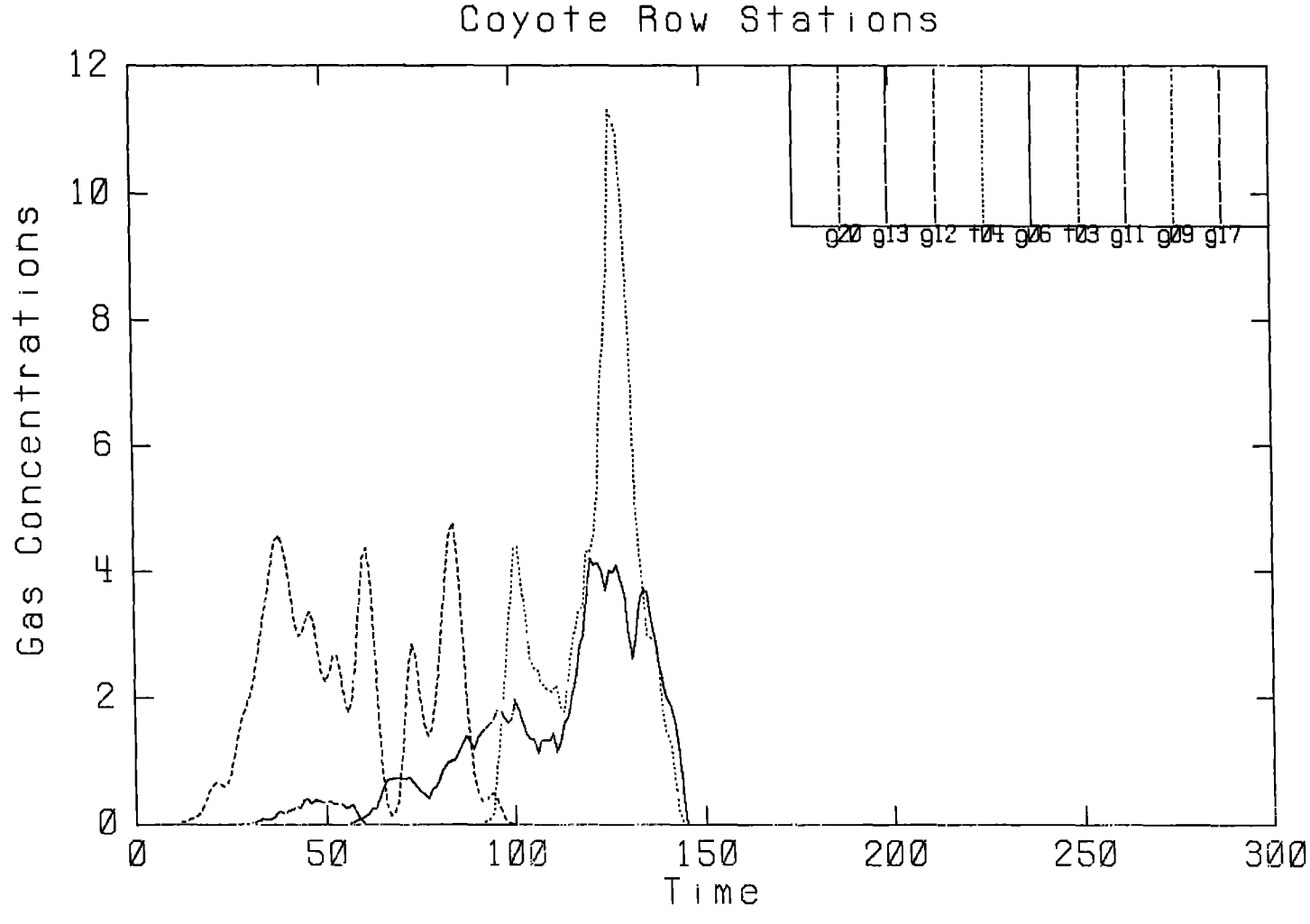
Coyote 5. Height 1. M. Row: 300 M.



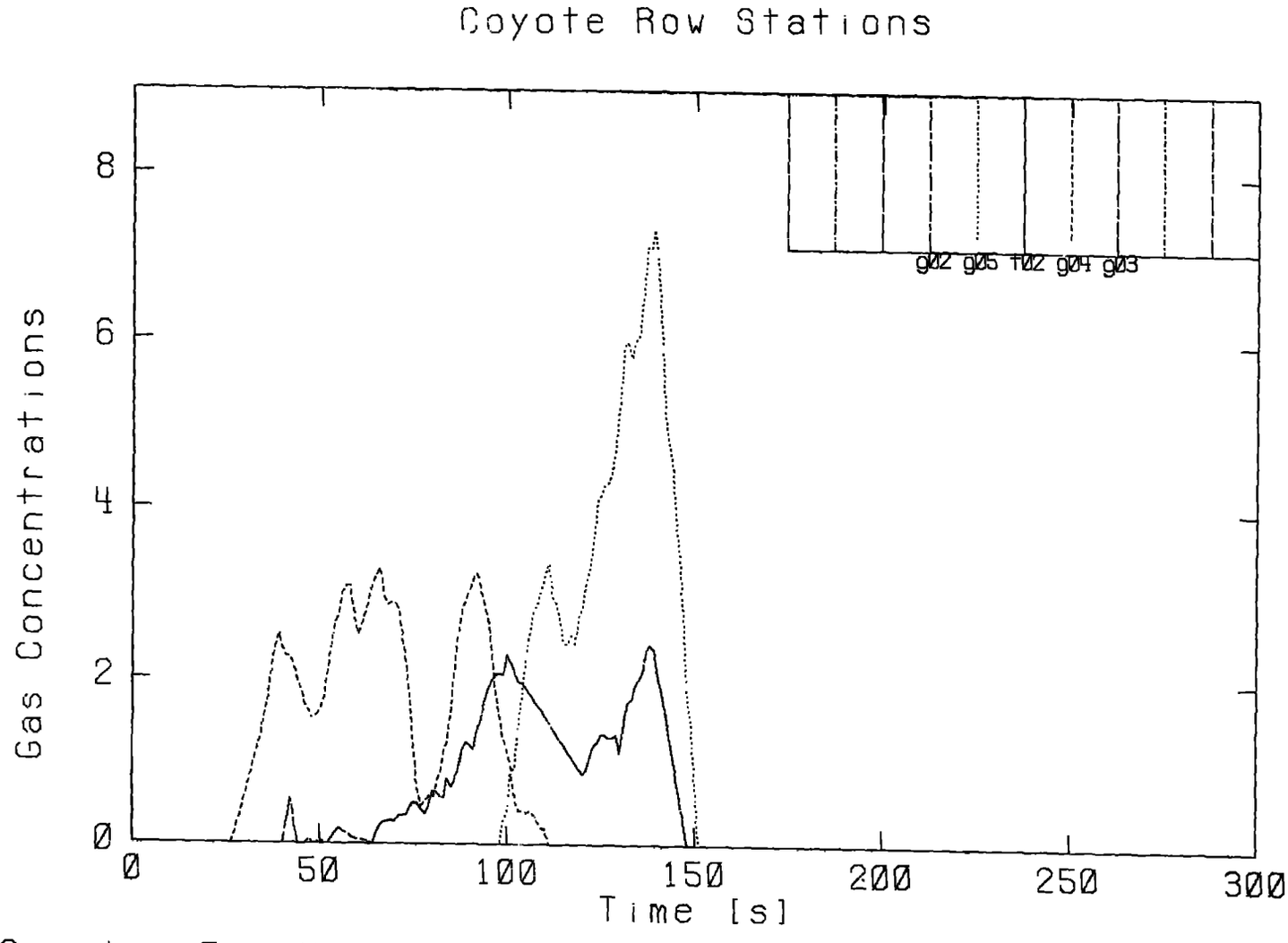
Coyote 5. Height 1. M. Row: 400 M.



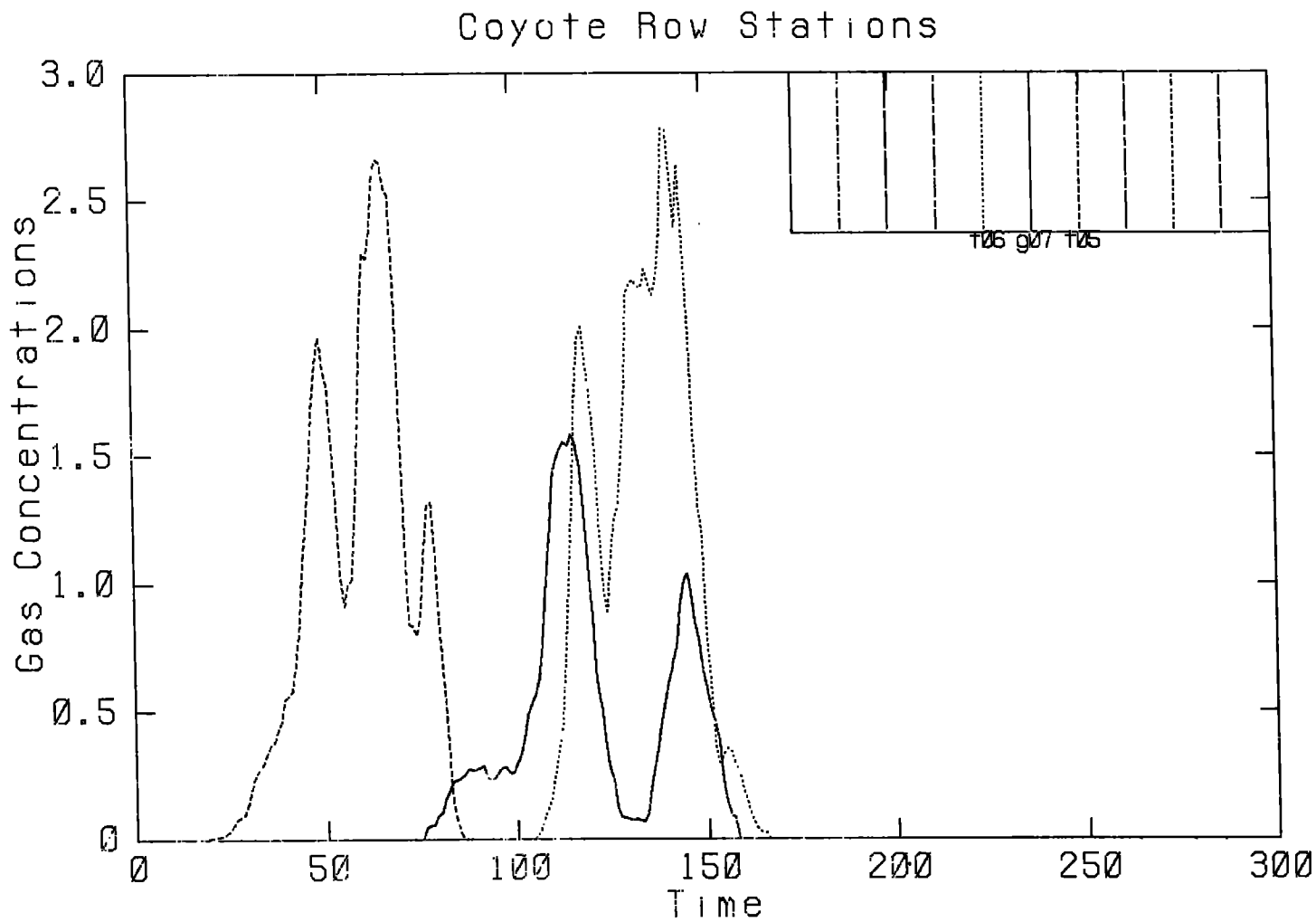
Coyote 5. Height 1. M. Row: 500 M.



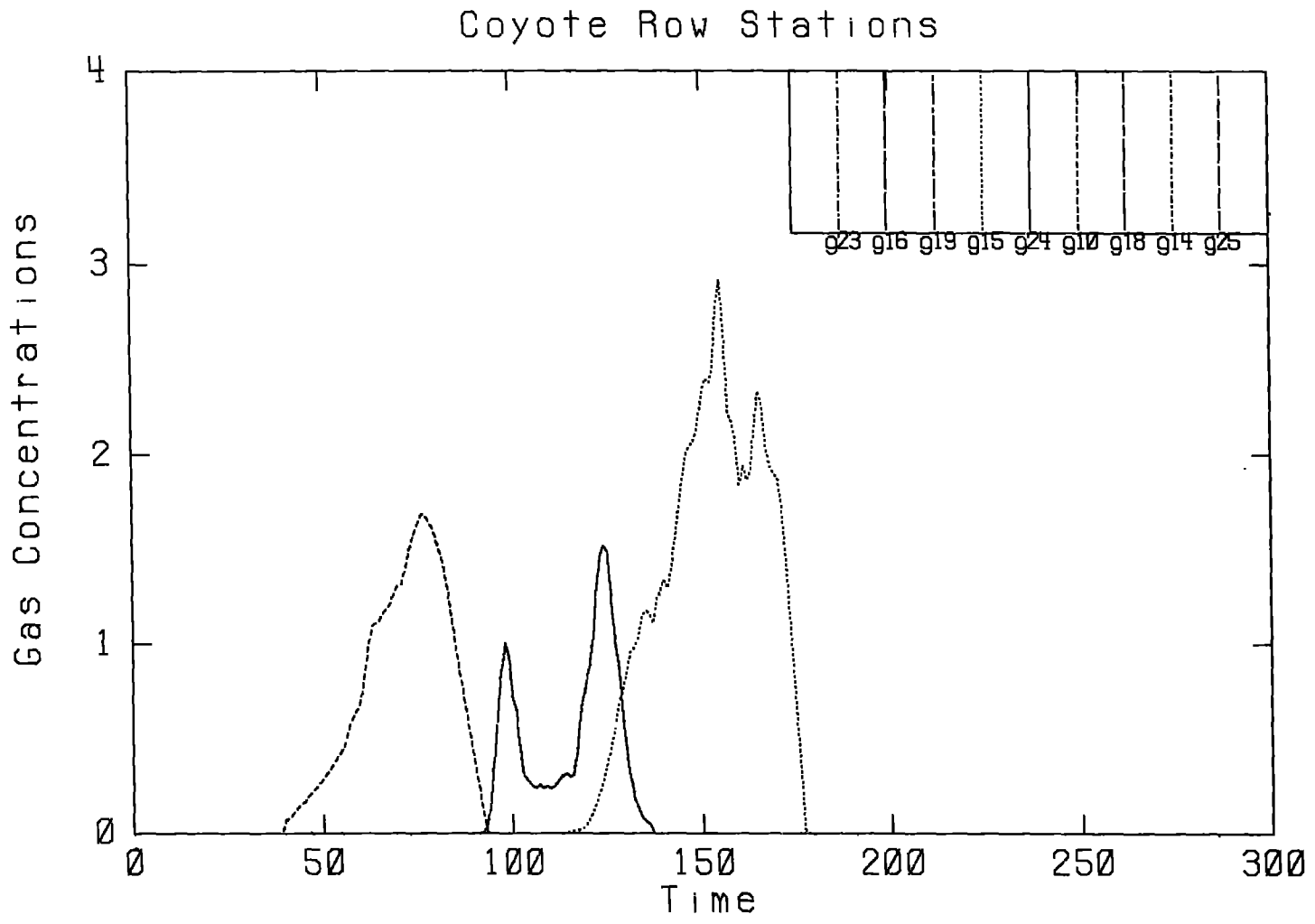
Coyote 5. Height 3. M. Row: 140 M.



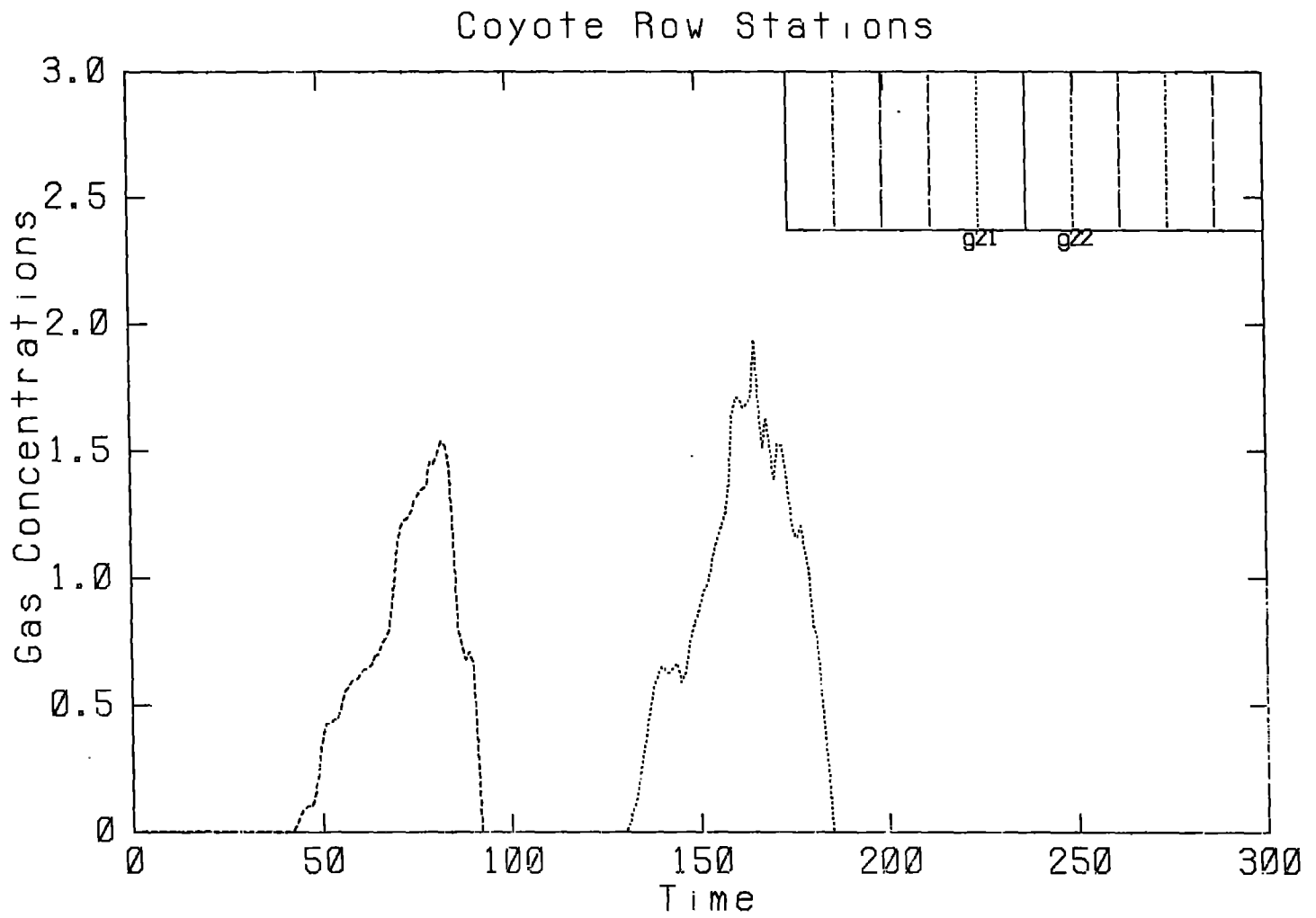
Coyote 5. Height 3. M. Row: 200 M.



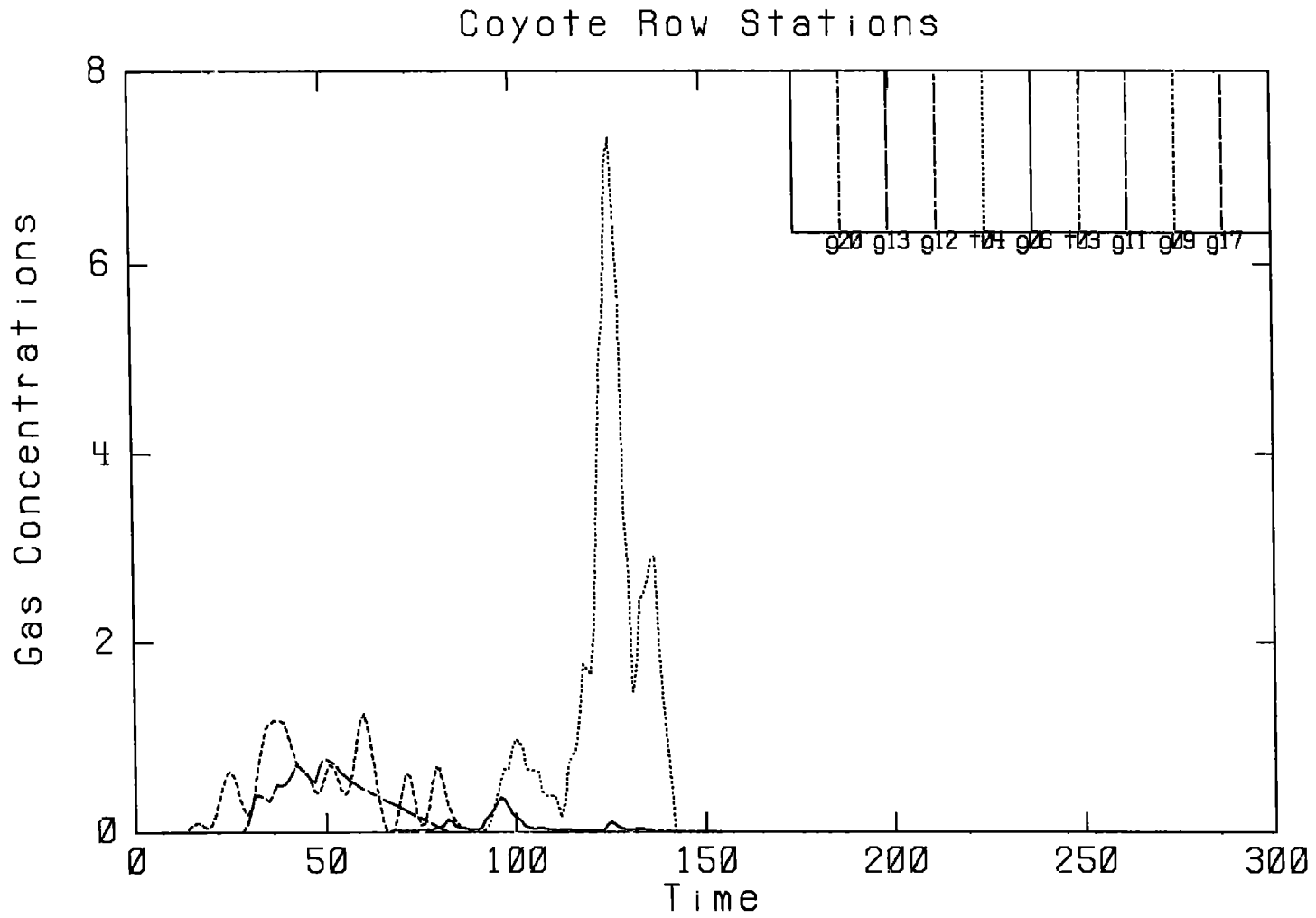
Coyote 5. Height 3. M. Row: 300 M.



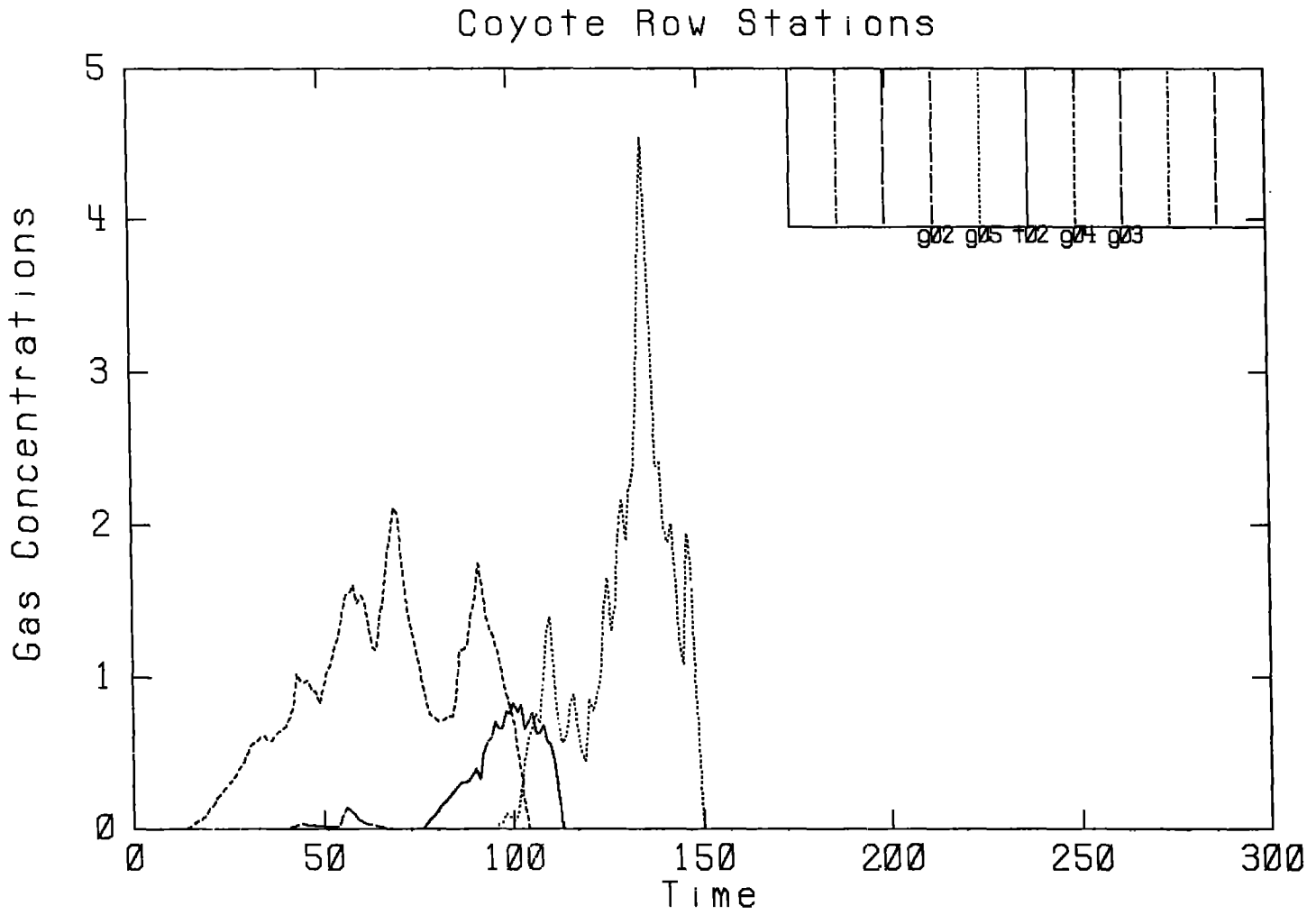
Coyote 5. Height 3. M. Row: 400 M.



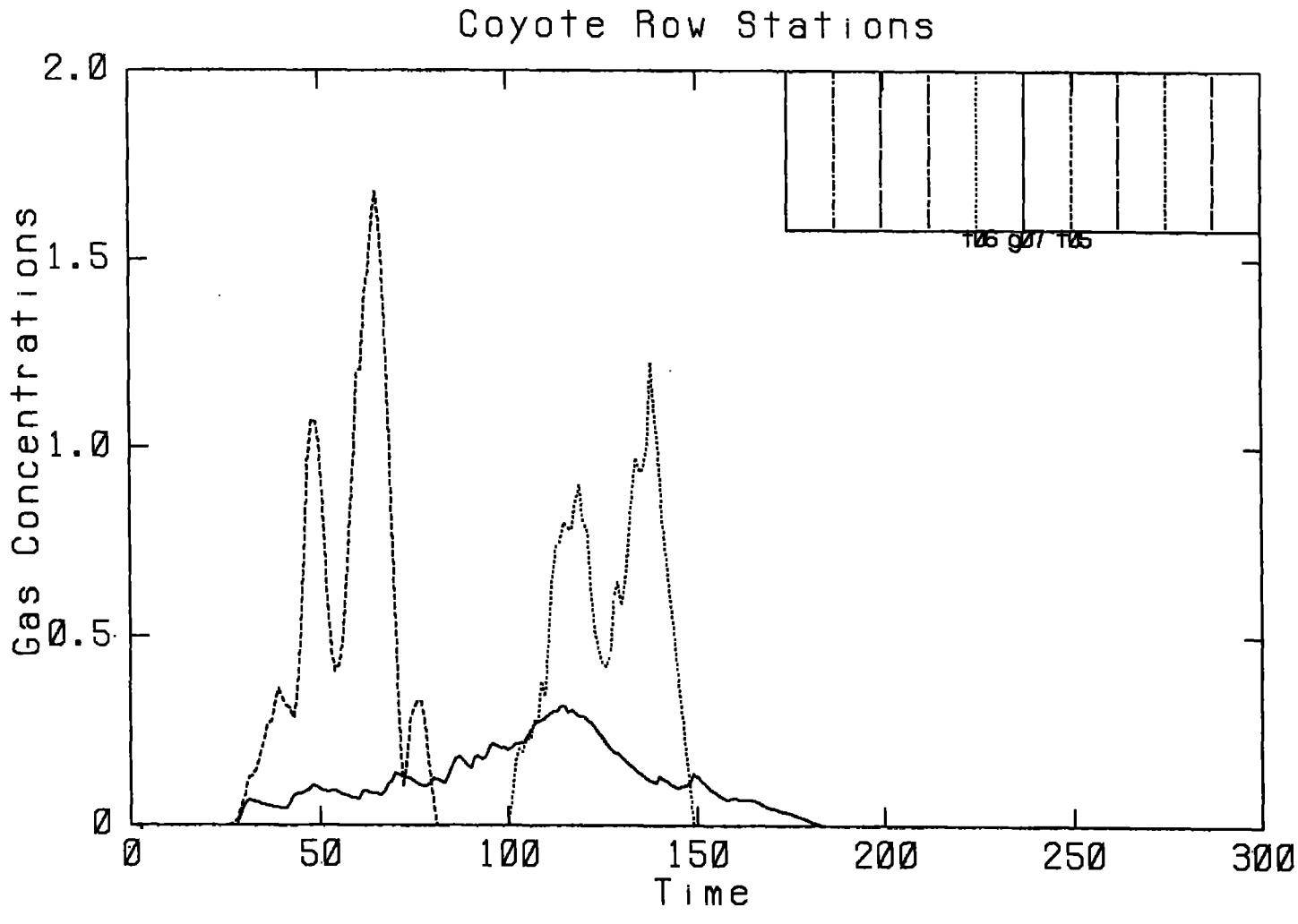
Coyote 5. Height 3. M. Row: 500 M.



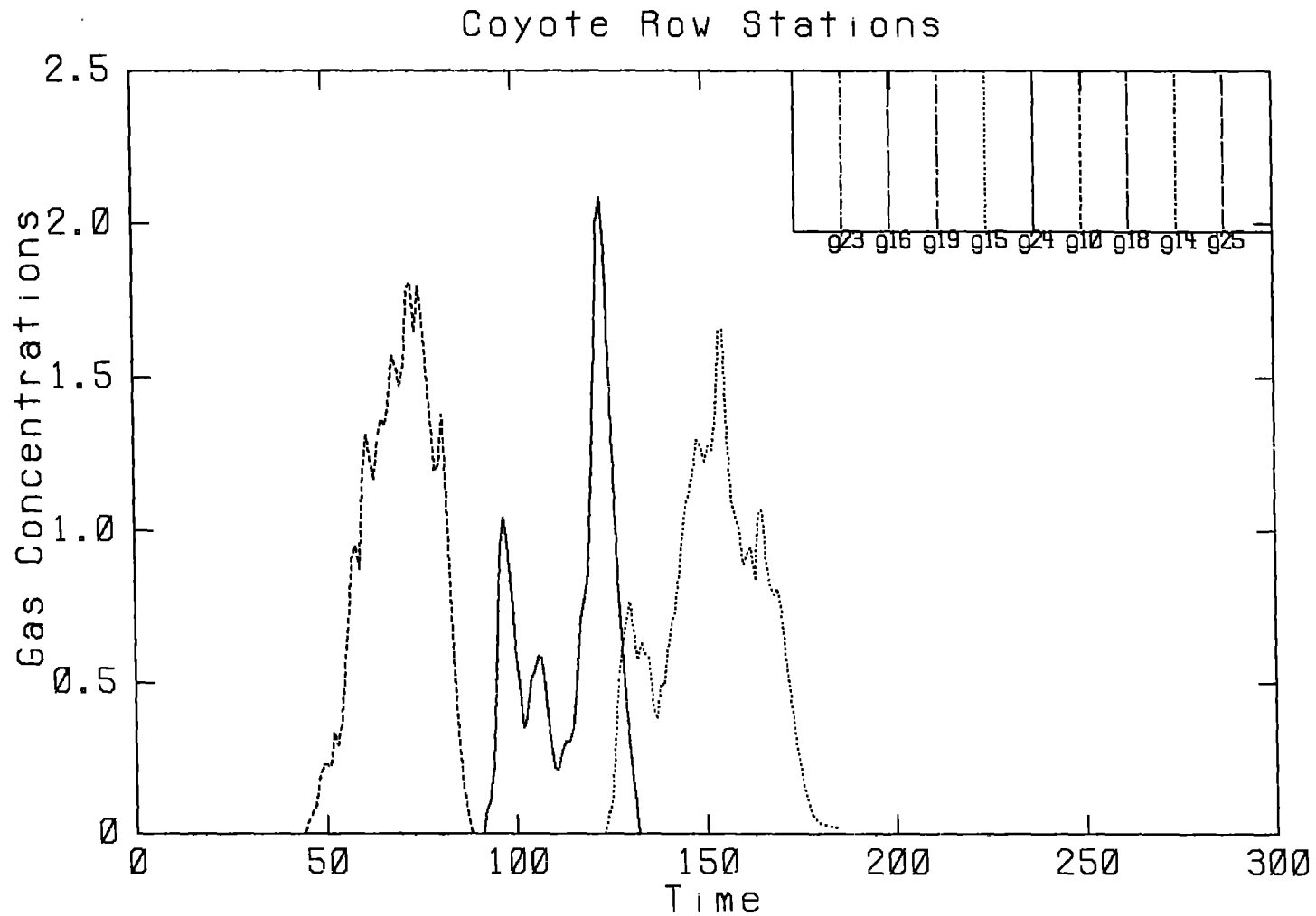
Coyote 5. Height 8. M. Row: 140 M.



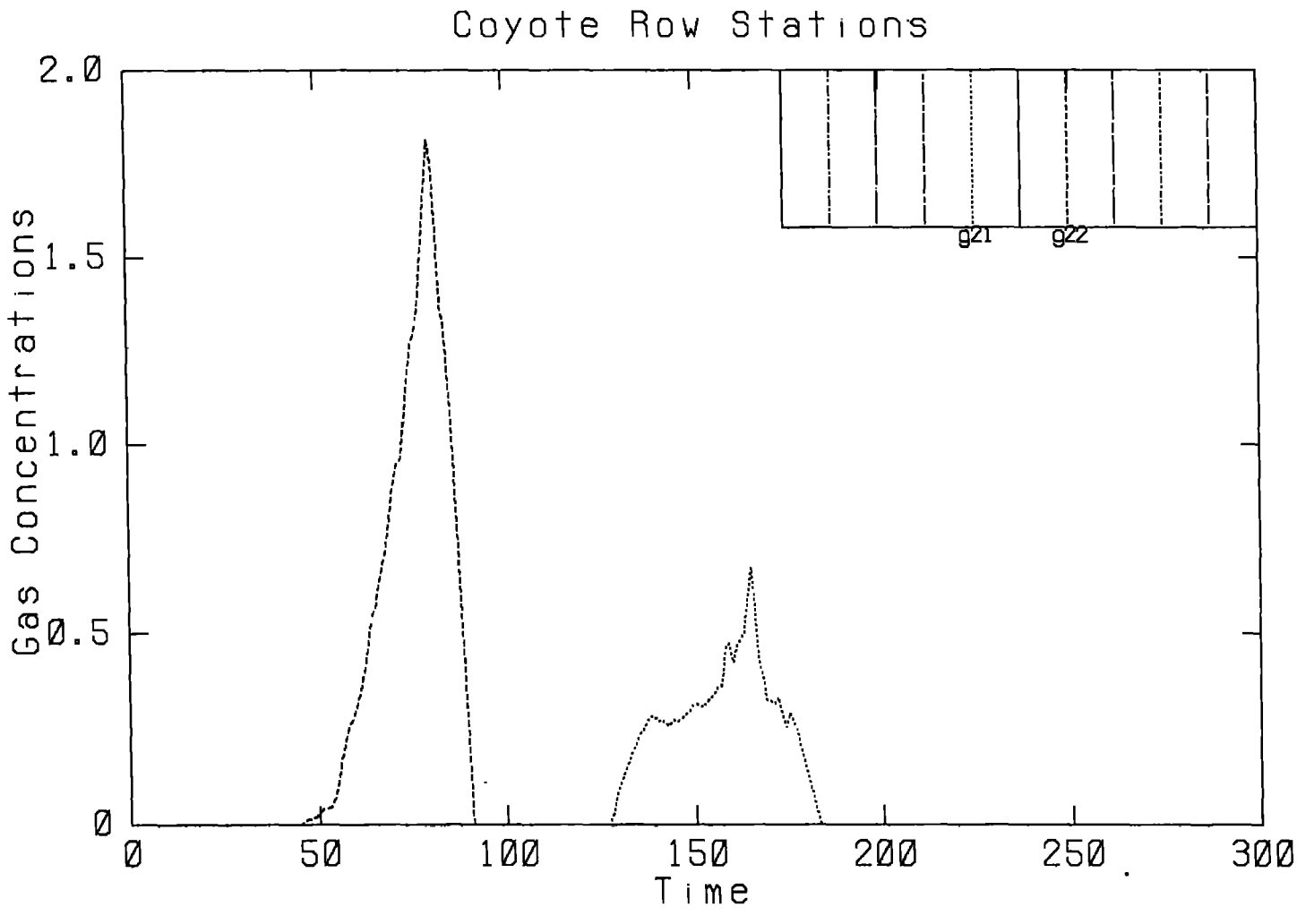
Coyote 5. Height 8. M. Row: .200 M.



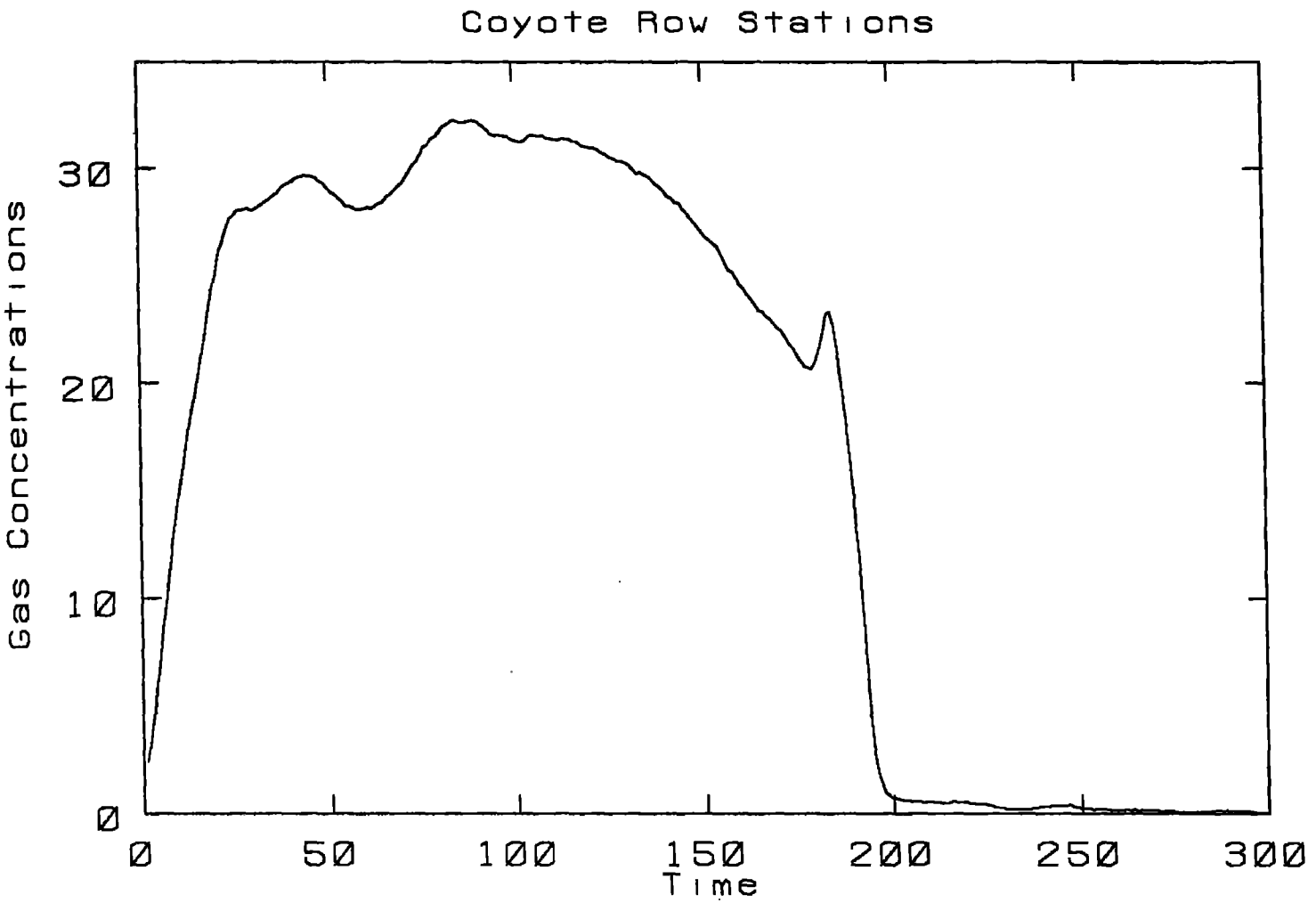
Coyote 5. Height 8. M. Row: 300 M.



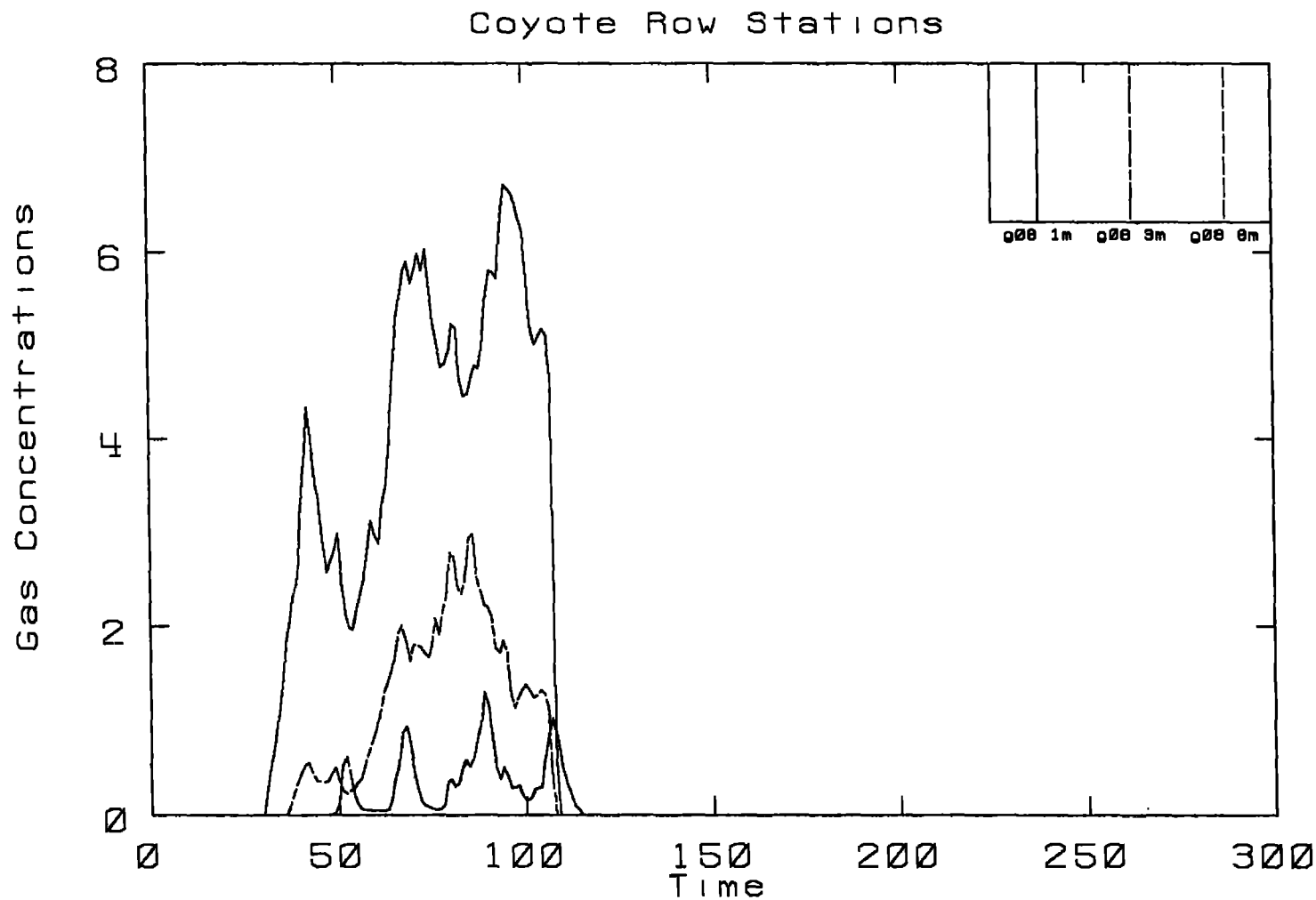
Coyote 5. Height 8. M. Row: 400 M.



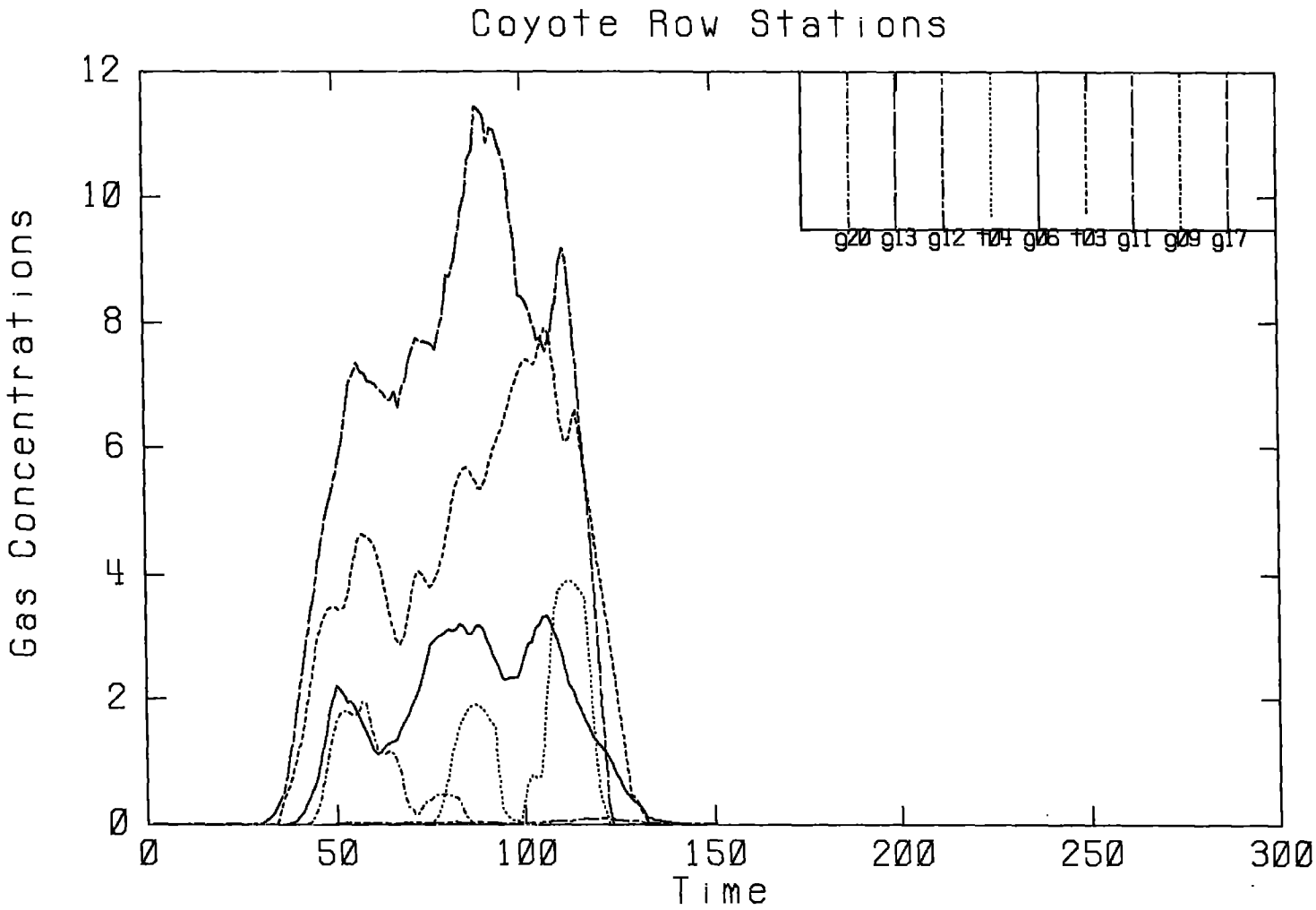
Coyote 5. Height 8. M. Row: 500 M.



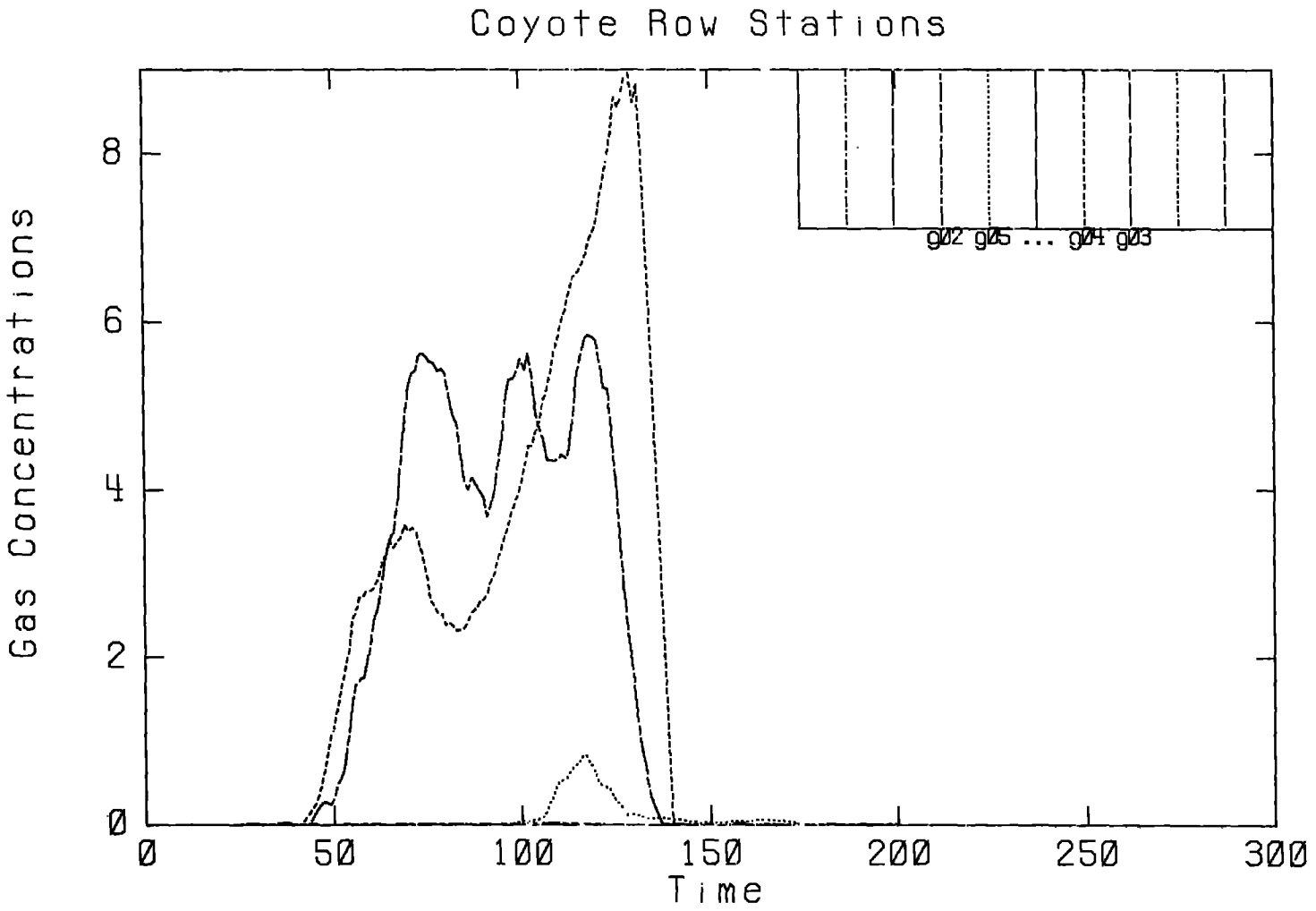
Coyote 6. Source



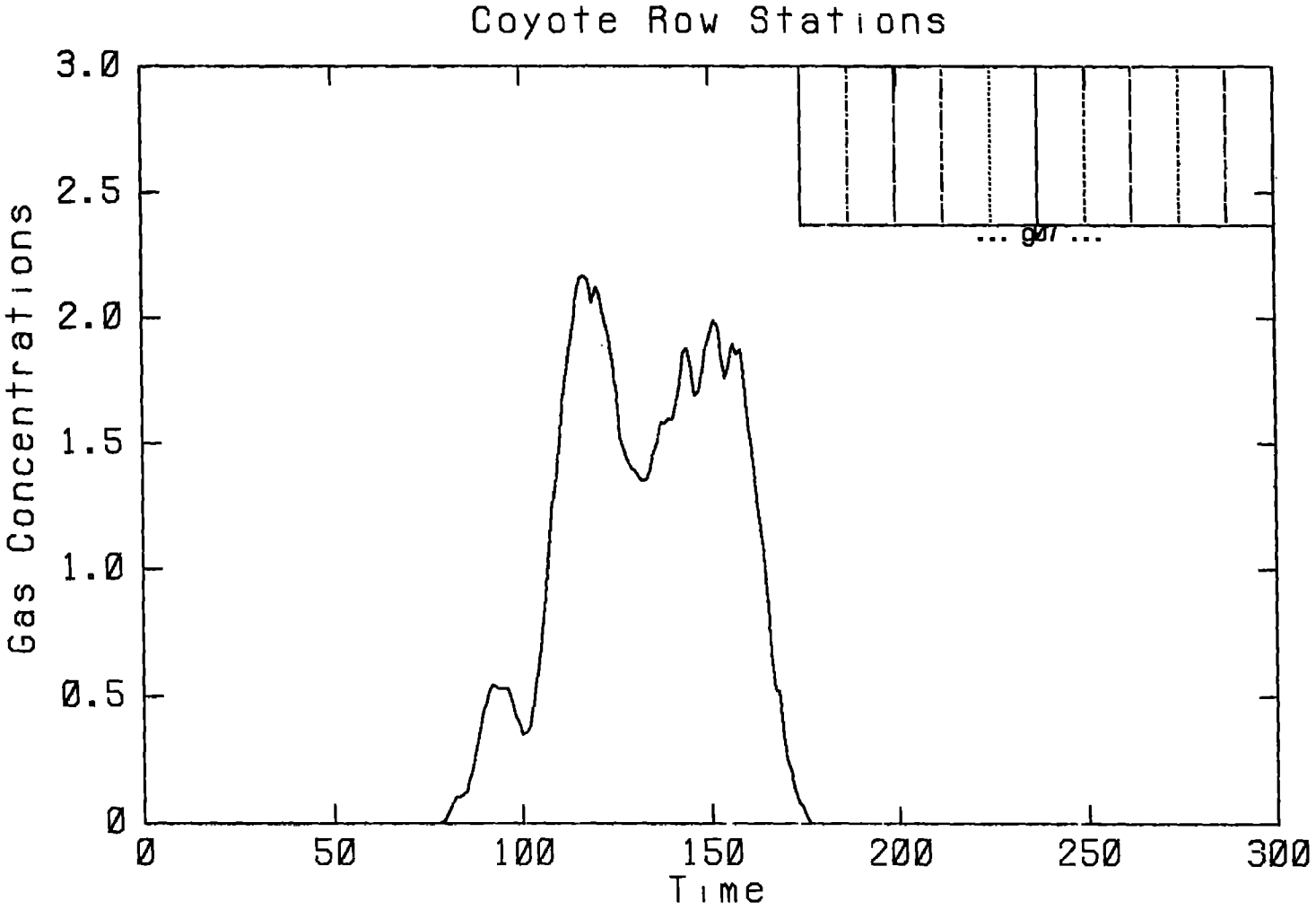
Coyote 6. 110 M. Row - all elevations



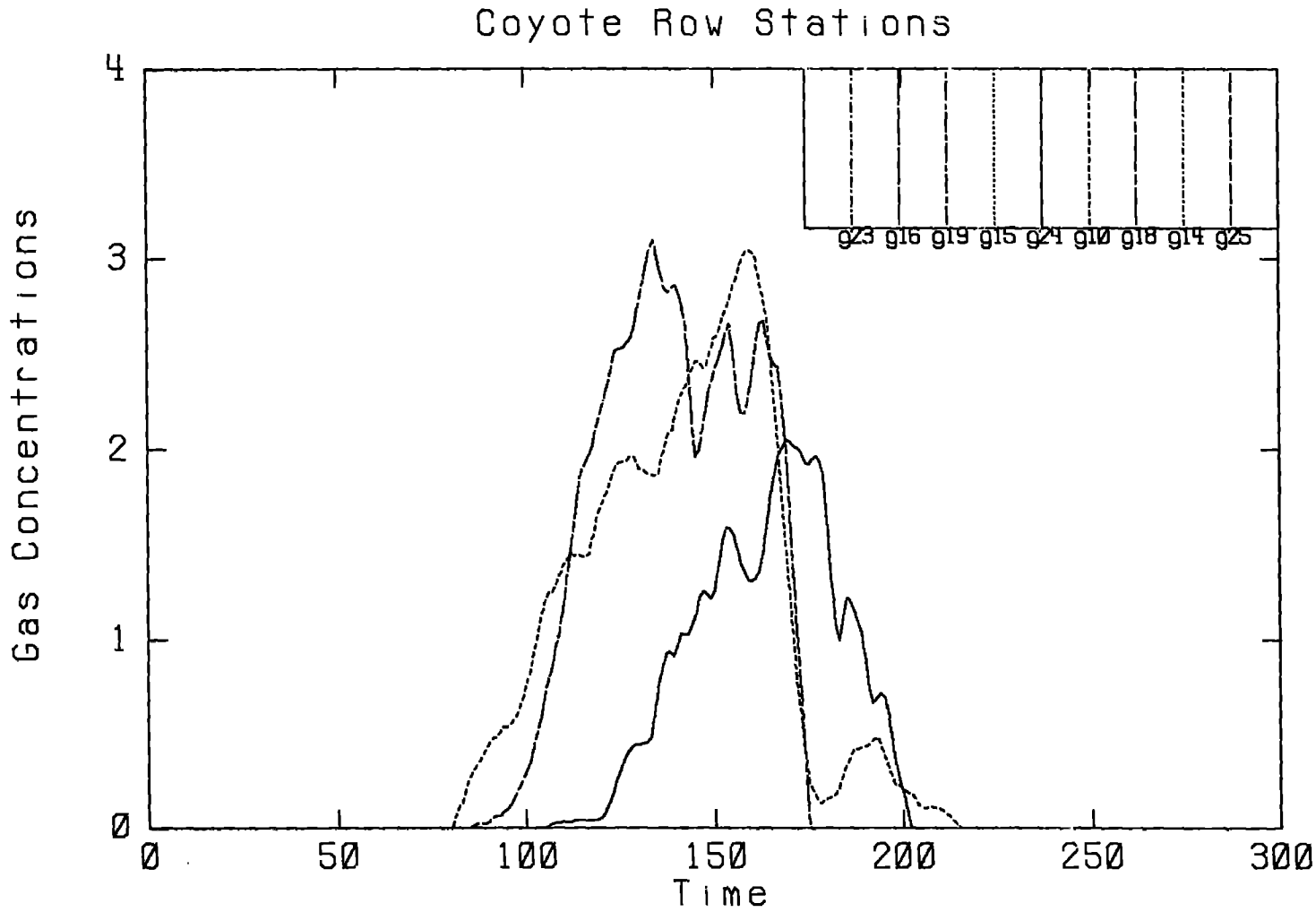
Coyote 6. Height 1. M. Row: 140 M.



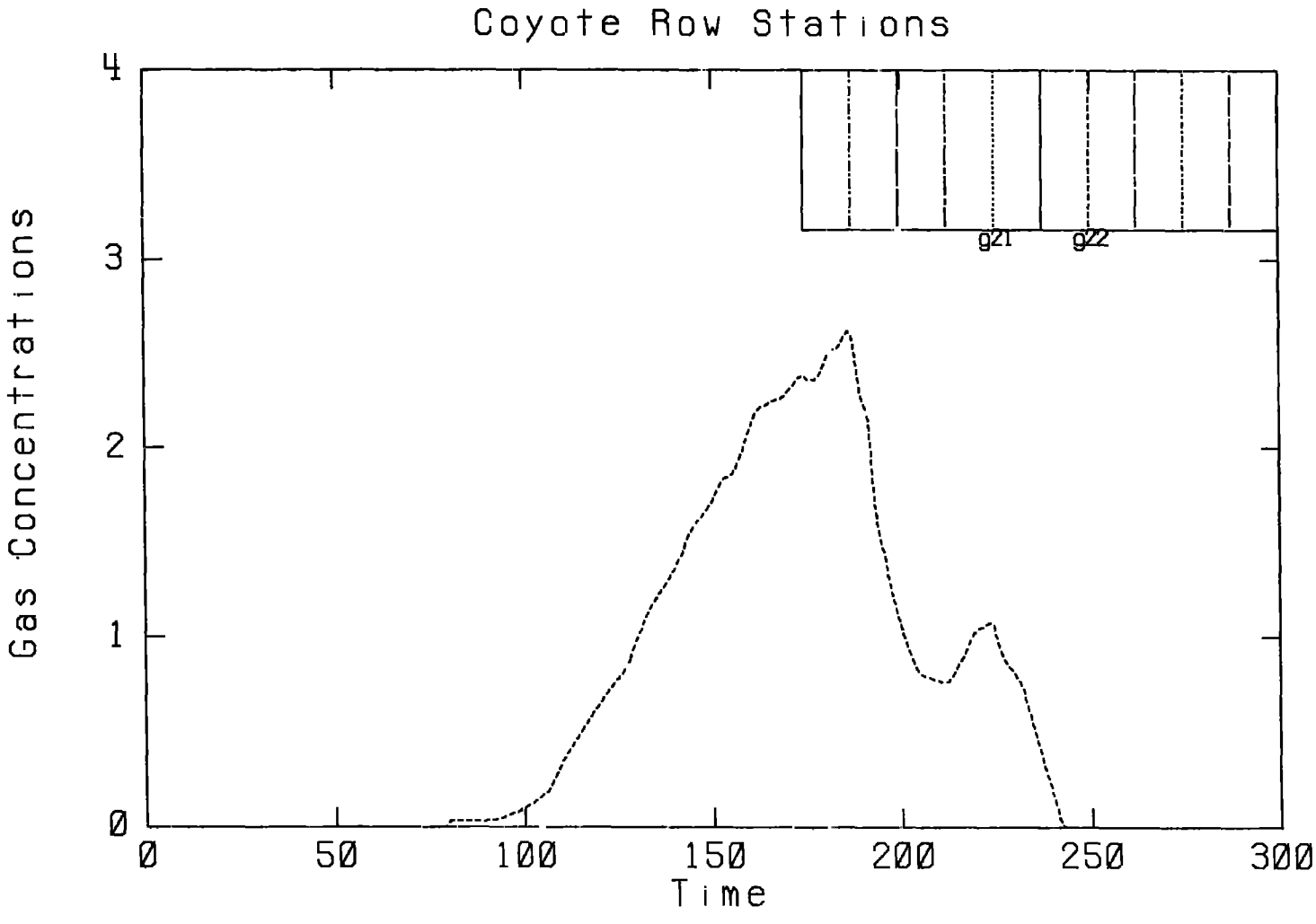
Coyote 6. Height 1. M. Row: 200 M.



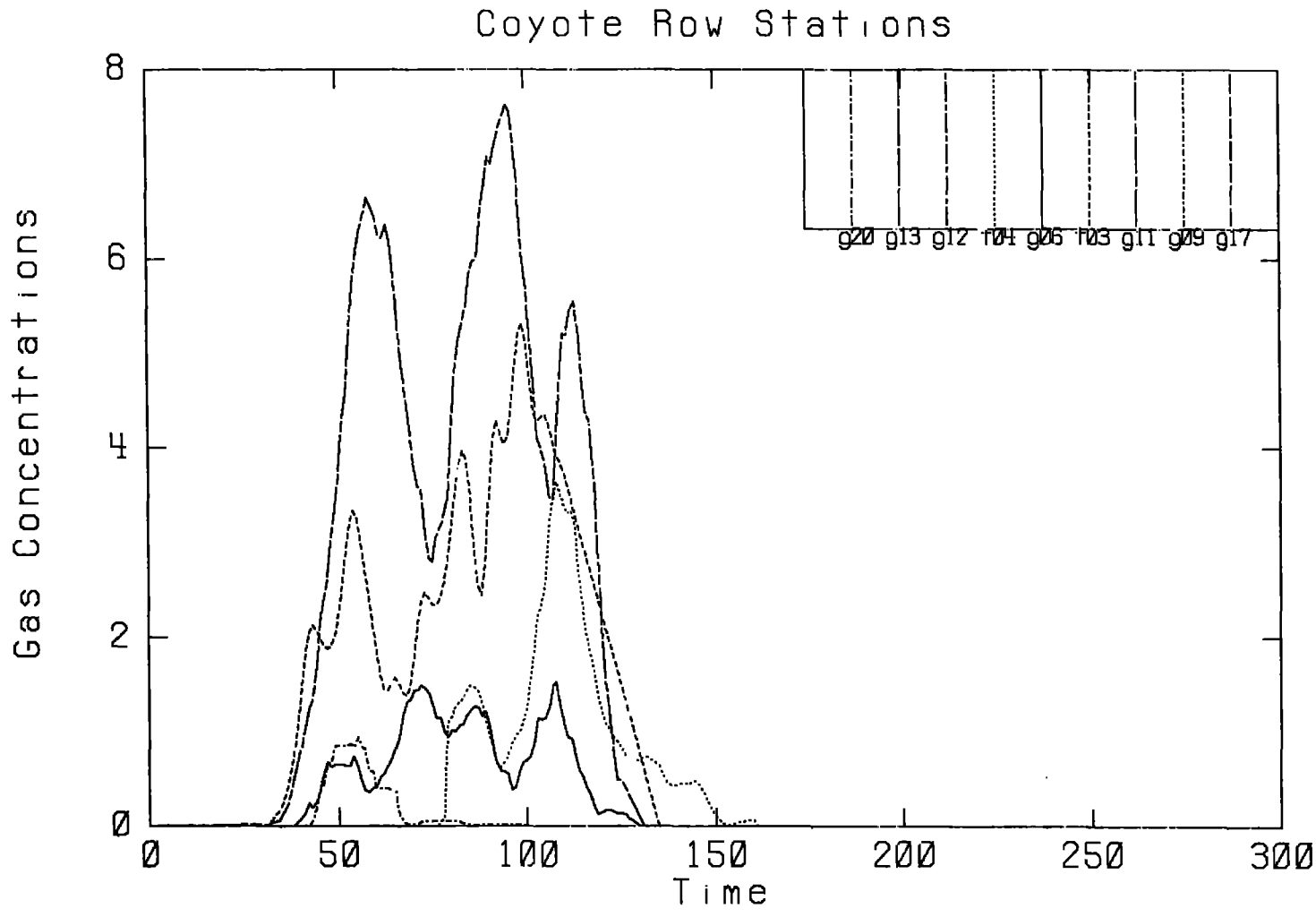
Coyote 6. Height 1. M. Row: 300 M.



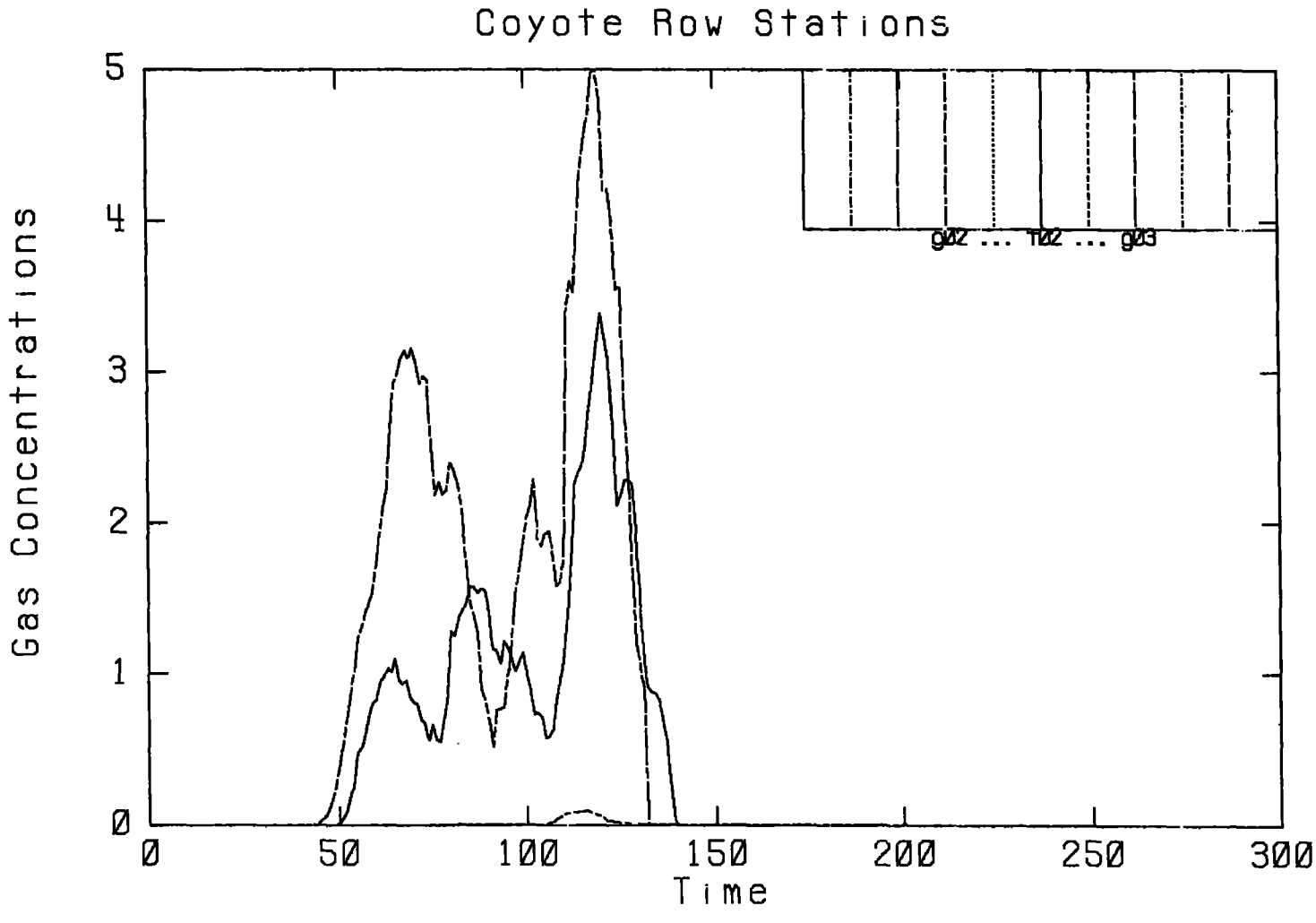
Coyote 6. Height 1. M. Row: 400 M.



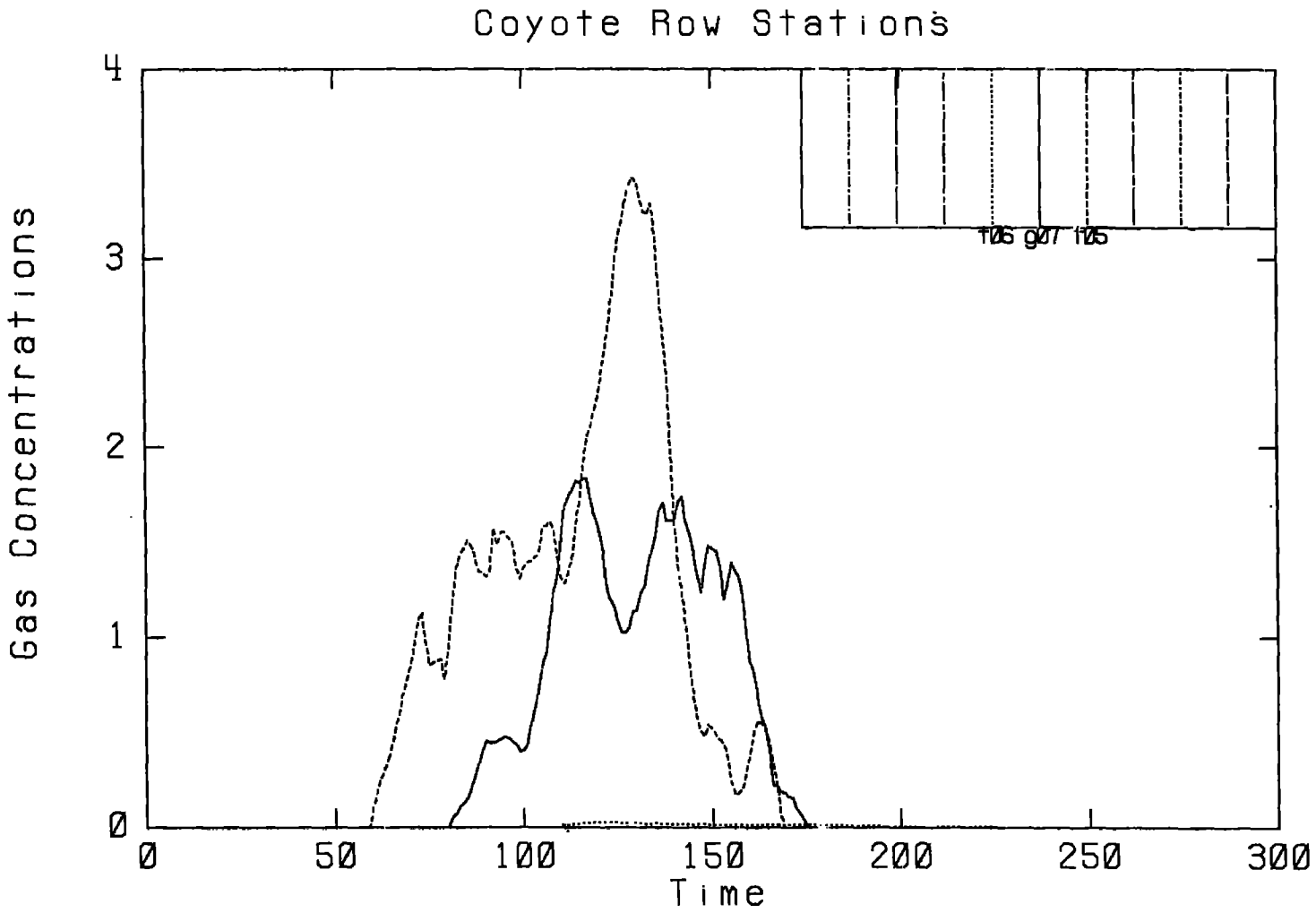
Coyote 6. Height 1. M. Row: 500 M.



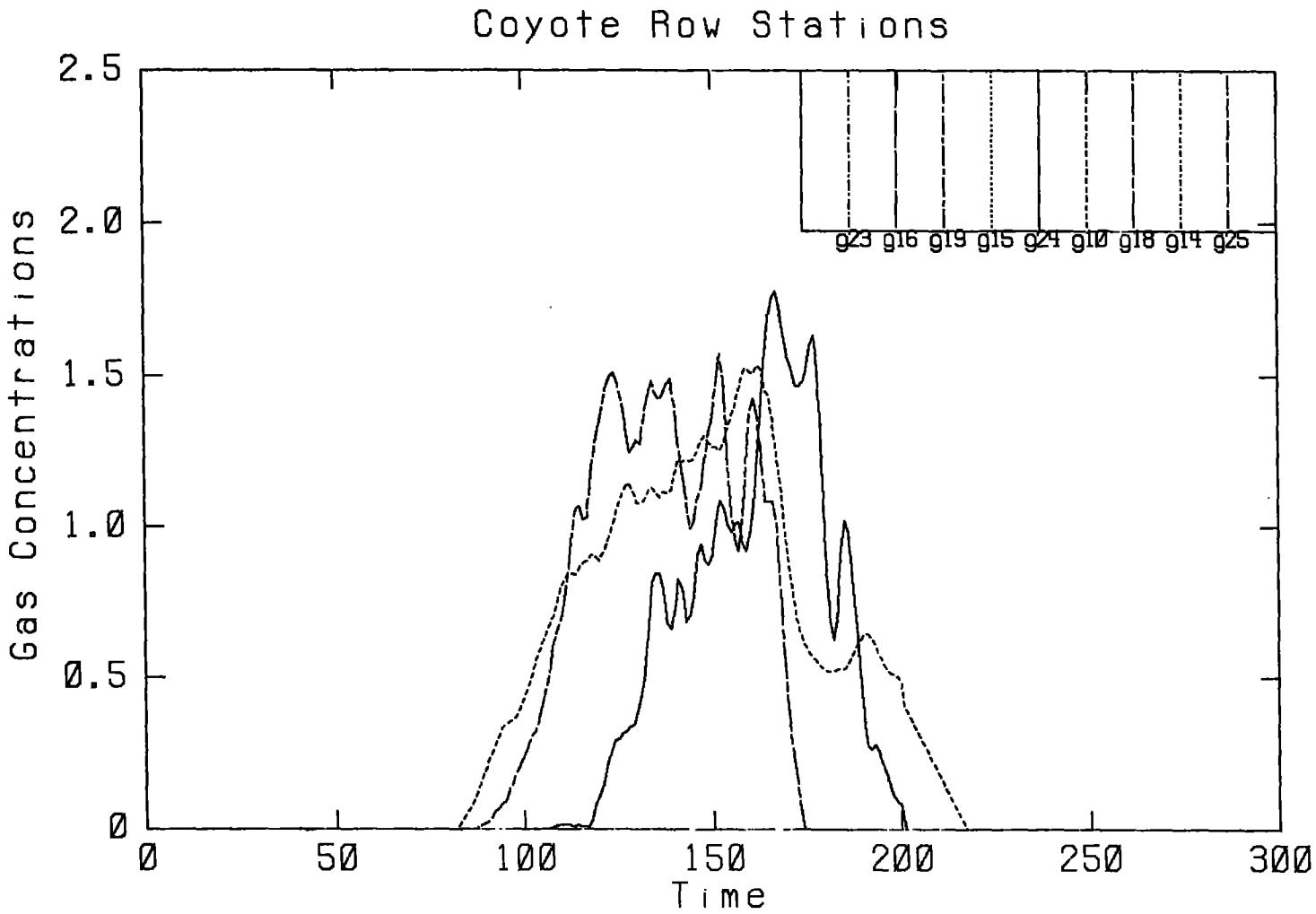
Coyote 6. Height 3. M. Row: 140 M.



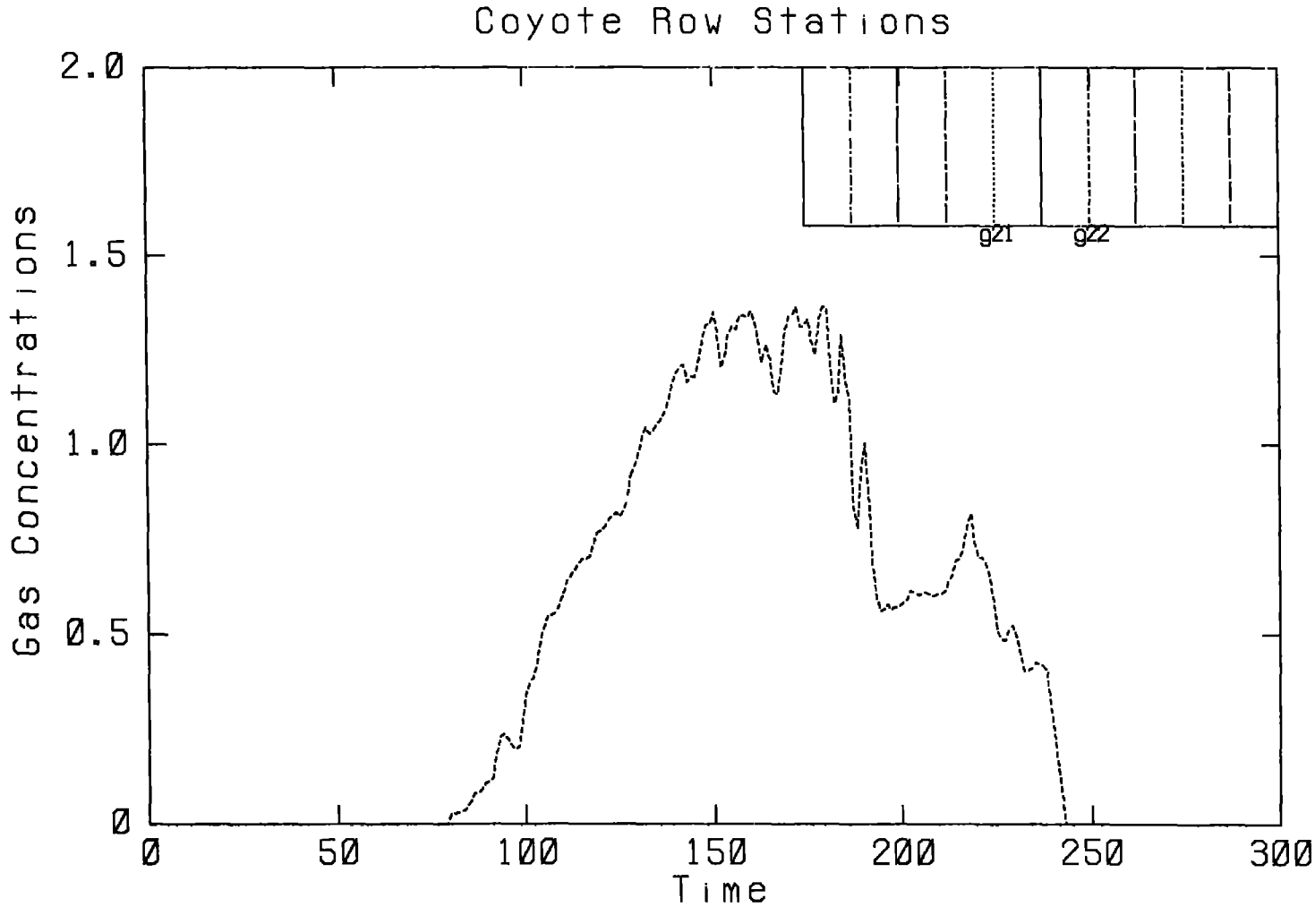
Coyote 6. Height 3. M. Row: 200 M.



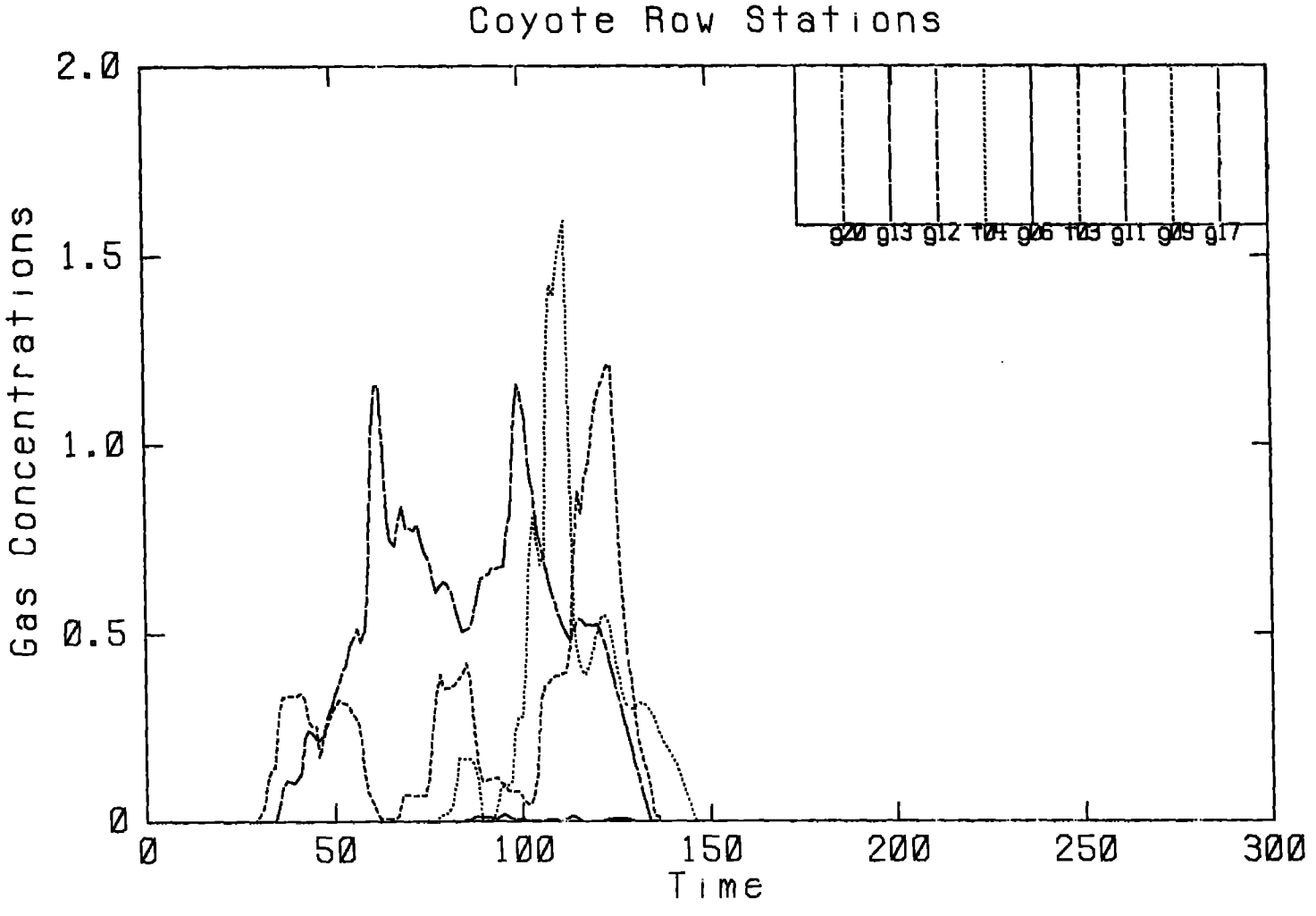
Coyote 6. Height 3. M. Row: 300 M.



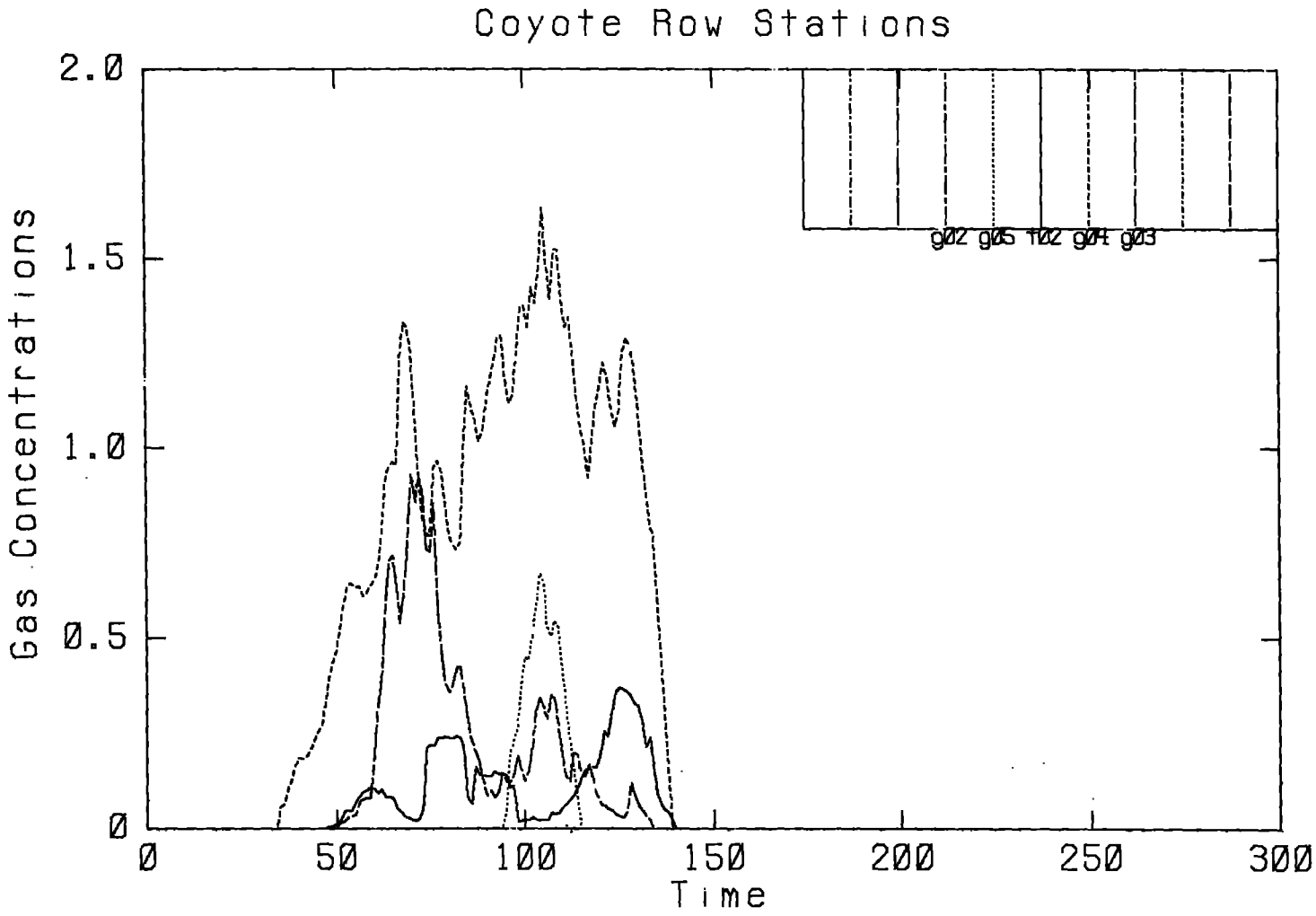
Coyote 6. Height 3. M. Row: 400 M.



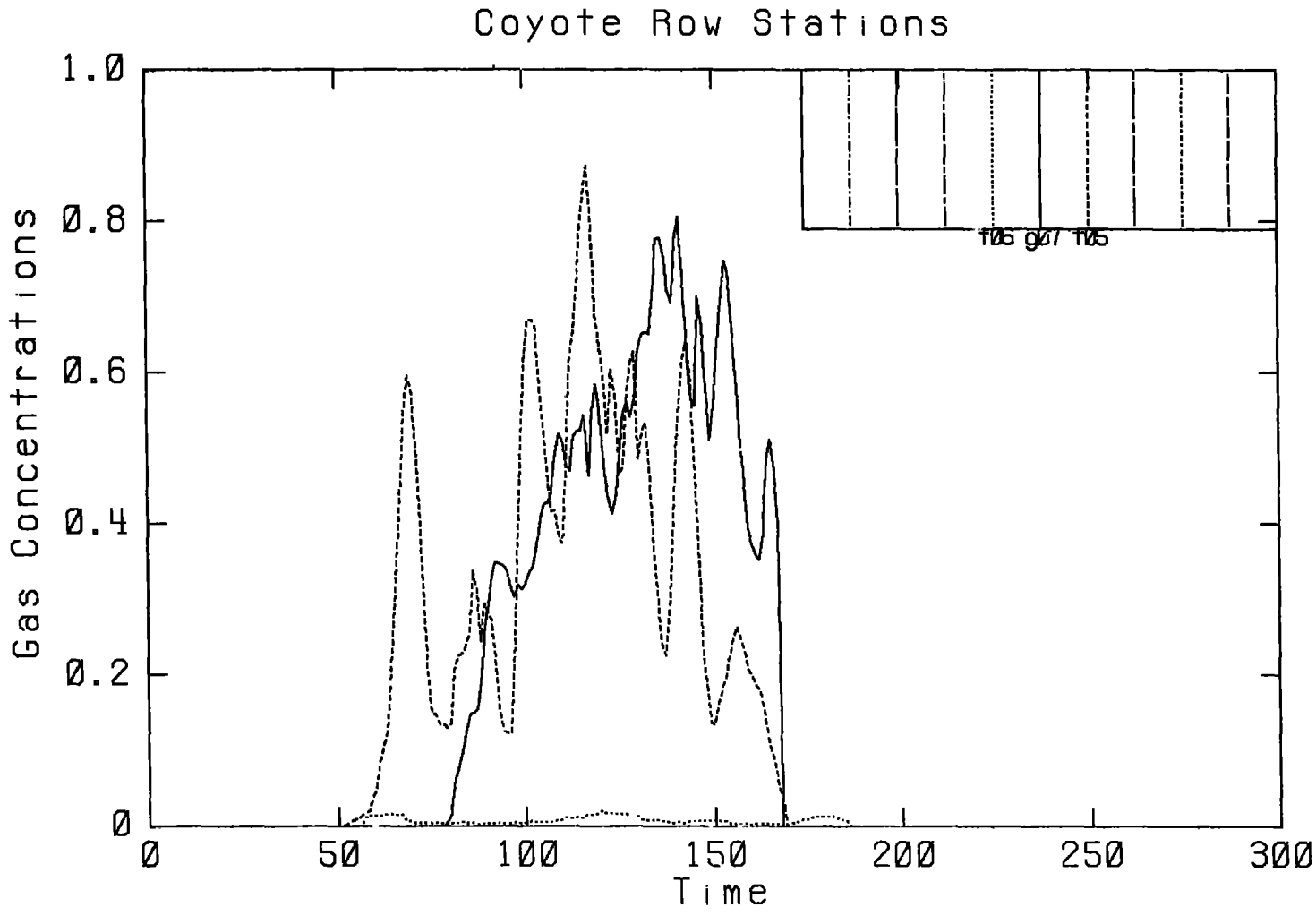
Coyote 6. Height 3. M. Row: 500 M.



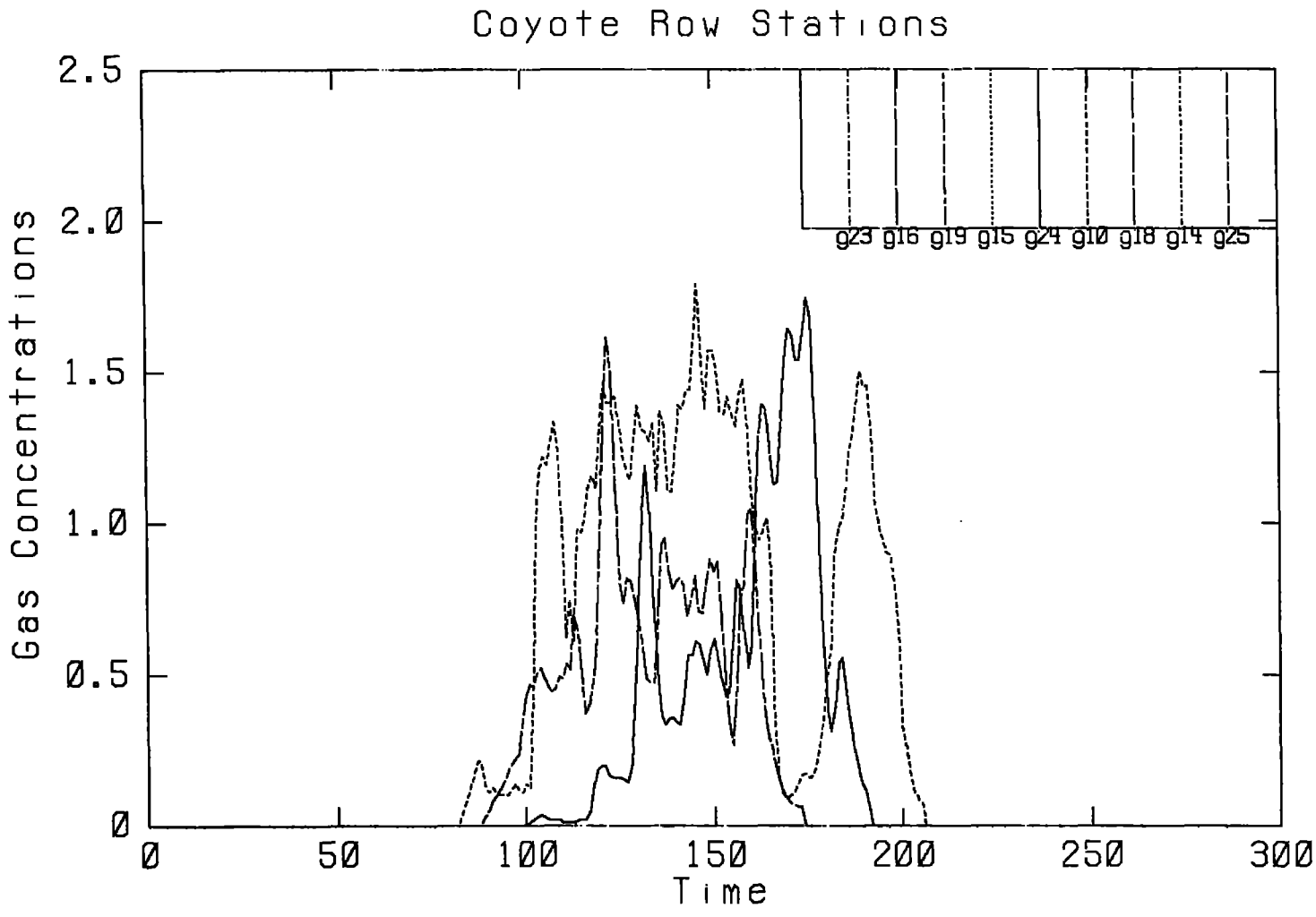
Coyote 6. Height 8. M. Row: 140 M.



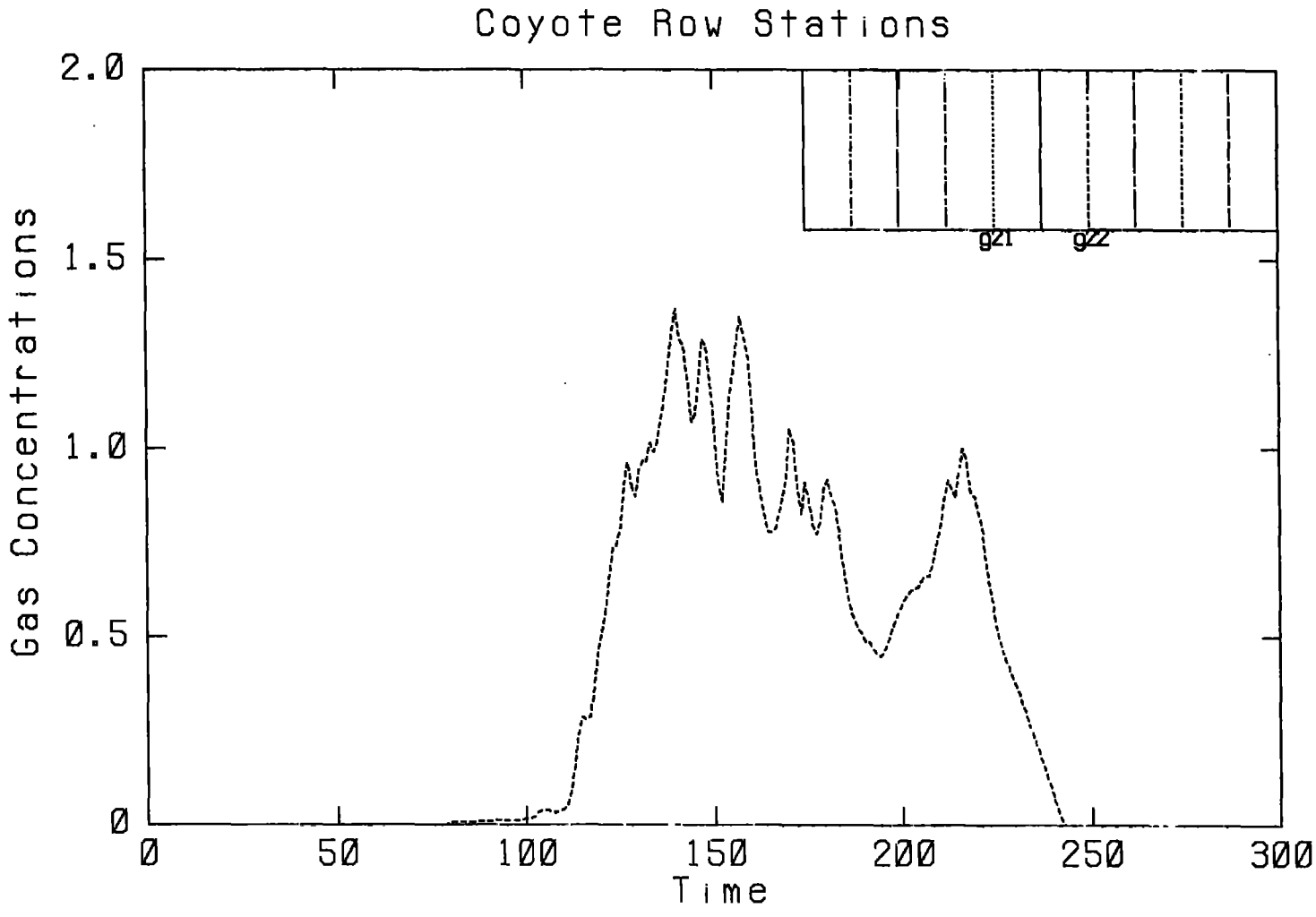
Coyote 6. Height 8. M. Row: 200 M.



Coyote 6. Height 8. M. Row: 300 M.



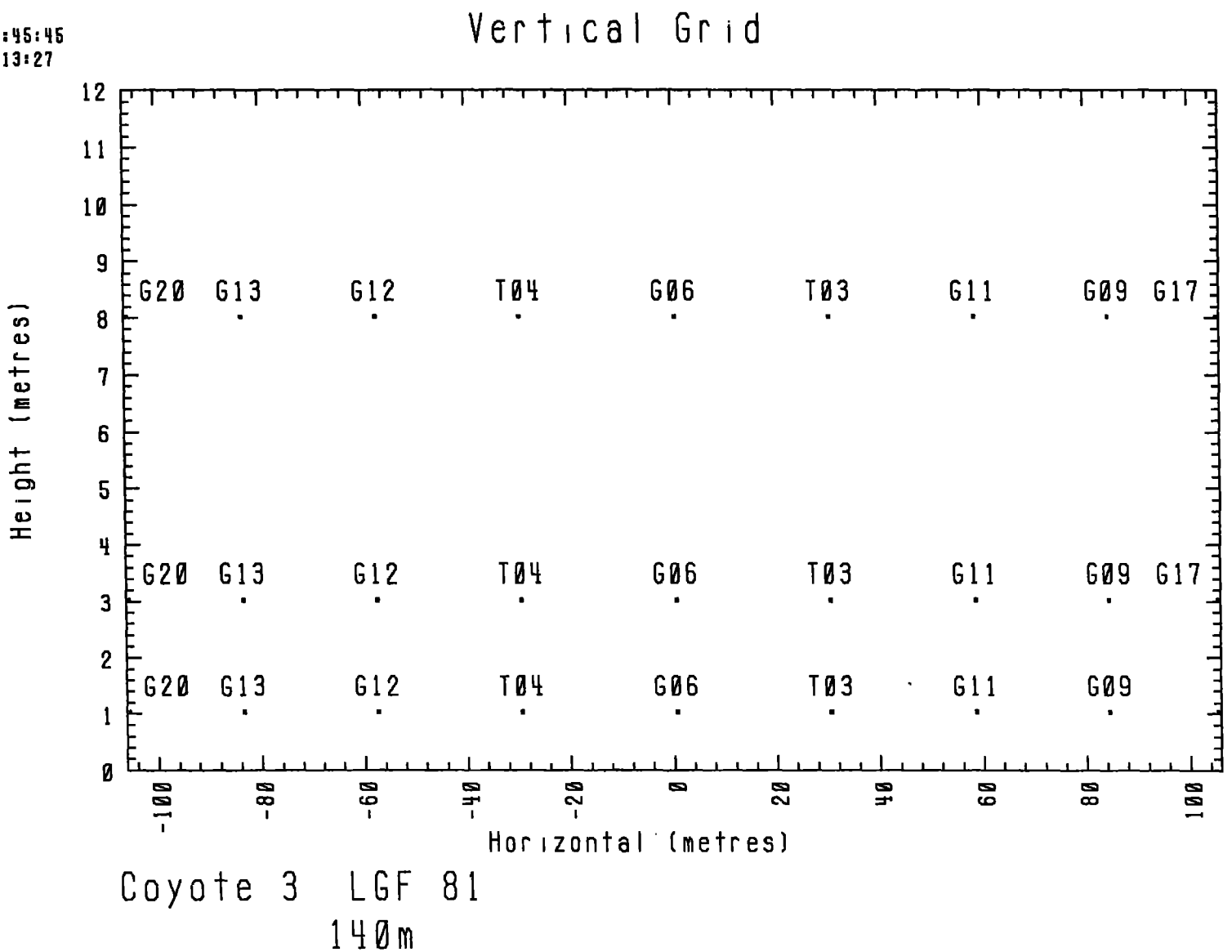
Coyote 6. Height 8. M. Row: 400 M.



Coyote 6. Height 8. M. Row: 500 M.

APPENDIX 3.: GAS-CONCENTRATION CONTOURS: VERTICAL PLANES

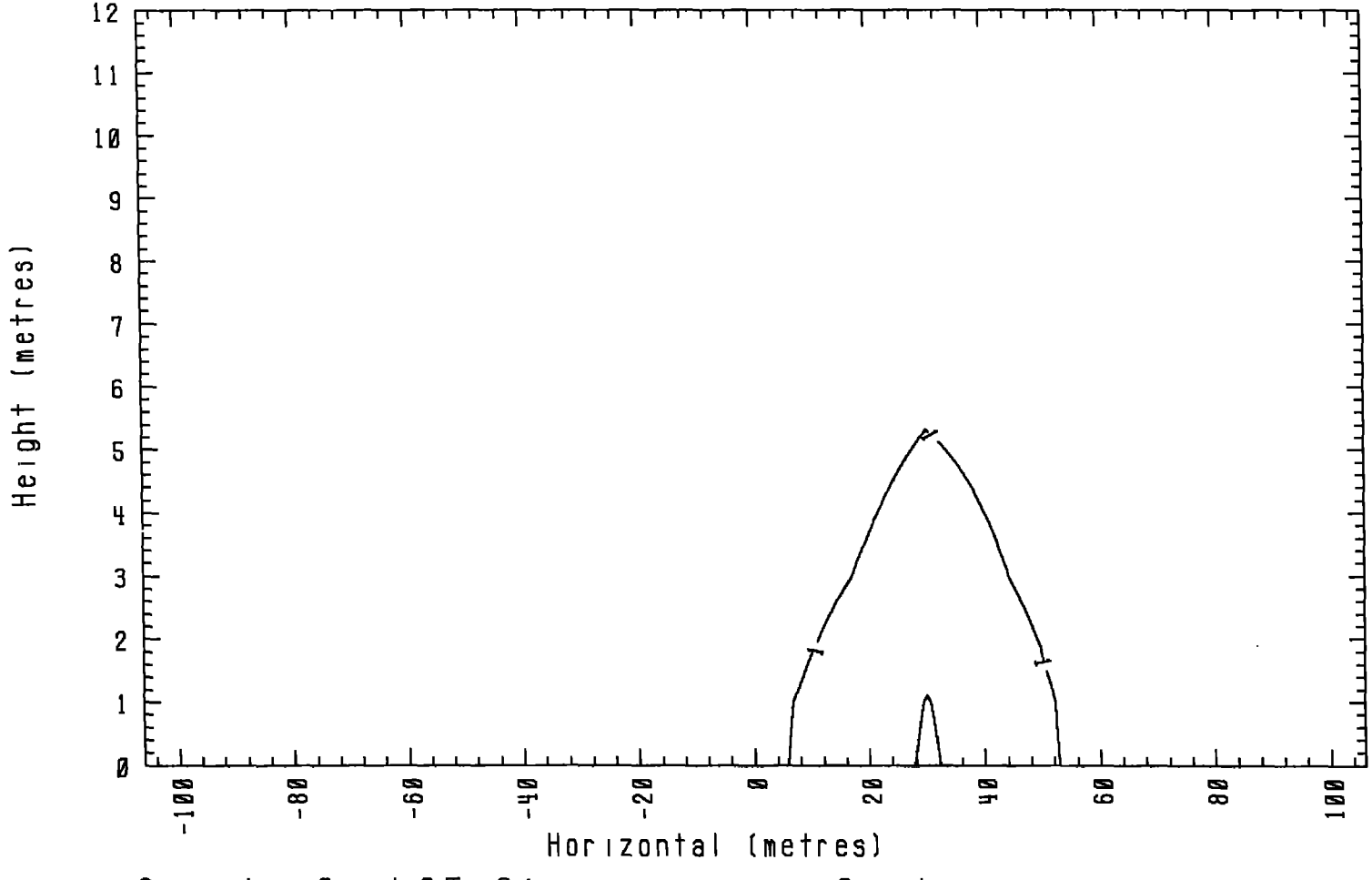
07/22/83u 10:45:45
08/04/83 15:13:27



Coyote 3 LGF 81
140m

07/22/83 10:45:45
08/04/83 15:13:27

Vertical Concentration Contours



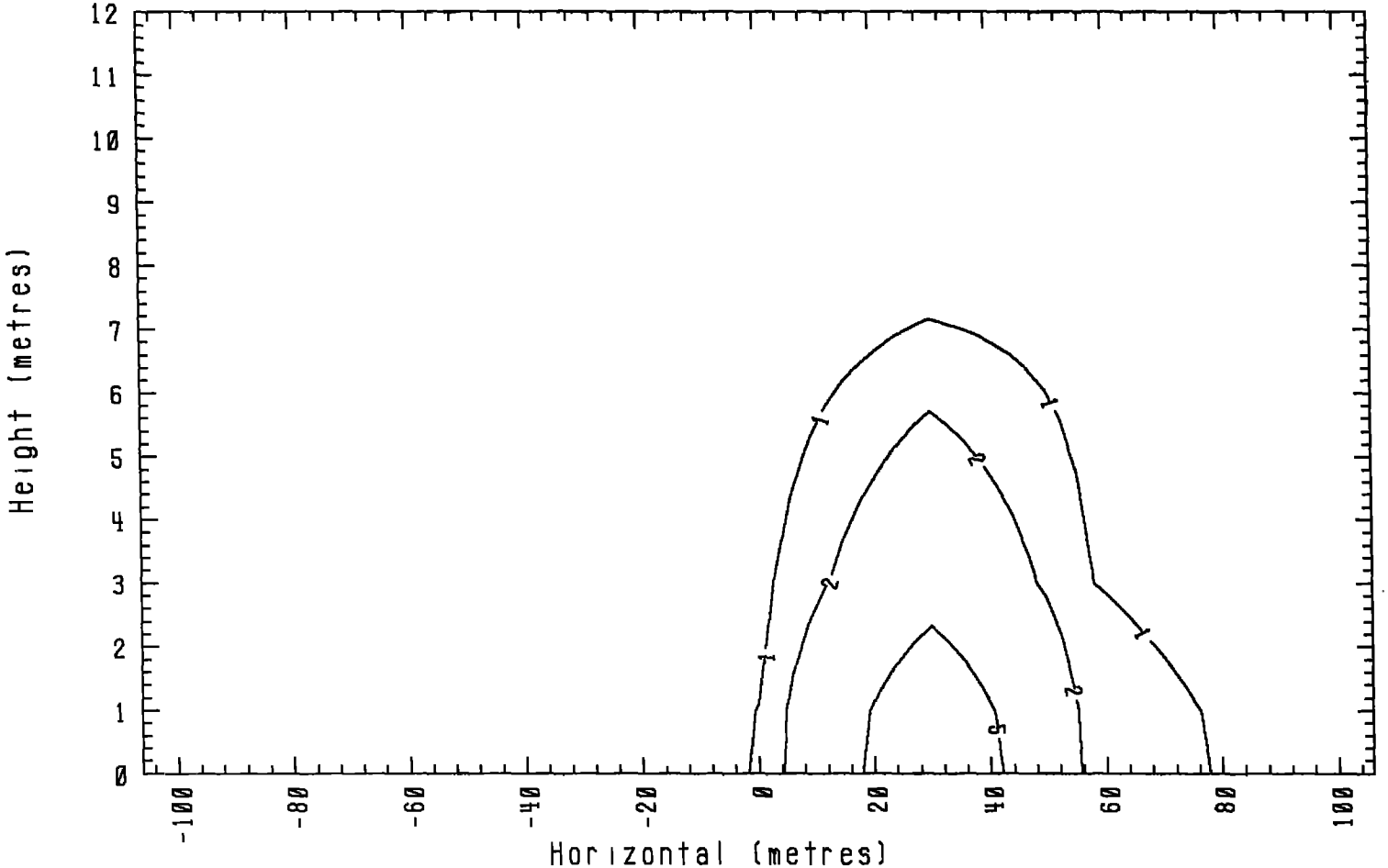
Coyote 3 LGF 81

Time = 40 sec 140m row

Contours:
1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/04/83 15:13:27

Vertical Concentration Contours

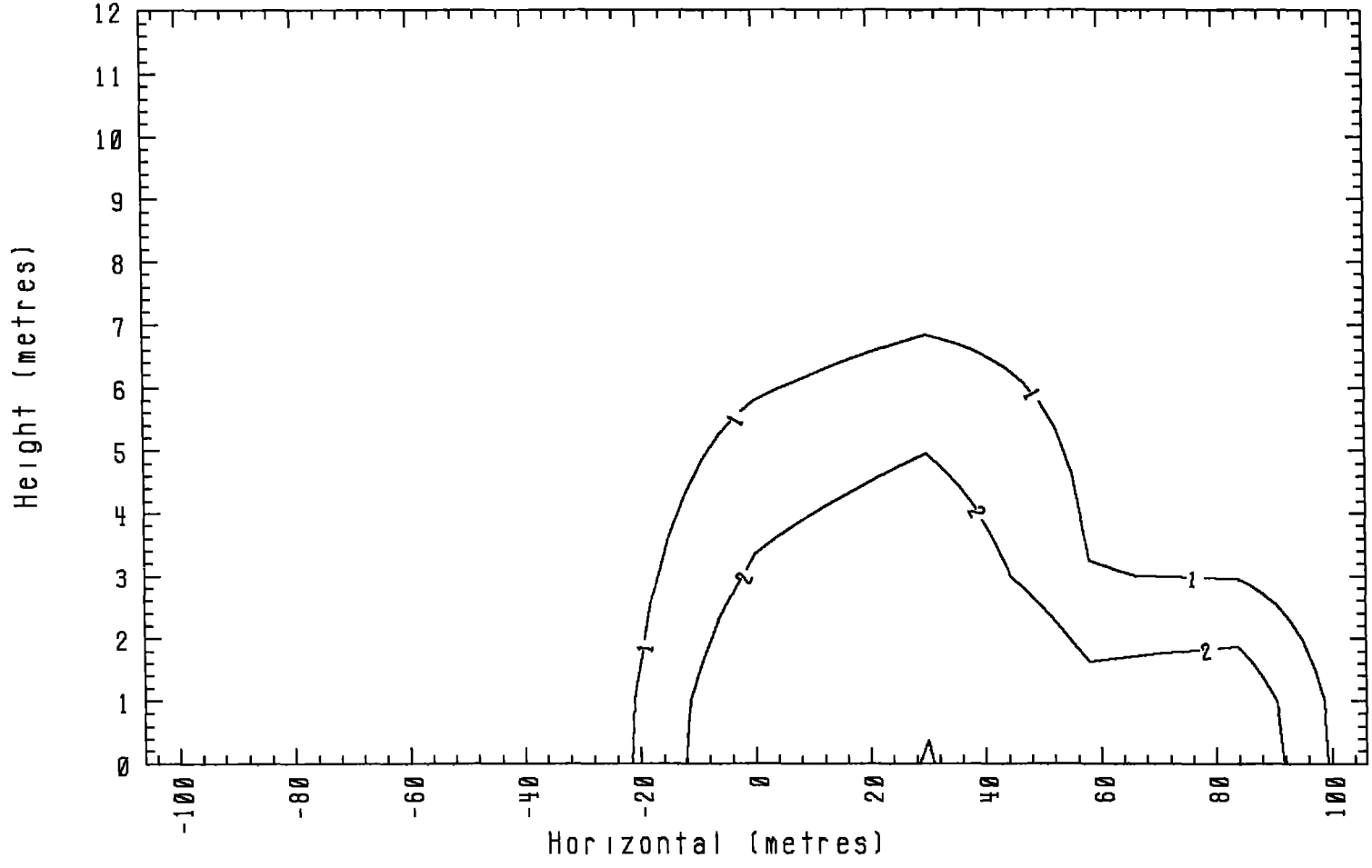


Coyote 3 LGF 81 Contours:

Time = 50 sec 140m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/04/83 15:13:27

Vertical Concentration Contours

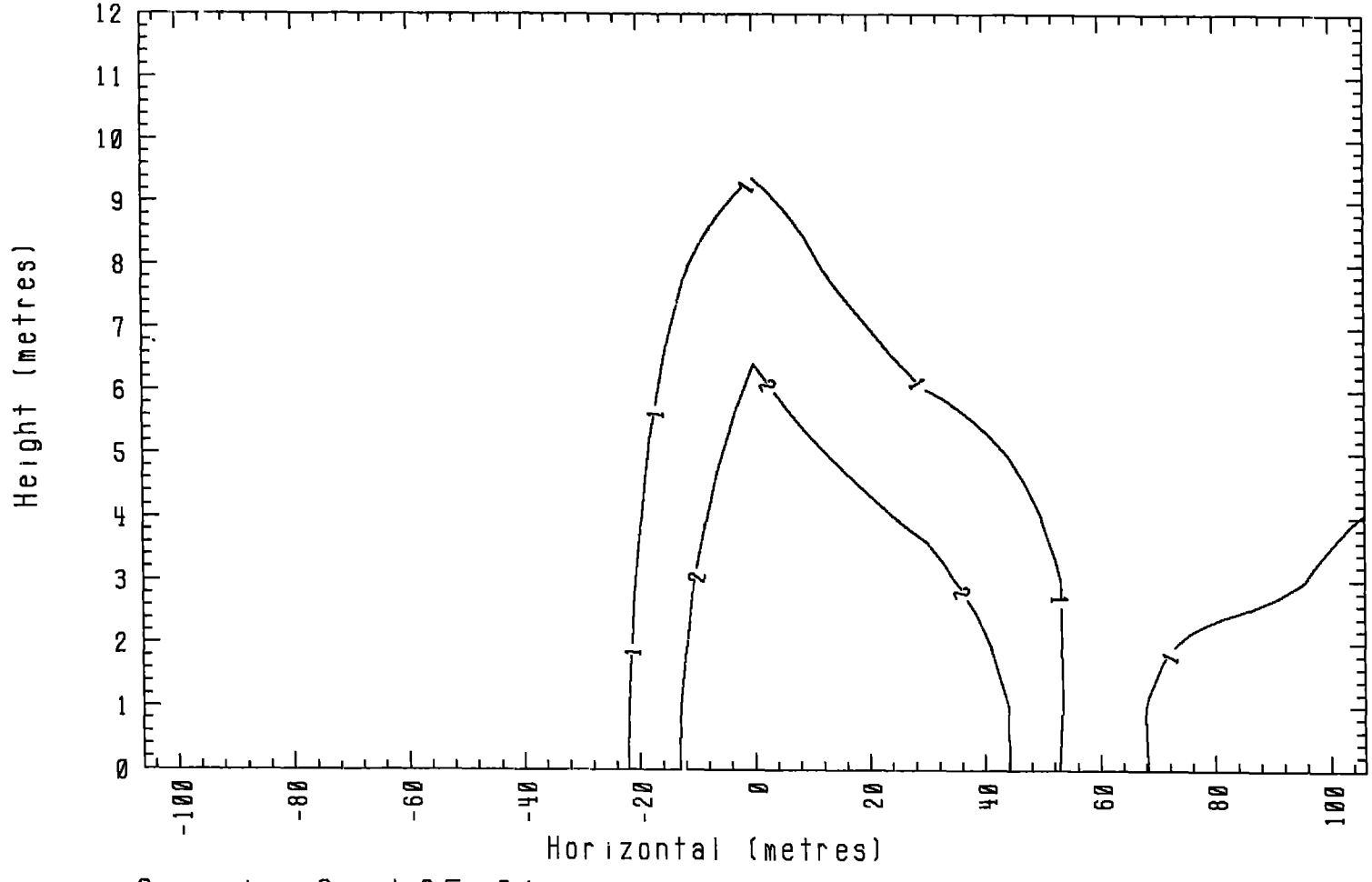


Coyote 3 LGF 81 Contours:

Time = 60 sec 140m row 1%,2%,5%,10%,15%,25%,35%

07/02/83u 10:45:45
08/04/83 15:13:27

Vertical Concentration Contours

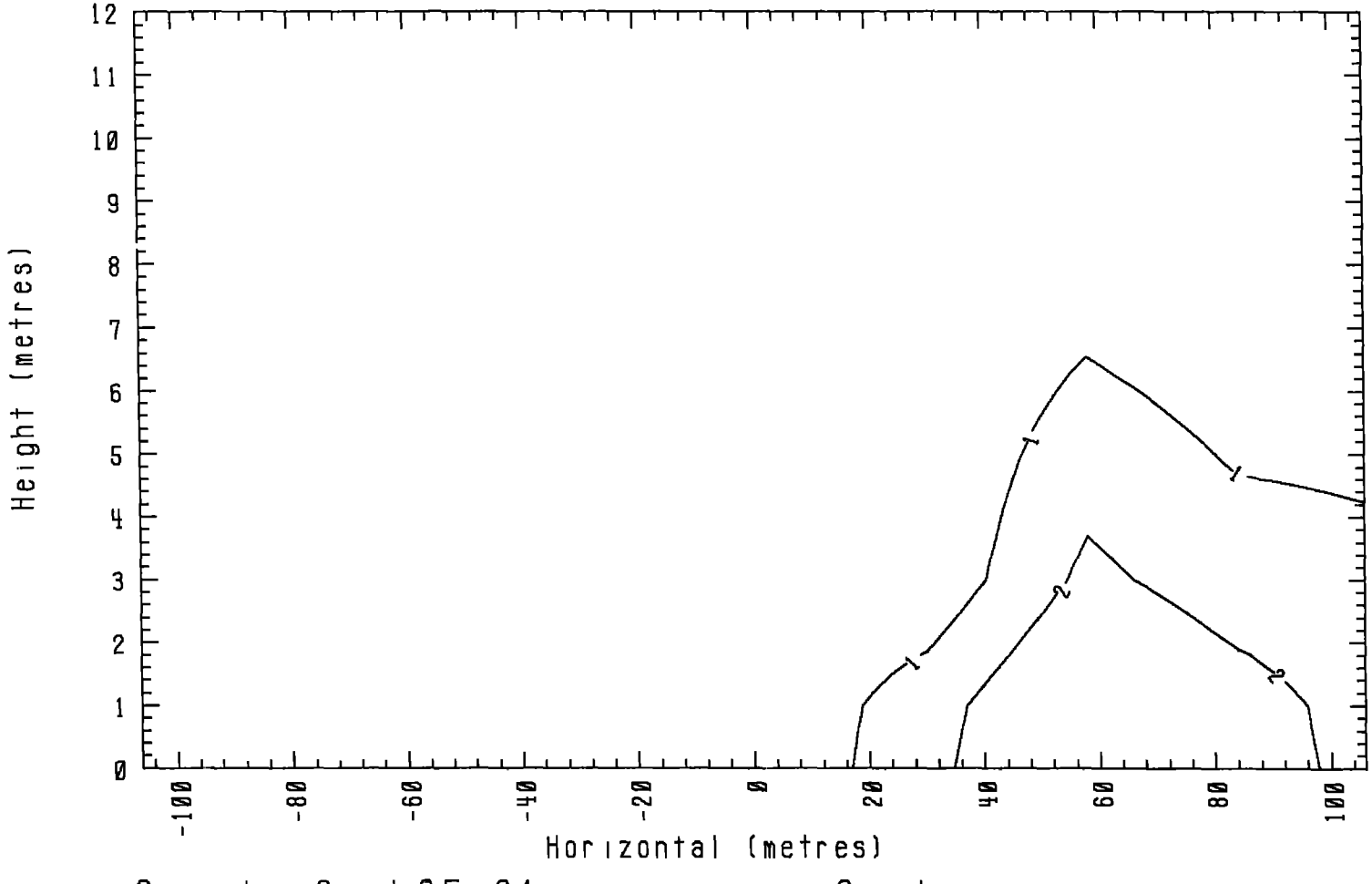


Coyote 3 LGF 81 Contours:

Time = 70 sec 140m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/04/83 15:13:27

Vertical Concentration Contours

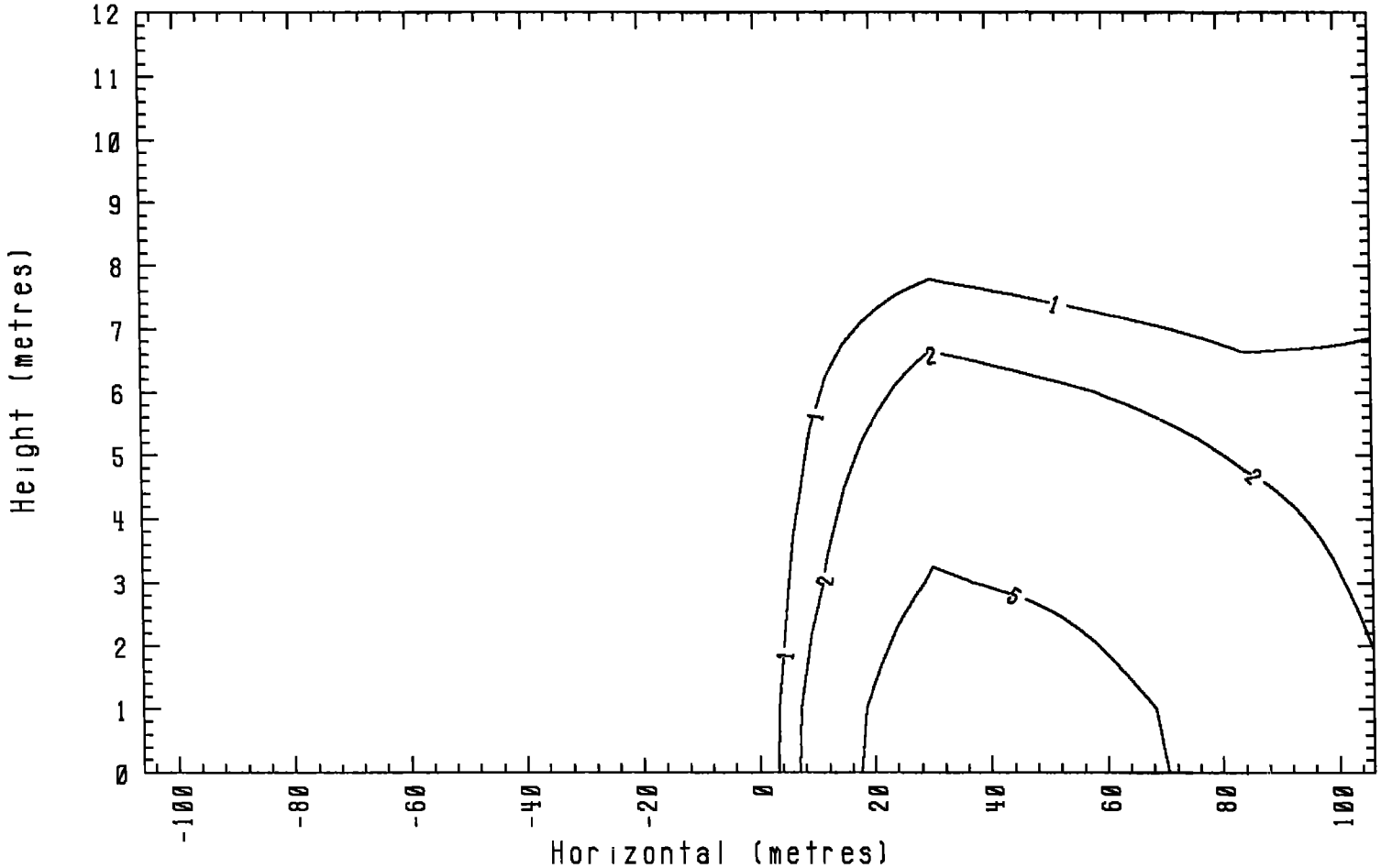


Coyote 3 LGF 81 Contours:

Time = 80 sec 140m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/04/83 15:13:27

Vertical Concentration Contours

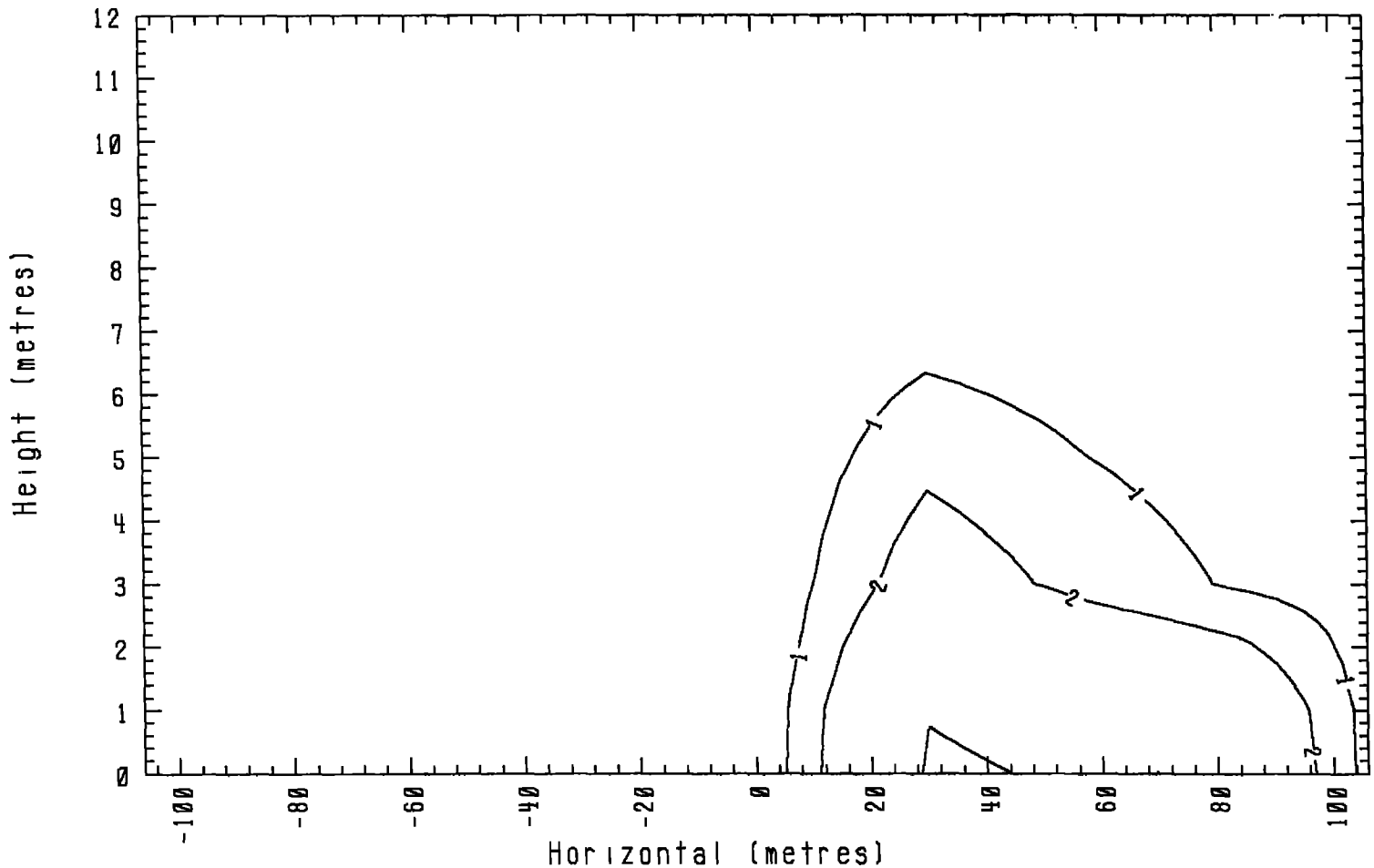


Coyote 3 LGF 81 Contours:

Time = 90 sec 140m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/04/83 15:13:27

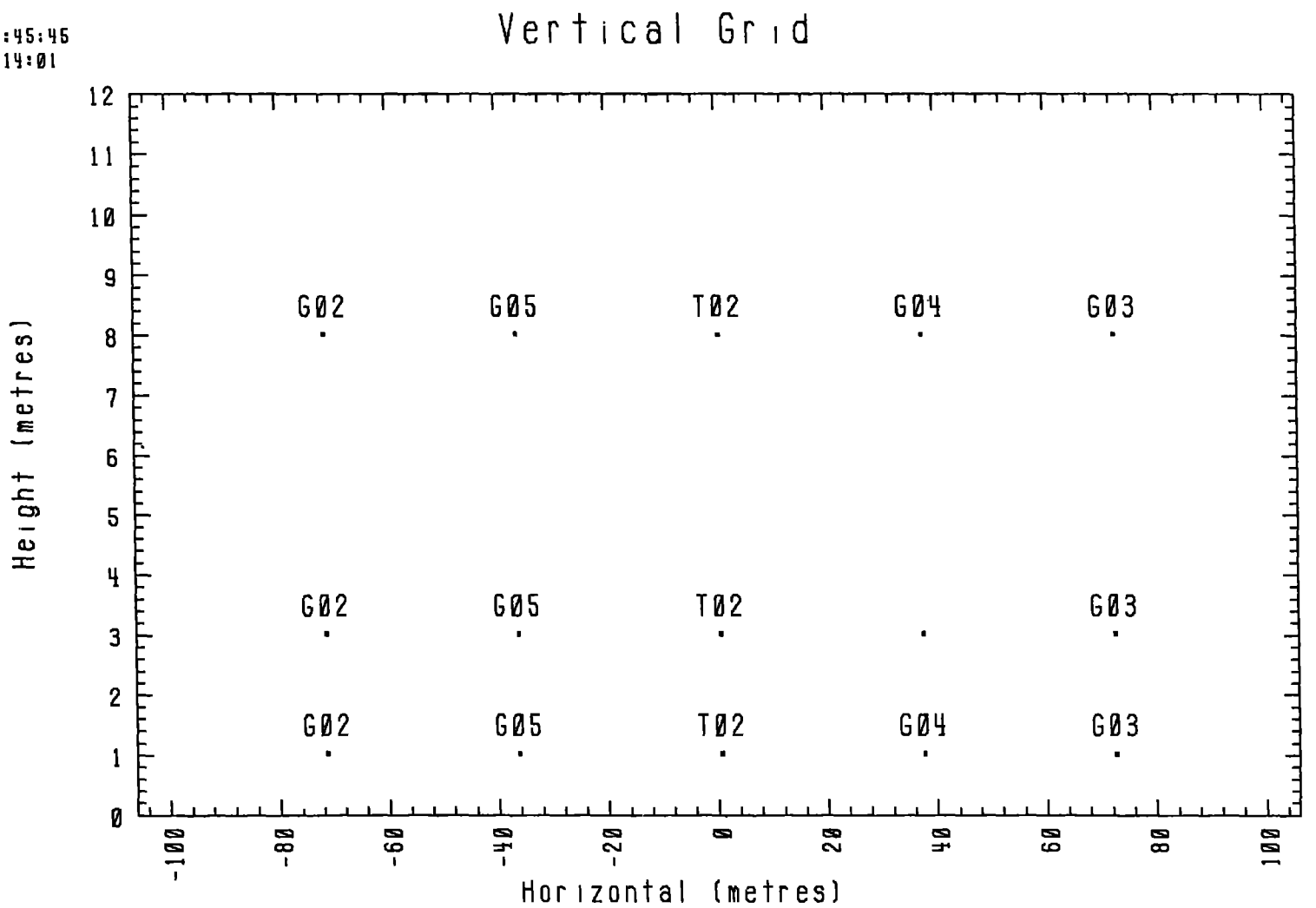
Vertical Concentration Contours



Coyote 3 LGF 81 Contours:

Time = 100 sec 140m row 1%,2%,5%,10%,15%,25%,35%

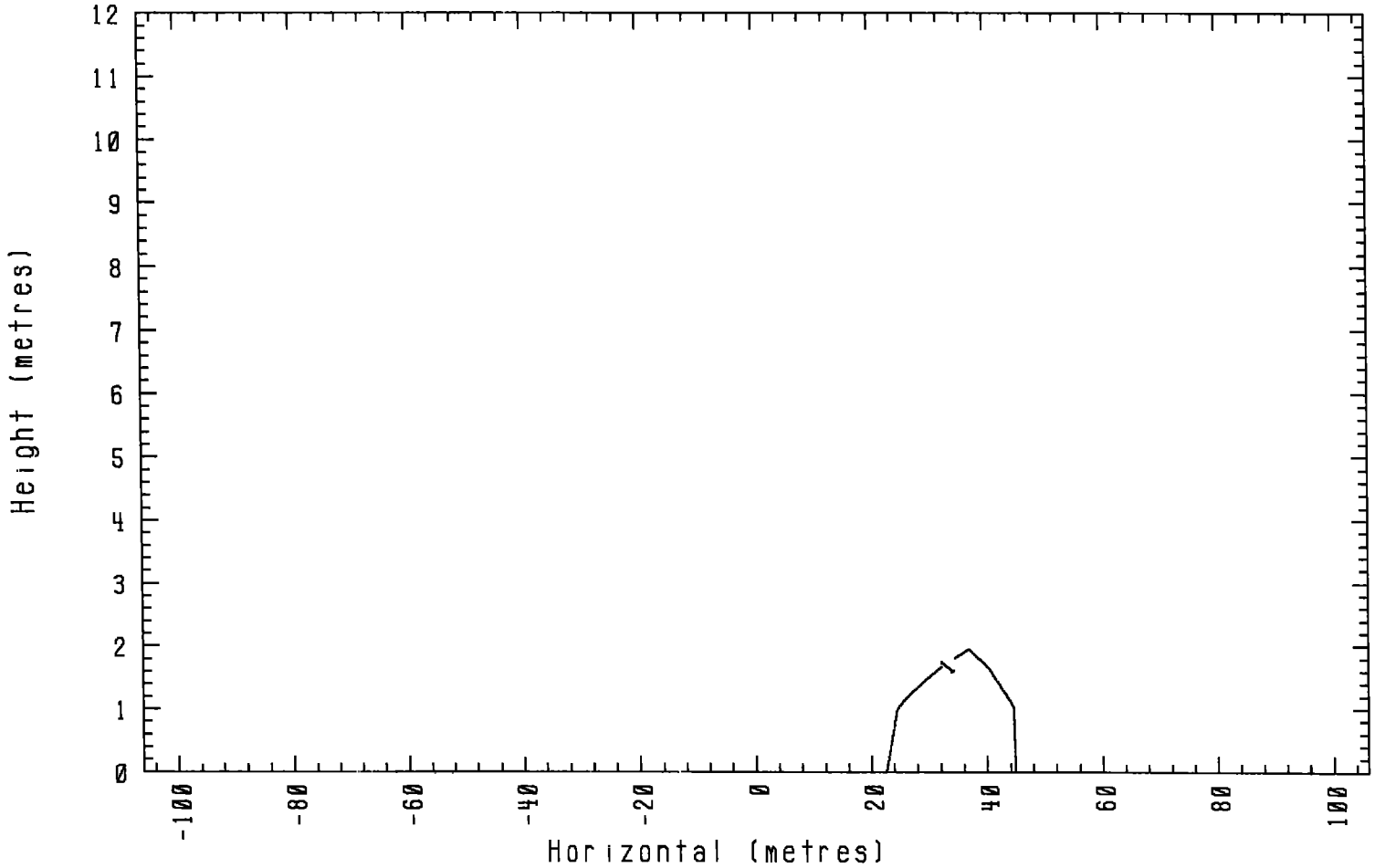
07/22/83u 10:45:45
08/04/83 15:14:01



Coyote 3 LGF 81
200m

07/22/83u 10:45:45
08/04/83 15:14:01

Vertical Concentration Contours

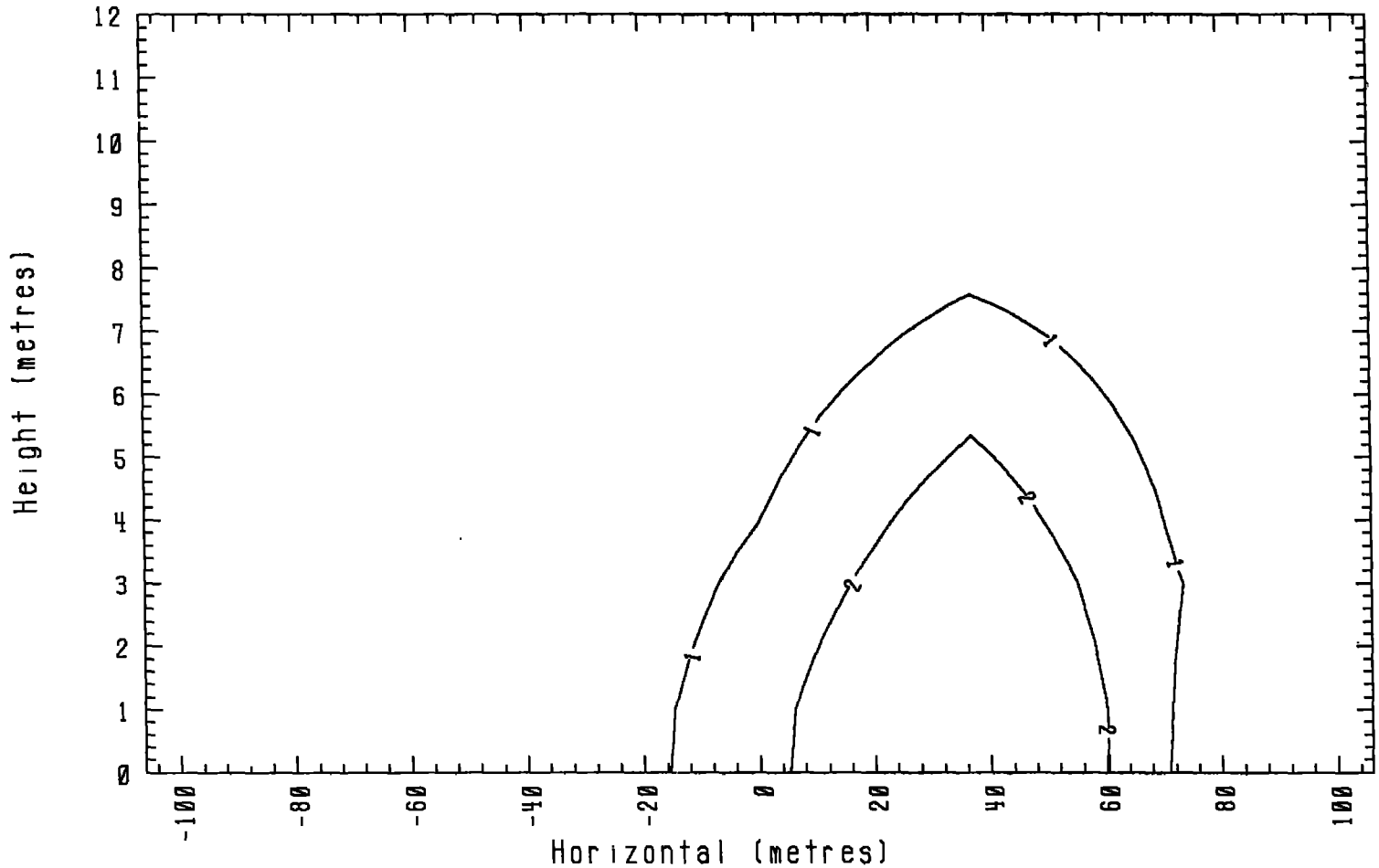


Coyote 3 LGF 81 Contours:

Time = 50 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:46
08/04/83 15:14:01

Vertical Concentration Contours

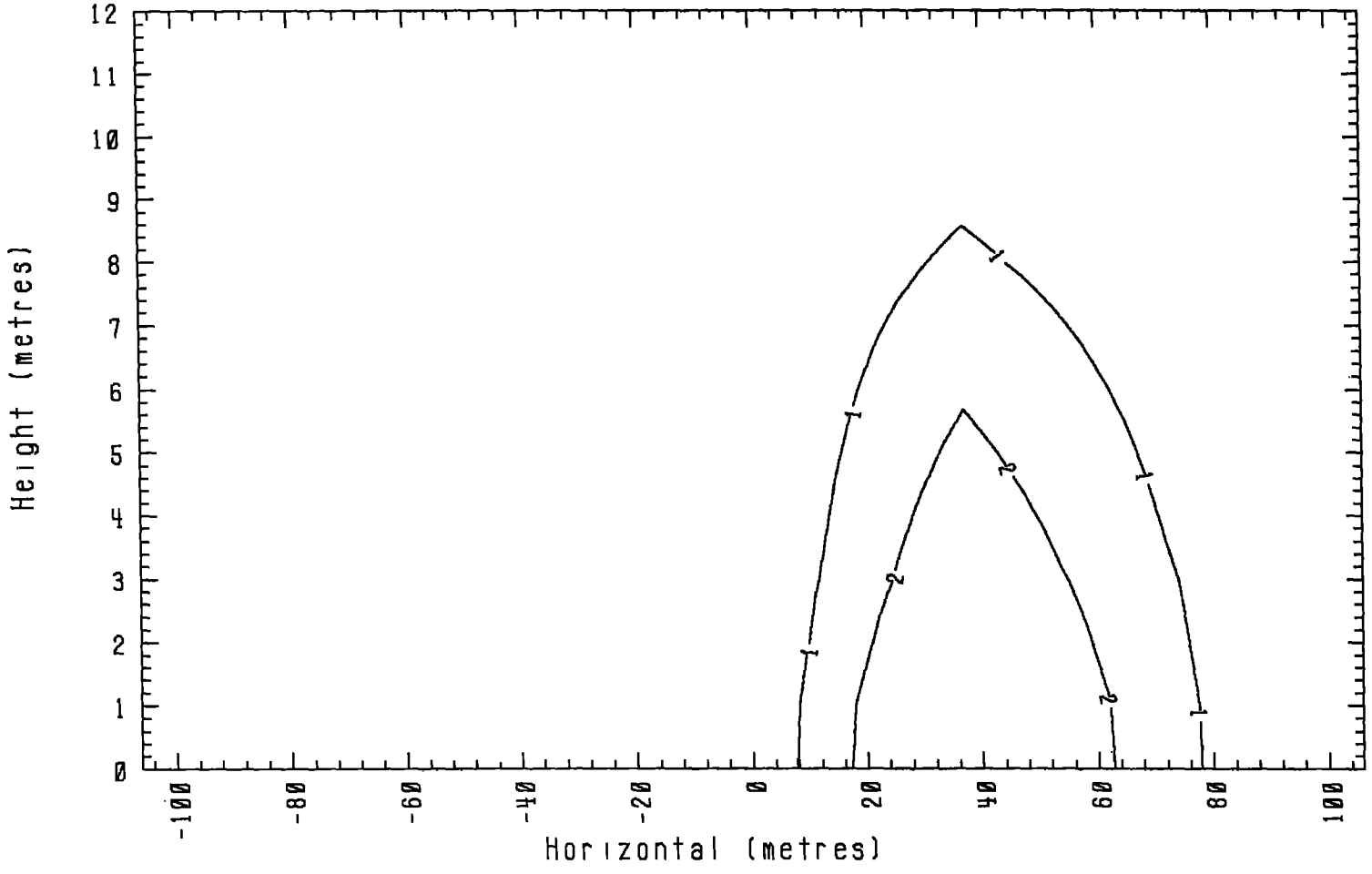


Coyote 3 LGF 81 Contours:

Time = 60 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/04/83 15:14:01

Vertical Concentration Contours

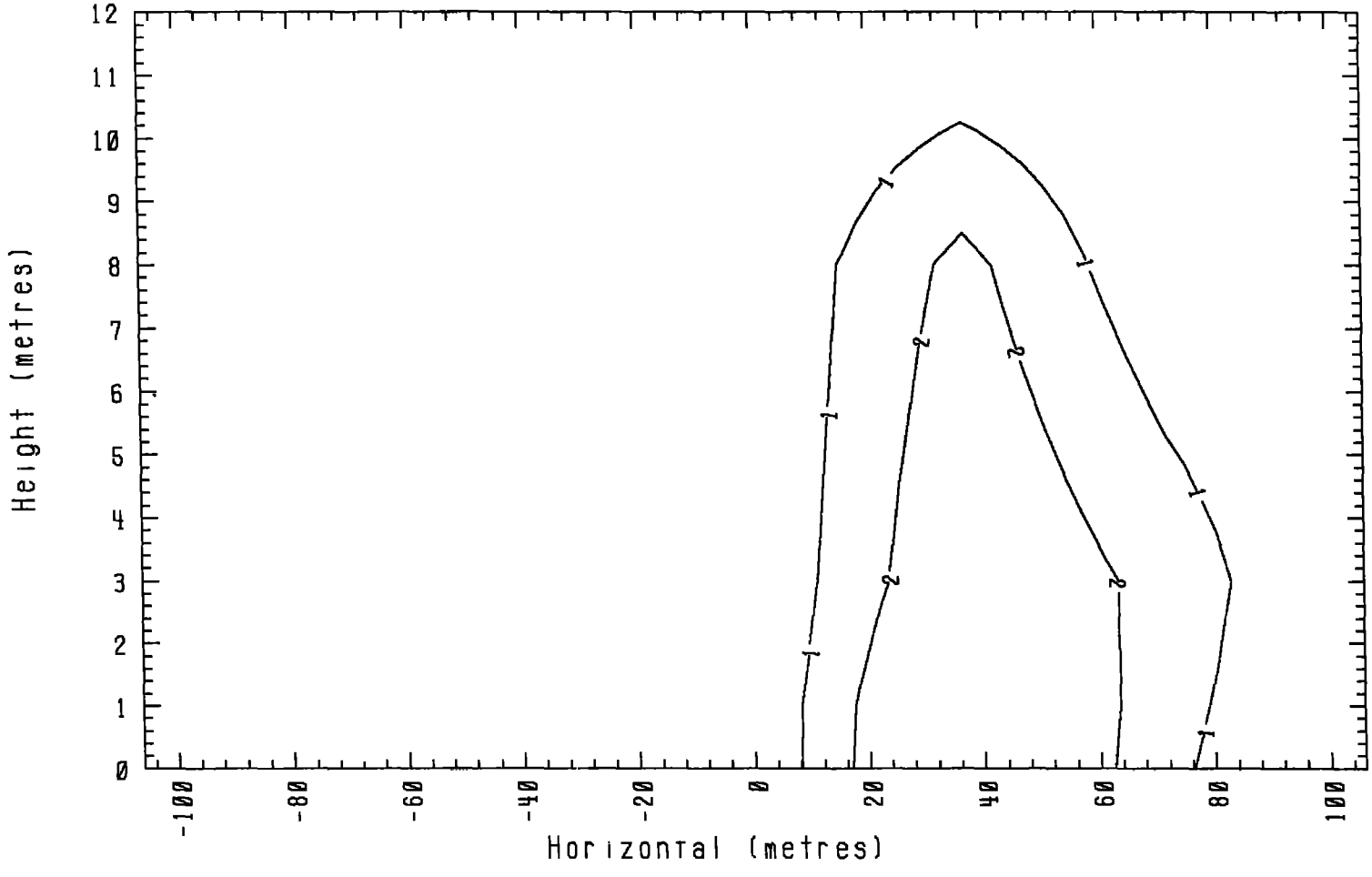


Coyote 3 LGF 81 Contours:

Time = 70 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/04/83 15:14:01

Vertical Concentration Contours

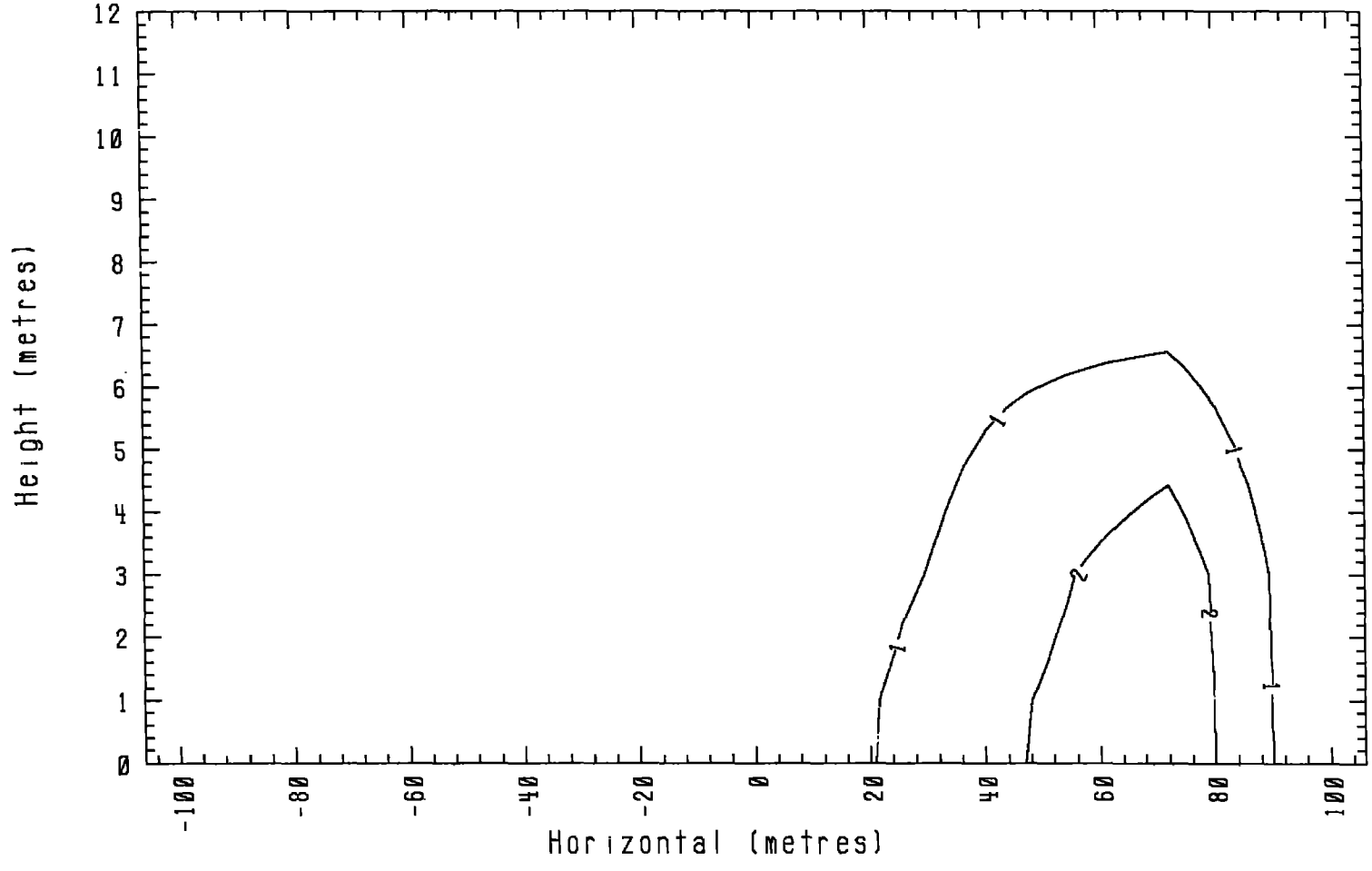


Coyote 3 LGF 81 Contours:

Time = 80 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/04/83 15:14:01

Vertical Concentration Contours

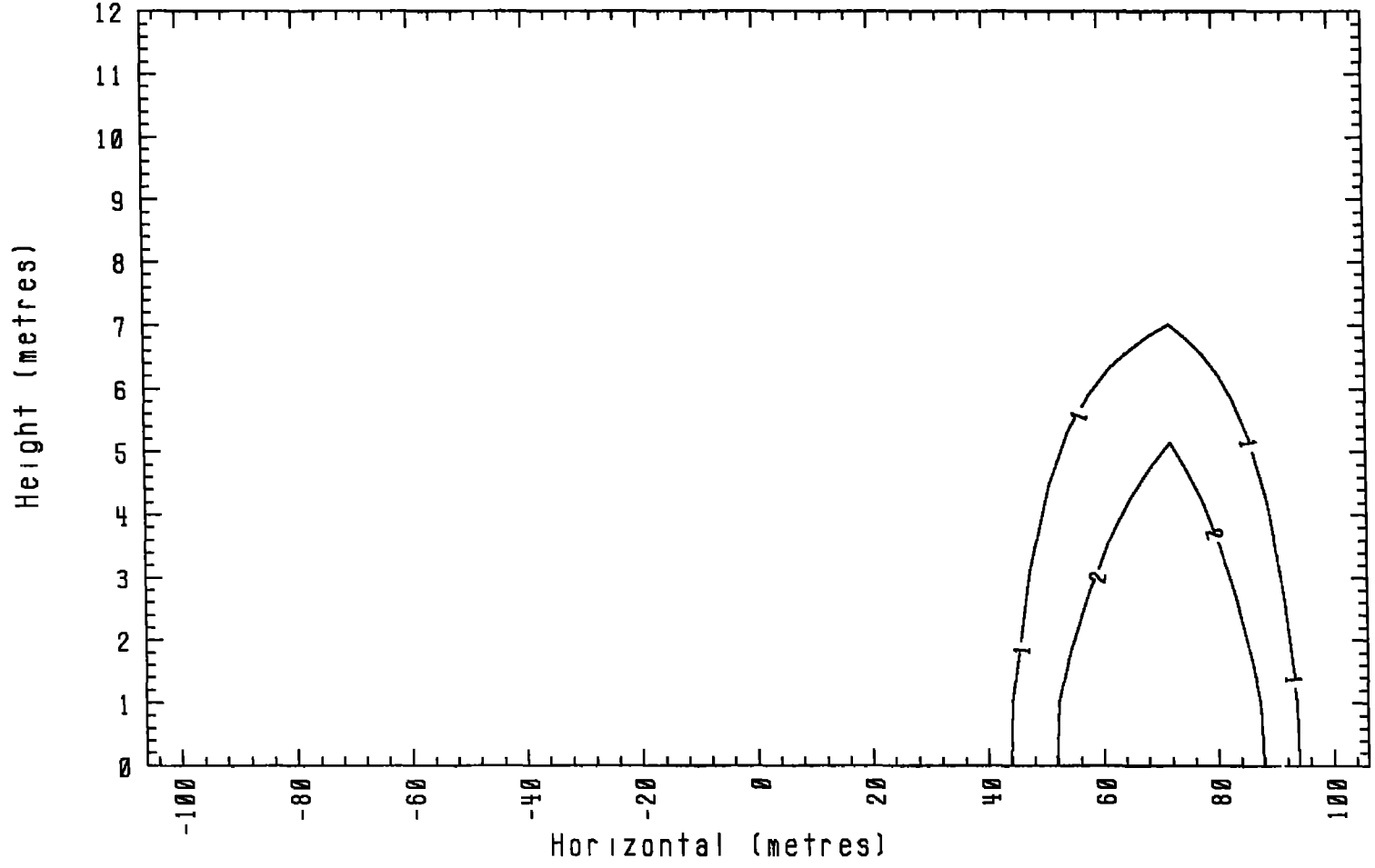


Coyote 3 LGF 81 Contours:

Time = 90 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/04/83 15:14:01

Vertical Concentration Contours

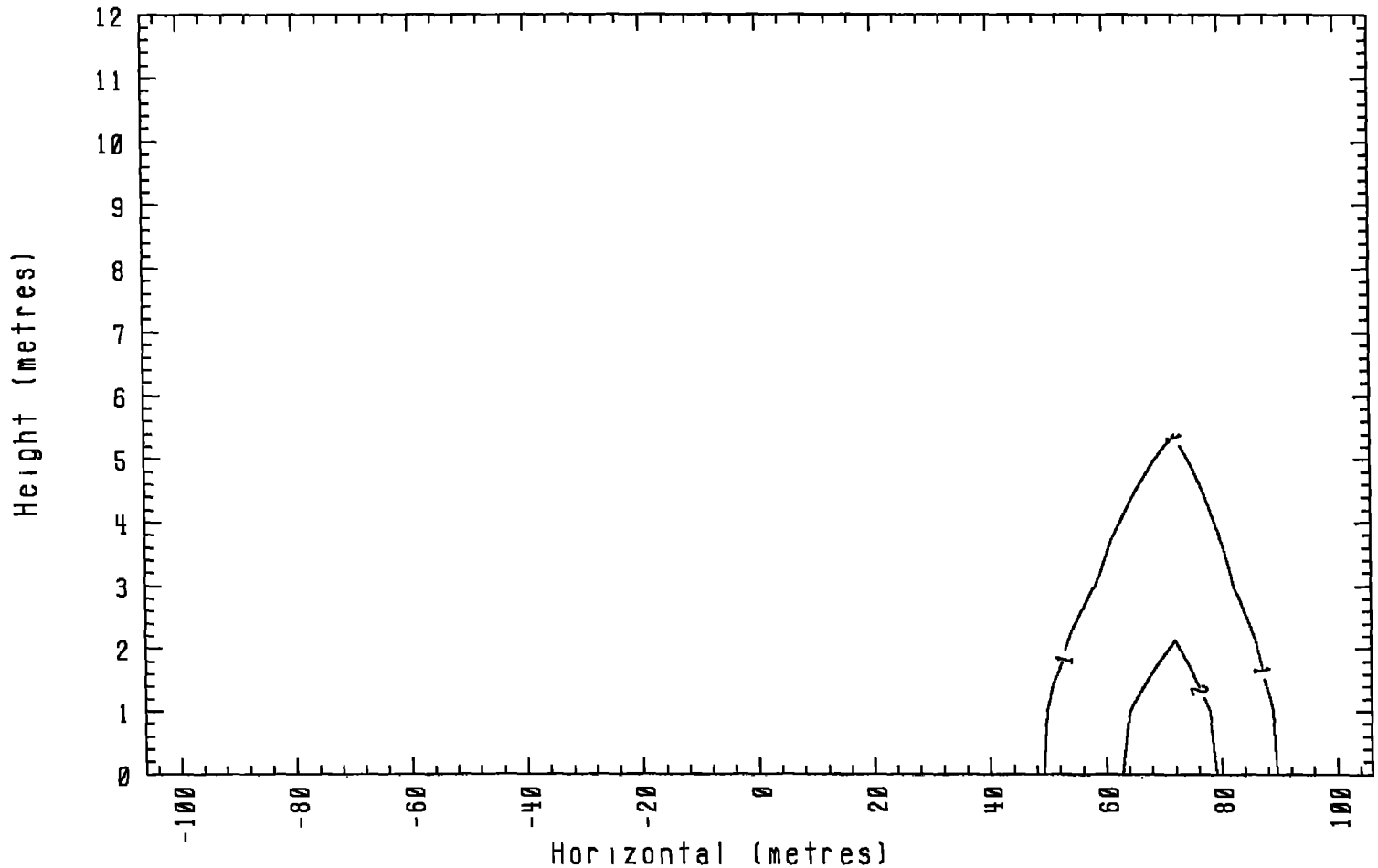


Coyote 3 LGF 81 Contours:

Time = 100 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/04/83 15:14:01

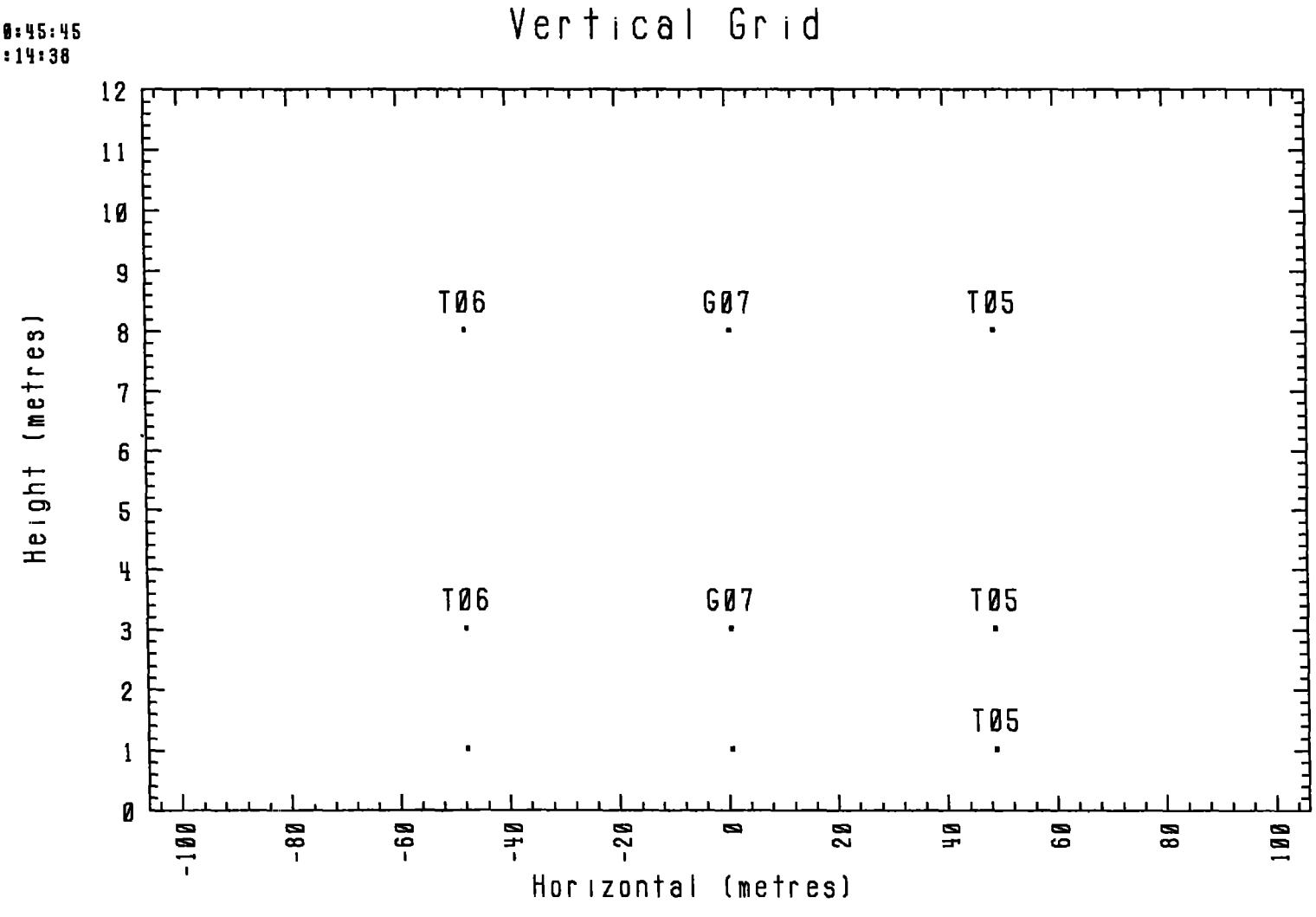
Vertical Concentration Contours



Coyote 3 LGF 81 Contours:

Time = 110 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
00/04/83 15:14:38

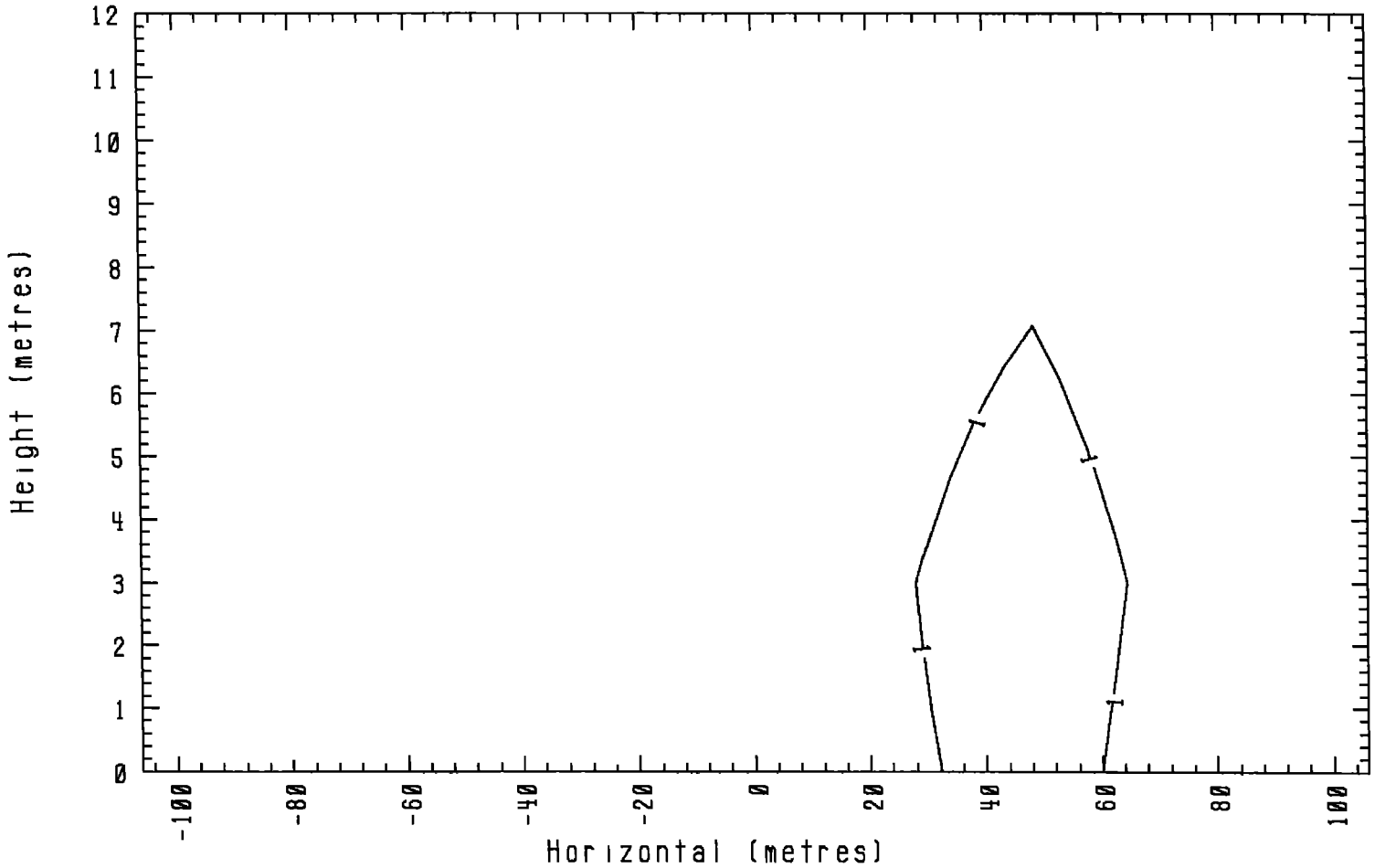


Coyote 3 LGF 81

300m

07/22/83u 10:45:45
08/04/83 15:14:38

Vertical Concentration Contours

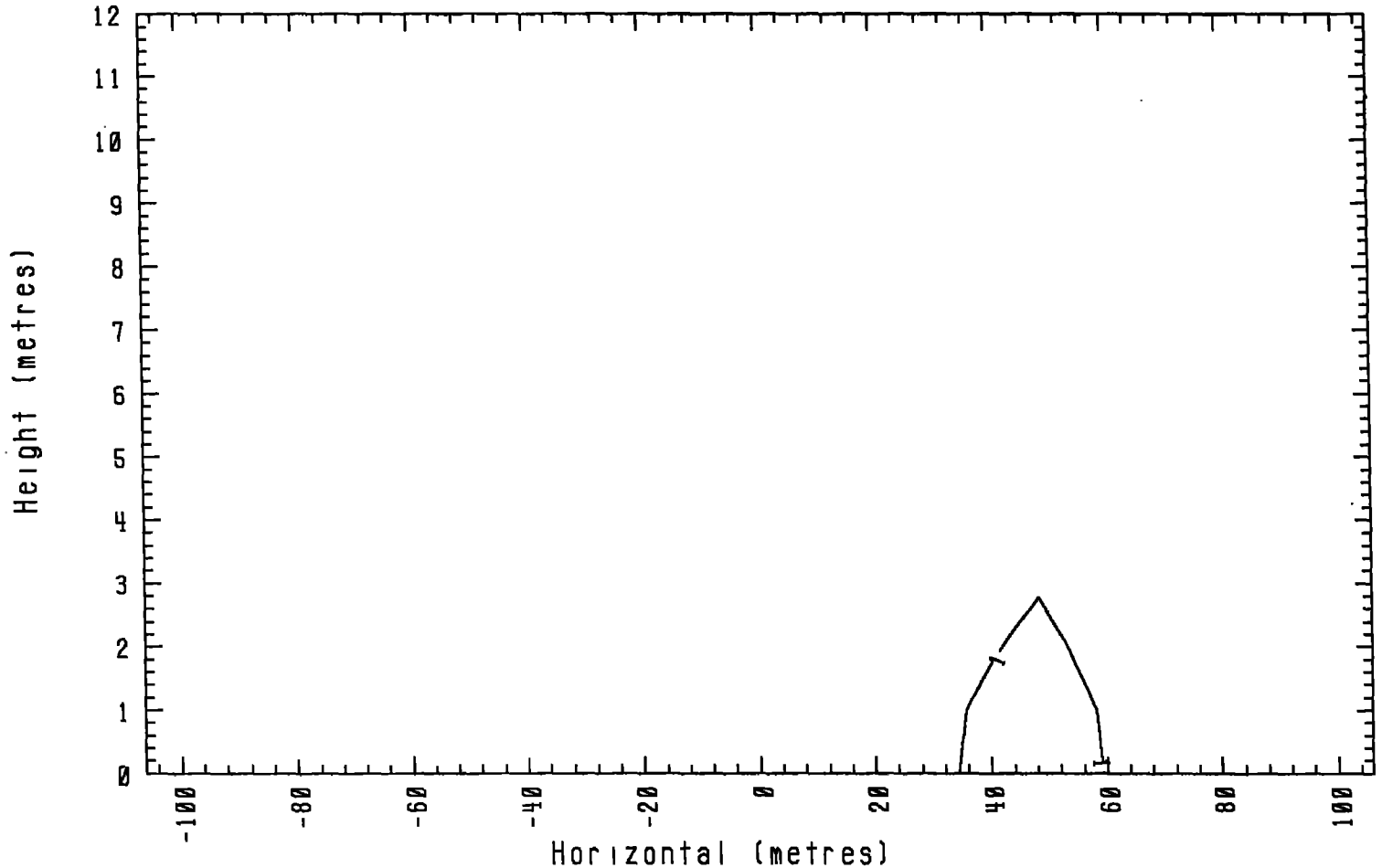


Coyote 3 LGF 81 Contours:

Time = 70 sec 300m row 1%,2%,5%,10%,15%,25%,35%

07/22/ 30 10:45:46
08/04.33 15:14:38

Vertical Concentration Contours

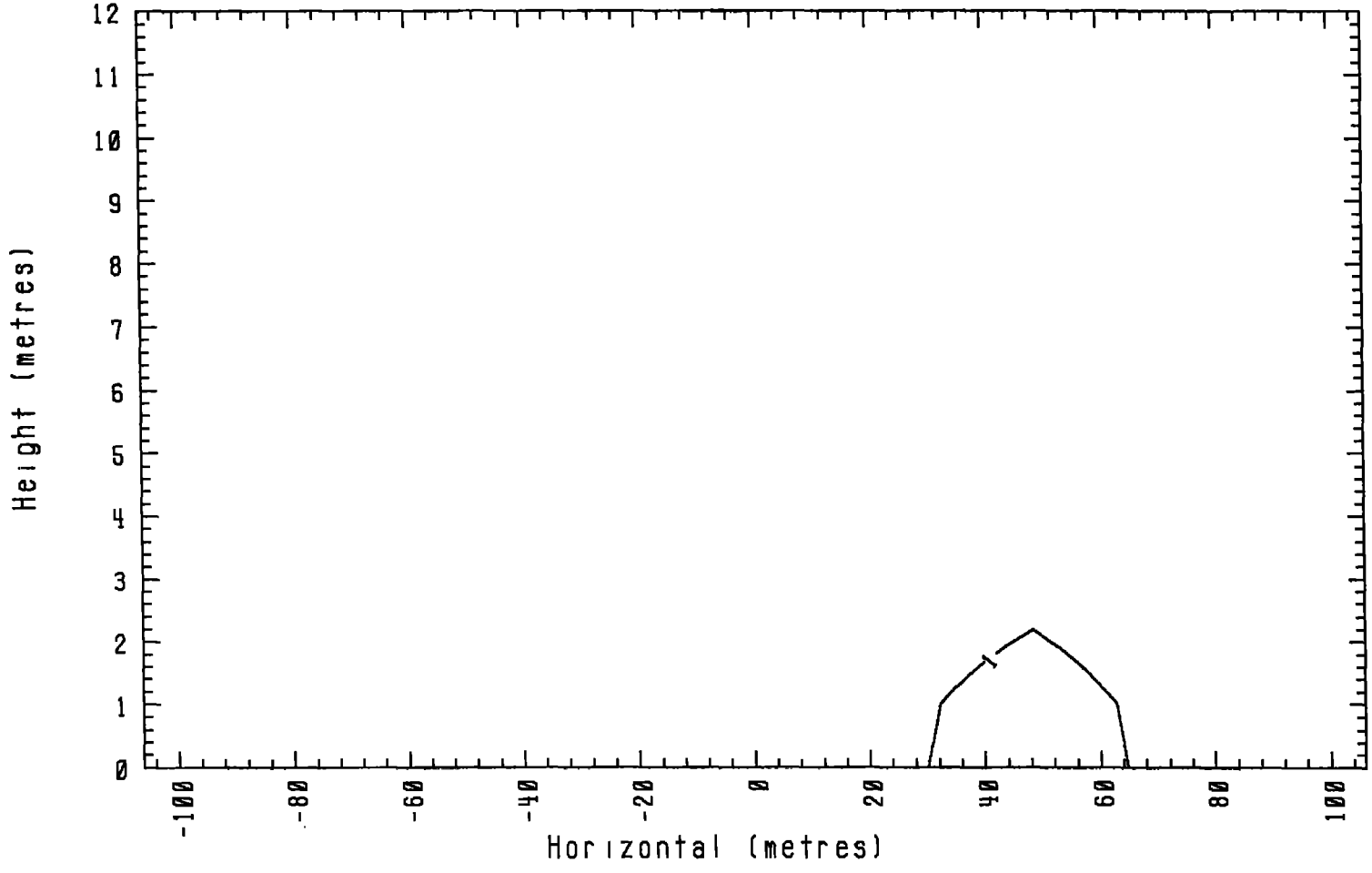


Coyote 3 LGF 81 Contours:

Time = 80 sec 300m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:46
08/04/83 15:14:38

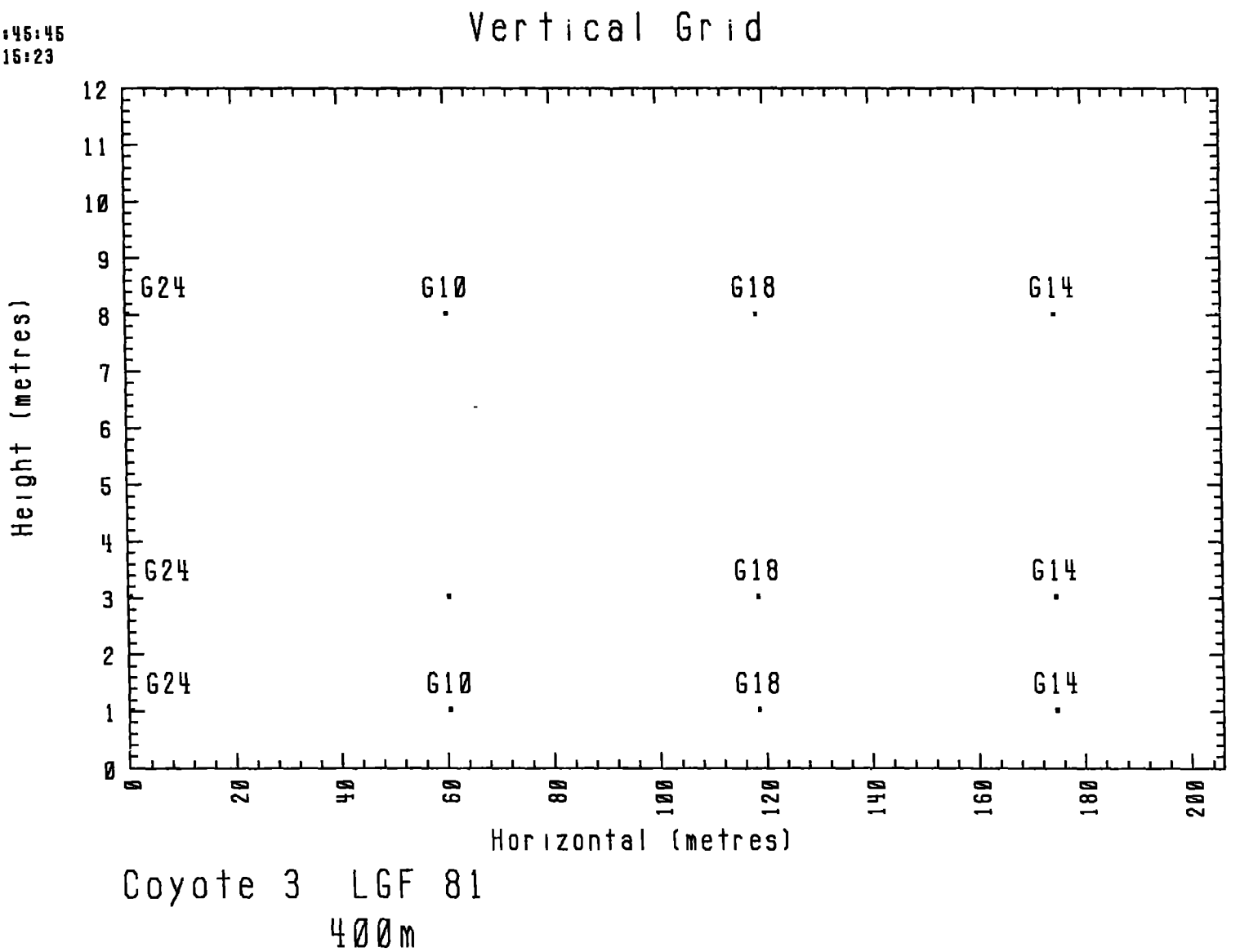
Vertical Concentration Contours



Coyote 3 LGF 81 Contours:

Time = 90 sec 300m row 1%,2%,5%,10%,15%,25%,35%

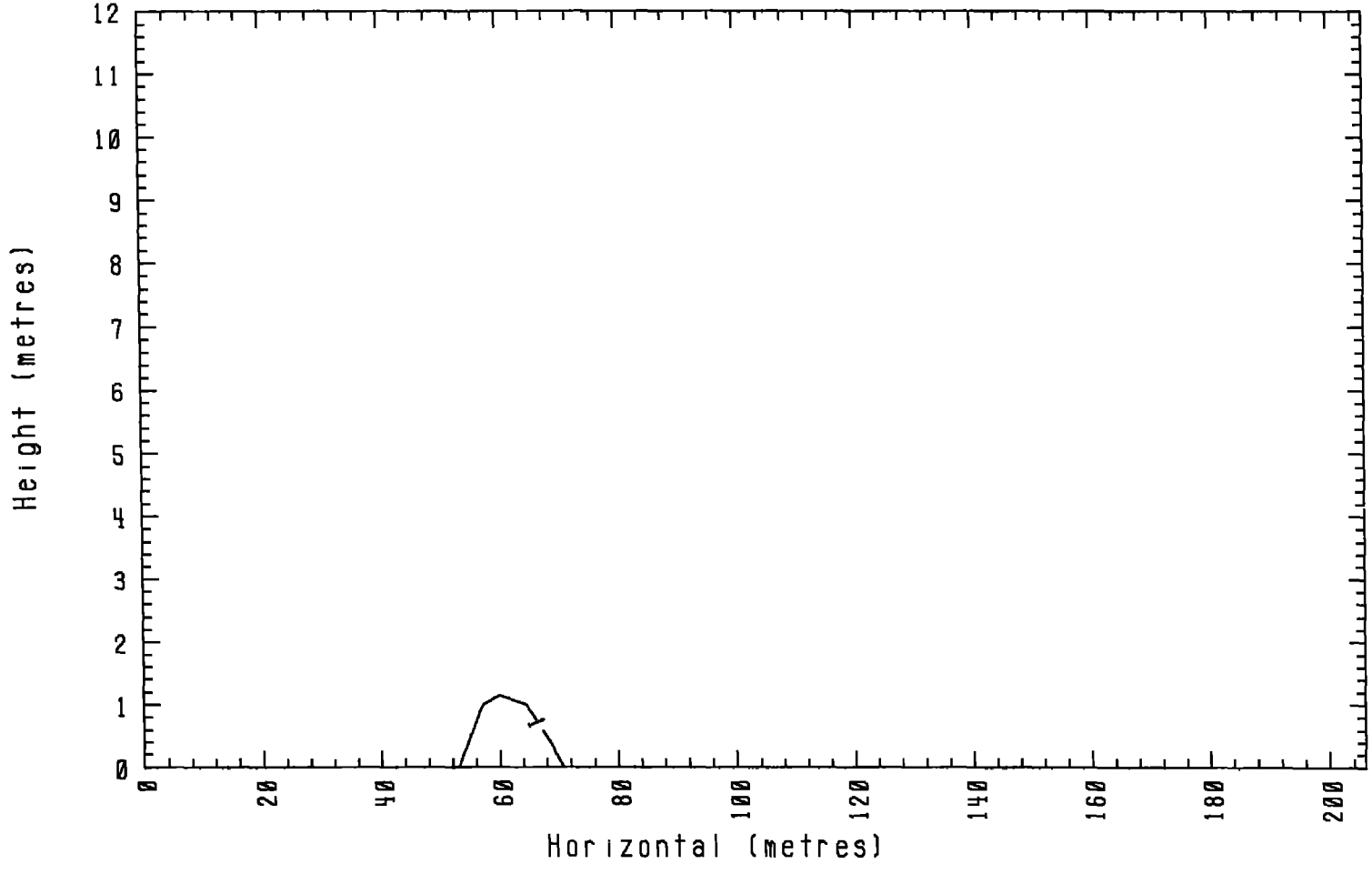
07/22/83u 10:45:45
08/04/83 15:15:23



Coyote 3 LGF 81
400m

07/22/83u 10:45:45
08/04/83 15:15:23

Vertical Concentration Contours

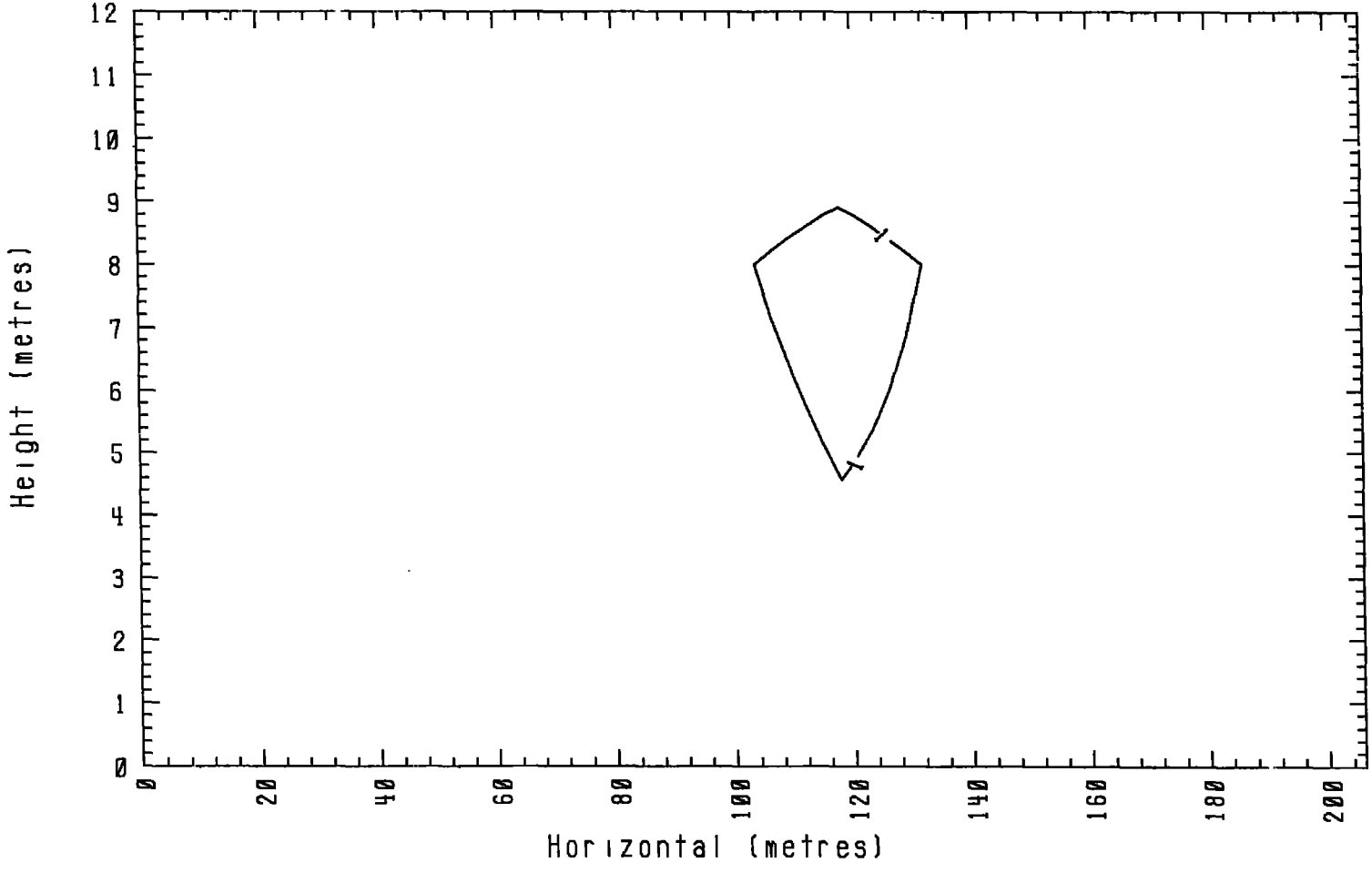


Coyote 3 LGF 81 Contours:

Time = 90 sec 400m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/04/83 15:15:23

Vertical Concentration Contours

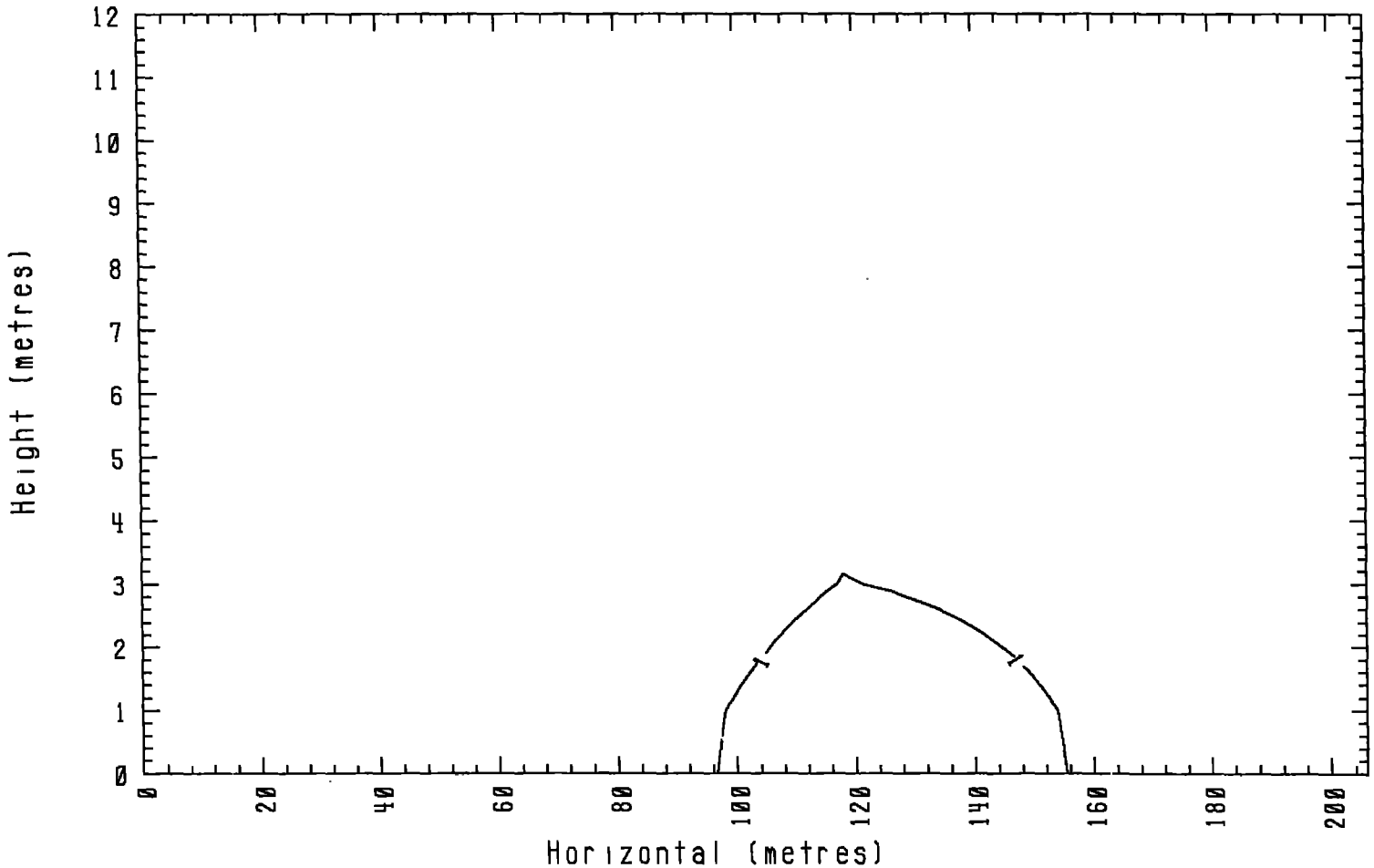


Coyote 3 LGF 81 Contours:

Time = 100 sec 400m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/04/83 15:15:23

Vertical Concentration Contours



Coyote 3 LGF 81

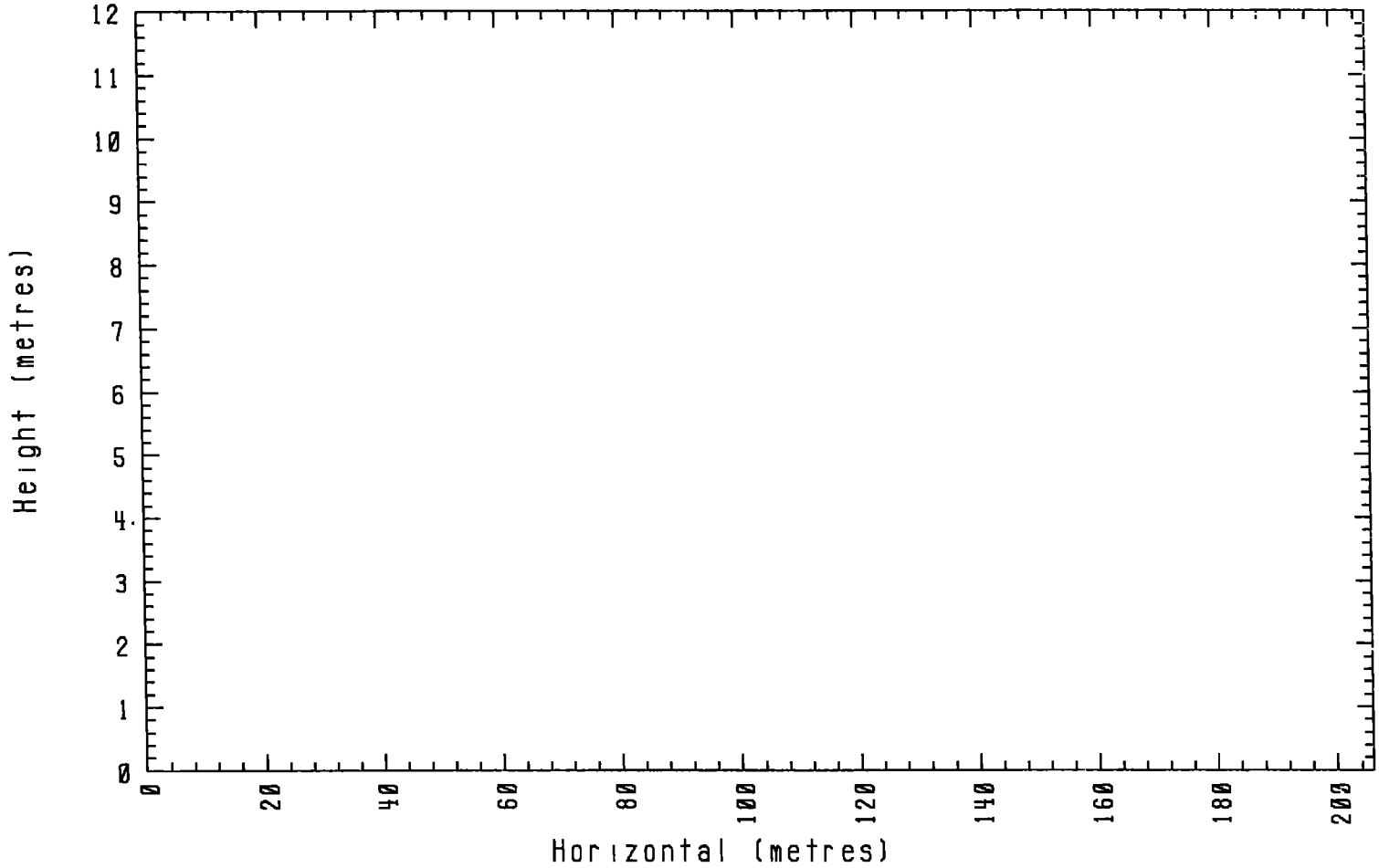
Time = 110 sec

400m row

Contours:
1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/04/83 15:15:23

Vertical Concentration Contours

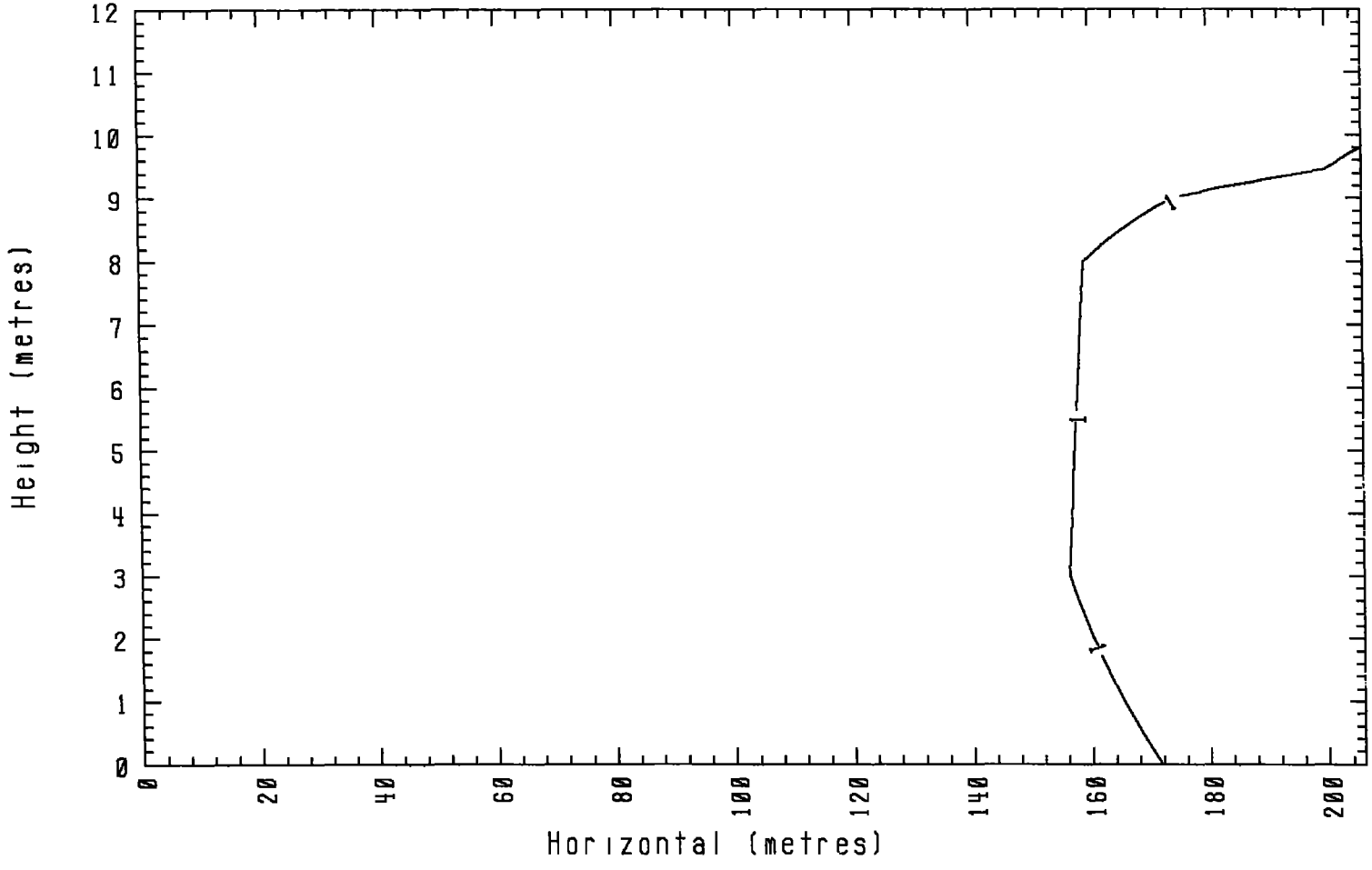


Coyote 3 LGF 81 Contours:

Time = 120 sec 400m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/04/83 15:15:23

Vertical Concentration Contours

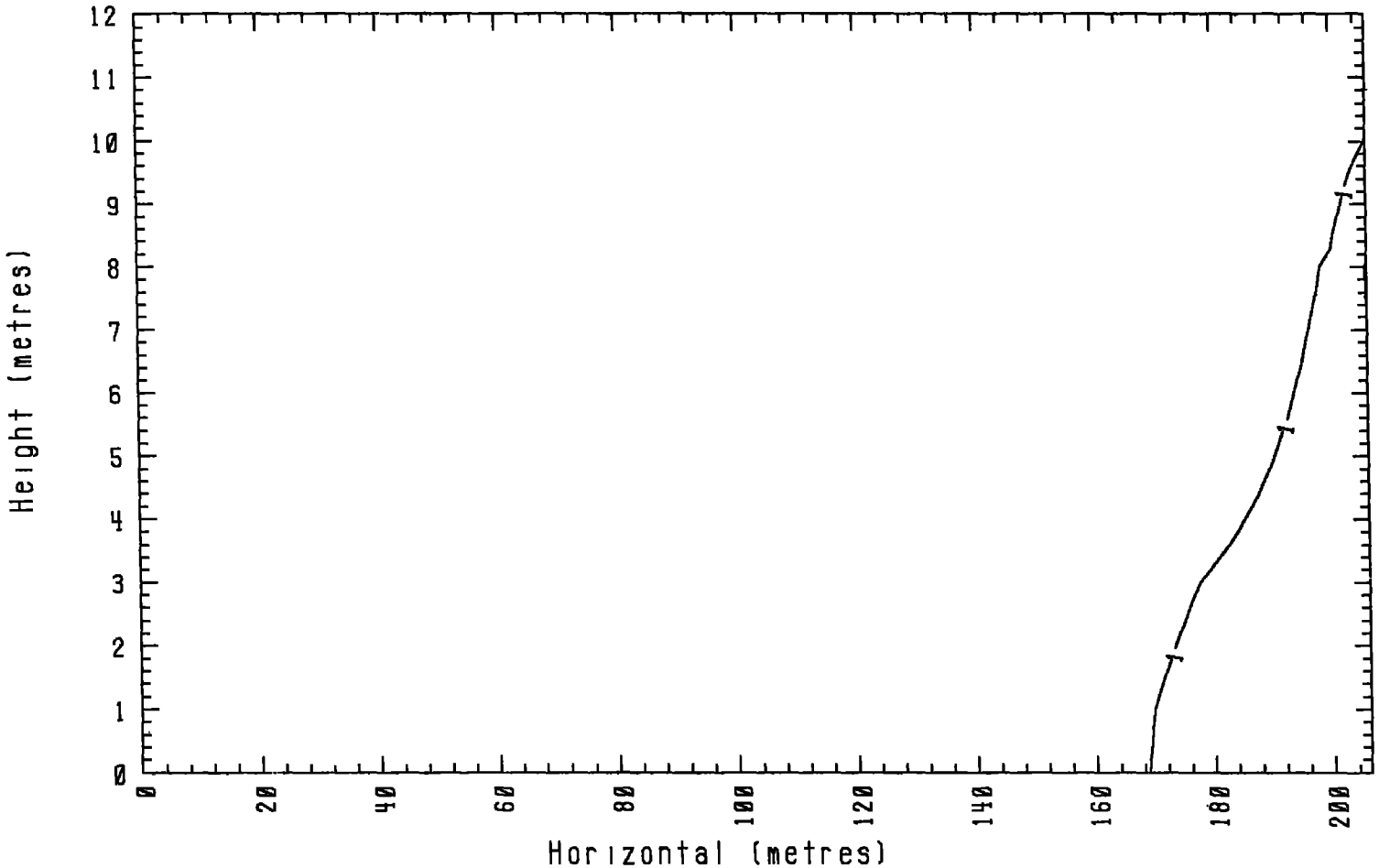


Coyote 3 LGF 81 Contours:

Time = 130 sec 400m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/04/83 15:15:23

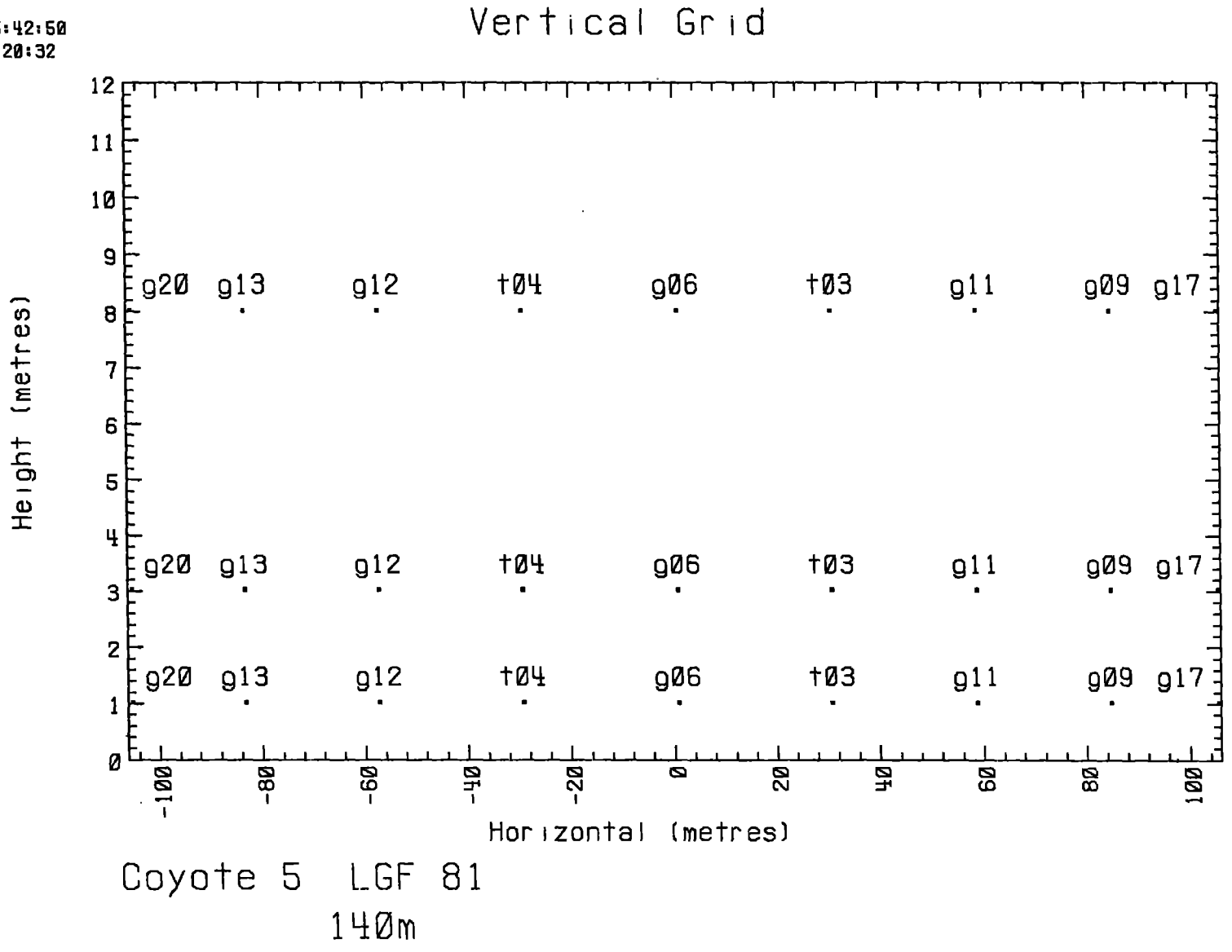
Vertical Concentration Contours



Coyote 3 LGF 81 Contours:

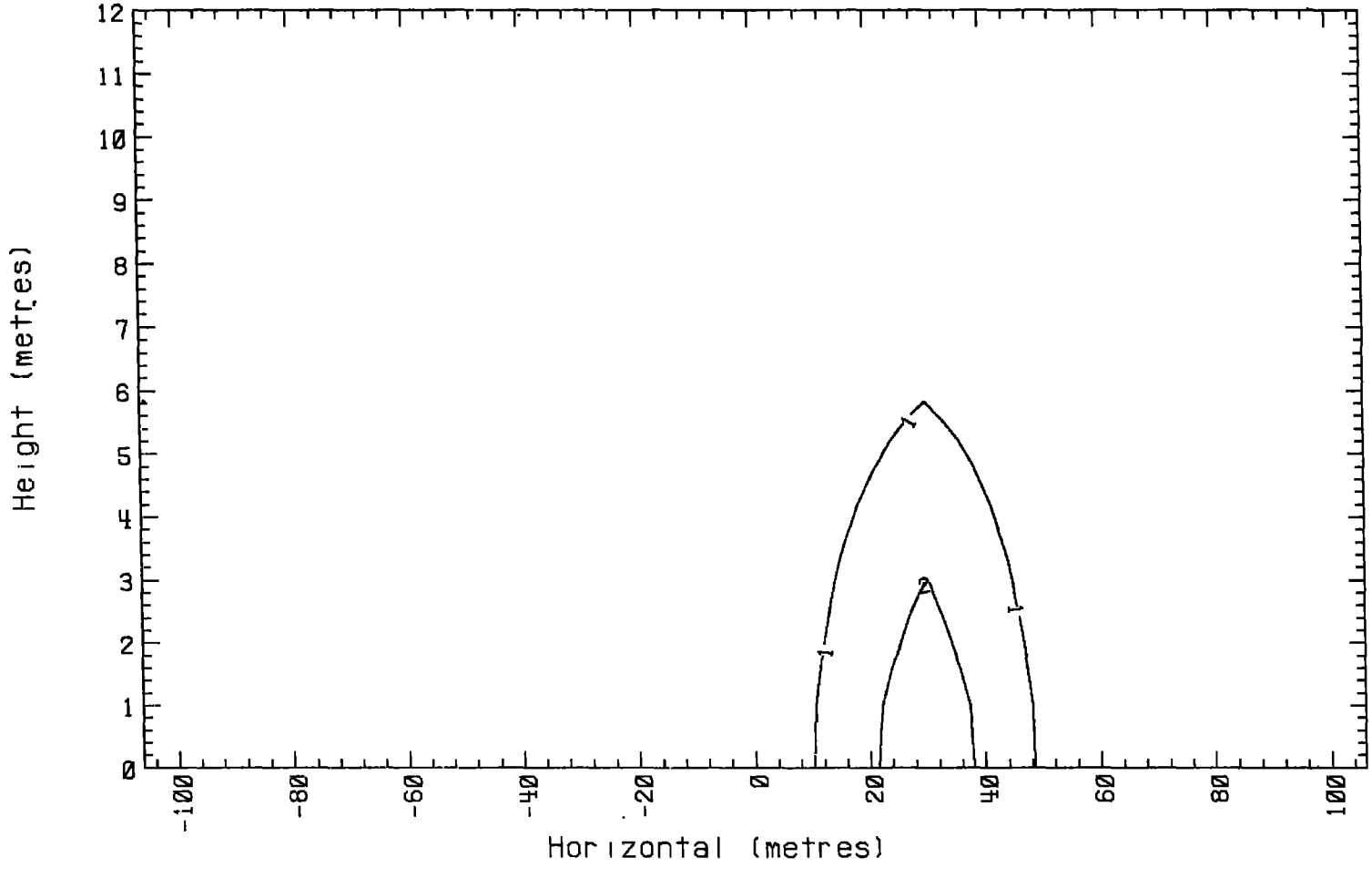
Time = 140 sec 400m row 1%,2%,5%,10%,15%,25%,35%

04/26/83u 15:42:50
04/28/83 16:20:32



04/26/83u 15:42:50
04/28/83 16:20:32

Vertical Concentration Contours

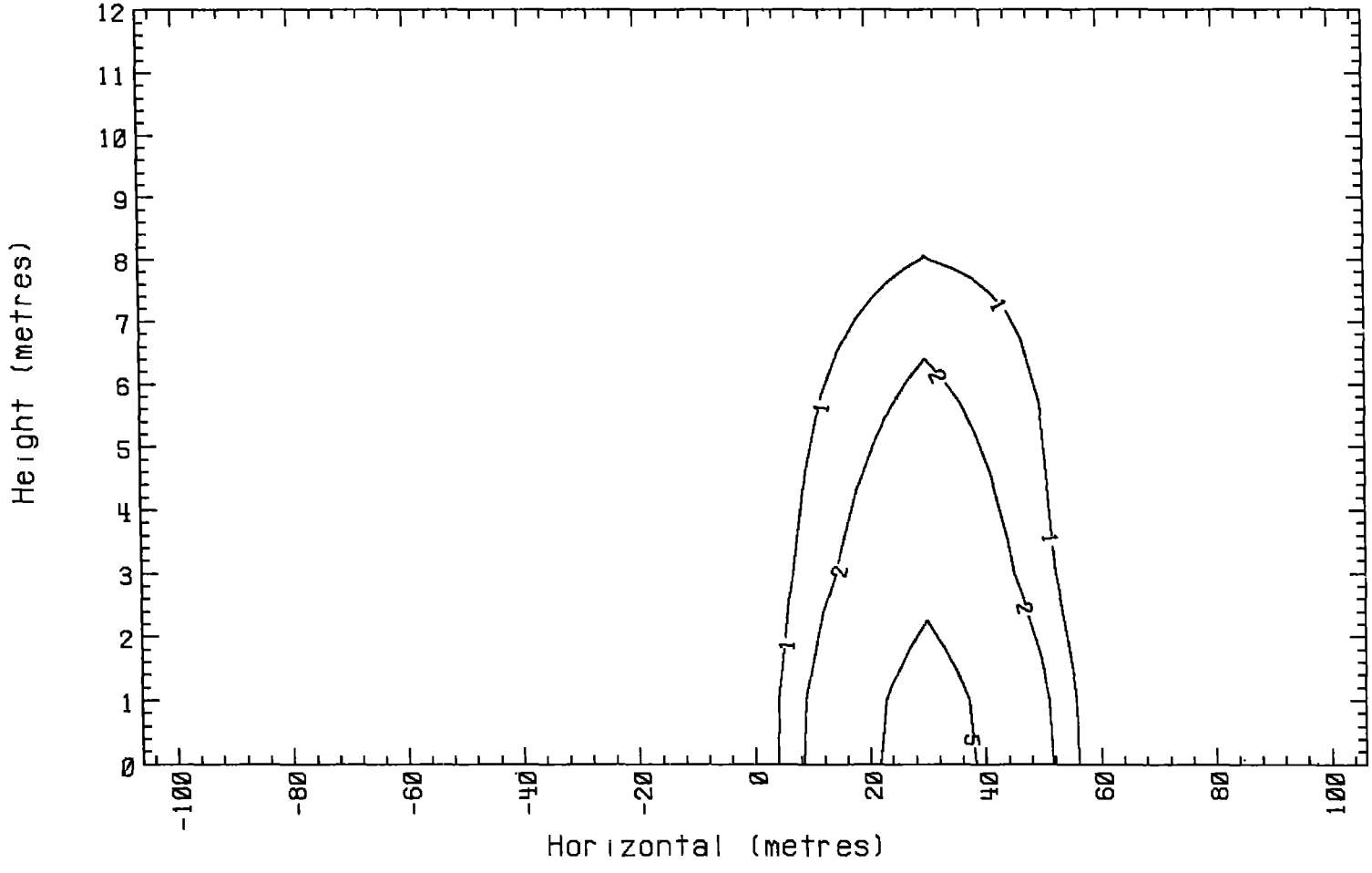


Coyote 5 LGF 81 Contours:

Time = 30 sec 140m row 1%,2%,5%,10%,15%,25%,35%

04/26/83u 15:42:50
04/28/83 16:20:32

Vertical Concentration Contours

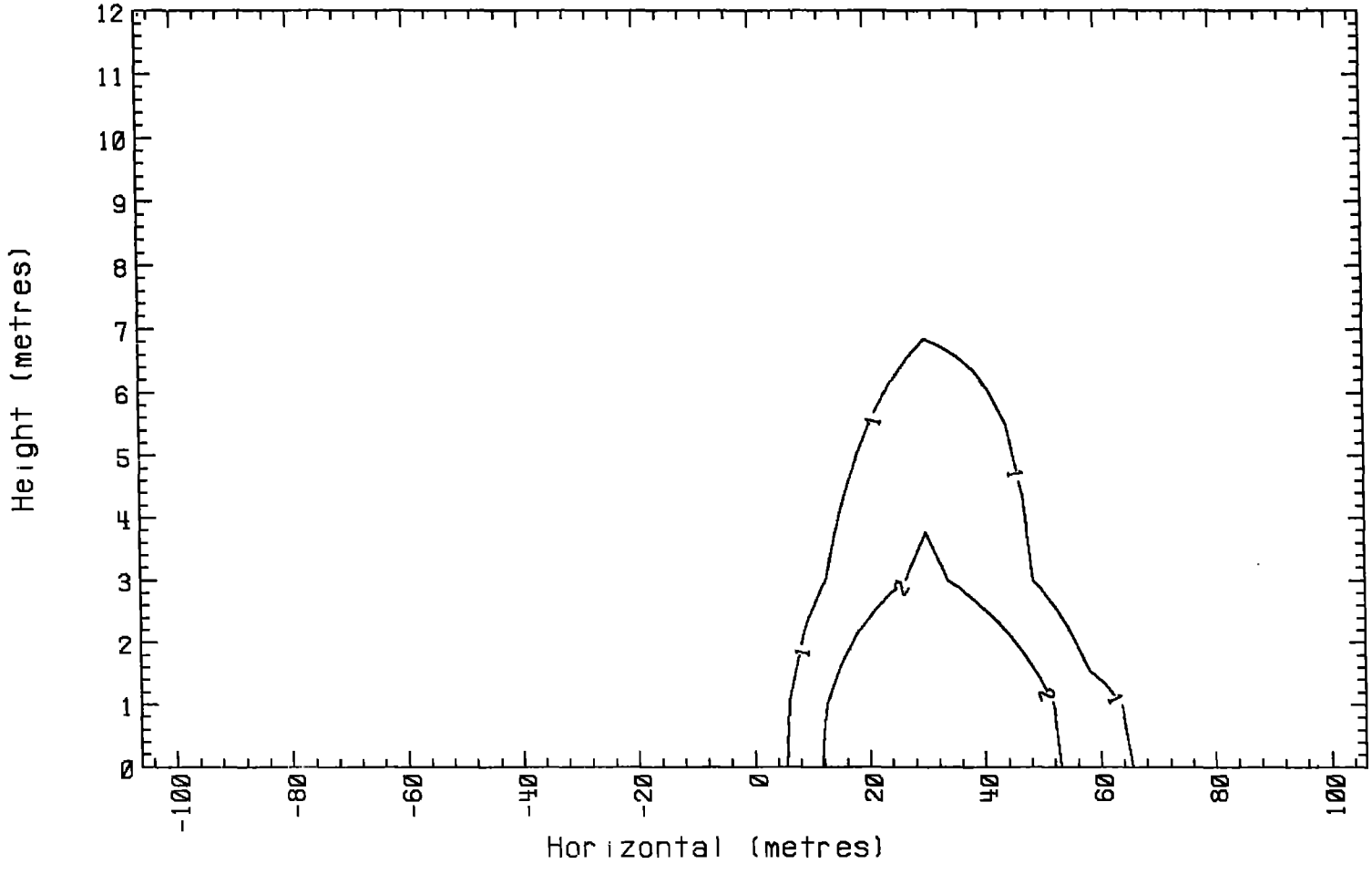


Coyote 5 LGF 81 Contours:

Time - 40 sec 140m row 1%,2%,5%,10%,15%,25%,35%

04/26/83u 15:42:50
04/28/83 16:20:32

Vertical Concentration Contours

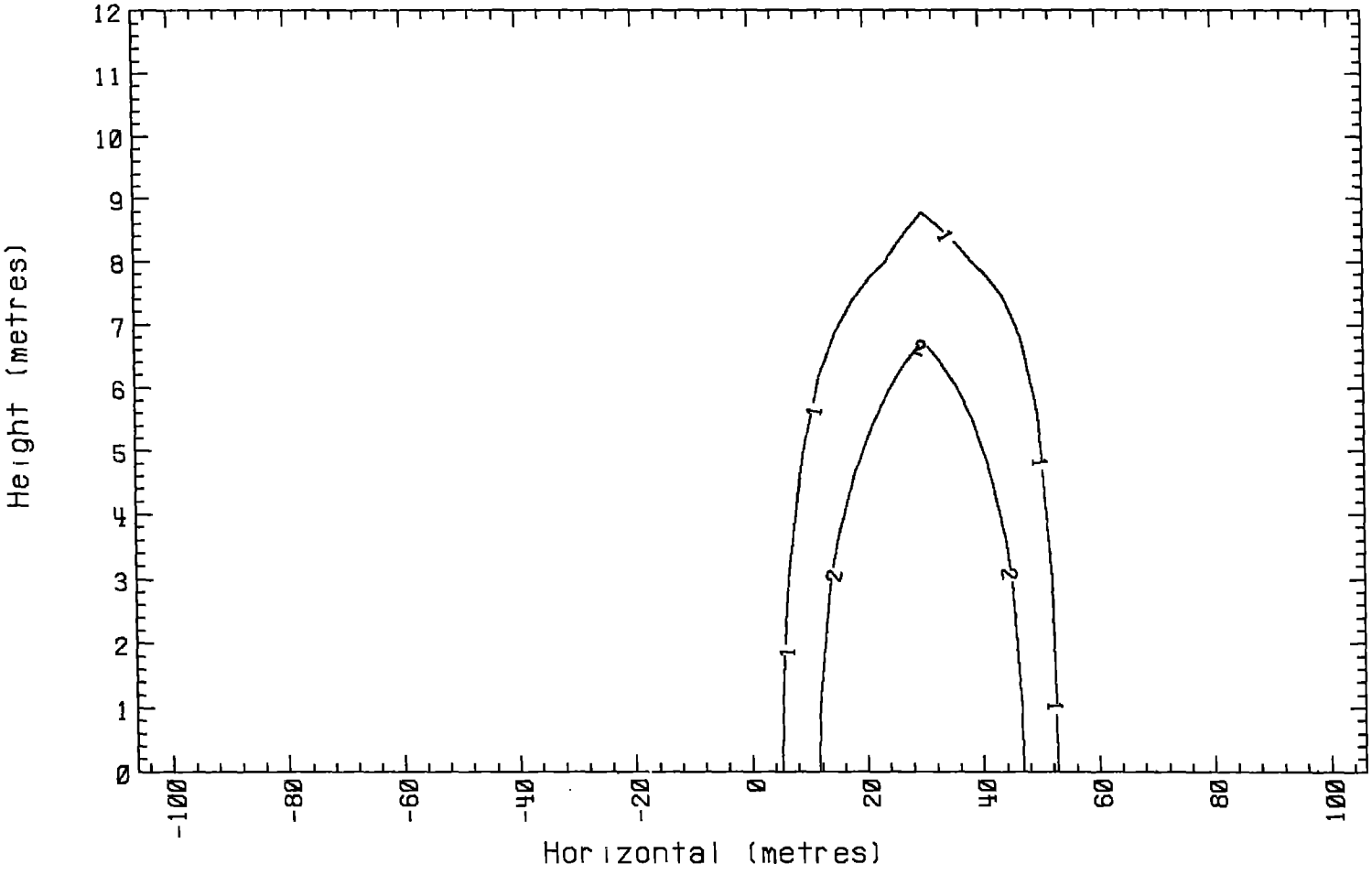


Coyote 5 LGF 81 Contours:

Time = 50 sec 140m row 1%,2%,5%,10%,15%,25%,35%

04/26/83u 15:42:50
04/28/83 16:20:32

Vertical Concentration Contours

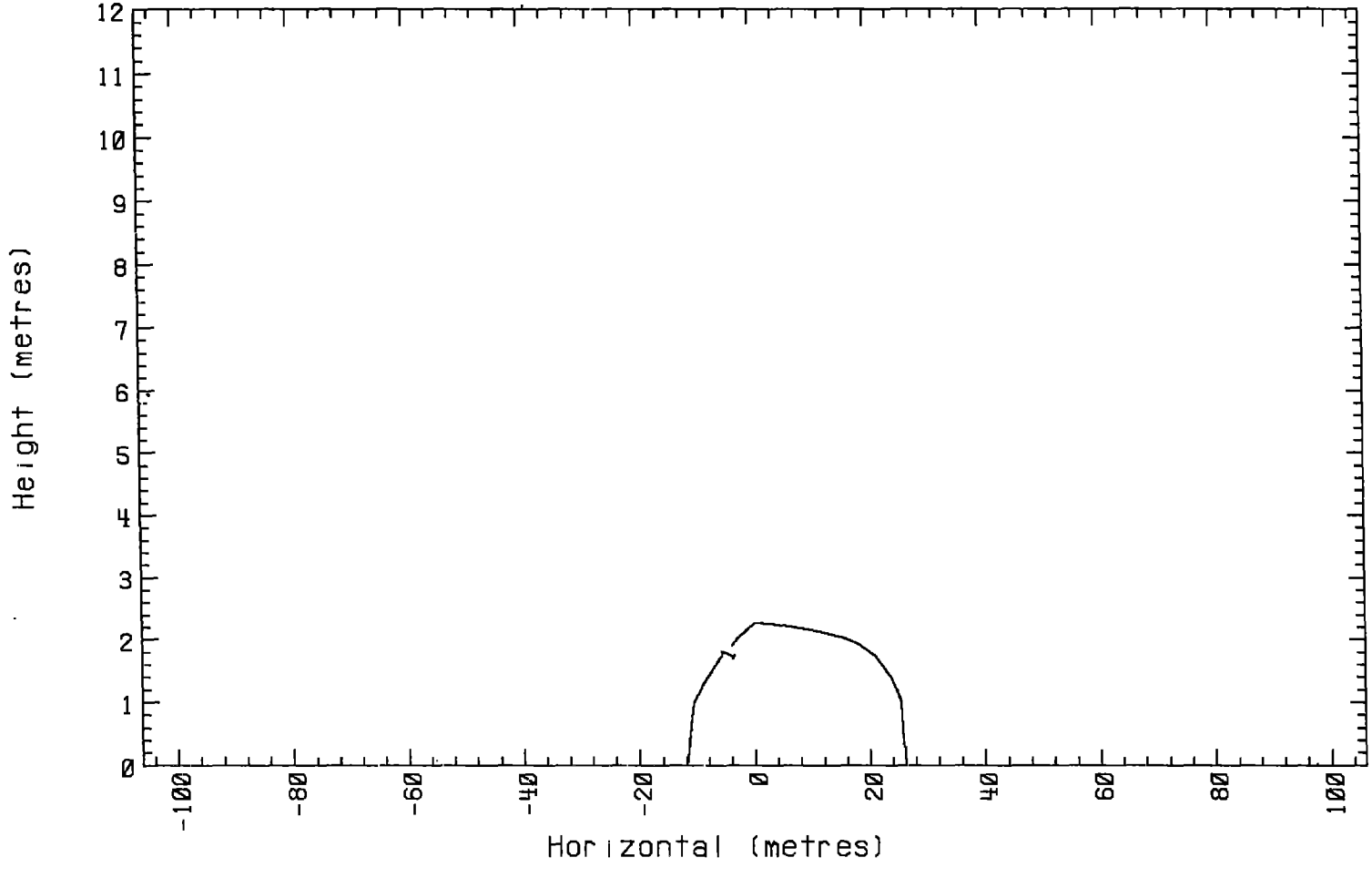


Coyote 5 LGF 81 Contours:

Time = 60 sec 140m row 1%,2%,5%,10%,15%,25%,35%

04/26/83u 15:42:50
04/28/83 16:20:32

Vertical Concentration Contours

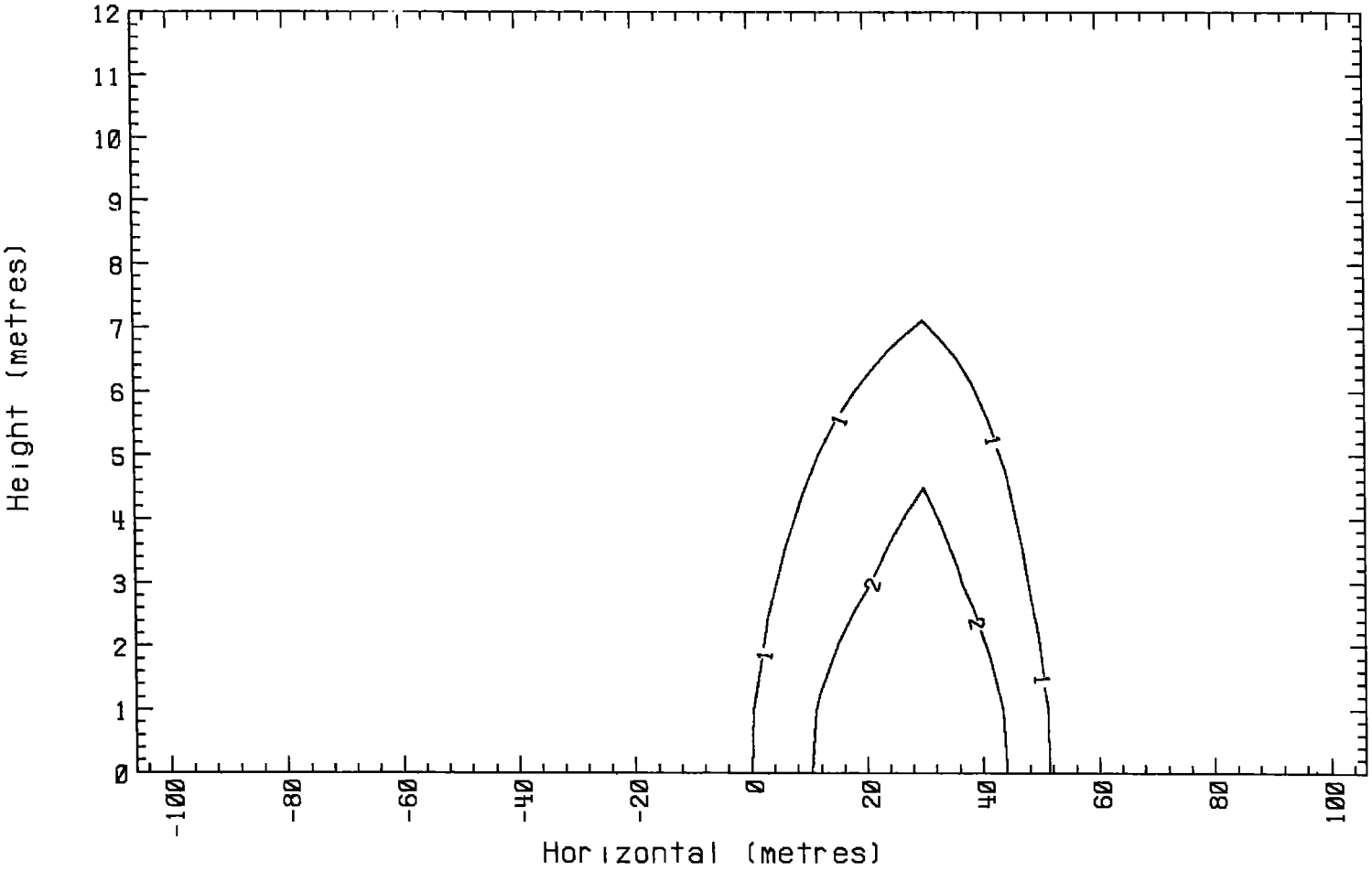


Coyote 5 LGF 81 Contours:

Time = 70 sec 140m row 1%,2%,5%,10%,15%,25%,35%

04/26/83u 15:42:50
04/28/83 16:20:32

Vertical Concentration Contours

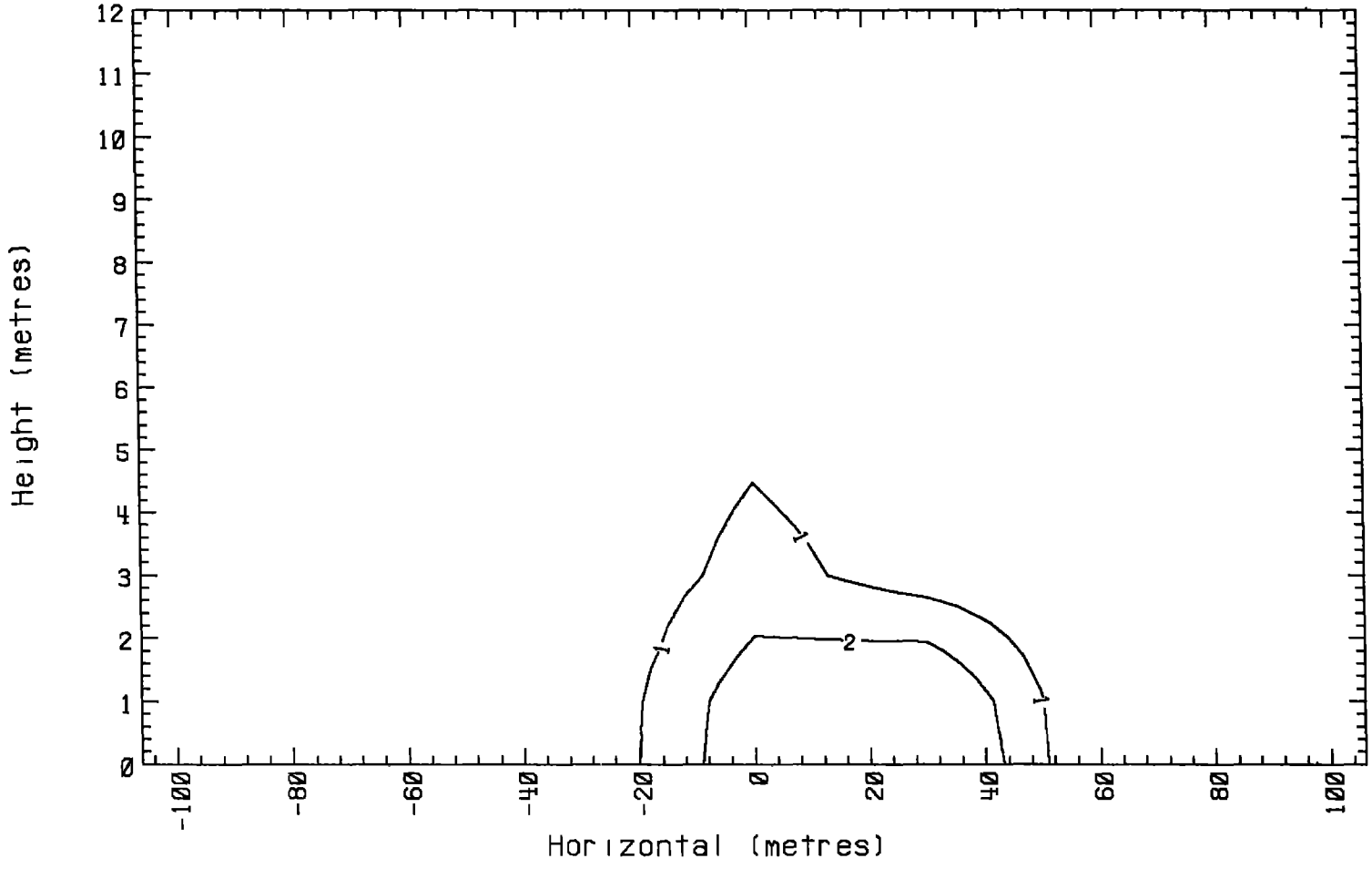


Coyote 5 LGF 81 Contours:

Time = 80 sec 140m row 1%,2%,5%,10%,15%,25%,35%

04/26/83u 15:42:50
04/28/83 16:20:32

Vertical Concentration Contours

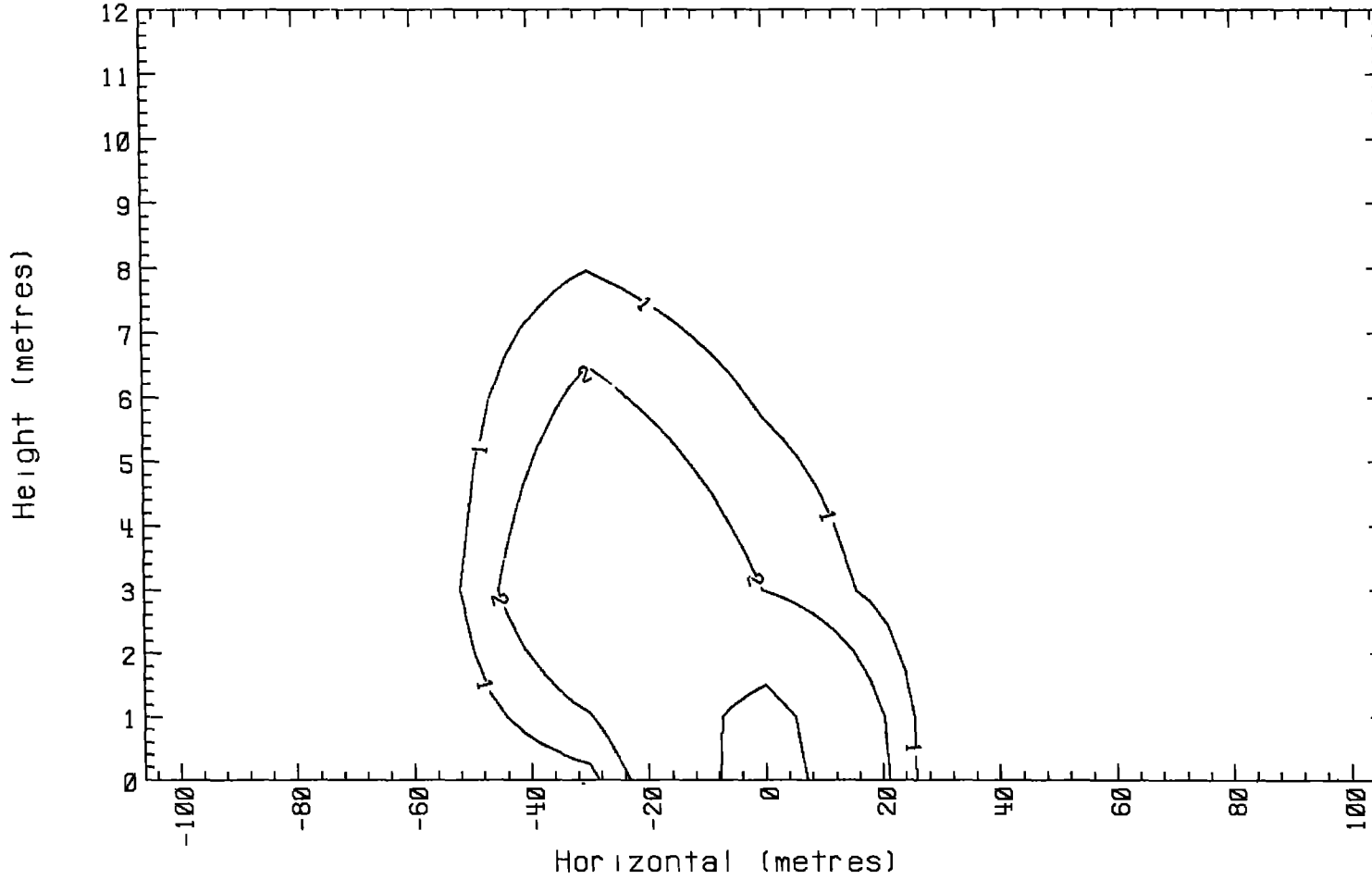


Coyote 5 LGF 81 Contours:

Time = 90 sec 140m row 1%,2%,5%,10%,15%,25%,35%

04/26/83u 15:42:50
04/28/83 16:20:32

Vertical Concentration Contours



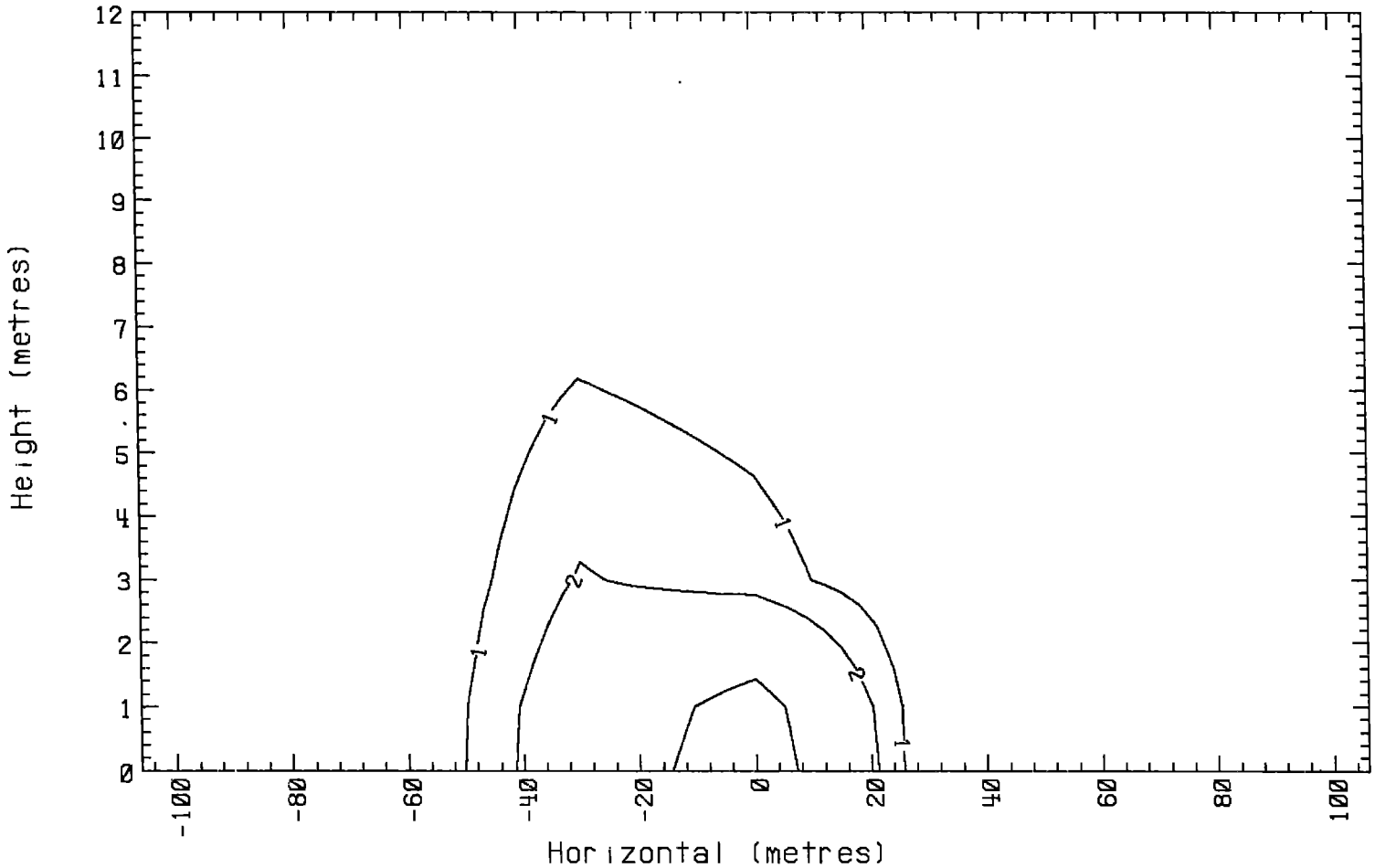
Coyote 5 LGF 81

Time = 100 sec 140m row

Contours:
1%,2%,5%,10%,15%,25%,35%

04/26/83u 15:42:50
04/28/83 16:20:32

Vertical Concentration Contours

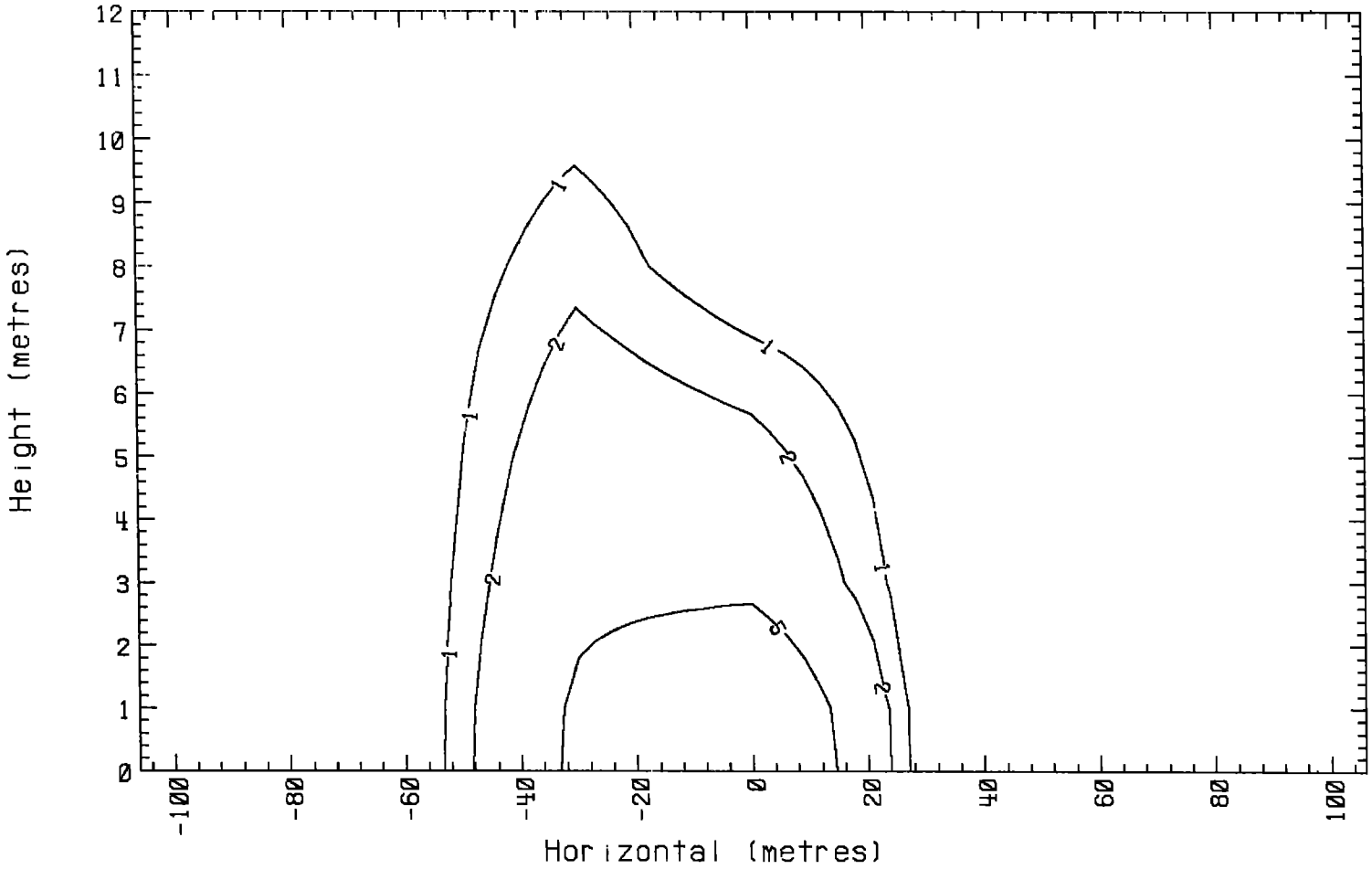


Coyote 5 LGF 81 Contours:

Time = 110 sec 140m row 1%,2%,5%,10%,15%,25%,35%

04/26/83u 15:42:50
04/28/83 16:20:32

Vertical Concentration Contours



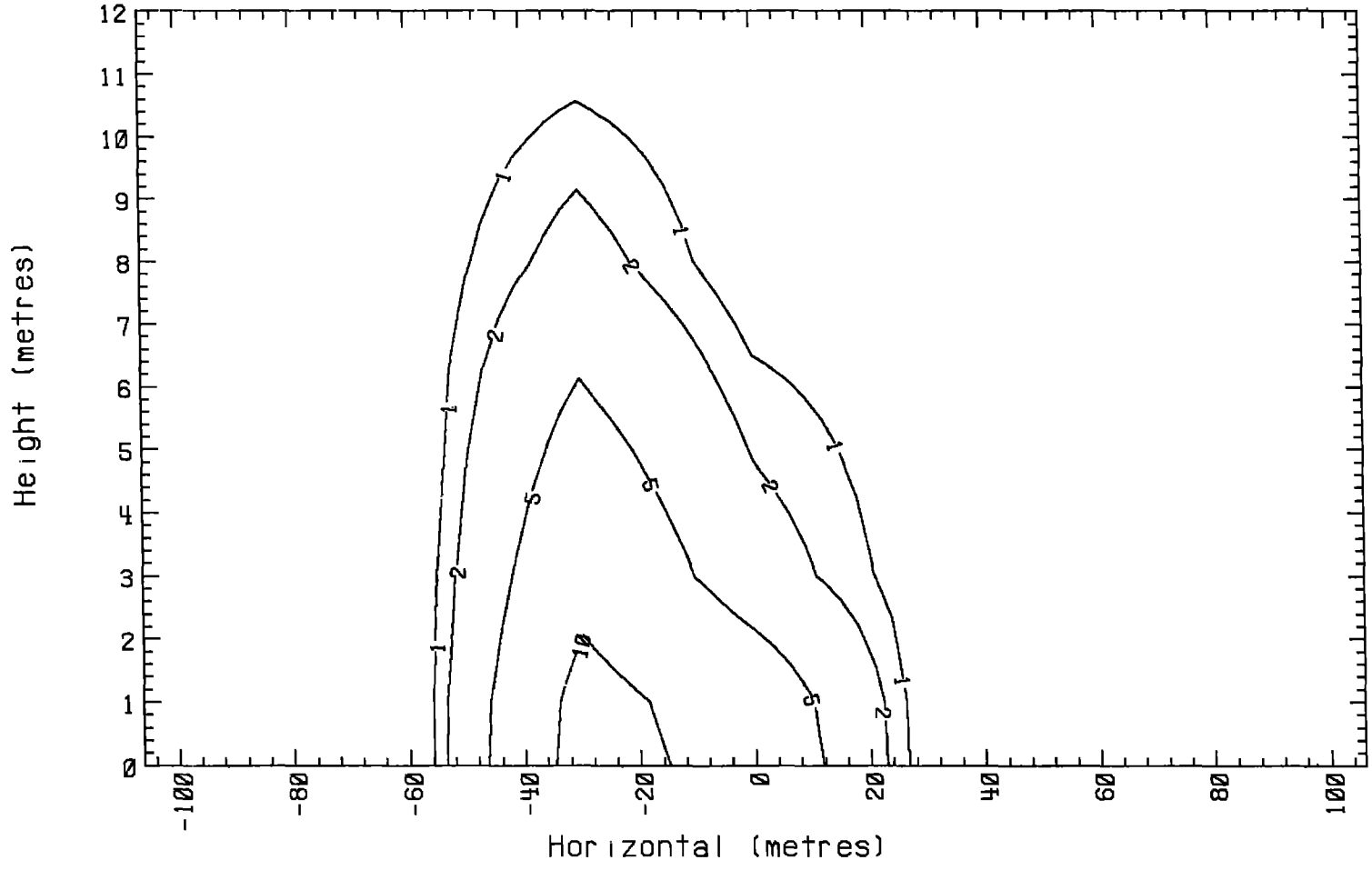
Coyote 5 LGF 81

Contours:

Time = 120 sec 140m row 1%,2%,5%,10%,15%,25%,35%

04/26/83u 15:42:50
04/28/83 16:20:32

Vertical Concentration Contours

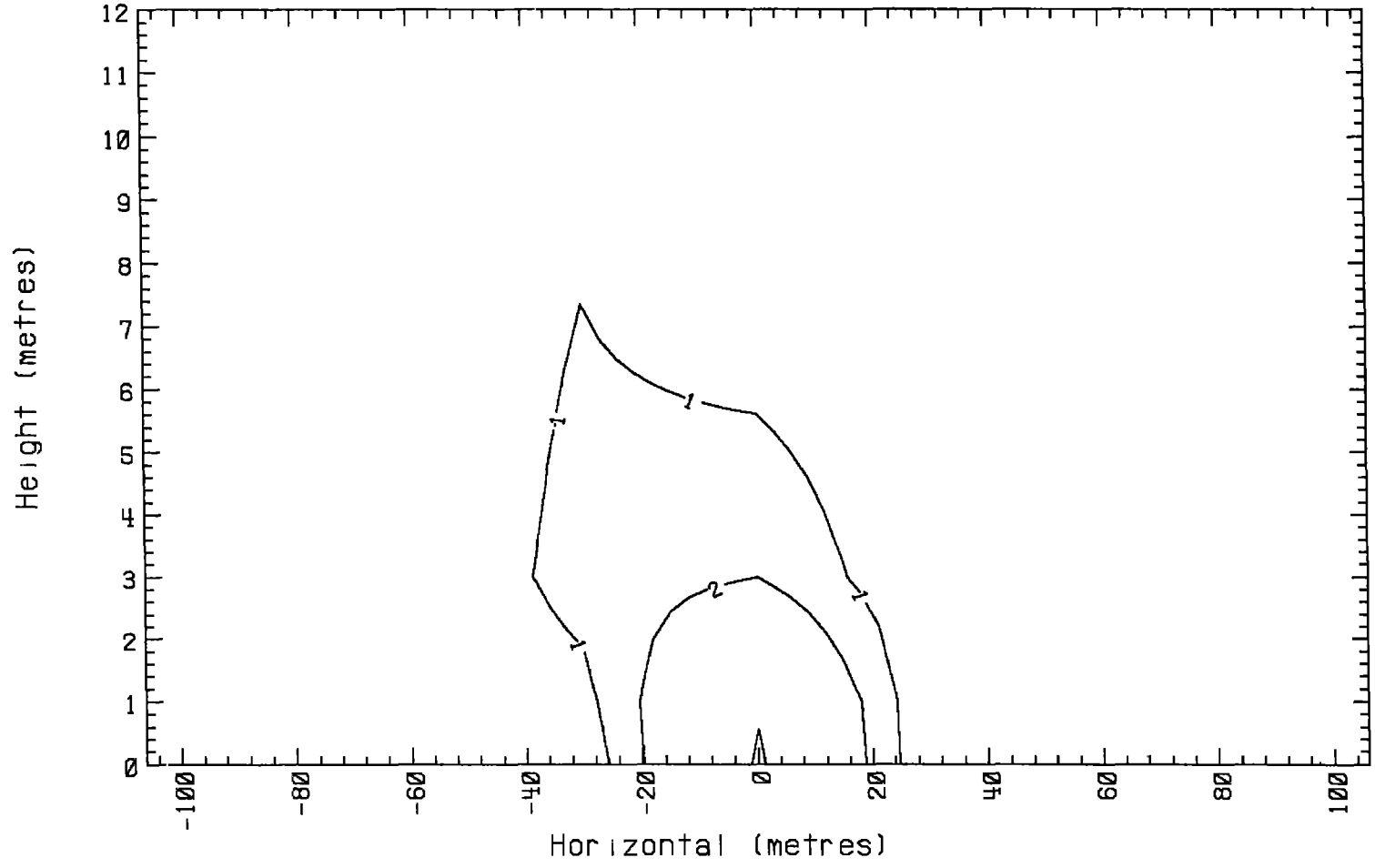


Coyote 5 LGF 81 Contours:

Time = 130 sec 140m row 1%,2%,5%,10%,15%,25%,35%

04/26/83u 15:42:50
04/28/83 16:20:32

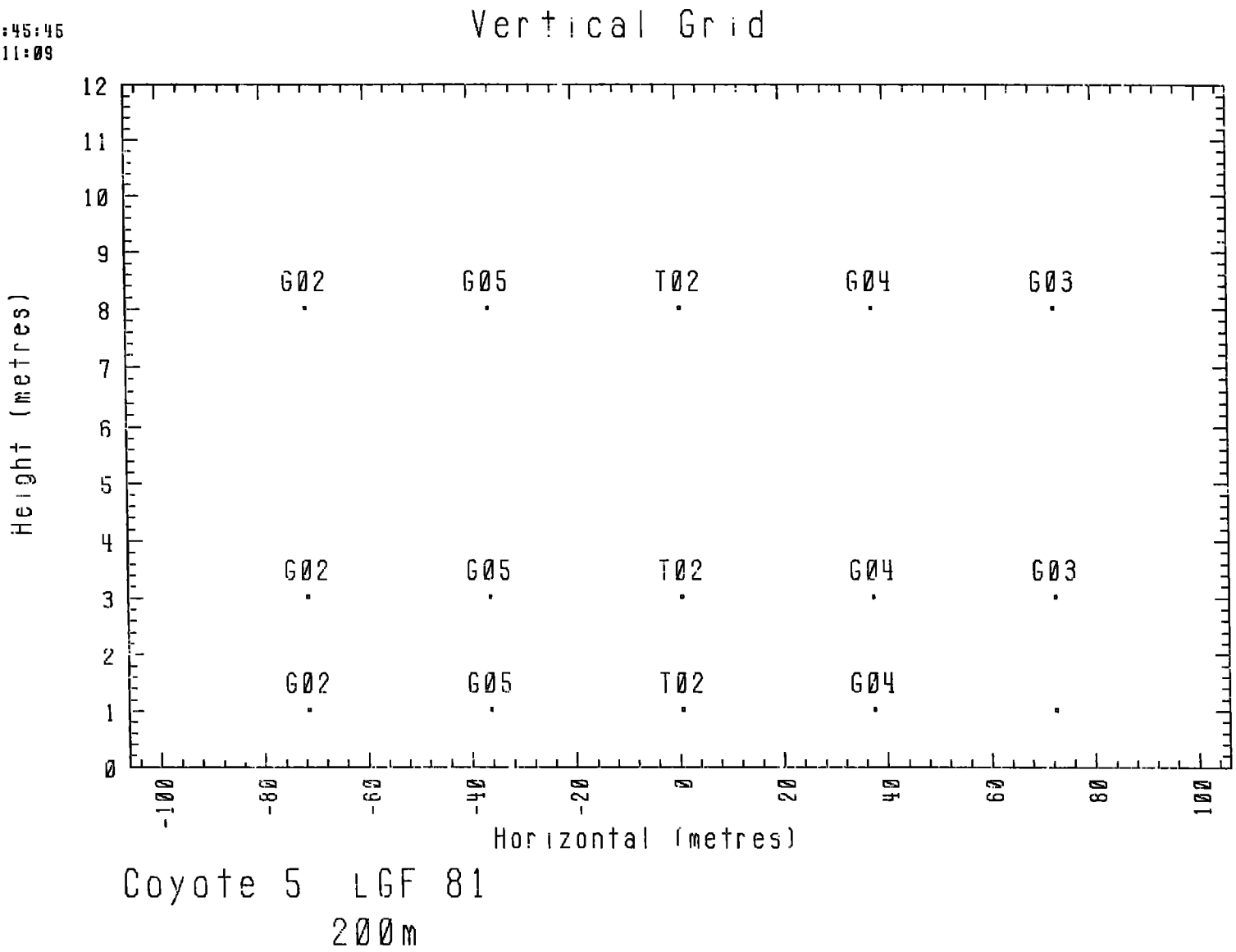
Vertical Concentration Contours



Coyote 5 LGF 81 Contours:

Time = 140 sec 140m row 1%,2%,5%,10%,15%,25%,35%

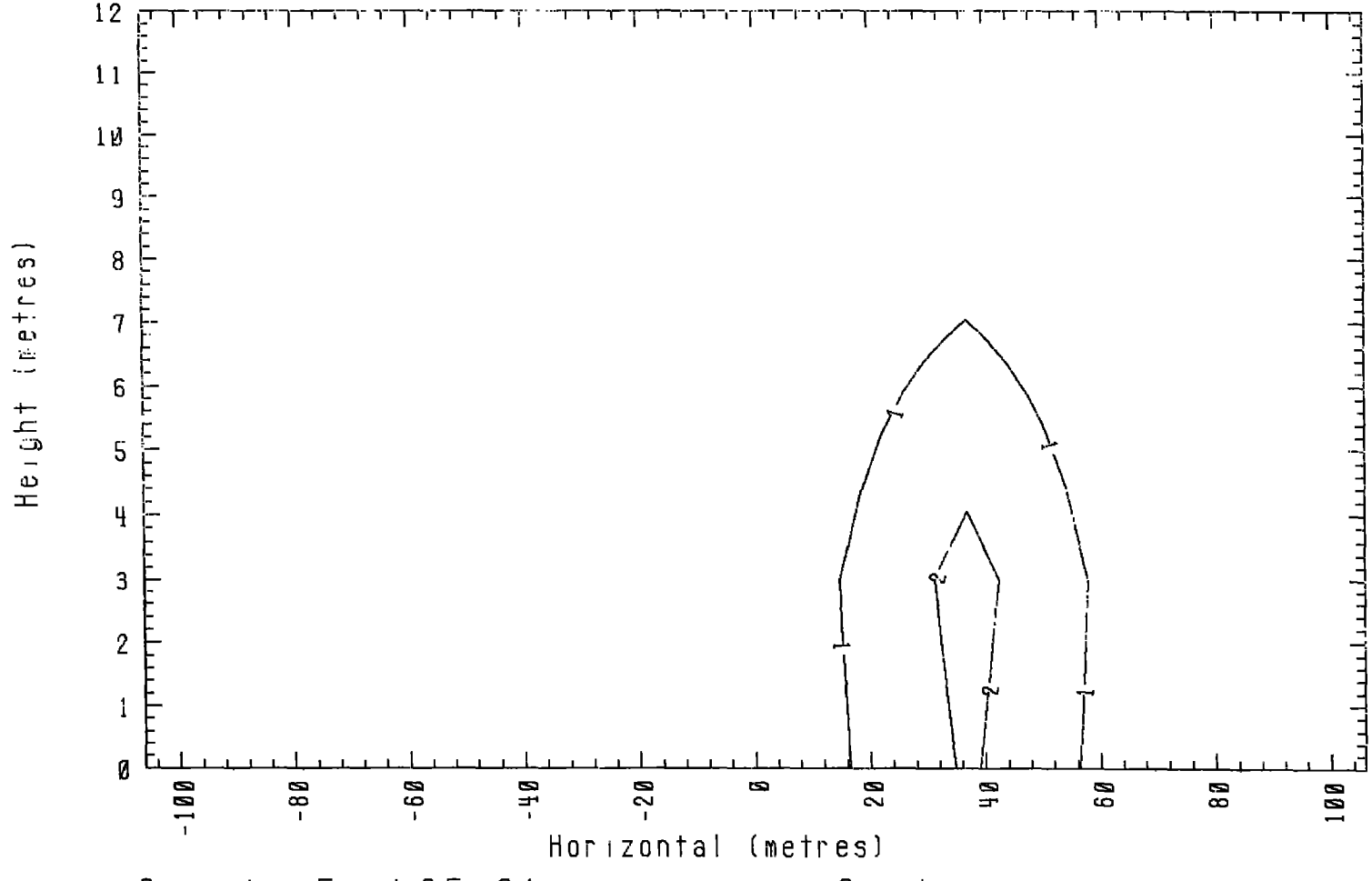
07/22/83u 10:45:45
11/15/83 12:11:09



Coyote 5 LGF 81
200m

07/22/83u 10:45:45
11/15/83 12:11:09

Vertical Concentration Contours

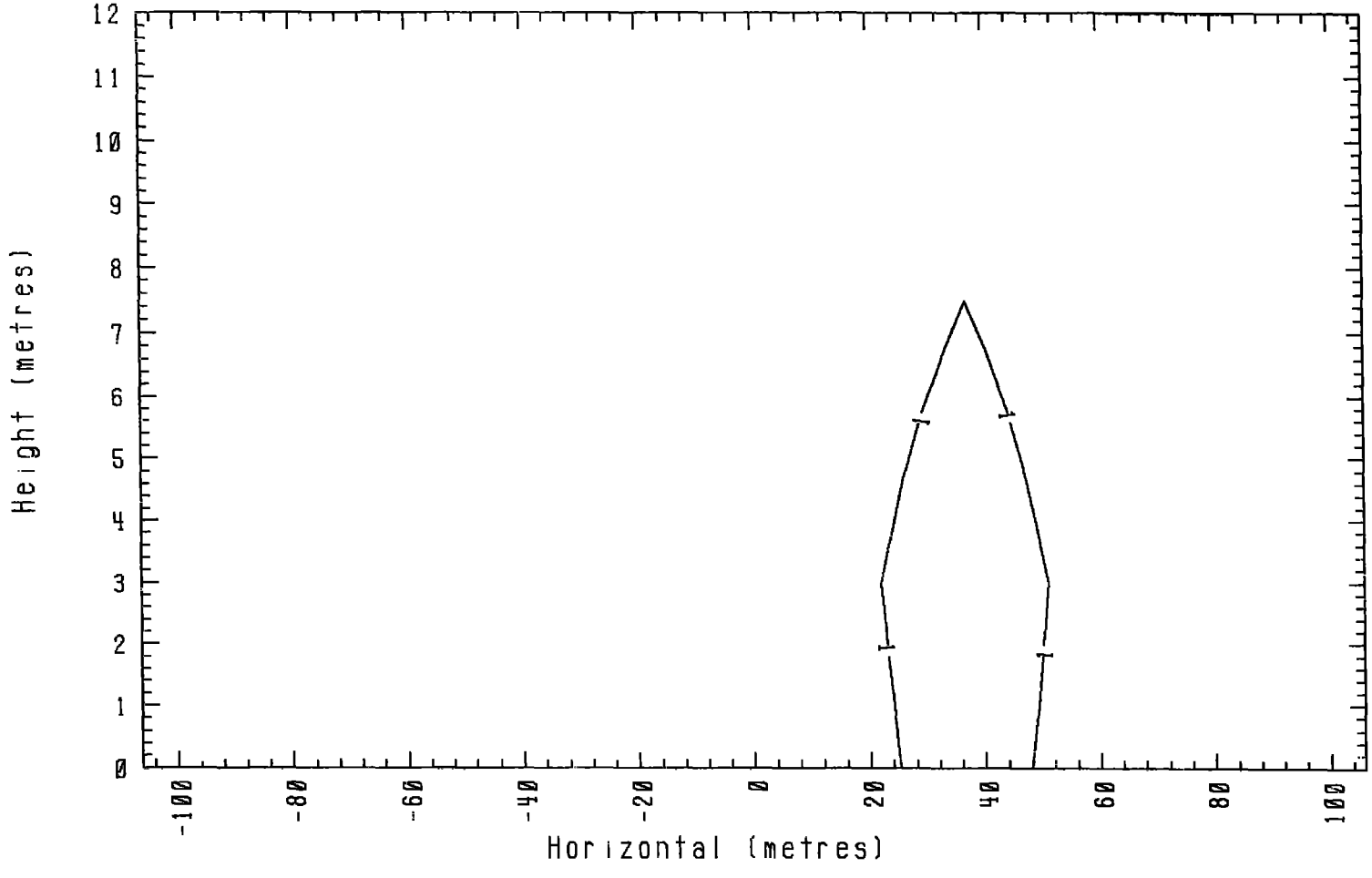


Coyote 5 LGF 81 Contours:

Time = 40 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
11/15/83 12:11:09

Vertical Concentration Contours

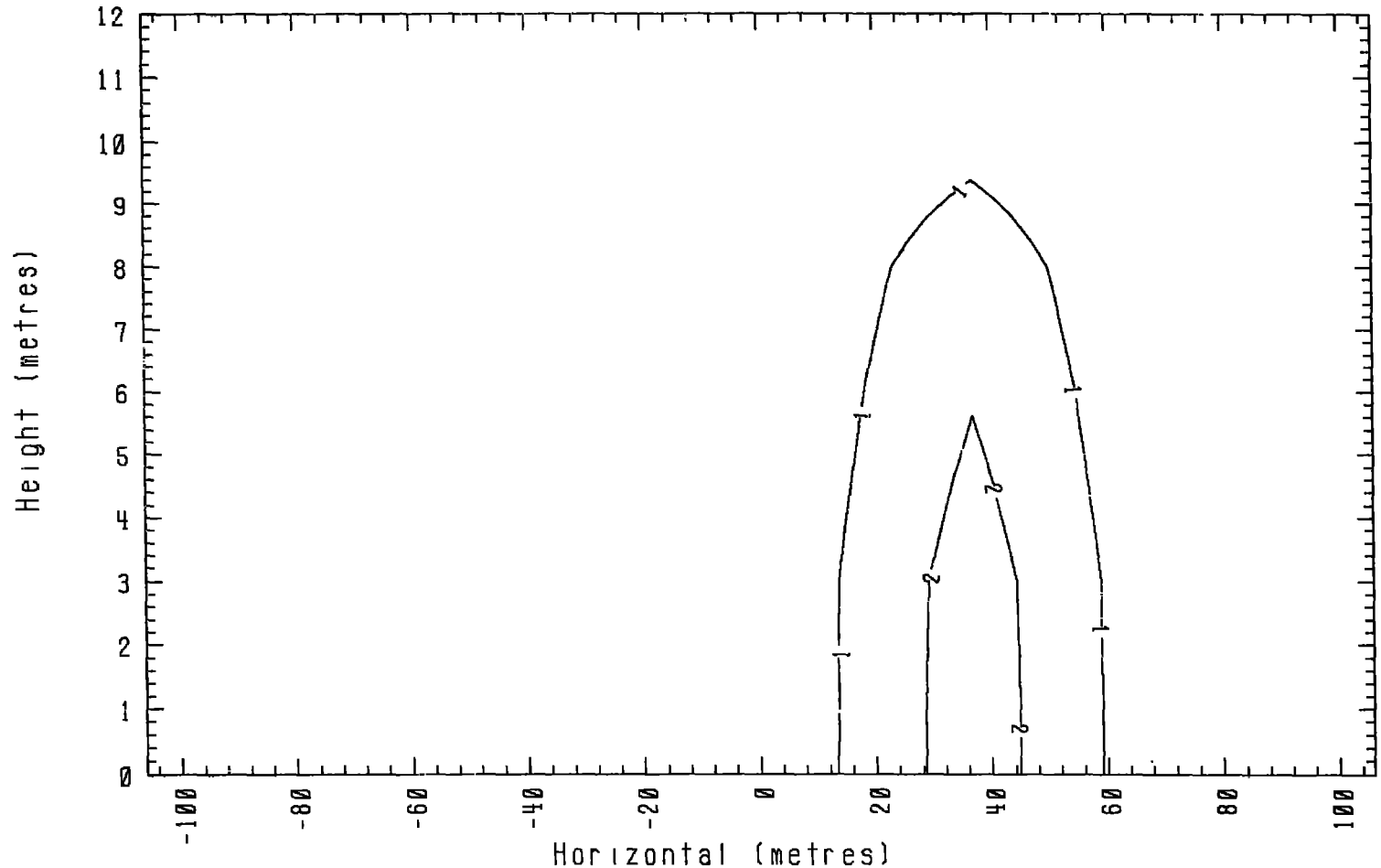


Coyote 5 LGF 81 Contours:

Time = 50 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
11/15/83 12:11:09

Vertical Concentration Contours

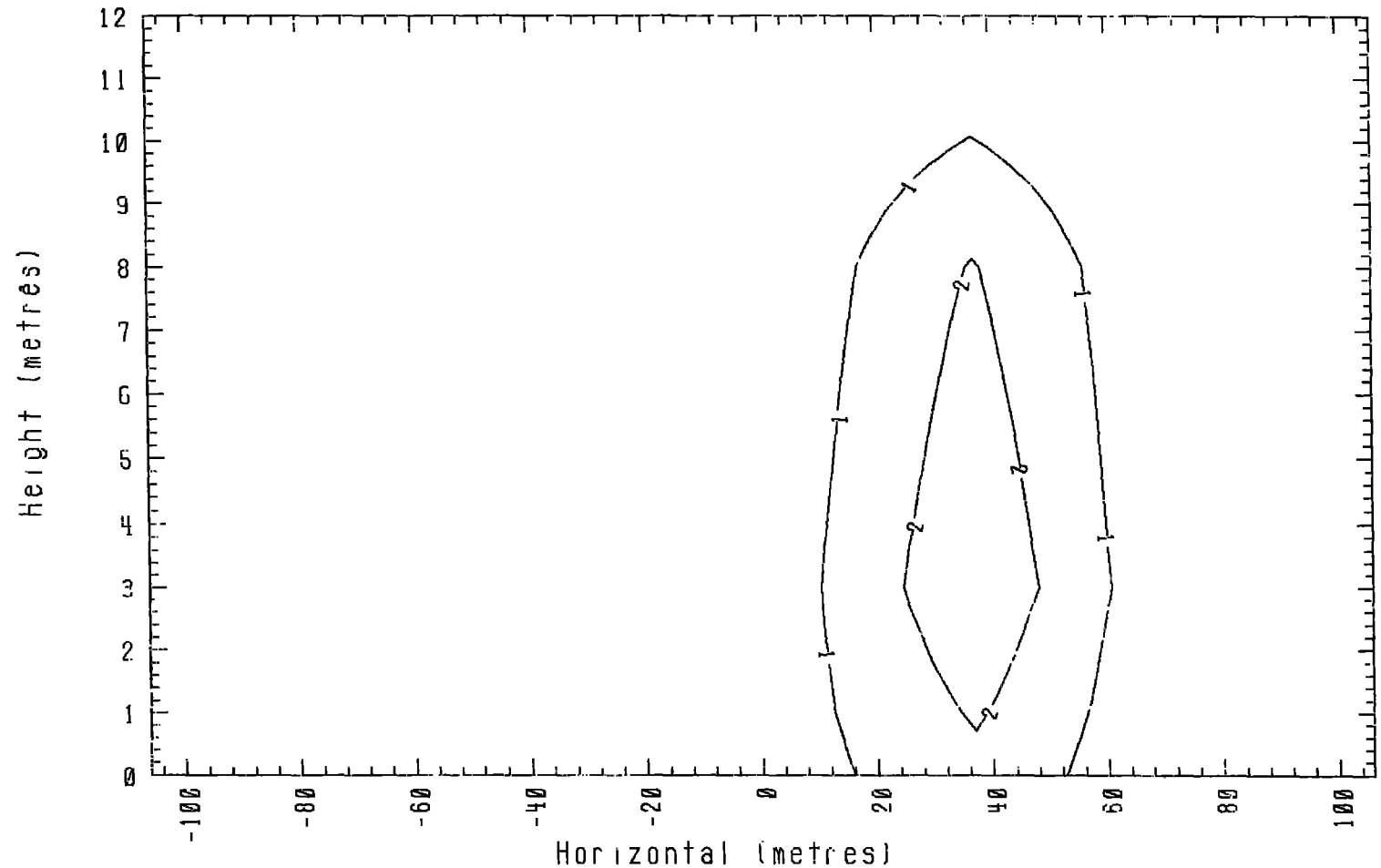


Coyote 5 LGF 81 Contours:

Time = 60 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
11/15/83 12:11:09

Vertical Concentration Contours

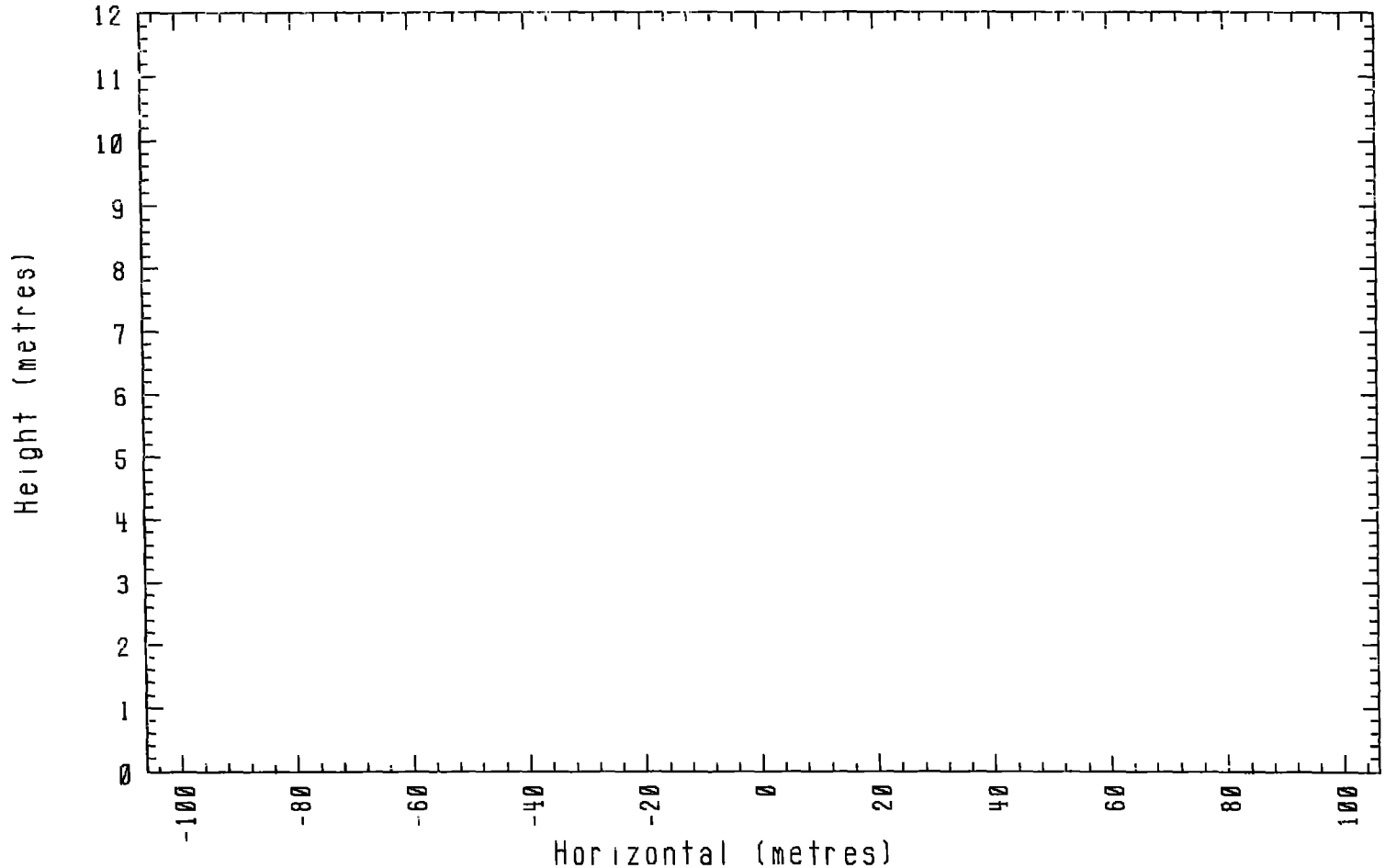


Coyote 5 LGF 81 Contours:

Time = 70 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83@ 10:45:45
11/15/83 12:11:09

Vertical Concentration Contours

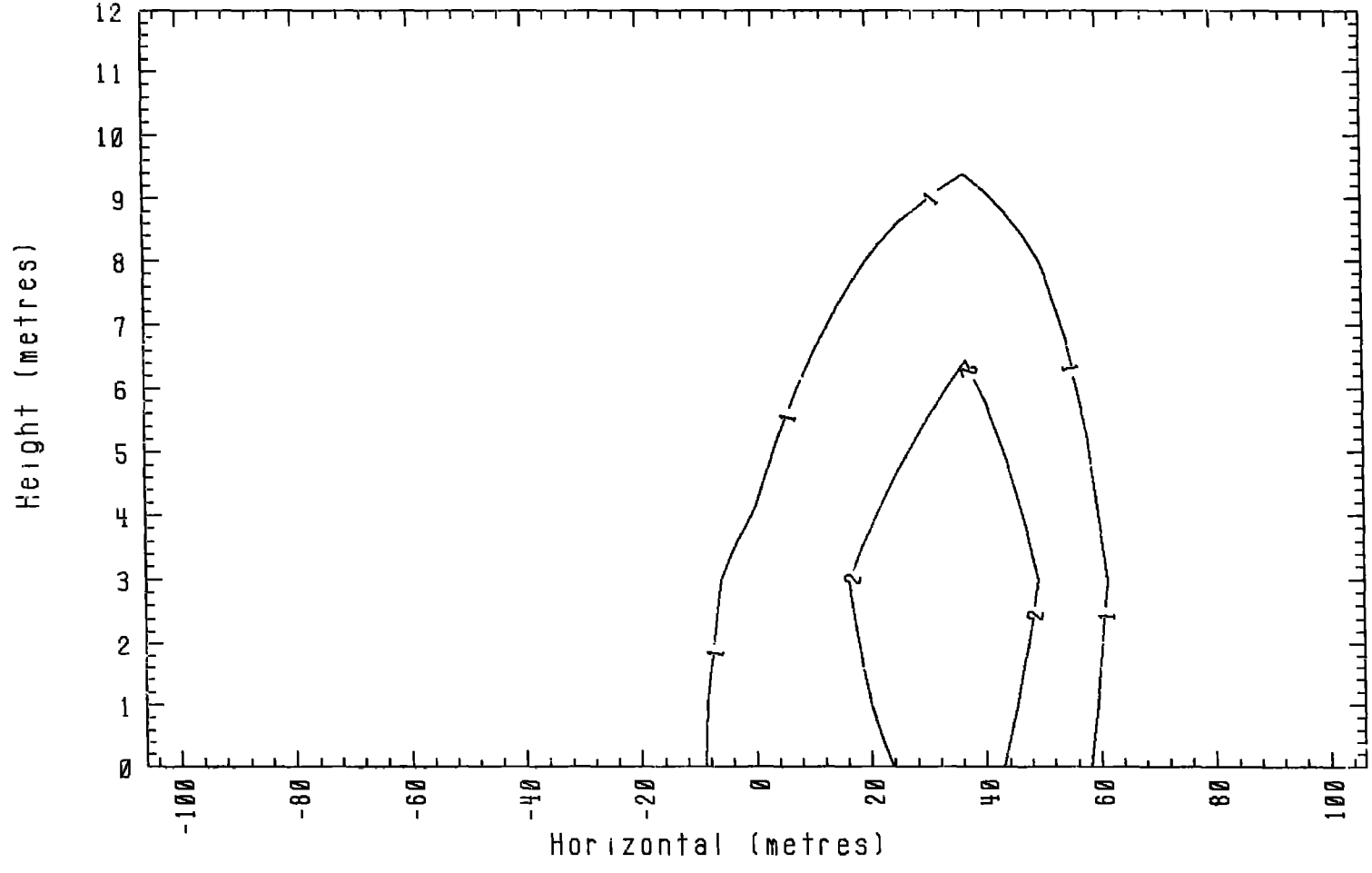


Coyote 5 LGF 81 Contours:

Time = 80 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 16:45:45
11/15/83 12:11:09

Vertical Concentration Contours

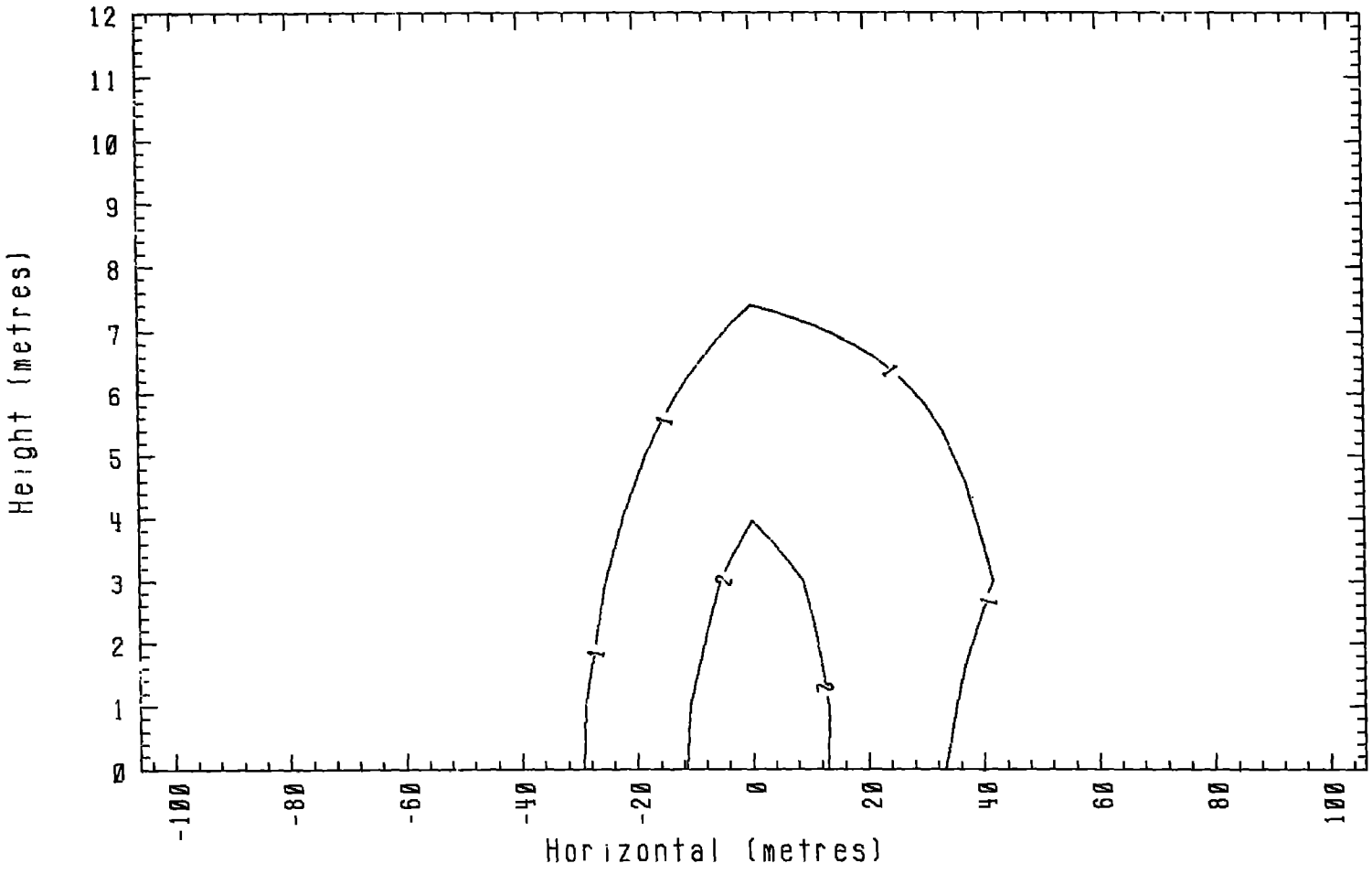


Coyote 5 LGF 81 Contours:

Time = 90 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
11/15/83 12:11:09

Vertical Concentration Contours

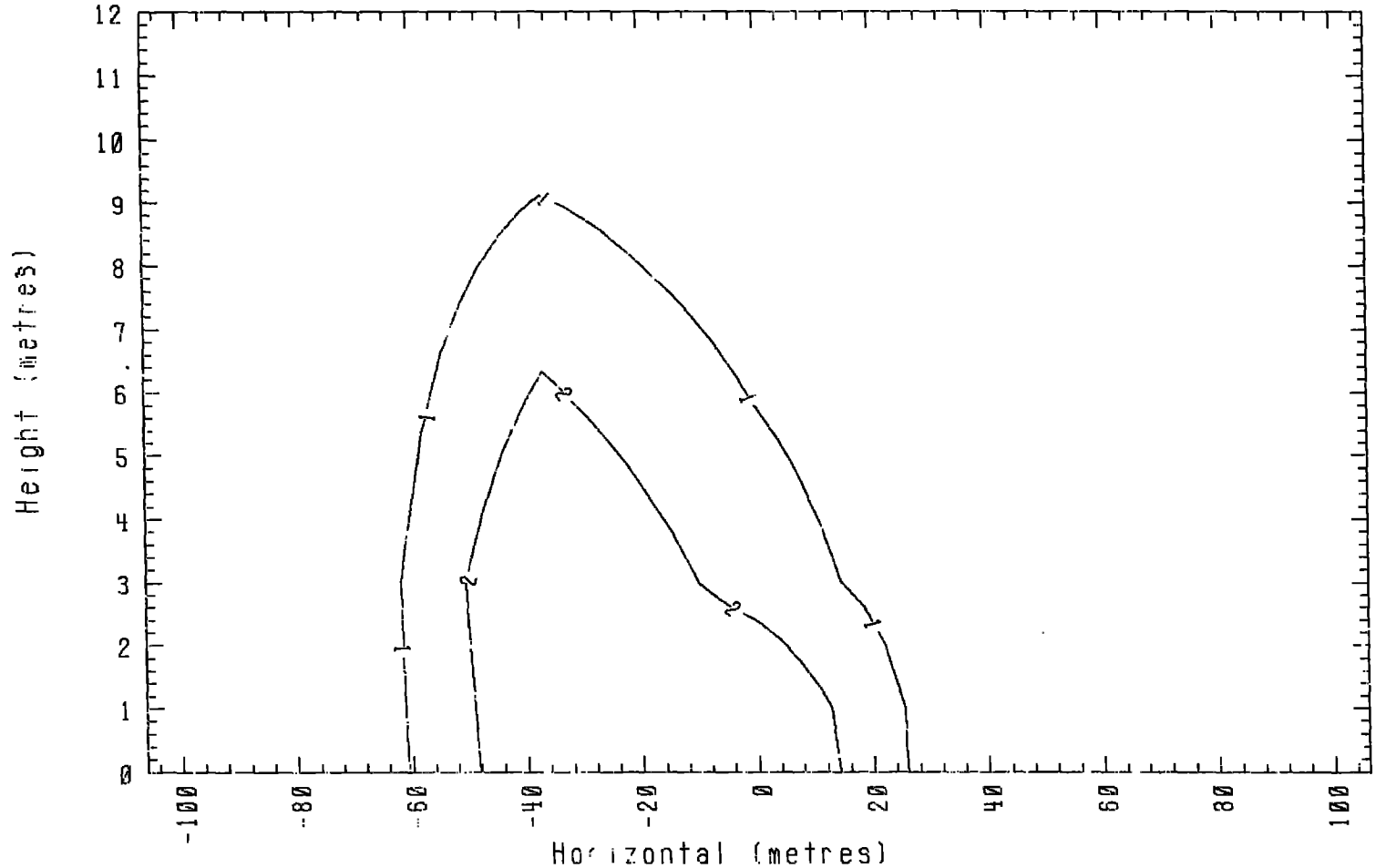


Coyote 5 LGF 81 Contours:

Time = 100 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
11/15/83 12:11:09

Vertical Concentration Contours

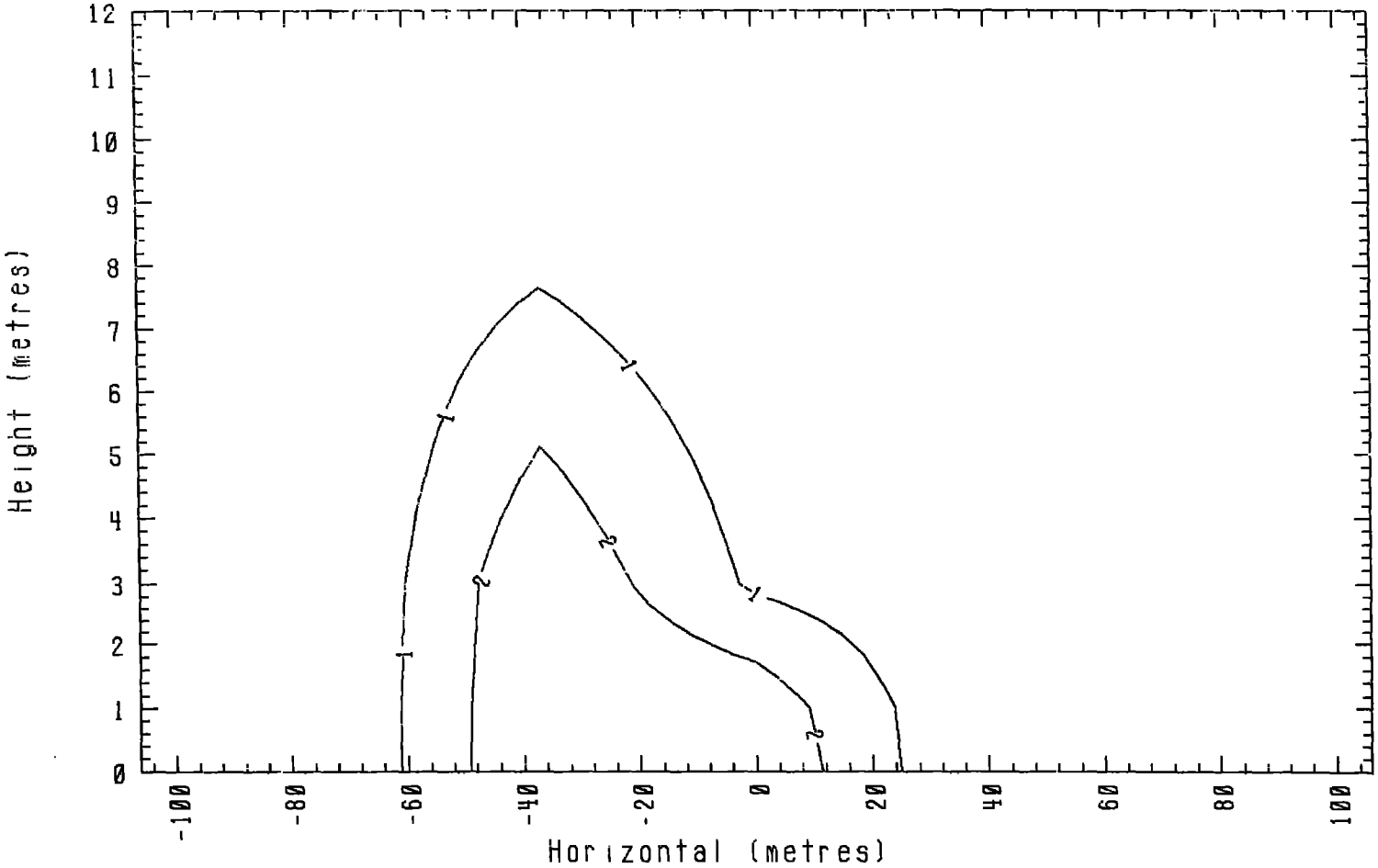


Coyote 5 LGF 81 Contours:

Time = 110 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:15
11/15/83 12:11:09

Vertical Concentration Contours

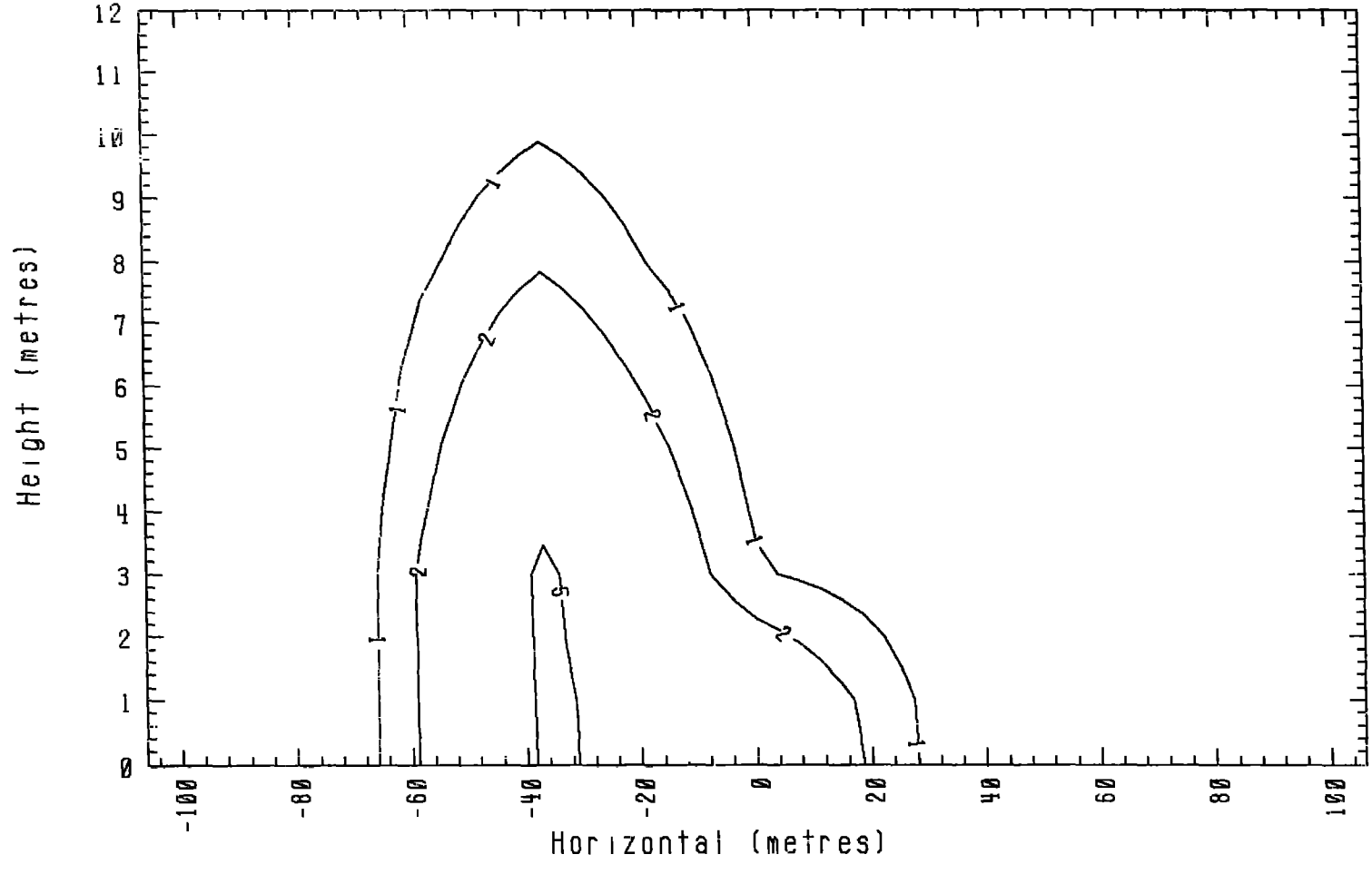


Coyote 5 LGF 81 Contours:

Time = 120 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
11/15/83 12:11:09

Vertical Concentration Contours

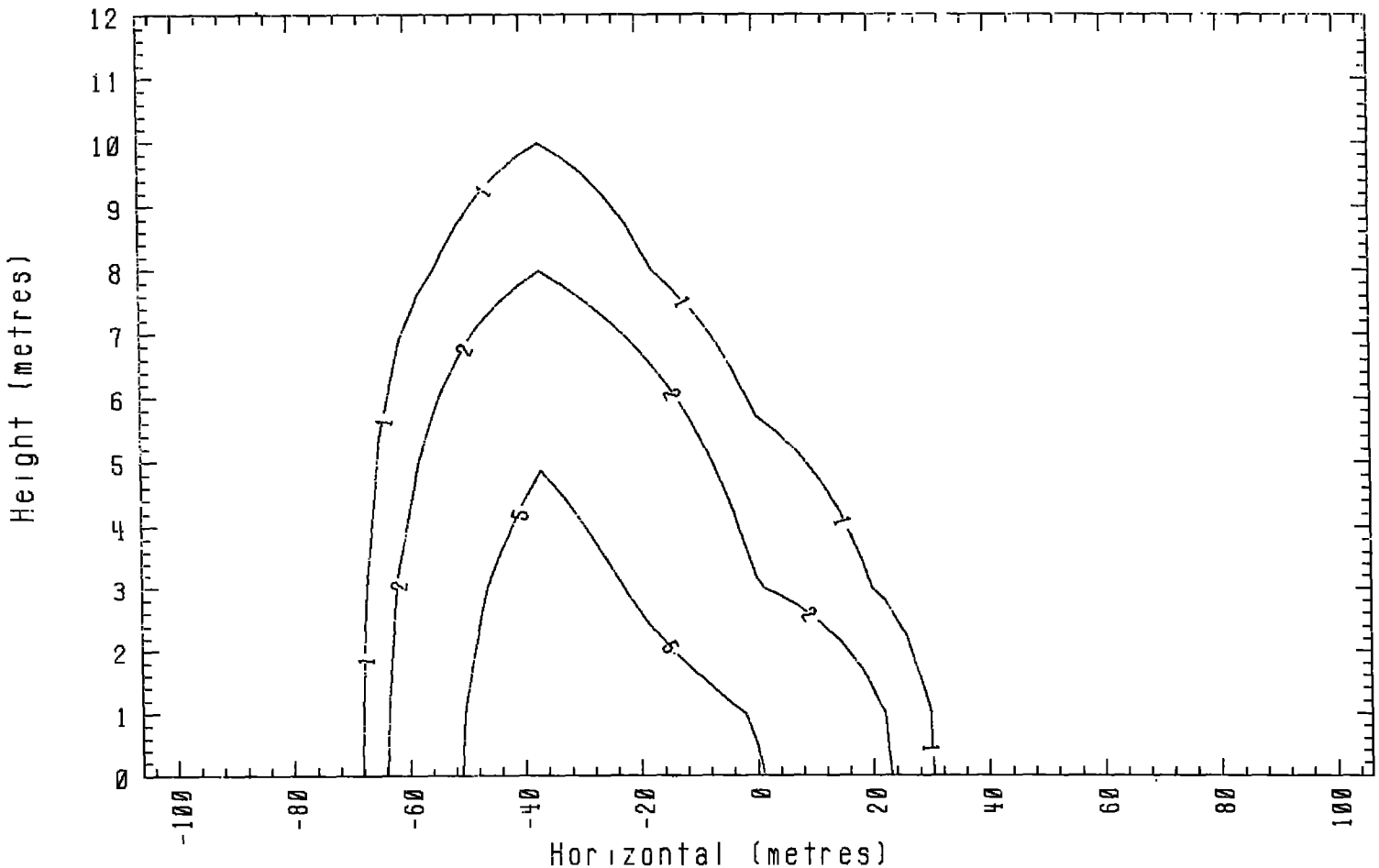


Coyote 5 LGF 81 Contours:

Time = 130 sec 200m row 1%,2%,5%,10%,15%,25%,35%

M7/22/83u 10:46:45
11/15/83 12:11:09

Vertical Concentration Contours

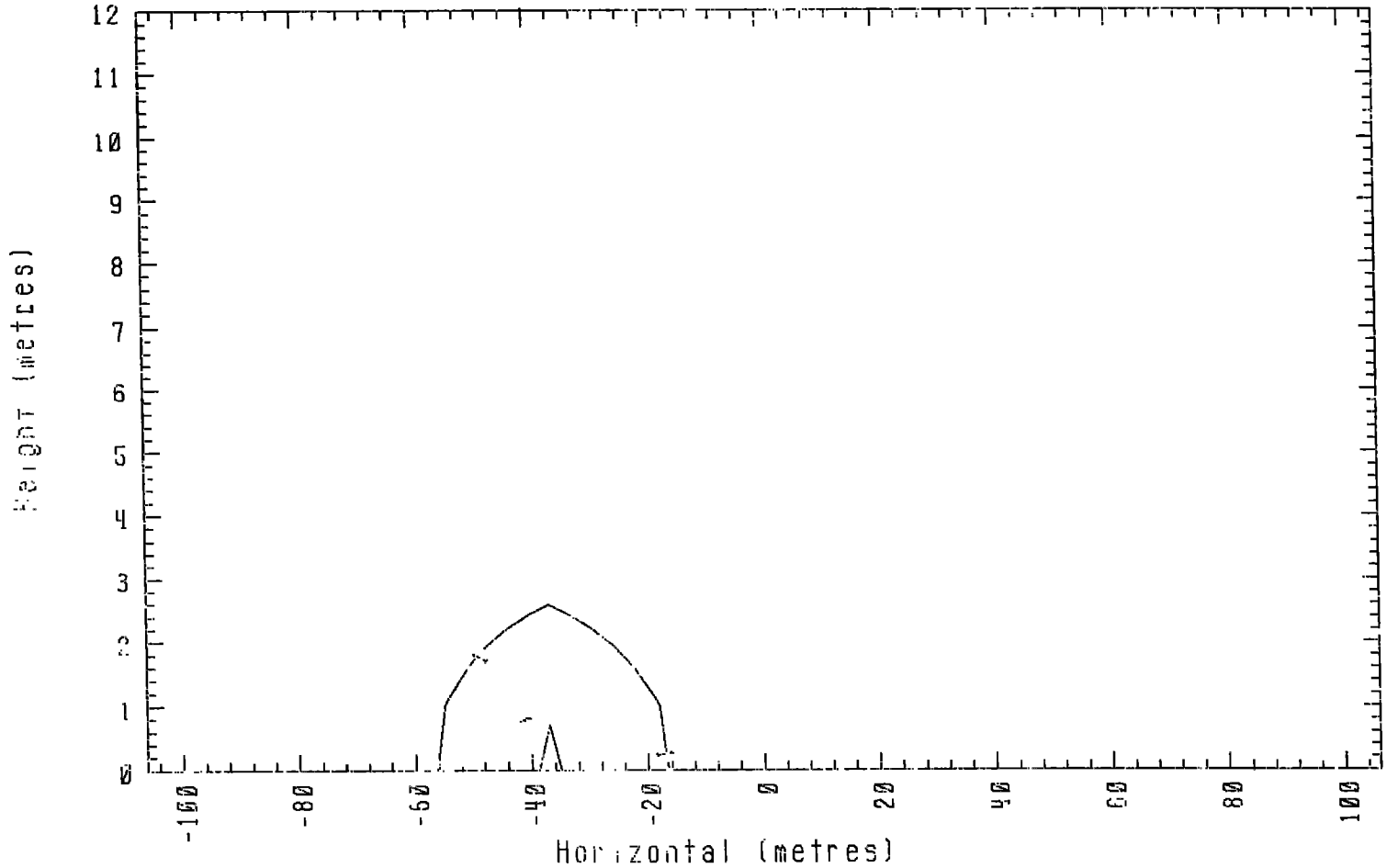


Coyote 5 LGF 81 Contours:

Time = 140 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83@ 19:45:45
11/15/83 12:11:09

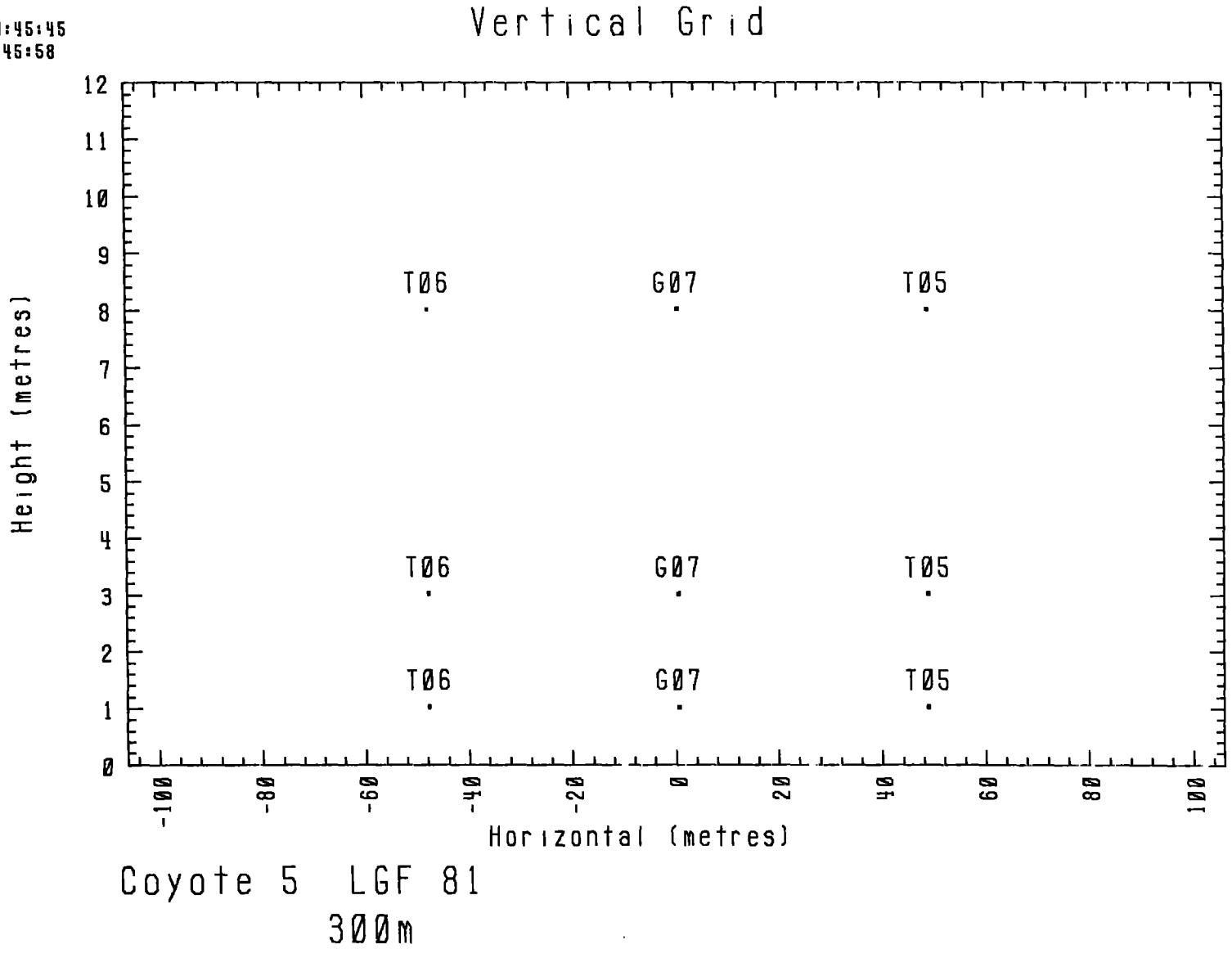
Vertical Concentration Contours



Coyote 5 LGF 81 Contours:

Time = 150 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/03/83 11:45:58

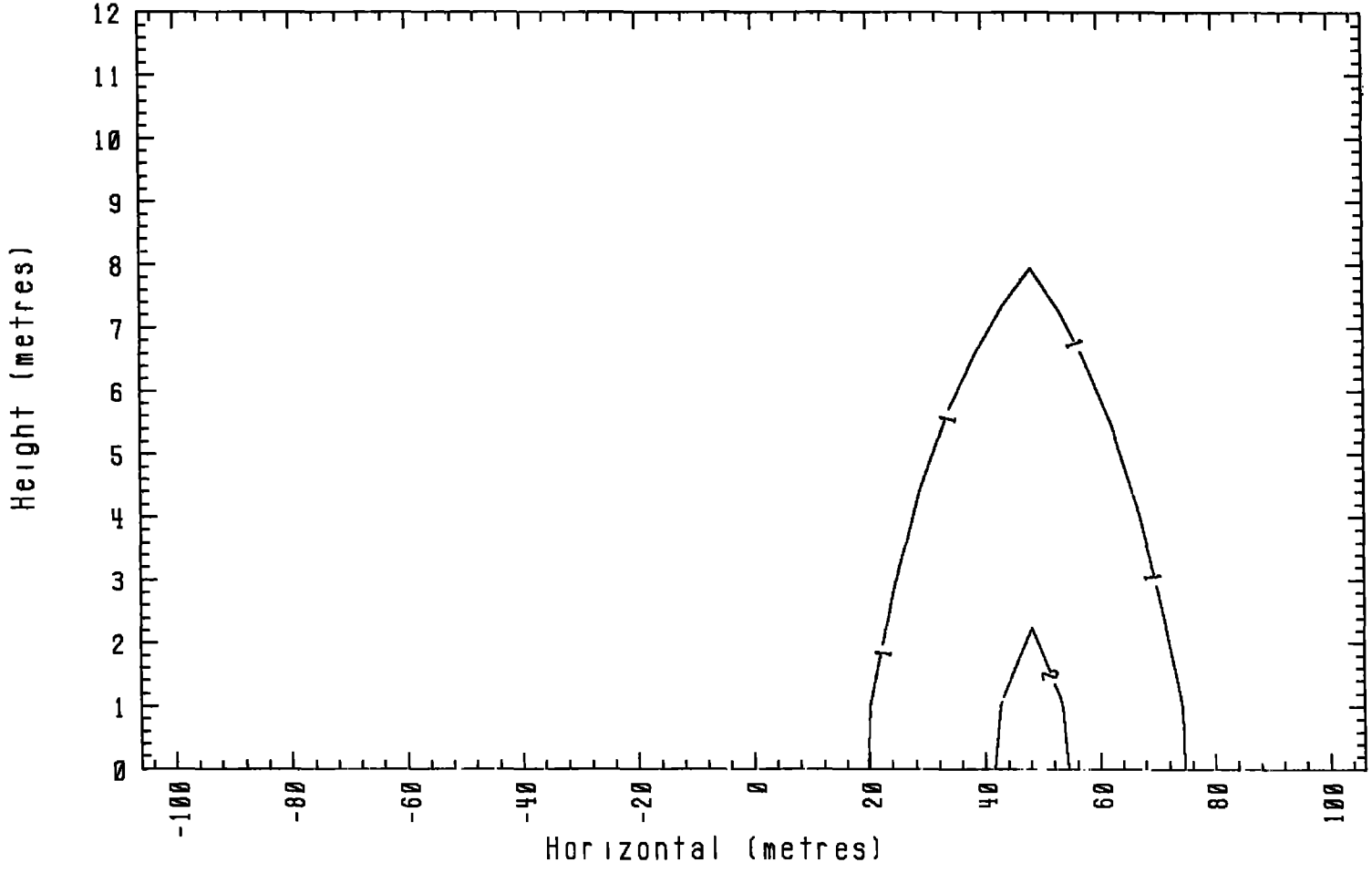


Coyote 5 LGF 81

300m

07/22/83u 10:45:45
08/03/83 11:45:58

Vertical Concentration Contours



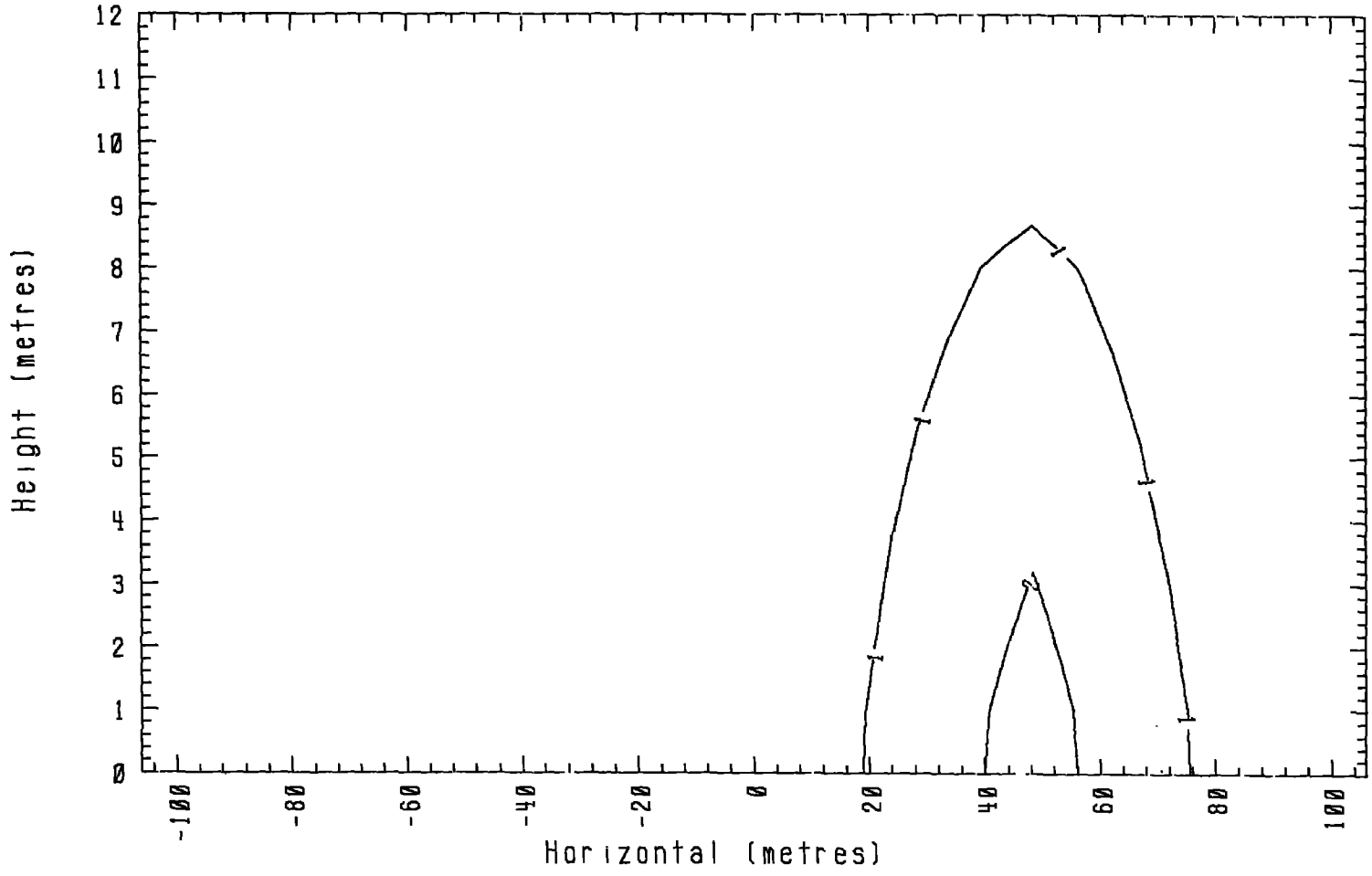
Coyote 5 LGF 81

Contours:

Time = 50 sec 300m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/03/83 11:45:58

Vertical Concentration Contours

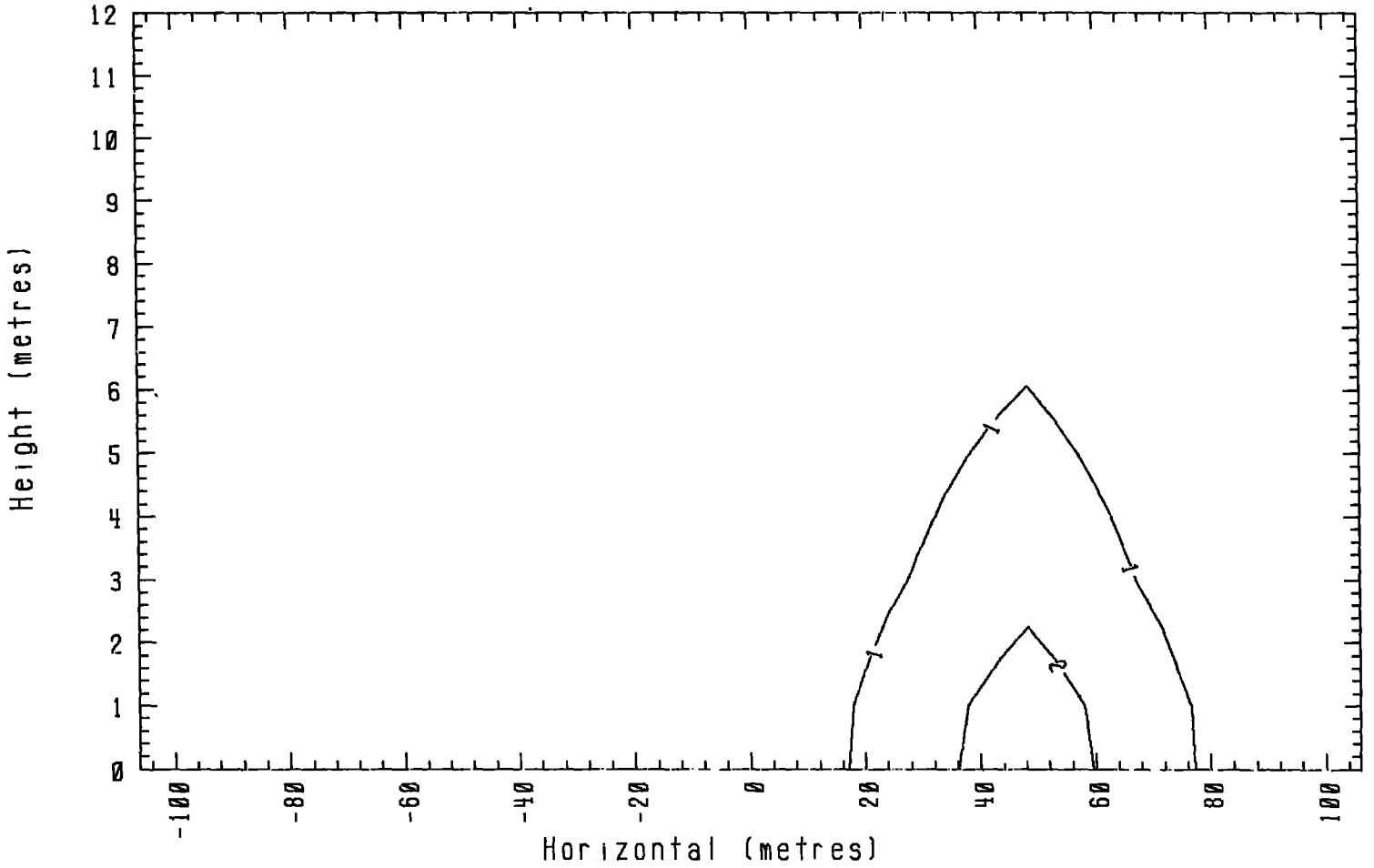


Coyote 5 LGF 81 Contours:

Time = 60 sec 300m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/03/83 11:45:50

Vertical Concentration Contours



Coyote 5 LGF 81

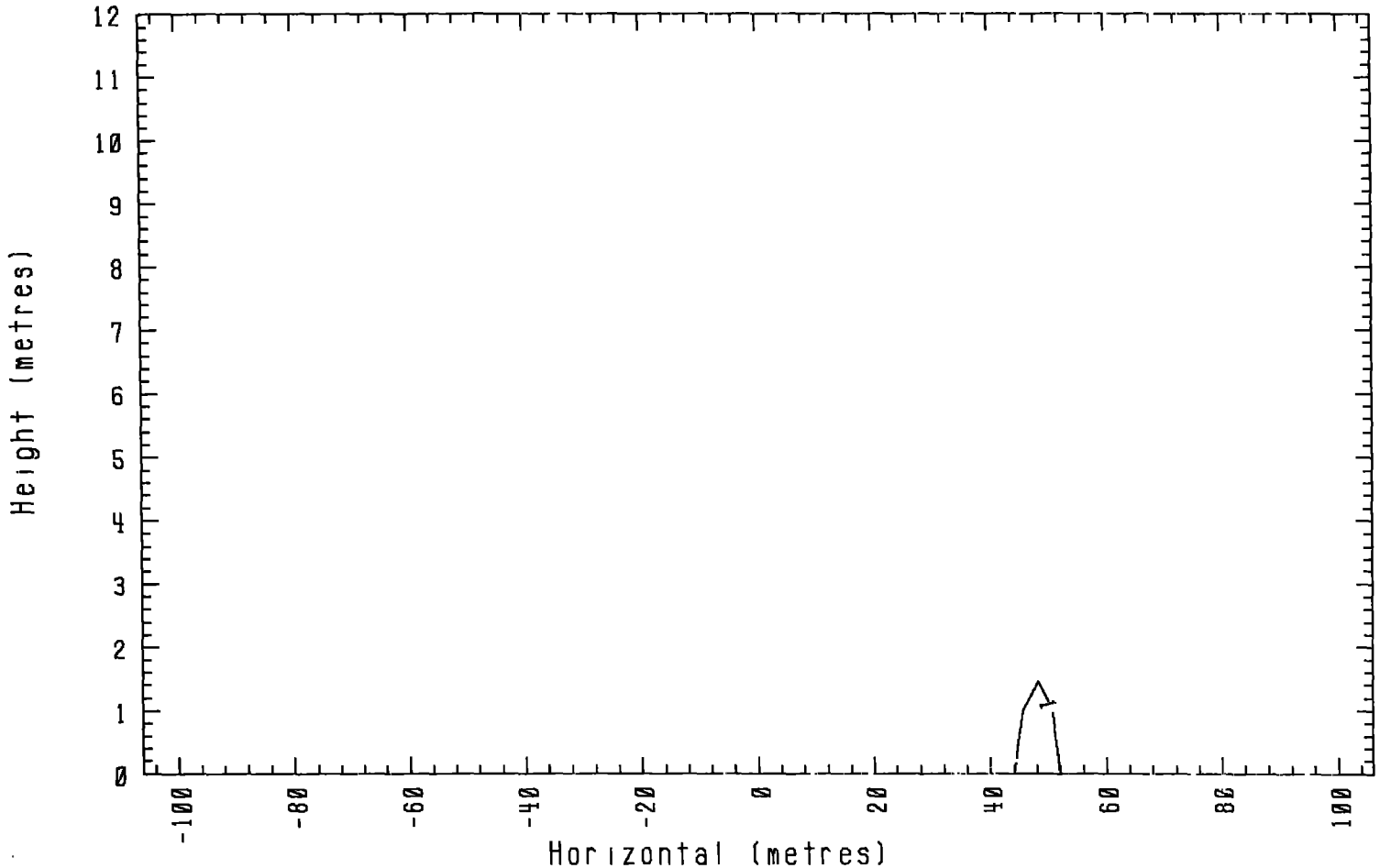
Time = 70 sec

300m row

Contours:
1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:46
08/03/83 11:45:58

Vertical Concentration Contours



Coyote 5 LGF 81

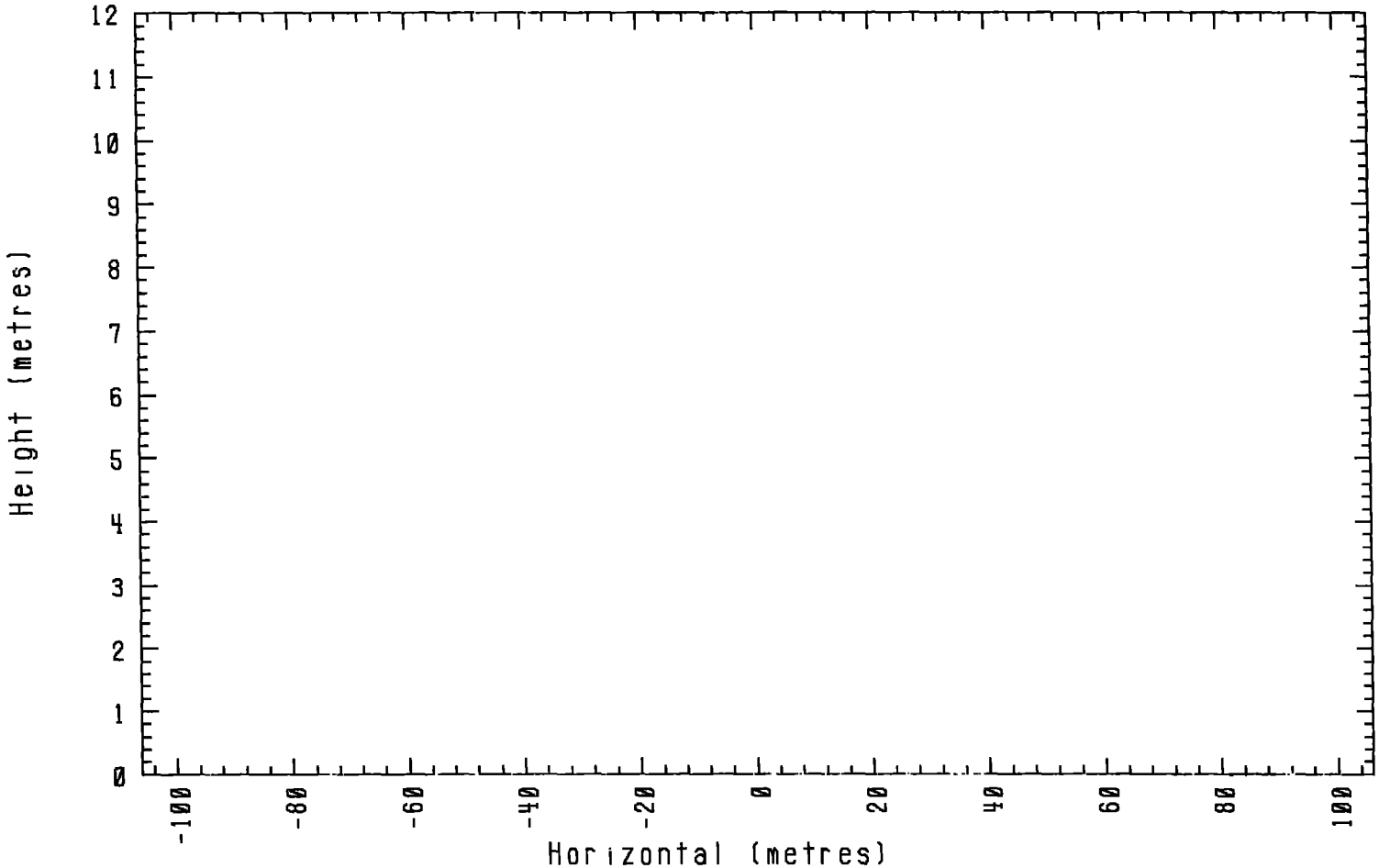
Time = 80 sec

300m row

Contours:
1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:46
08/03/83 11:45:58

Vertical Concentration Contours

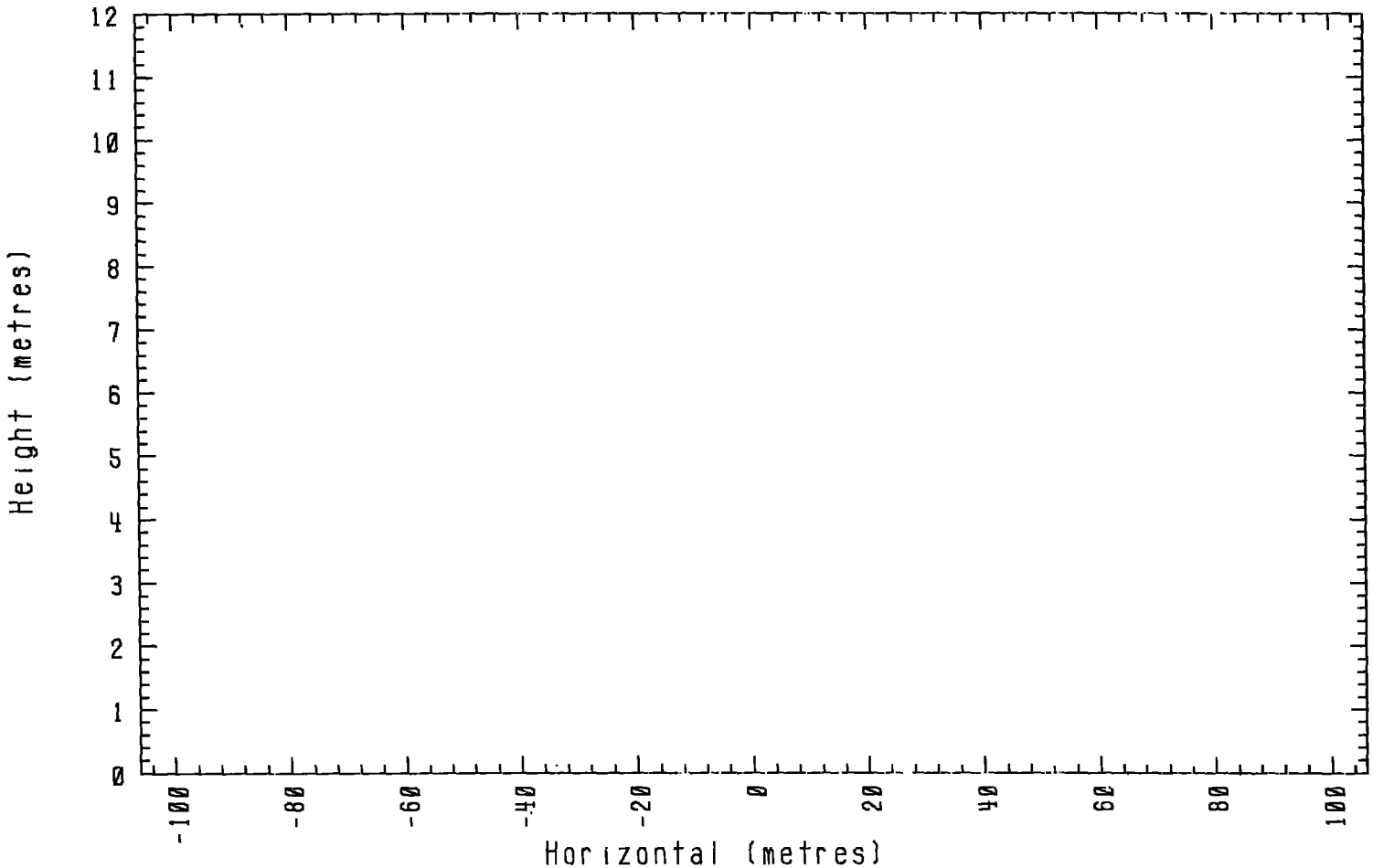


Coyote 5 LGF 81 Contours:

Time = 90 sec 300m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/03/83 11:45:58

Vertical Concentration Contours

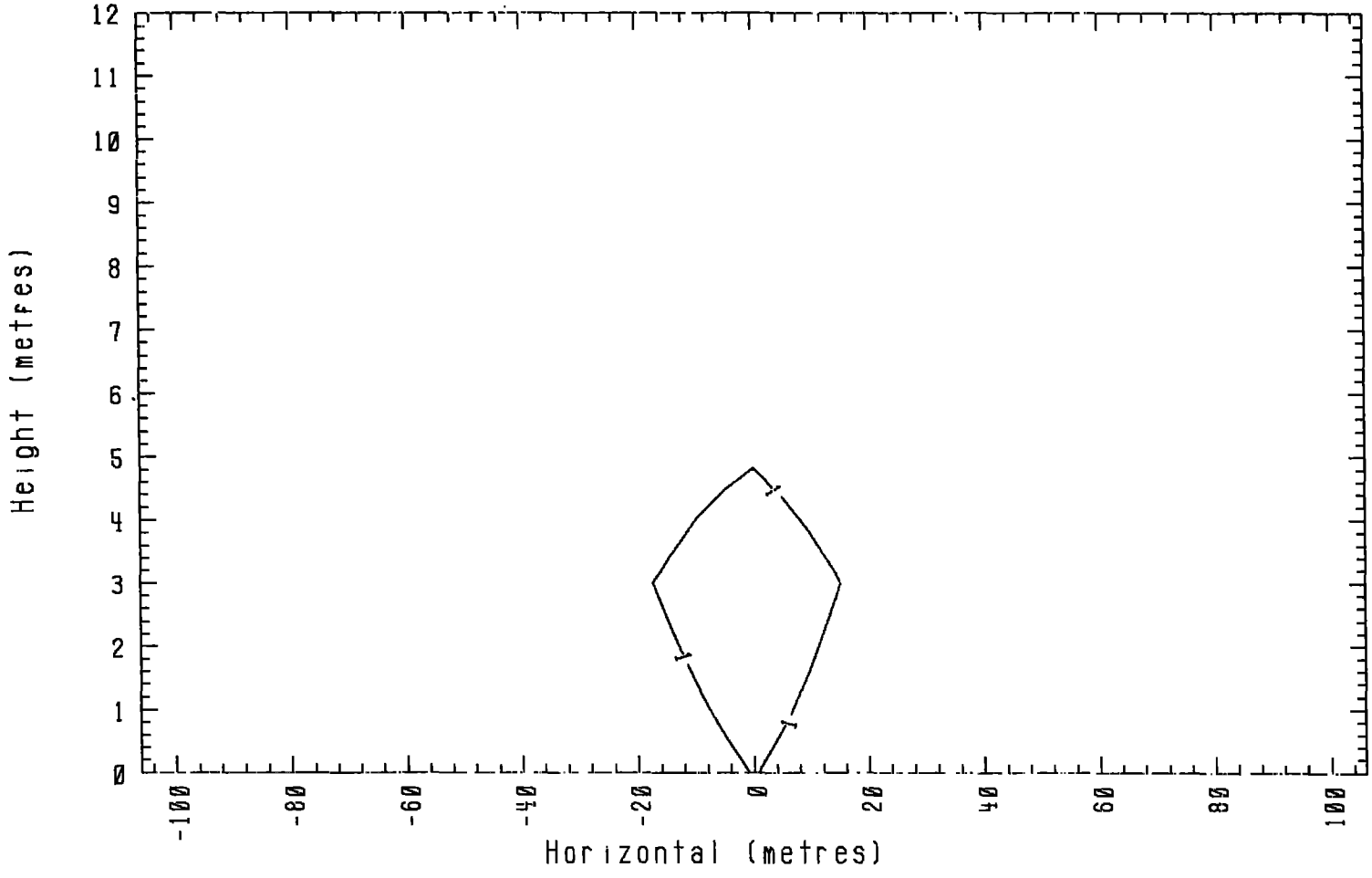


Coyote 5 LGF 81 Contours:

Time = 100 sec 300m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/03/83 11:45:58

Vertical Concentration Contours



Coyote 5 LGF 81

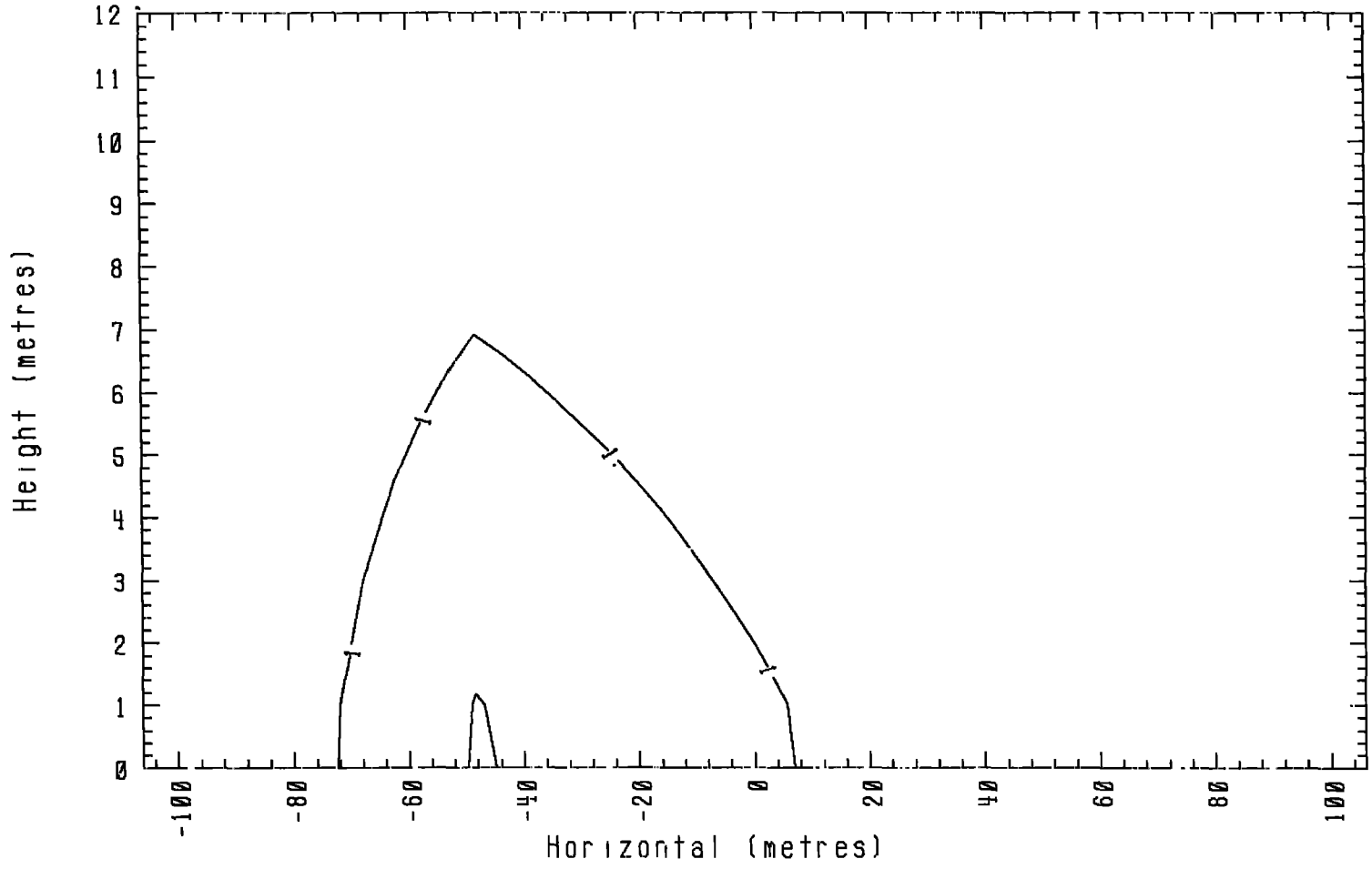
Time = 110 sec

300m row

Contours:
1%,2%,5%,10%,15%.25%,35%

07/22/83u 10:45:45
08/03/83 11:45:58

Vertical Concentration Contours

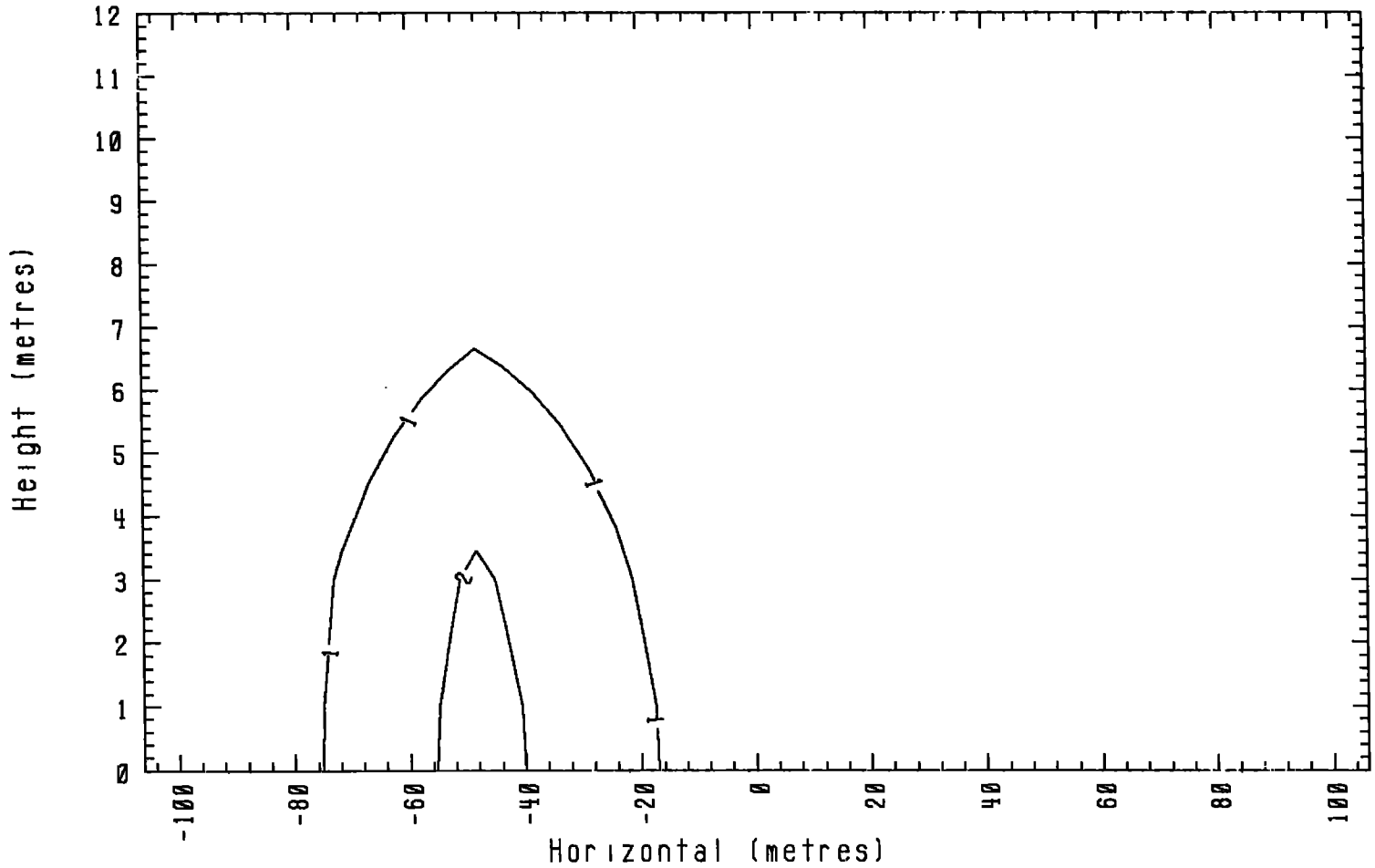


Coyote 5 LGF 81 Contours:

Time = 120 sec 300m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/03/83 11:45:58

Vertical Concentration Contours



Coyote 5 LGF 81

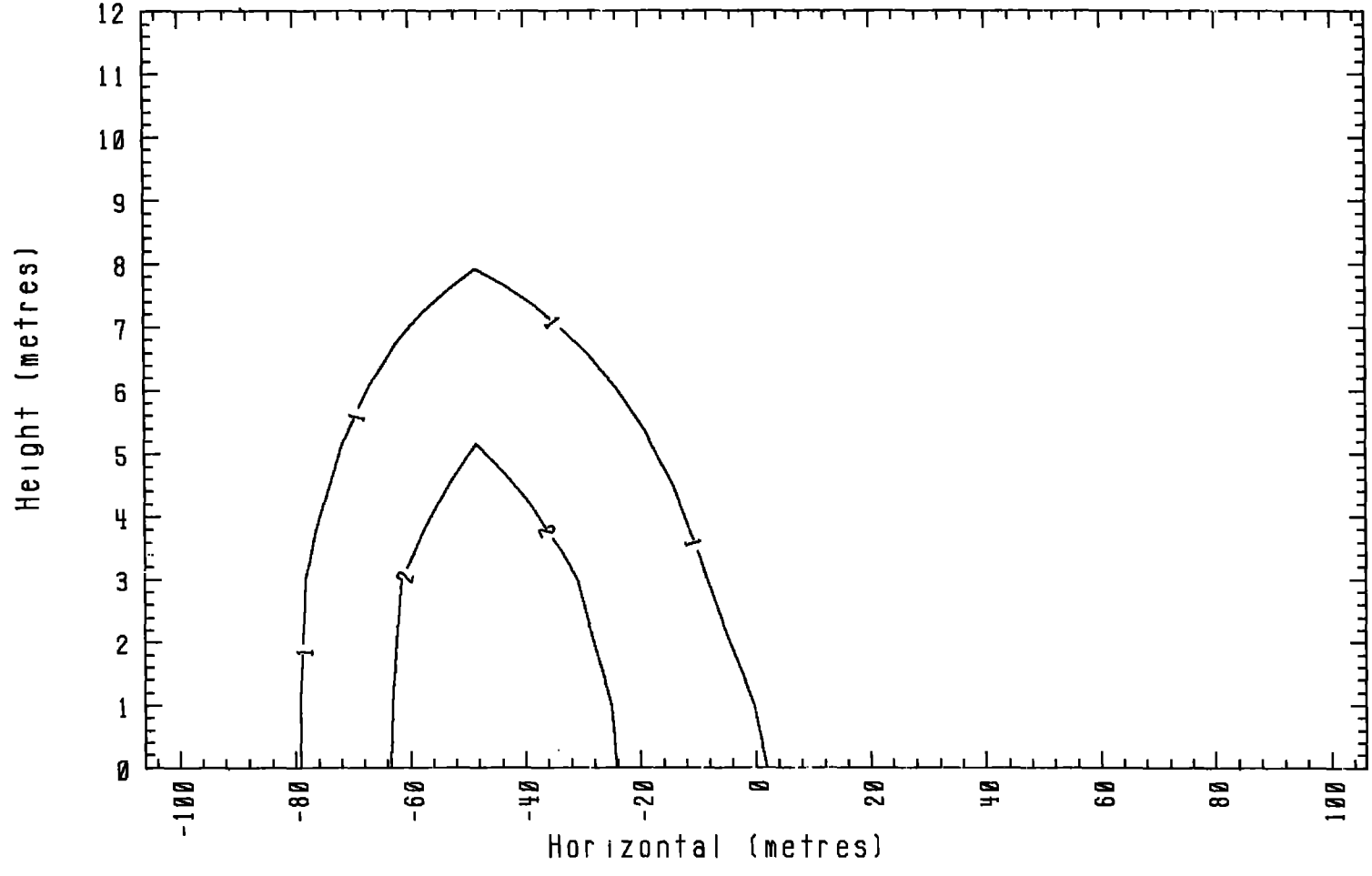
Time = 130 sec

300m row

Contours:
1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:46
08/03/83 11:45:58

Vertical Concentration Contours

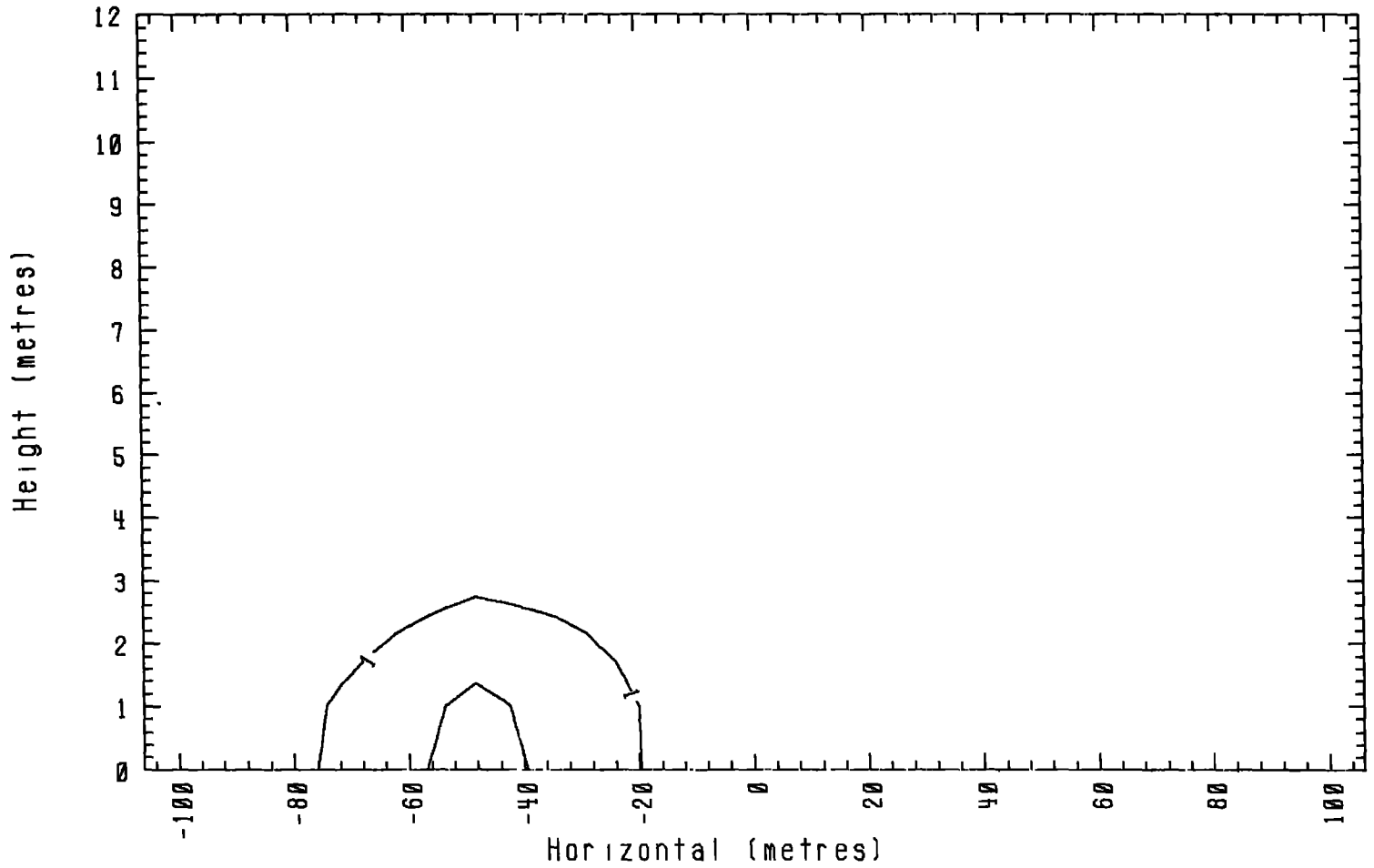


Coyote 5 LGF 81 Contours:

Time = 140 sec 300m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/03/83 11:45:58

Vertical Concentration Contours



Coyote 5 LGF 81

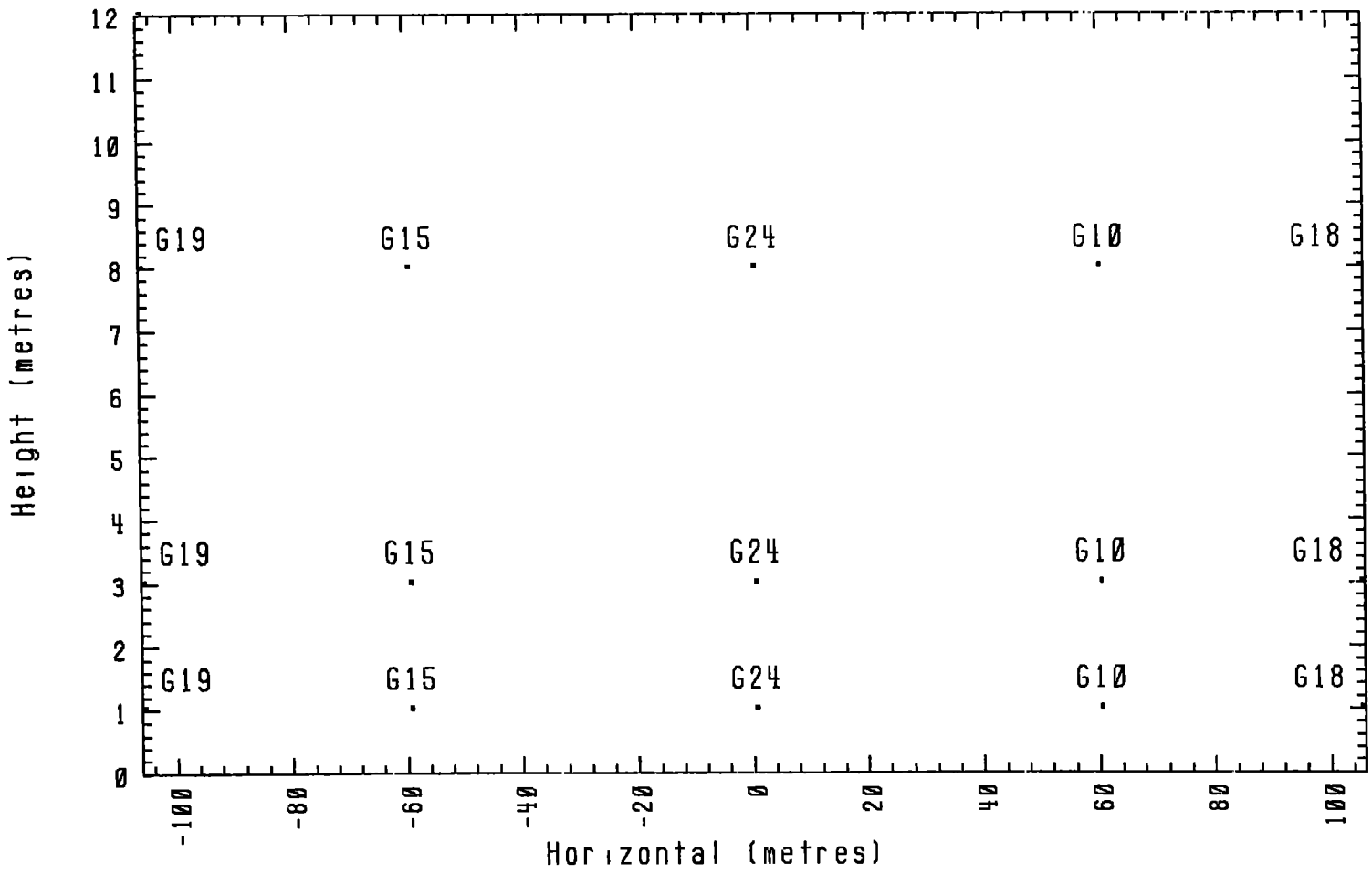
Time = 150 sec

300m row

Contours:
1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/03/83 09:52:56

Vertical Grid

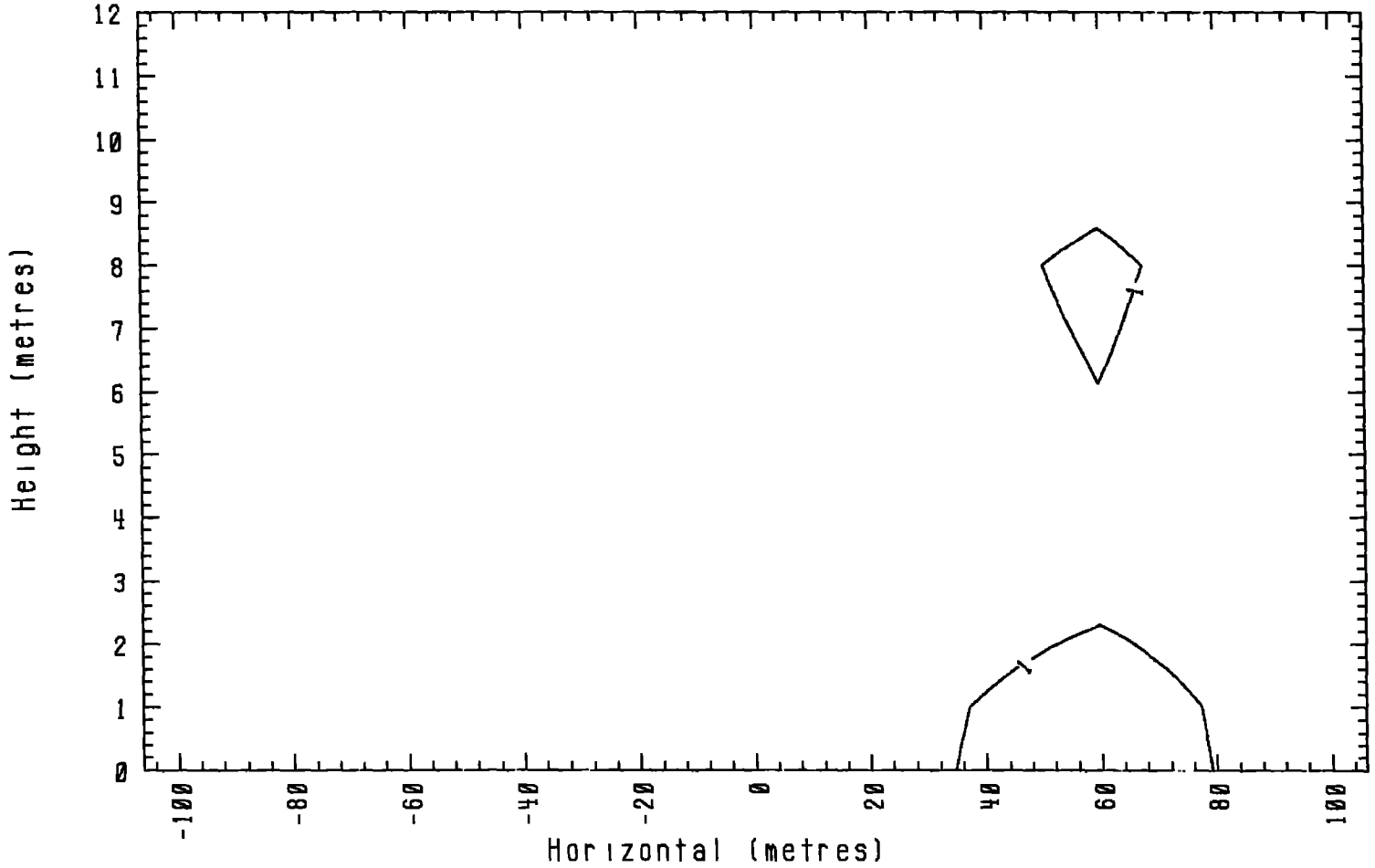


Coyote 5 LGF 81

400m

07/22/83u 10:45:45
08/03/83 09:52:56

Vertical Concentration Contours

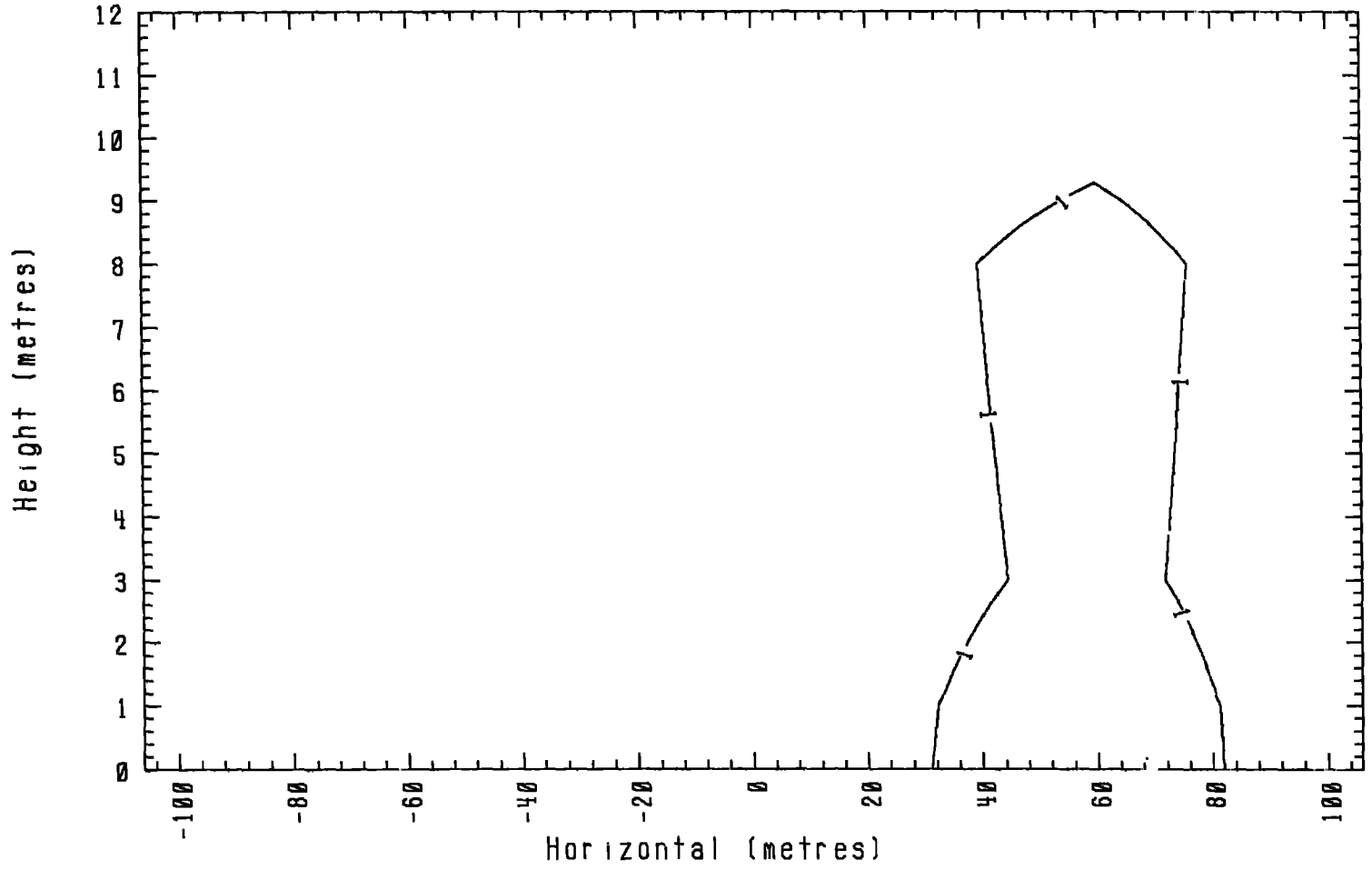


Coyote 5 LGF 81 Contours:

Time = 60 sec 400m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:46
08/03/83 09:52:56

Vertical Concentration Contours

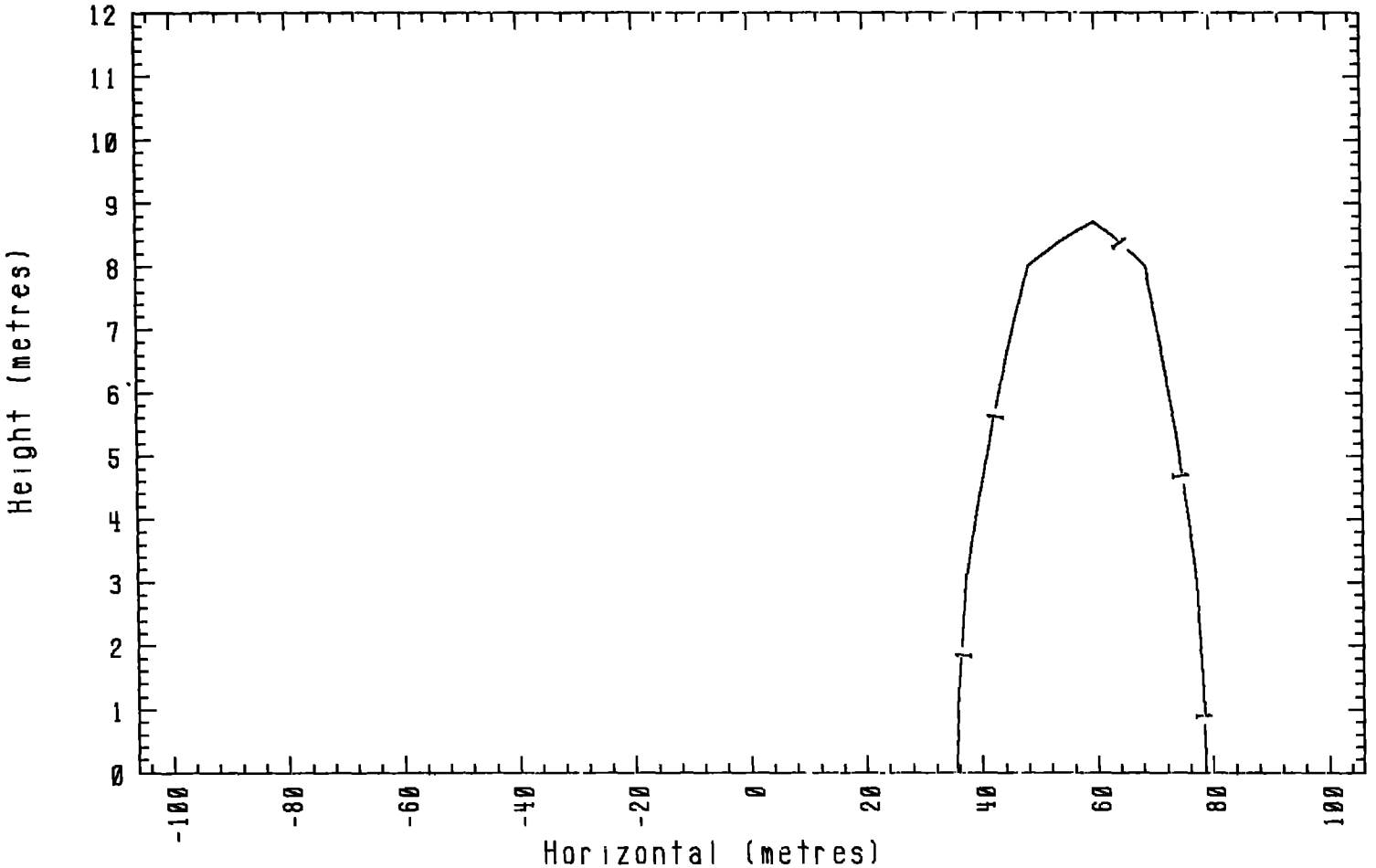


Coyote 5 LGF 81 Contours:

Time = 70 sec 400m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:46
08/03/83 09:52:56

Vertical Concentration Contours

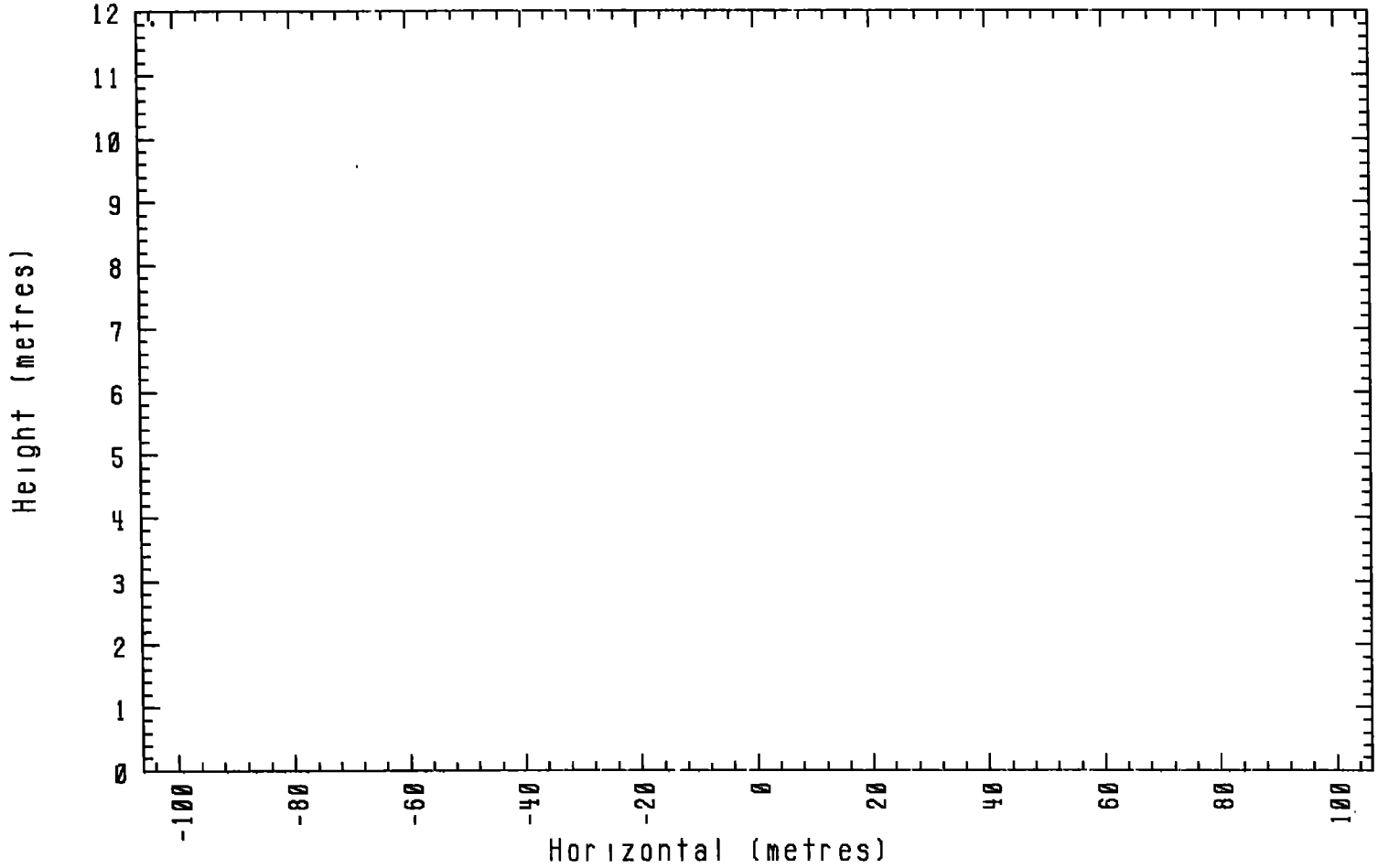


Coyote 5 LGF 81 Contours:

Time = 80 sec 400m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/03/83 09:52:56

Vertical Concentration Contours



Coyote 5 LGF 81

Contours:

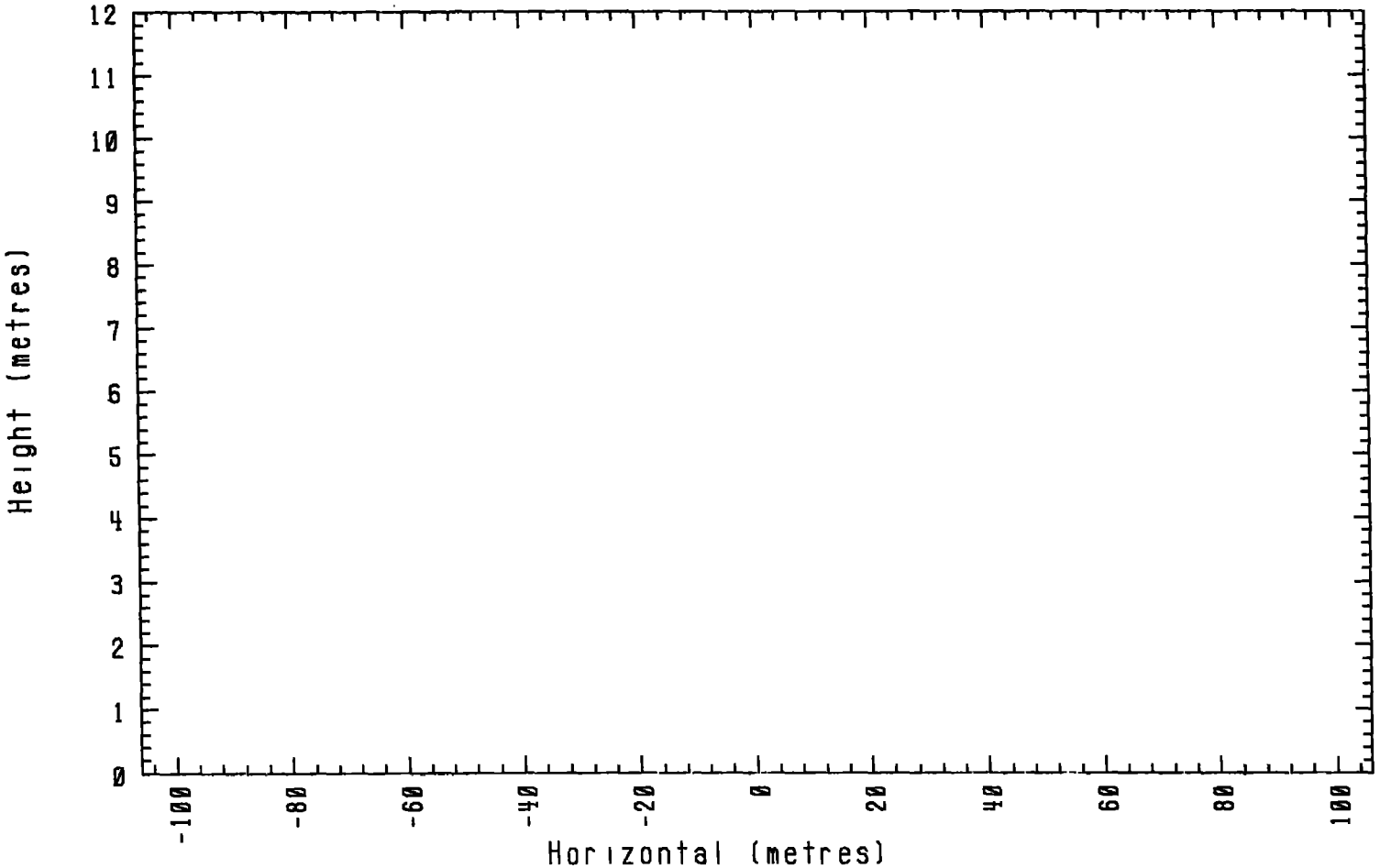
Time = 90 sec

400m row

1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:46
08/03/83 09:52:56

Vertical Concentration Contours



Coyote 5 LGF 81

Contours:

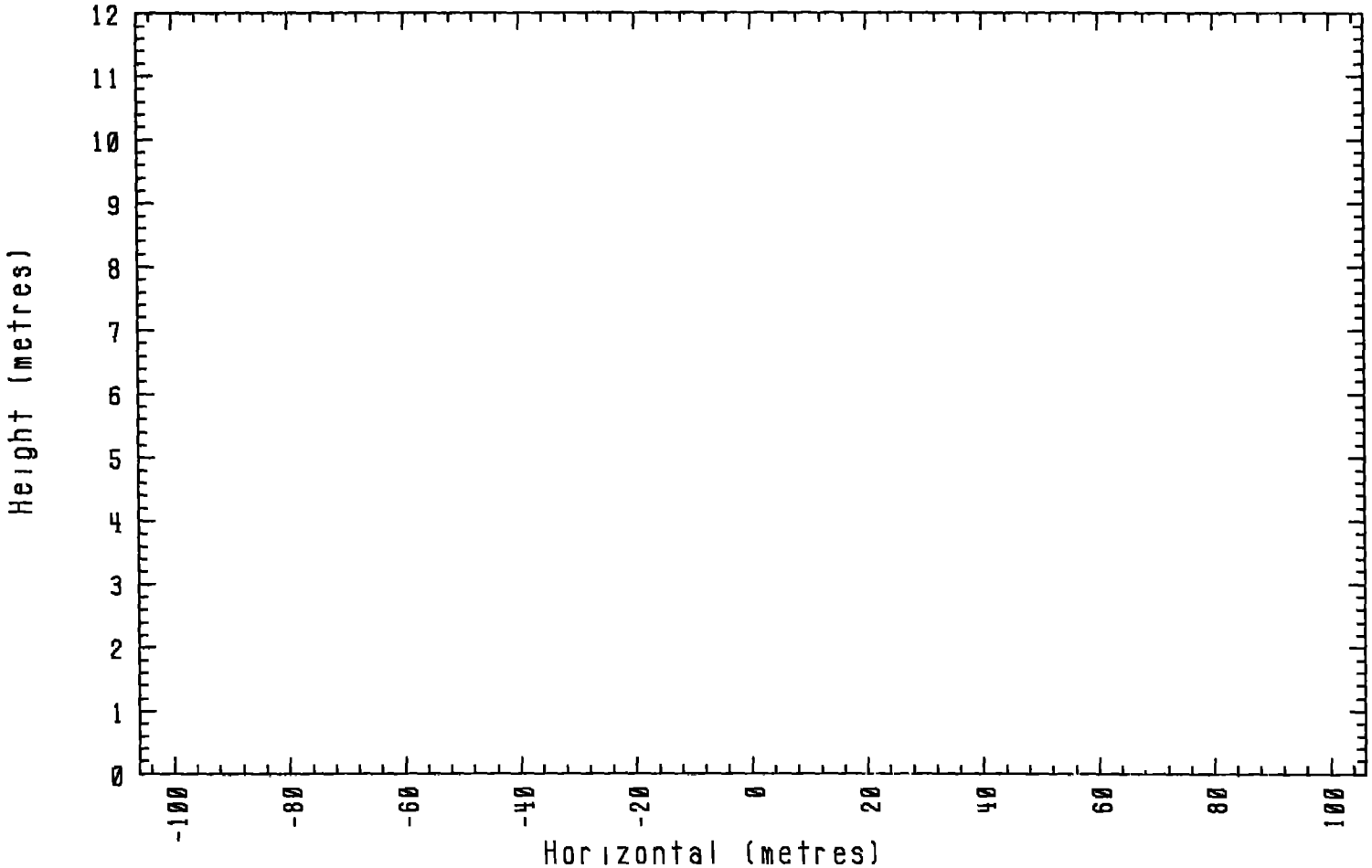
Time = 100 sec

400m row

1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/03/83 09:52:56

Vertical Concentration Contours

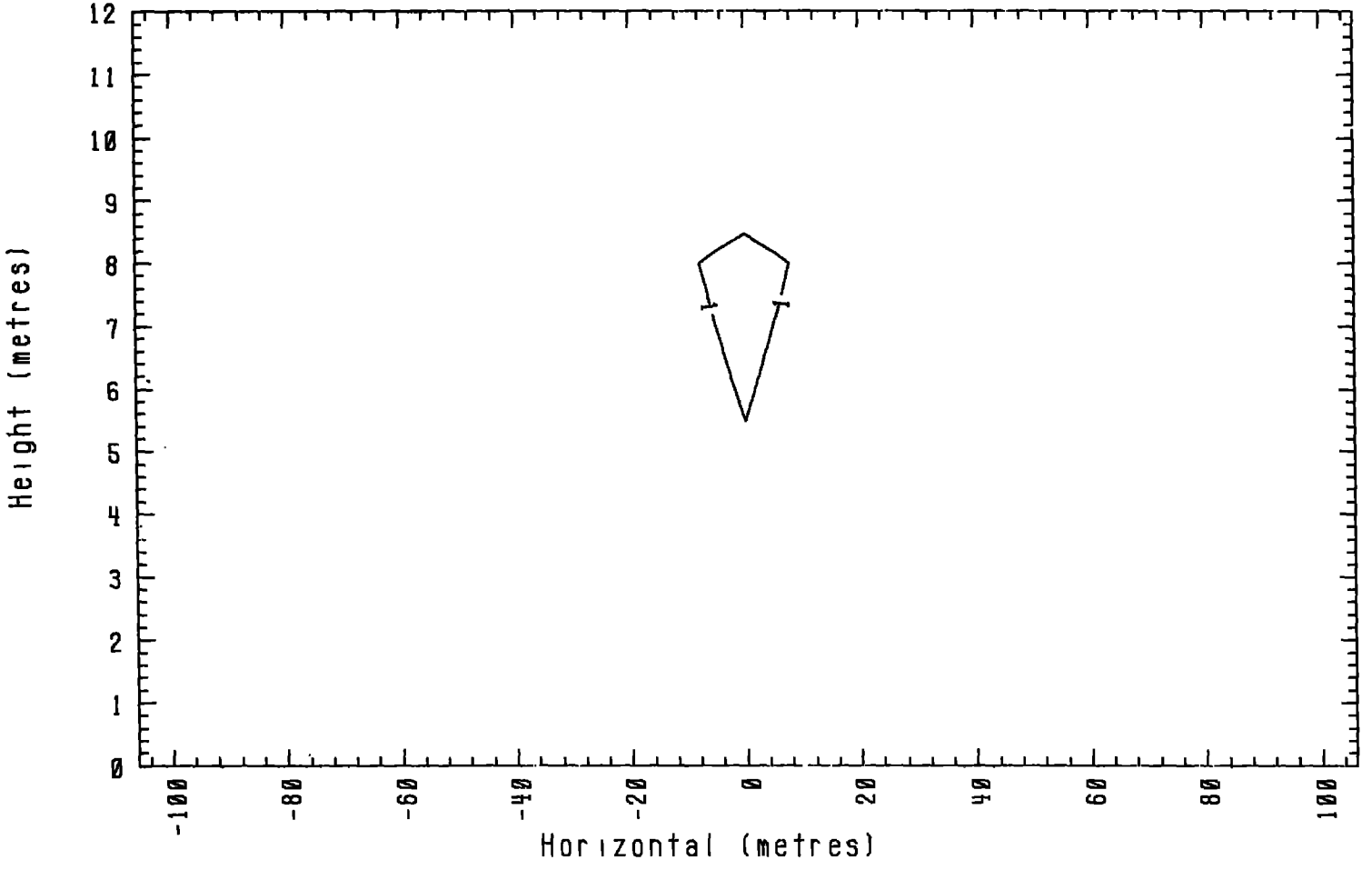


Coyote 5 LGF 81 Contours:

Time = 110 sec 400m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:46
08/03/83 09:52:56

Vertical Concentration Contours

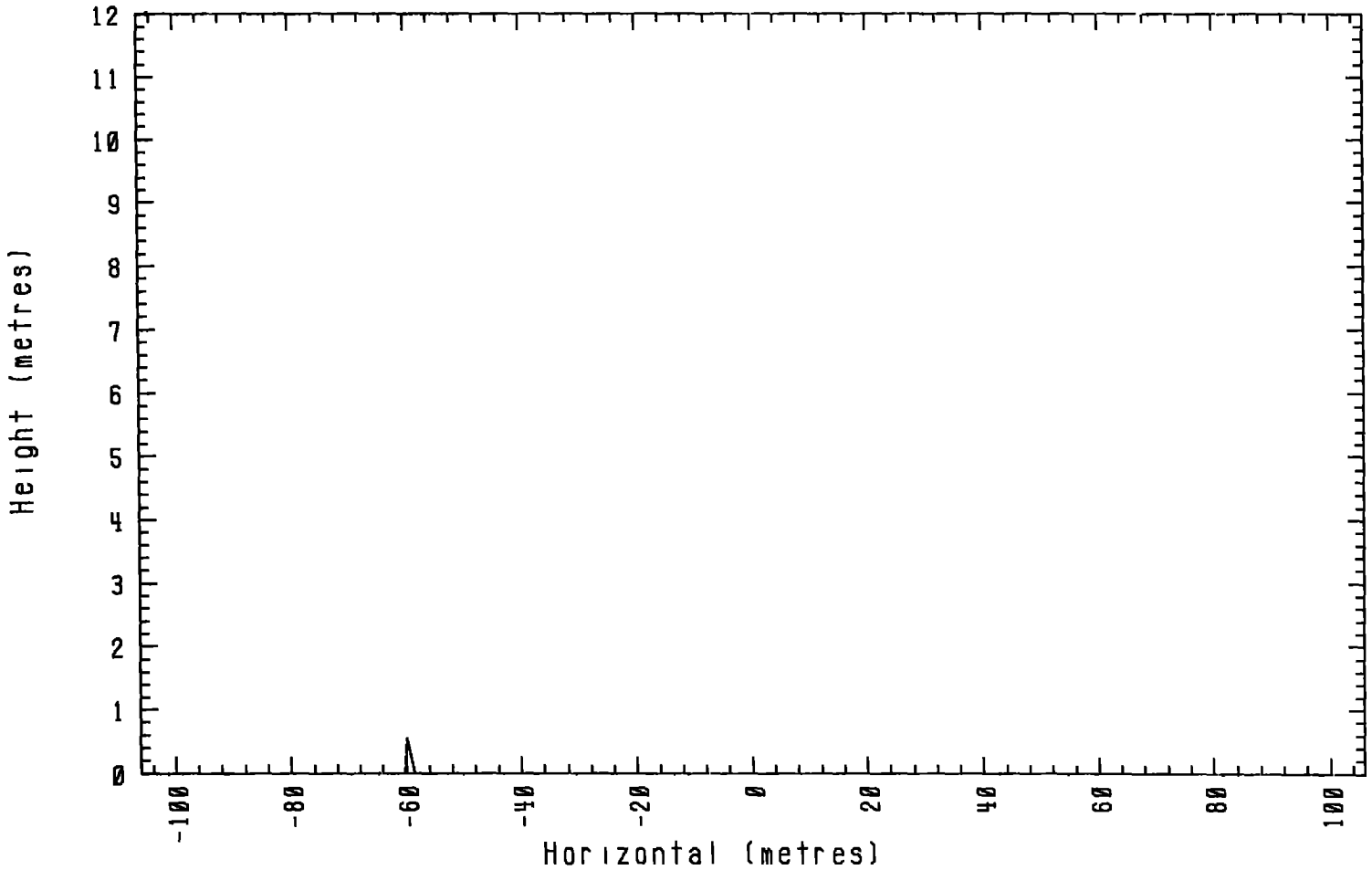


Coyote 5 LGF 81 Contours:

Time = 120 sec 400m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:46
08/03/83 09:52:56

Vertical Concentration Contours

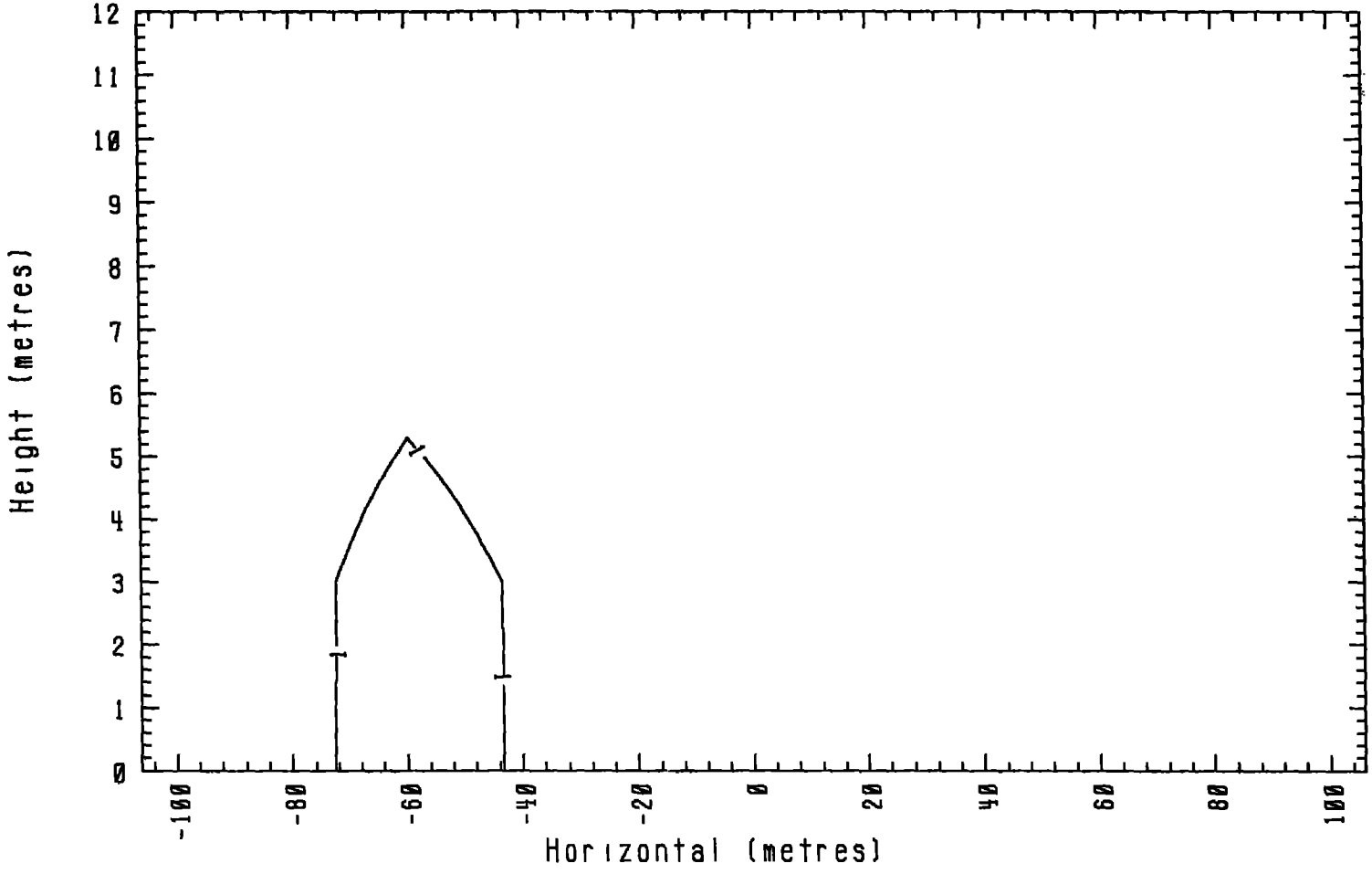


Coyote 5 LGF 81 Contours:

Time = 130 sec 400m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:46
08/03/83 09:52:56

Vertical Concentration Contours

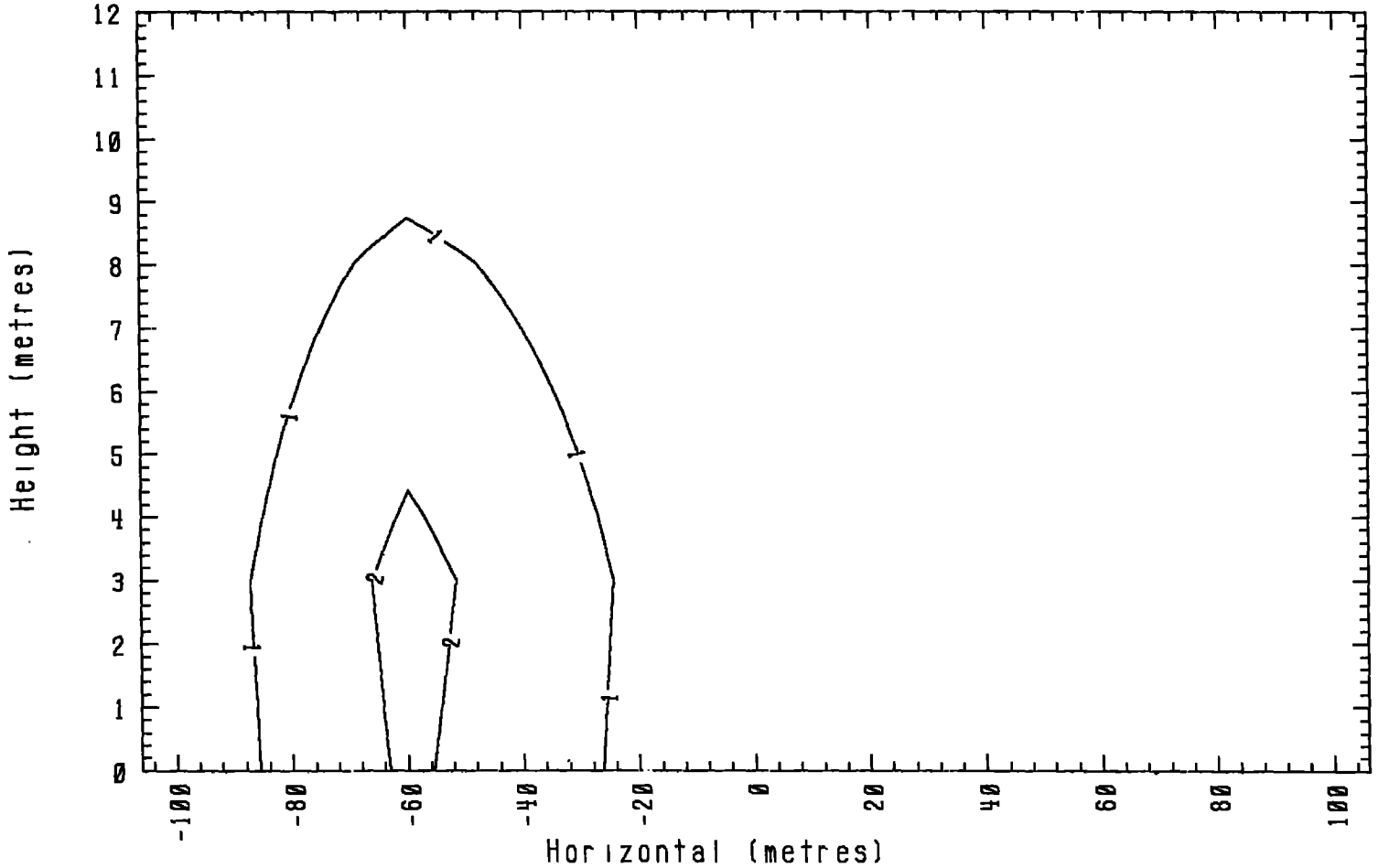


Coyote 5 LGF 81 Contours:

Time = 140 sec 400m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:46
08/03/83 09:52:56

Vertical Concentration Contours

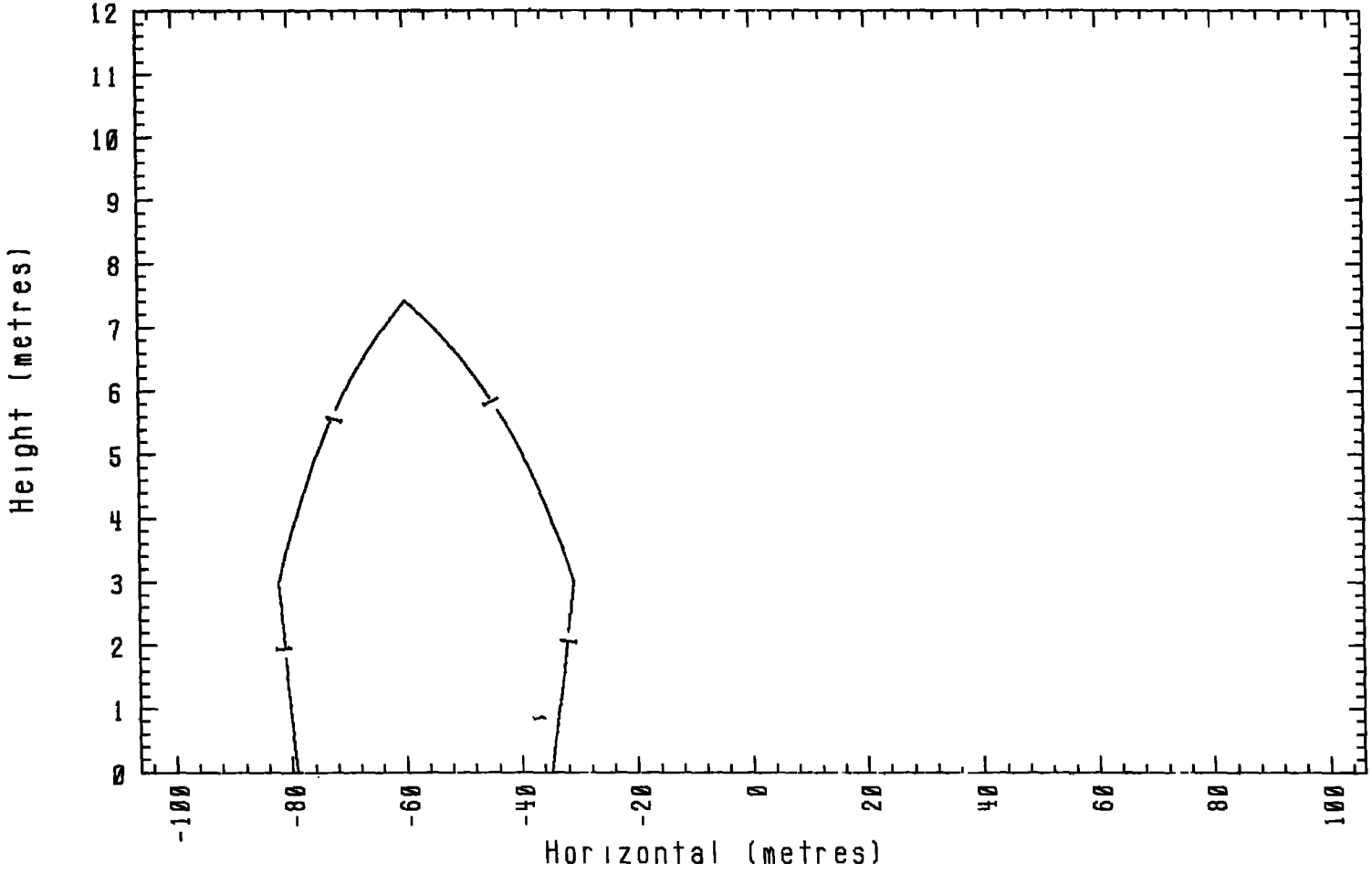


Coyote 5 LGF 81 Contours:

Time = 150 sec 400m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/03/83 09:52:56

Vertical Concentration Contours

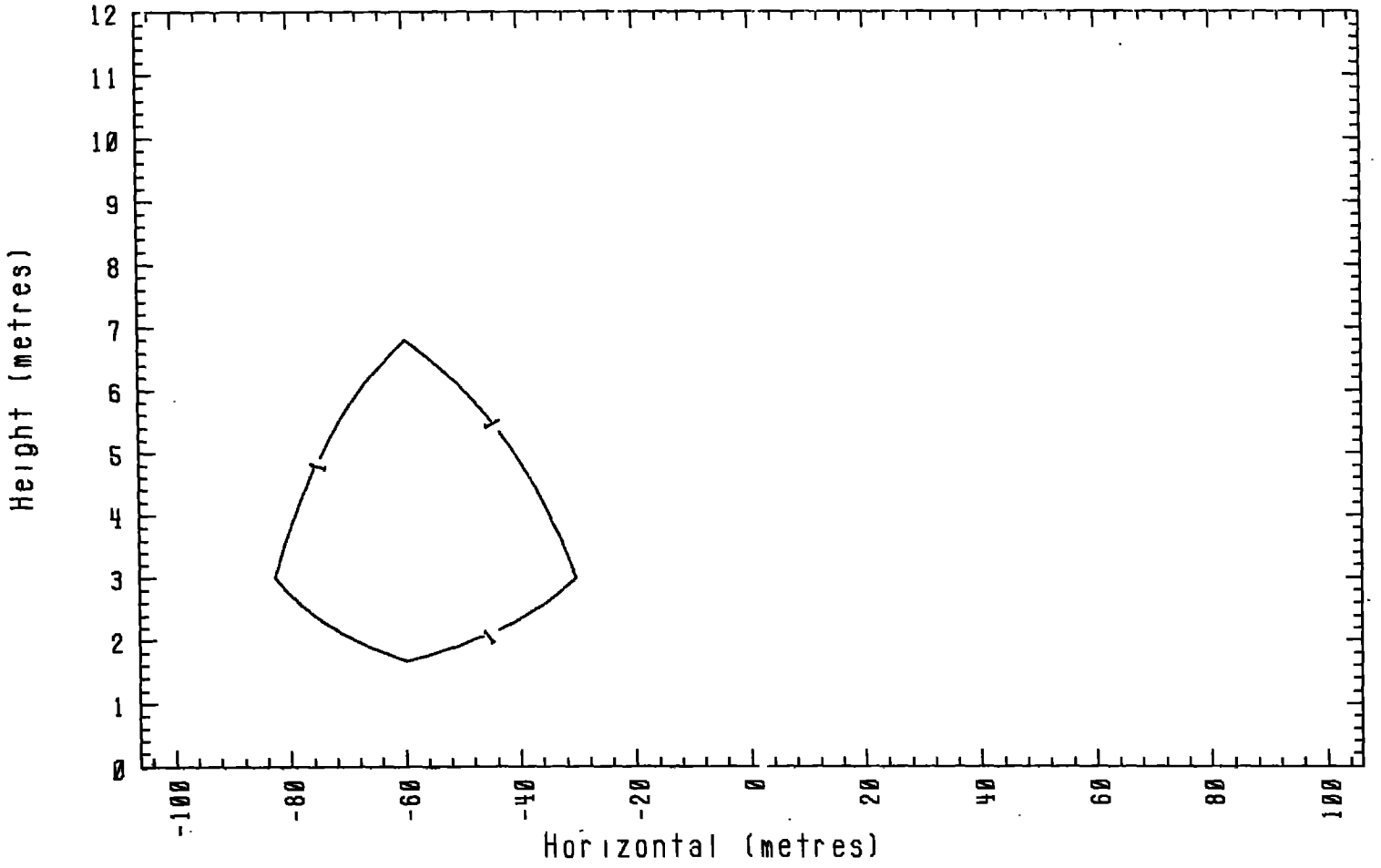


Coyote 5 LGF 81 Contours:

Time = 160 sec 400m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/03/83 09:52:56

Vertical Concentration Contours



Coyote 5 LGF 81

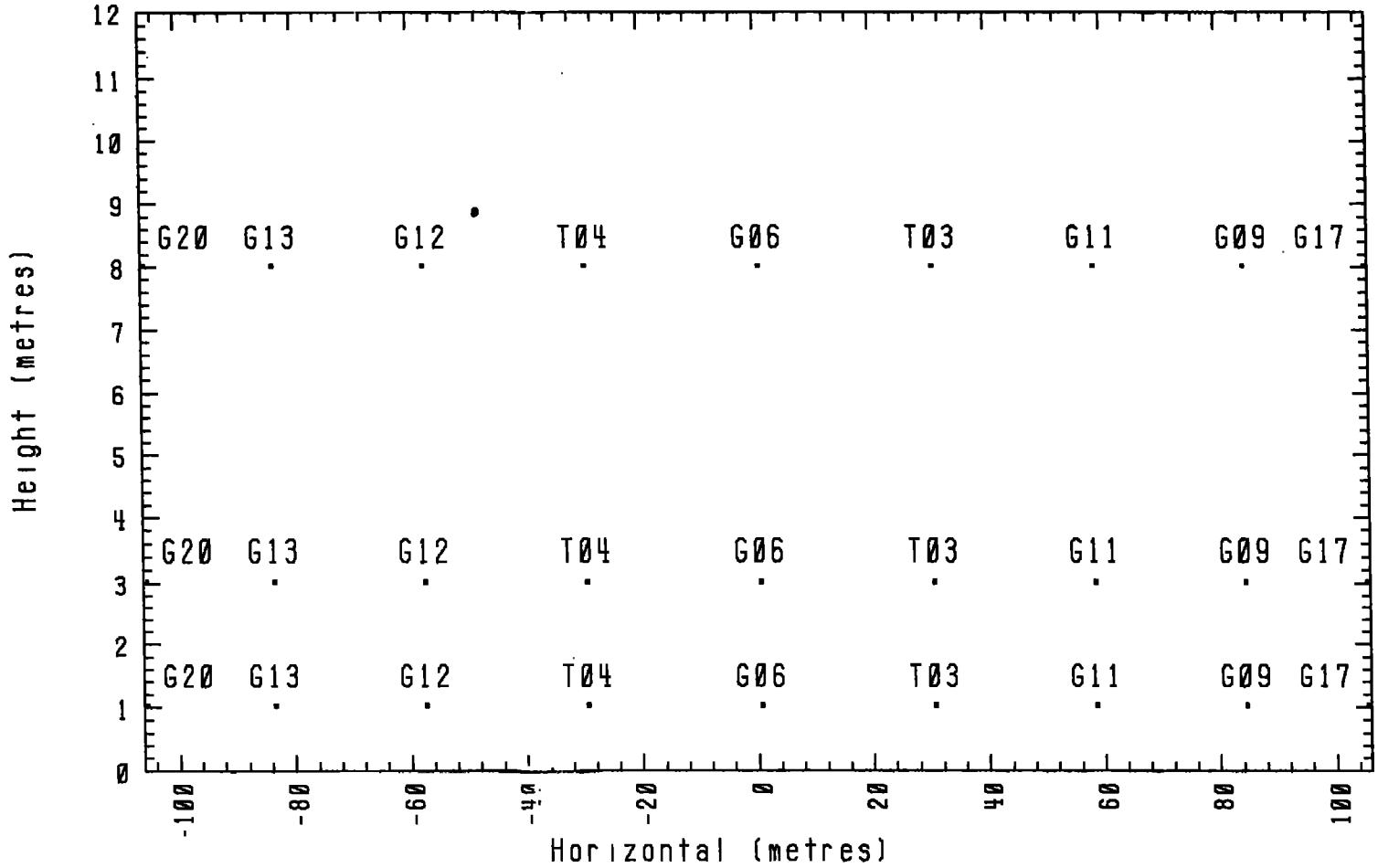
Time = 170 sec

400m row

Contours:
1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
10/18/83 11:26:16

Vertical Grid

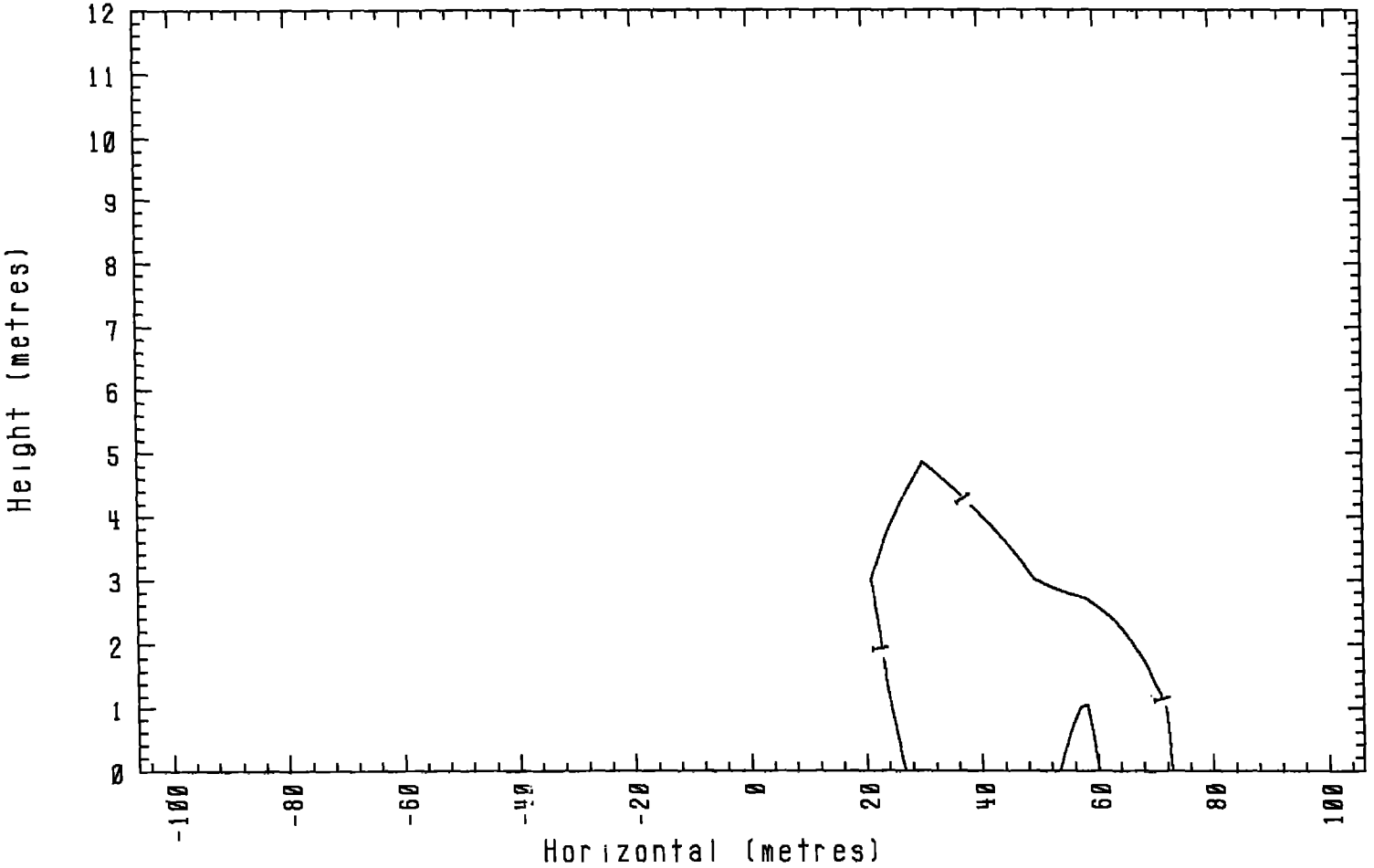


Coyote 6 LGF 81

140m

07/22/83u 10:45:45
10/18/83 11:26:16

Vertical Concentration Contours

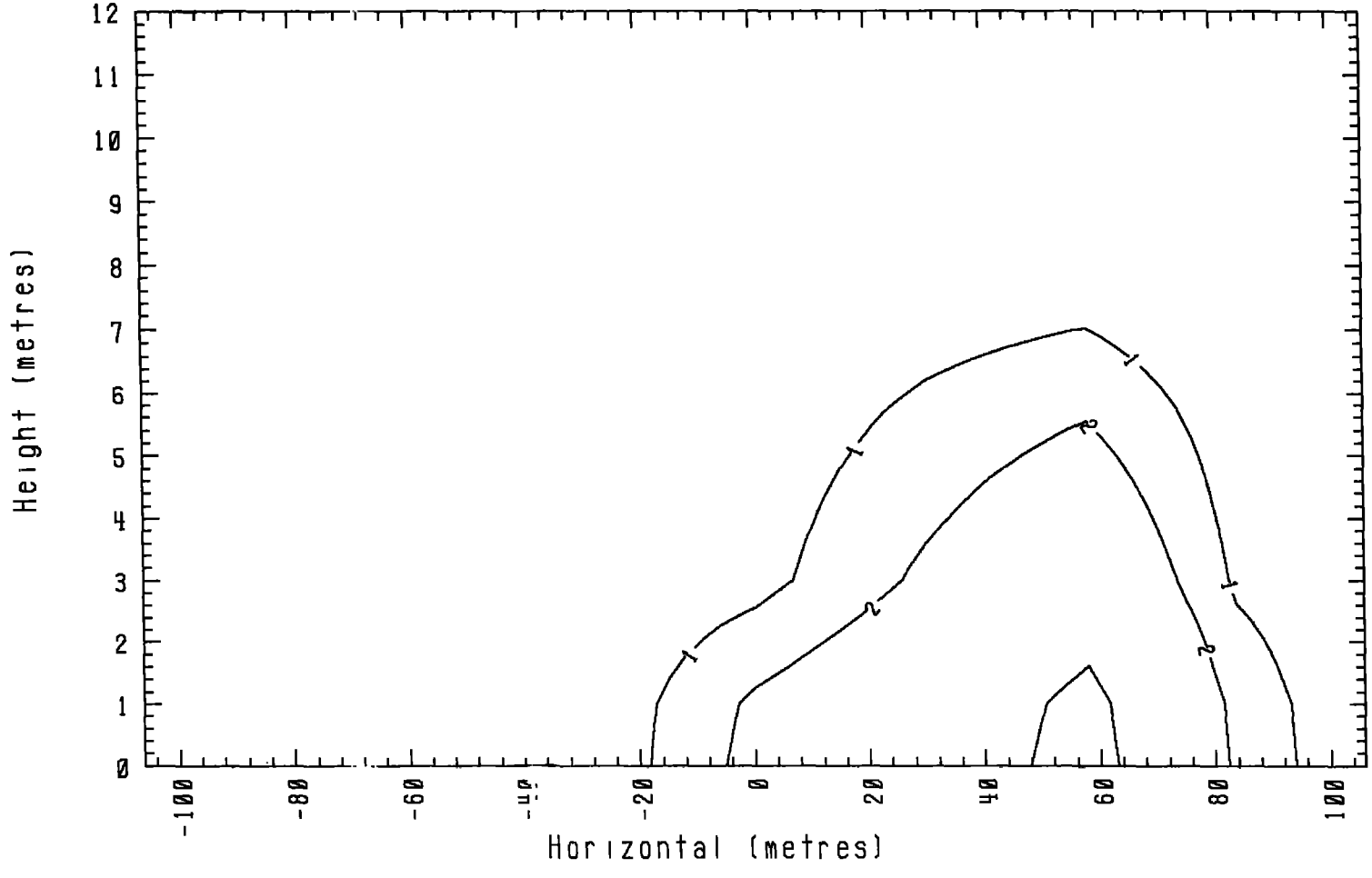


Coyote 6 LGF 81 Contours:

Time = 40 sec 140m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
10/10/83 11:26:16

Vertical Concentration Contours

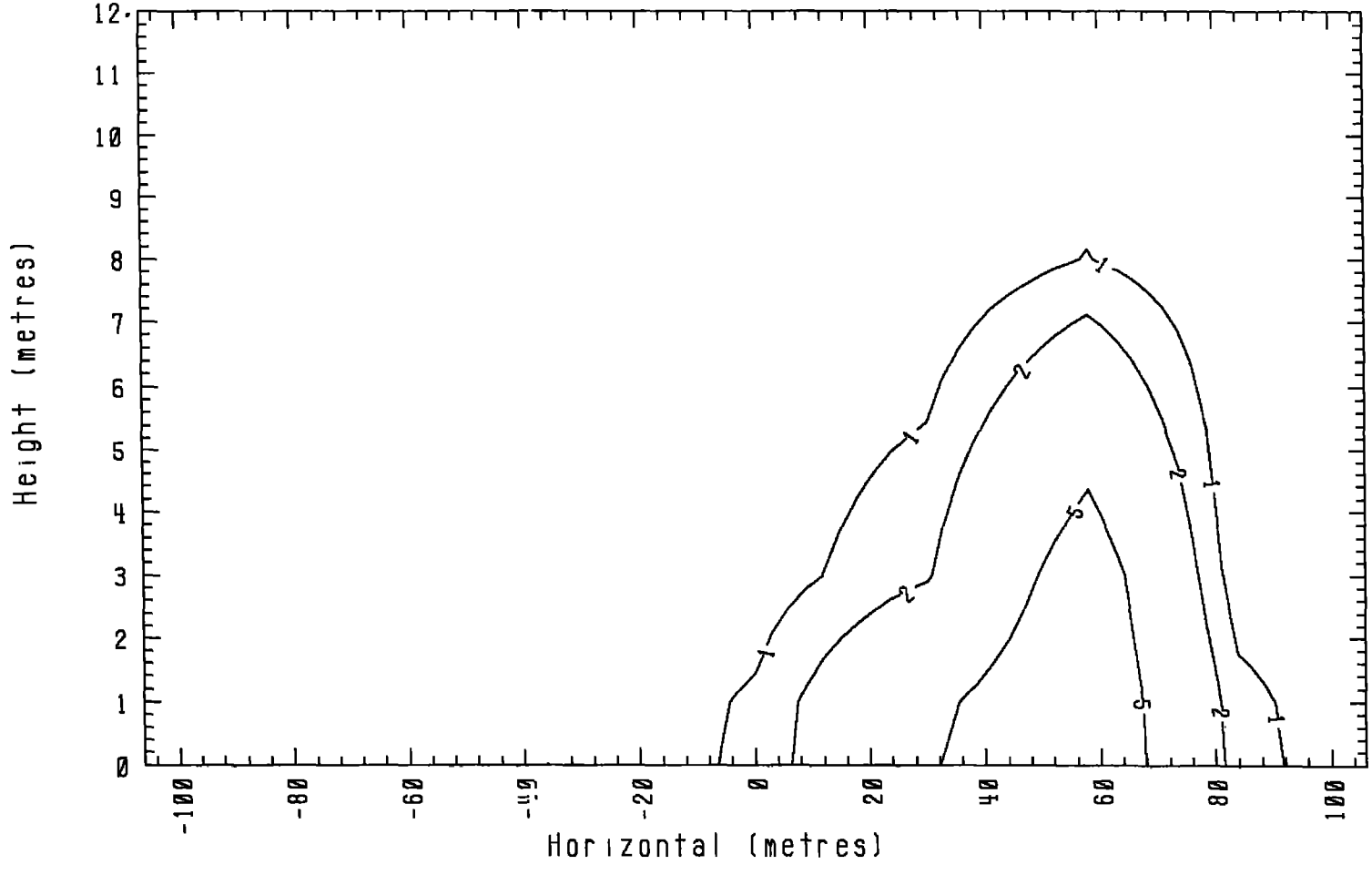


Coyote 6 LGF 81 Contours:

Time = 50 sec 1-10m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
10/18/83 11:26:16

Vertical Concentration Contours



Coyote 6 LGF 81

Time = 60 sec

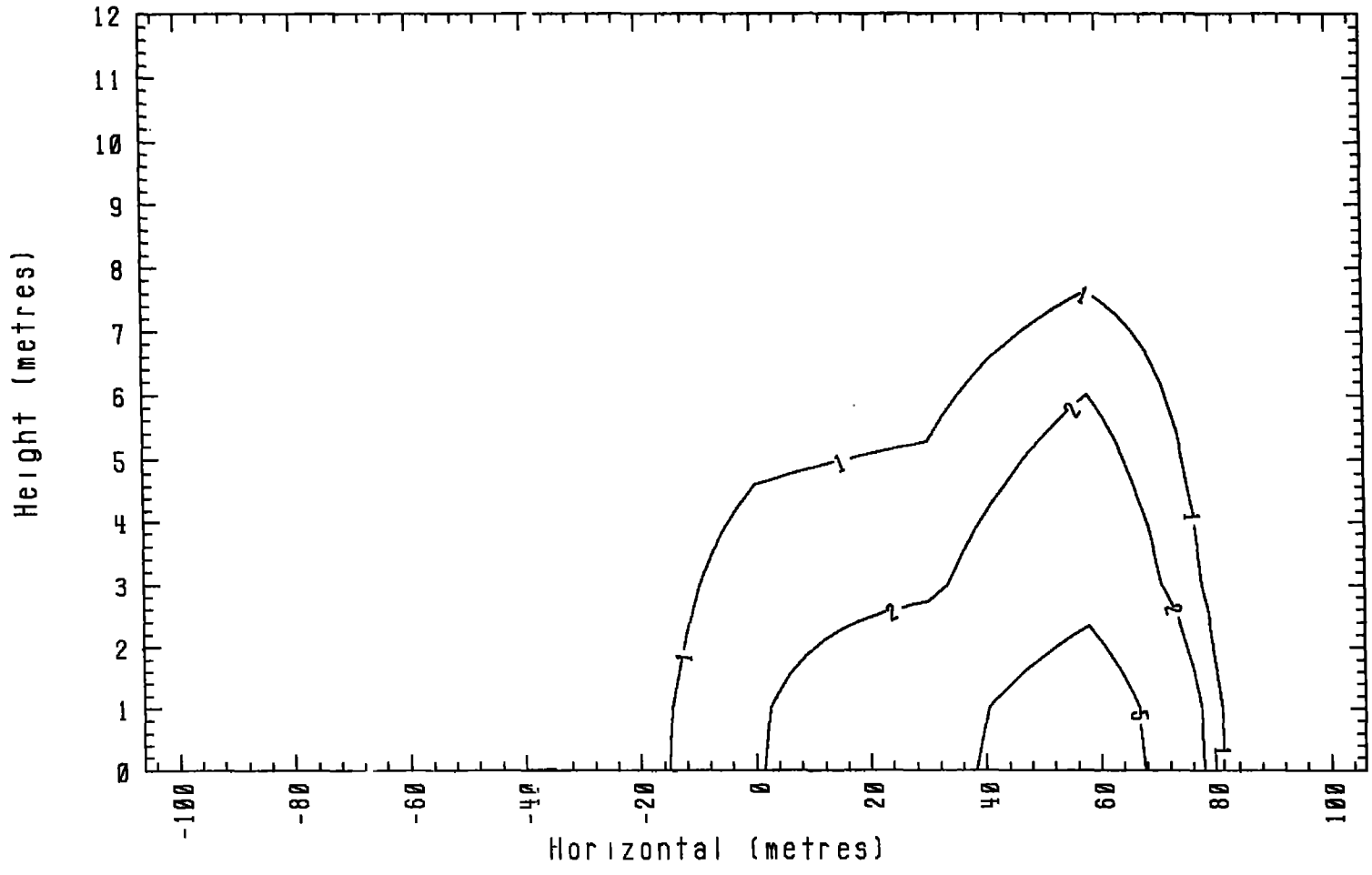
10m row

Contours:

1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
10/18/83 11:26:16

Vertical Concentration Contours

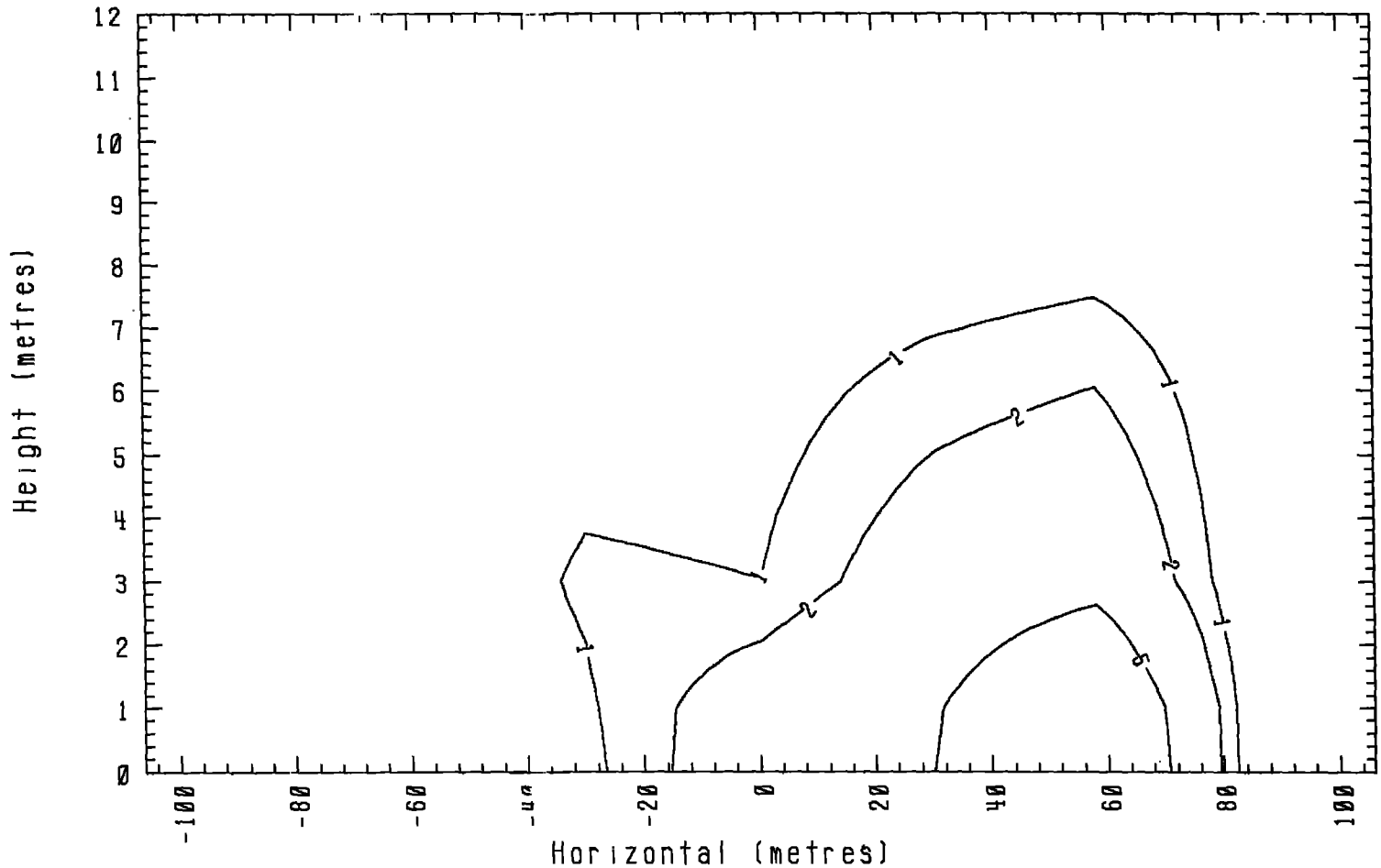


Coyote 6 LGF 81 Contours:

Time = 70 sec 140m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
10/10/83 11:26:16

Vertical Concentration Contours

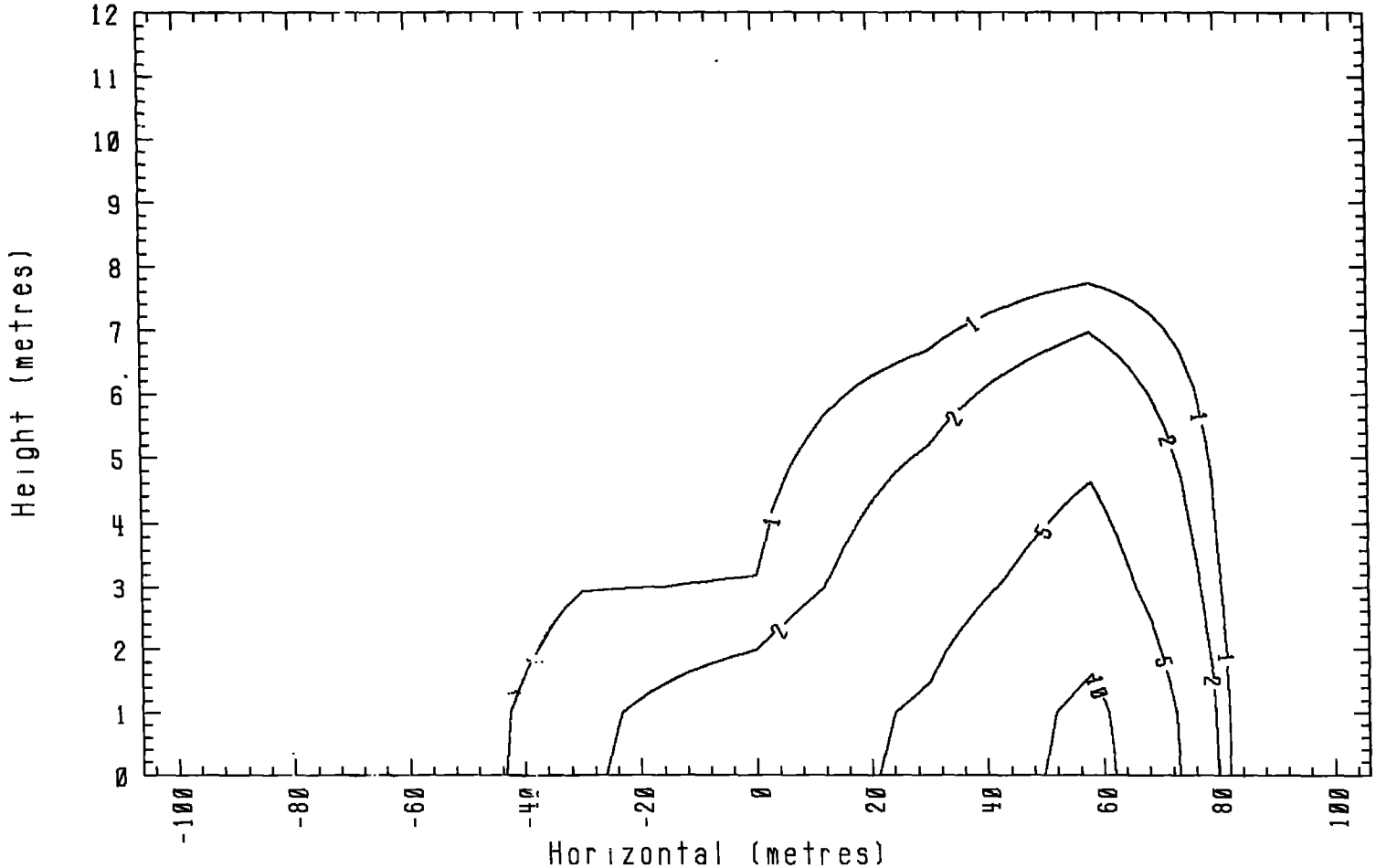


Coyote 6 LGF 81 Contours:

Time = 80 sec 10m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
10/18/83 11:26:16

Vertical Concentration Contours

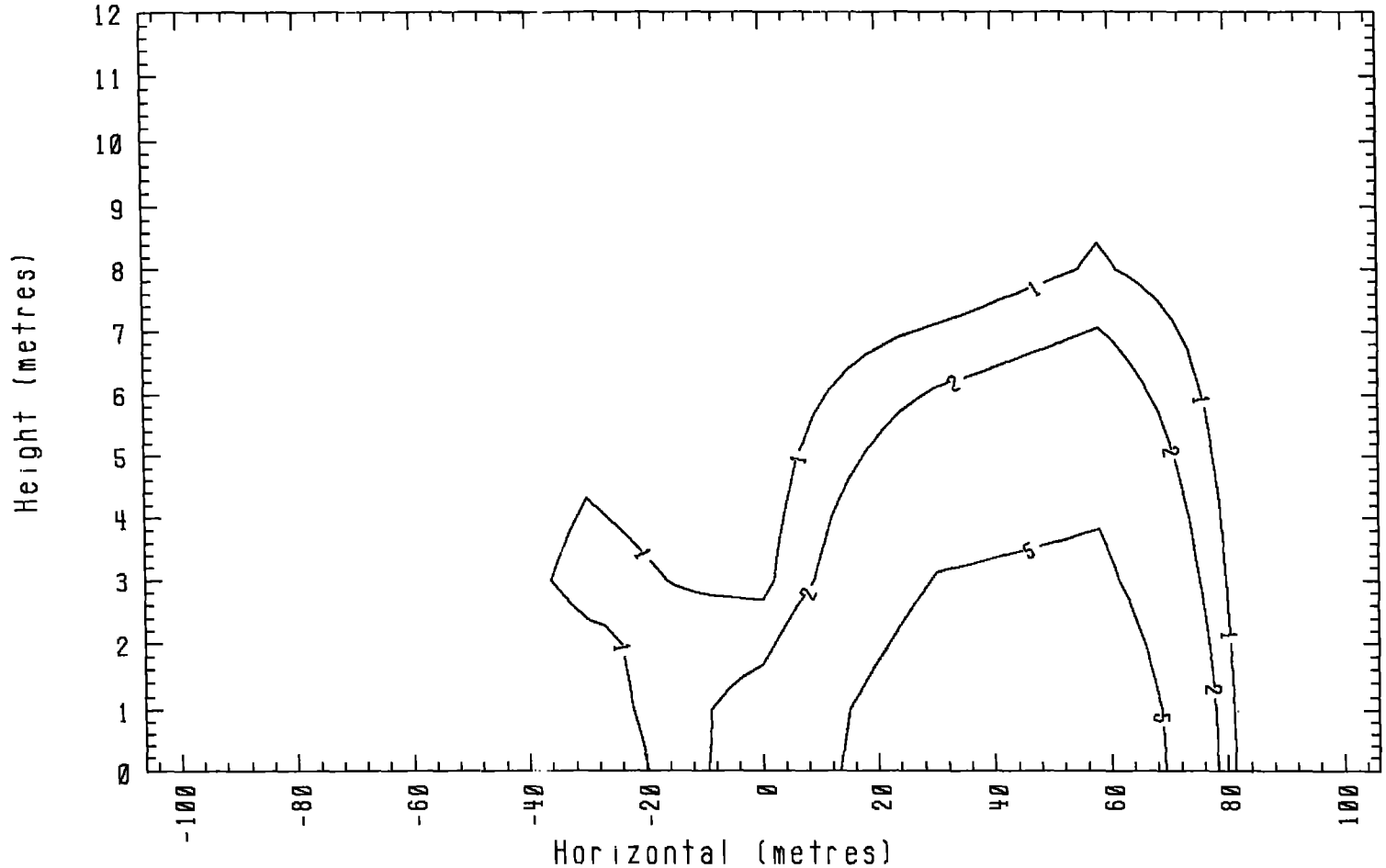


Coyote 6 LGF 81 Contours:

Time = 90 sec 140m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
10/18/83 11:26:16

Vertical Concentration Contours

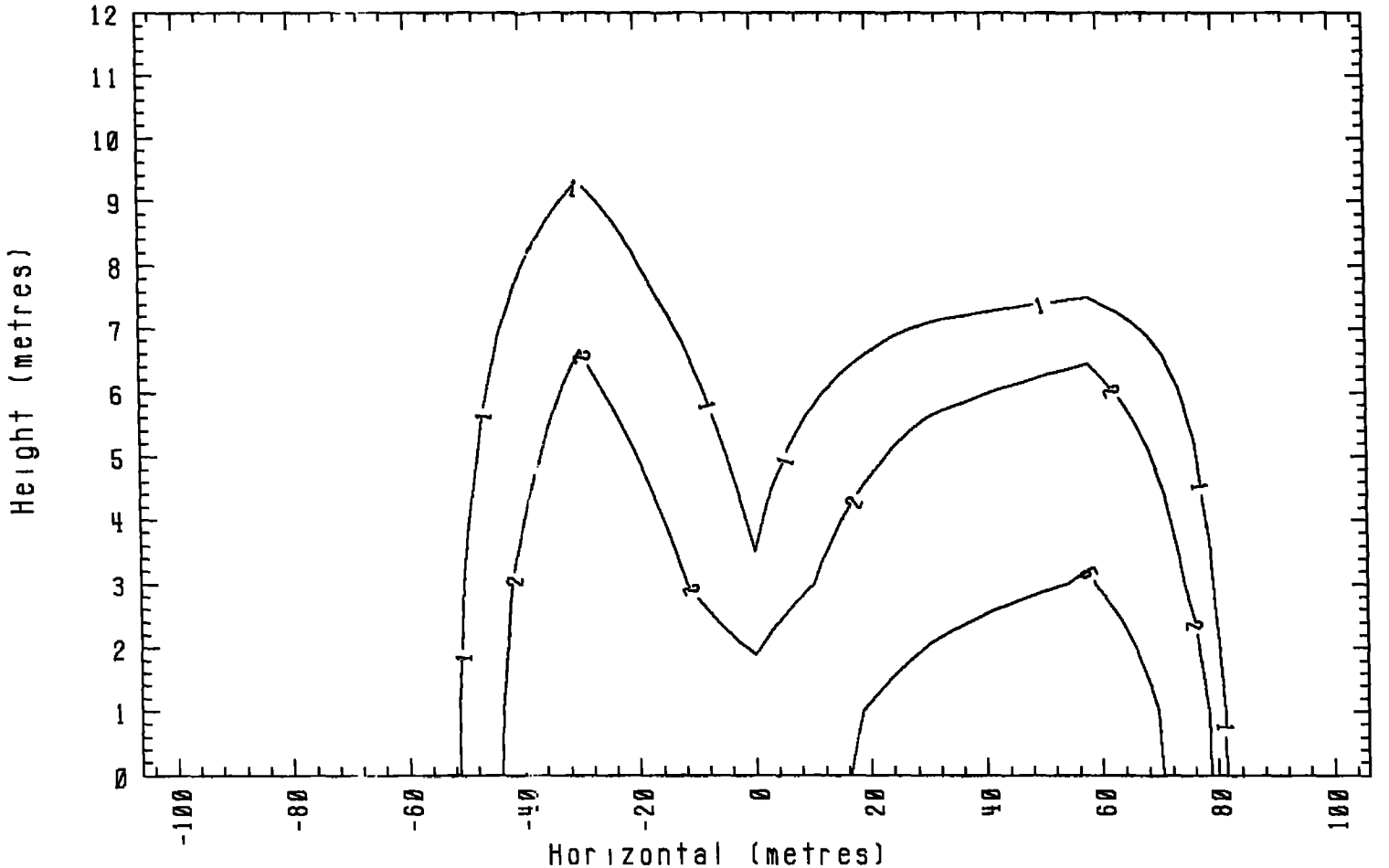


Coyote 6 LGF 81 Contours:

Time = 100 sec 140m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
10/18/83 11:26:16

Vertical Concentration Contours



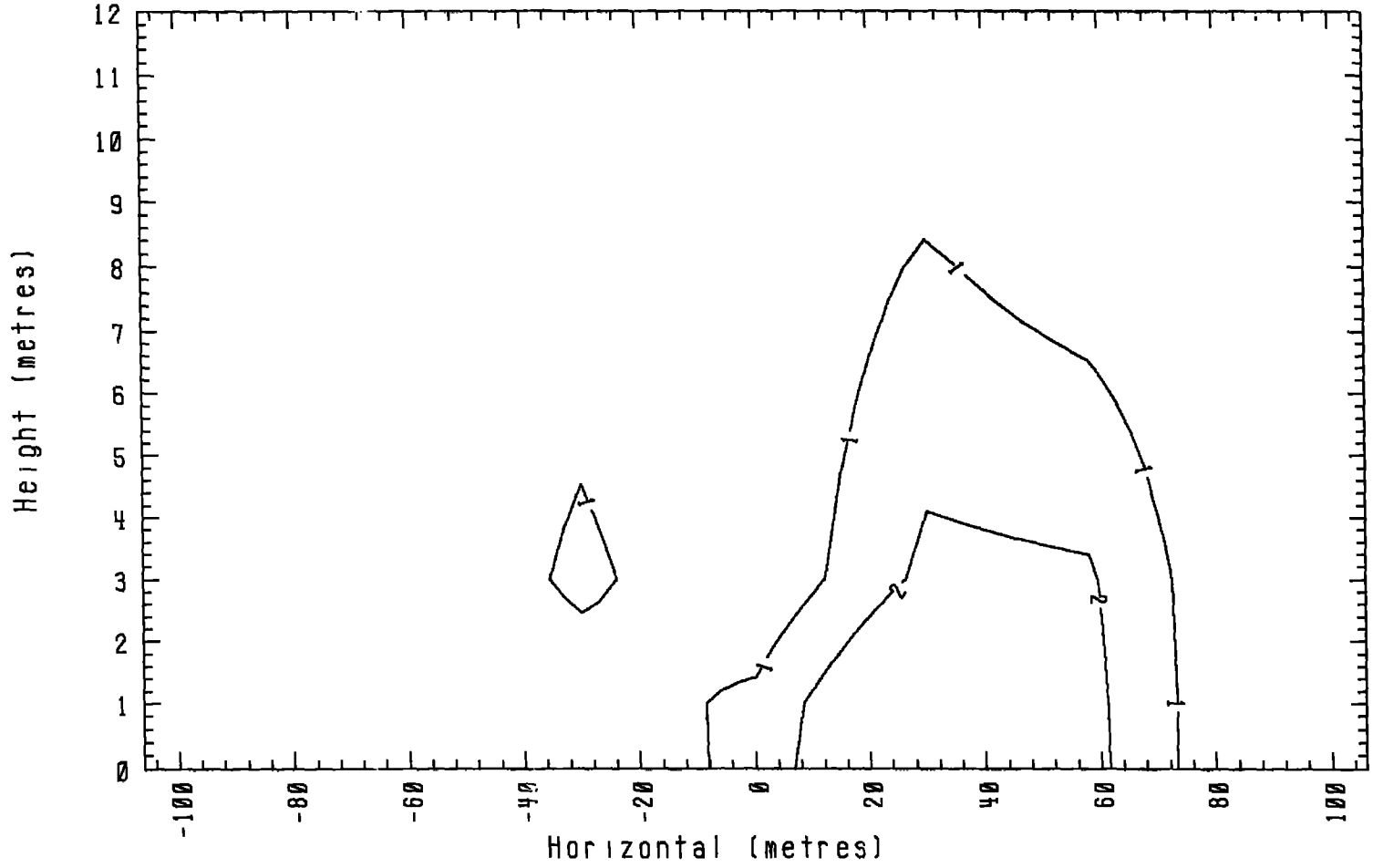
Coyote 6 LGF 81

Time = 110 sec 140m row

Contours:
1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
10/18/83 11:26:16

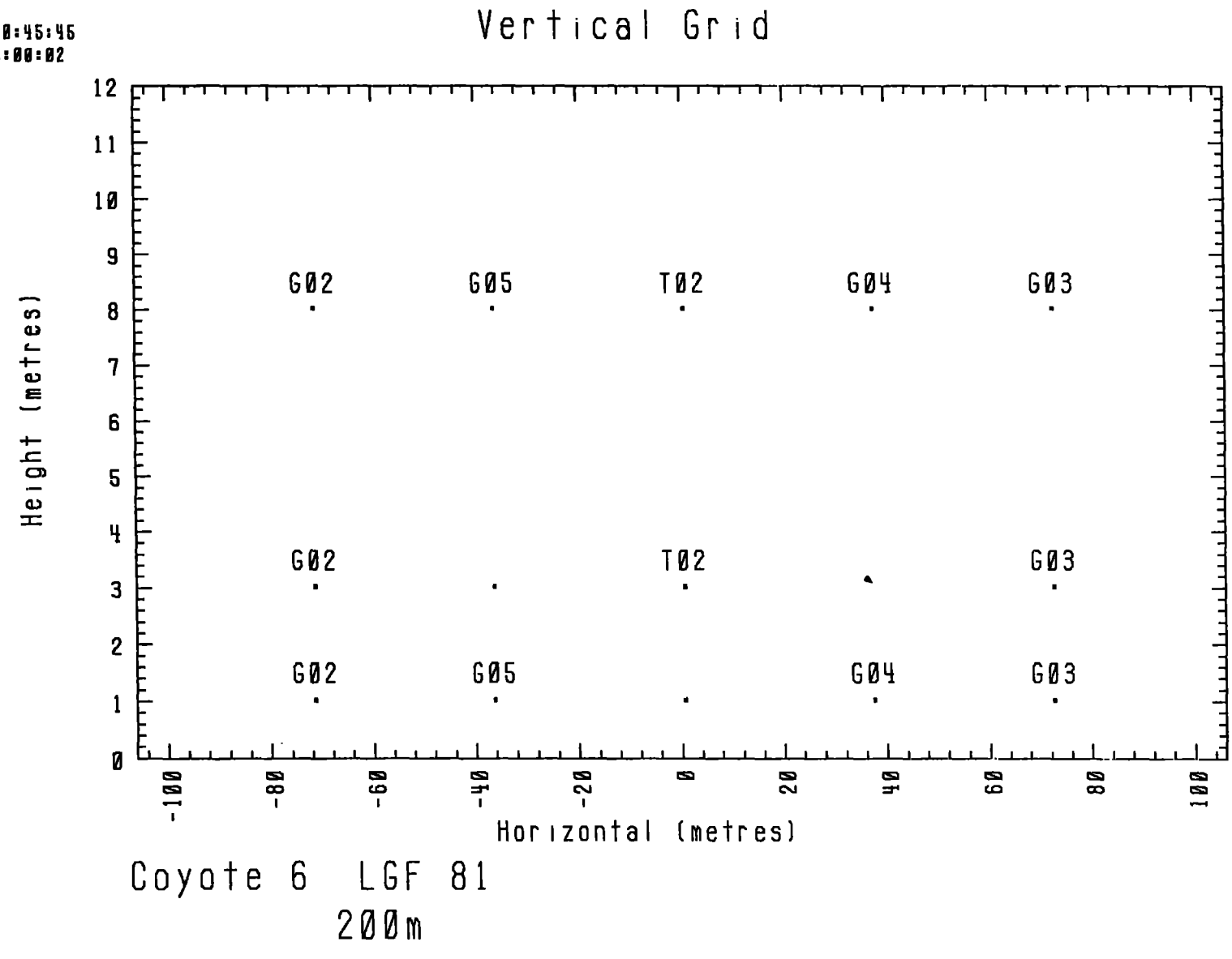
Vertical Concentration Contours



Coyote 6 LGF 81 Contours:

Time = 120 sec 140m row 1%,2%,5%,10%,15%,25%,35%

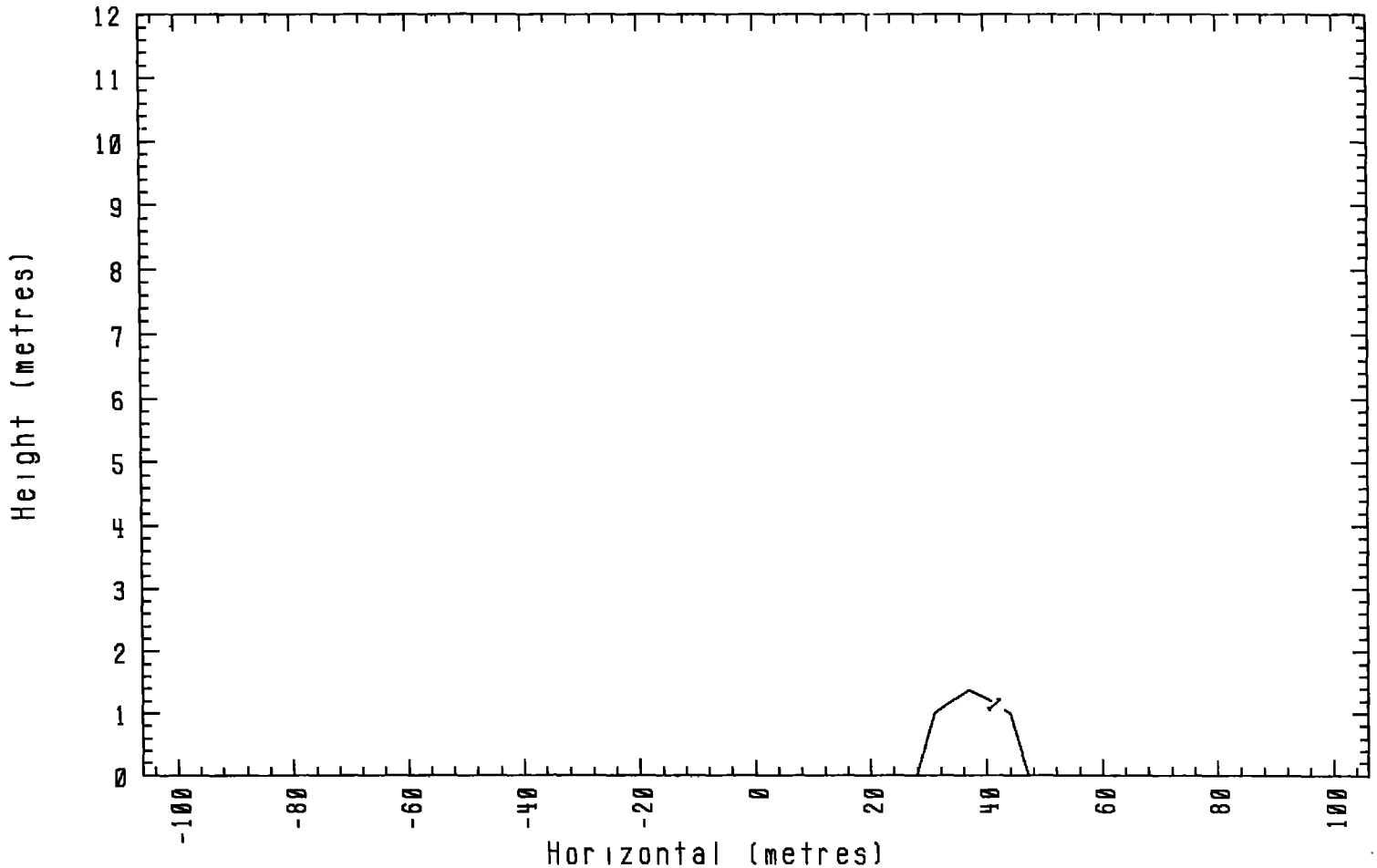
07/22/83u 10:45:45
08/09/83 16:00:02



Coyote 6 LGF 81
200m

07/22/83u 10:45:45
08/09/83 16:00:02

Vertical Concentration Contours

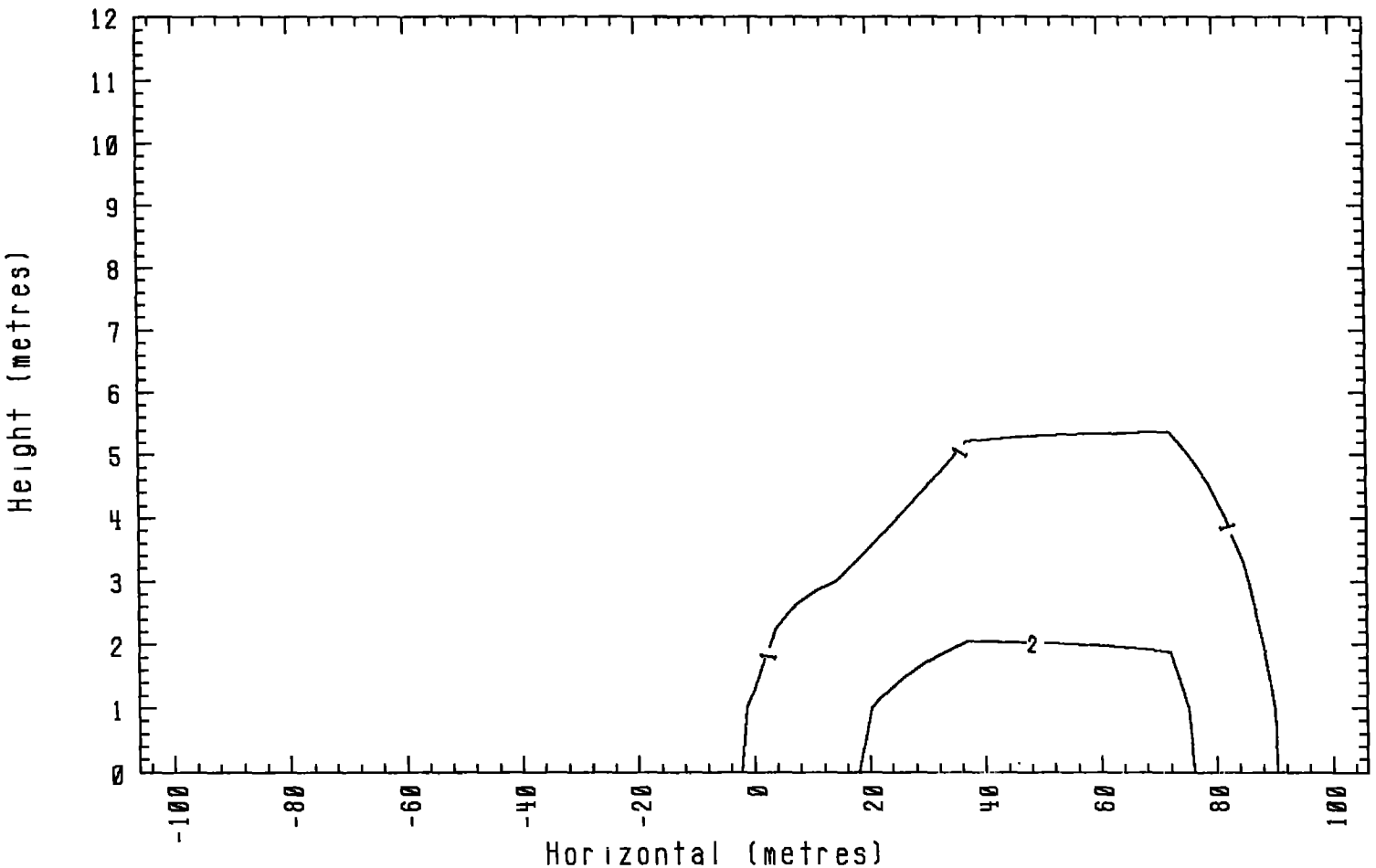


Coyote 6 LGF 81 Contours:

Time = 50 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/09/83 16:00:02

Vertical Concentration Contours

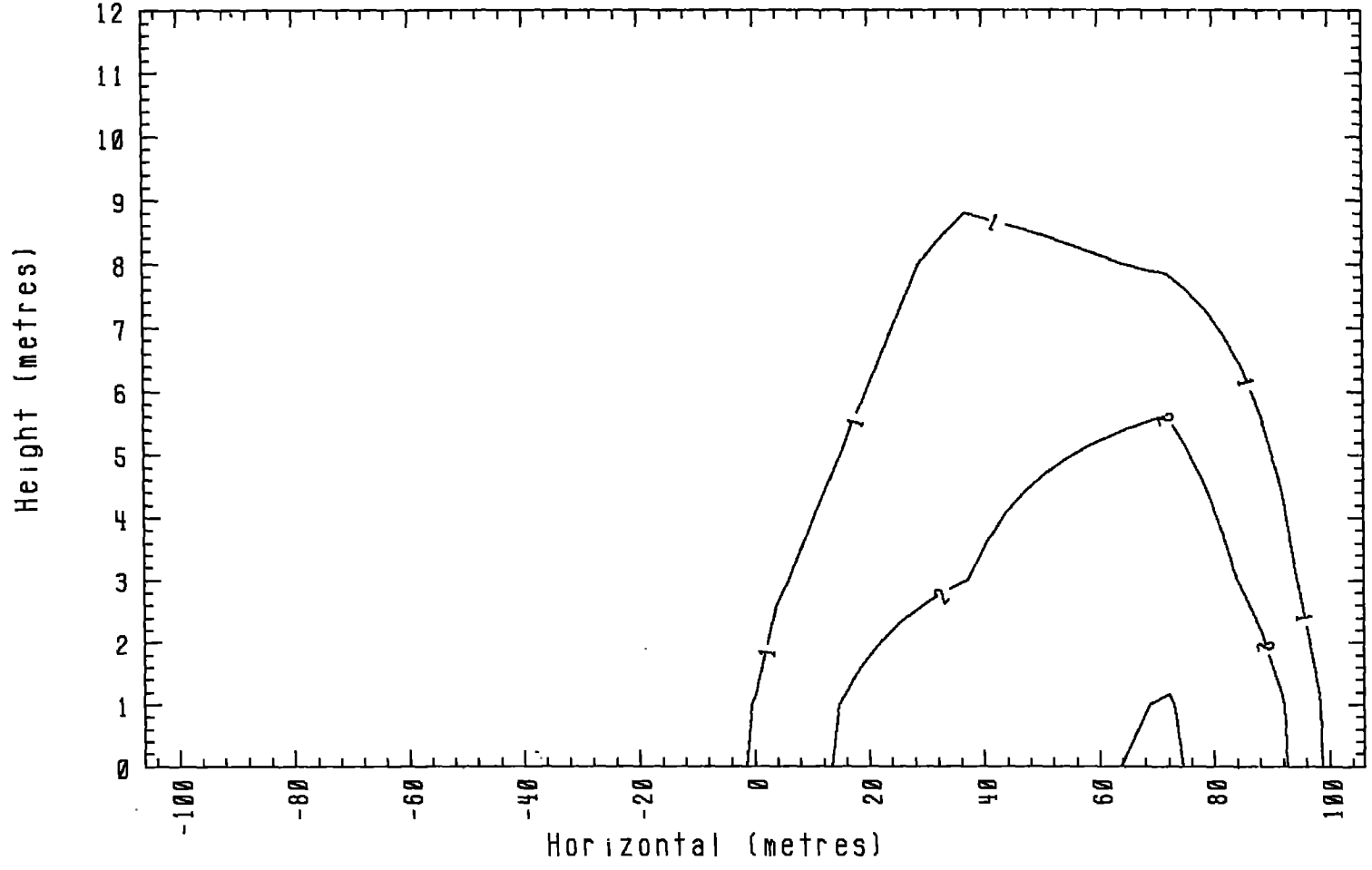


Coyote 6 LGF 81 Contours:

Time = 60 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/09/83 16:00:02

Vertical Concentration Contours

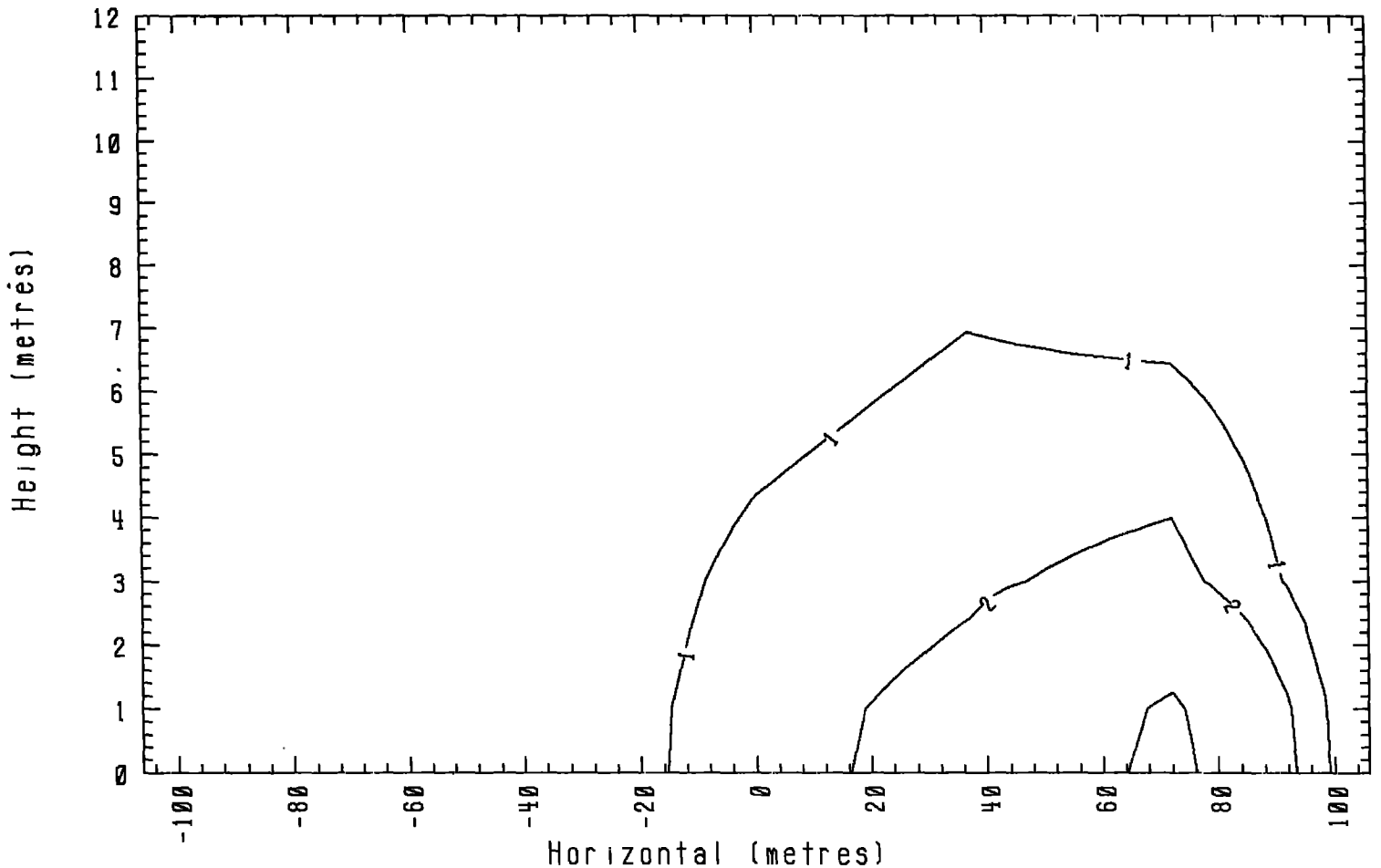


Coyote 6 LGF 81 Contours:

Time = 70 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/09/83 16:00:02

Vertical Concentration Contours



Coyote 6 LGF 81

Time = 80 sec

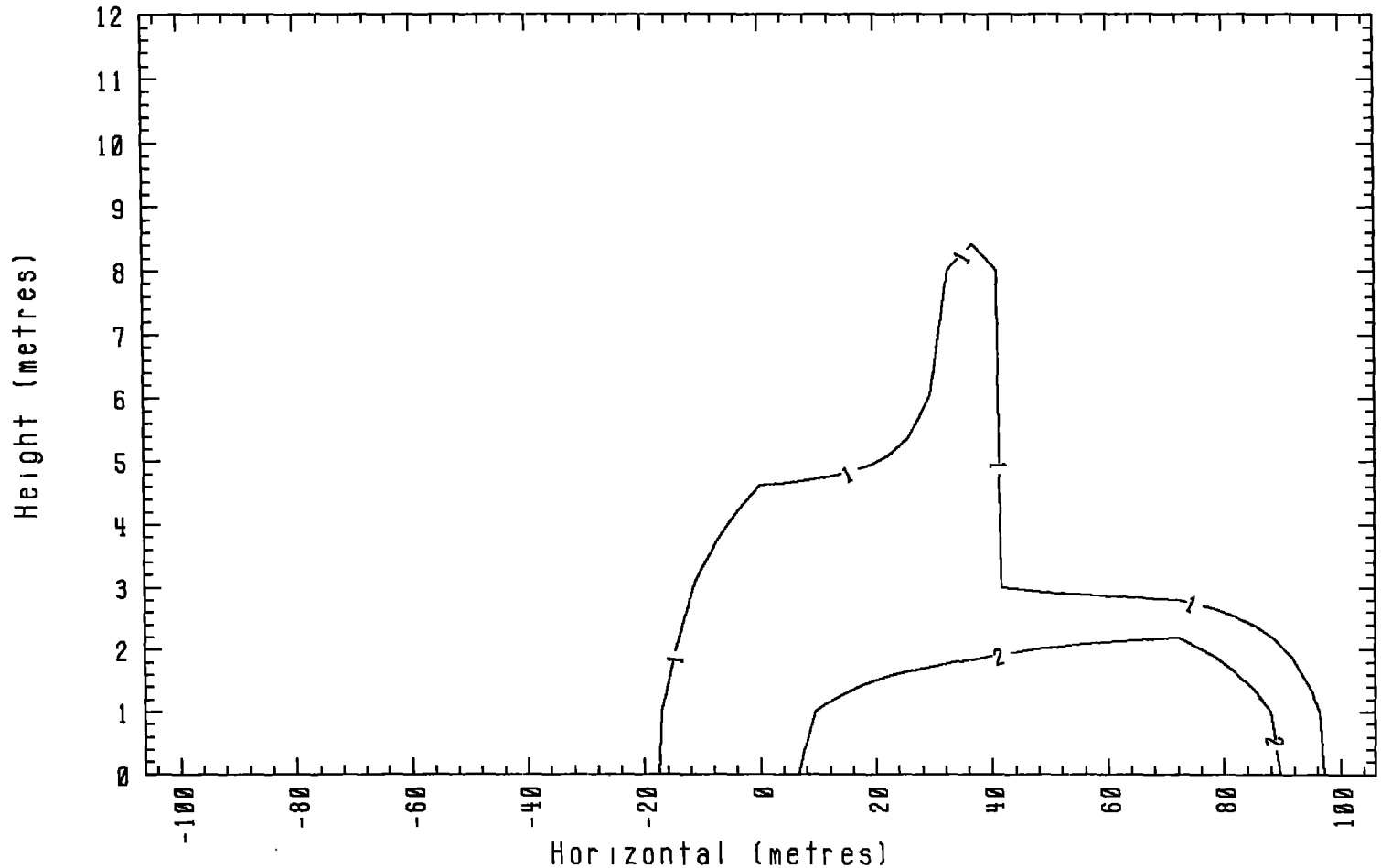
200m row

Contours:

1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/09/83 16:00:02

Vertical Concentration Contours

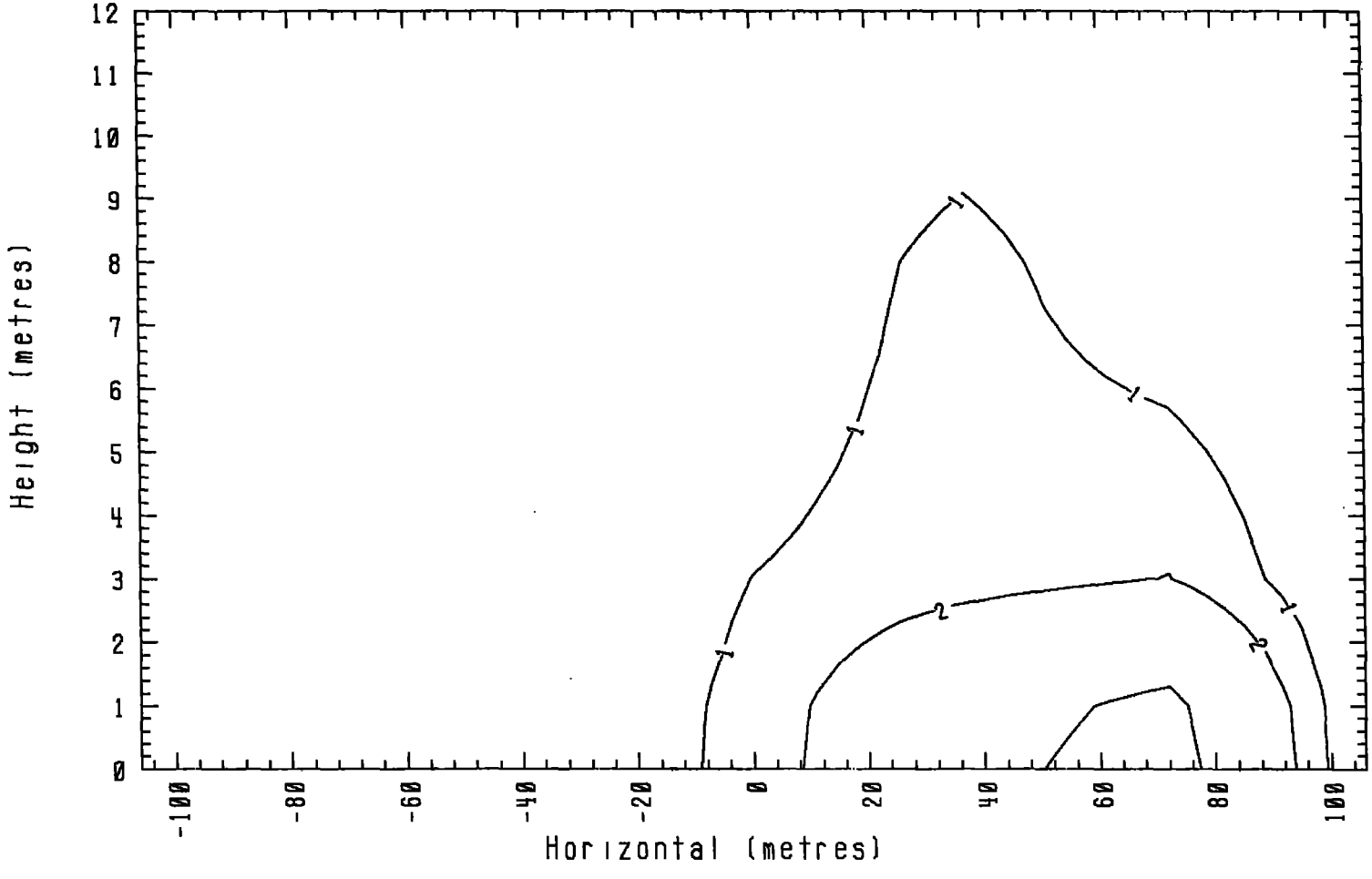


Coyote 6 LGF 81 Contours:

Time = 90 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/09/83 16:00:02

Vertical Concentration Contours

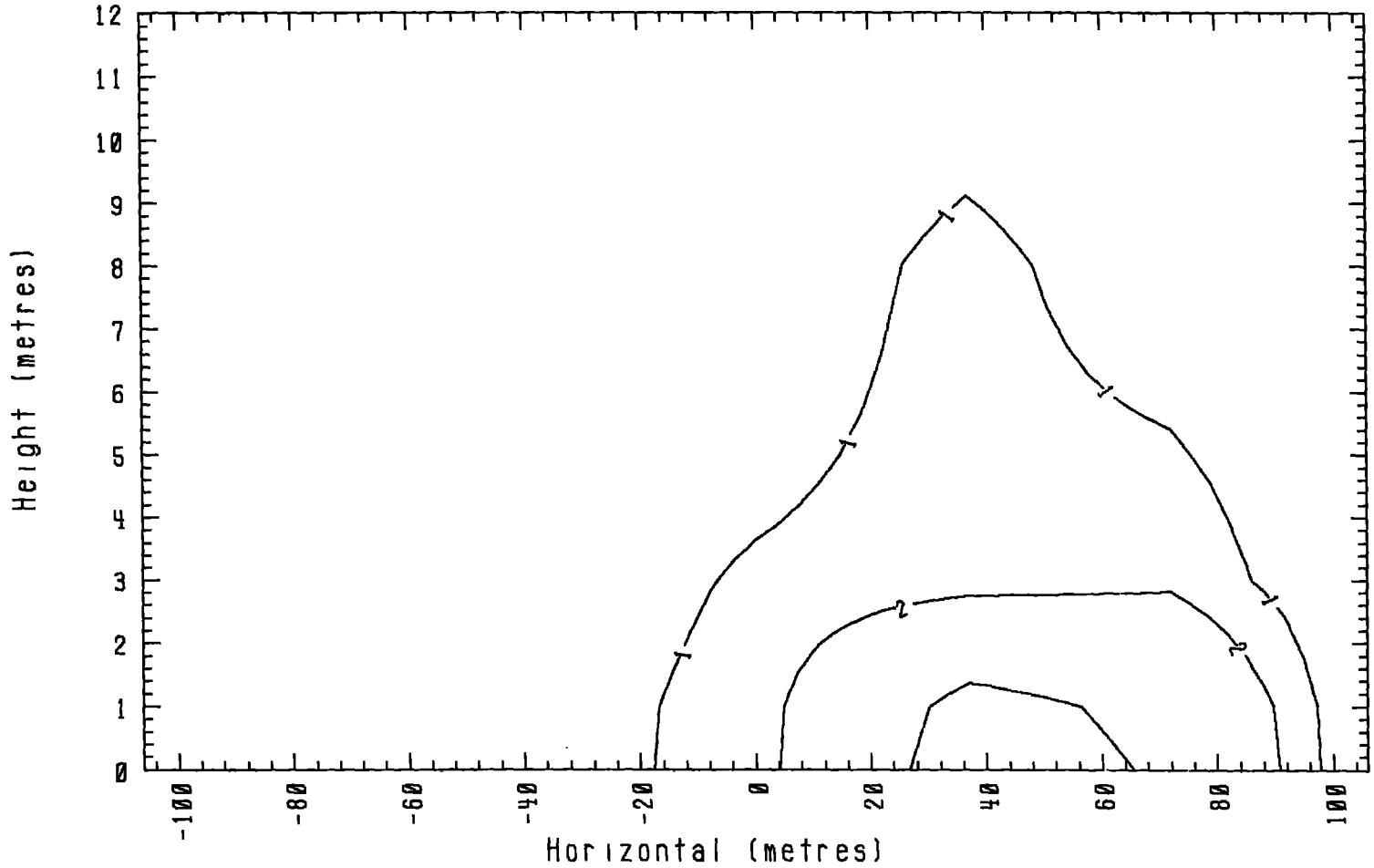


Coyote 6 LGF 81 Contours:

Time = 100 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/09/83 16:00:02

Vertical Concentration Contours

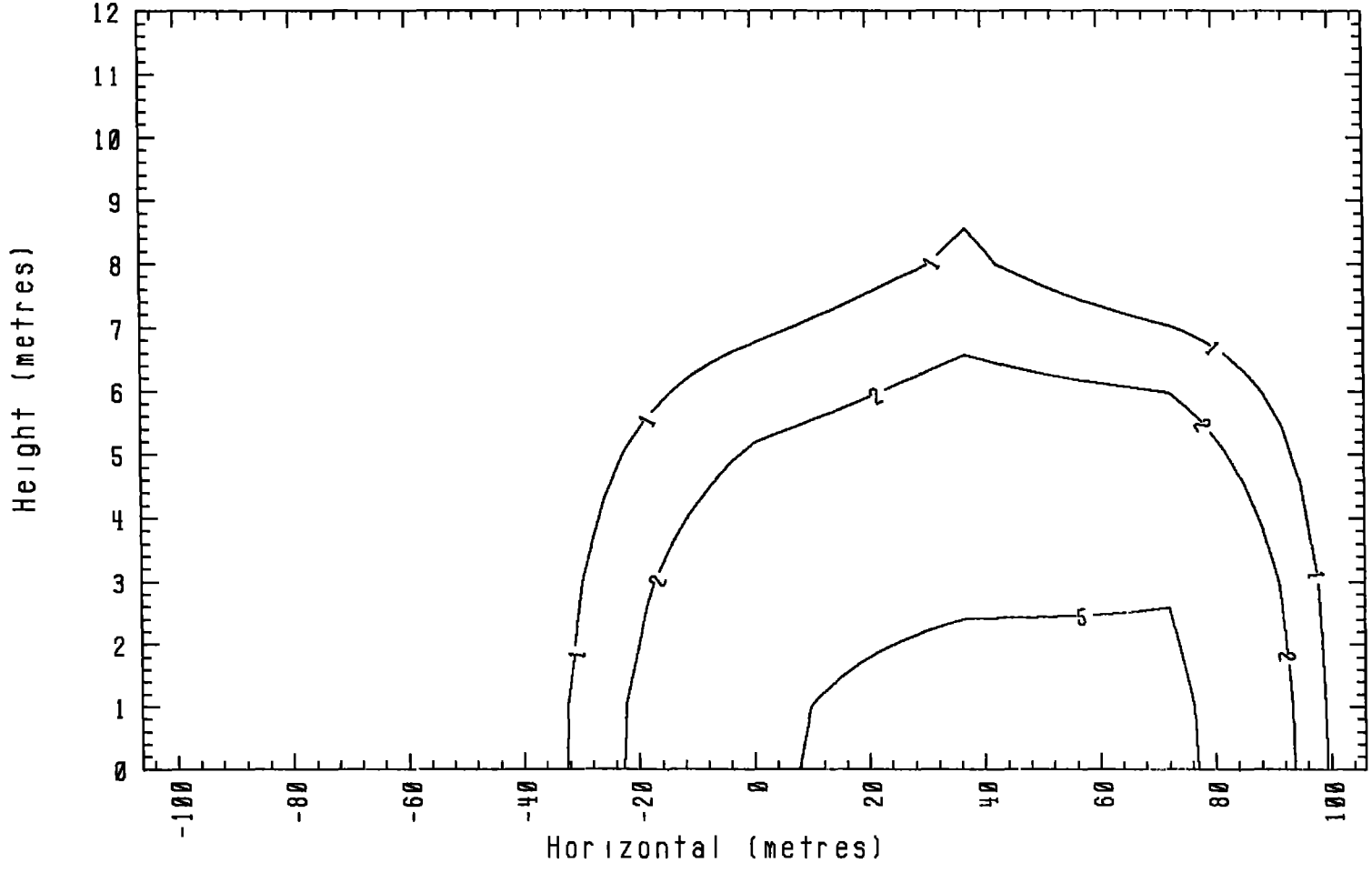


Coyote 6 LGF 81 Contours:

Time = 110 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/09/83 16:00:02

Vertical Concentration Contours

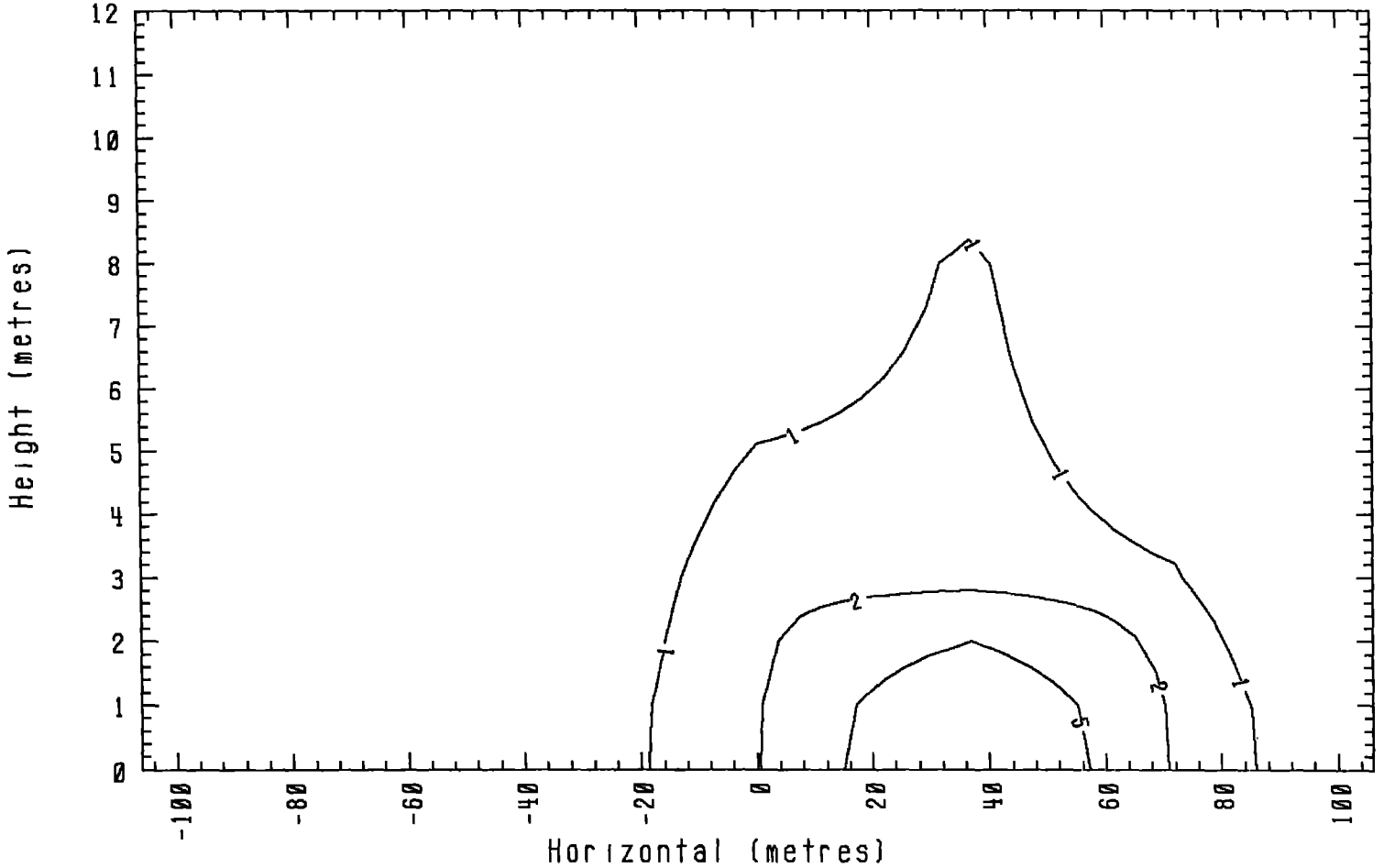


Coyote 6 LGF 81 Contours:

Time = 120 sec 200m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/09/83 16:00:02

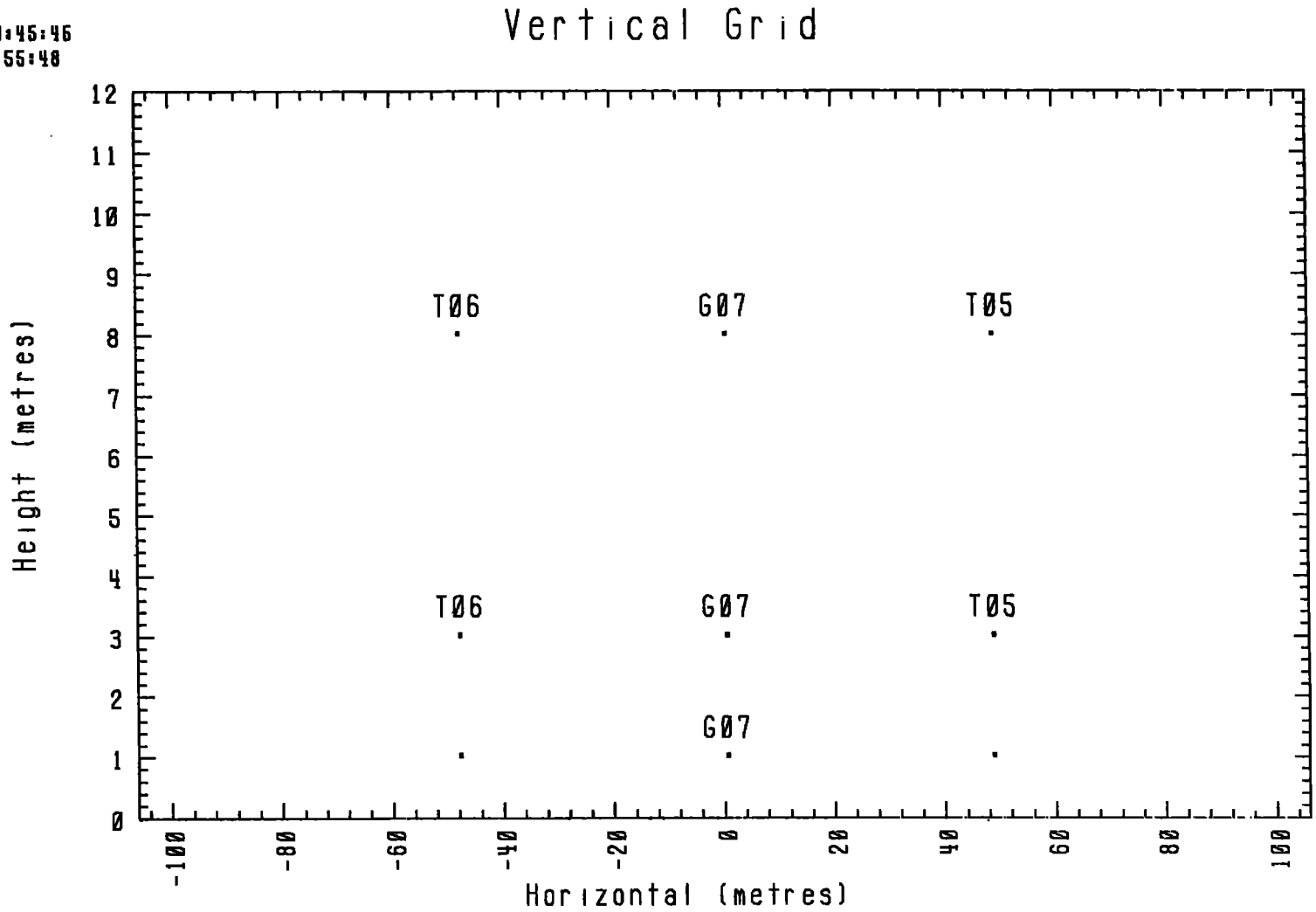
Vertical Concentration Contours



Coyote 6 LGF 81 Contours:

Time = 130 sec 200m row 1%,2%,5%,10%,15%,25%,35%

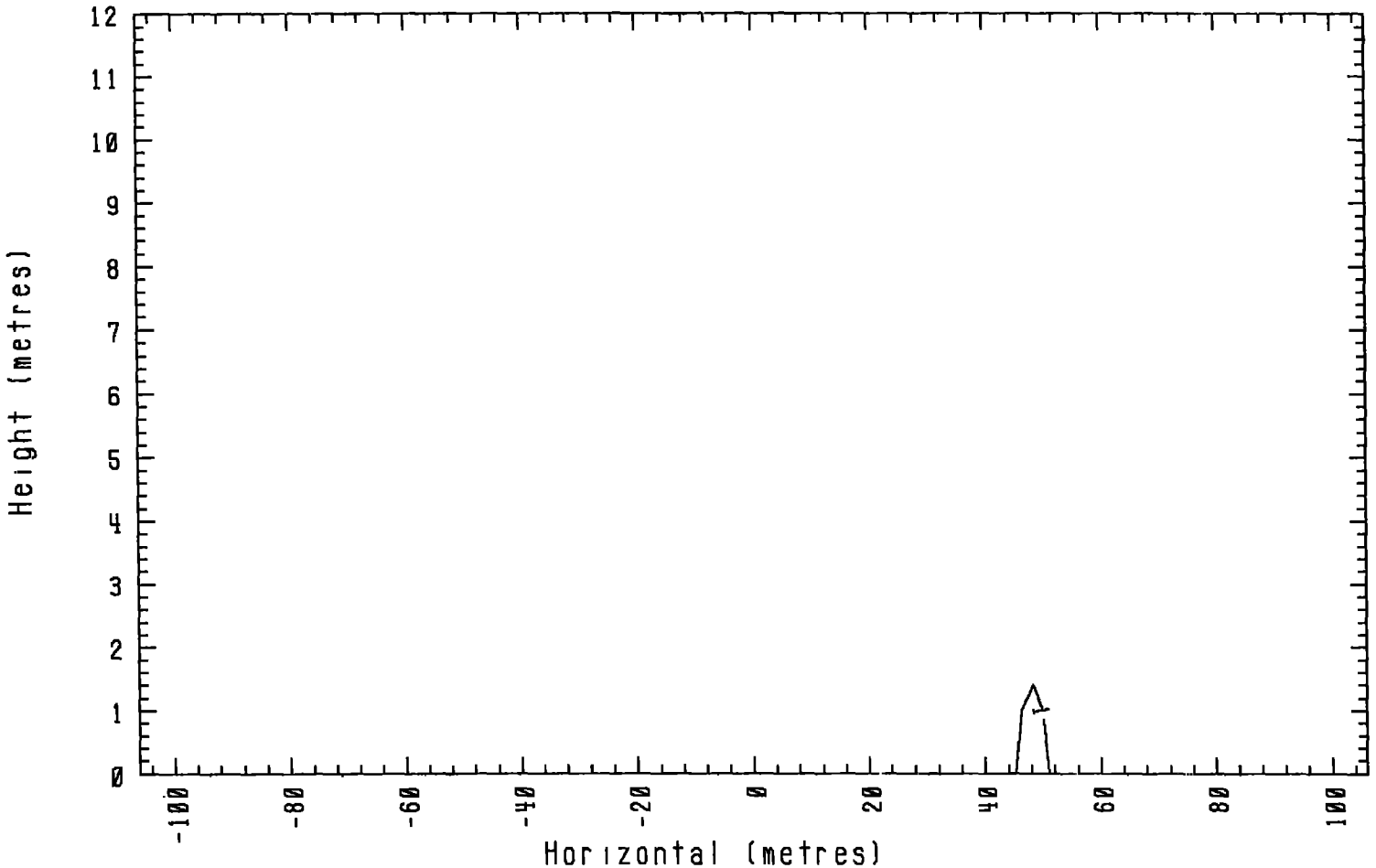
07/22/83u 10:45:46
08/09/83 15:55:48



Coyote 6 LGF 81
300m

07/22/83u 10:45:45
08/09/83 15:55:48

Vertical Concentration Contours

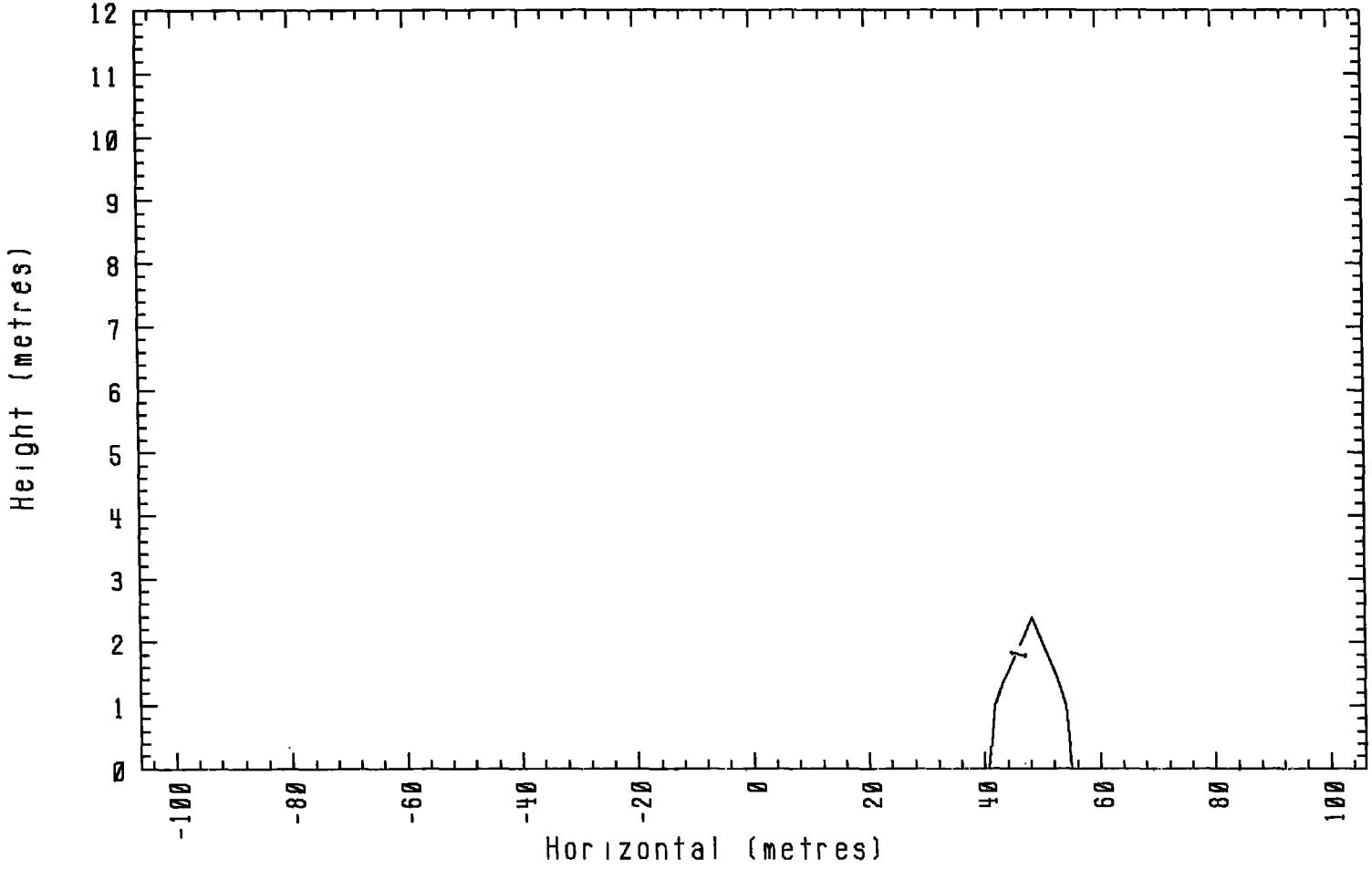


Coyote 6 LGF 81 Contours:

Time = 70 sec 300m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:46
08/09/83 15:55:48

Vertical Concentration Contours

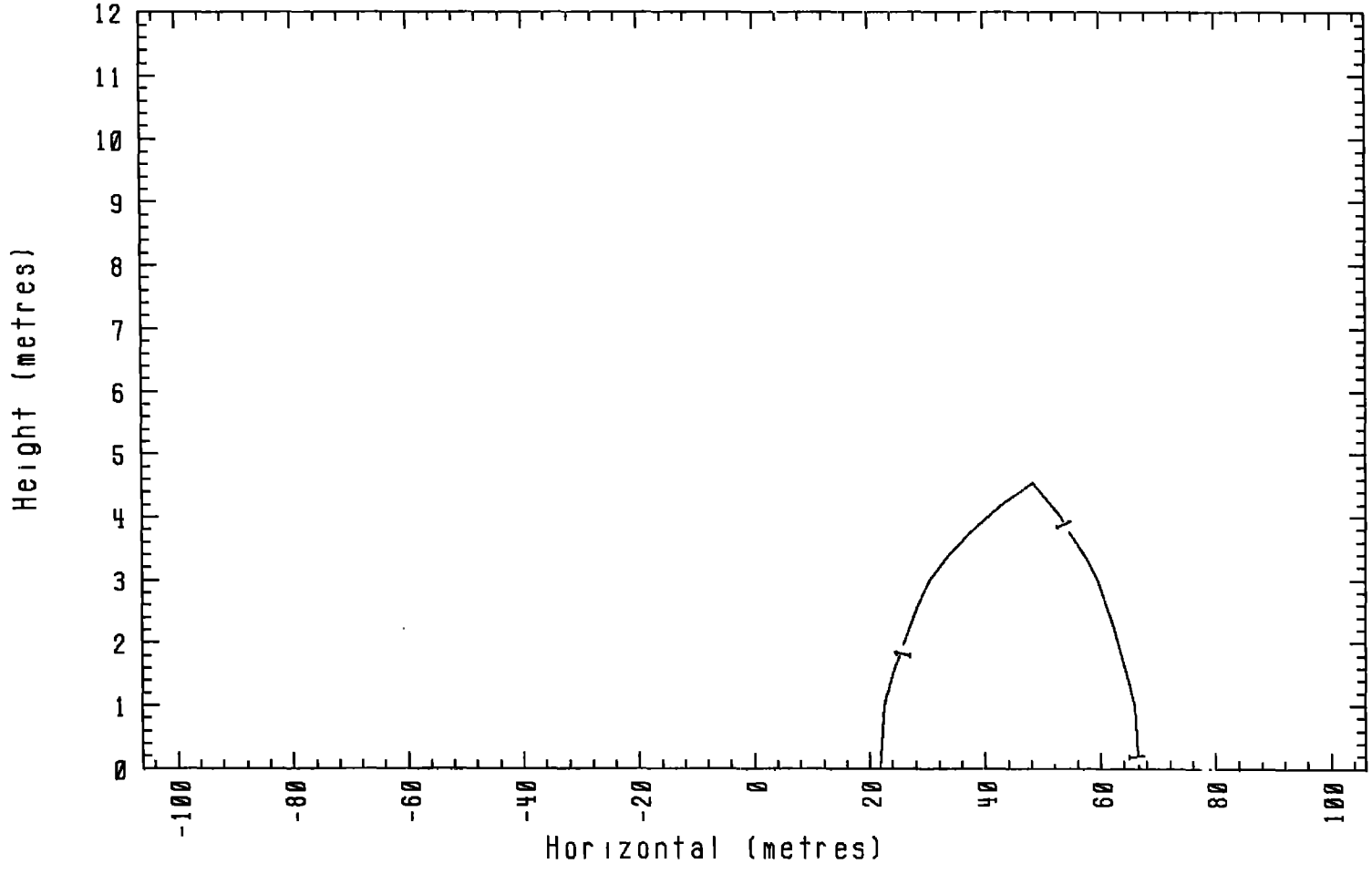


Coyote 6 LGF 81 Contours:

Time = 80 sec 300m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/09/83 15:55:48

Vertical Concentration Contours

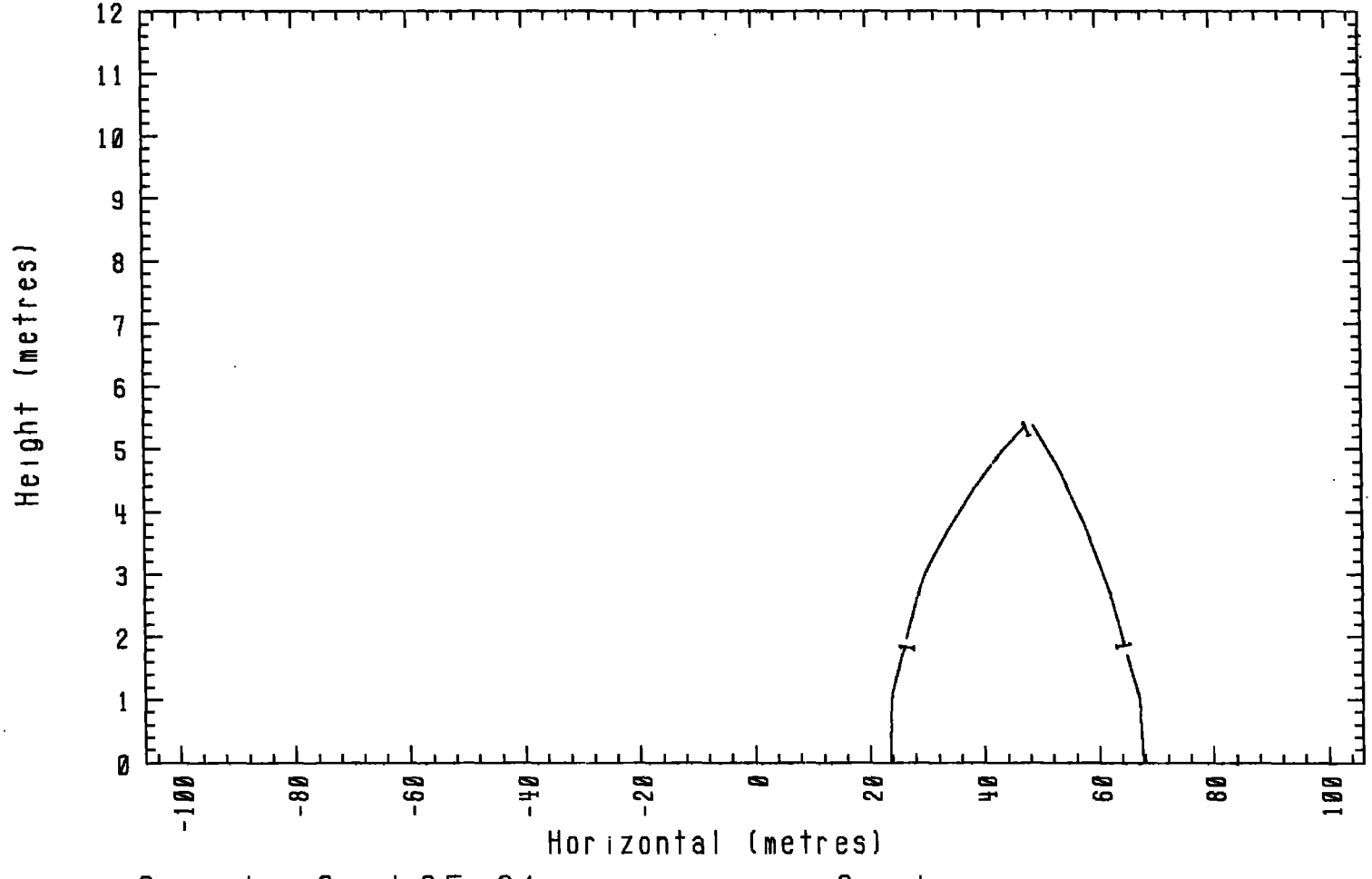


Coyote 6 LGF 81 Contours:

Time = 90 sec 300m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/09/83 15:55:48

Vertical Concentration Contours

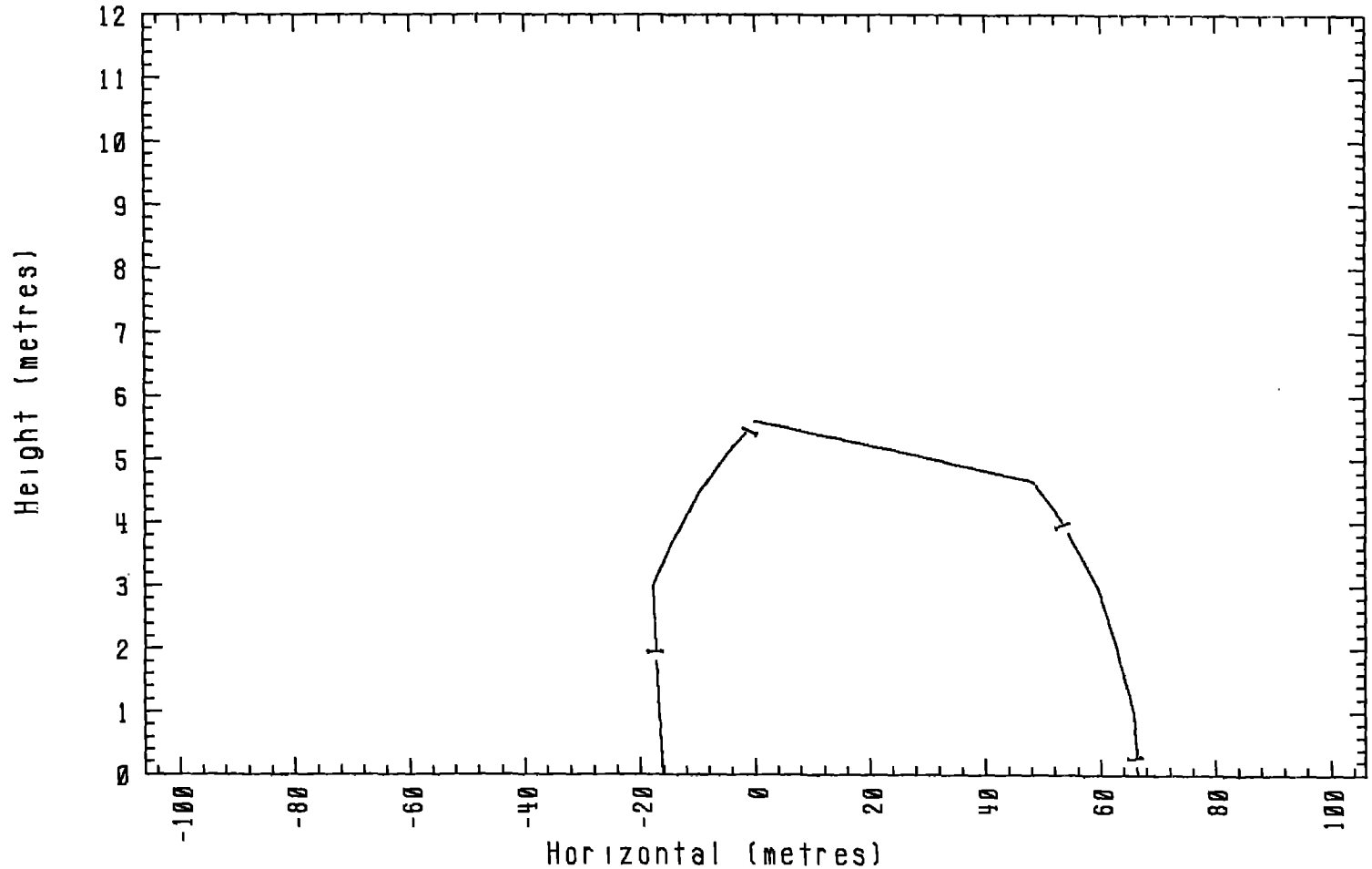


Coyote 6 LGF 81 Contours:

Time = 100 sec 300m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/09/83 15:55:48

Vertical Concentration Contours

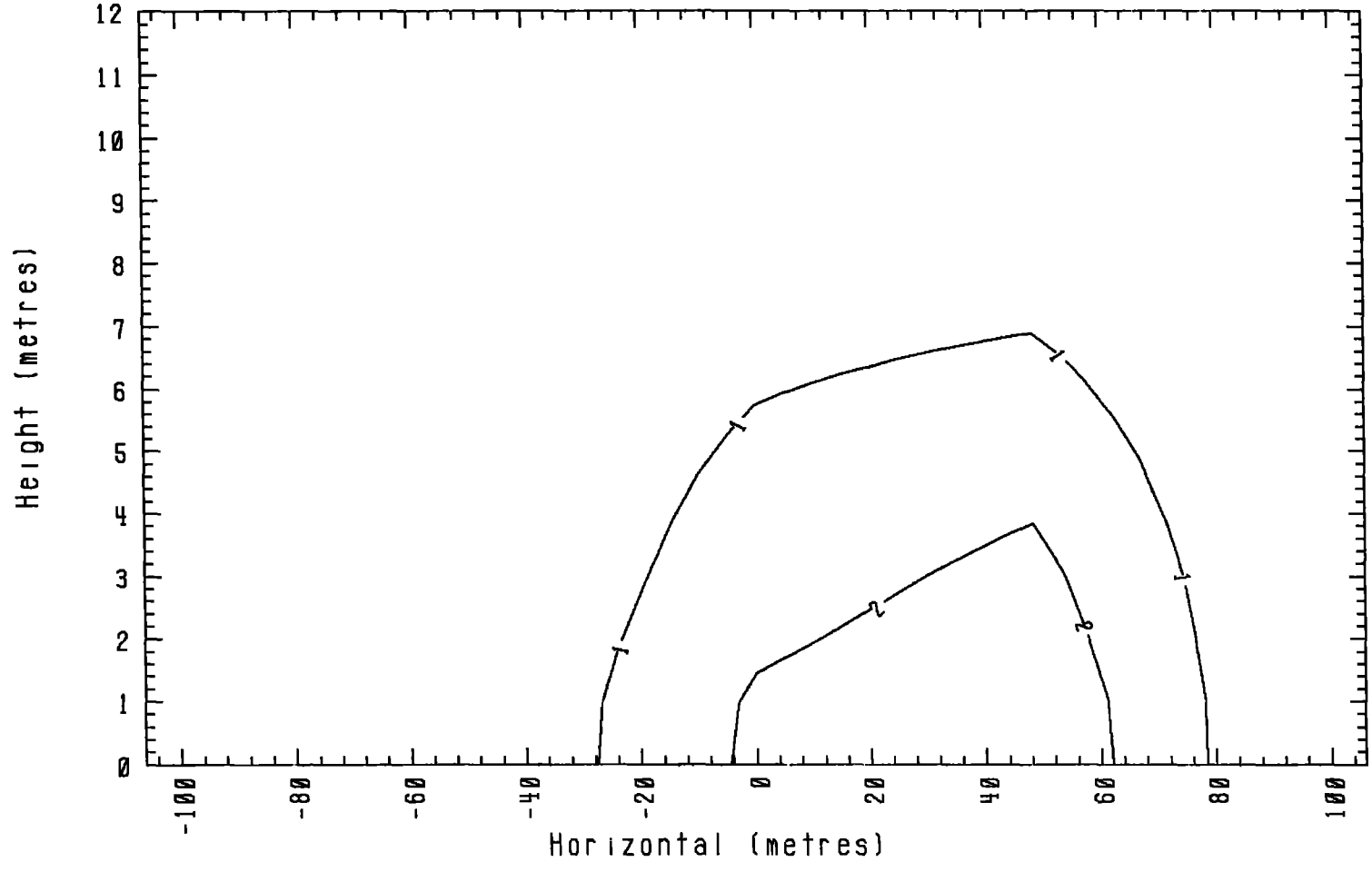


Coyote 6 LGF 81 Contours:

Time = 110 sec 300m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/09/83 15:55:48

Vertical Concentration Contours

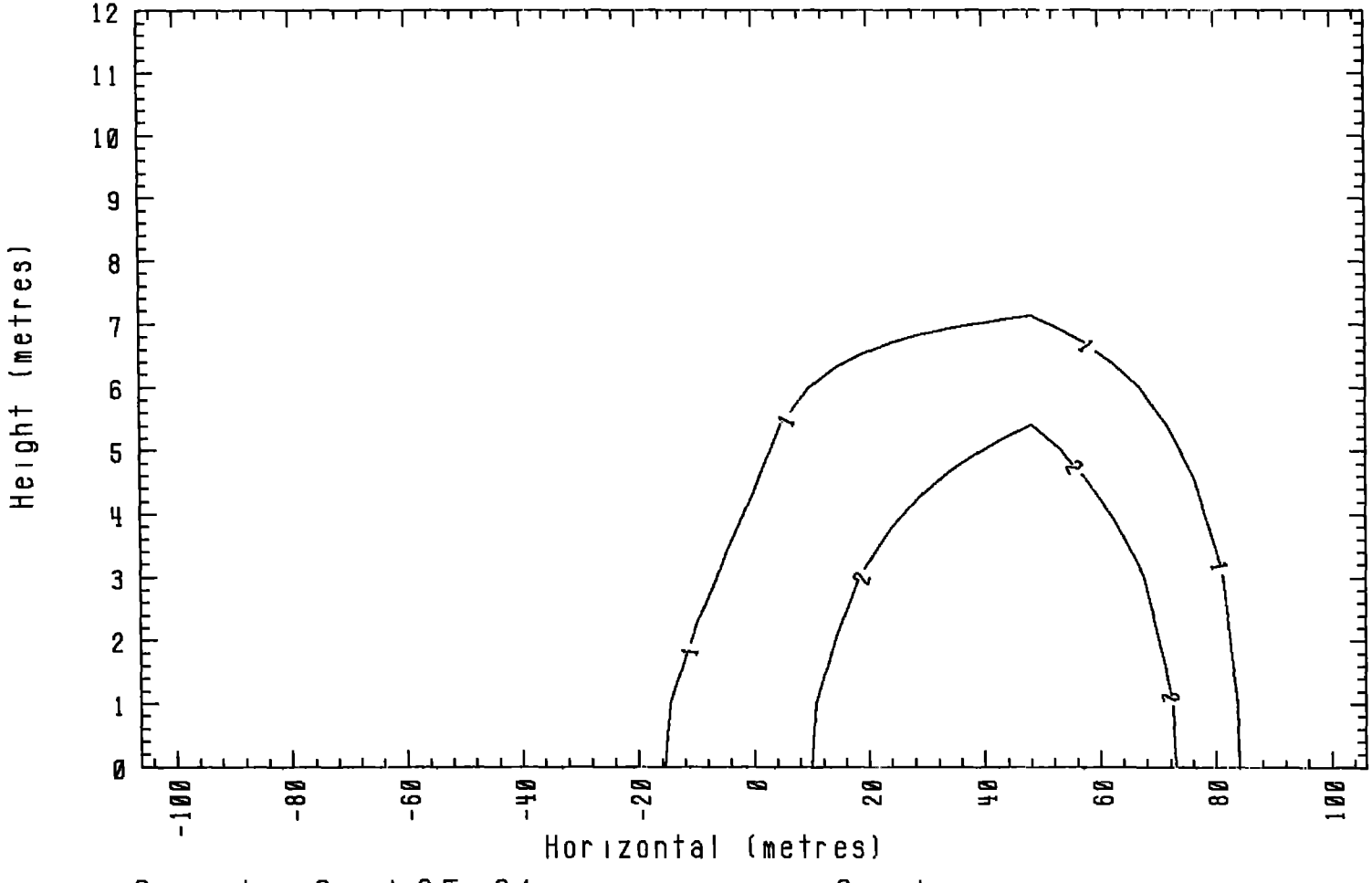


Coyote 6 LGF 81 Contours:

Time = 120 sec 300m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:46
08/09/83 15:55:48

Vertical Concentration Contours

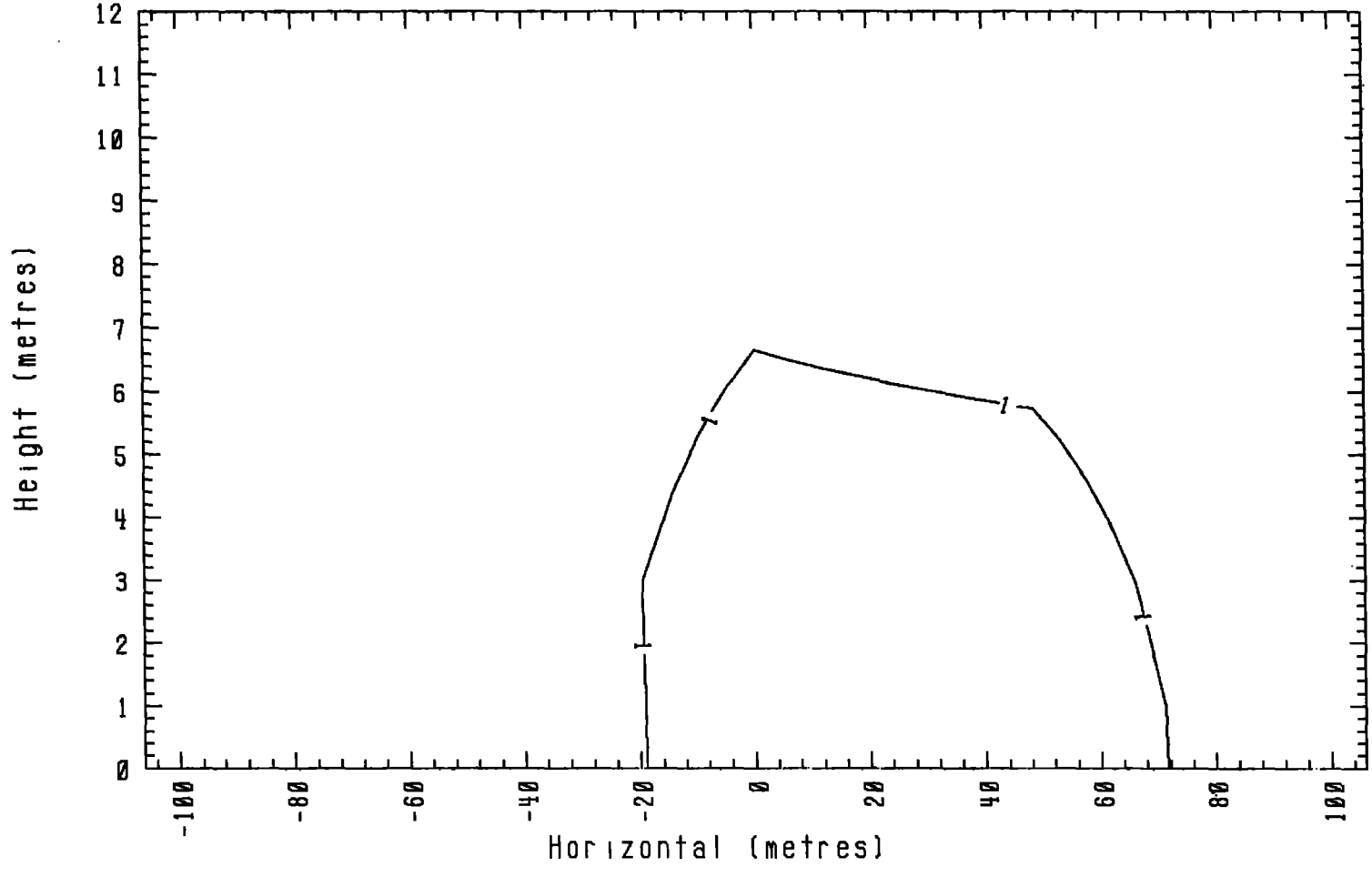


Coyote 6 LGF 81 Contours:

Time = 130 sec 300m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/09/83 15:55:48

Vertical Concentration Contours

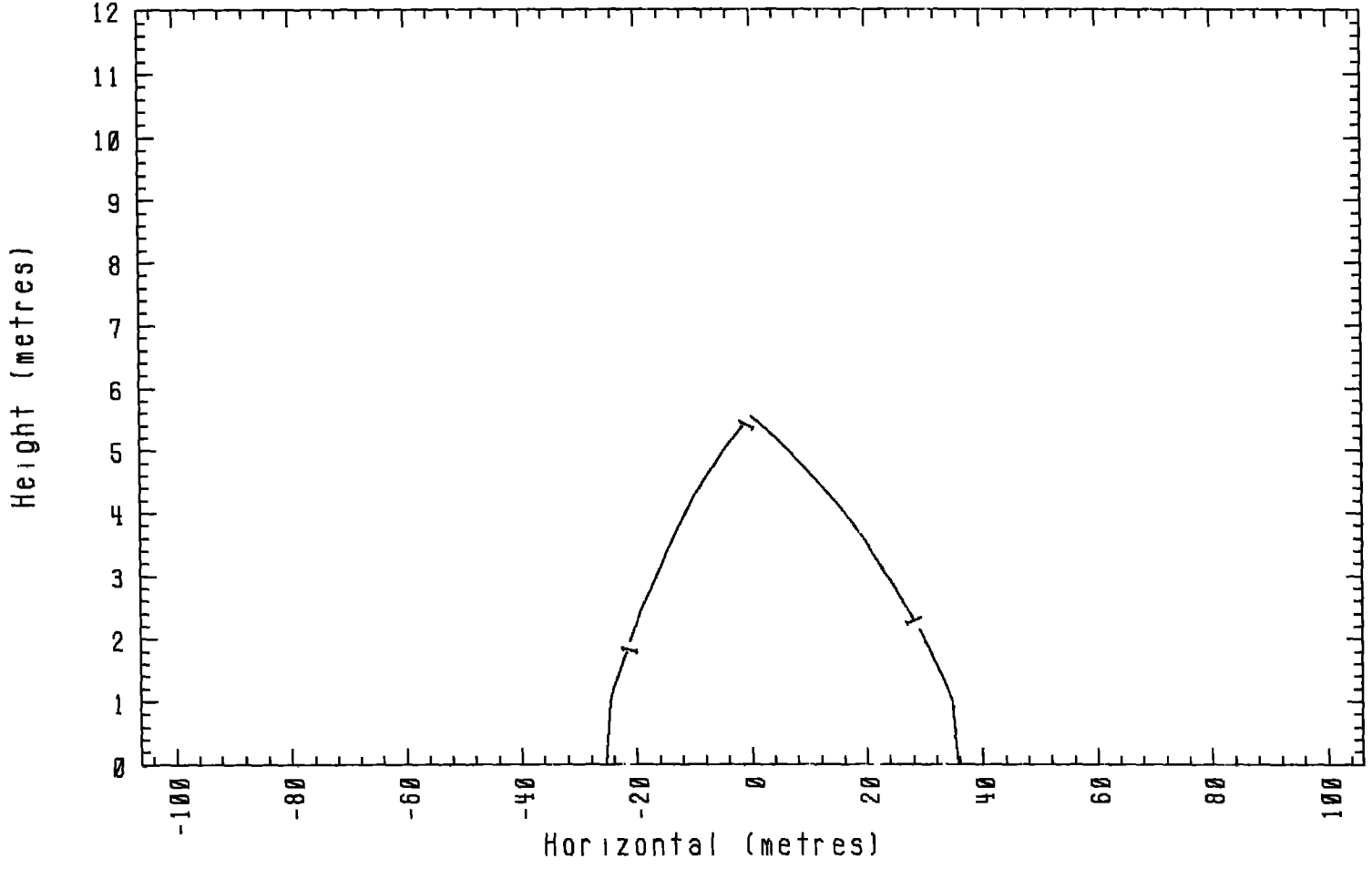


Coyote 6 LGF 81 Contours:

Time = 140 sec 300m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/09/83 15:55:48

Vertical Concentration Contours

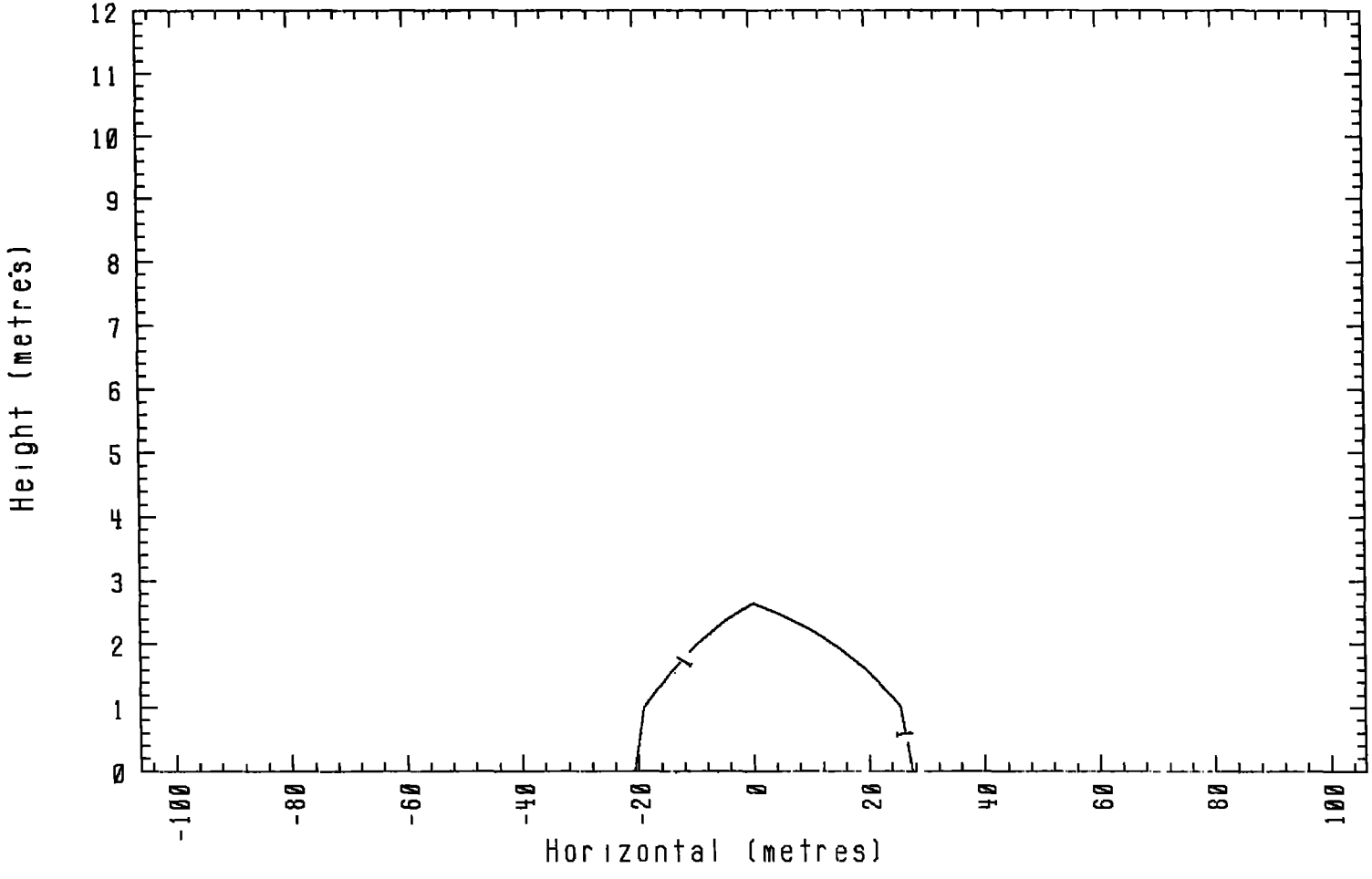


Coyote 6 LGF 81 Contours:

Time = 150 sec 300m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/09/83 15:55:48

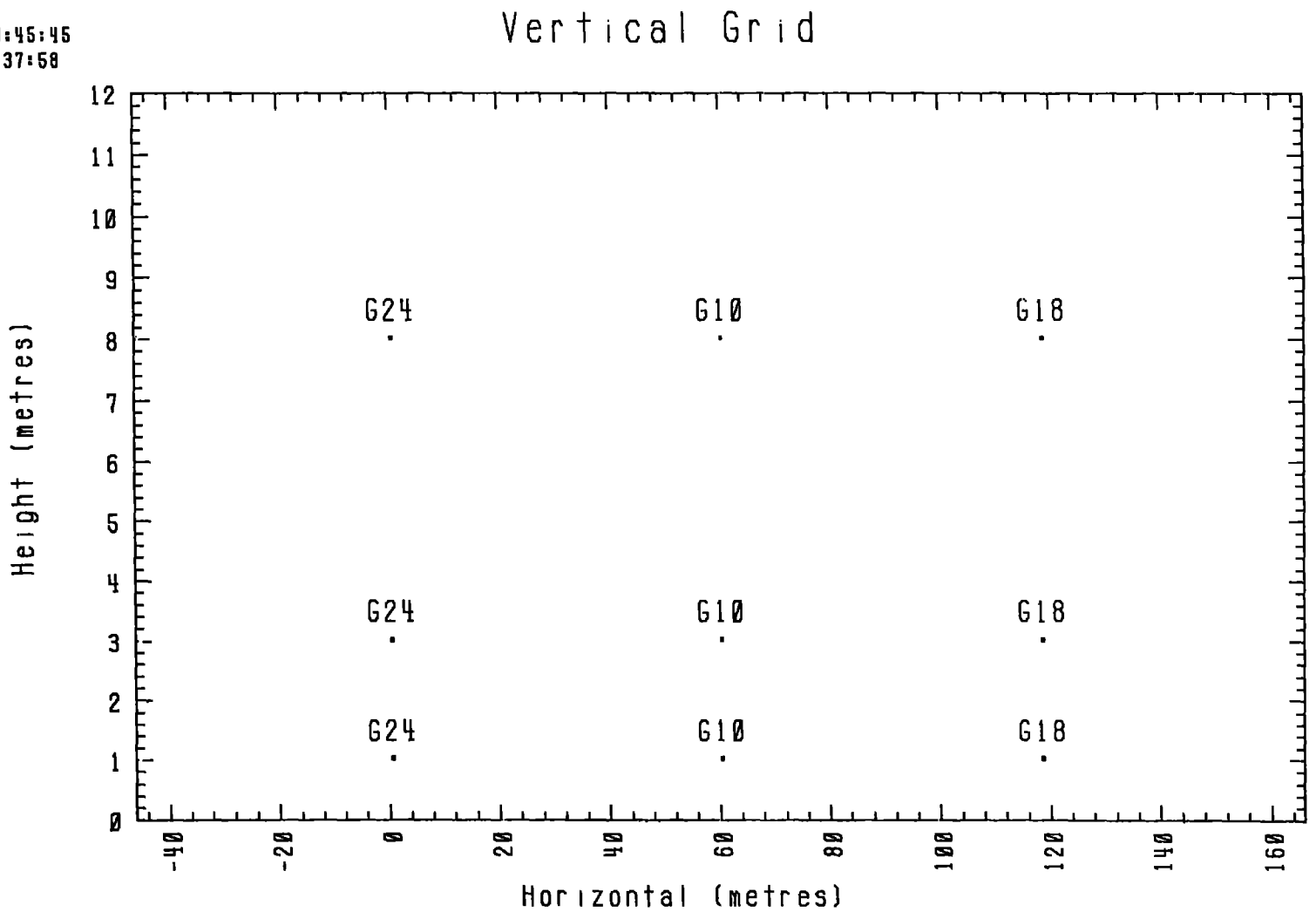
Vertical Concentration Contours



Coyote 6 LGF 81 Contours:

Time = 160 sec 300m row 1%,2%,5%,10%,15%,25%,35%

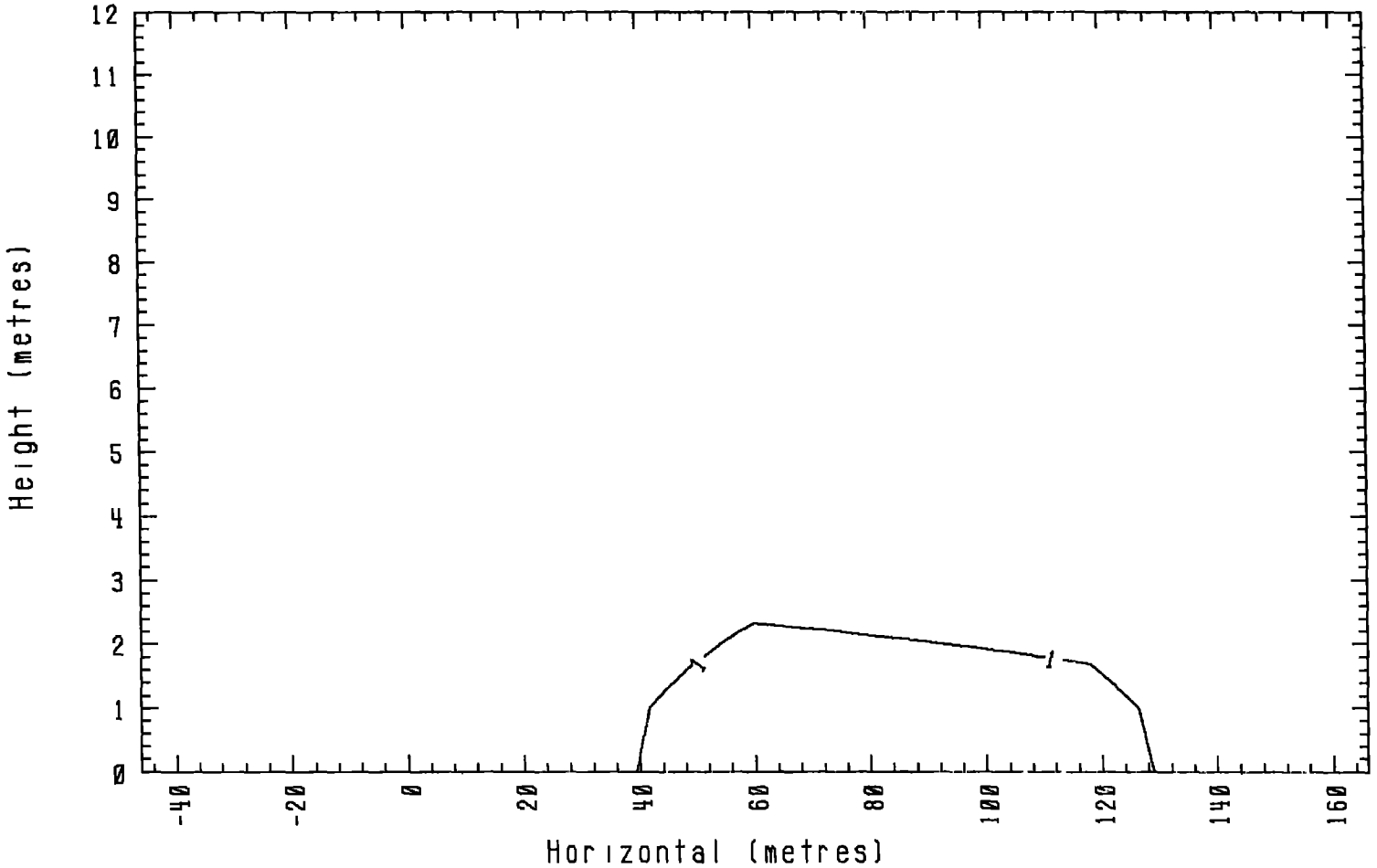
07/22/83u 10:45:45
08/09/83 15:37:58



Coyote 6 LGF 81
400m

07/22/83u 10:45:45
08/09/83 15:37:58

Vertical Concentration Contours

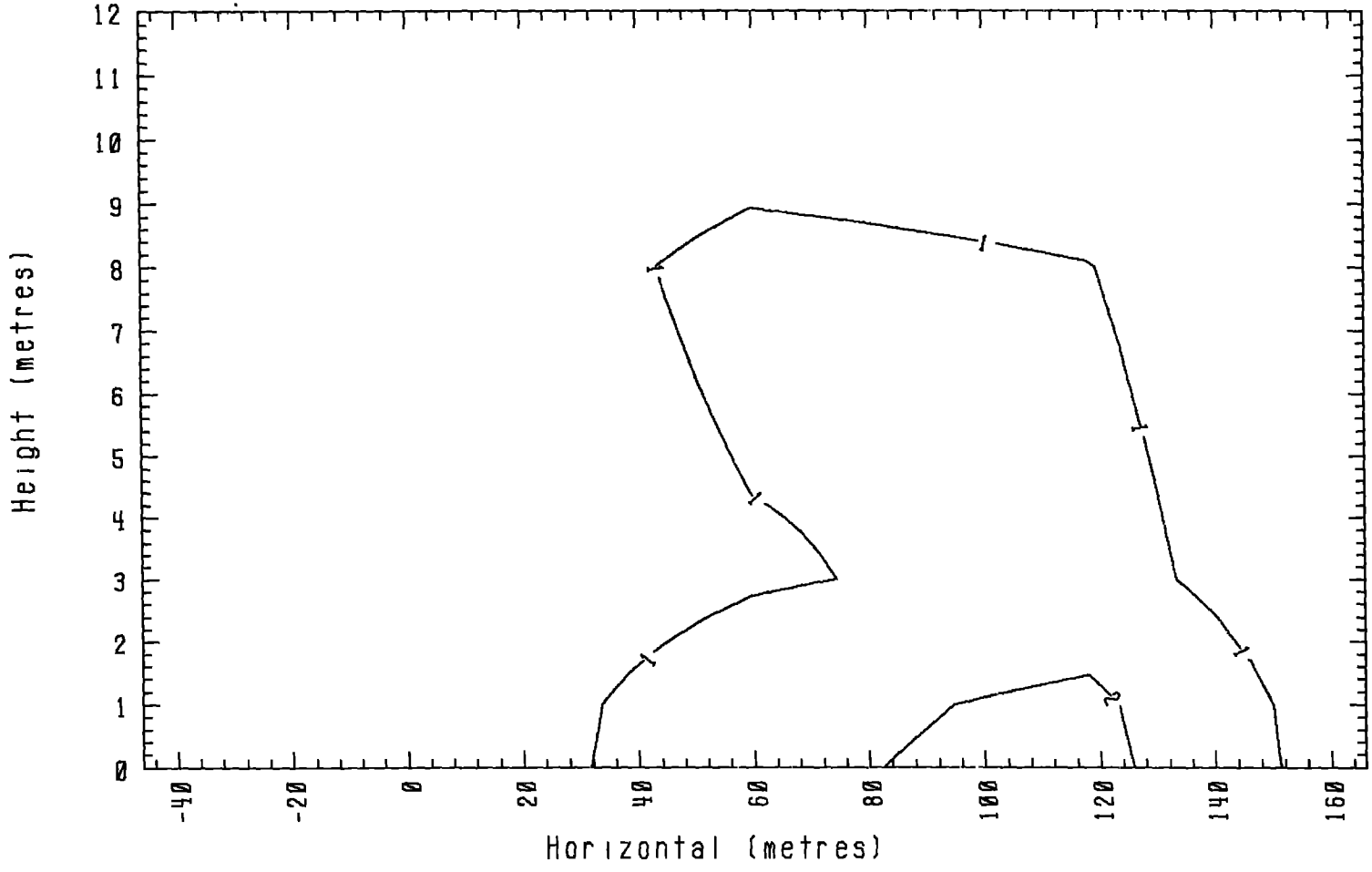


Coyote 6 LGF 81 Contours:

Time = 110 sec 400m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/09/83 15:37:58

Vertical Concentration Contours



Coyote 6 LGF 81

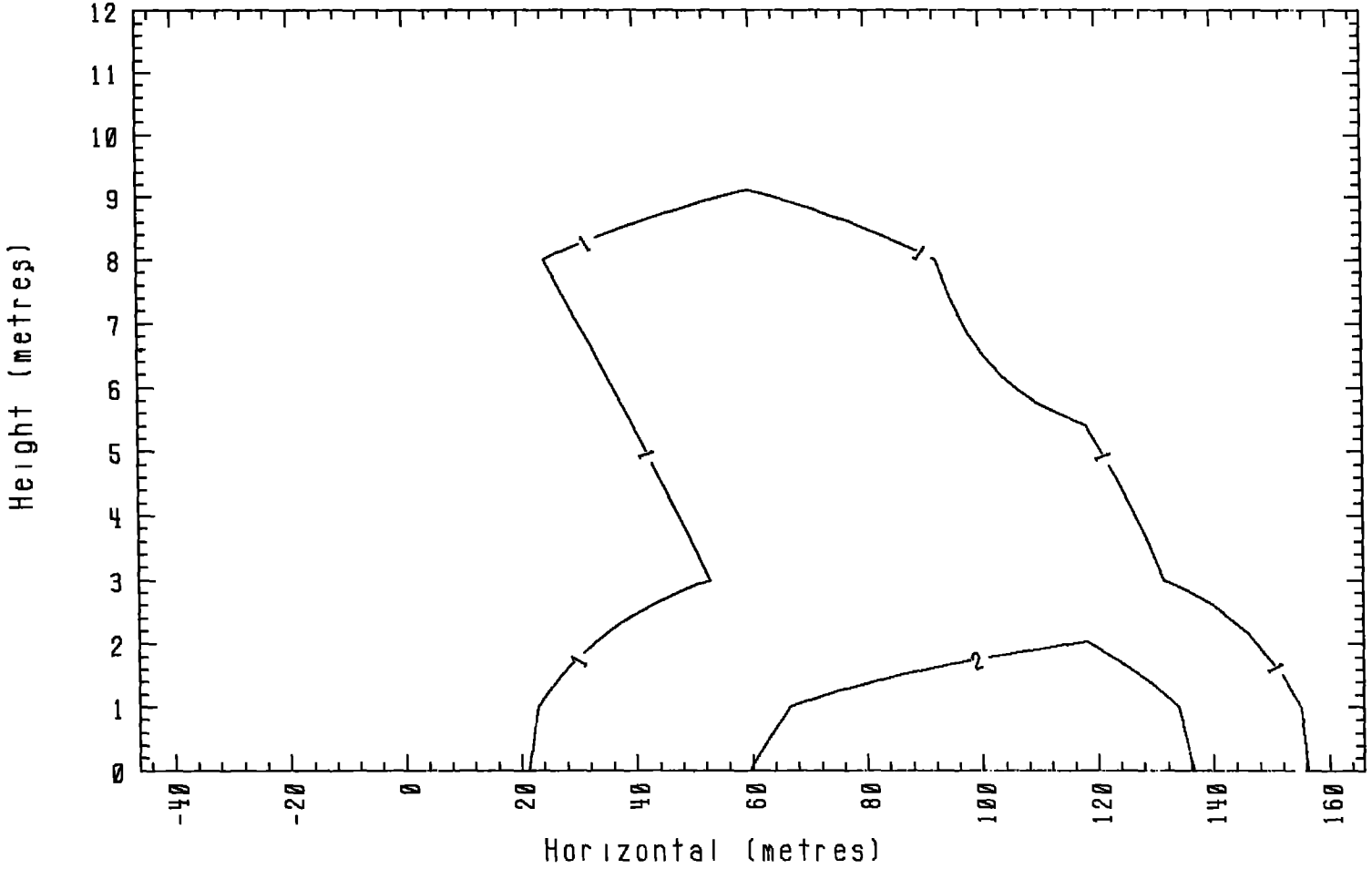
Time = 120 sec

400m row

Contours:
1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:46
08/09/83 15:37:58

Vertical Concentration Contours

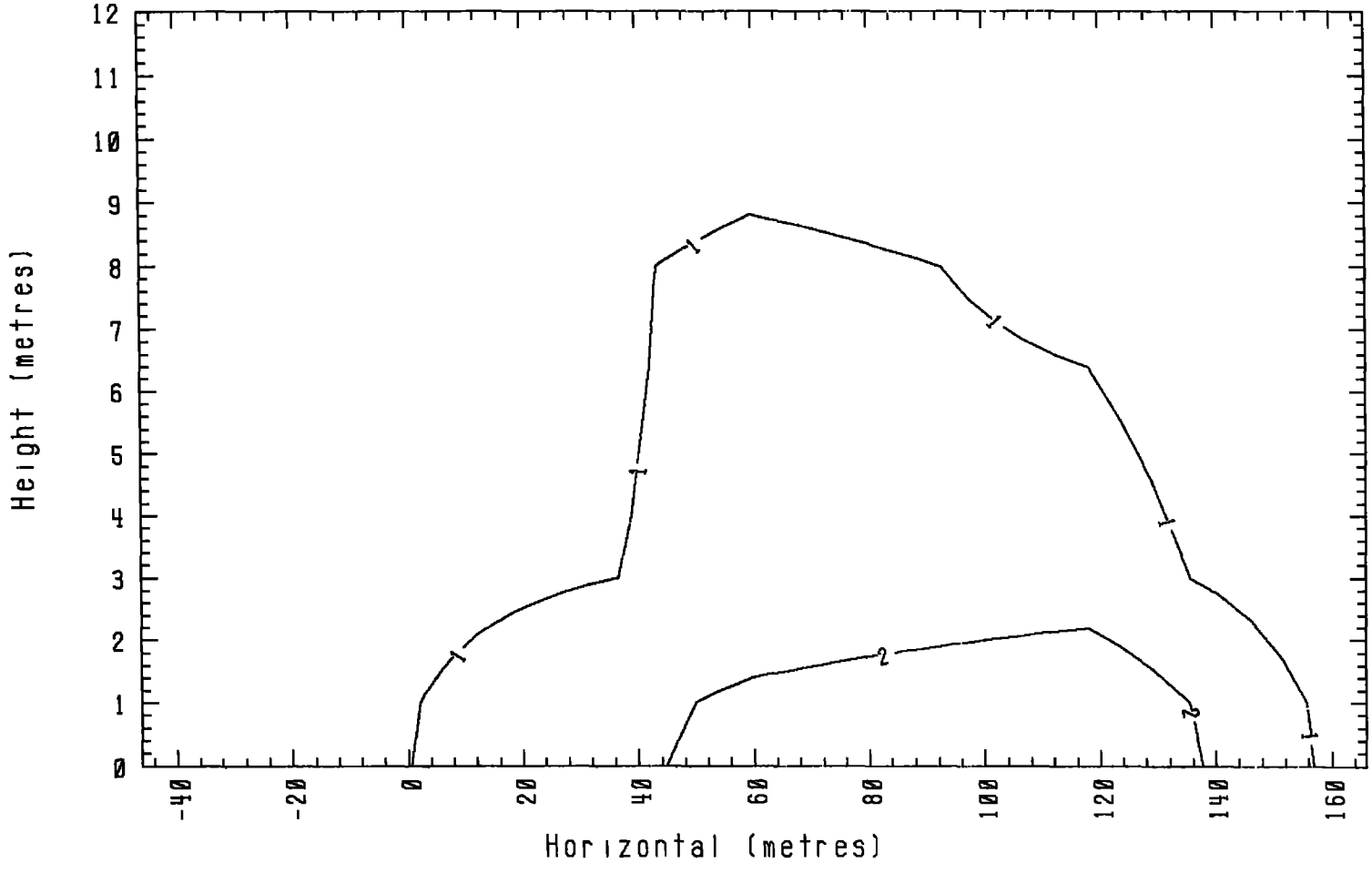


Coyote 6 LGF 81 Contours:

Time = 130 sec 400m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/09/83 15:37:58

Vertical Concentration Contours



Coyote 6 LGF 81

Time = 140 sec

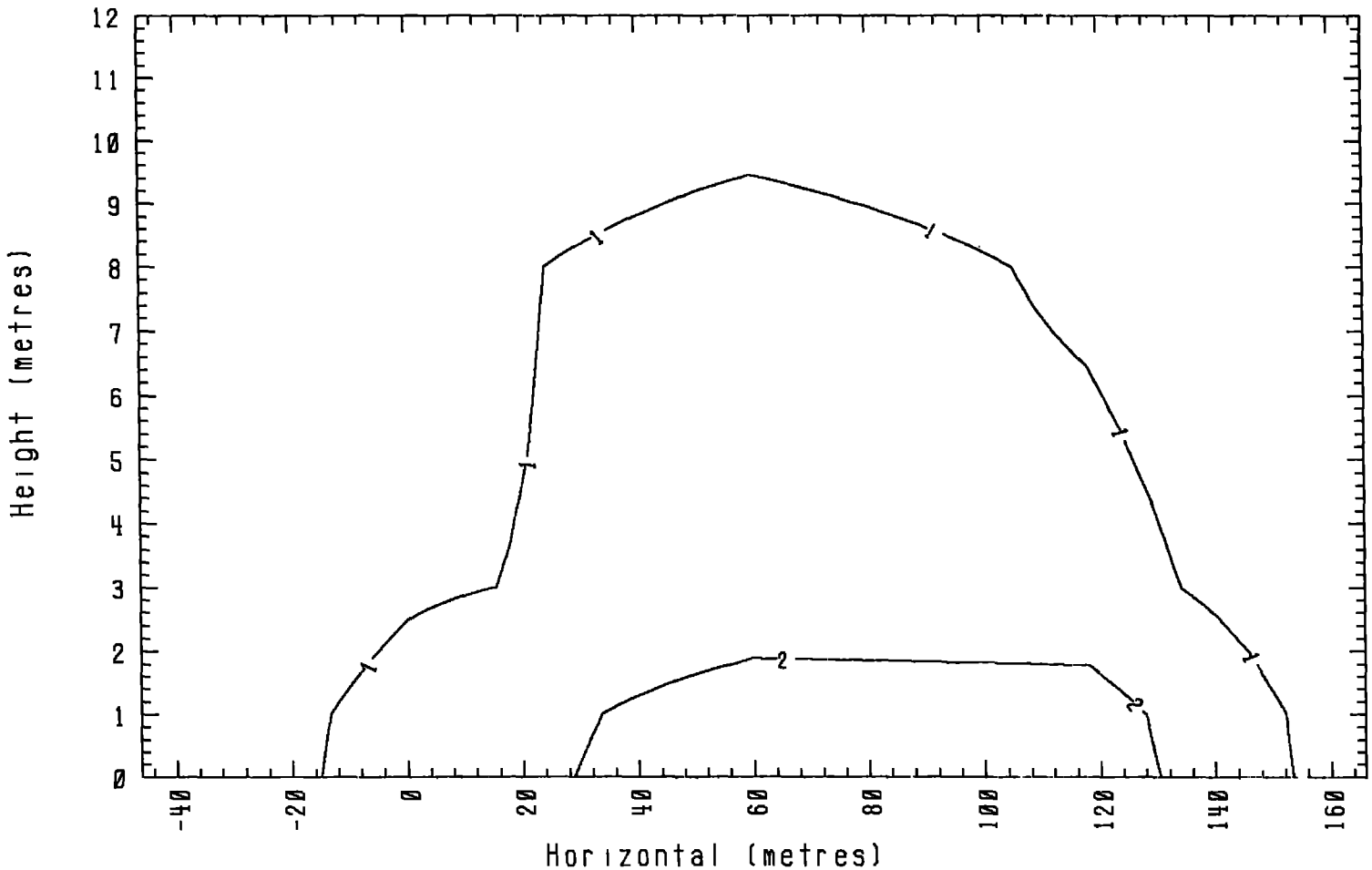
400m row

Contours:

1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:46
08/09/83 15:37:58

Vertical Concentration Contours

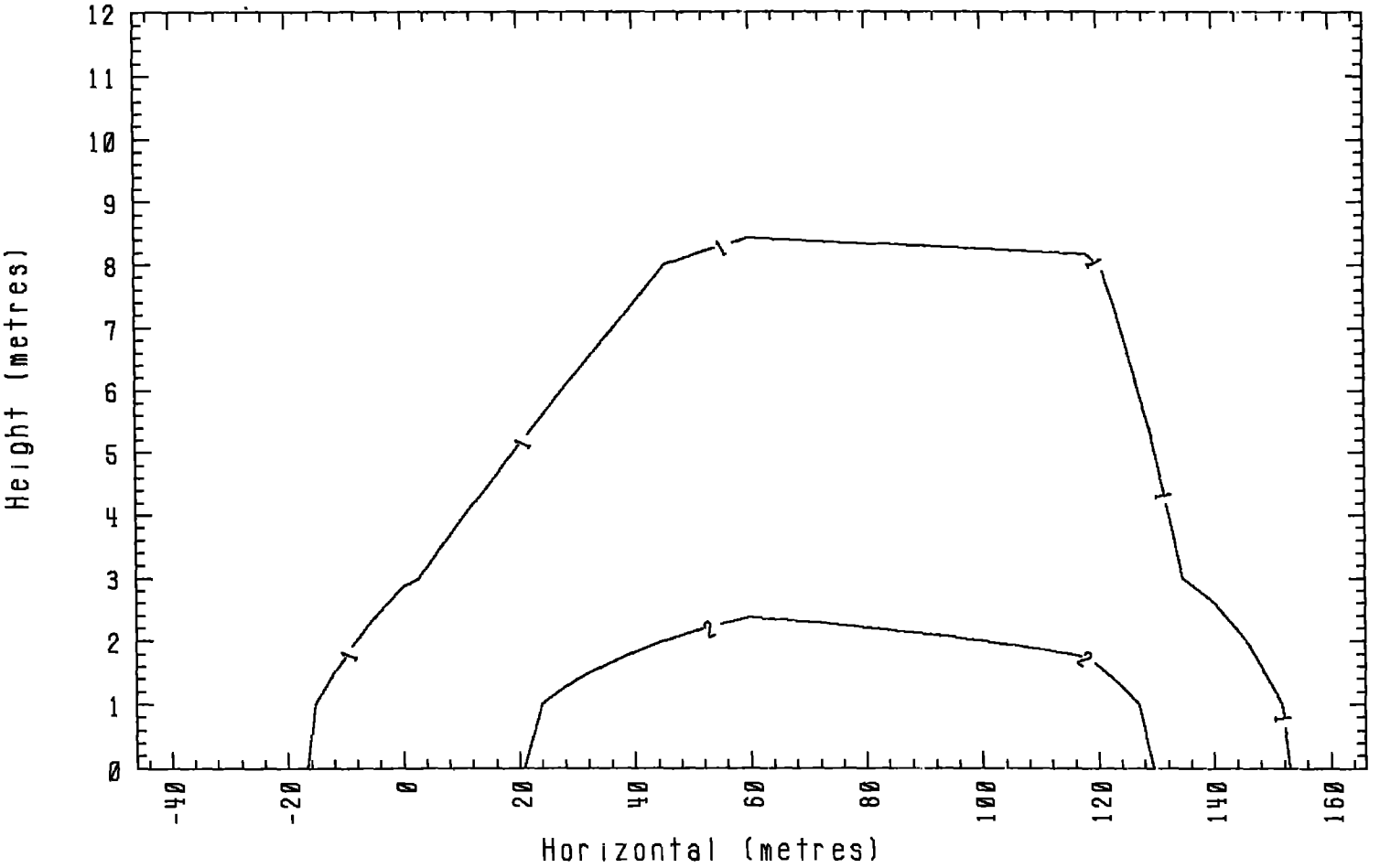


Coyote 6 LGF 81 Contours:

Time = 150 sec 400m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/09/83 15:37:58

Vertical Concentration Contours

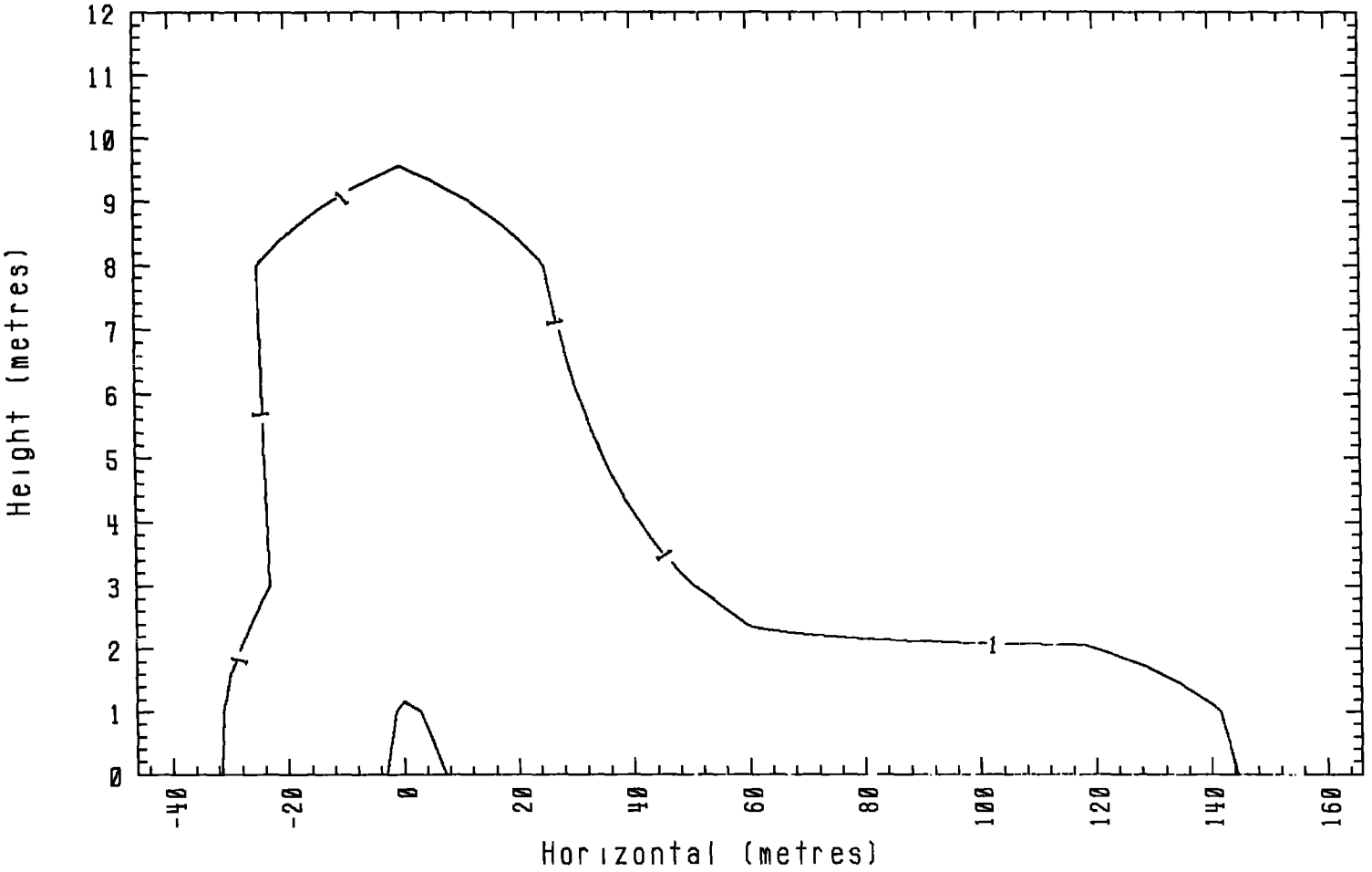


Coyote 6 LGF 81 Contours:

Time = 160 sec 400m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/09/83 15:37:58

Vertical Concentration Contours

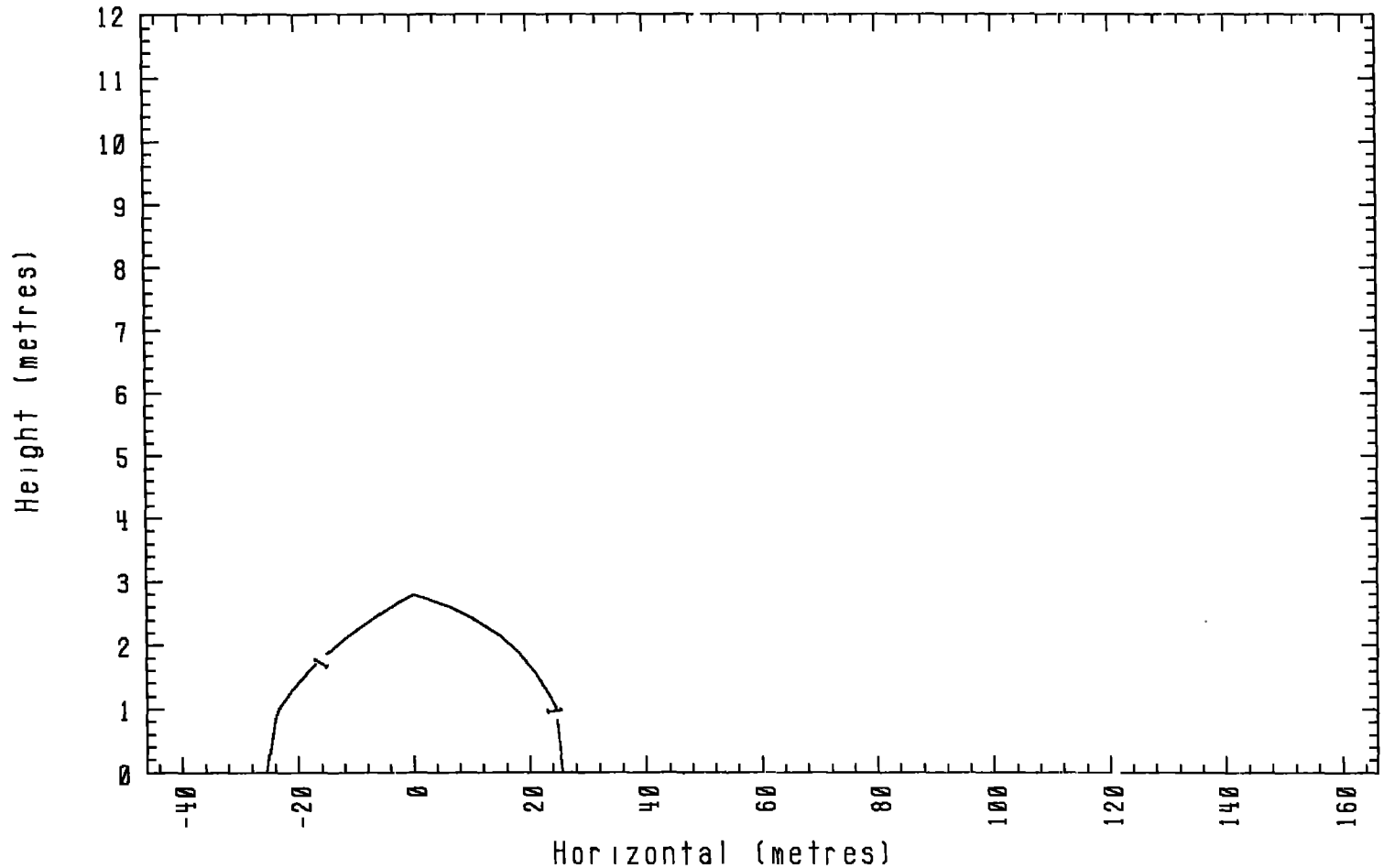


Coyote 6 LGF 81 Contours:

Time = 170 sec 400m row 1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/09/83 15:37:58

Vertical Concentration Contours



Coyote 6 LGF 81

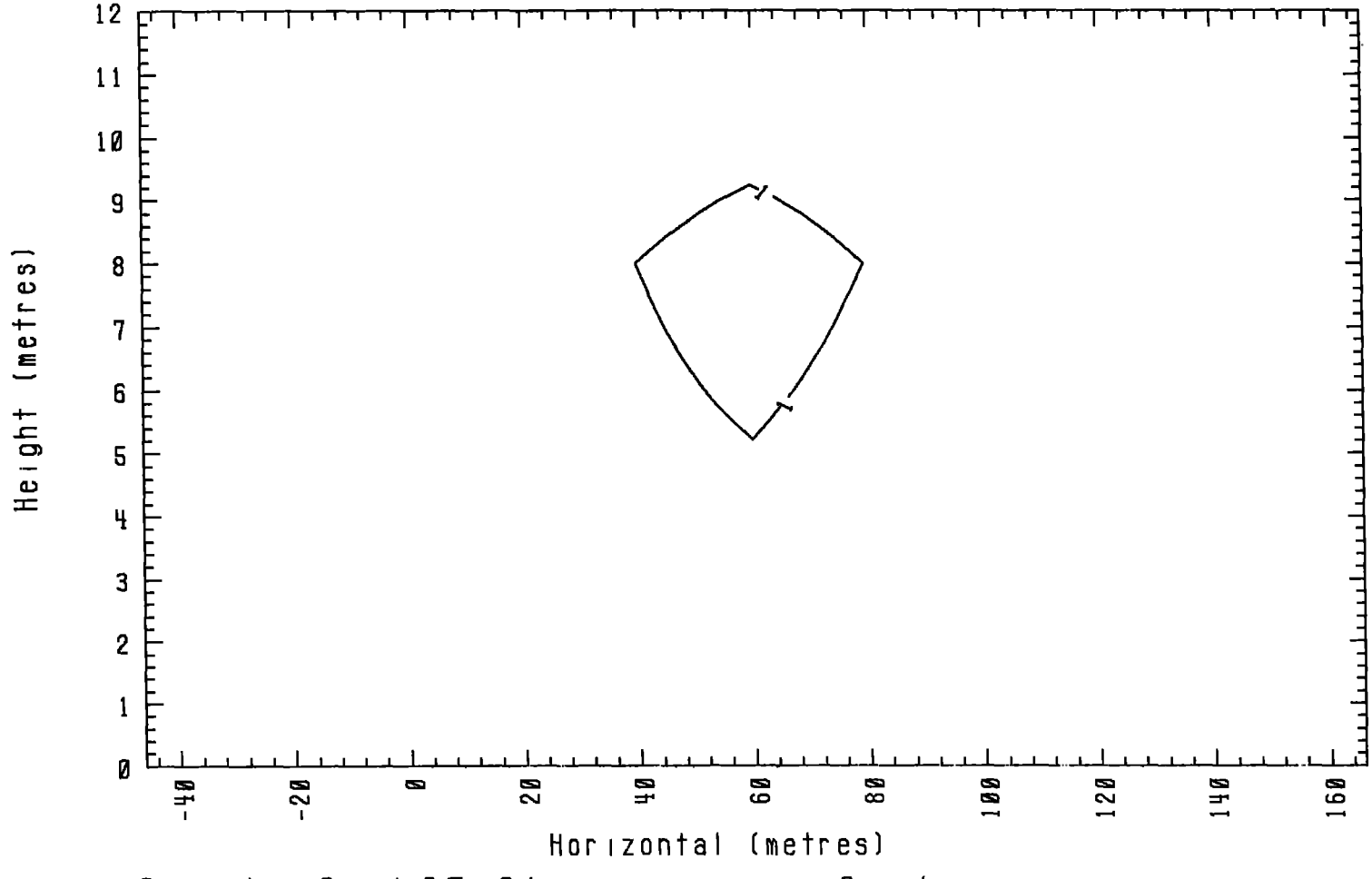
Time = 180 sec

400m row

Contours:
1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/09/83 15:37:58

Vertical Concentration Contours



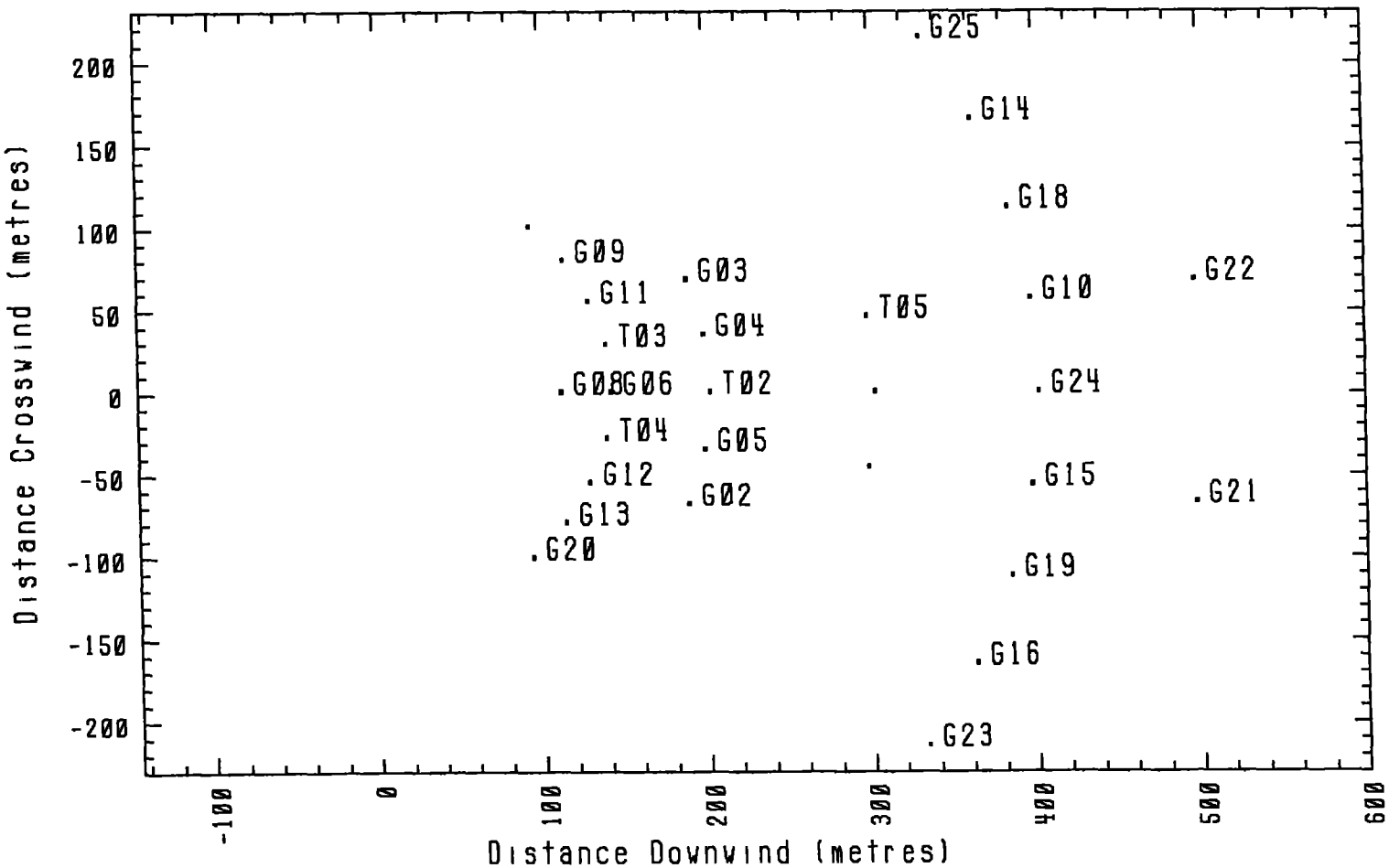
Coyote 6 LGF 81 Contours:

Time = 190 sec 400m row 1%,2%,5%,10%,15%,25%,35%

APPENDIX 4: GAS-CONCENTRATION CONTOURS: HORIZONTAL PLANES

07/22/83u 10:45:45
08/04/83 15:10:56

Horizontal grid



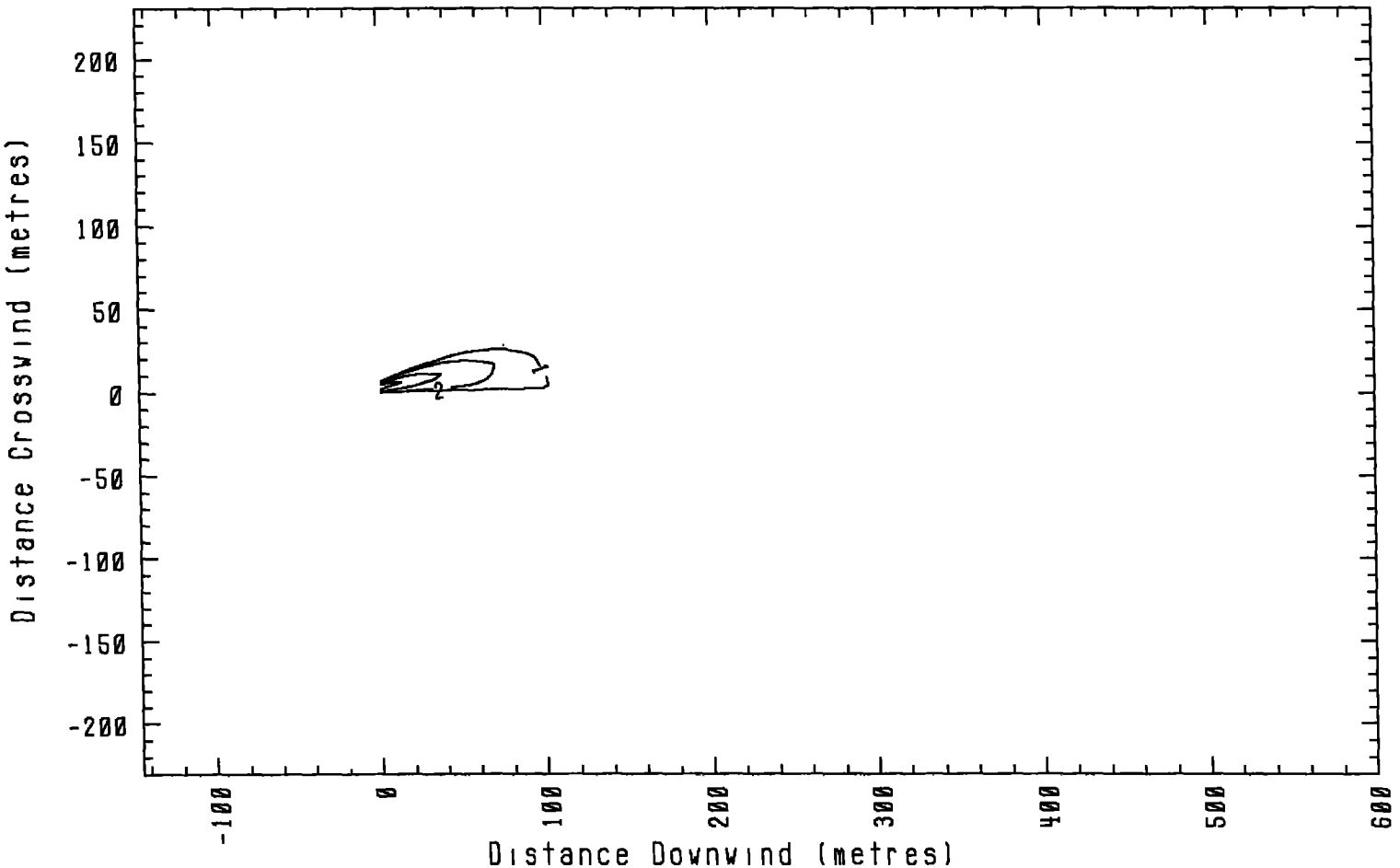
Coyote 3 LGF 81

Windvel = 6.000 m/s

Ignition time 99.7 sec. at Radius 79. m.

07/22/83u 10:45:46
08/04/83 14:06:47

Horizontal Concentration Contours



Coyote 3 LGF 81

Time = 30 sec, level 1m

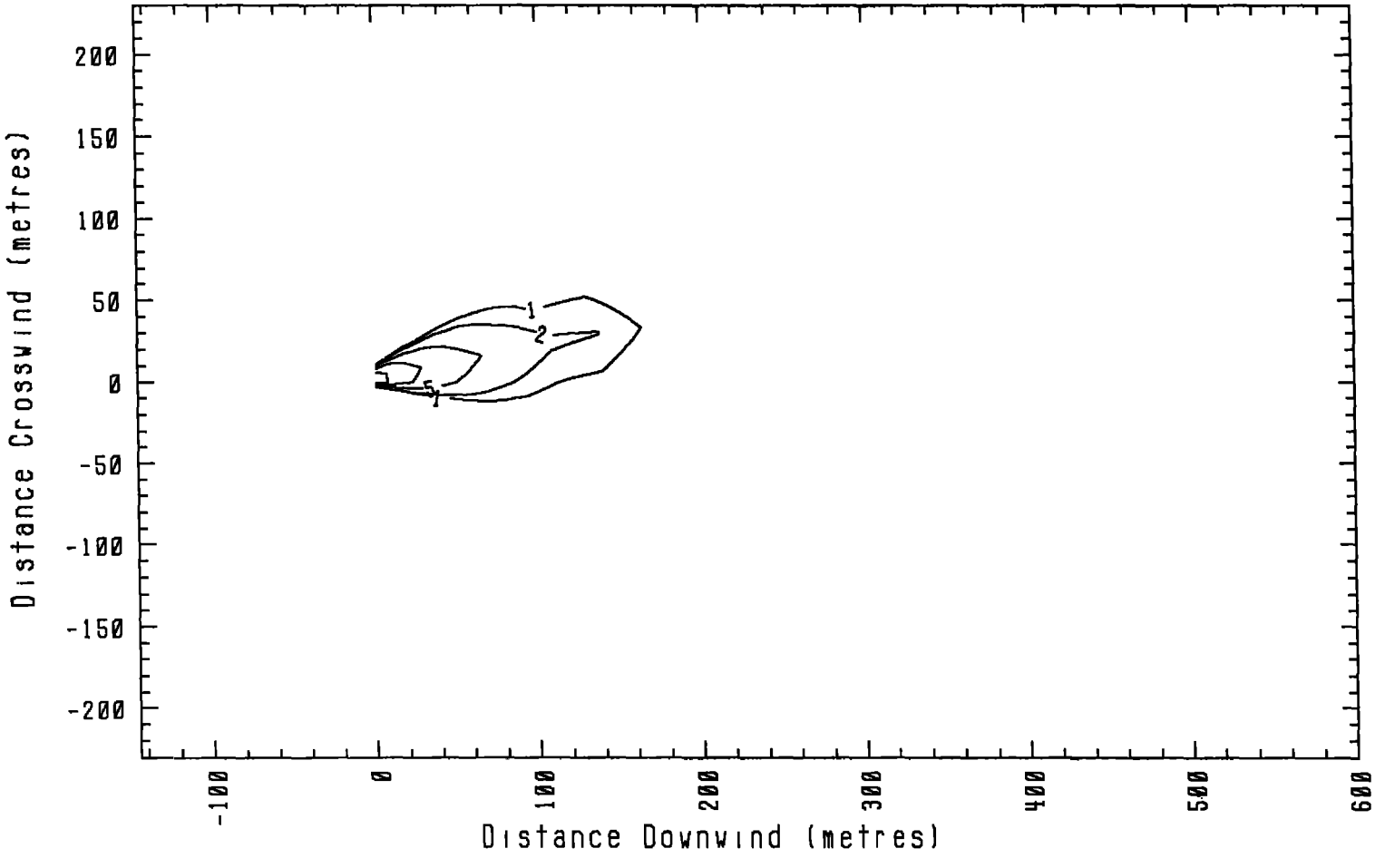
In conc, In x axis, boundary = 180. m.

Contours:

1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/04/83 14:06:47

Horizontal Concentration Contours



Coyote 3 LGF 81

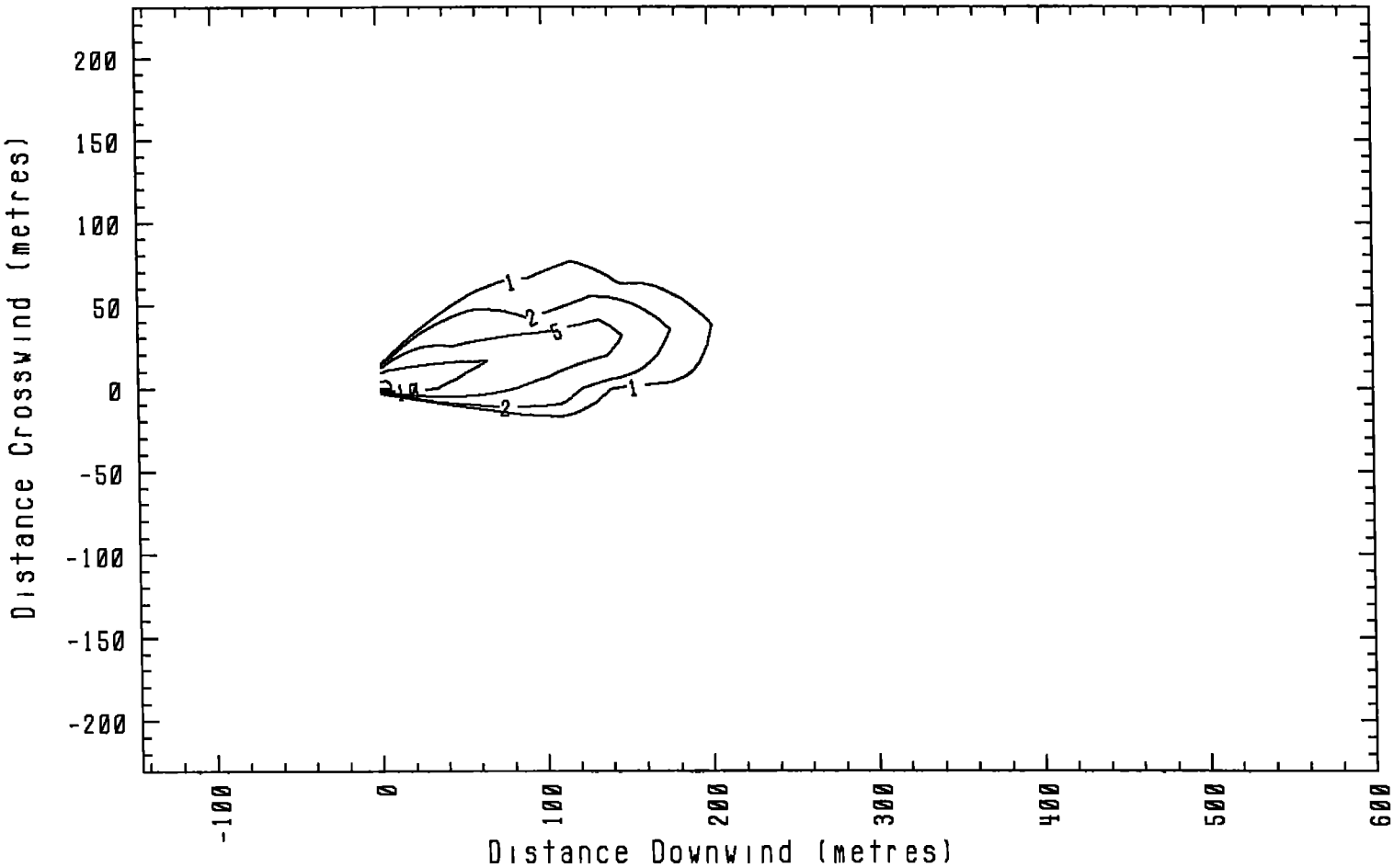
Time = 40 sec, level 1m

Contours:
1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 240. m.

07/22/83u 10:45:45
08 4/83 14:06:47

Horizontal Concentration Contours



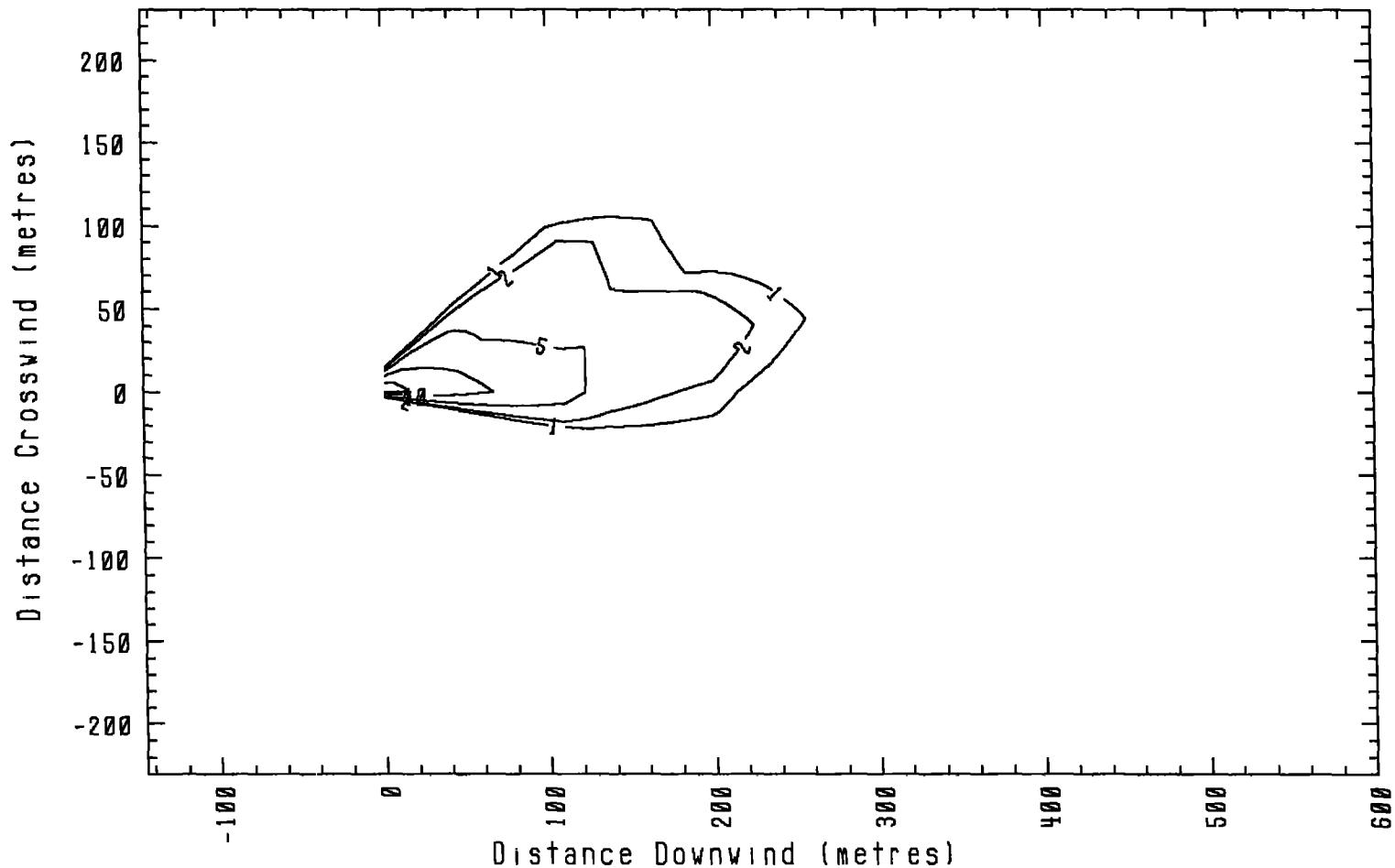
Coyote 3 LGF 81 Contours:

Time = 50 sec, level 1m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 300. m.

07/22/83 10:45:45
08/04/83 14:06:47

Horizontal Concentration Contours



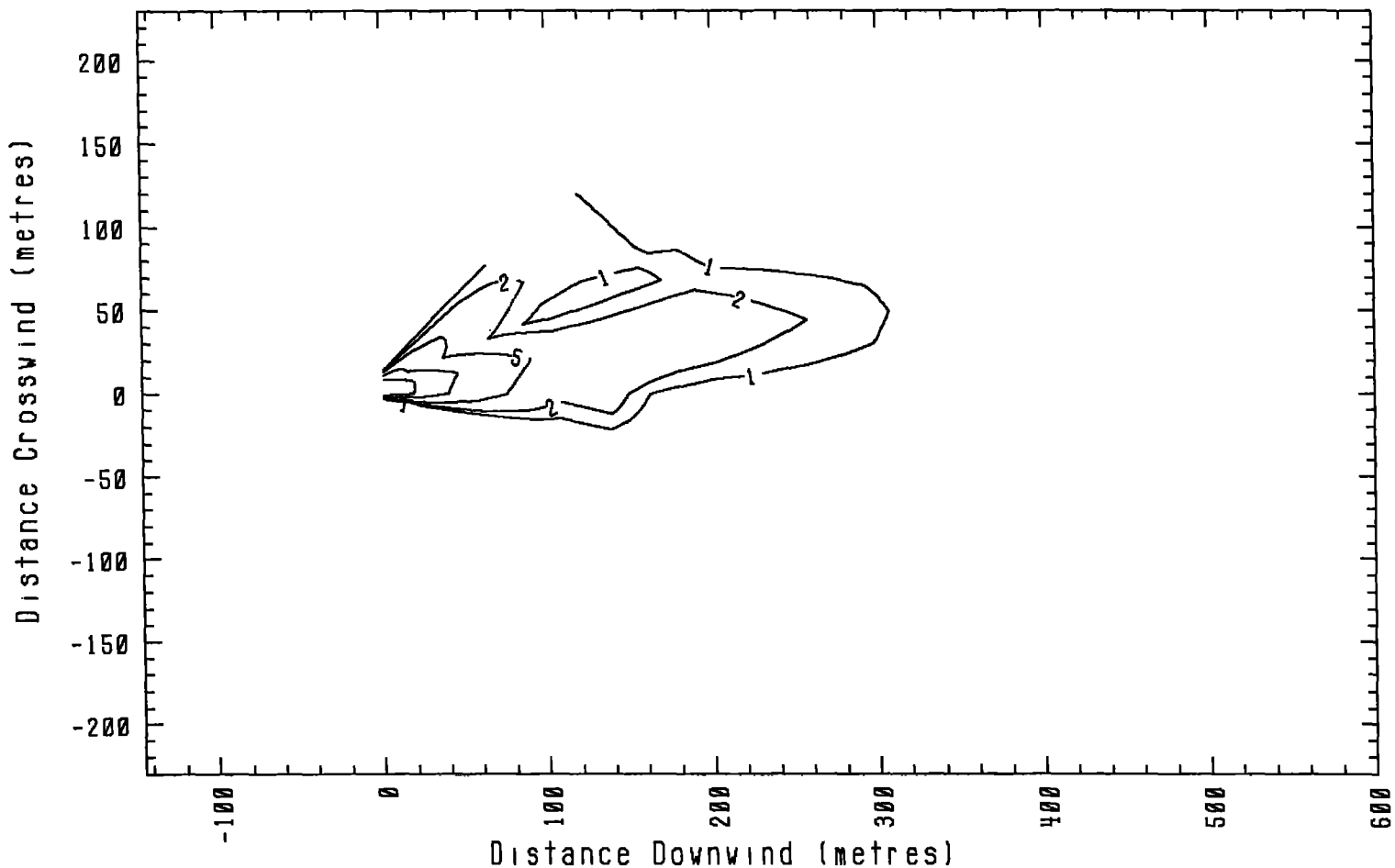
Coyote 3 LGF 81 Contours:

Time = 60 sec, level 1m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 360. m.

07/22/83u 10:45:45
08/04/83 14:06:47

Horizontal Concentration Contours



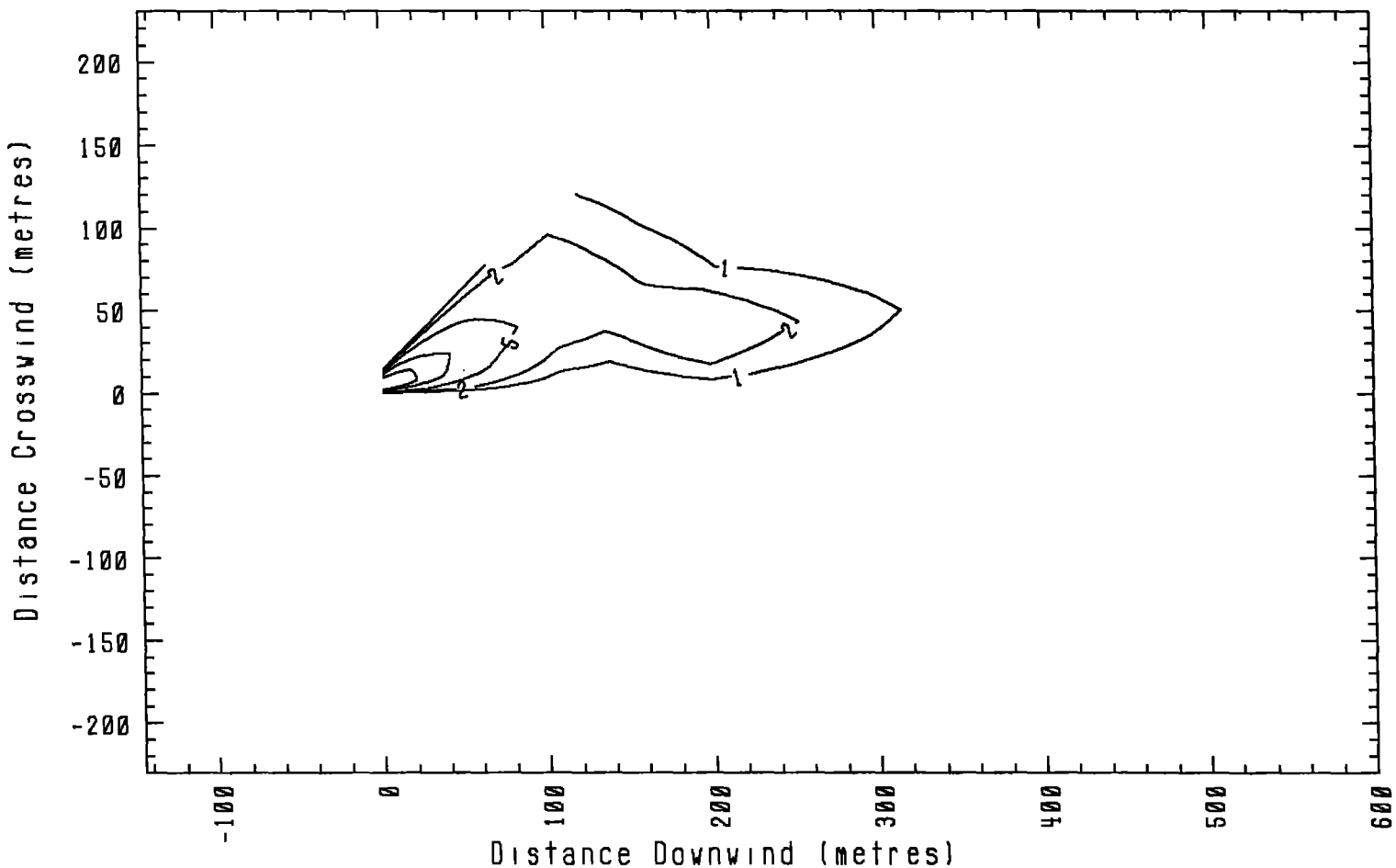
Coyote 3 LGF 81 Contours:

Time = 70 sec, level 1m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 420. m.

07/22/83u 10:45:45
08/04/83 14:06:47

Horizontal Concentration Contours



Coyote 3 LGF 81

Time = 80 sec, level 1m

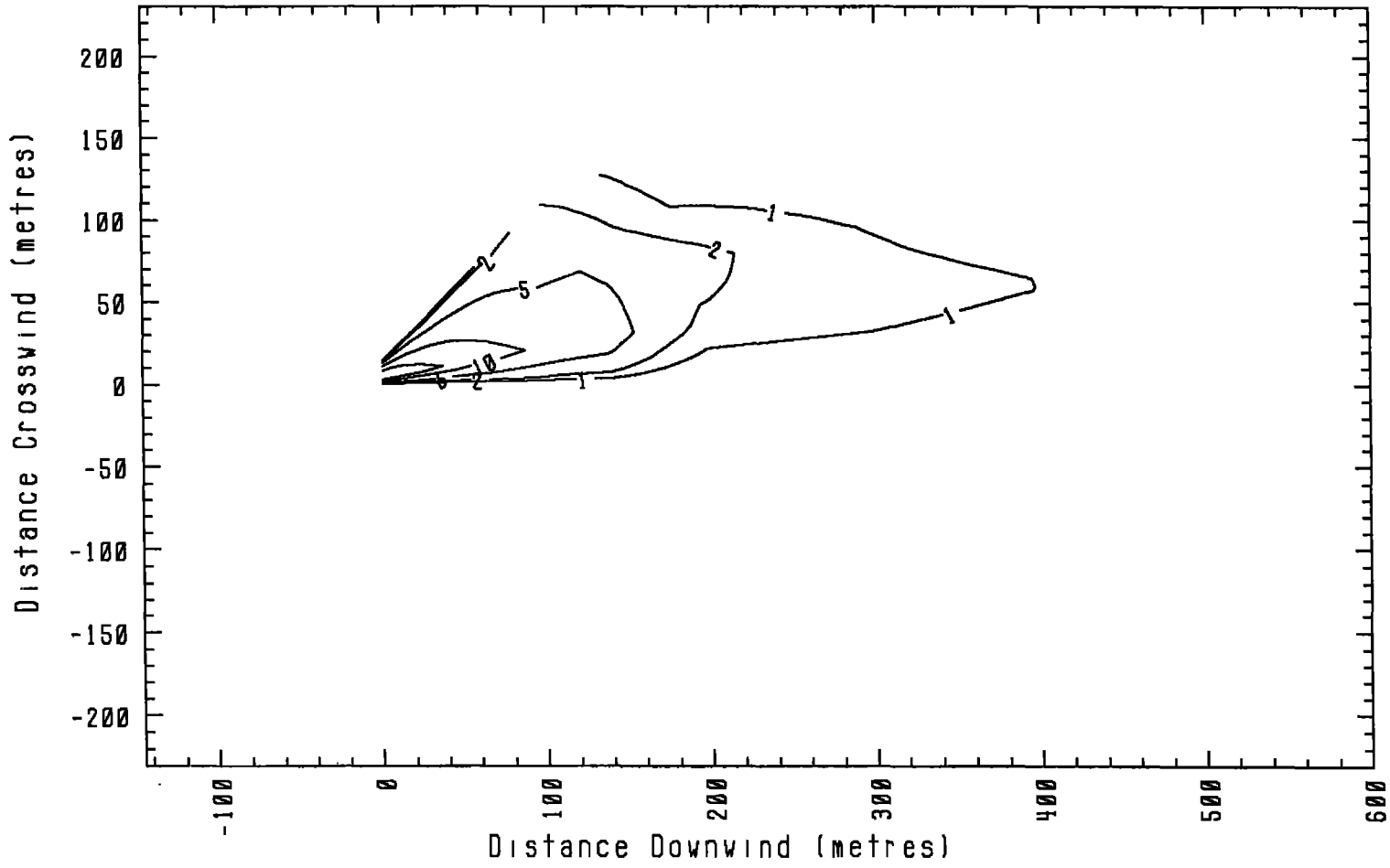
ln conc, ln x axis, boundary = 480. m.

Contours:

1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:46
08/04/83 14:06:47

Horizontal Concentration Contours



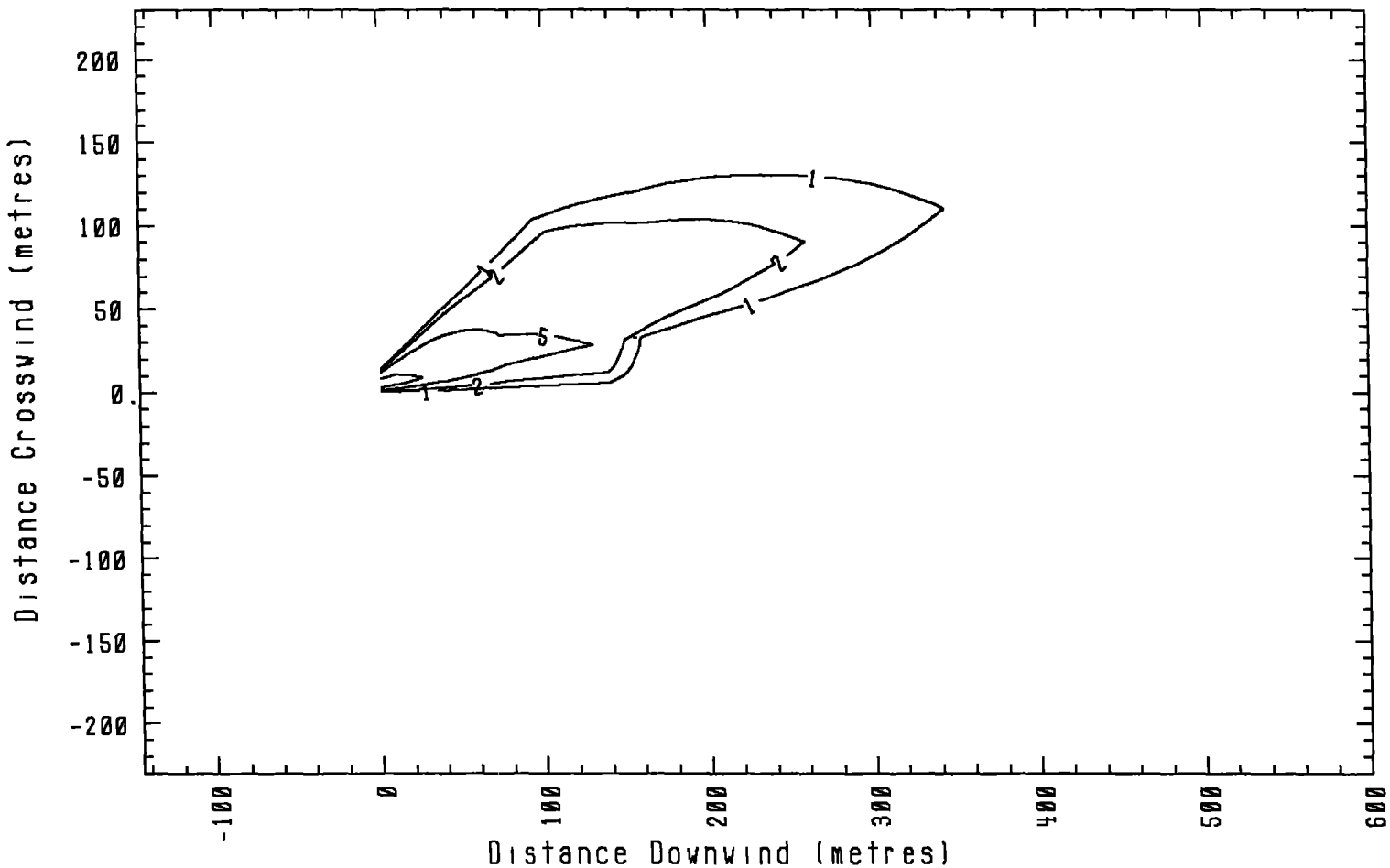
Coyote 3 LGF 81 Contours:

Time = 90 sec, level 1m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 540. m.

07/22/83u 10:45:45
08/04/83 14:06:47

Horizontal Concentration Contours



Coyote 3 LGF 81

Time = 100 sec, level 1m

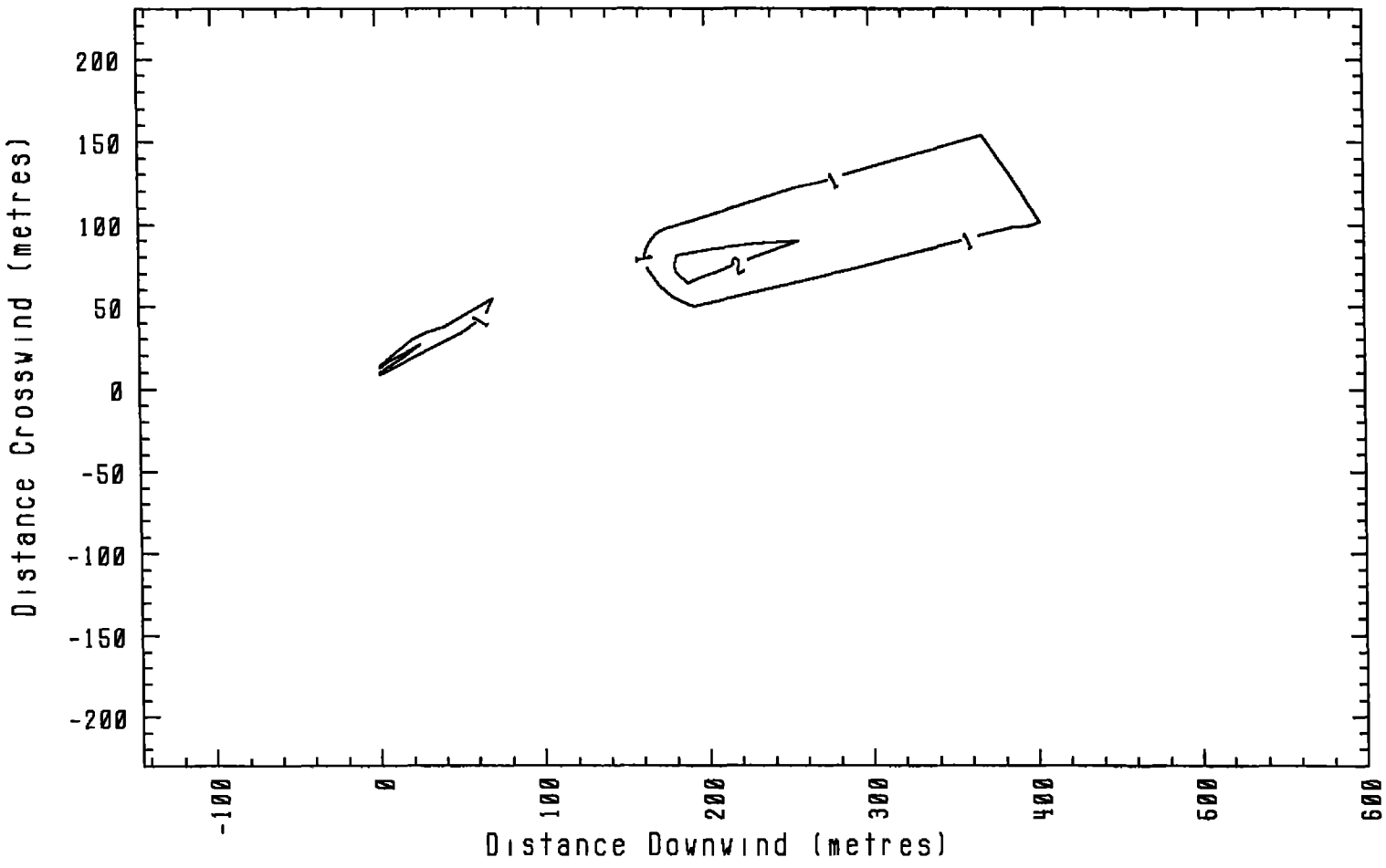
ln conc, ln x axis, boundary = 600. m.

Contours:

1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/04/83 14:06:47

Horizontal Concentration Contours



Coyote 3 LGF 81

Time = 110 sec, level 1m

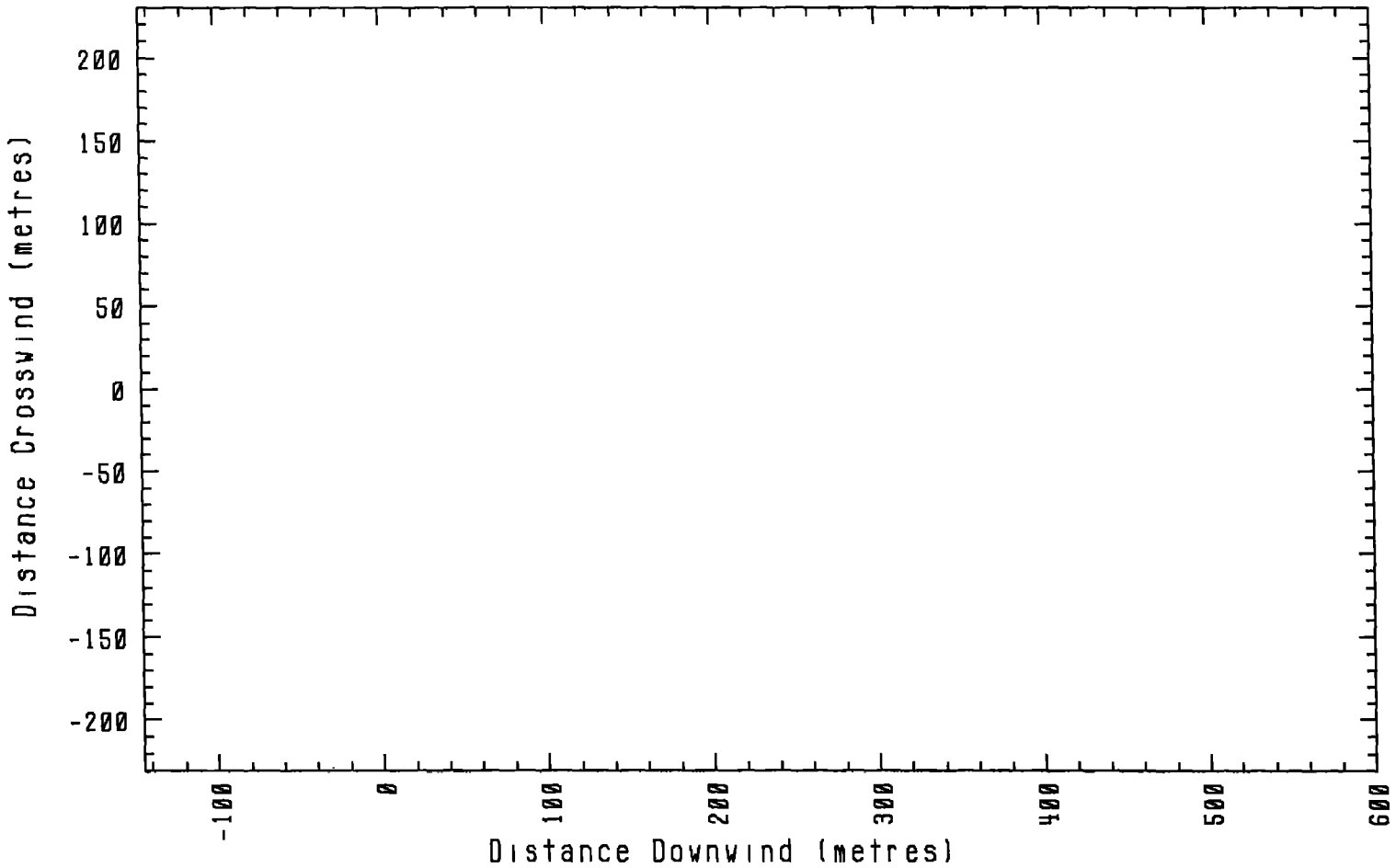
ln conc, ln x axis, boundary = 660. m.

Contours:

1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/04/83 14:06:47

Horizontal Concentration Contours



Coyote 3 LGF 81

Time = 120 sec, level 1m

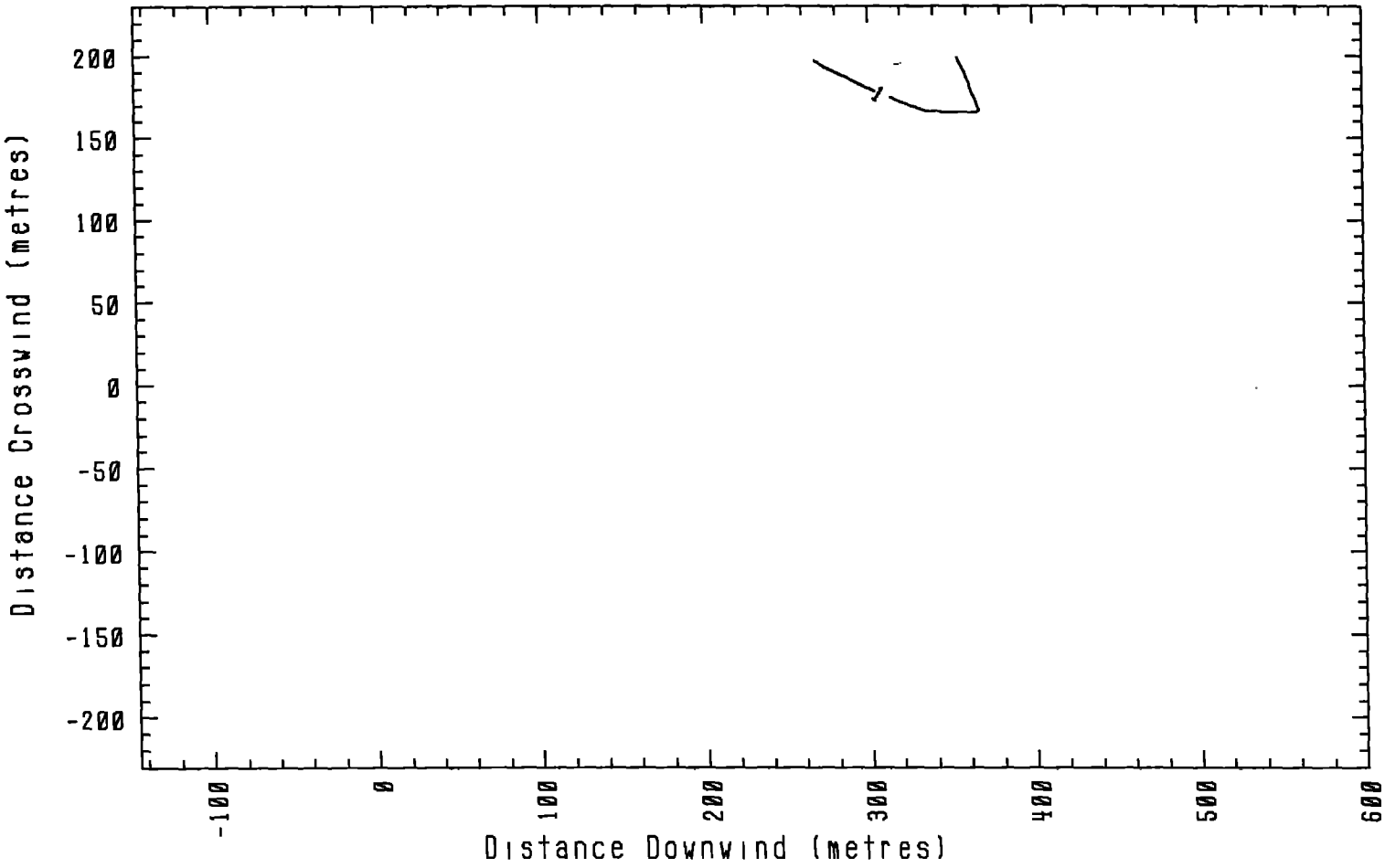
ln conc, ln x axis, boundary = 720. m.

Contours:

1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/04/83 14:06:47

Horizontal Concentration Contours



Coyote 3 LGF 81

Time = 130 sec, level 1m

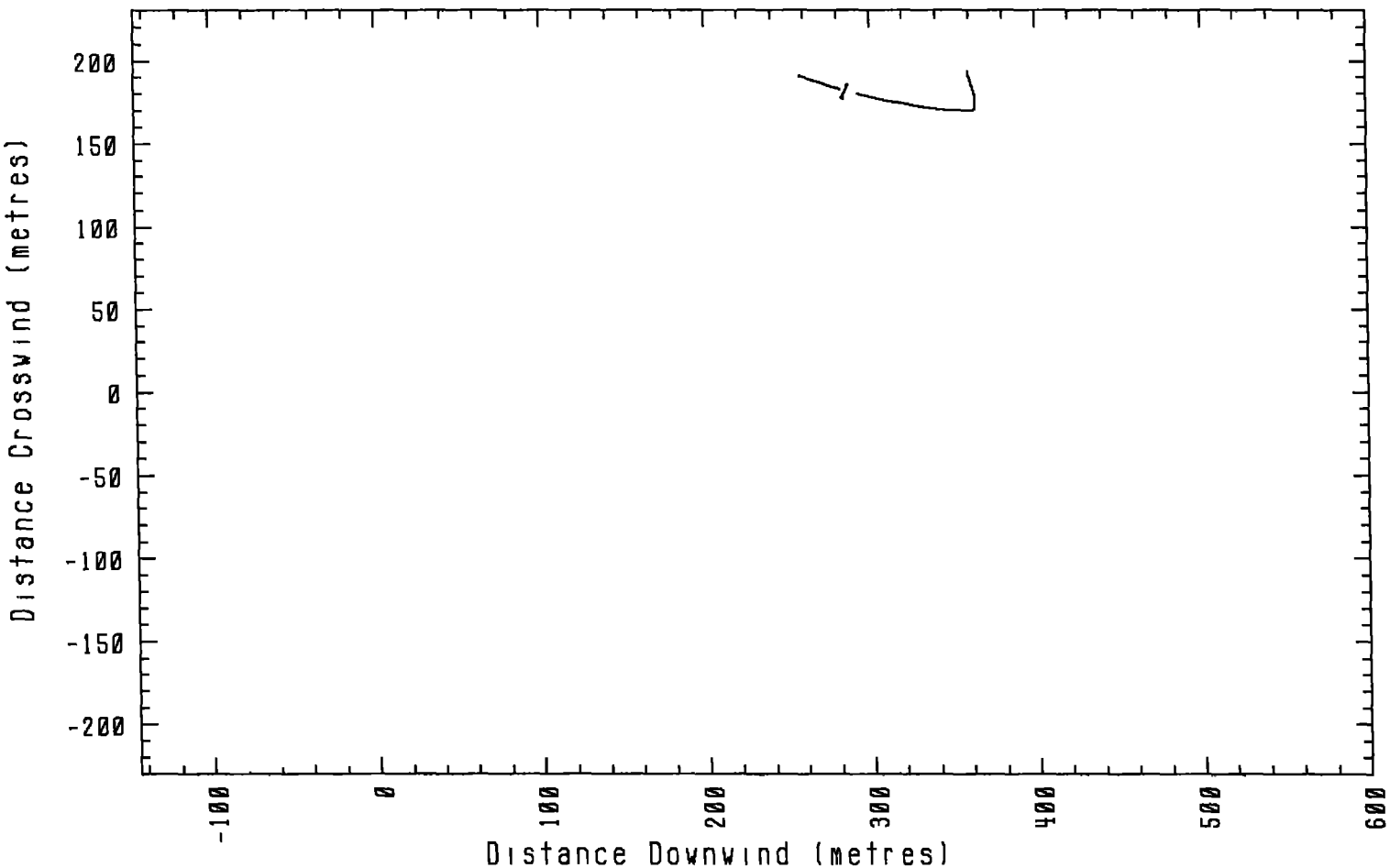
ln conc, ln x axis, boundary = 780. m.

Contours:

1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/04/83 14:06:47

Horizontal Concentration Contours

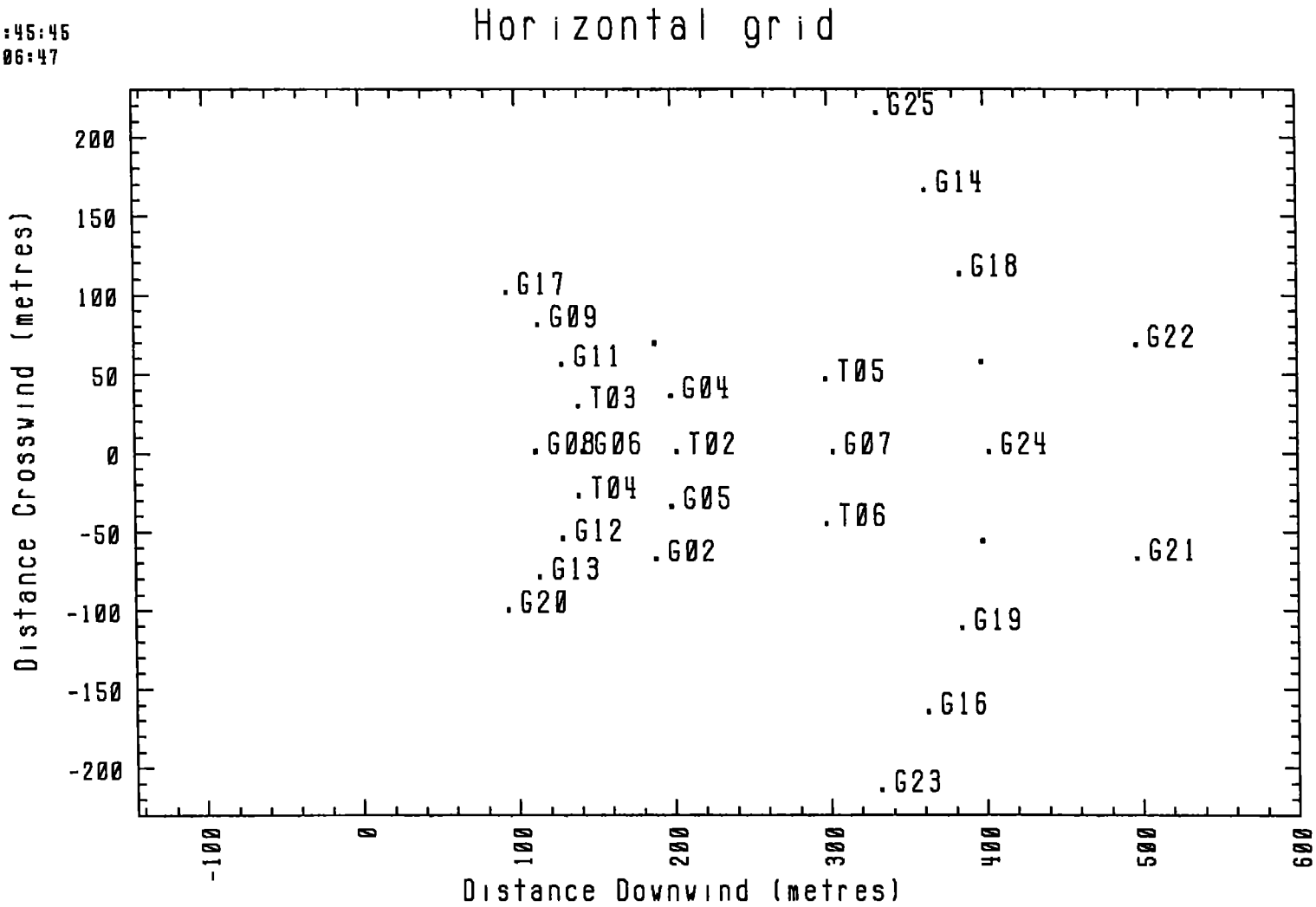


Coyote 3 LGF 81 Contours:

Time = 140 sec, level 1m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 840. m.

07/22/83u 10:45:45
08/04/83 14:06:47



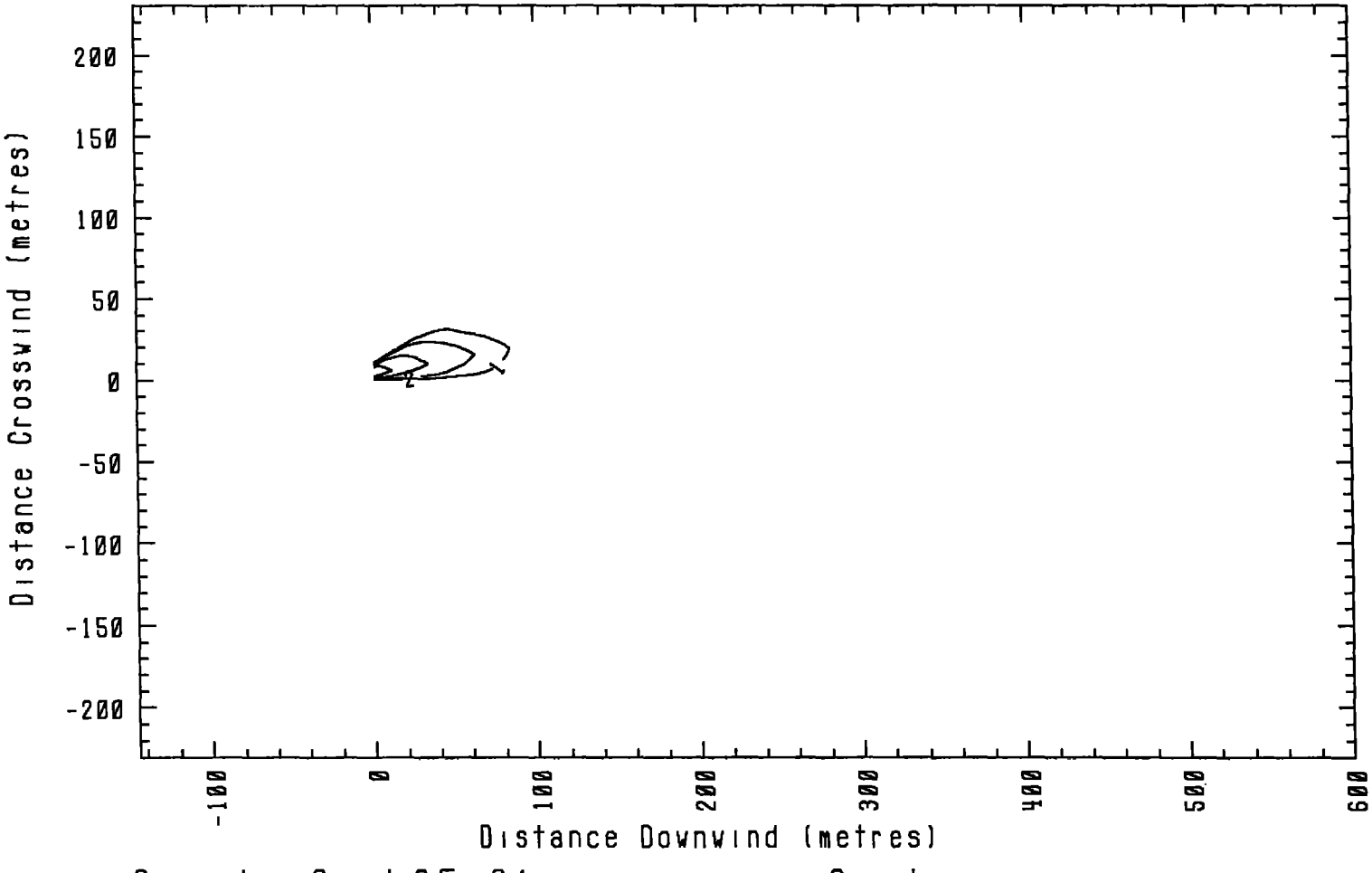
Coyote 3 LGF 81

Windvel = 6.000 m/s

Ignition time 99.7 sec. at Radius 79. m.

07/22/83u 10:45:45
08/04/83 15:10:56

Horizontal Concentration Contours



Coyote 3 LGF 81

Time = 30 sec, level 3m

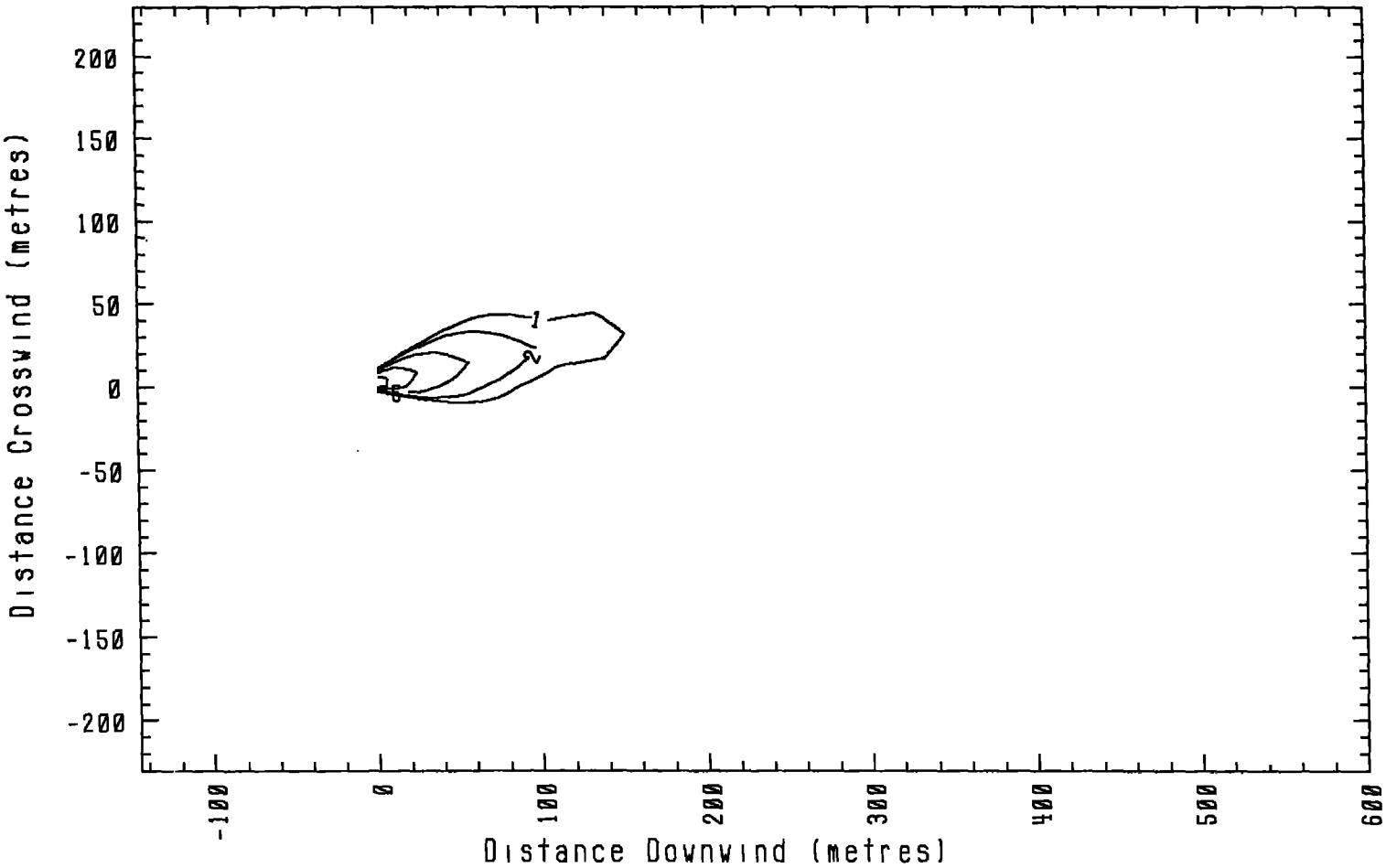
ln conc, ln x axis, boundary = 180. m.

Contours:

1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/04/83 15:10:56

Horizontal Concentration Contours



Coyote 3 LGF 81

Time = 40 sec, level 3m

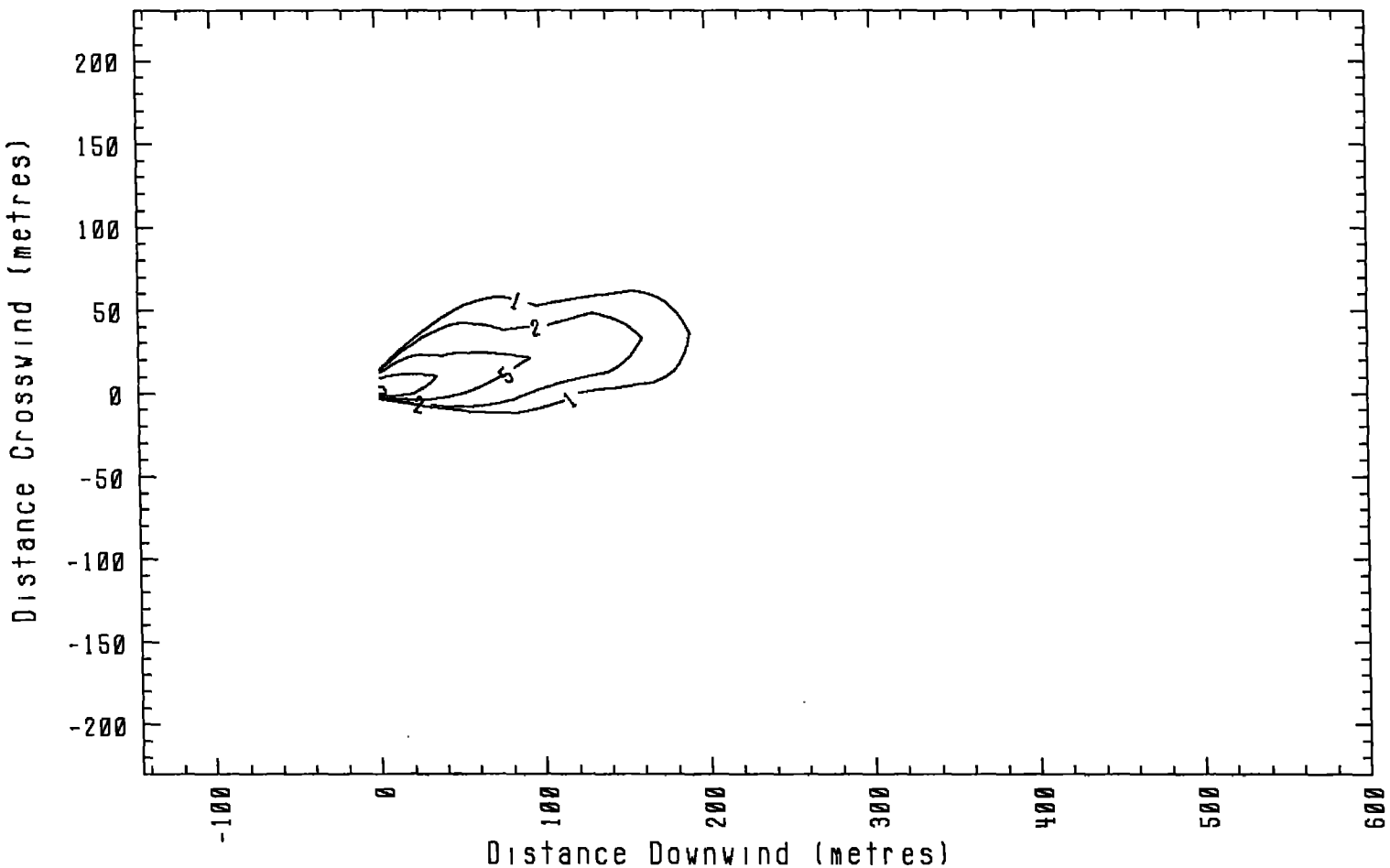
In conc, In x axis, boundary = 240. m.

Contours:

1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/04/83 15:10:56

Horizontal Concentration Contours



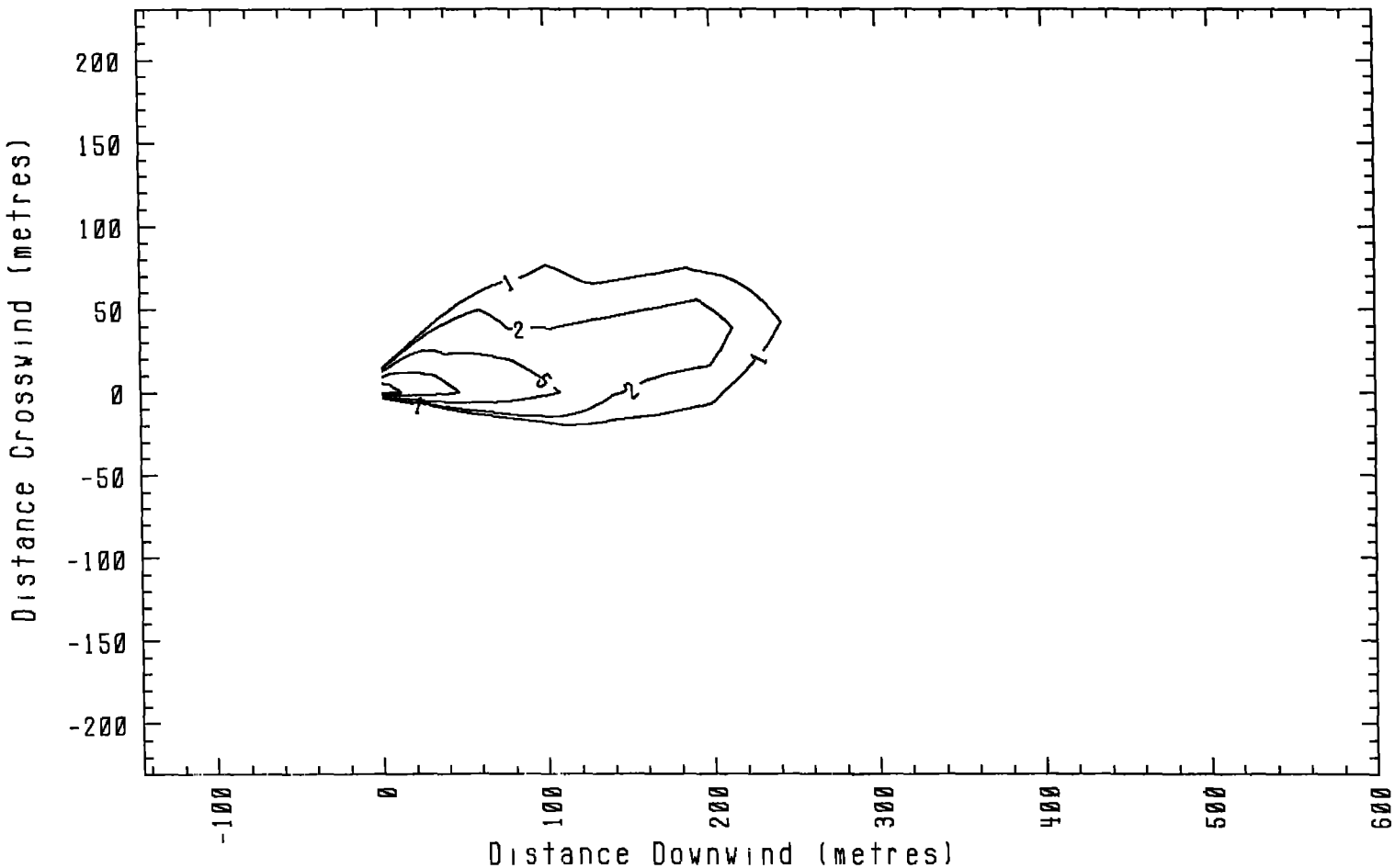
Coyote 3 LGF 81 Contours:

Time = 50 sec, level 3m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 300. m.

07/22/83u 10:45:45
08/04/83 15:10:56

Horizontal Concentration Contours



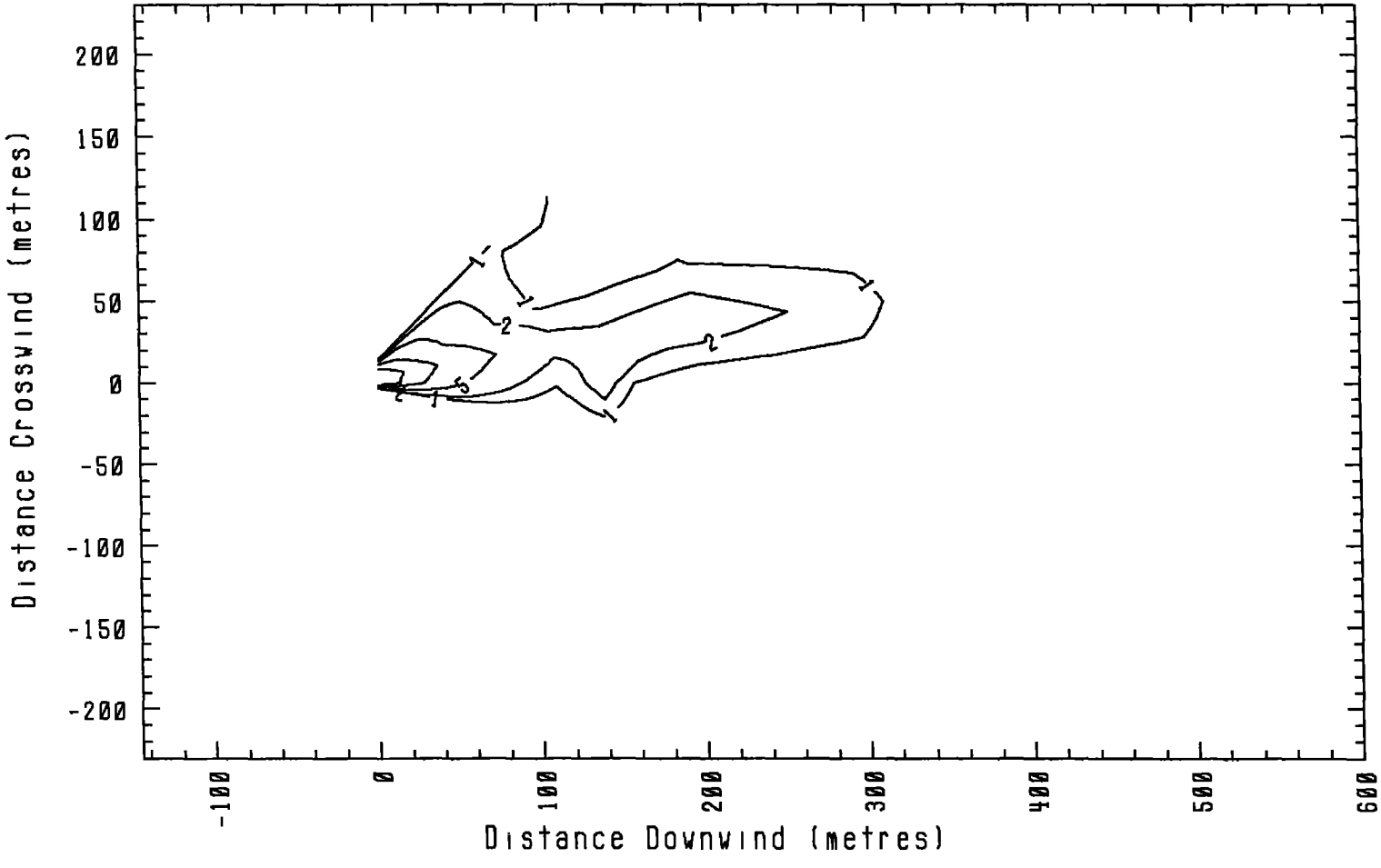
Coyote 3 LGF 81 Contours:

Time = 60 sec, level 3m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 360. m.

07/22/83u 10:45:45
08/04/83 15:10:56

Horizontal Concentration Contours



Coyote 3 LGF 81

Time = 70 sec, level 3m

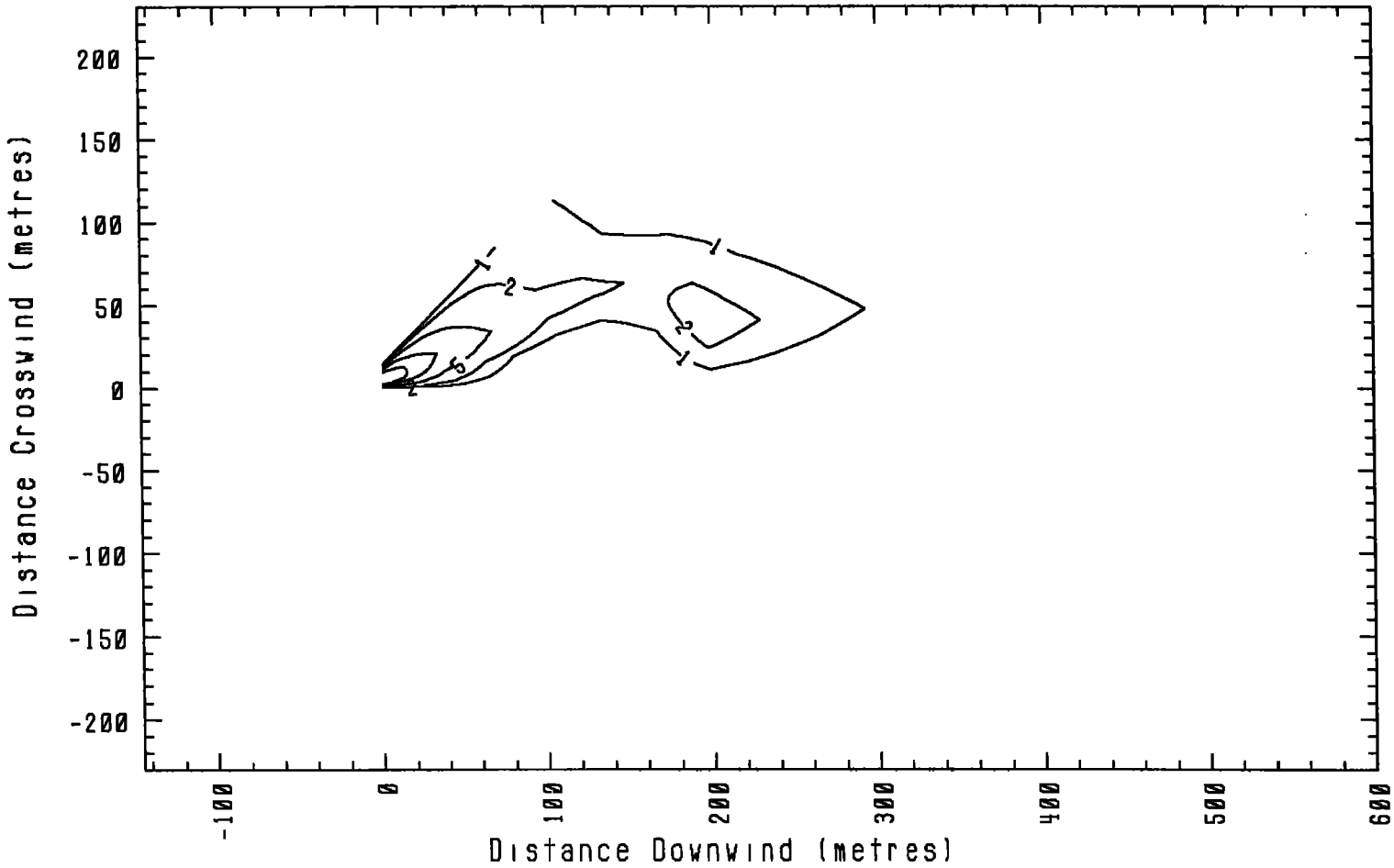
ln conc, ln x axis, boundary = 420. m.

Contours:

1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/04/83 15:10:56

Horizontal Concentration Contours



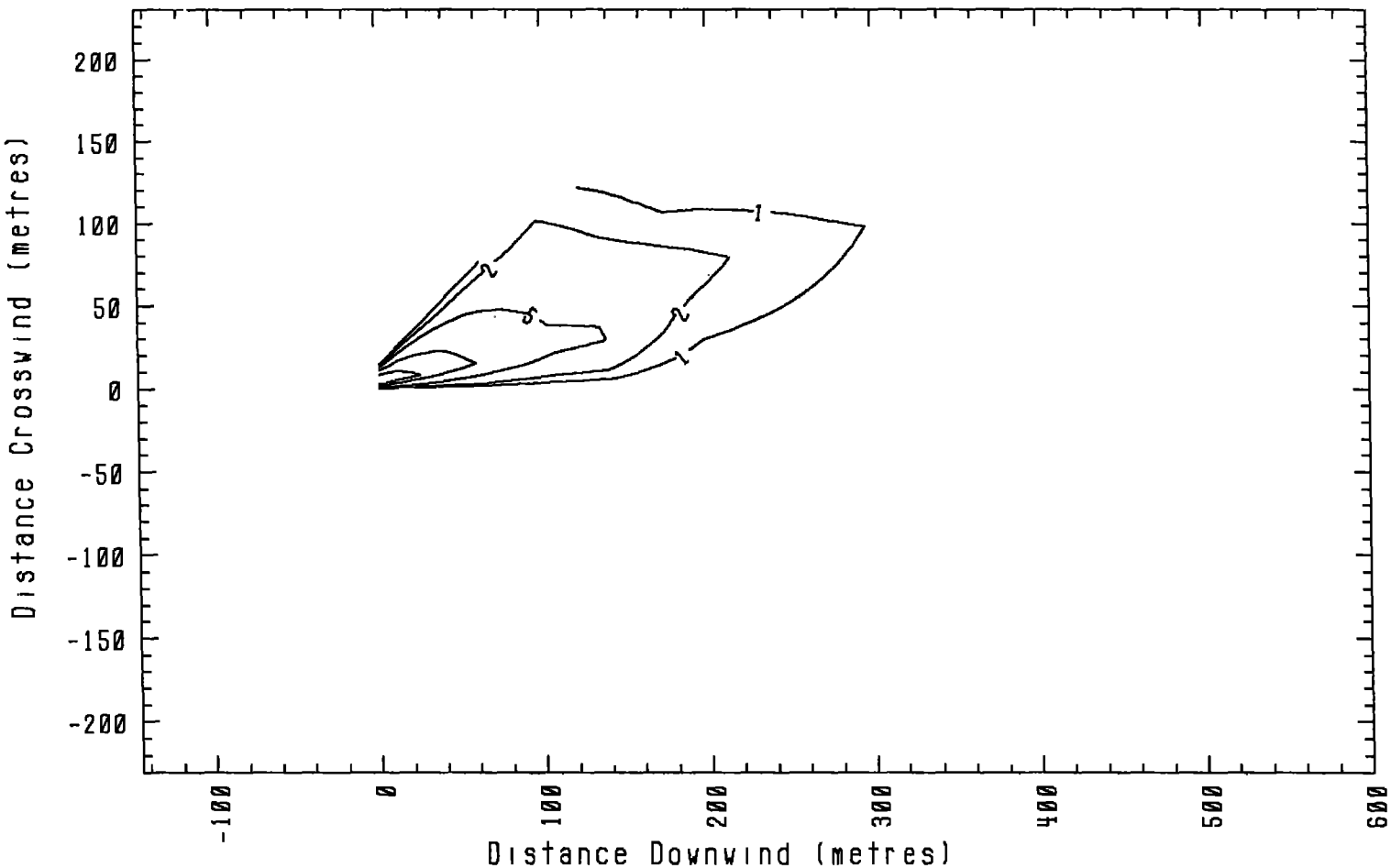
Coyote 3 LGF 81 Contours:

Time = 80 sec, level 3m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 480. m.

07/22/83u 10:45:45
08/04/83 15:10:56

Horizontal Concentration Contours



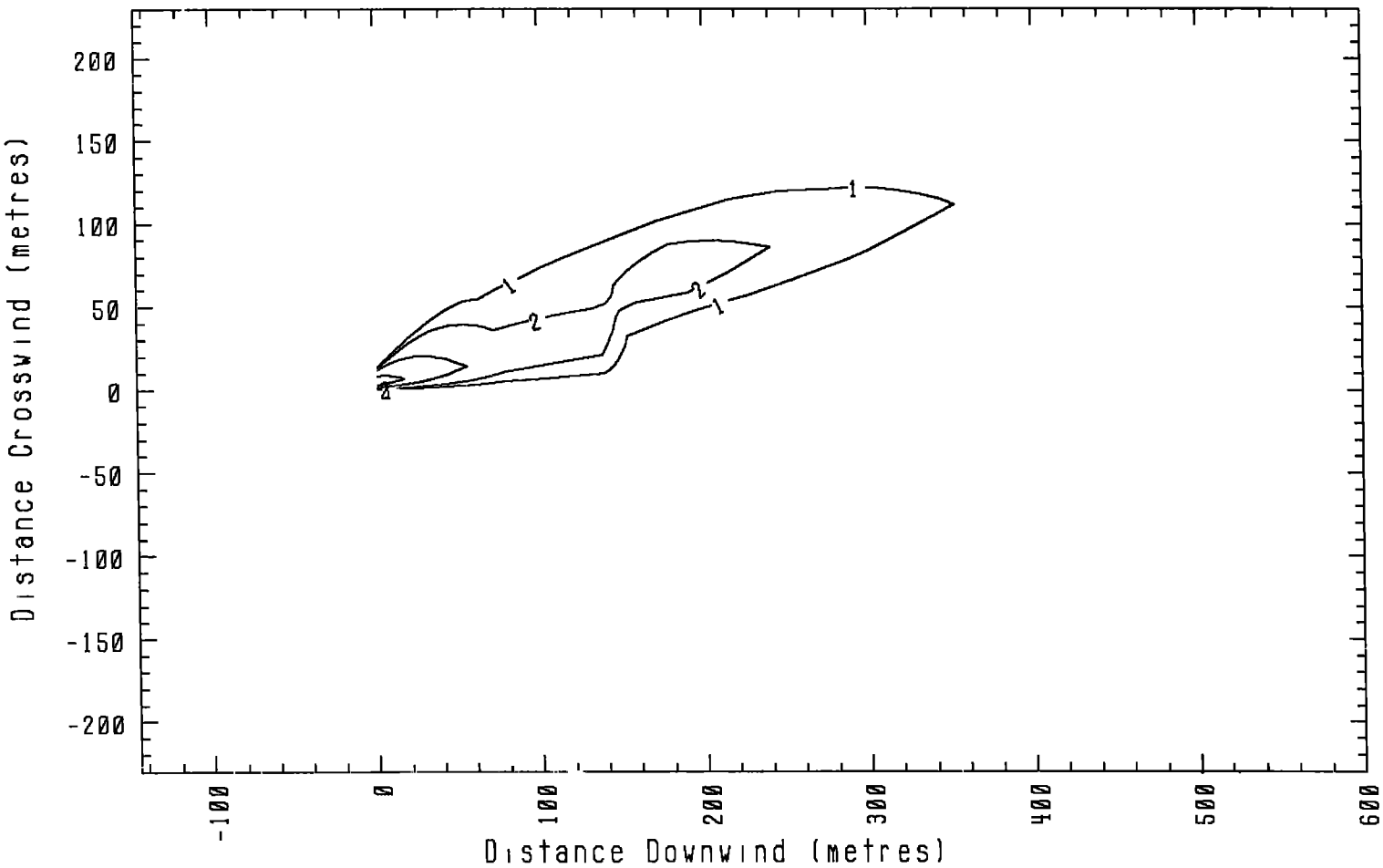
Coyote 3 LGF 81 Contours:

Time = 90 sec, level 3m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 540. m.

07/22/83u 10:45:45
08/04/83 15:10:56

Horizontal Concentration Contours



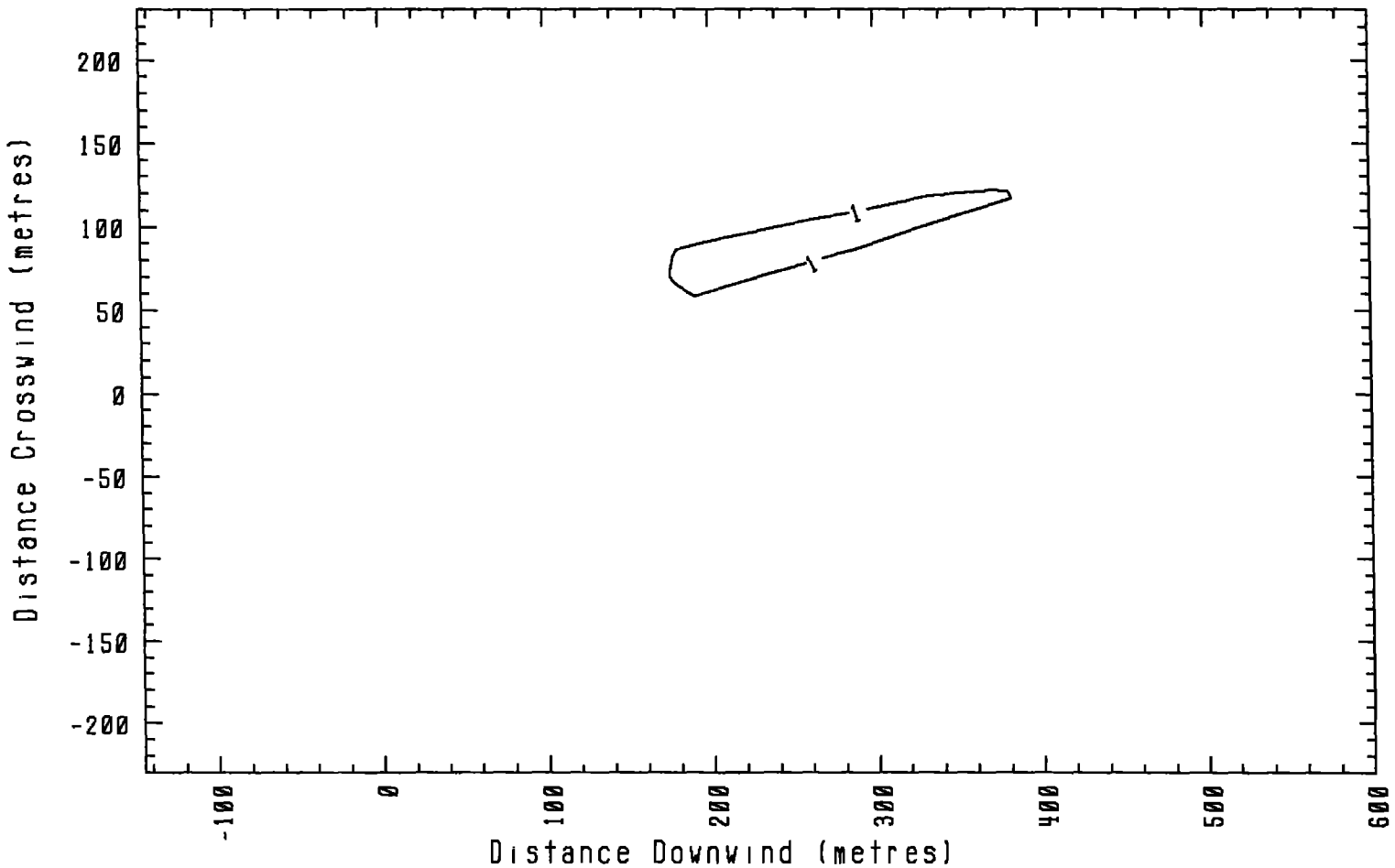
Coyote 3 LGF 81 Contours:

Time = 100 sec, level 3m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 600. m.

07/22/83u 10:45:45
08/04/83 15:10:56

Horizontal Concentration Contours



Coyote 3 LGF 81

Time = 110 sec, level 3m

In conc, In x axis,

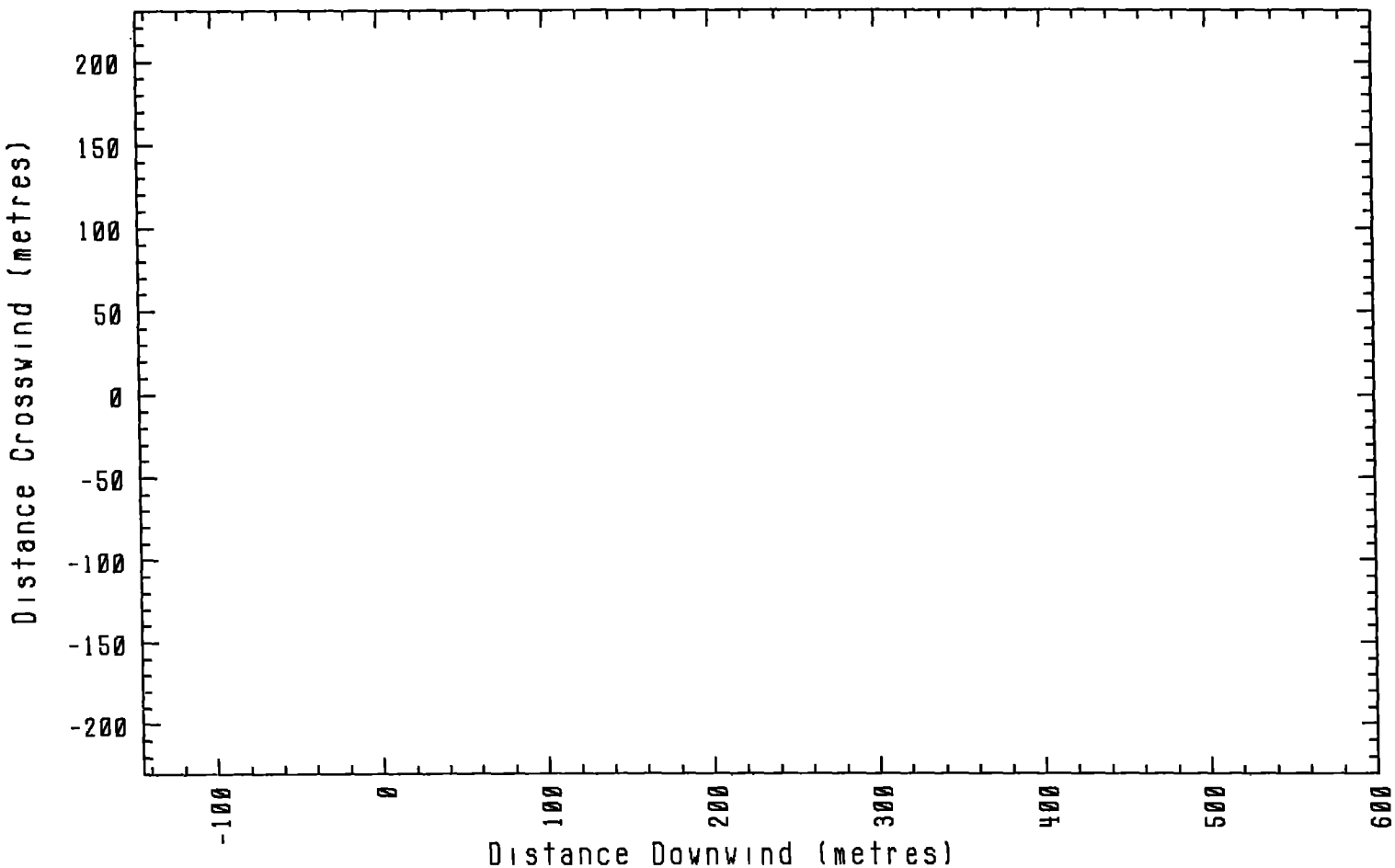
Contours:

1%,2%,5%,10%,15%,25%,35%

boundary = 660. m.

07/22/83u 10:45:45
08/04/83 15:10:56

Horizontal Concentration Contours



Coyote 3 LGF 81

Time = 120 sec, level 3m

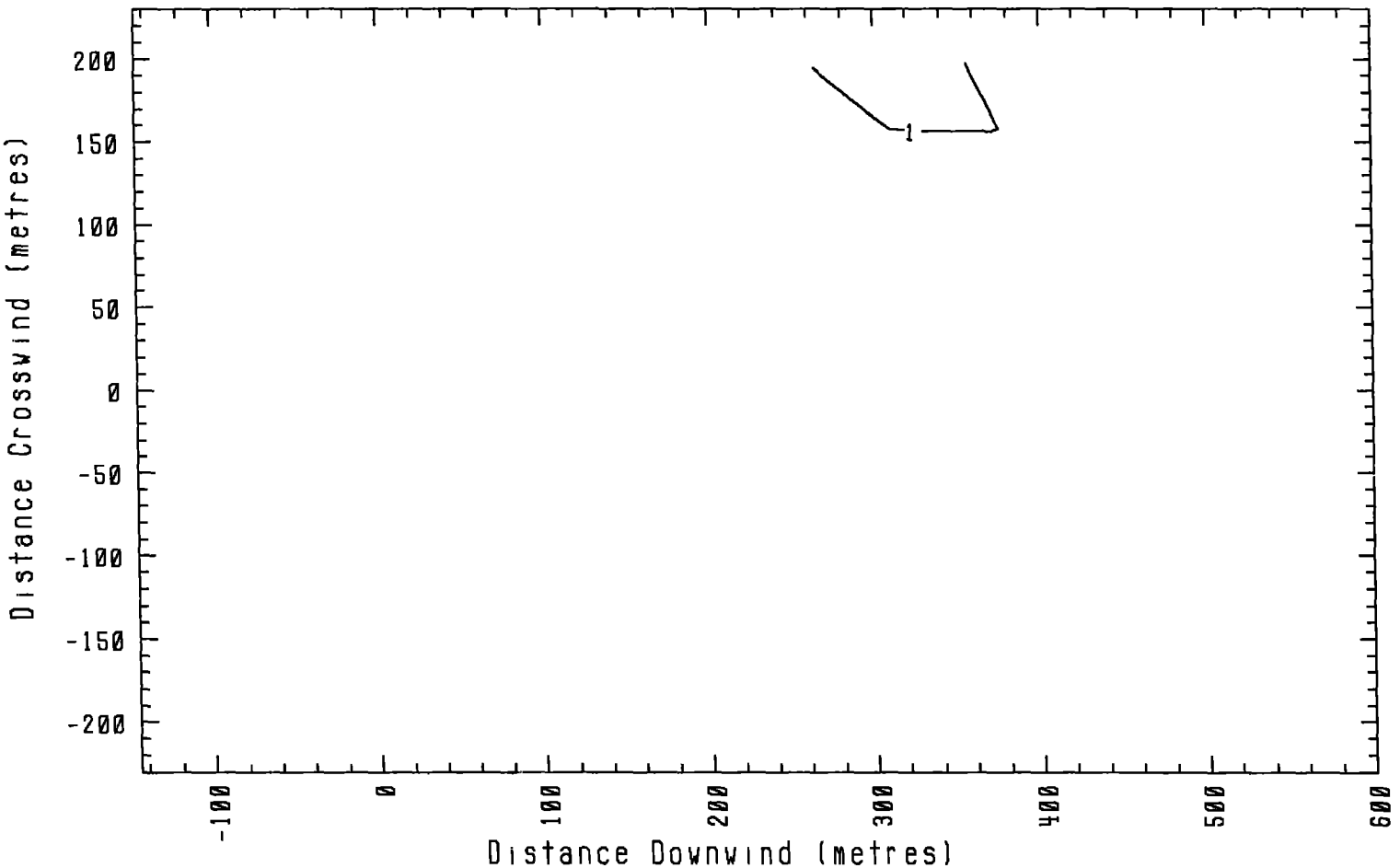
ln conc, ln x axis, boundary = 720. m.

Contours:

1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/04/83 15:10:56

Horizontal Concentration Contours



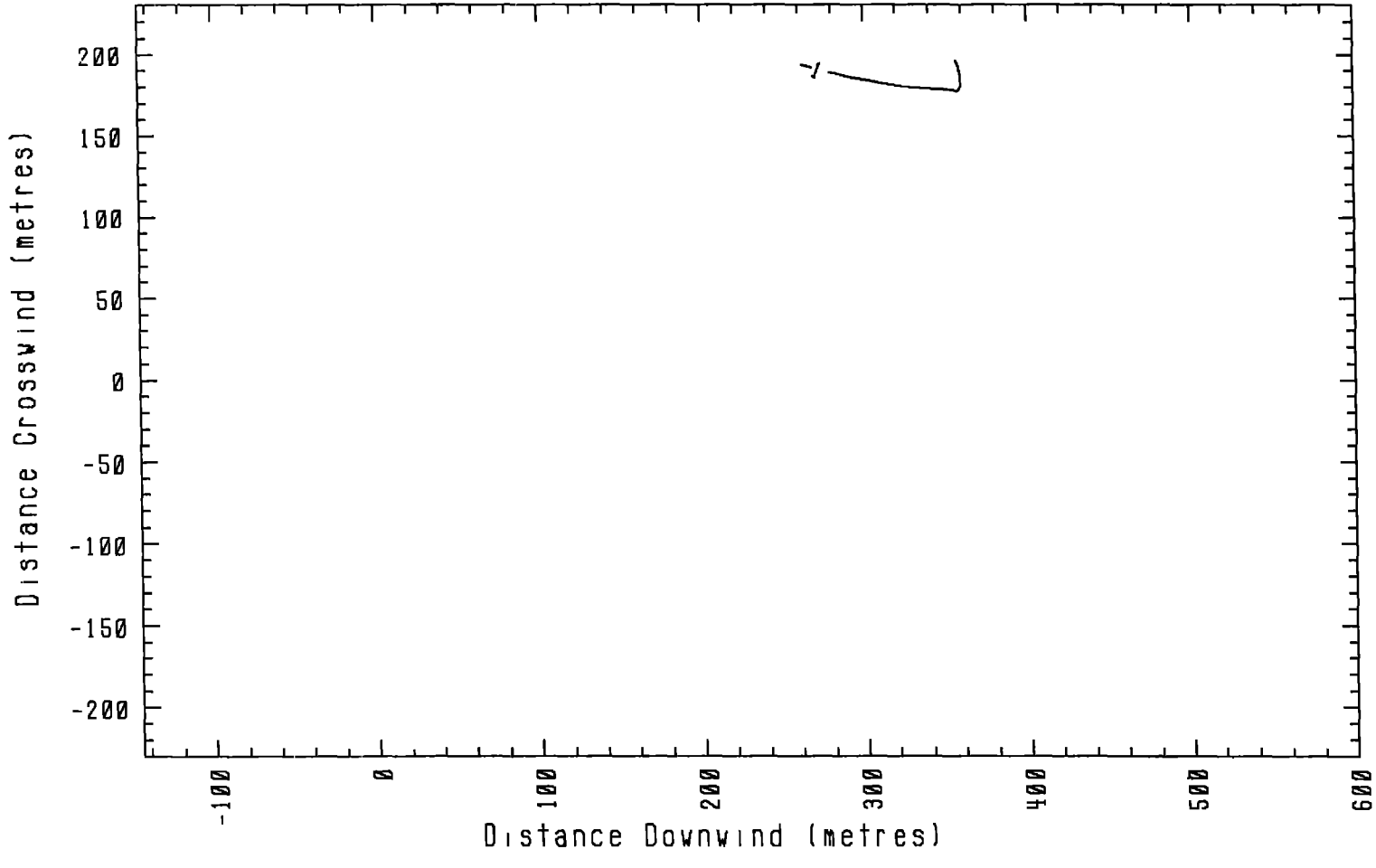
Coyote 3 LGF 81 Contours:

Time = 130 sec, level 3m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 780. m.

07/22/83u 10:45:45
08/04/83 15:10:56

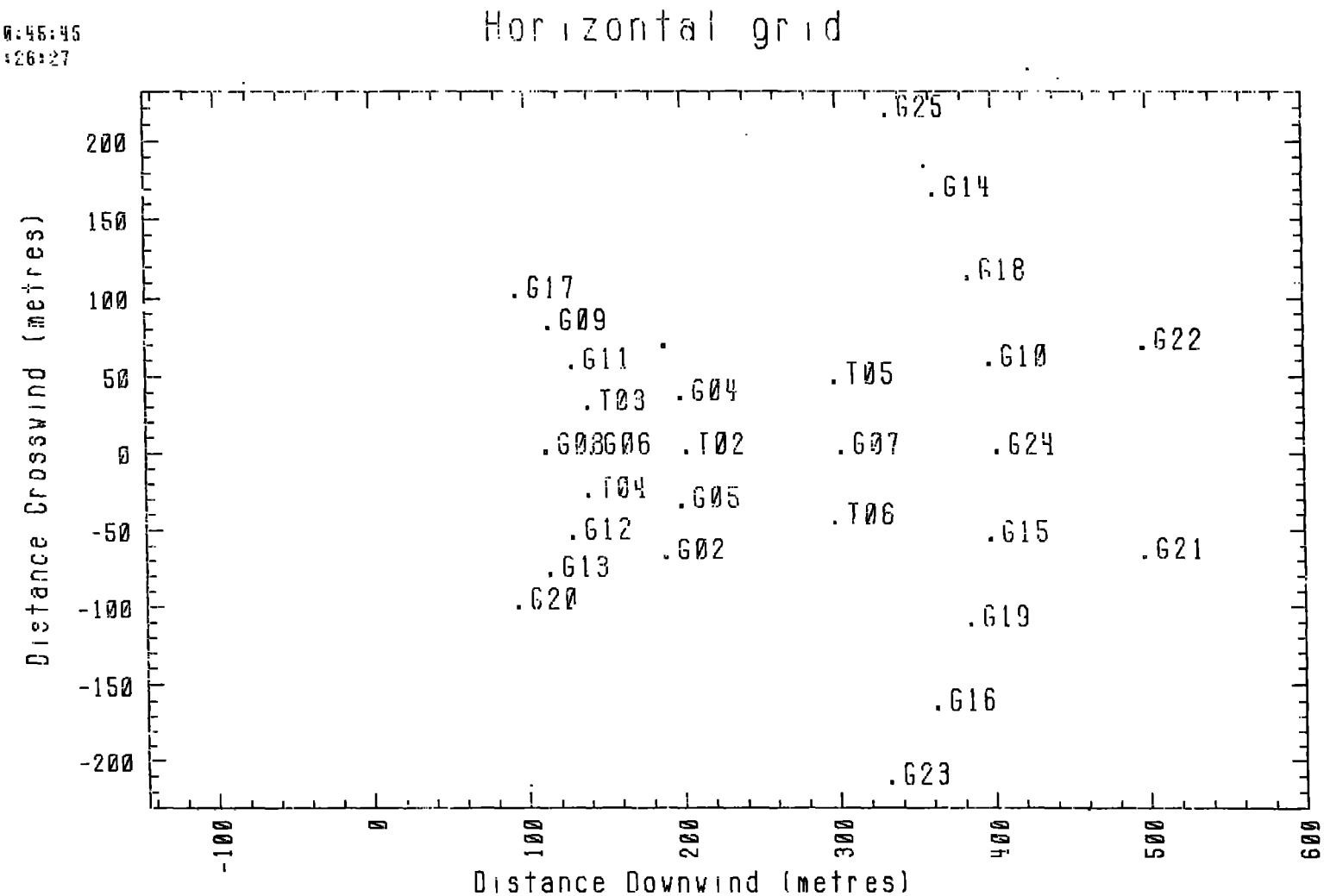
Horizontal Concentration Contours



Coyote 3 LGF 81 Contours:

Time = 140 sec, level 3m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 840. m.



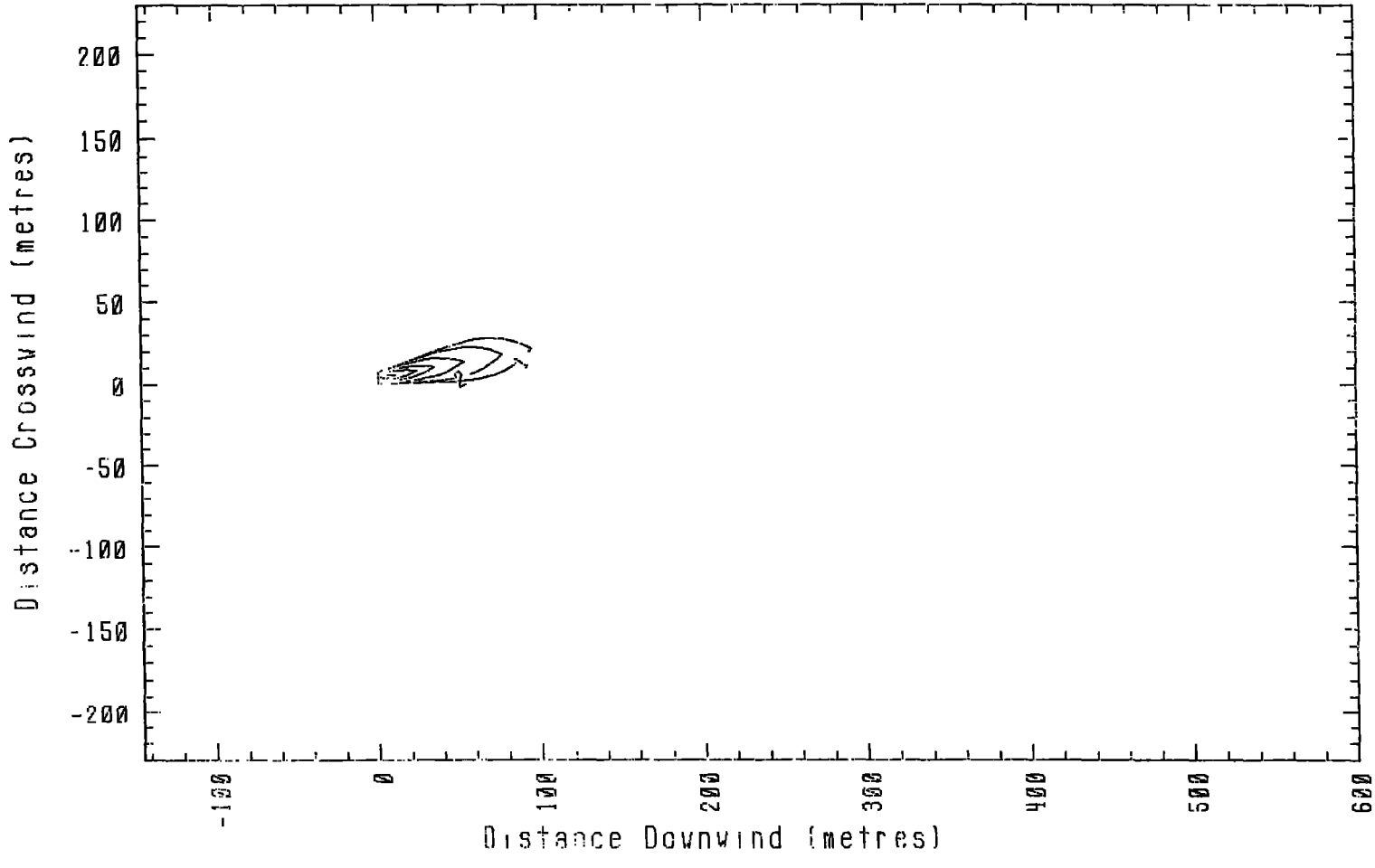
Coyote 5 LGF 81

Windvel = 9.700 m/s

Ignition time 132.7 sec. at Radius 79. m.

07/22/83u 10:45:46
11/15/83 15:26:27

Horizontal Concentration Contours



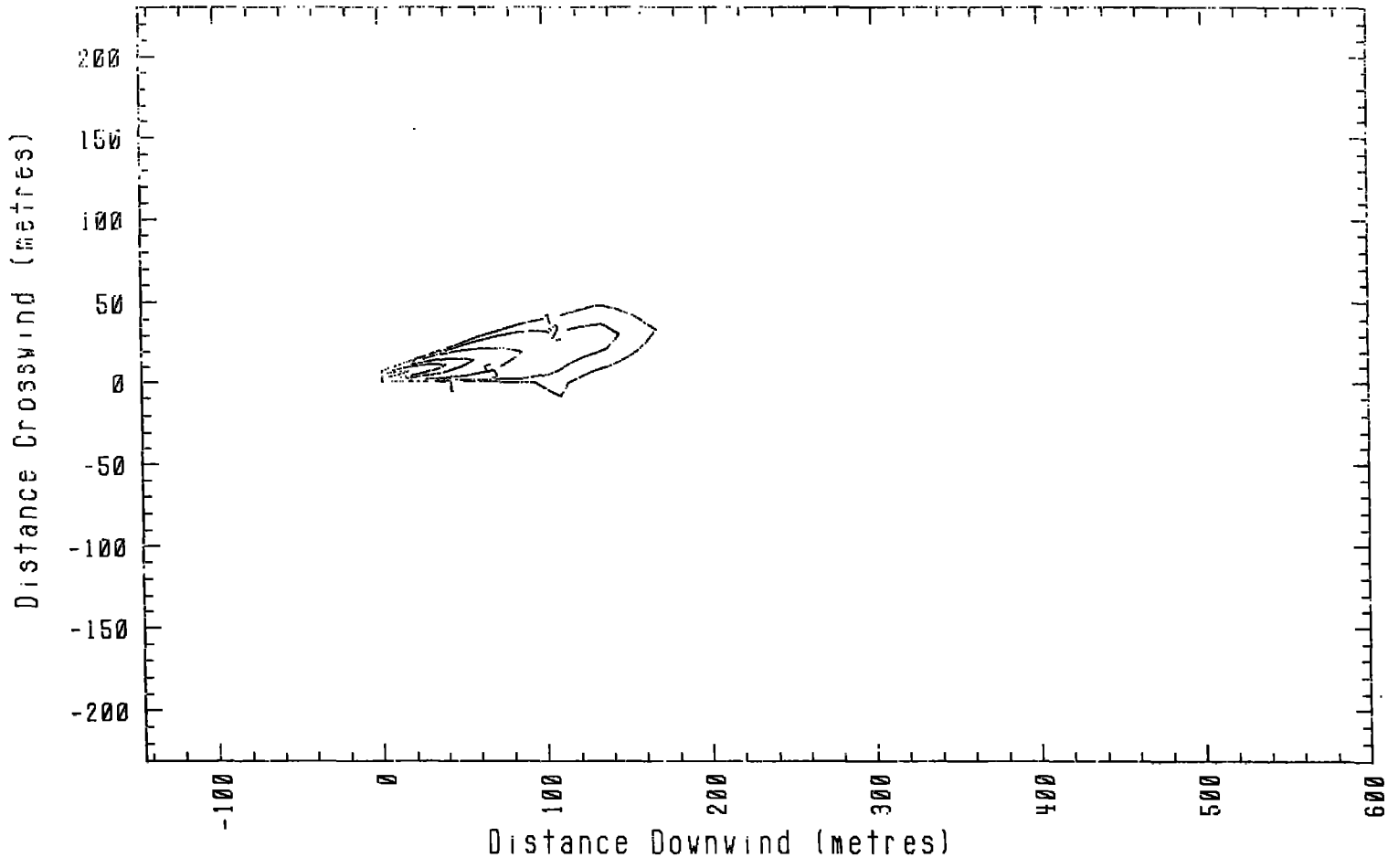
Coyote 5 LGF 81 Contours:

Time = 20 sec. level 1m. 1%,2%,5%,10%,15%,25%,35%

In conc, In x axis, boundary = 194. m.

07/22/83u 10:45:45
11/15/83 15:26:27

Horizontal Concentration Contours



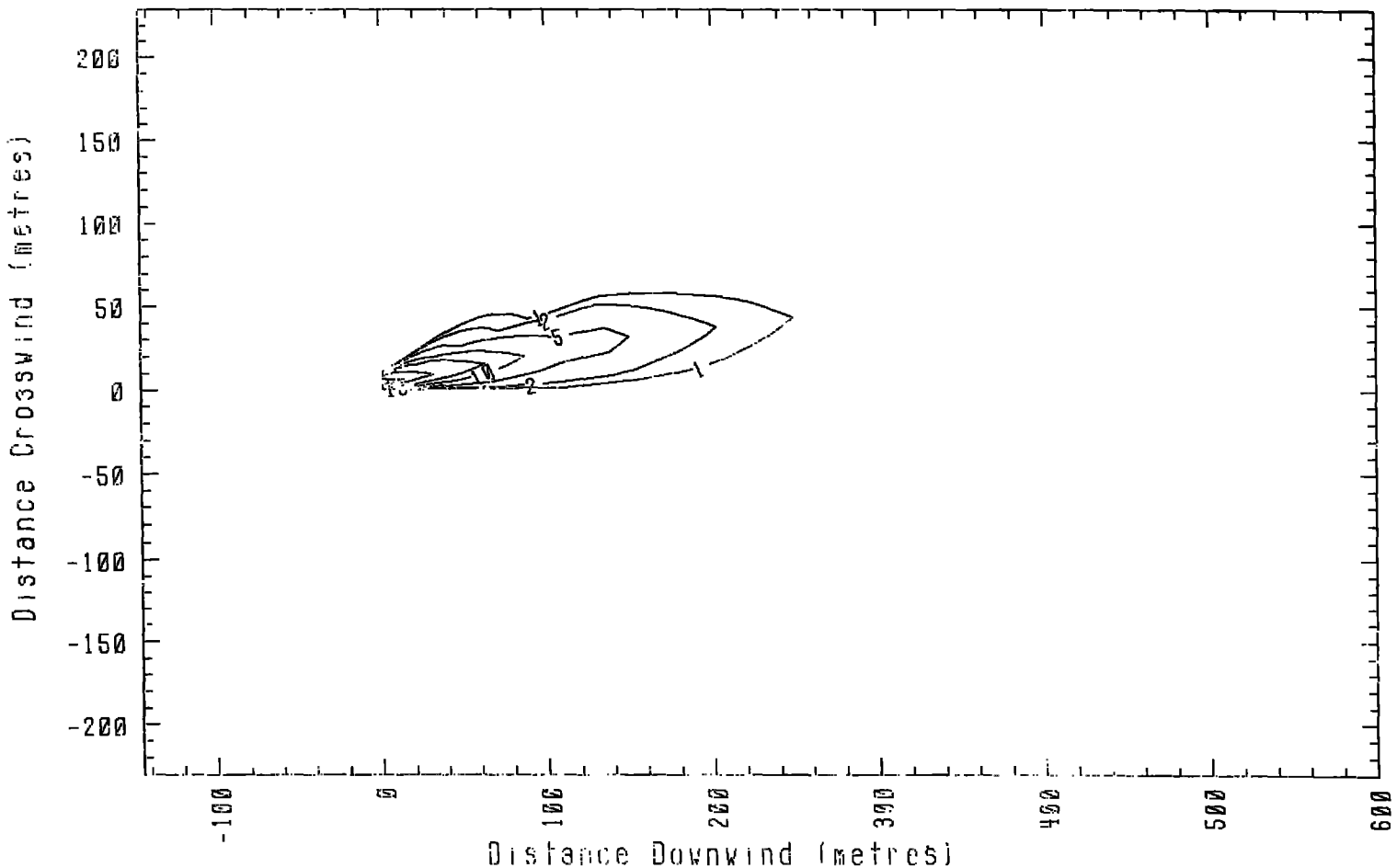
Coyote 5 LGF 81 Contours:

Time = 30 sec, level 1m. 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 291. m.

07/22/83u 10:45:46
11/15/83 15:26:27

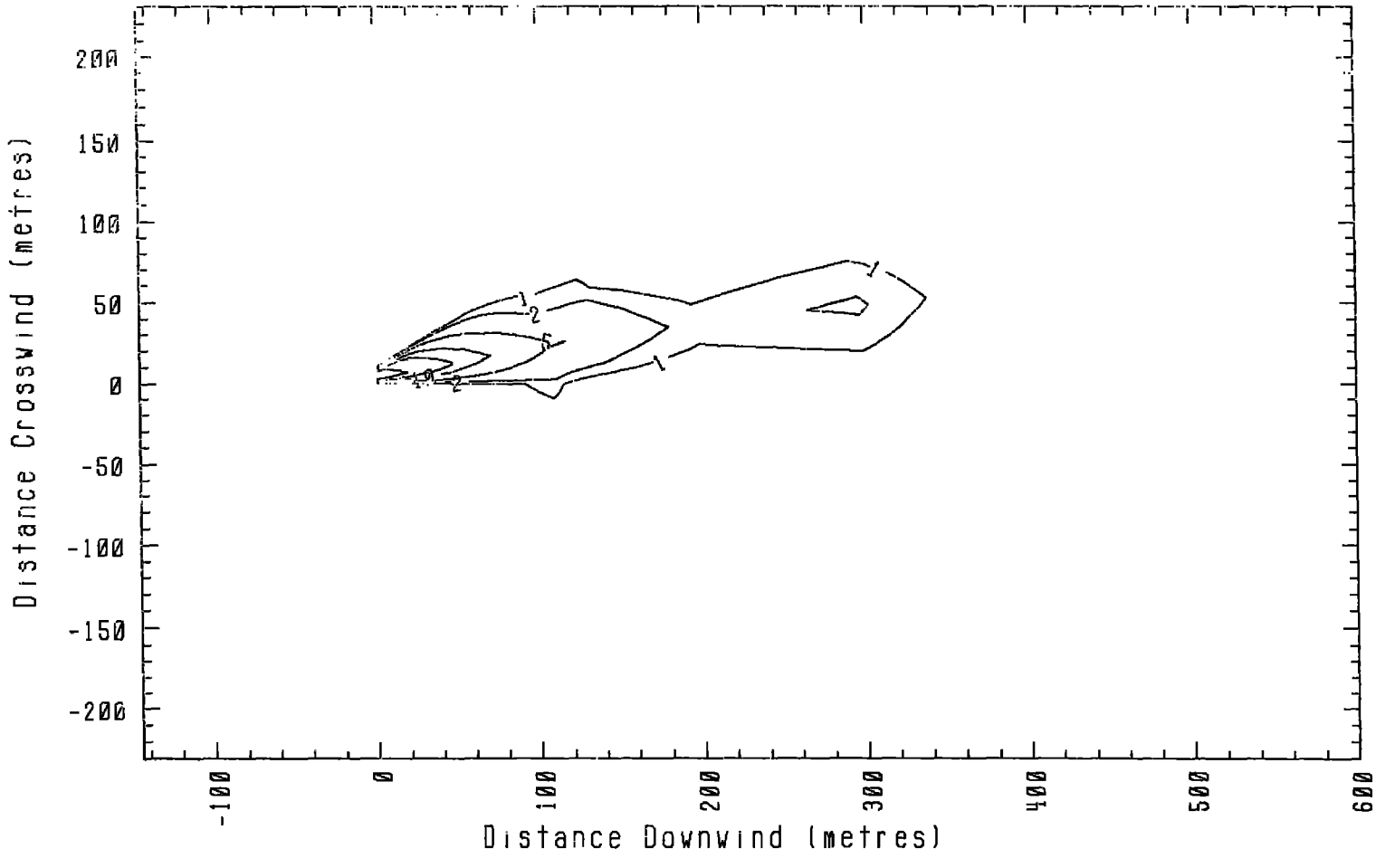
Horizontal Concentration Contours



Coyote 5 LGF 81 Contours:
Time = 40 sec. level 1m. 1%,2%,5%,10%,15%,25%,35%
ln conc, ln x axis, boundary = 388. m.

07/22/83 10:45:45
11/15/83 15:26:27

Horizontal Concentration Contours



Coyote 5 LGF 81

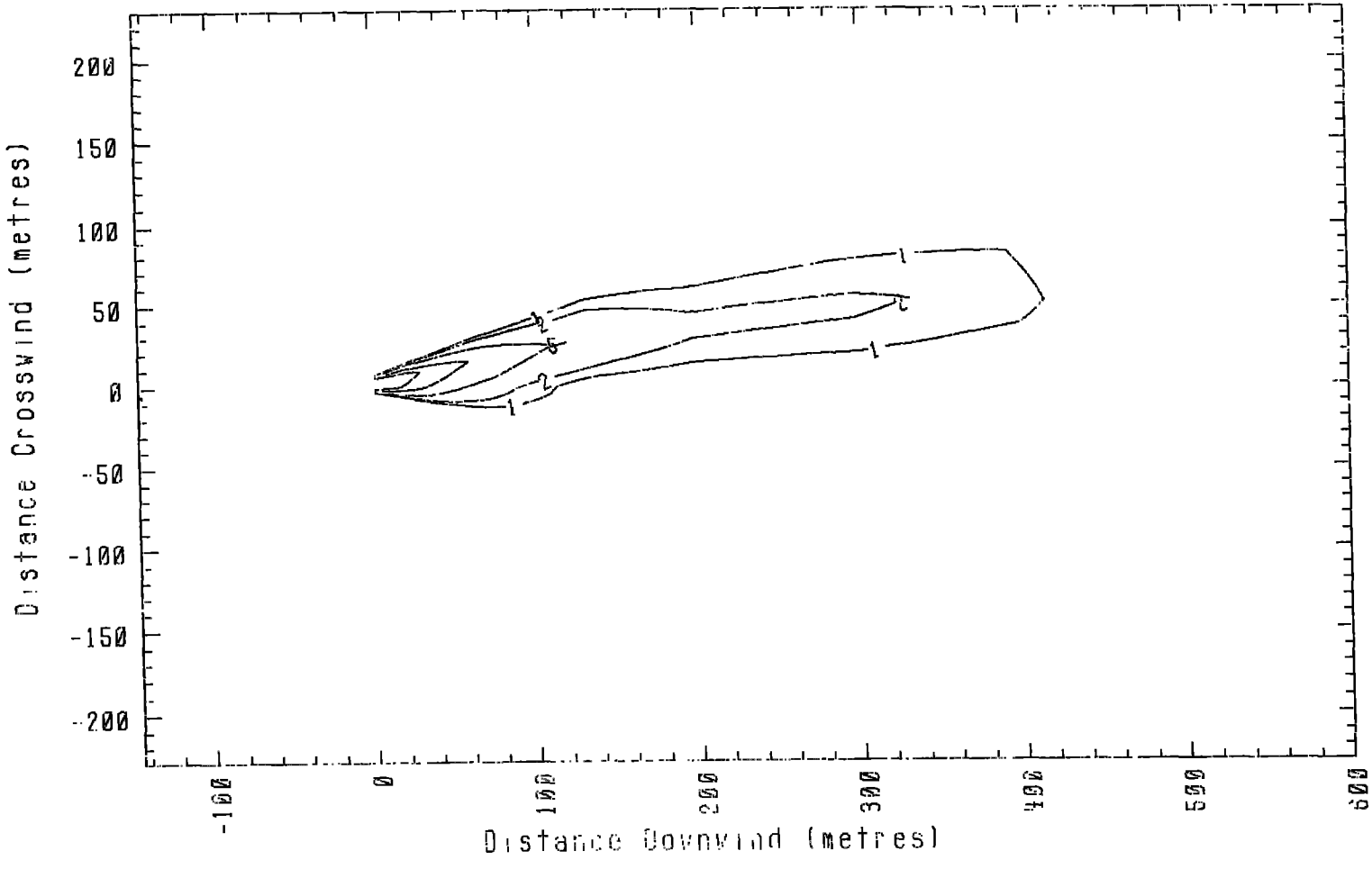
Time = 50 sec, level 1m.

In conc, In x axis, boundary = 485. m.

Contours:
1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
11/15/83 15:26:27

Horizontal Concentration Contours



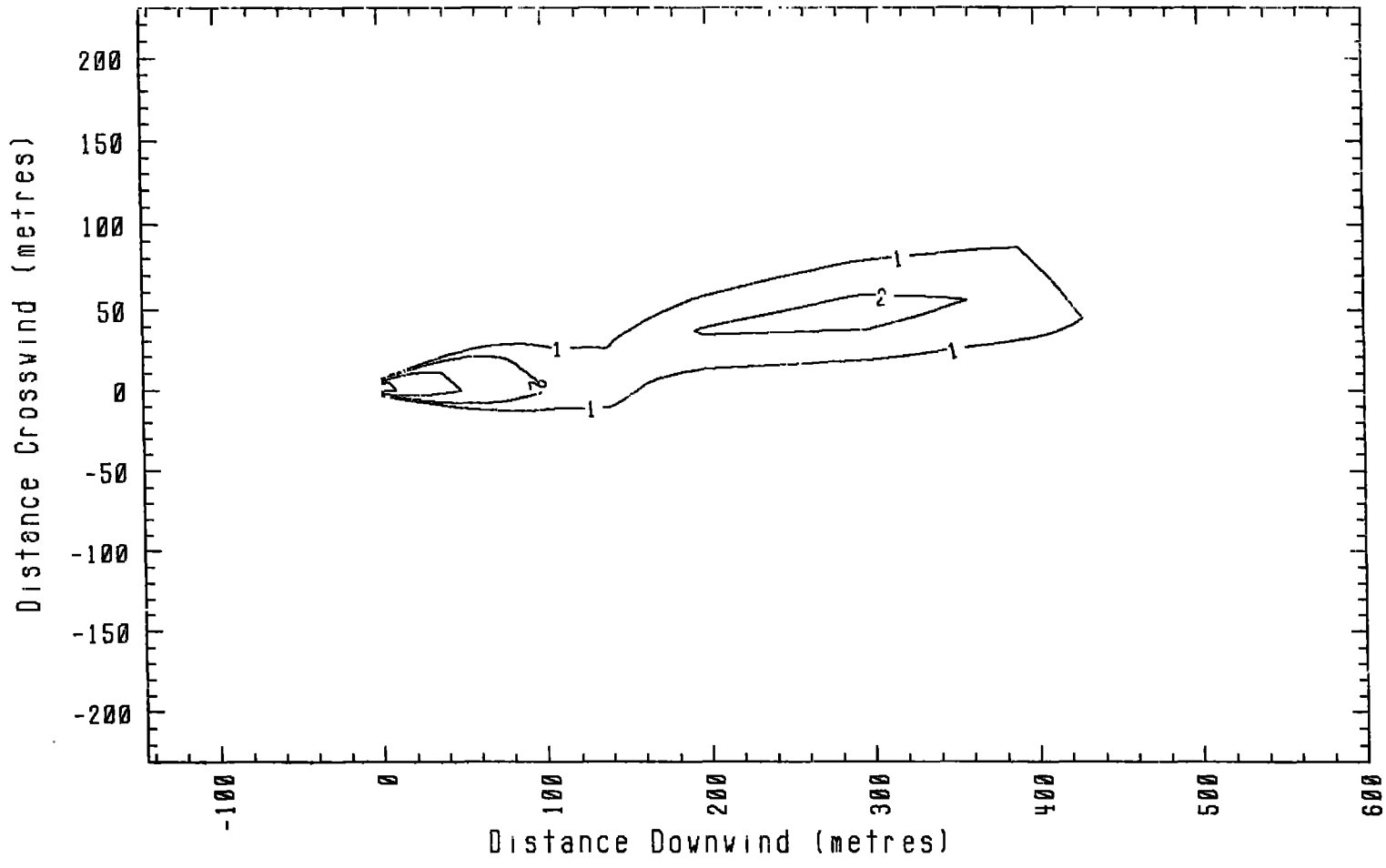
Coyote 5 LGF 81 Contours:

Time = 60 sec. level 1m. 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 532. m.

07/22/83u 10:45:45
11/15/83 15:26:27

Horizontal Concentration Contours



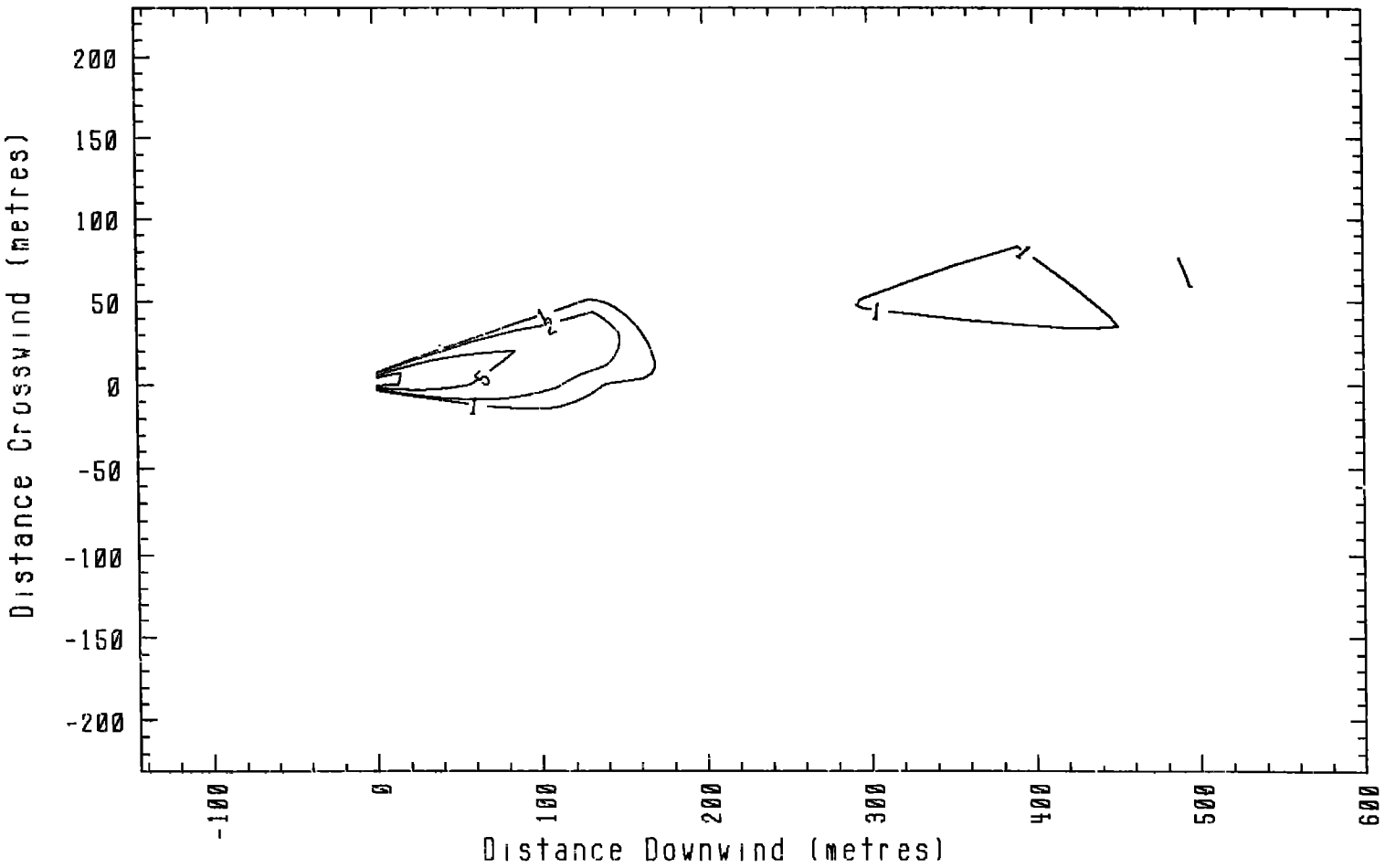
Coyote 5 LGF 81 Contours:

Time = 70 sec, level 1m. 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 679. m.

07/22/83u 10:45:46
11/15/83 15:26:27

Horizontal Concentration Contours



Coyote 5 LGF 81

Time = 80 sec, level 1m.

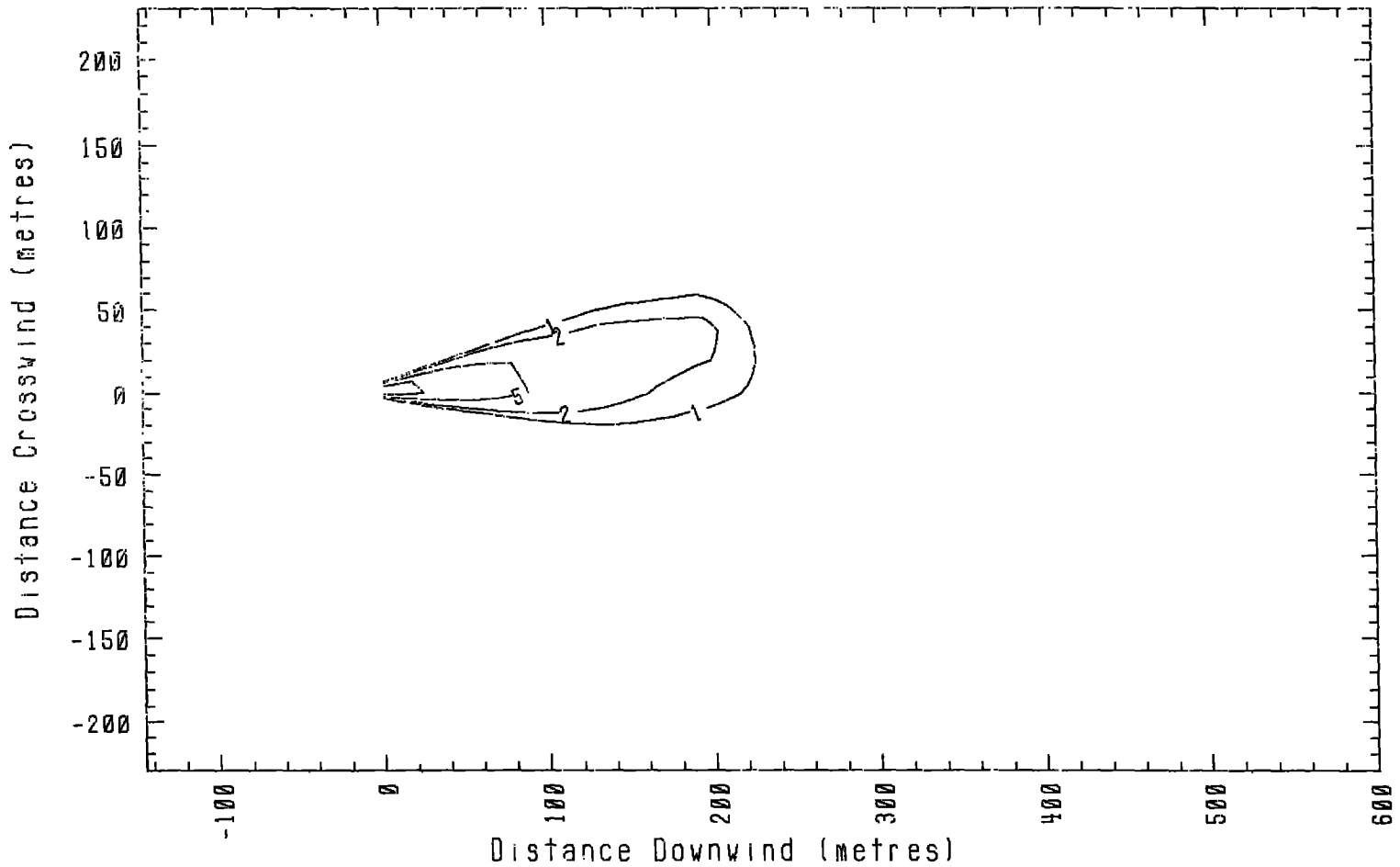
In conc, In x axis, boundary = 776. m.

Contours:

1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
11/15/83 16:26:27

Horizontal Concentration Contours



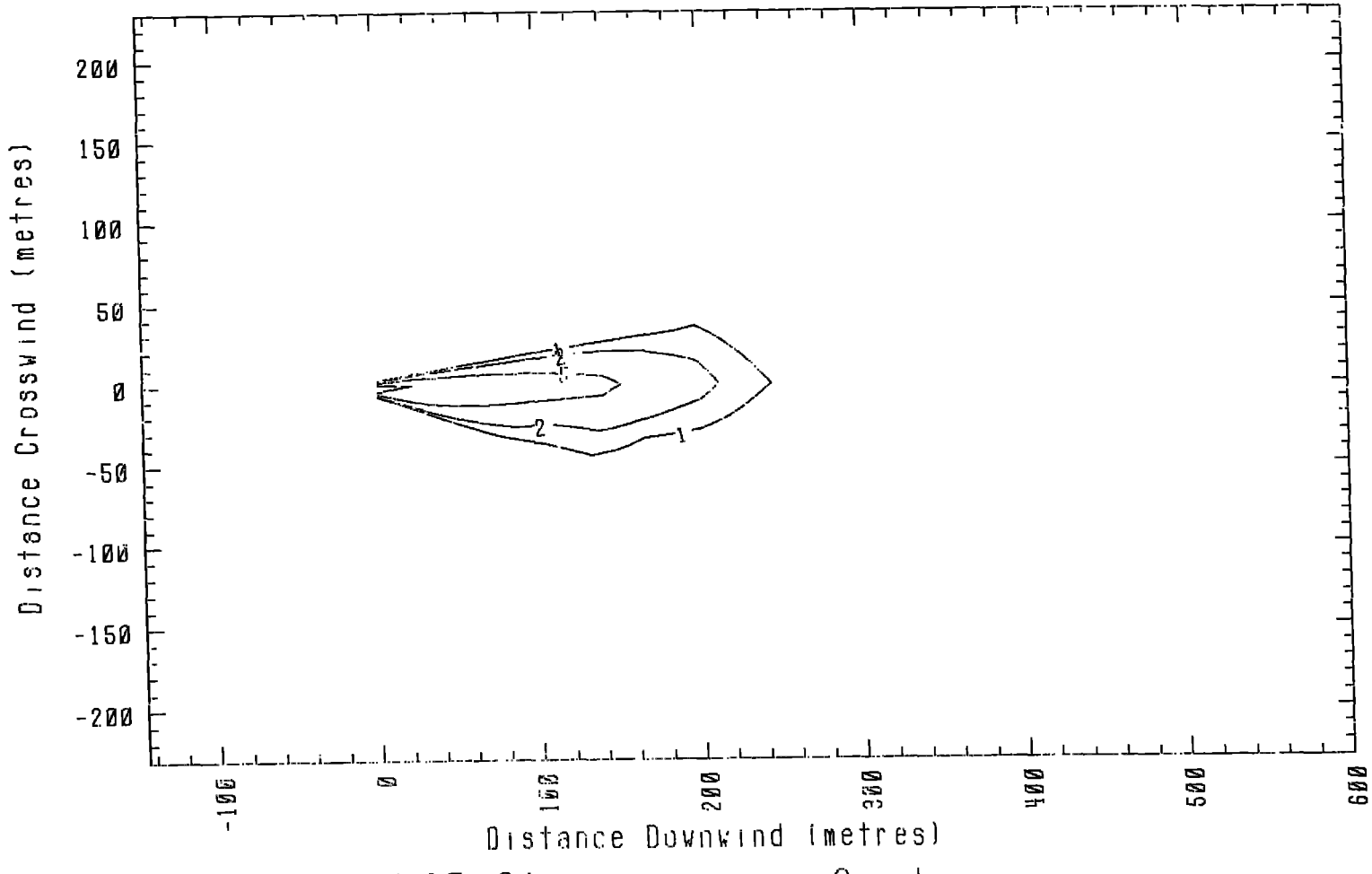
Coyote 5 LGF 81 Contours:

Time = 90 sec, level 1m. 1%,2%,5%,10%,15%,25%,35%

In conc, In x axis, boundary = 873. m.

07/22/83u 10:45:45
11/15/83 15:26:27

Horizontal Concentration Contours



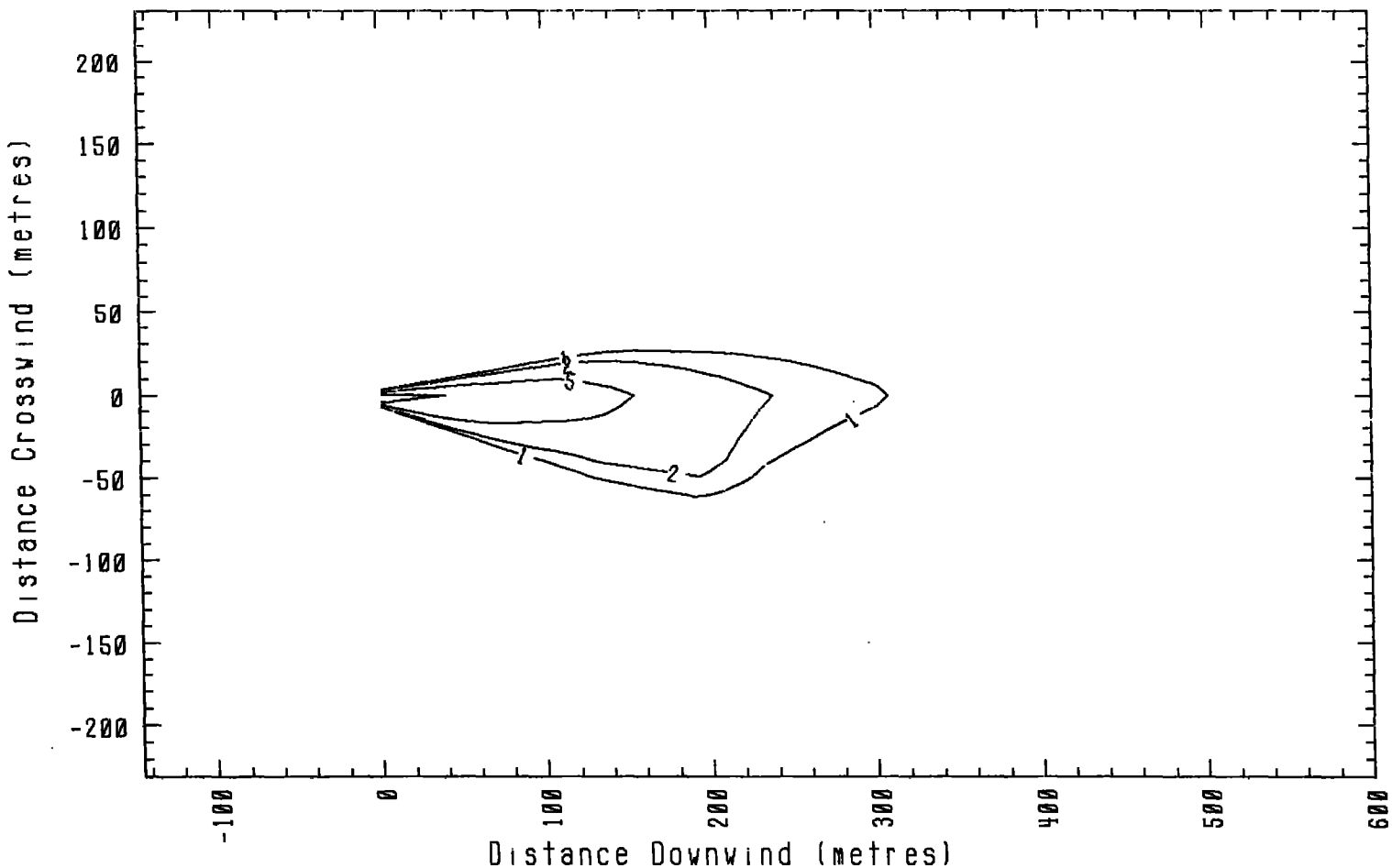
Coyote 5 LGF 81 Contours:

Time = 100 sec, level 1m. 1%,2%,5%,10%,15%,25%,35%

ln conc. ln x axis. boundary = 970. m.

07/22/83u 10:45:45
11/15/83 15:26:27

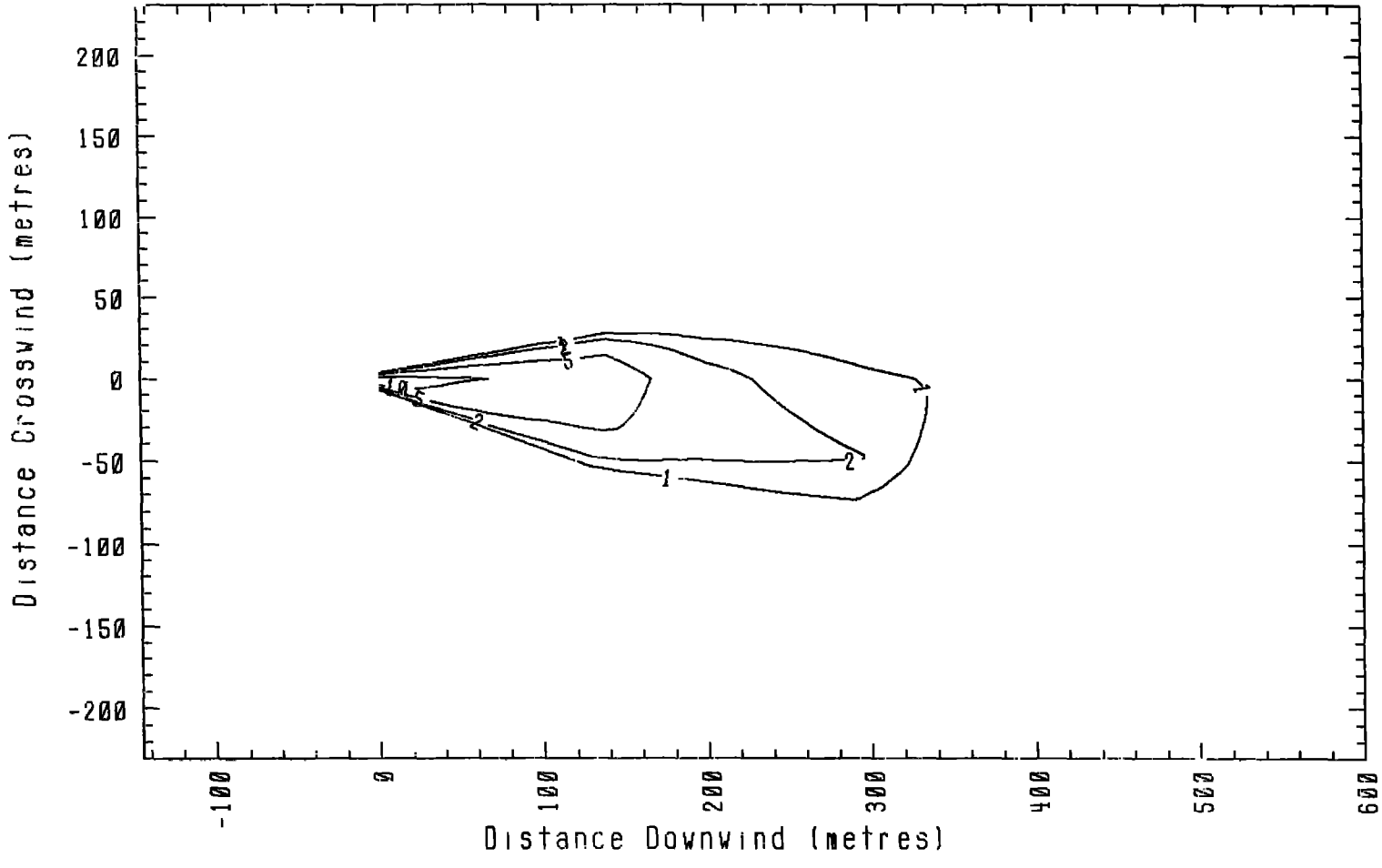
Horizontal Concentration Contours



Coyote 5 LGF 81 Contours:
Time = 110 sec, level 1m. 1%,2%,5%,10%,15%,25%,35%
ln conc, ln x axis, boundary = 1067. m.

07/22/83u 10:45:45
11/15/83 15:26:27

Horizontal Concentration Contours



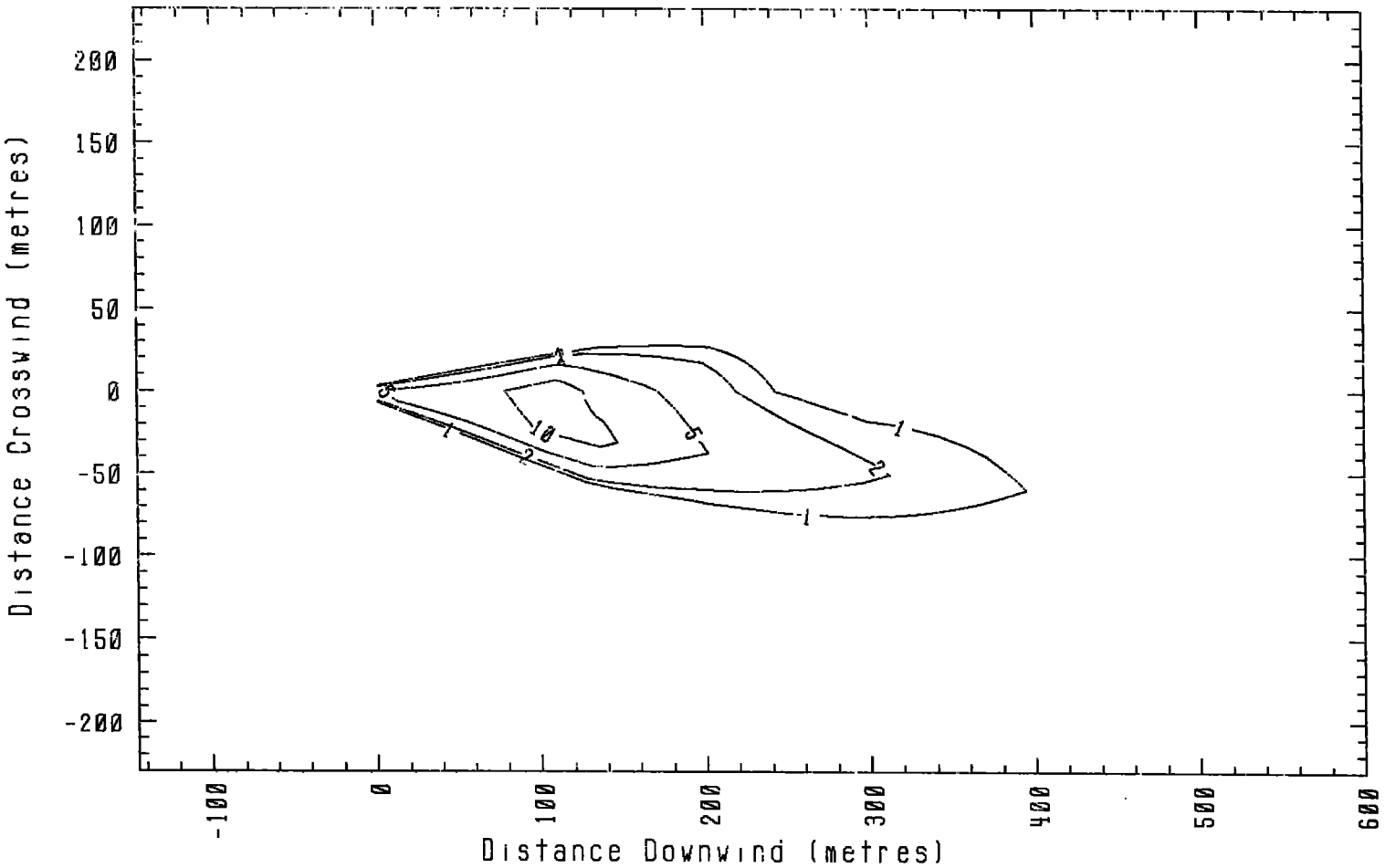
Coyote 5 LGF 81 Contours:

Time = 120 sec. level 1m. 1%,2%,5%,10%,15%,25%,35%

In conc, In x axis, boundary = 1164. m.

97/22/83@ 10:45:46
01/15/83 15:26:27

Horizontal Concentration Contours



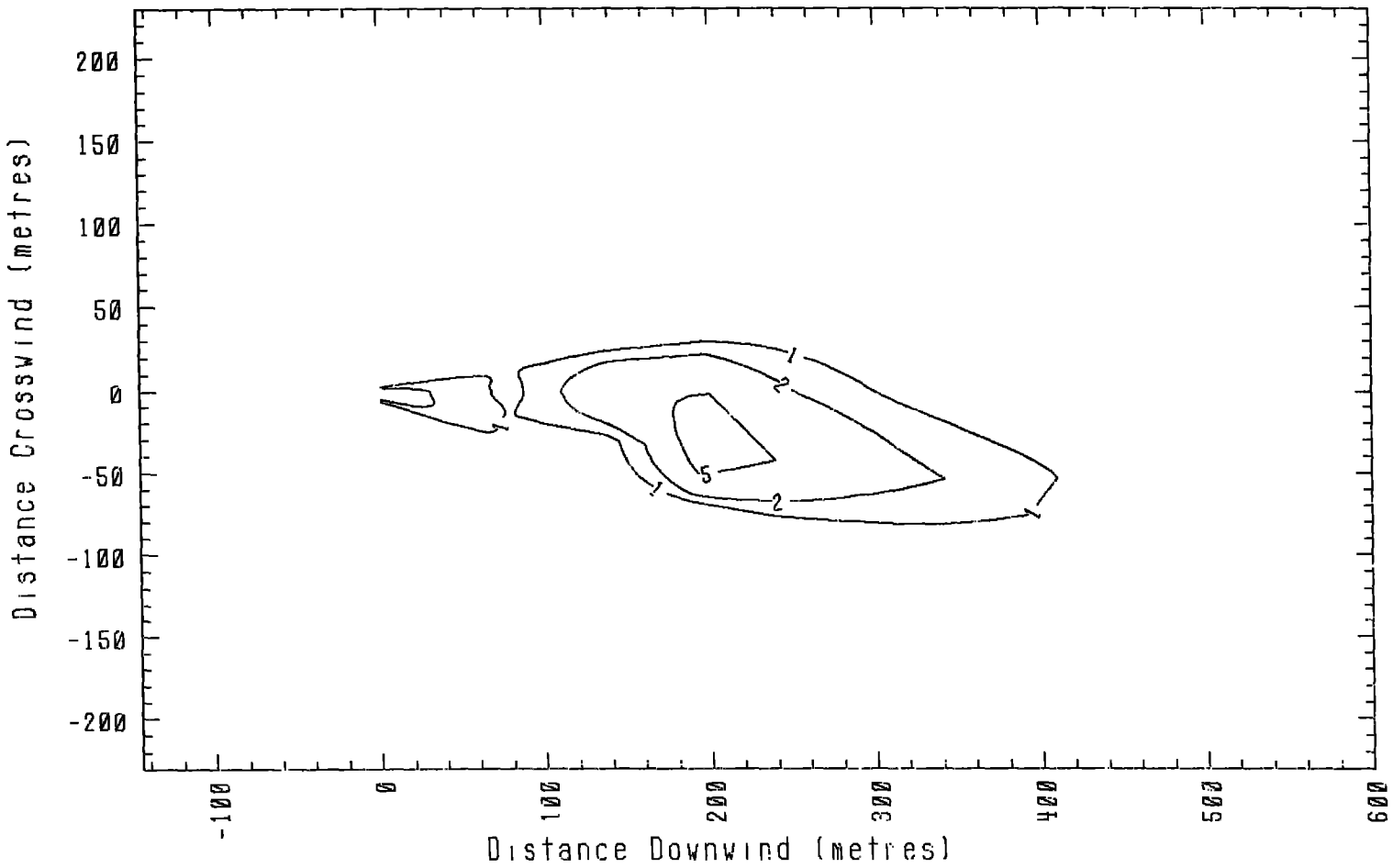
Coyote 5 LGF 81 Contours:

Time = 130 sec, level 1m. 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 1261. m.

07/22/83u 10:46:45
11/15/83 15:26:27

Horizontal Concentration Contours



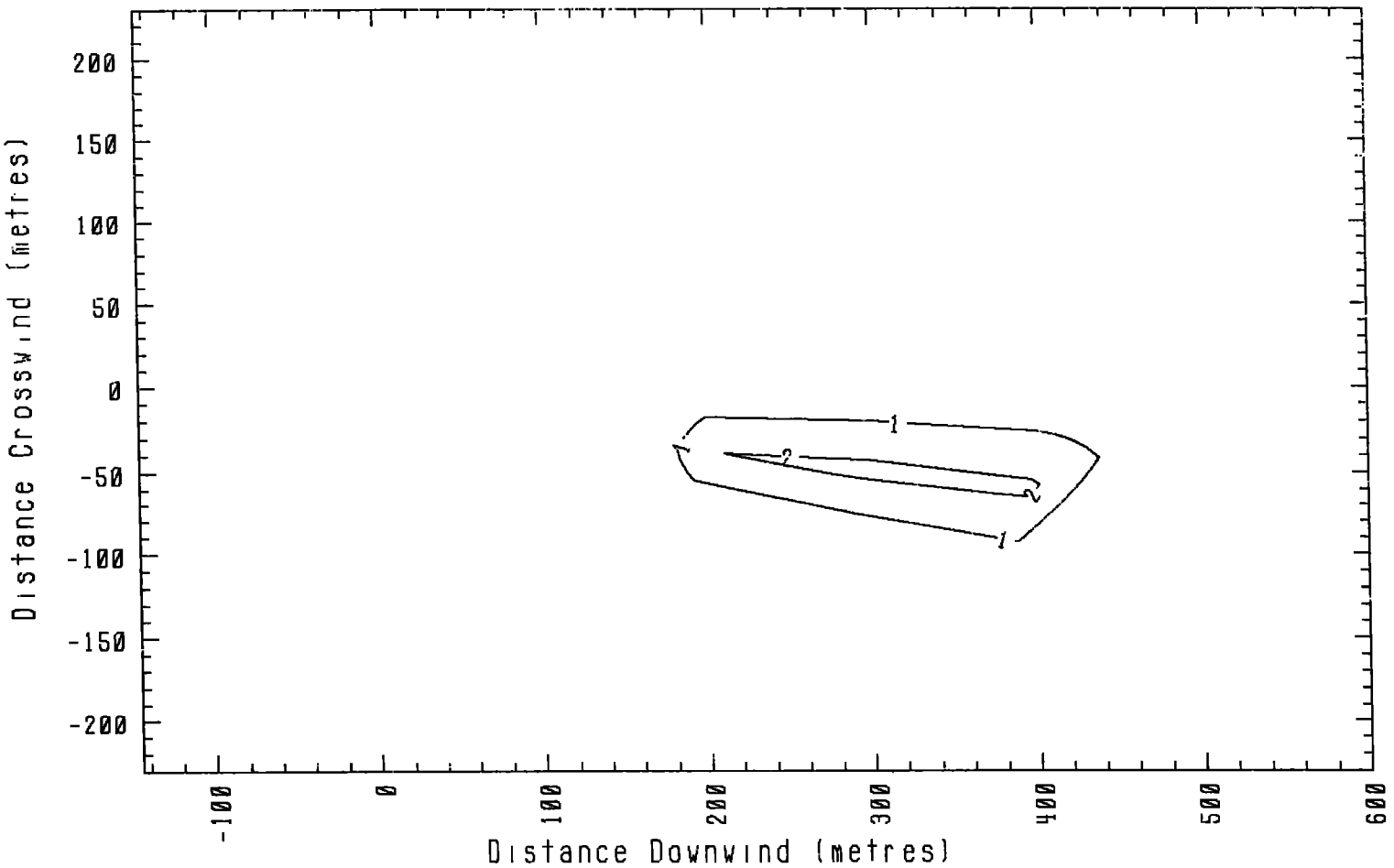
Coyote 5 LGF 81 Contours:

Time = 140 sec, level 1m. 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 1358. m.

07/22/83u 10:45:45
11/15/83 15:26:27

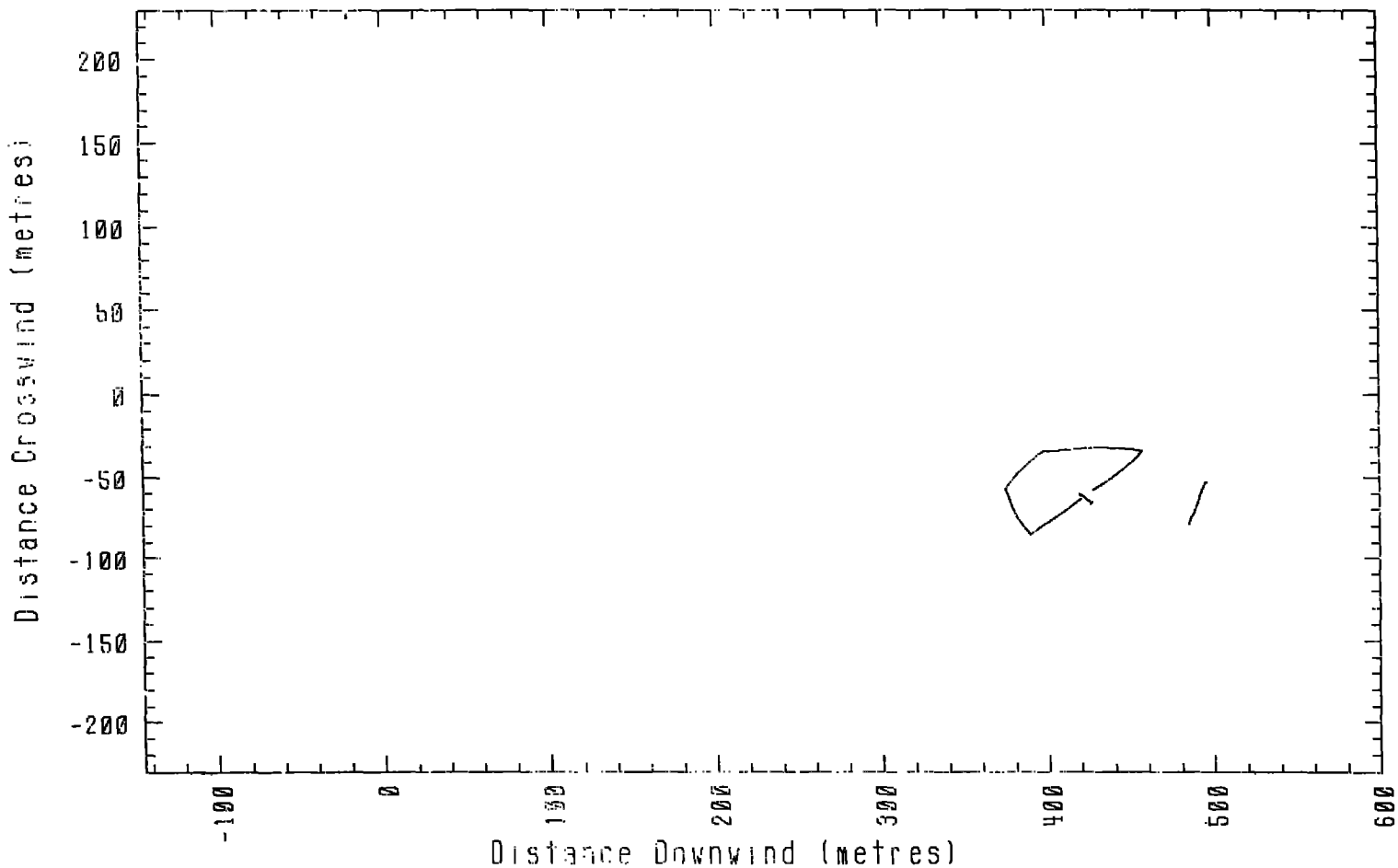
Horizontal Concentration Contours



Coyote 5 LGF 81 Contours:
Time = 150 sec, level 1m. 1%,2%,5%,10%,15%,25%,35%
ln conc, ln x axis, boundary = 1455. m.

07/22/83u 10:45:45
11/15/03 15:26:27

Horizontal Concentration Contours



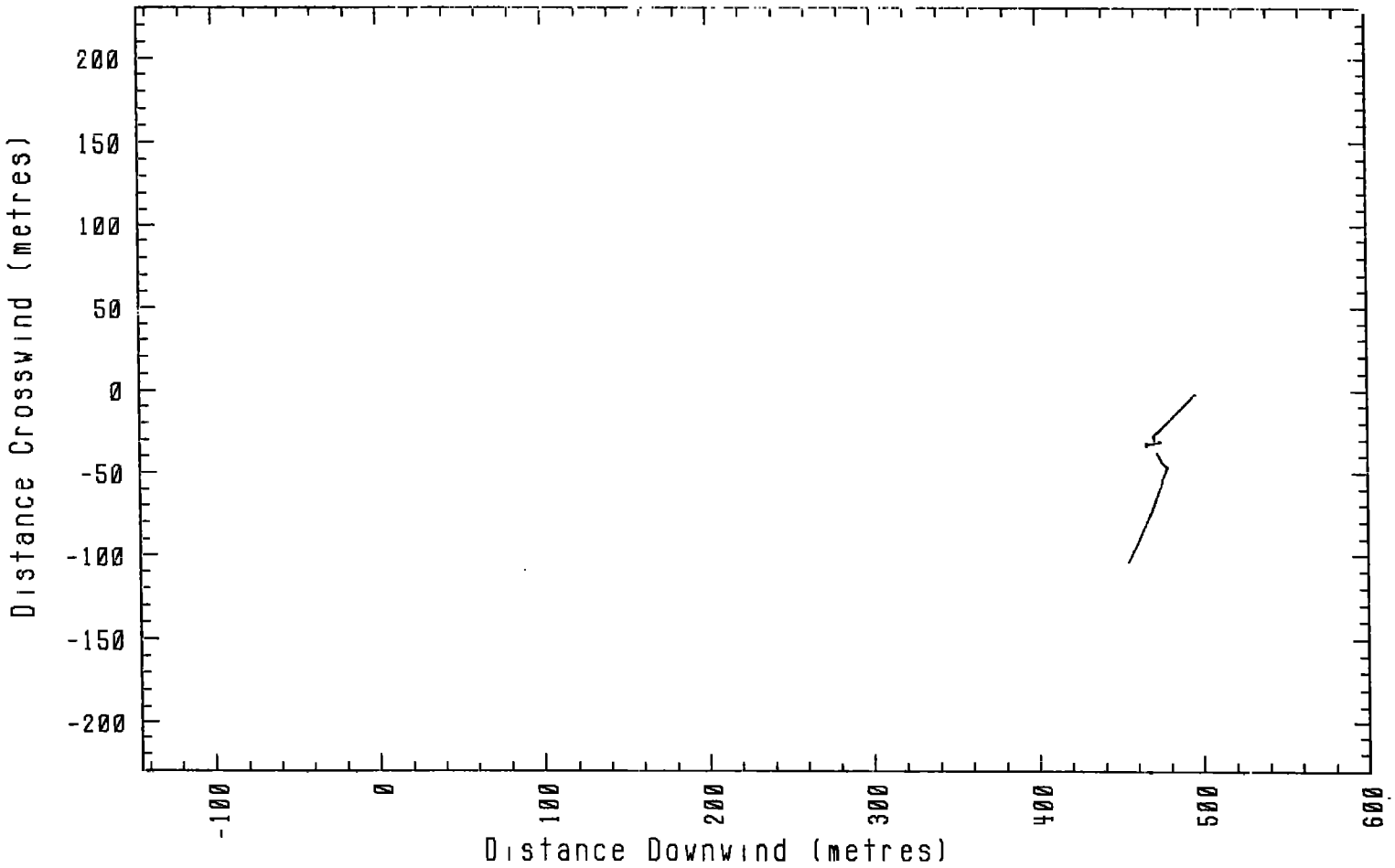
Coyote 5 LGF 81 Contours:

Time = 160 sec, level 1m. 1%,2%,5%,10%,15%,25%,35%

ln conc. in x axis, boundary = 1552. m.

07/22/83u 10:45:45
11/15/83 15:26:27

Horizontal Concentration Contours

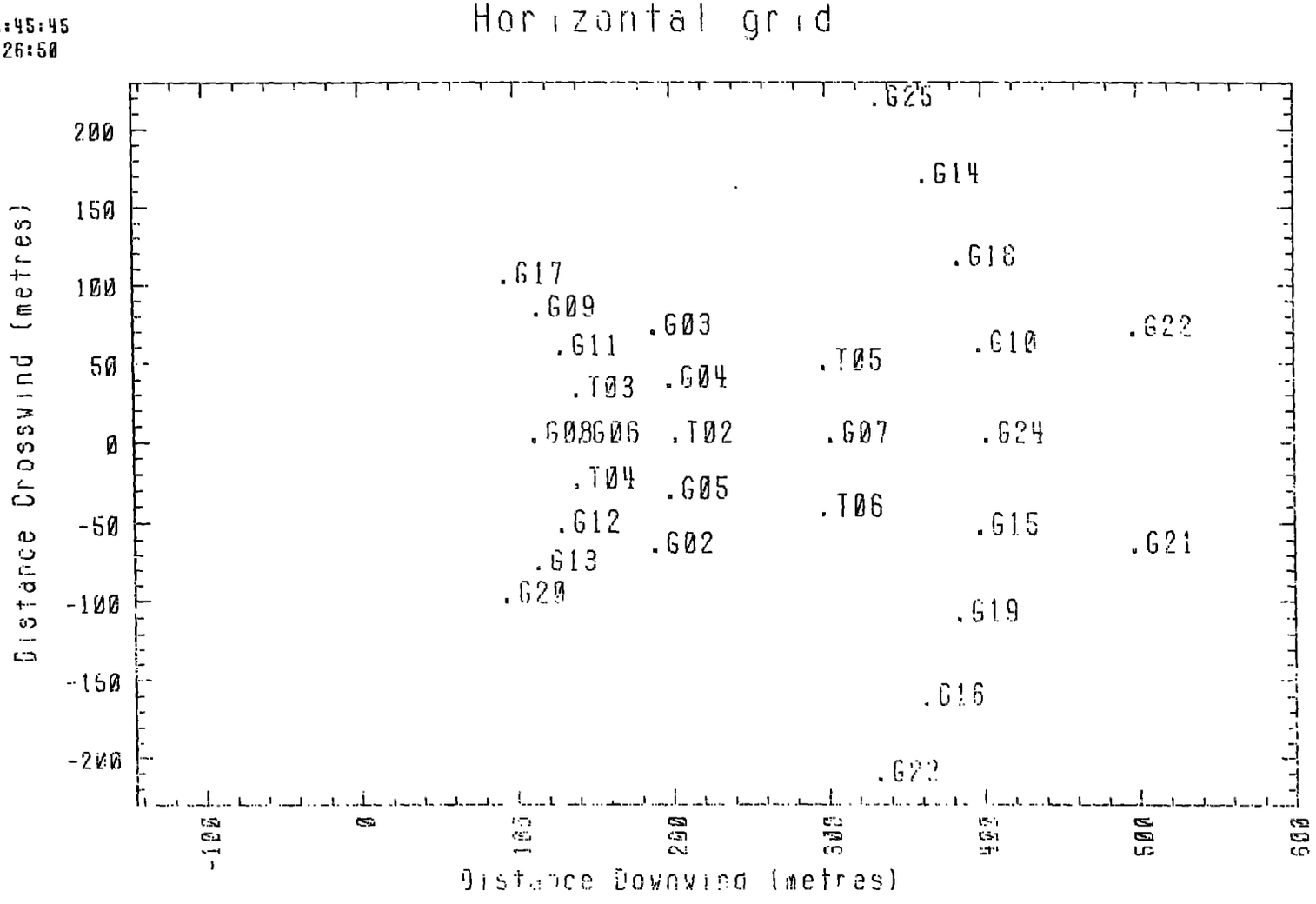


Coyote 5 LGF 81 Contours:

Time = 170 sec, level 1m. 1%,2%,5%,10%,15%,25%,35%

In conc, In x axis, boundary = 1649. m.

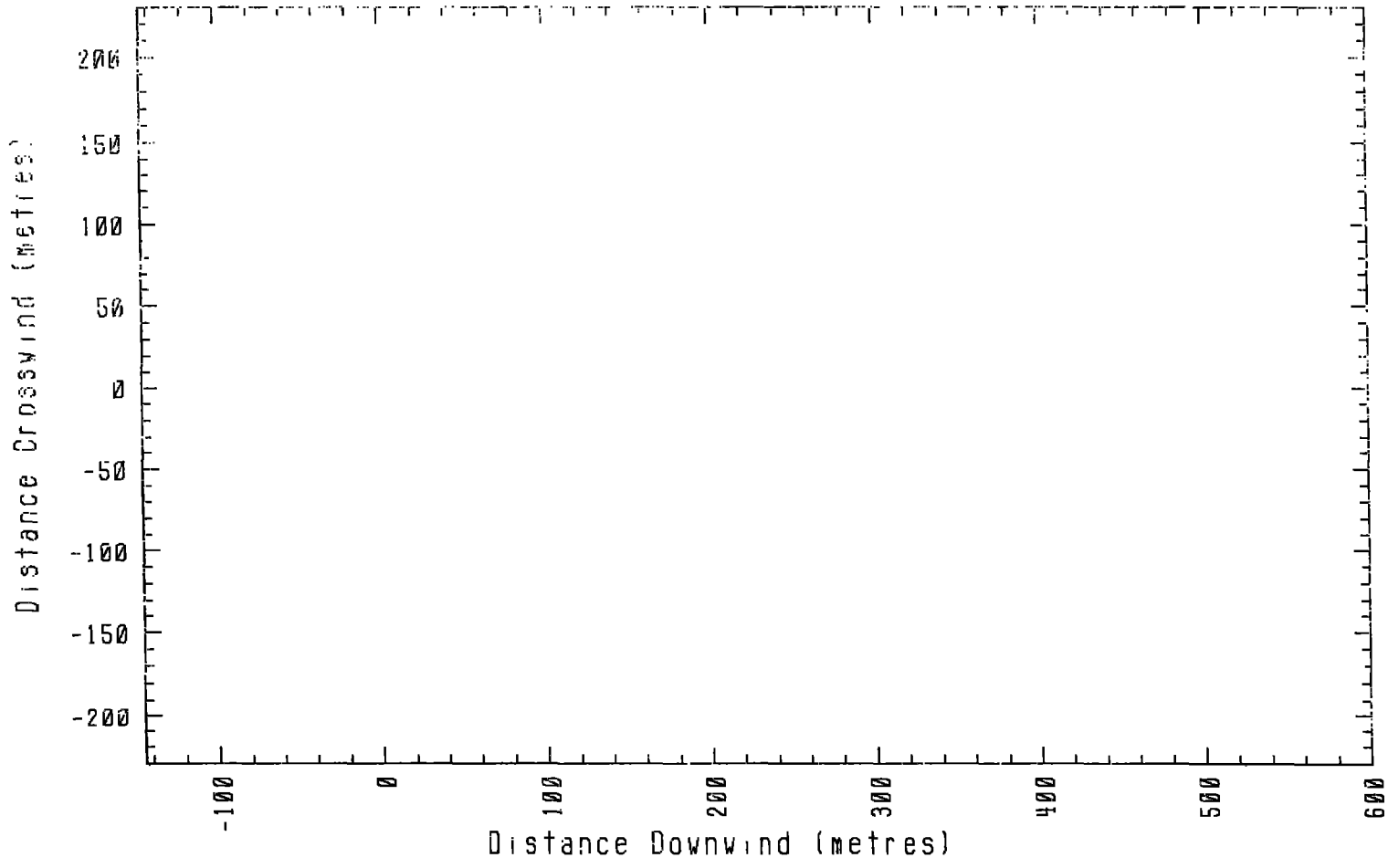
07/22/83u 10:45:45
11/15/83 15:26:50



Coyote 5 LGF 81
Windvel = 9.700 m/s
Ignition time 132.7 sec. at Radius 79. m.

07/22/83@ 16:45:05
11/15/83 15:26:50

Horizontal Concentration Contours



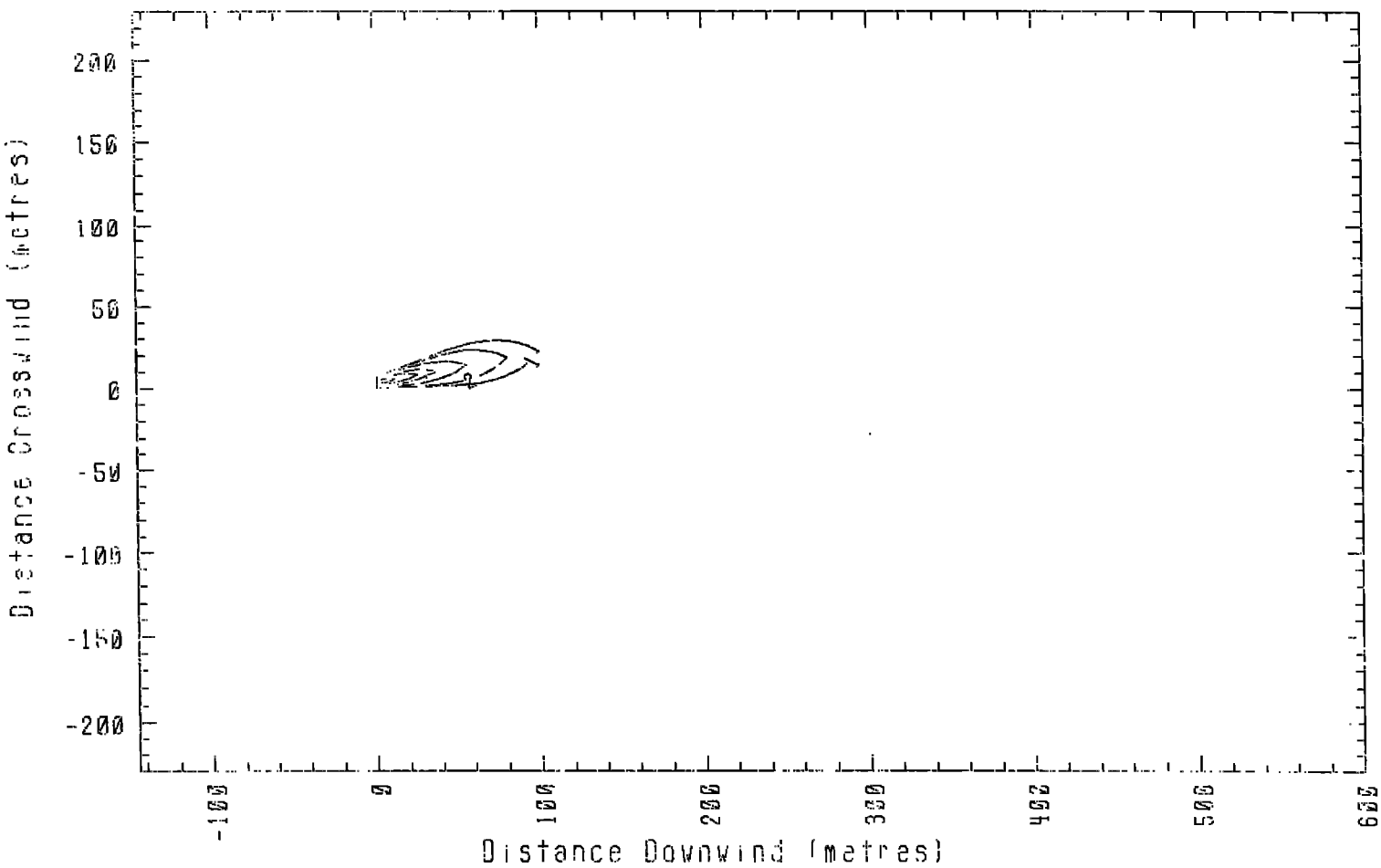
Coyote 5 LGF 81 Contours:

Time = 10 sec, level 3m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 97. m.

07/22/83u 10:45:45
11/15/83 15:26:56

Horizontal Concentration Contours



Coyote 5 LGF 81

Time = 20 sec, level 3m

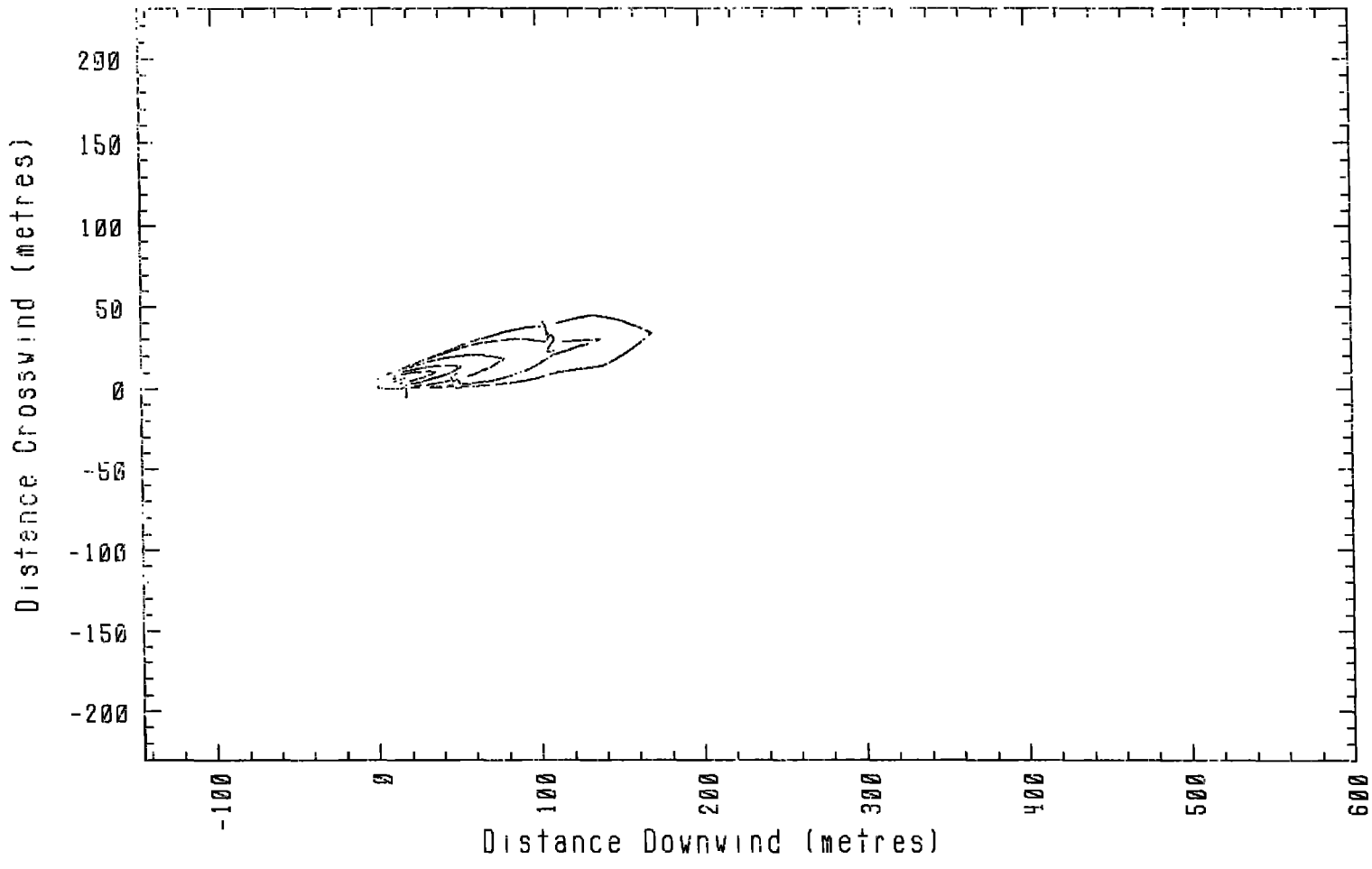
In conc, ln x axis, boundary = 194. m.

Contours:

1%,2%,5%,10%,15%,25%,35%

N:/22/83u 10:45:45
11/15/83 15:26:50

Horizontal Concentration Contours



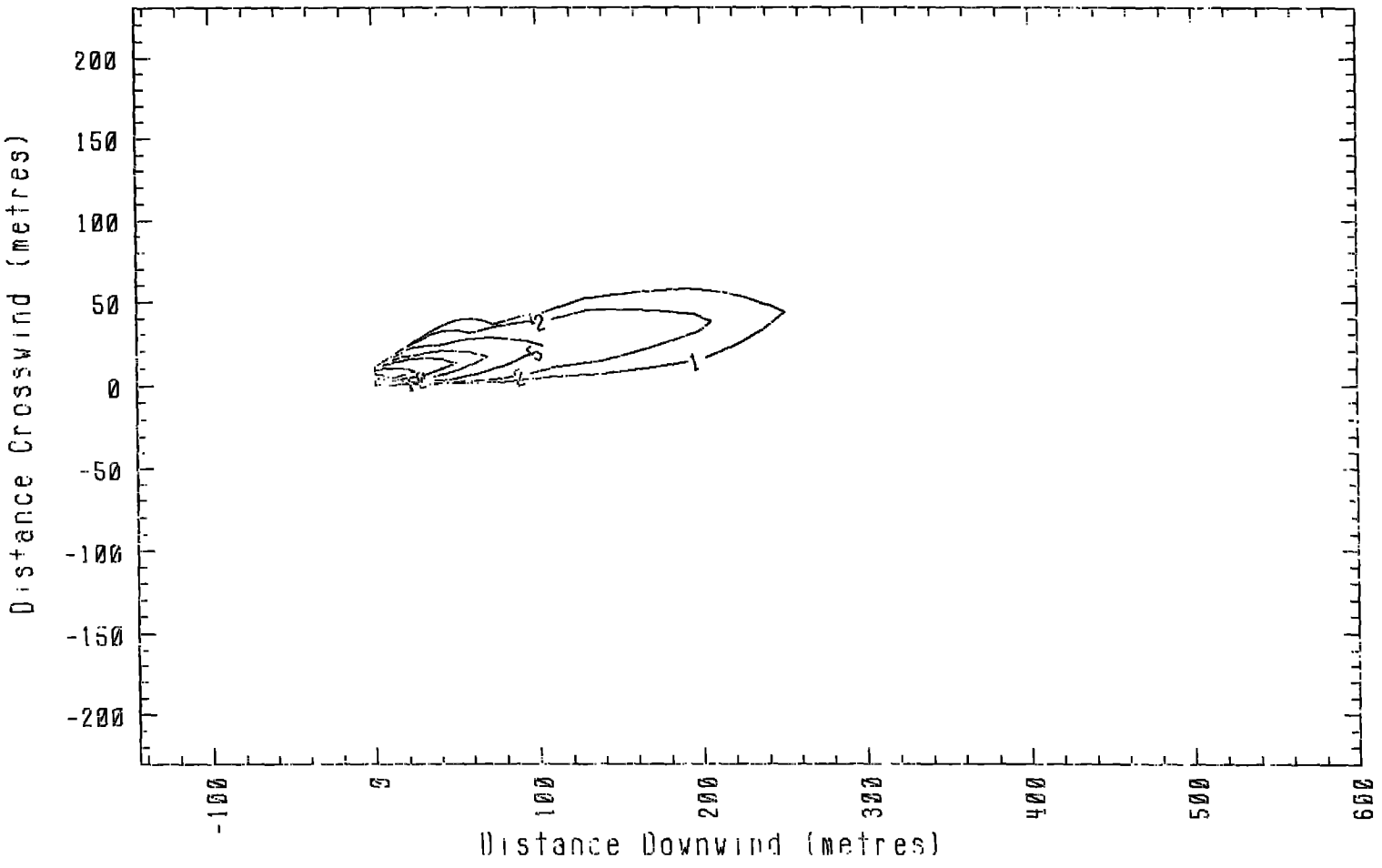
Coyote 5 LGF 81 Contours:

Time = 30 sec, level 3m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = .291. m.

07/22/83u 10:45:45
11/15/83 15:26:50

Horizontal Concentration Contours



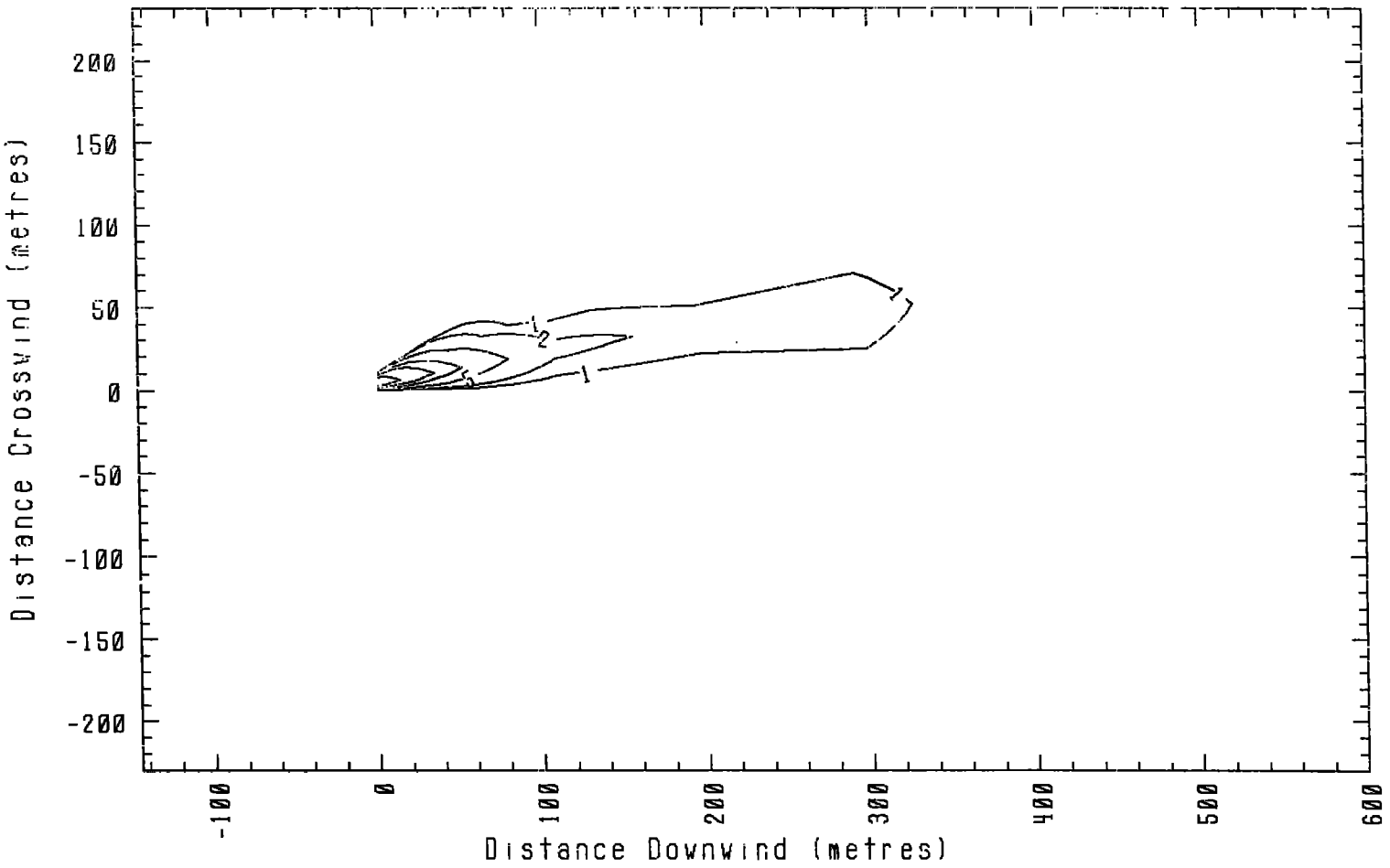
Coyote 5 LGF 81 Contours:

Time = 40 sec. level 3m 1%,2%,5%,10%,15%,25%,35%

In conc, In x axis, boundary = 388. m.

07/22/83u 10:45:45
11/15/83 15:26:50

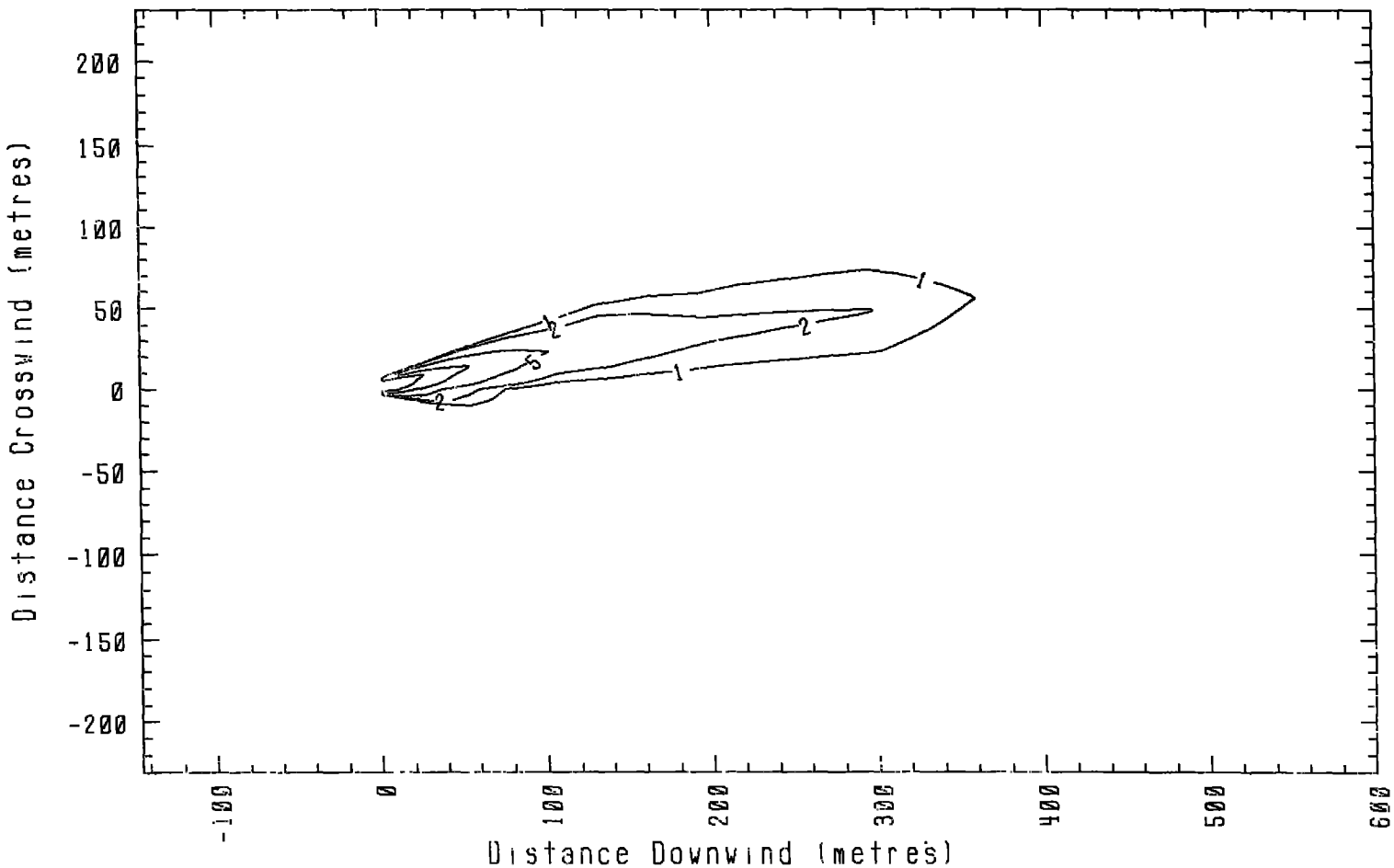
Horizontal Concentration Contours



Coyote 5 LGF 81 Contours:
Time = 50 sec, level 3m 1%,2%,5%,10%,15%,25%,35%
ln conc, ln x axis, boundary = 485. m.

07/22/83u 10:45:45
11/15/83 15:26:56

Horizontal Concentration Contours



Coyote 5 LGF 81

Time = 60 sec. level 3m

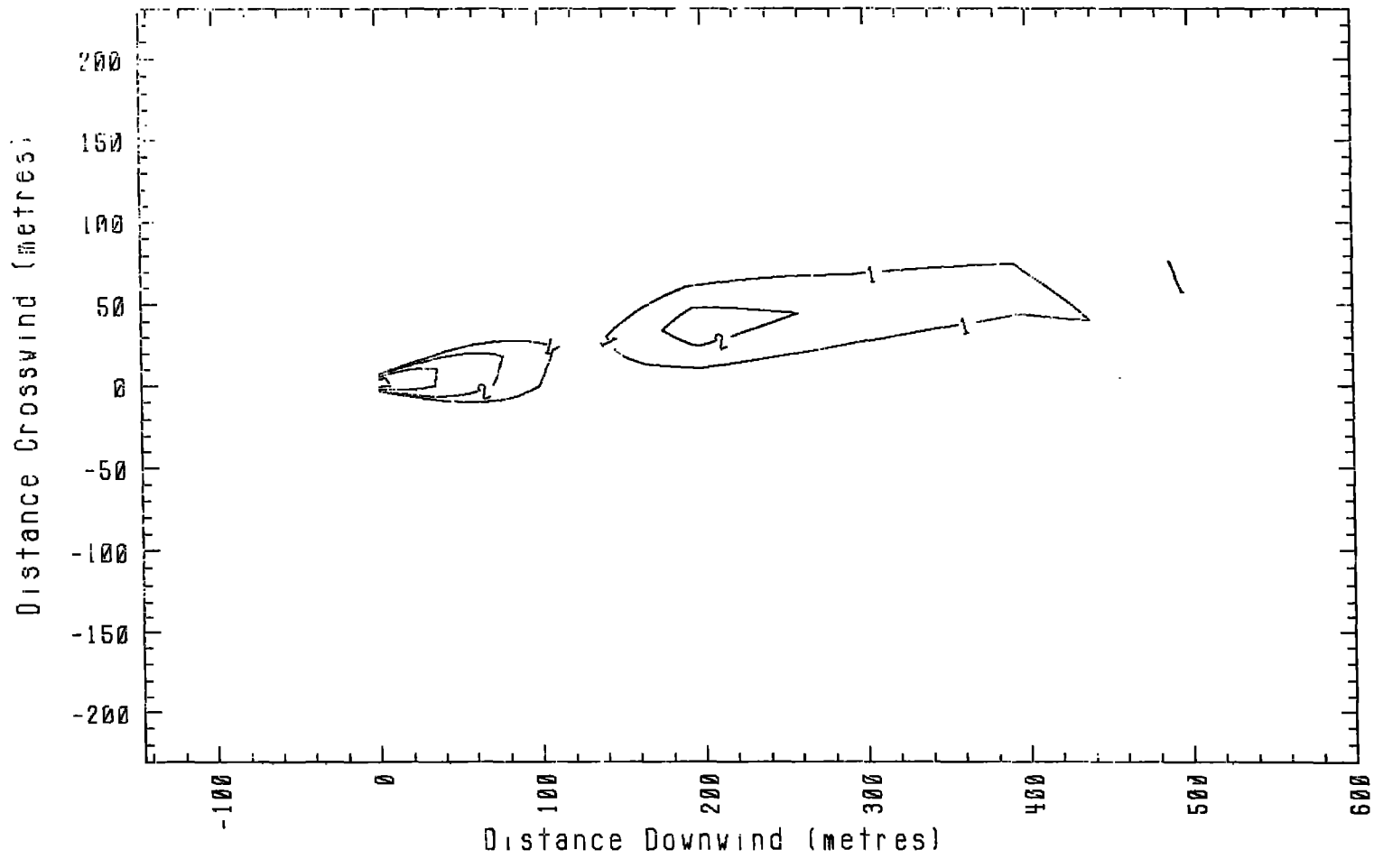
In conc. In x axis, boundary = 582. m.

Contours:

1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:46:45
11/15/83 15:29:56

Horizontal Concentration Contours



Coyote 5 LGF 81

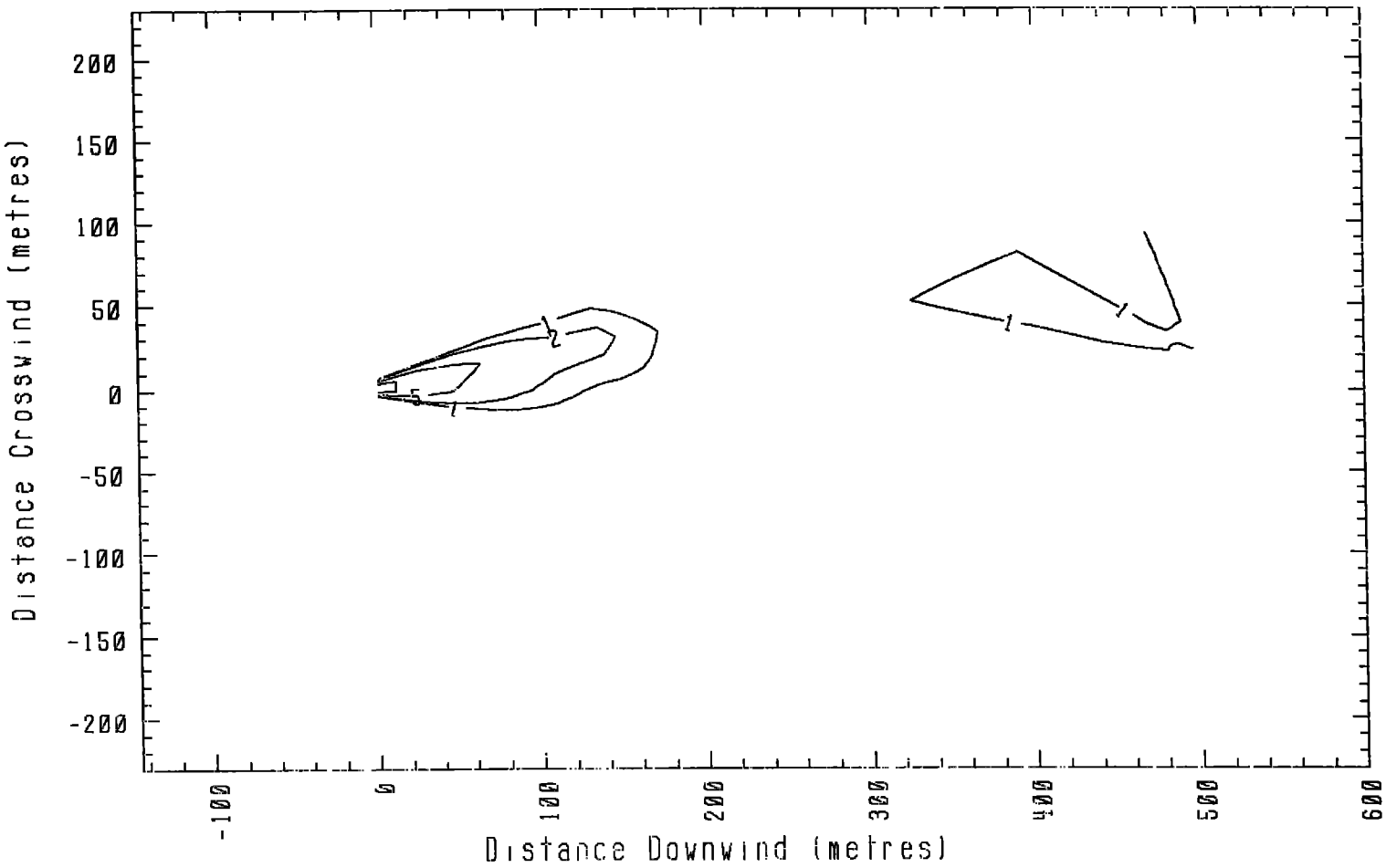
Time = 70 sec, level 3m

In conc, In x axis, boundary = 679. m.

Contours:
1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
11/15/83 15:26:50

Horizontal Concentration Contours



Coyote 5 LGF 8i

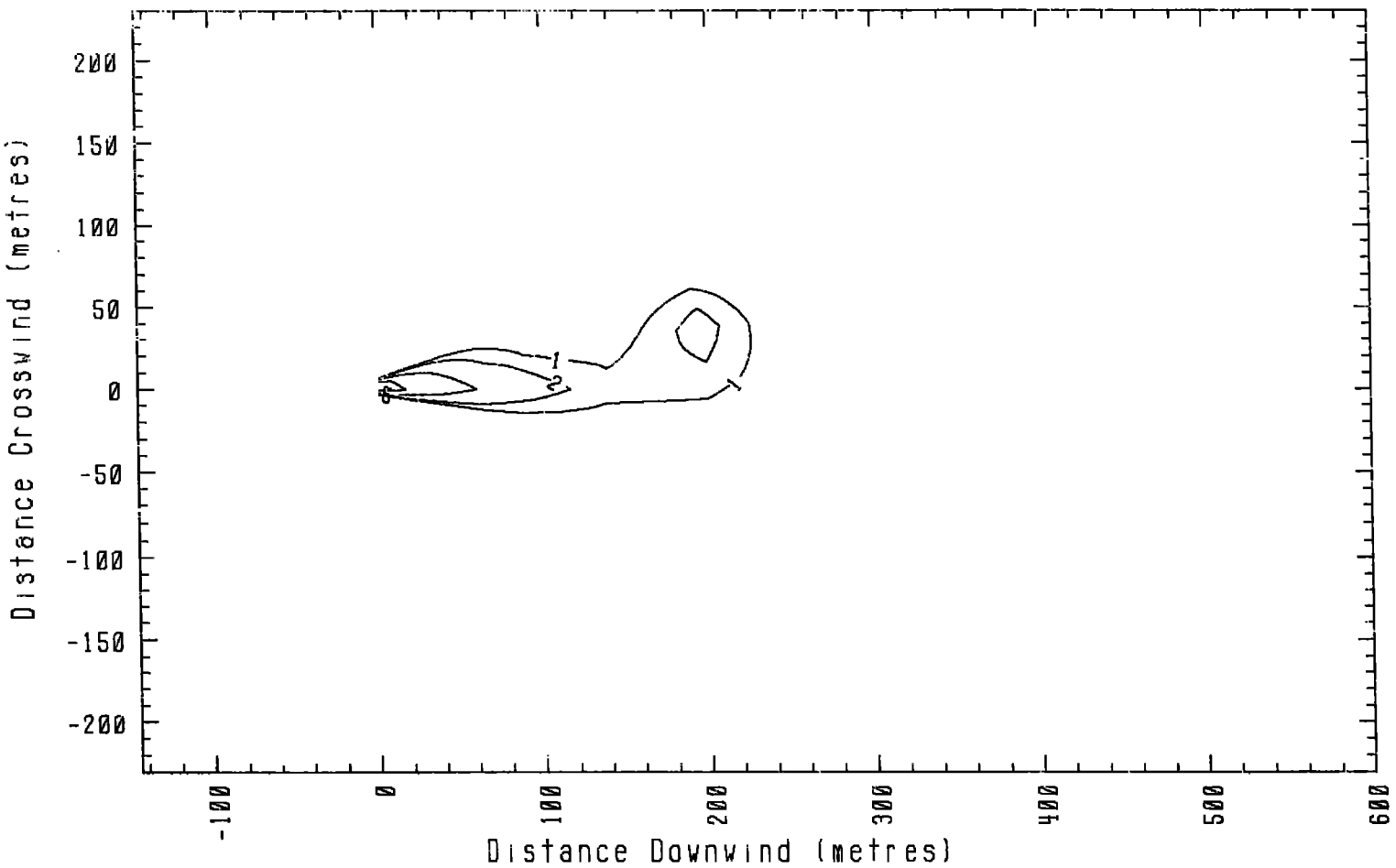
Time = 80 sec, level 3m

In conc, in x axis, boundary = 776. m.

Contours:
1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
11/15/83 15:26:50

Horizontal Concentration Contours



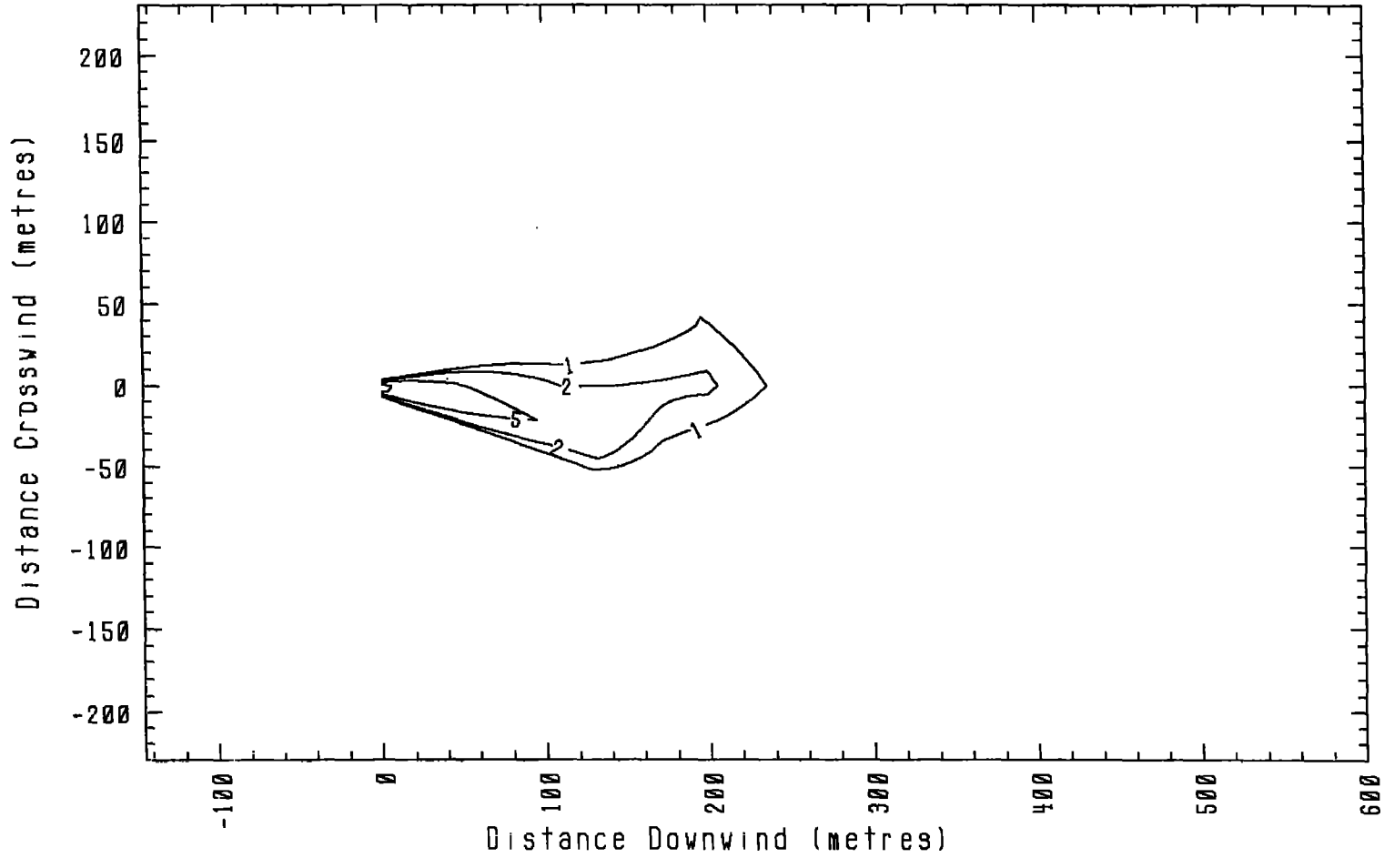
Coyote 5 LGF 81 Contours:

Time = 90 sec, level 3m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 873. m.

07/22/83u 10:45:45
11/15/83 15:26:50

Horizontal Concentration Contours



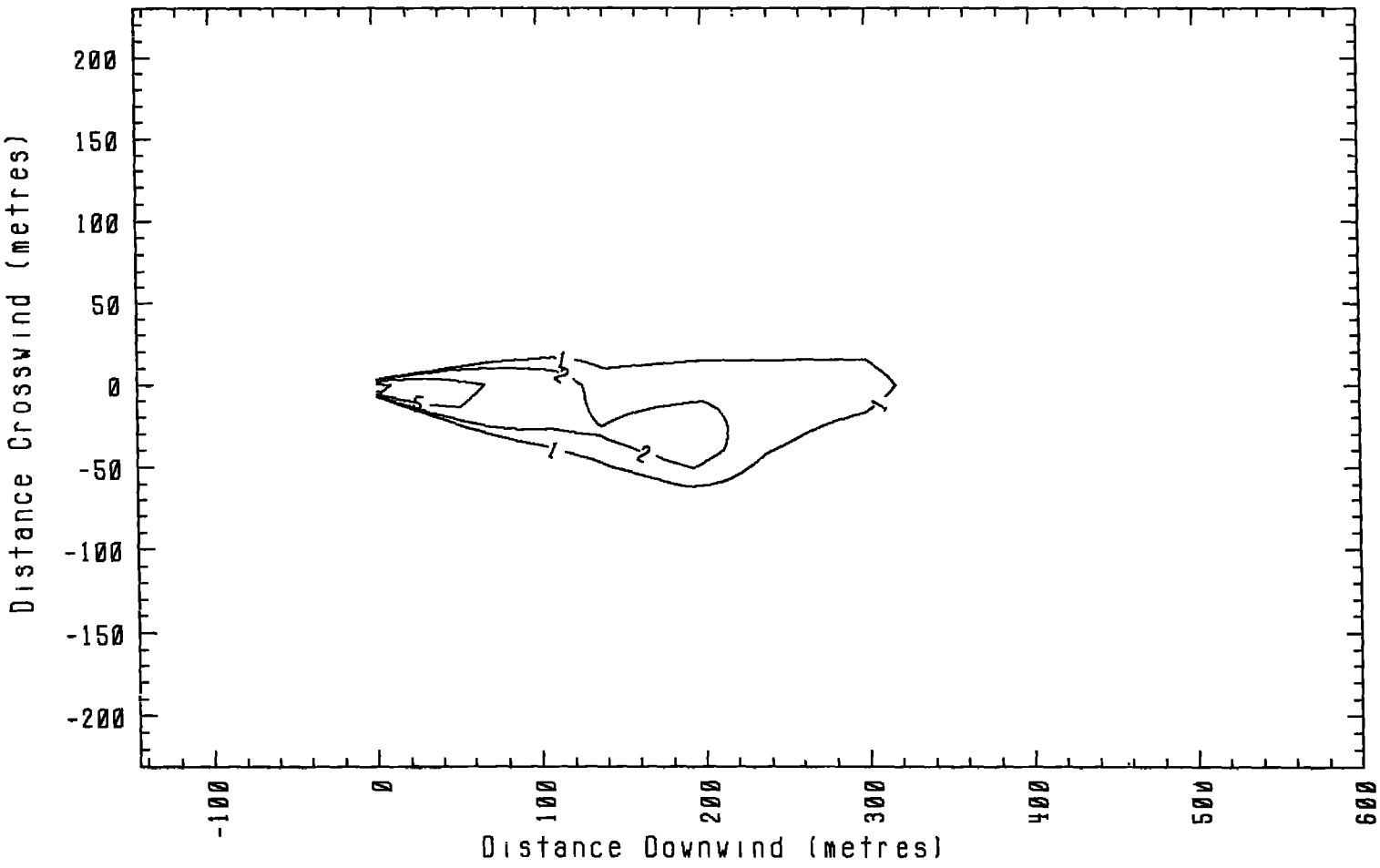
Coyote 5 LGF 81 Contours:

Time = 100 sec, level 3m 1%,2%,5%,10%,15%,25%,35%

In conc, In x axis, boundary = 970. m.

07/22/83u 10:45:45
11/15/83 15:26:50

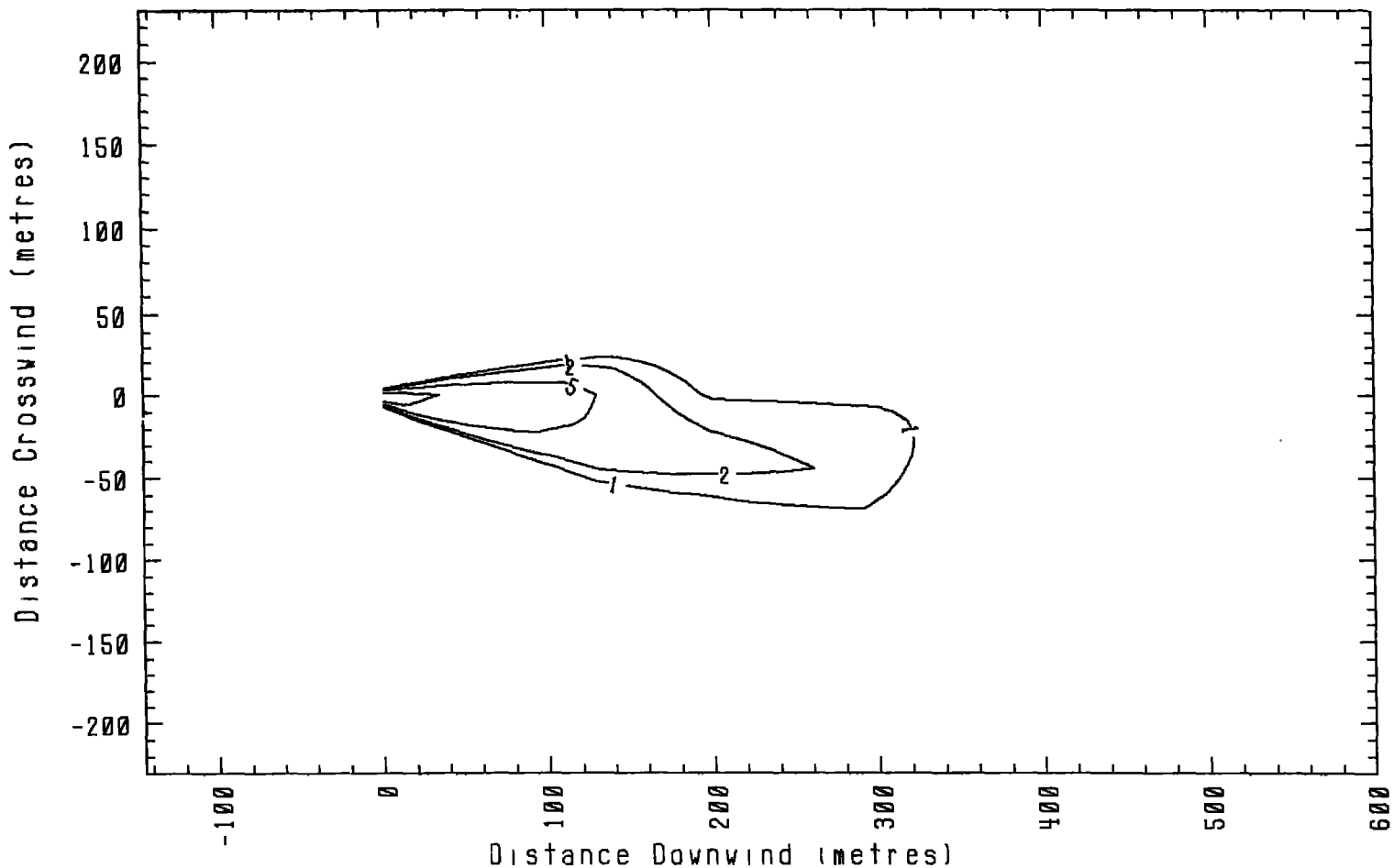
Horizontal Concentration Contours



Coyote 5 LGF 81 Contours:
Time = 110 sec, level 3m 1%,2%,5%,10%,15%,25%,35%
ln conc, ln x axis, boundary = 1067. m.

07/22/83u 10:45:46
11/15/83 15:26:50

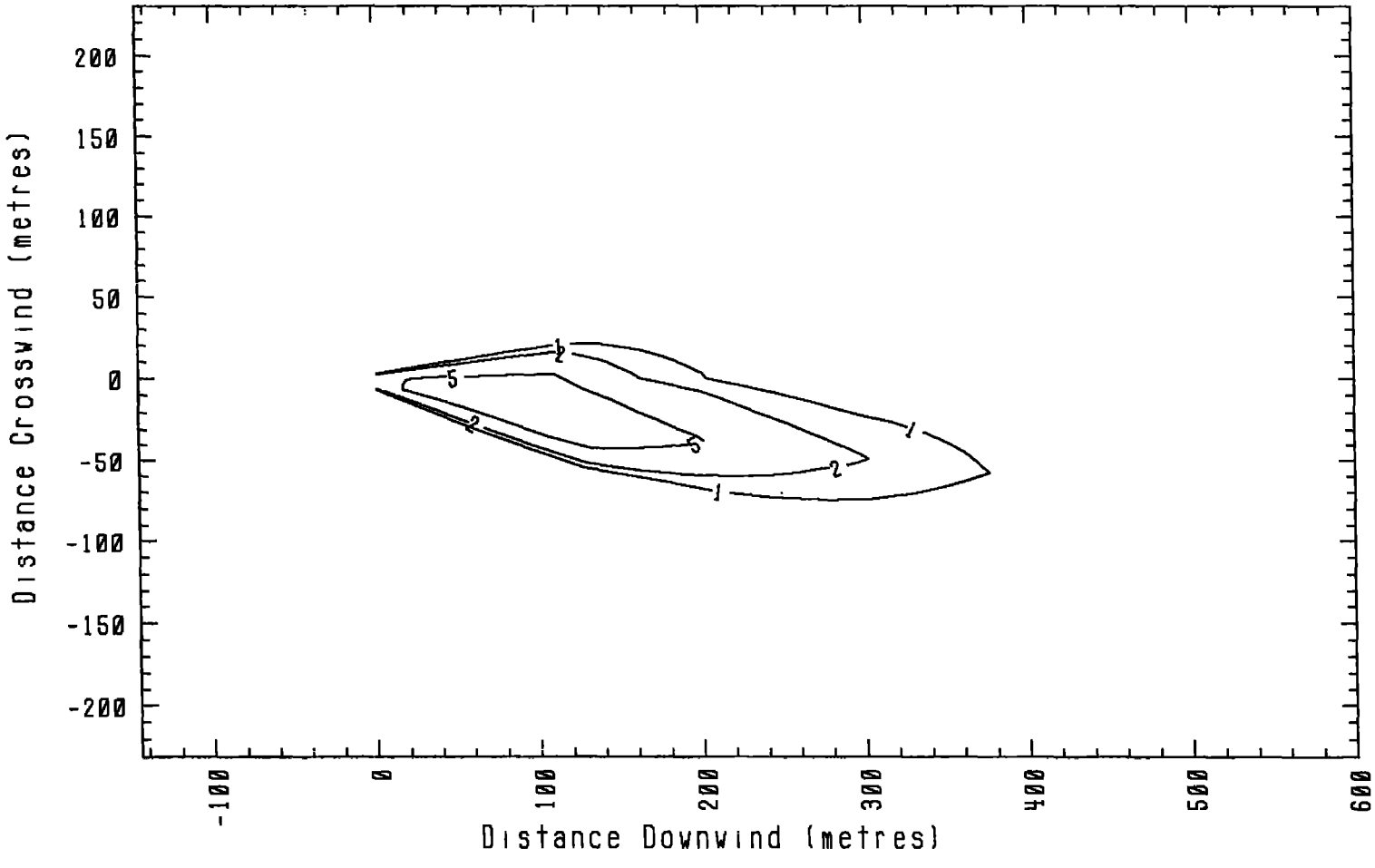
Horizontal Concentration Contours



Coyote 5 LGF 81 Contours:
Time = 120 sec, level 3m 1%,2%,5%,10%,15%,25%,35%
In conc, in x axis, boundary = 1164. m.

07/22/83u 10:45:45
11/15/83 16:26:50

Horizontal Concentration Contours



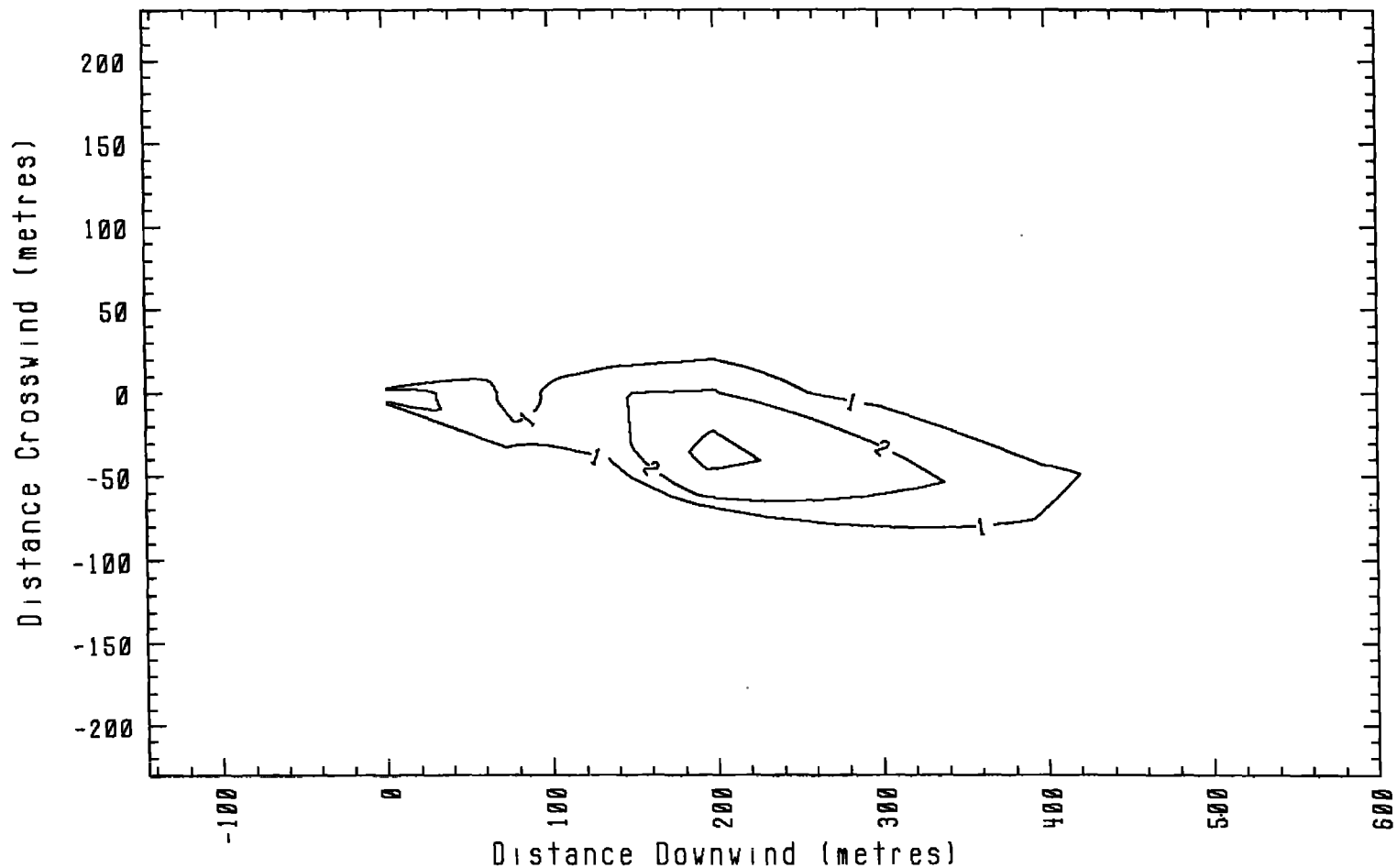
Coyote 5 LGF 81 Contours:

Time = 130 sec, level 3m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 1261. m.

07/22/83u 10:45:45
11/15/83 15:26:50

Horizontal Concentration Contours



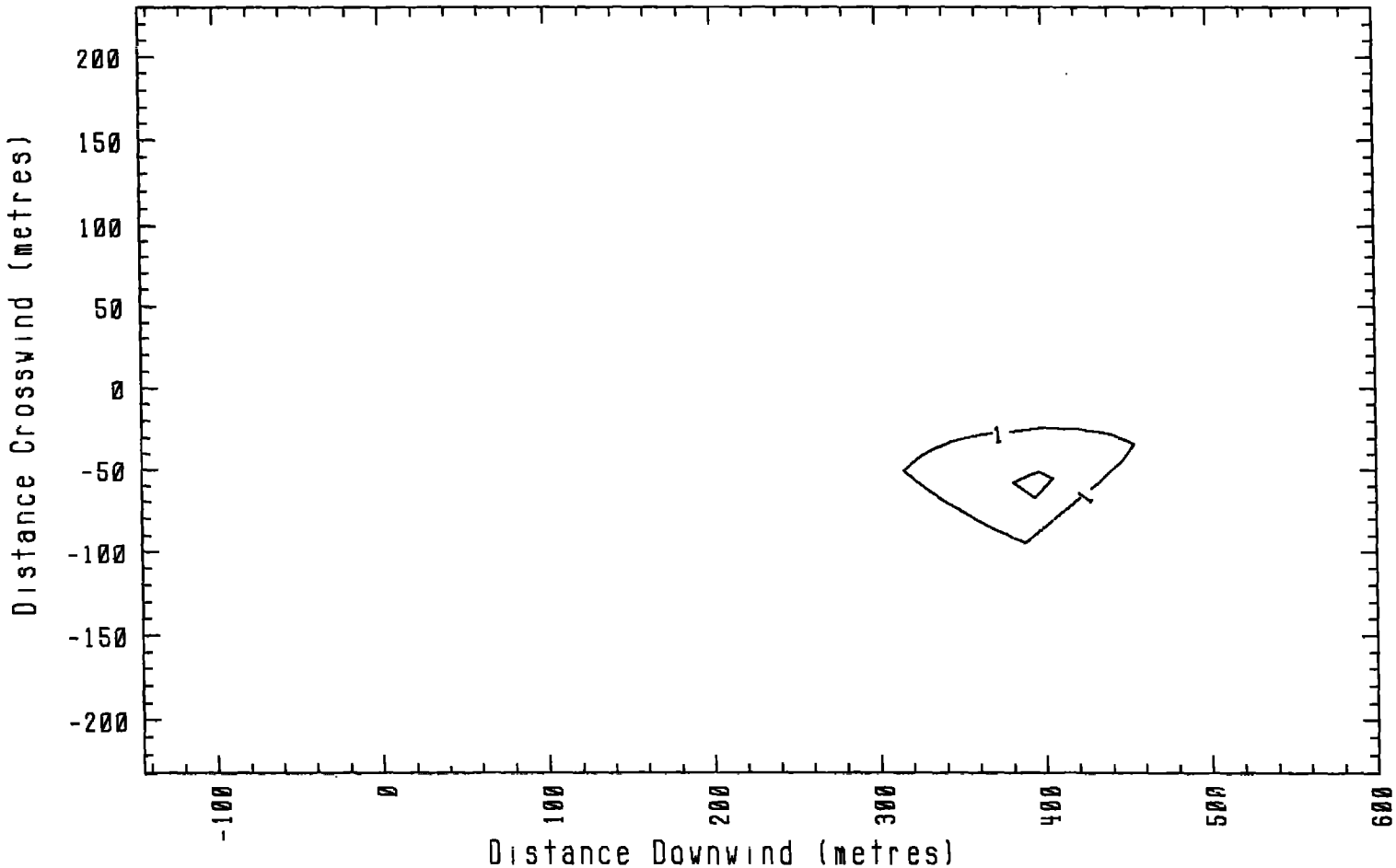
Coyote 5 LGF 81 Contours:

Time = 140 sec, level 3m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 1358. m.

07/22/83u 10:45:46
11/15/83 16:26:50

Horizontal Concentration Contours



Coyote 5 LGF 81

Time = 150 sec, level 3m

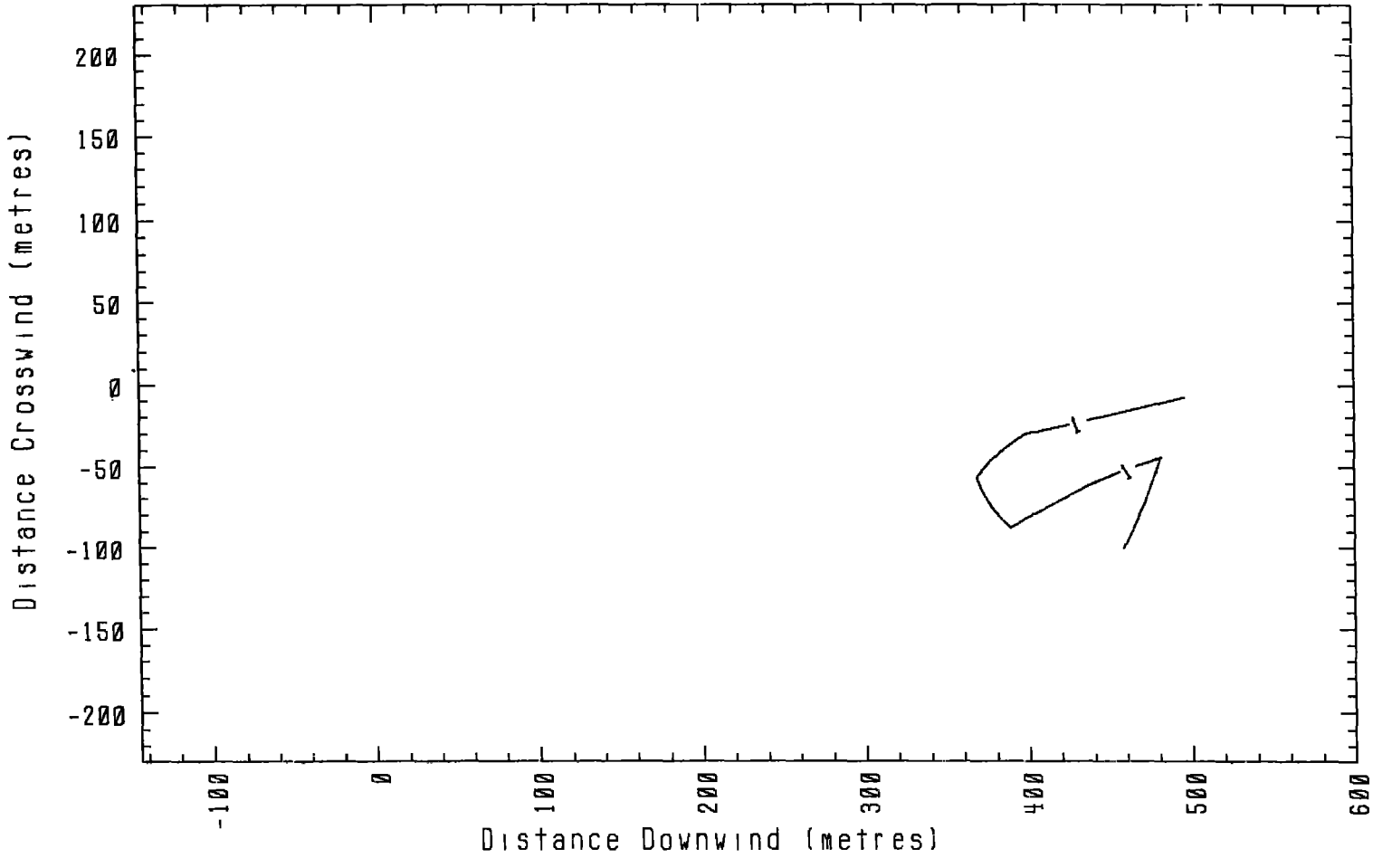
In conc, In x axis, boundary = 1455. m.

Contours:

1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
11/15/83 15:26:50

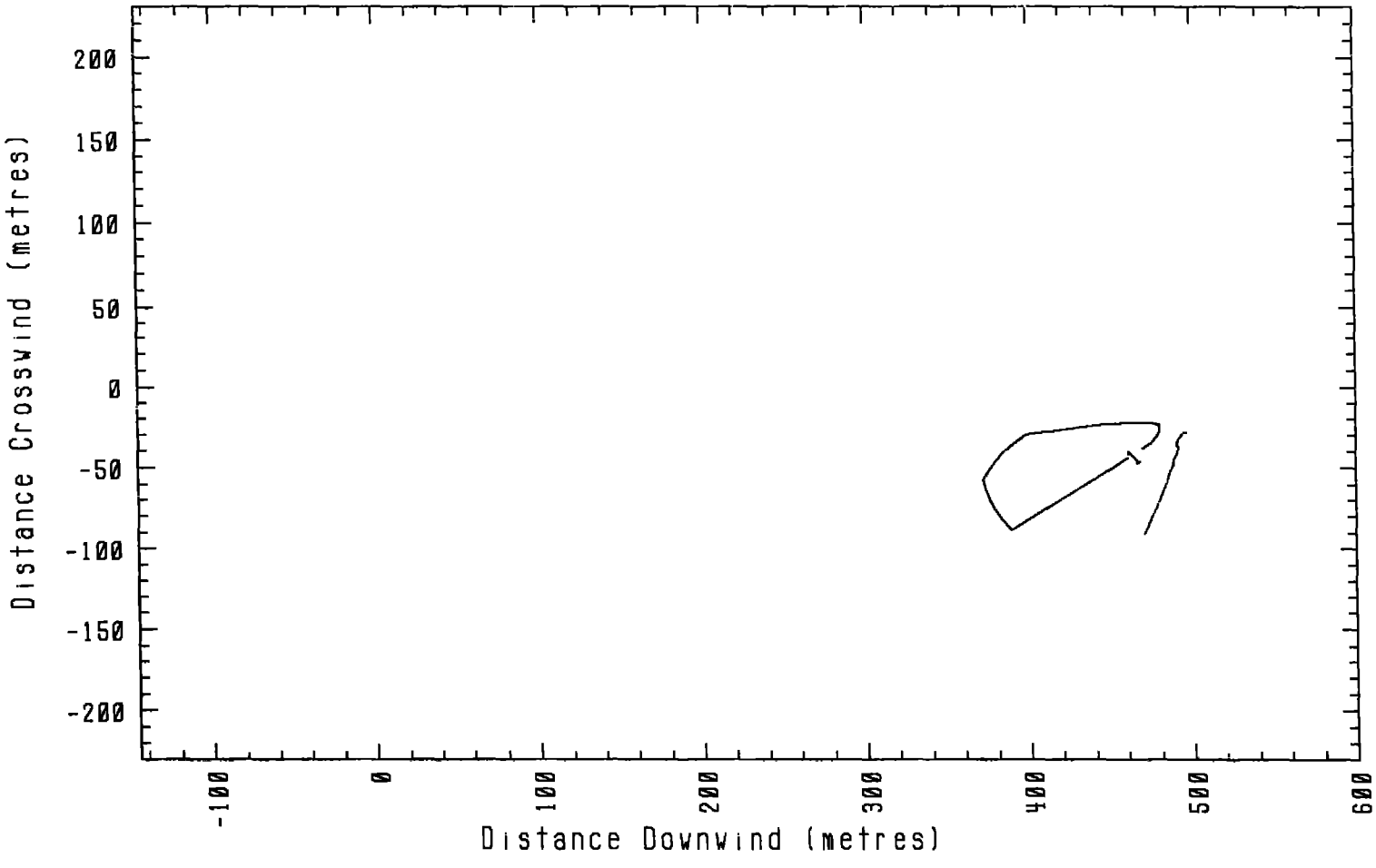
Horizontal Concentration Contours



Coyote 5 LGF 81 Contours:
Time = 160 sec, level 3m 1%,2%,5%,10%,15%,25%,35%
ln conc, ln x axis, boundary = 1552. m.

07/22/83u 10:45:45
11/15/83 15:26:50

Horizontal Concentration Contours



Coyote 5 LGF 81

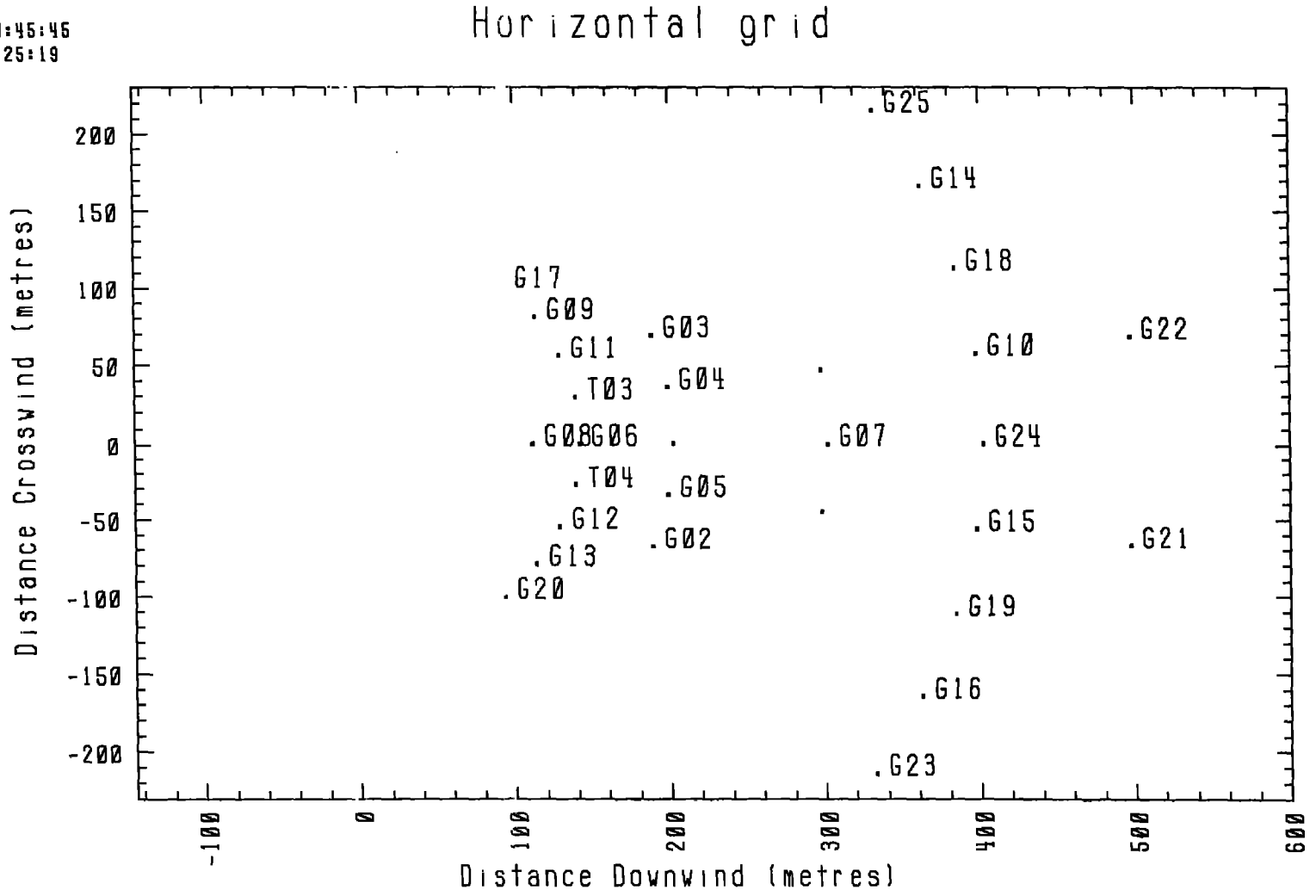
Time = 170 sec, level 3m

In conc, In x axis, boundary = 1649. m.

Contours:

1%,2%,5%,10%,15%,25%,35%

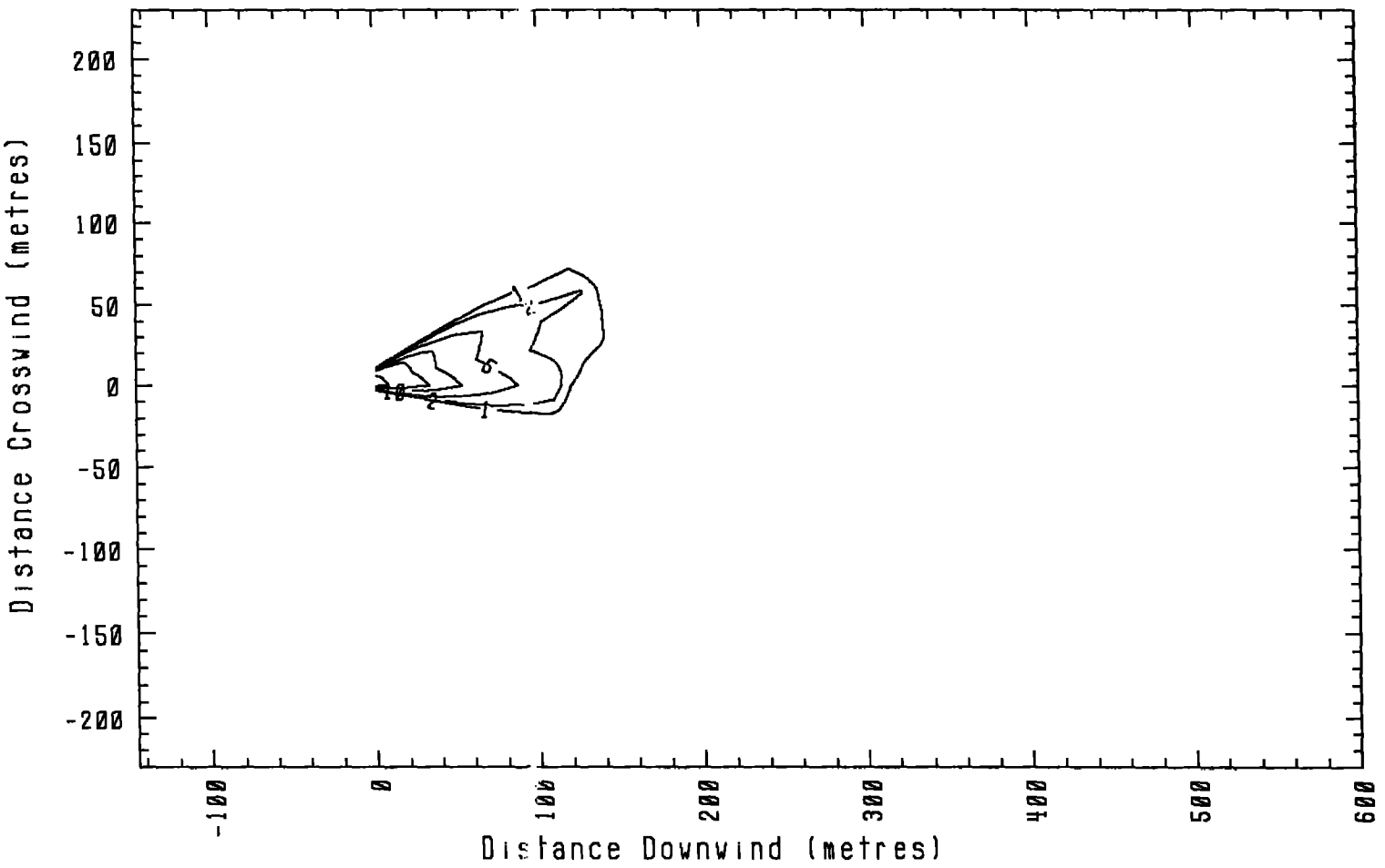
07/22/83u 10:45:46
10/18/83 11:25:19



Coyote 6 LGF 81
Windvel - 4.600 m/s
Ignition time 104.2 sec. at Radius 79. m.

07/22/83u 10:45:46
10/18/83 11:25:19

Horizontal Concentration Contours



Coyote 6 LGF 81

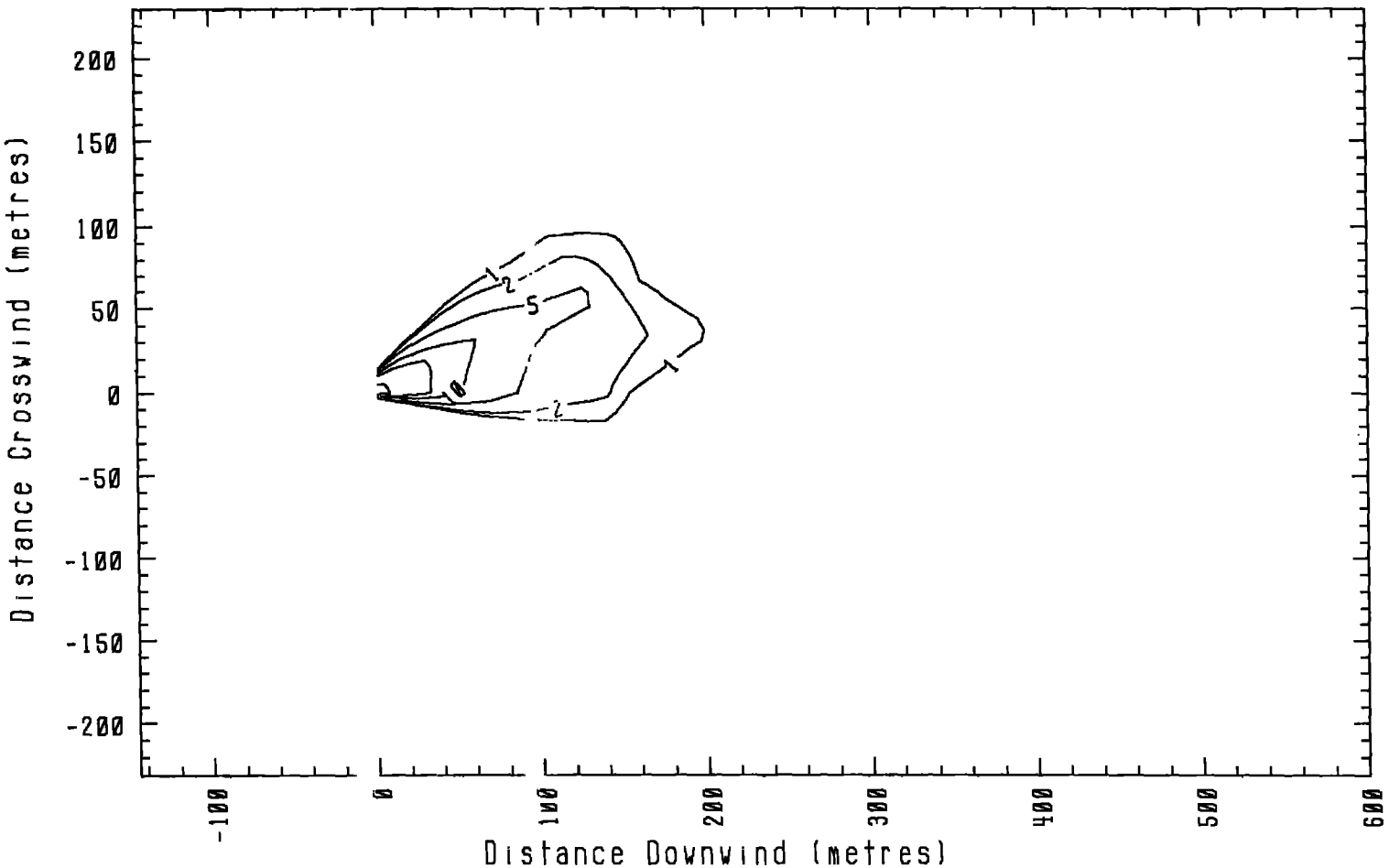
Time = 40 sec, level 1m

Contours:
1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 184. m.

07/22/83u 10:45:46
10/18/83 11:25:19

Horizontal Concentration Contours



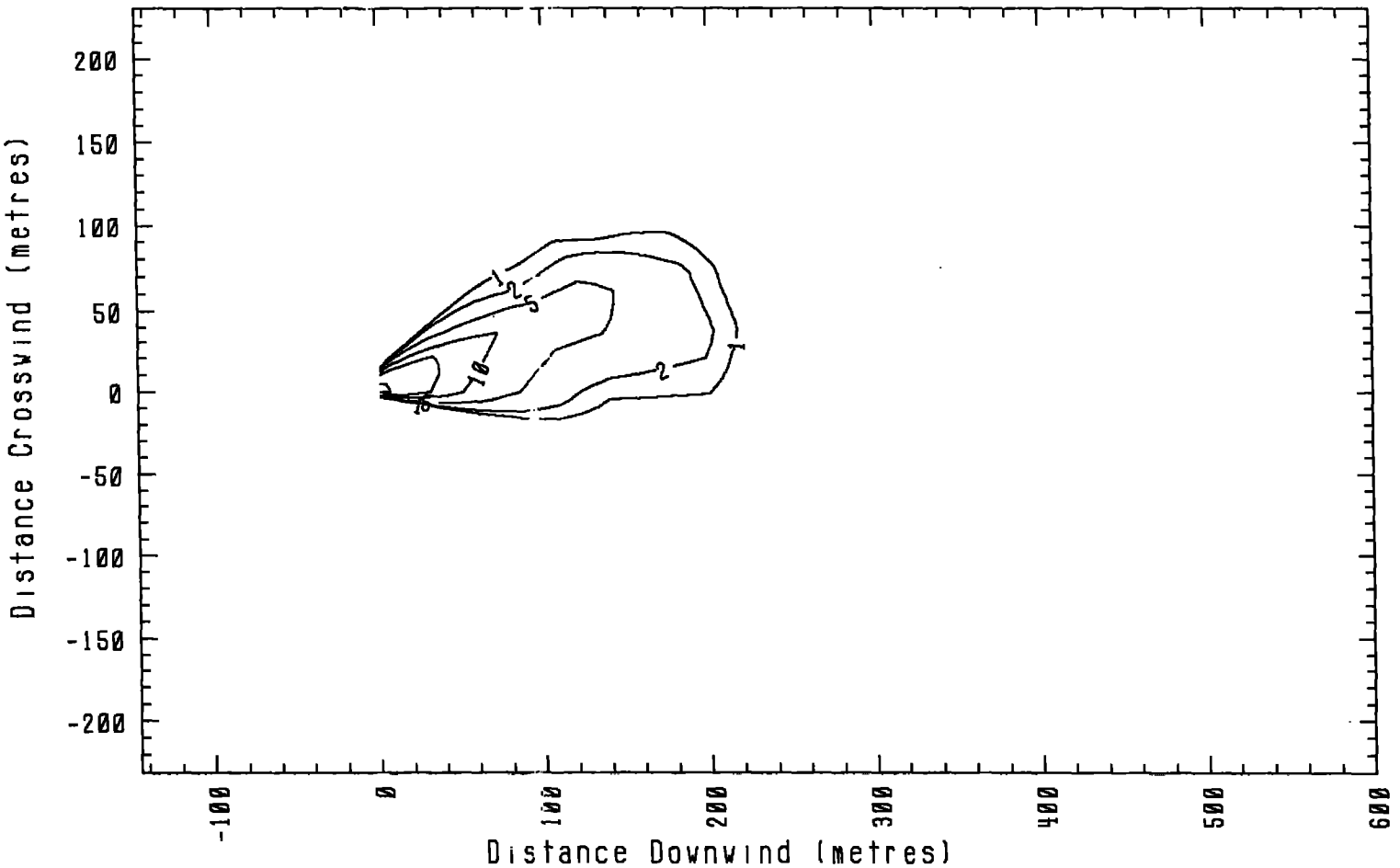
Coyote 6 LGF 81 Contours:

Time = 50 sec, level 1m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 230. m.

07/22/83u 10:45:45
10/18/83 11:25:19

Horizontal Concentration Contours



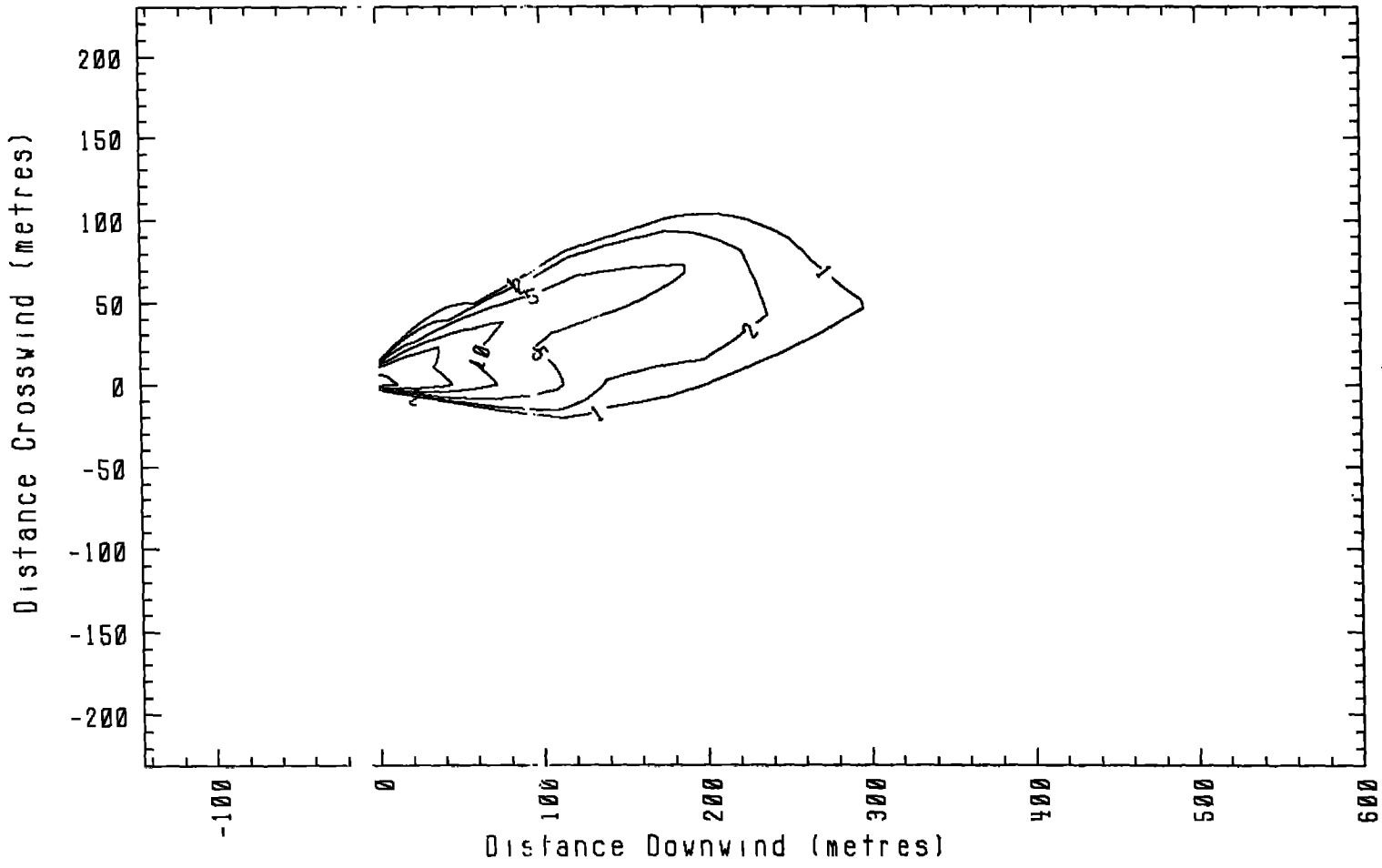
Coyote 6 LGF 81 Contours:

Time = 60 sec, level 1m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 276. m.

07/22/83u 10:45:45
10/18/83 11:25:19

Horizontal Concentration Contours



Coyote 6 LGF 81

Time = 70 sec, level 1m

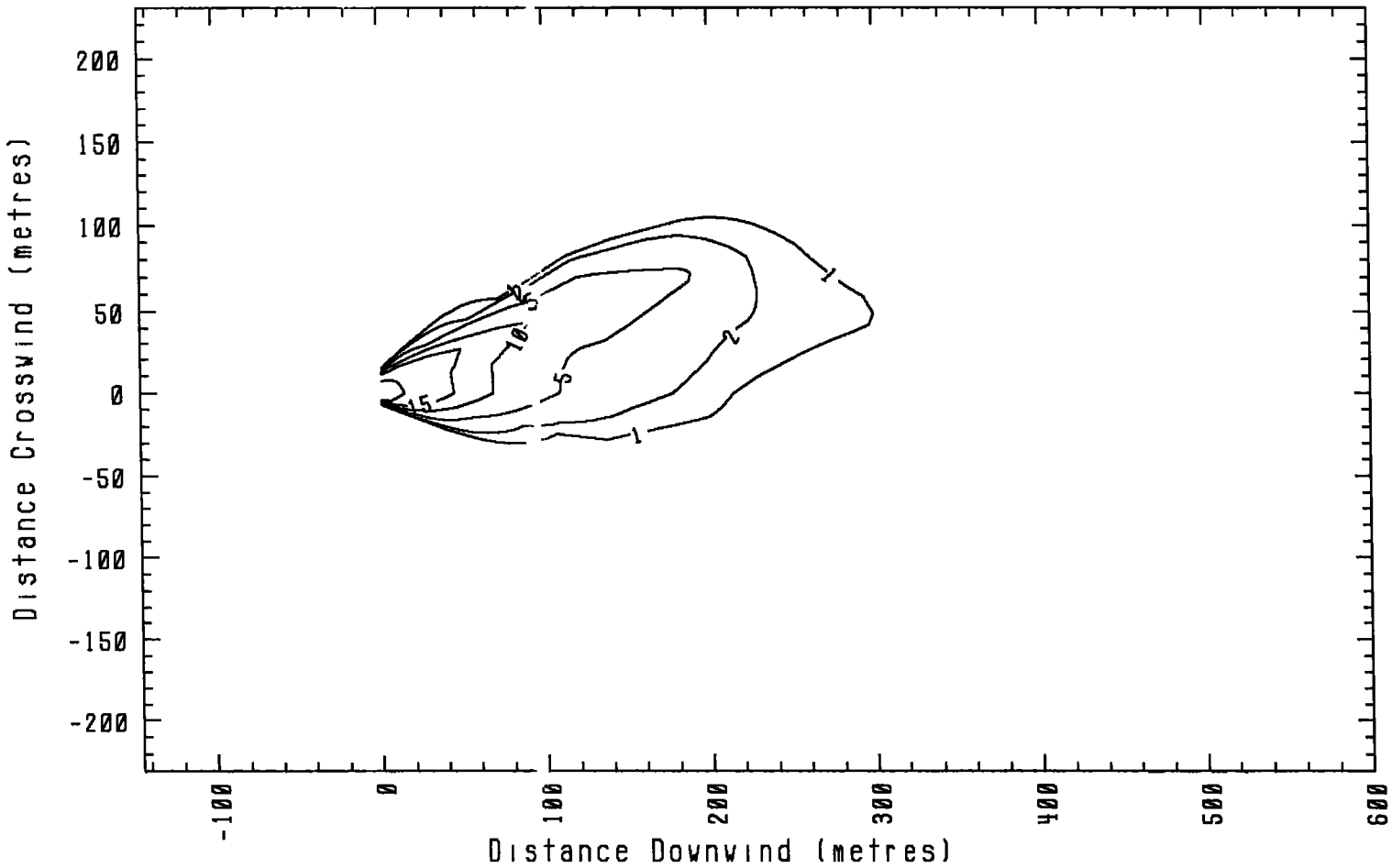
ln conc, ln x axis, boundary = 322. m.

Contours:

1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
10/18/83 11:25:19

Horizontal Concentration Contours



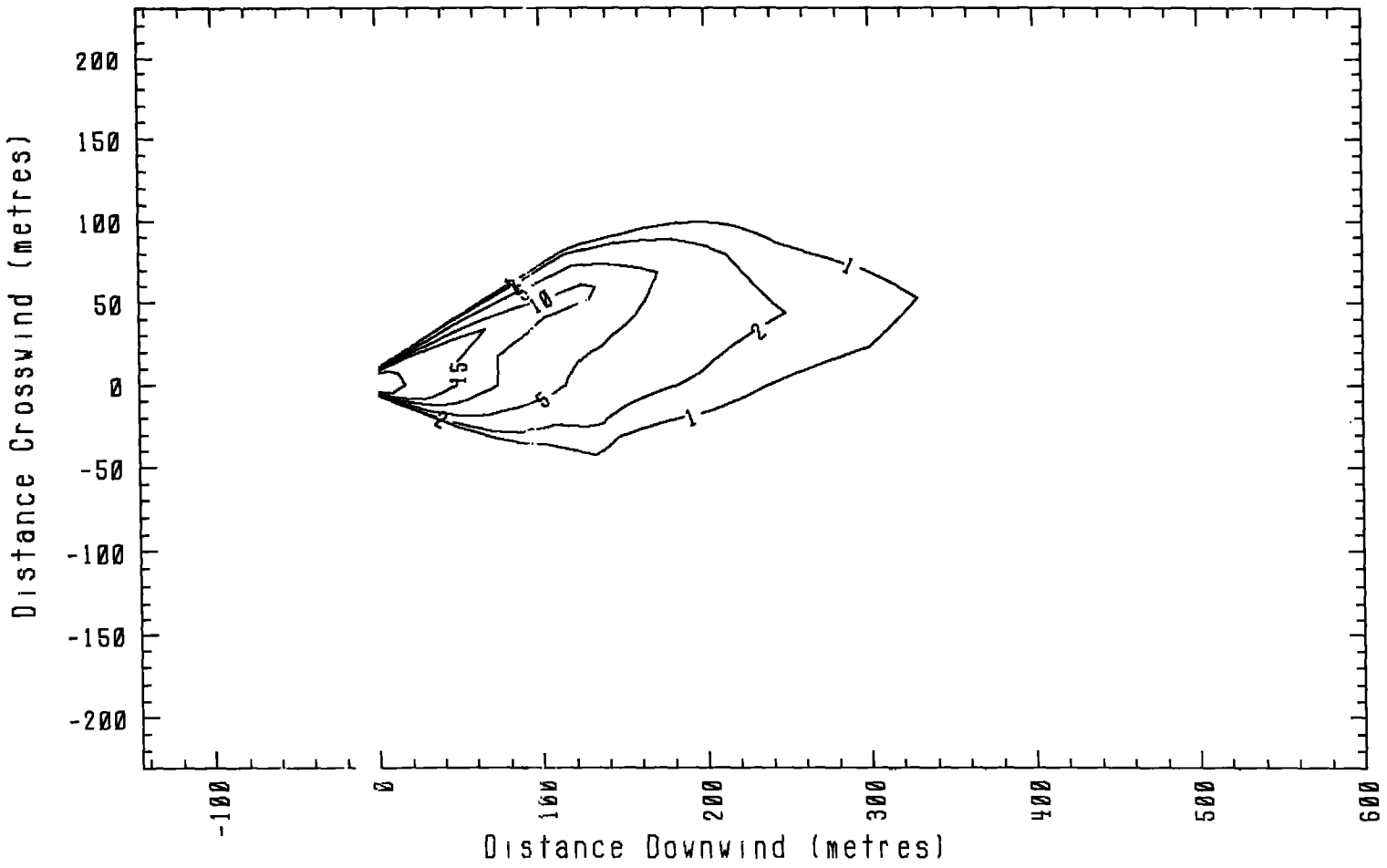
Coyote 6 LGF 81 Contours:

Time = 80 sec, level 1m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 368. m.

07/22/83u 10:45:46
10/18/83 11:25:19

Horizontal Concentration Contours



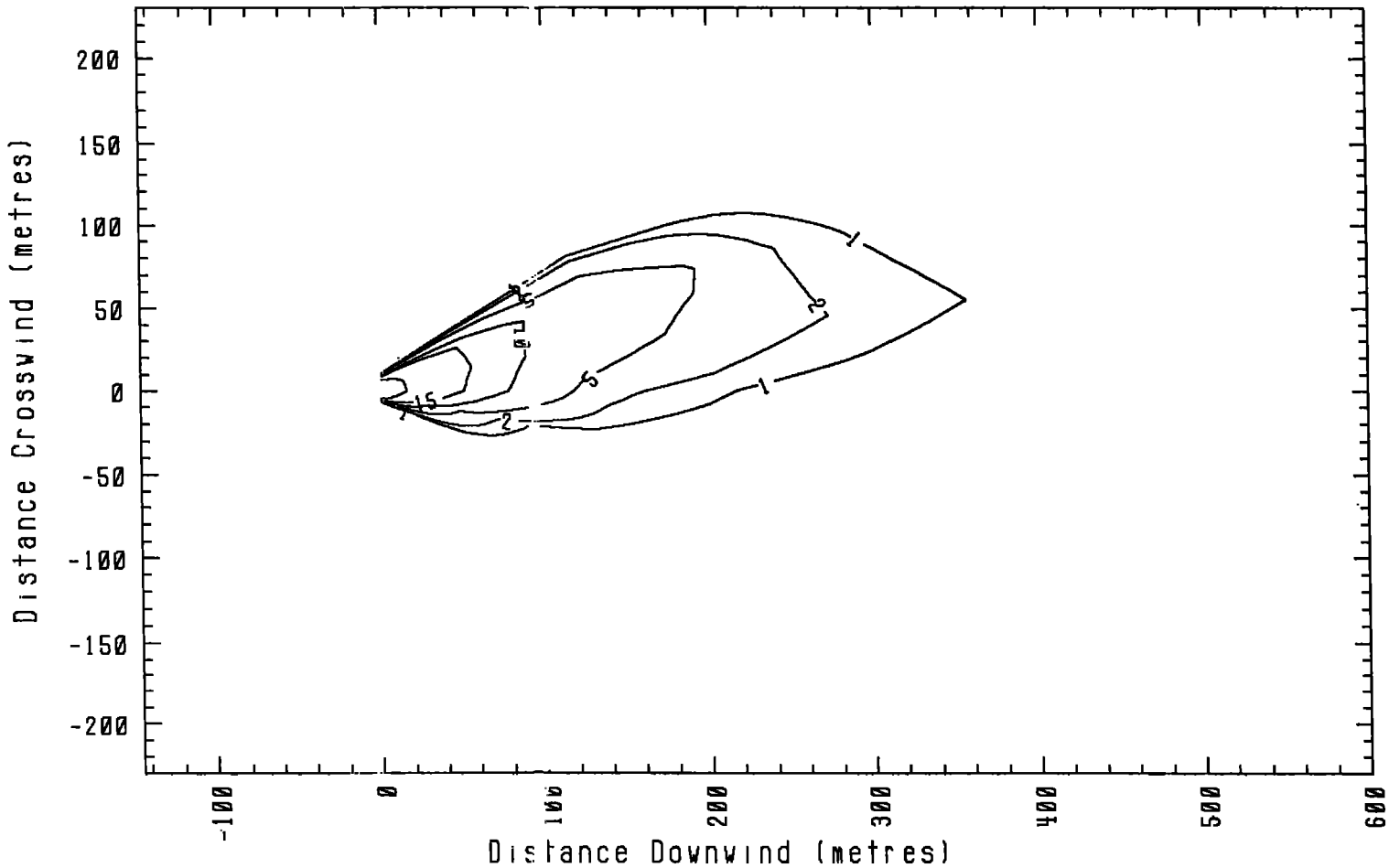
Coyote 6 LGF 81 Contours:

Time = 90 sec, level 1m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 414. m.

07/22/83u 10:45:45
10/18/83 11:25:19

Horizontal Concentration Contours



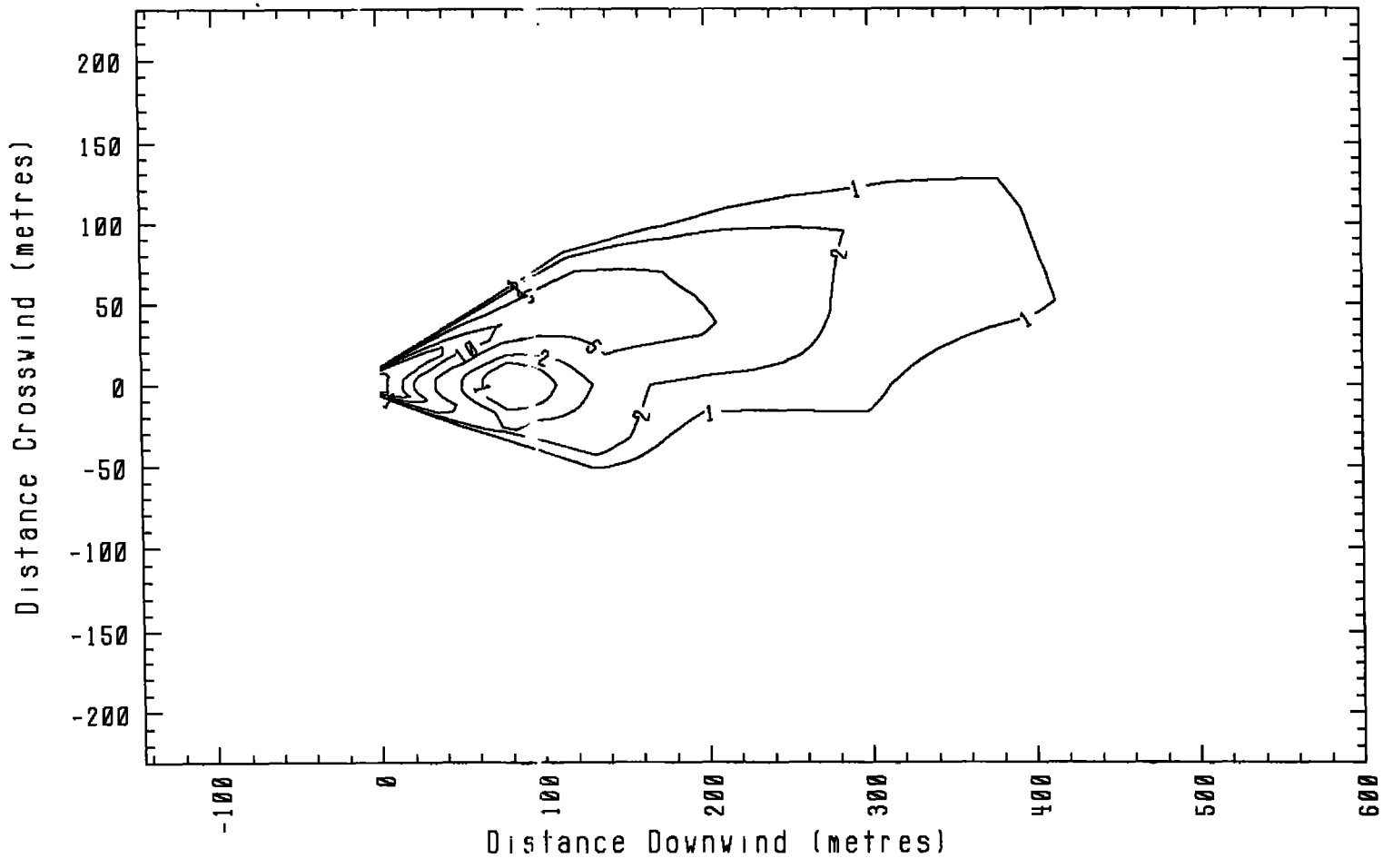
Coyote 6 LGF 81 Contours:

Time = 100 sec, level 1m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 460. m.

07/22/83u 10:45:45
10/18/83 11:25:19

Horizontal Concentration Contours



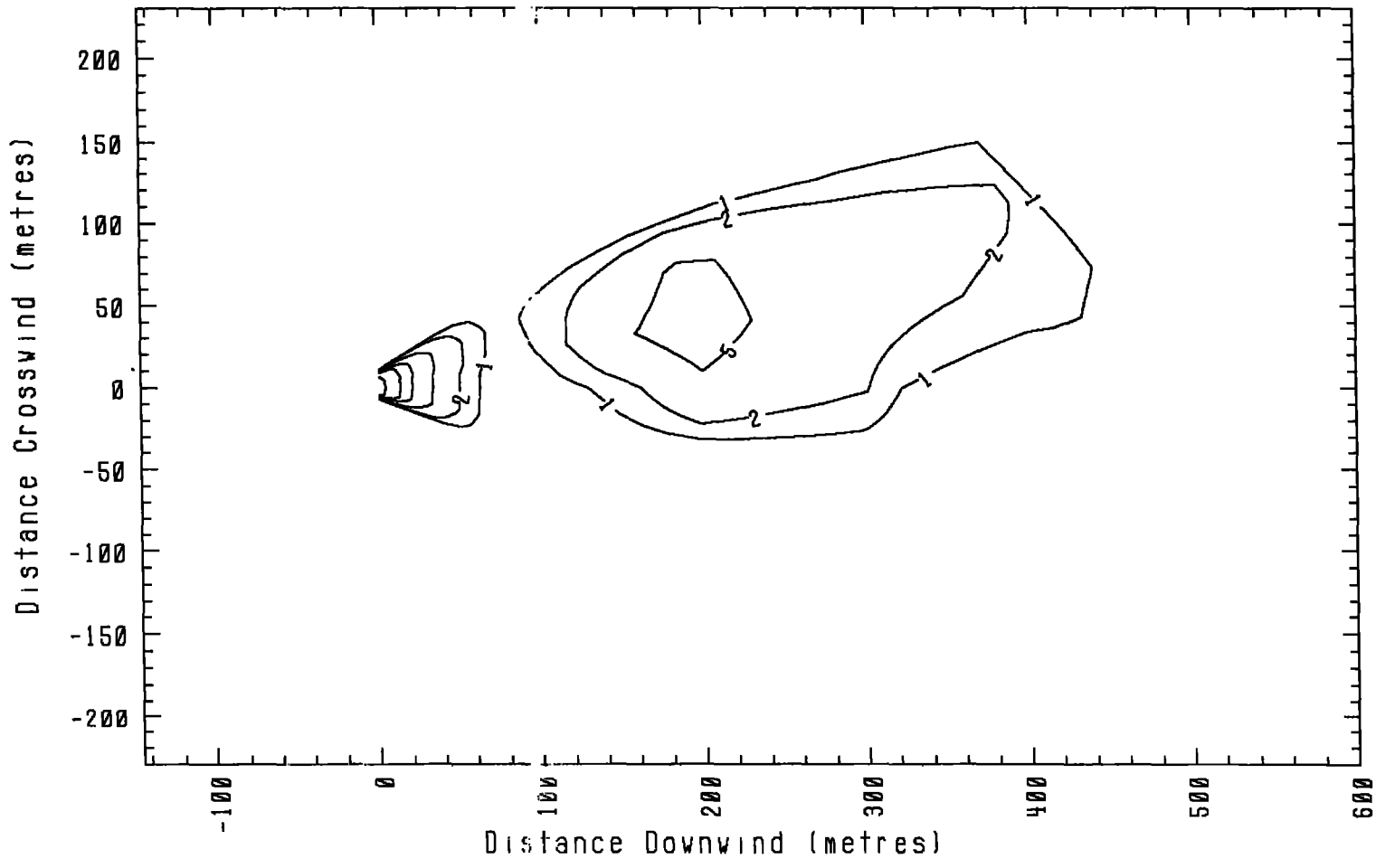
Coyote 6 LGF 81 Contours:

Time = 110 sec, level 1m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 506. m.

07/22/83u 10:45:46
10/18/83 11:25:19

Horizontal Concentration Contours



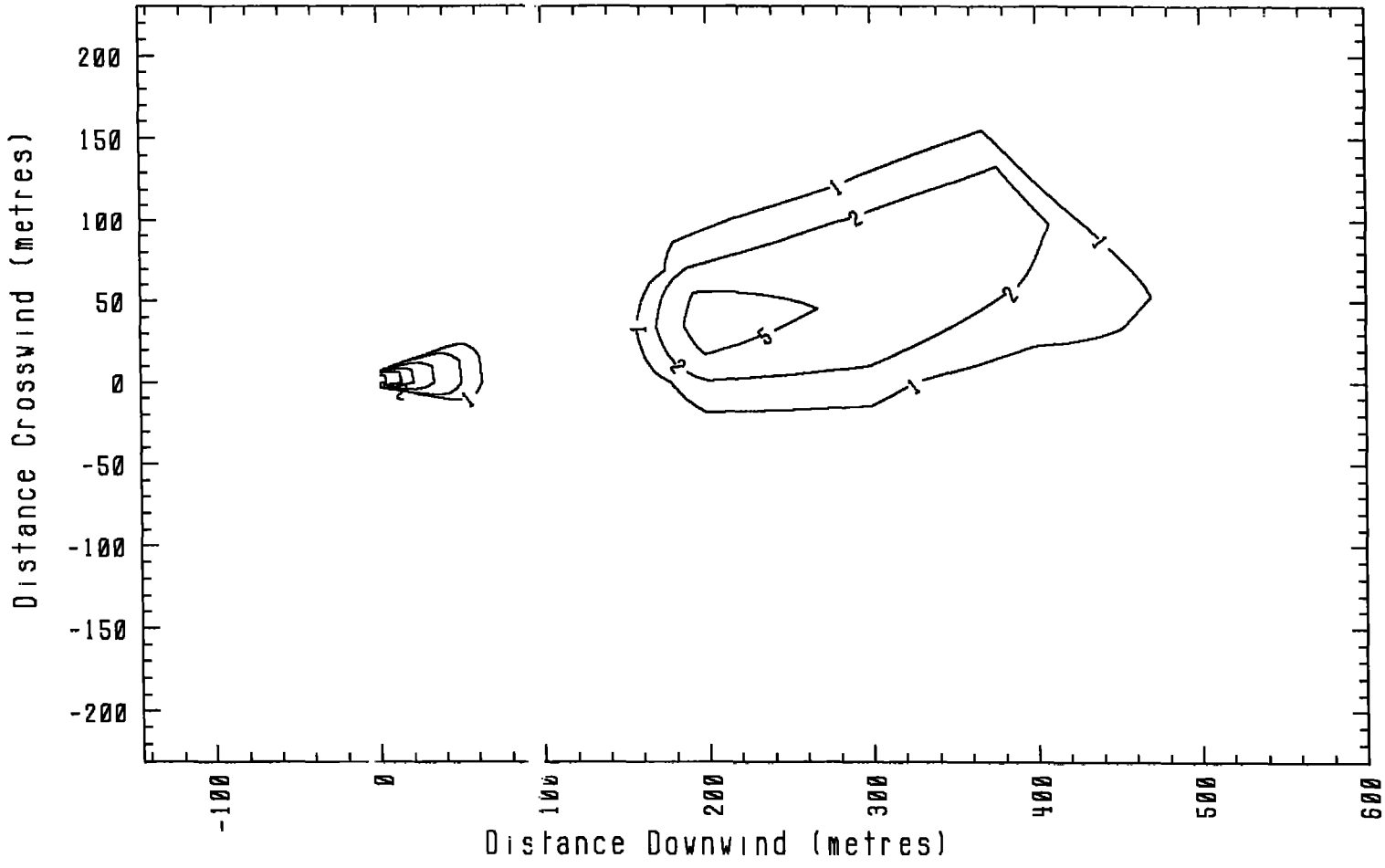
Coyote 6 LGF 81 Contours:

Time = 120 sec, level 1m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 552. m.

07/22/83u 10:45:46
10/18/83 11:25:19

Horizontal Concentration Contours



Coyote 6 LGF 81

Time = 130 sec, level 1m

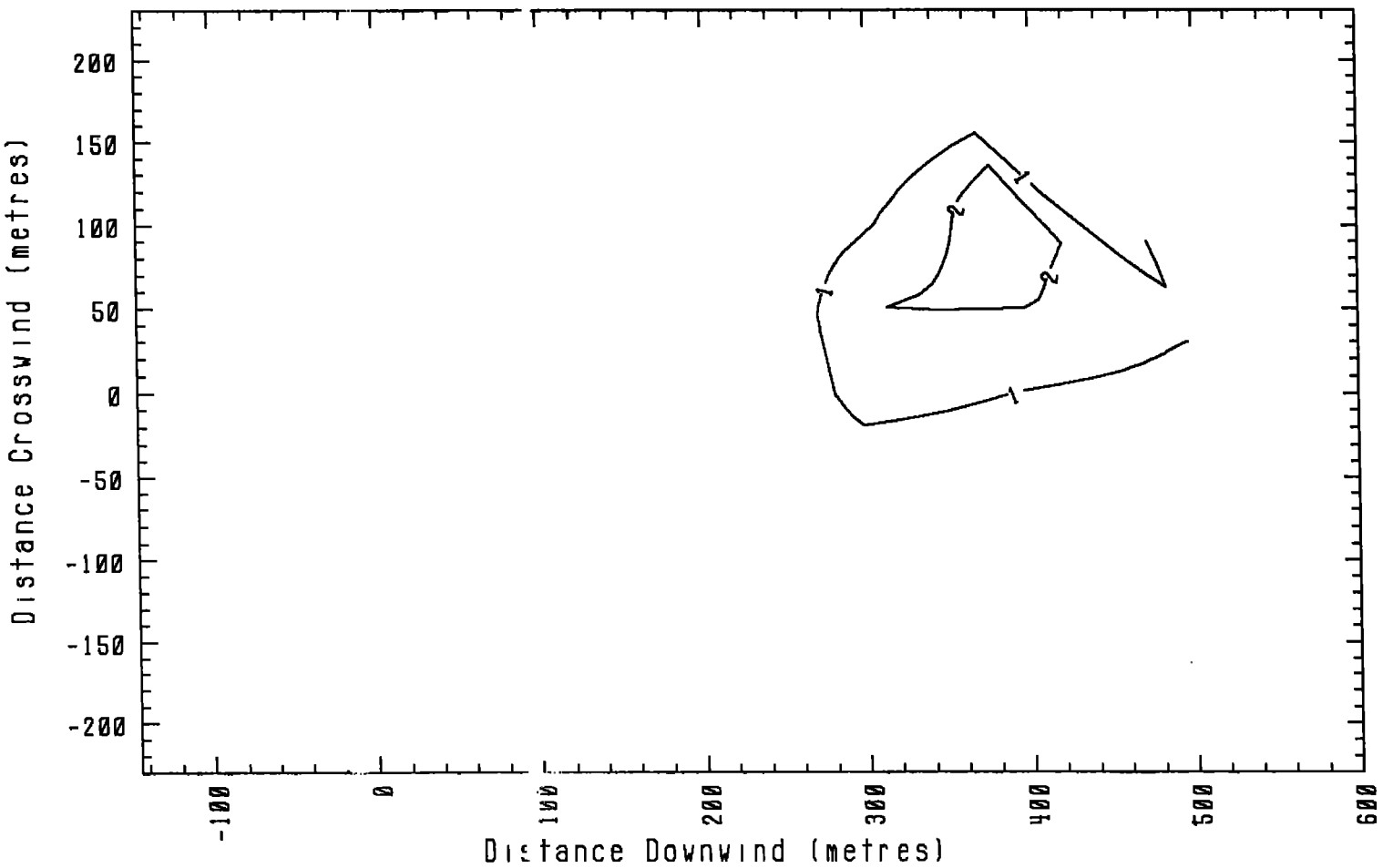
ln conc, ln x axis, boundary = 598. m.

Contours:

1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
10/10/83 11:25:19

Horizontal Concentration Contours



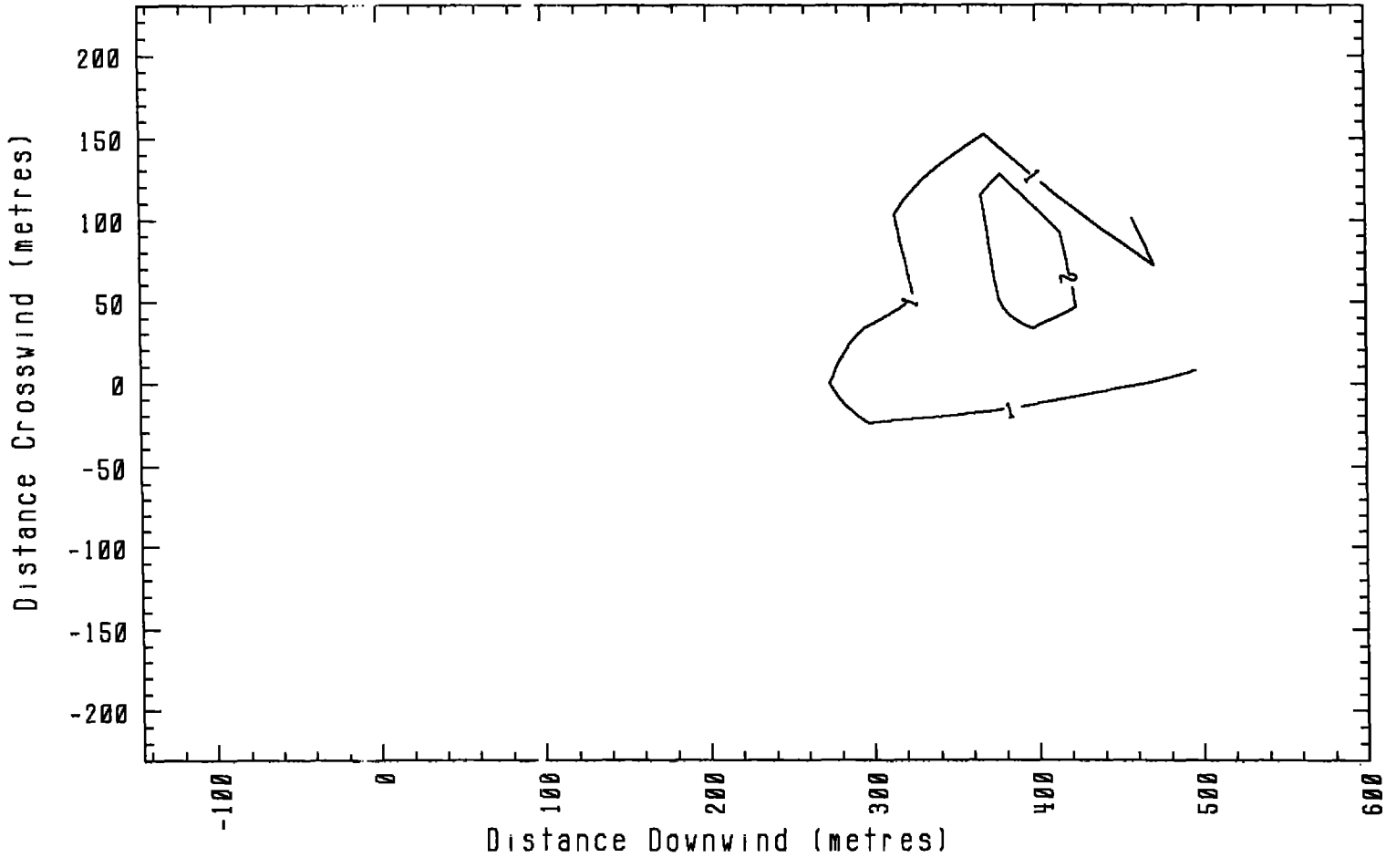
Coyote 6 LGF 81 Contours:

Time = 140 sec, level 1m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 644. m.

07/22/83u 10:45:45
10/18/83 11:25:19

Horizontal Concentration Contours



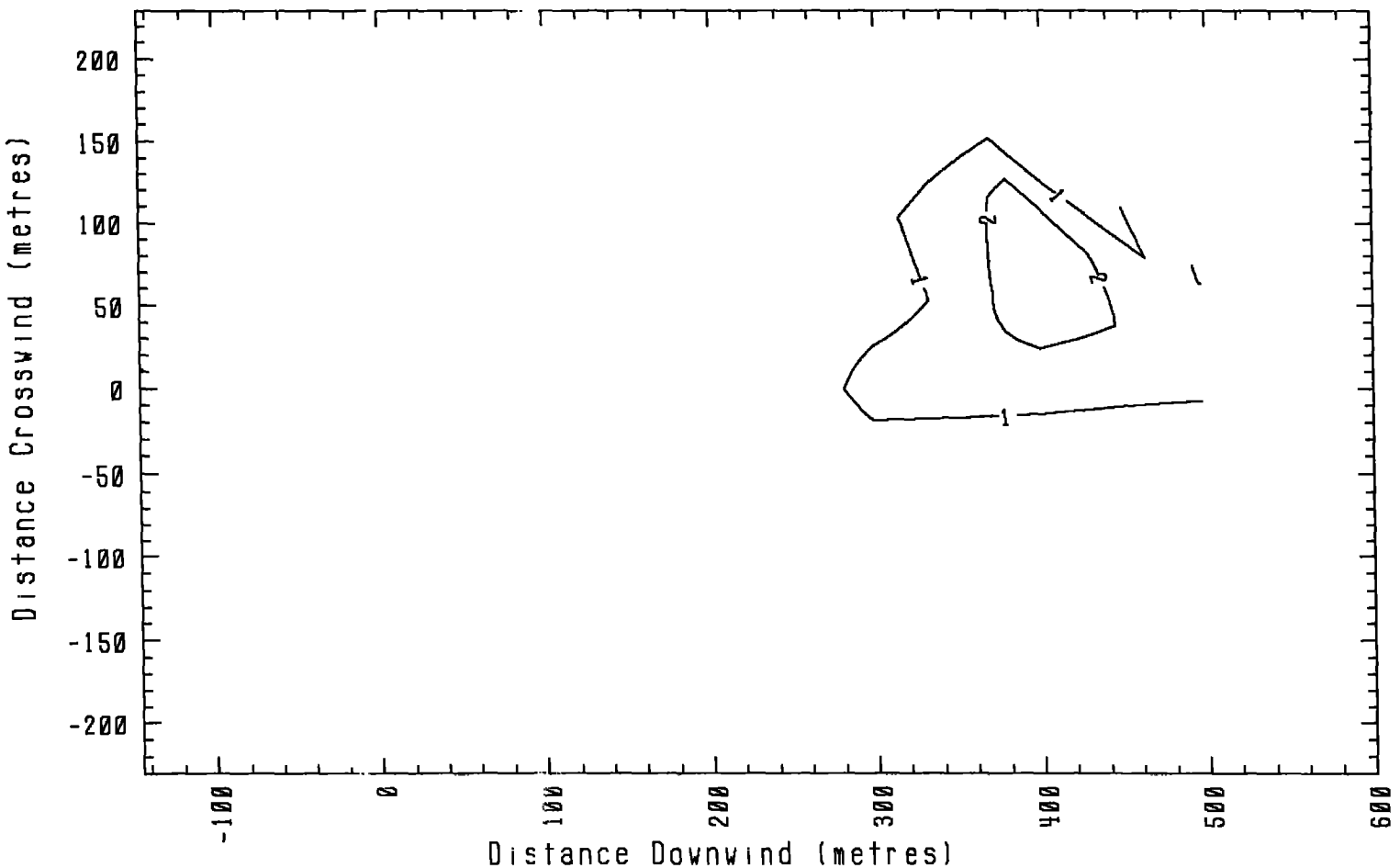
Coyote 6 LGF 81 Contours:

Time = 150 sec, level 1m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 690. m.

07/22/83u 10:45:46
10/18/83 11:25:19

Horizontal Concentration Contours



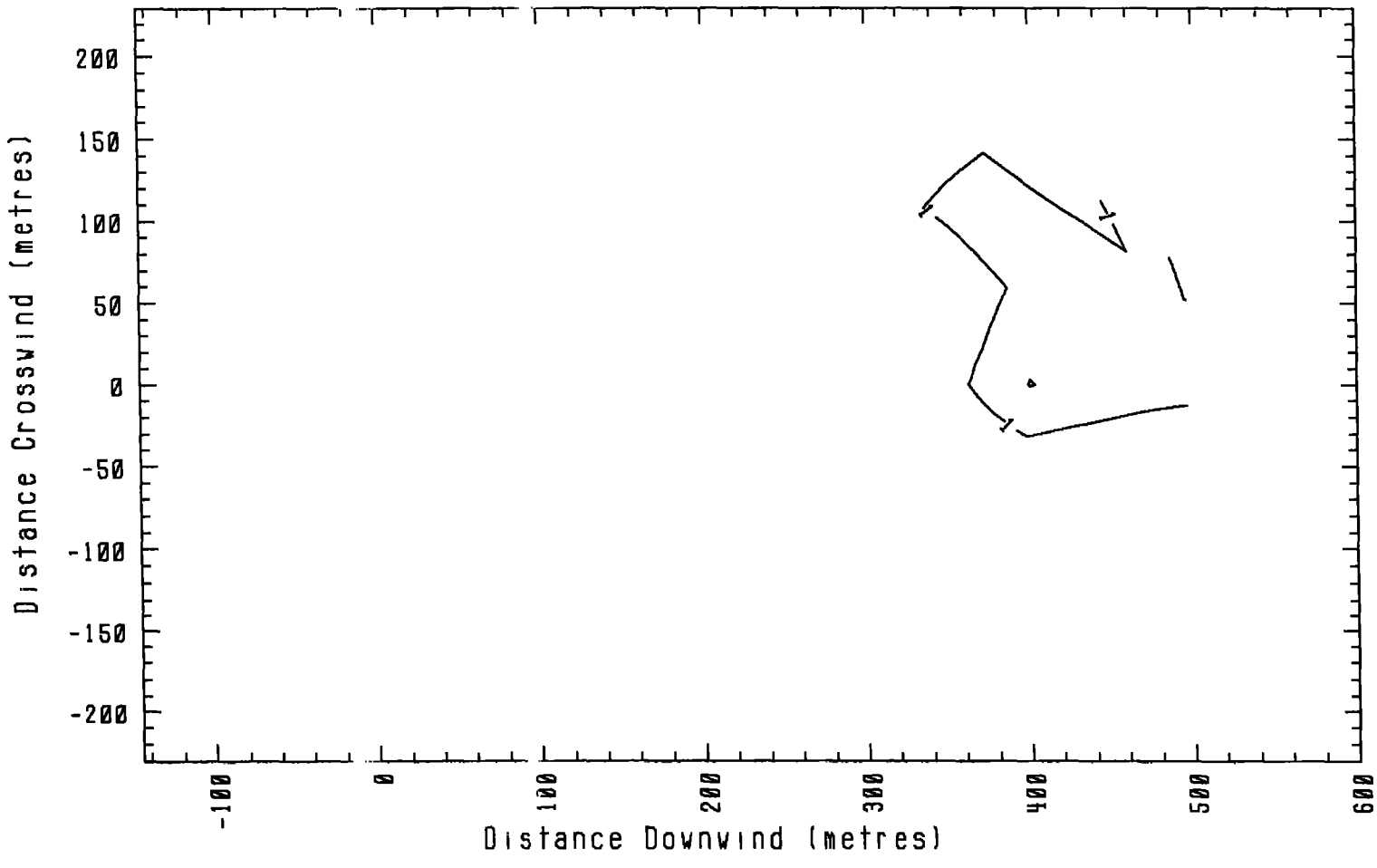
Coyote 6 LGF 81 Contours:

Time = 160 sec. level 1m 1%,2%,5%,10%,15%,25%,35%

ln conc. ln x axis, boundary = 736. m.

07/22/83u 10:45:45
10/18/83 11:25:19

Horizontal Concentration Contours



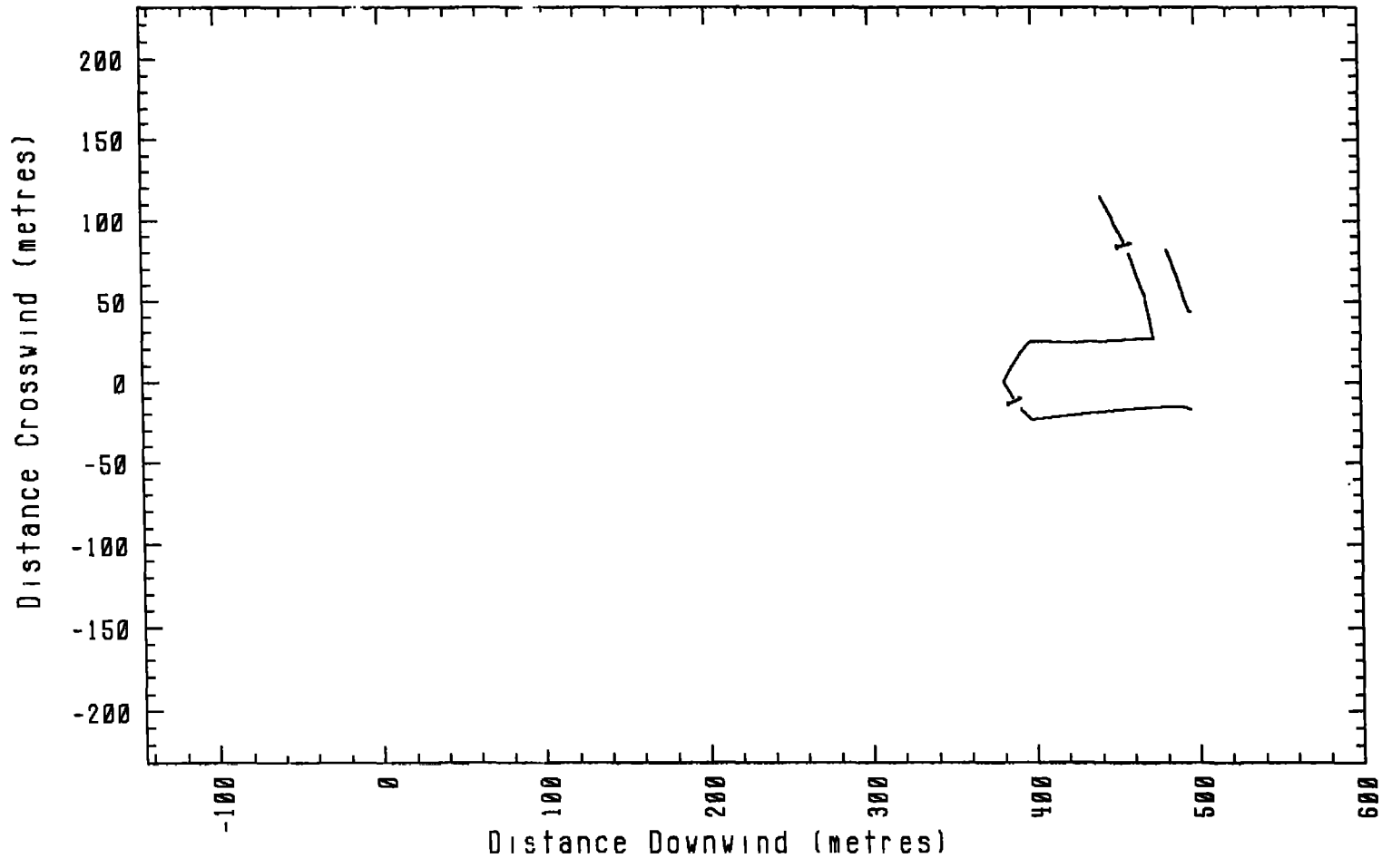
Coyote 6 LGF 81 Contours:

Time = 170 sec, level 1m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 782. m.

07/22/83u 10:45:46
10/18/83 11:25:19

Horizontal Concentration Contours



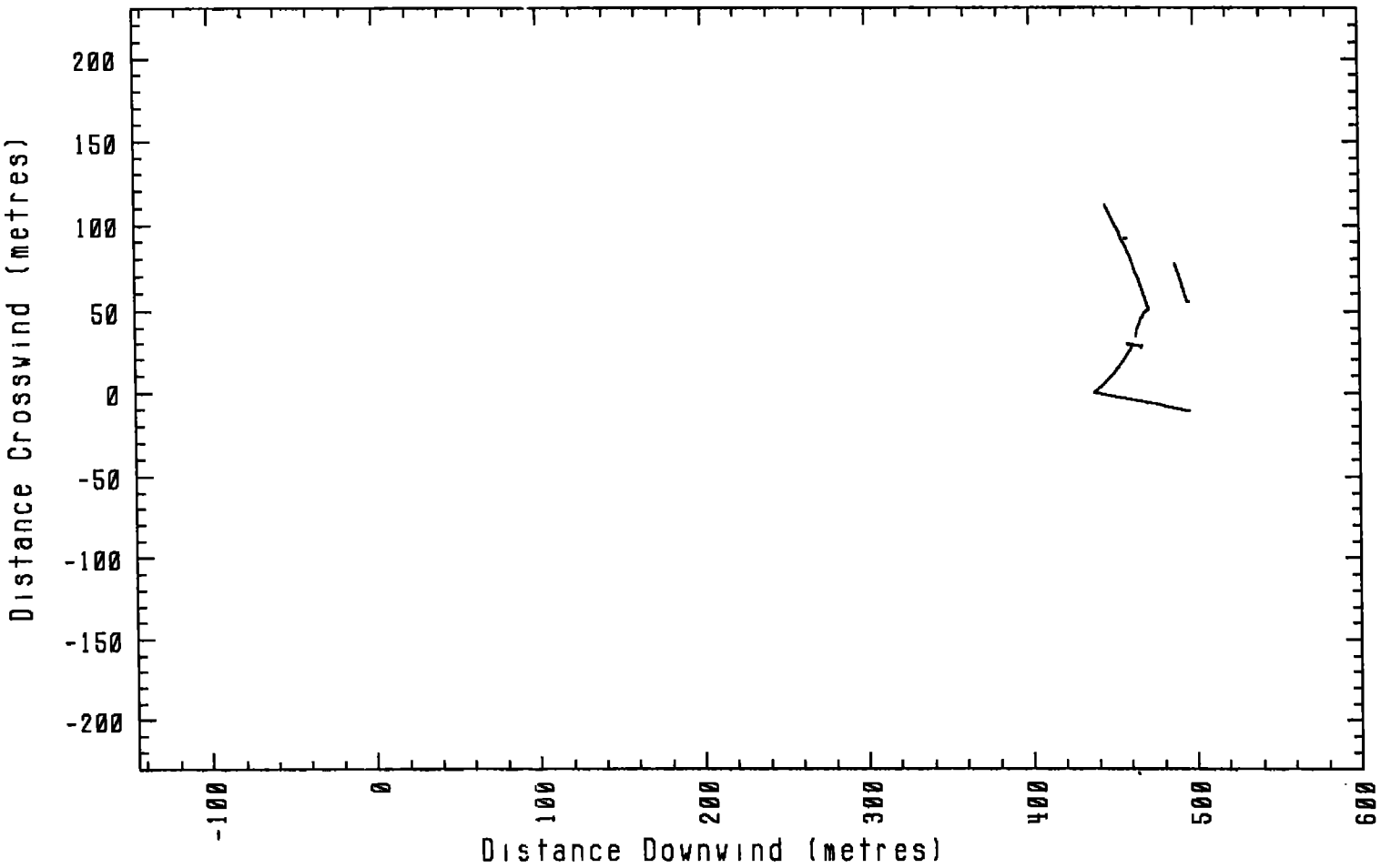
Coyote 6 LGF 81 Contours:

Time = 180 sec, level 1m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 828. m.

07/22/83u 10:45:45
10/18/83 11:25:19

Horizontal Concentration Contours

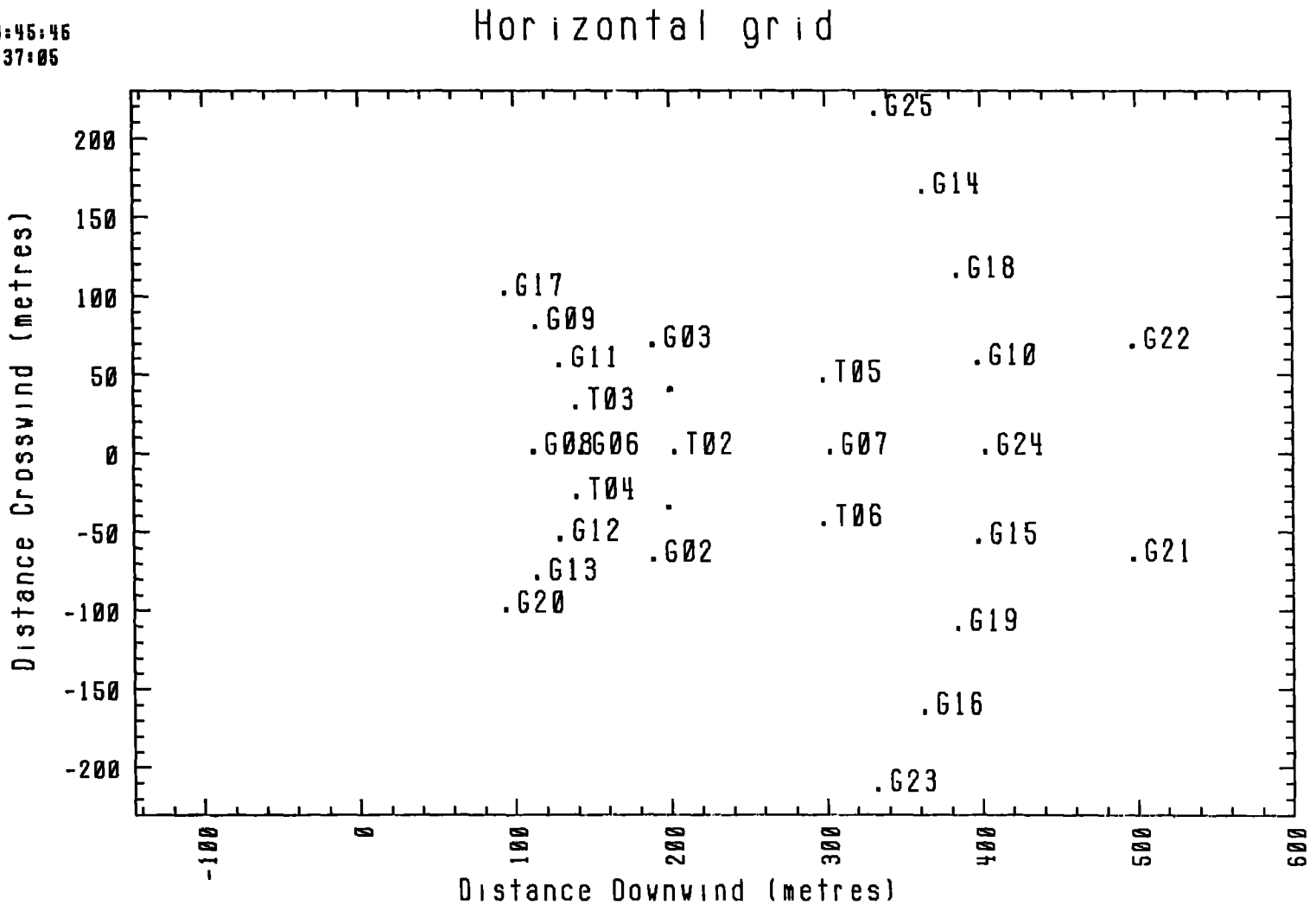


Coyote 6 LGF 81 Contours:

Time = 190 sec, level 1m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 874. m.

07/22/83u 10:45:46
08/09/83 11:37:05



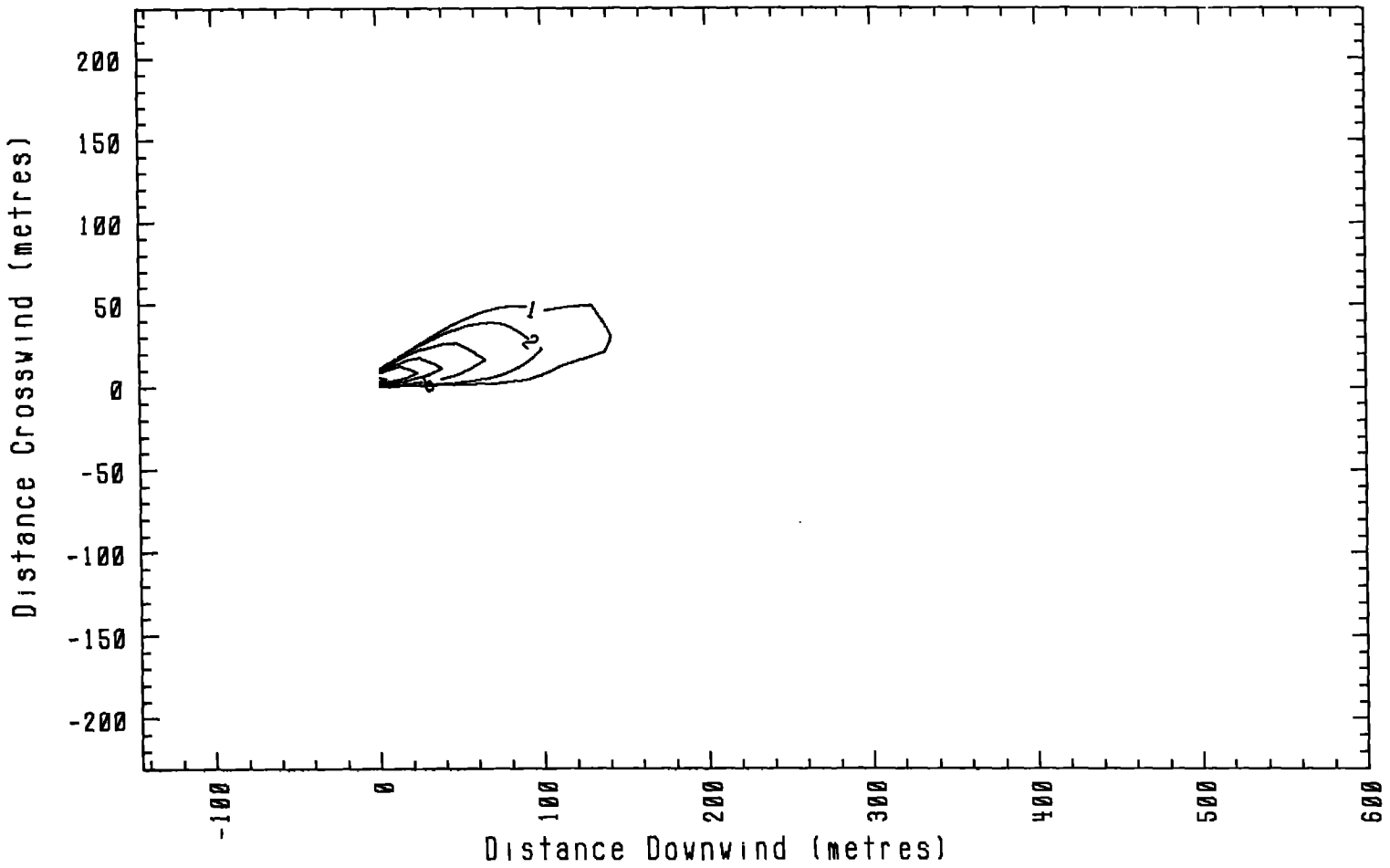
Coyote 6 LGF 81

Windvel - 4.600 m/s

Ignition time 104.2 sec. at Radius 79. m.

07/22/83u 10:45:46
08/09/83 16:17:21

Horizontal Concentration Contours



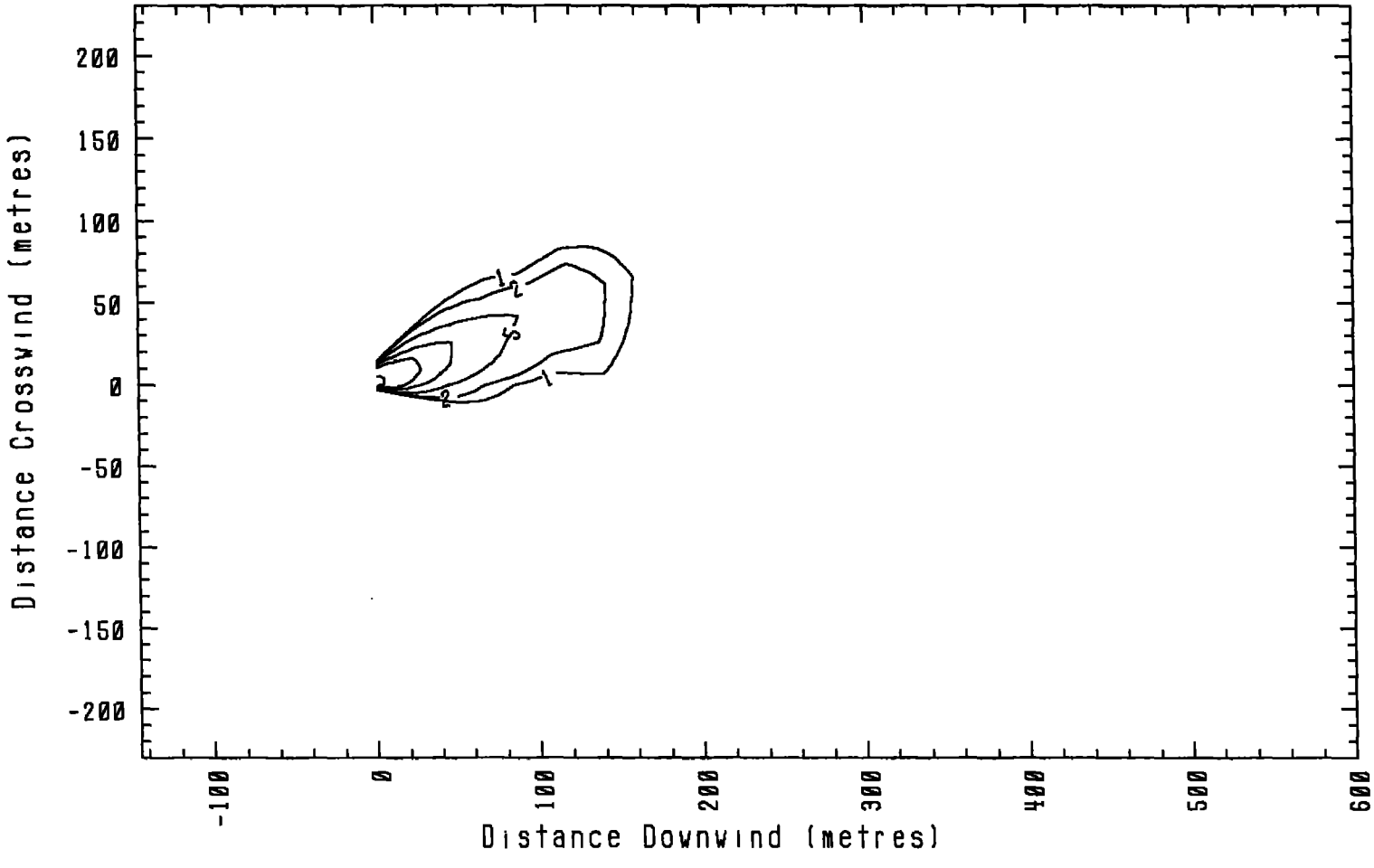
Coyote 6 LGF 81 Contours:

Time = 40 sec, level 3m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 184. m.

07/22/83u 10:45:46
08/09/83 16:17:21

Horizontal Concentration Contours



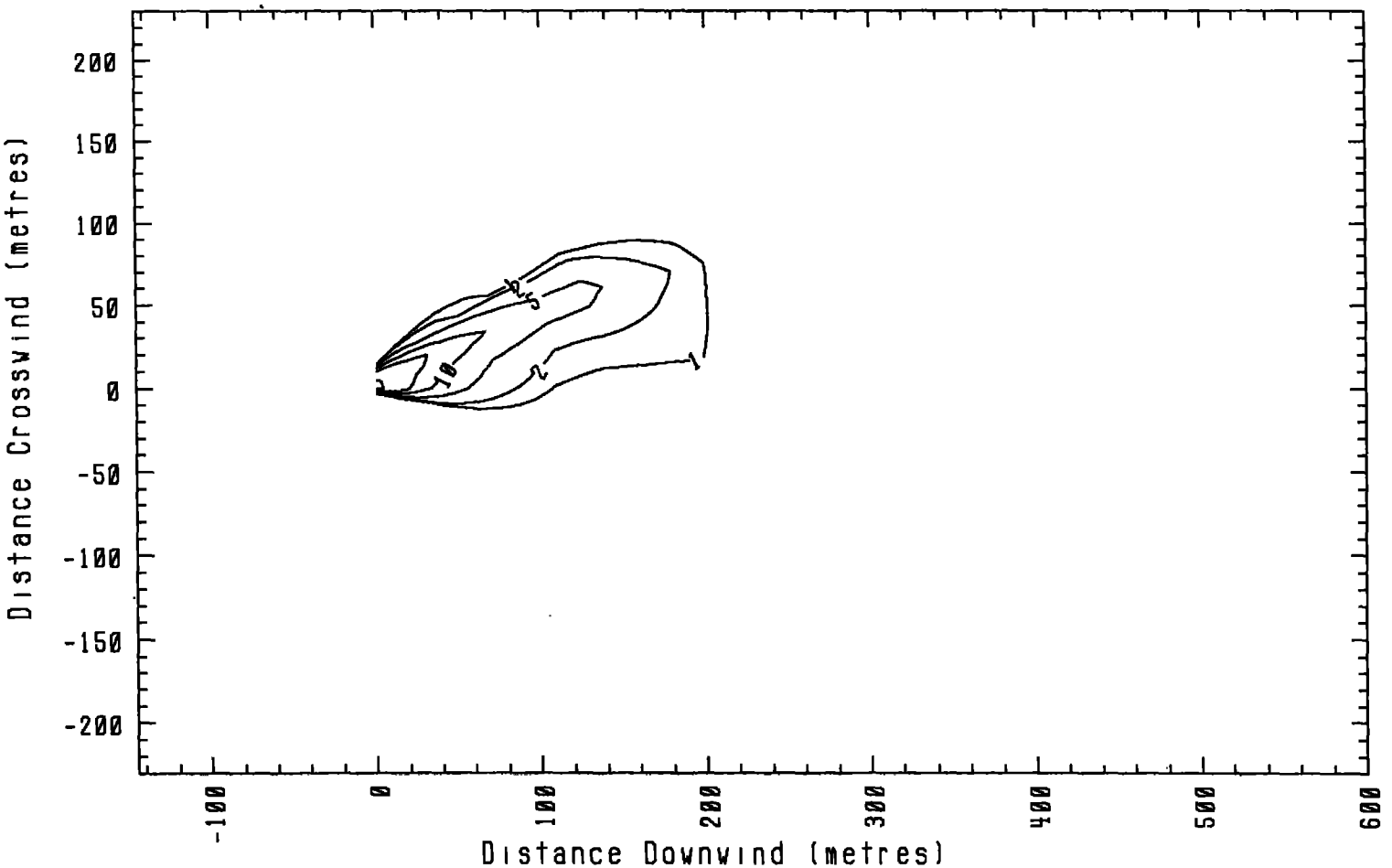
Coyote 6 LGF 81 Contours:

Time = 50 sec, level 3m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 230. m.

07/22/83u 10:45:45
08/09/83 16:17:21

Horizontal Concentration Contours



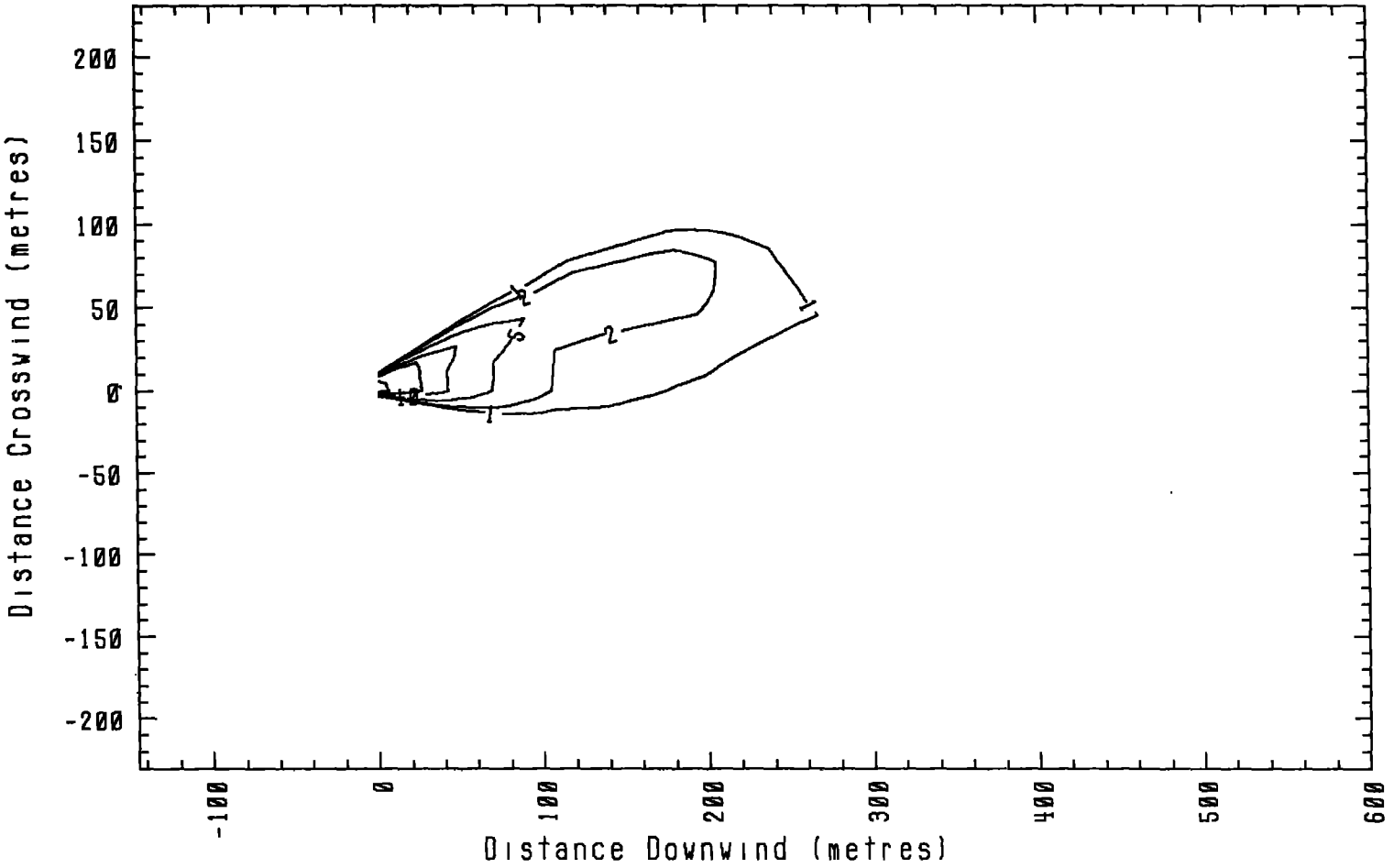
Coyote 6 LGF 81 Contours:

Time = 60 sec, level 3m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 276. m.

07/22/83u 10:45:46
08/09/83 16:17:21

Horizontal Concentration Contours



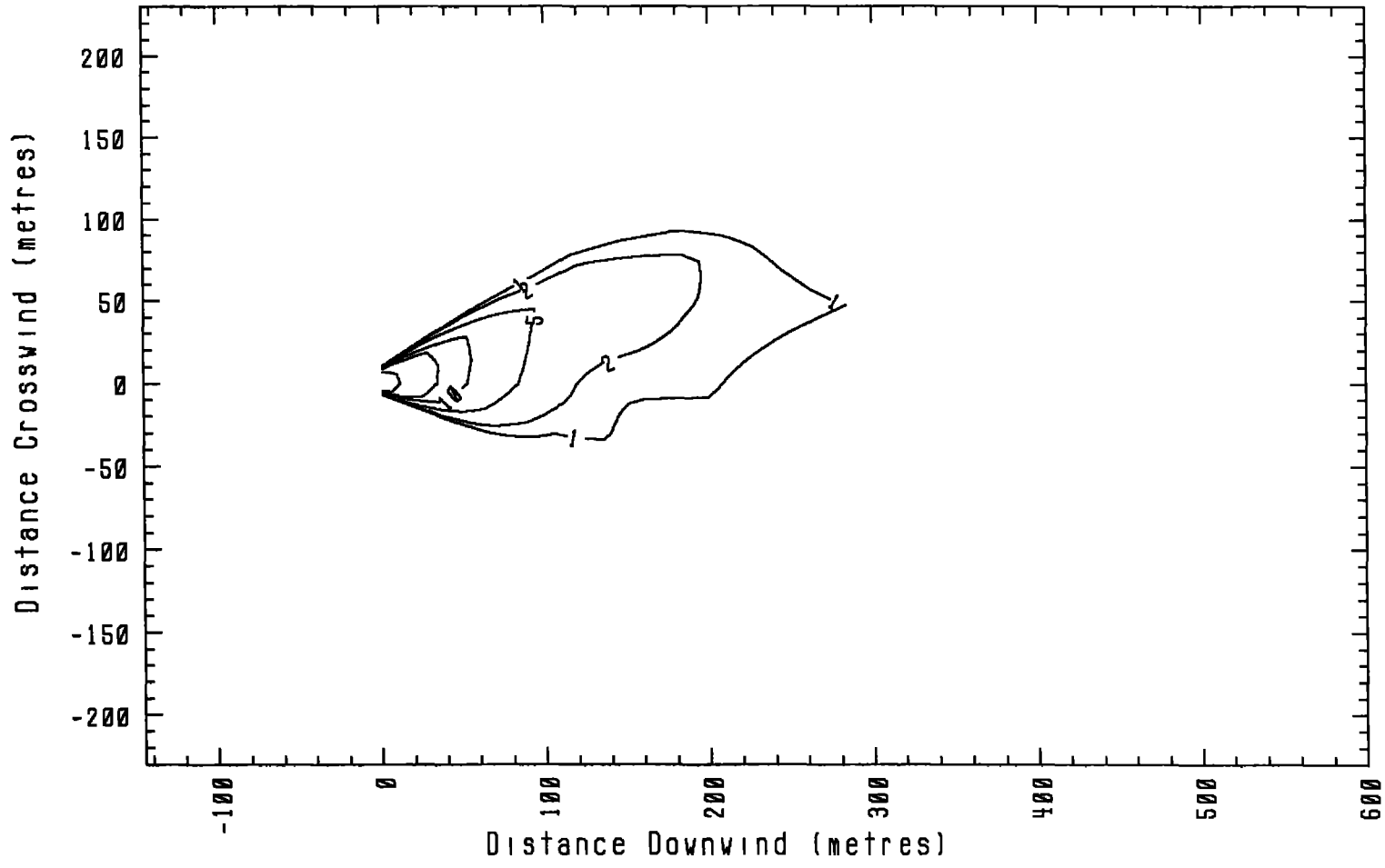
Coyote 6 LGF 81 Contours:

Time = 70 sec, level 3m 1%,2%,5%,10%,15%,25%,35%

In conc, in x axis, boundary = 322. m.

07/22/83u 10:45:45
08/09/83 16:17:21

Horizontal Concentration Contours



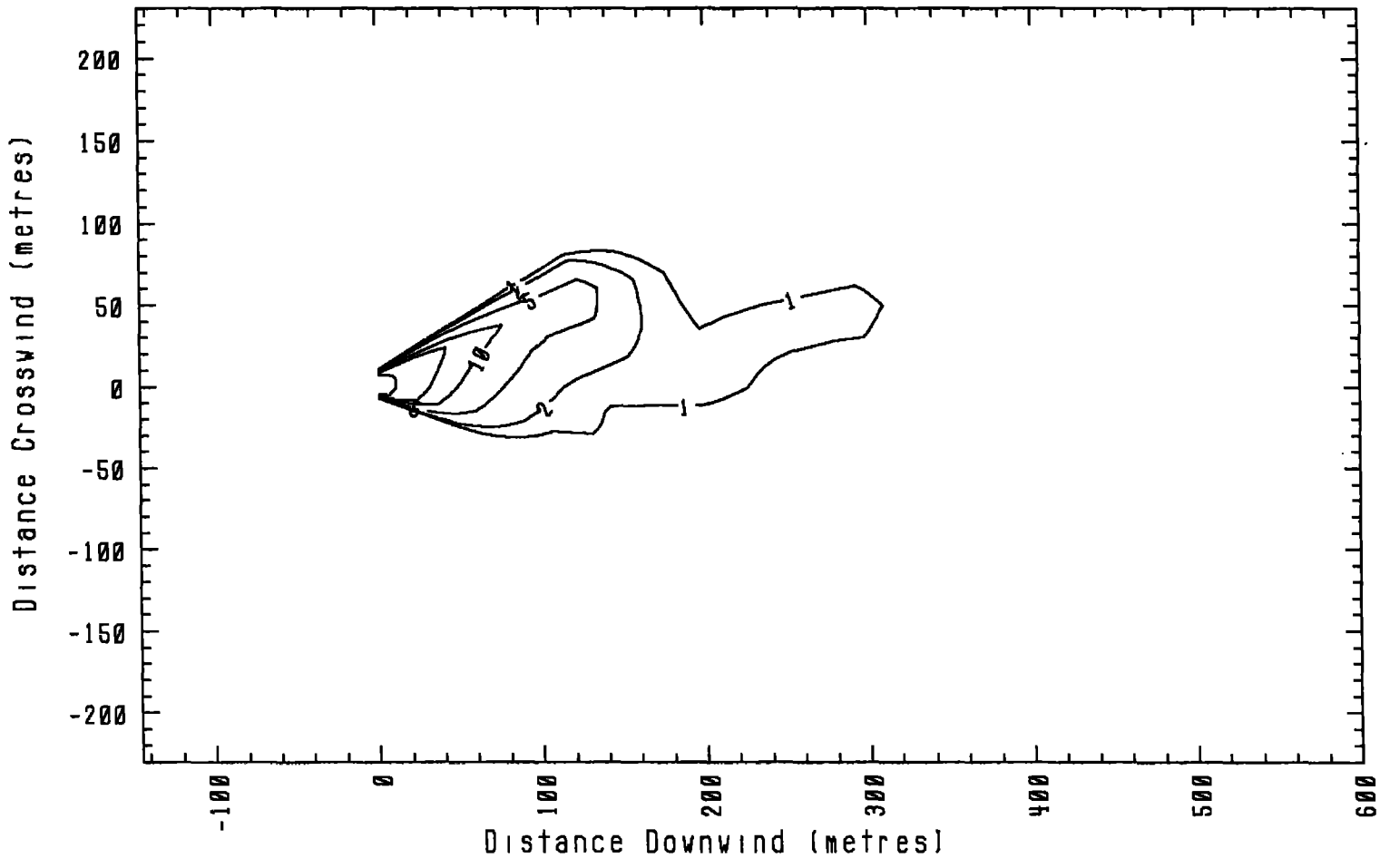
Coyote 6 LGF 81 Contours:

Time = 80 sec, level 3m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 368. m.

07/22/83u 10:45:45
08/09/83 16:17:21

Horizontal Concentration Contours



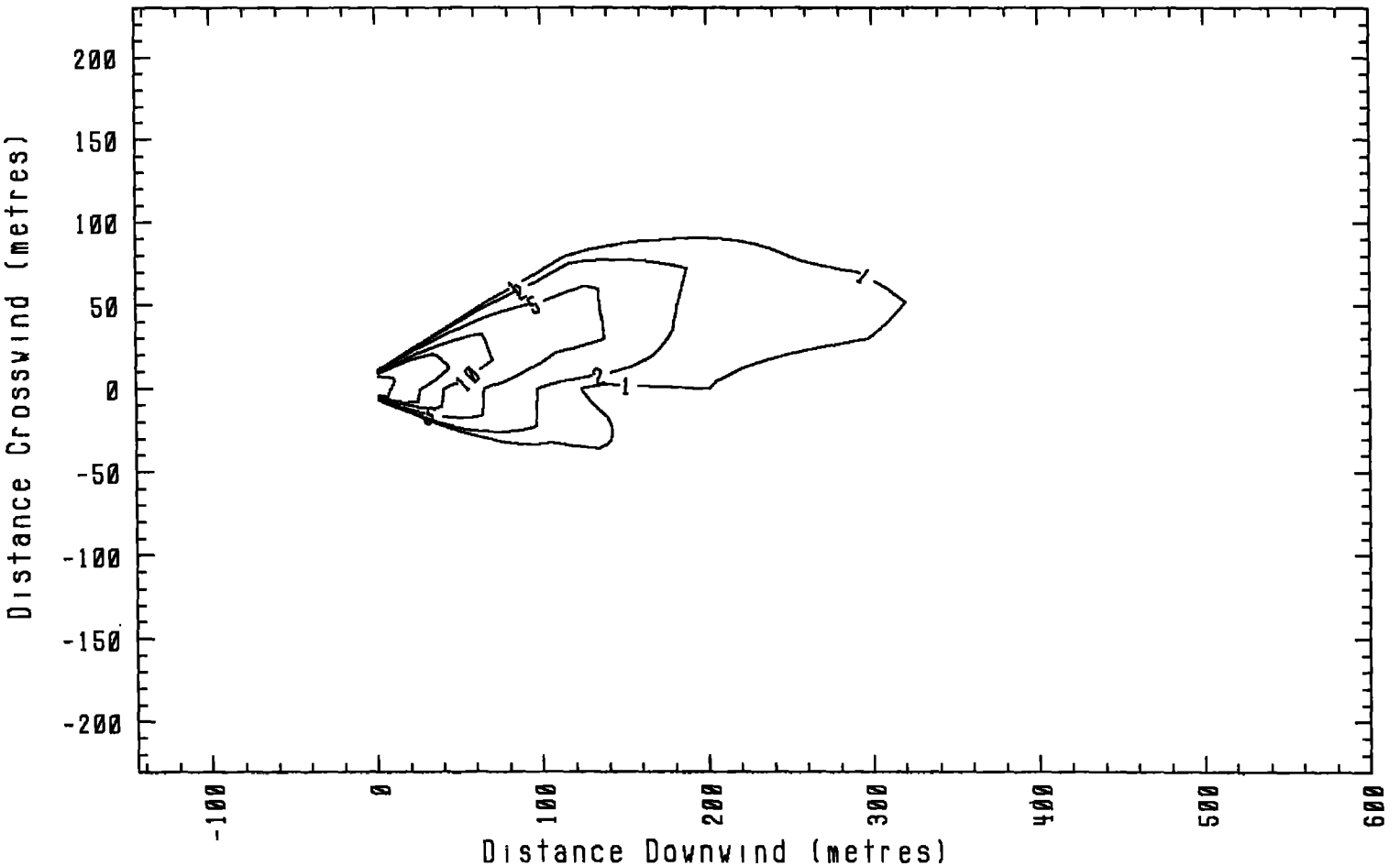
Coyote 6 LGF 81 Contours:

Time = 90 sec, level 3m 1%,2%,5%,10%,15%,25%,35%

In conc, In x axis, boundary = 414. m.

07/22/83u 10:45:46
08/09/83 16:17:21

Horizontal Concentration Contours



Coyote 6 LGF 81

Time = 100 sec, level 3m

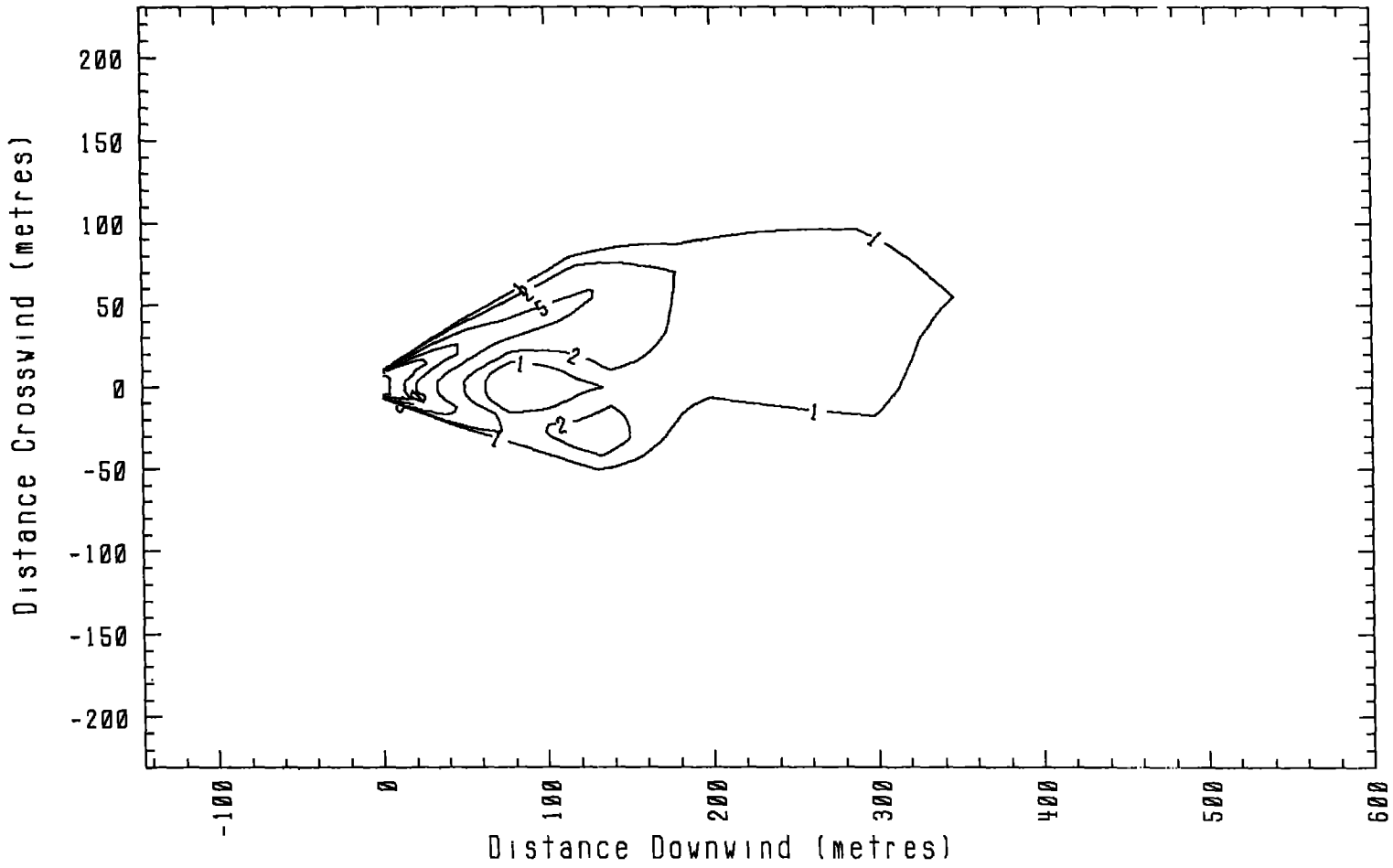
In conc, In x axis, boundary = 460. m.

Contours:

1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/09/83 16:17:21

Horizontal Concentration Contours



Coyote 6 LGF 81

Time = 110 sec, level 3m

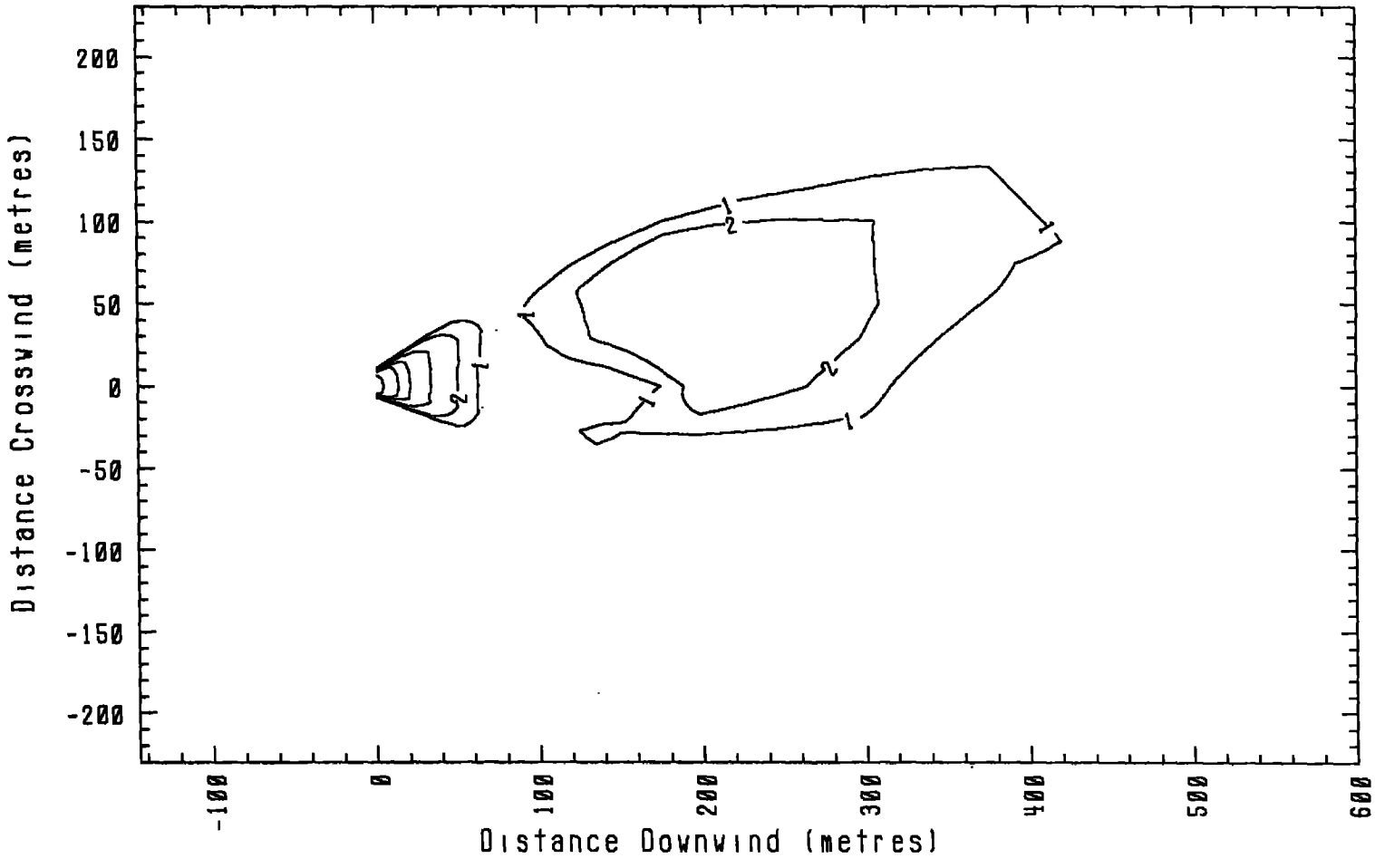
ln conc, ln x axis, boundary = 506. m.

Contours:

1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:46
08/09/83 16:17:21

Horizontal Concentration Contours



Coyote 6 LGF 81

Time = 120 sec, level 3m

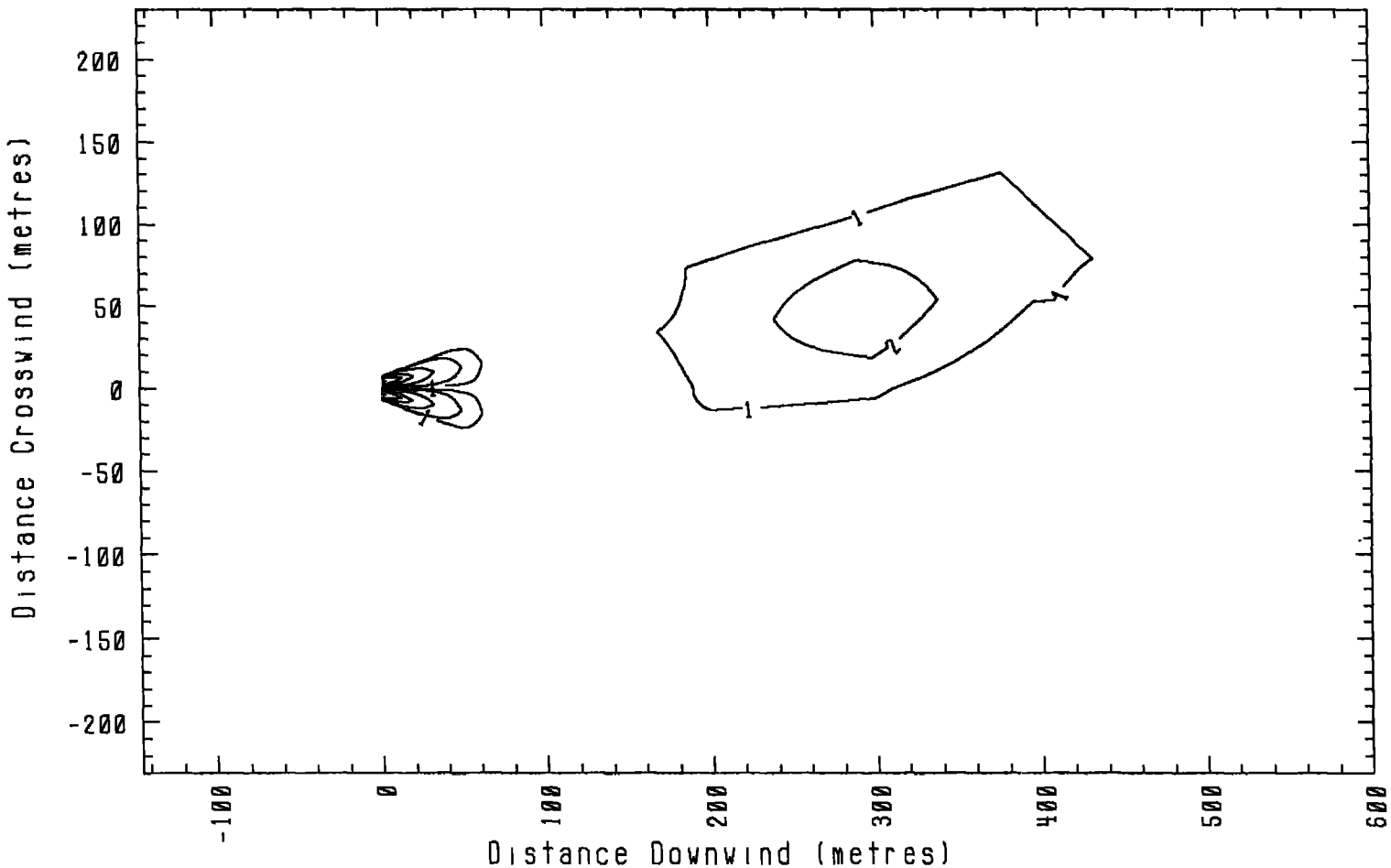
In conc, ln x axis, boundary = 552. m.

Contours:

1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:45
08/09/83 16:17:21

Horizontal Concentration Contours



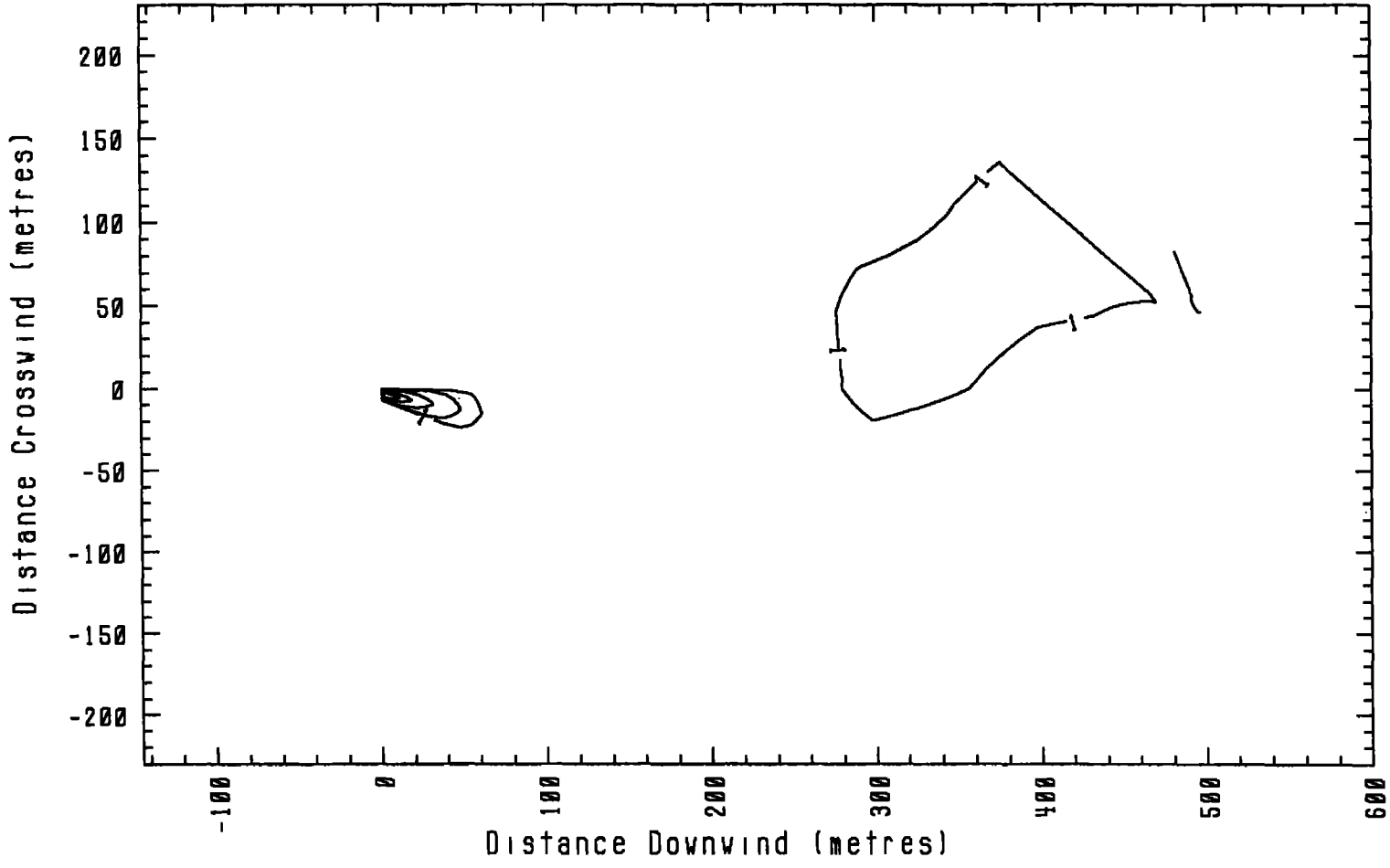
Coyote 6 LGF 81 Contours:

Time = 130 sec, level 3m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 598. m.

07/22/83u 10:45:45
08/09/83 16:17:21

Horizontal Concentration Contours



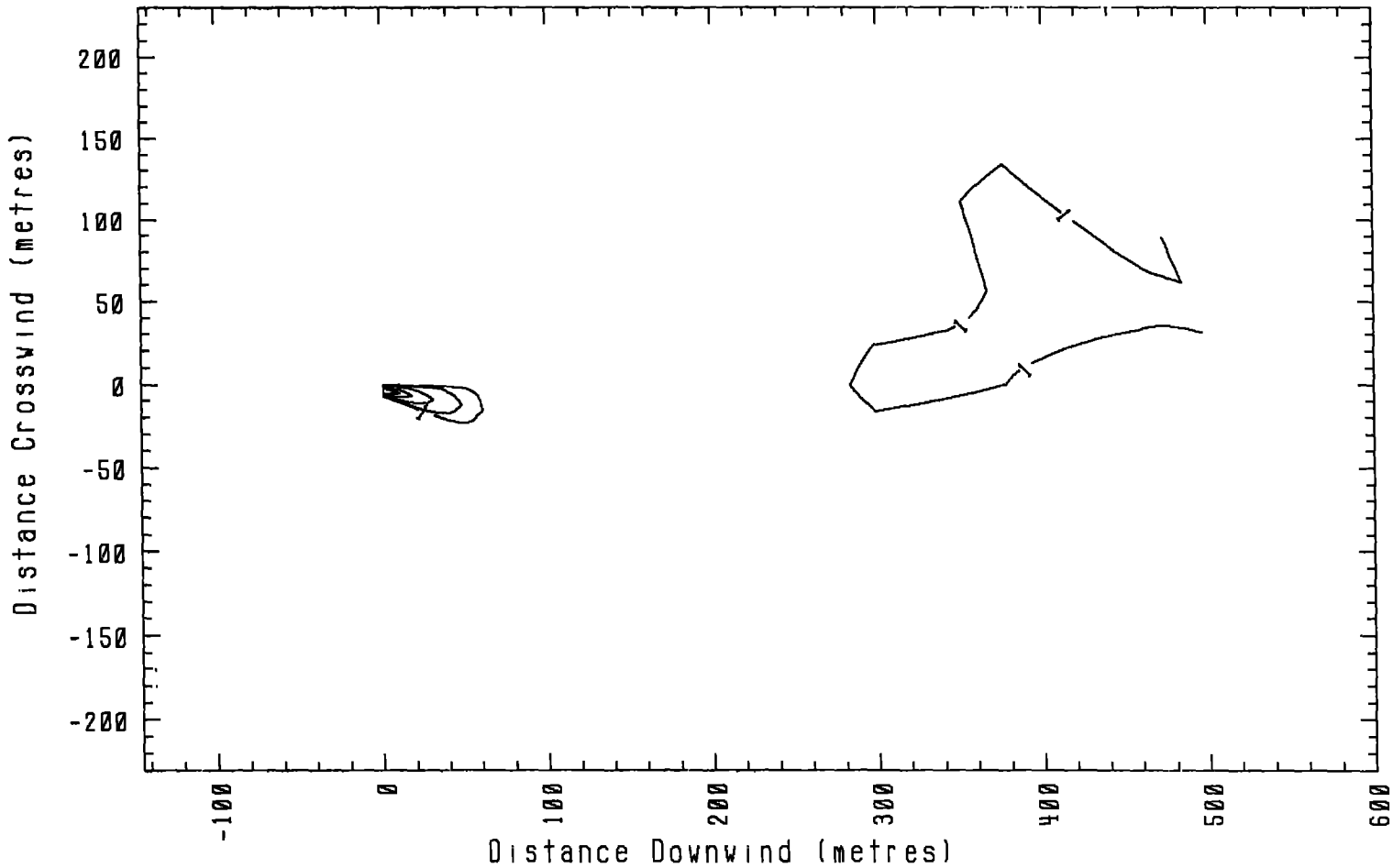
Coyote 6 LGF 81 Contours:

Time = 140 sec, level 3m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 644. m.

07/22/83u 10:45:45
08/09/83 16:17:21

Horizontal Concentration Contours



Coyote 6 LGF 81

Time = 150 sec, level 3m

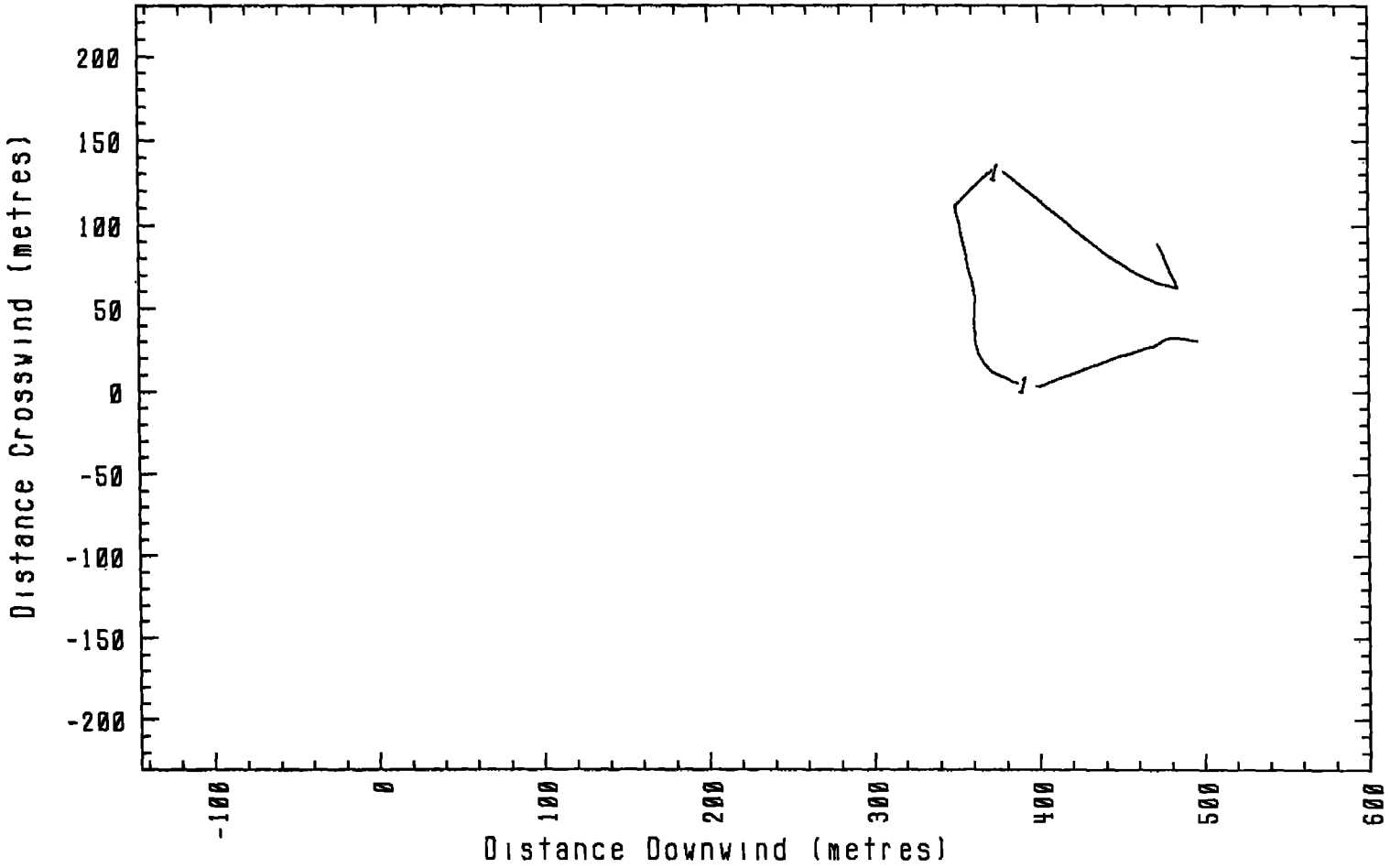
ln conc, ln x axis, boundary = 690. m.

Contours:

1%,2%,5%,10%,15%,25%,35%

07/22/83u 10:45:46
08/09/83 16:17:21

Horizontal Concentration Contours



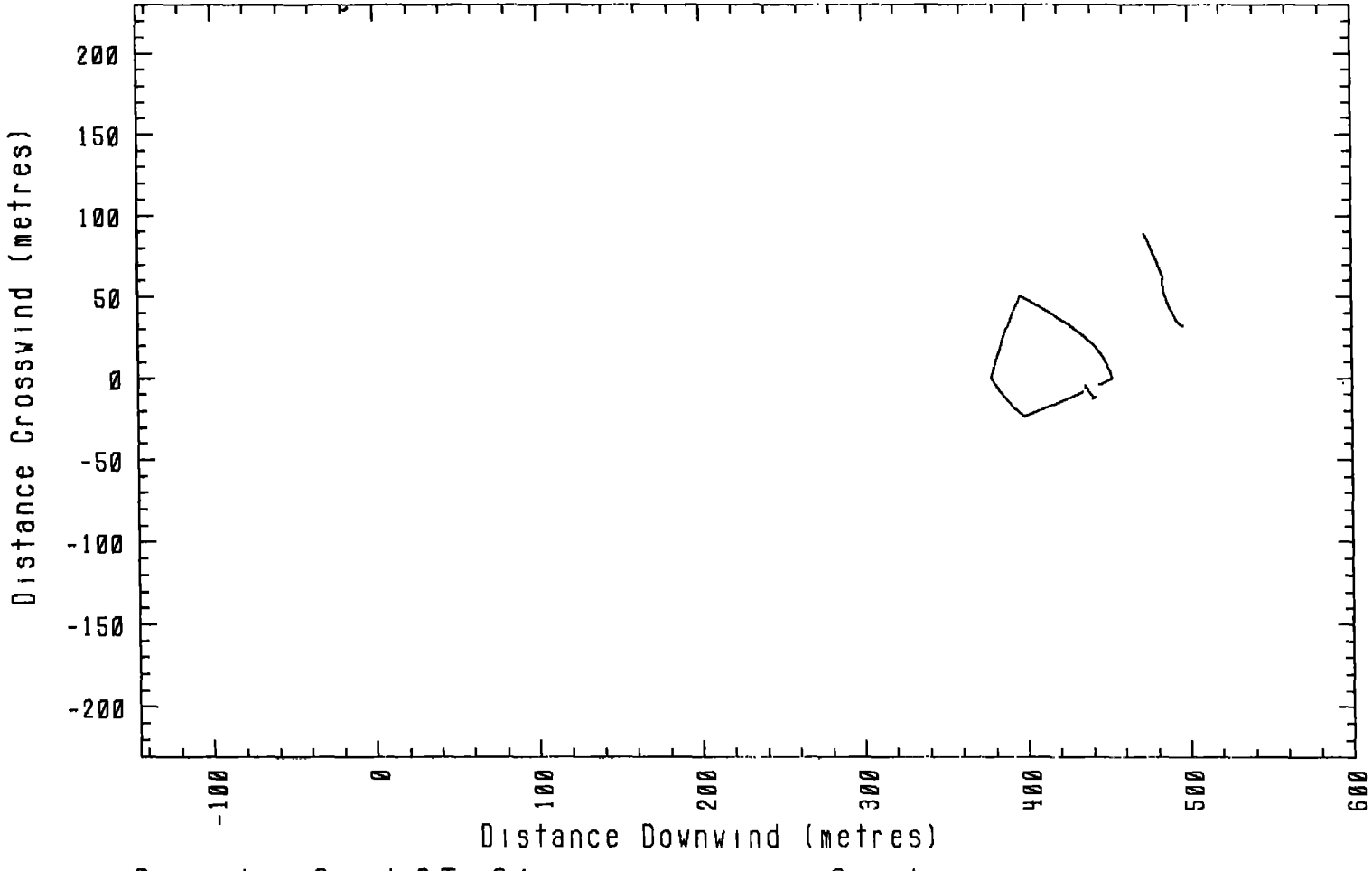
Coyote 6 LGF 81 Contours:

Time = 160 sec, level 3m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 736. m.

07/22/83u 10:45:45
08/09/83 16:17:21

Horizontal Concentration Contours



Coyote 6 LGF 81 Contours:

Time = 170 sec, level 3m 1%,2%,5%,10%,15%,25%,35%

ln conc, ln x axis, boundary = 782. m.

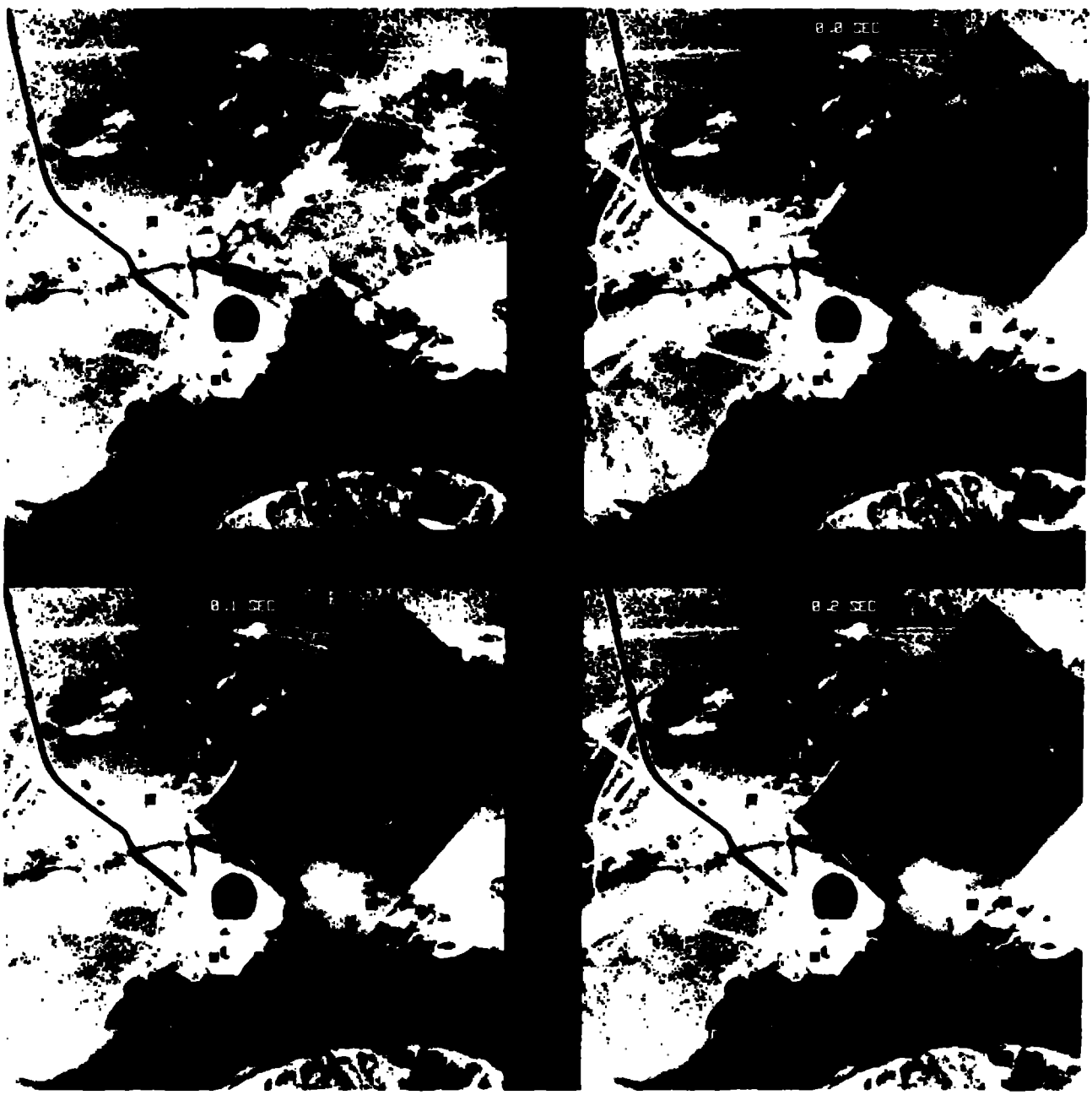
APPENDIX 5: SELECTED IR IMAGES

EG&G RSL / DOE

COYOTE 6 27 OCTOBER 1981 1693 PST

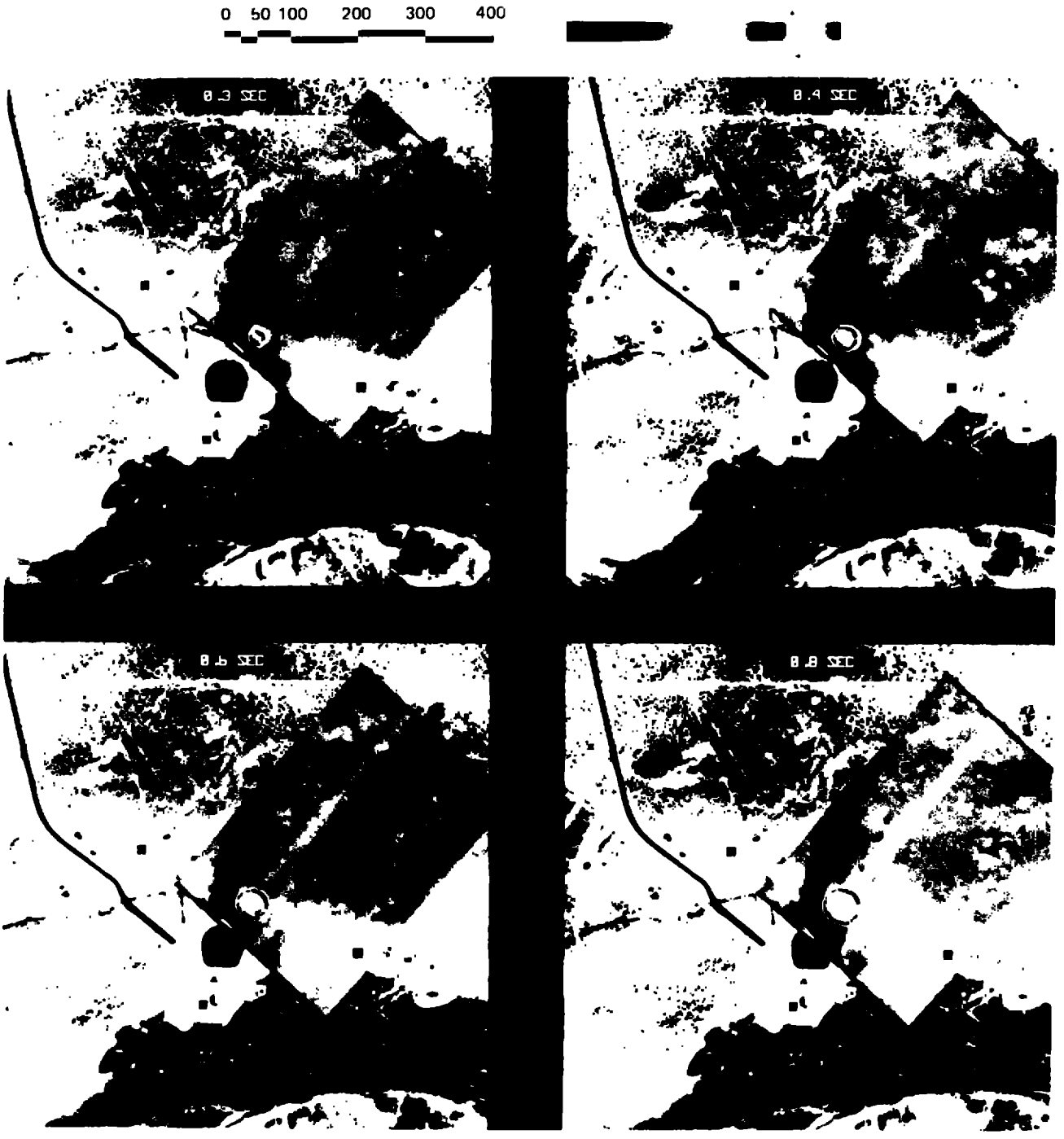
INFRAMETRICS THERMAL IMAGING SYSTEM
UNFILTERED CHANNEL 8.5 - 12.5 μM

0 50 100 200 300 400



EG&G PCL / DOE

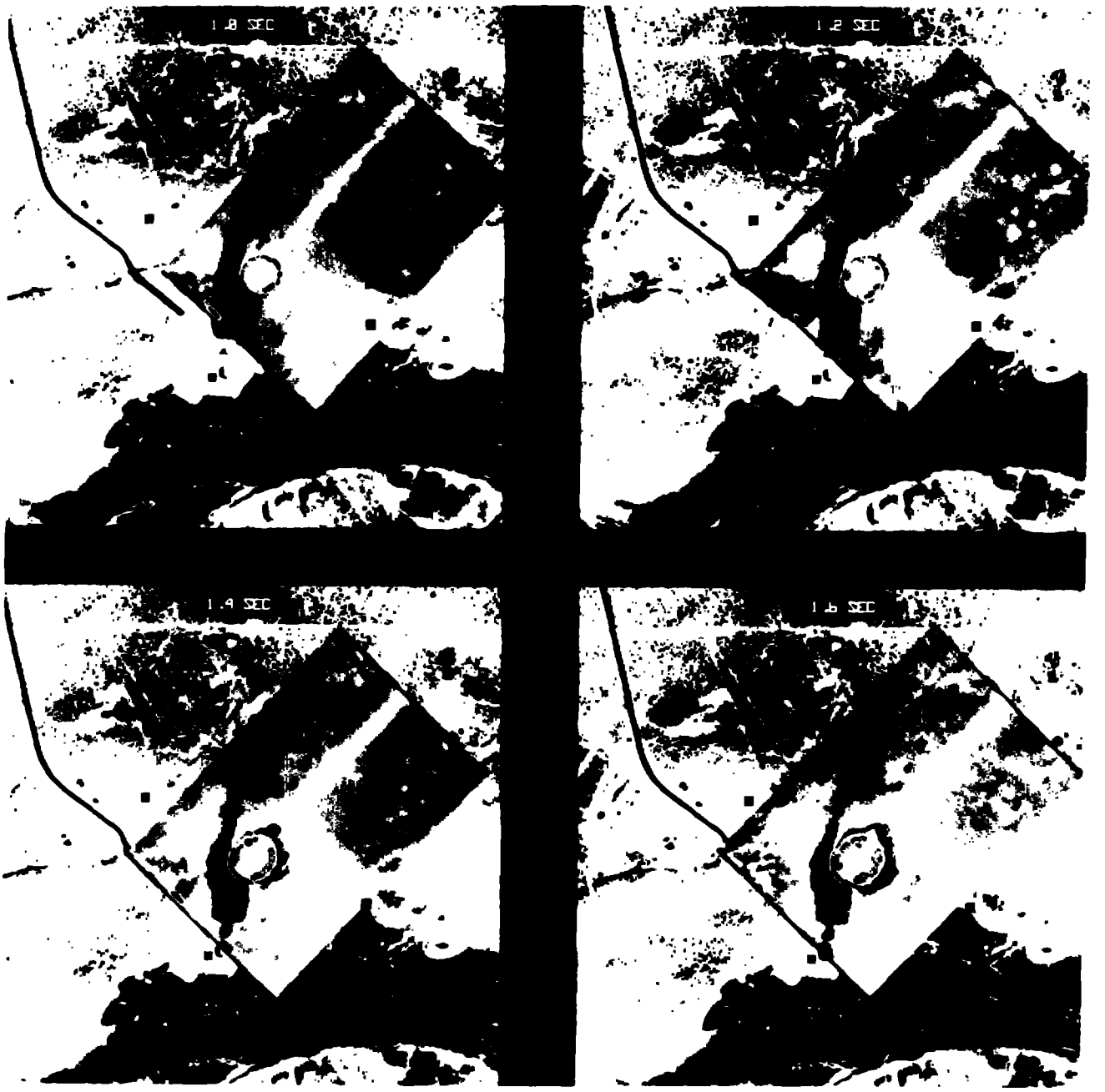
INFRAMETRICS THERMAL IMAGING SYSTEM
UNFILTERED CHANNEL 8.5 - 12.5 μM

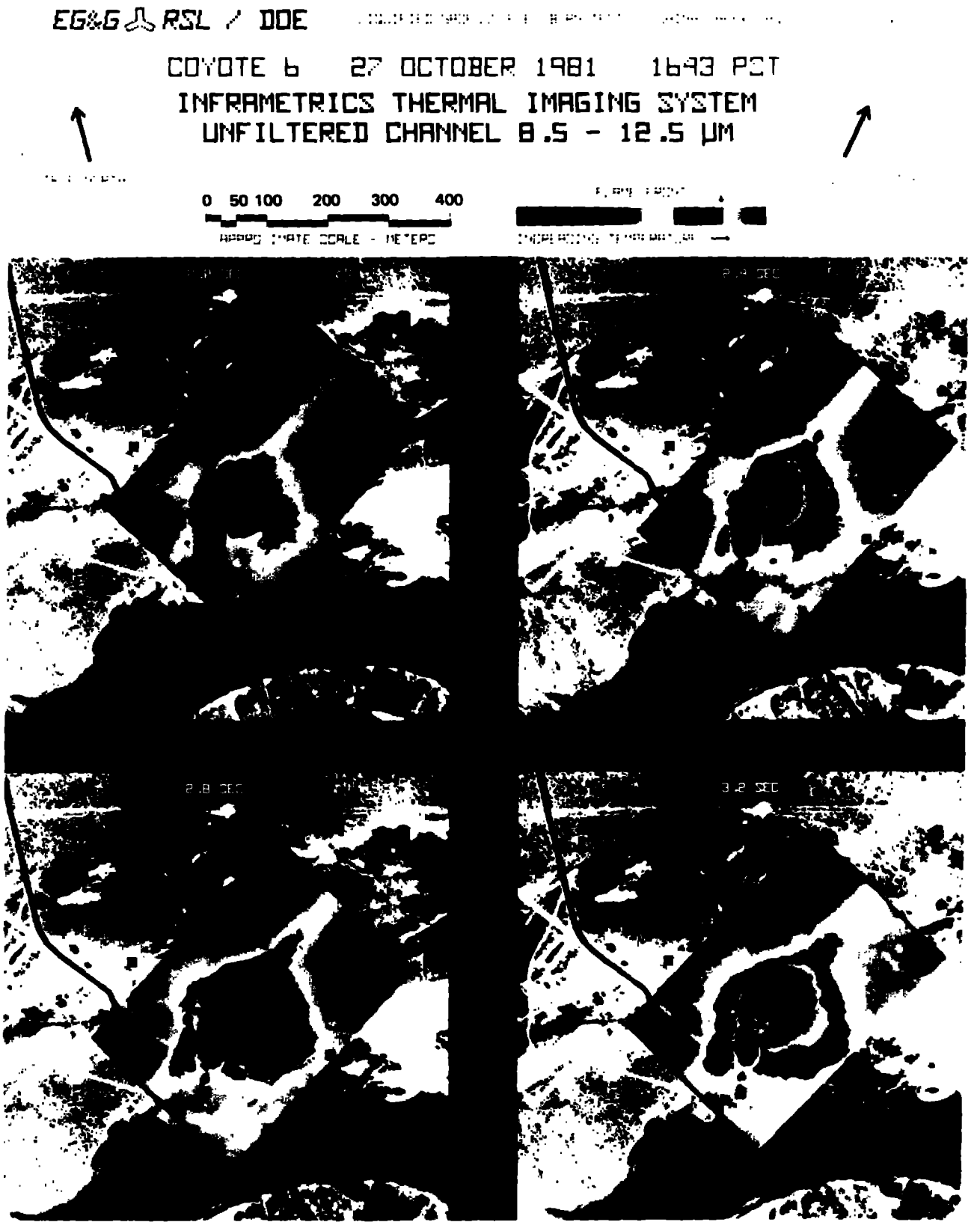


EG&G RSL / DOE

INFRAMETRICS THERMAL IMAGING SYSTEM
UNFILTERED CHANNEL 8.5 - 12.5 μM

0 50 100 200 300 400



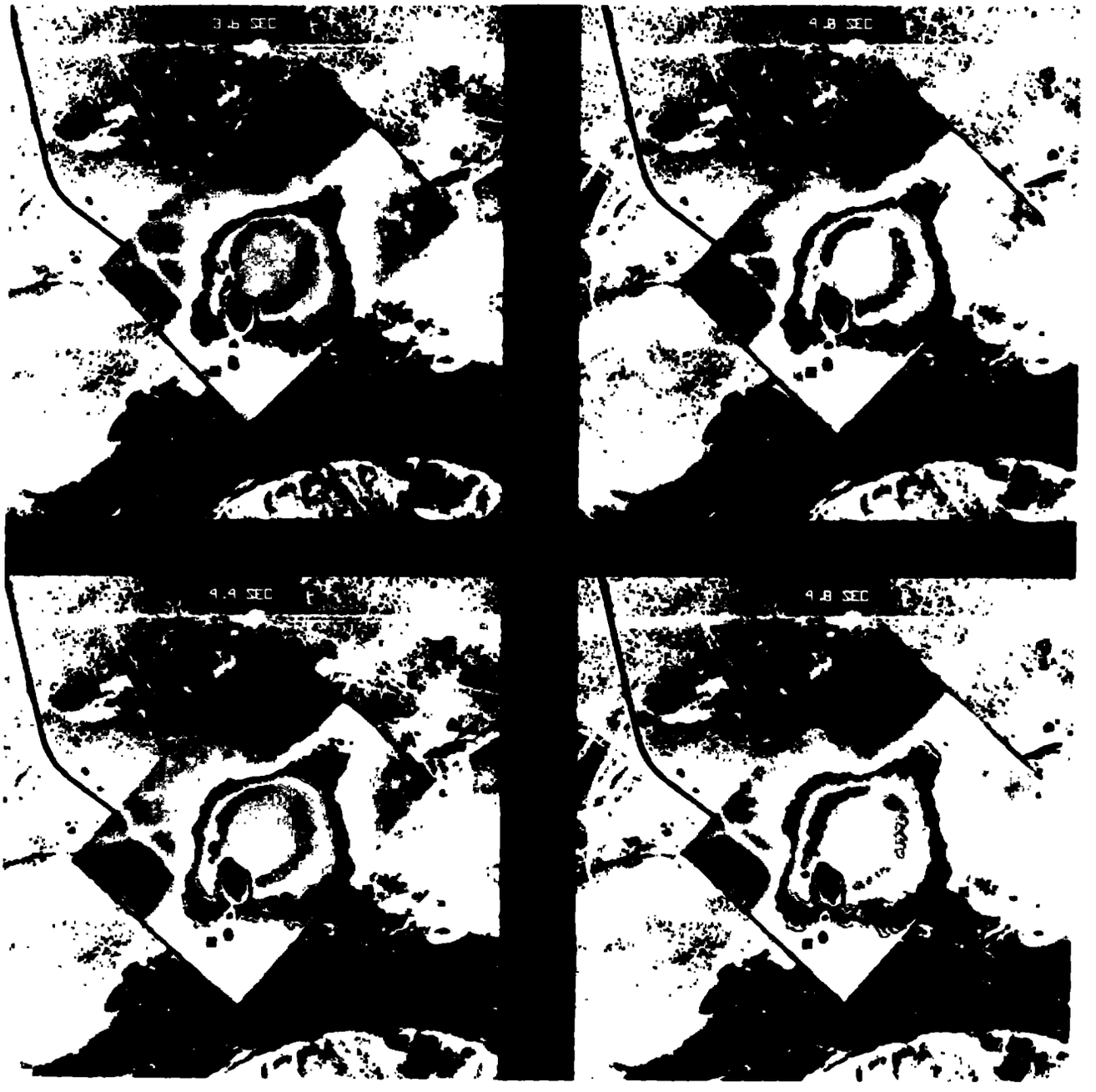

EG&G RSL / DOE
COYOTE 6 27 OCTOBER 1981 1693 PST
INFRAMETRICS THERMAL IMAGING SYSTEM
UNFILTERED CHANNEL 8.5 - 12.5 µM
0 50 100 200 300 400
2.8 SEC
3.2 SEC

EG&G RSL / DOE

[illegible] 2 OCTOBER 1981 [illegible]

INFRAMETRICS THERMAL IMAGING SYSTEM
UNFILTERED CHANNEL 8.5 - 12.5 μM

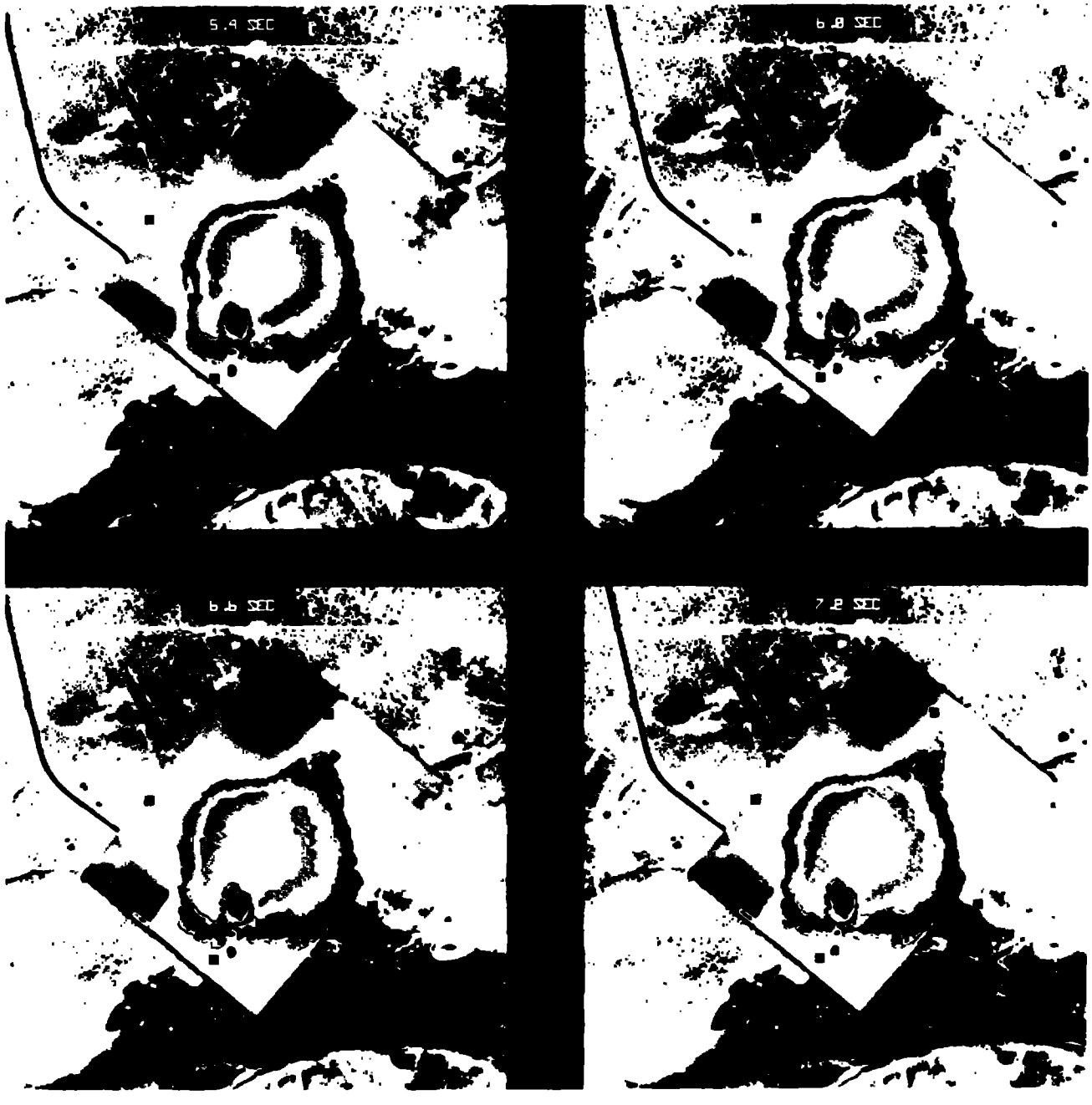
0 50 100 200 300 400



EG&G RSL / DOE

INFRAMETRICS THERMAL IMAGING SYSTEM
UNFILTERED CHANNEL 8.5 - 12.5 μM

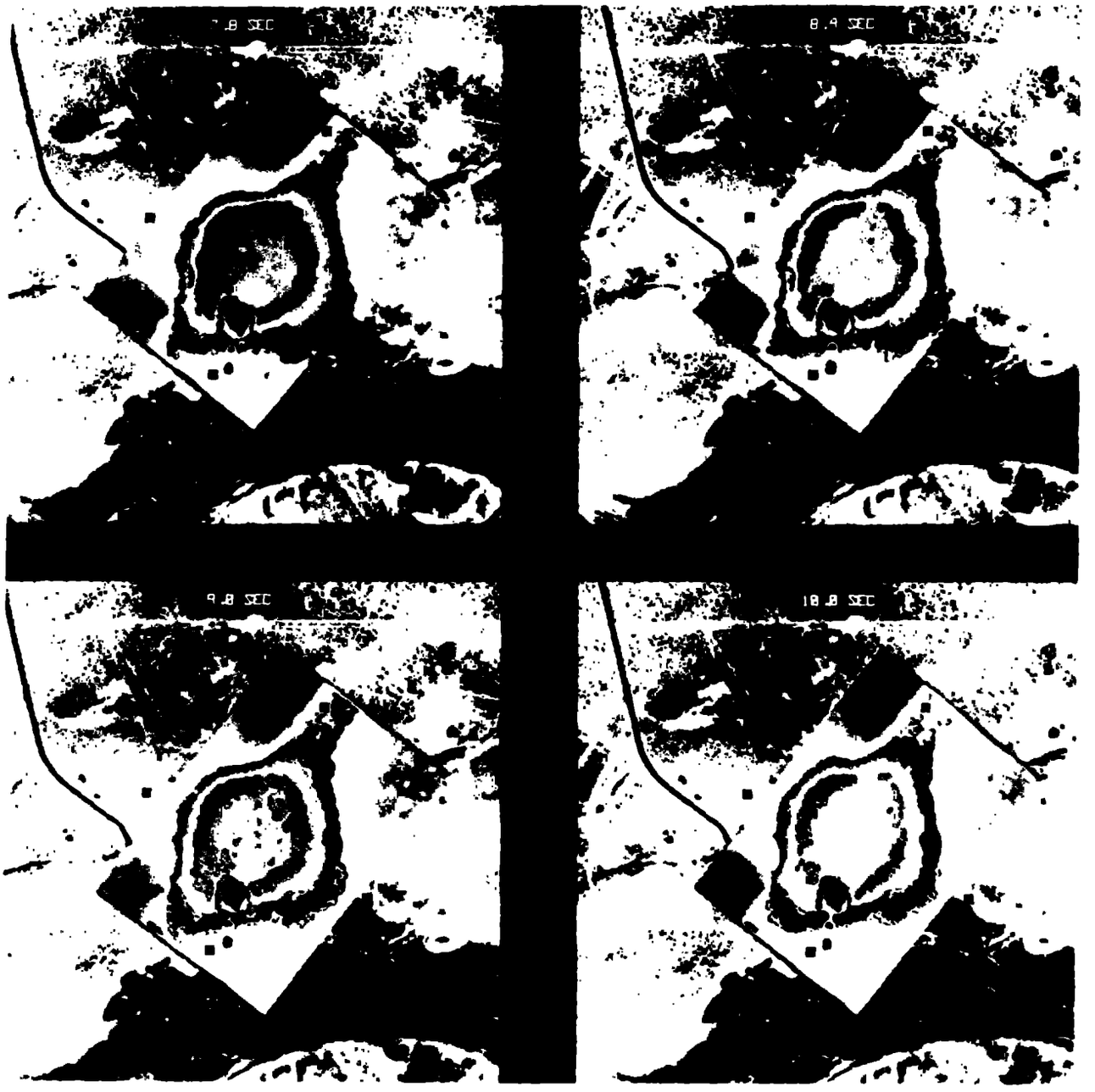
0 50 100 200 300 400



EG&G RSL / DOE

[illegible] OCTOBER 1981 [illegible]

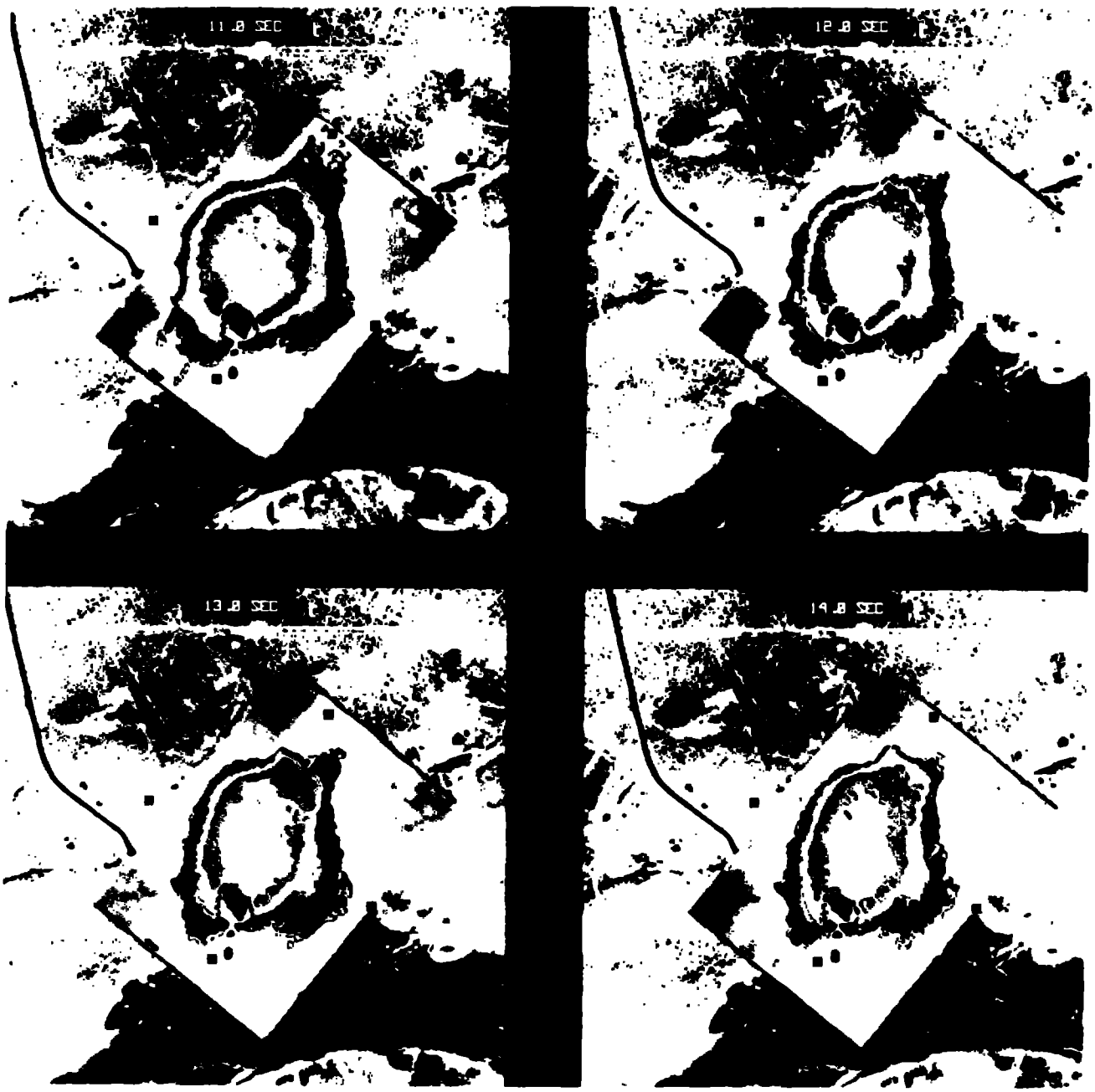
INFRAMETRICS THERMAL IMAGING SYSTEM
UNFILTERED CHANNEL 8.5 - 12.5 μM



EG&G RSL / DOE

INFRAMETRICS THERMAL IMAGING SYSTEM
UNFILTERED CHANNEL 8.5 - 12.5 μM

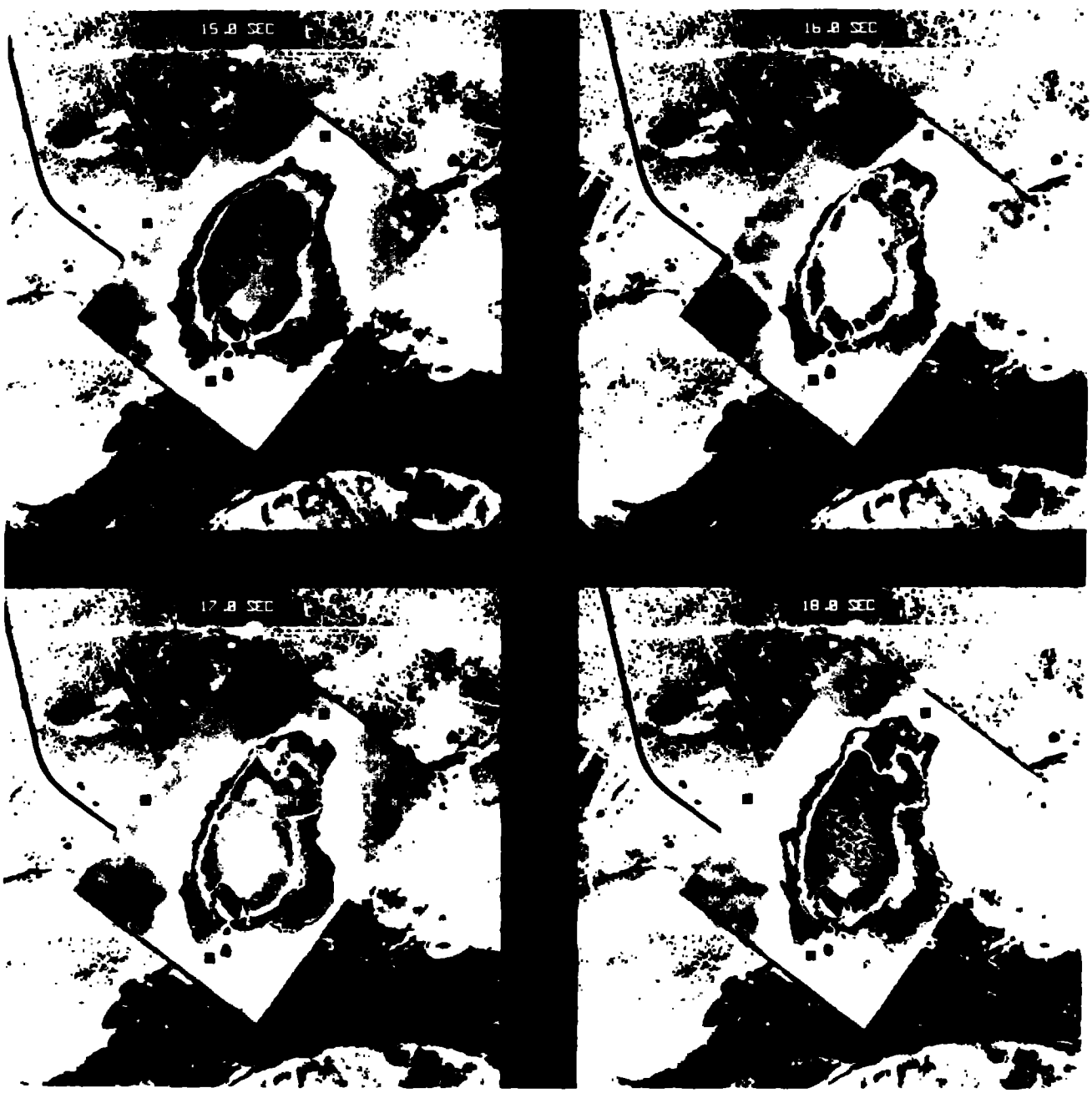
0 50 100 200 300 400

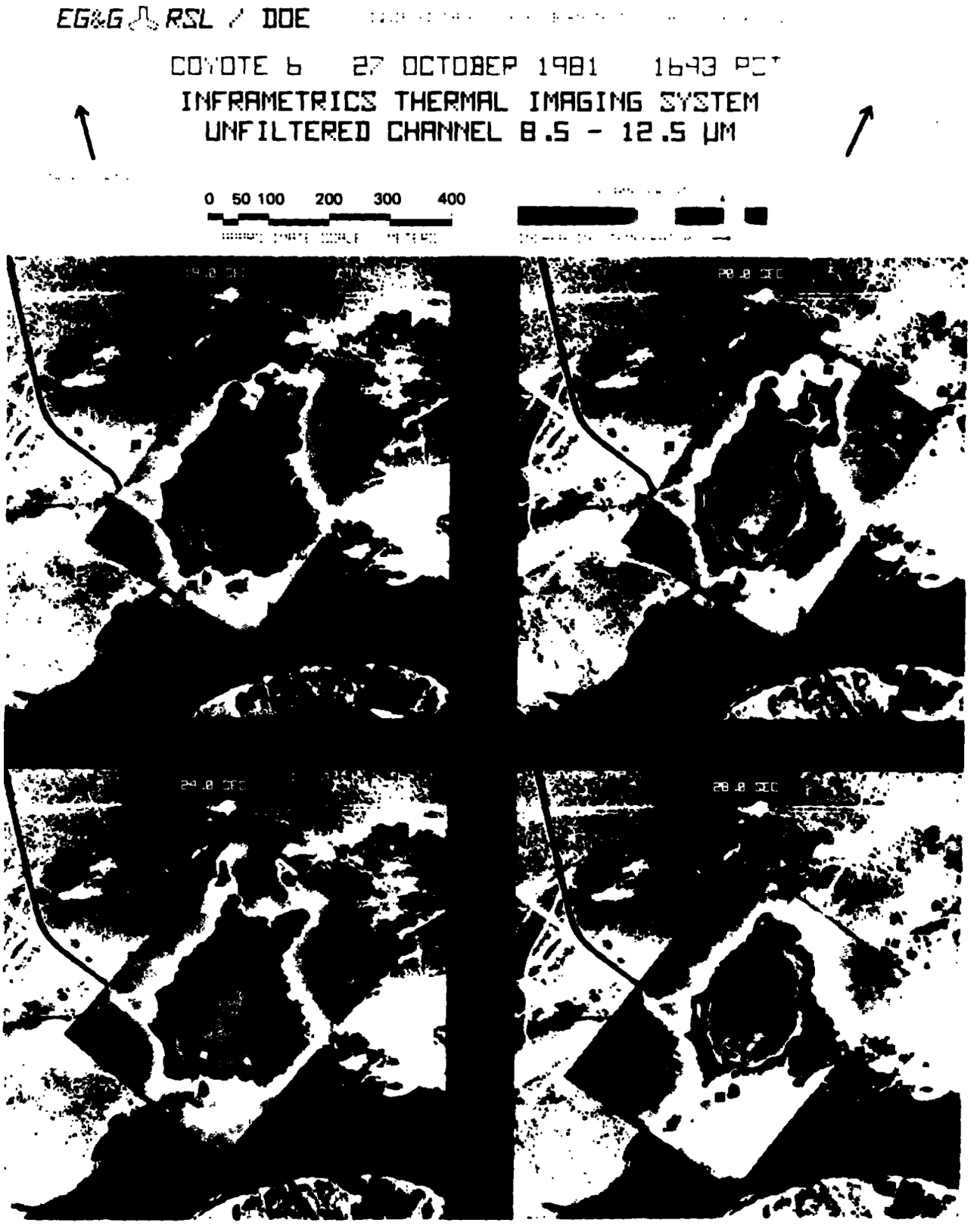


EG&G RSL / DOE

INFRAMETRICS THERMAL IMAGING SYSTEM
UNFILTERED CHANNEL 8.5 - 12.5 μM

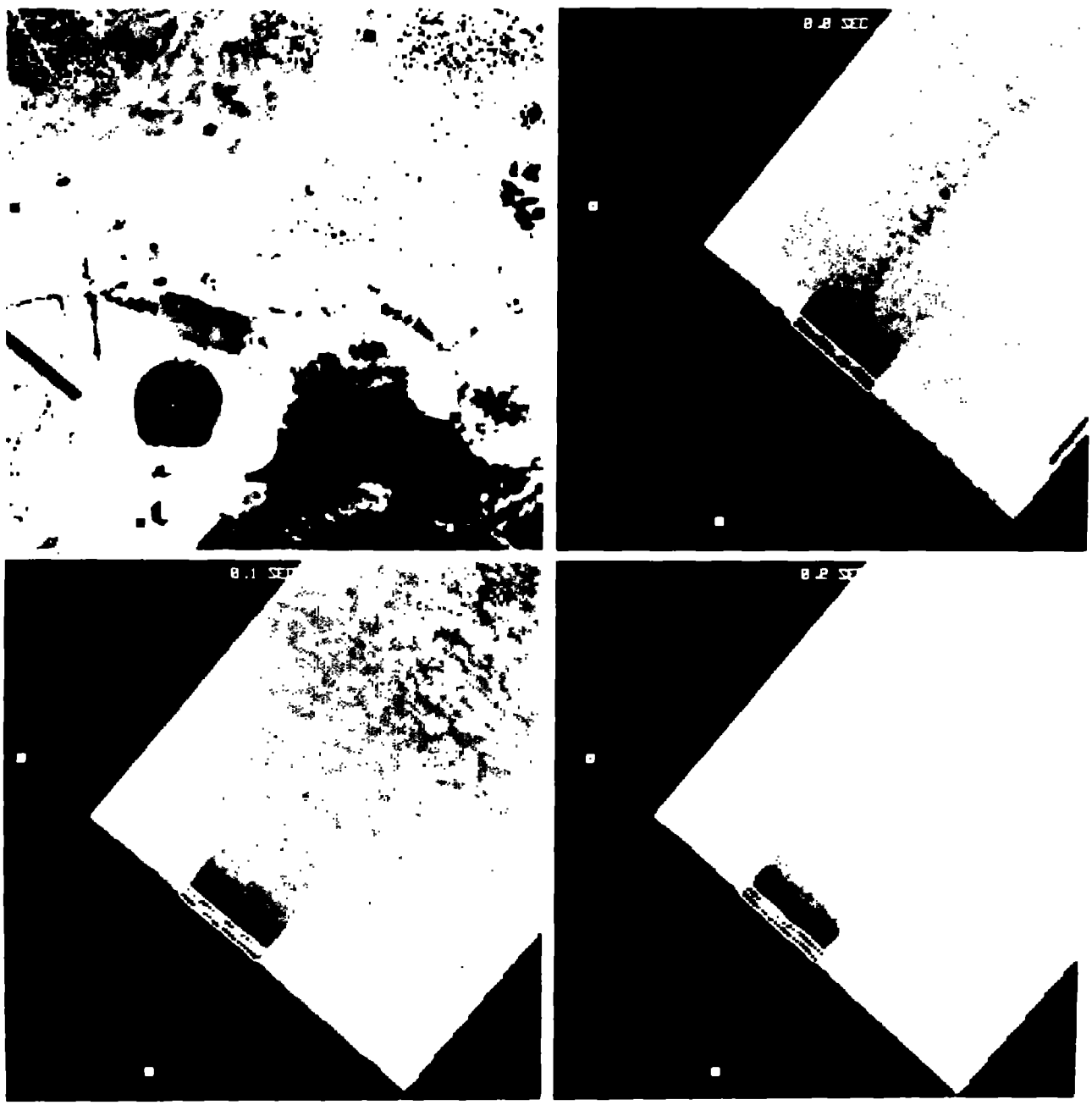
0 50 100 200 300 400




EG&G RSL / DOE
COYOTE 6 27 OCTOBER 1981 1643 PST
INFRAMETRICS THERMAL IMAGING SYSTEM
UNFILTERED CHANNEL 8.5 - 12.5 μM
0 50 100 200 300 400

EG&G PSL . DOE

INFRAMETRICS THERMAL IMAGING SYSTEM
FILTERED CHANNEL 3.3 - 3.5 μM



EG&G PCL / DOE

INFRAMETRICS THERMAL IMAGING SYSTEM
FILTERED CHANNEL 3.3 - 3.5 μM

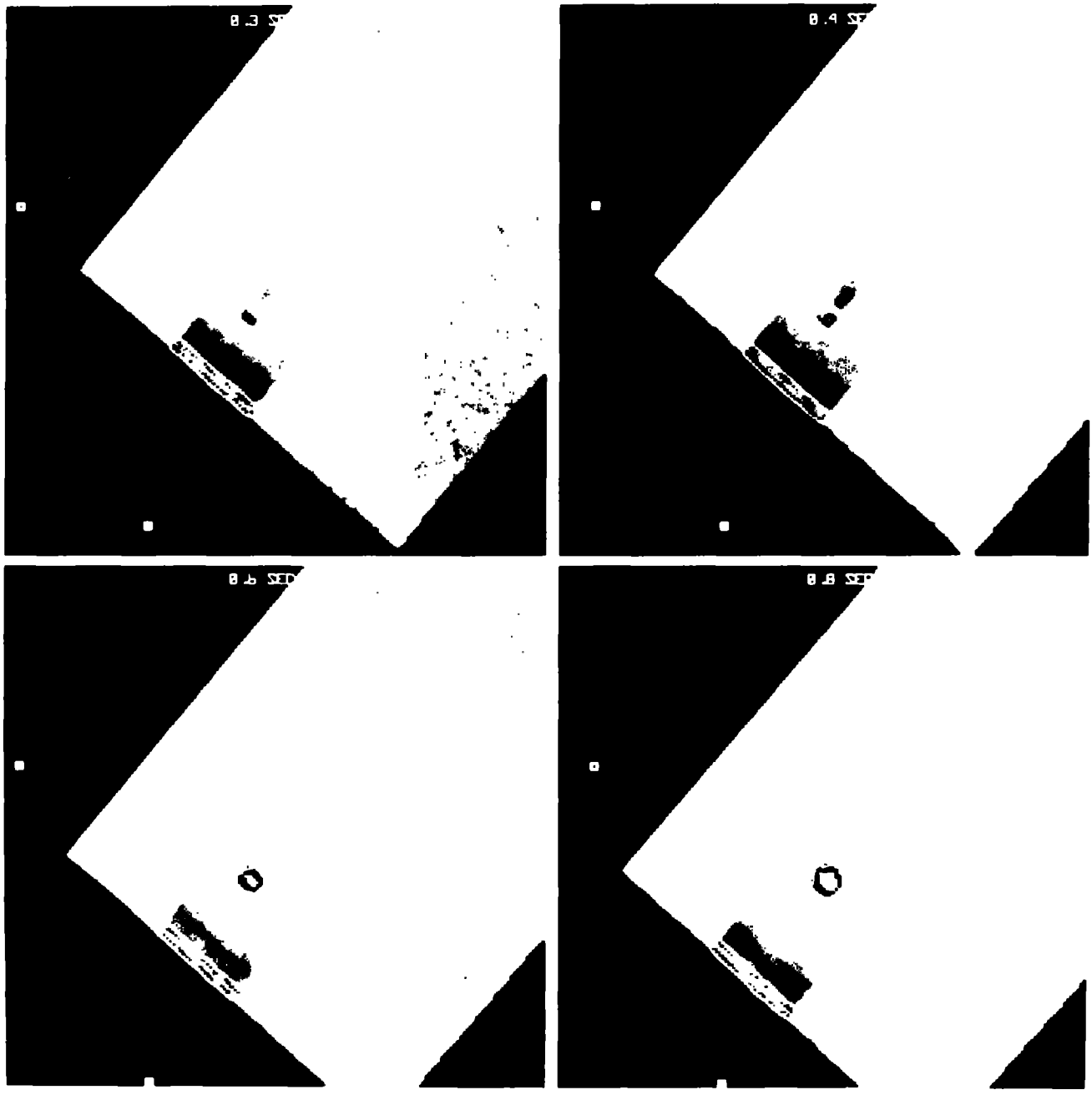
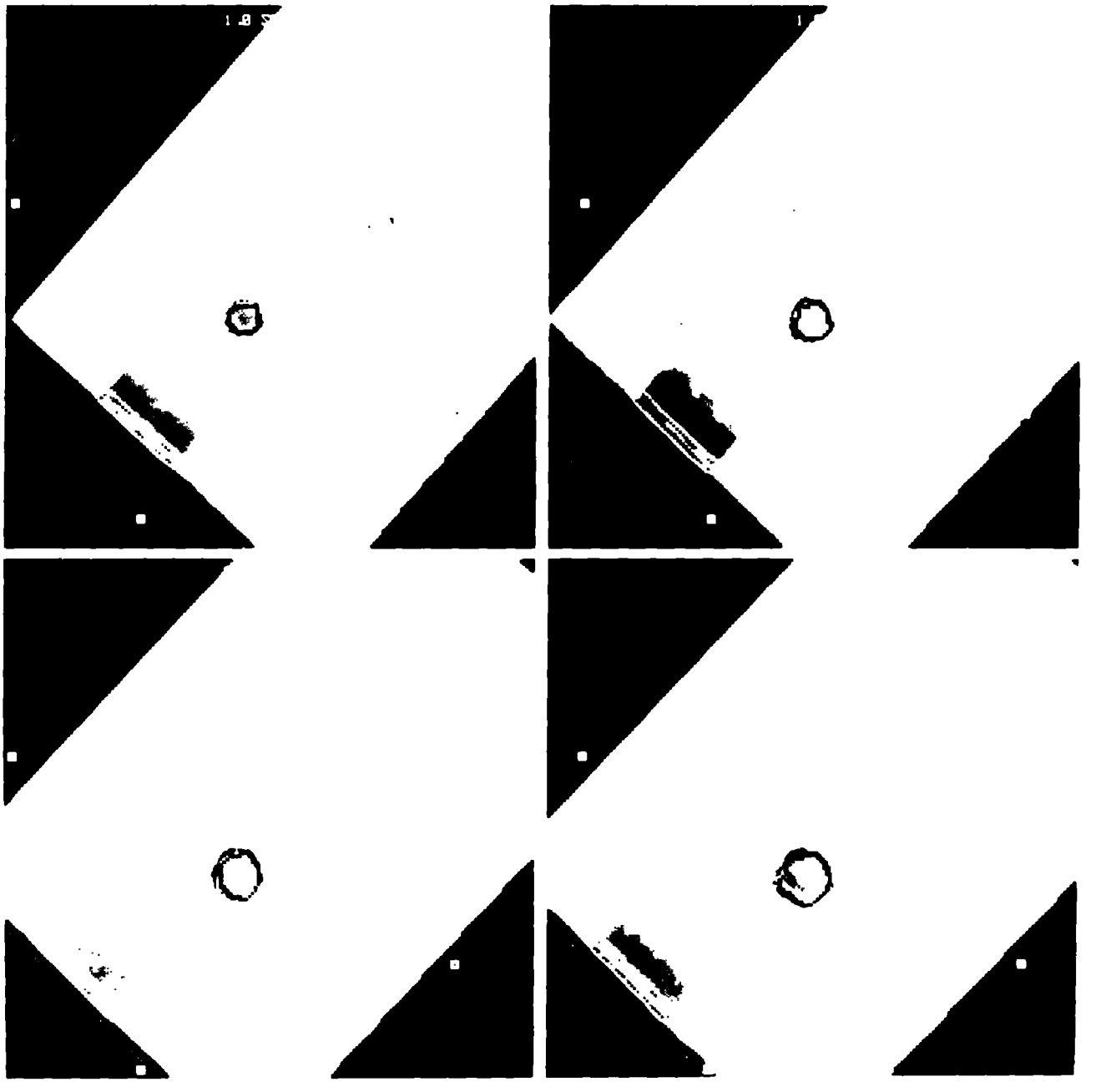


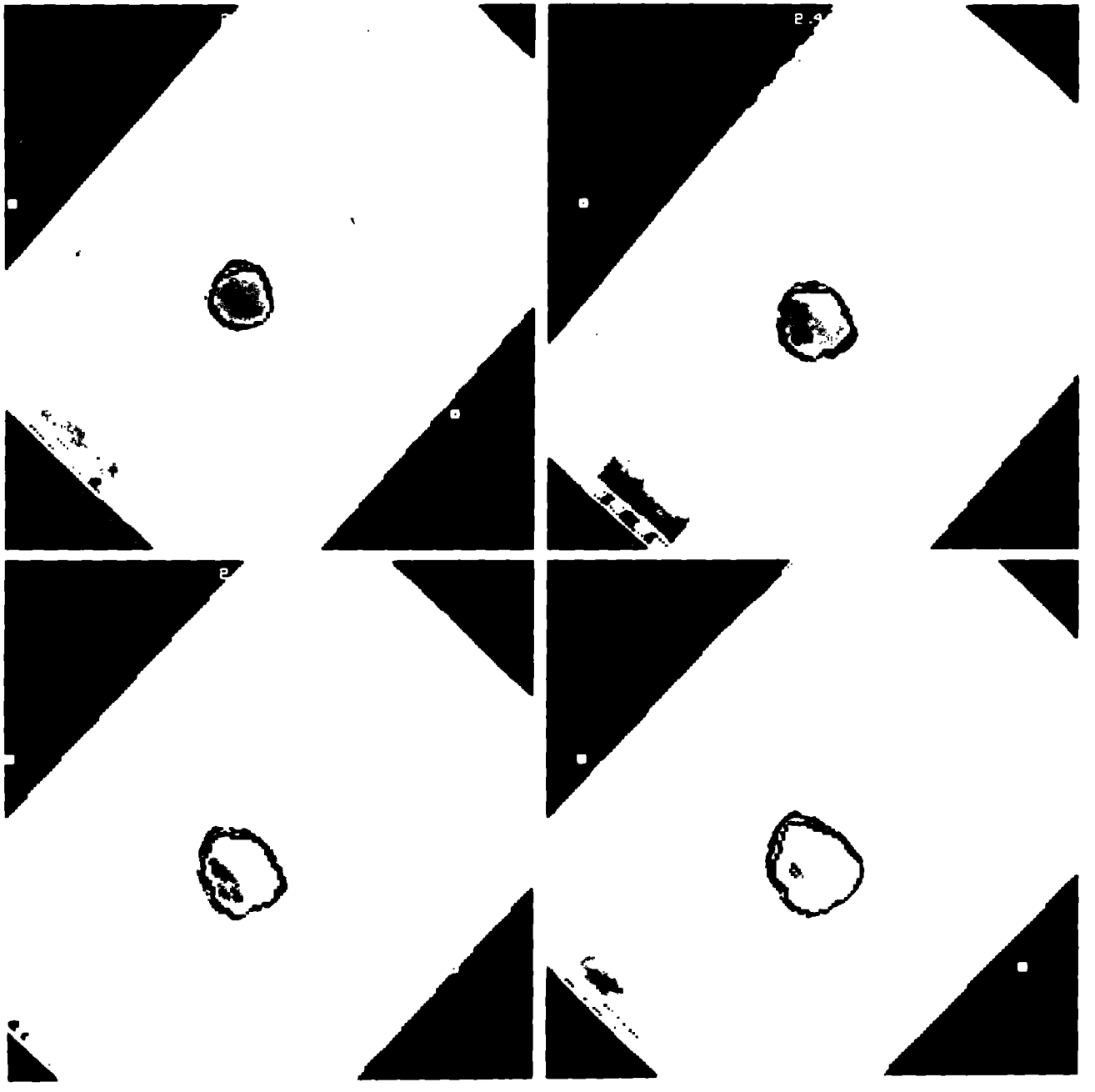
FIG 3 RCL DOE

INFRAMETRICS THERMAL IMAGING SYSTEM
FILTERED CHANNEL 3.3 - 3.5 μM



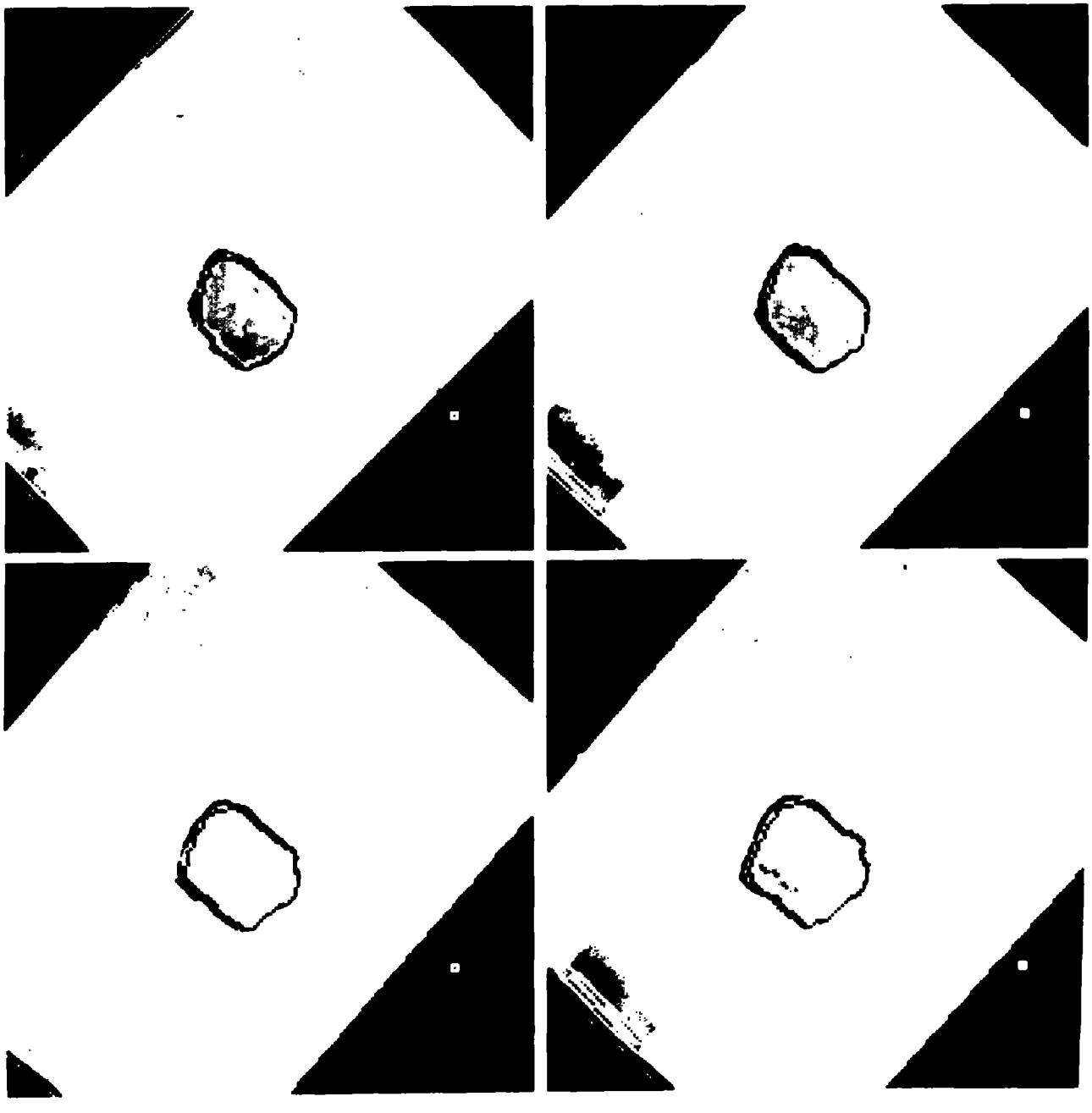
EG&G RSL / DOE

INFRAMETRICS THERMAL IMAGING SYSTEM
FILTERED CHANNEL 3.3 - 3.5 μM



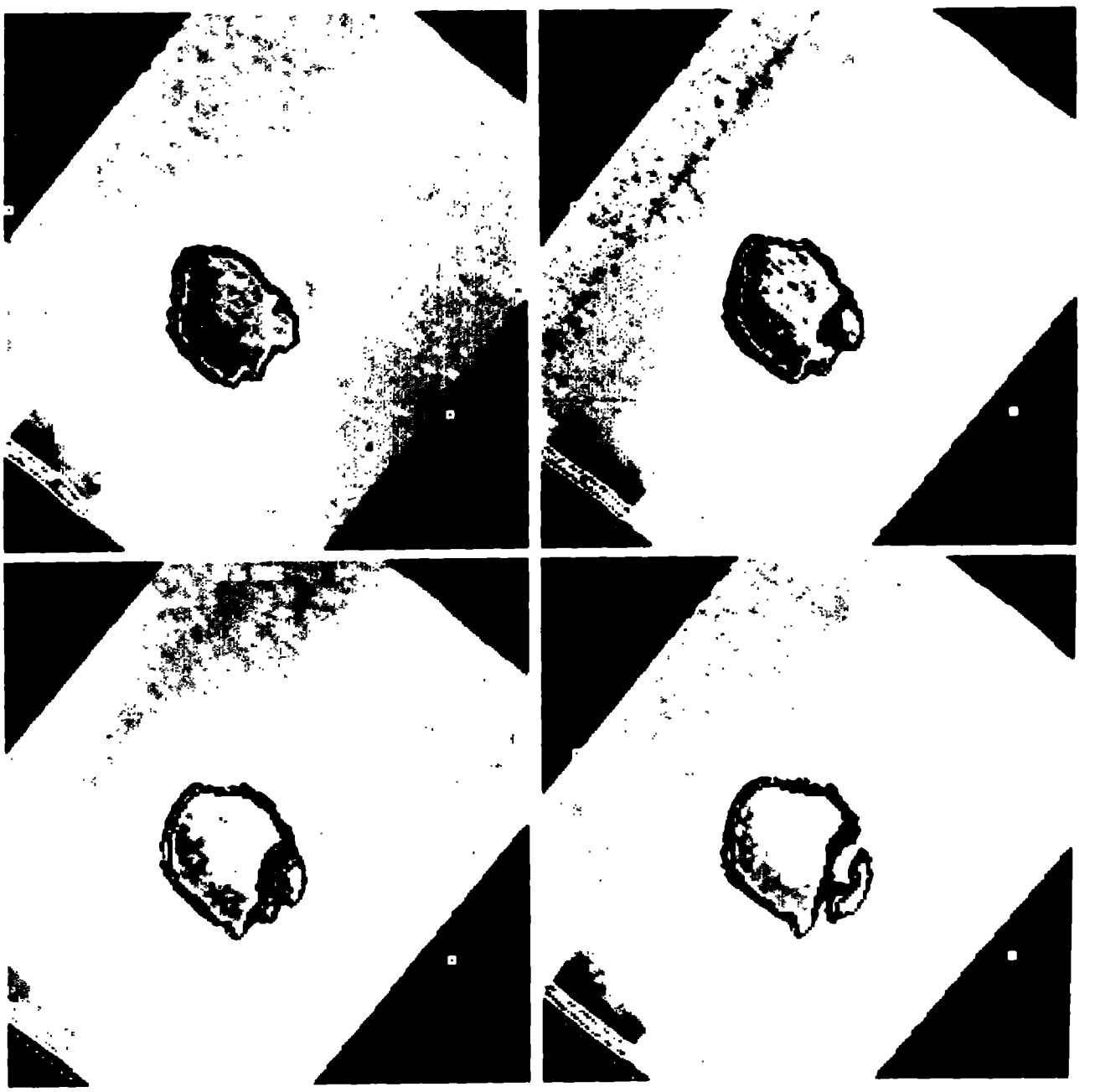
EG.G PCL DOE

INFRAMETRICS THERMAL IMAGING SYSTEM
FILTERED CHANNEL 3.3 - 3.5 μM



EG&G / RSL / DOE

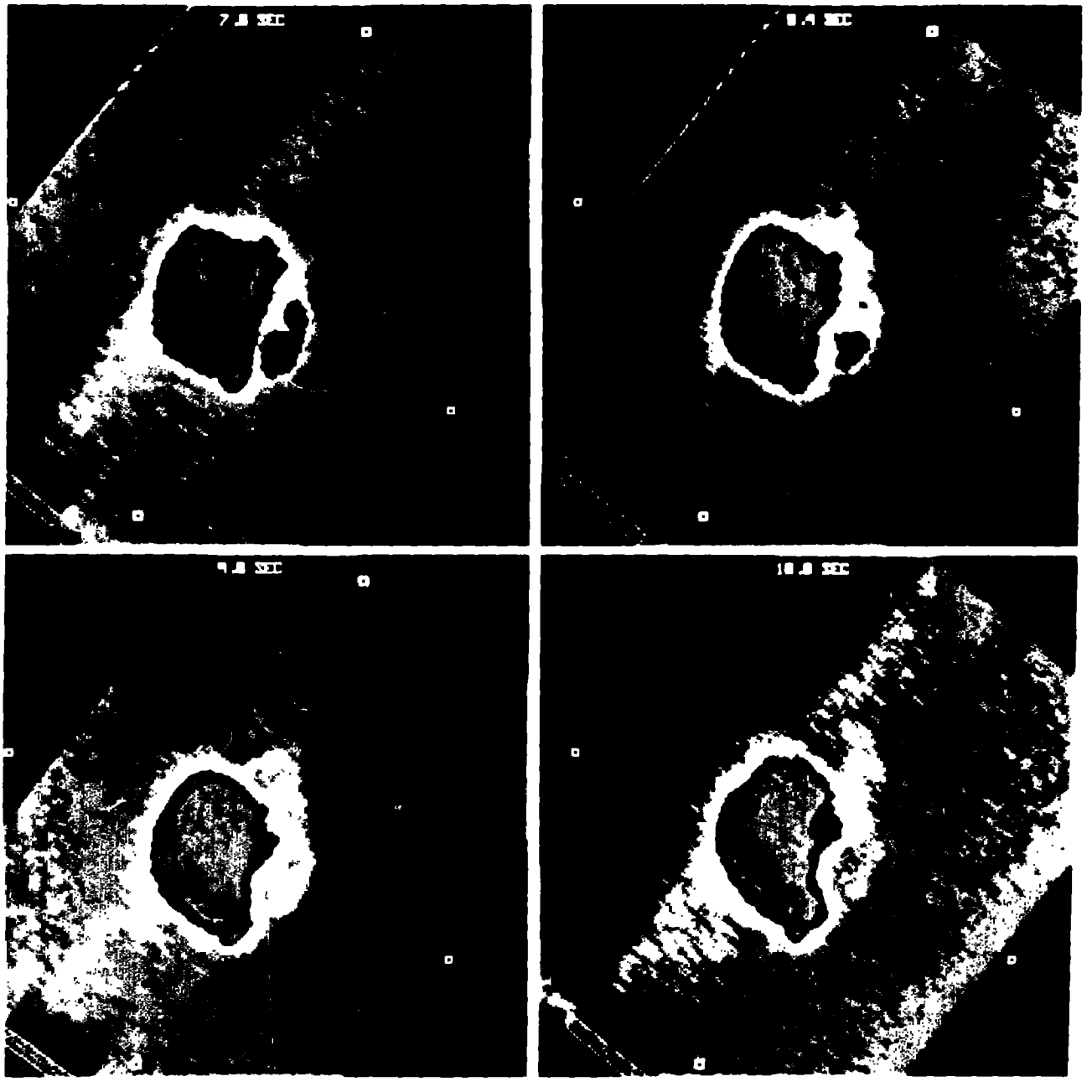
INFRAMETRICS THERMAL IMAGING SYSTEM
FILTERED CHANNEL 3.3 - 3.5 μM



EG&G, RSL / DOE

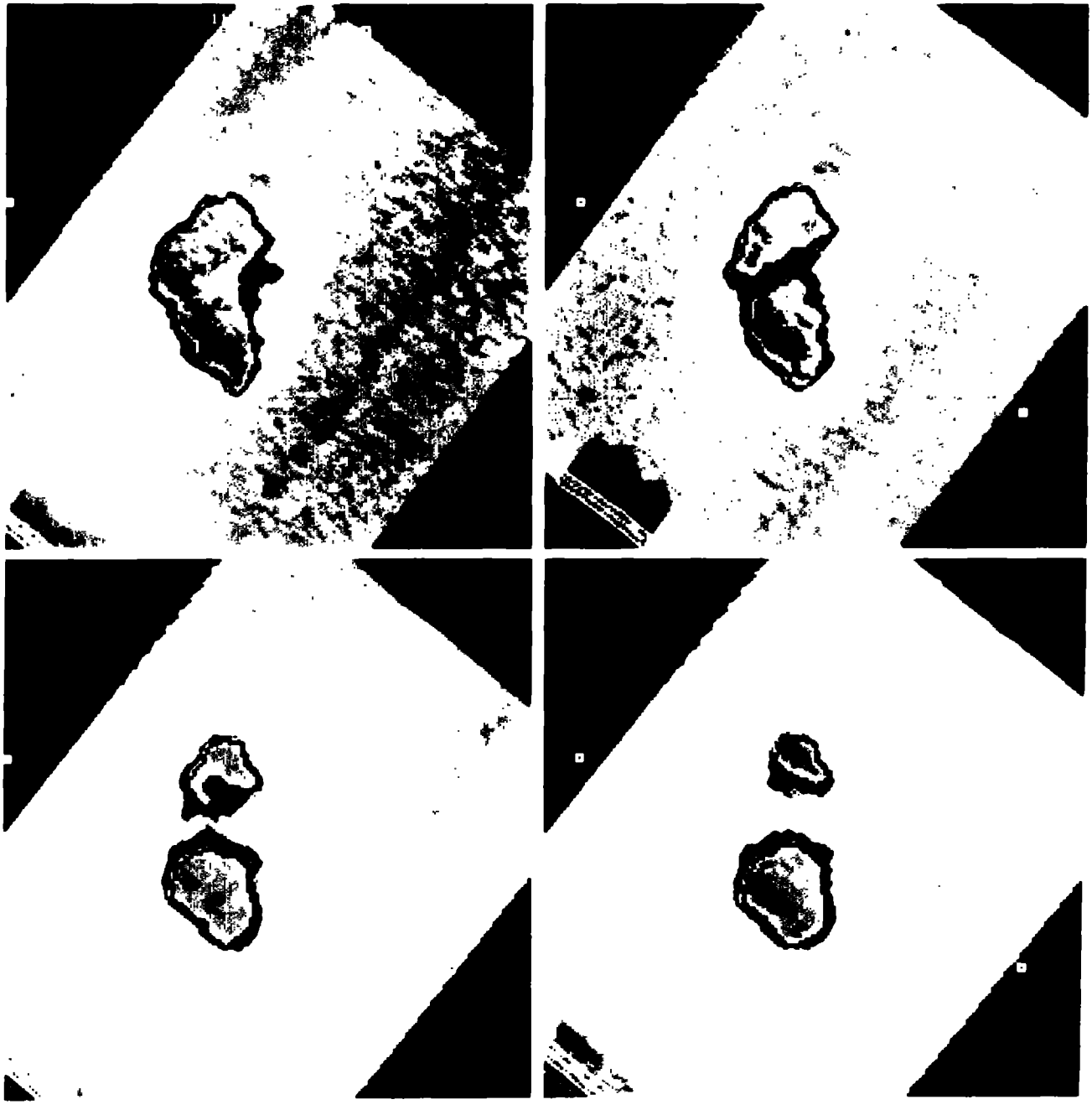
COYOTE 6 27 OCTOBER 1981 1693 PST

INFRAMETRICS THERMAL IMAGING SYSTEM
FILTERED CHANNEL 3.3 - 3.5 μM



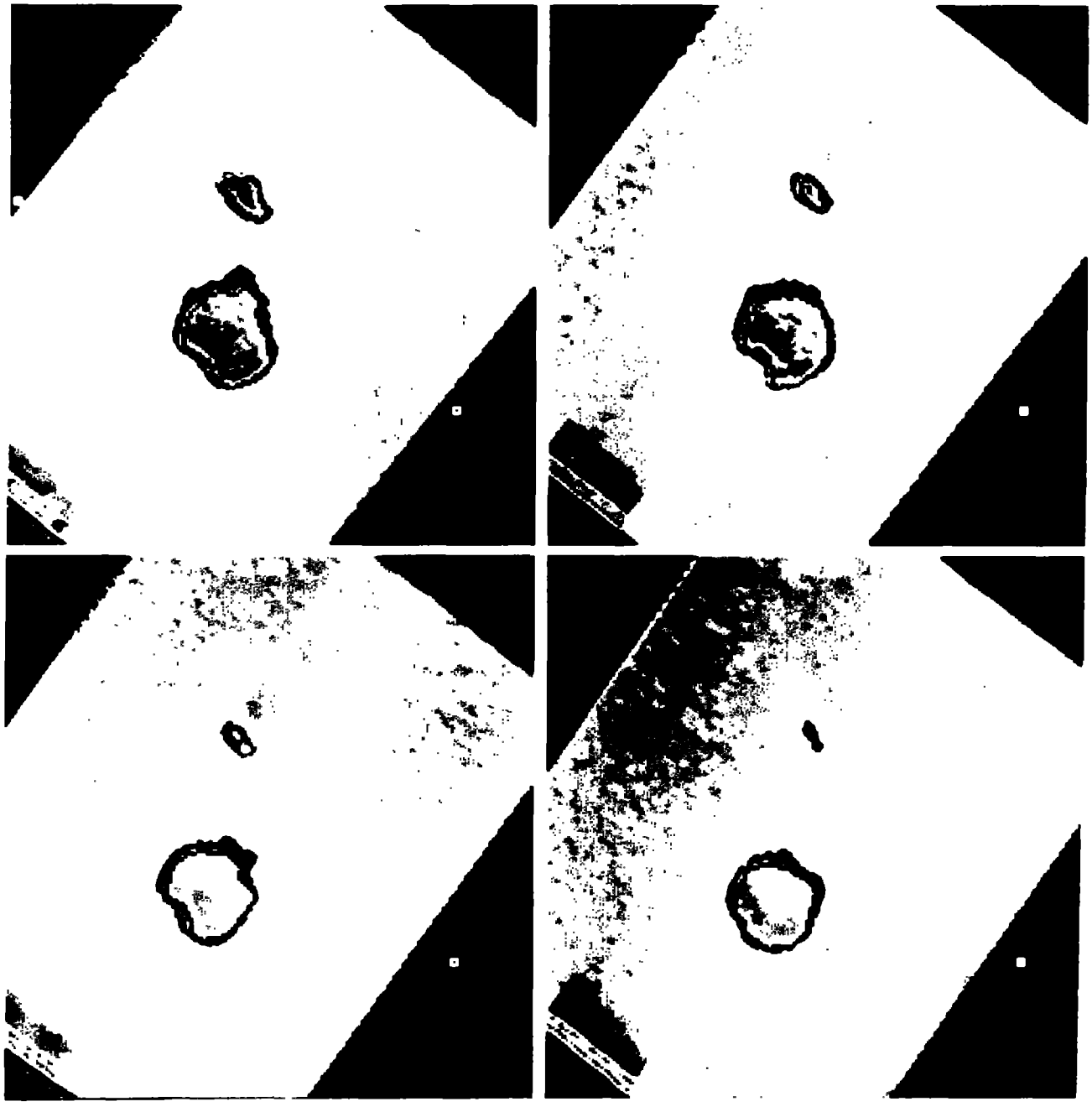
EG&G RSL / DOE

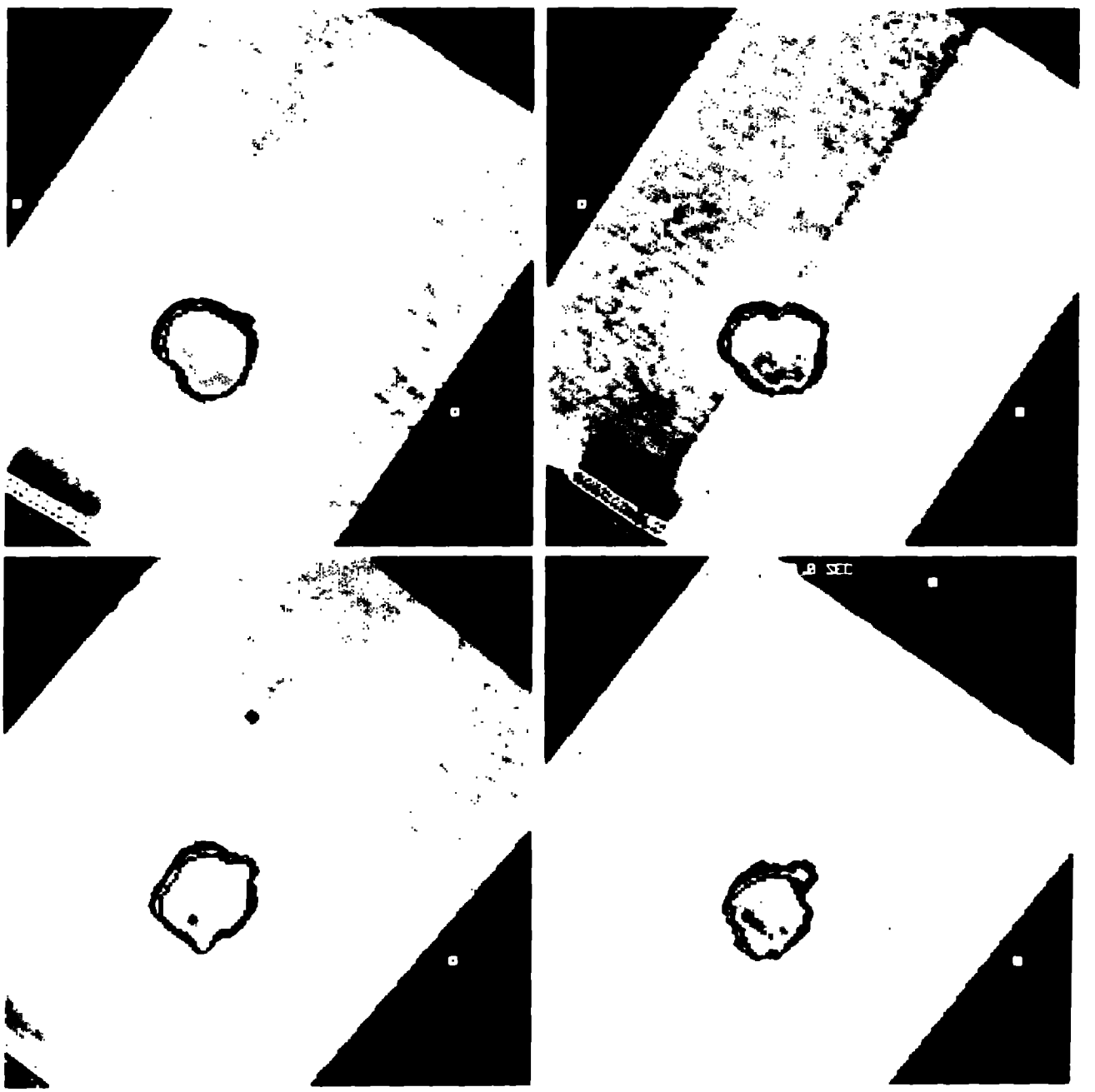
INFRAMETRICS THERMAL IMAGING SYSTEM
FILTERED CHANNEL 3.3 - 3.5 μM



EG.G PCL / DOE

INFRAMETRICS THERMAL IMAGING SYSTEM
FILTERED CHANNEL 3.3 - 3.5 μM



EG&G PSL , DOE

INFRAMETRICS THERMAL IMAGING SYSTEM
FILTERED CHANNEL 3.3 - 3.5 μM