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E-20 Catcher Position and Skew Studies

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AGS Studies Report

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Subject(s) E-20 Catcher Position and Skew Studies

Observations and Conclusions

Abstract

The losses around the catcher at L-12 and the total ring sum losses were studied in the time interval between 200 and 250 ms. The most significant observations were the decreasing of the losses in L-12 and the decrease in the total ring losses by positioning and skewing the device. All the data was collected via IAGP.

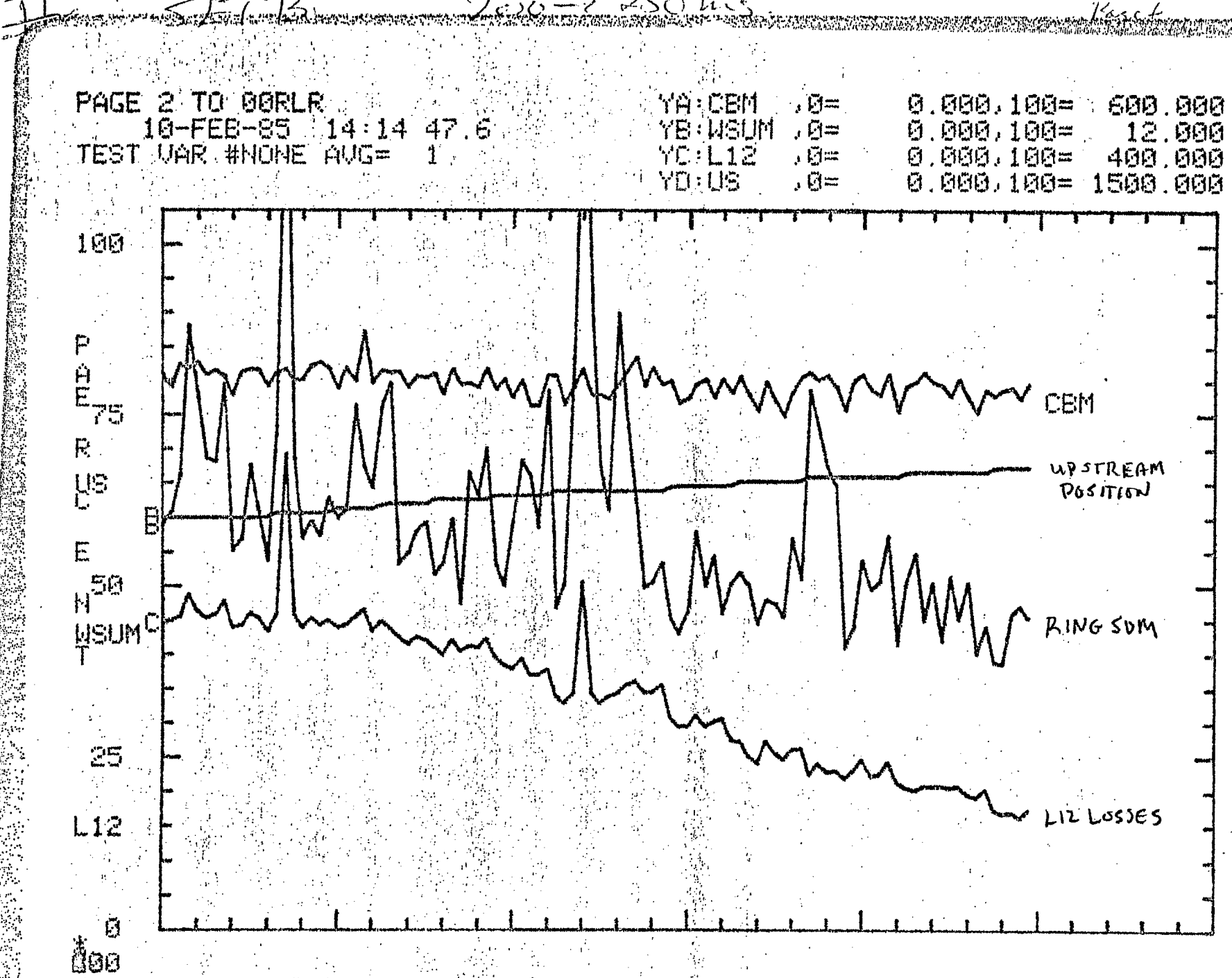
Observations

There were two basic, initial goals in this study. The first was to determine the optimal position of the device, moving the upstream and downstream drives by the same amount. The second was to study the effect of skewing it around this optimal position. It was found that this position lies around positioning the up and downstream drives at 900 to 1000 (900 to 1000 mils). In this position, the losses in L-12 were decreased with a smaller increase in E-20 and F-02. A slight decrease was observed in the total ring losses.

The catcher was then skewed around the positions 1100, 1000, and 950. The first two positions showed no real dramatic results. At around 950 some significant results were observed. First of all, the CBM remained constant for the total skew. The F-02 and E-20 were seen to increase with increasing skew, the L-12 losses decreased while the losses in E-20 went up slightly, and a drop was seen in the ring sum losses.

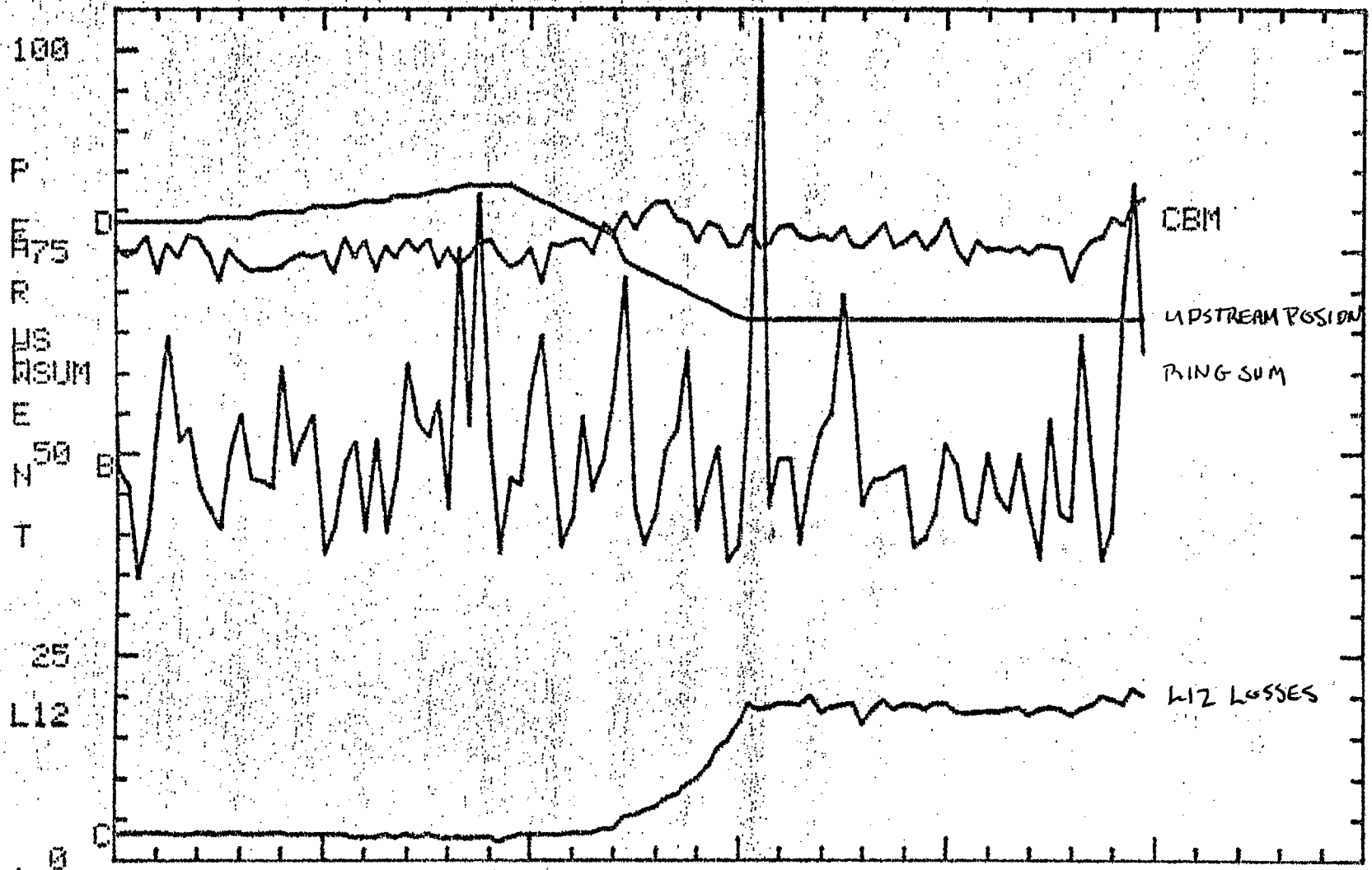
Method of Skewing

The catcher was skewed such that the upstream inner edge remained fixed (i.e., it was rotated about the upstream inner edge).


PAGE 2 TO 00RLR
10-FEB-85 14:14 47.6
TEST VAR #NONE AVG= 1
YA:CBM ,0= 0.000,100= 600.000
YB:WSUM ,0= 0.000,100= 12.000
YC:L12 ,0= 0.000,100= 400.000
YD:US ,0= 0.000,100= 1500.000
100
75
50
25
0
PERCENT
L12
WSUM
CBM
UPSTREAM POSITION
RING SUM
L12 LOSSES
*00
NUMBER OF PULSES

PAGE 2 TO 00RLR
10-FEB-85 14:23 44.8
TEST VAR #NONE AVG= 1

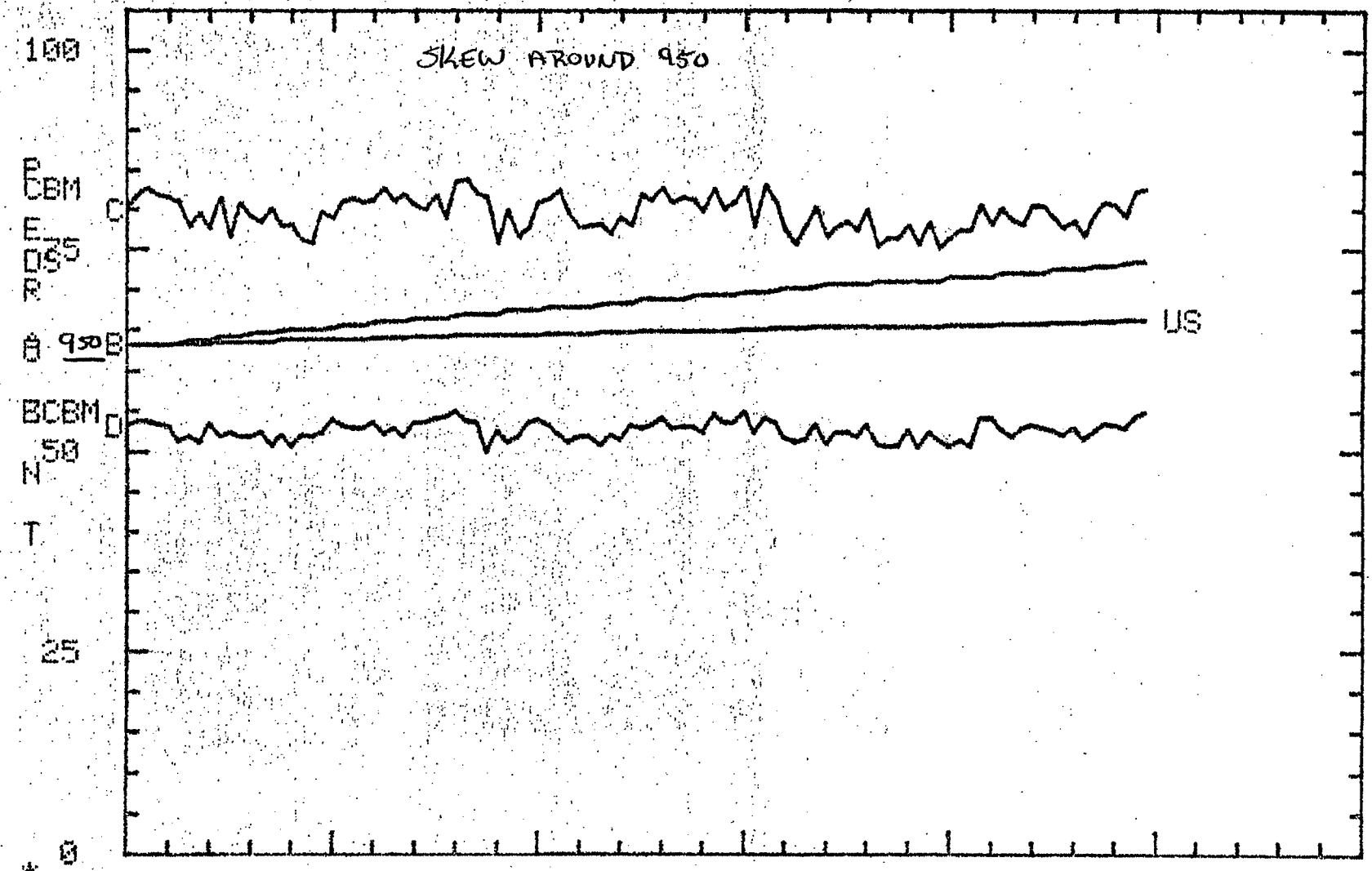
YA:CBM ,0= 0.000,100= 600.000
YB:WSUM ,0= 0.000,100= 12.000
YC:L12 ,0= 0.000,100= 400.000
YD:US ,0= 0.000,100= 1500.000



SKEW

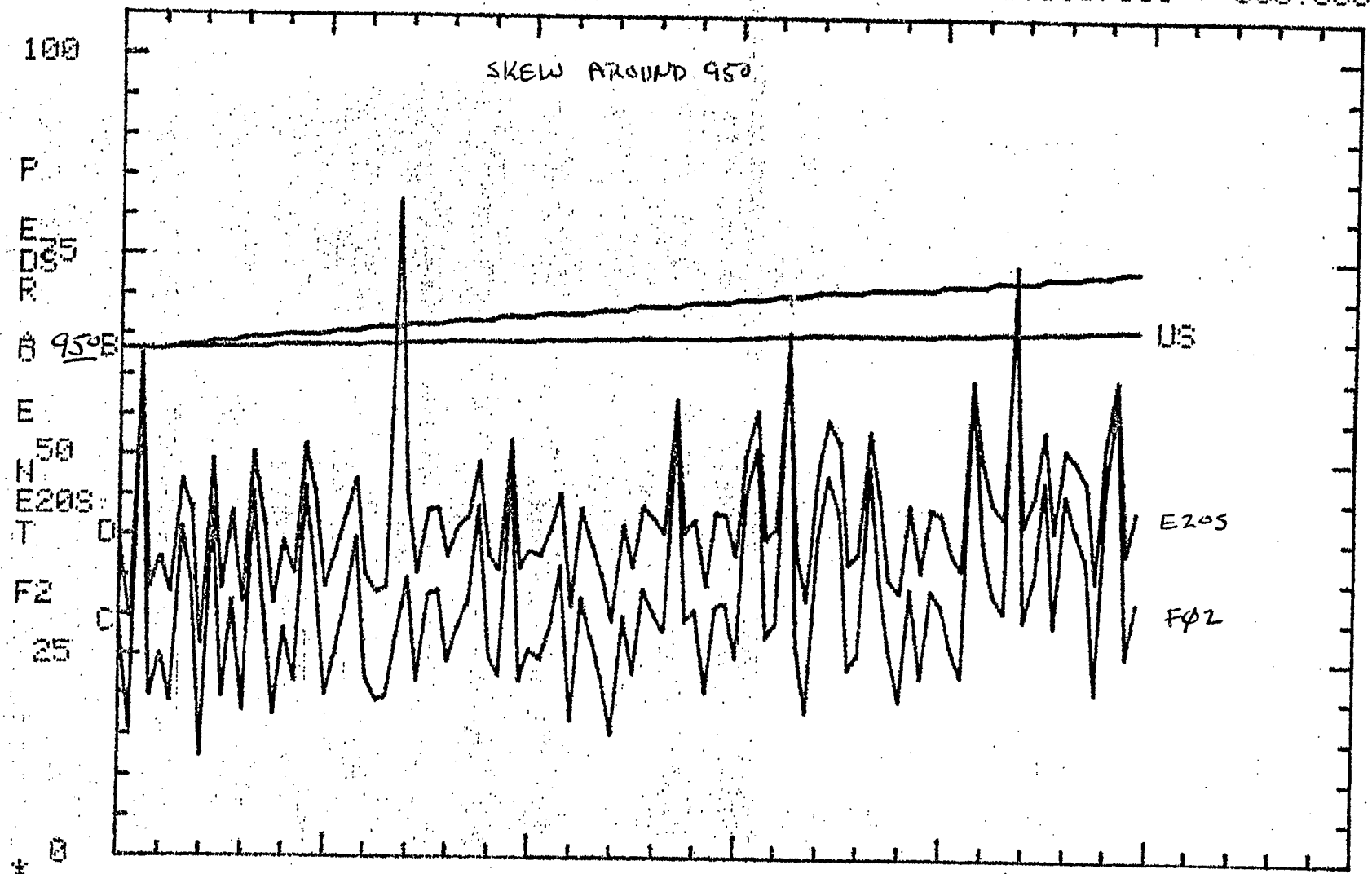
PAGE 2 TO 00RLR
10-FEB-85 15:27 35.7
TEST VAR #NONE AVG= 1

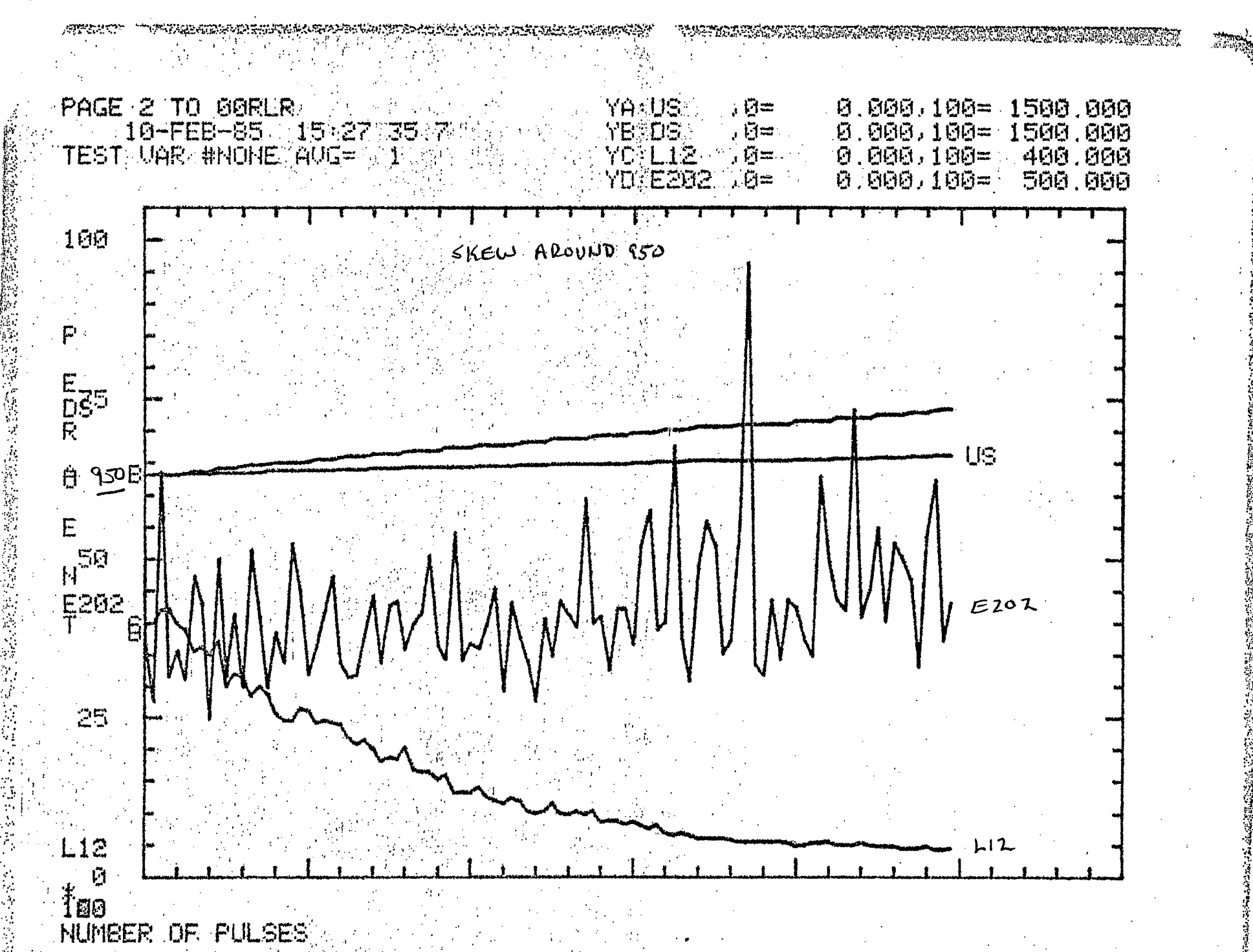
YA:US ,0= 0.000,100= 1500.000
YB:DS ,0= 0.000,100= 1500.000
YC:CBM ,0= 0.000,100= 600.000
YD:3CBM ,0= 0.000,100= 1000.000



PAGE 2 TO 00RLR
10-FEB-85 15:27 35.7
TEST VAR #NONE AVG= 1

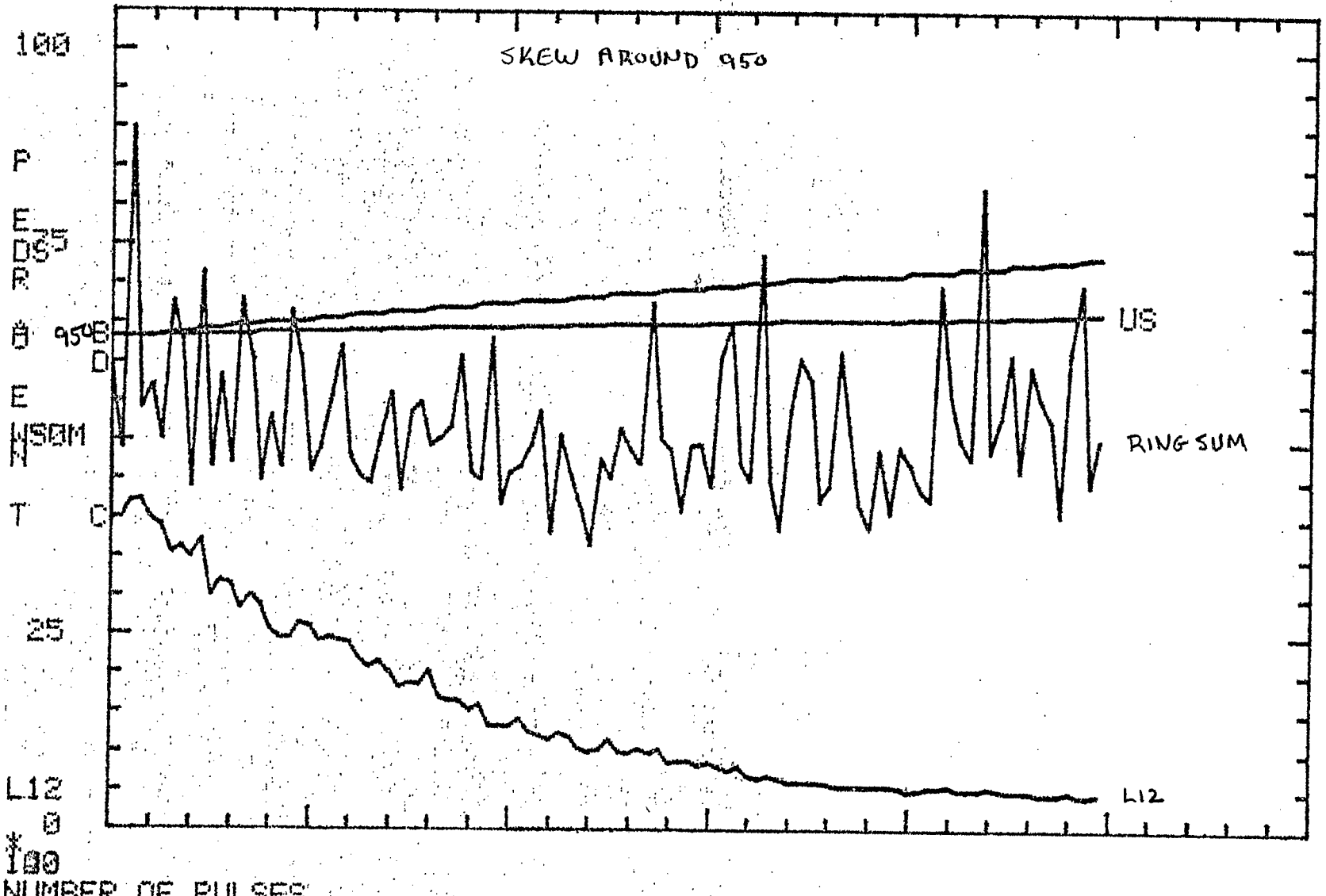
YA:US ,0= 0.000,100= 1500.000
YB:DS ,0= 0.000,100= 1500.000
YC:F2 ,0= 0.000,100= 600.000
YD:E20S ,0= 0.000,100= 600.000




PAGE 2 TO 00RLR
10-FEB-85 15:27 35.7
TEST VAR #NONE AVG= 1
YA:US ,0= 0.000,100= 1500.000
YB:DS ,0= 0.000,100= 1500.000
YC:L12 ,0= 0.000,100= 400.000
YD:E202 ,0= 0.000,100= 500.000
SKEW AROUND 950
100
P
E
R
C
E
N
T
75
50
25
0
950
US
E202
L12
100
NUMBER OF PULSES

PAGE 2 TO 00RLR
10-FEB-85 15:27:35.7
TEST VAR #NONE AVG= 1

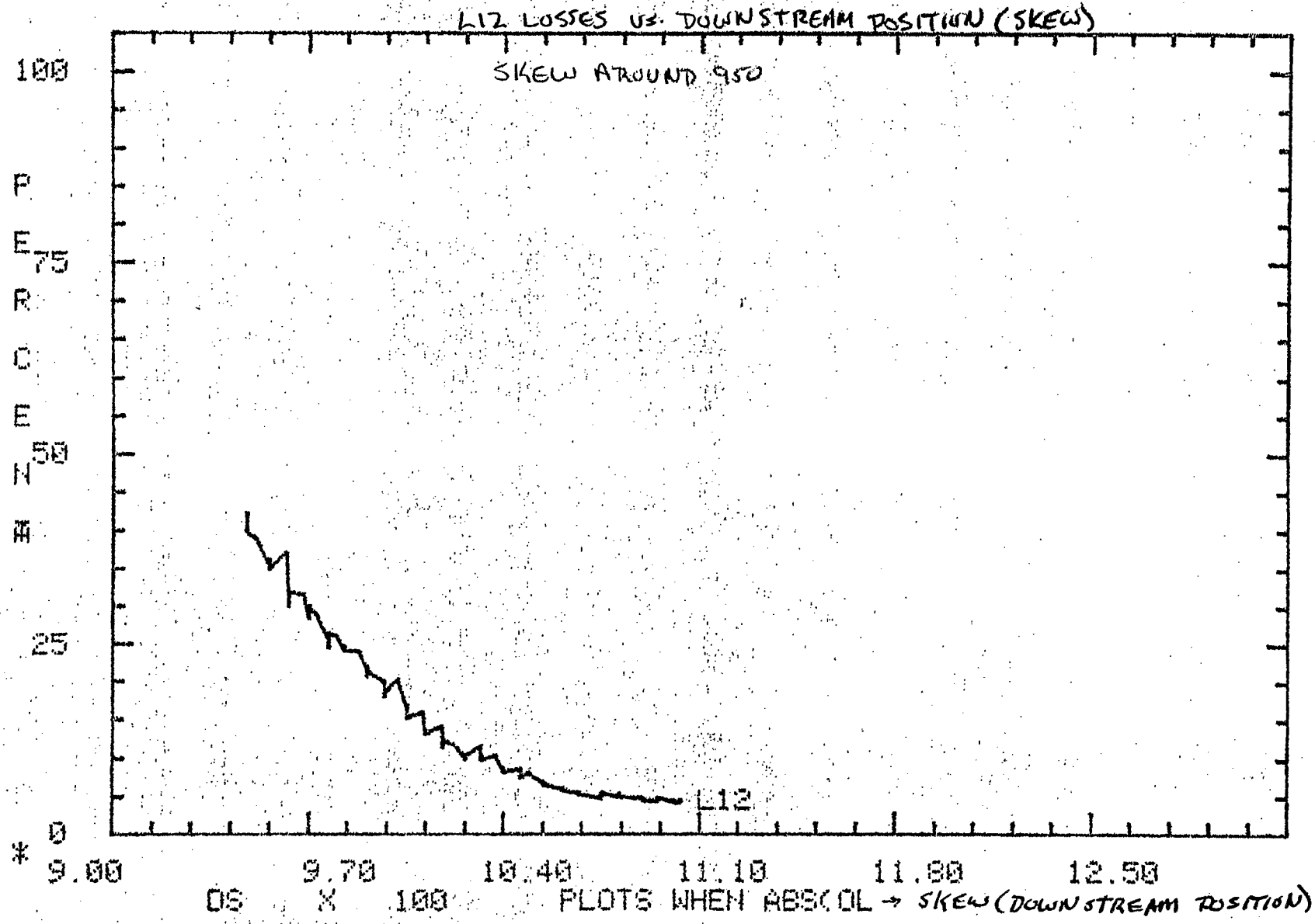
YA:US ,0= 0.000,100= 1500.000
YB:DS ,0= 0.000,100= 1500.000
YC:L12 ,0= 0.000,100= 400.000
YD:WSUM ,0= 0.000,100= 12.000



*100
NUMBER OF PULSES

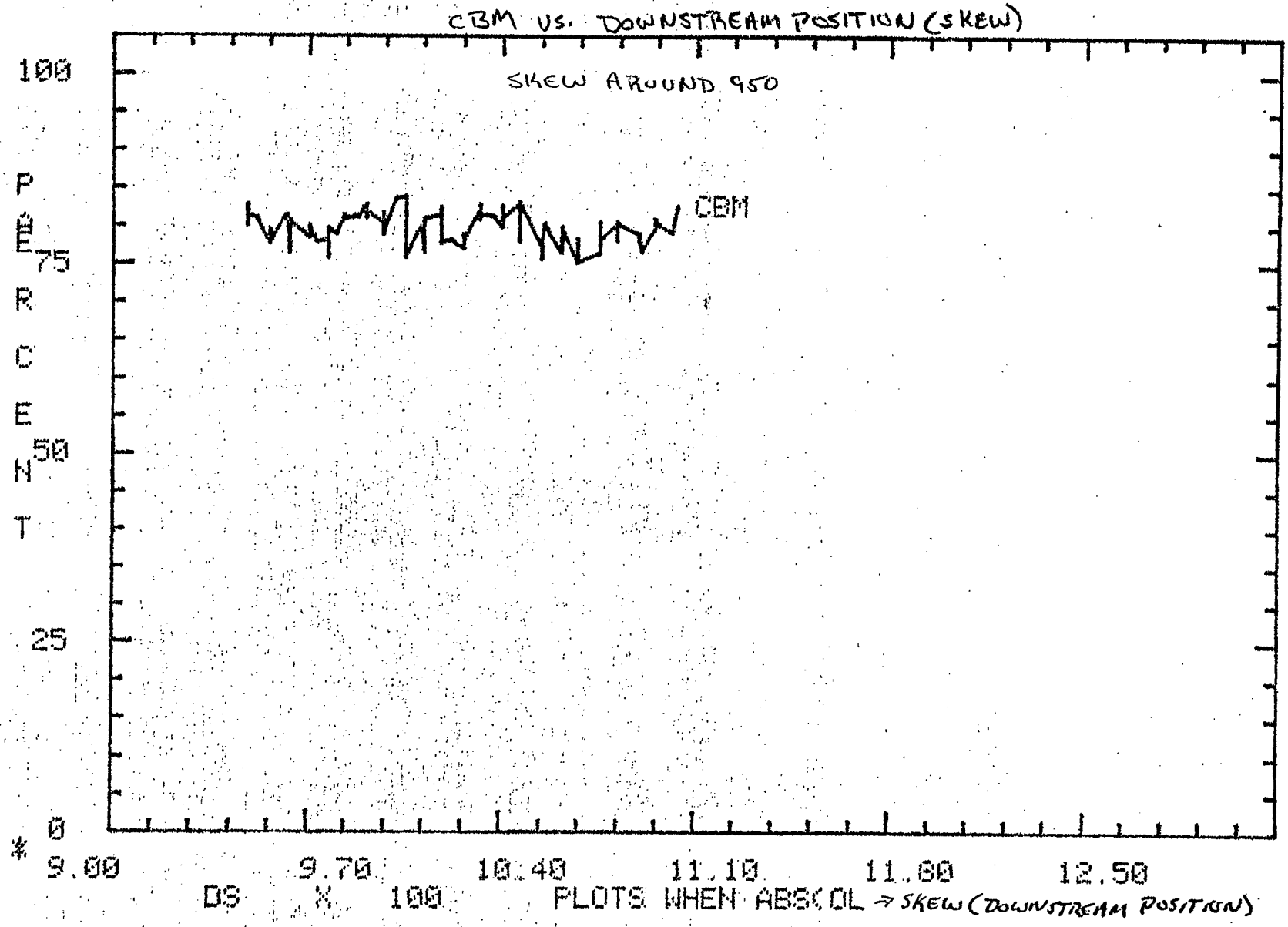
PAGE 2 TO 00RLR
10-FEB-85 15:27 35.7
TEST VAR #NONE AVG= 1

YAD-UNEW) ,0= 0.000,100= 400.000
X — RZEDS

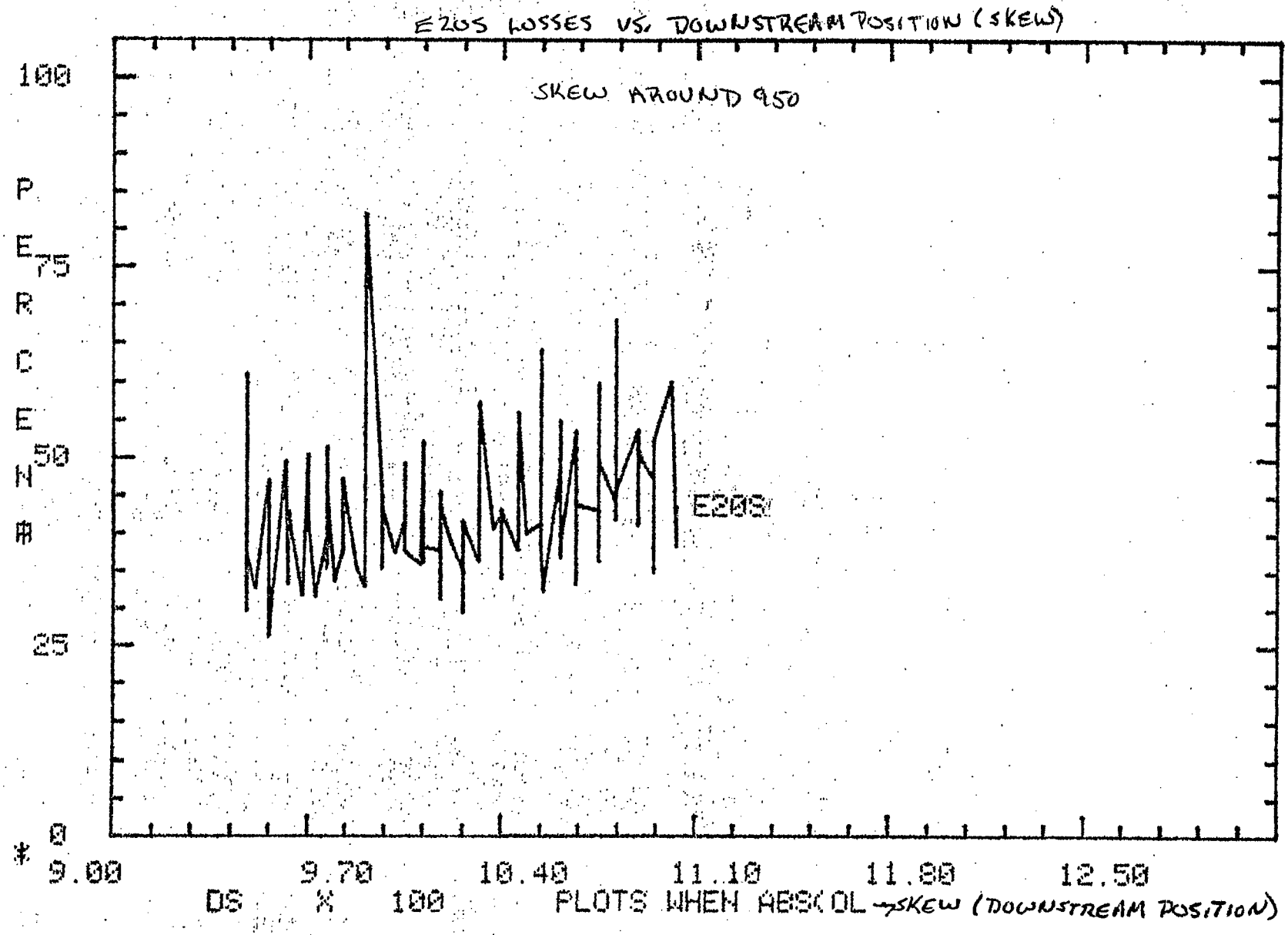


PAGE 2 TO 00RLR
10-FEB-85 15:27 35.7
TEST VAR #NONE AVG= 1

YAD-[illegible]).0= [illegible]1.000,100= 600.000

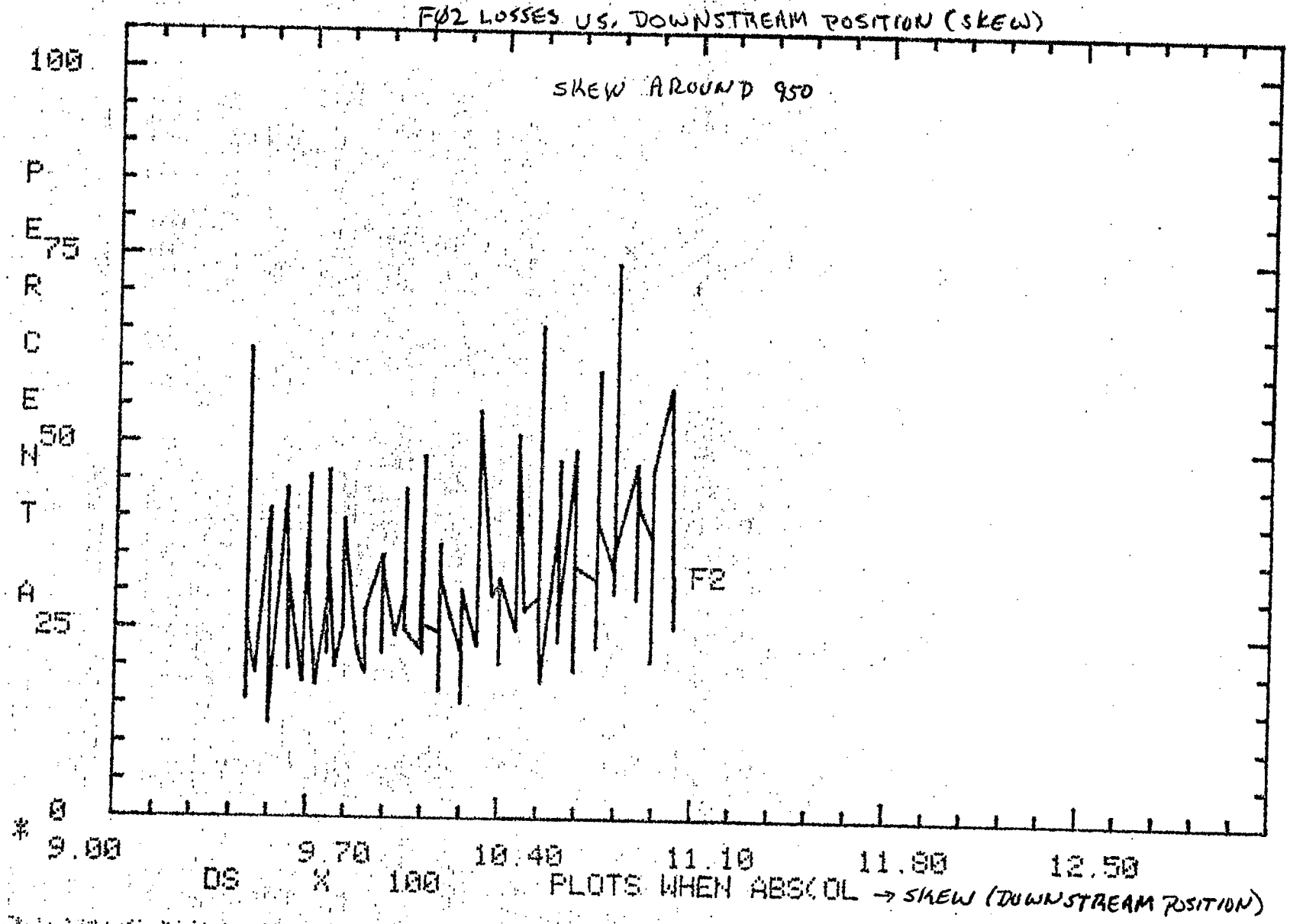


PAGE 2 TO 00RLR
10-FEB-85 15:27 35.7
TEST VAR #NONE AUG= 1



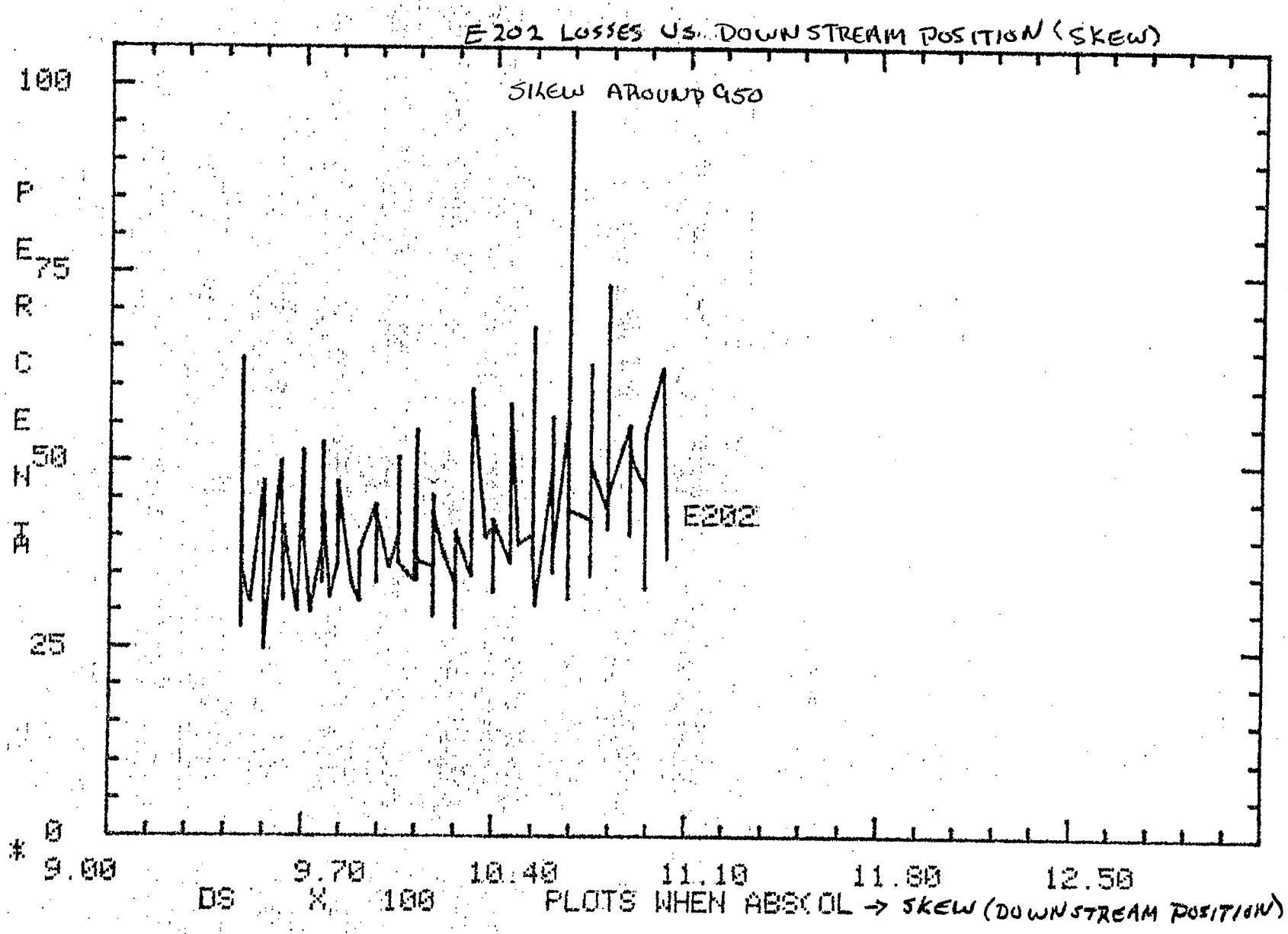
PAGE 2 TO 00RLR
10-FEB-85 15:27 35.7
TEST VAR: #NONE AVG= 1

YAD-AXEW), X= 0.000,100= 600.000



PAGE 2 TO 00RLR
10-FEB-85 15:27:35.7
TEST VAR #NONE AUG= 1

YA-[illegible]2 .X= 0.000,100= 500.000



PAGE 2 TO 00RLR
10-FEB-85 15:27 35.7
TEST VAR #NONE AVG= 1

YAD+[illegible],X= 00.000,100= 12.000