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AUTHORITY

CNO [N772] ltr N772A/6U875630, 20 Jan 2006, ONR ltr, 31 Jan 2006

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AUTHORITY

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MC REPORT 011
Volume 9

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ACOUSTIC ENVIRONMENTAL SCENARIOS AND PREDICTIONS FOR ASW

VOLUME 9
AREA 3B, SUMMER
PREDICTIONS FOR PASSIVE SONAR

October 1972

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LONG RANGE ACOUSTIC PROPAGATION PROJECT

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OCEAN SCIENCE PROGRAM
MAURY CENTER FOR OCEAN SCIENCE
Department of the Navy
Washington, D.C.

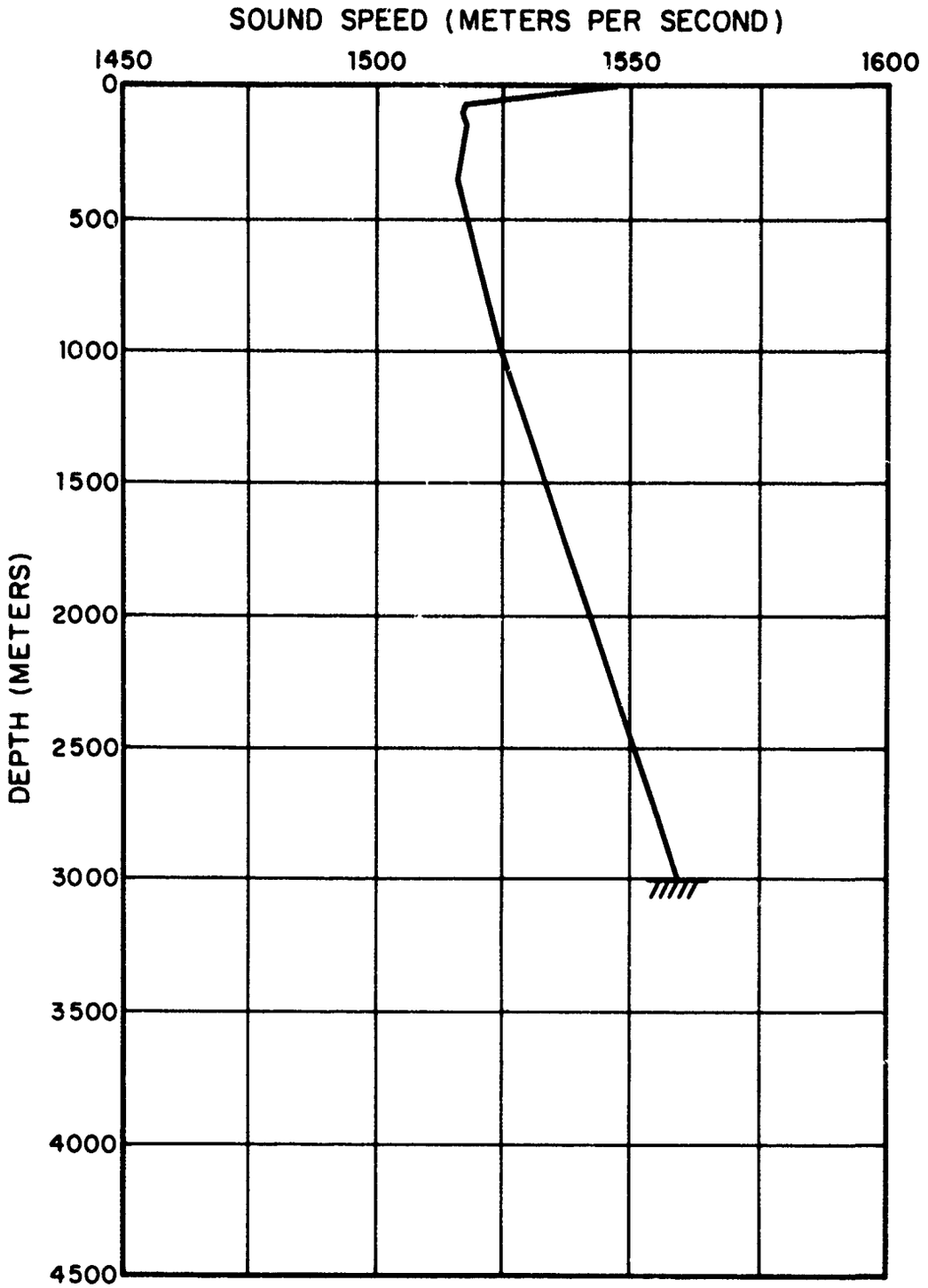
[redacted]
Director, Long Range Acoustic Propagation Project (ONR Code 102-OS)
Arlington, Va. 22217

ACOUSTIC ENVIRONMENTAL SCENARIOS AND PREDICTIONS FOR ASW

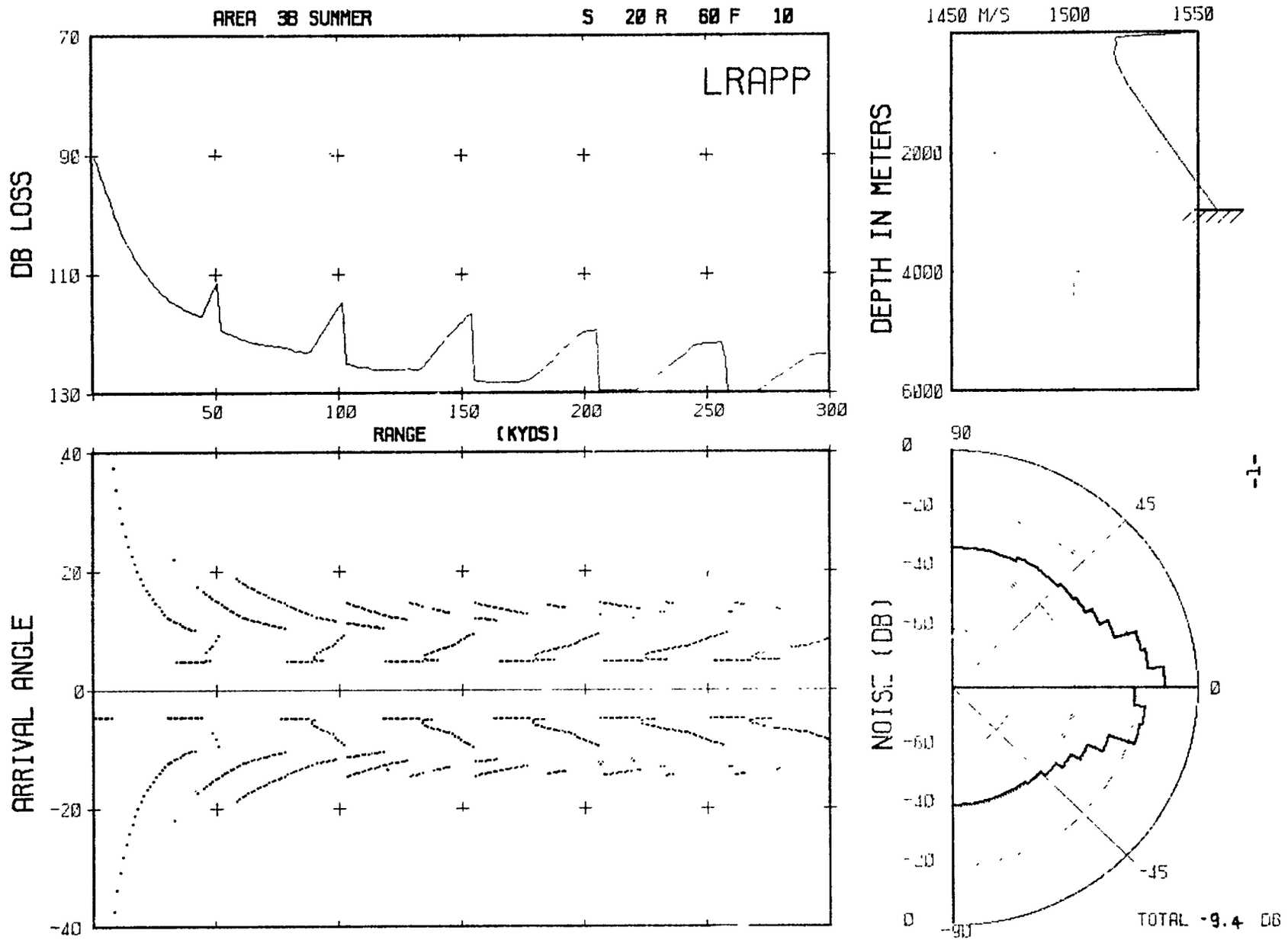
Volume IX: AREA 3B SUMMER

PREDICTIONS FOR PASSIVE SONAR

Refer to Volume I of this report for an explanation of the plot format and descriptions of models and ocean areas.



SOUND SPEED PROFILE
AREA 3B, SUMMER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RANGE (KYDS)
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1500
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DEPTH IN METERS
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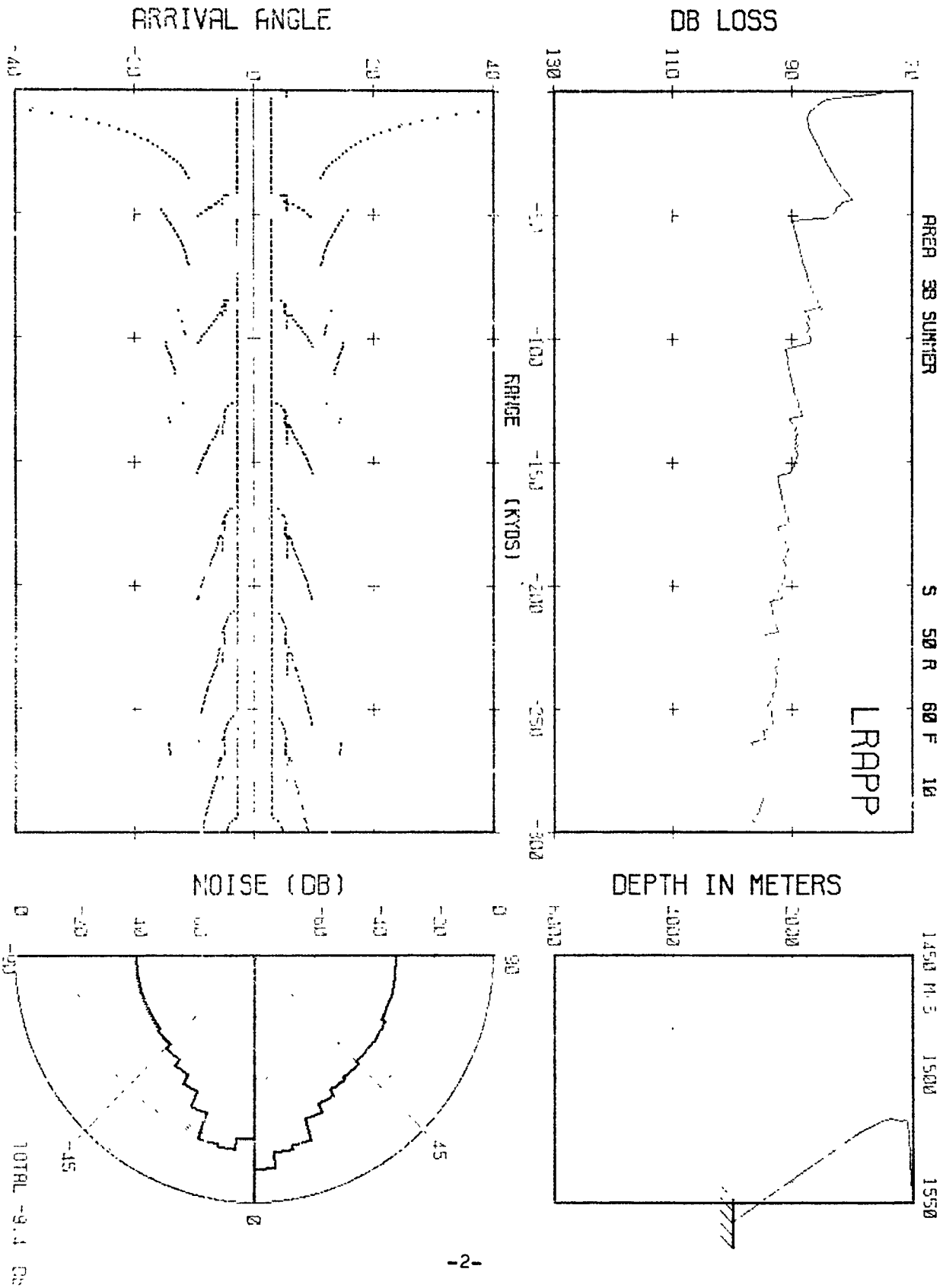
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DEPTH IN METERS
NOISE (DB)
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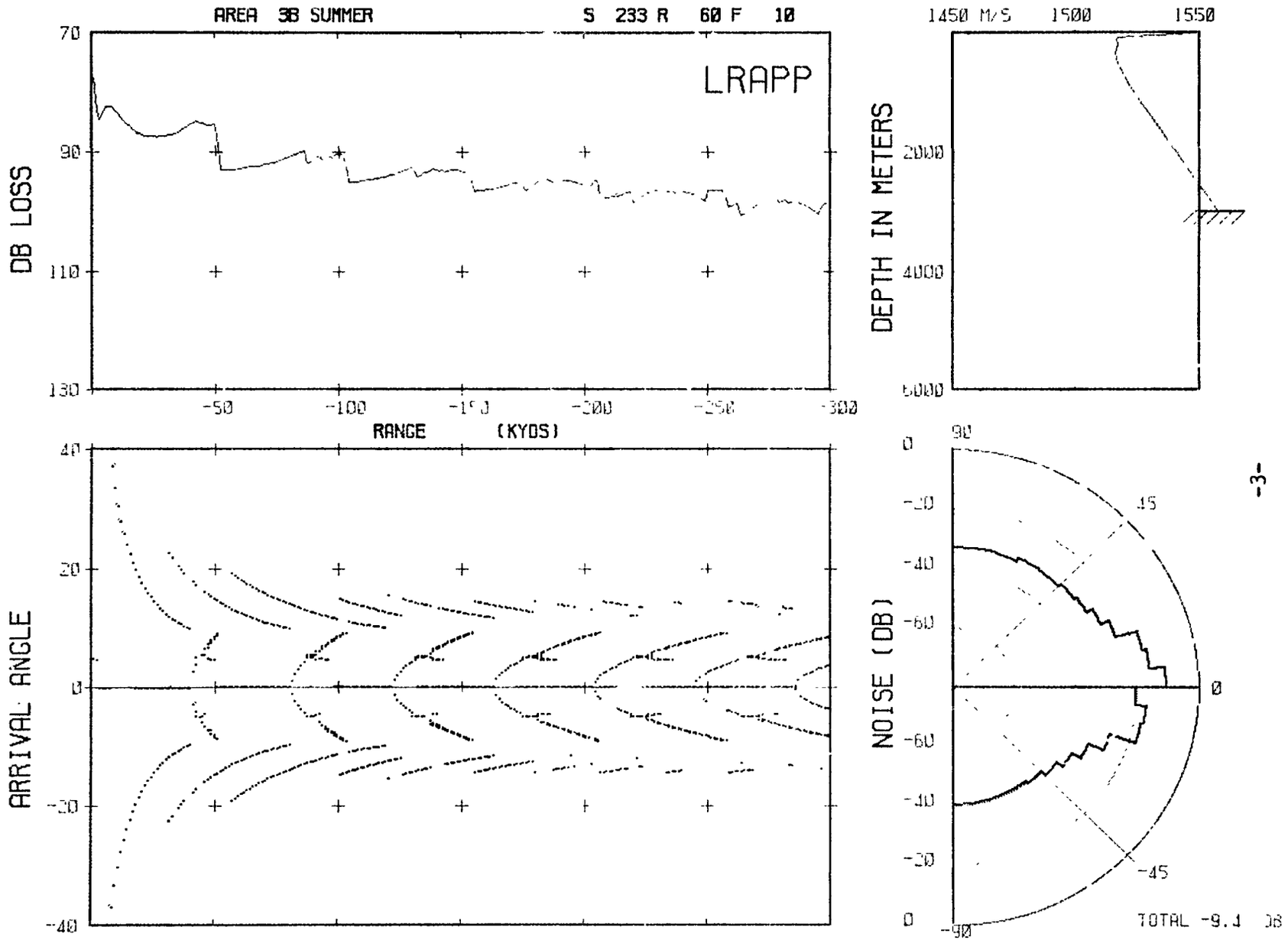
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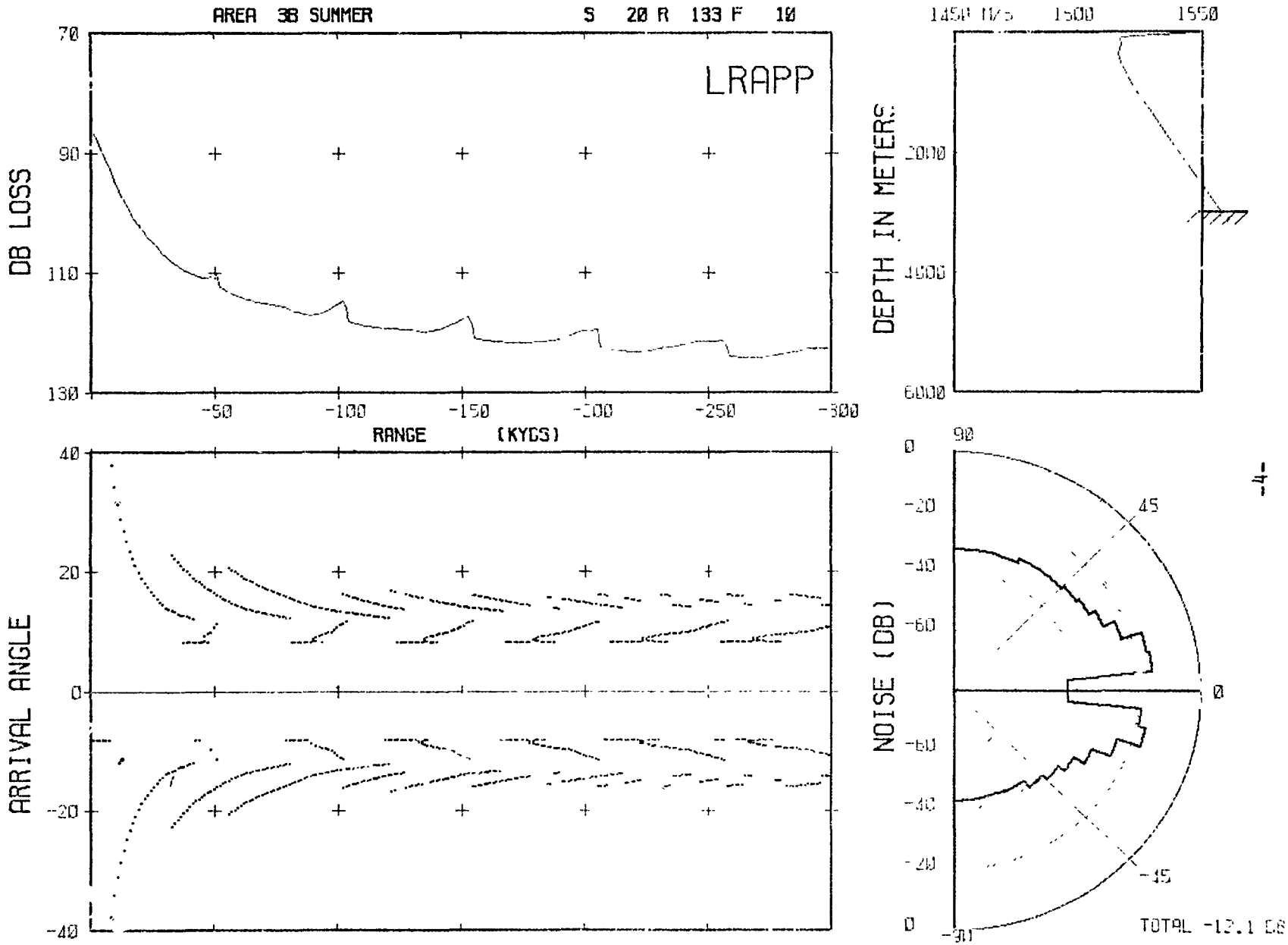
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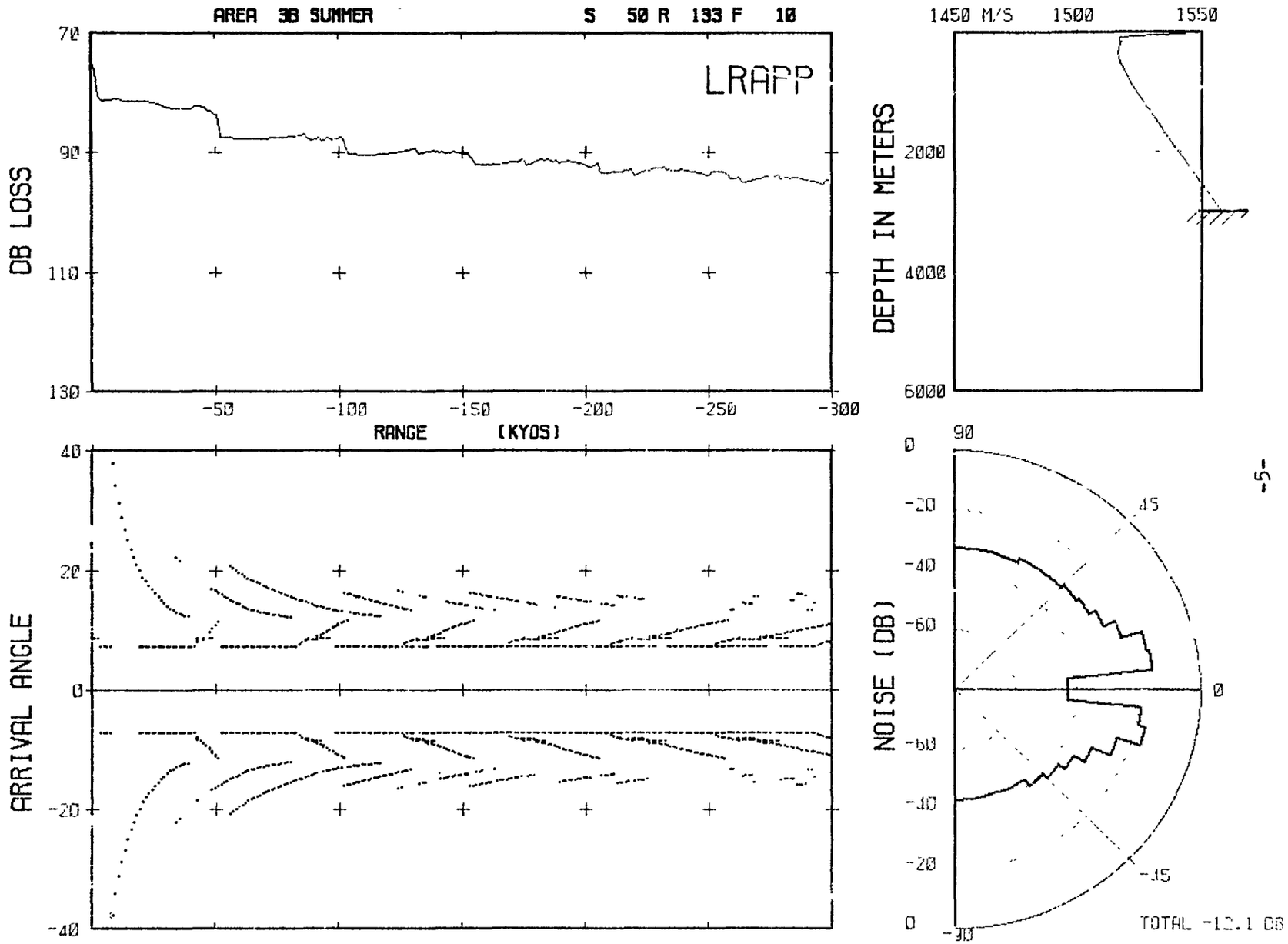
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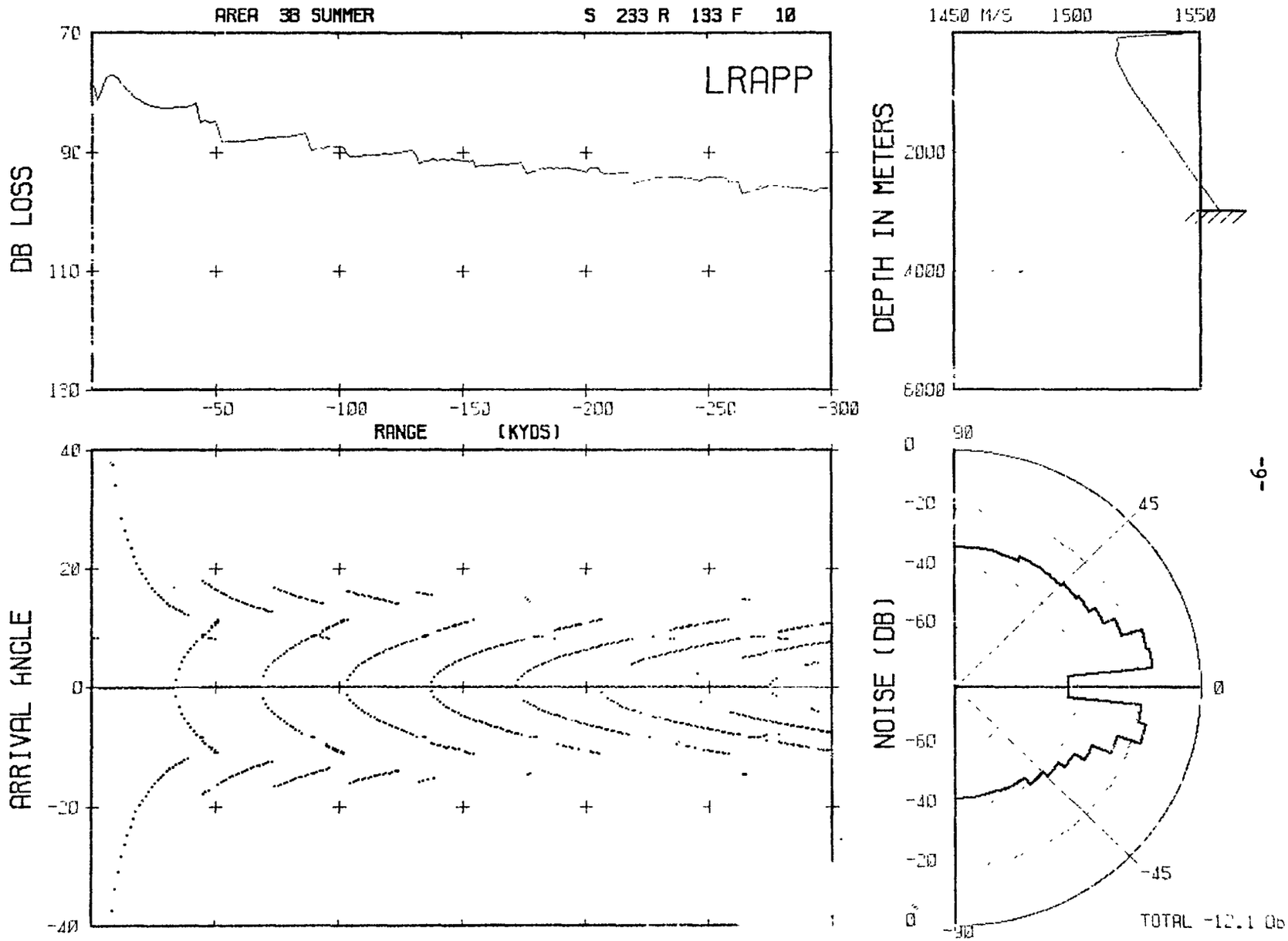
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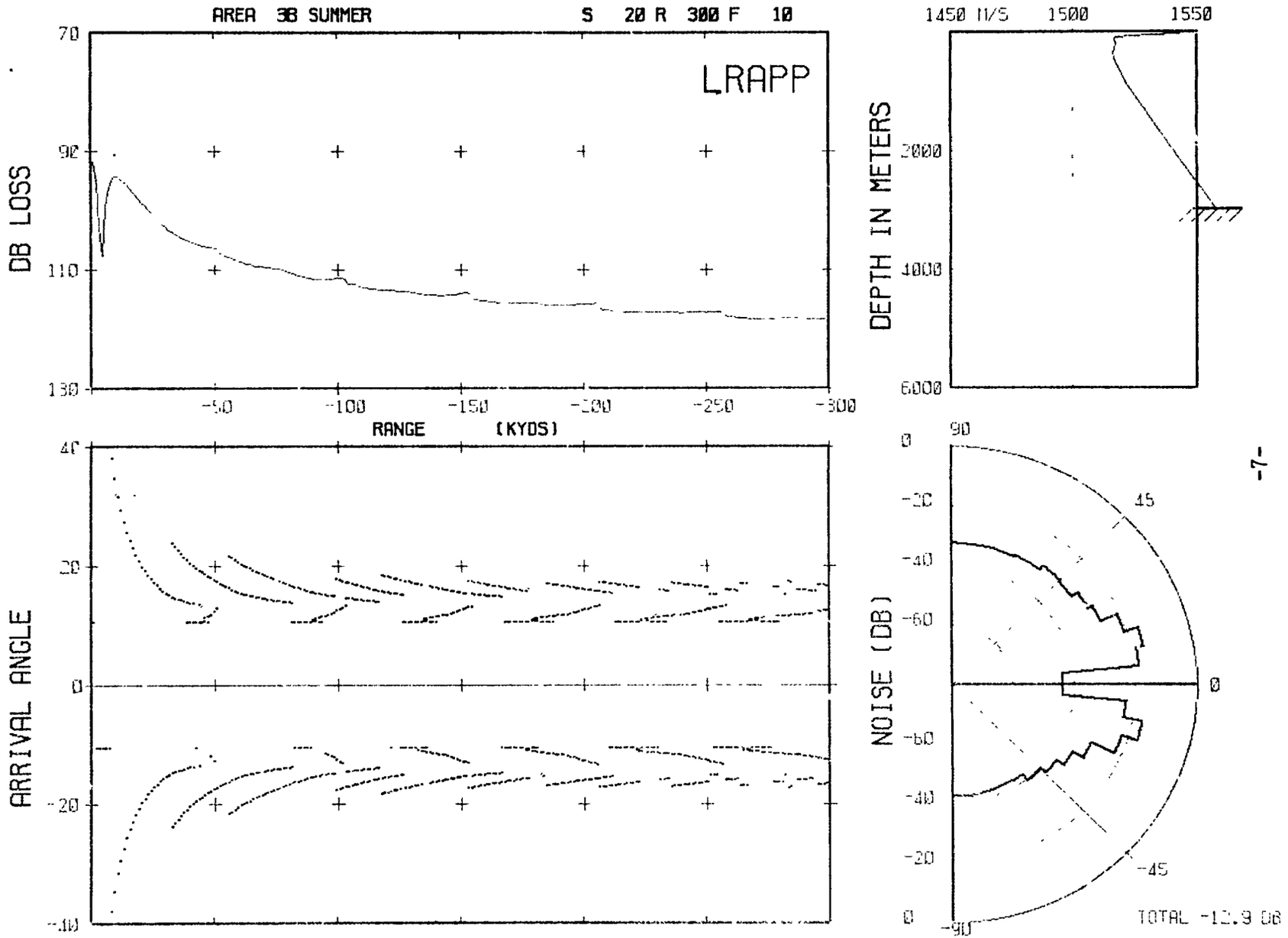
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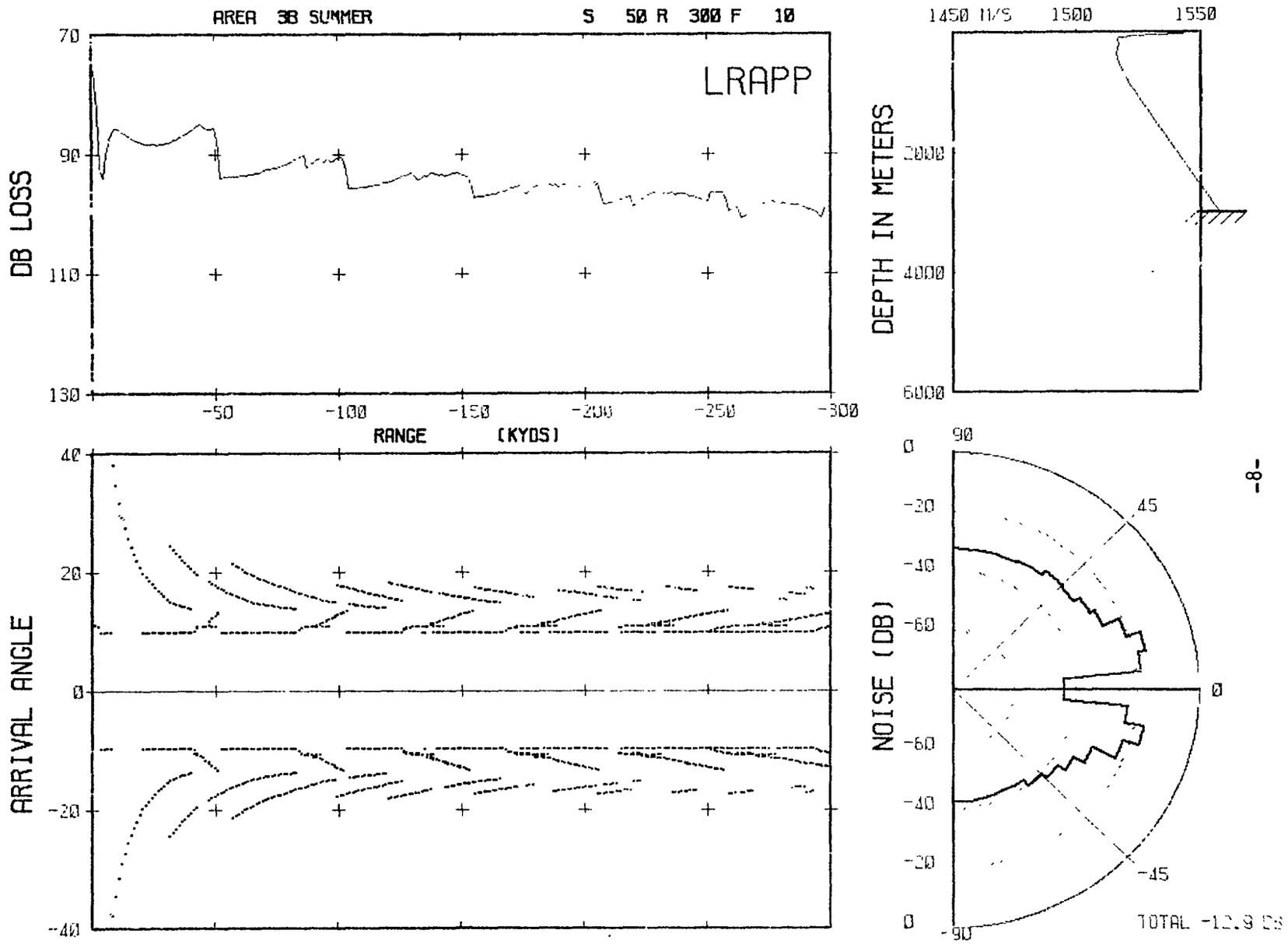
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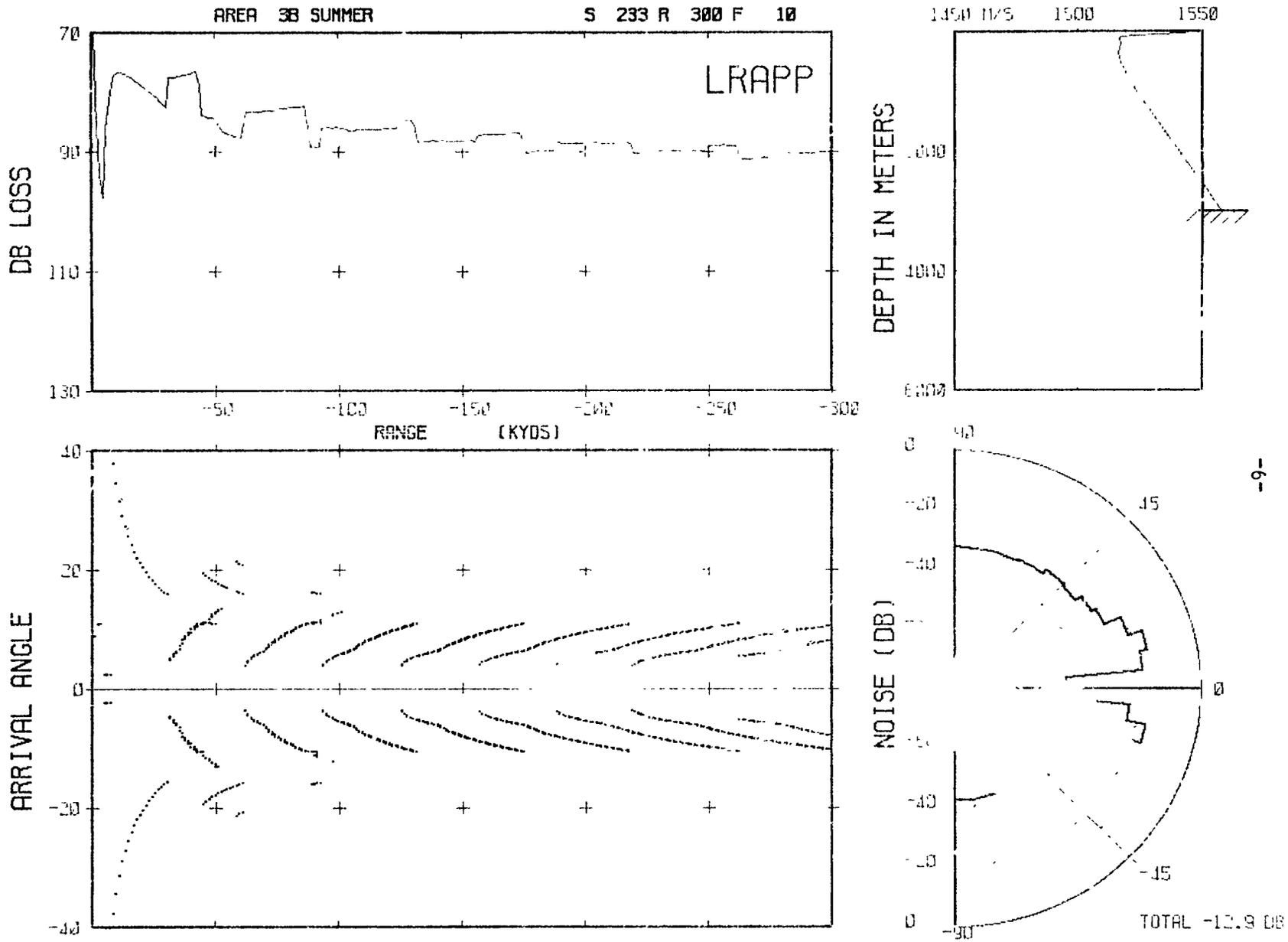
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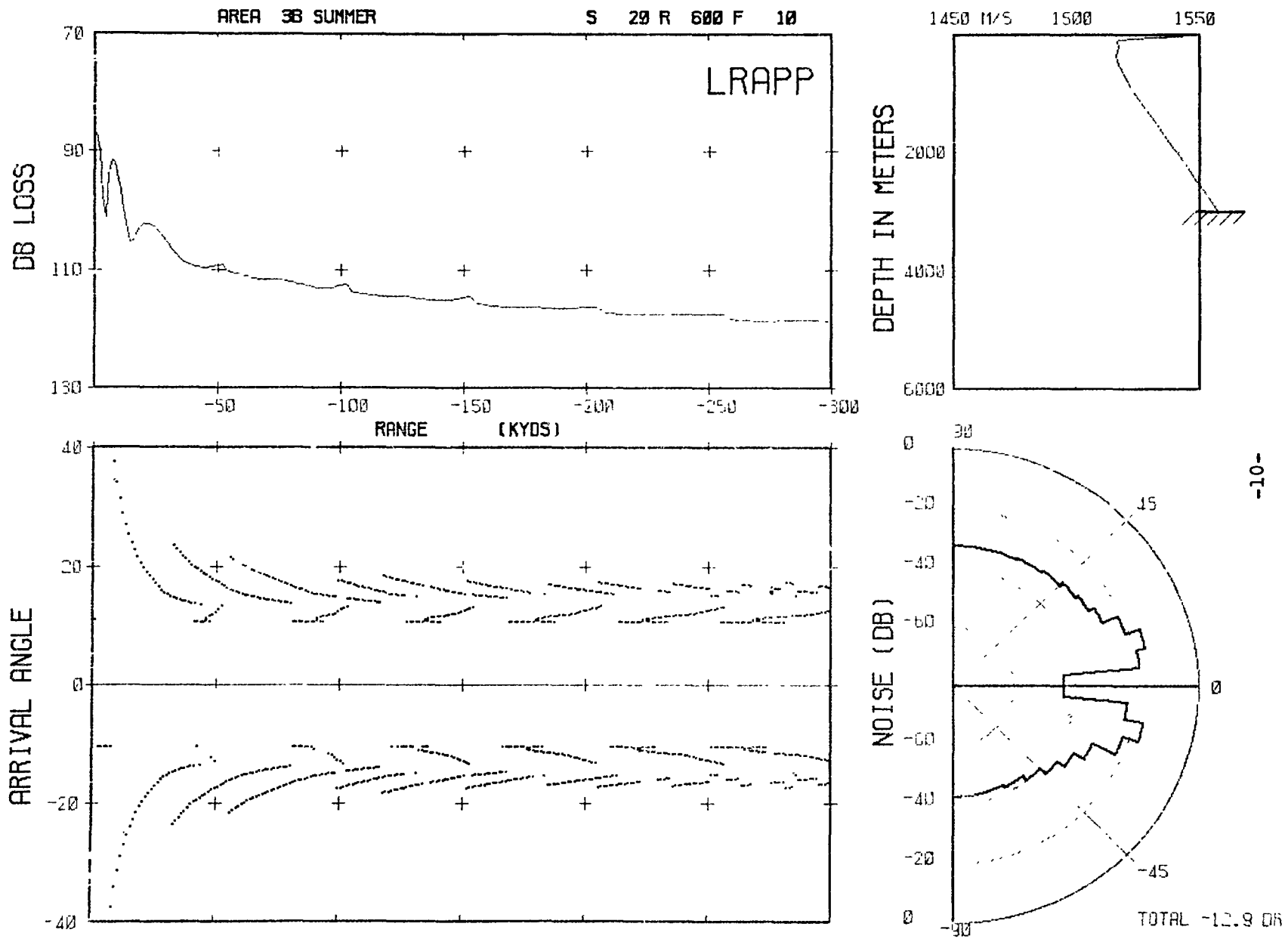
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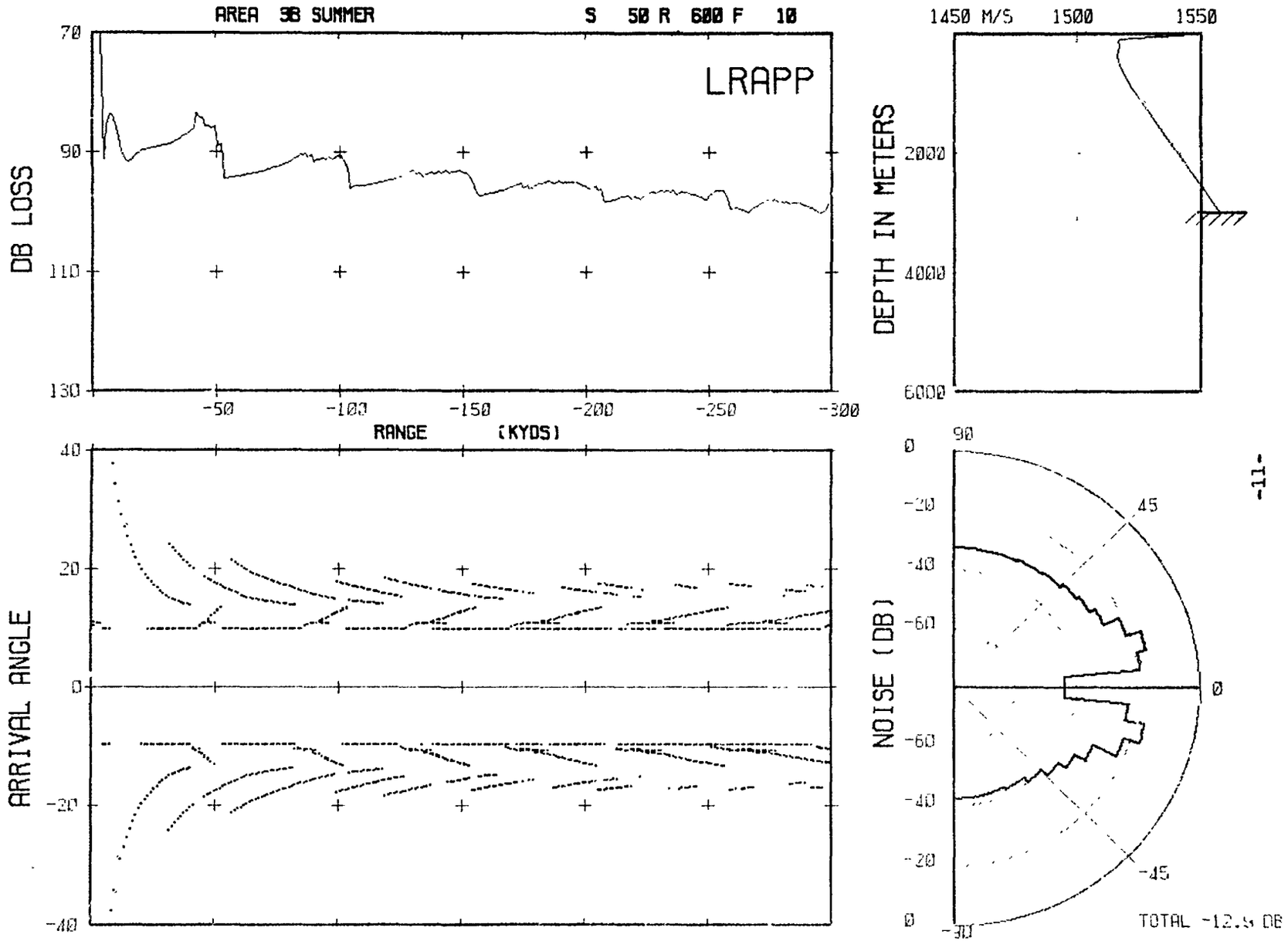
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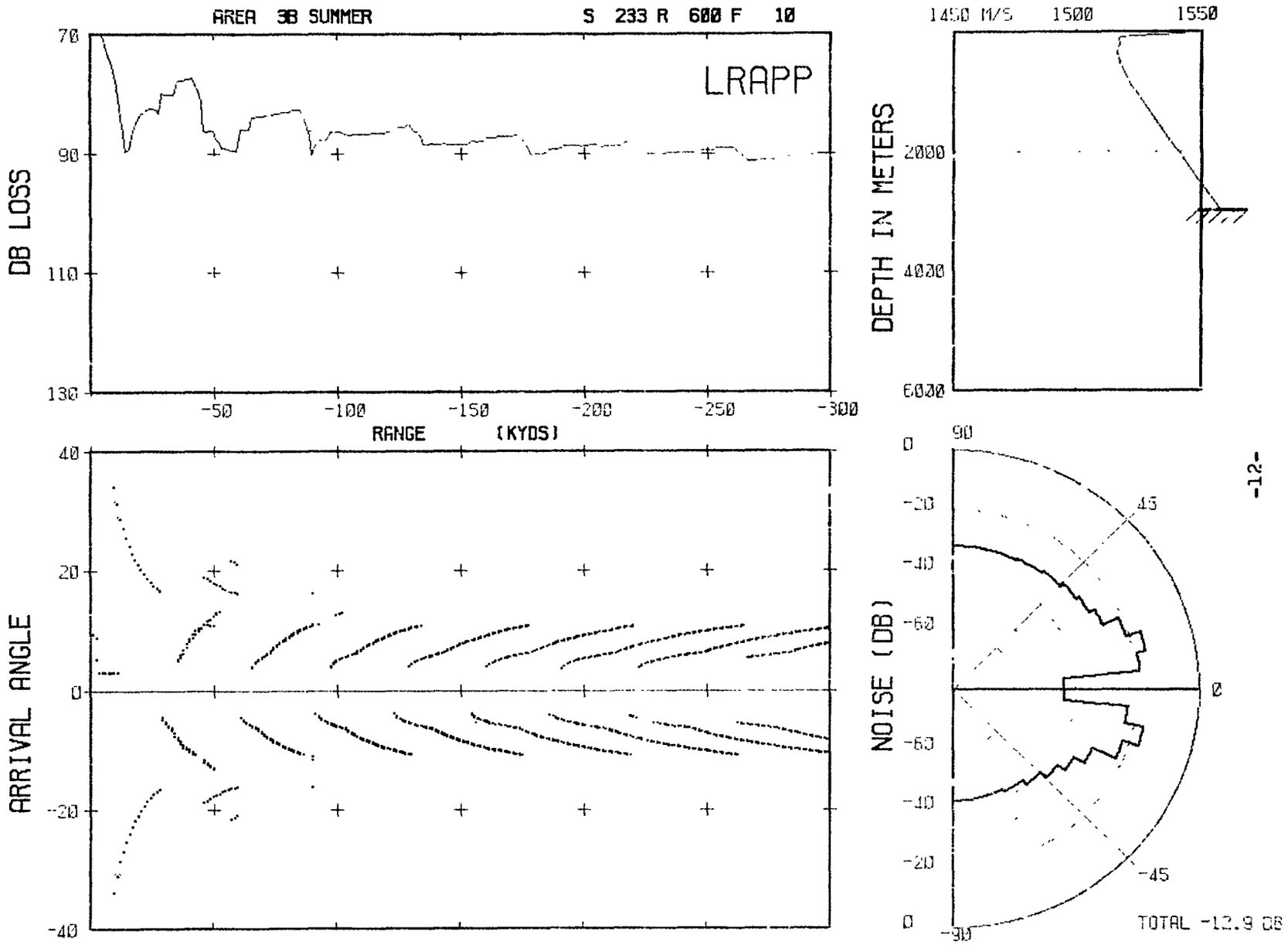
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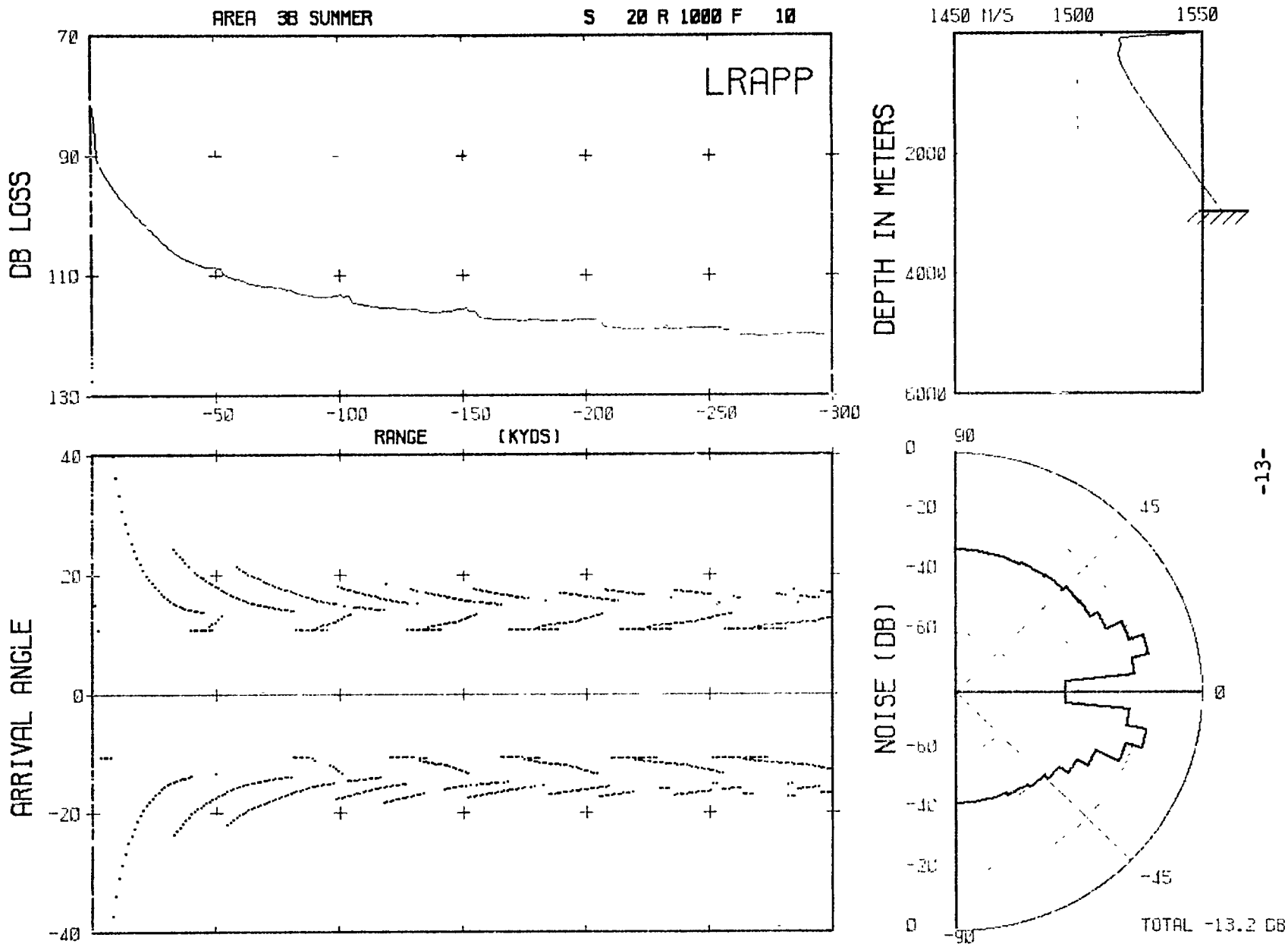
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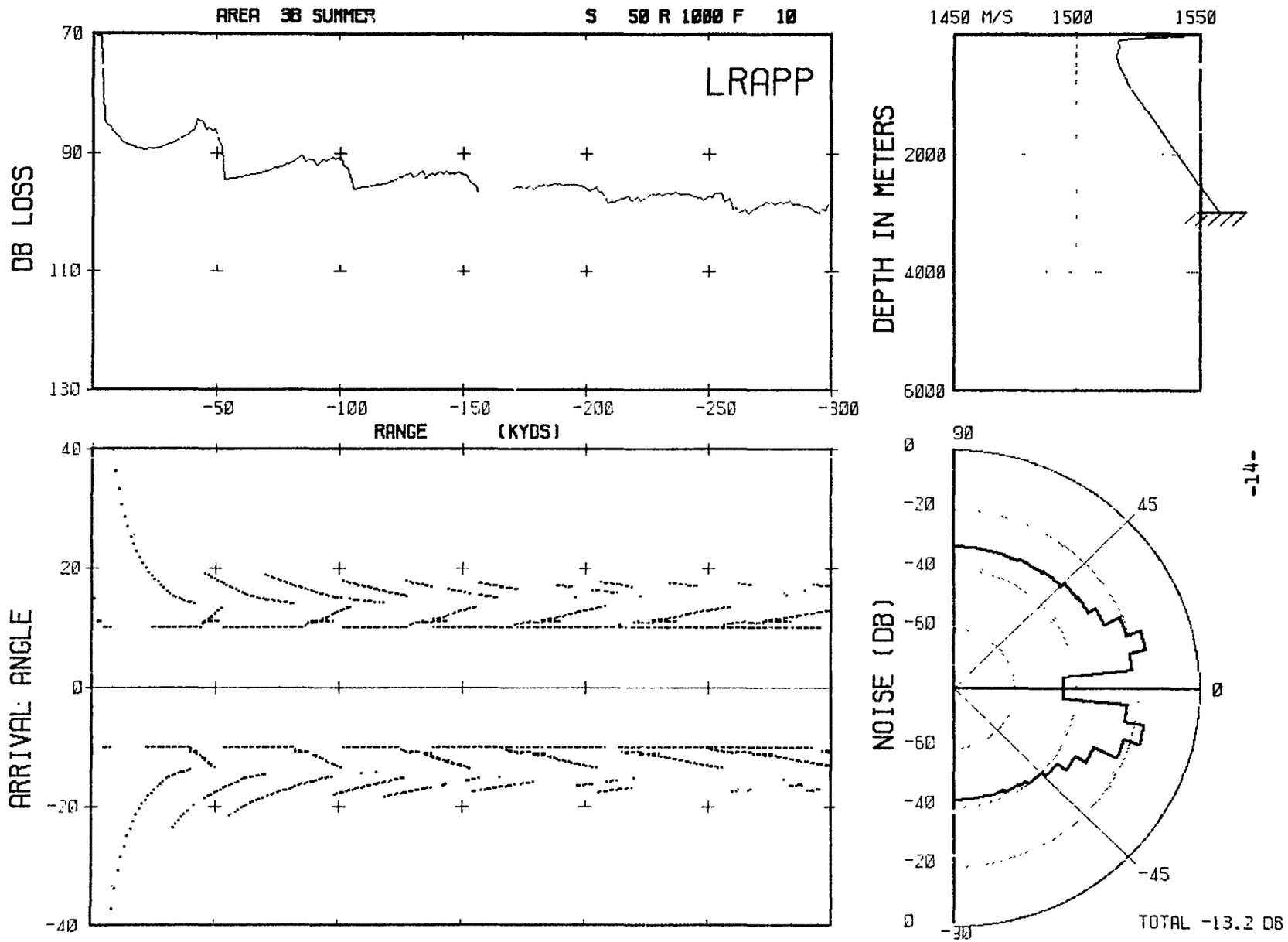
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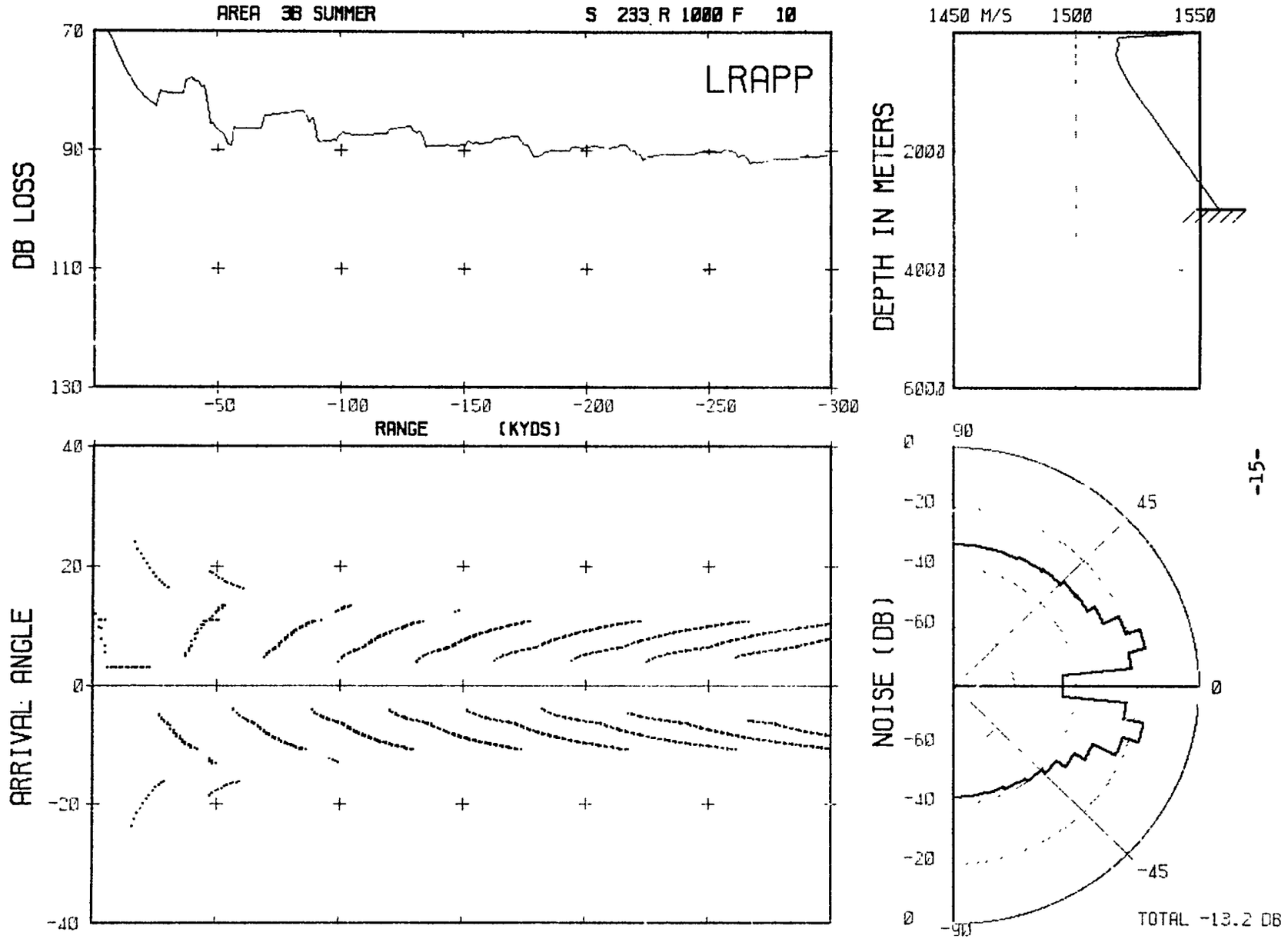
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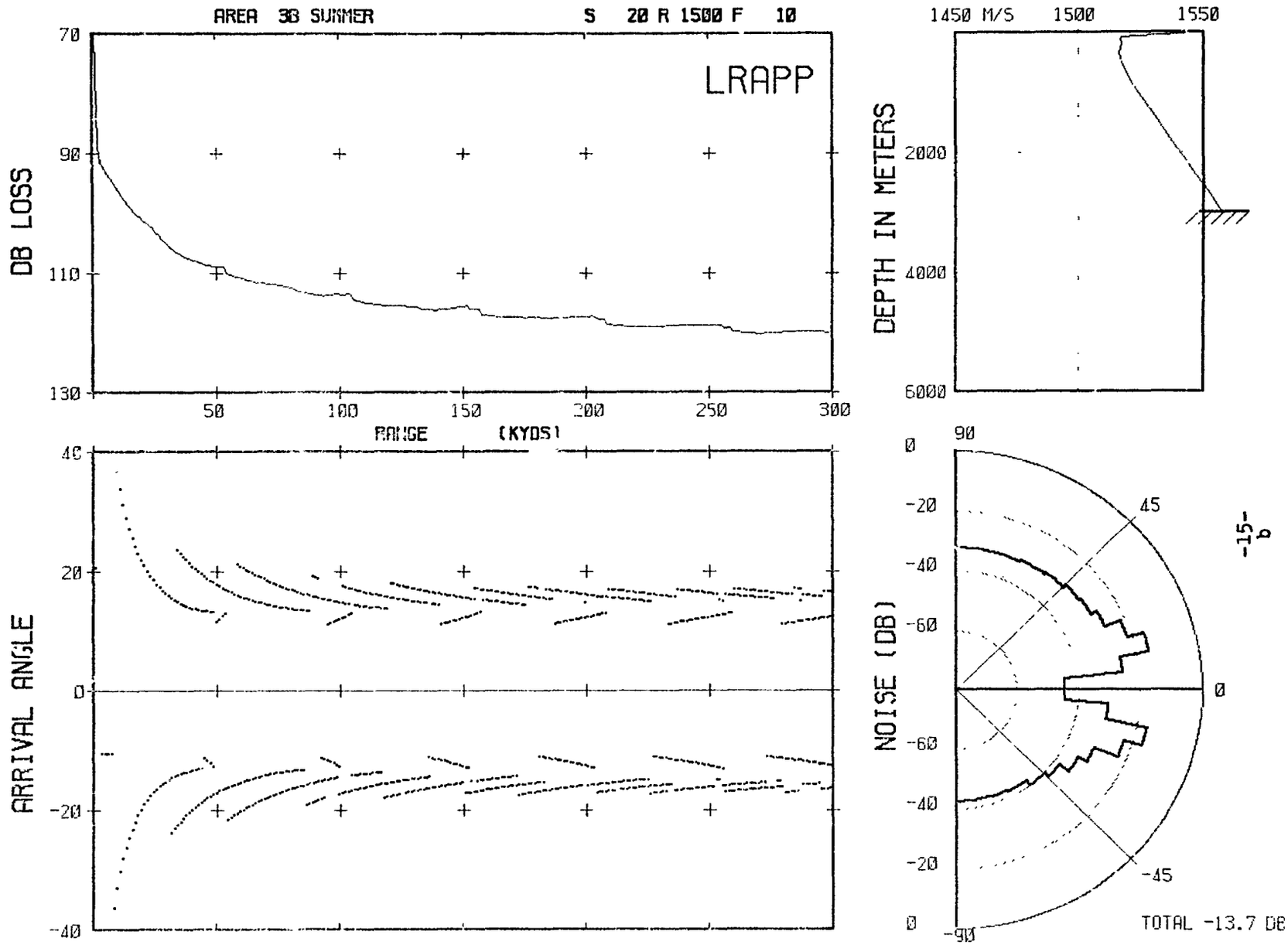

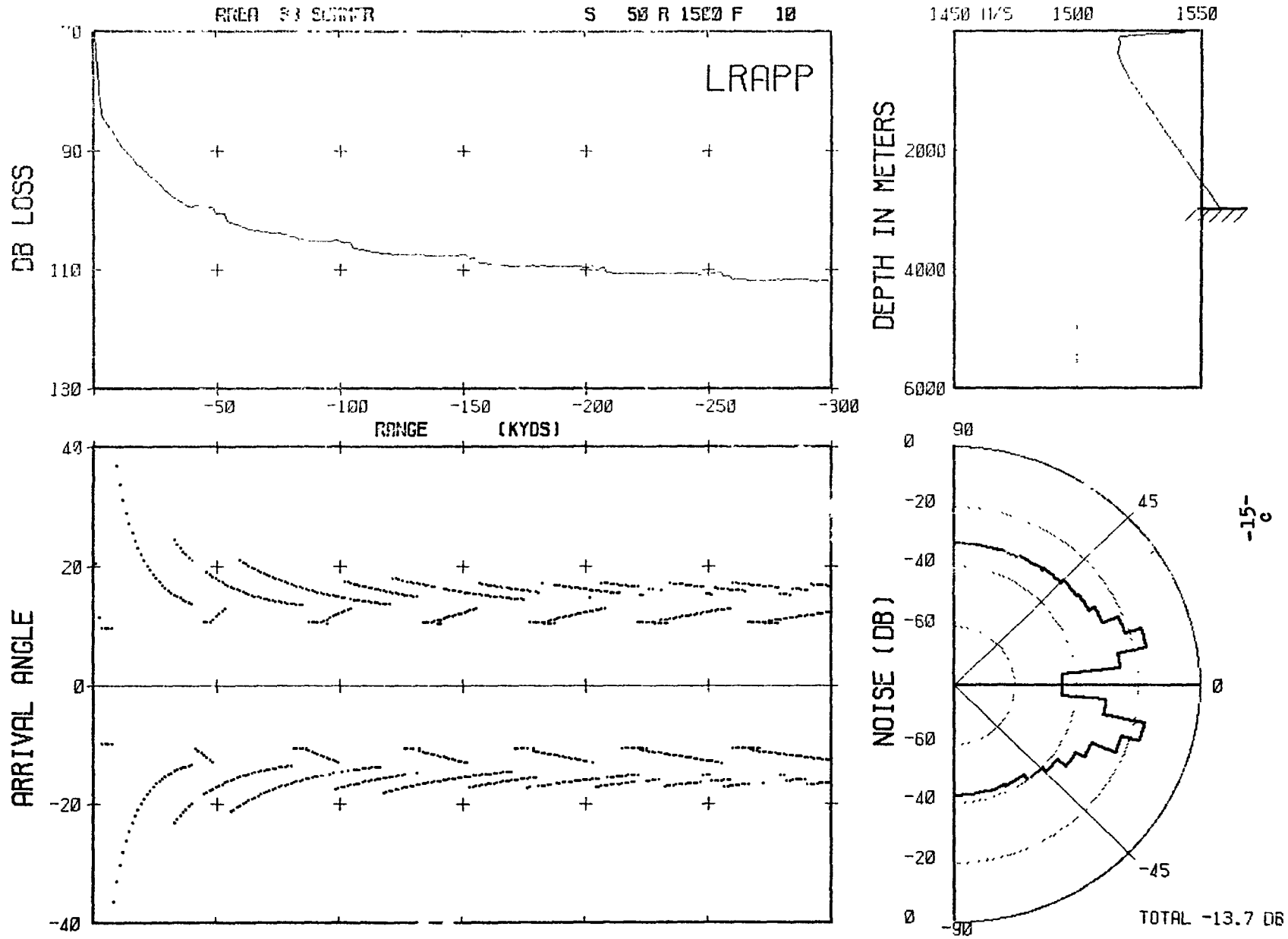
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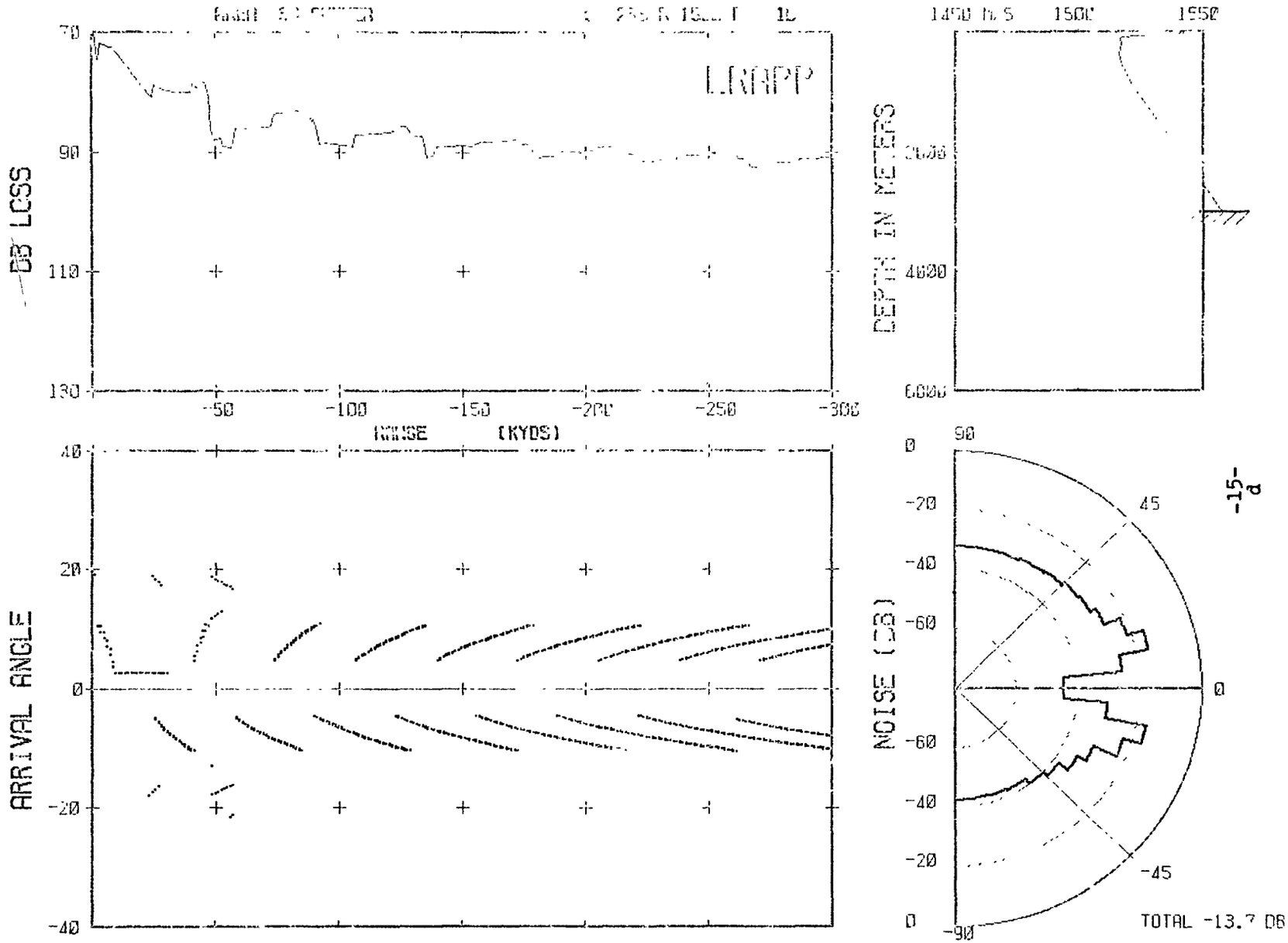
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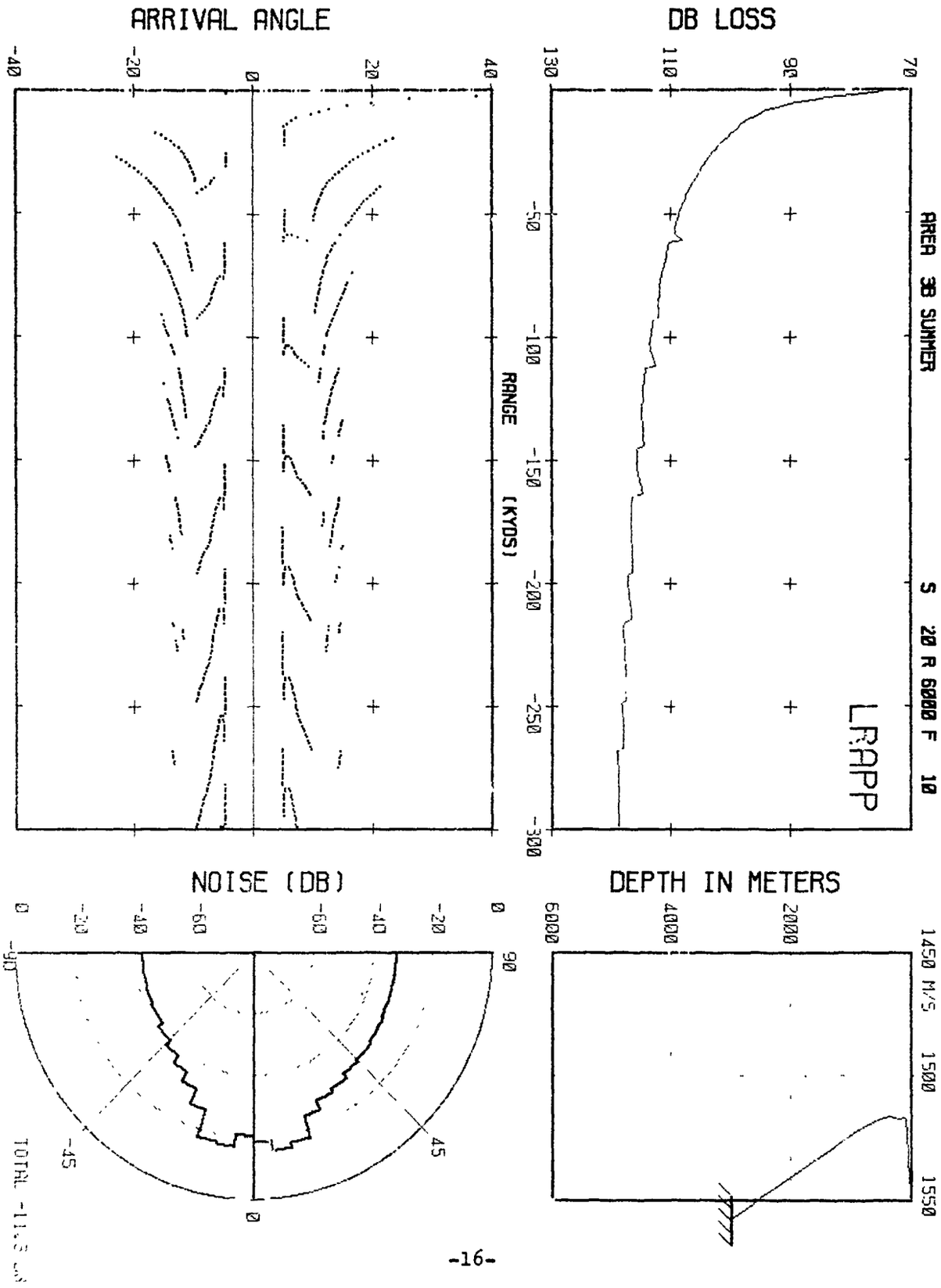
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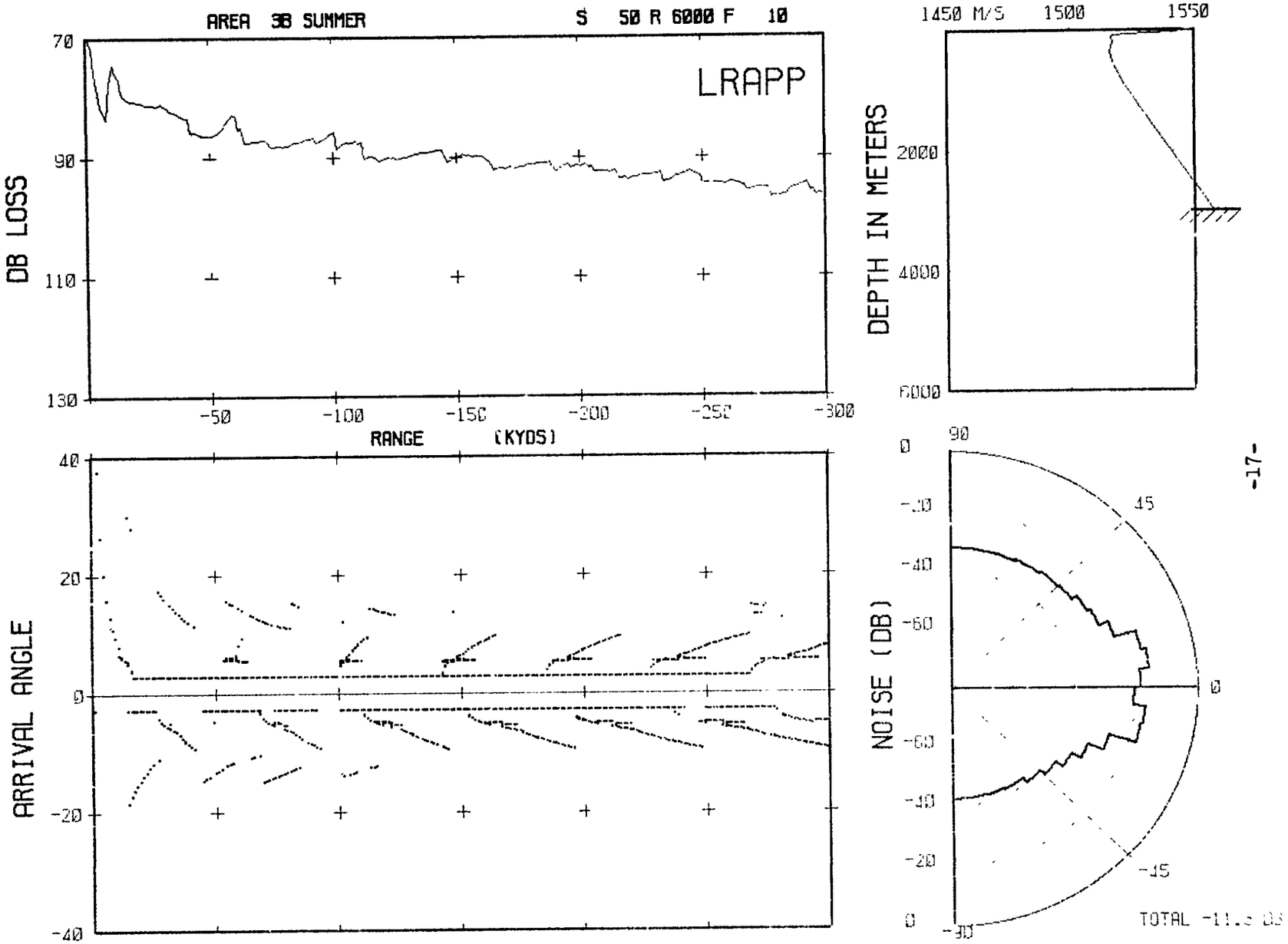
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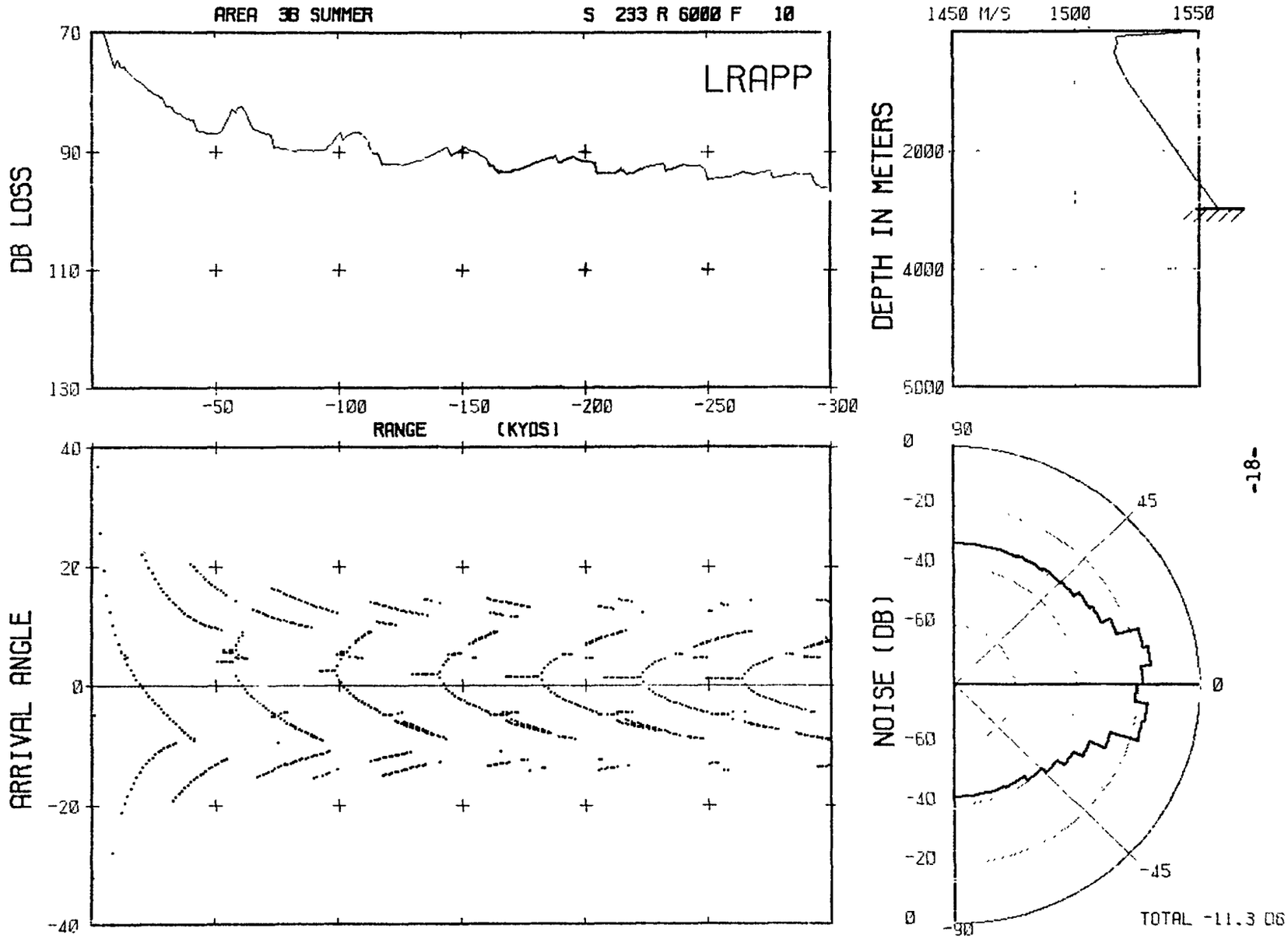
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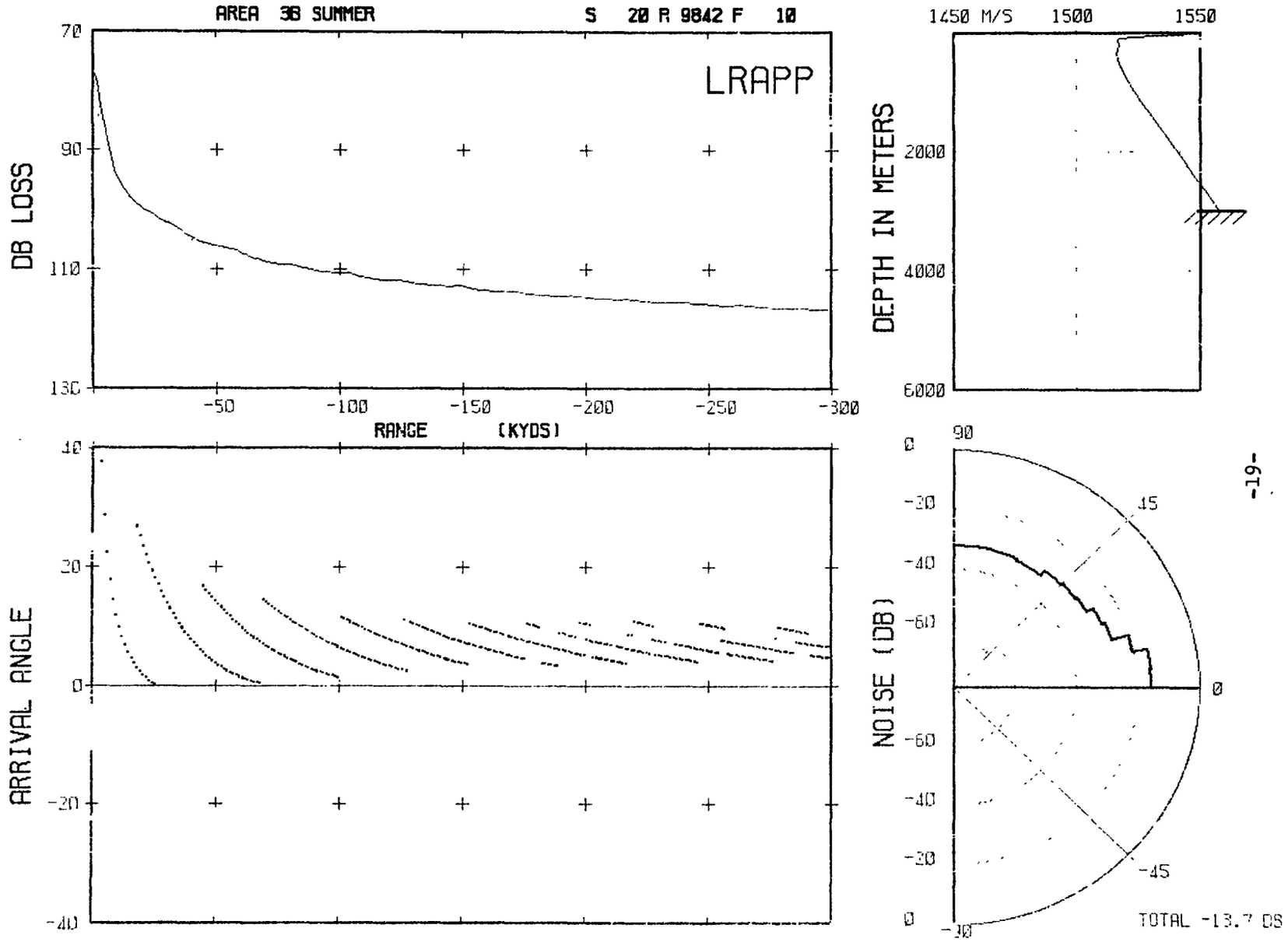
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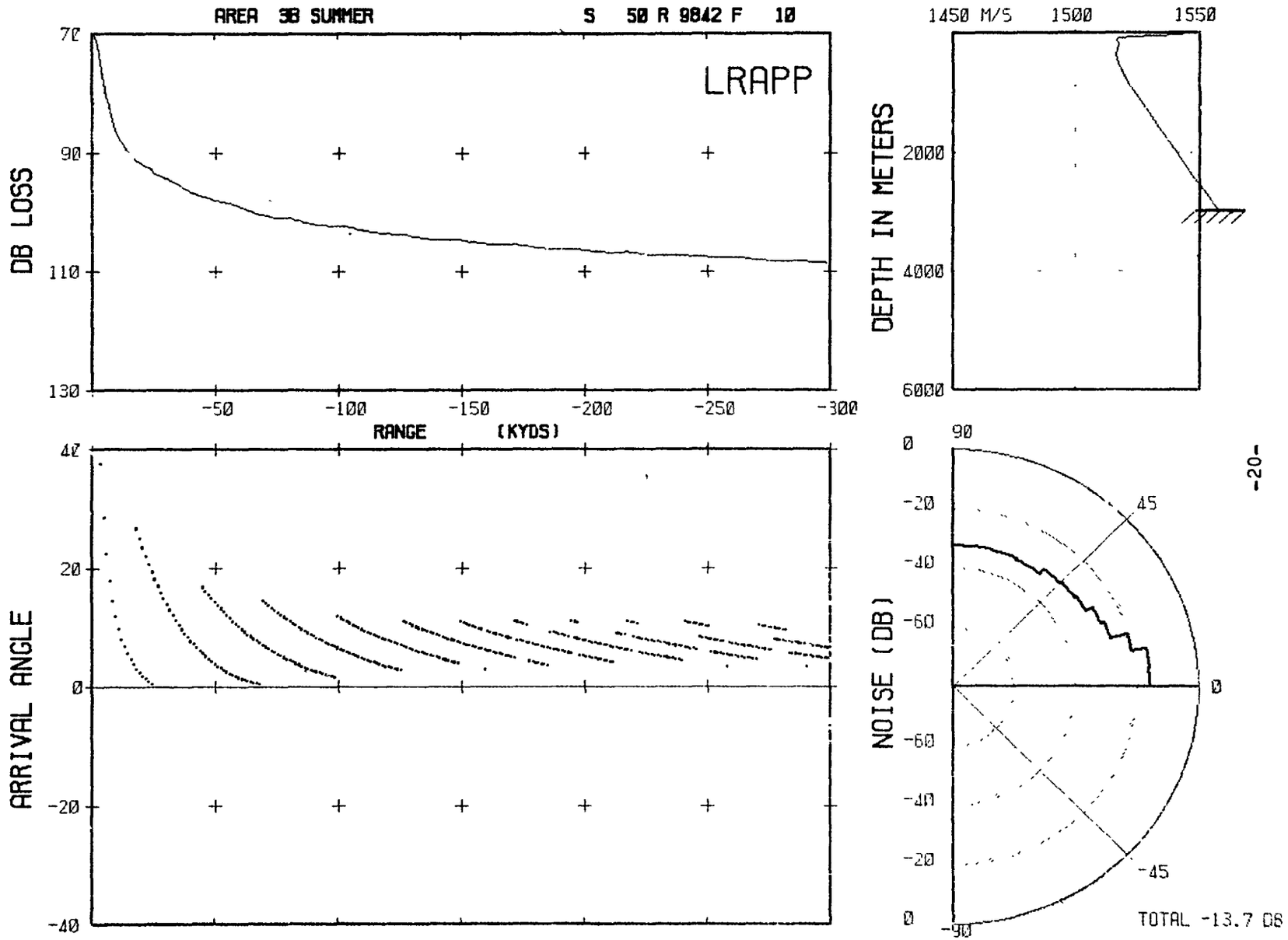
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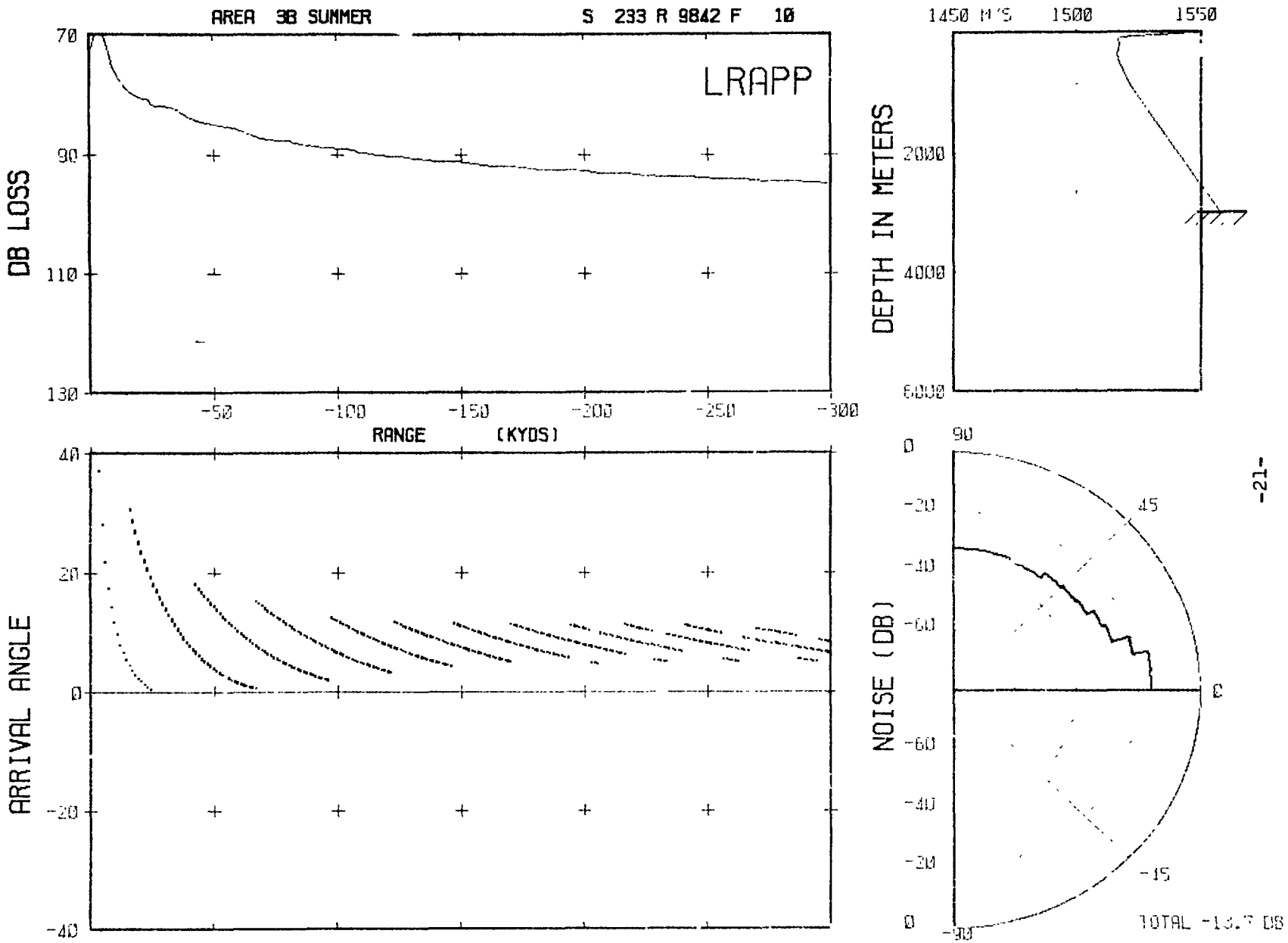
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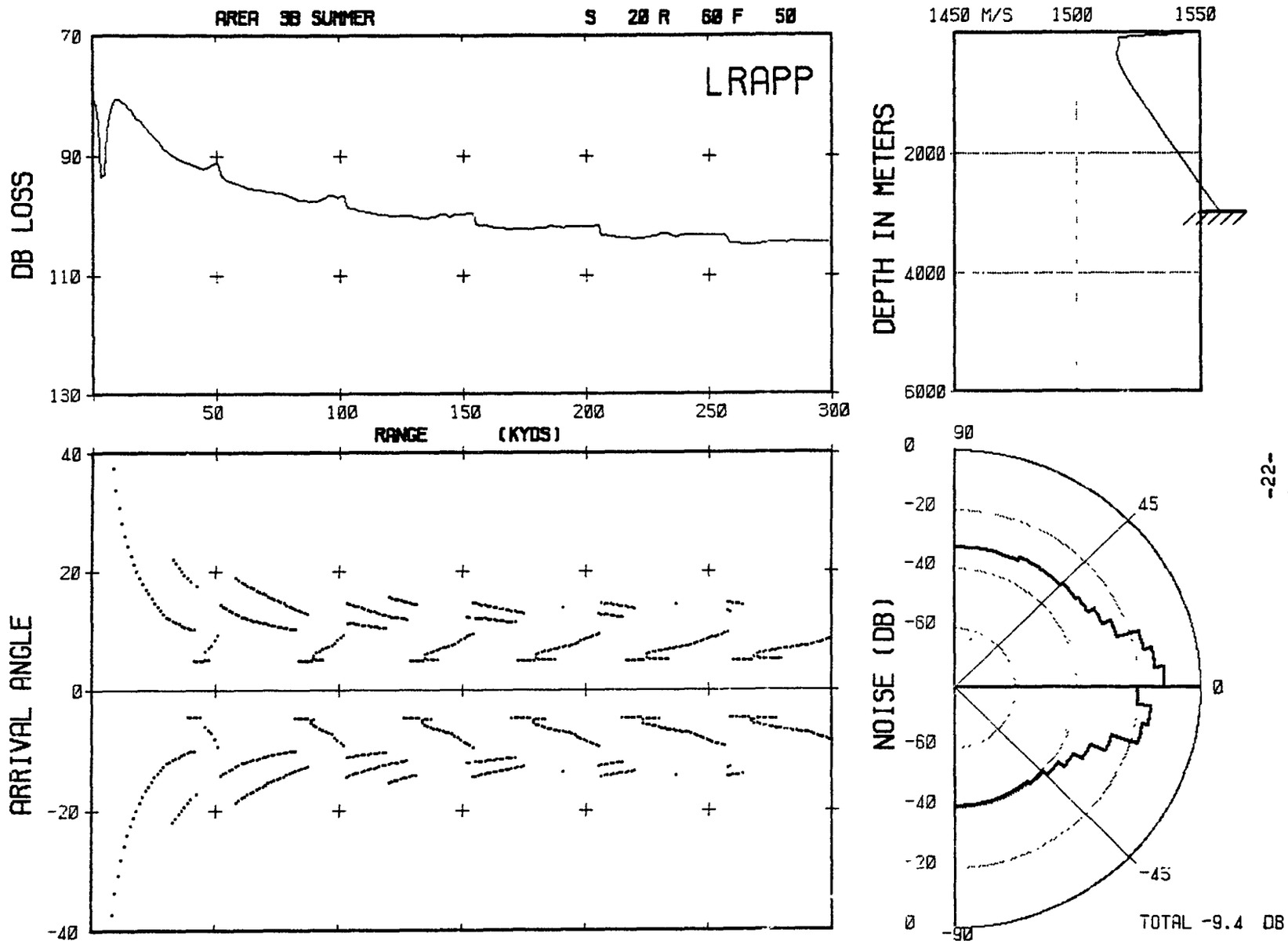
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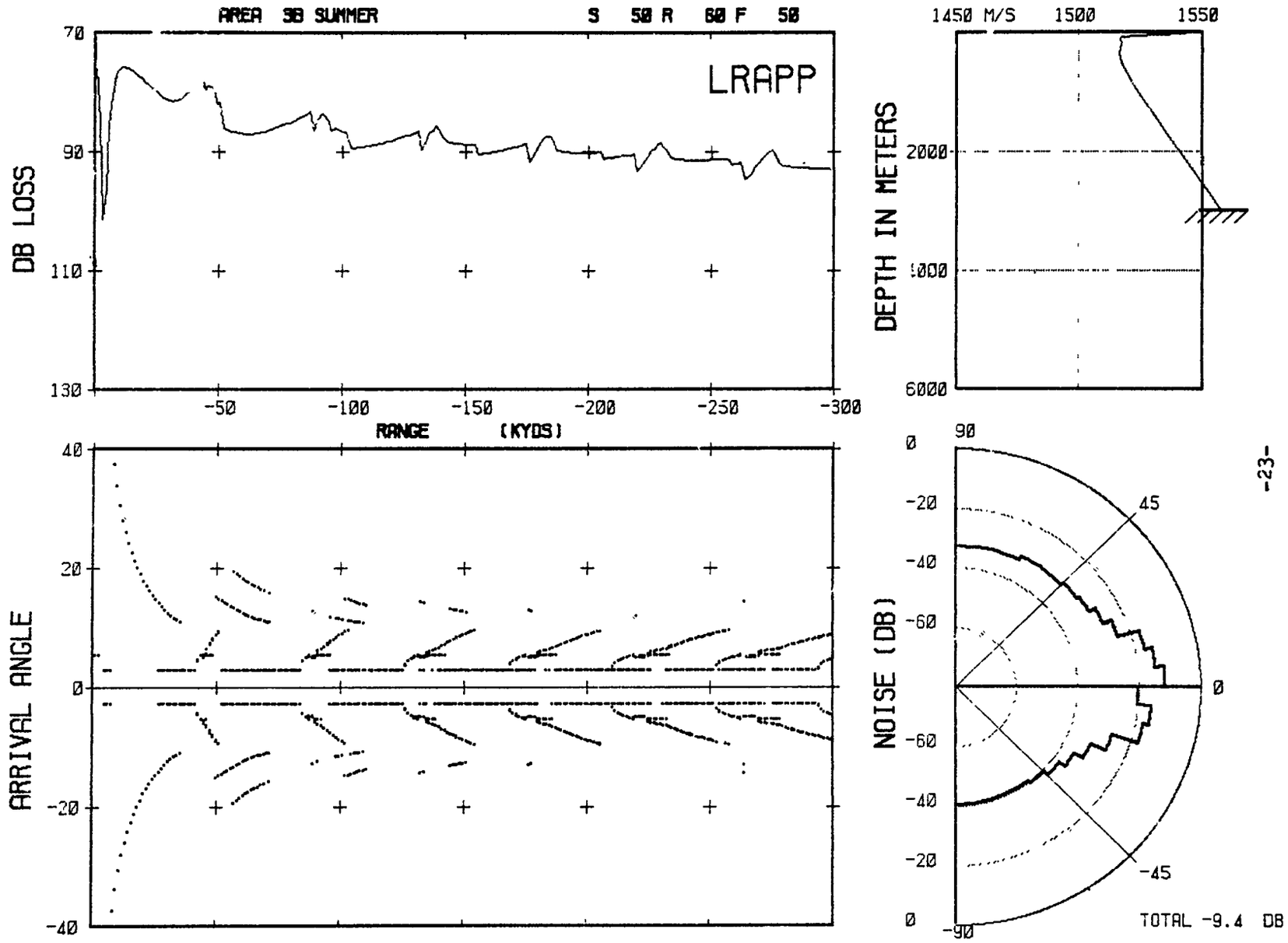
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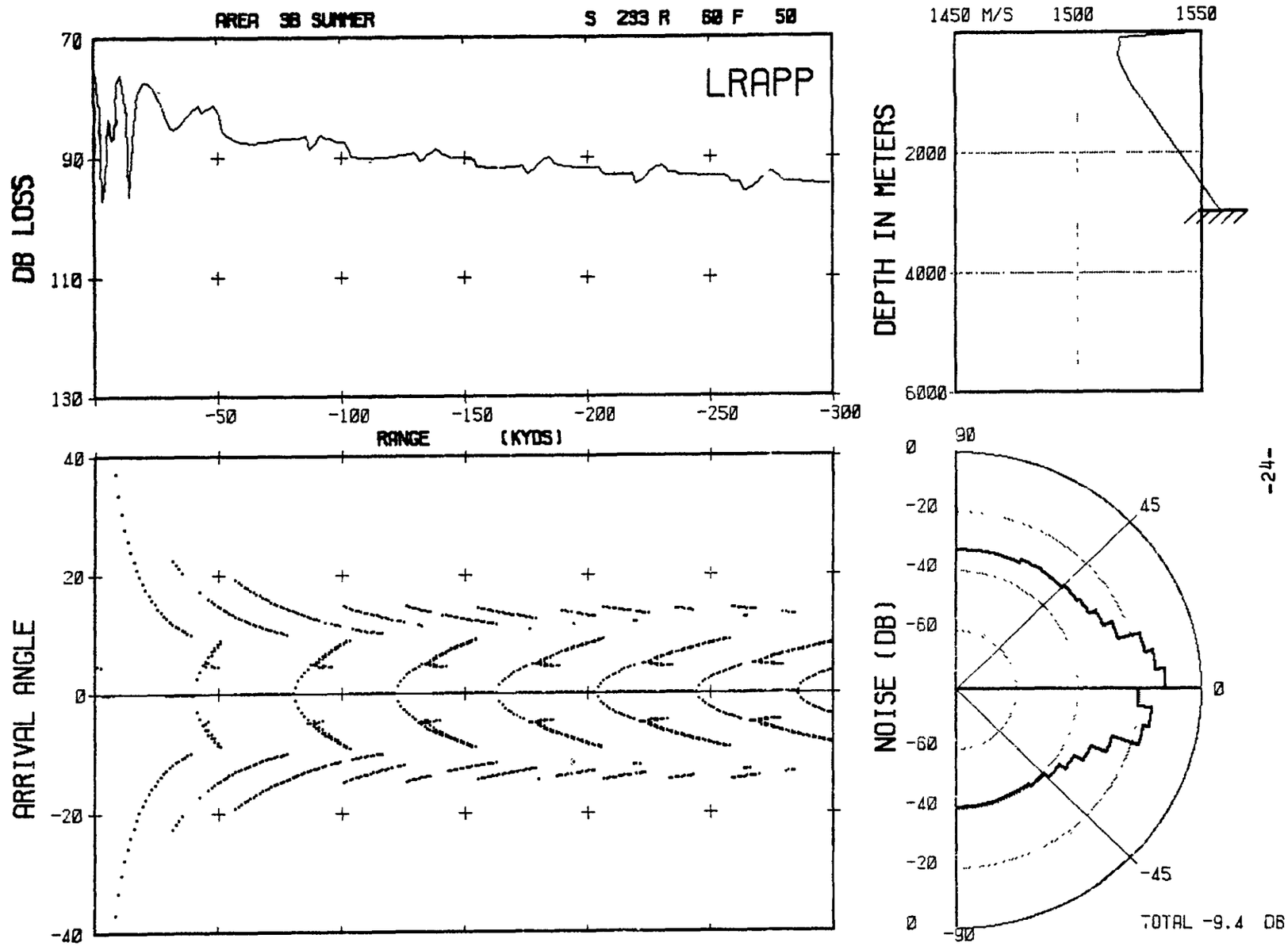
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90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
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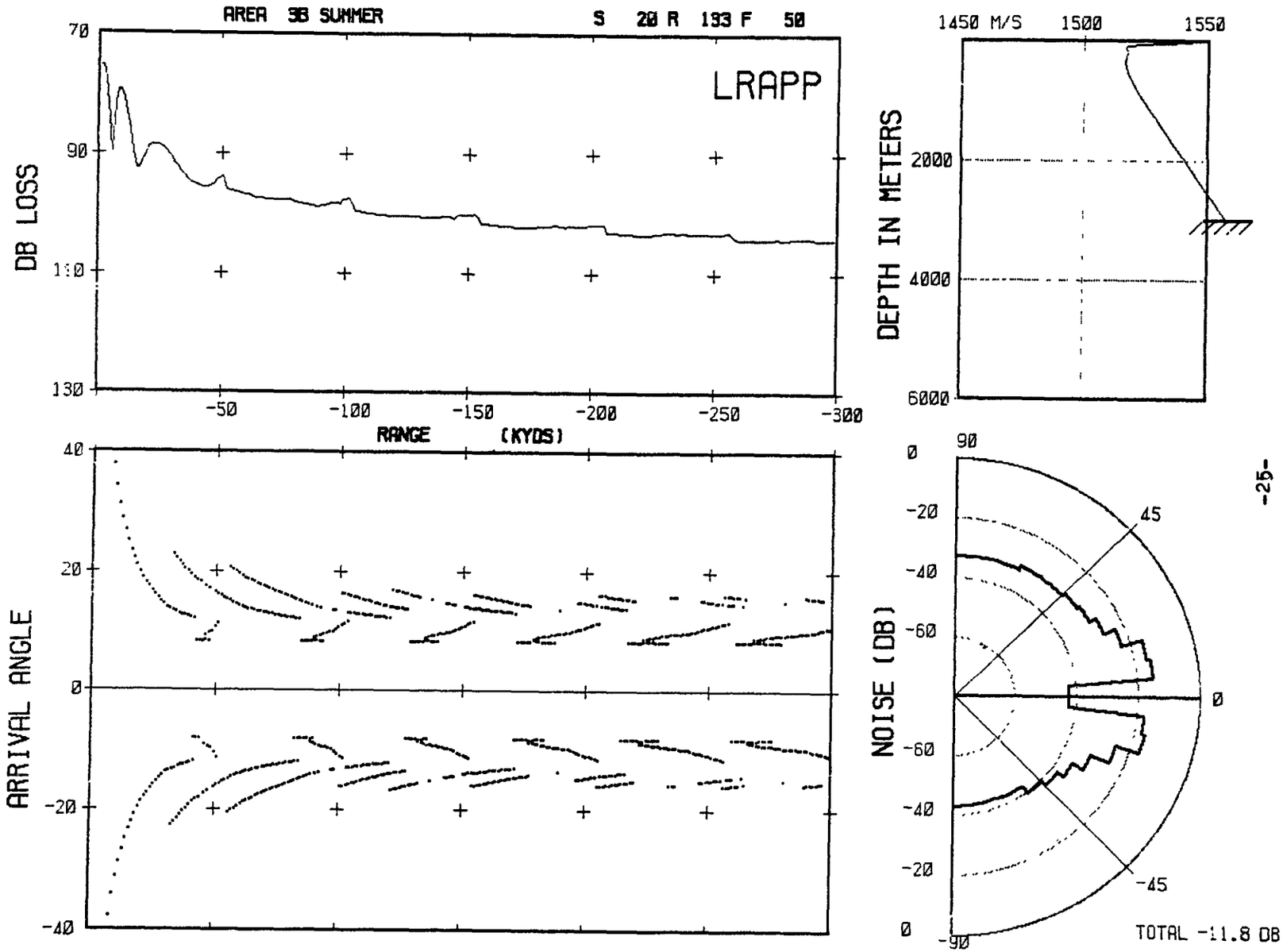
AREA 3B SUMMER
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DB LOSS
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RANGE (KYDS)
1450 M/S
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1550
DEPTH IN METERS
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NOISE (DB)
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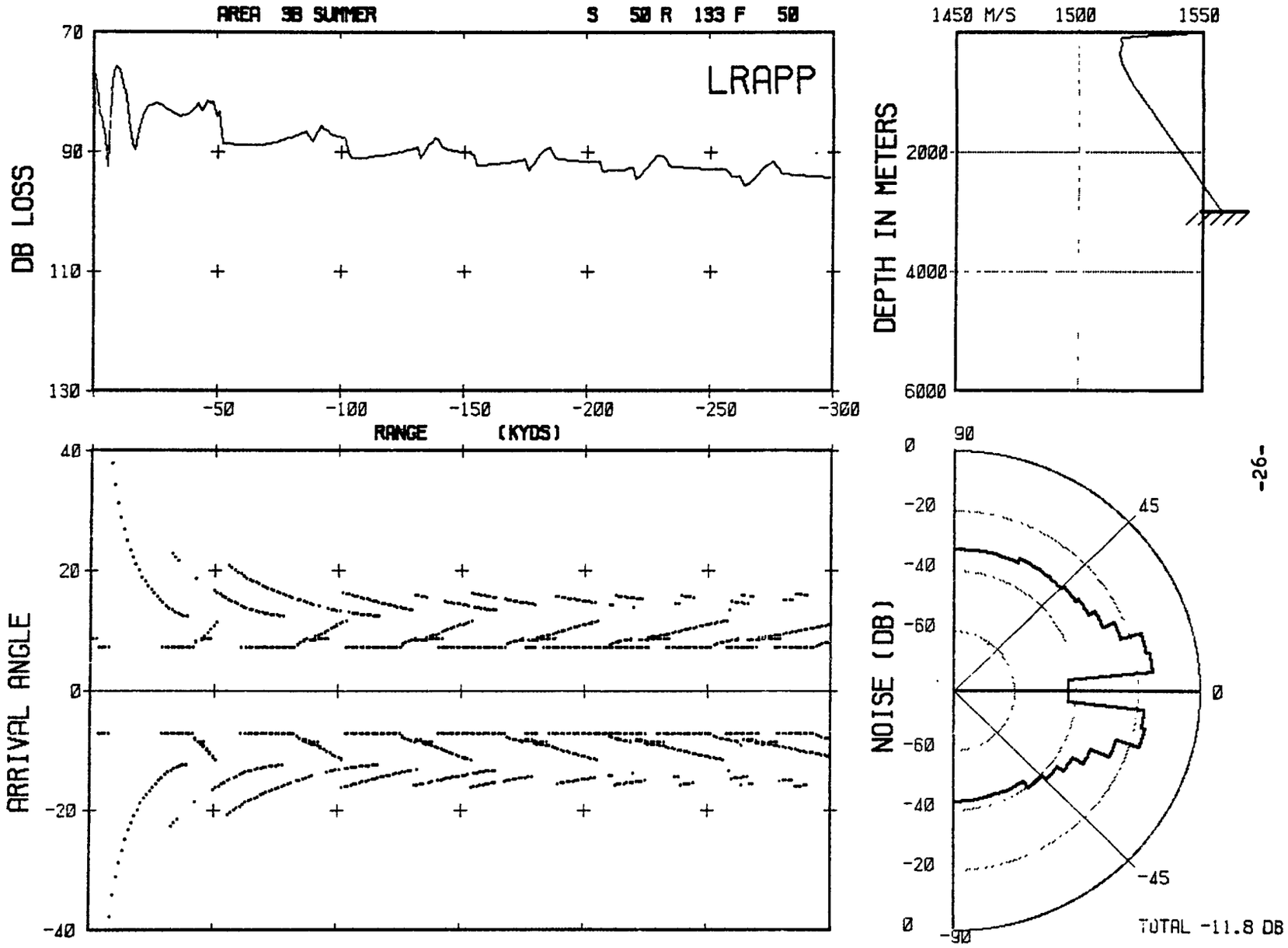
TOTAL -11.8 DB


AREA 3B SUMMER
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DB LOSS
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RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
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ARRIVAL ANGLE
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NOISE (DB)
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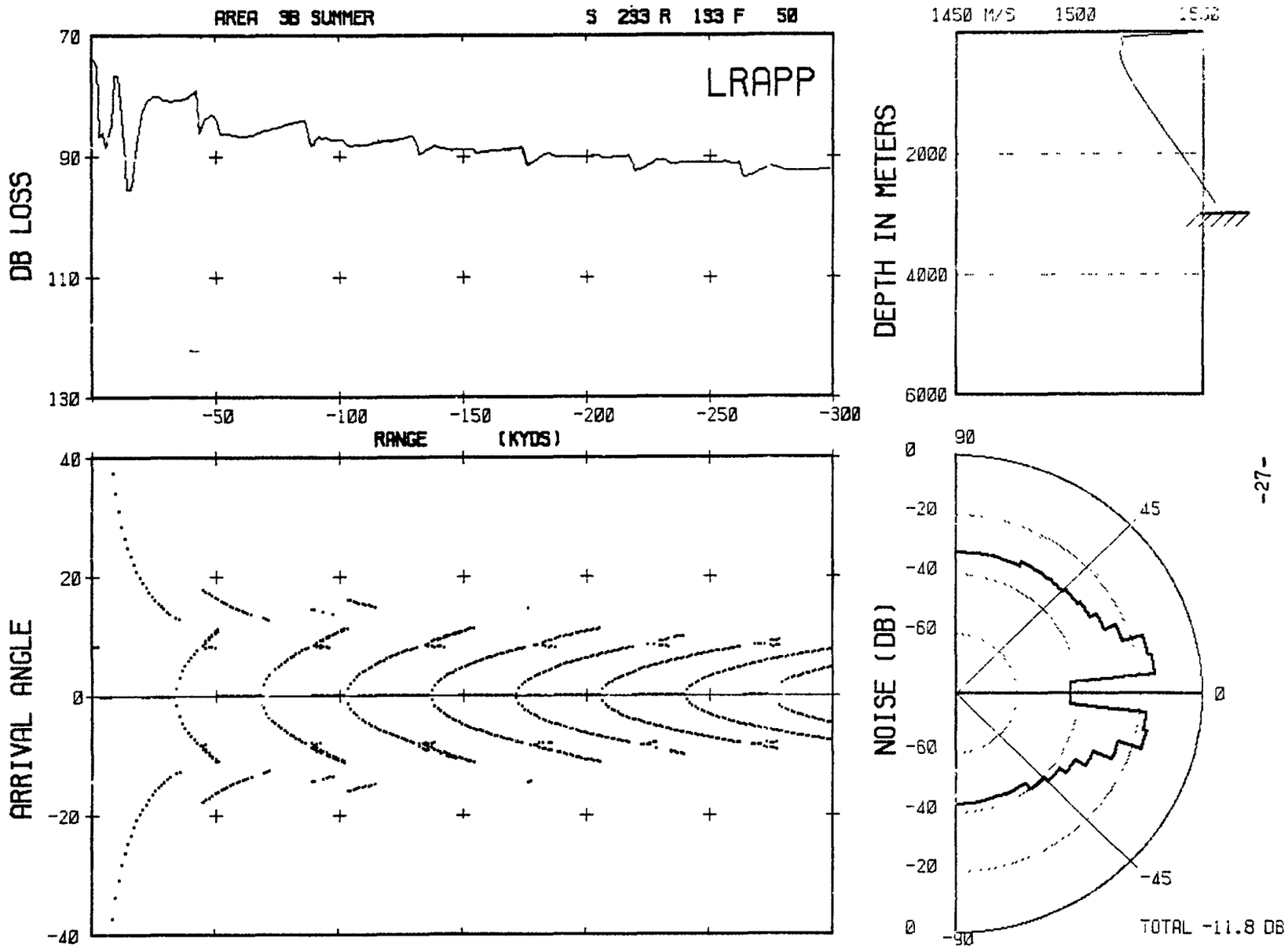
TOTAL -11.8 DB


AREA 3B SUMMER
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DB LOSS
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RANGE (KYDS)
1450 M/S
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DEPTH IN METERS
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4000
6000
ARRIVAL ANGLE
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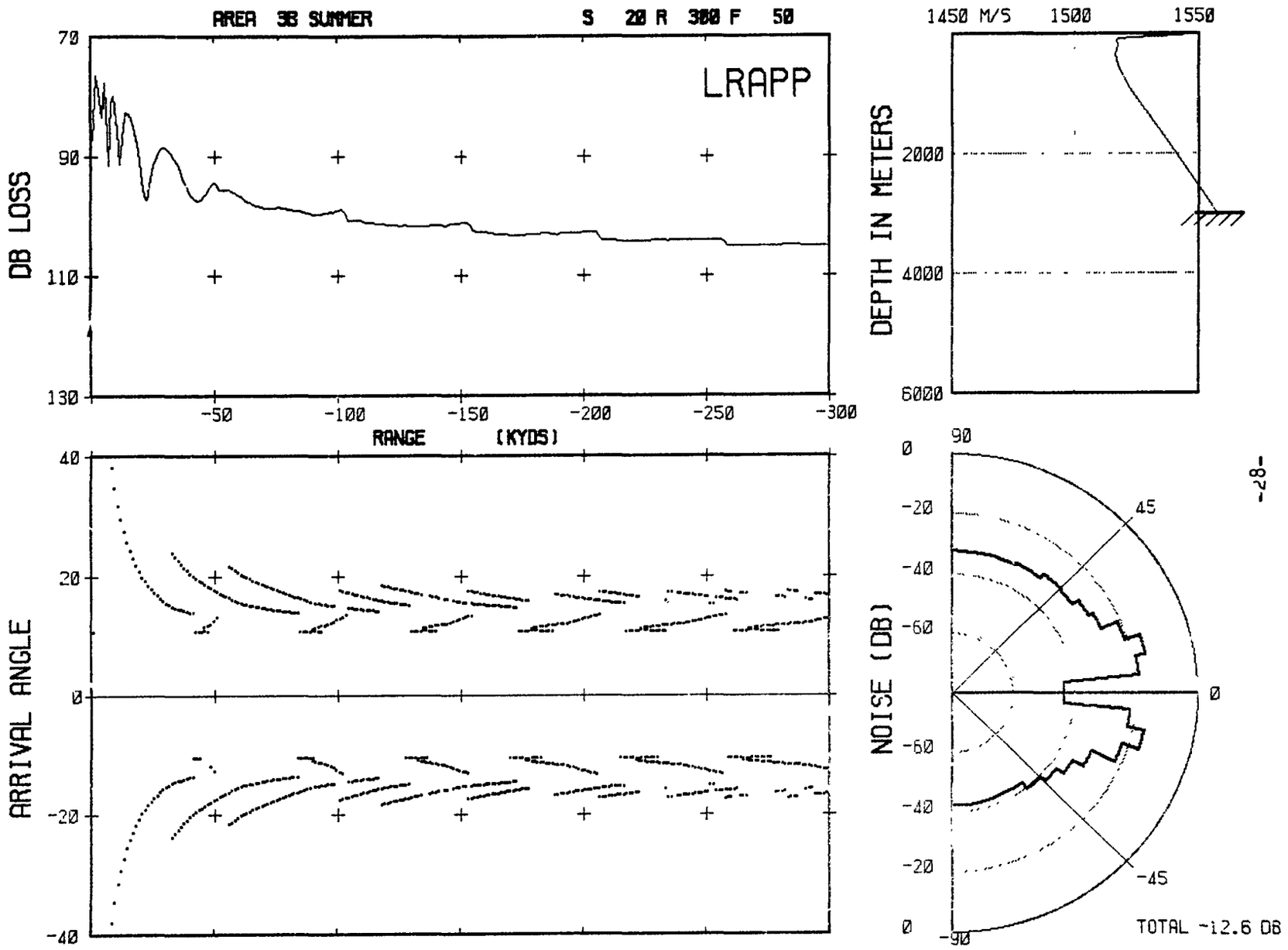
TOTAL -11.8 DB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DB LOSS
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-50
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-200
-250
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RANGE (KYDS)
1450 M/S
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1550
DEPTH IN METERS
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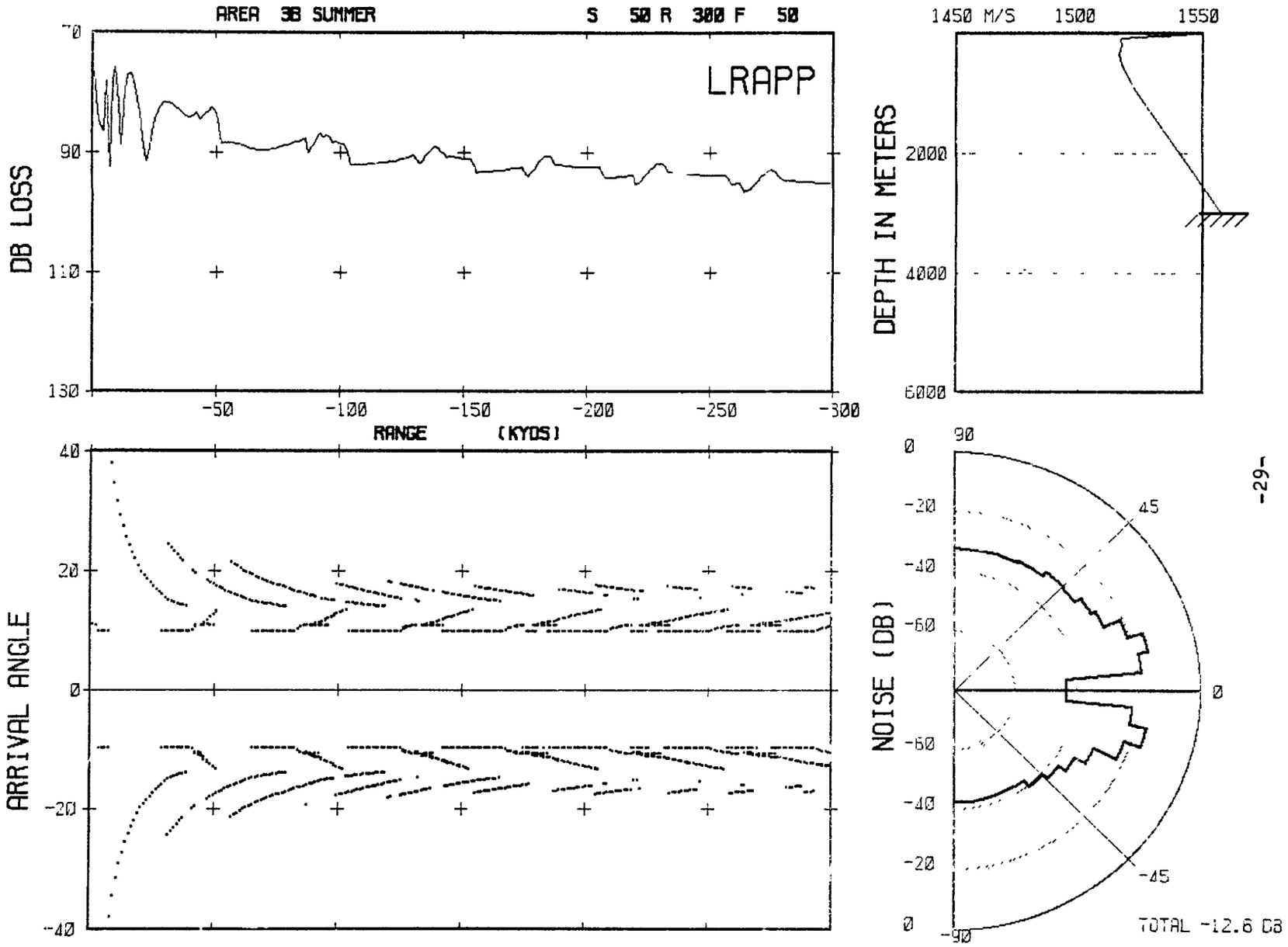
TOTAL -12.6 DB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RANGE (KYDS)
1450 M/S 1500 1550
DEPTH IN METERS
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ARRIVAL ANGLE
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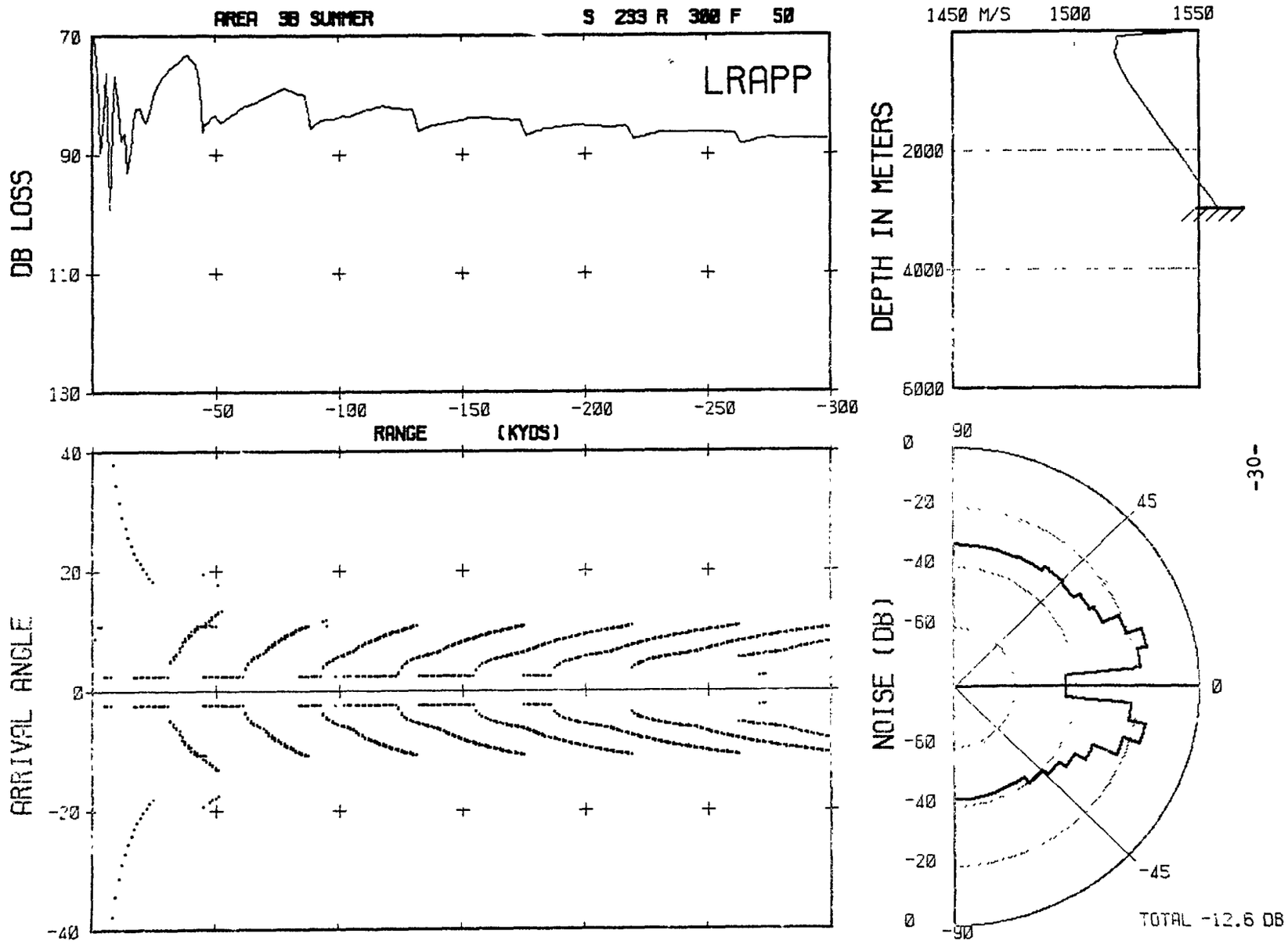
TOTAL -12.6 DB


AREA 3B SUMMER
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RANGE (KYDS)
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DEPTH IN METERS
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ARRIVAL ANGLE
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NOISE (DB)
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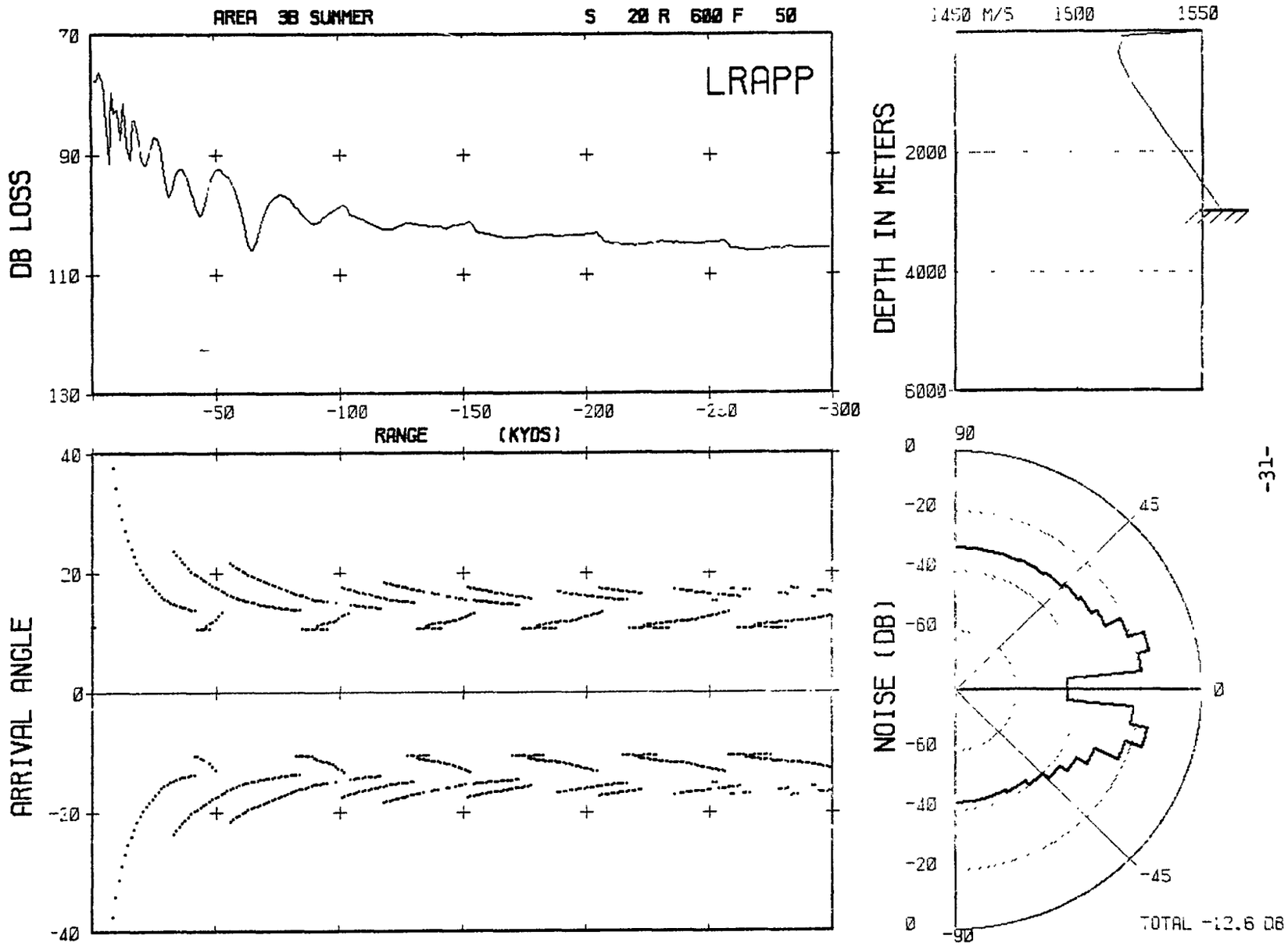
TOTAL -12.6 DB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RANGE (KYDS)
1450 M/S
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DEPTH IN METERS
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ARRIVAL ANGLE
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NOISE (DB)
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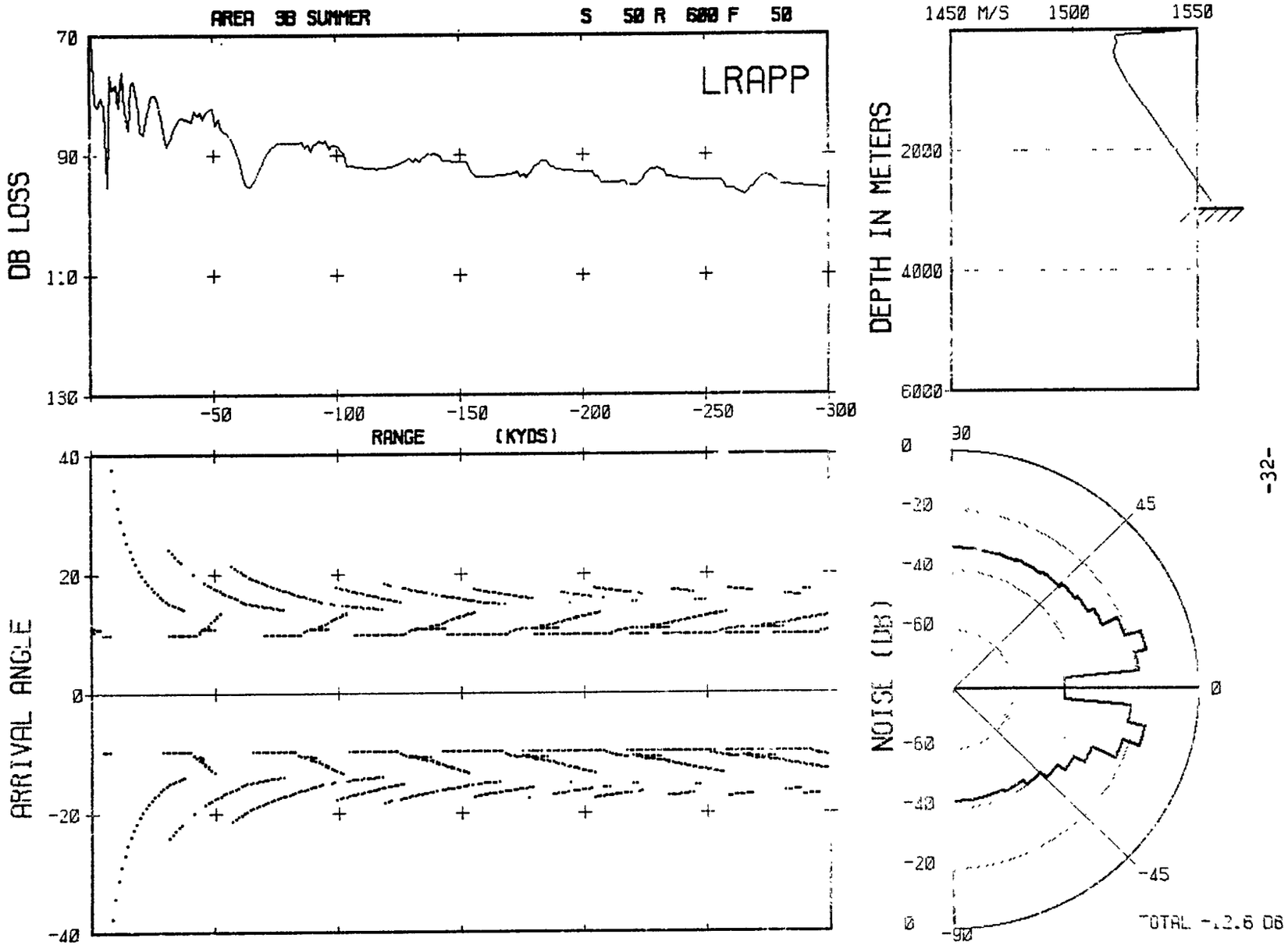
TOTAL -12.6 DB


AREA 3B SUMMER
S 50 R 600 F 50
LRAPP
DB LOSS
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RANGE (KYDS)
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1550
DEPTH IN METERS
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ARRIVAL ANGLE
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NOISE (DB)
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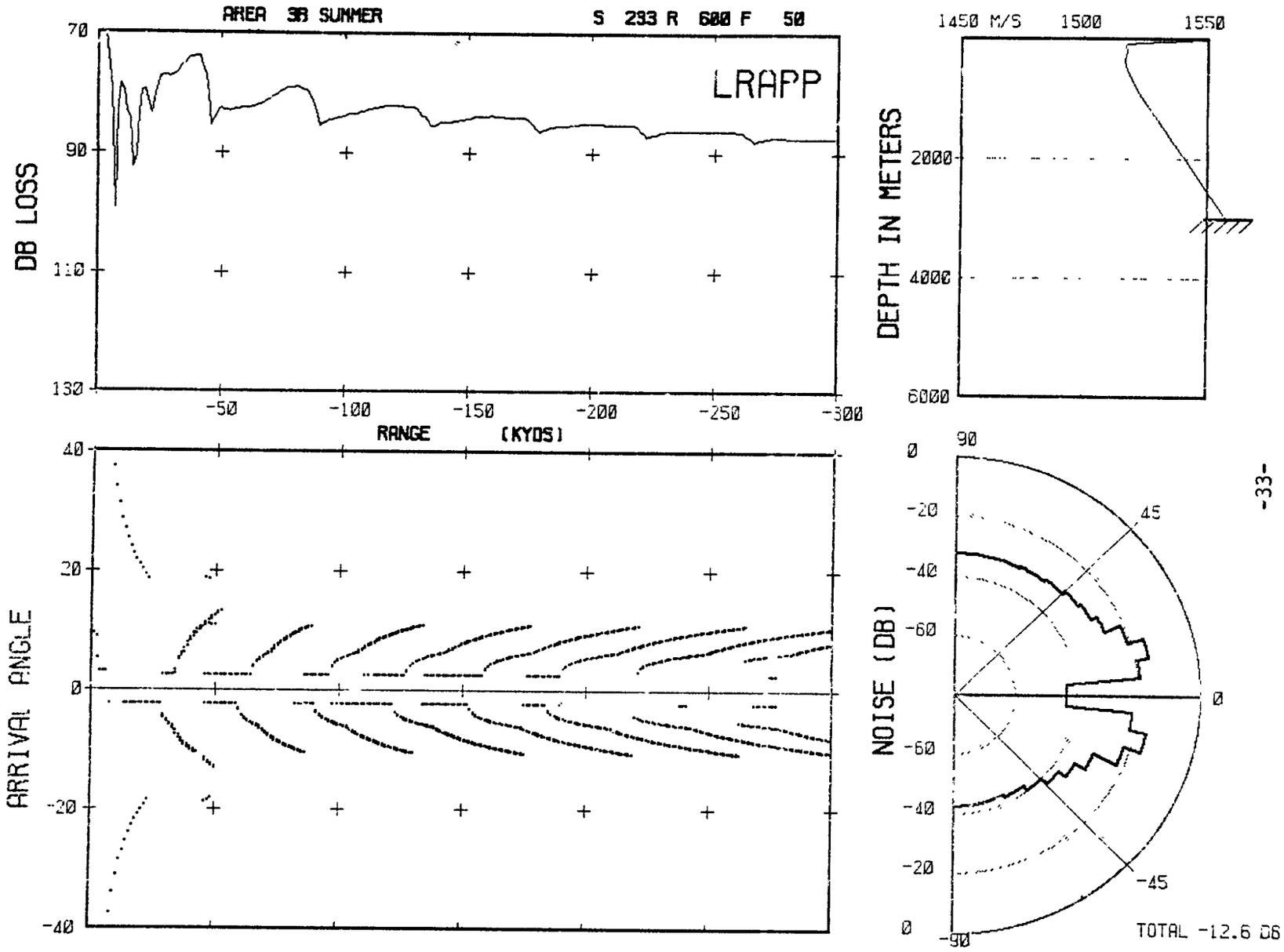
TOTAL -12.6 DB


AREA 3B SUMMER
S 233 R 600 F 50
LRAPP
DB LOSS
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RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
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ARRIVAL ANGLE
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NOISE (DB)
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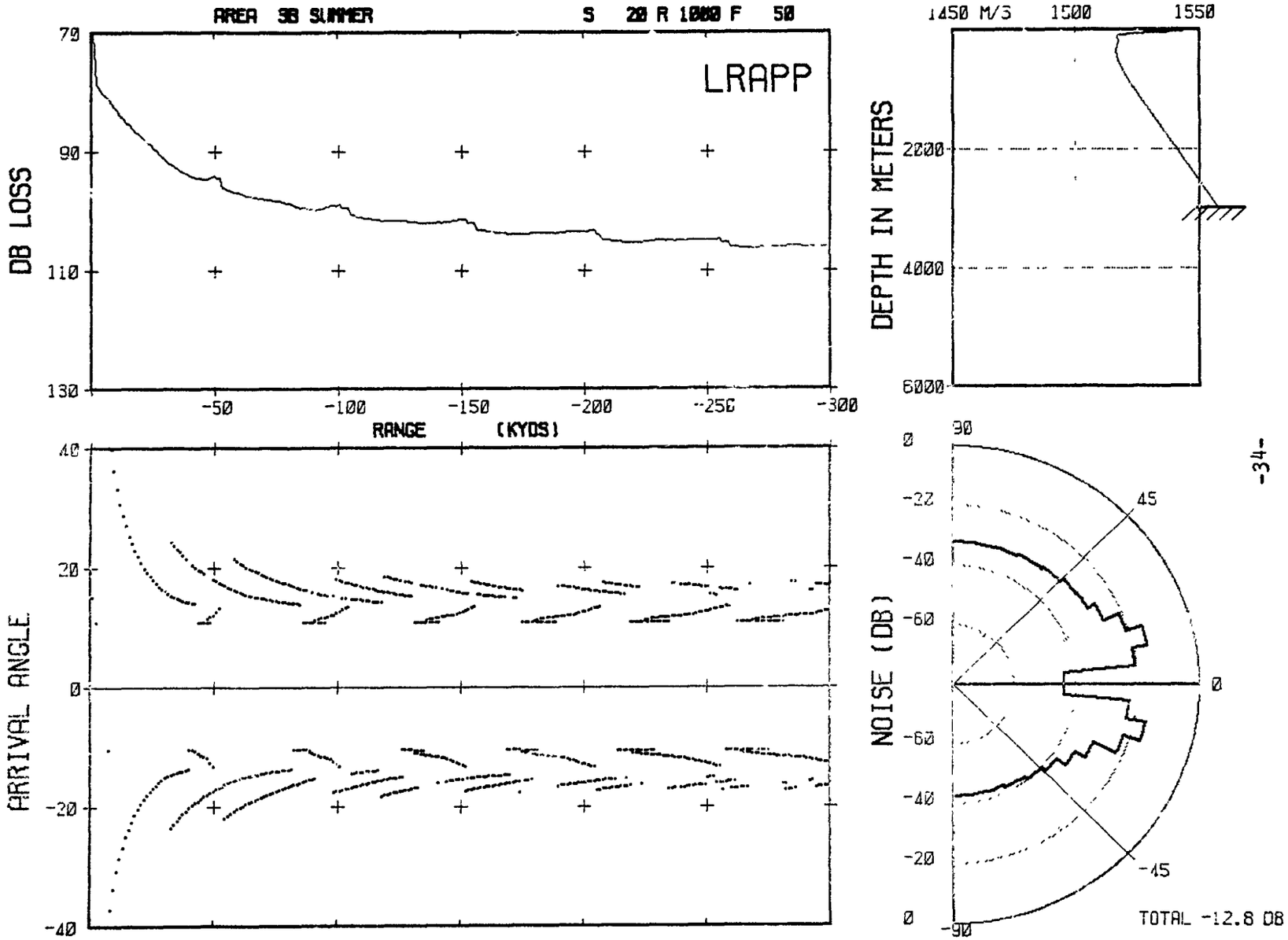
TOTAL -12.6 DB


AREA 3B SUMMER S 20 R 1000 F 50
LRAPP
DB LOSS
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130
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RANGE (KYDS)
1450 M/S
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1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
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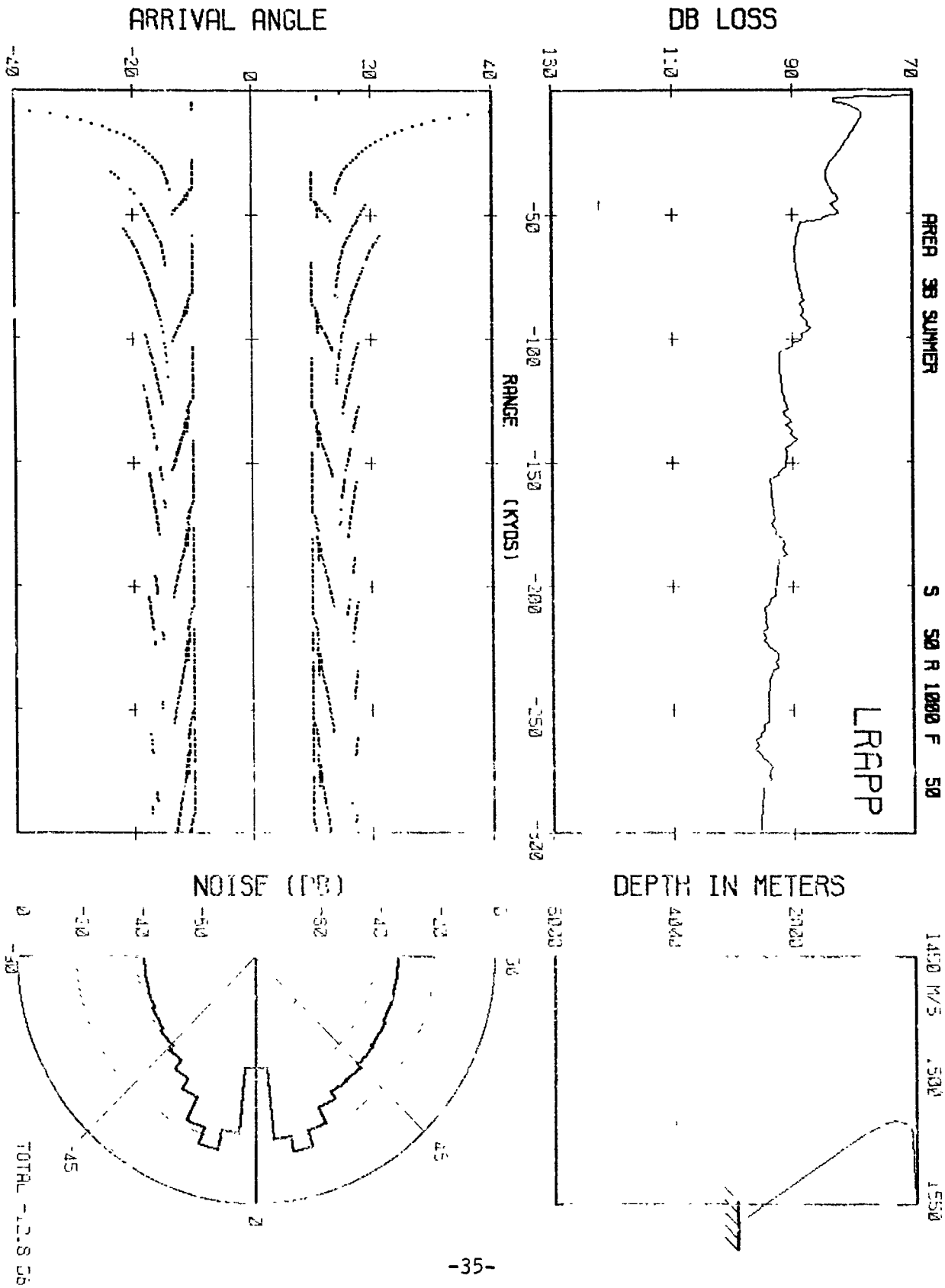
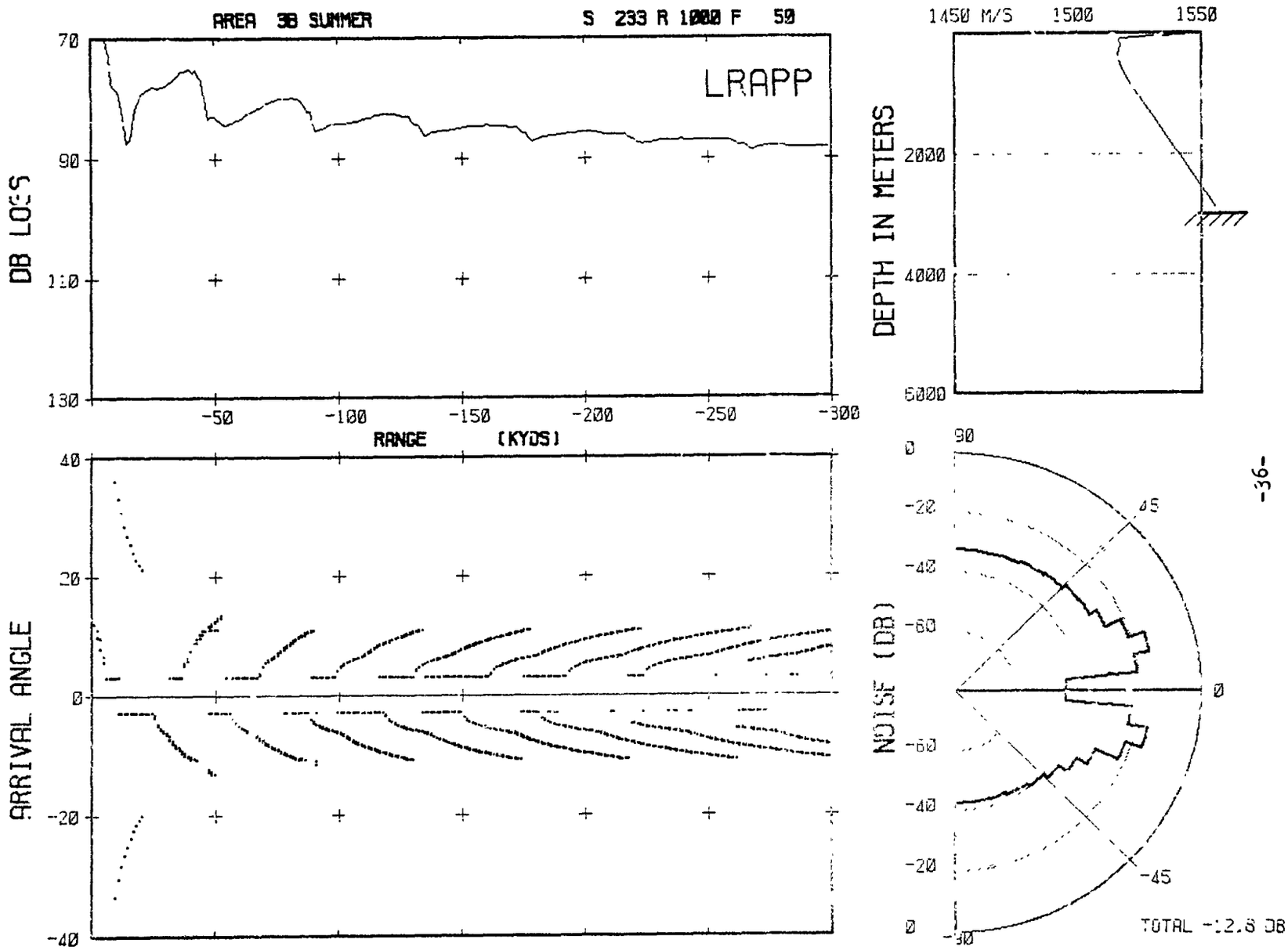
45
-45
TOTAL -12.8 DB


DB LOSS
ARRIVAL ANGLE
AREA 9B SUMMER
S 50 R 1000 F 50
LRAPP
RANGE (KYDS)
DEPTH IN METERS
NOISE (DB)
1450 M/S
TOTAL -12.8 DB


AREA 3B SUMMER
S 233 R 1000 F 50
LRAPP
DB LOSS
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110
130
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-200
-250
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RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
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ARRIVAL ANGLE
40
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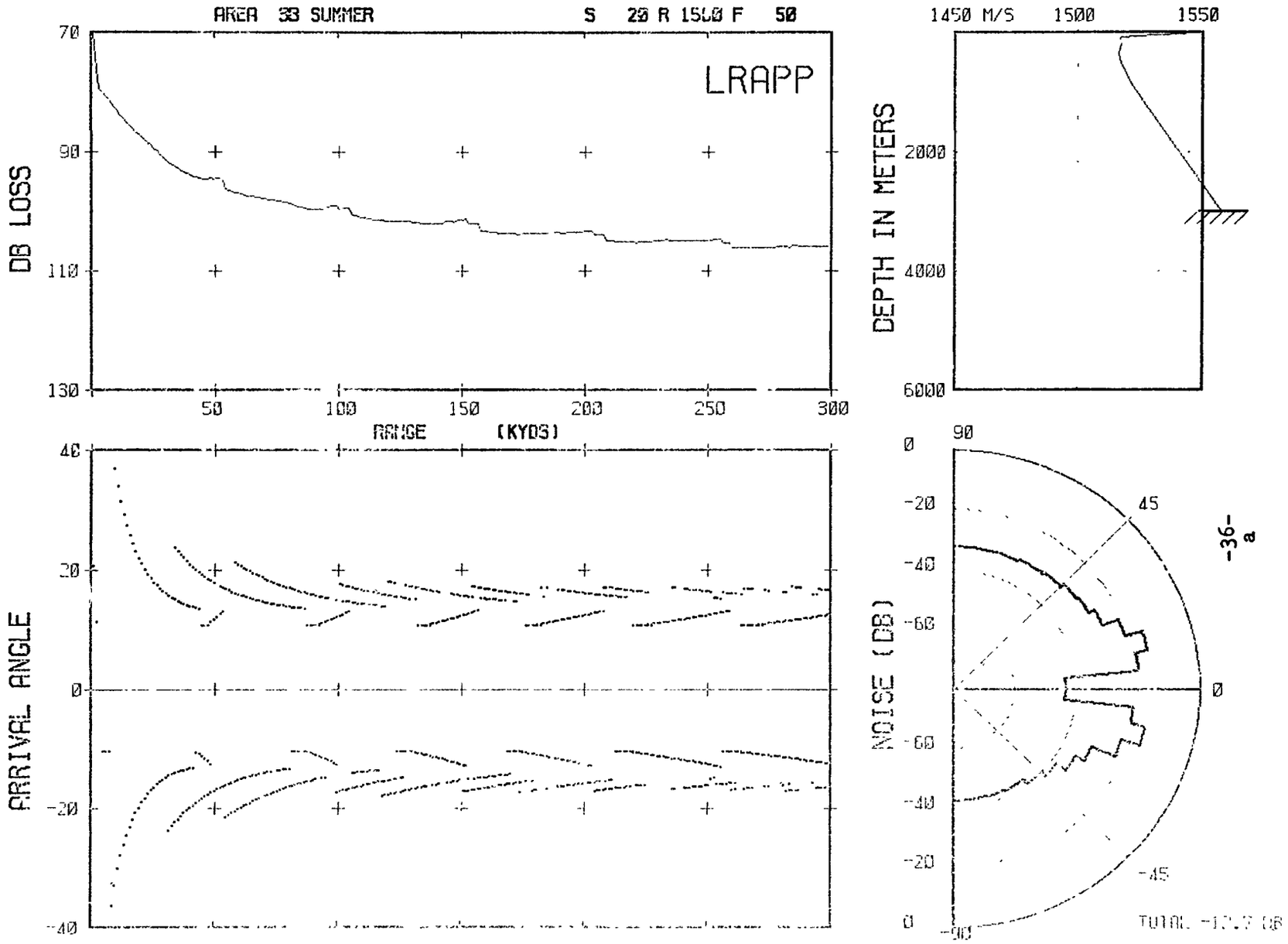
NOISE (DB)
90
45
-45
-90
TOTAL -12.8 DB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DB LOSS
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RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
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ARRIVAL ANGLE
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NOISE (DB)
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45
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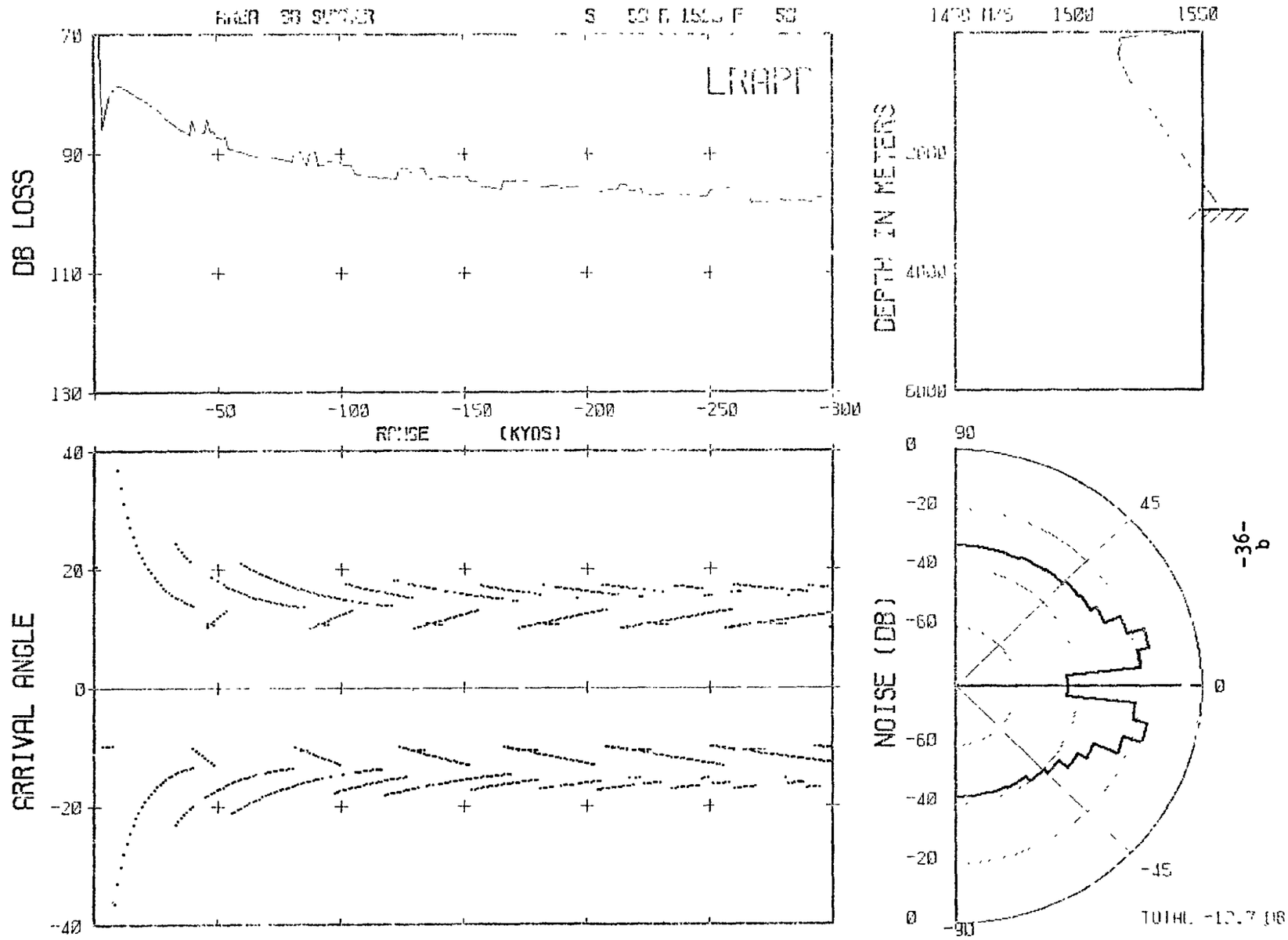
-90
TOTAL -12.7 DB


LRAPT
DB LOSS
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-300
RANGE (KYDS)
ARRIVAL ANGLE
40
20
0
-20
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DEPTH IN METERS
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6000
NOISE (DB)
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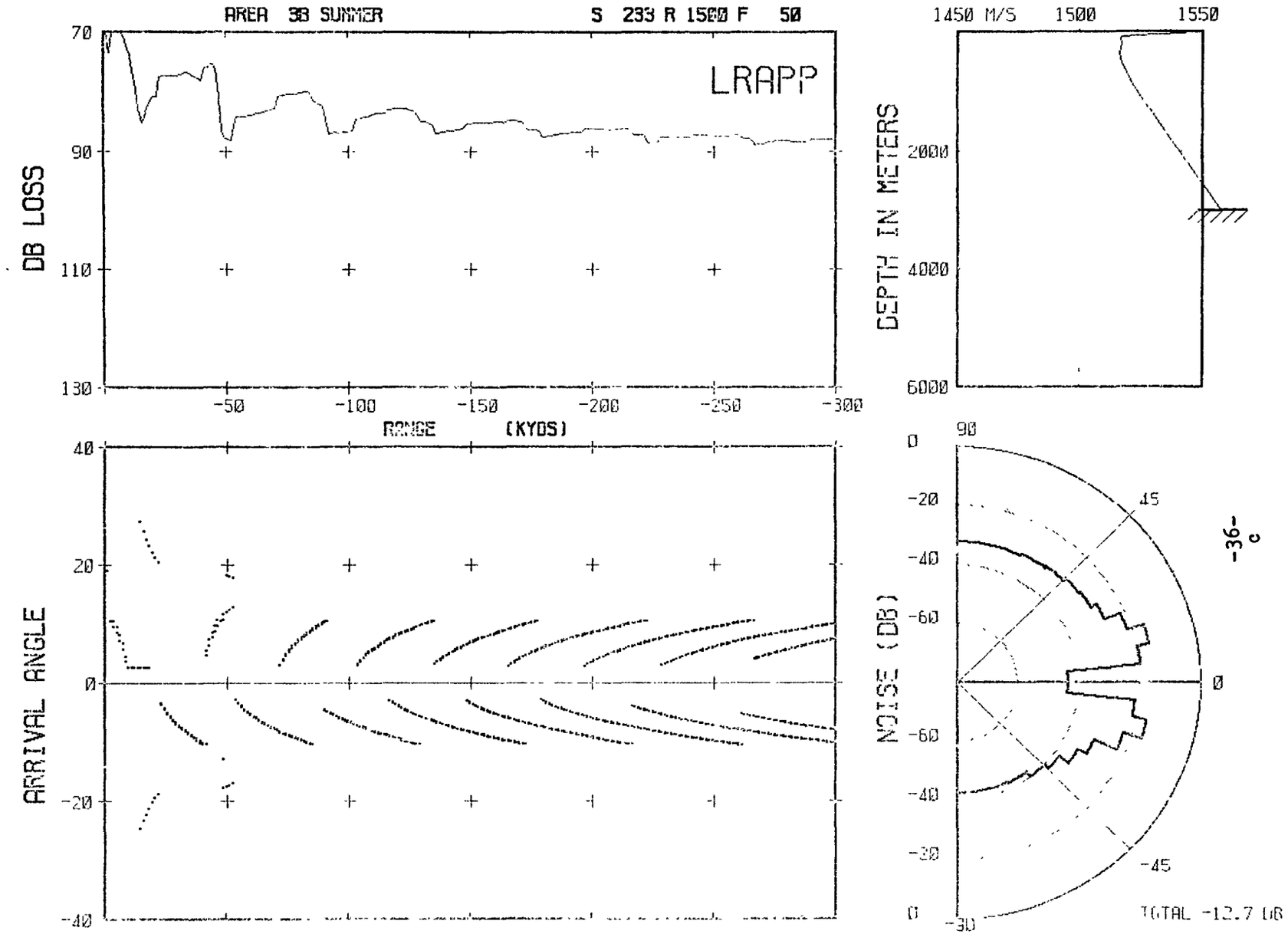
TOTAL -12.7 DB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LRAPP
DB LOSS
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RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
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-40
NOISE (DB)
0
-20
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-30
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45
0
-45
-90
TOTAL -12.7 DB

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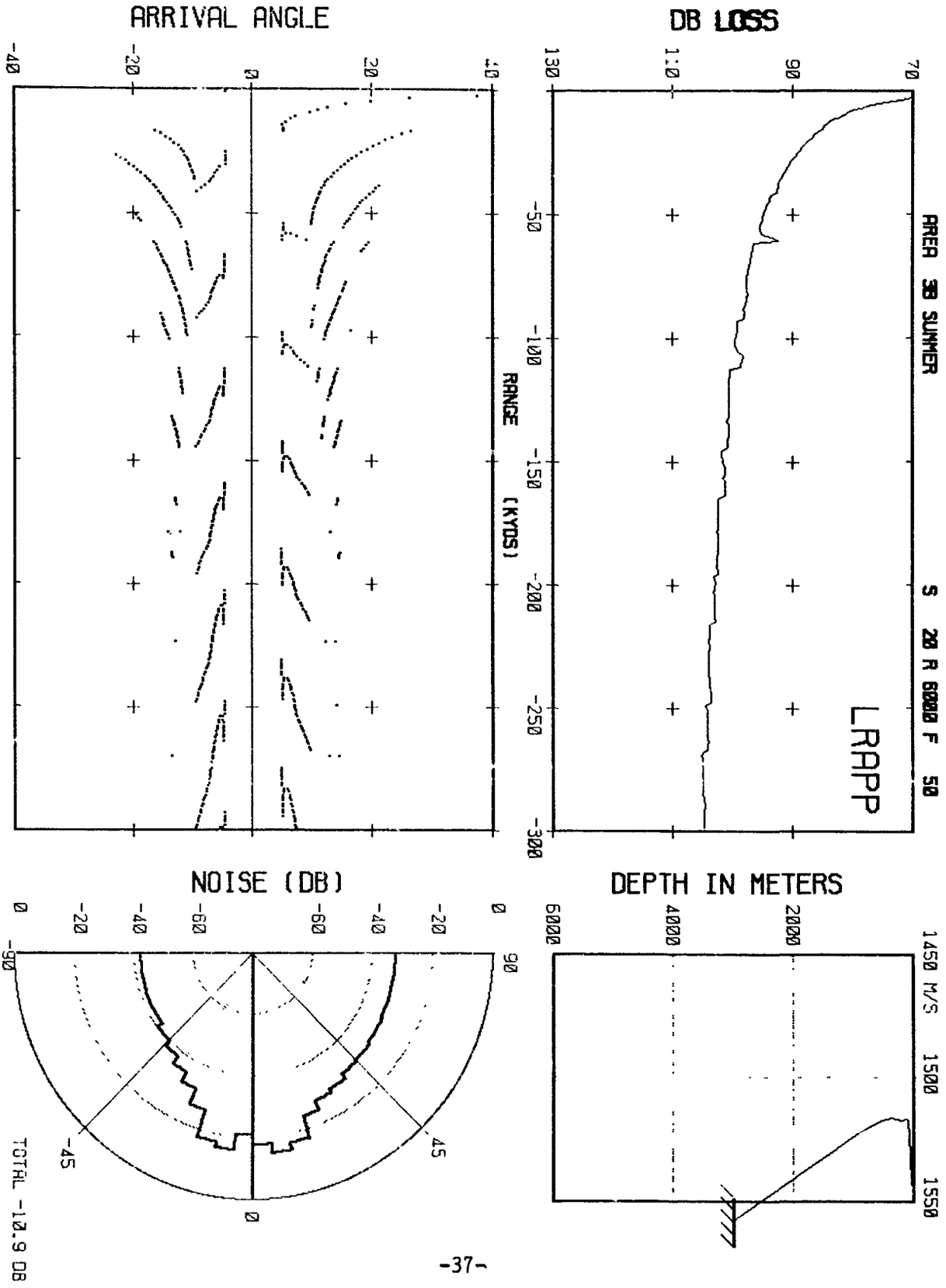

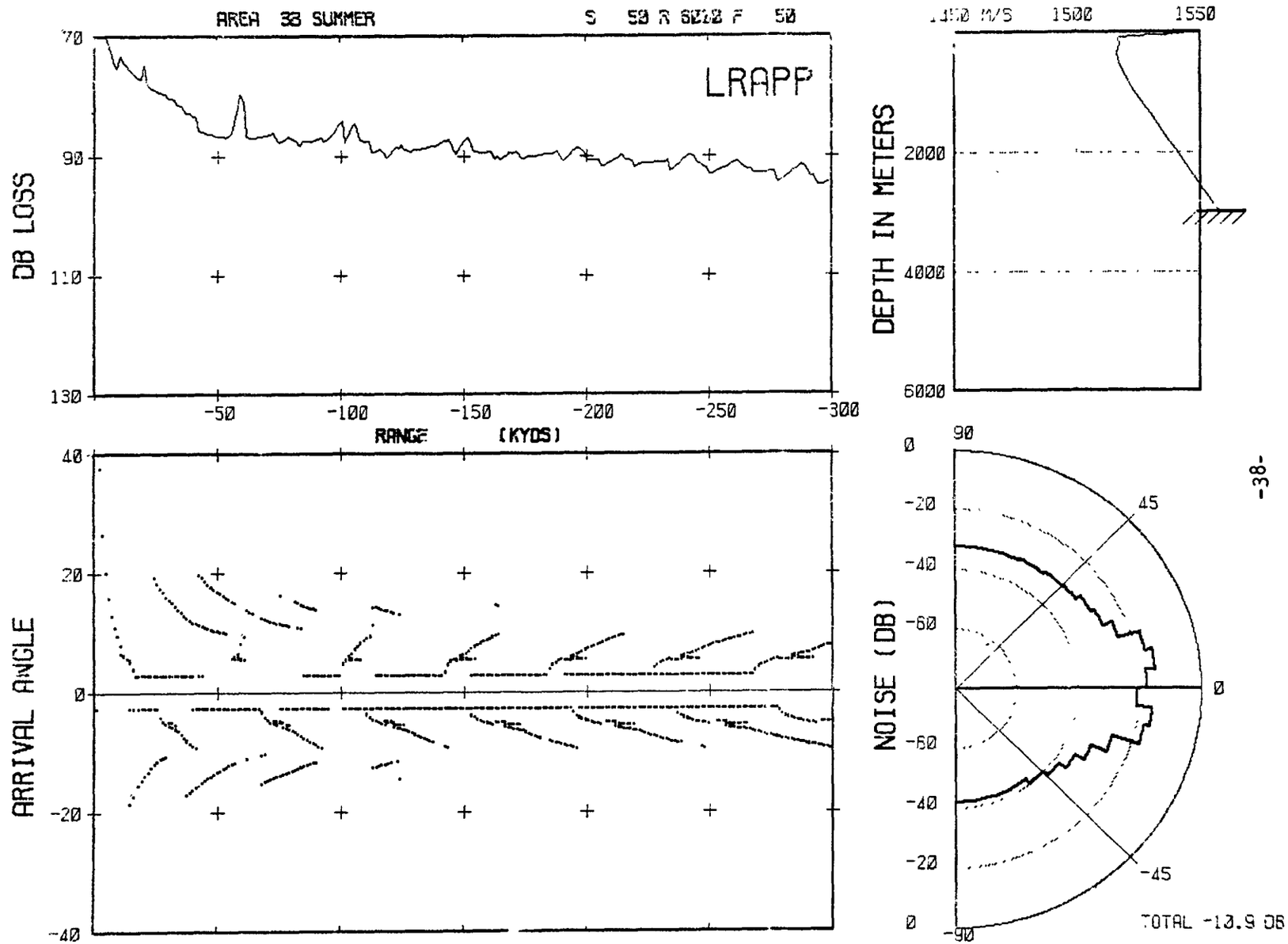
AREA 33 SUMMER
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LRAPP
DB LOSS
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RANGE (KYDS)
ARRIVAL ANGLE
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NOISE (DB)
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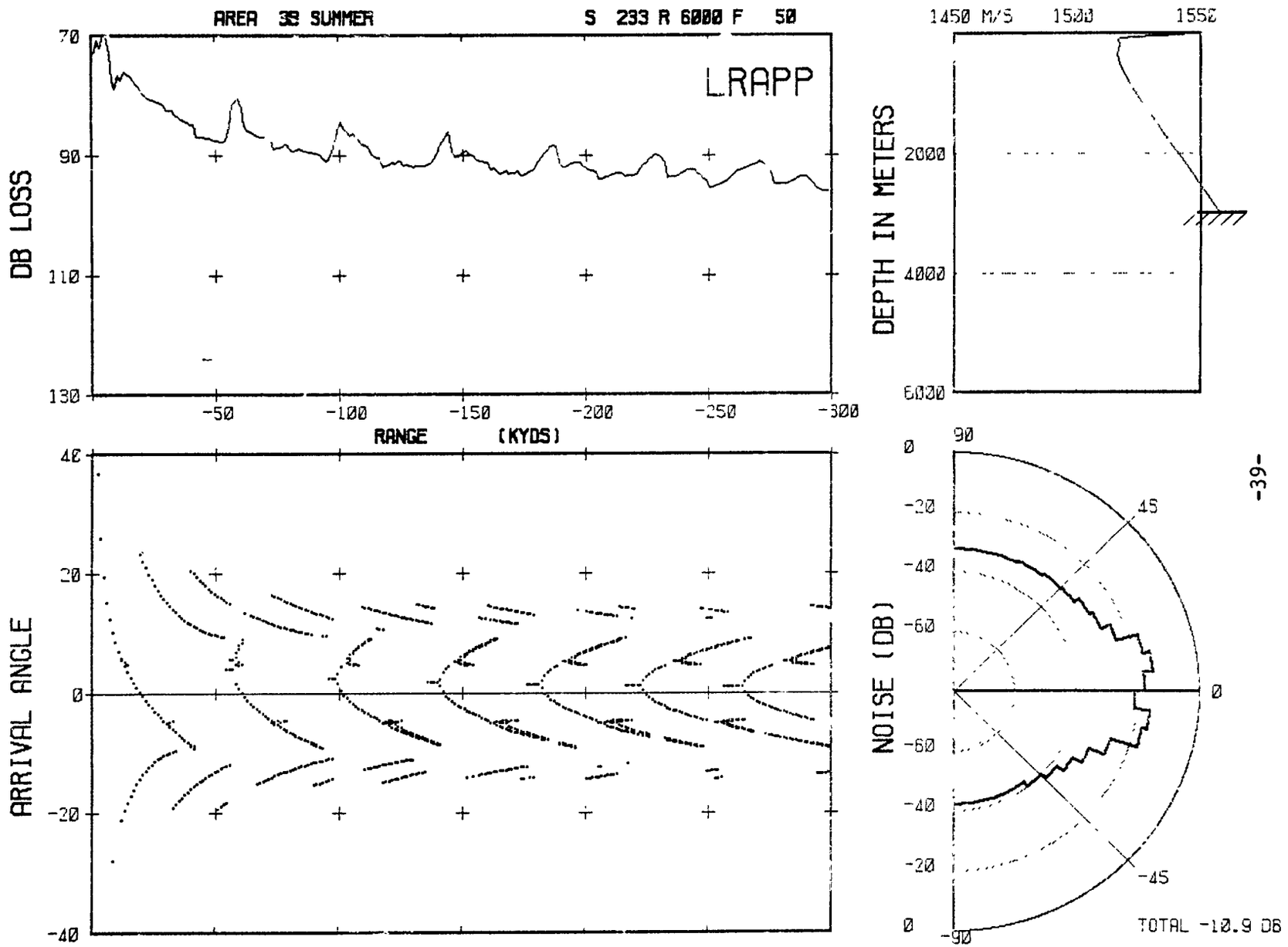
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RANGE (KYDS)
1450 M/S
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1550
DEPTH IN METERS
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6000
ARRIVAL ANGLE
40
20
0
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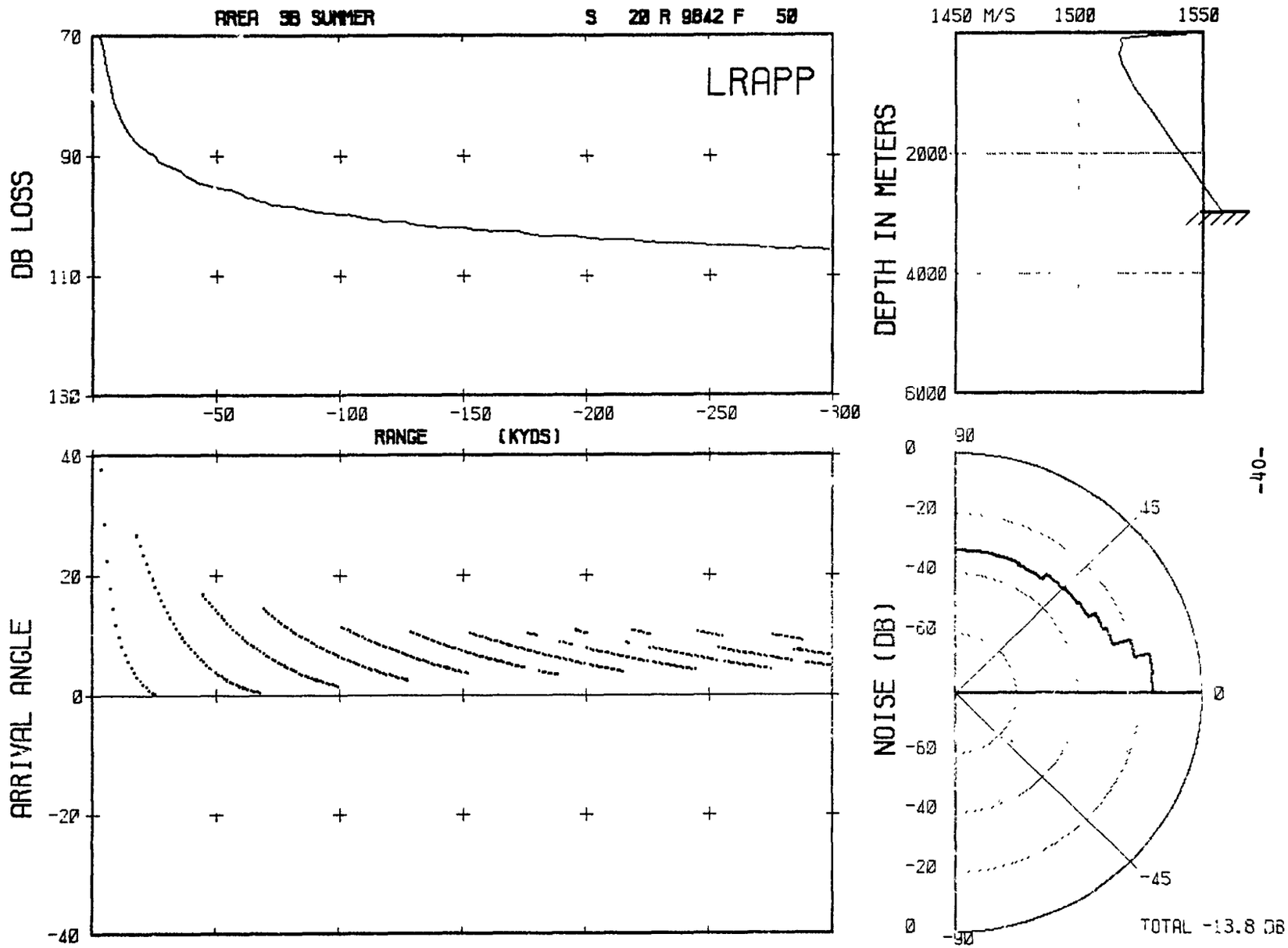
TOTAL -10.9 DB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DEPTH IN METERS
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4000
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ARRIVAL ANGLE
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NOISE (DB)
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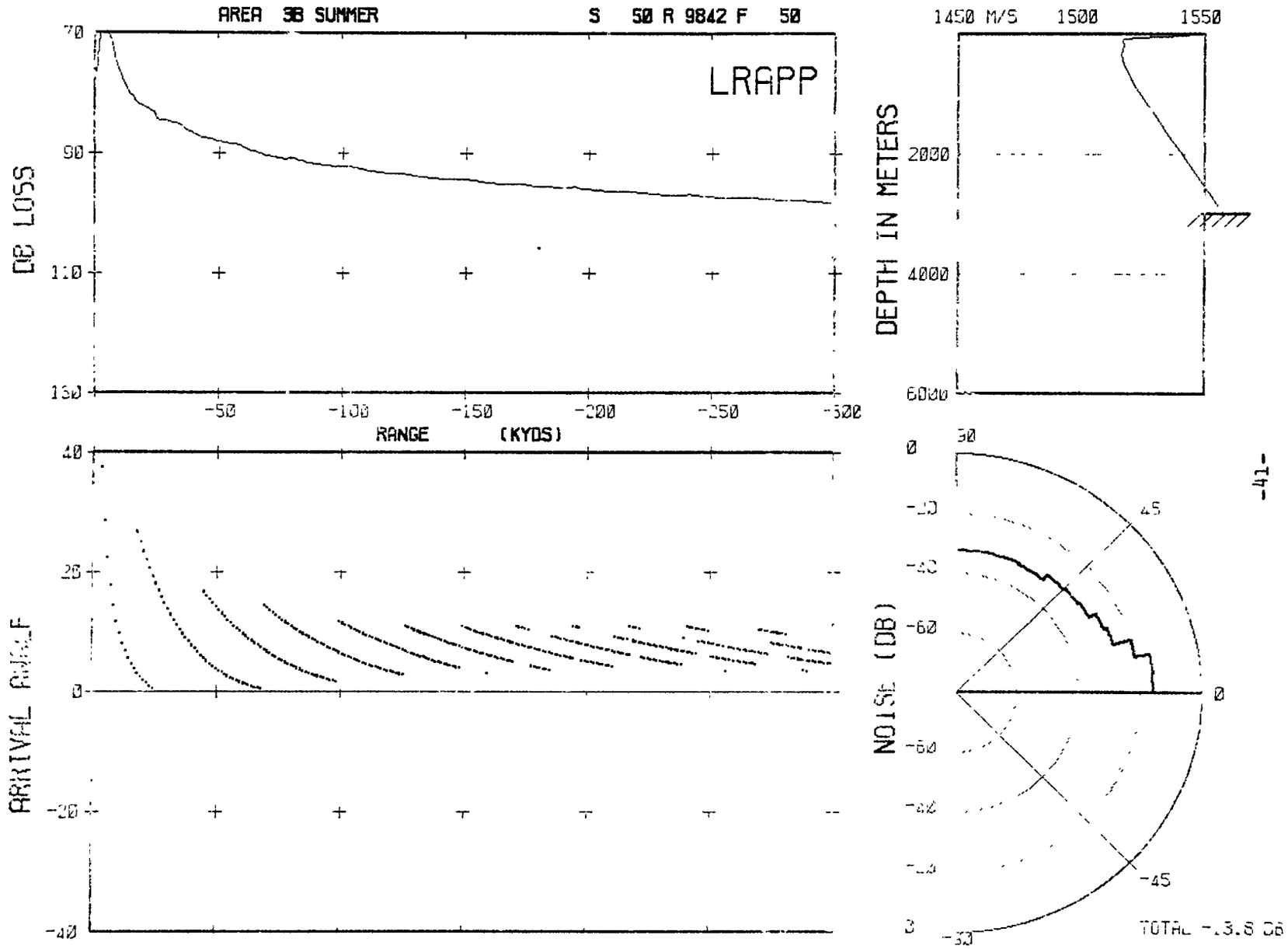
TOTAL -13.8 DB


AREA 3B SUMMER
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LRAPP
DB LOSS
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110
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-150
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RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
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ARRIVAL ANGLE
NOISE (DB)
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-45
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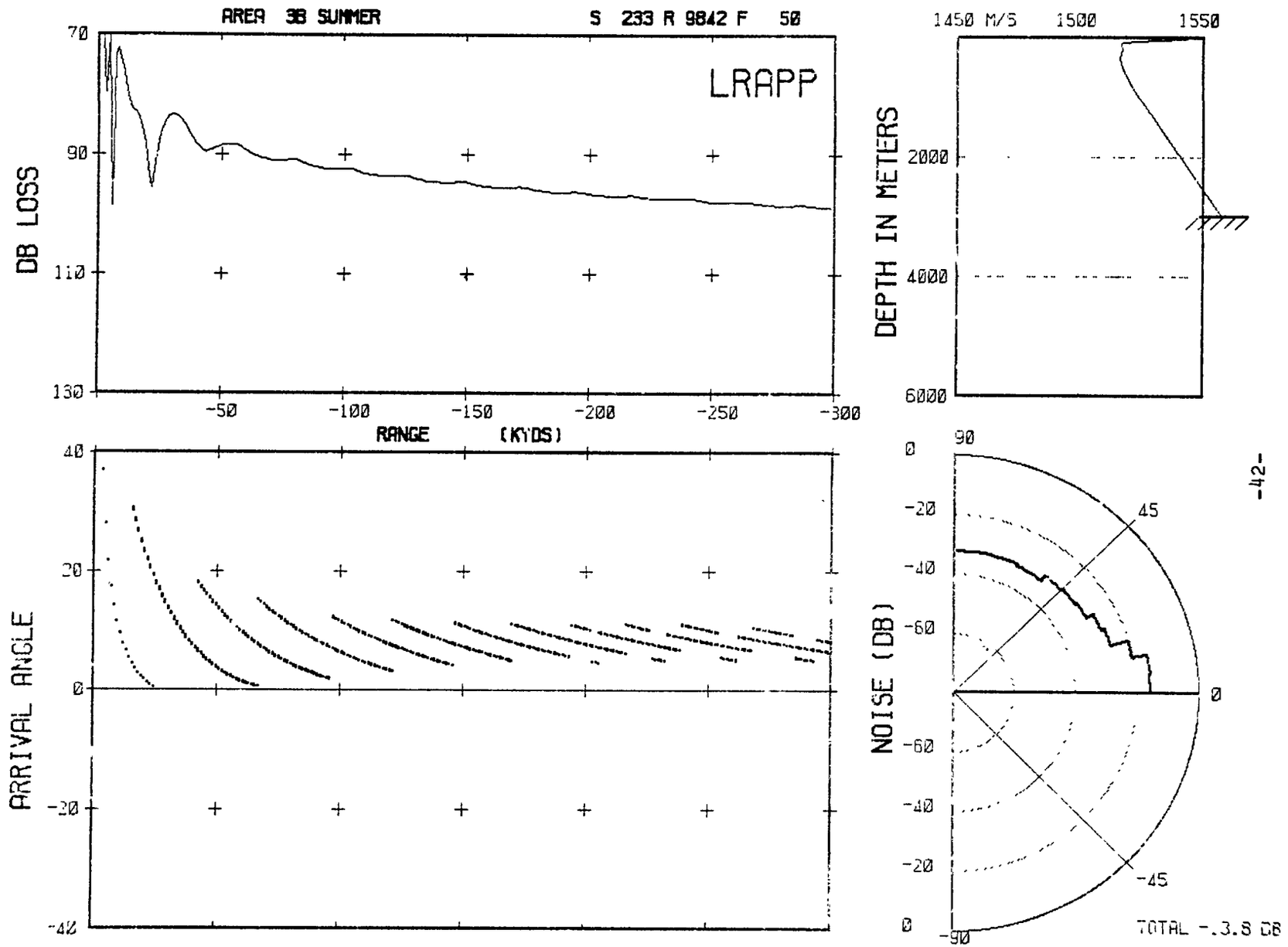
TOTAL -13.8 DB


AREA 3B SUMMER
S 233 R 9842 F 50
LRAPP
DB LOSS
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RANGE (KYDS)
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1550
DEPTH IN METERS
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ARRIVAL ANGLE
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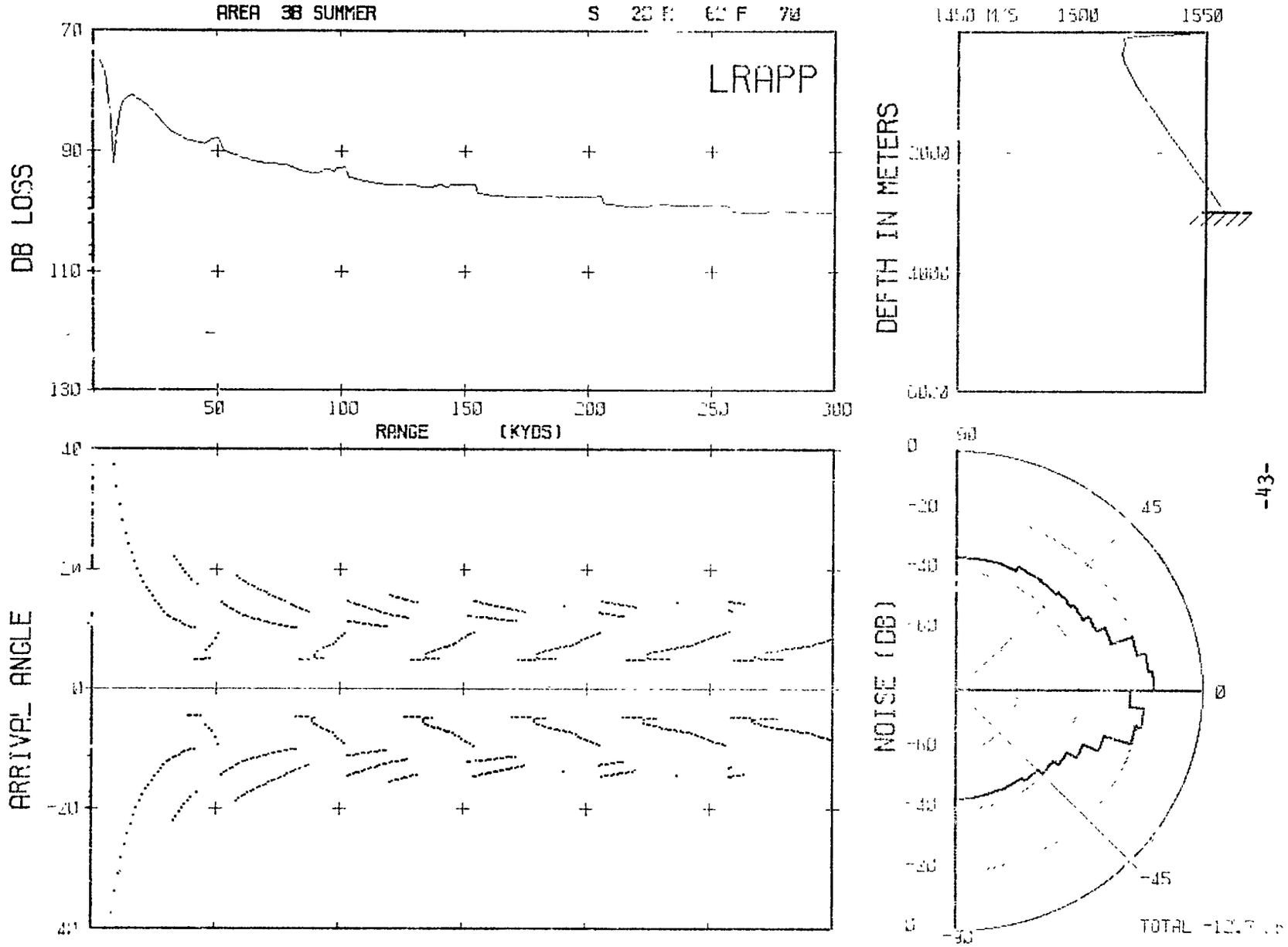
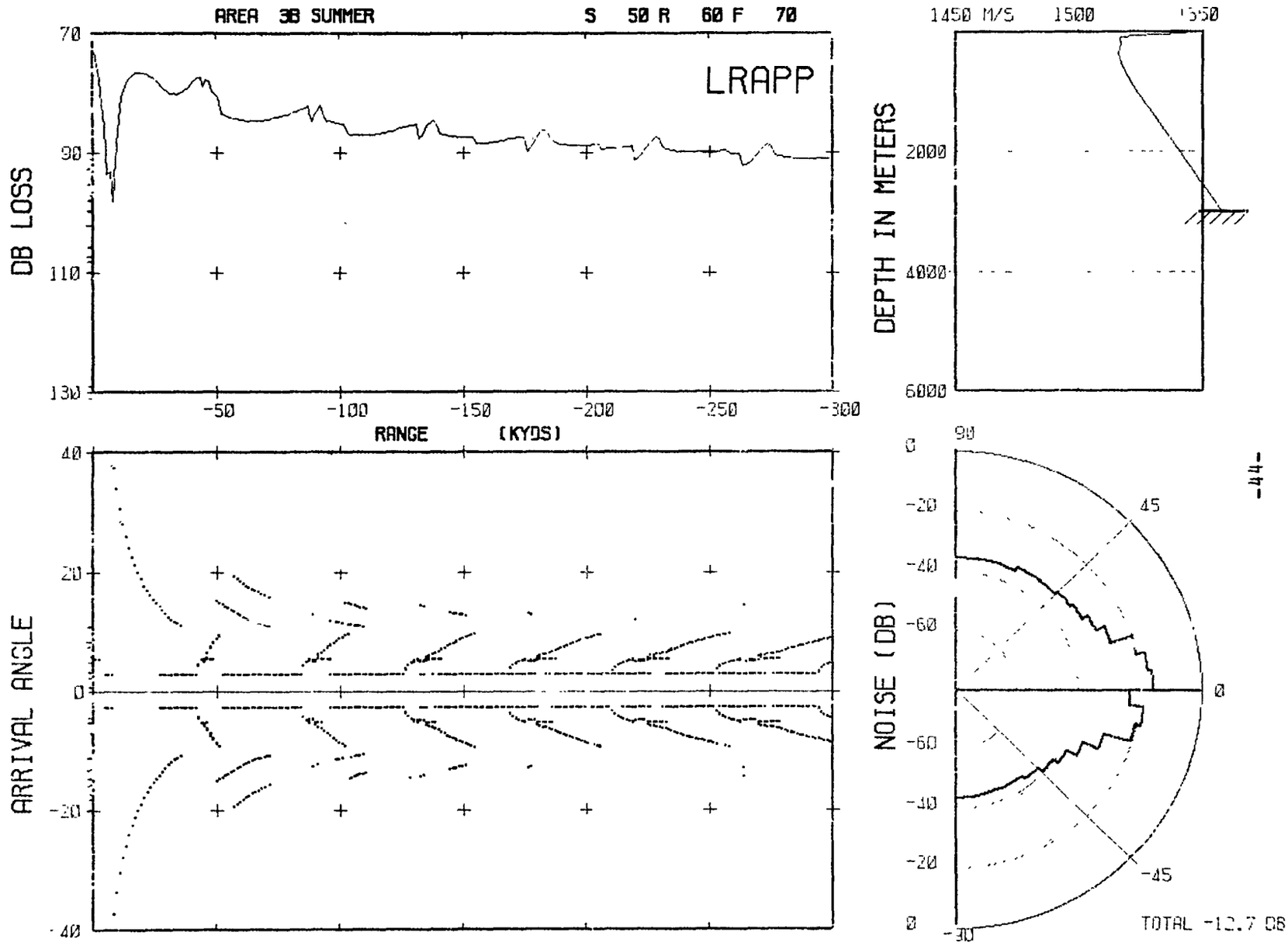
TOTAL -.3.8 DB


AREA 3B SUMMER
LRAPP
DB LOSS
RANGE (KYDS)
DEPTH IN METERS
ARRIVAL ANGLE
NOISE (DB)
TOTAL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LRAPP
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RANGE (KYDS)
1450 M/S 1500 1550
DEPTH IN METERS
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NOISE (DB)
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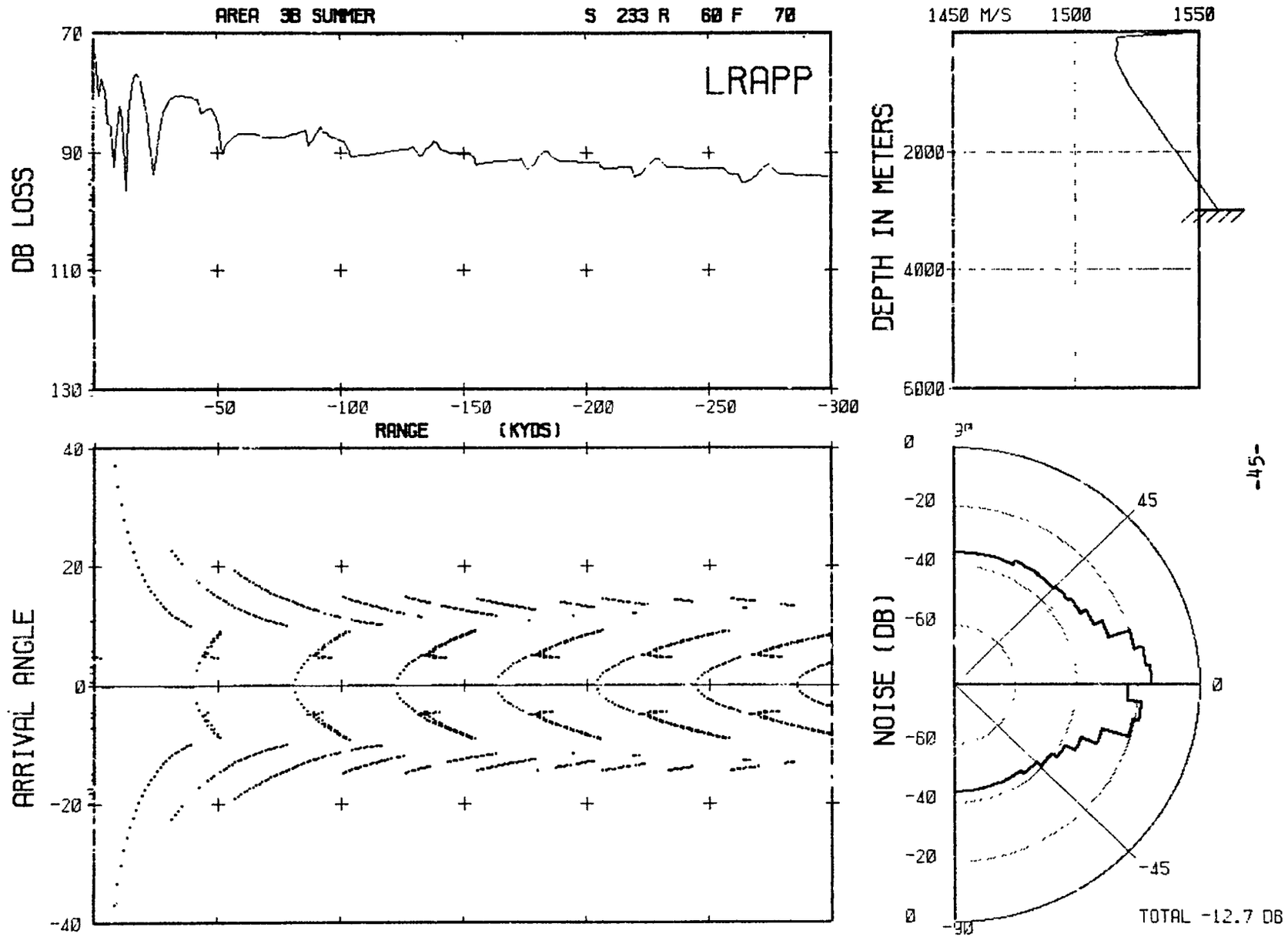
TOTAL -12.7 DB


AREA 3B SUMMER
S 233 R 60 F 70
LRAPP
DB LOSS
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RANGE (KYDS)
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DEPTH IN METERS
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ARRIVAL ANGLE
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NOISE (DB)
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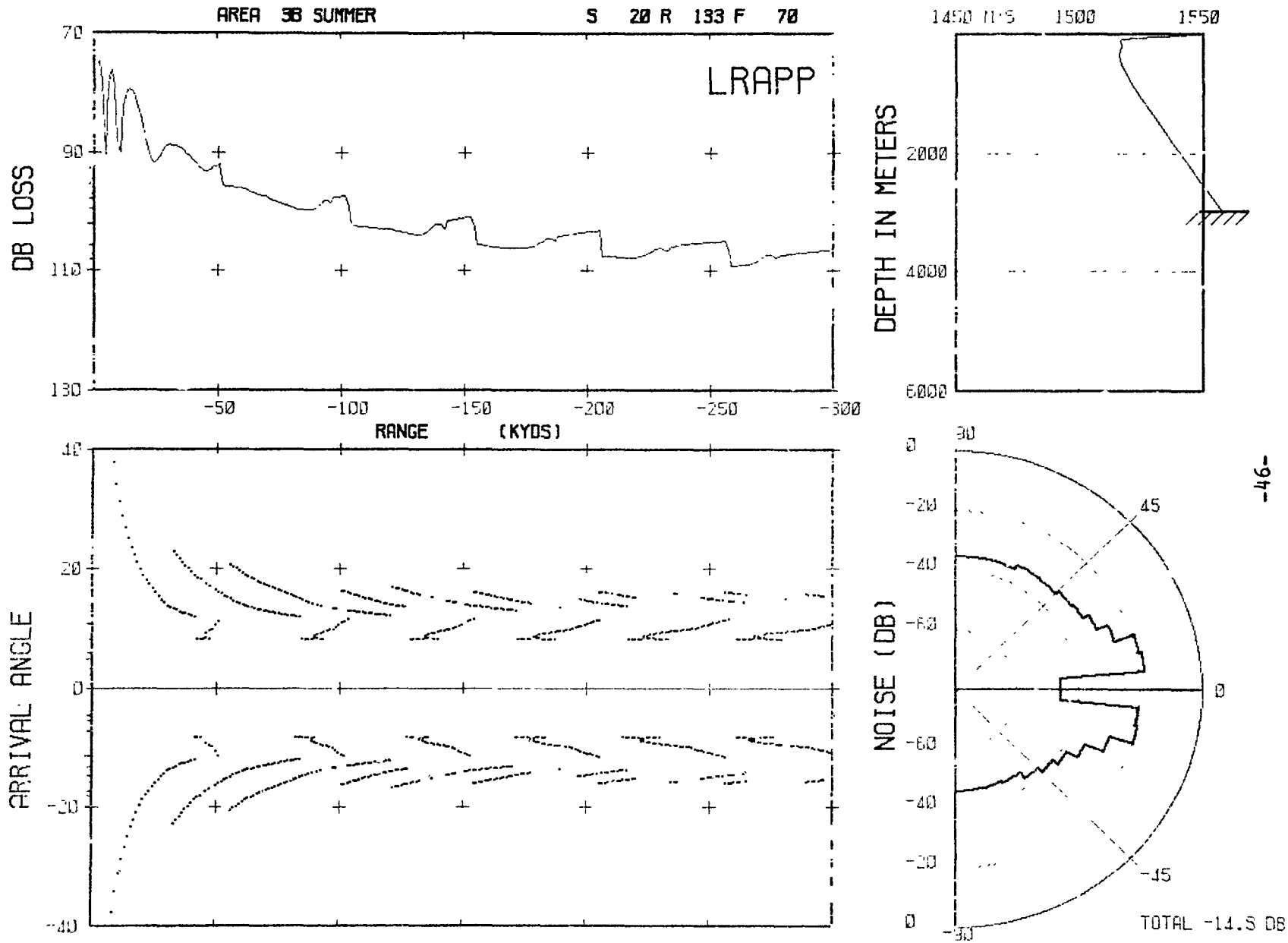
TOTAL -12.7 DB


AREA 3B SUMMER
S 20 R 133 F 70
LRAPP
DB LOSS
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RANGE (KYDS)
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DEPTH IN METERS
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ARRIVAL ANGLE
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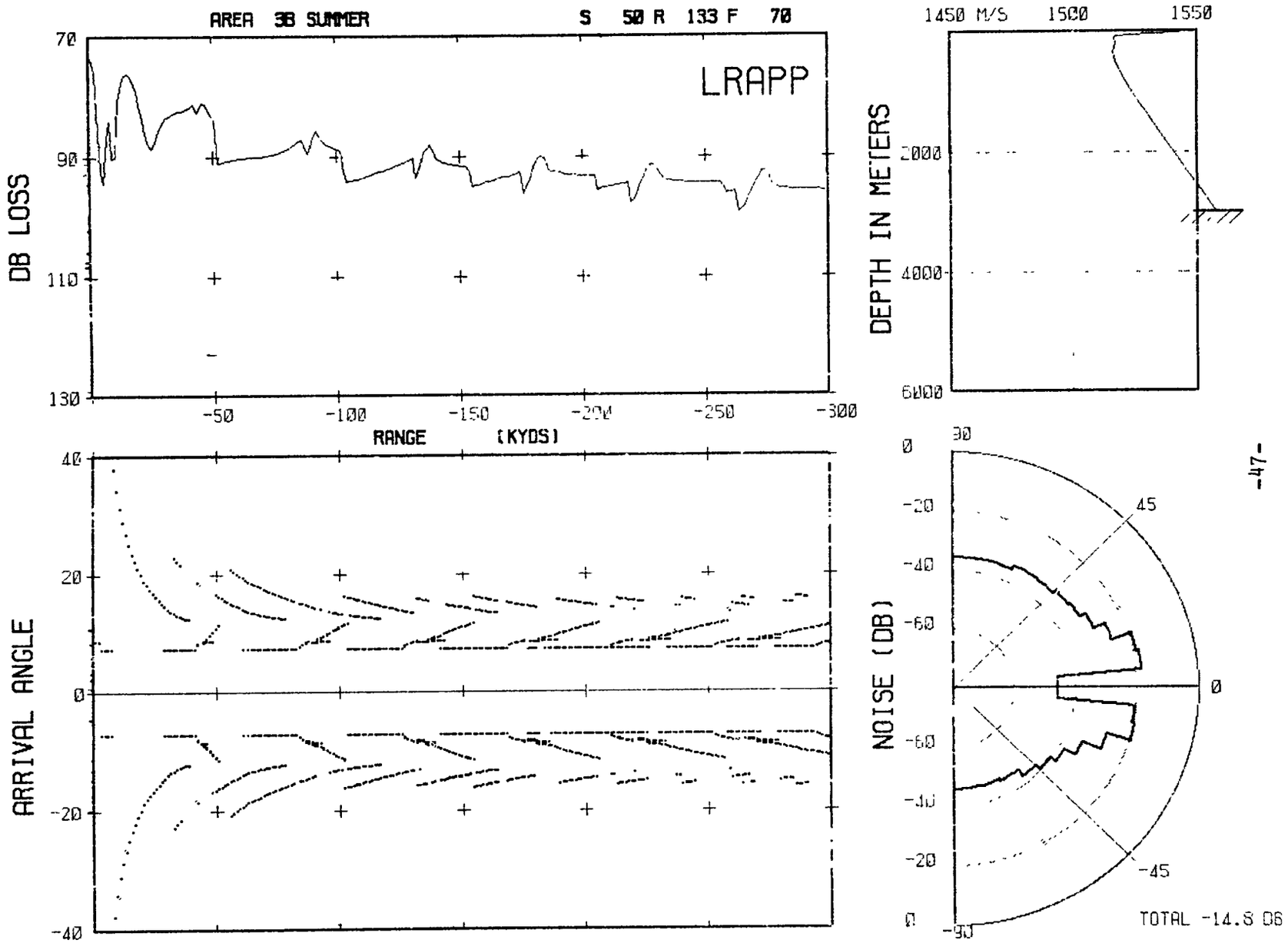
TOTAL -14.5 DB


AREA 3B SUMMER
S 50 R 133 F 70
LRAPP
DB LOSS
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RANGE (KYDS)
1450 M/S
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DEPTH IN METERS
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NOISE (DB)
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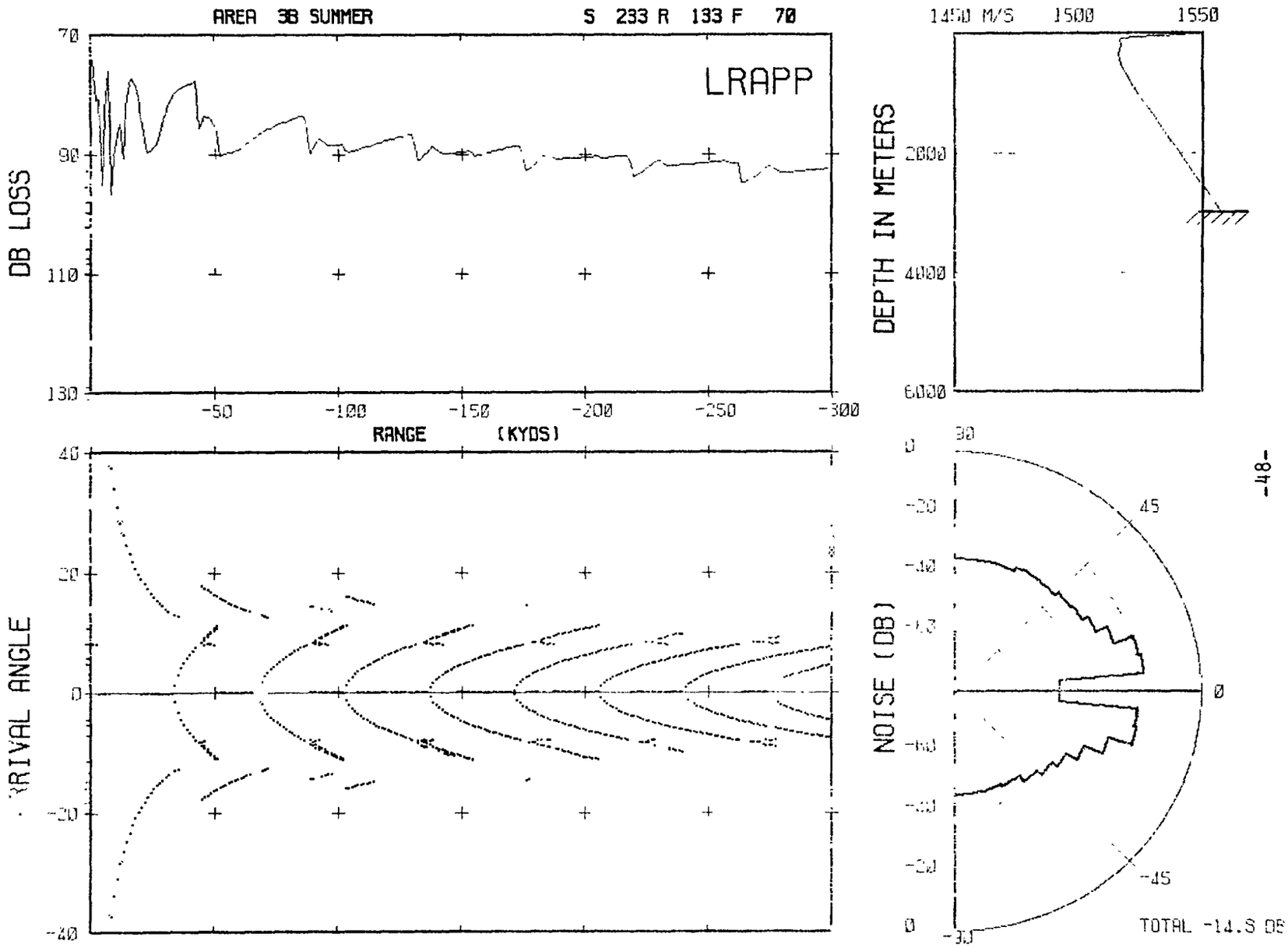
-90
TOTAL -14.8 DB


AREA 3B SUMMER
S 233 R 133 F 70
LRAPP
DB LOSS
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RANGE (KYDS)
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DEPTH IN METERS
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NOISE (DB)
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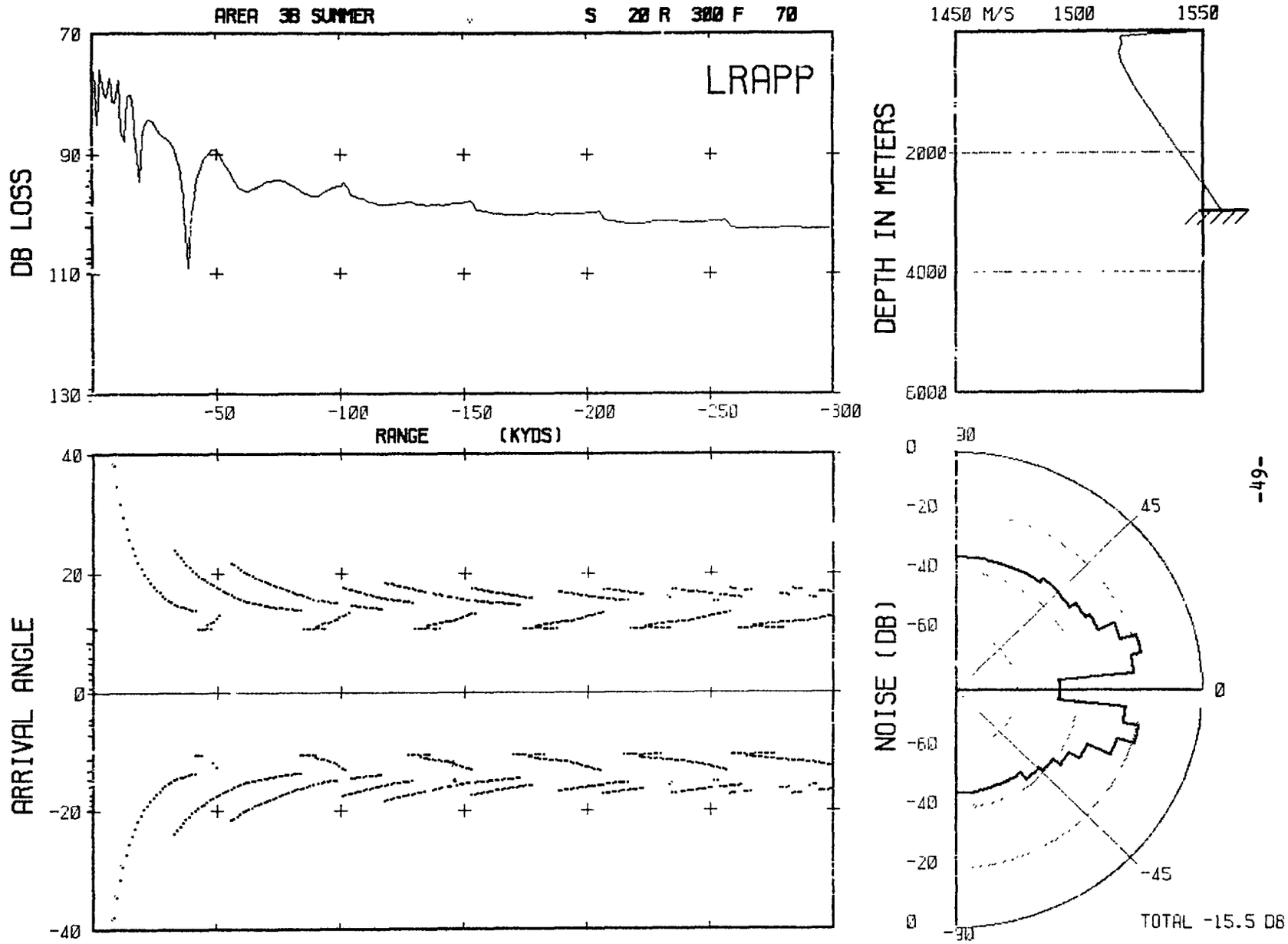
TOTAL -14.5 DB


AREA 3B SUMMER
S 20 R 300 F 70
LRAPP
DB LOSS
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RANGE (KYDS)
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1550
DEPTH IN METERS
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ARRIVAL ANGLE
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NOISE (DB)
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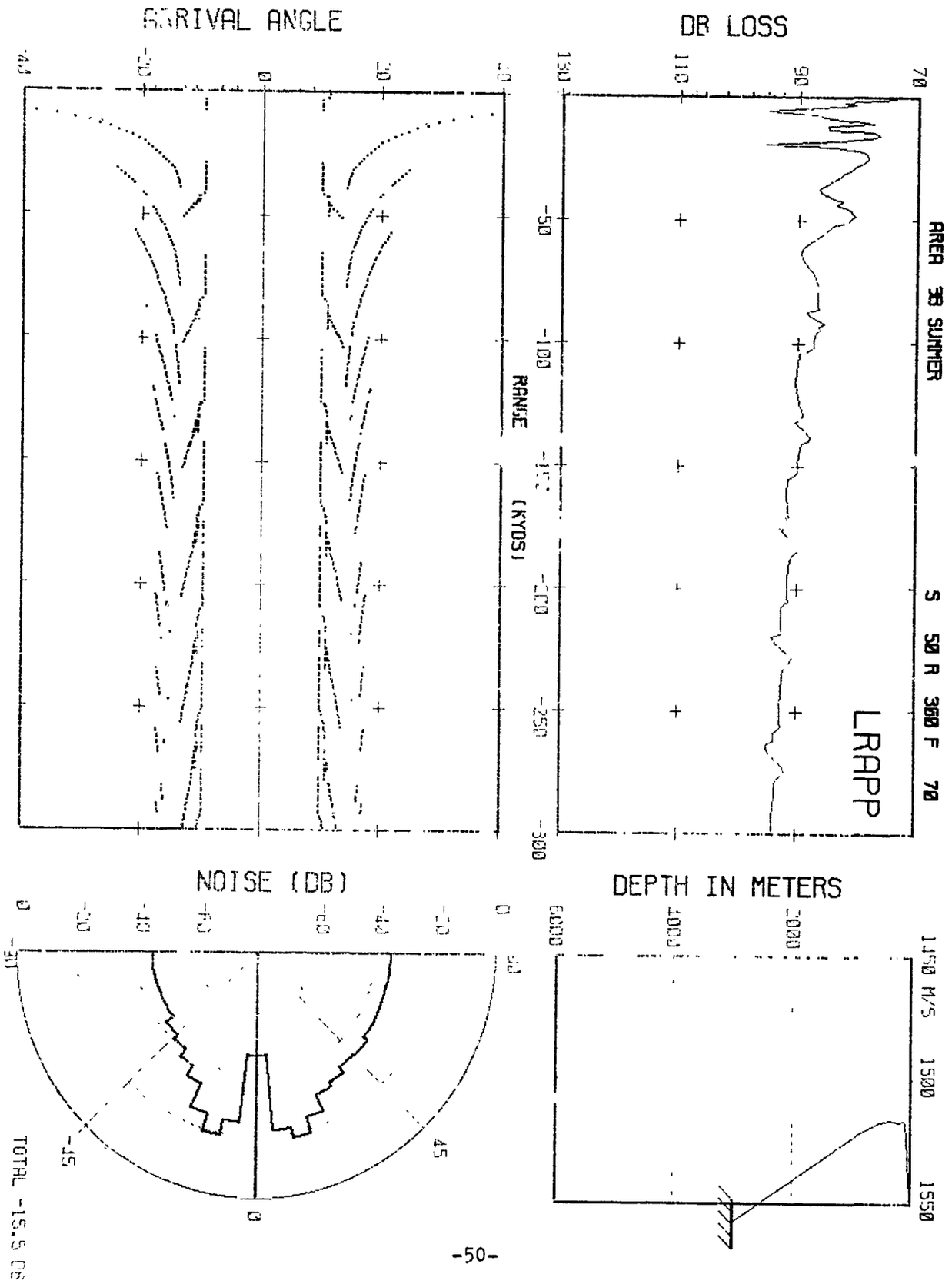
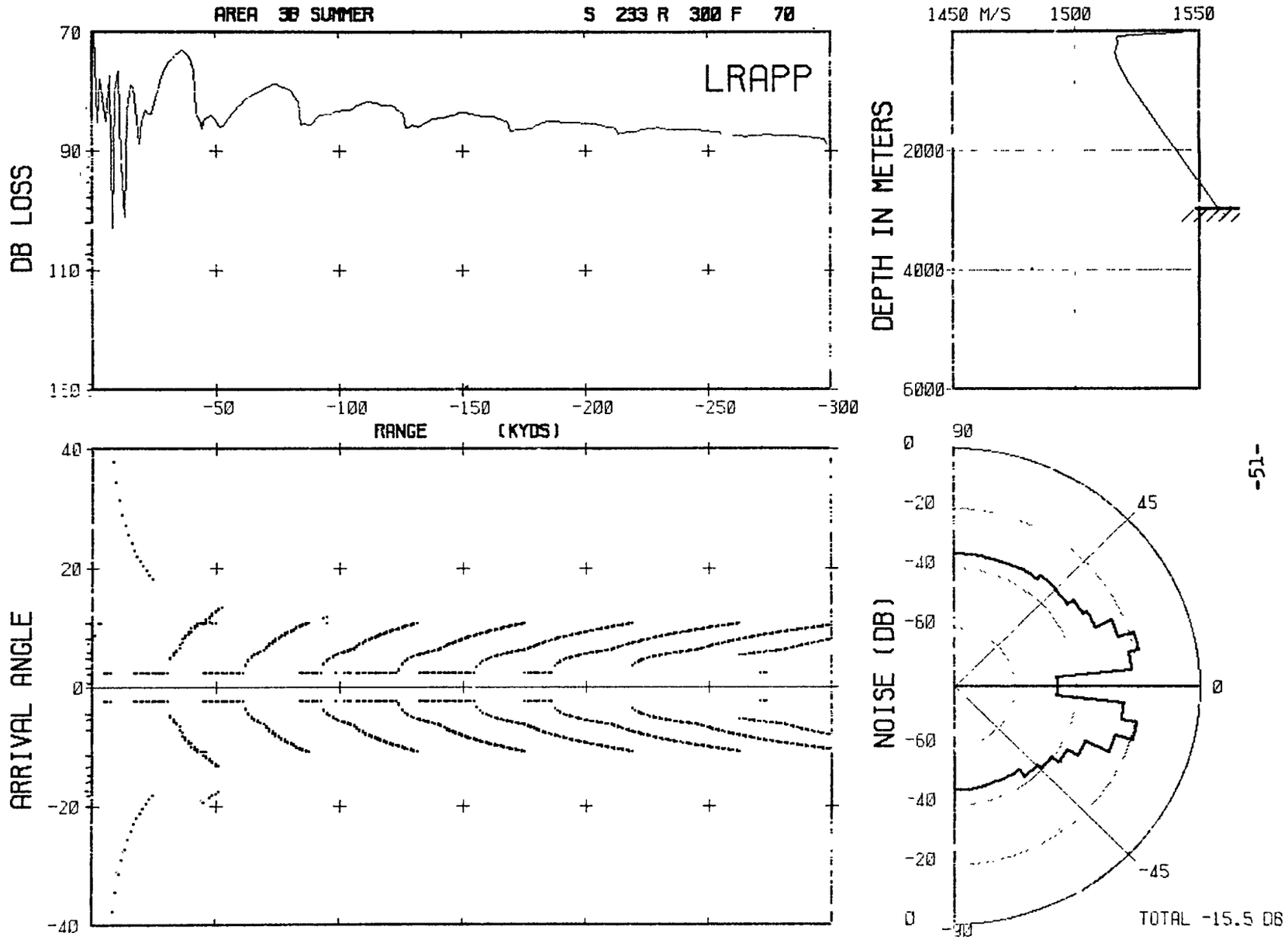
-90
TOTAL -15.5 DB


ARRIVAL ANGLE
DB LOSS
AREA 38 SUMMER
S 50 R 360 F 70
LRAPP
RANGE (KYDS)
NOISE (DB)
DEPTH IN METERS
1450 M/S
1500
1550
TOTAL -15.5 DB


AREA 3B SUMMER
S 233 R 300 F 70
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
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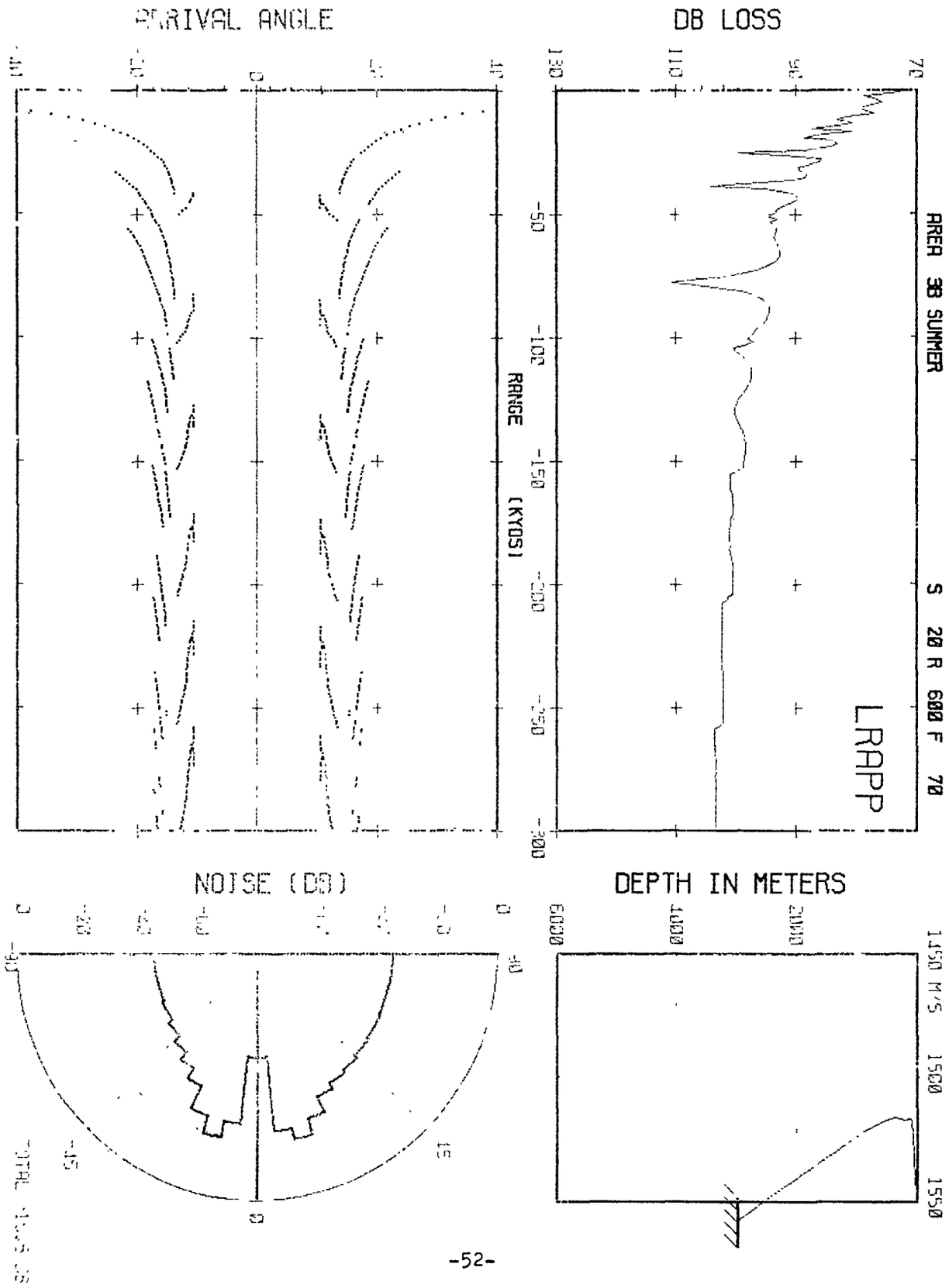
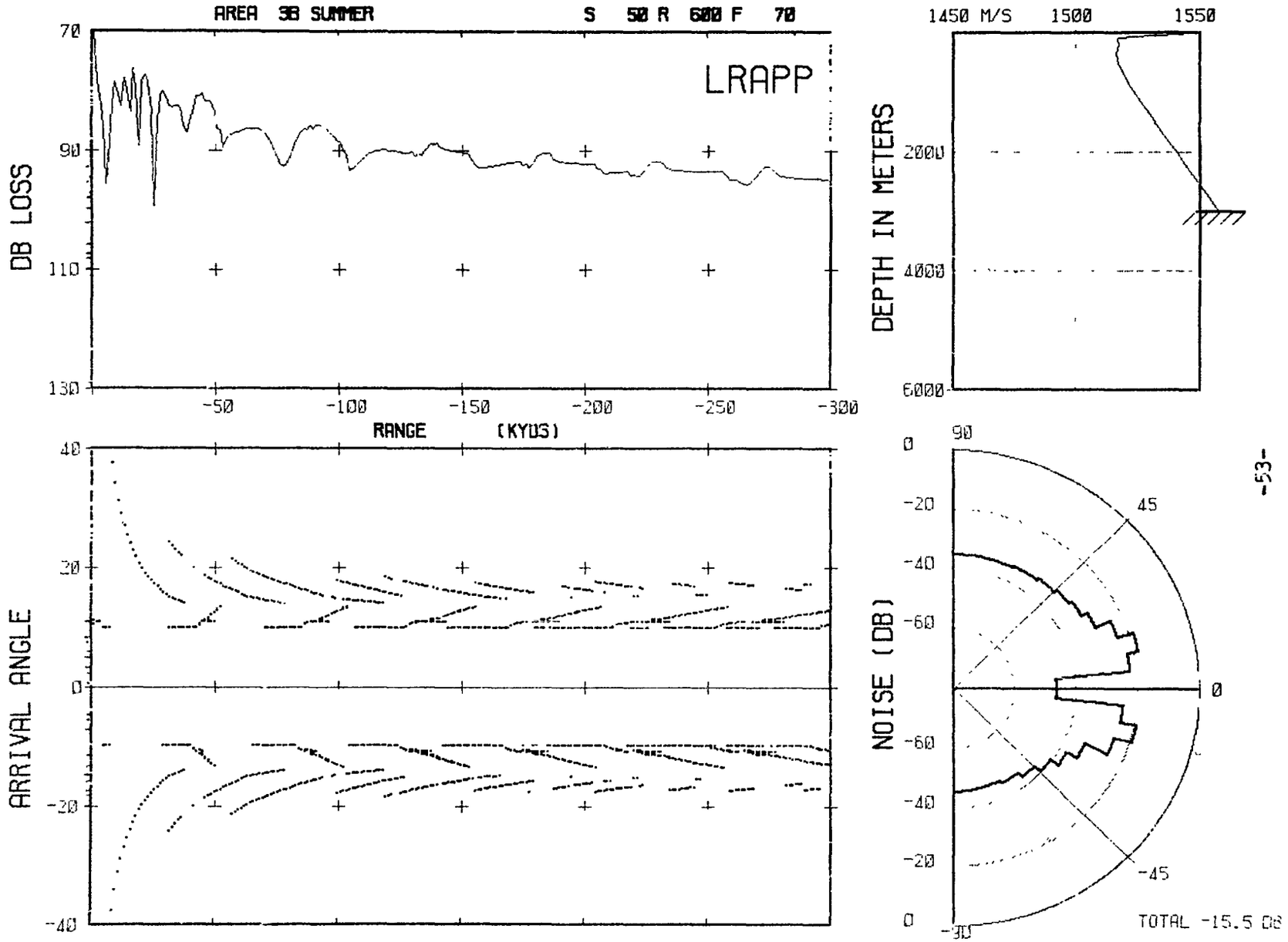
-45
-90
TOTAL -15.5 DB


ARRIVAL ANGLE
DB LOSS
AREA 3B SUMMER
S 20 R 600 F 70
LRAPP
RANGE (KYDS)
NOISE (DB)
DEPTH IN METERS
1450 M/S
1500
1550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LRAPP
DB LOSS
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110
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-50
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-200
-250
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RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
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NOISE (DB)
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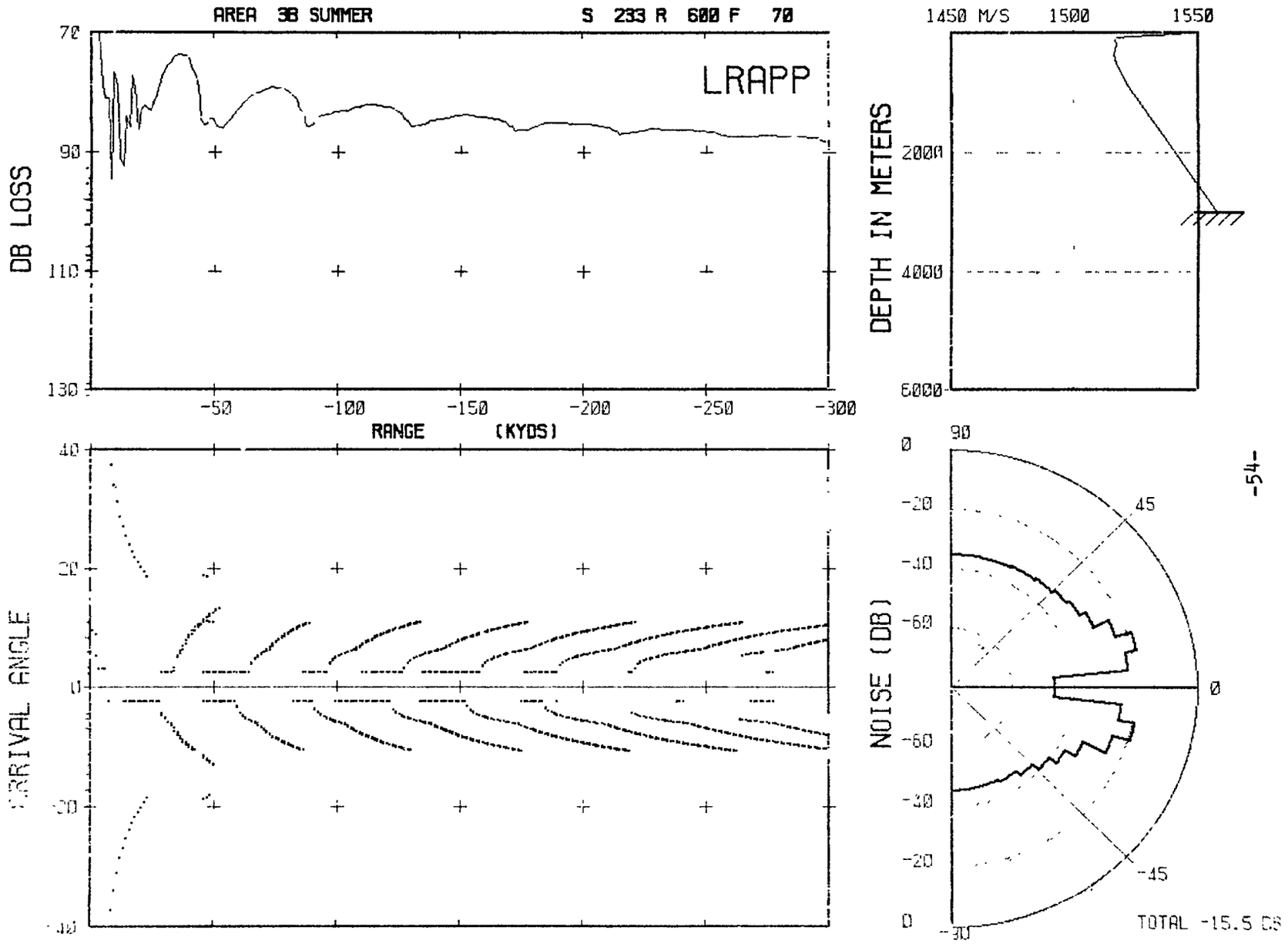
TOTAL -15.5 DB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LRAPP
DB LOSS
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RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
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NOISE (DB)
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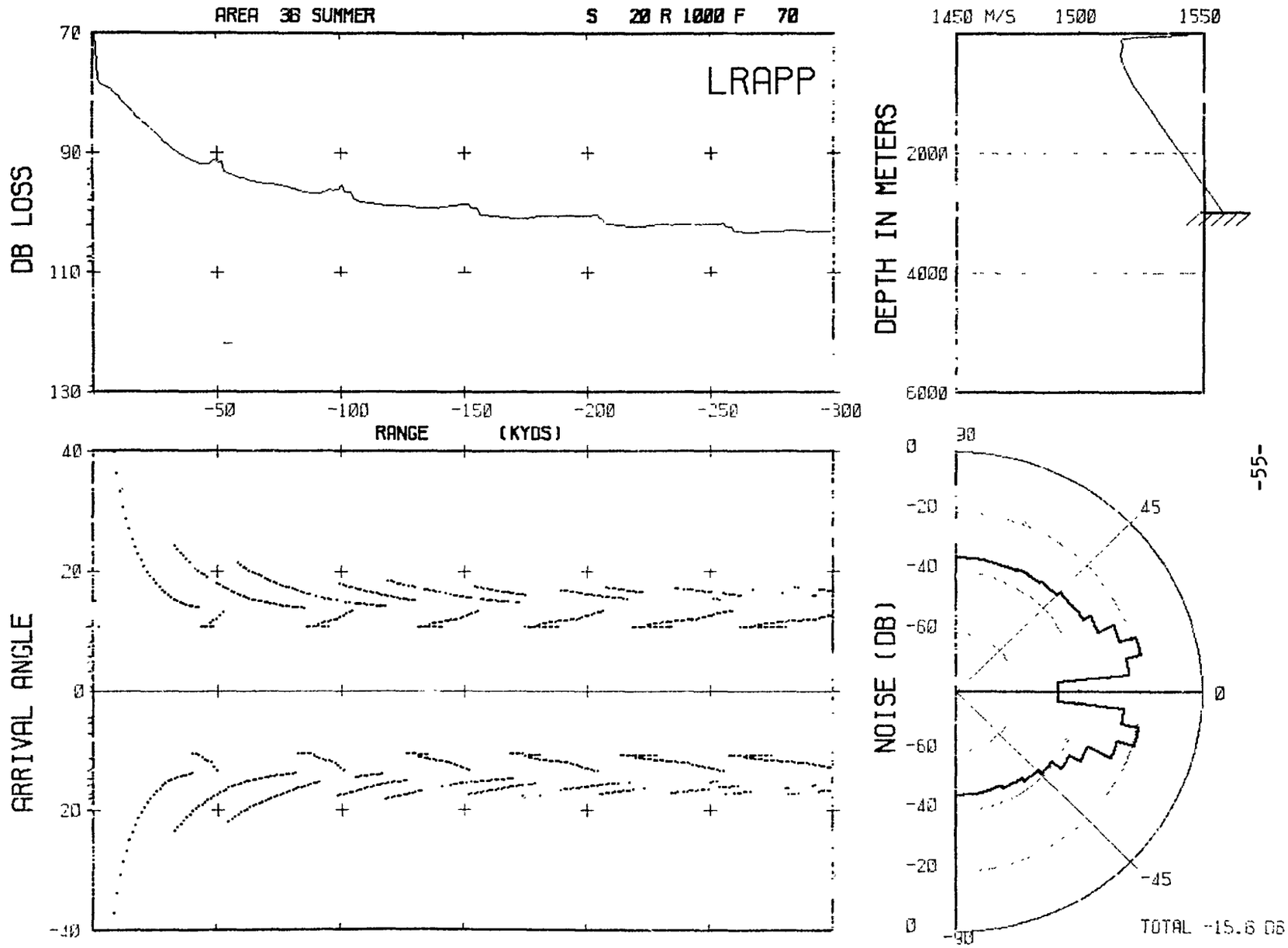
TOTAL -15.5 DB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LRAPP
DB LOSS
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-250
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RANGE (KYDS)
1450 M/S
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1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
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20
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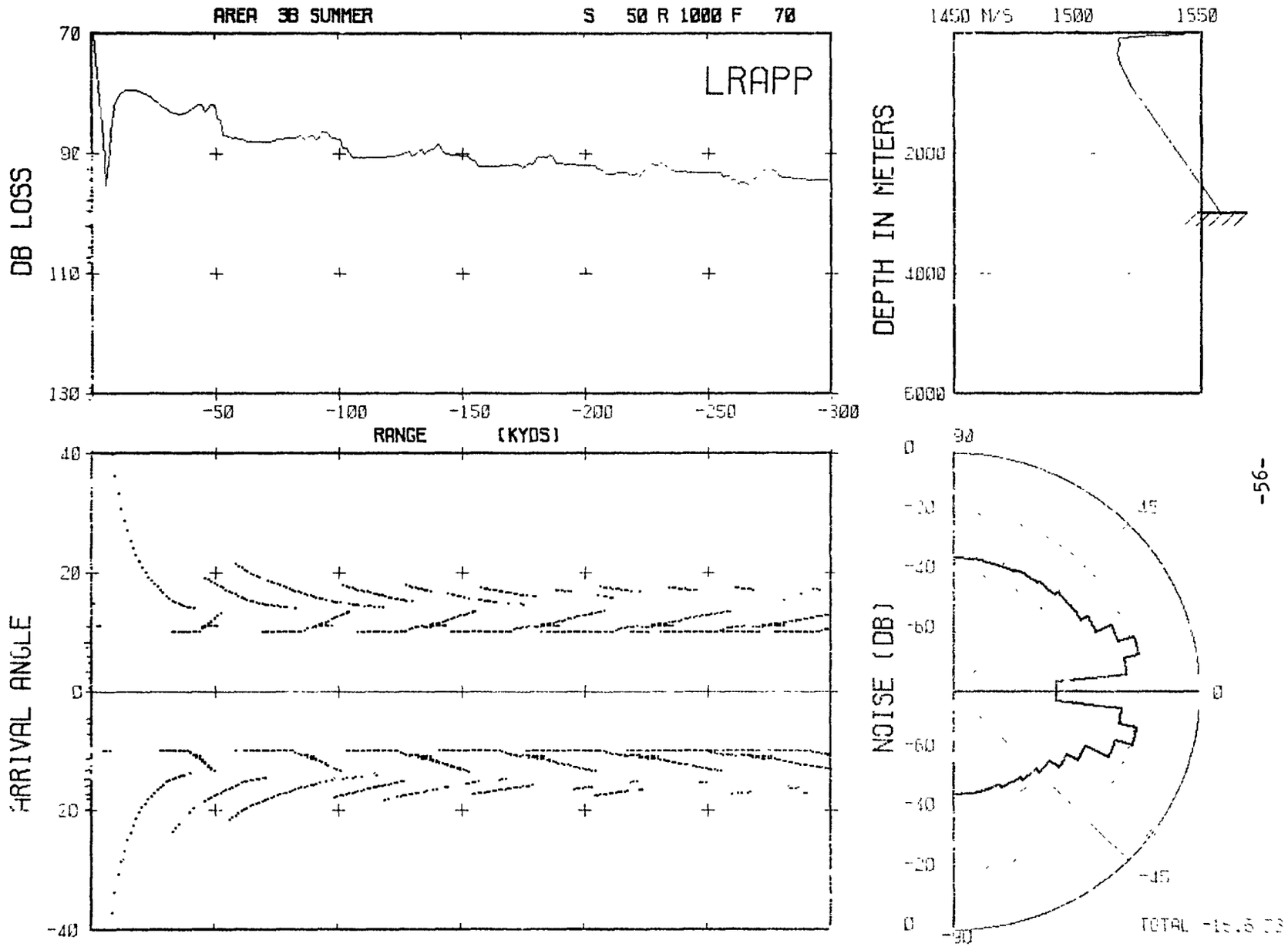
TOTAL -15.6 DB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LRAPP
DB LOSS
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RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
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NOISE (DB)
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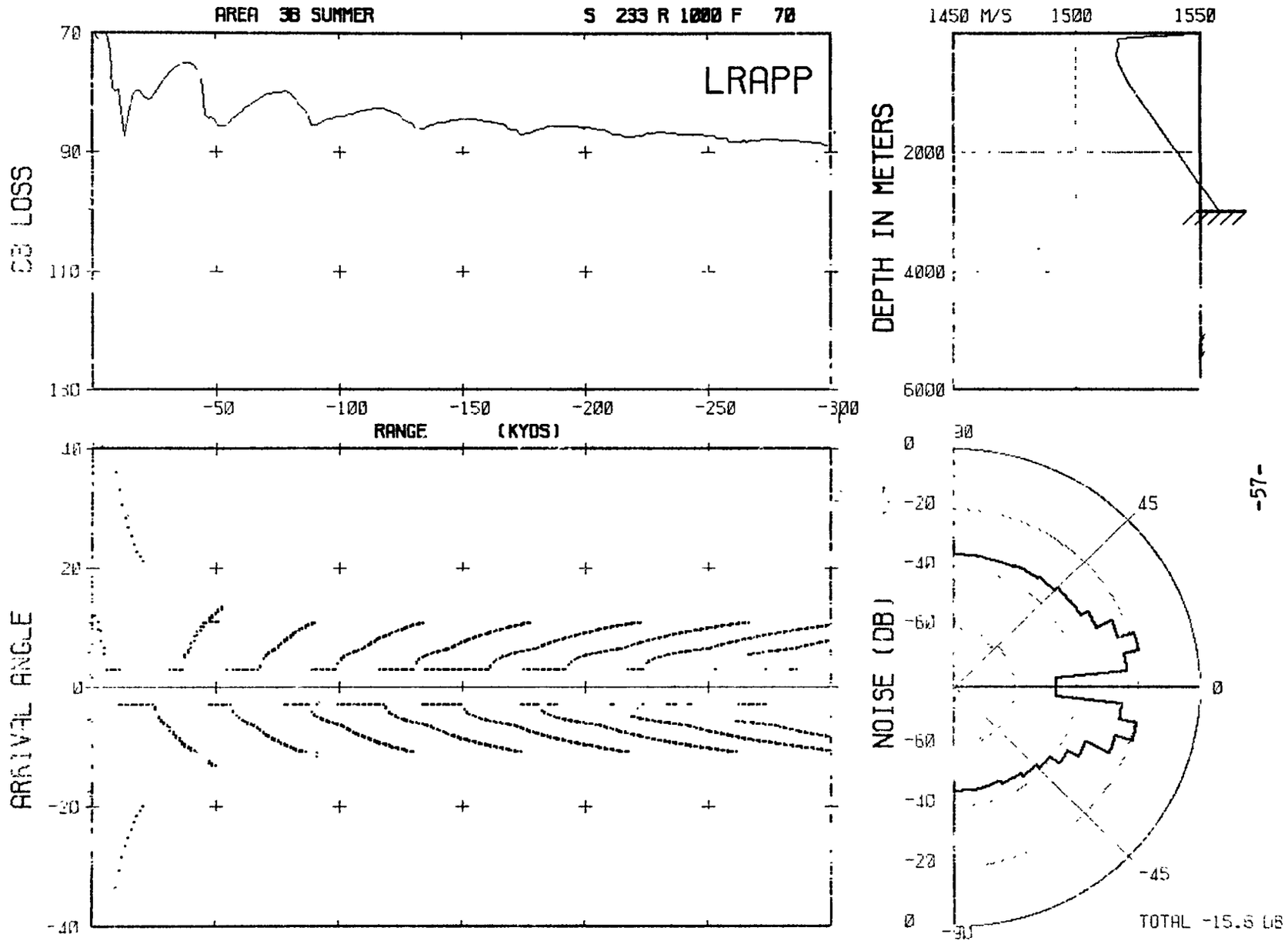
TOTAL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LRAPP
CB LOSS
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RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
0
-20
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0
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TOTAL -15.6 DB

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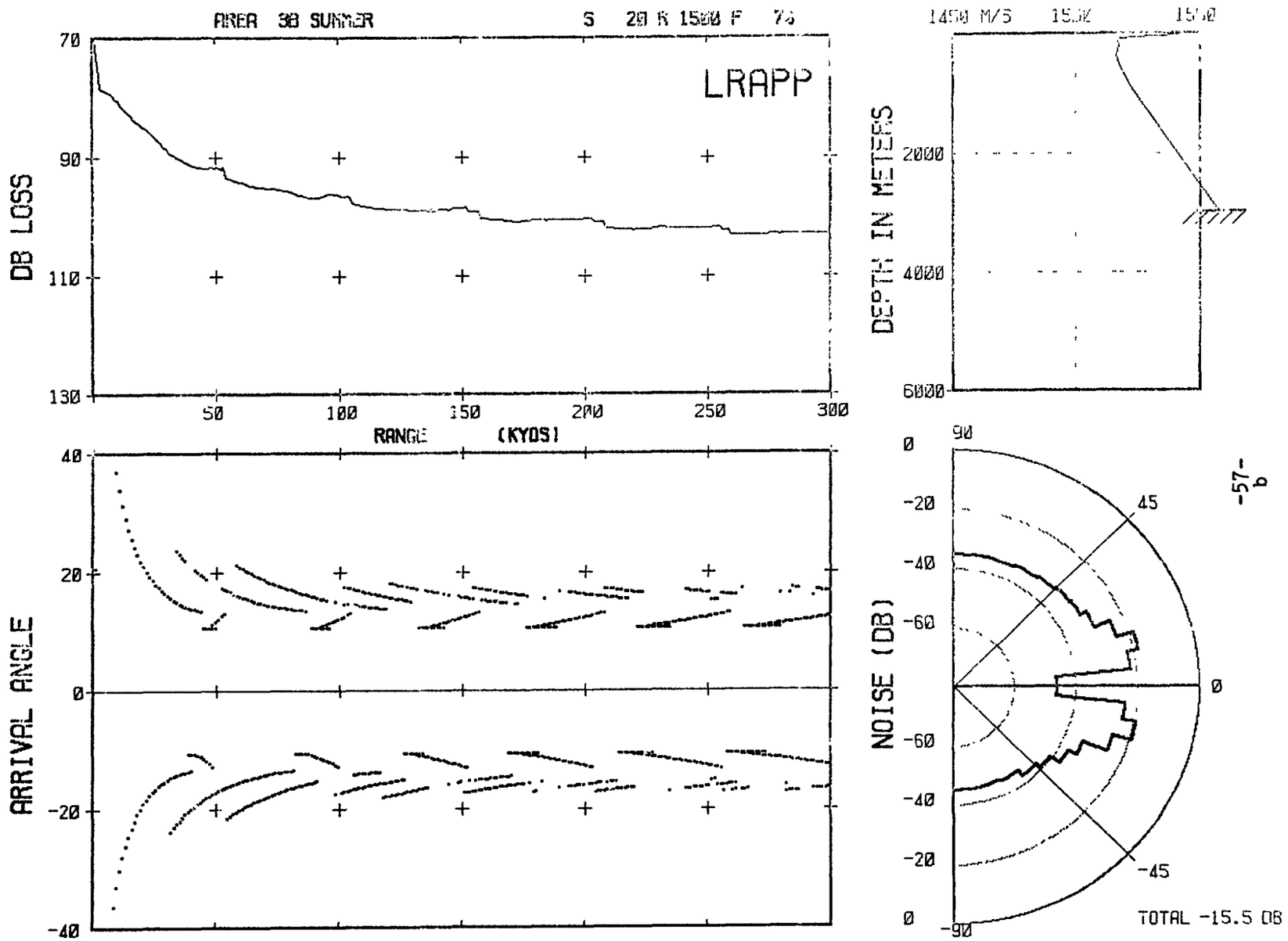

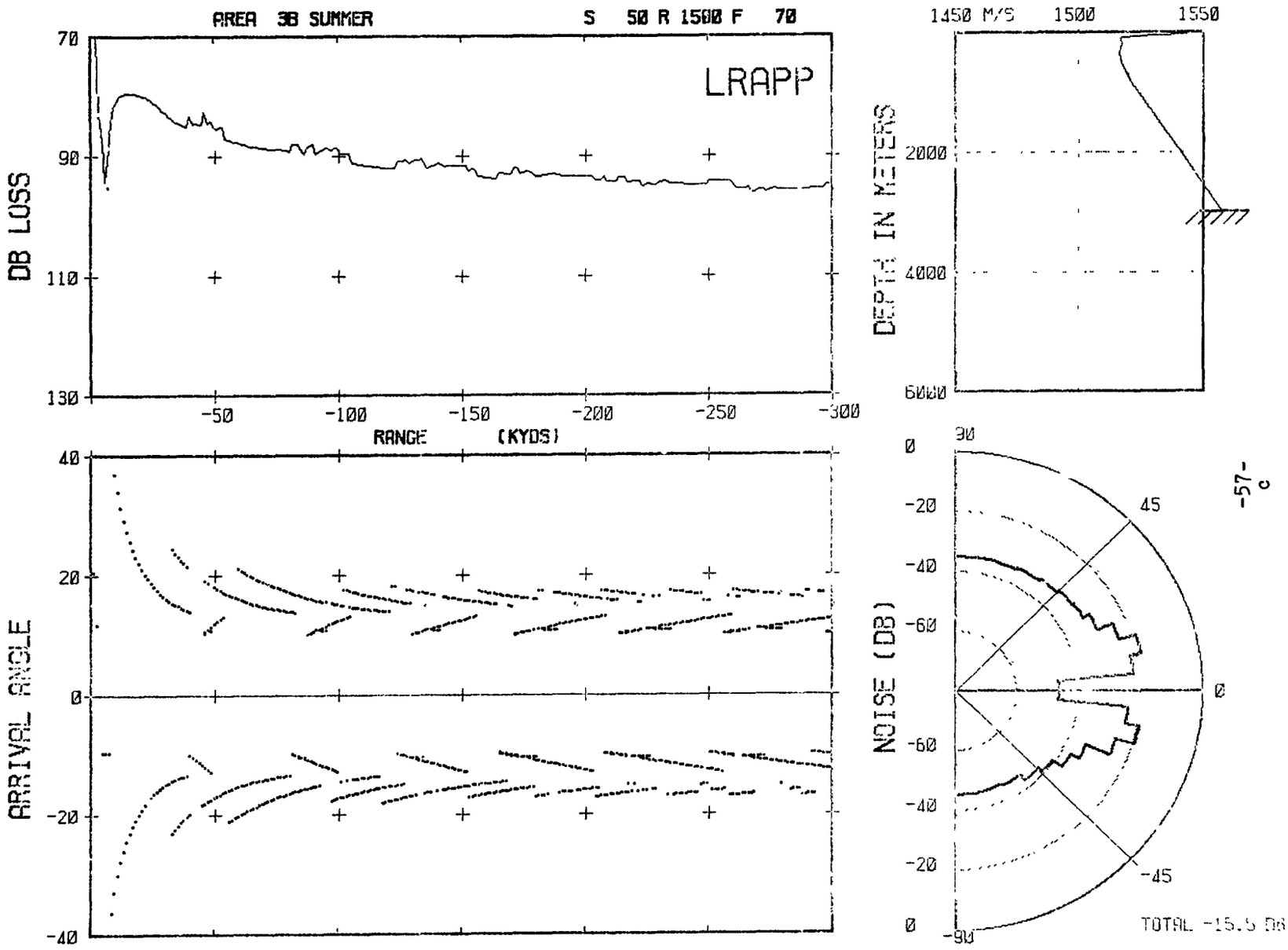
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LRAPP
DB LOSS
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-100
-150
-200
-250
-300
RANGE (KYDS)
ARRIVAL ANGLE
40
20
0
-20
-40
1450 M/S
1500
1550
DEPTH IN METERS
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6000
NOISE (DB)
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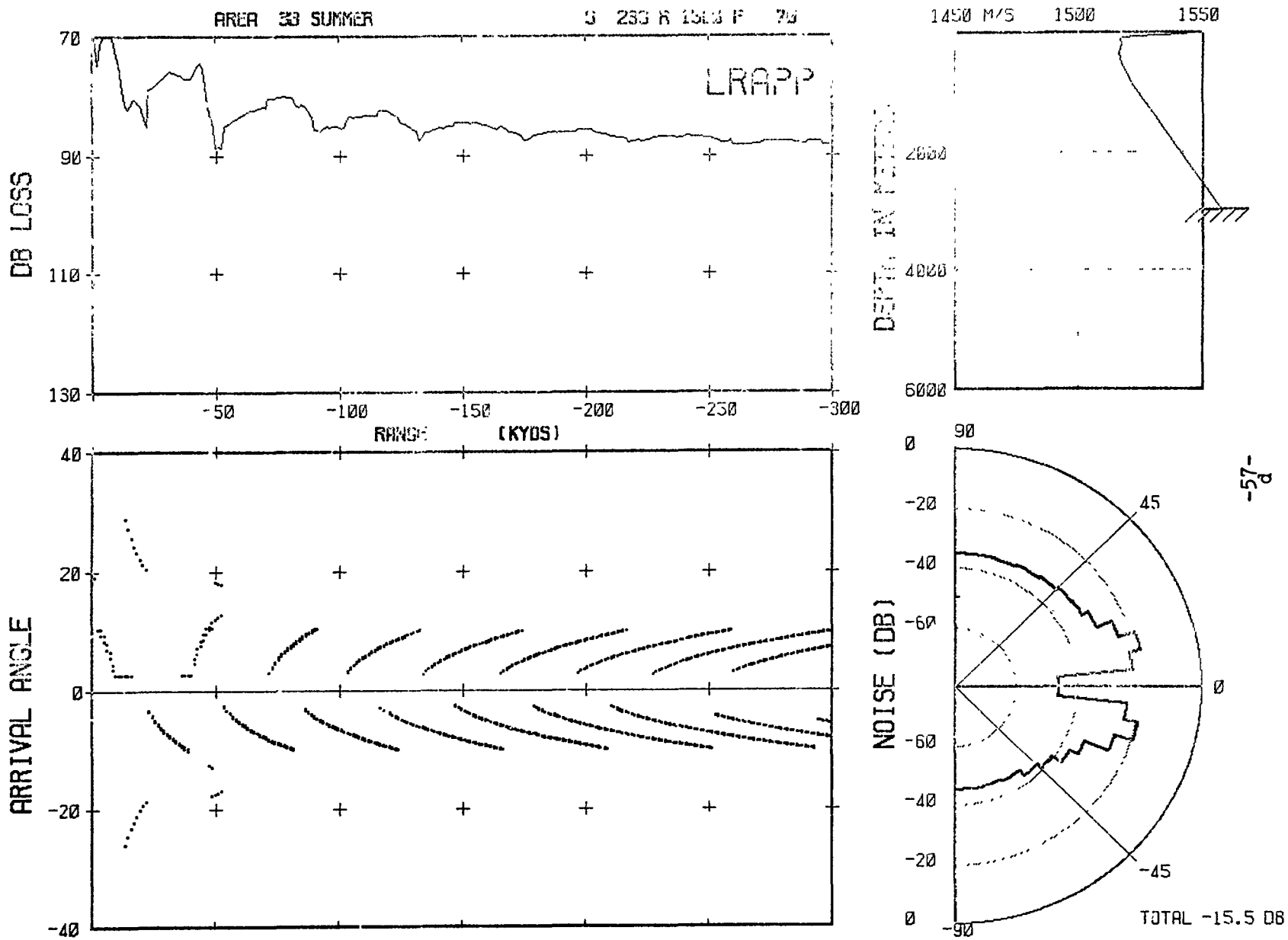
-90
TOTAL -15.5 DB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DB LOSS
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130
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-150
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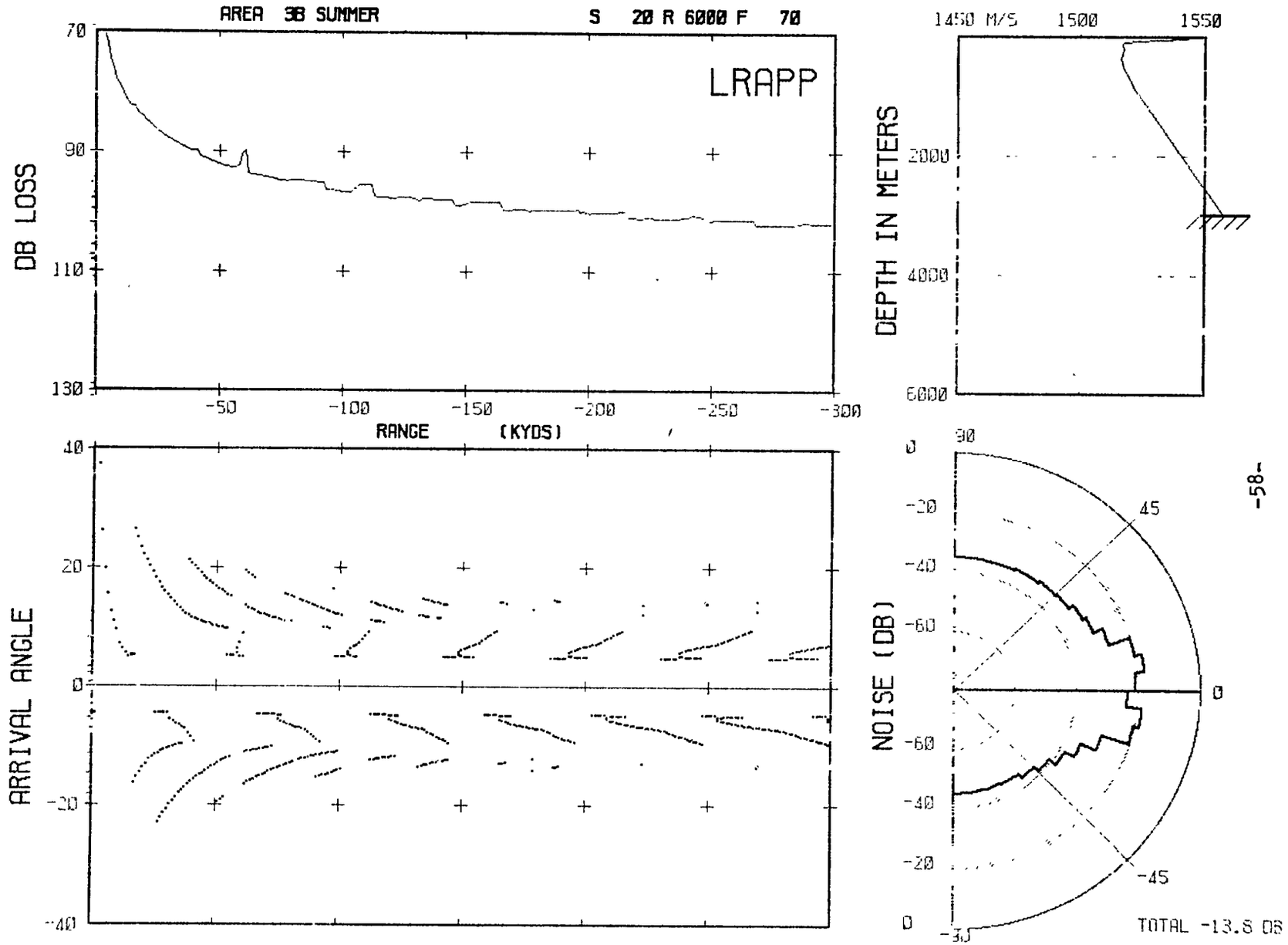
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
-45
-90
TOTAL -15.5 DB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RANGE (KYDS)
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1500
1550
DEPTH IN METERS
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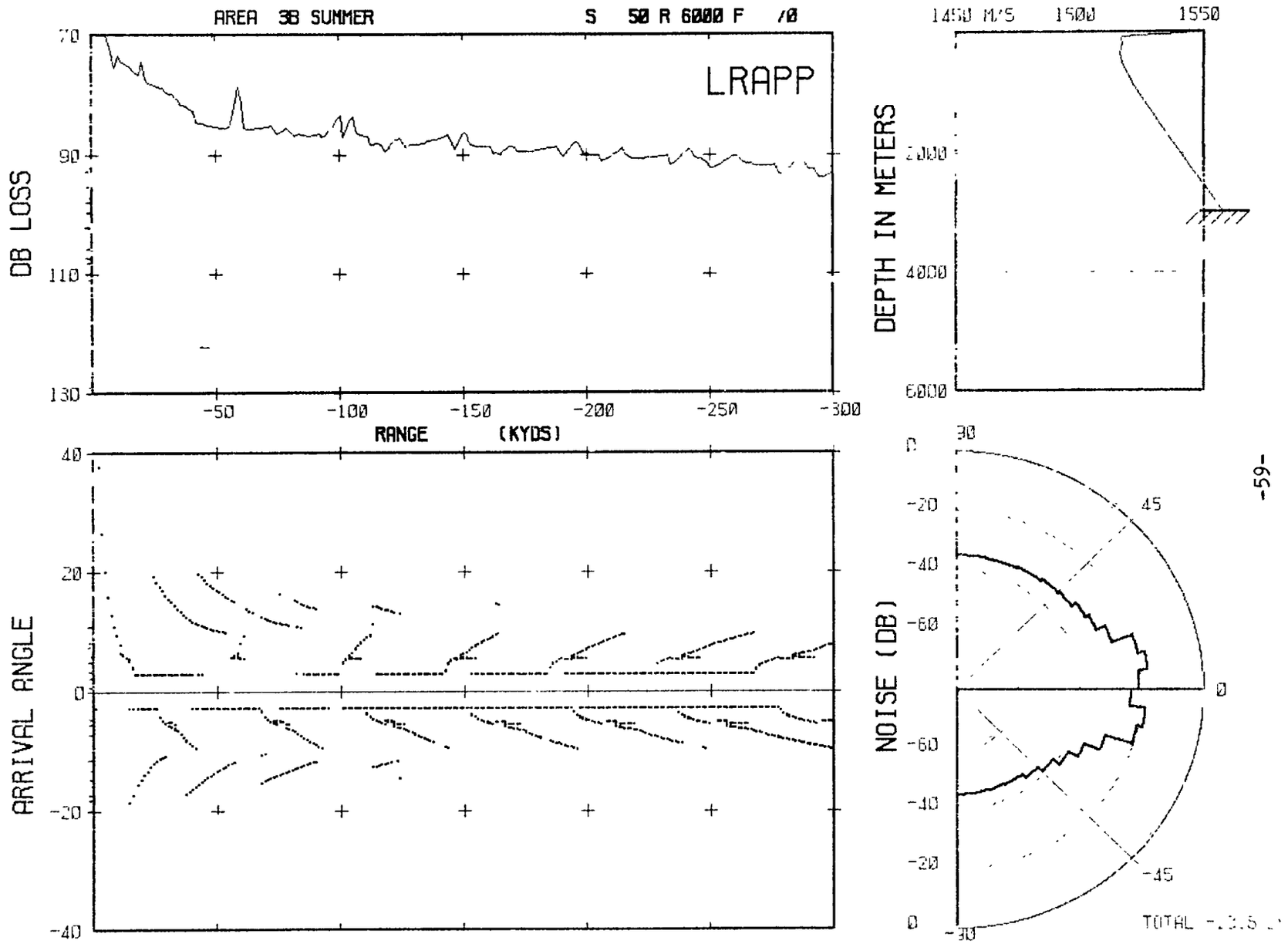
TOTAL -13.8 DB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LRAPP
DB LOSS
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130
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-100
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RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
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NOISE (DB)
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-45
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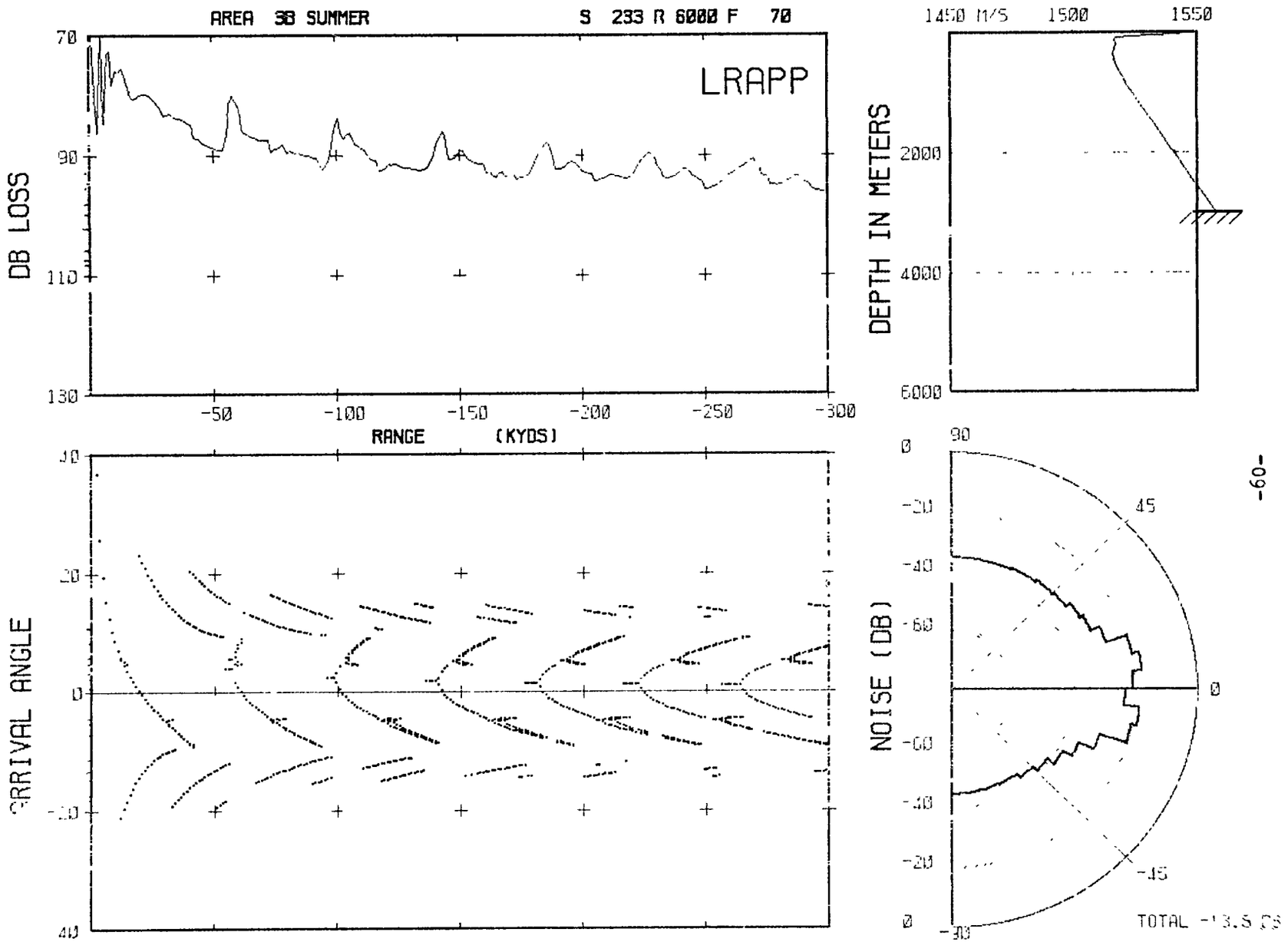
TOTAL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DB LOSS
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RANGE (KYDS)
1450 M/S
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1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
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NOISE (DB)
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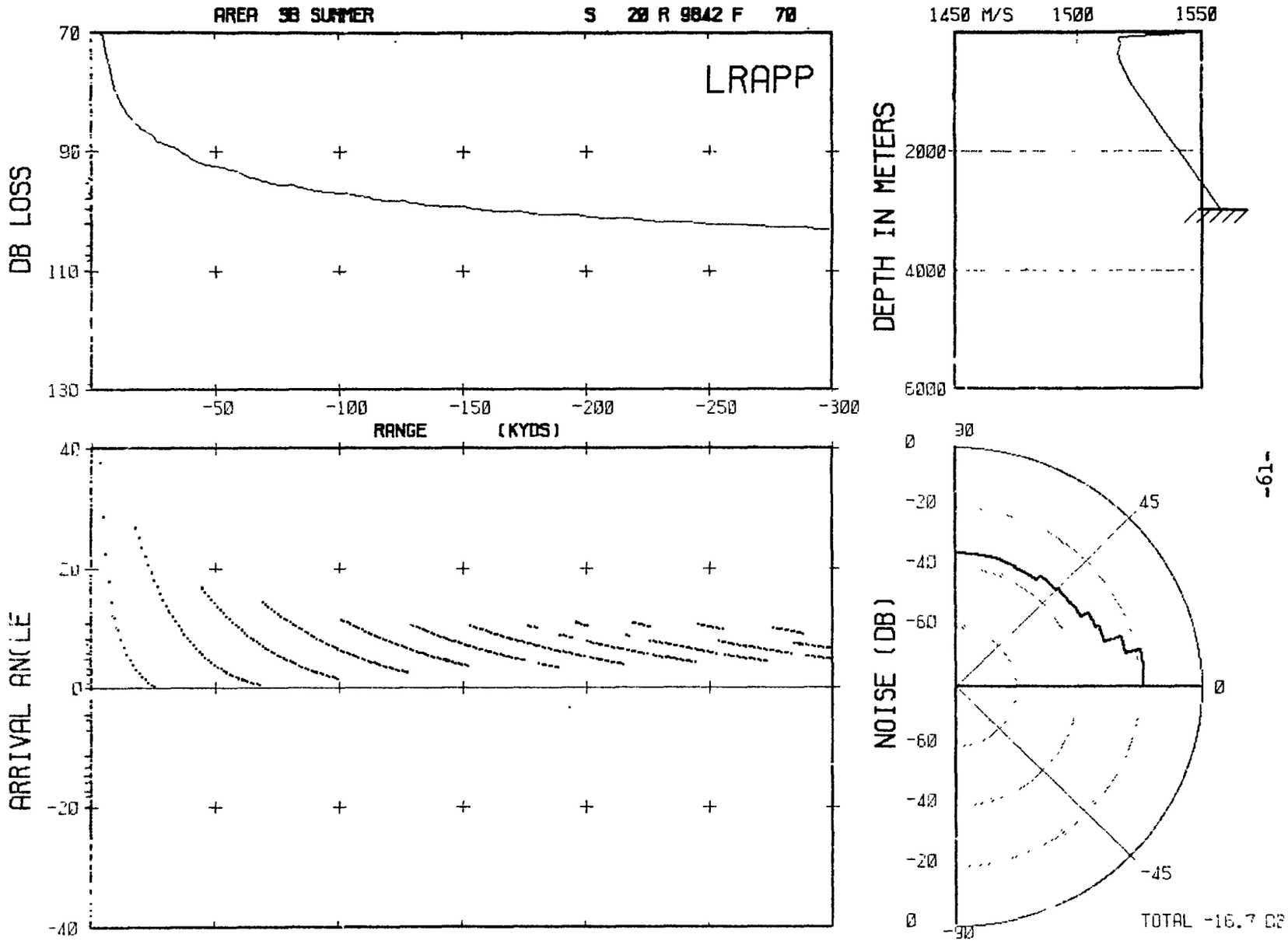
TOTAL -13.5 DB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DEPTH IN METERS
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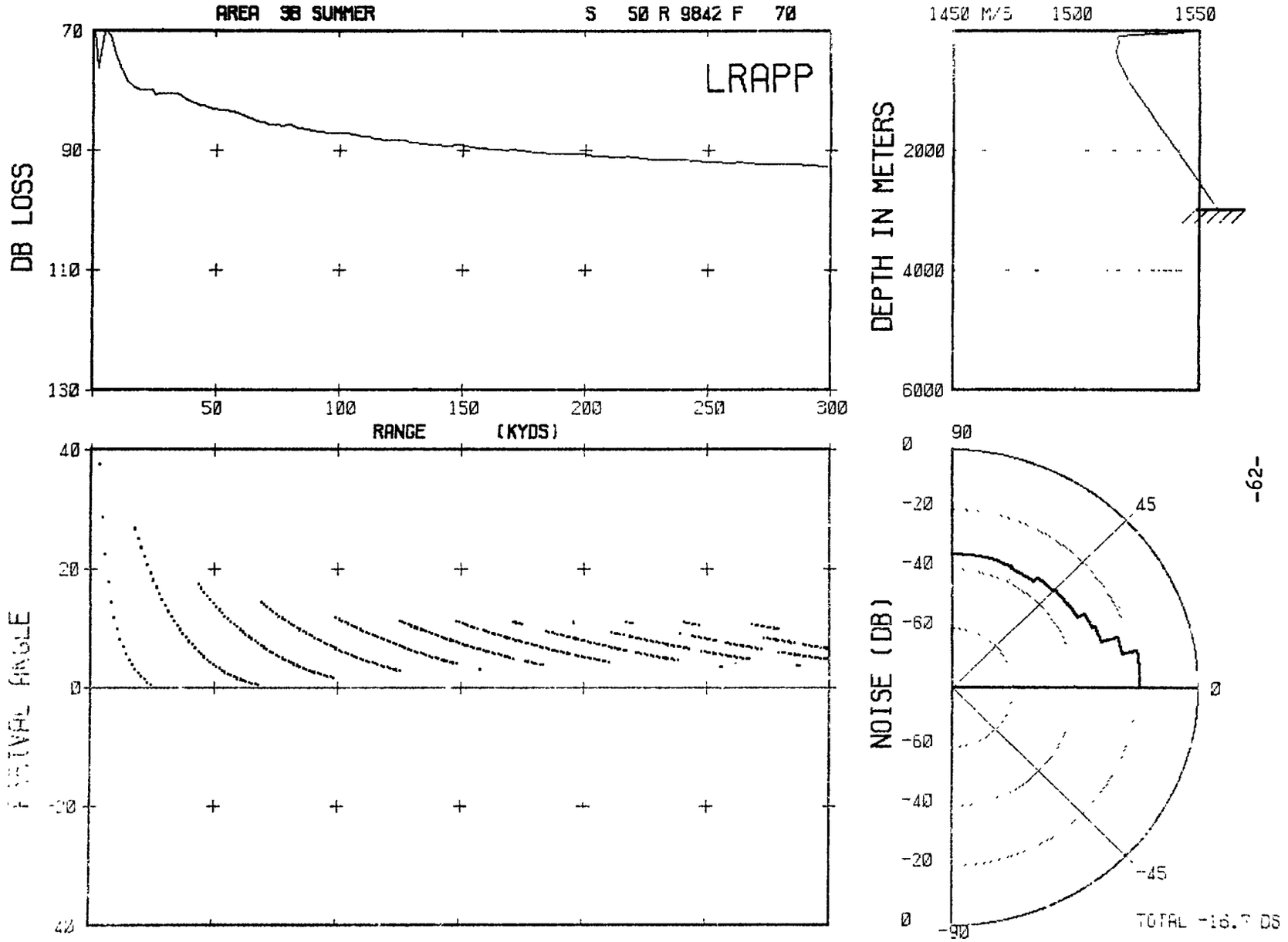
TOTAL -16.7 DB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RANGE (KYDS)
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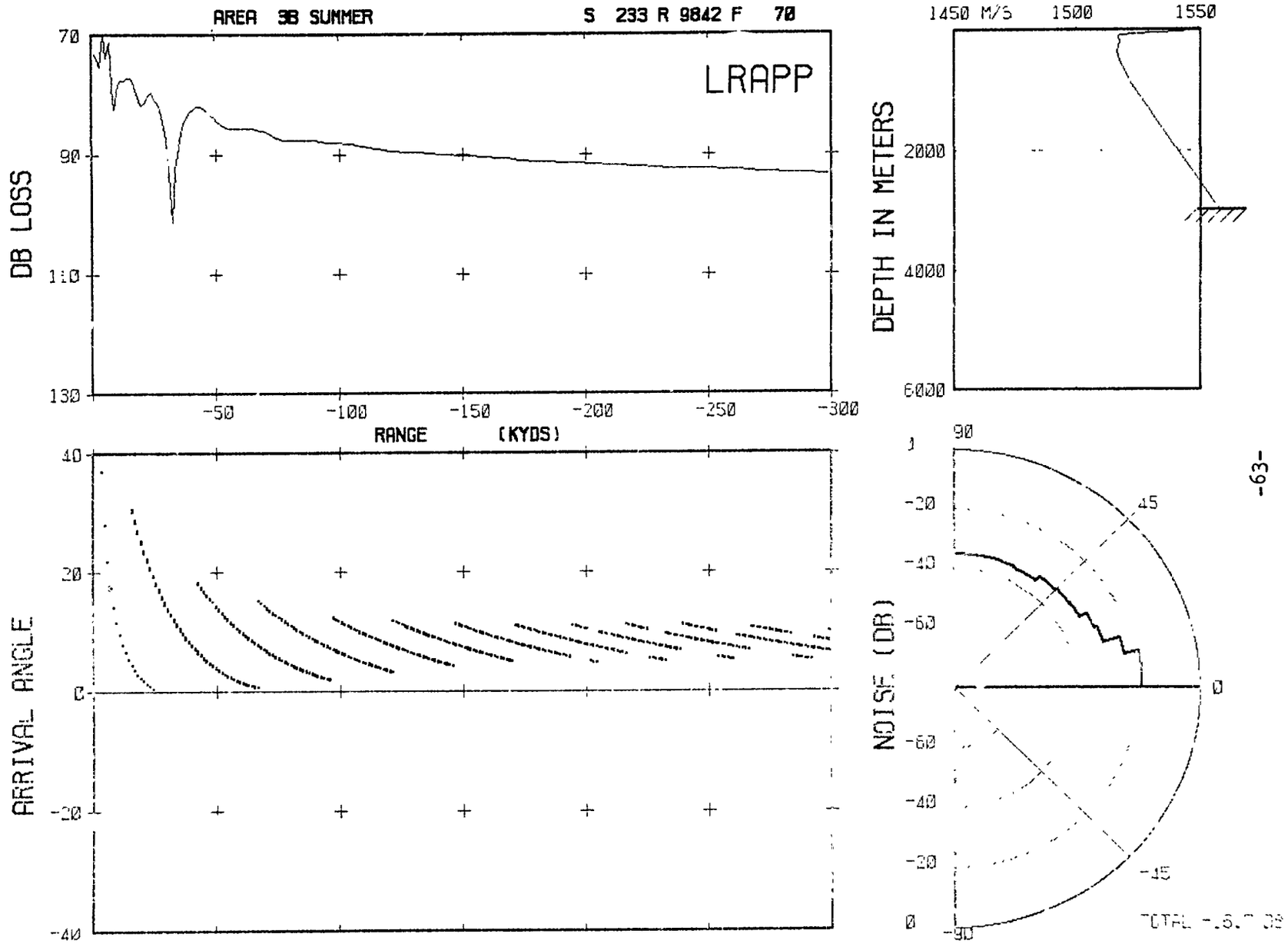
TOTAL -16.7 DB


AREA 3B SUMMER
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DB LOSS
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RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
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6000
ARRIVAL ANGLE
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NOISE (DB)
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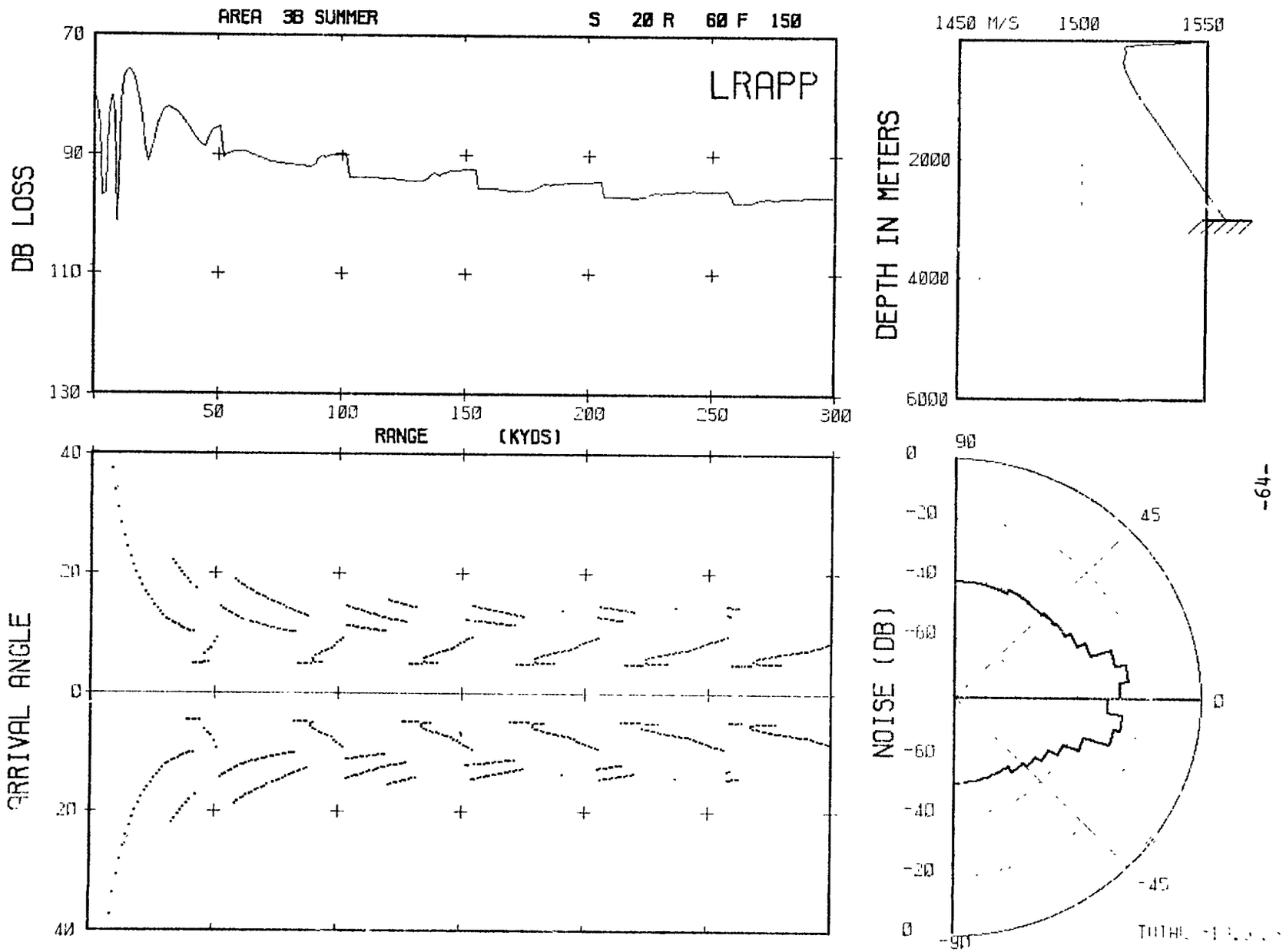
TOTAL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RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
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ARRIVAL ANGLE
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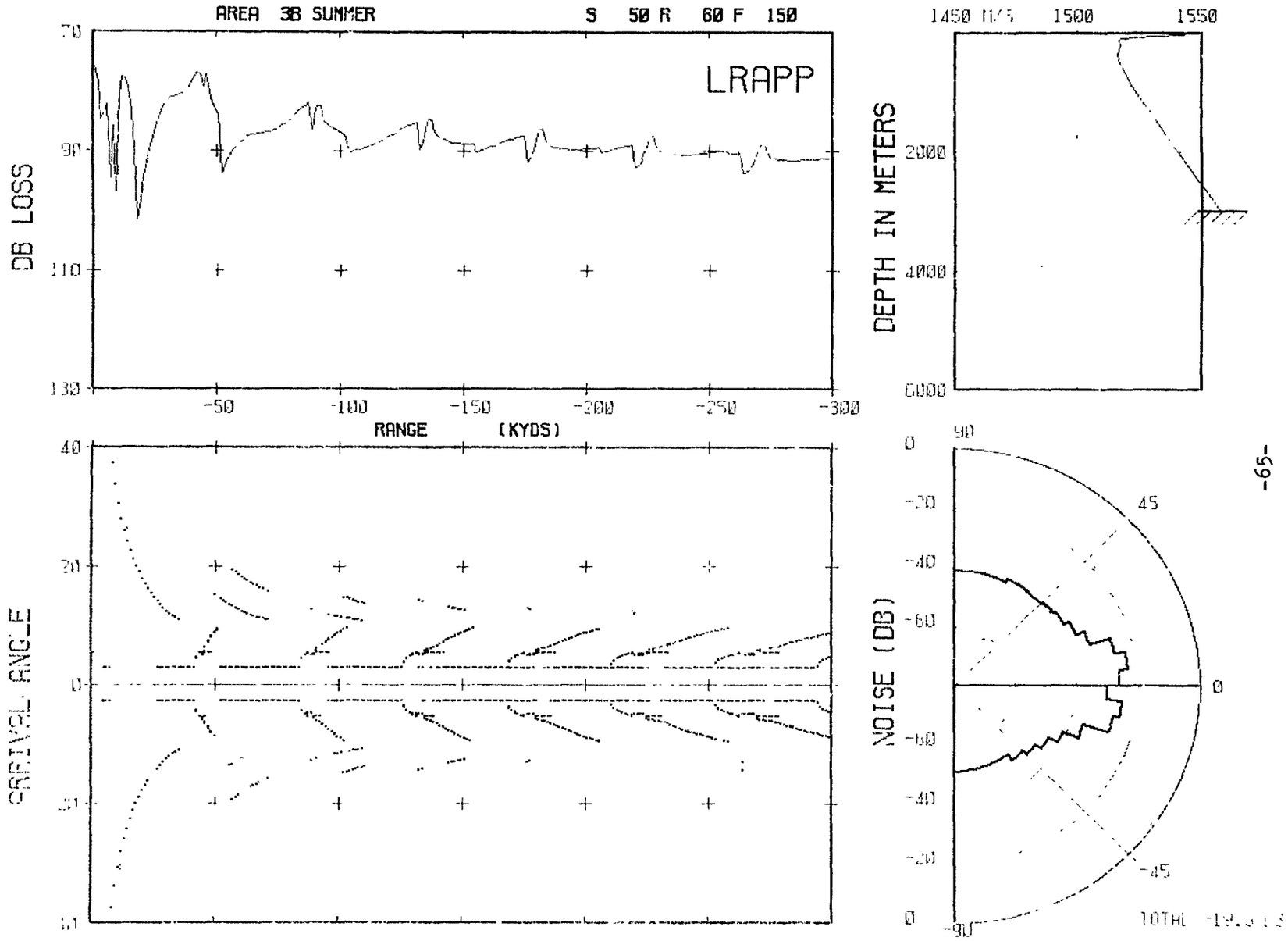
AREA 3B SUMMER
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DB LOSS
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RANGE (KYDS)
DEPTH IN METERS
1450
1500
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ARRIVAL ANGLE
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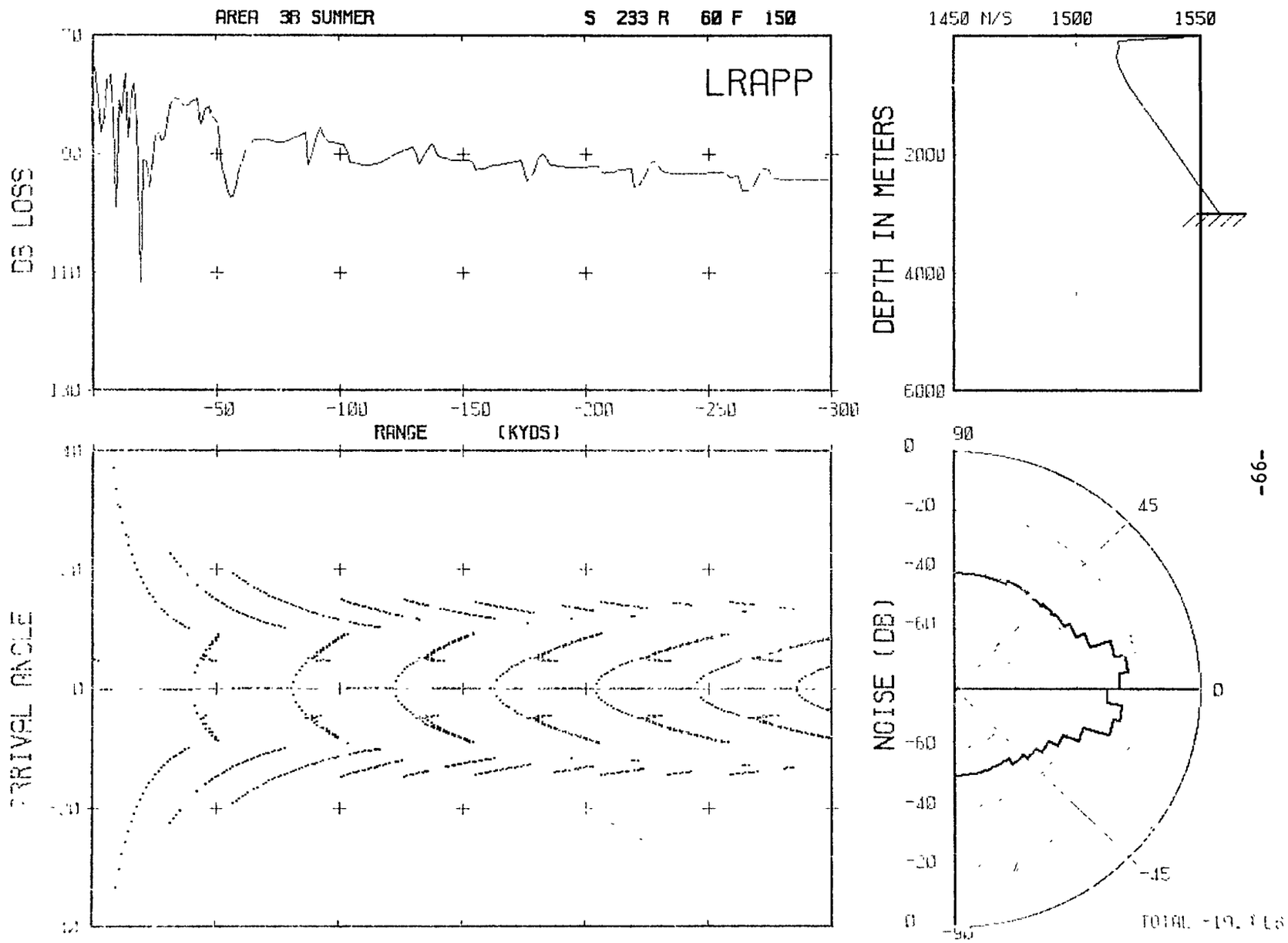
AREA 3B SUMMER
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LRAPP
DB LOSS
RANGE (KYDS)
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DEPTH IN METERS
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6000
ARRIVAL ANGLE
NOISE (DB)
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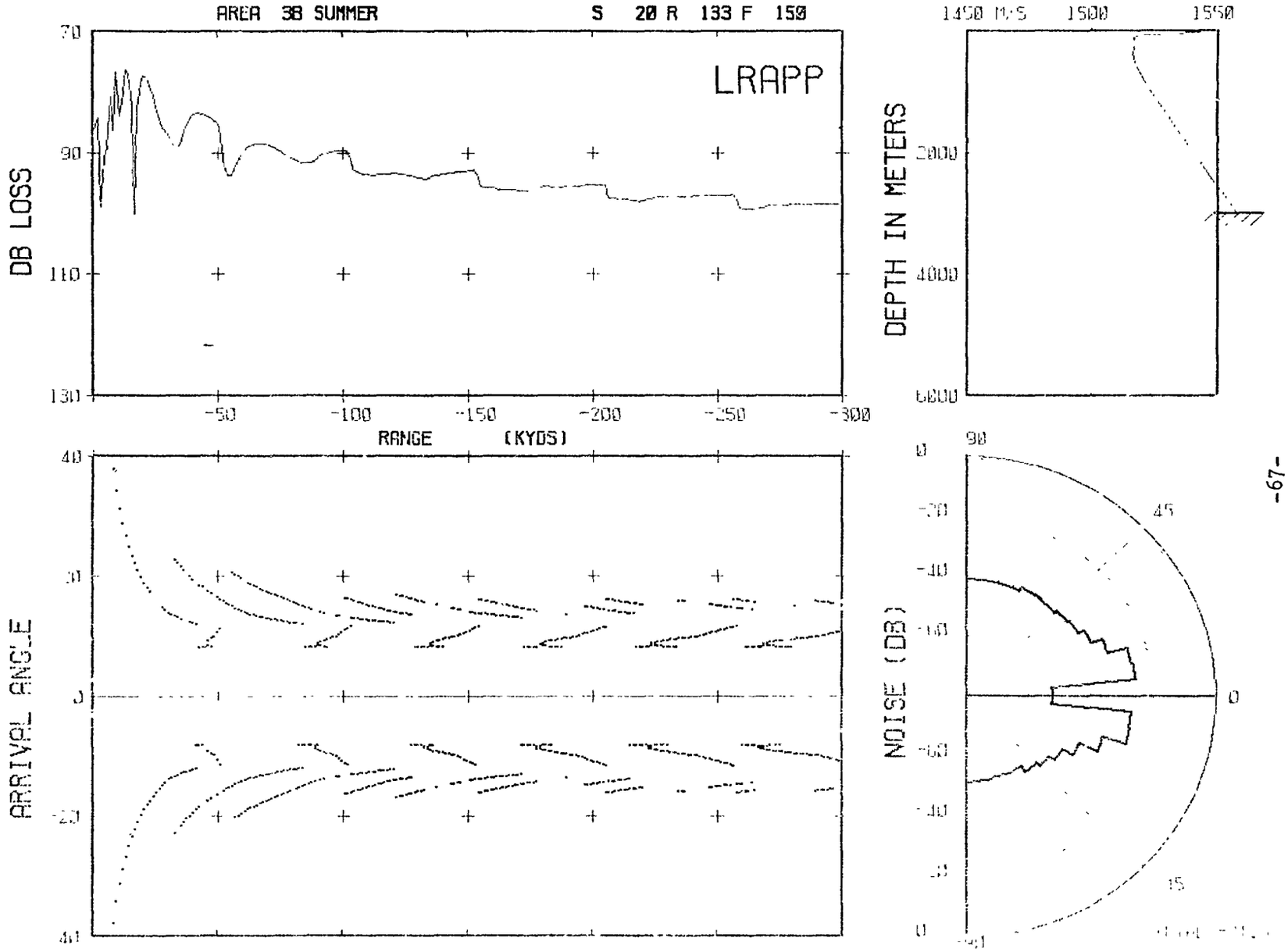
-45
-90
TOTAL


AREA 3B SUMMER
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LRAPP
DB LOSS
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RANGE (KYDS)
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ARRIVAL ANGLE
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NOISE (DB)
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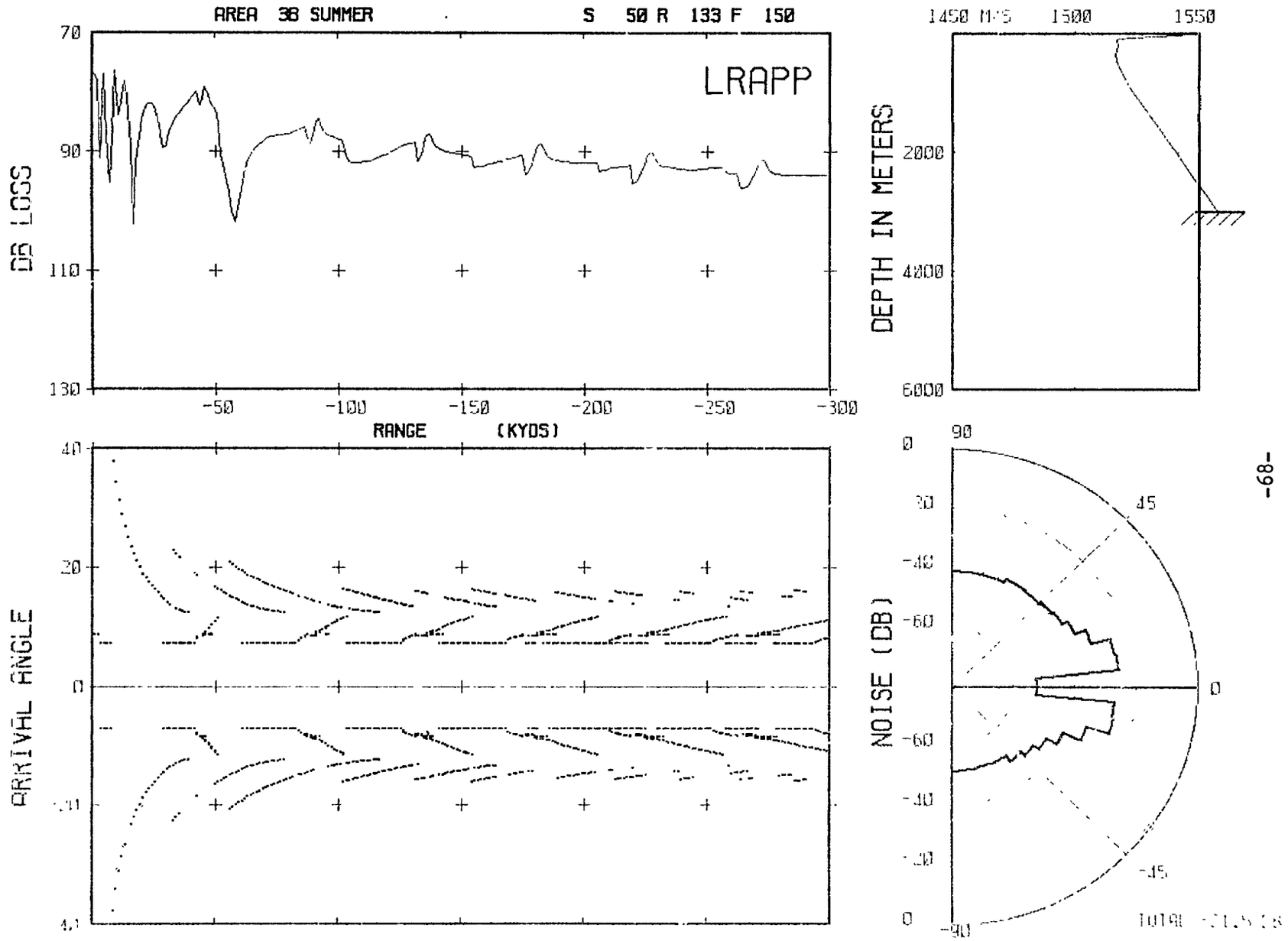
AREA 36 SUMMER
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LRAPP
DB LOSS
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RANGE (KYDS)
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ARRIVAL ANGLE
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NOISE (DB)
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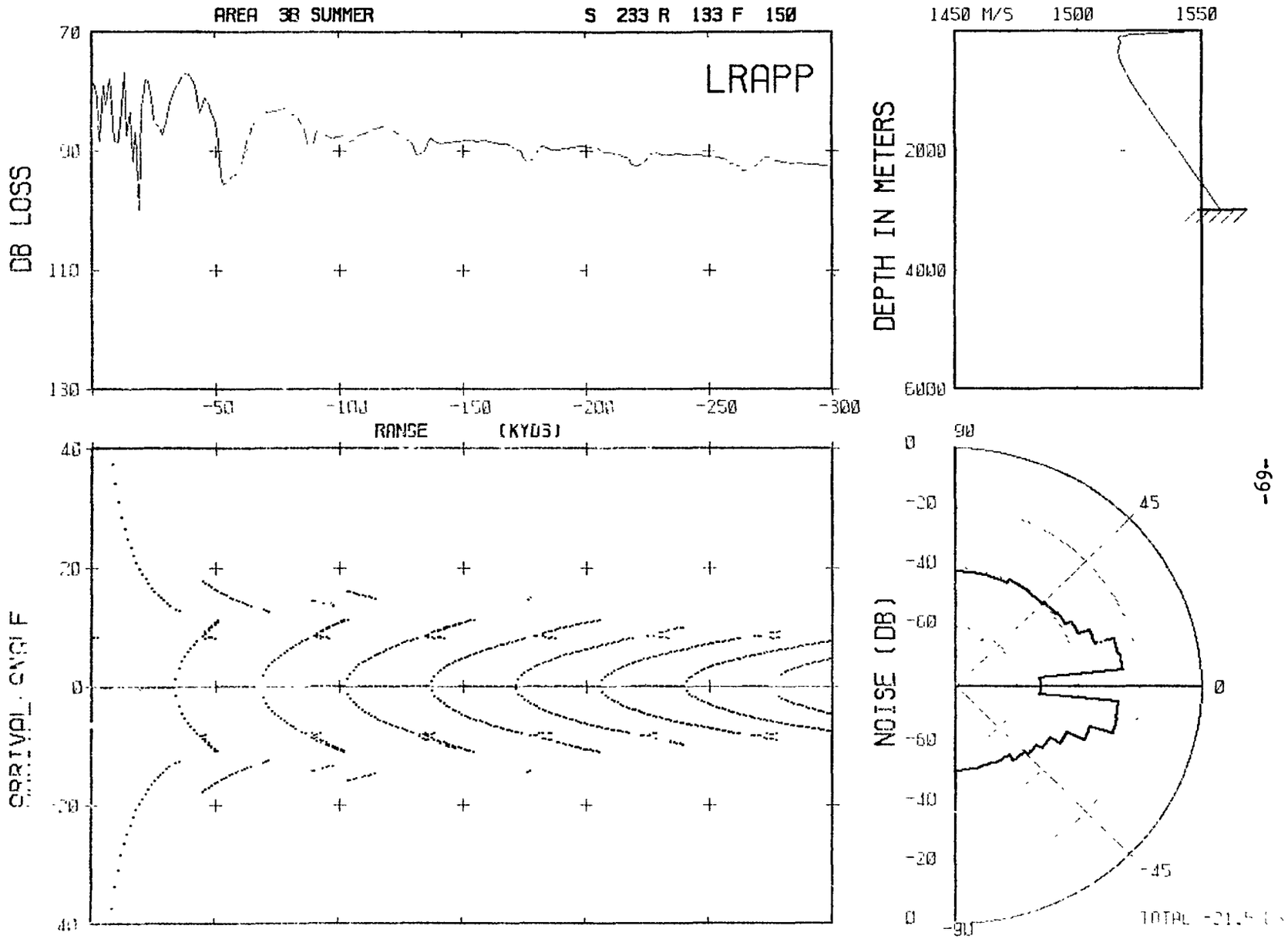
AREA 3B SUMMER
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LRAPP
DB LOSS
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RANGE (KYDS)
1450 M/S
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DEPTH IN METERS
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4000
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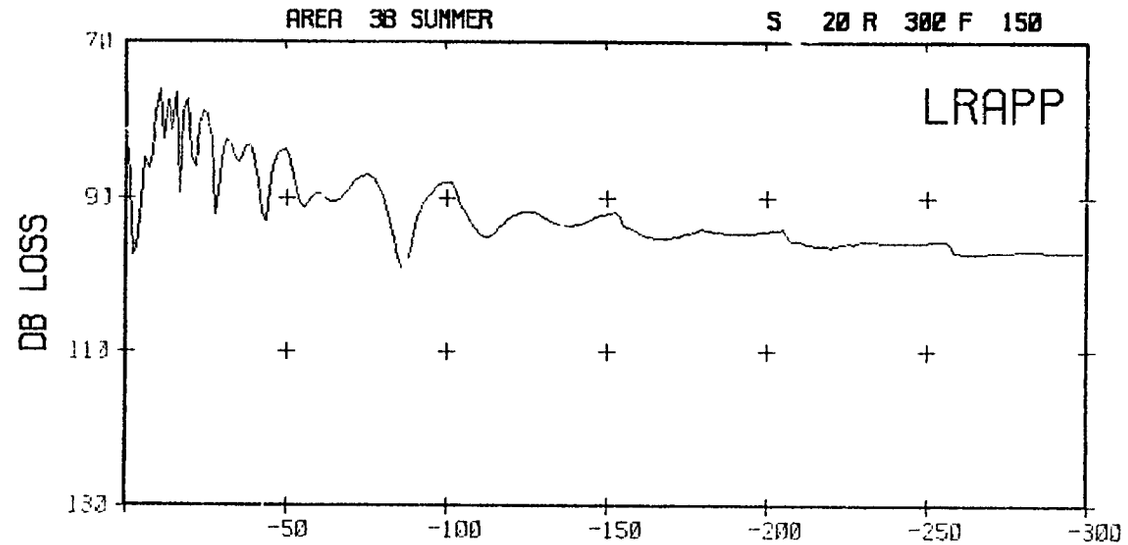
-90
NOISE (DB)


AREA 3B SUMMER
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DB LOSS
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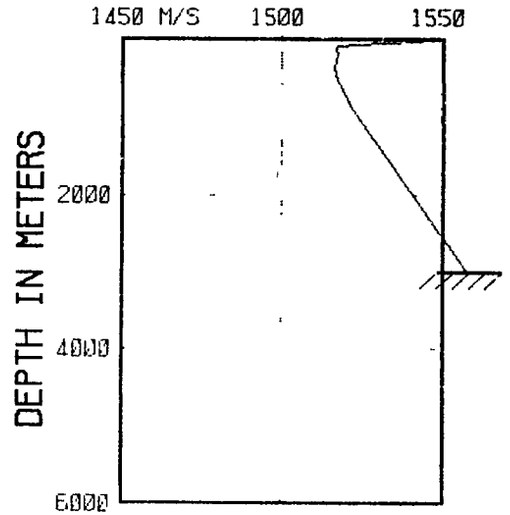
RANGE (KYDS)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2000
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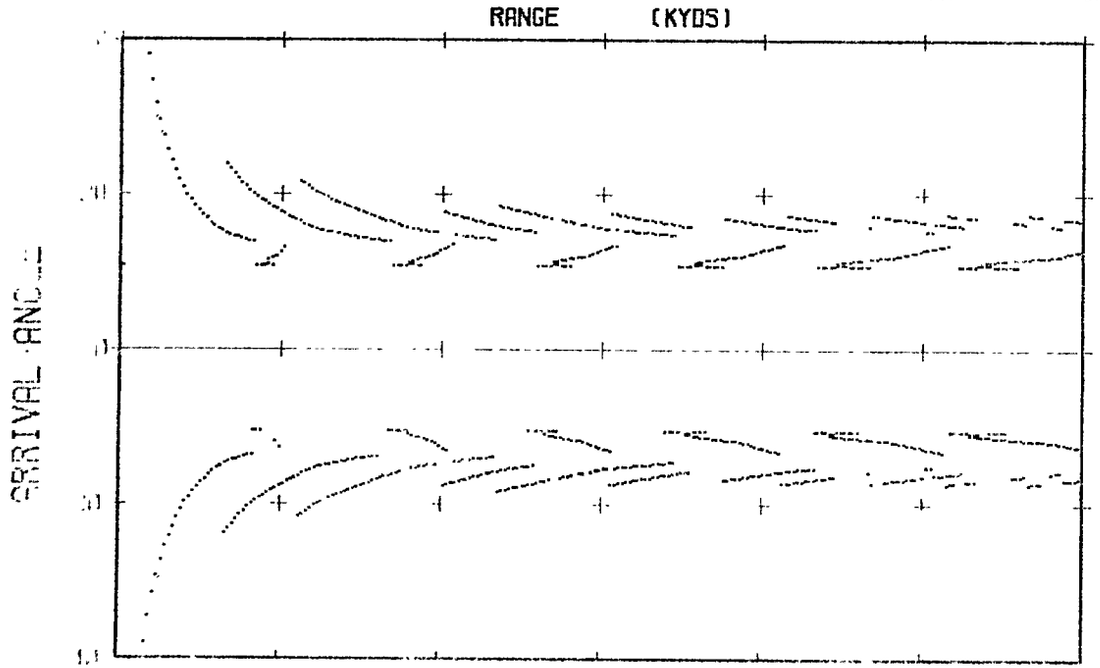
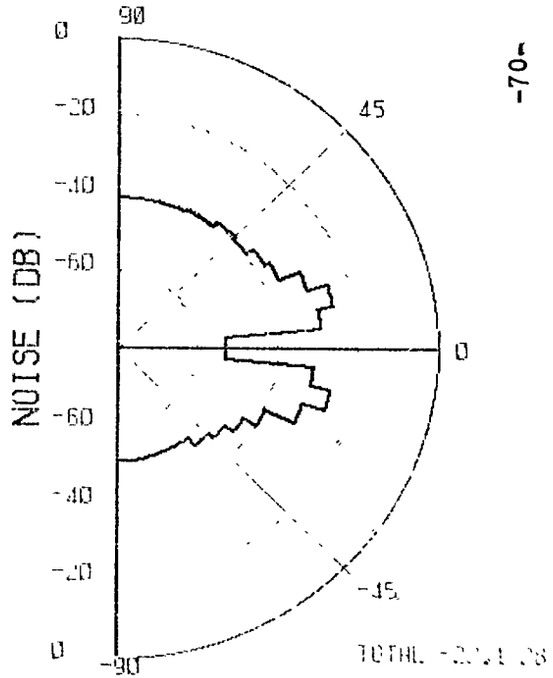

ARRIVAL ANGLE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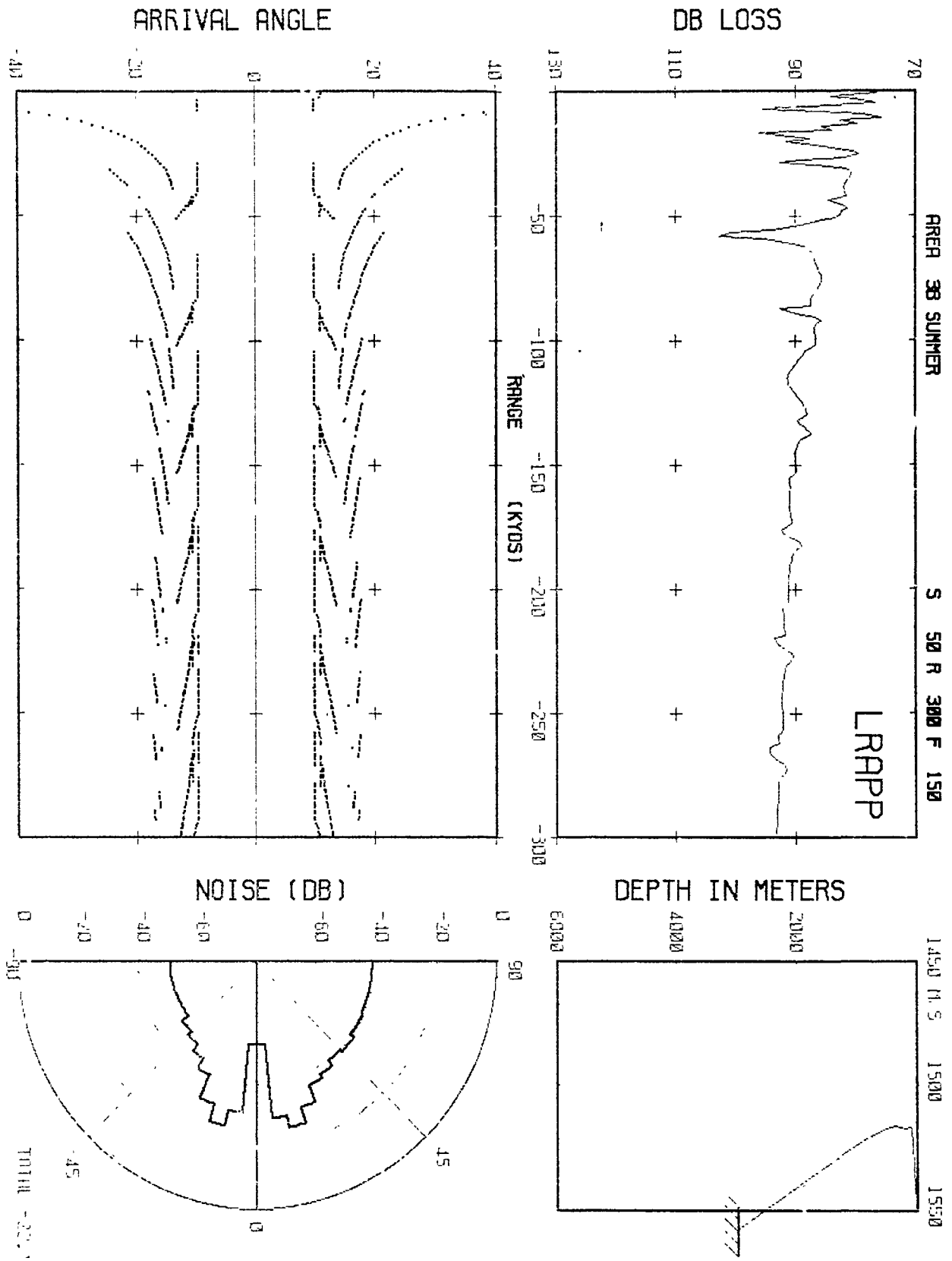
AREA 3B SUMMER
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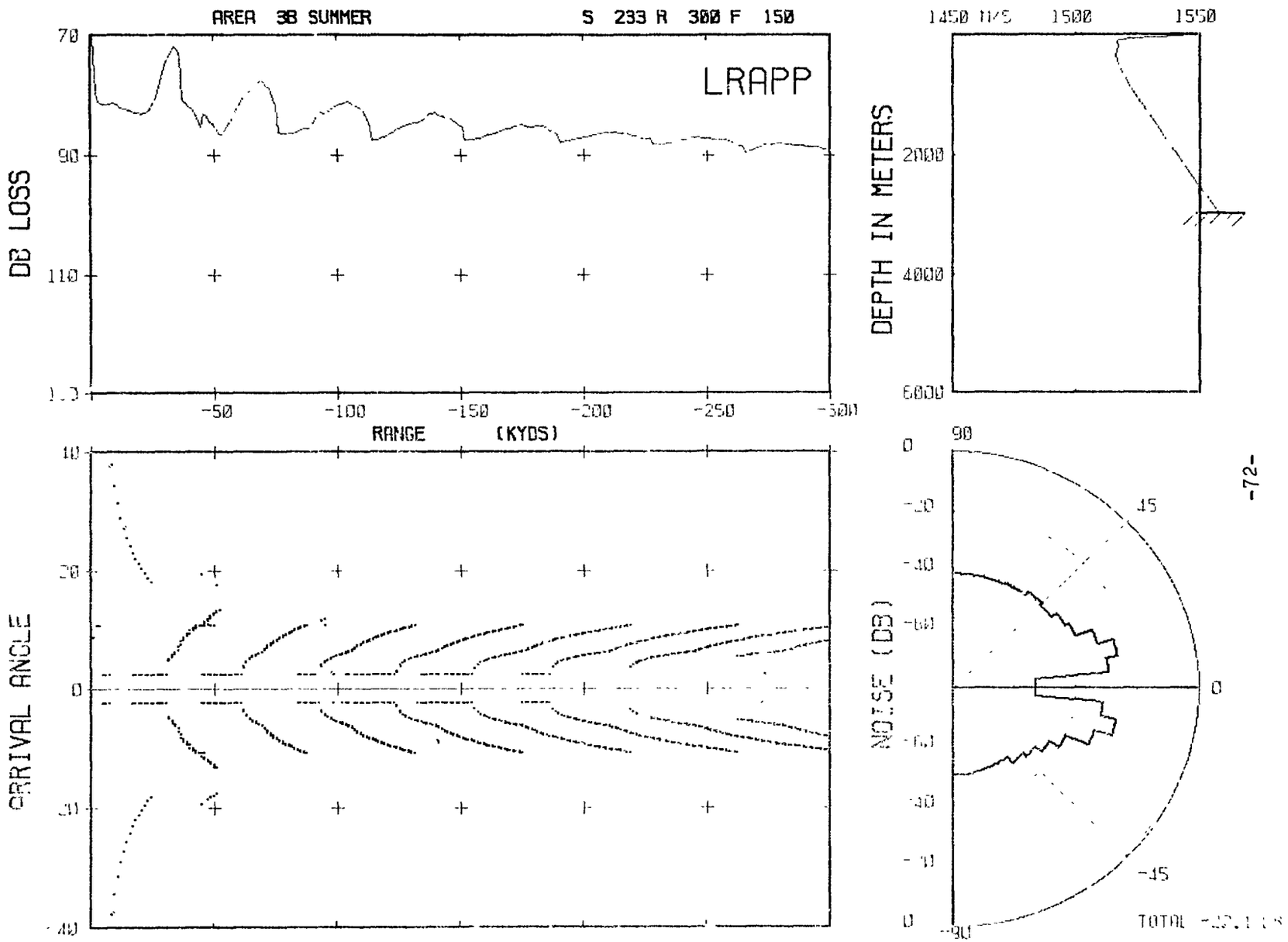
LRAPP
DB LOSS
RANGE (KYDS)
ARRIVAL ANGLE
DEPTH IN METERS
NOISE (DB)
1450 M.S
1500
1550
TOTAL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LRAPP
DB LOSS
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-250
RANGE (KYDS)
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1500
1550
DEPTH IN METERS
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4000
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NOISE (DB)
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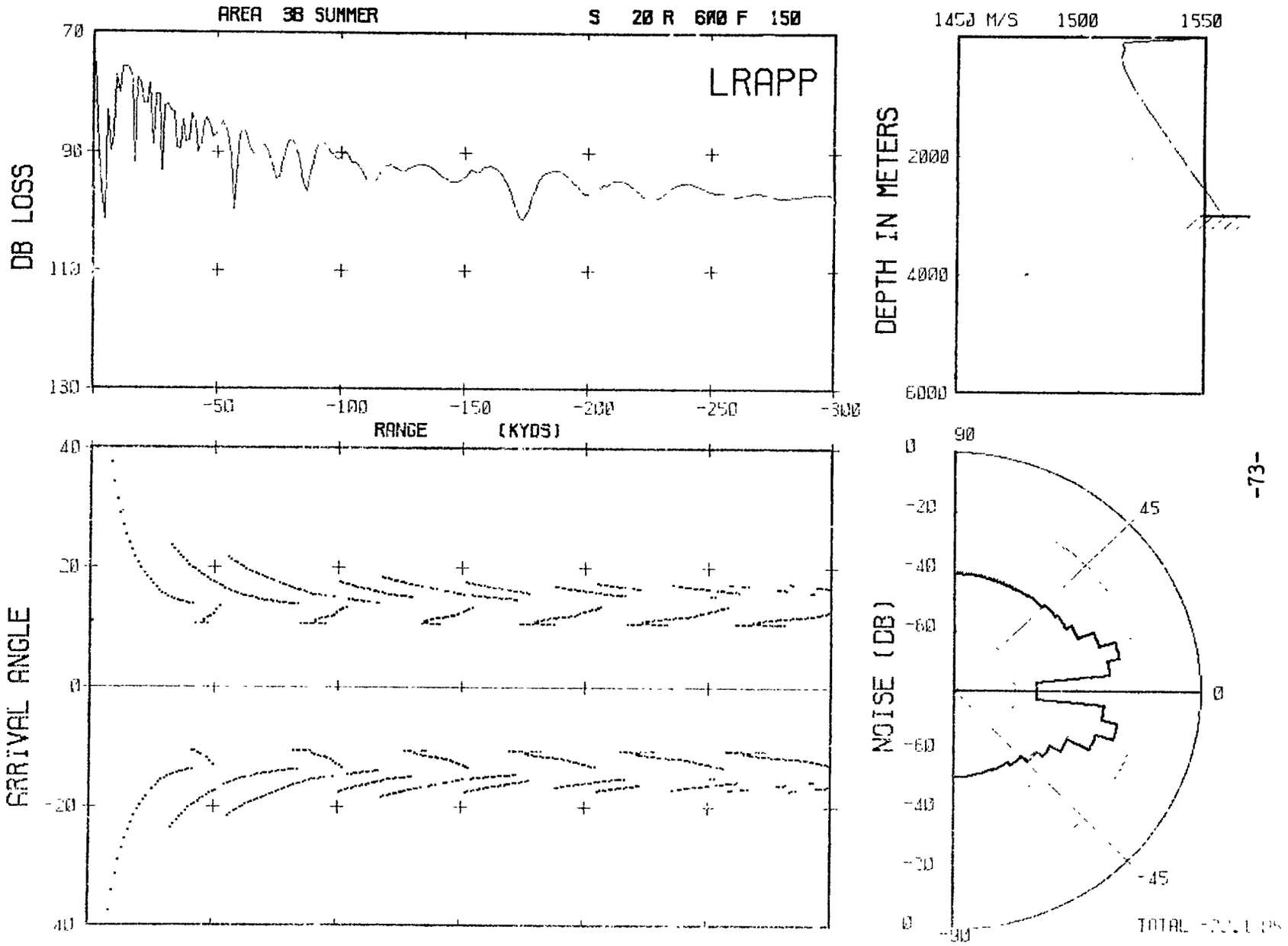
TOTAL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DB LOSS
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RANGE (KYDS)
1450 M/S
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1550
DEPTH IN METERS
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ARRIVAL ANGLE
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NOISE (DB)
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-45
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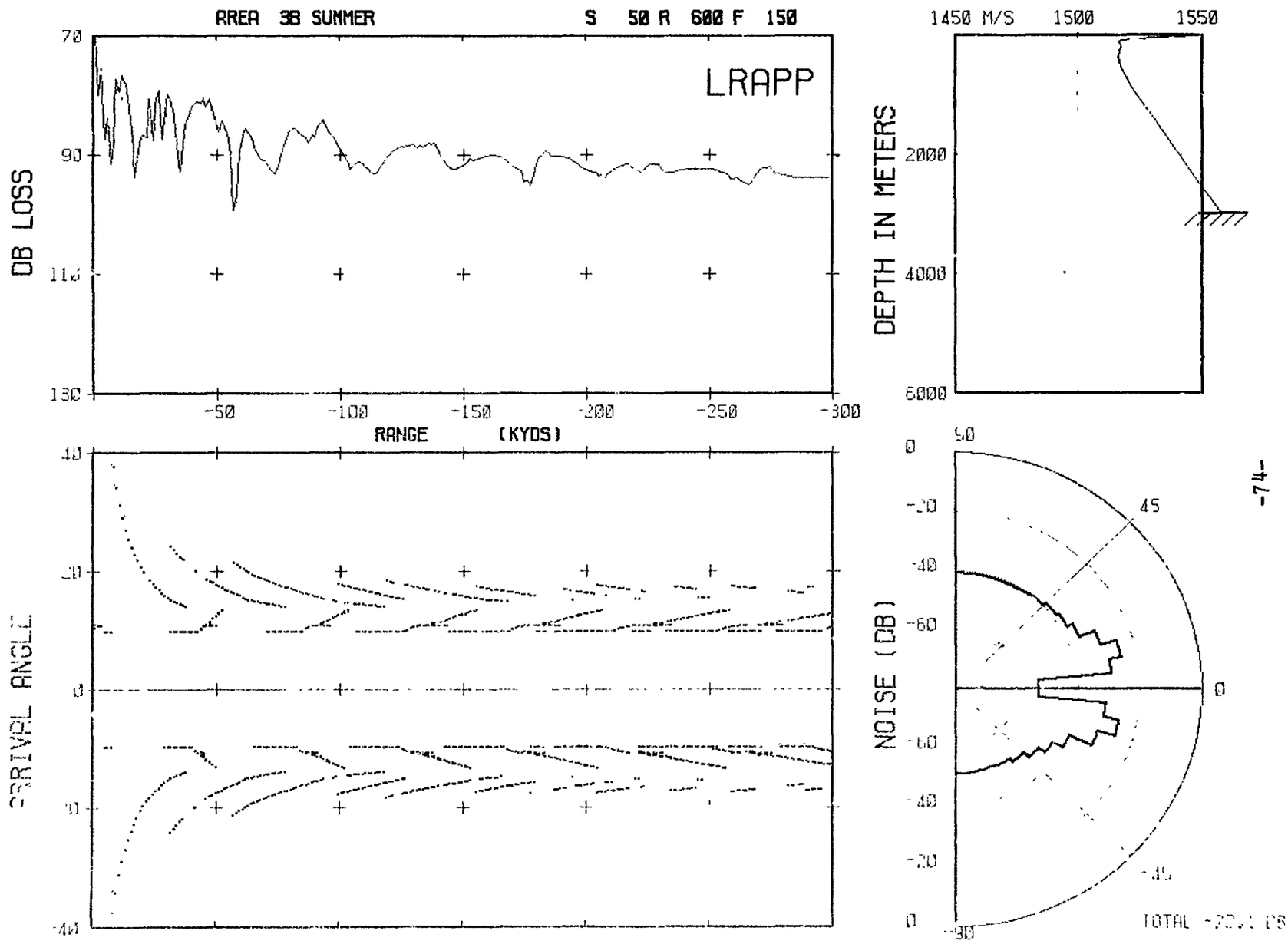
TOTAL


RREA 3B SUMMER
S 50 R 600 F 150
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
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-40
NOISE (DB)
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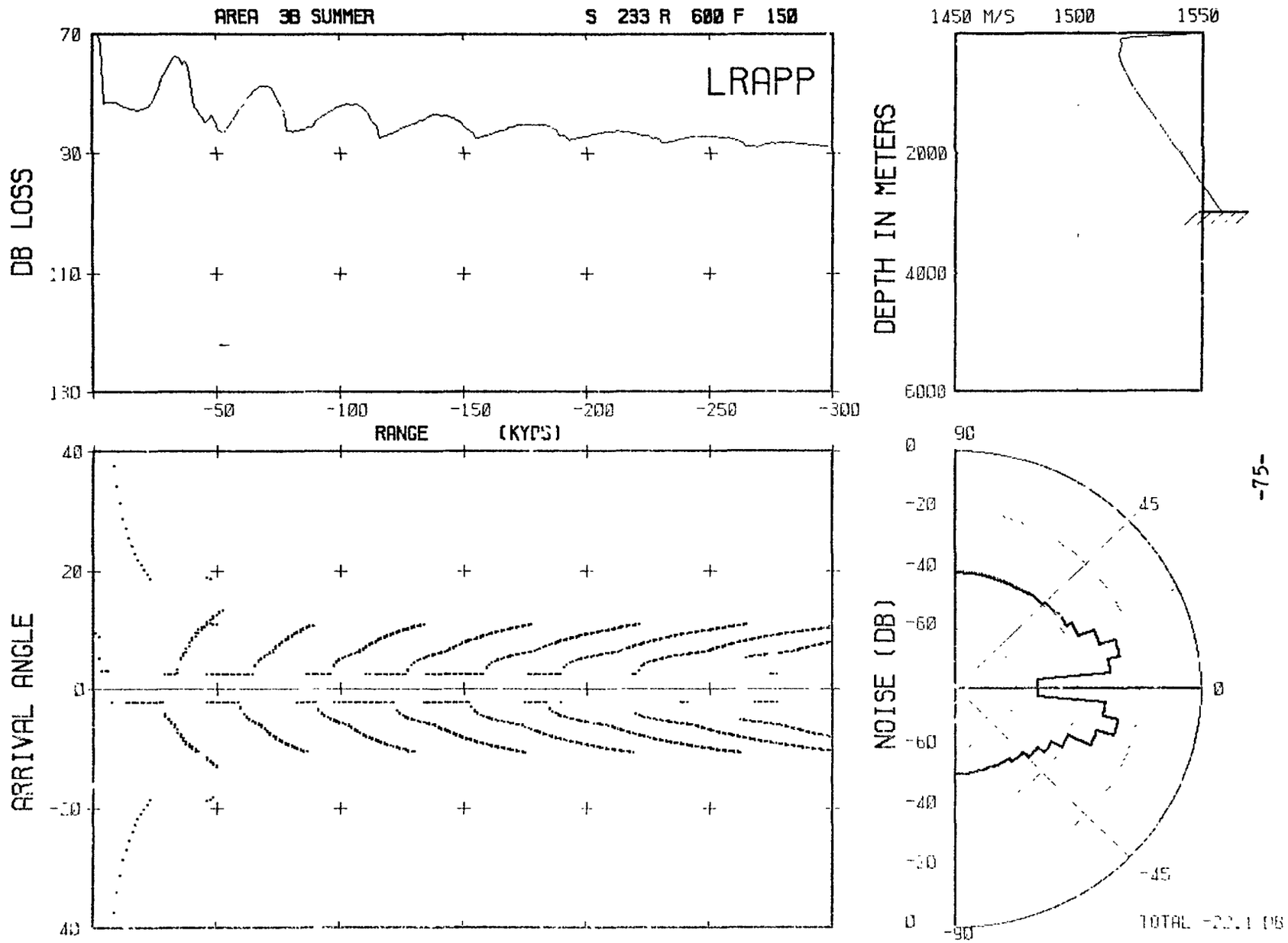
-20
-40
-60
TOTAL


AREA 3B SUMMER
S 233 R 600 F 150
LRAPP
DB LOSS
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90
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RANGE (KYDS)
1450 M/S
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DEPTH IN METERS
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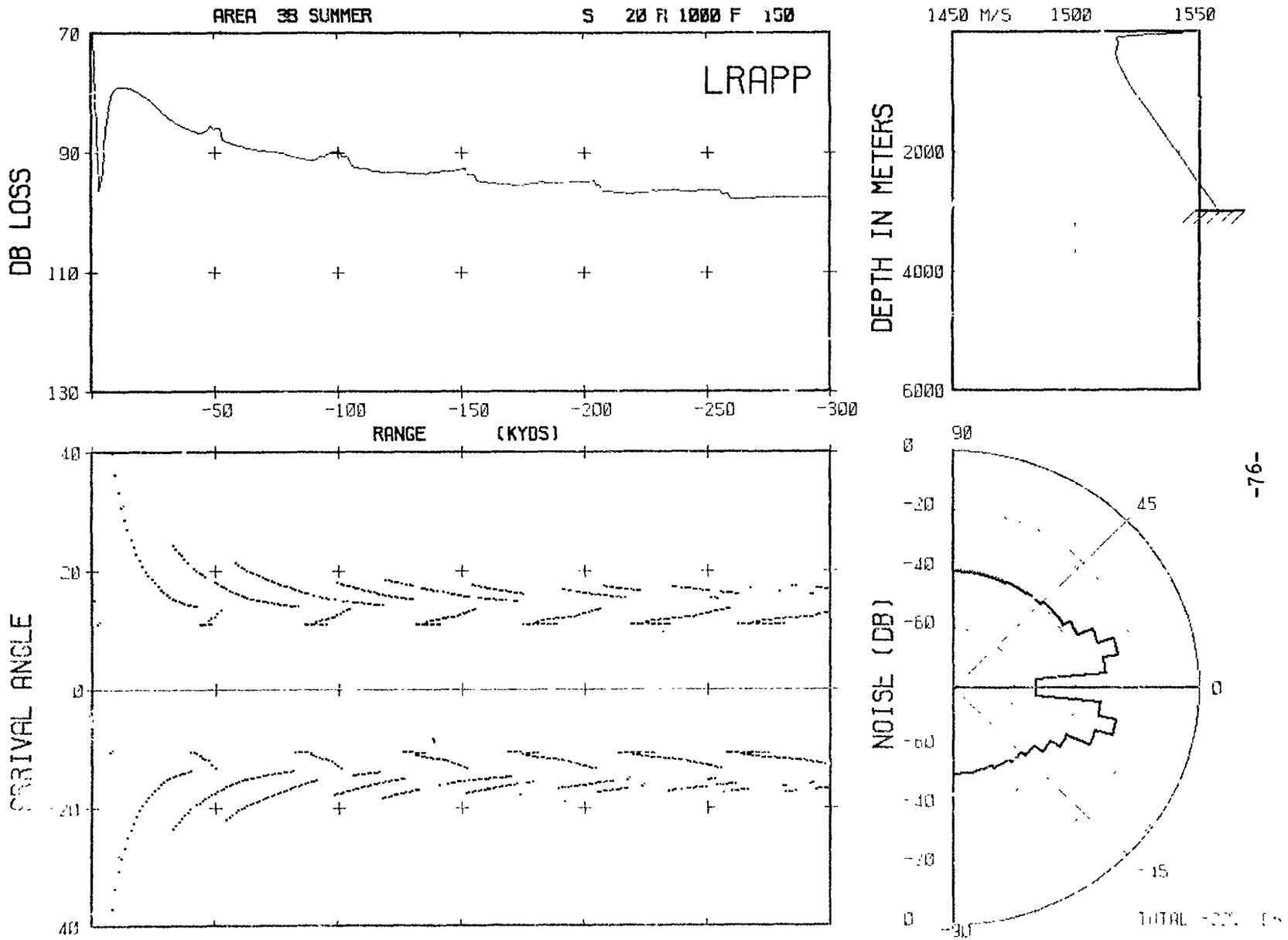
TOTAL -22.1 DB


AREA 3B SUMMER
S 20 R 1000 F 150
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
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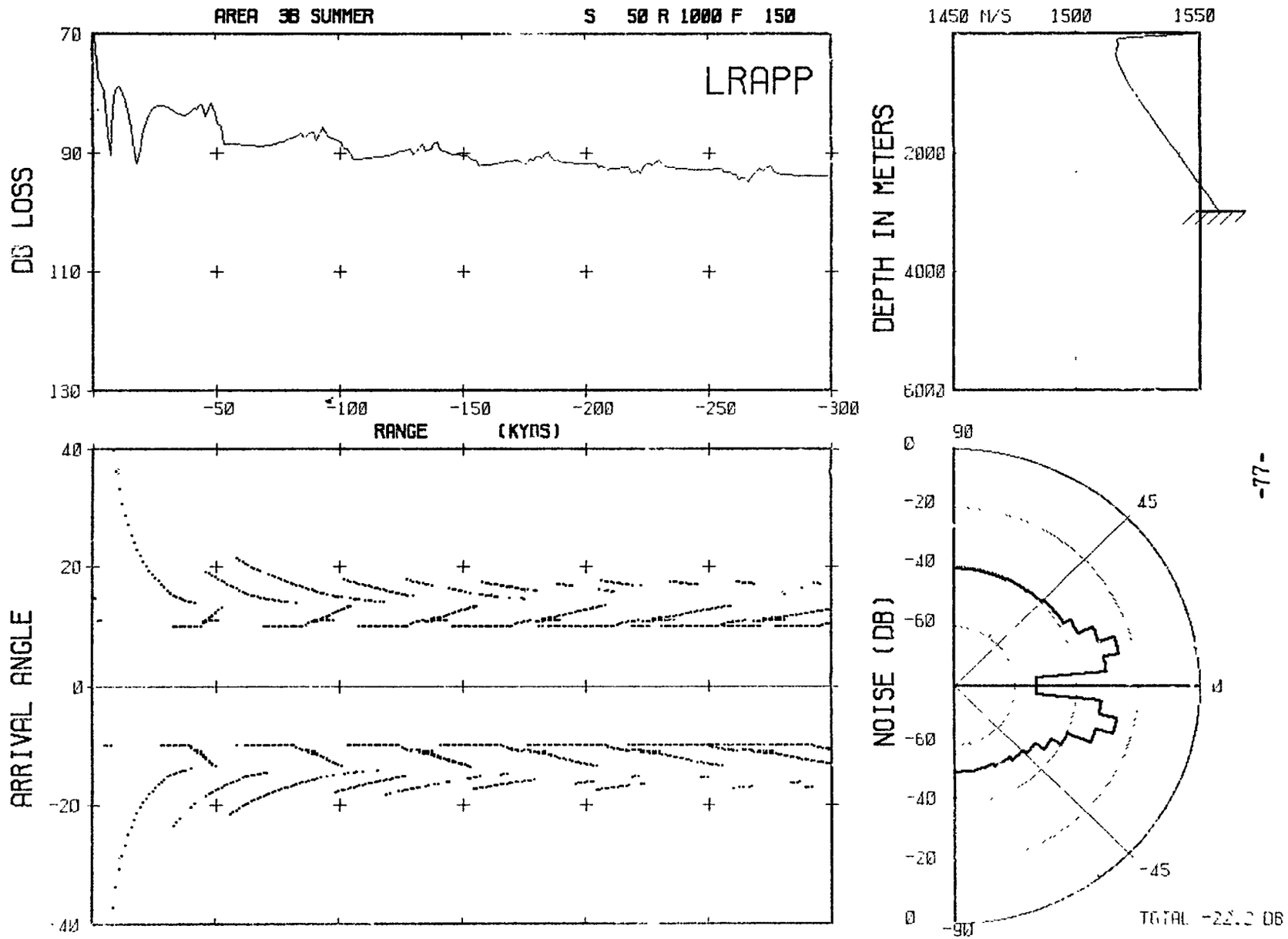
-20
-40
NOISE (DB)
90
45
0
-45
-90
TOTAL


AREA 3B SUMMER
S 50 R 1000 F 150
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
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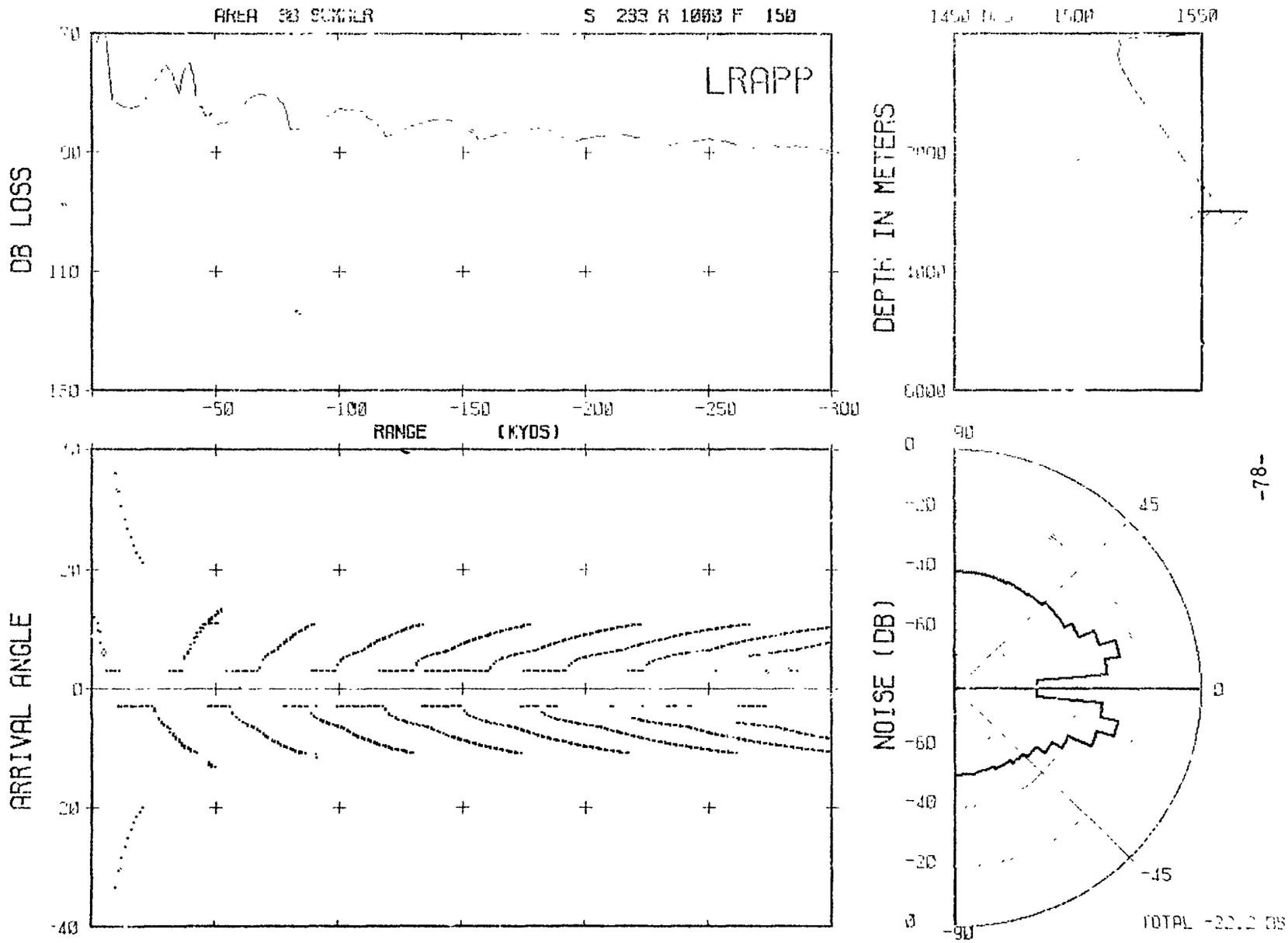
-40
NOISE (DB)
90
45
-45
-90
TOTAL -22.2 DB


AREA 30 SUMMER
S 233 R 1003 F 150
LRAPP
DB LOSS
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
DEPTH IN METERS
1450
1500
1550
2000
4000
6000
ARRIVAL ANGLE
20
0
-20
-40
NOISE (DB)
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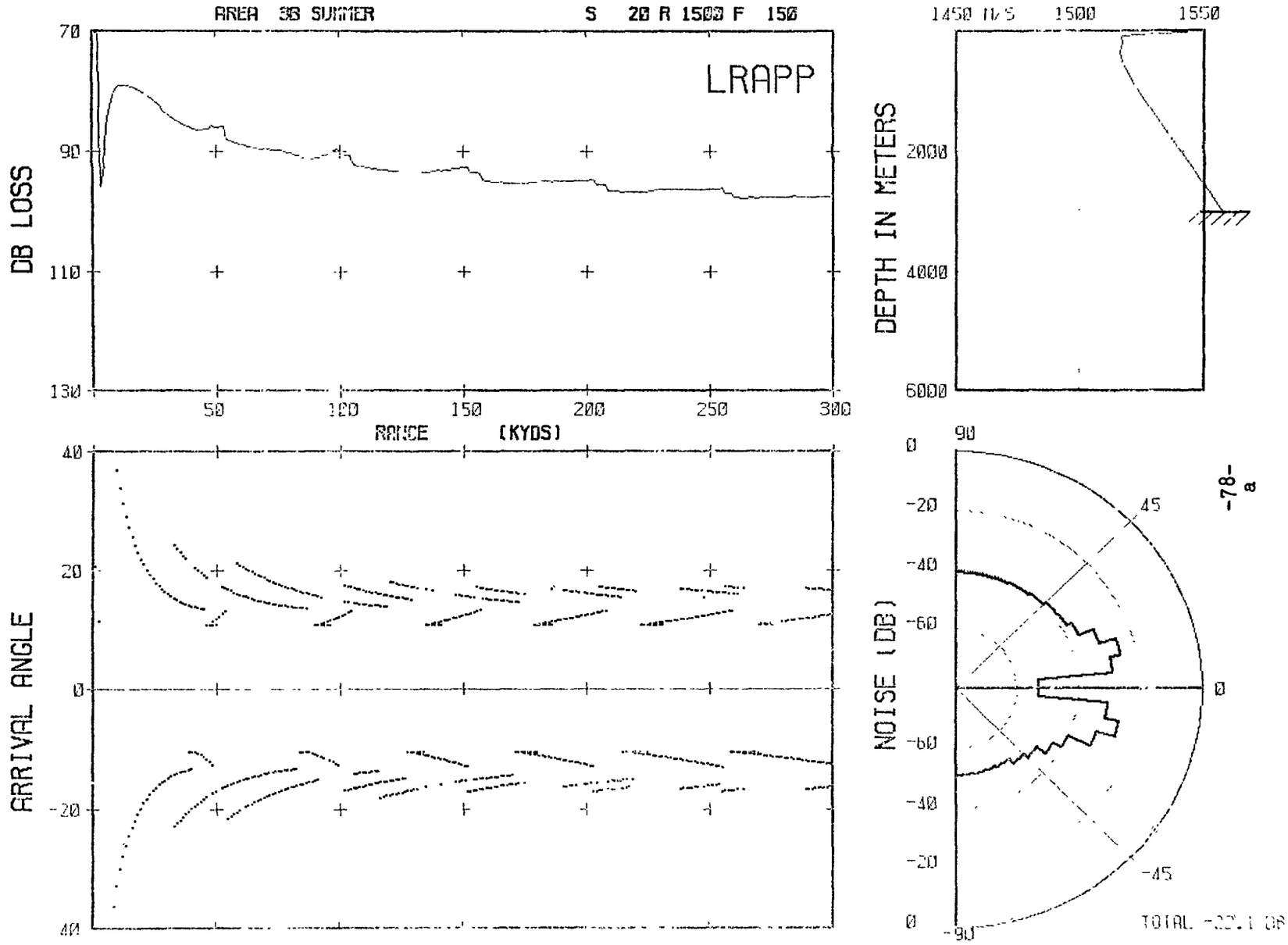
-20
-40
-60
90
45
0
-45
-90
TOTAL -22.2 DB


AREA 36 SUMMER
S 20 R 1500 F 150
LRAPP
DB LOSS
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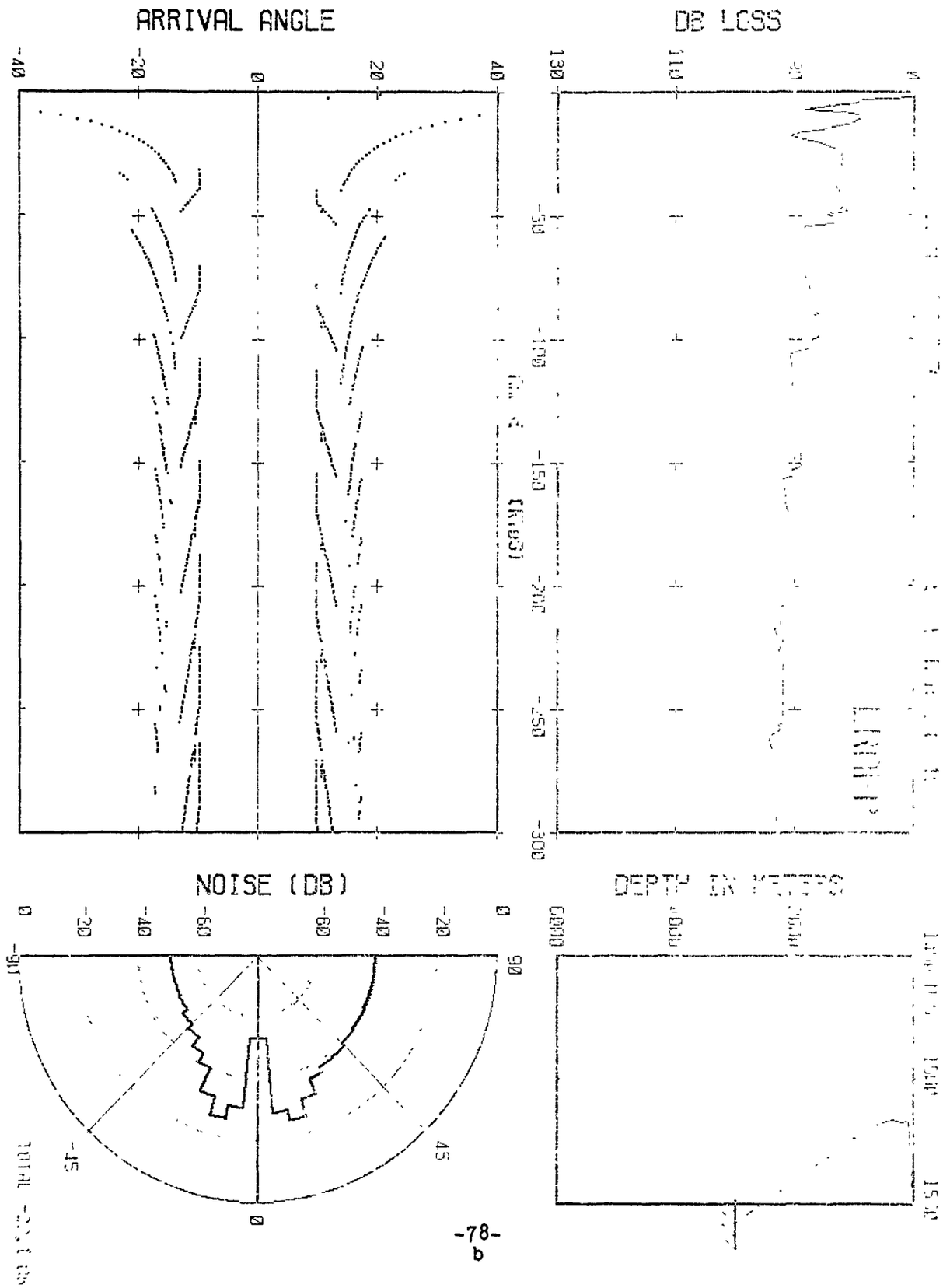
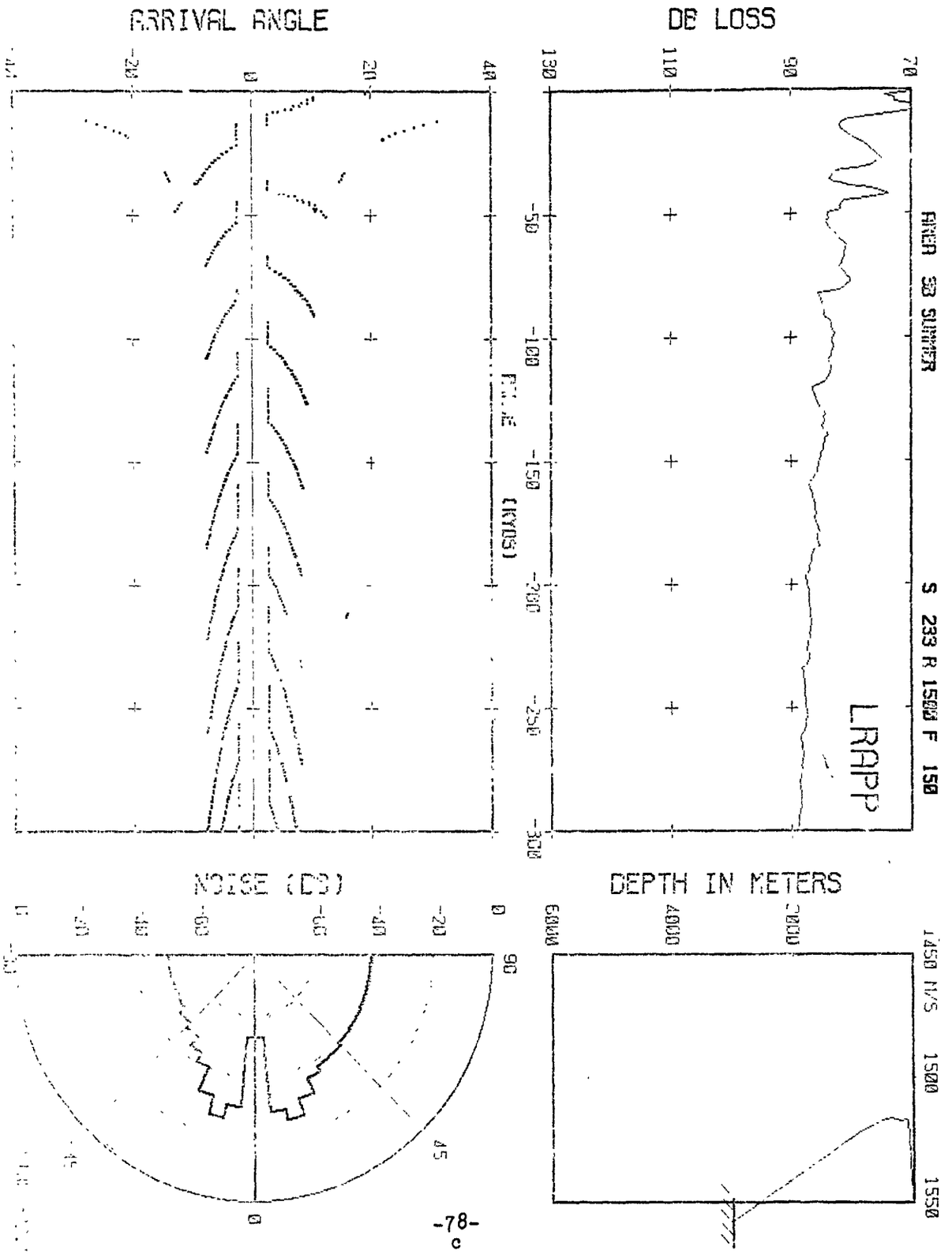
90
110
130
50
100
150
200
250
300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
40
NOISE (DB)
0
-20
-40
-60
-60
-40
-20
0
90
45
0
-45
-90
TOTAL -22.1 DB


ARRIVAL ANGLE
DB LOSS
NOISE (DB)
DEPTH IN METERS


ARRIVAL ANGLE
DB LOSS
AREA 3B SUMMER
S 233 R 1500 F 150
LRAPP
(KYDS)
NOISE (DB)
DEPTH IN METERS
1450 M/S
1500
1550

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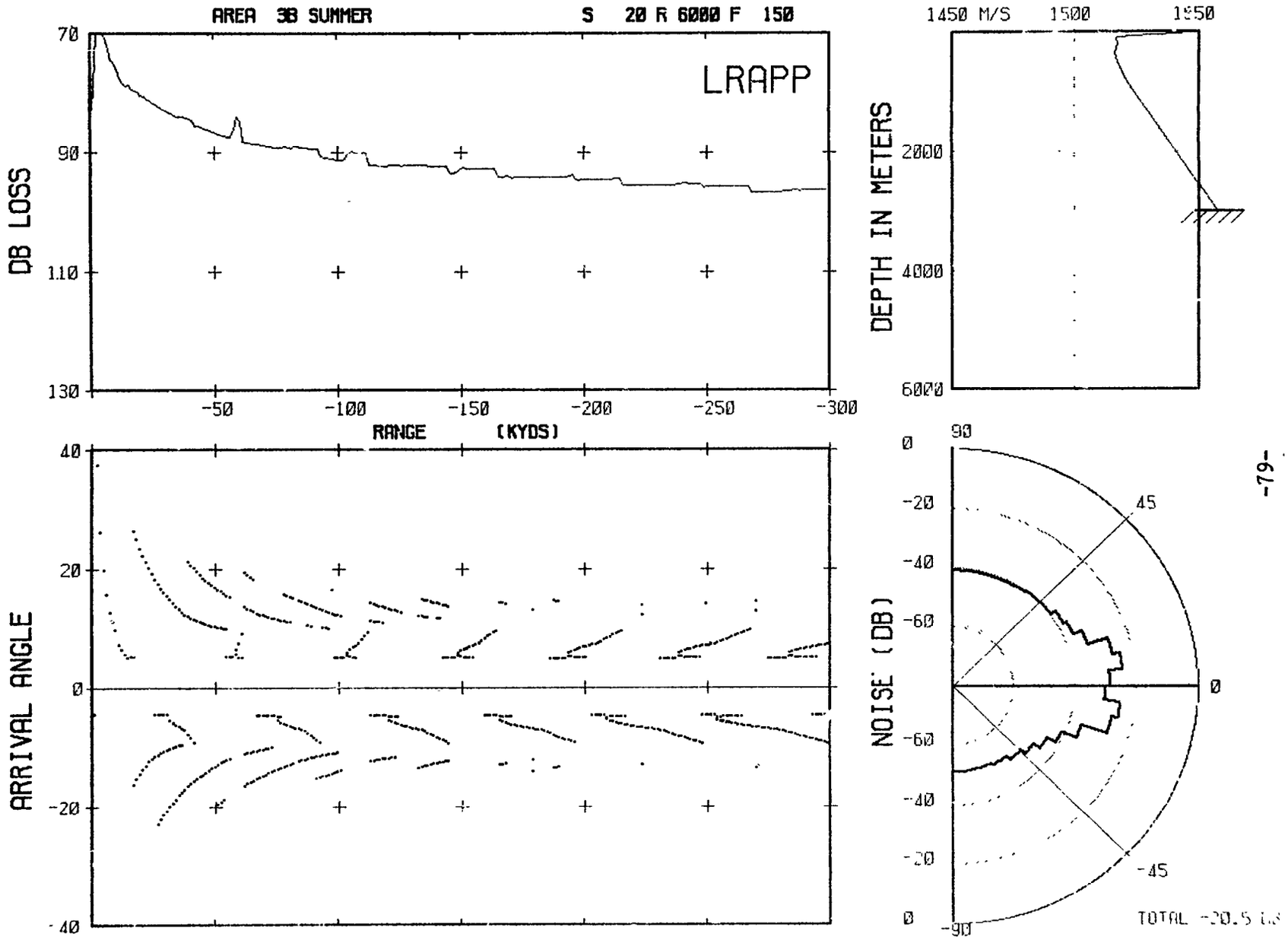
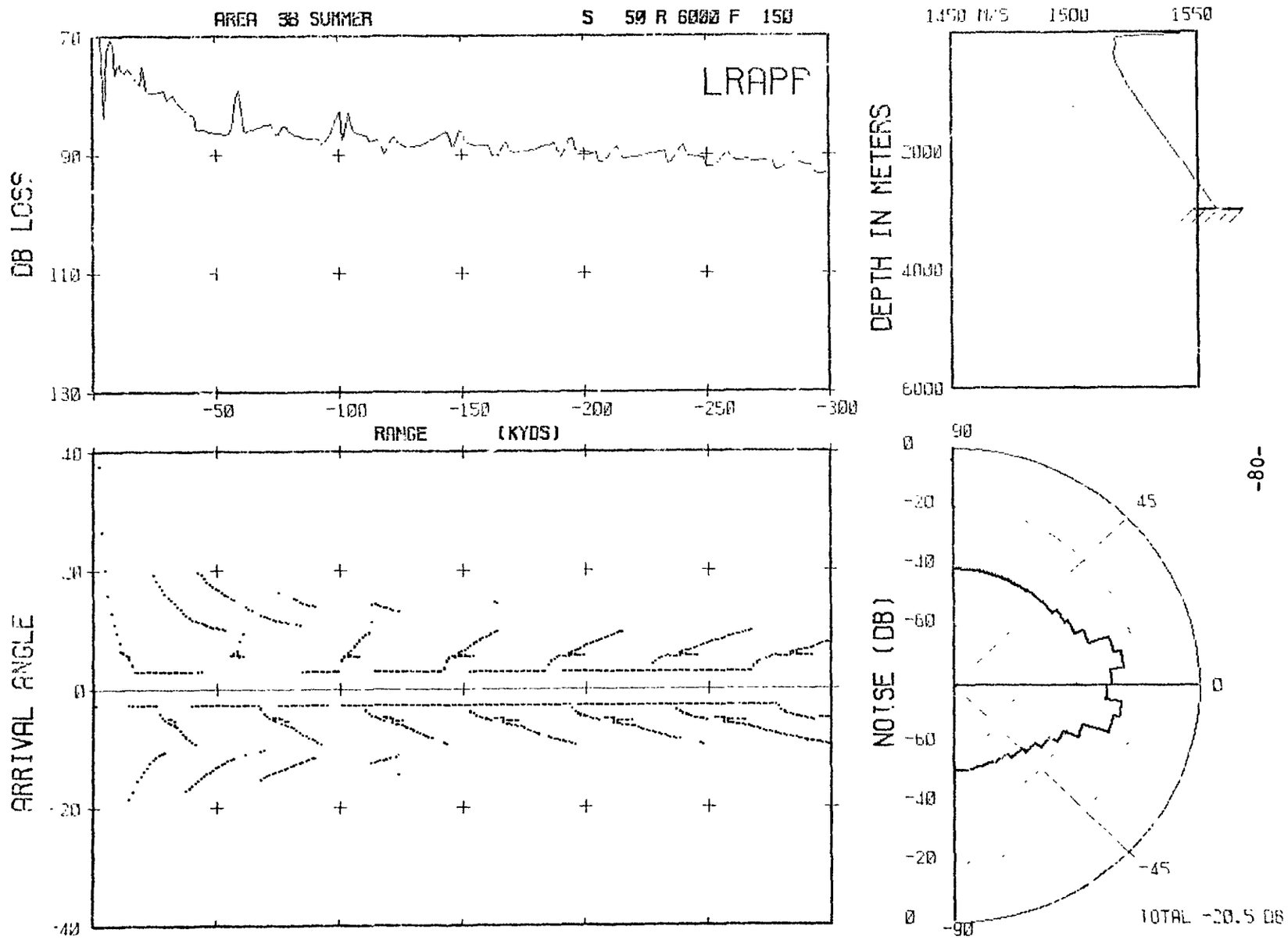
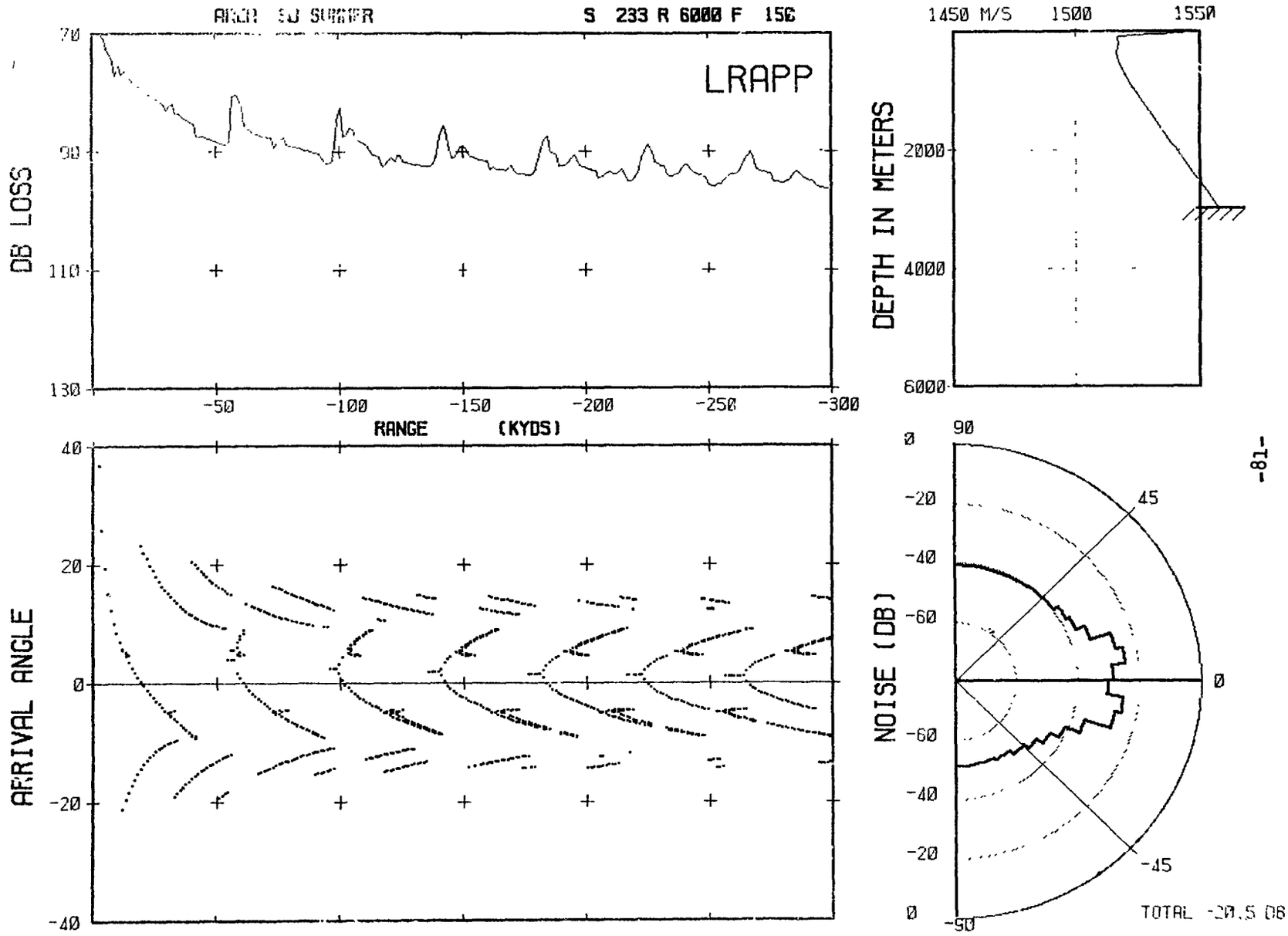
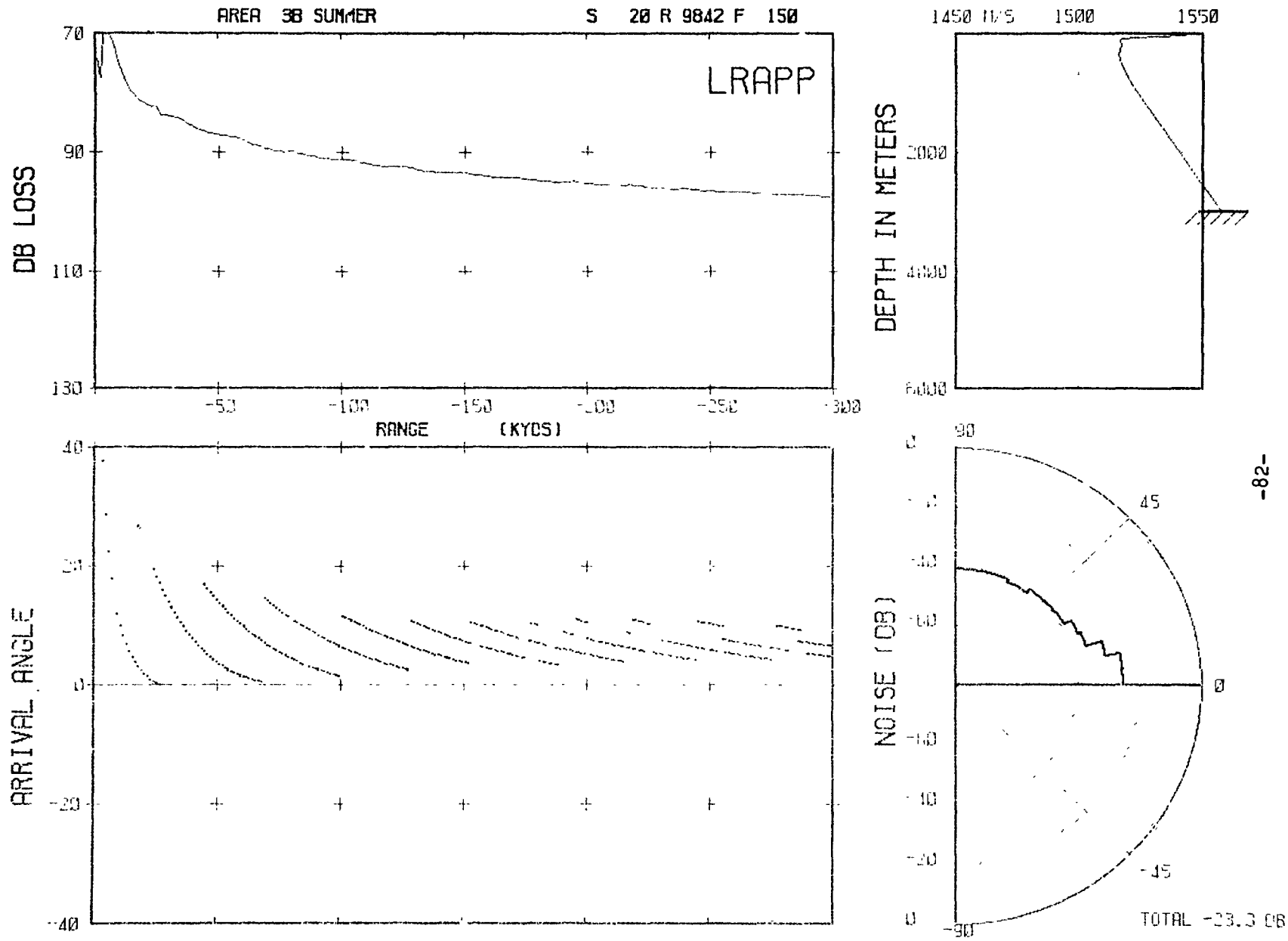



AREA 38 SUMMER
S 50 R 6000 F 150
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
-45
-90
TOTAL -20.5 DB


S 233 R 6000 F 150
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
-45
-90
TOTAL -20.5 DB


AREA 3B SUMMER
S 20 R 9842 F 150
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
0
-45
-90
TOTAL -23.3 DB

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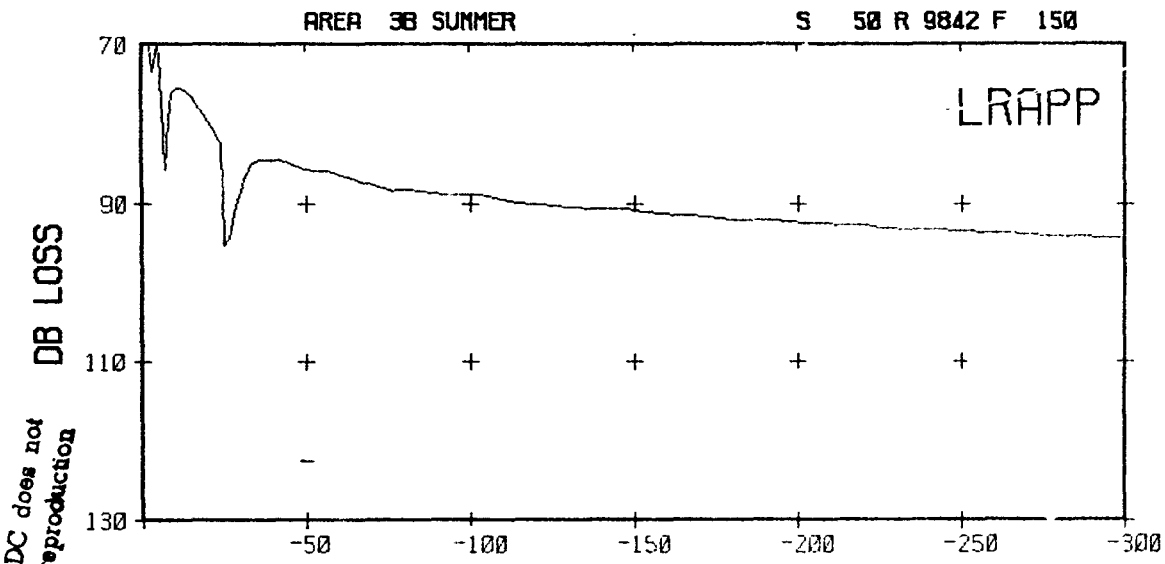
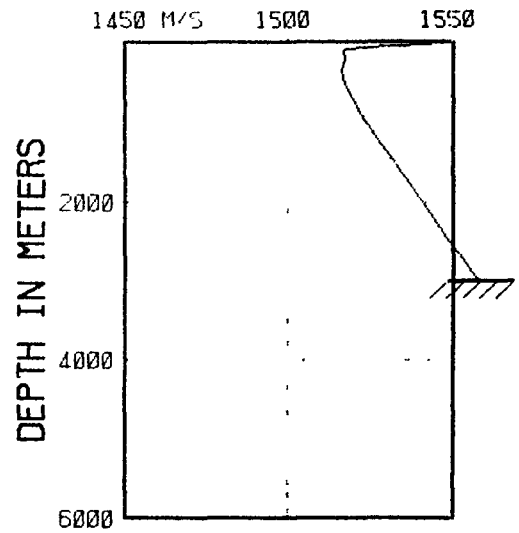
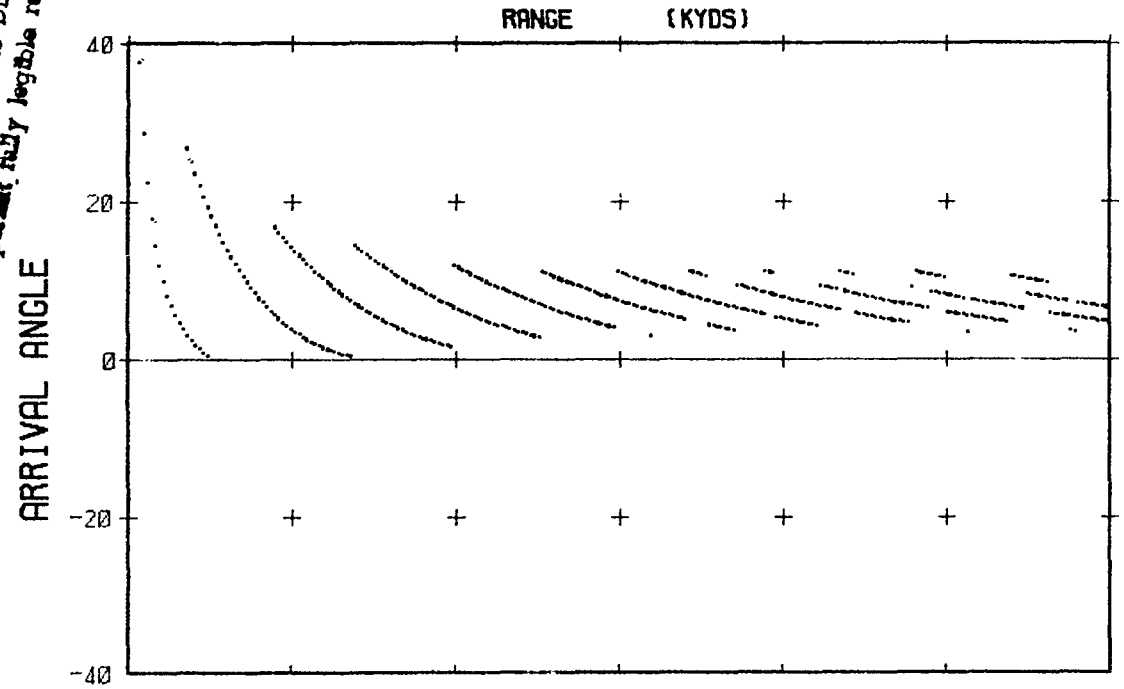
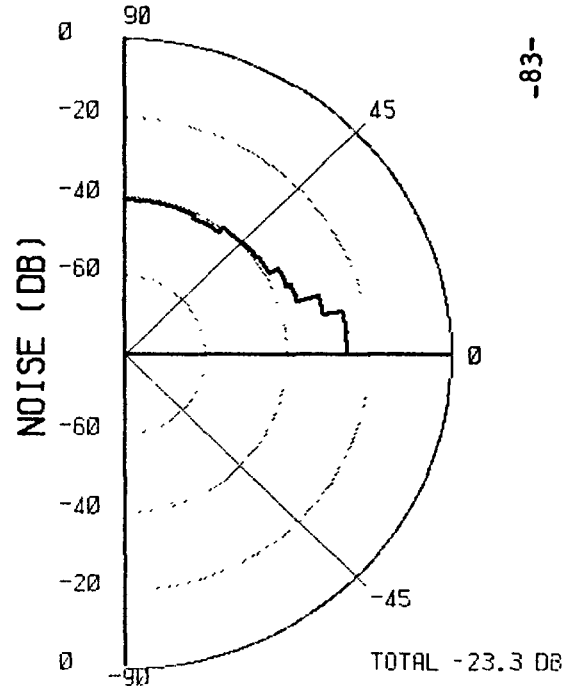
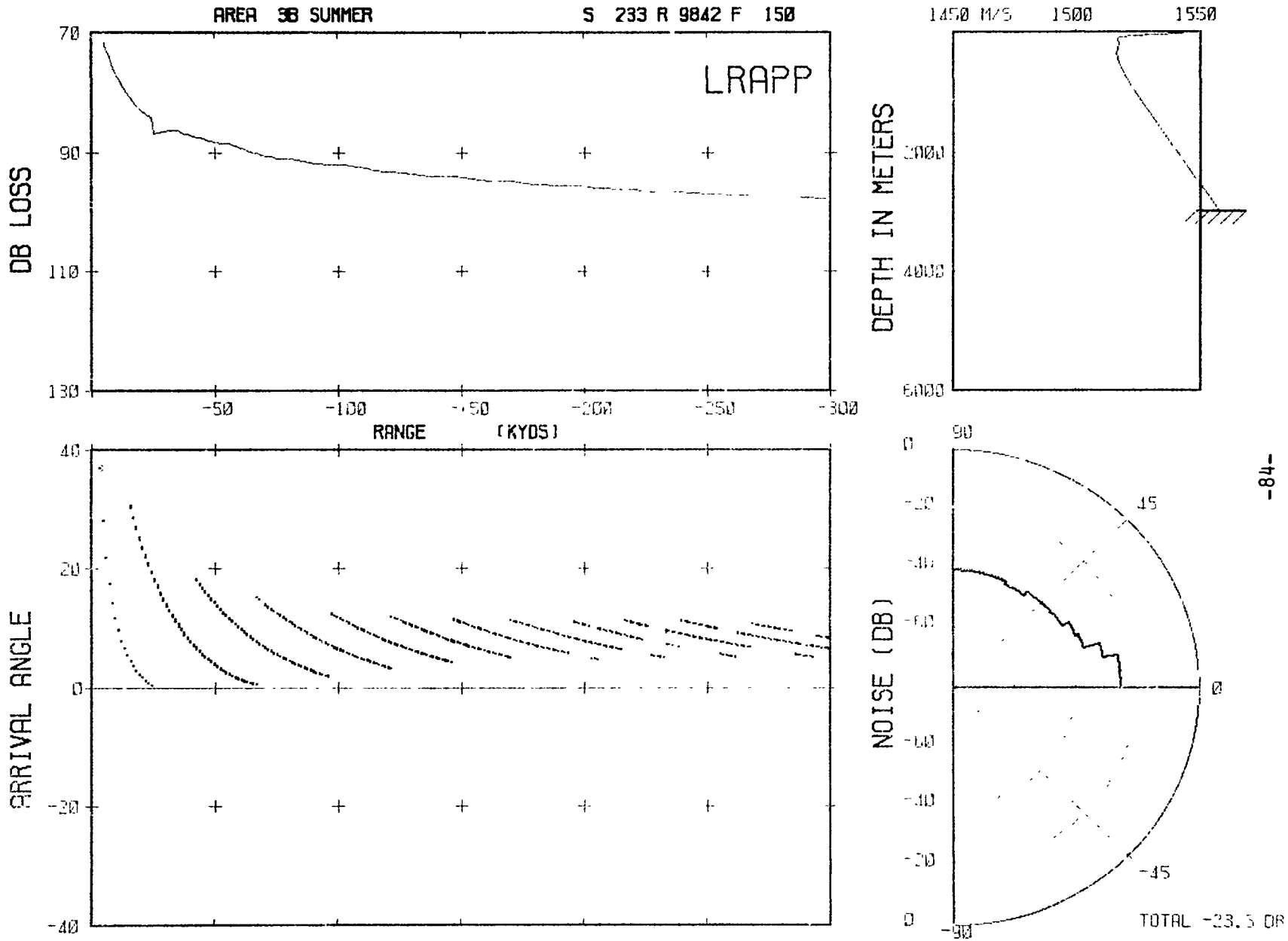
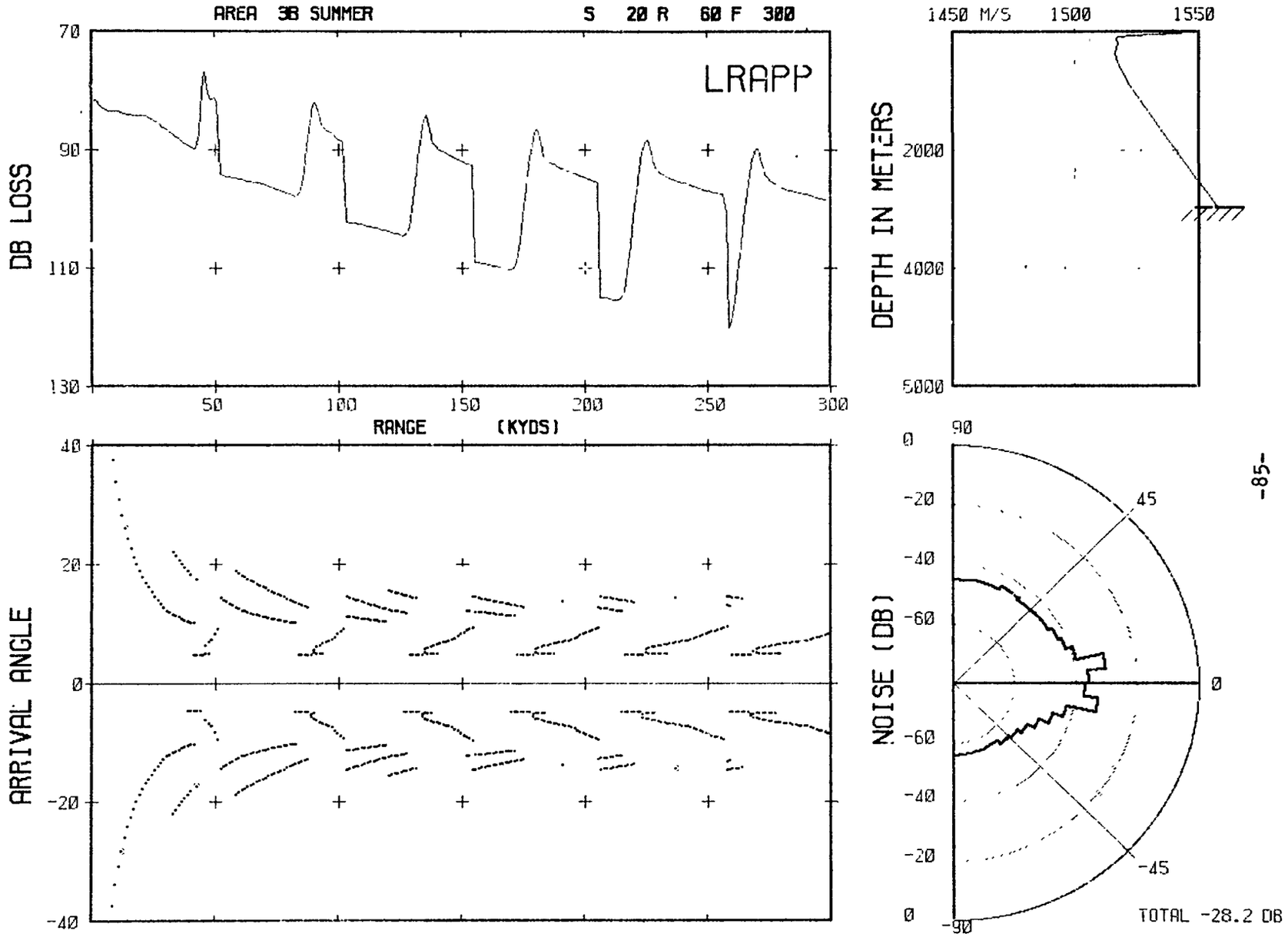


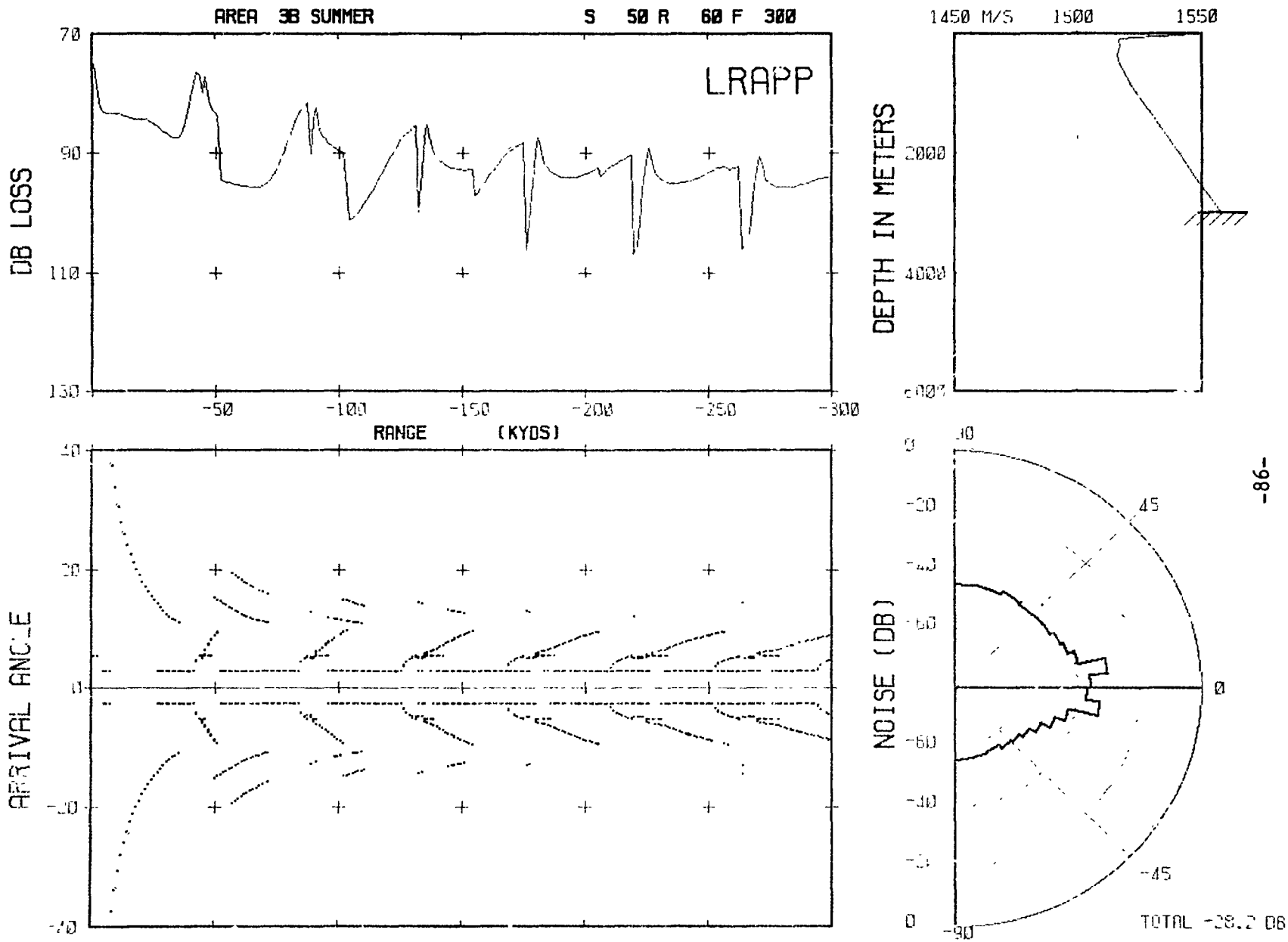


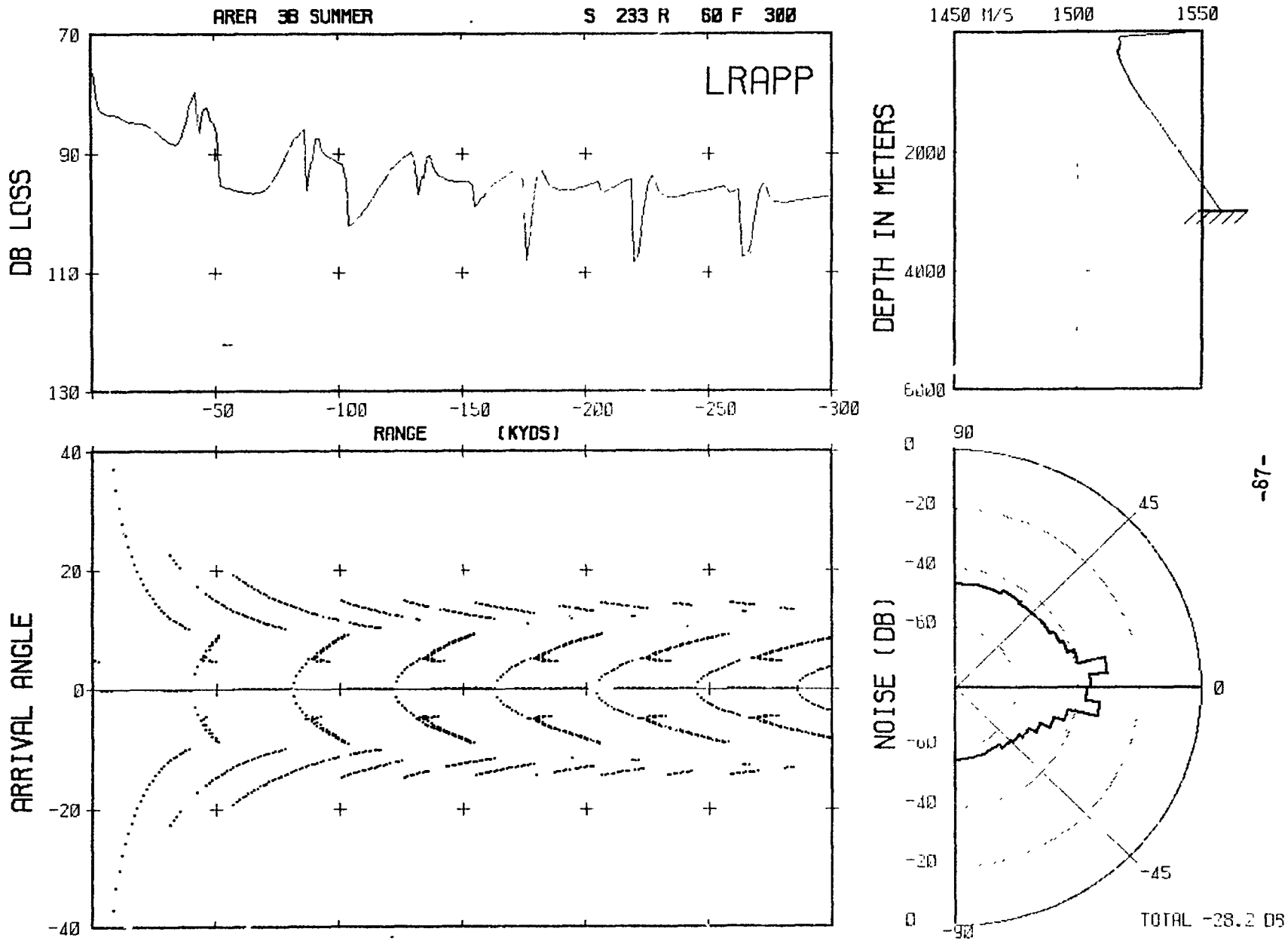


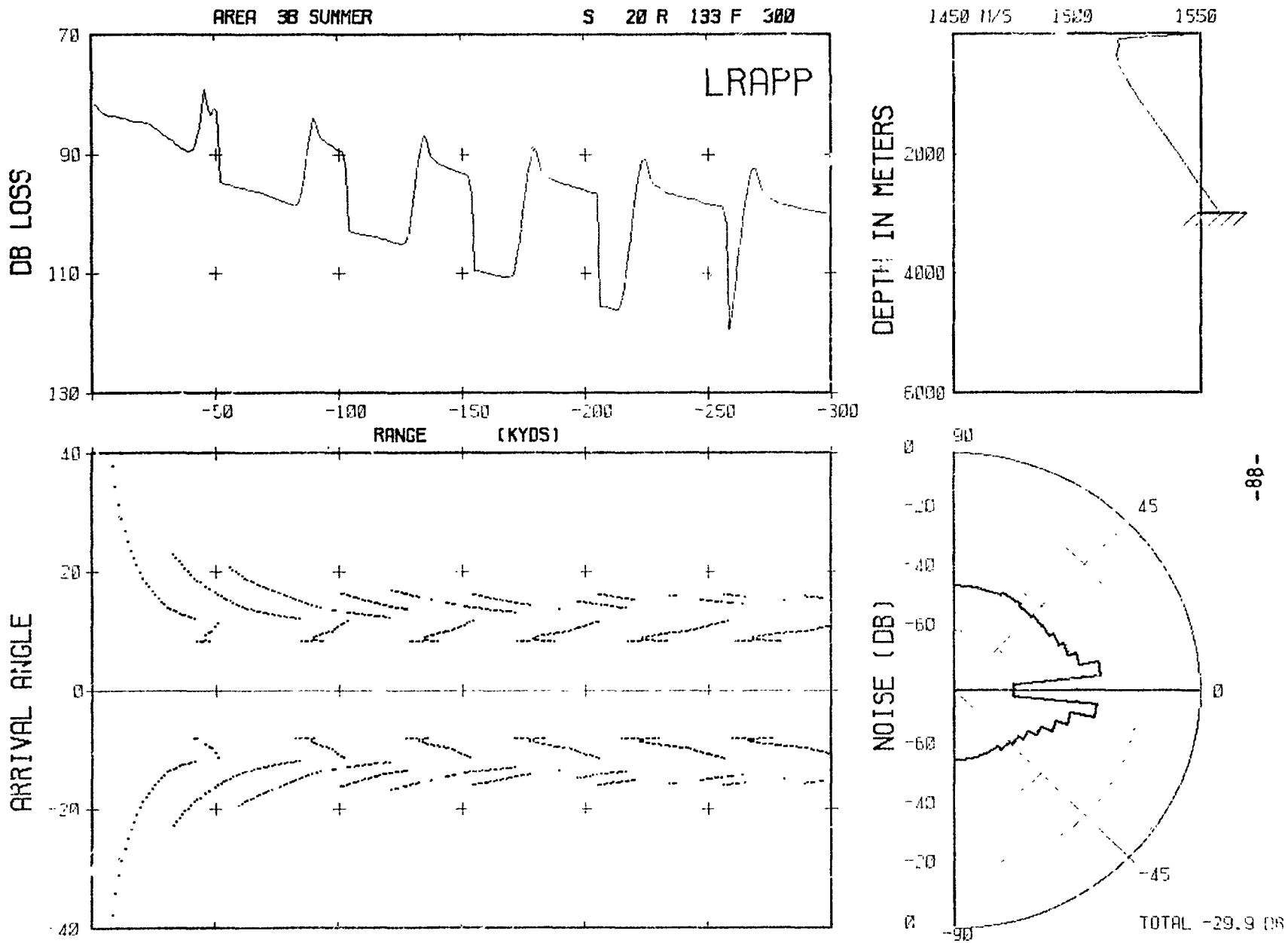


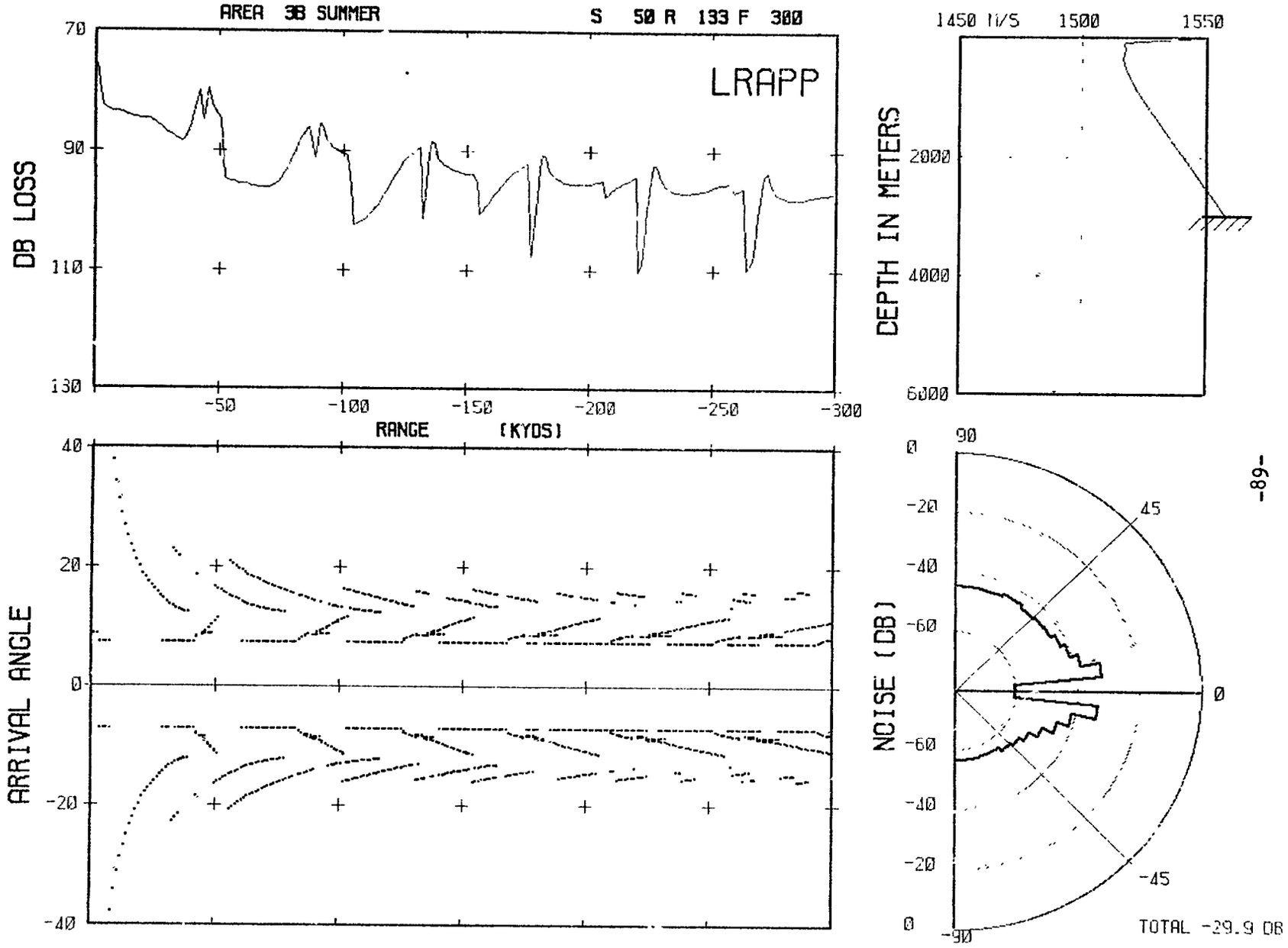

AREA 3B SUMMER
S 233 R 9842 F 150
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
3000
4000
5000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
0
-45
-90
TOTAL -23.5 DB

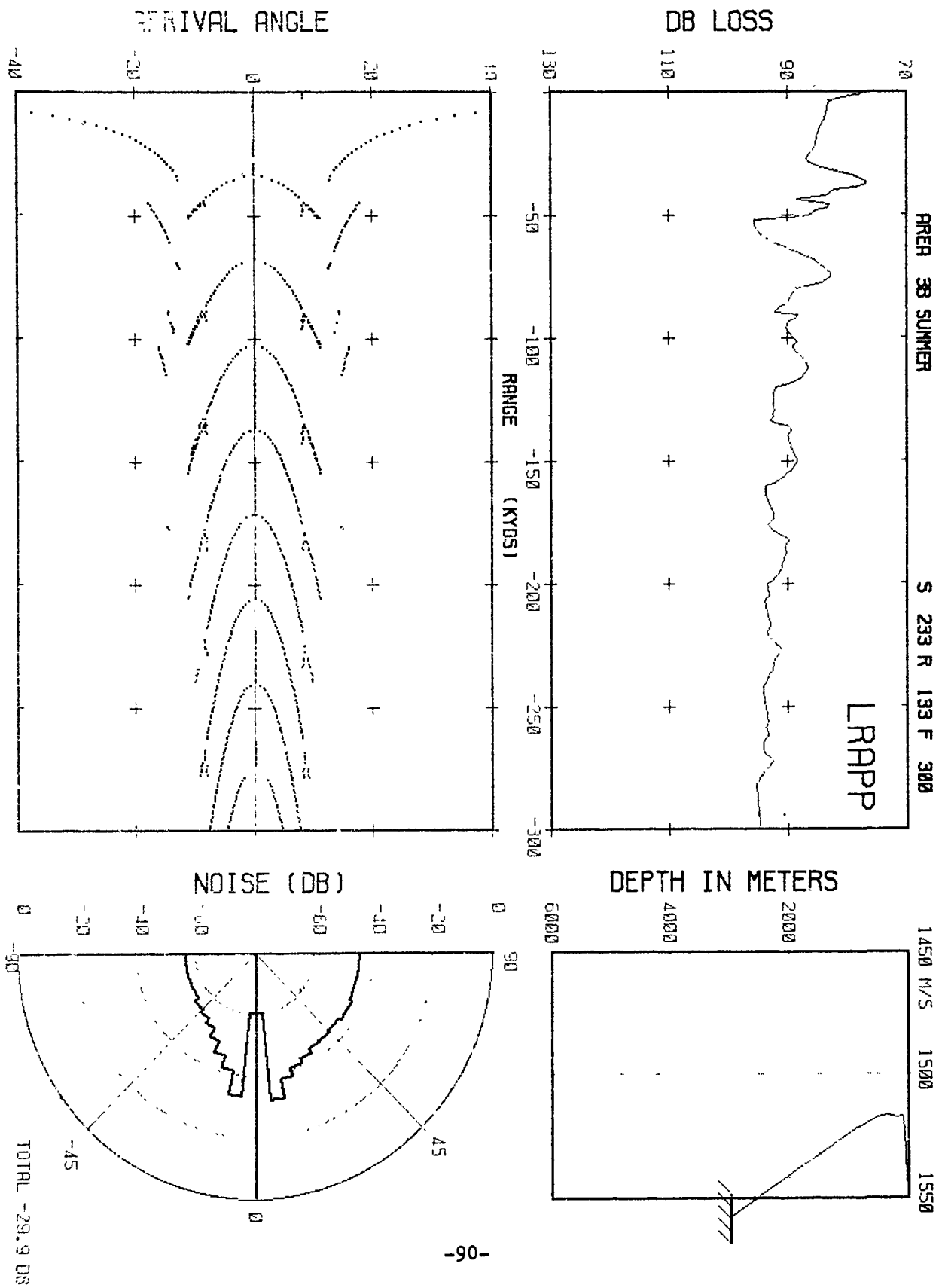

AREA 3B SUMMER
S 20 R 60 F 300
LRAPP
DB LOSS
70
90
110
130
50
100
150
200
250
300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
5000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
0
-20
-40
-60
-60
-40
-20
0
-90
45
-45
TOTAL -28.2 DB


AREA 3B SUMMER
S 50 R 60 F 300
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
ARRIVAL ANGLE
NOISE (DB)
45
-45
TOTAL -28.2 DB

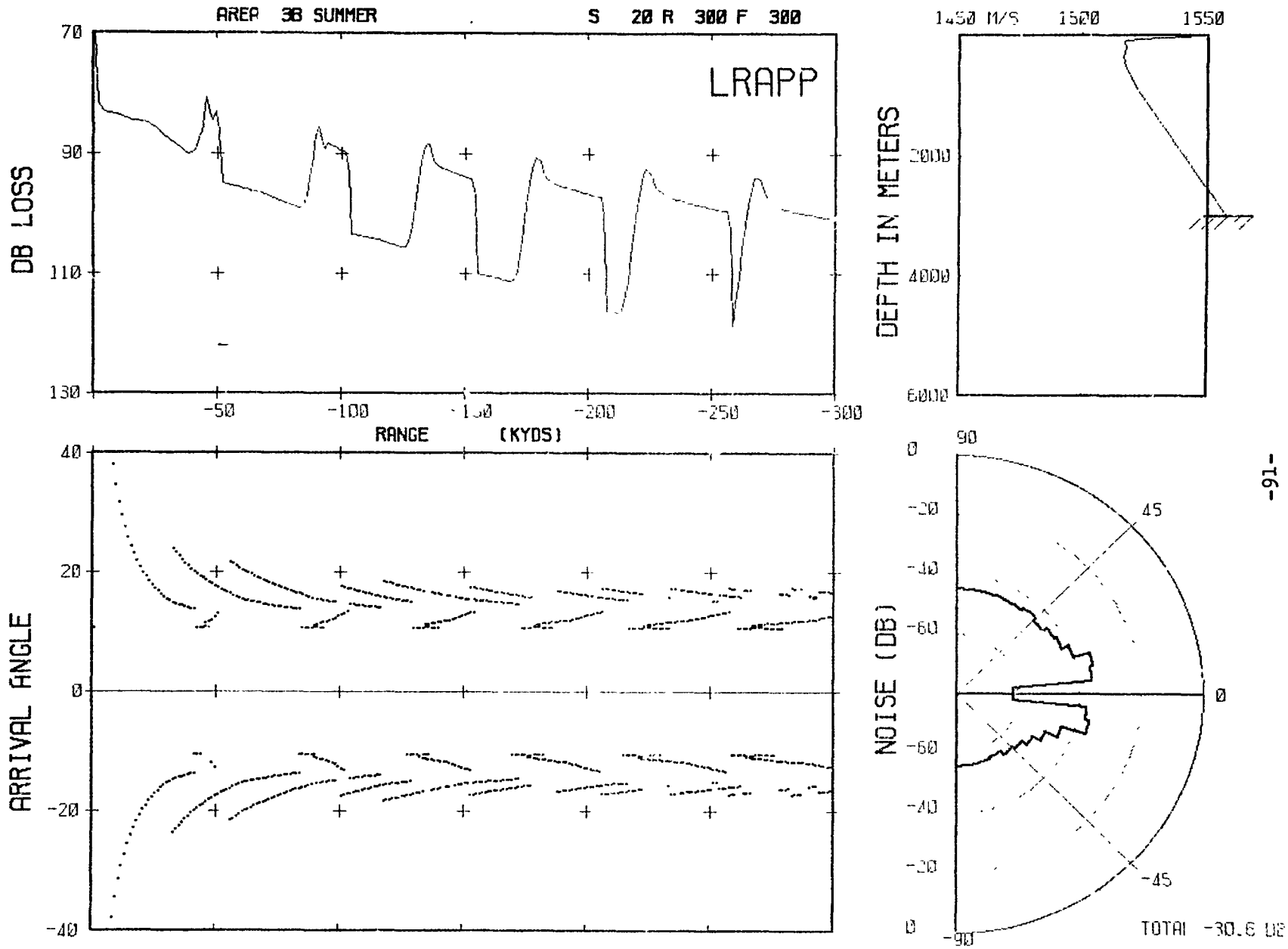

AREA 3B SUMMER
S 233 R 60 F 300
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
0
-20
-40
-60
-60
-40
-20
0
90
45
0
-45
-90
TOTAL -28.2 DB

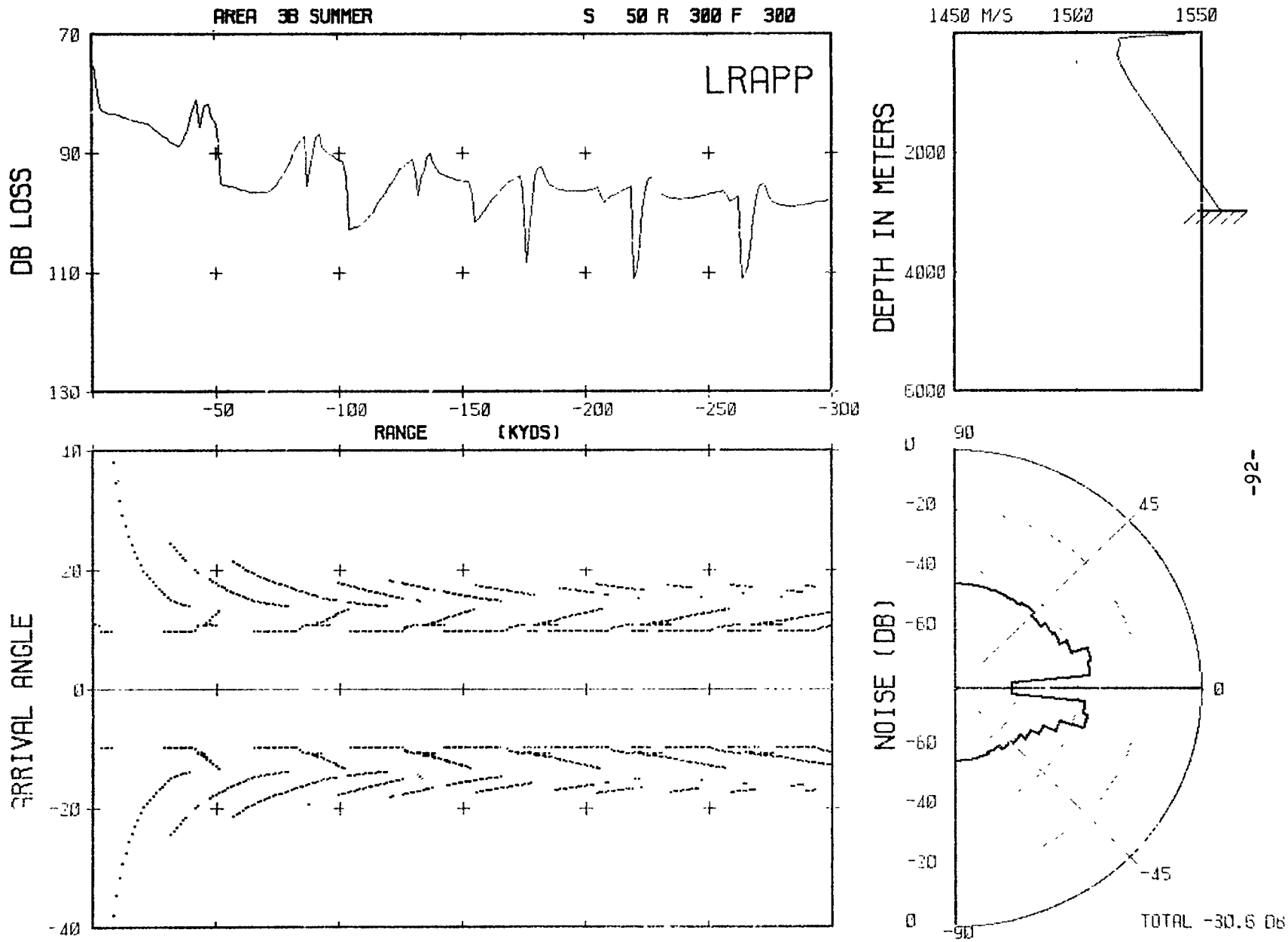

AREA 3B SUMMER
S 20 R 133 F 300
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
0
-20
-40
-60
-60
-40
-20
0
90
45
0
-45
-90
TOTAL -29.9 DB

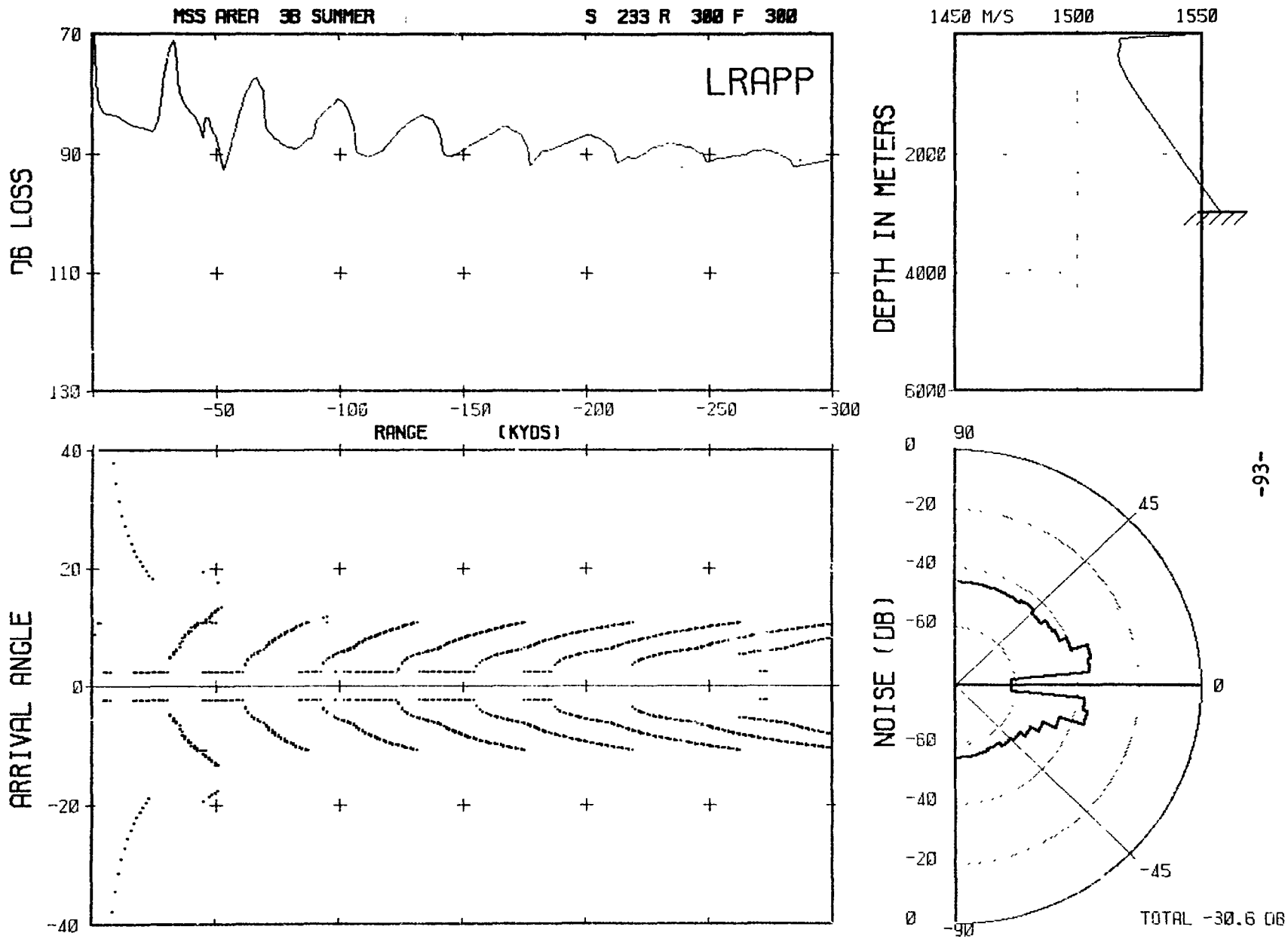

AREA 3B SUMMER
S 50 R 133 F 300
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
0
-45
-90
TOTAL -29.9 DB



DB LOSS
AREA 38 SUMMER
S 233 R 133 F 300
LRAPP
RANGE (KYDS)
DEPTH IN METERS
1450 M/S
1500
1550
NOISE (DB)
TOTAL -29.9 DB


AREA 3B SUMMER
S 20 R 300 F 300
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
0
-45
-90
TOTAL -30.6 DB


AREA 3B SUMMER
S 50 R 300 F 300
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
10
20
0
-20
-40
NOISE (DB)
90
45
-45
-90
TOTAL -30.6 DB


MSS AREA 3B SUMMER
S 233 R 300 F 300
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
-45
-90
TOTAL -30.6 DB

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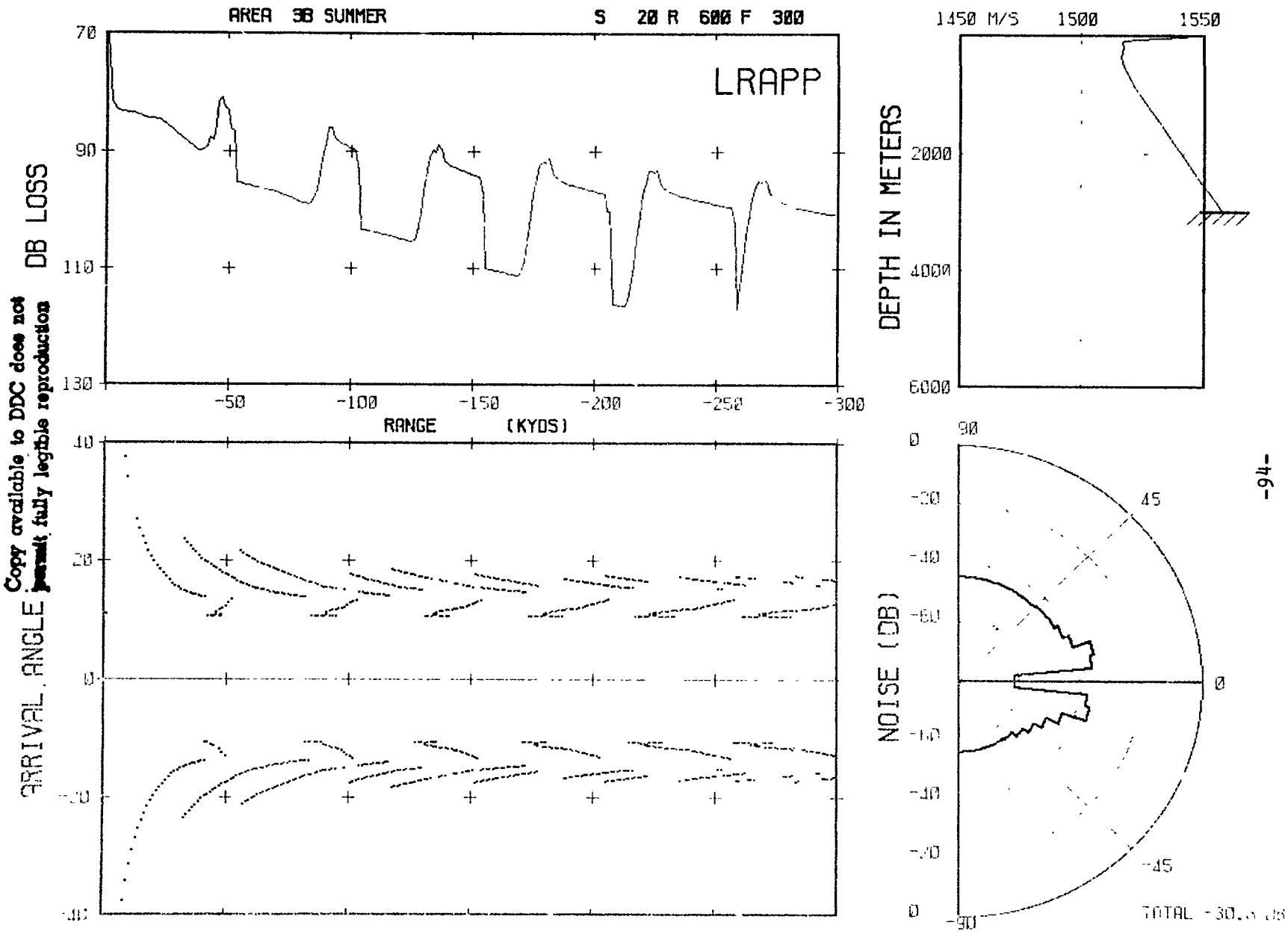

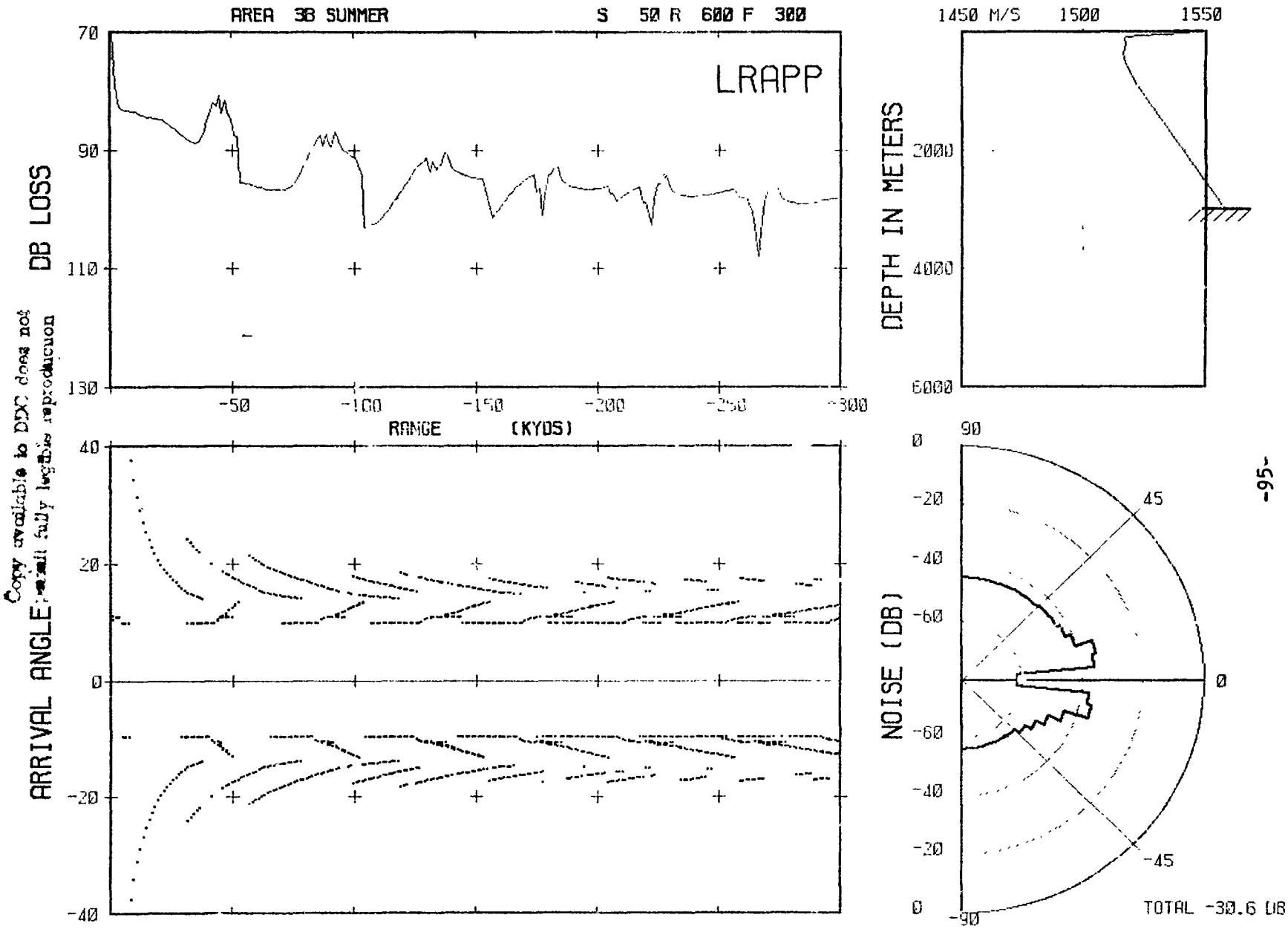

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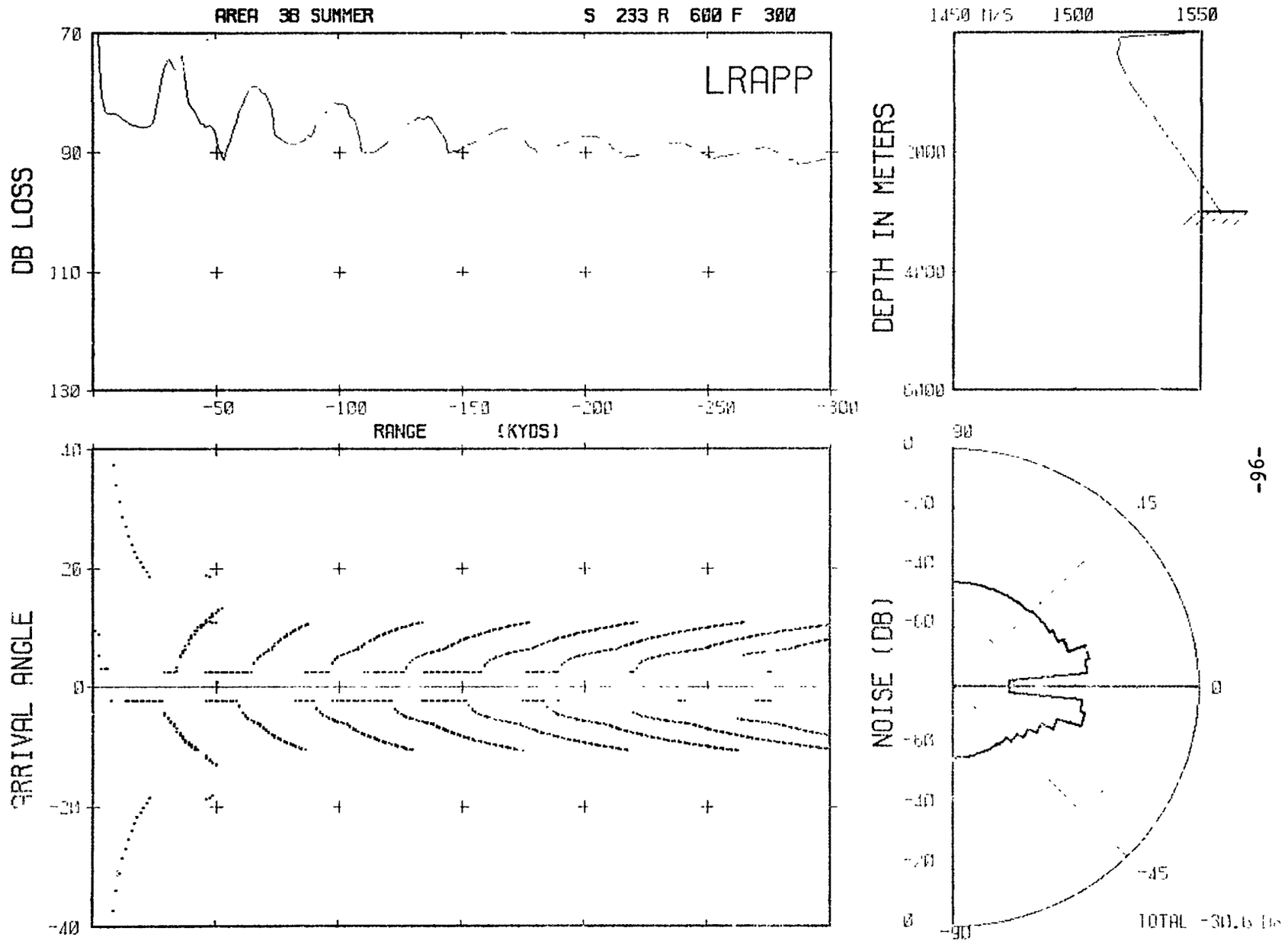
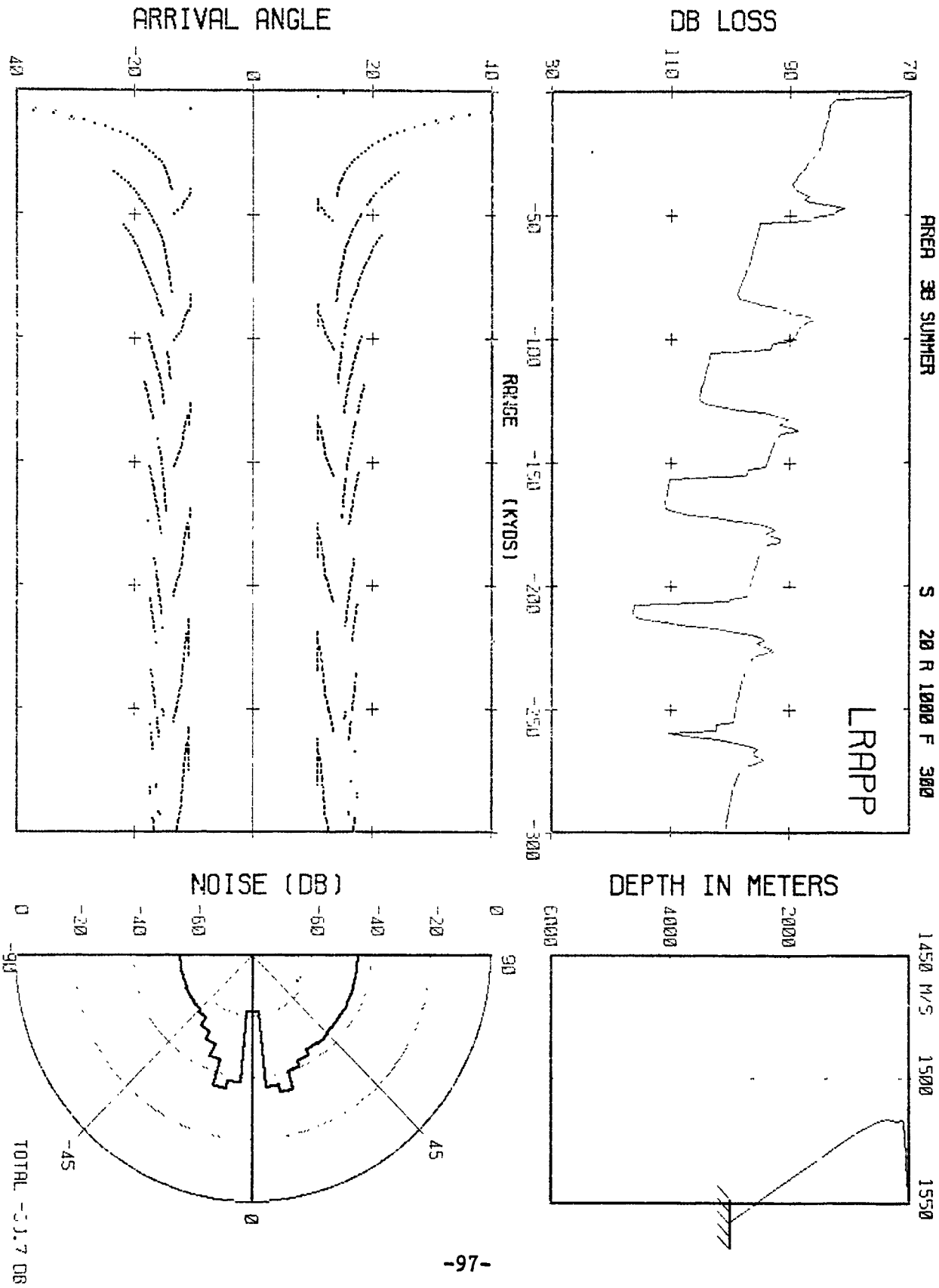
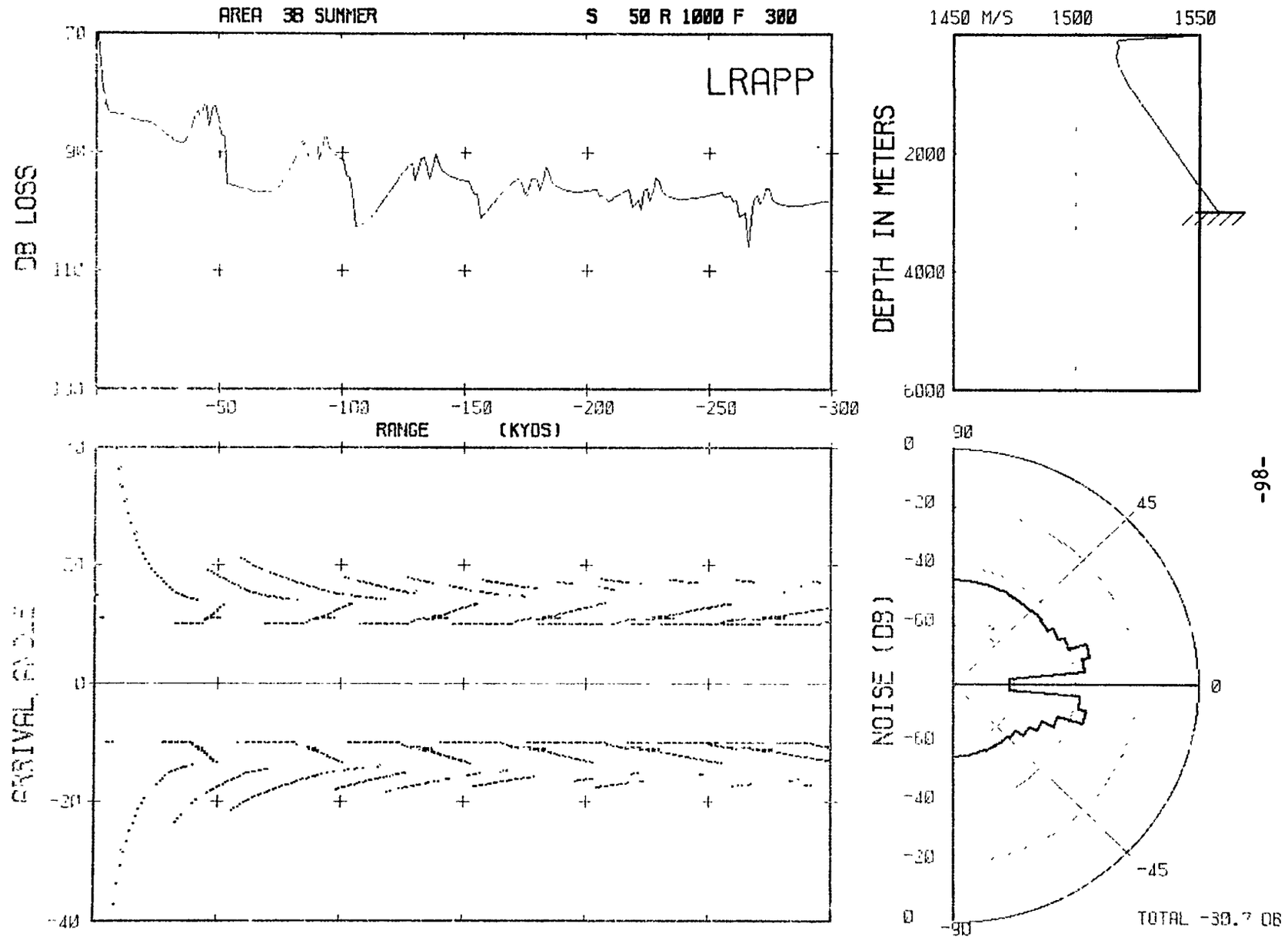
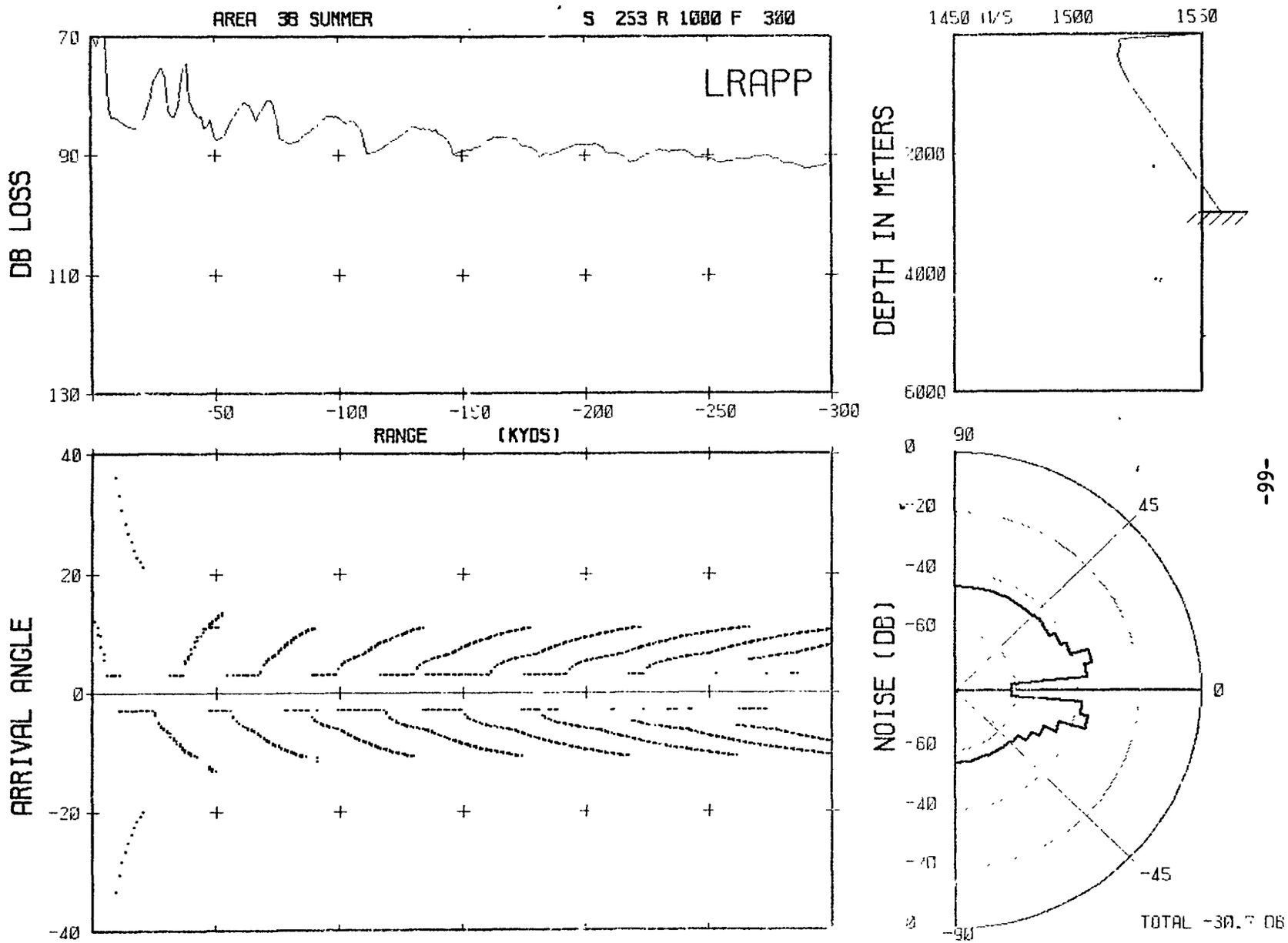

AREA 3B SUMMER
S 233 R 600 F 300
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
0
-45
-90
TOTAL -30.6 DB


ARRIVAL ANGLE
DB LOSS
AREA 38 SUMMER
S 20 R 1000 F 300
LRAPP
RANGE (KYDS)
NOISE (DB)
DEPTH IN METERS
1450 M/S
1500
1550
TOTAL -31.7 DB


AREA 3B SUMMER
S 50 R 1000 F 300
LRAPP
DB LOSS
RANGE (KYDS)
1450 M/S 1500 1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
NOISE (DB)
TOTAL -30.7 DB


AREA 3B SUMMER
S 253 R 1000 F 300
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
0
-20
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-40
0
90
45
0
-45
-90
TOTAL -30.7 DB

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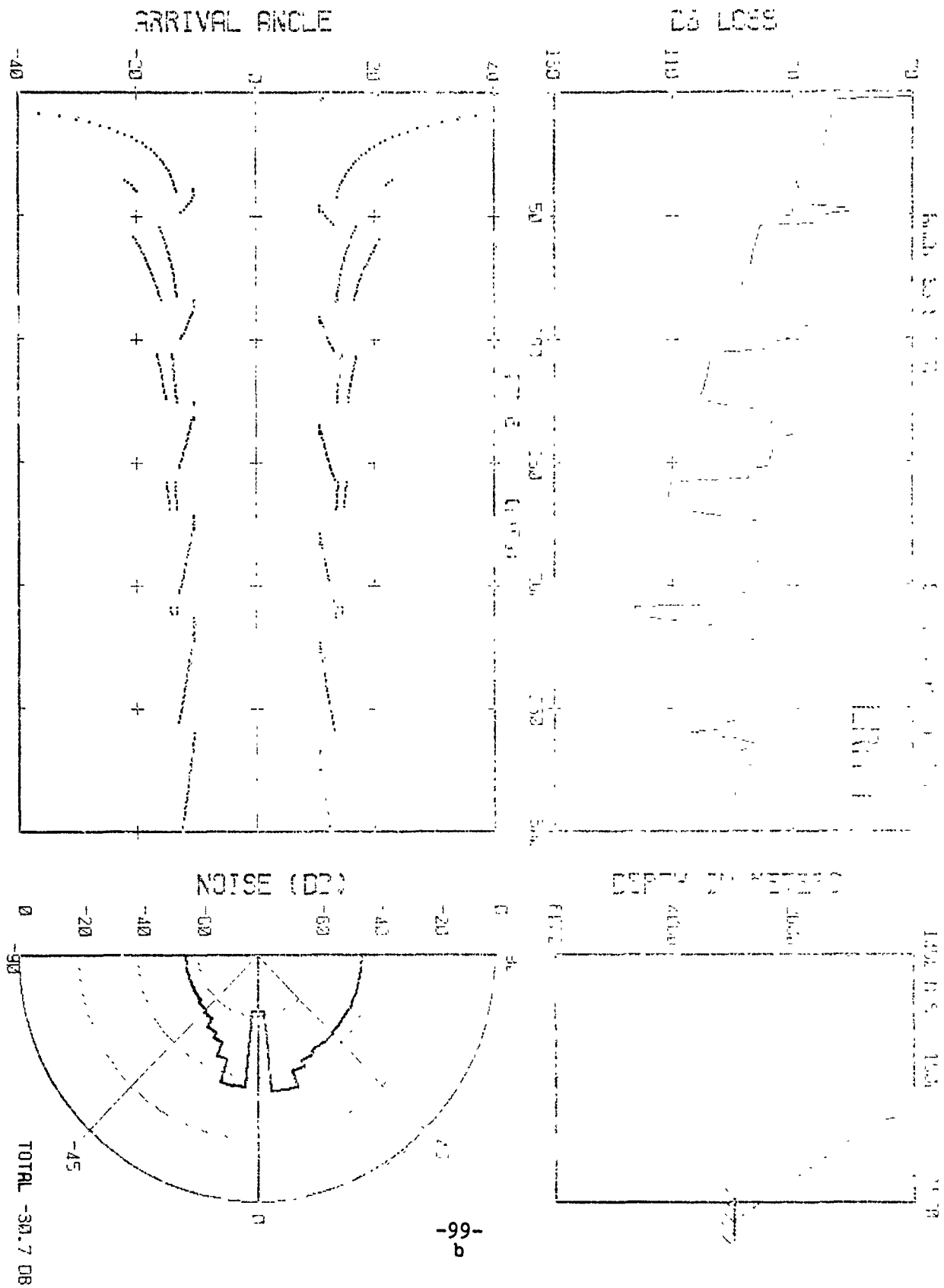
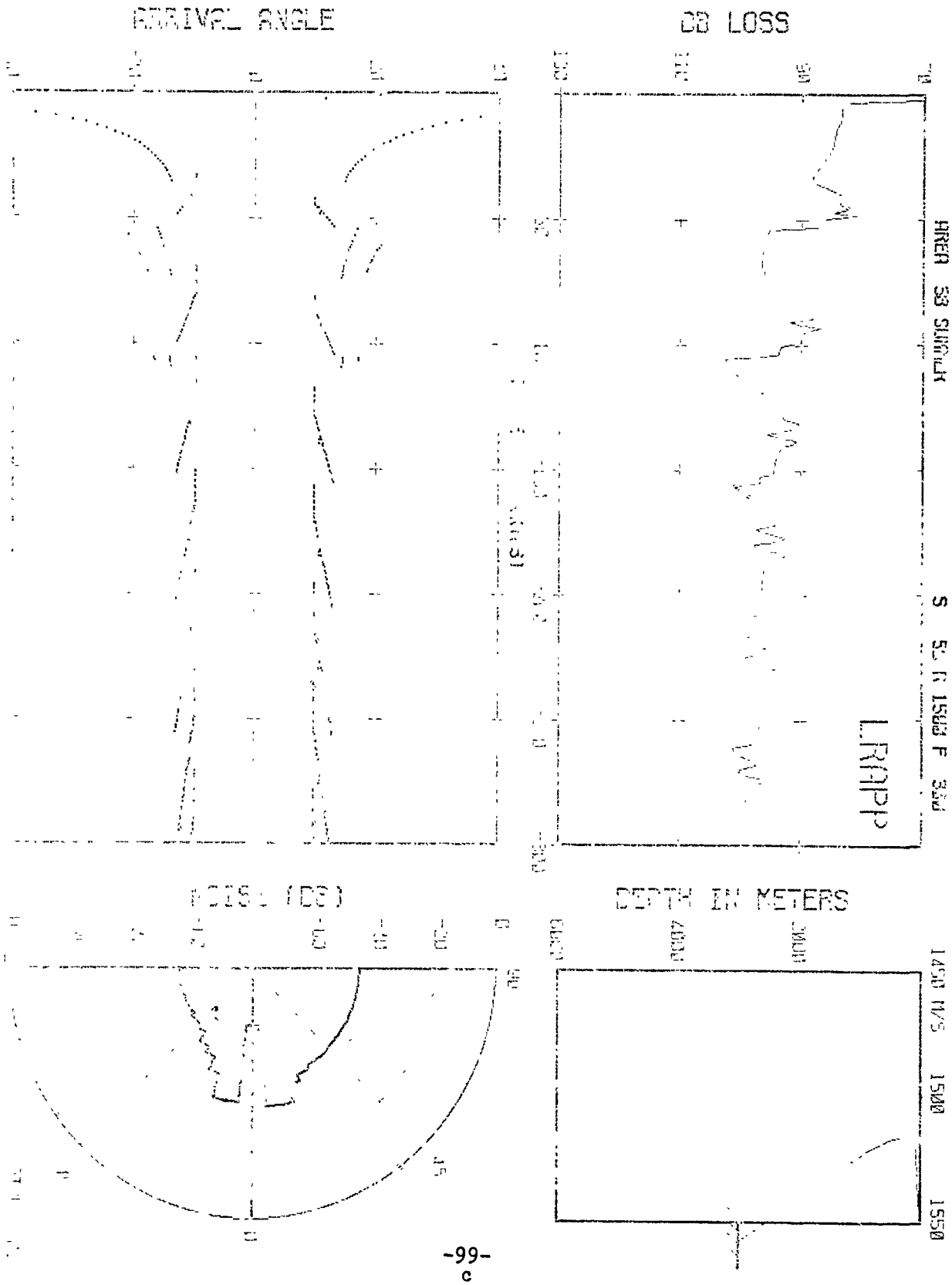
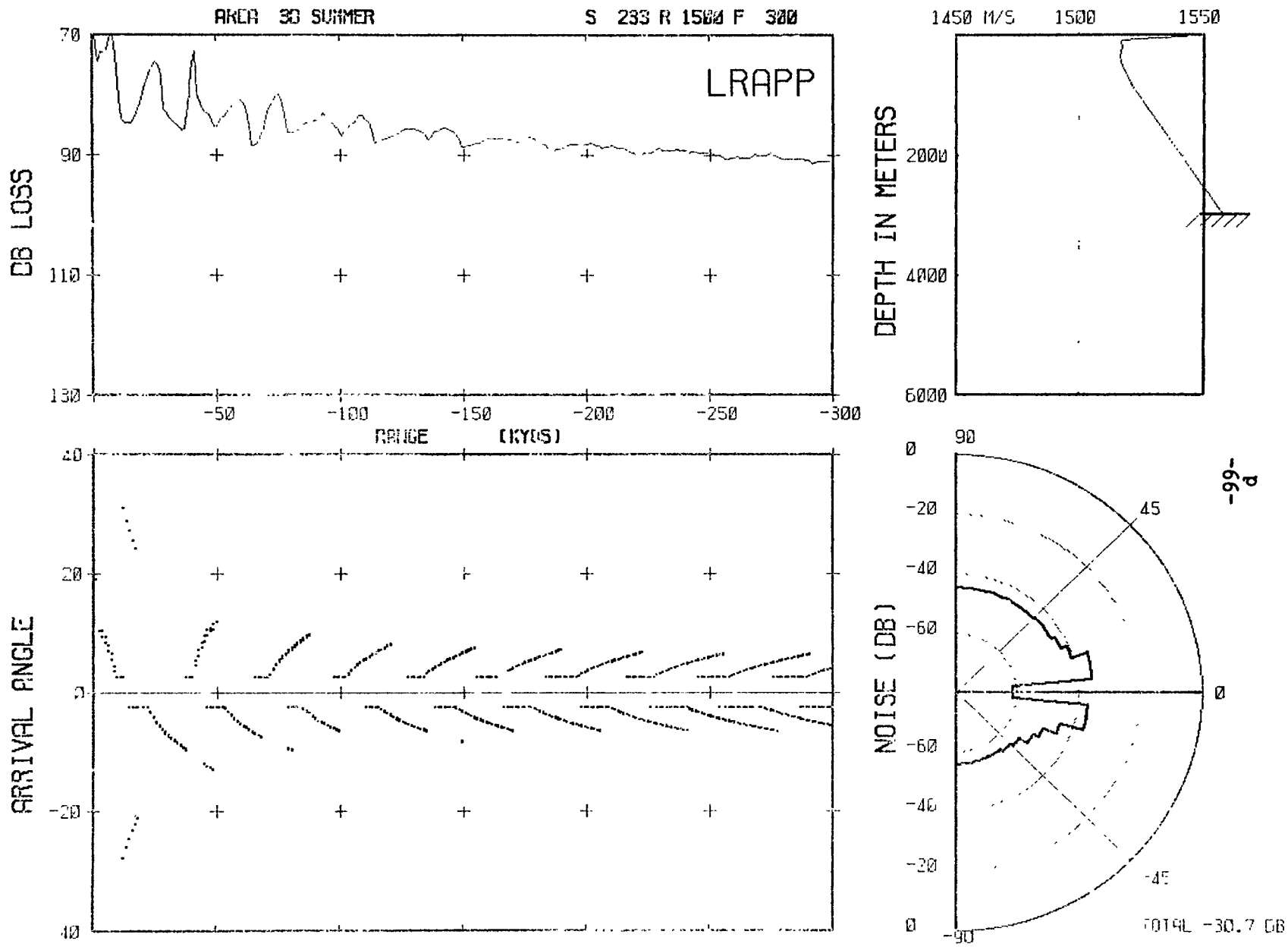
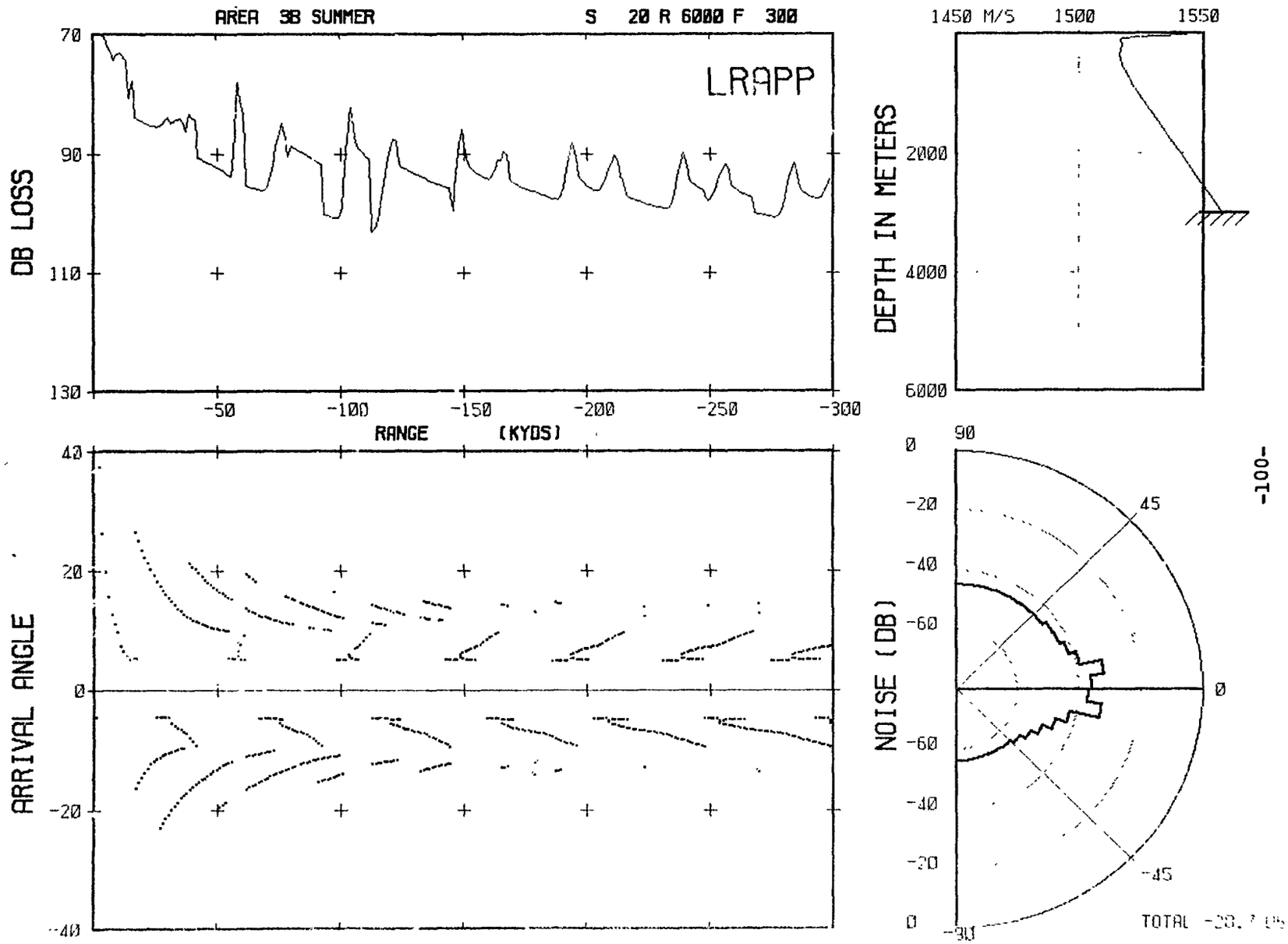



ARRIVAL ANGLE
DB LOSS
AREA 33 SUMMER
S 55 R 1500 F 300
LRAPP
DEPTH IN METERS
1450 M/S
1500
1550


AREA 30 SUMMER
S 233 R 1500 F 300
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
40
NOISE (DB)
90
0
-20
-40
-60
45
-45
-90
TOTAL -30.7 DB


AREA 3B SUMMER
S 20 R 6000 F 300
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
-45
-90
TOTAL

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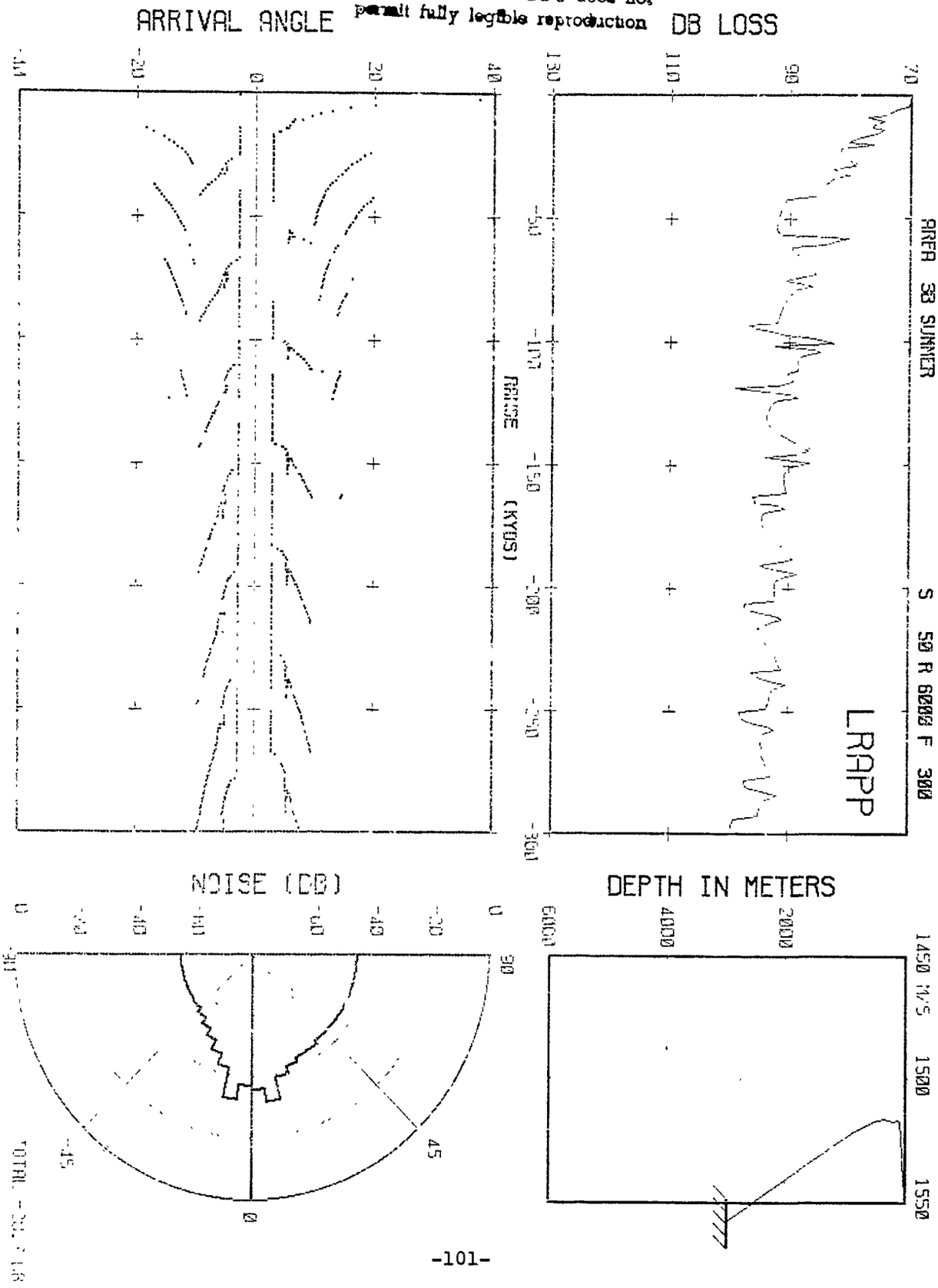

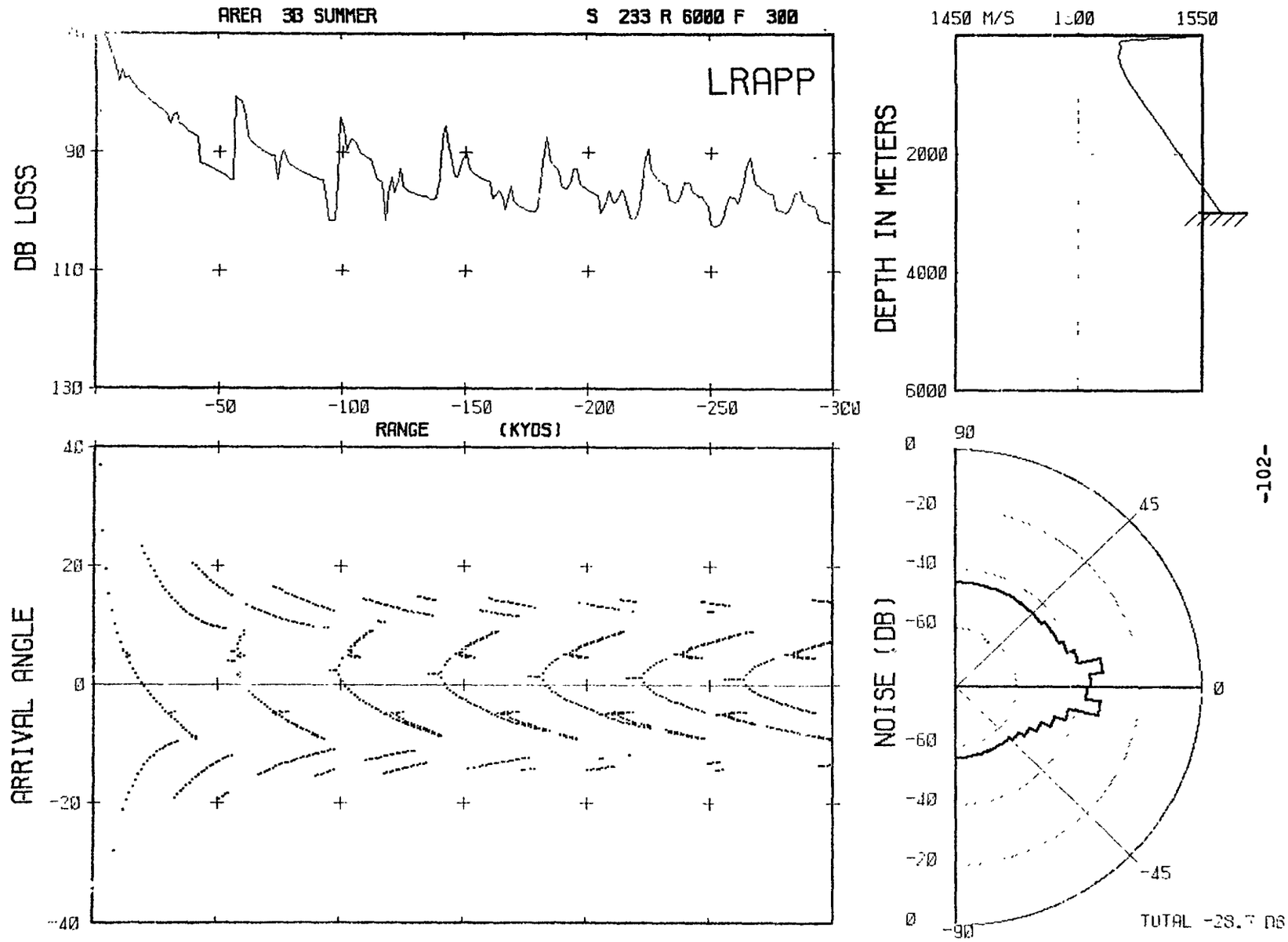
AREA 3B SUMMER
S 233 R 6000 F 300
LRAPP
DB LOSS
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
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DEPTH IN METERS
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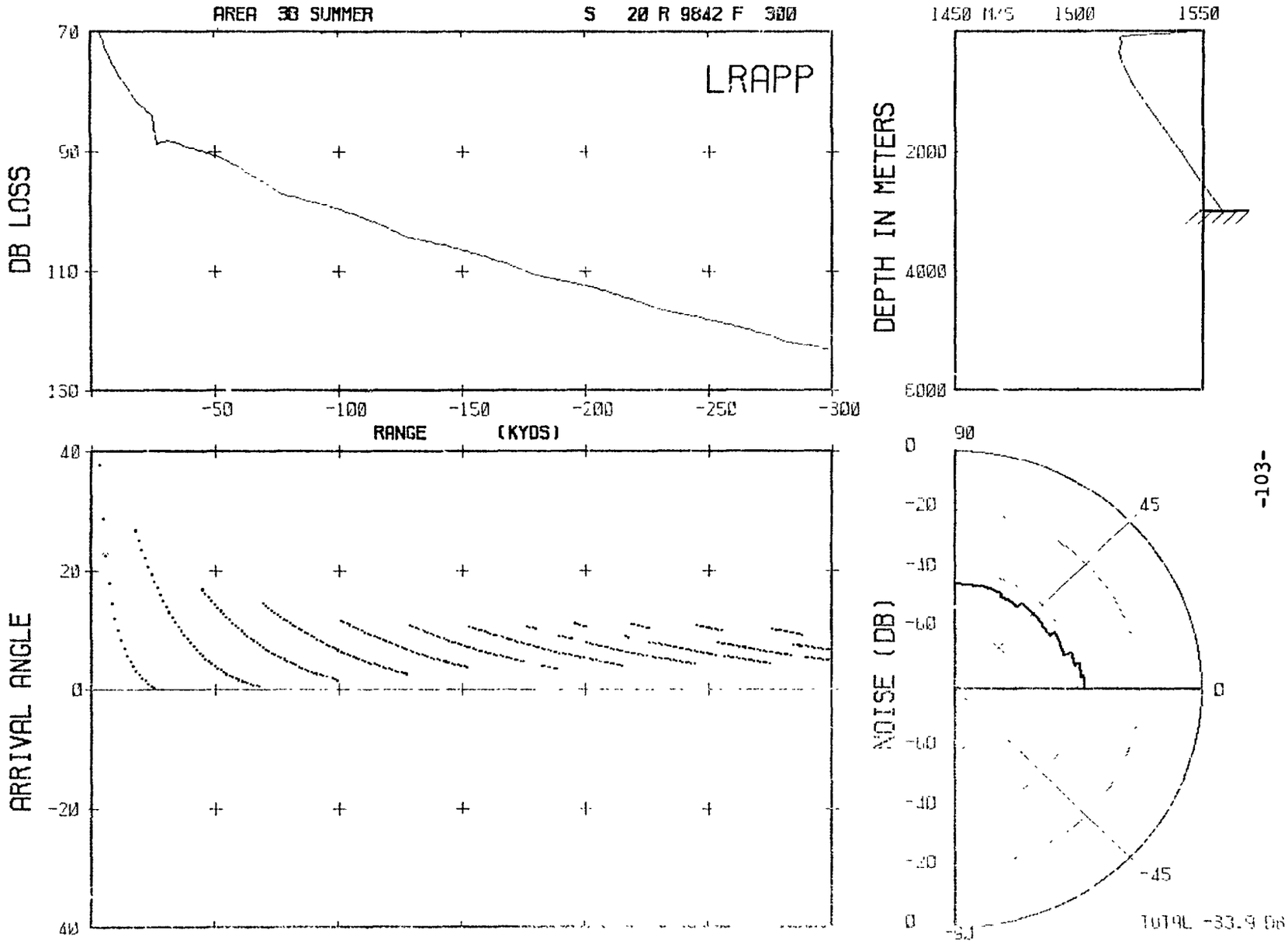
AREA 3B SUMMER
S 20 R 9842 F 300
LRAPP
DB LOSS
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-200
-250
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RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
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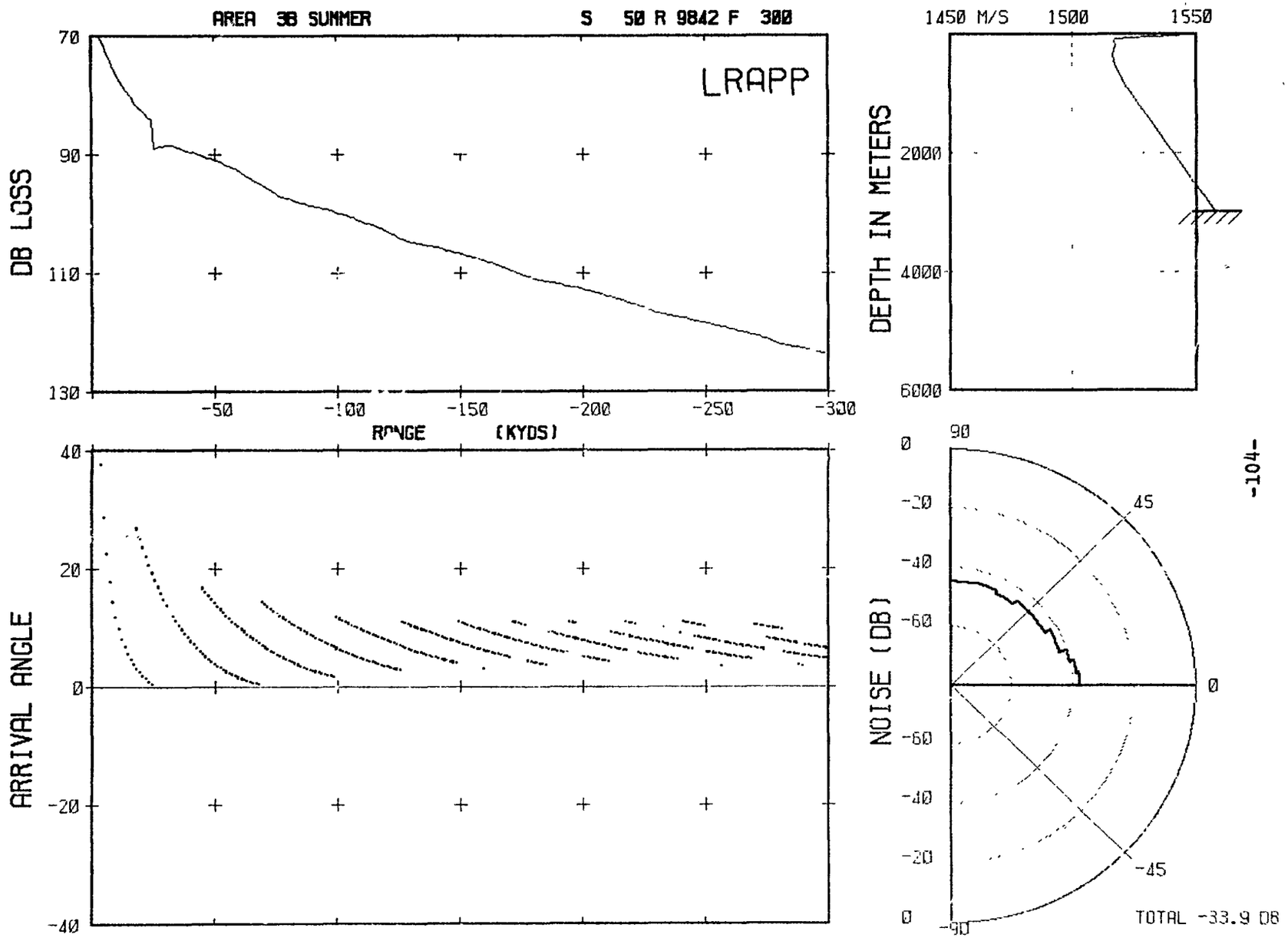
TOTAL -33.9 DB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RANGE (KYDS)
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1550
DEPTH IN METERS
2000
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NOISE (DB)
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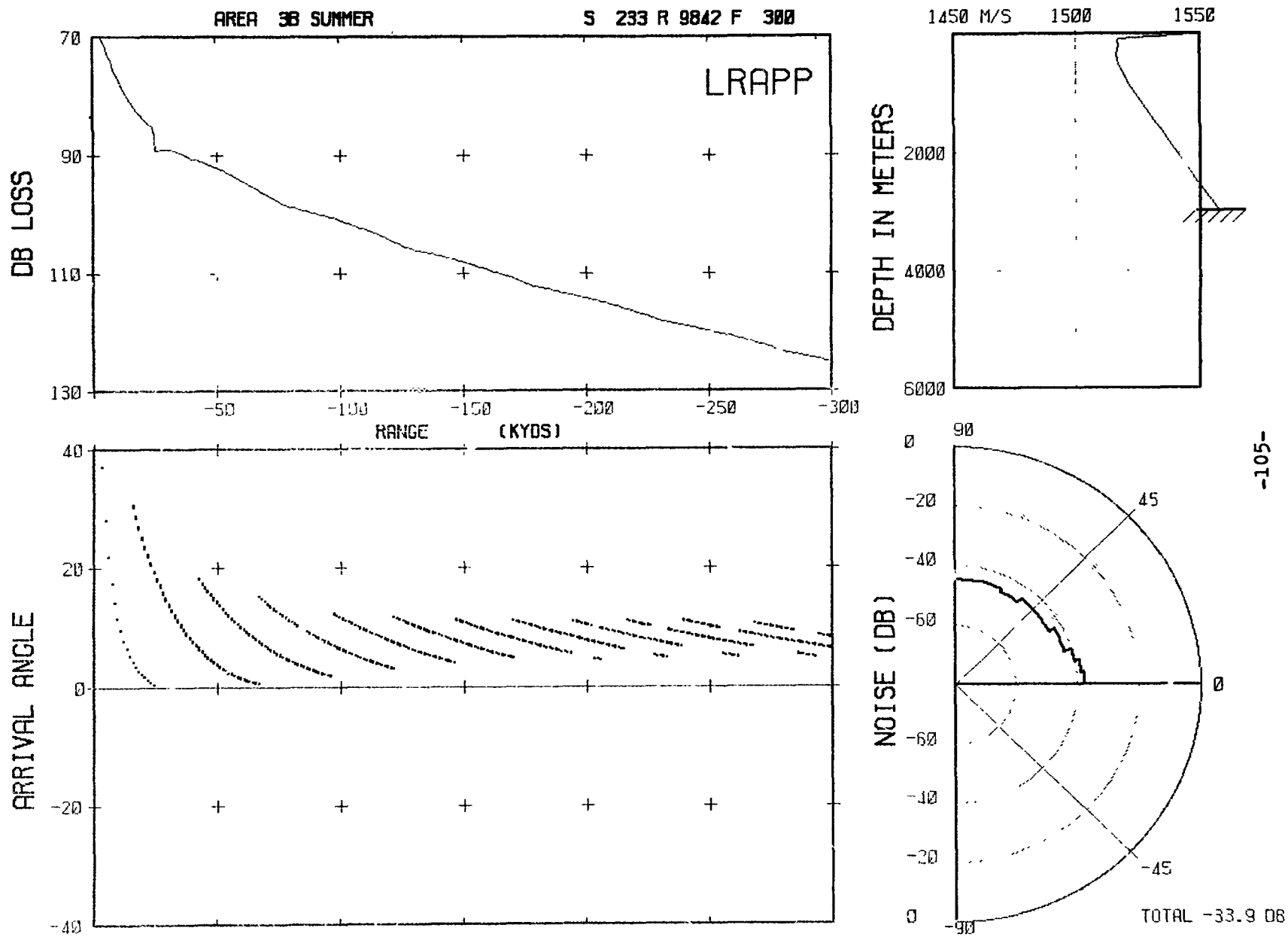
TOTAL -33.9 DB


AREA 3B SUMMER
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RANGE (KYDS)
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1550
DEPTH IN METERS
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ARRIVAL ANGLE
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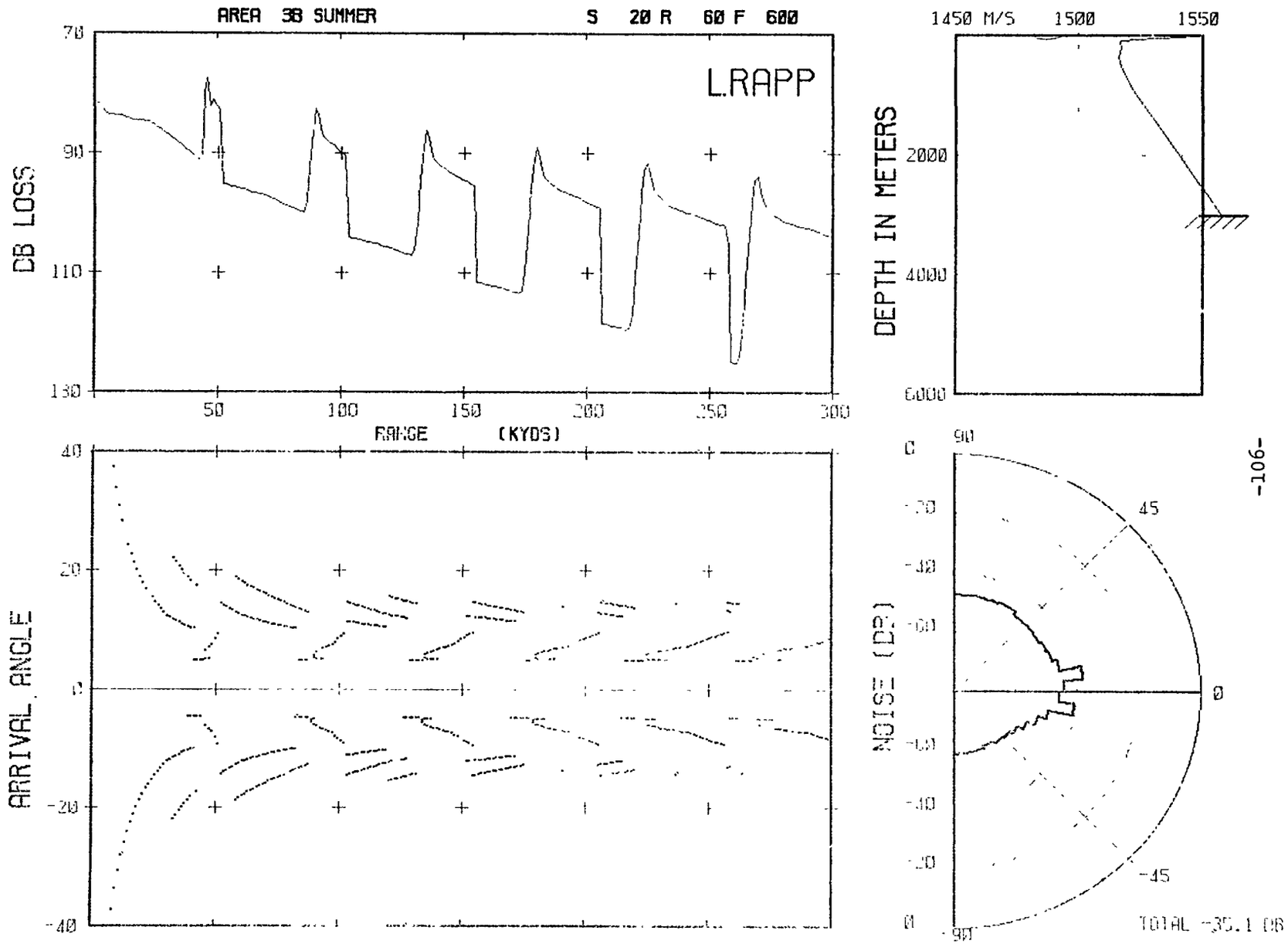
TOTAL -33.9 DB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DB LOSS
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RANGE (KYDS)
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1500
1550
DEPTH IN METERS
2000
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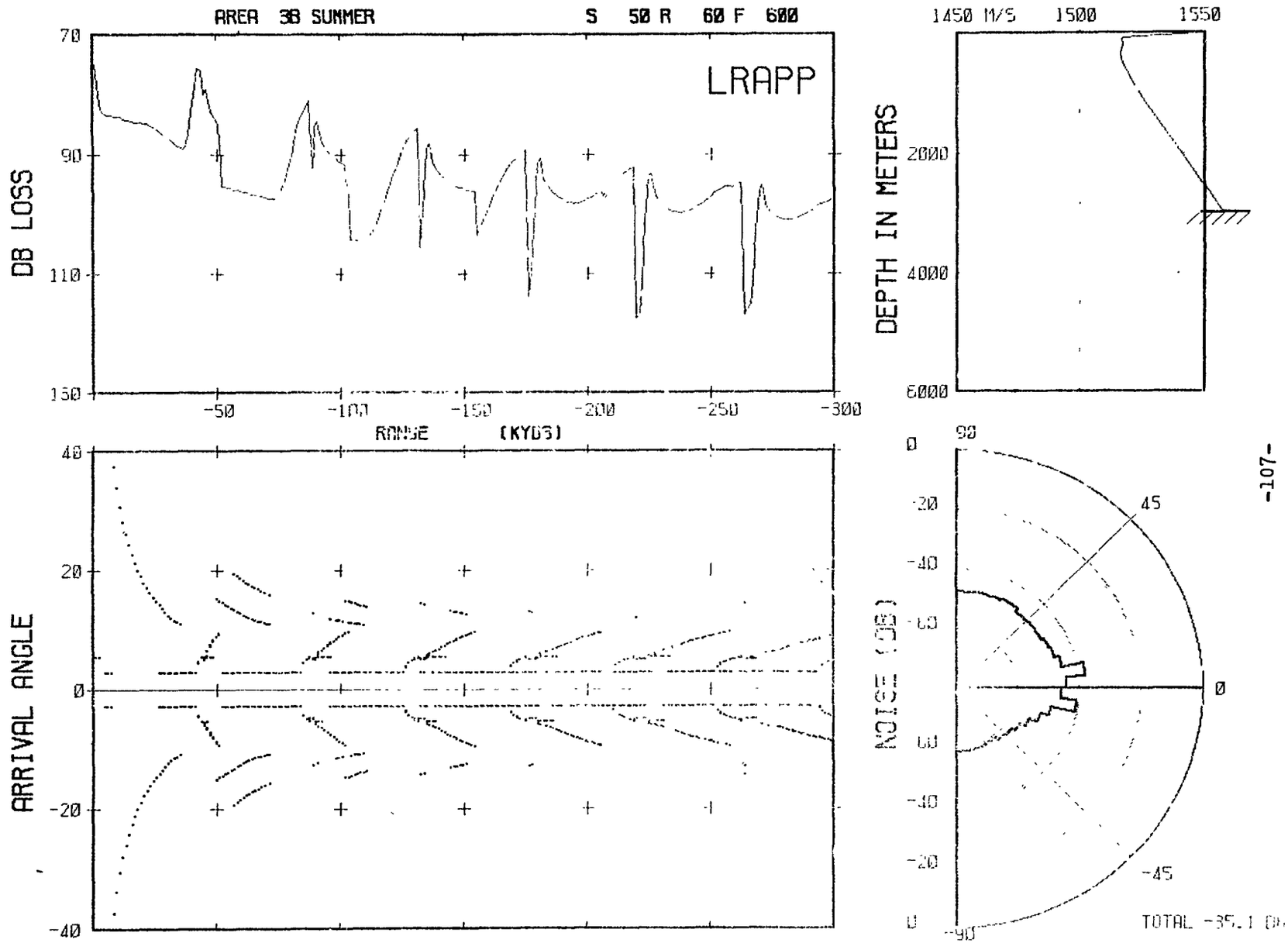
TOTAL -35.1 DB


AREA 3B SUMMER
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LRAPP
DB LOSS
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RANGE (KYDS)
1450 M/S
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DEPTH IN METERS
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ARRIVAL ANGLE
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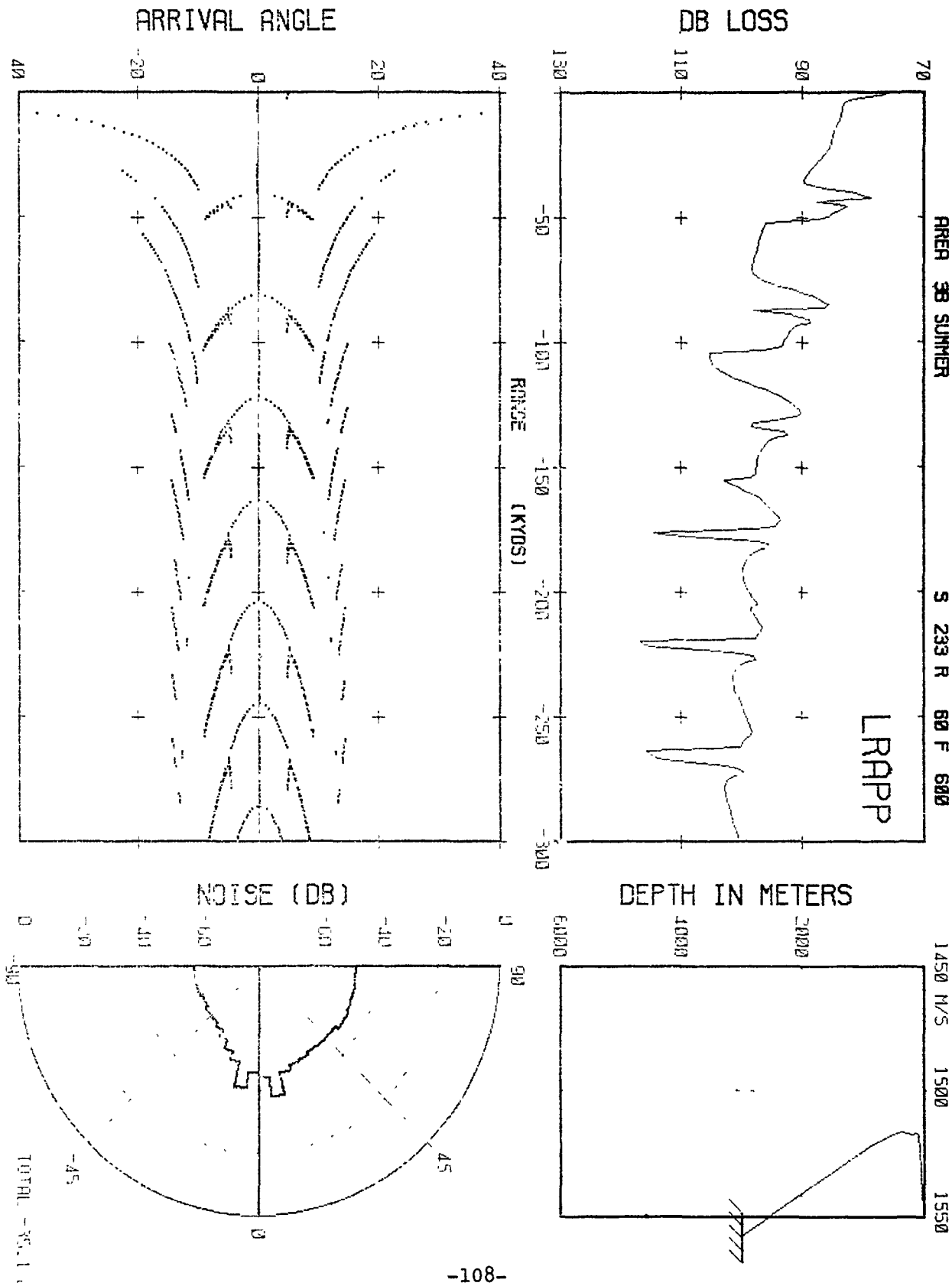
TOTAL -35.1 DB


ARRIVAL ANGLE
DB LOSS
AREA 3B SUMMER
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LRAPP
RANGE (KYDS)
NOISE (DB)
DEPTH IN METERS
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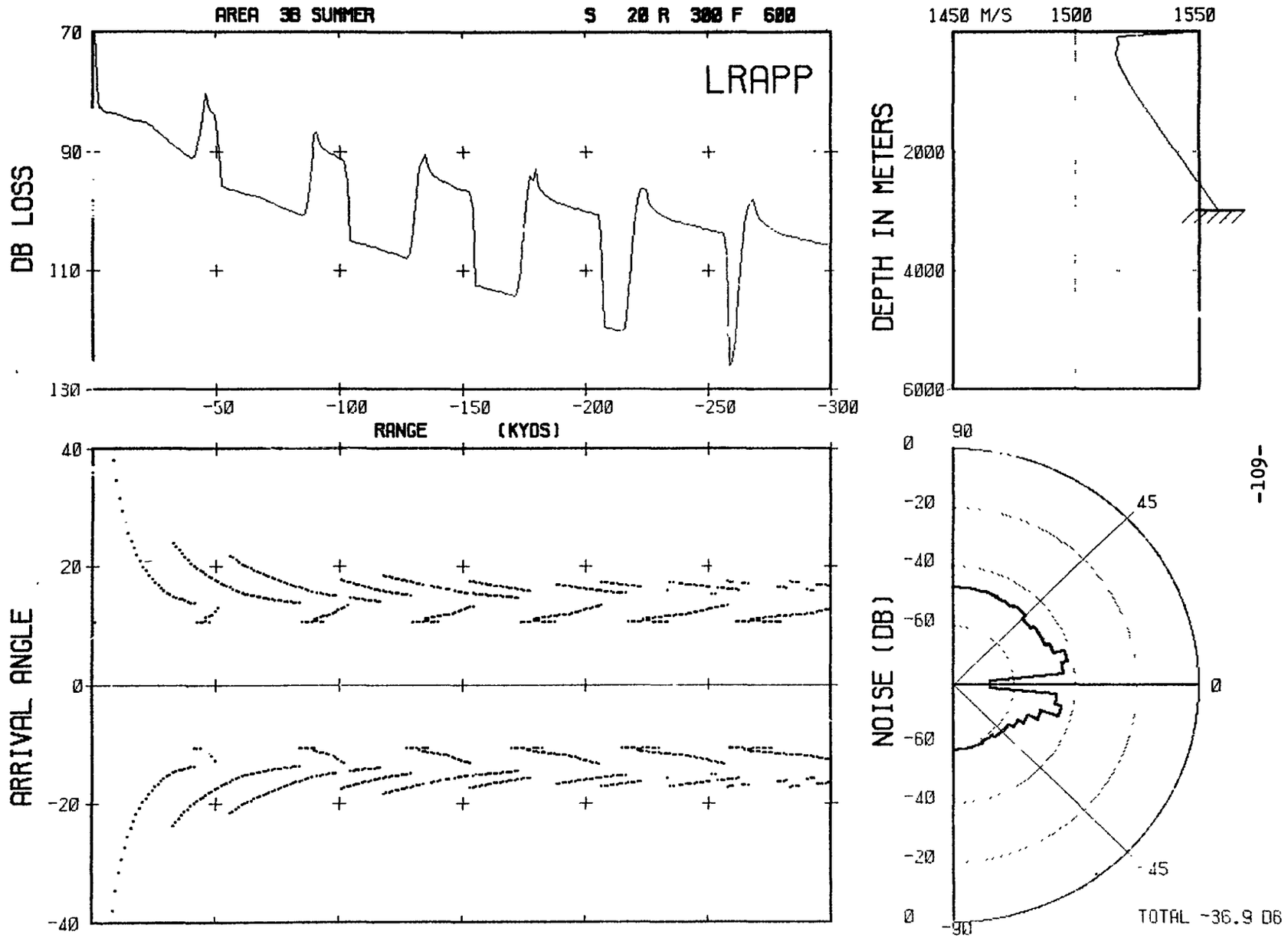
AREA 3B SUMMER S 20 R 300 F 600
LRAPP
DB LOSS
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-250
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RANGE (KYDS)
1450 M/S 1500 1550
DEPTH IN METERS
2000
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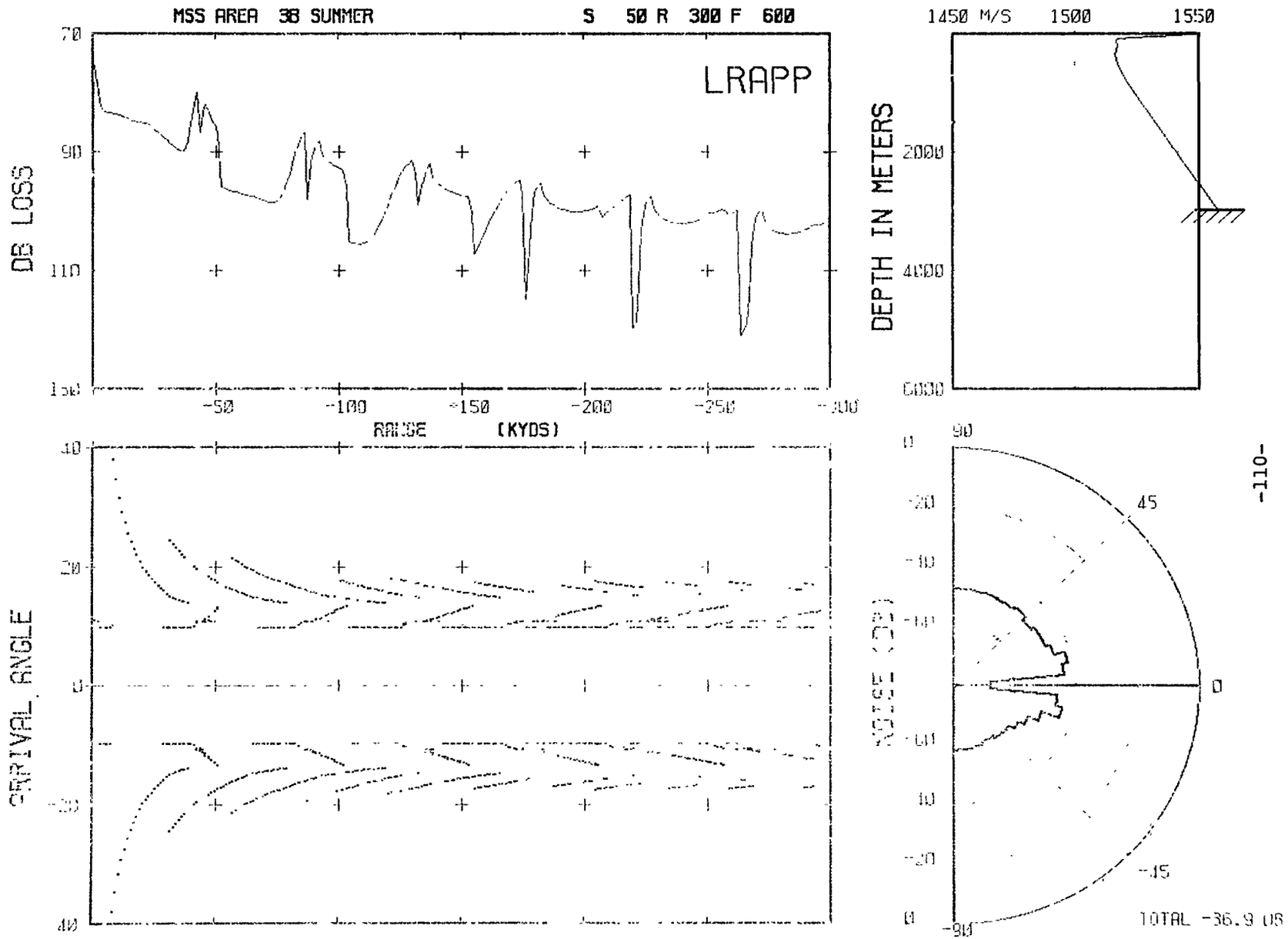
TOTAL -36.9 DB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S 50 R 300 F 600
LRAPP
DB LOSS
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RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
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ARRIVAL ANGLE
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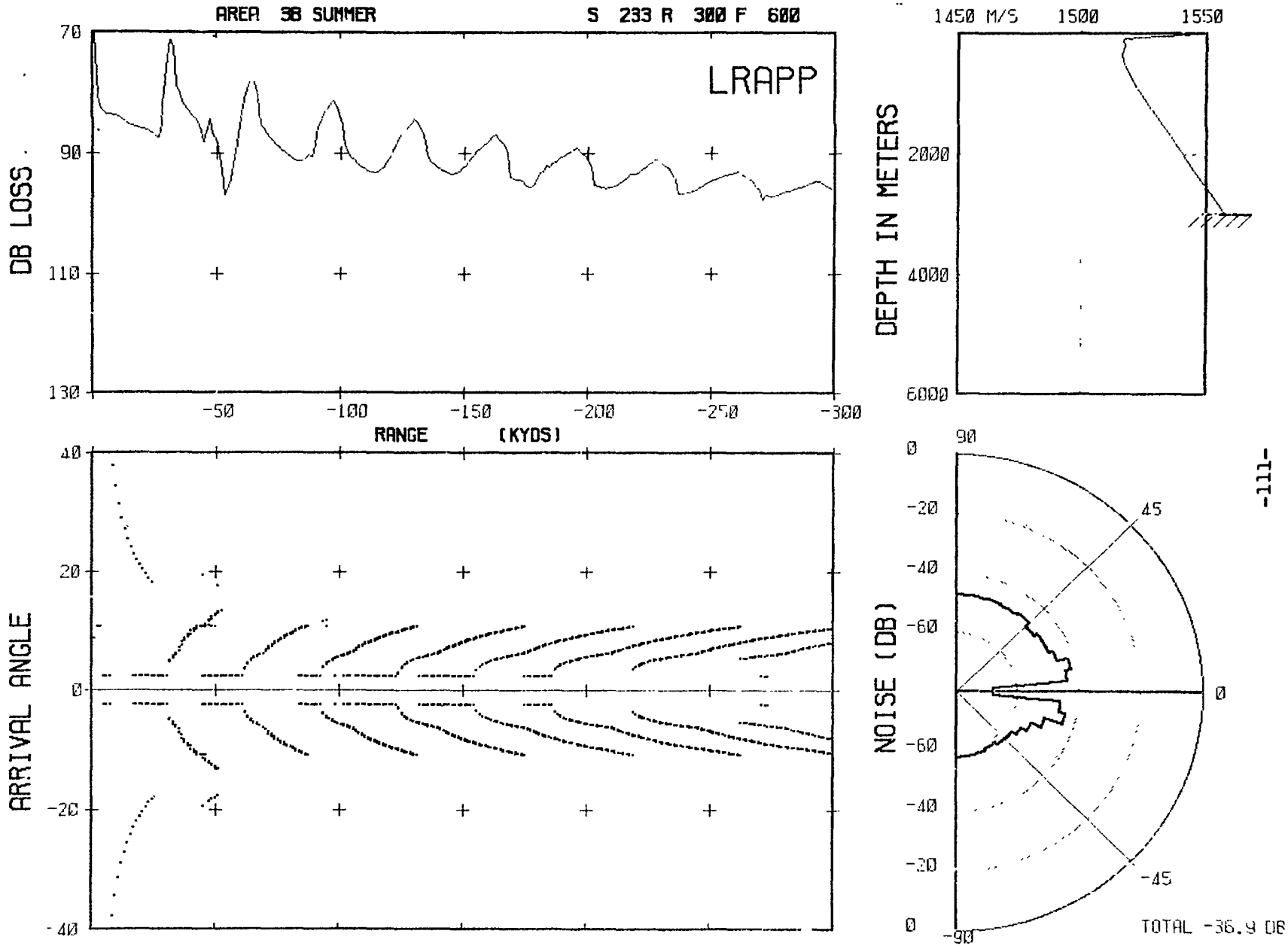
TOTAL -36.9 DB


AREA 3B SUMMER
S 233 R 300 F 600
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DB LOSS
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RANGE (KYDS)
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1550
DEPTH IN METERS
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6000
ARRIVAL ANGLE
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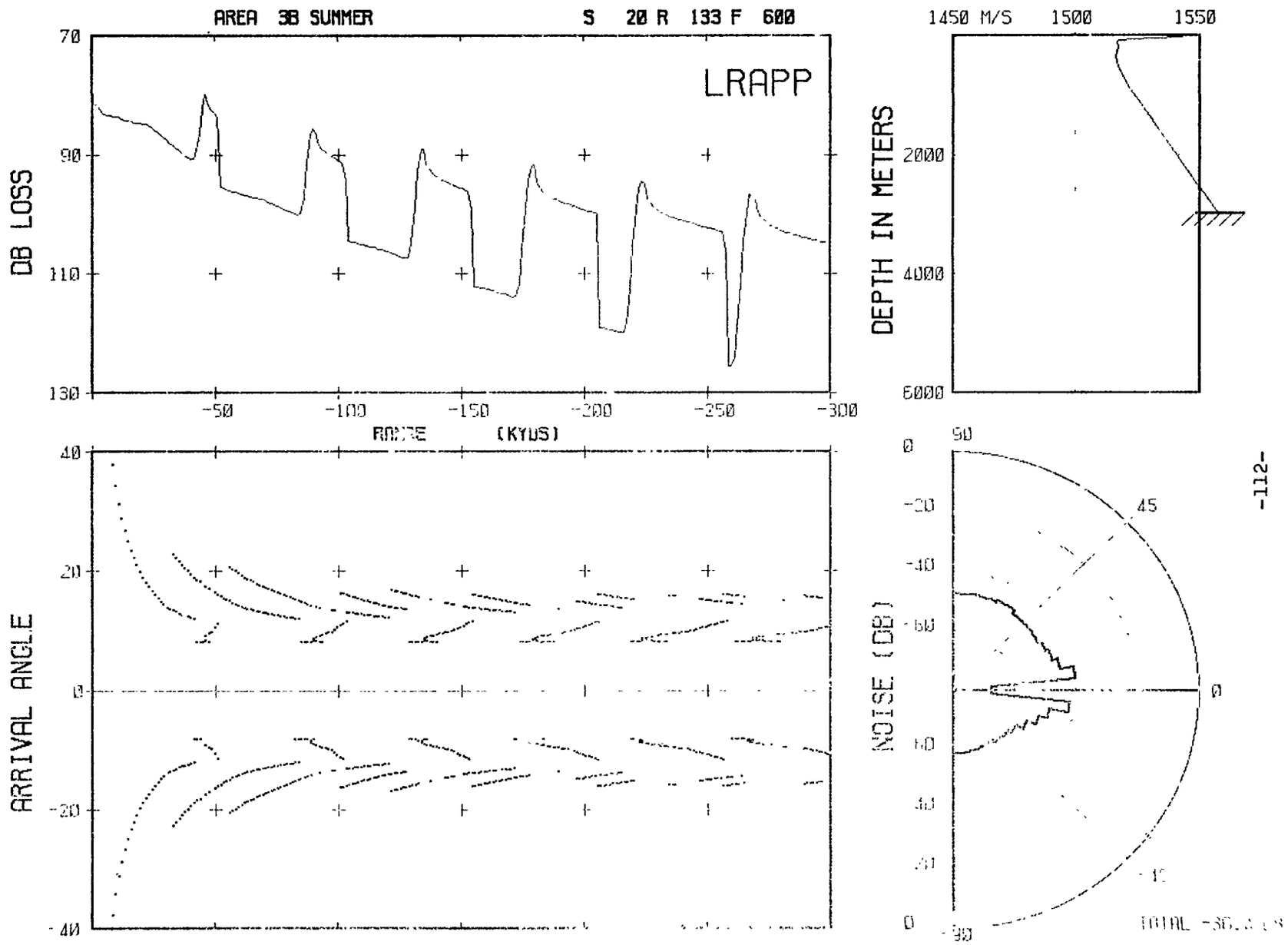
TOTAL -36.9 DB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RANGE (KYDS)
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1550
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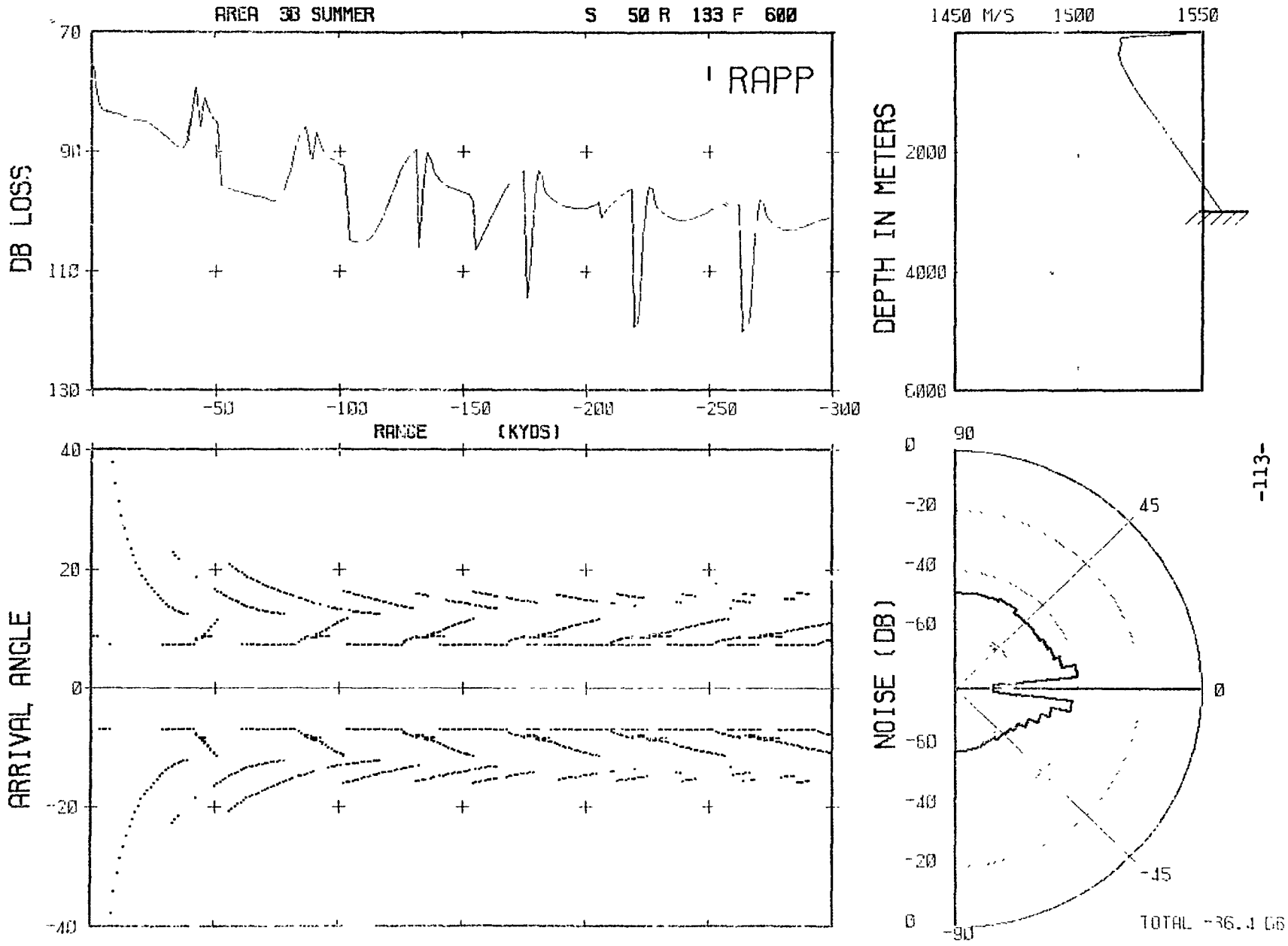
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DB LOSS
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RANGE (KYDS)
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1550
DEPTH IN METERS
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ARRIVAL ANGLE
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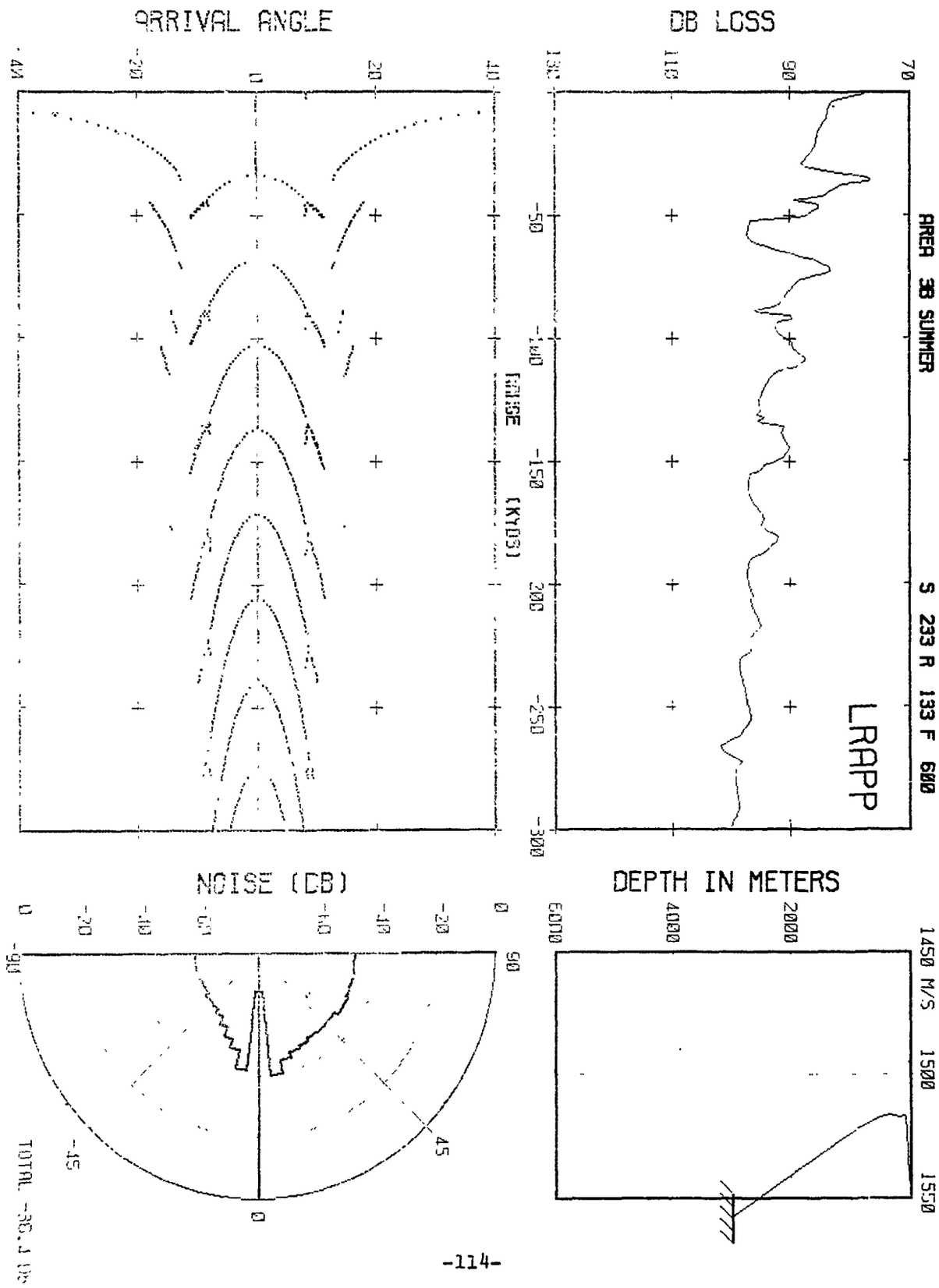
-90
TOTAL -36.4 DB


ARRIVAL ANGLE
DB LOSS
AREA 3B SUMMER
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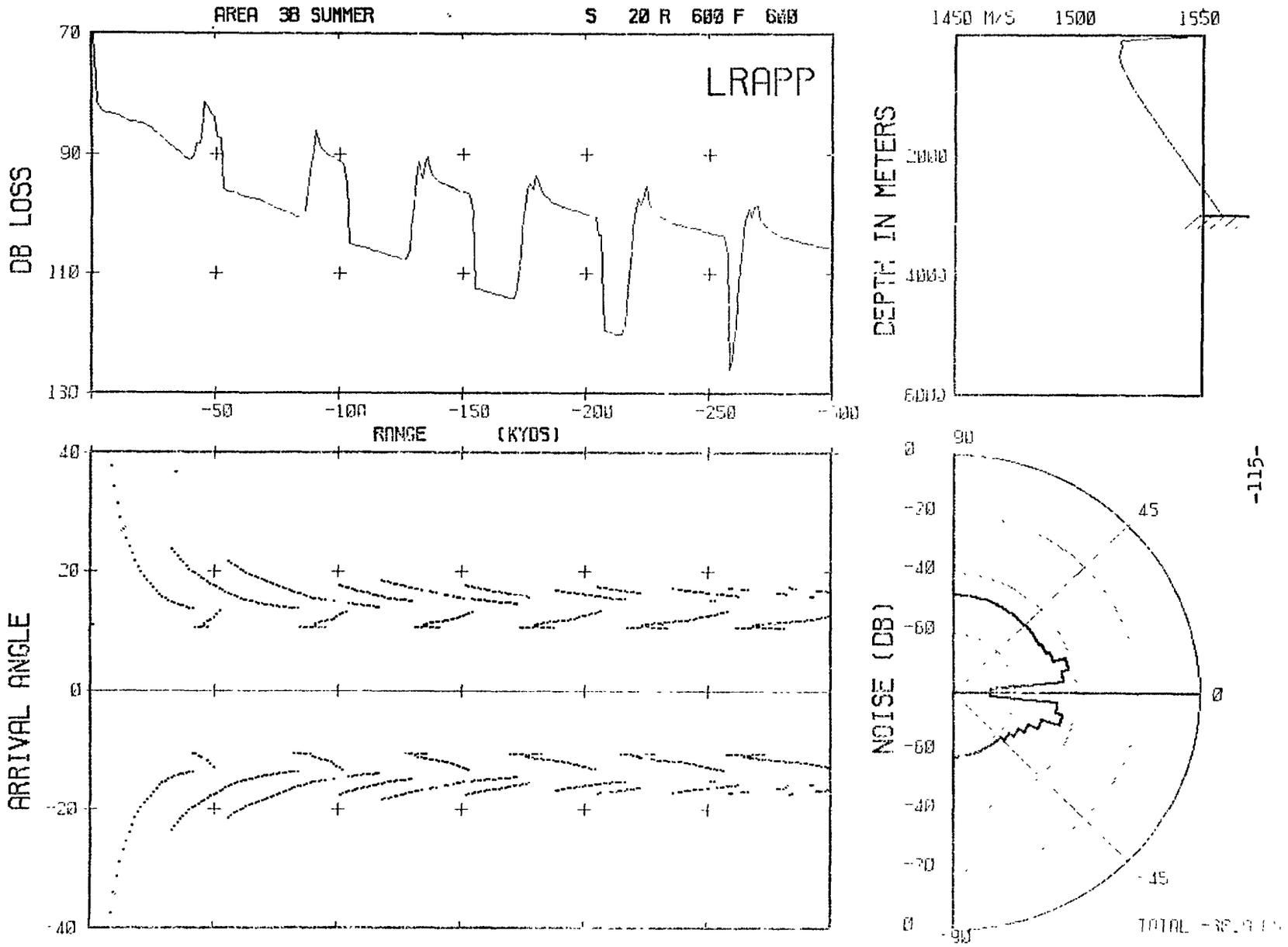
LRAPP
RANGE (KYDS)
NOISE (DB)
DEPTH IN METERS
1450 M/S
1500
1550
TOTAL -36.4 DB


AREA 3B SUMMER
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LRAPP
DB LOSS
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-50
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-150
-200
-250
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1500
1550
DEPTH IN METERS
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ARRIVAL ANGLE
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NOISE (DB)
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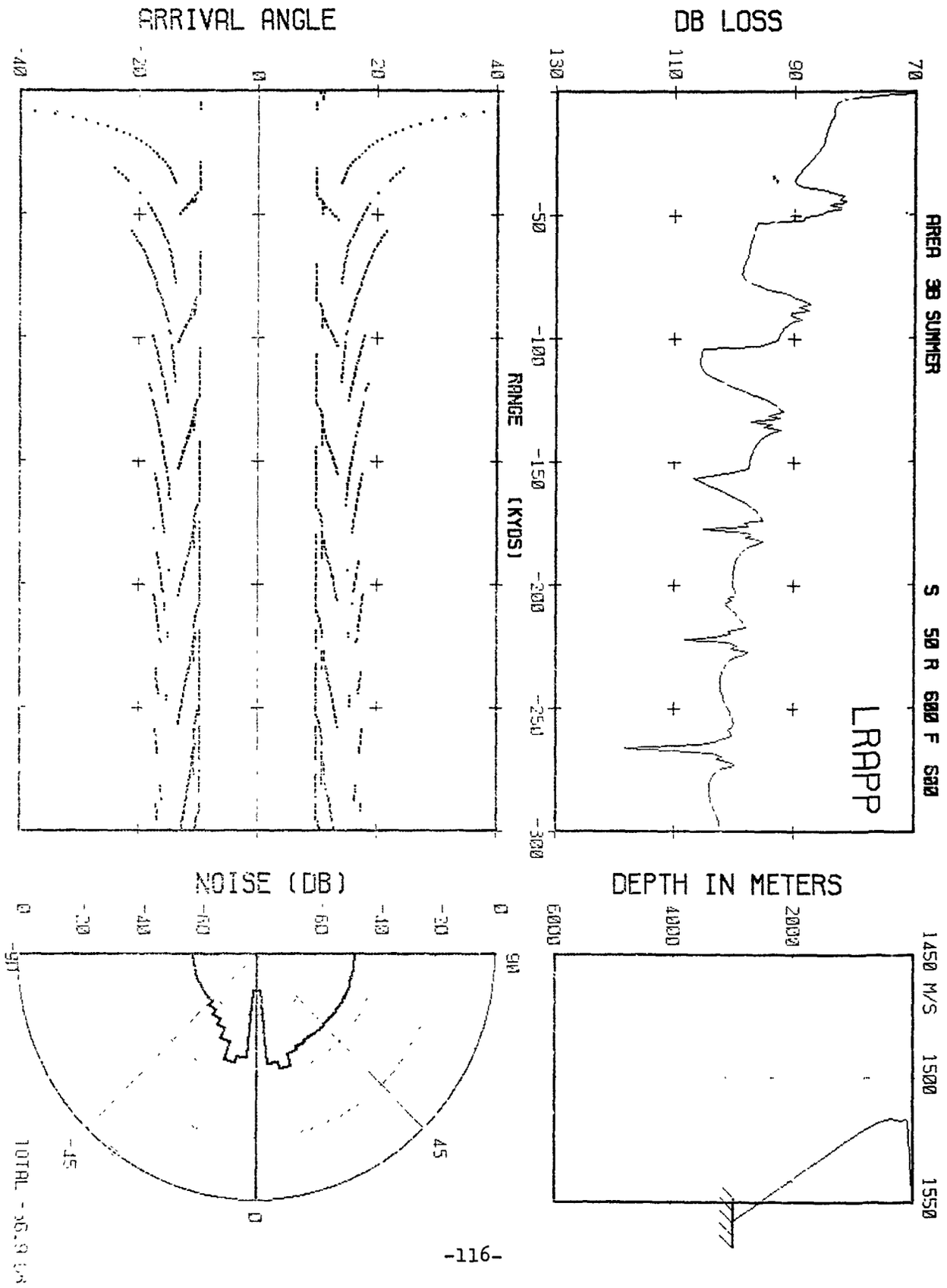
TOTAL


ARRIVAL ANGLE
DB LOSS
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NOISE (DB)
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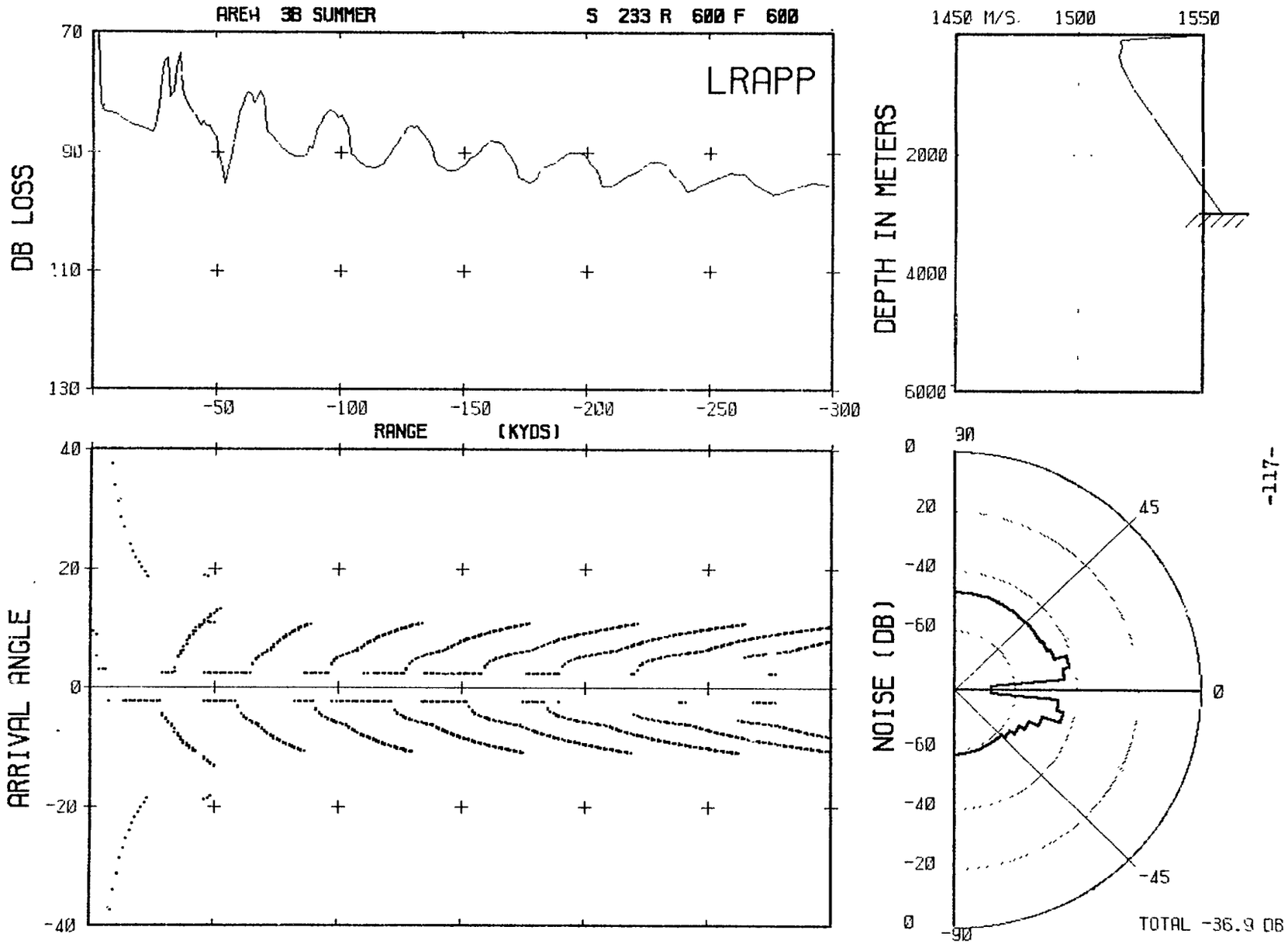
1550
TOTAL


AREA 3B SUMMER
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LRAPP
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RANGE (KYDS)
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1550
DEPTH IN METERS
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4000
6000
ARRIVAL ANGLE
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NOISE (DB)
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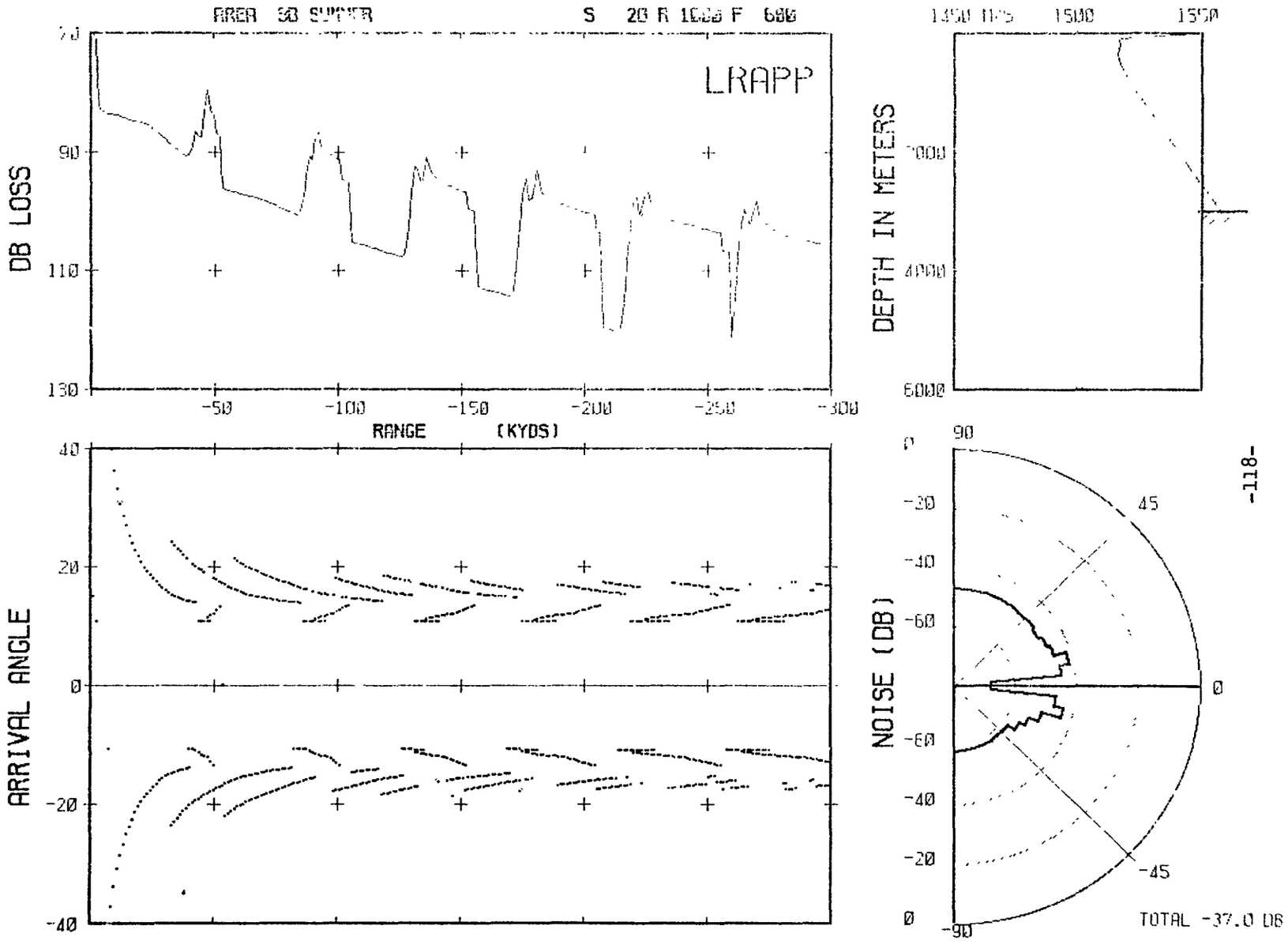
TOTAL -36.9 DB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LRAPP
DB LOSS
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RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
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NOISE (DB)
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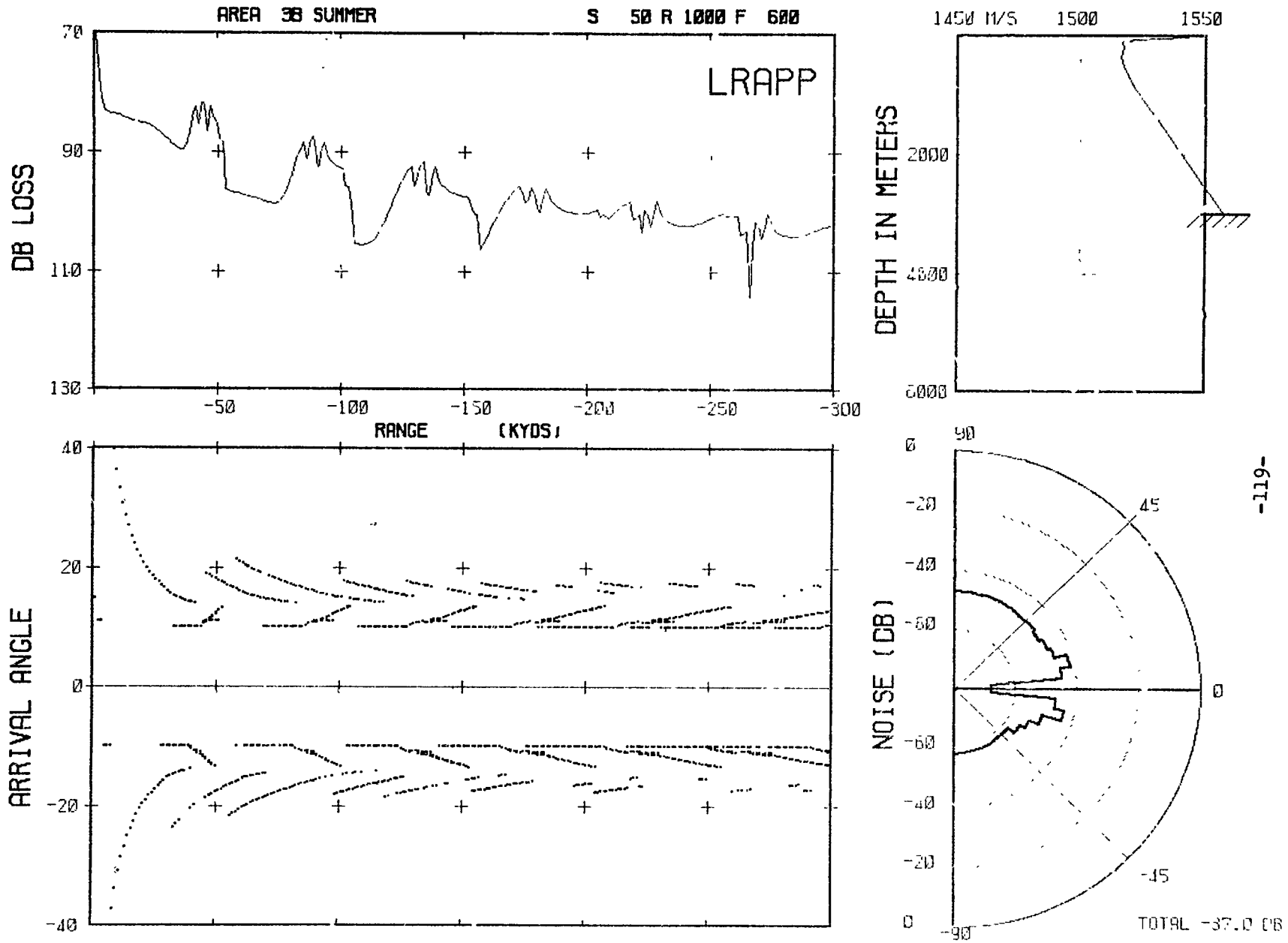
TOTAL -37.0 DB


AREA 3B SUMMER
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LRAPP
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RANGE (KYDS)
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DEPTH IN METERS
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NOISE (DB)
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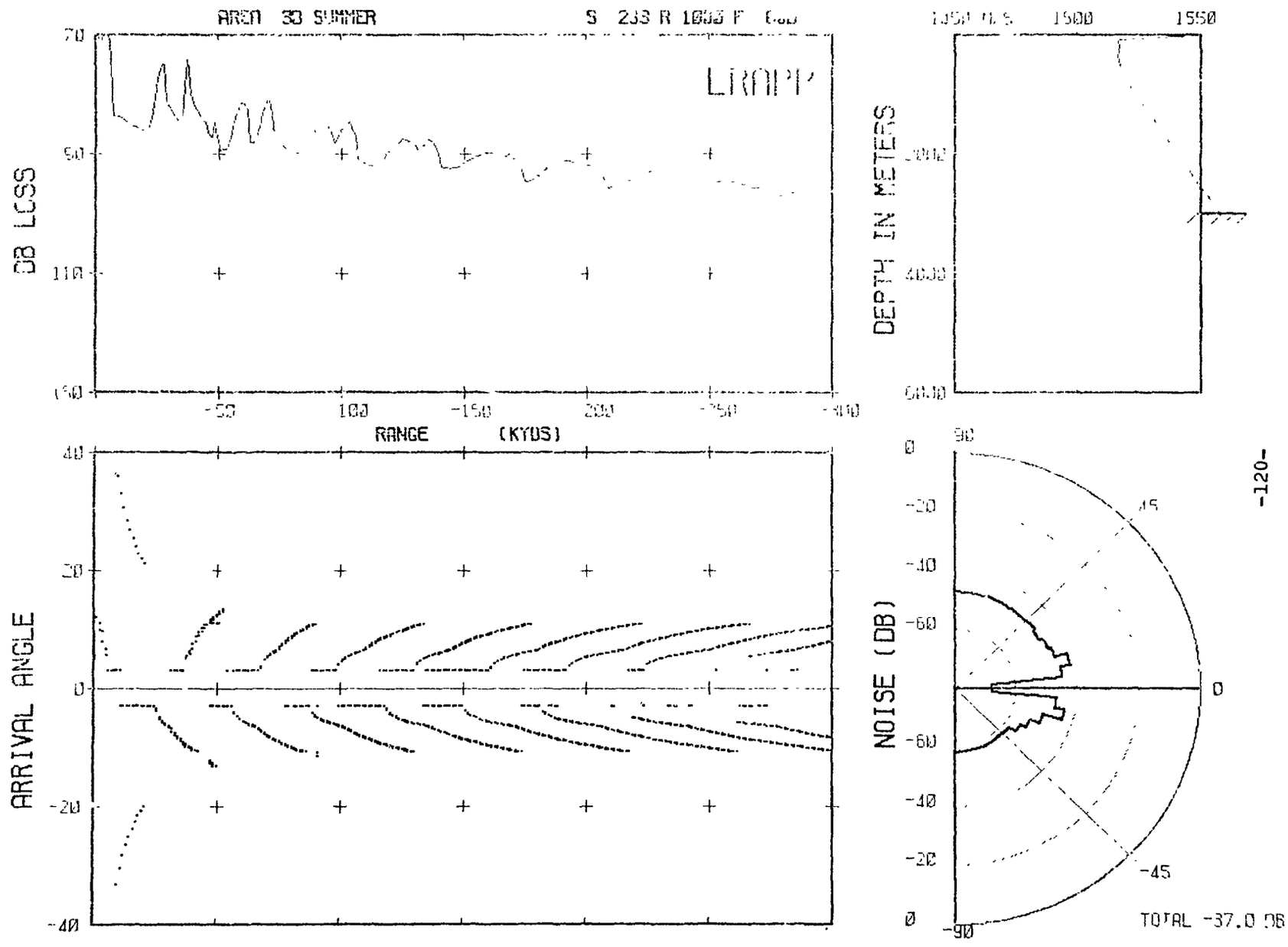
TOTAL -37.0 DB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DEPTH IN METERS
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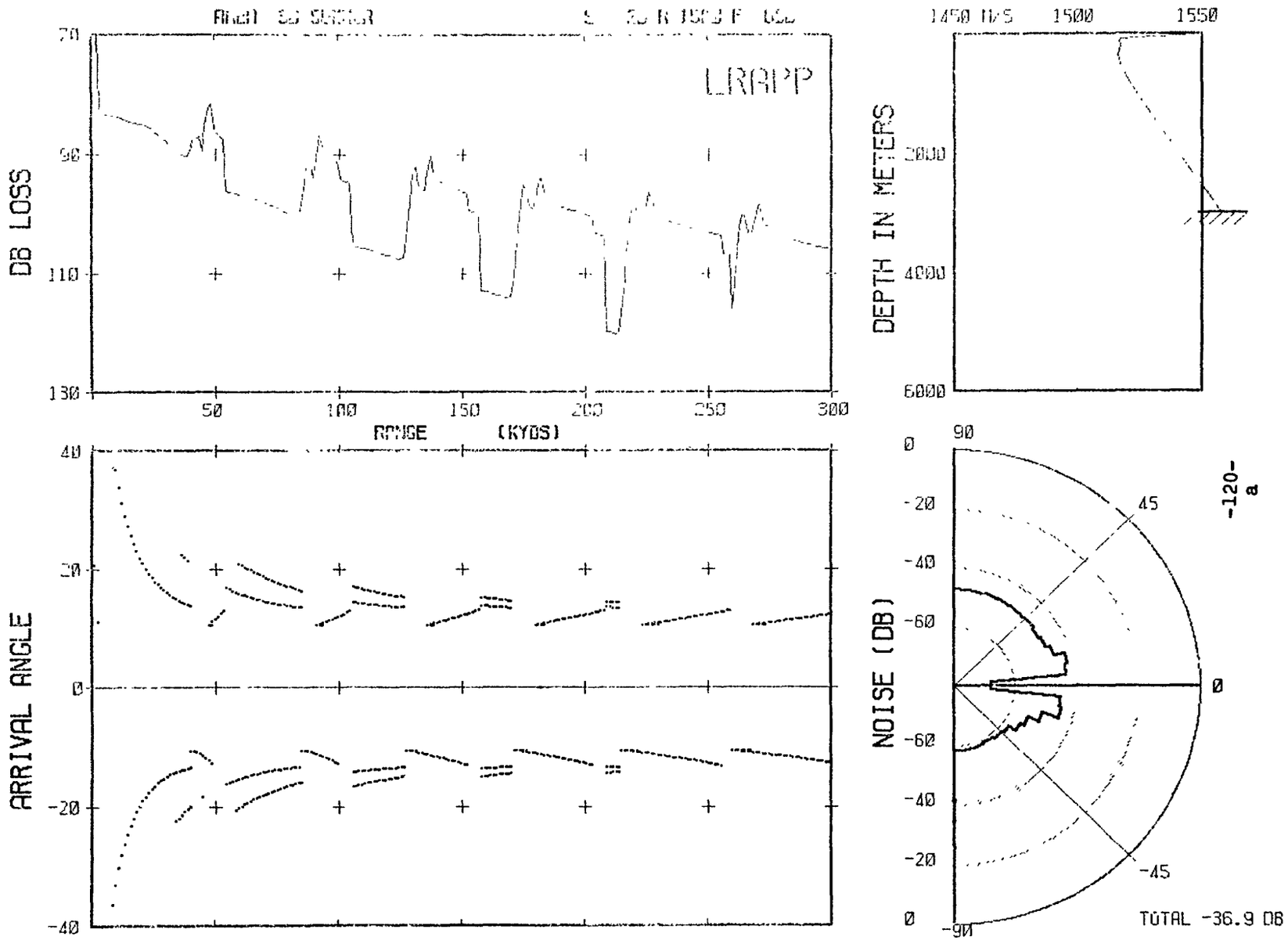
TOTAL -37.0 DB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RANGE (KYDS)
DEPTH IN METERS
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1500
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2000
4000
6000
ARRIVAL ANGLE
40
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TOTAL -36.9 DB

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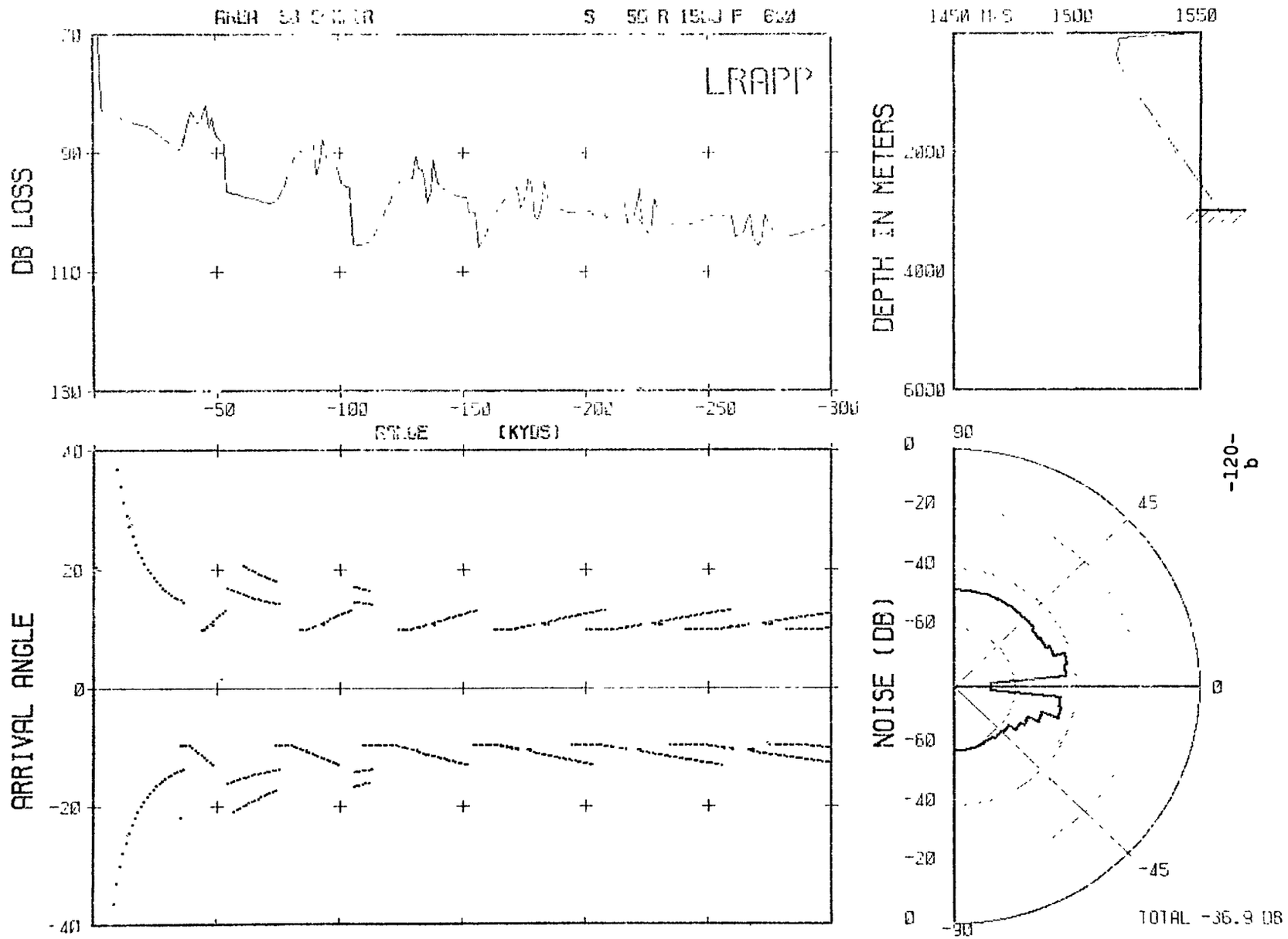
LRAPP
DB LOSS
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RANGE (KYDS)
DEPTH IN METERS
1450 M/S
1500
1550
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ARRIVAL ANGLE
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NOISE (DB)
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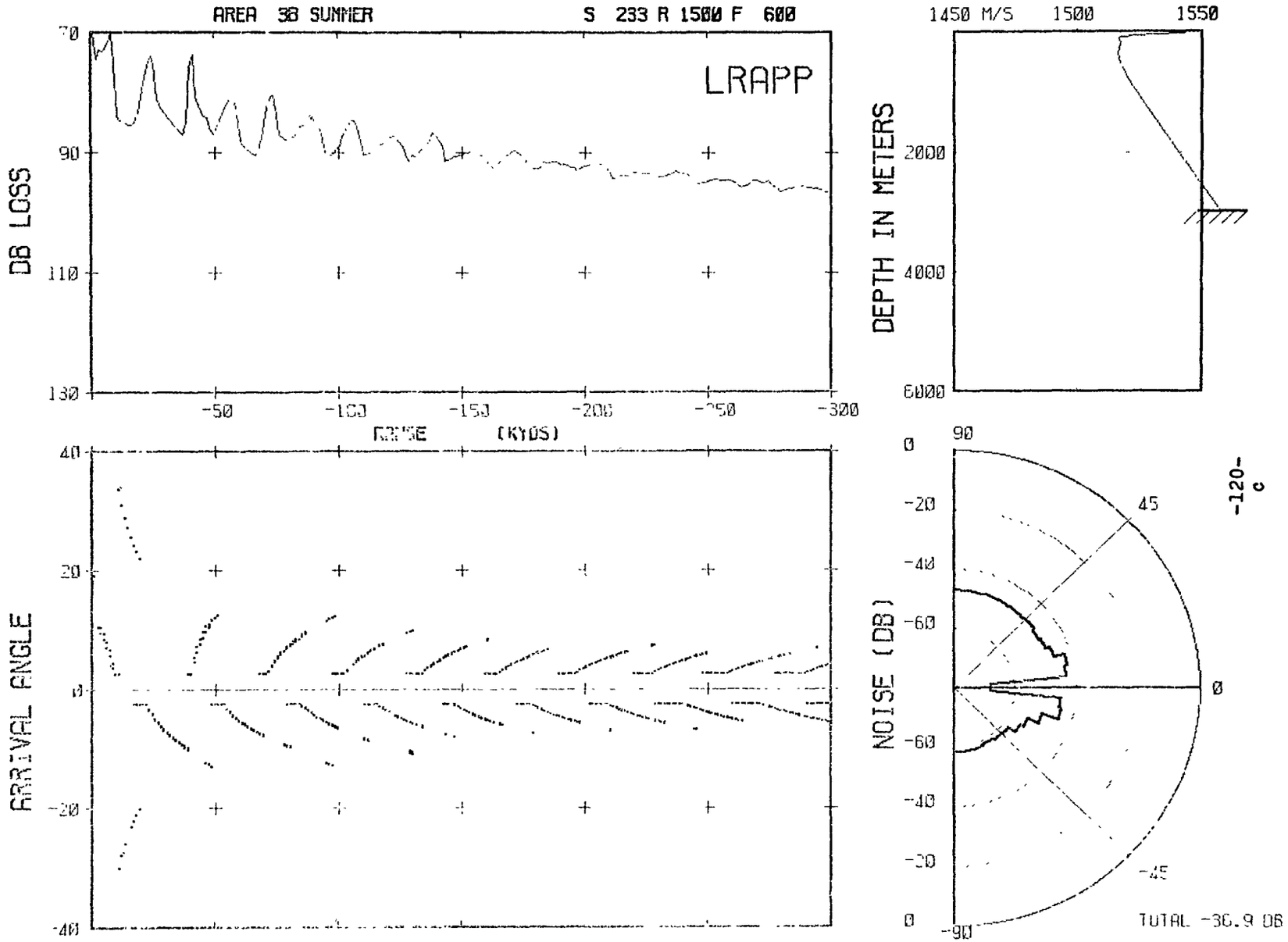
-90
TOTAL -36.9 DB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1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
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20
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-20
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NOISE (DB)
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TOTAL -30.9 DB

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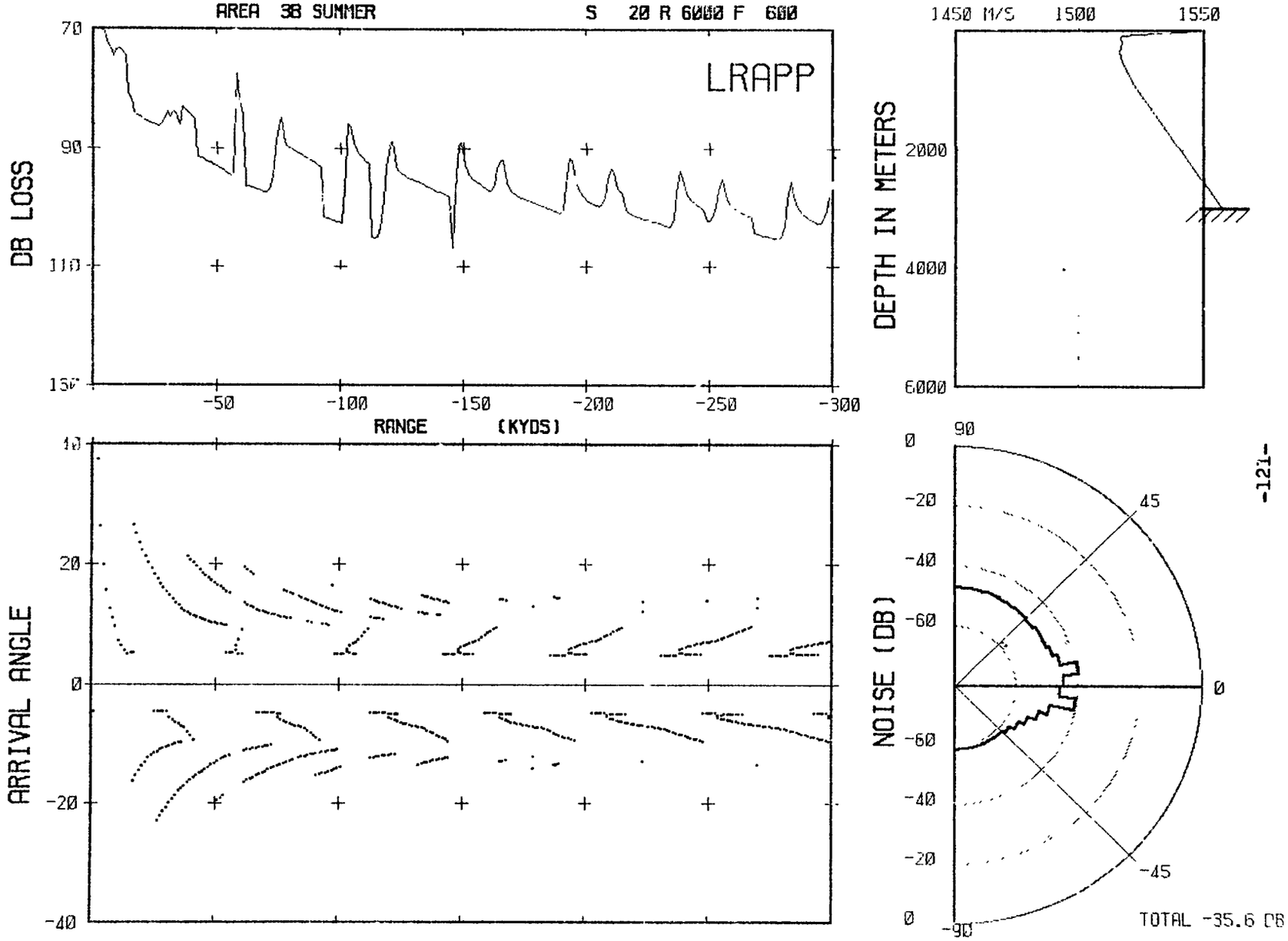

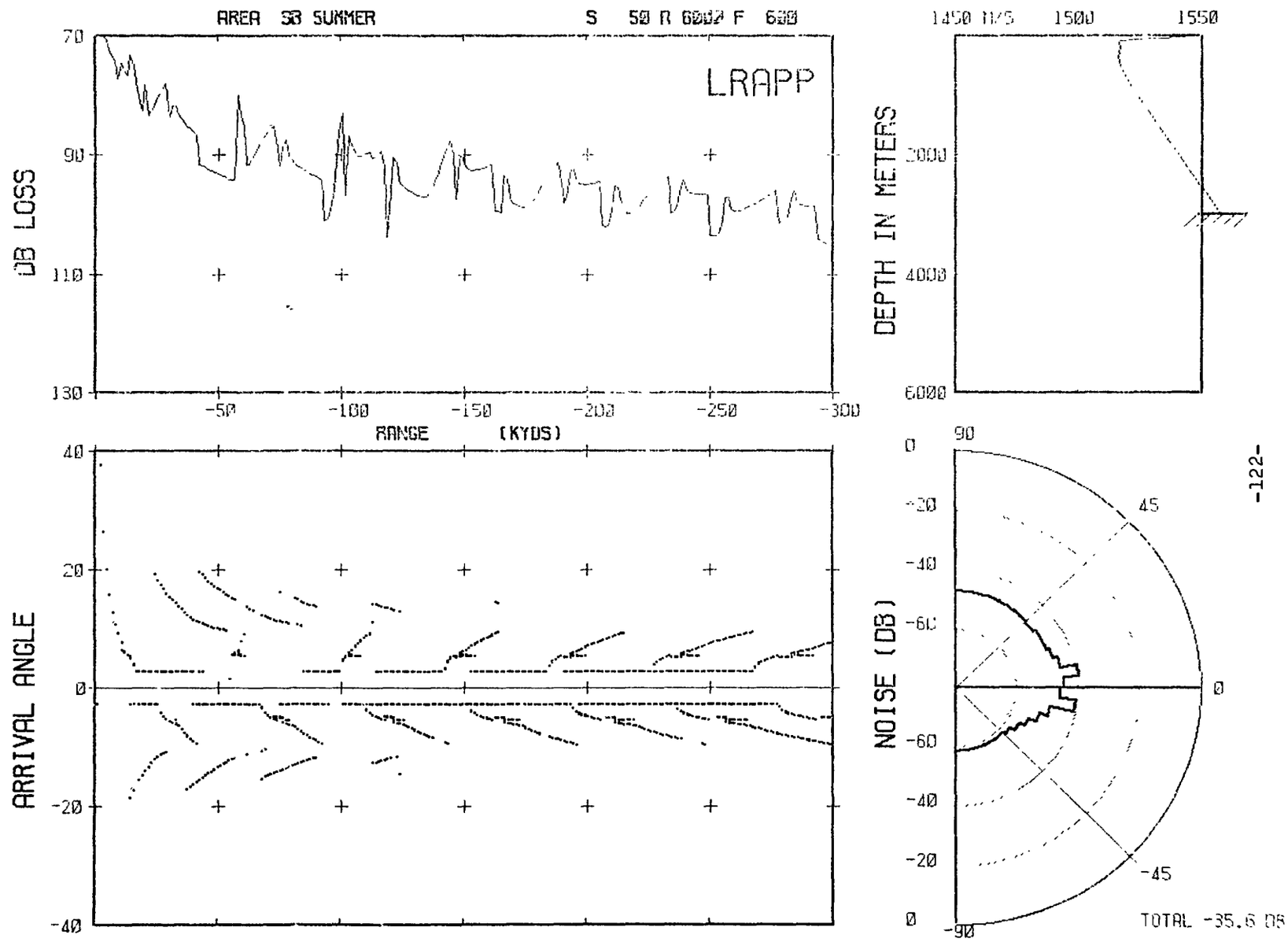
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1550
DEPTH IN METERS
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ARRIVAL ANGLE
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NOISE (DB)
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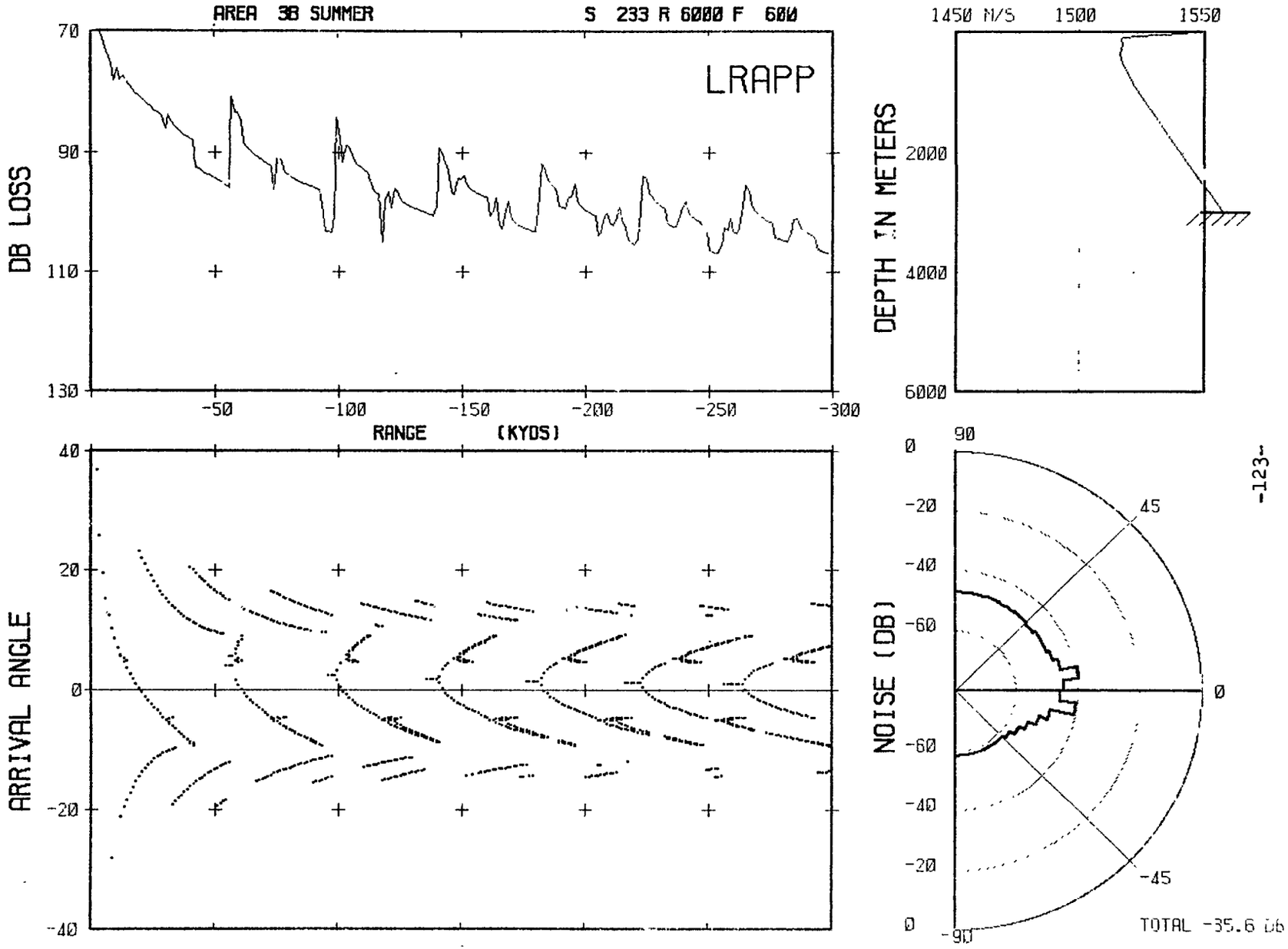
TOTAL -35.6 DB


AREA 3B SUMMER
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RANGE (KYDS)
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DEPTH IN METERS
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ARRIVAL ANGLE
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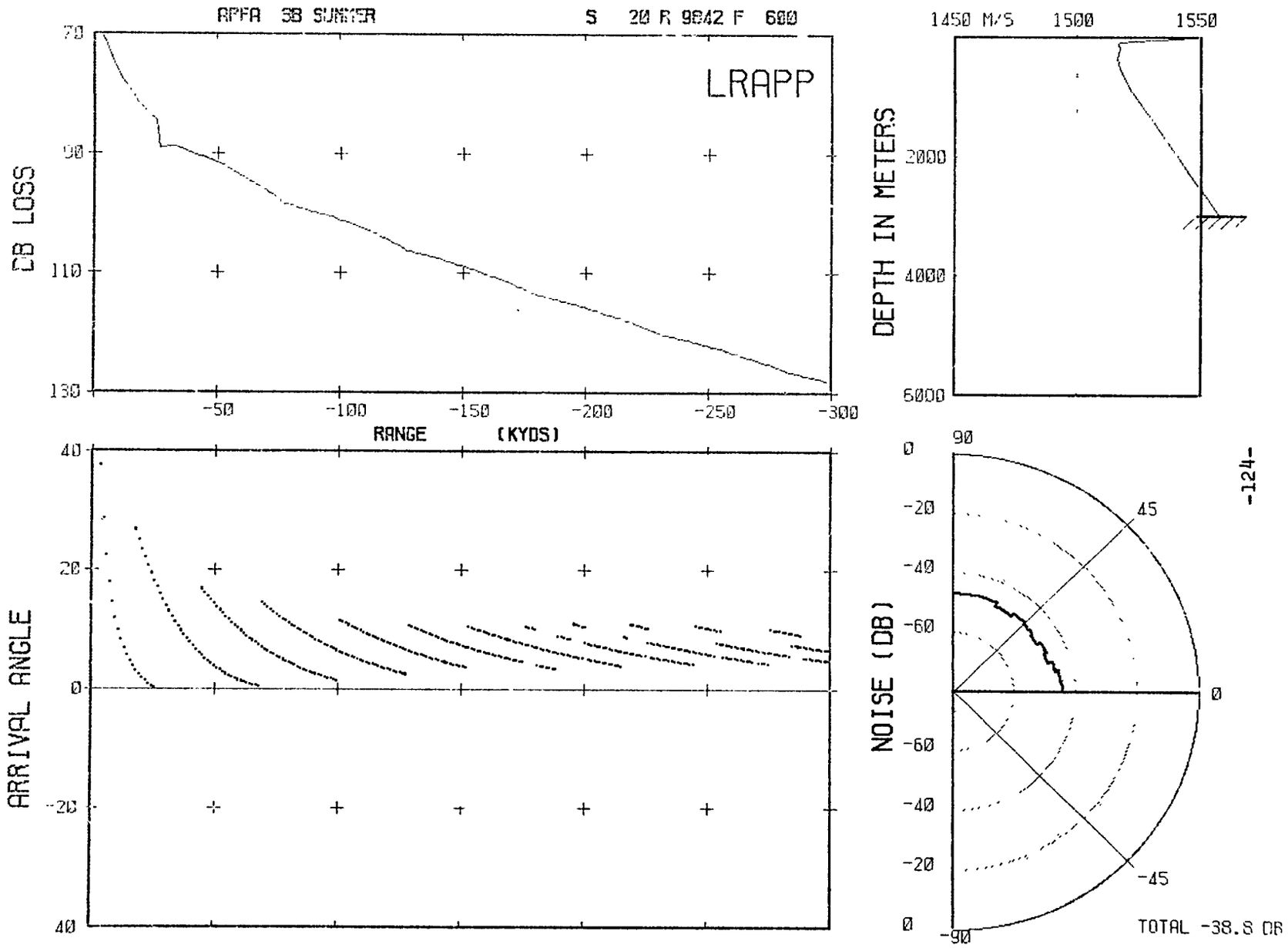
TOTAL -35.6 DB


RPFA 3B SUMMER S 20 R 9842 F 600
LRAPP
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RANGE (KYDS)
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DEPTH IN METERS
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ARRIVAL ANGLE
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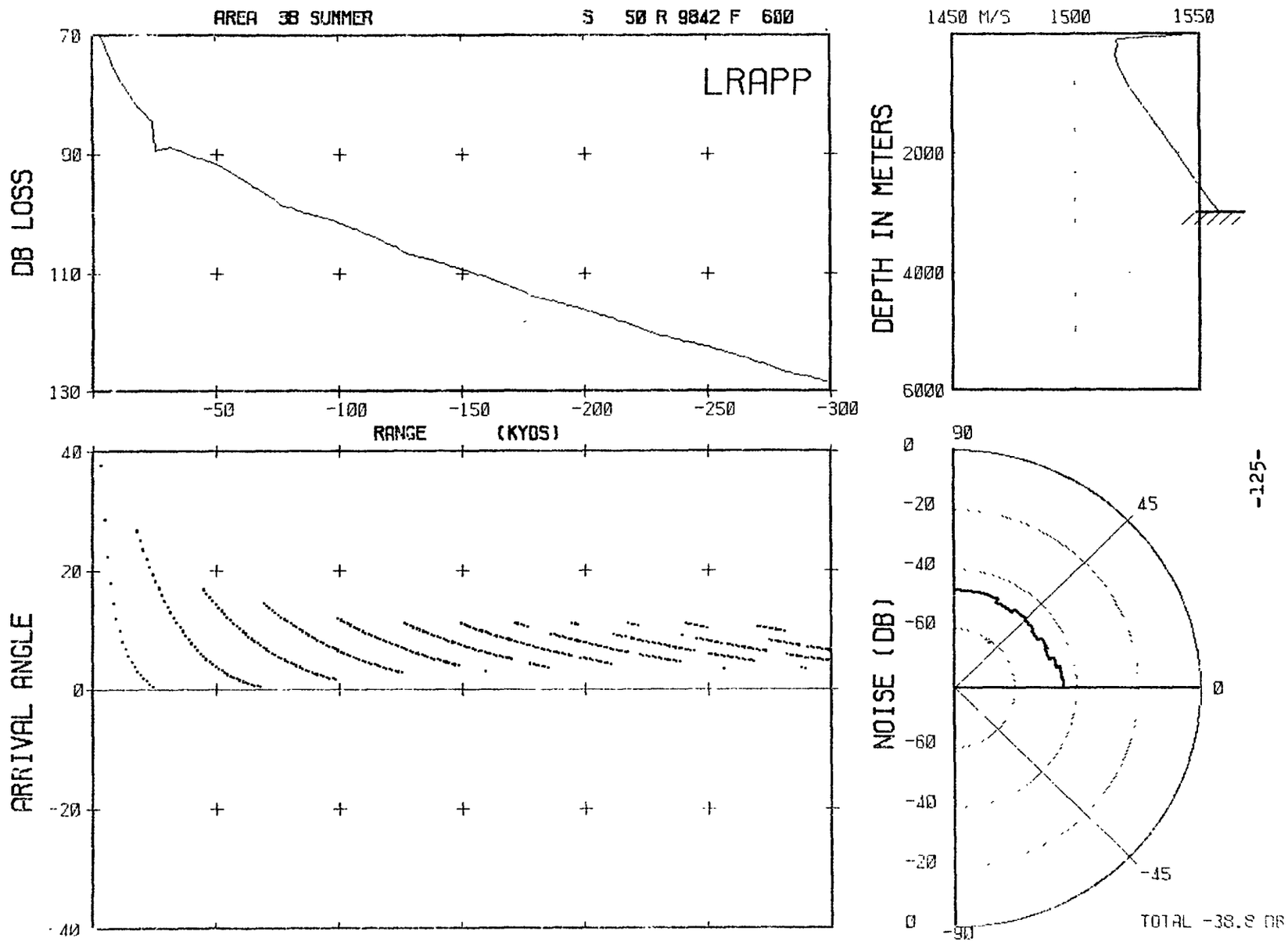
TOTAL -38.8 DB


AREA 3B SUMMER
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LRAPP
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RANGE (KYDS)
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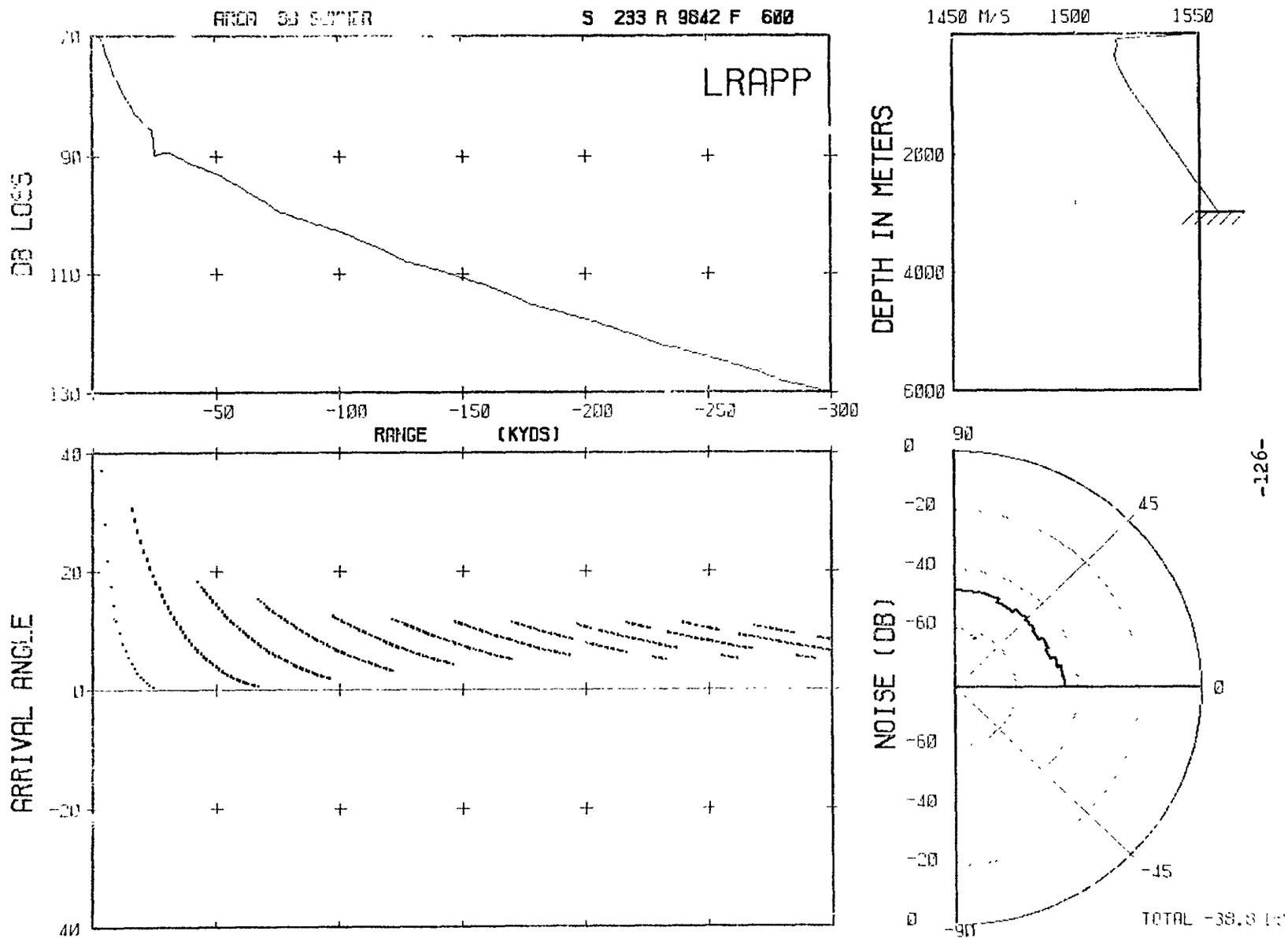
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DEPTH IN METERS
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NOISE (DB)
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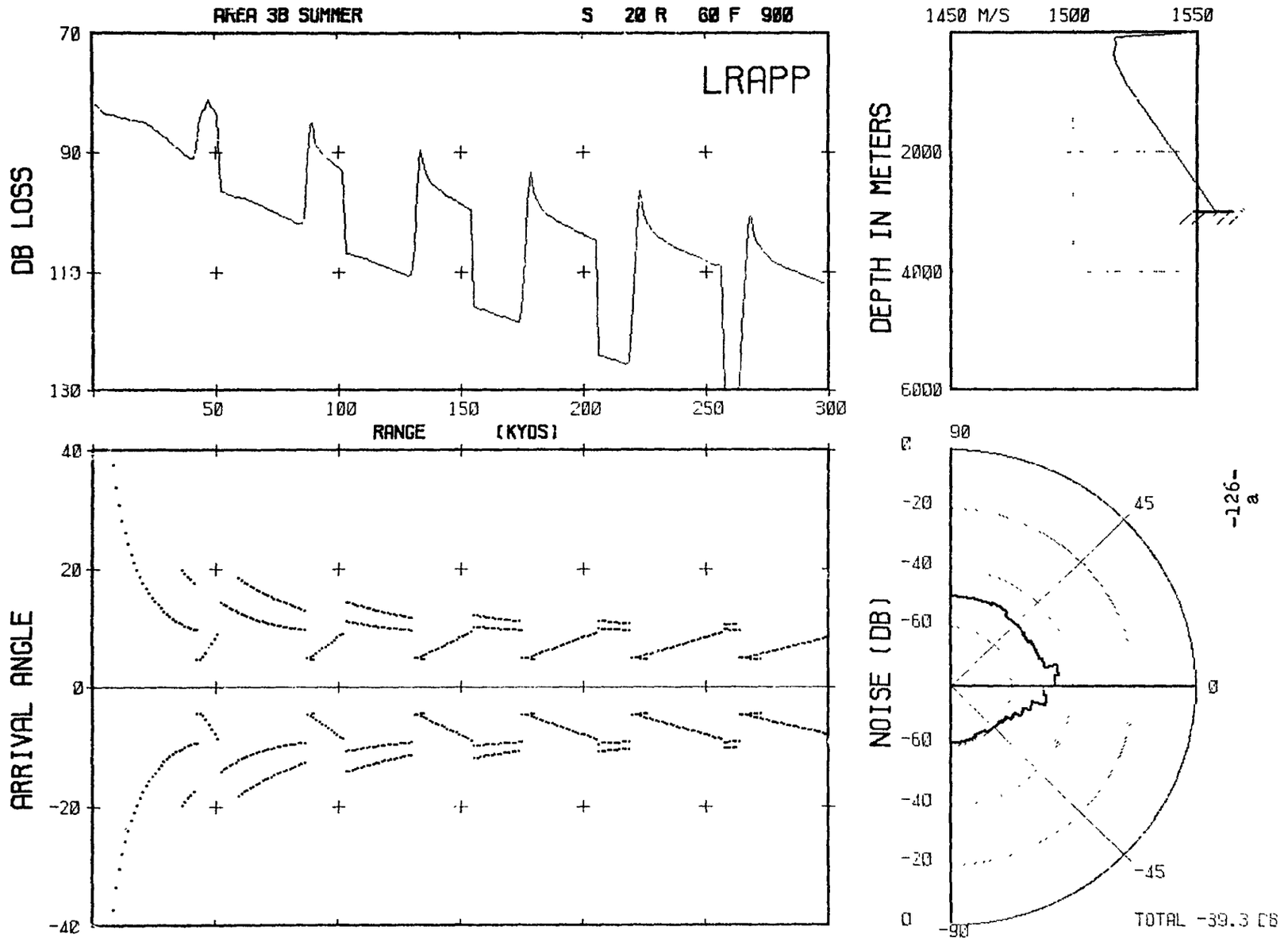
TOTAL -38.8 DB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DB LOSS
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DEPTH IN METERS
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TOTAL -39.3 DB

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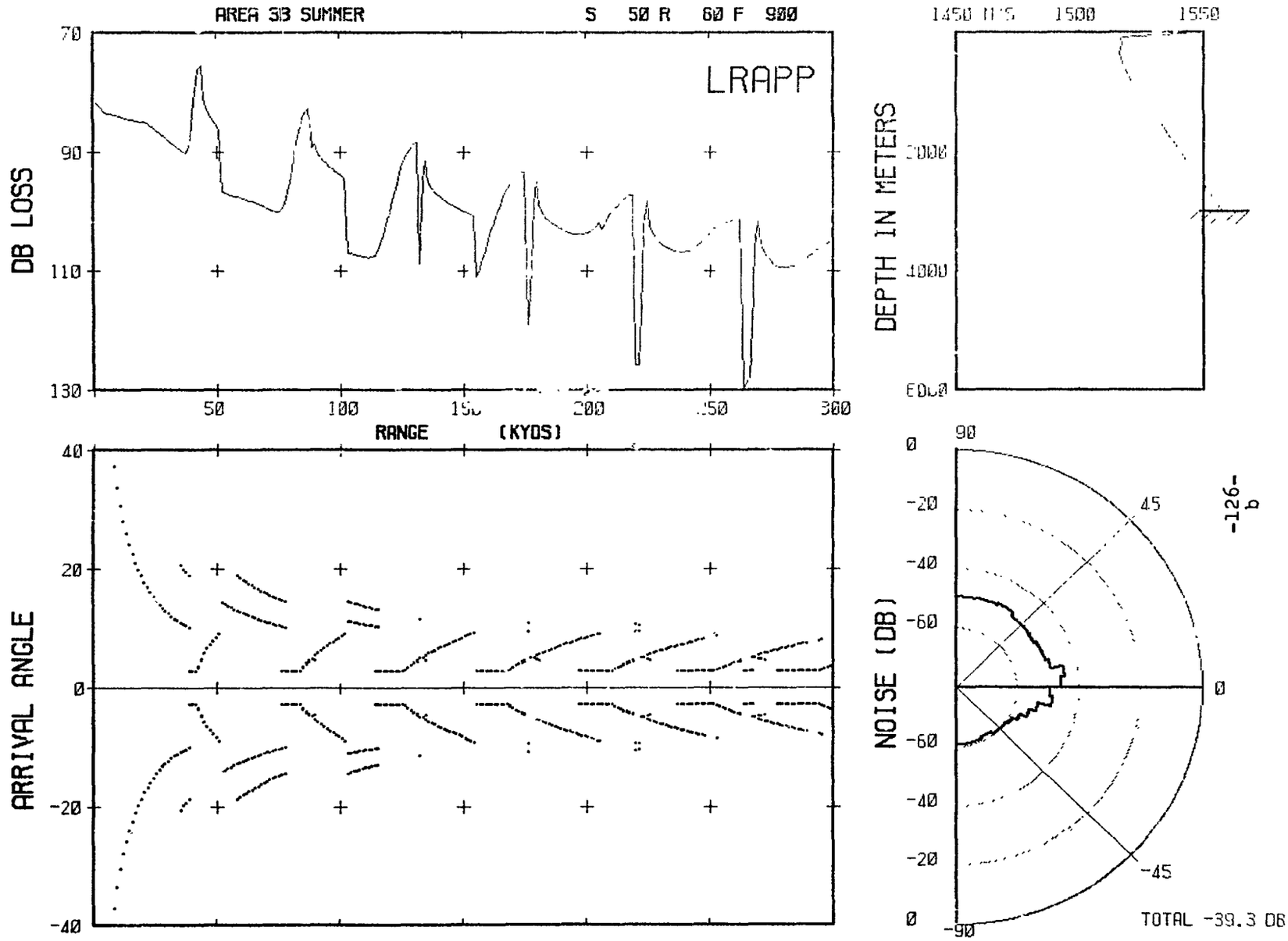
AREA 3B SUMMER
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LRAPP
DB LOSS
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RANGE (KYDS)
ARRIVAL ANGLE
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1450 M/S
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DEPTH IN METERS
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NOISE (DB)
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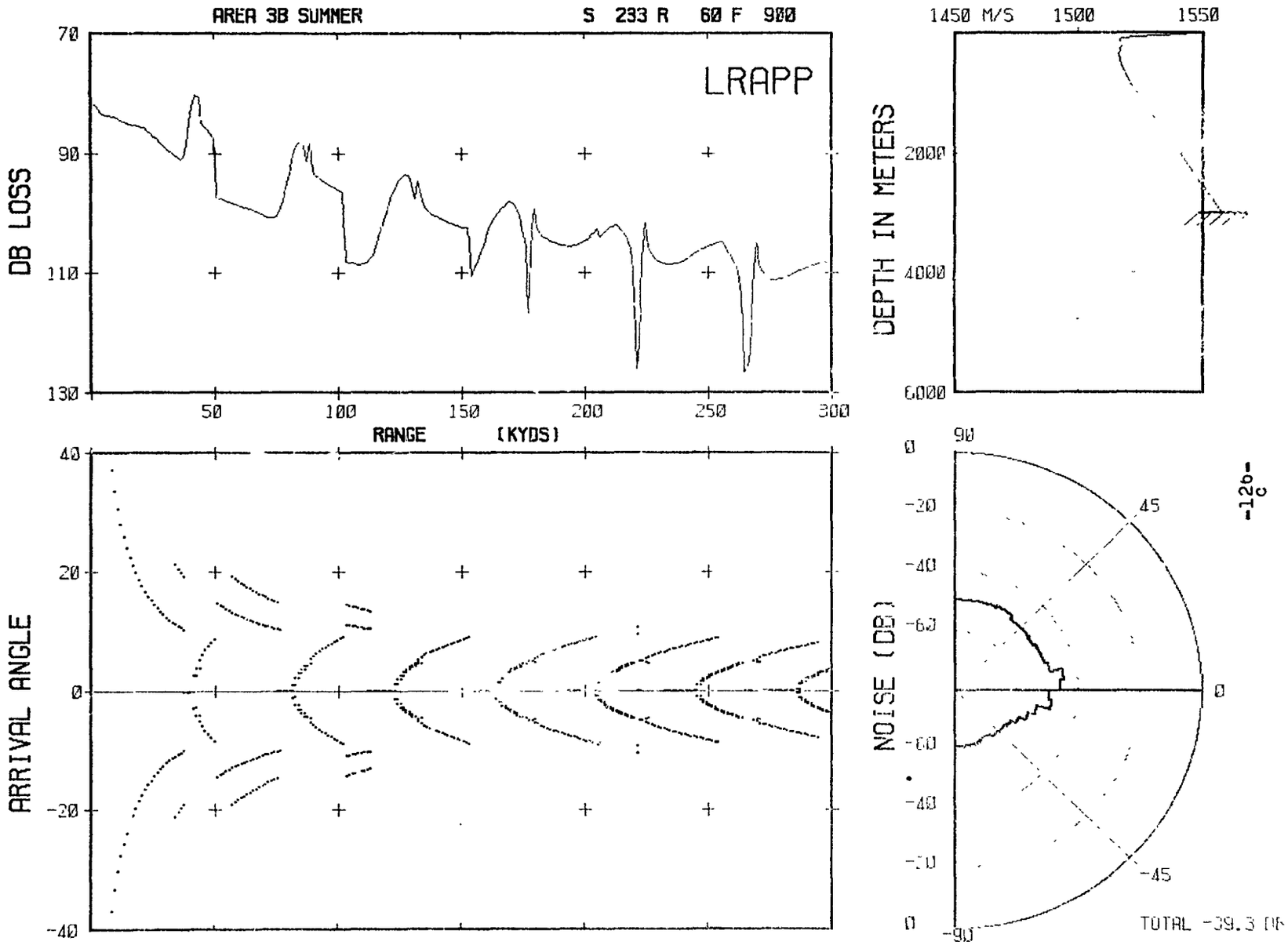
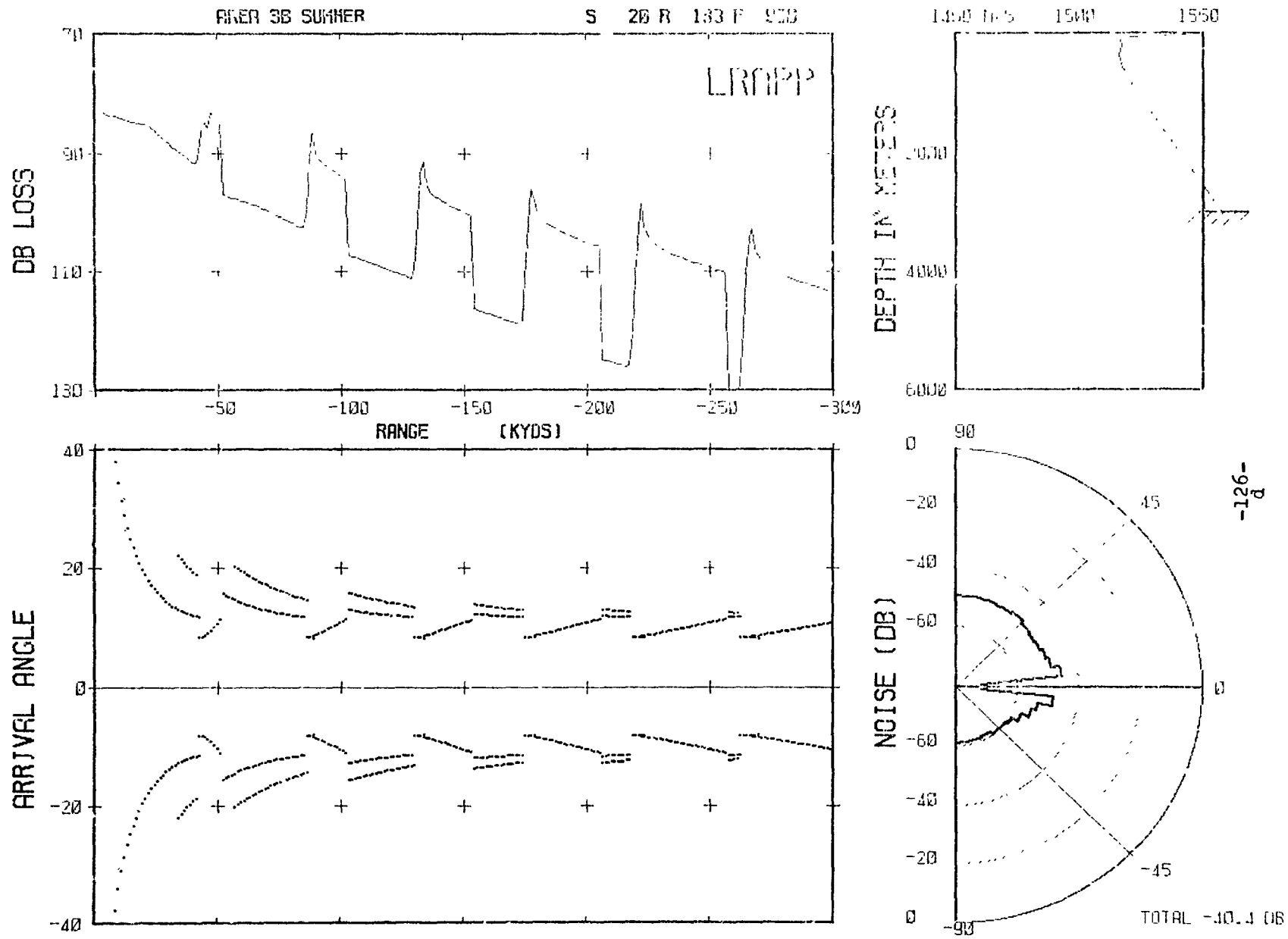
-90
TOTAL -39.3 DB


AREA 3B SUMMER
S 233 R 60 F 900
LRAPP
DB LOSS
70
90
110
130
50
100
150
200
250
300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
0
-45
-90
TOTAL -39.3 DB


AREA 3B SUMMER
S 20 R 183 F 950
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
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-20
-40
-60
-60
-40
-20
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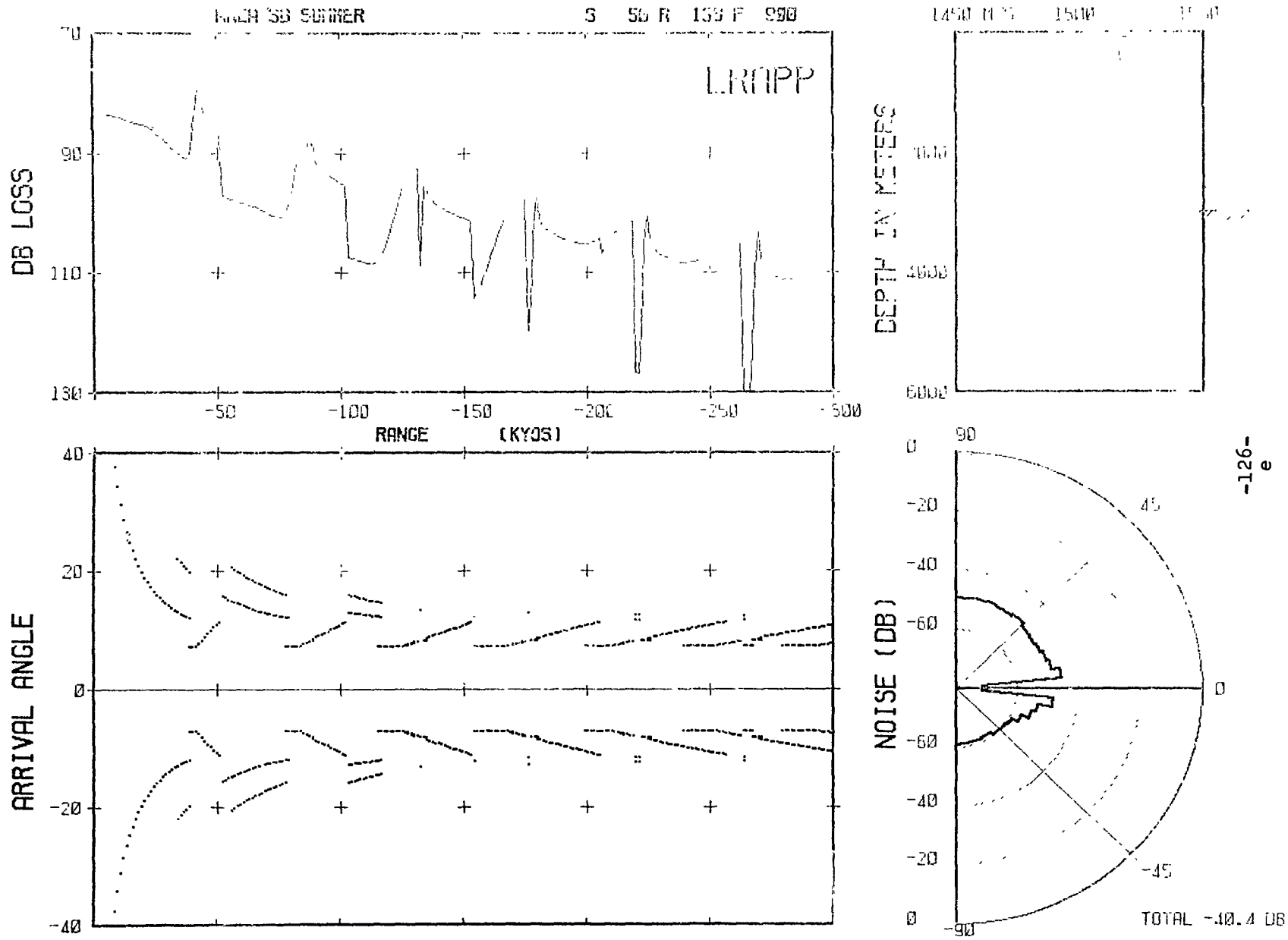
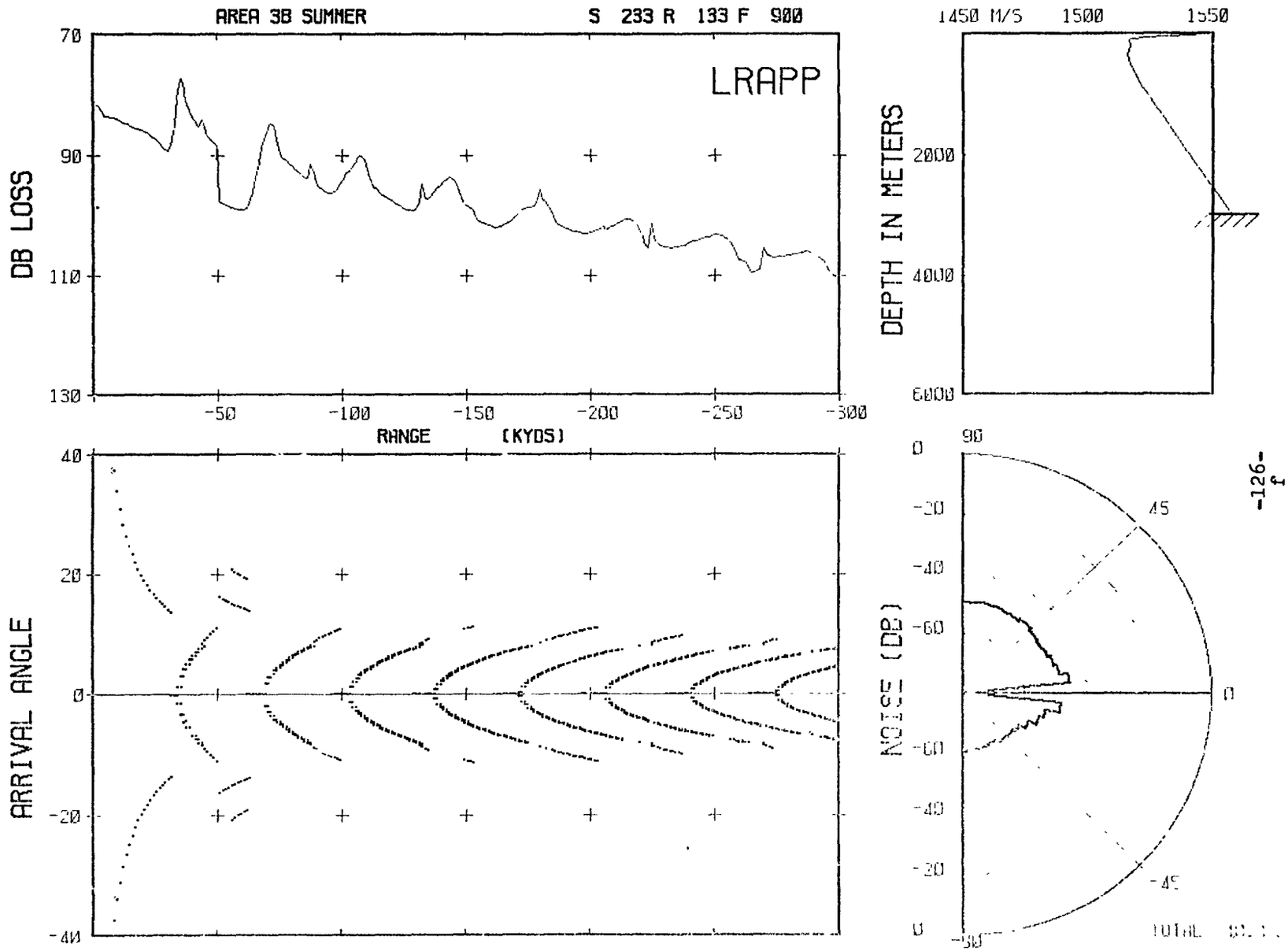
90
45
0
-45
-90
TOTAL -40.4 DB


LRMPP
DB LOSS
RANGE (KYDS)
ARRIVAL ANGLE
DEPTH IN METERS
NOISE (DB)
TOTAL -40.4 DB


AREA 3B SUMMER
S 233 R 133 F 900
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
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-20
-40
NOISE (DB)
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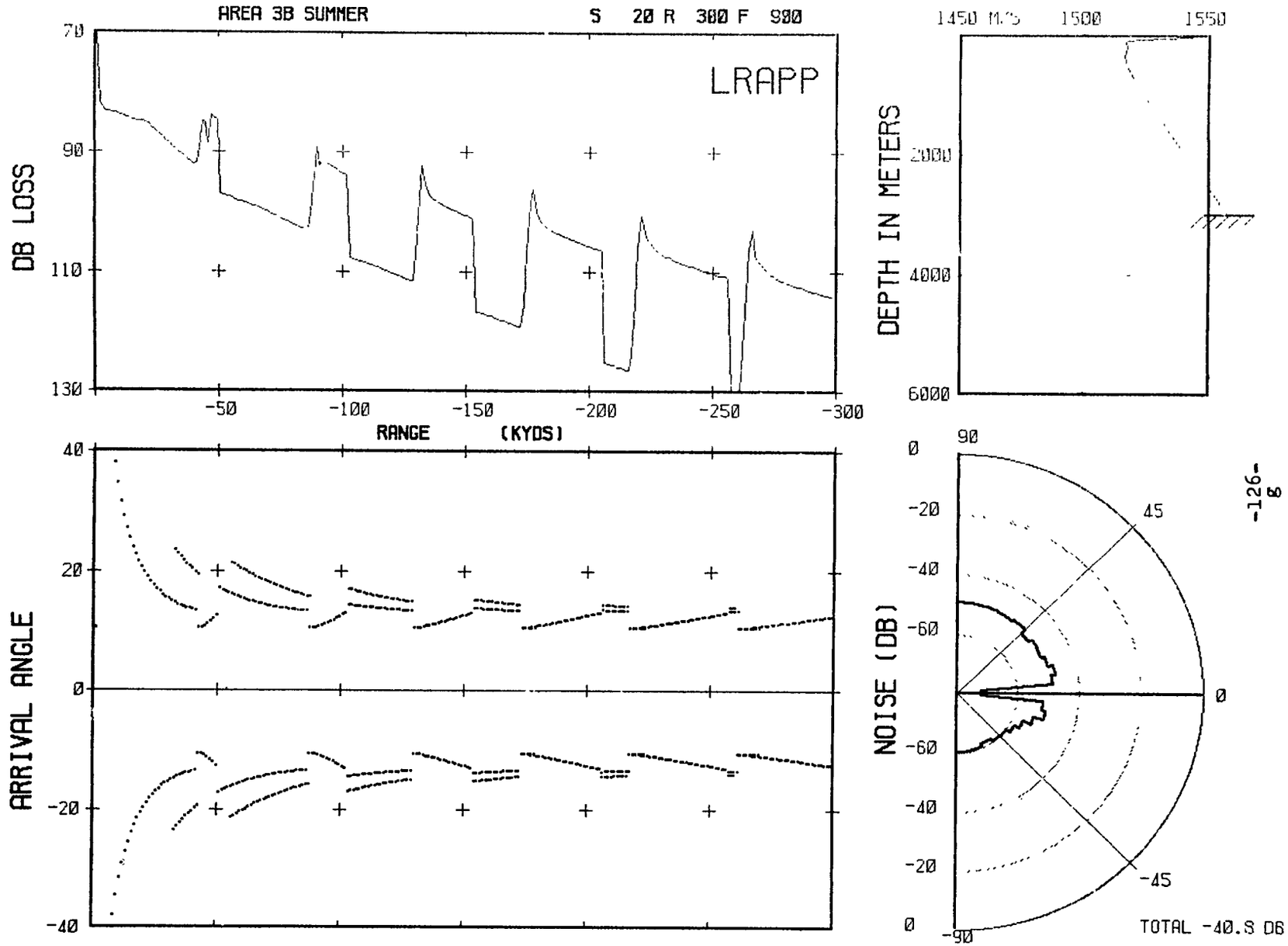
45
0
-45
-90


AREA 3B SUMMER
S 20 R 300 F 900
LRAPP
DB LOSS
70
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110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
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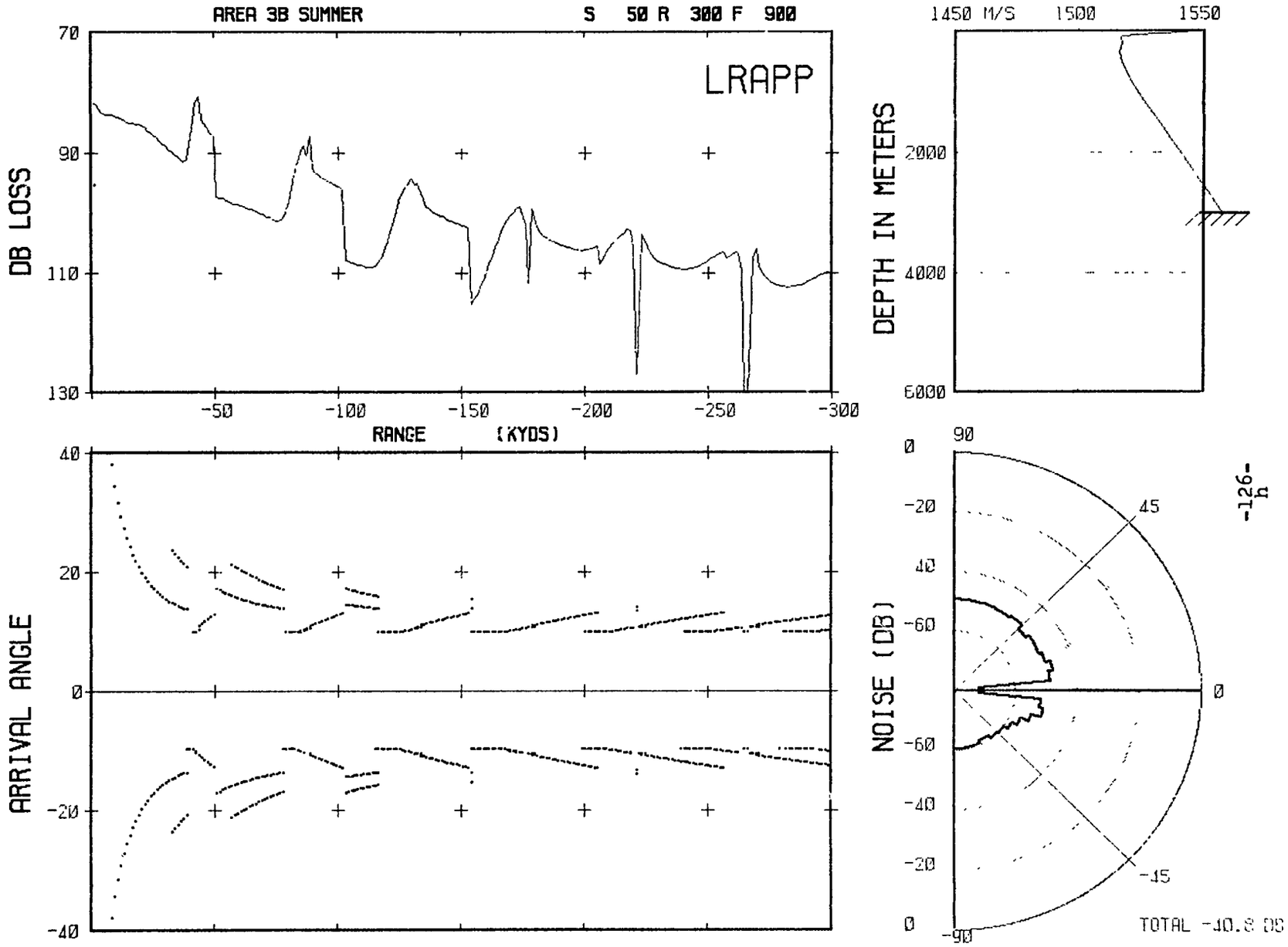
20
0
-20
-40
NOISE (DB)
90
45
0
-45
-90
TOTAL -40.8 DB


AREA 3B SUMMER
S 50 R 300 F 900
LRAPP
DB LOSS
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110
130
-50
-100
-150
-200
-250
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RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
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-40
NOISE (DB)
90
45
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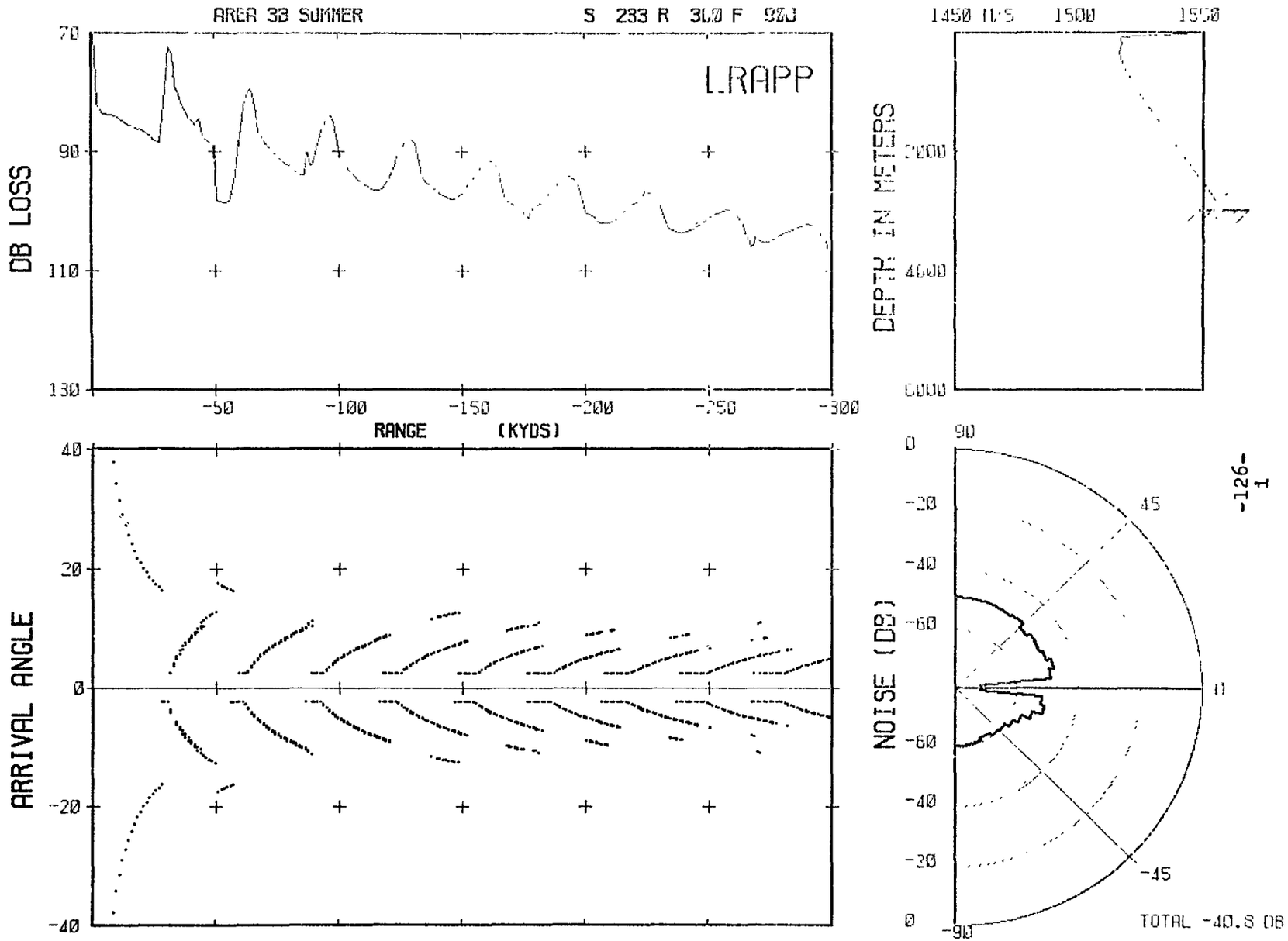
-90
TOTAL -40.8 DB


AREA 33 SUMMER
S 233 R 300 F 900
LRAPP
DB LOSS
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130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
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-40
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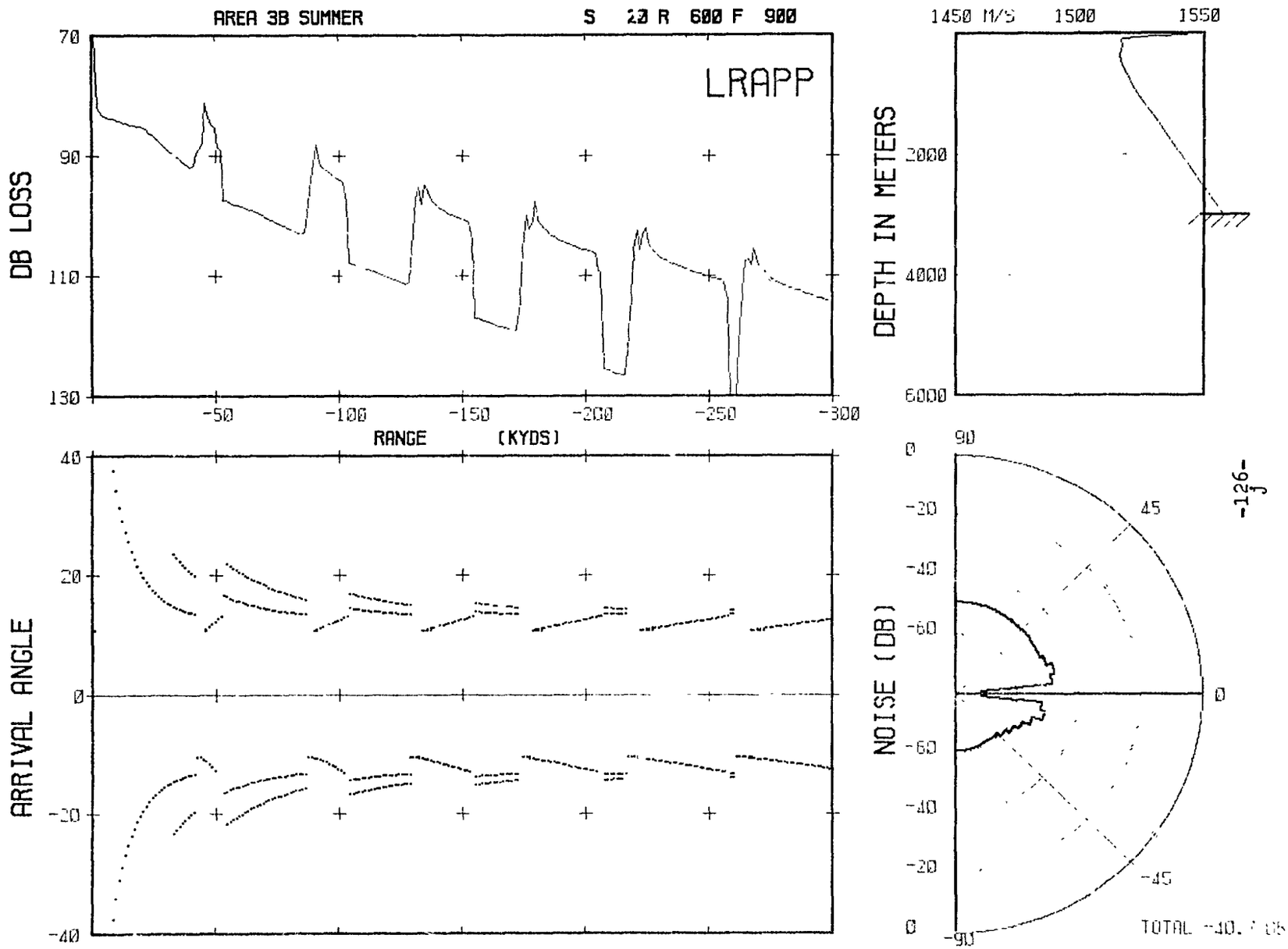
-20
0
90
45
0
-45
-90
TOTAL -40.8 DB


AREA 3B SUMMER
S 20 R 600 F 900
LRAPP
DB LOSS
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90
110
130
-50
-100
-150
-200
-250
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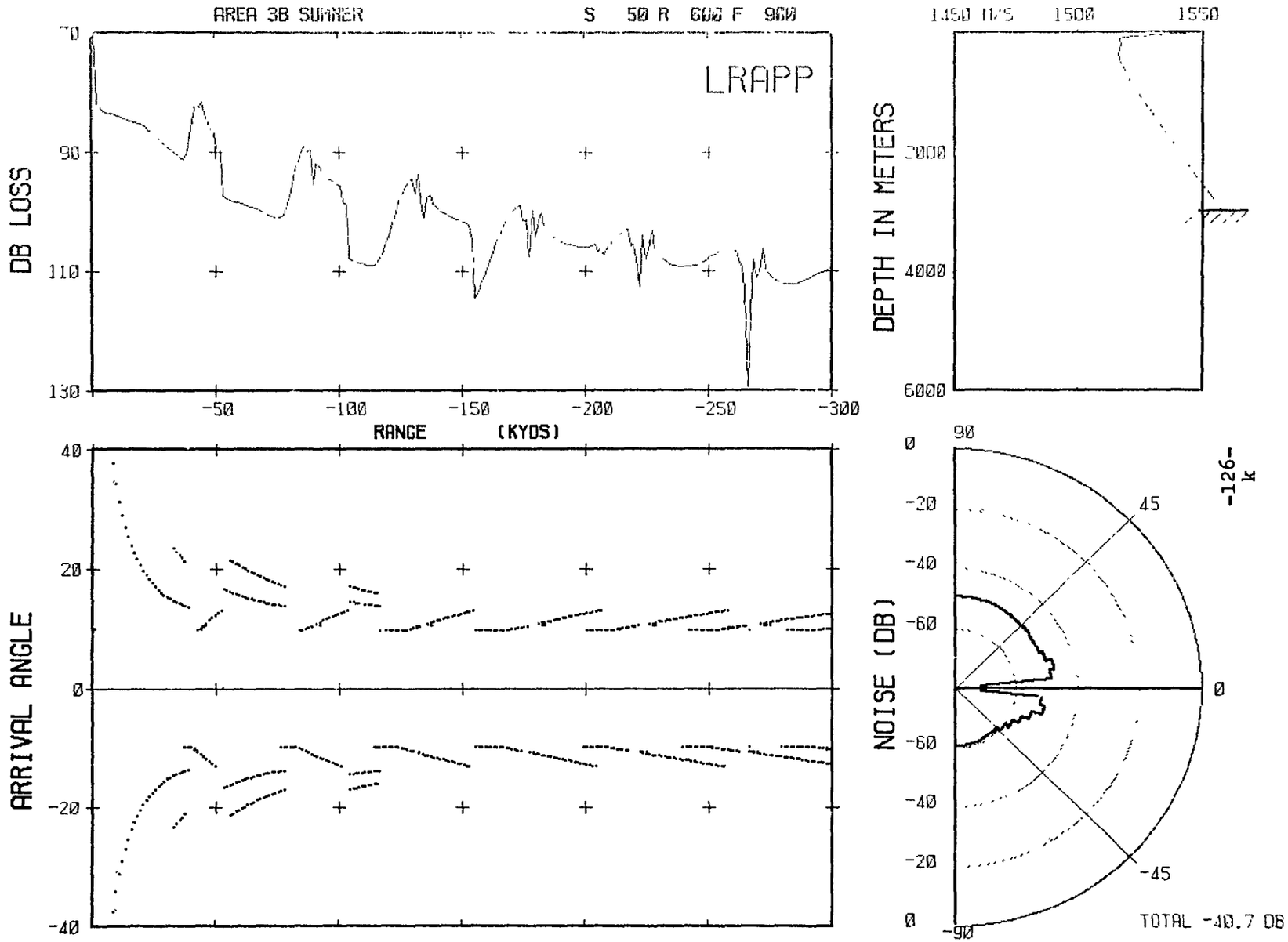
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
0
-45
-90
TOTAL -40.


AREA 3B SUMMER
S 50 R 600 F 900
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
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20
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-40
NOISE (DB)
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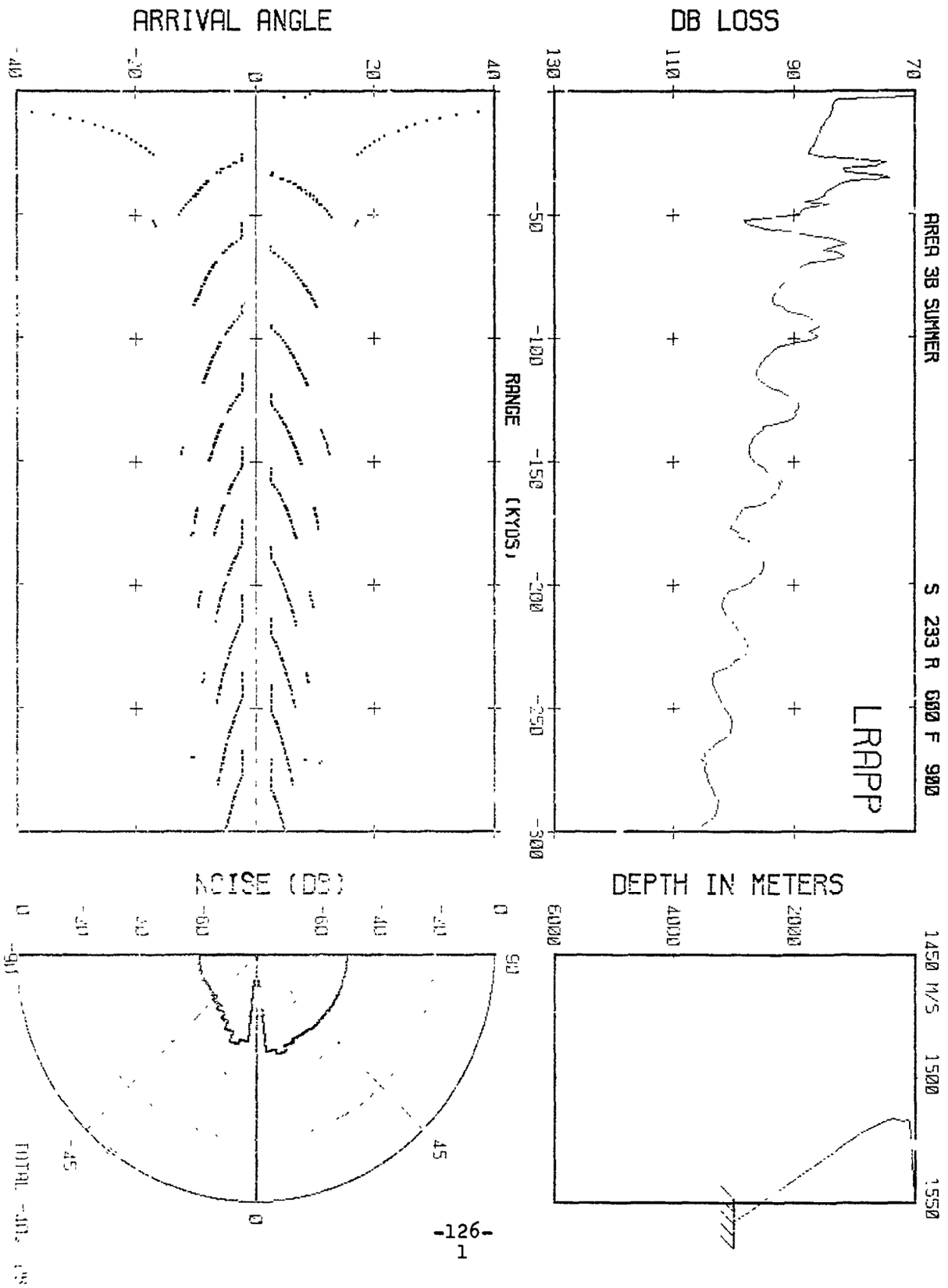
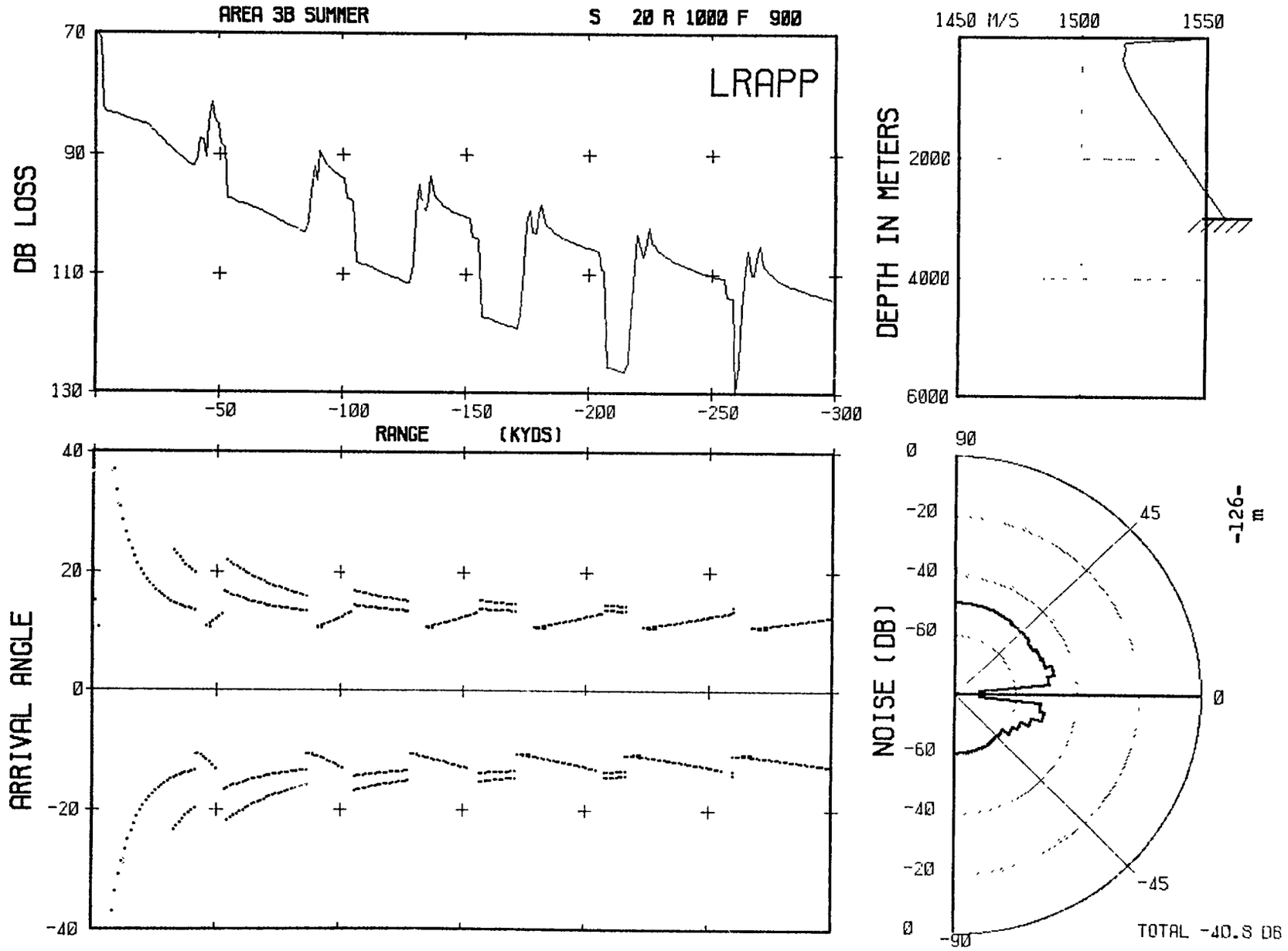
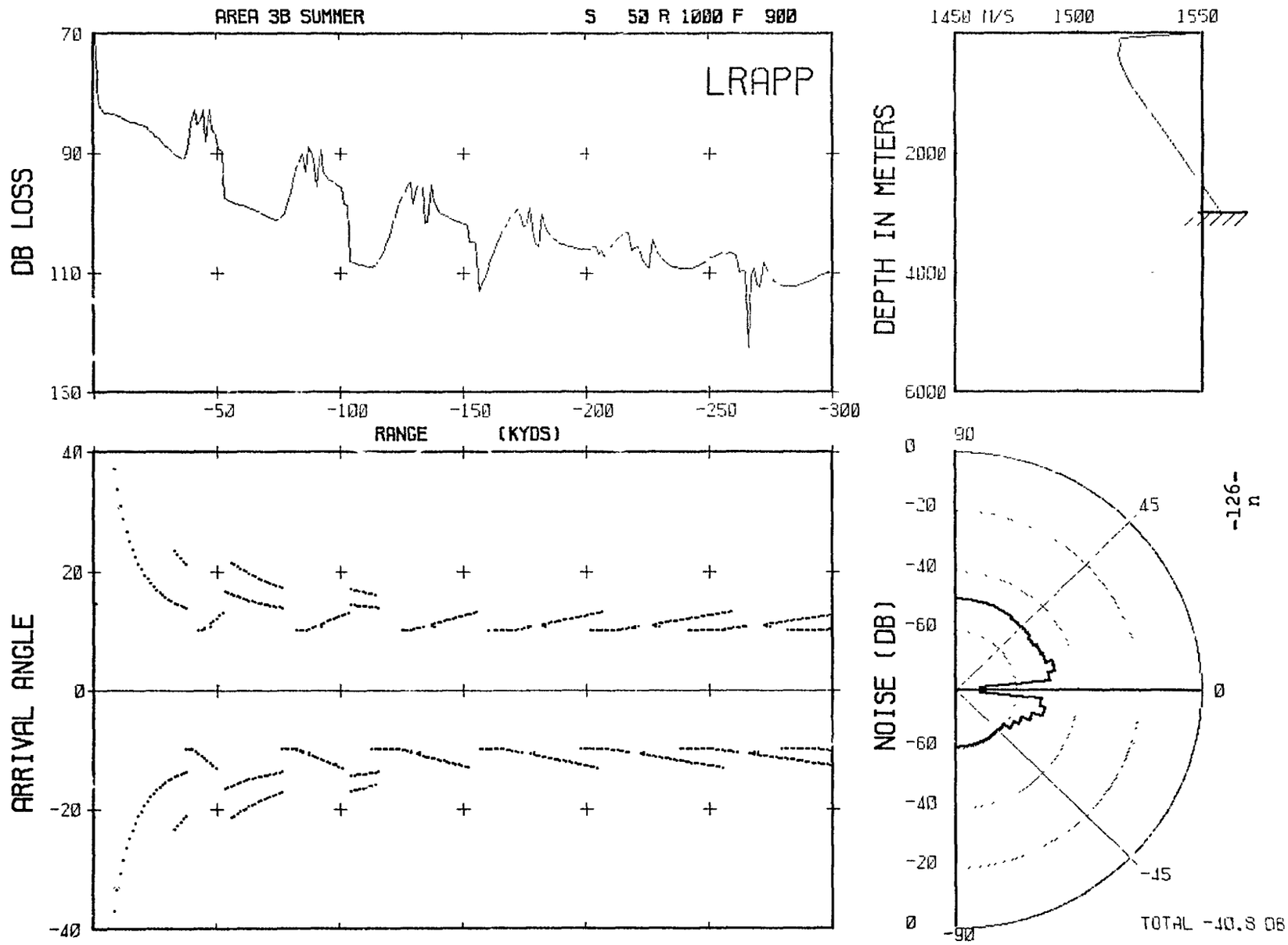
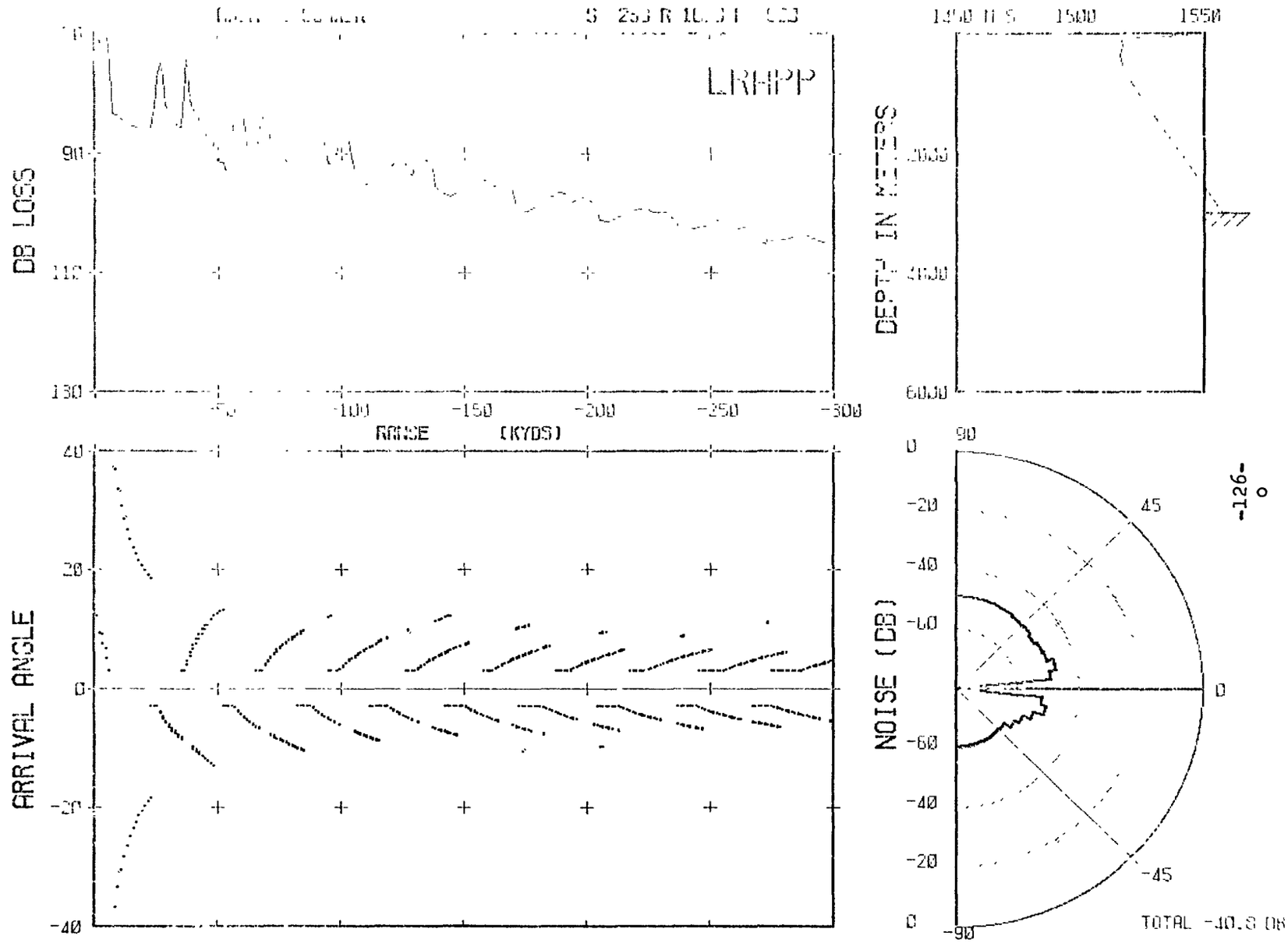
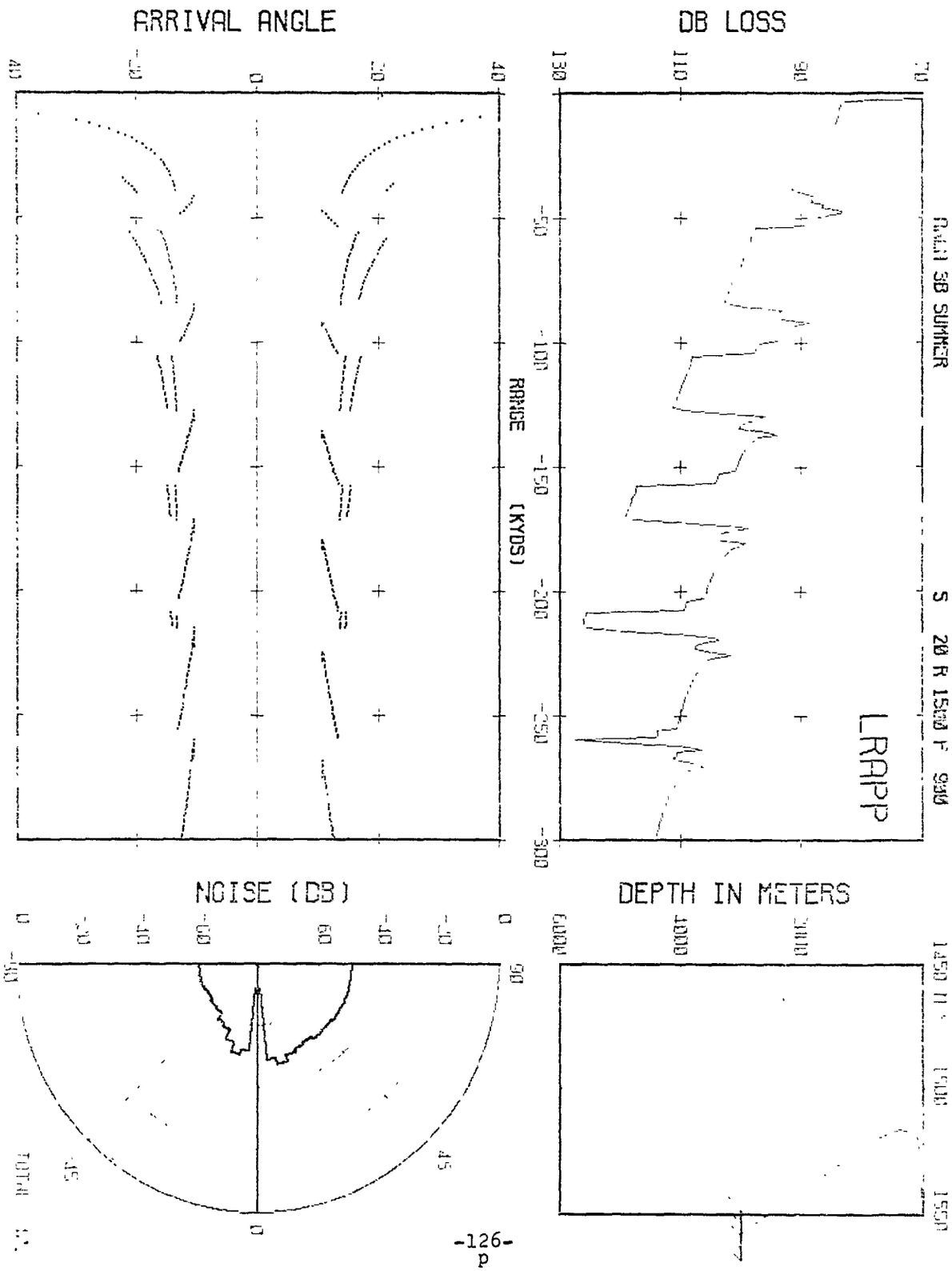
-45
-90
TOTAL -40.7 DB

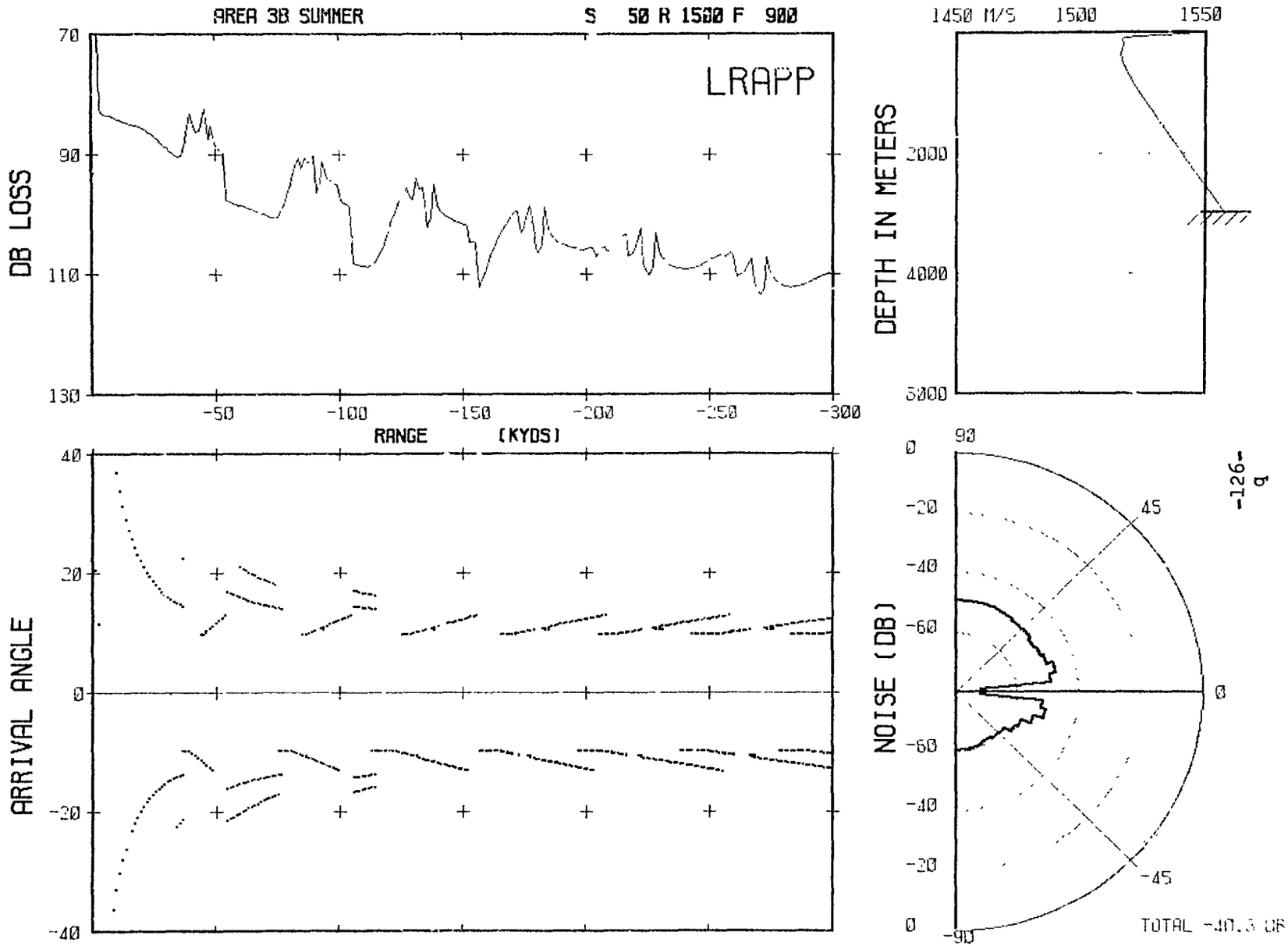

ARRIVAL ANGLE
DB LOSS
AREA 3B SUMMER
S 233 R 600 F 900
LRAPP
RANGE (KYDS)
NOISE (DB)
DEPTH IN METERS
1450 M/S
1500
1550

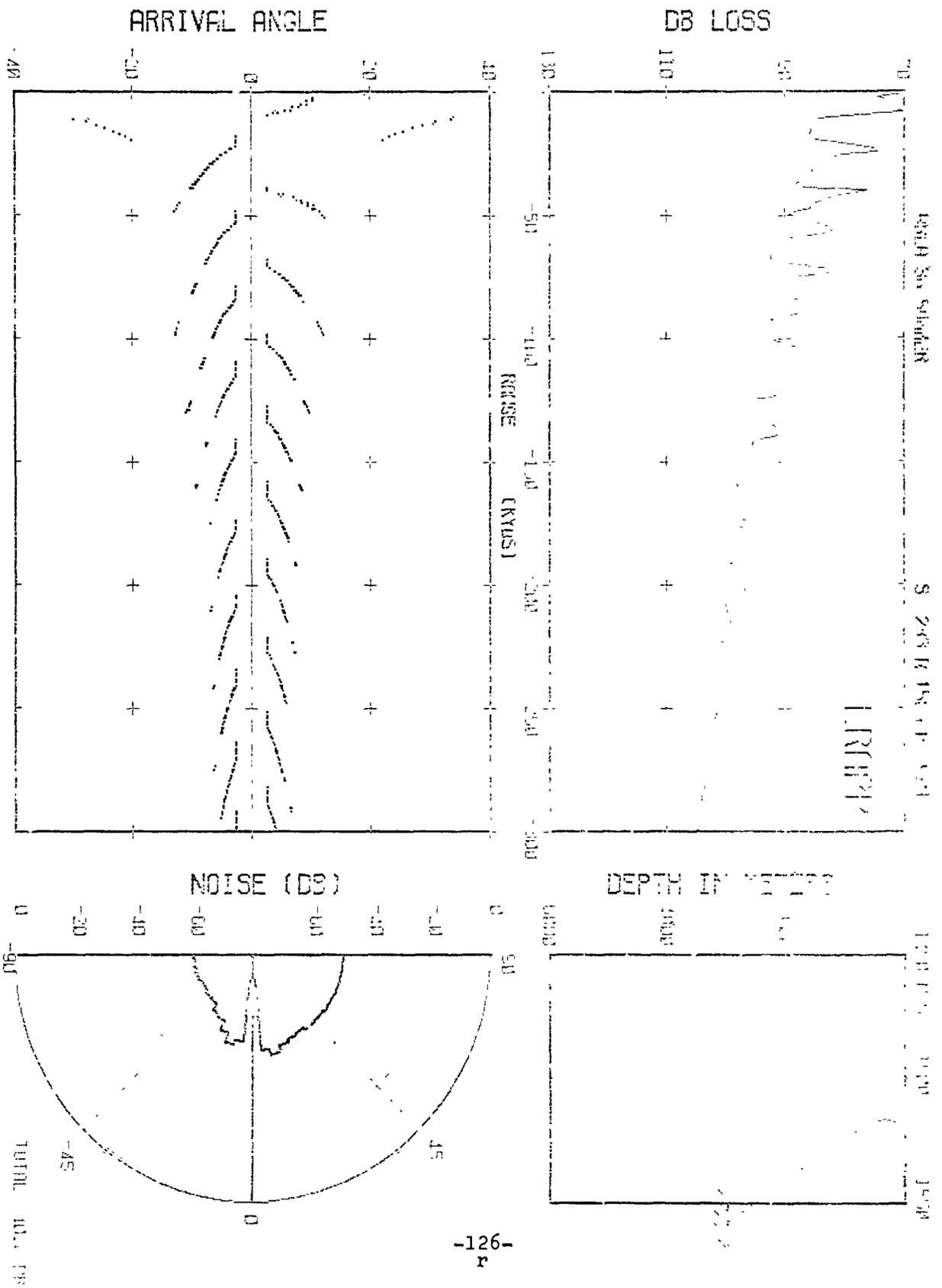

AREA 3B SUMMER
S 20 R 1000 F 900
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
-45
-90
TOTAL -40.8 DB

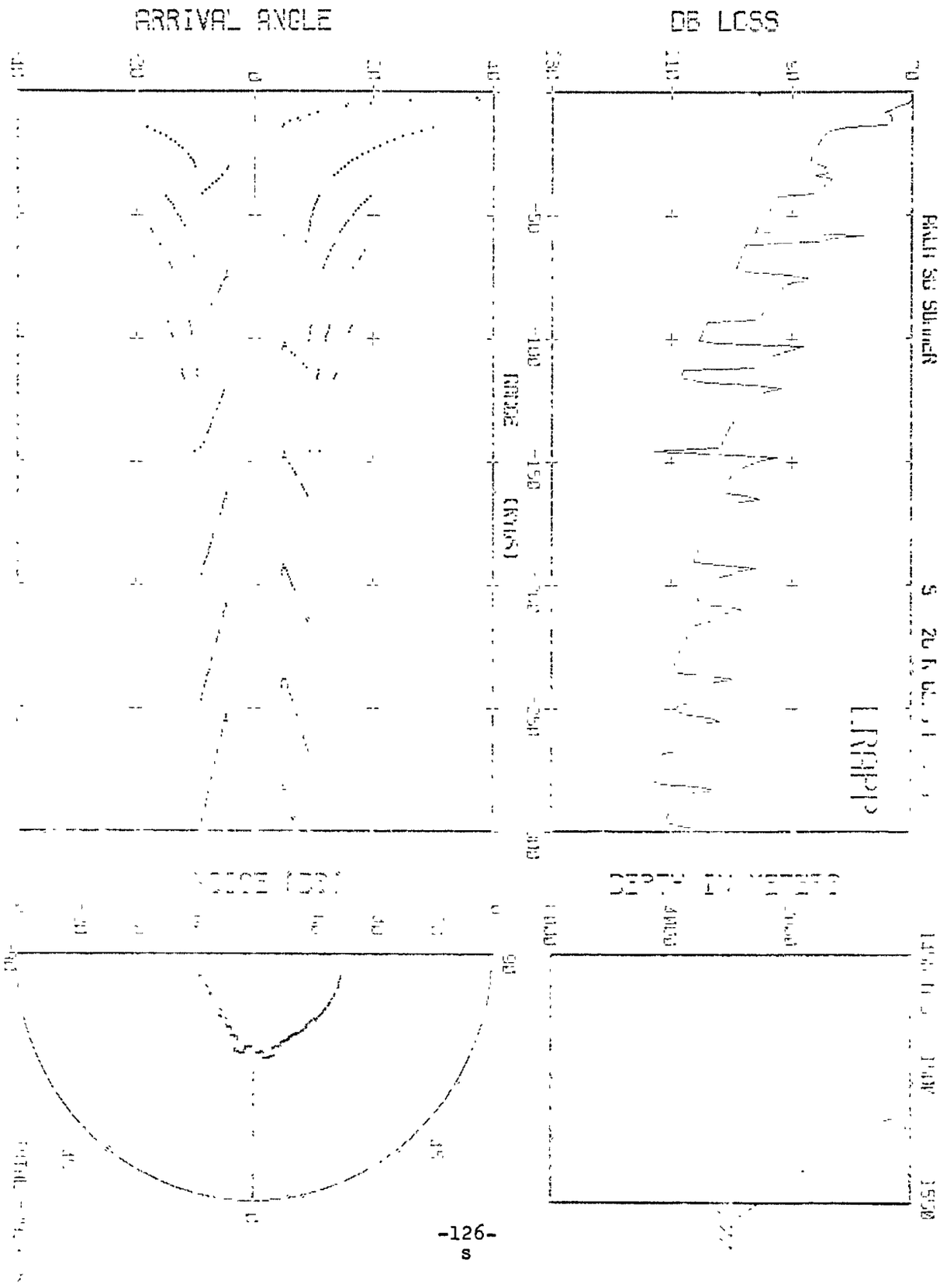

AREA 3B SUMMER
S 50 R 1000 F 900
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
-45
-90
TOTAL -40.8 DB

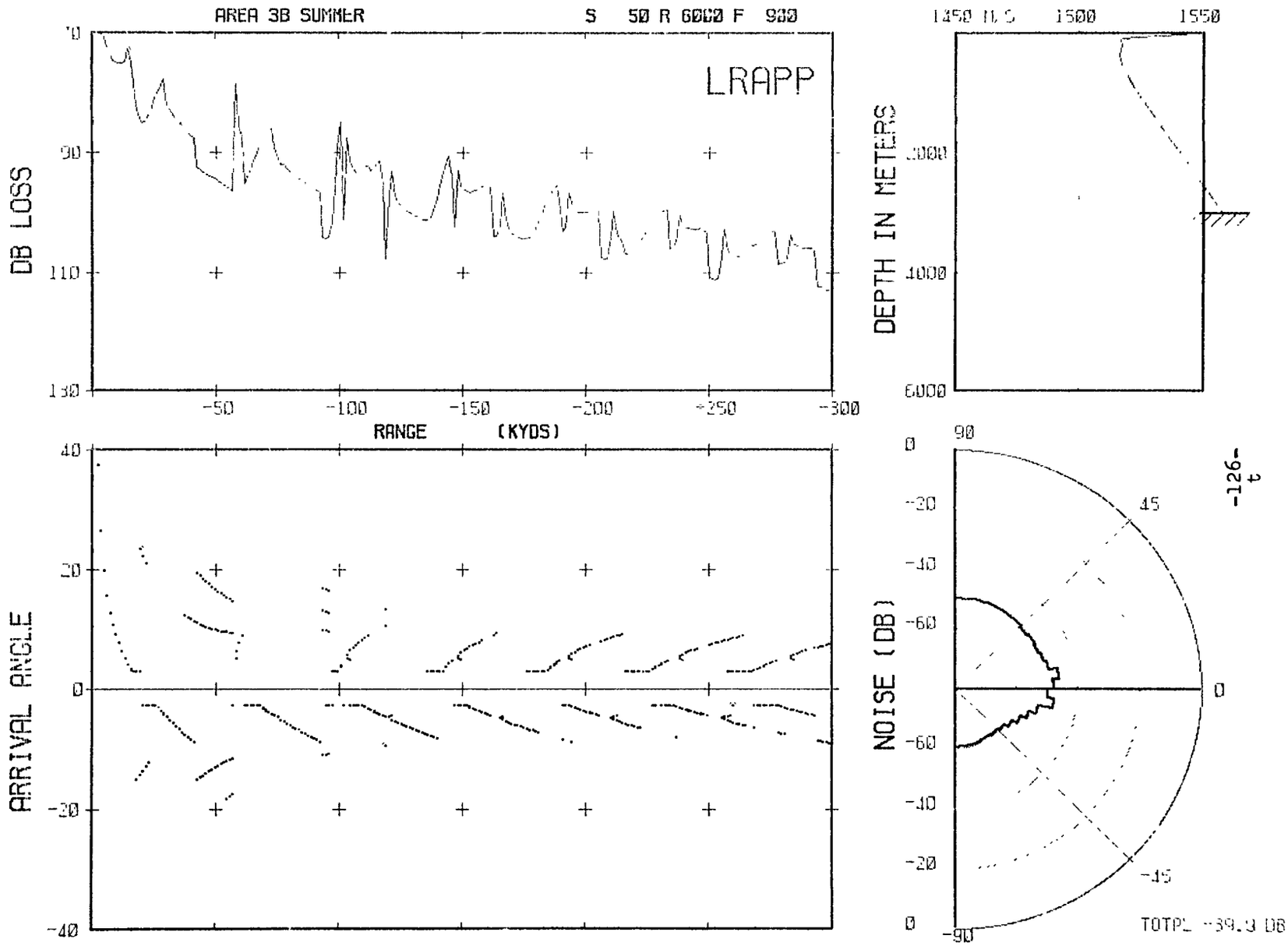

LRHPP
DB LOSS
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
DEPTH IN METERS
1500
1550
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
-45
-90
TOTAL -40.8 DB

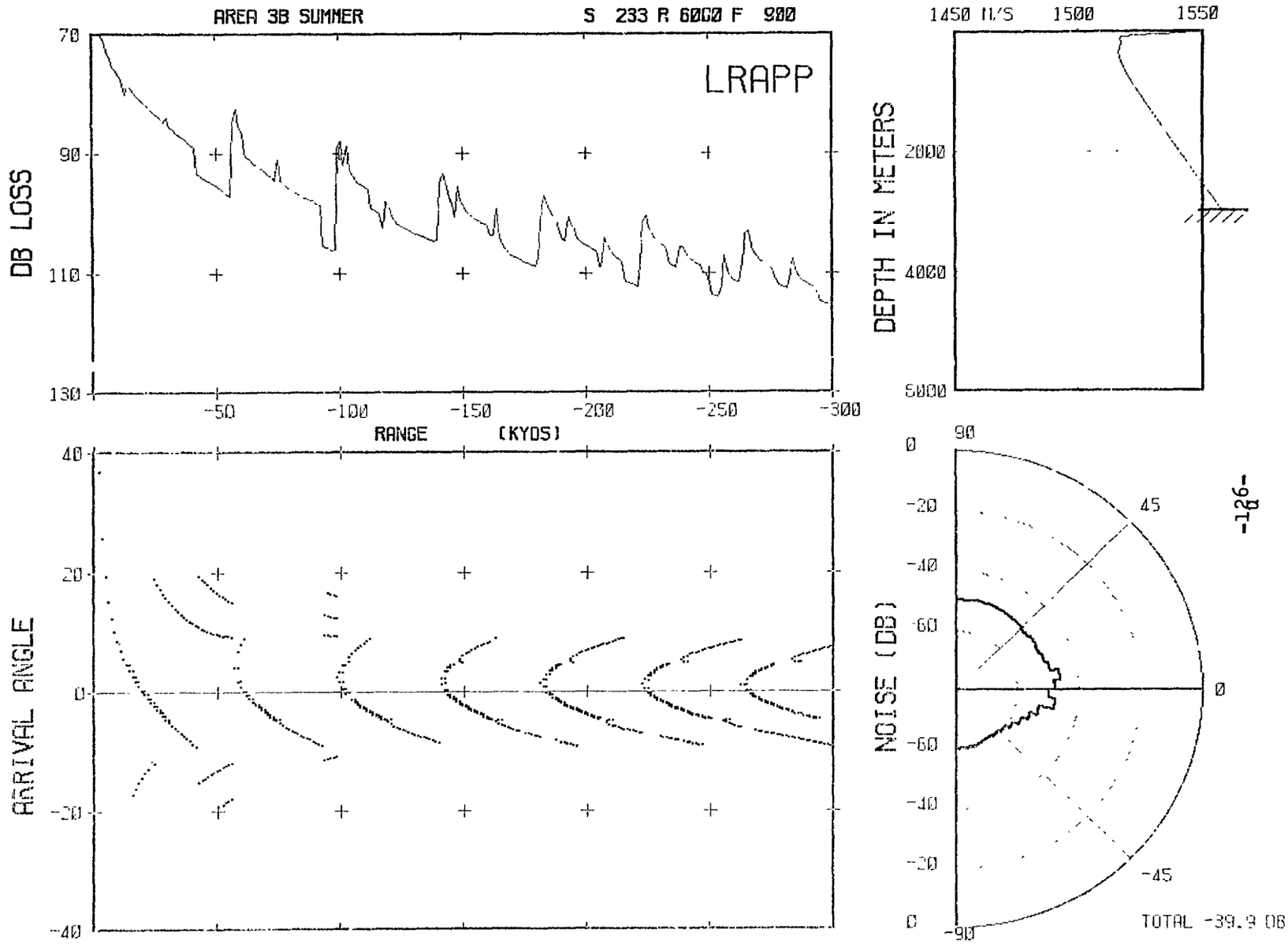

ARRIVAL ANGLE
DB LOSS
RANGE (KYDS)
LRAPP
NOISE (DB)
DEPTH IN METERS

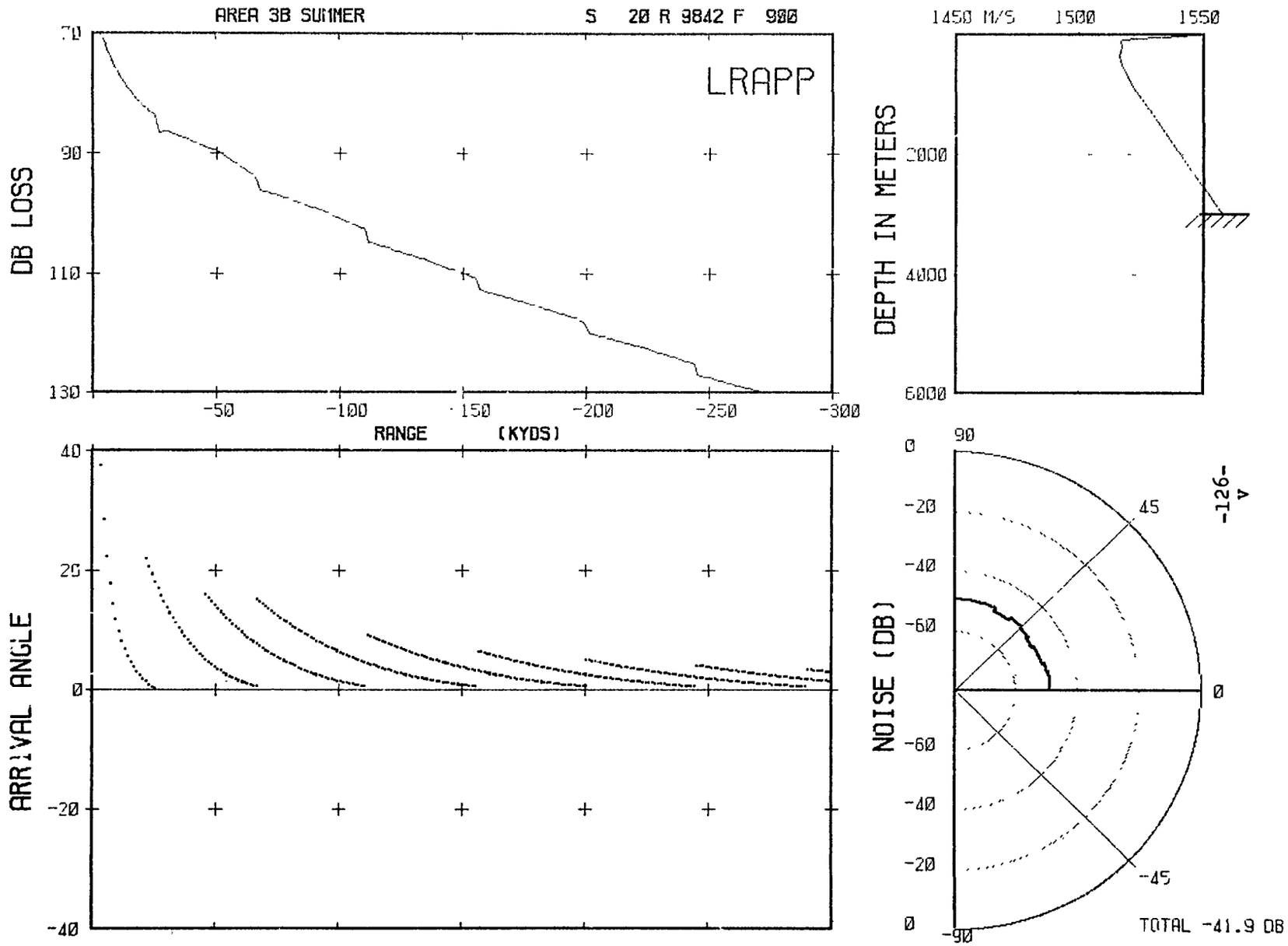

AREA 3B SUMMER
S 50 R 1500 F 900
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
0
-45
-90
TOTAL -40.3 DB


ARRIVAL ANGLE
DB LOSS
NOISE (DB)
DEPTH IN METERS
RANGE (KYDS)


ARRIVAL ANGLE
DB LOSS
RANGE
(KYDS)
DEPTH IN METERS


AREA 3B SUMMER
S 50 R 6000 F 900
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
0
-45
-90
TOTPL -39.0 DB


AREA 3B SUMMER
S 233 R 6000 F 900
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
0
-20
-40
-60
-60
-40
-20
0
-90
45
-45
TOTAL -39.9 DB


AREA 3B SUMMER
S 20 R 9842 F 900
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
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-40
NOISE (DB)
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0
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-60
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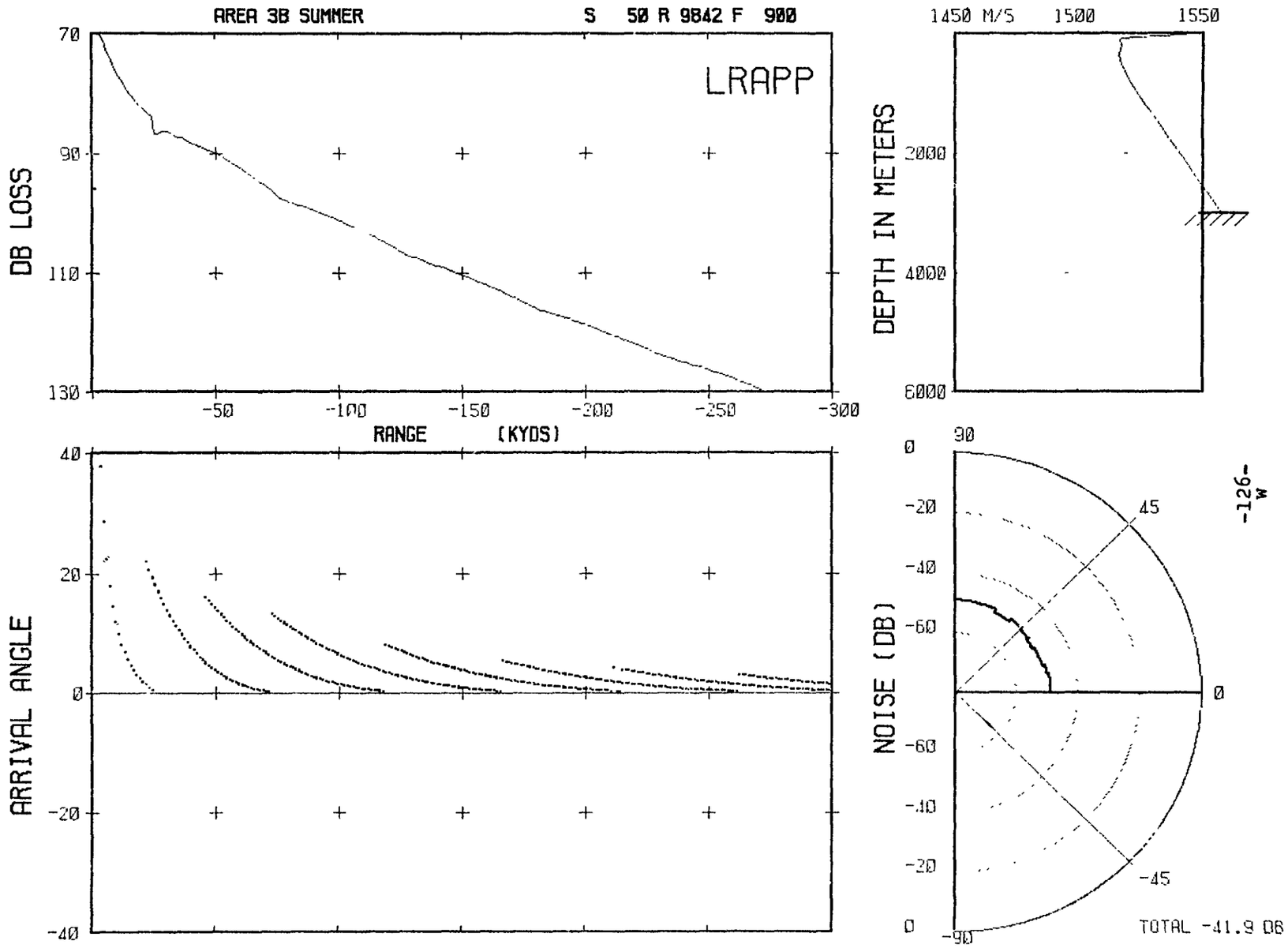
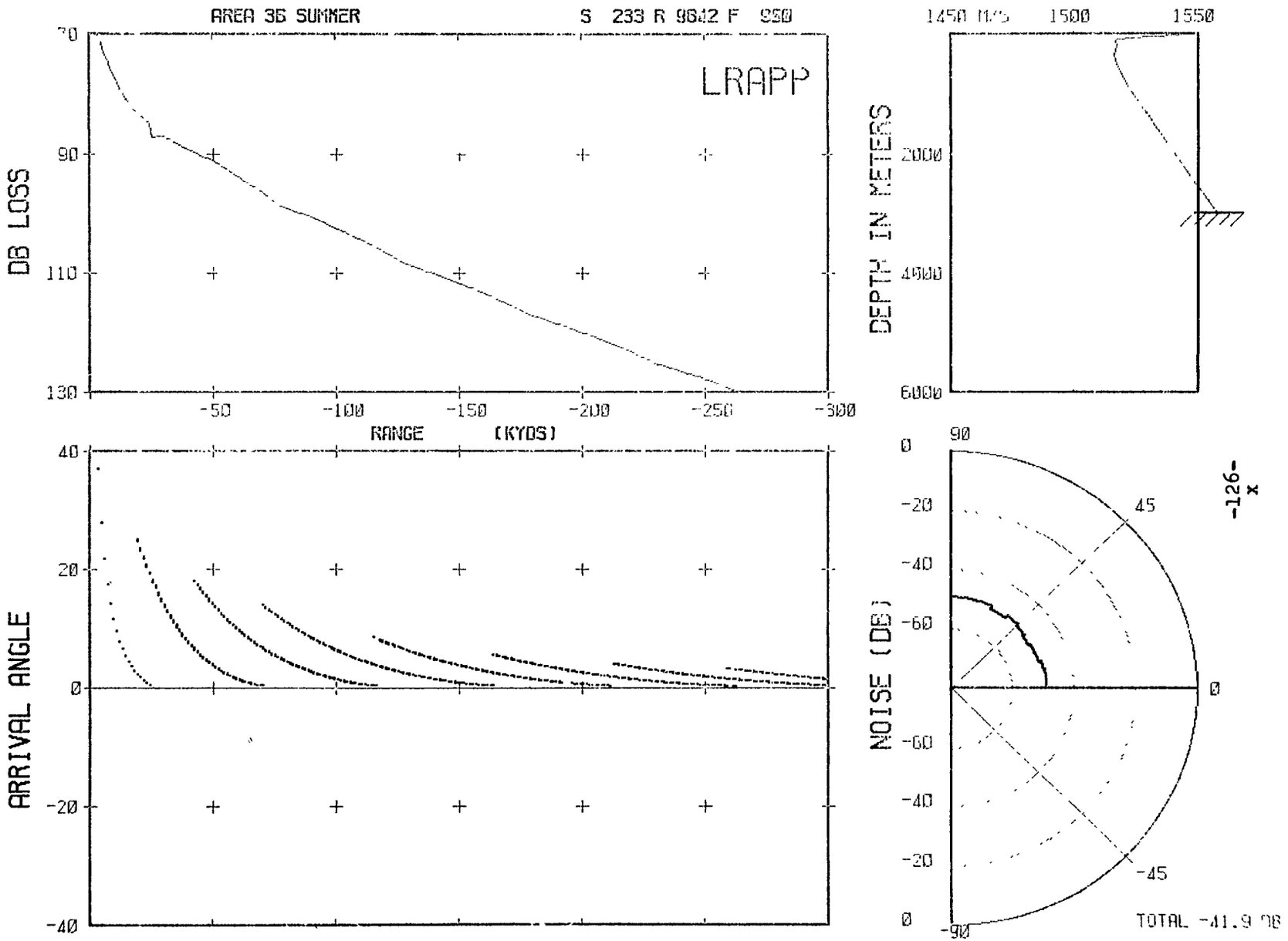
-45
-90
TOTAL -41.9 DB


AREA 3B SUMMER
S 50 R 9842 F 900
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
-45
-90
TOTAL -41.9 DB


AREA 36 SUMMER
S 233 R 9642 F 950
LRAPP
DB LOSS
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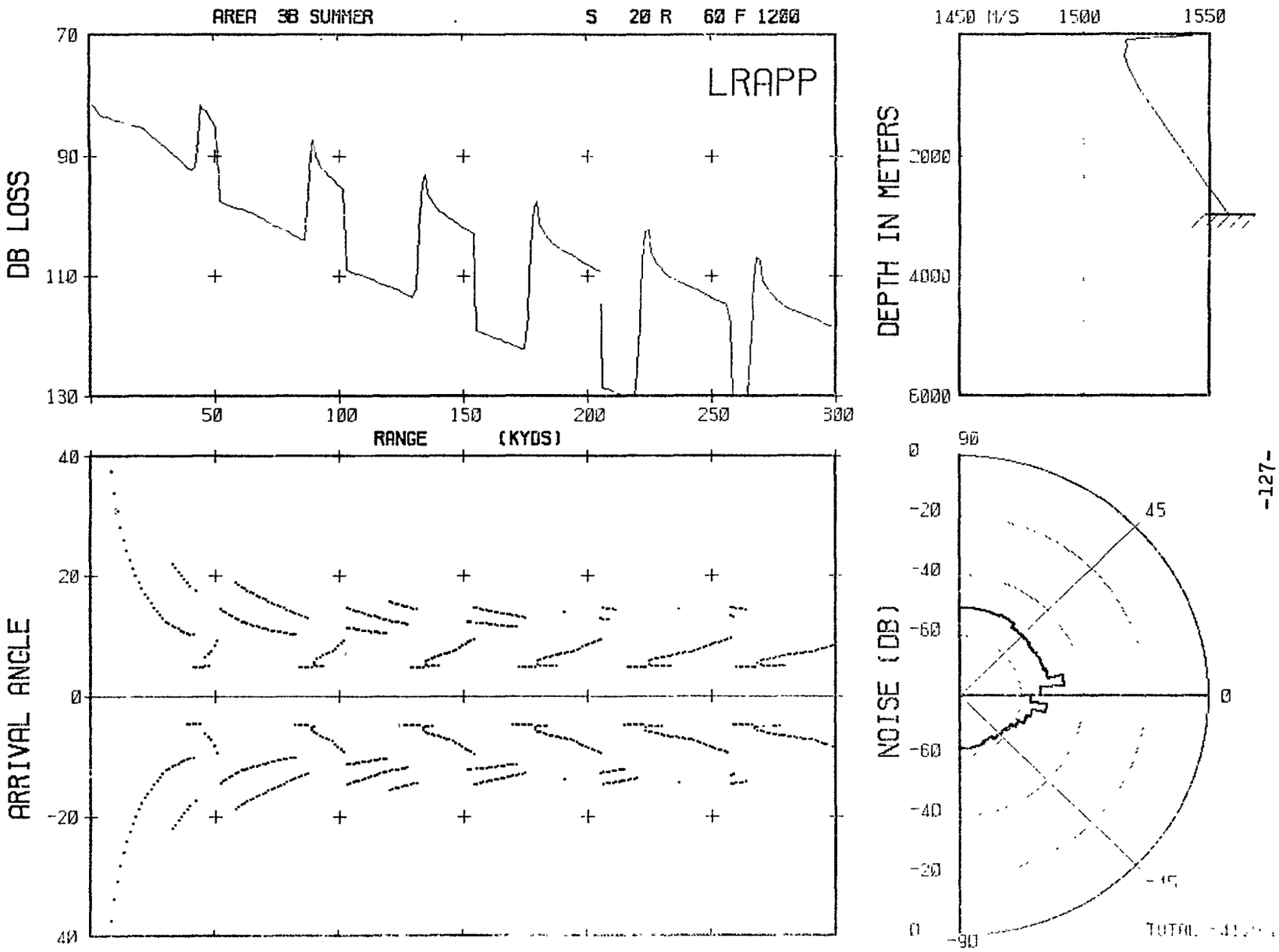
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
0
-45
-90
TOTAL -41.9 DB


AREA 3B SUMMER
S 20 R 60 F 1200
LRAPP
DB LOSS
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130
50
100
150
200
250
300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
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NOISE (DB)
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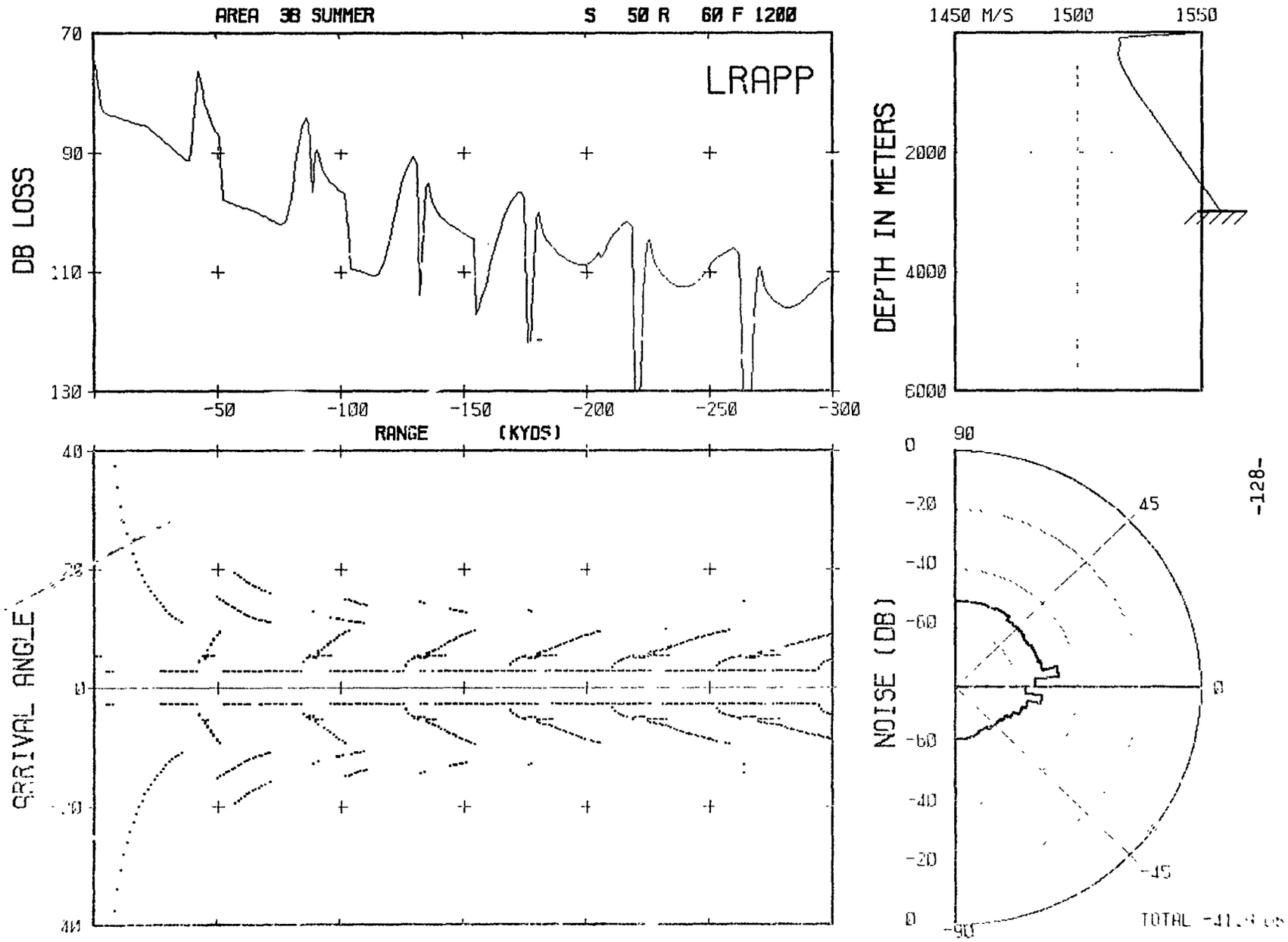
-90


AREA 3B SUMMER
S 50 R 60 F 1200
LRAPP
DB LOSS
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90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
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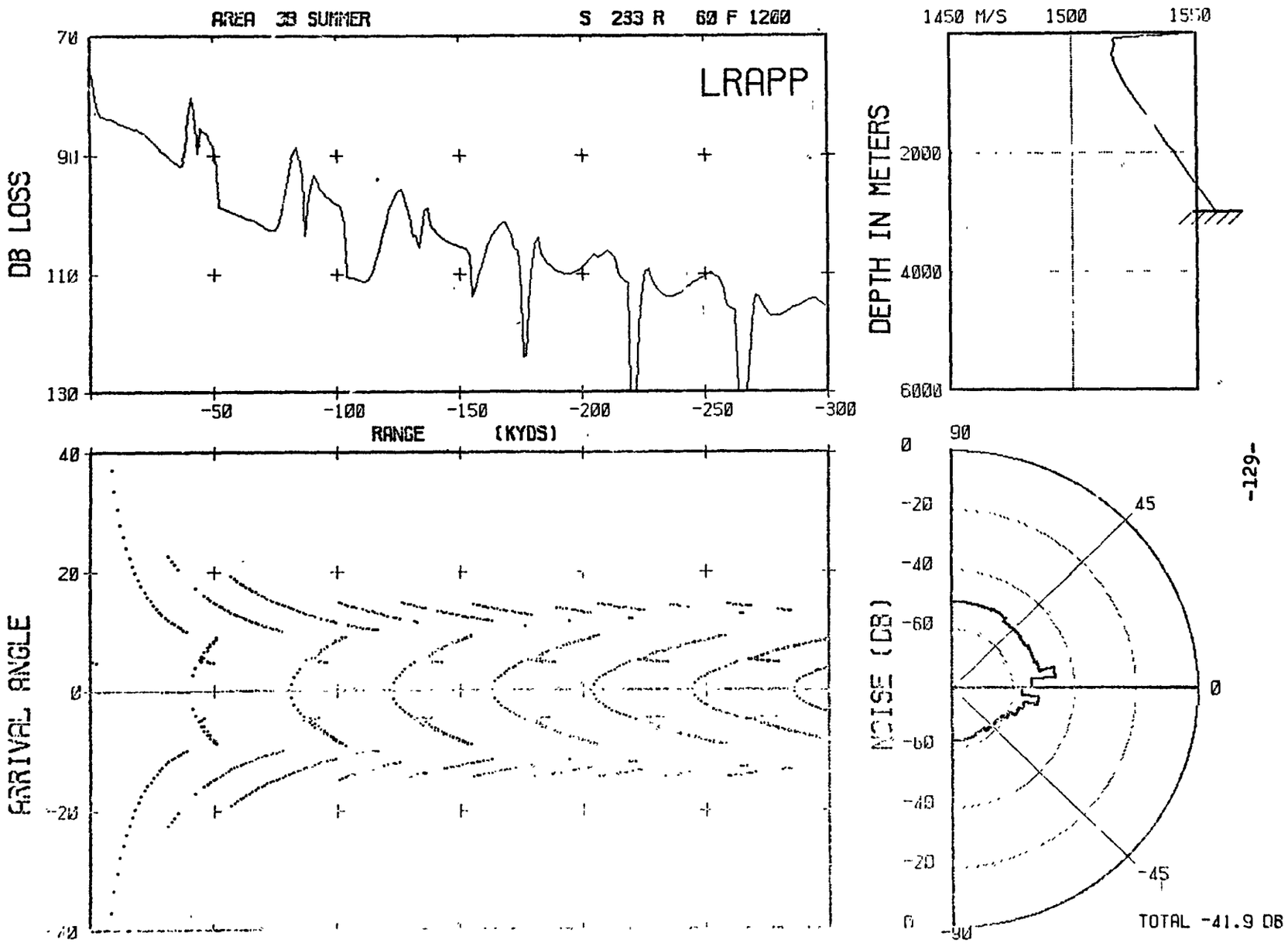
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
0
NOISE (DB)
90
45
-45
-90
TOTAL


AREA 33 SUMMER
S 233 R 60 F 1200
LRAPP
DB LOSS
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90
110
130
-50
-100
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-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
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45
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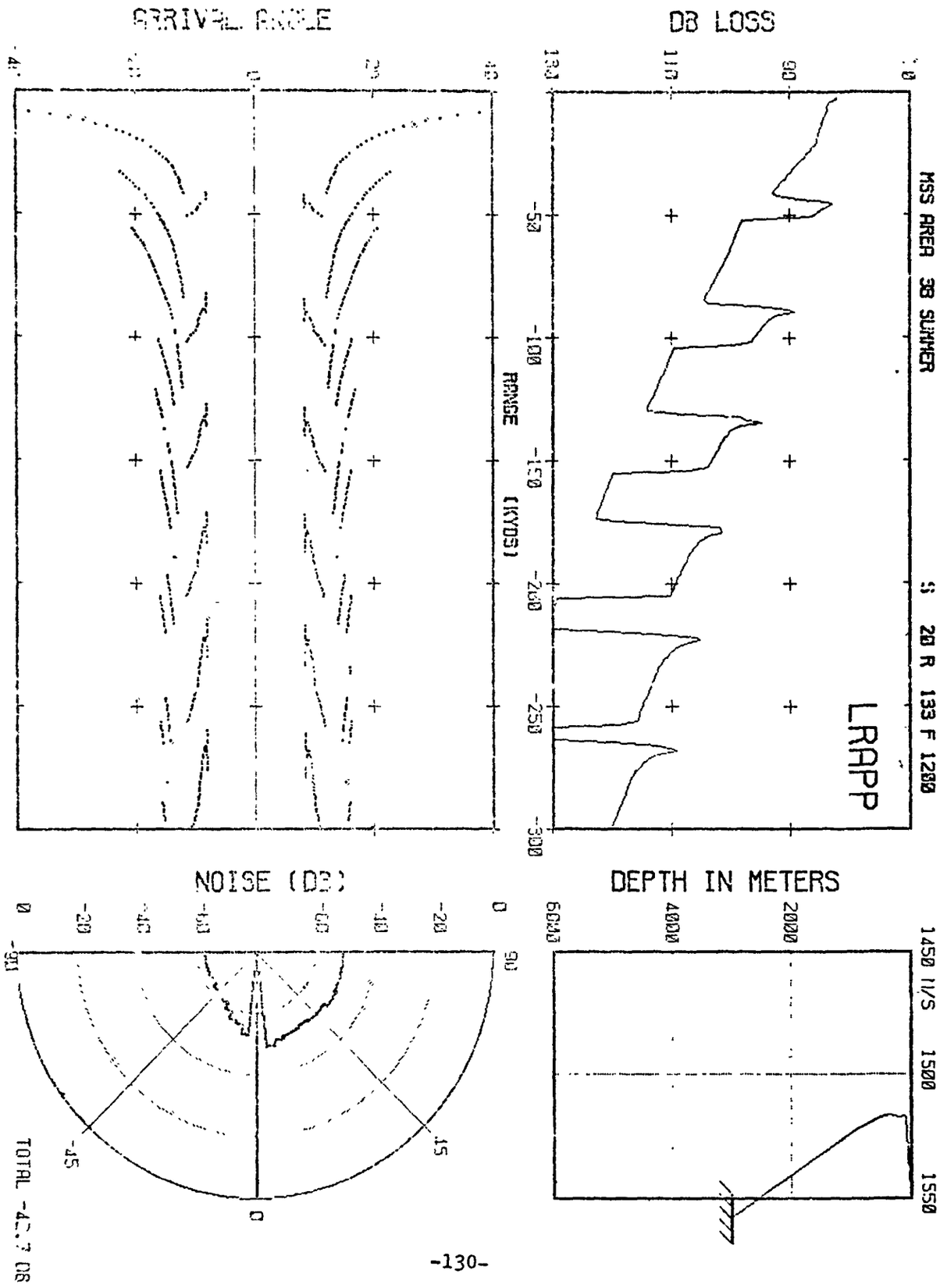
-90
TOTAL -41.9 DB


ARRIVAL ANGLE
DB LOSS
MSS AREA 3B SUMMER
S 20 R 133 F 1200
LRAPP
RANGE (KYDS)
NOISE (DB)
DEPTH IN METERS
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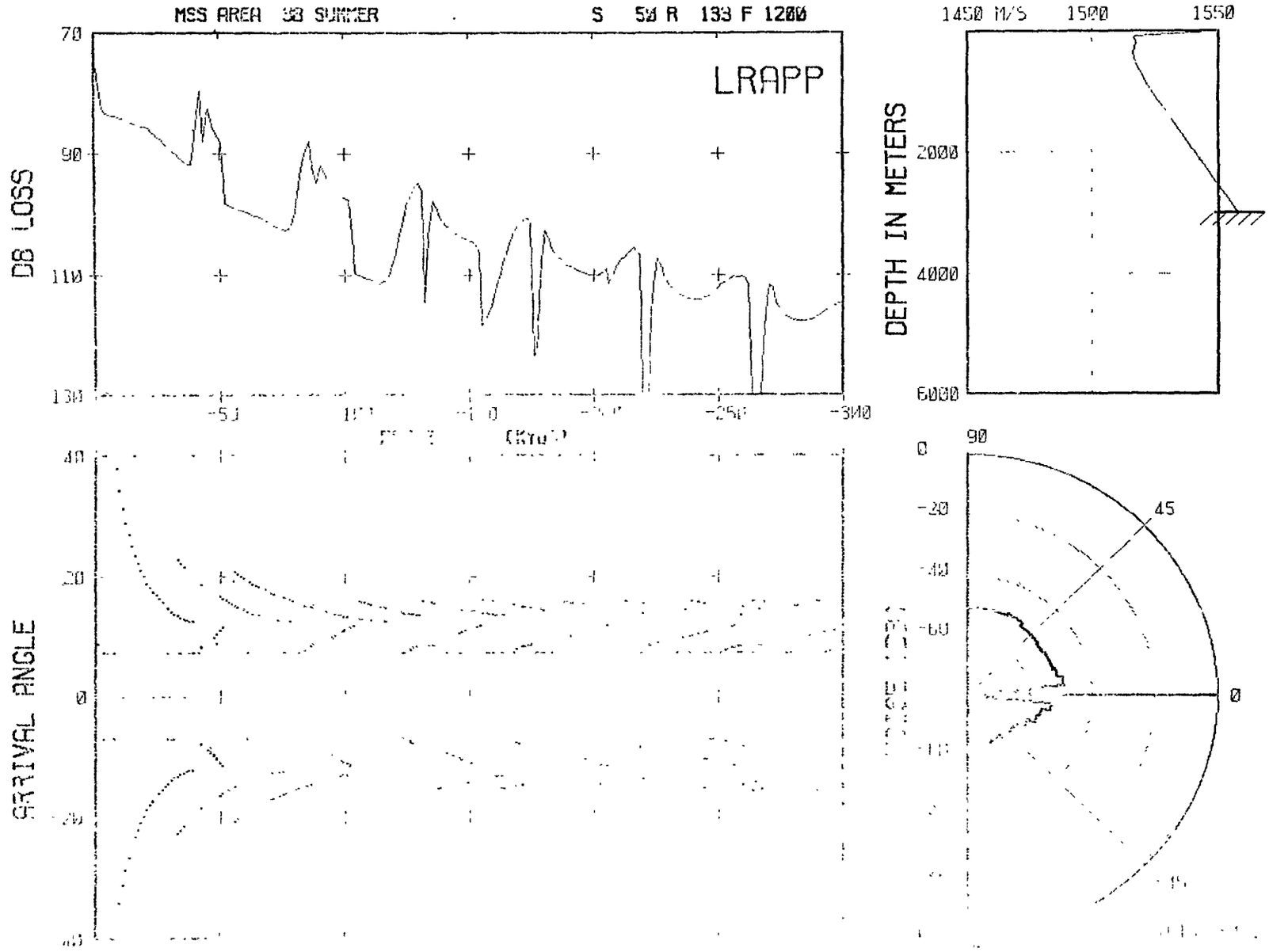
1500
1550
TOTAL -42.7 DB


MSS AREA 33 SUMMER
S 50 R 133 F 1200
LRAPP
DB LOSS
70
90
110
130
-300
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
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0
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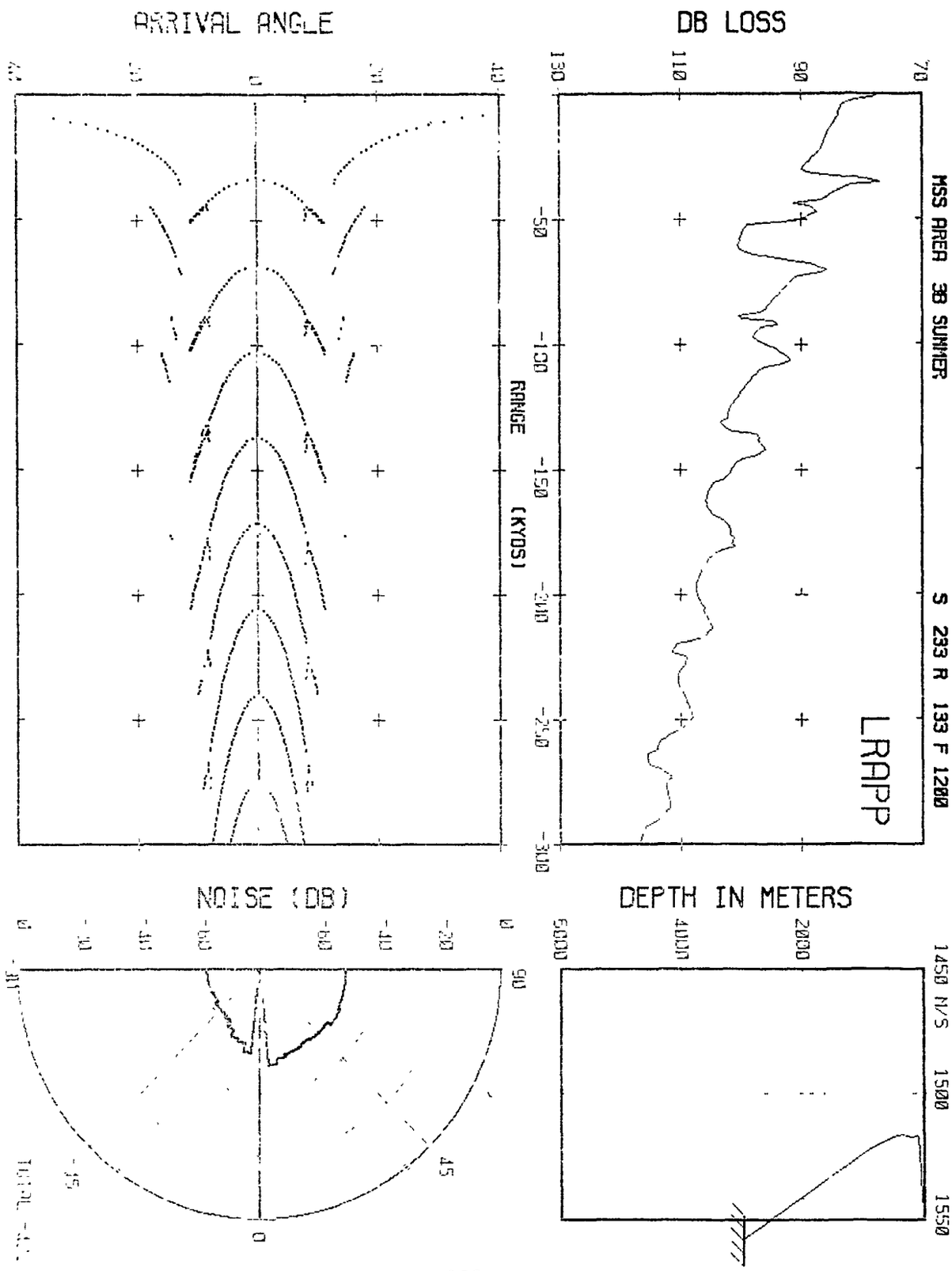
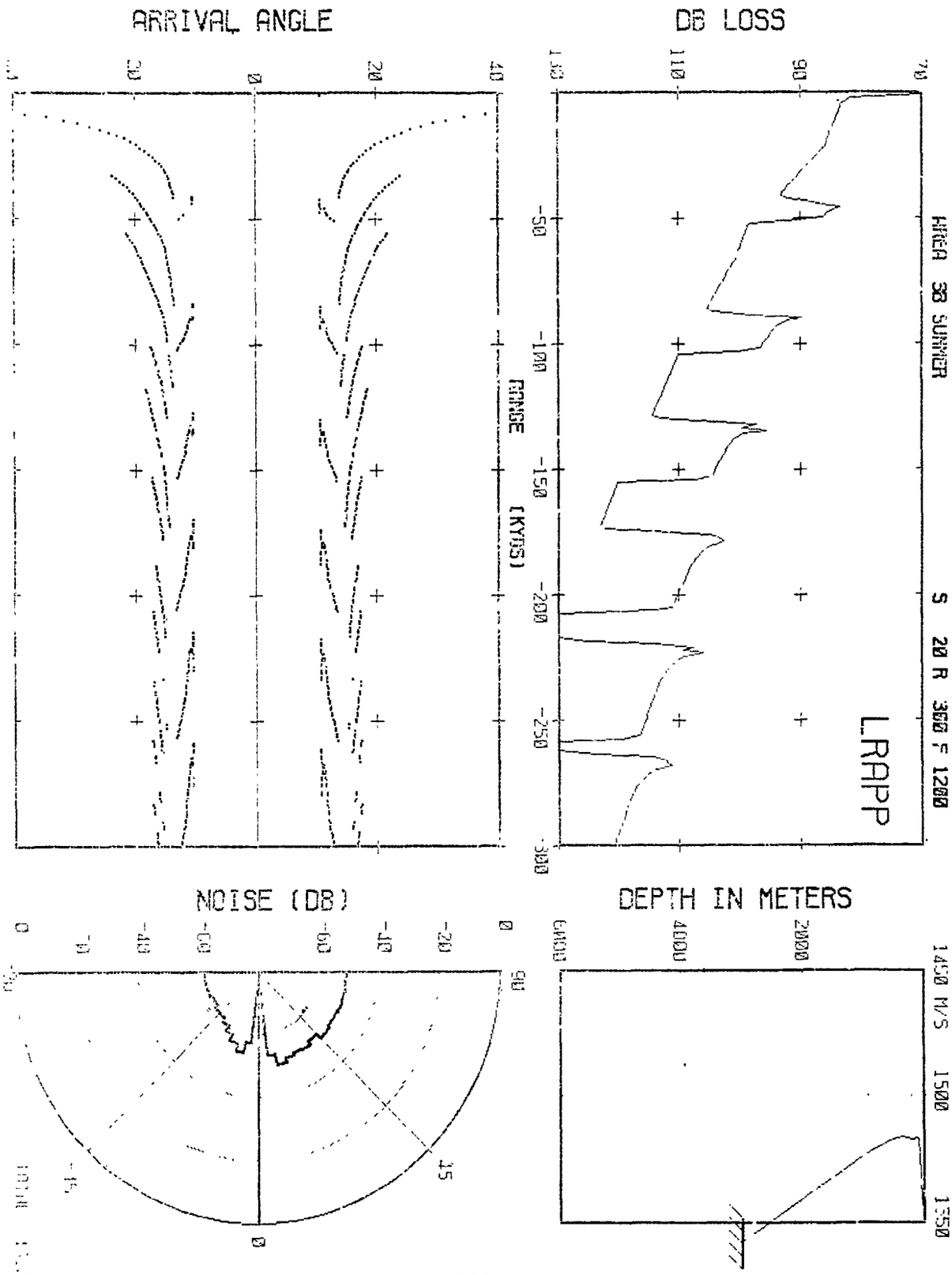
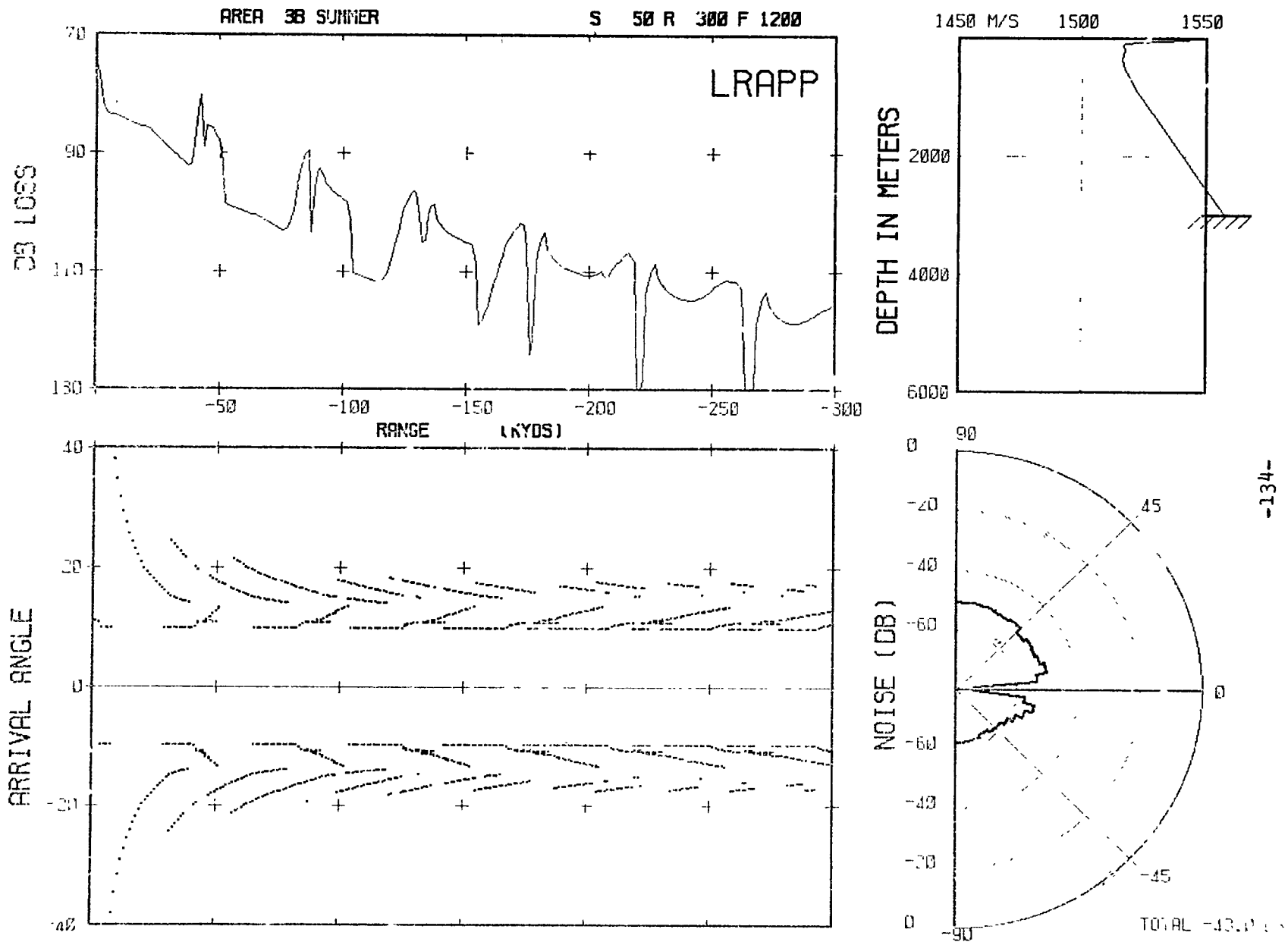

ARRIVAL ANGLE
DB LOSS
MSS AREA 3B SUMMER
S 233 R 133 F 1200
LRAPP
RANGE (KYDS)
NOISE (DB)
DEPTH IN METERS
1450 M/S
1500
1550


ARRIVAL ANGLE
DB LOSS
AREA 3B SUMMER
S 20 R 300 F 1200
LRAPP
RANGE (KYDS)
NOISE (DB)
DEPTH IN METERS
1450 M/S
1500
1550


AREA 3B SUMMER
S 50 R 300 F 1200
LRAPP
DB LOSS
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90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
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-20
-40
NOISE (DB)
90
45
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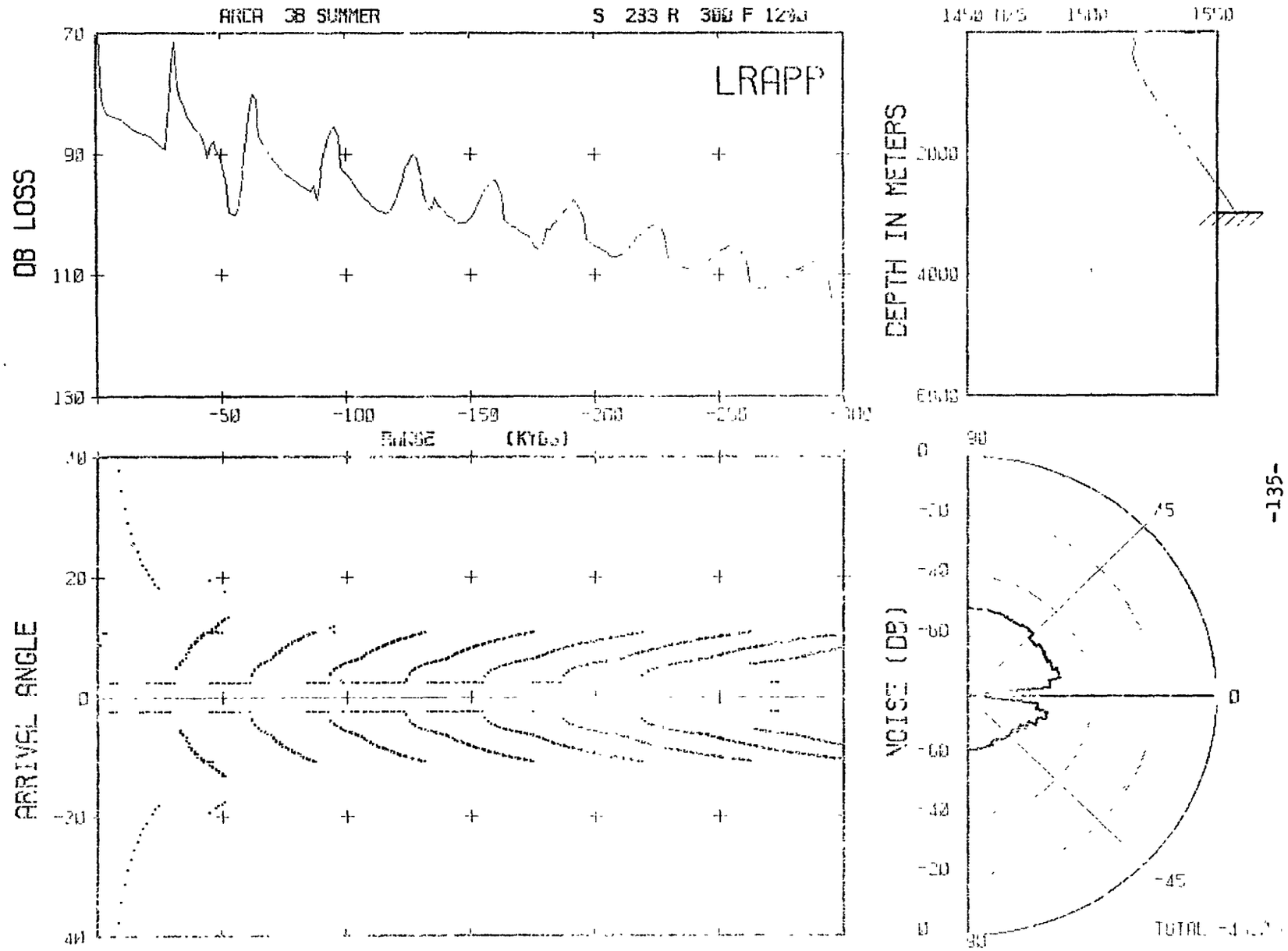
-45
-90
-20
-40
-60
TOTAL


AREA 3B SUMMER
S 233 R 300 F 1200
LRAPP
DB LOSS
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90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
DEPTH IN METERS
2000
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6000
ARRIVAL ANGLE
40
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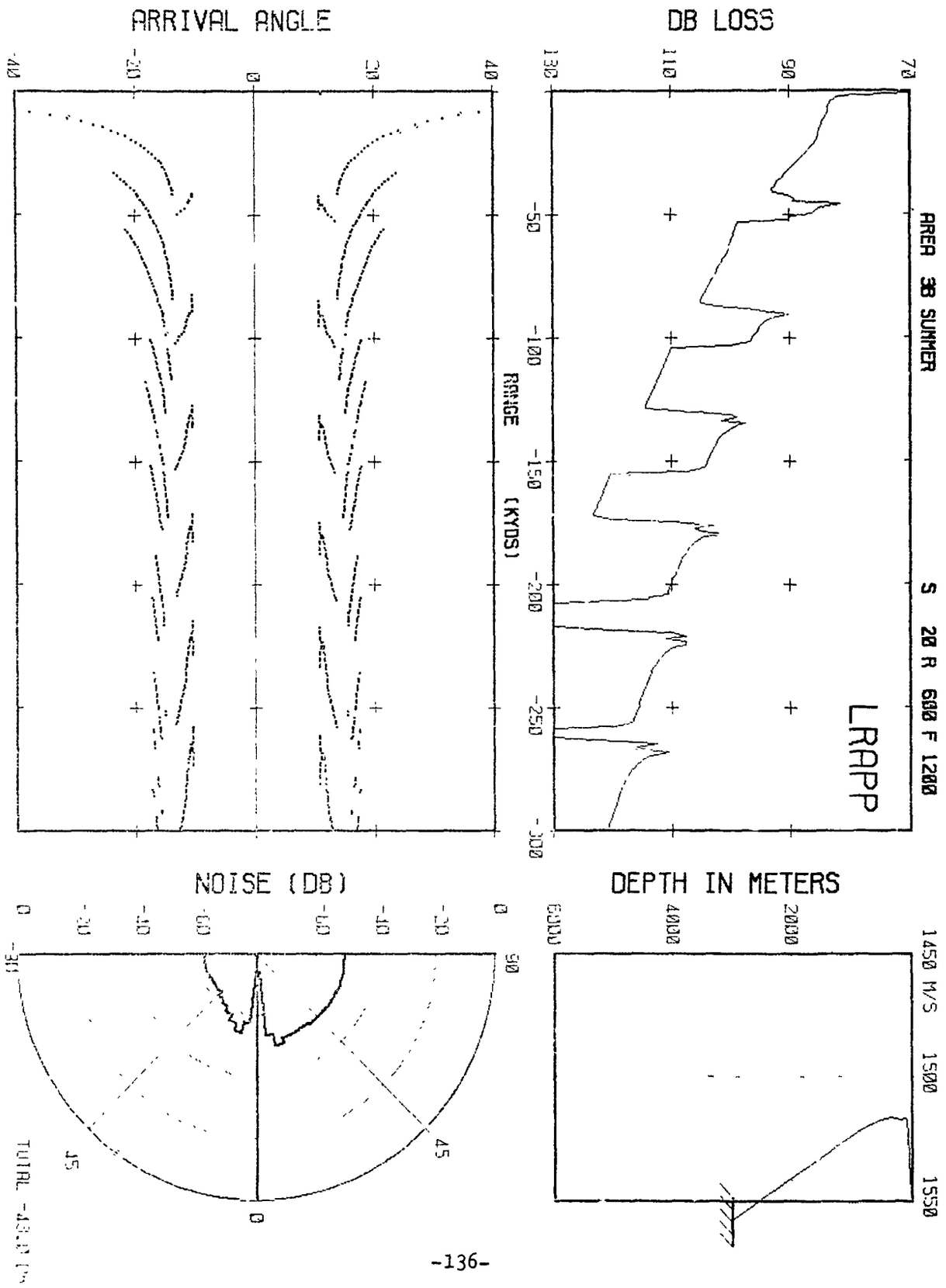
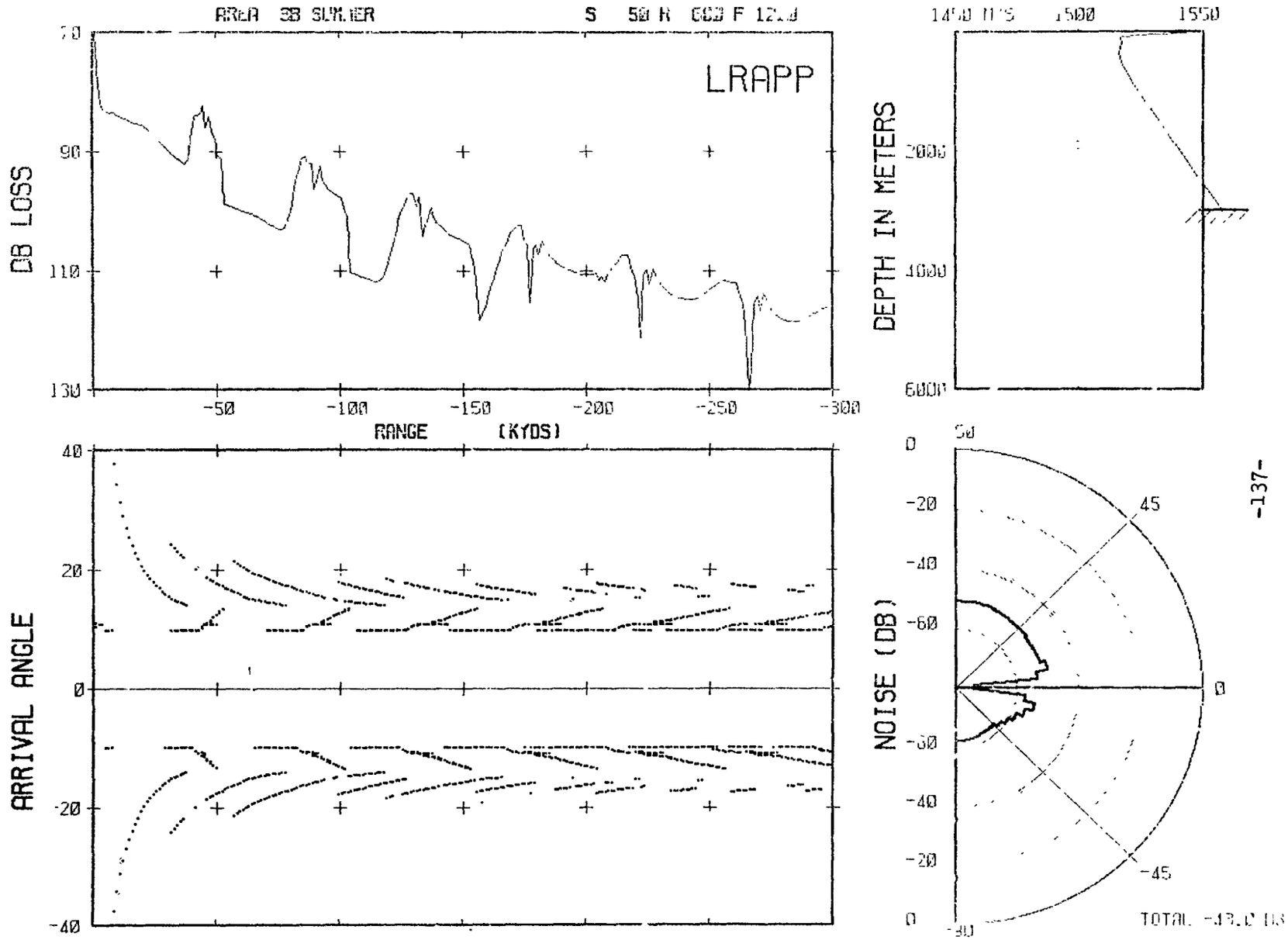
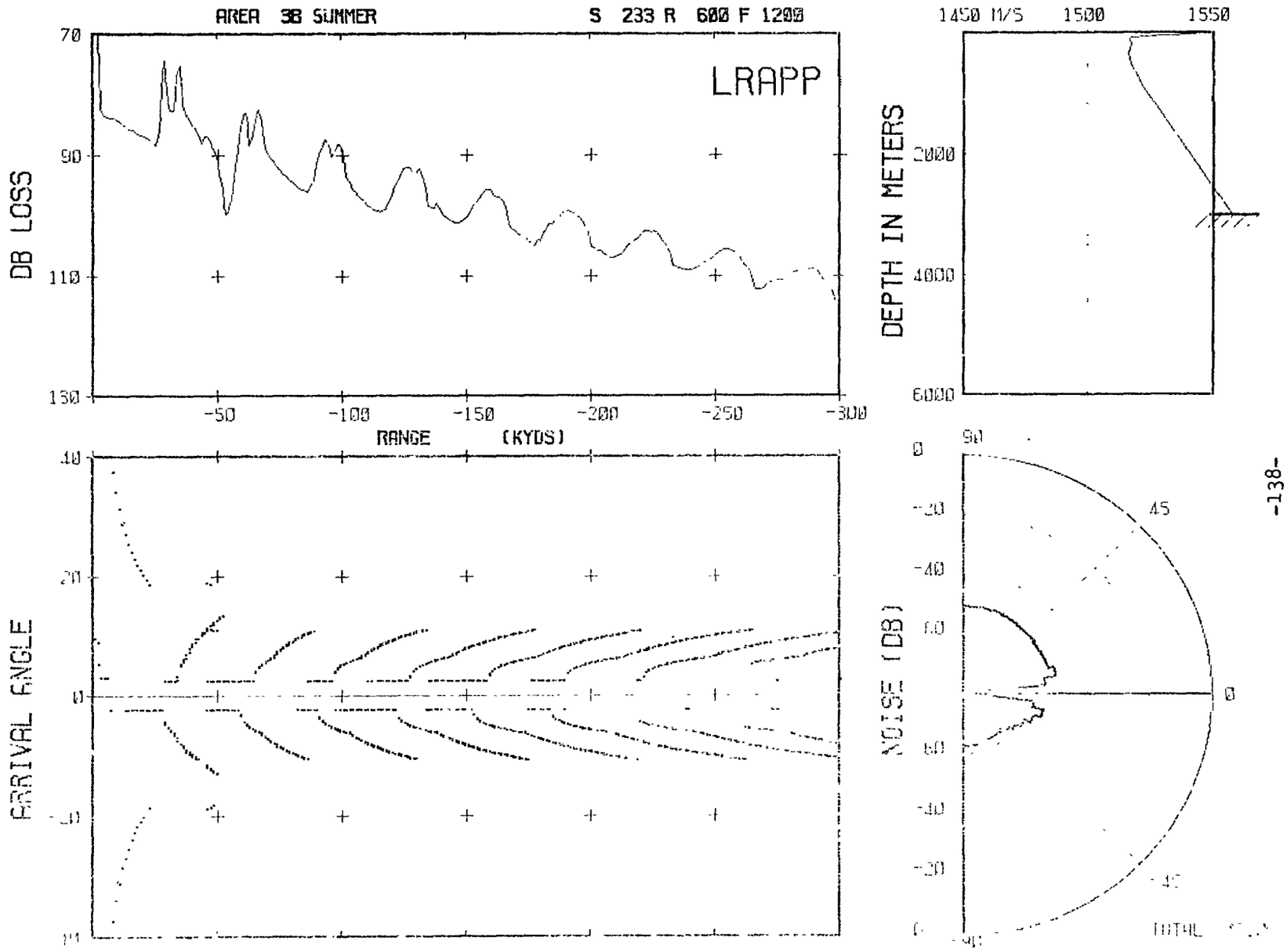
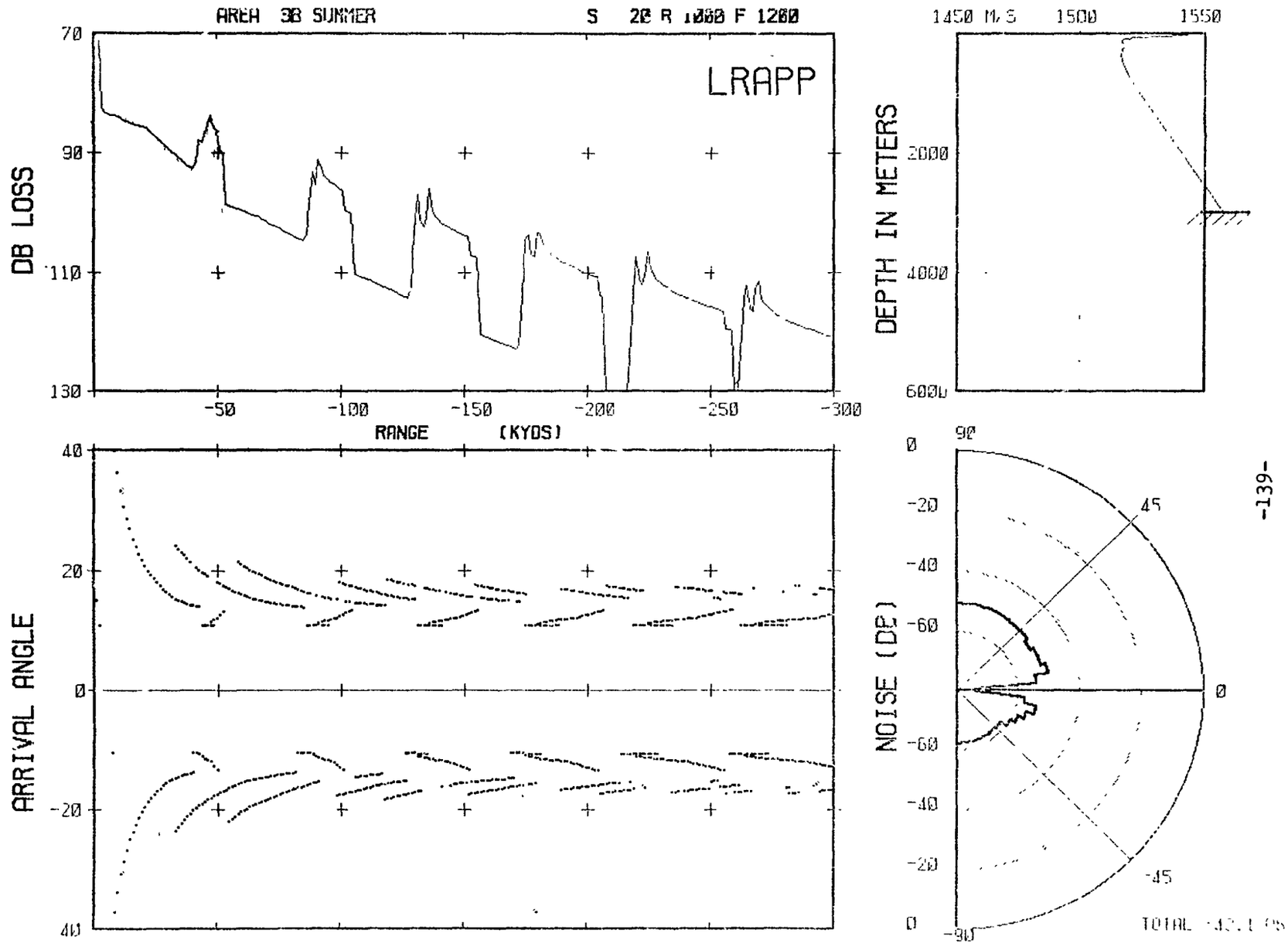
-20
-40
NOISE (DB)
90
45
0
-45
-90
TOTAL


ARRIVAL ANGLE
DB LOSS
AREA 3B SUMMER
S 20 R 600 F 1200
LRAPP
RANGE (KYDS)
NOISE (DB)
DEPTH IN METERS
1450 M/S
1500
1550


LRAPP
DB LOSS
RANGE (KYDS)
DEPTH IN METERS
ARRIVAL ANGLE
NOISE (DB)
TOTAL


AREA 3B SUMMER
S 233 R 600 F 1200
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
0
-45
-90
TOTAL


AREA 3B SUMMER
S 20 R 1000 F 1200
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
40
NOISE (DB)
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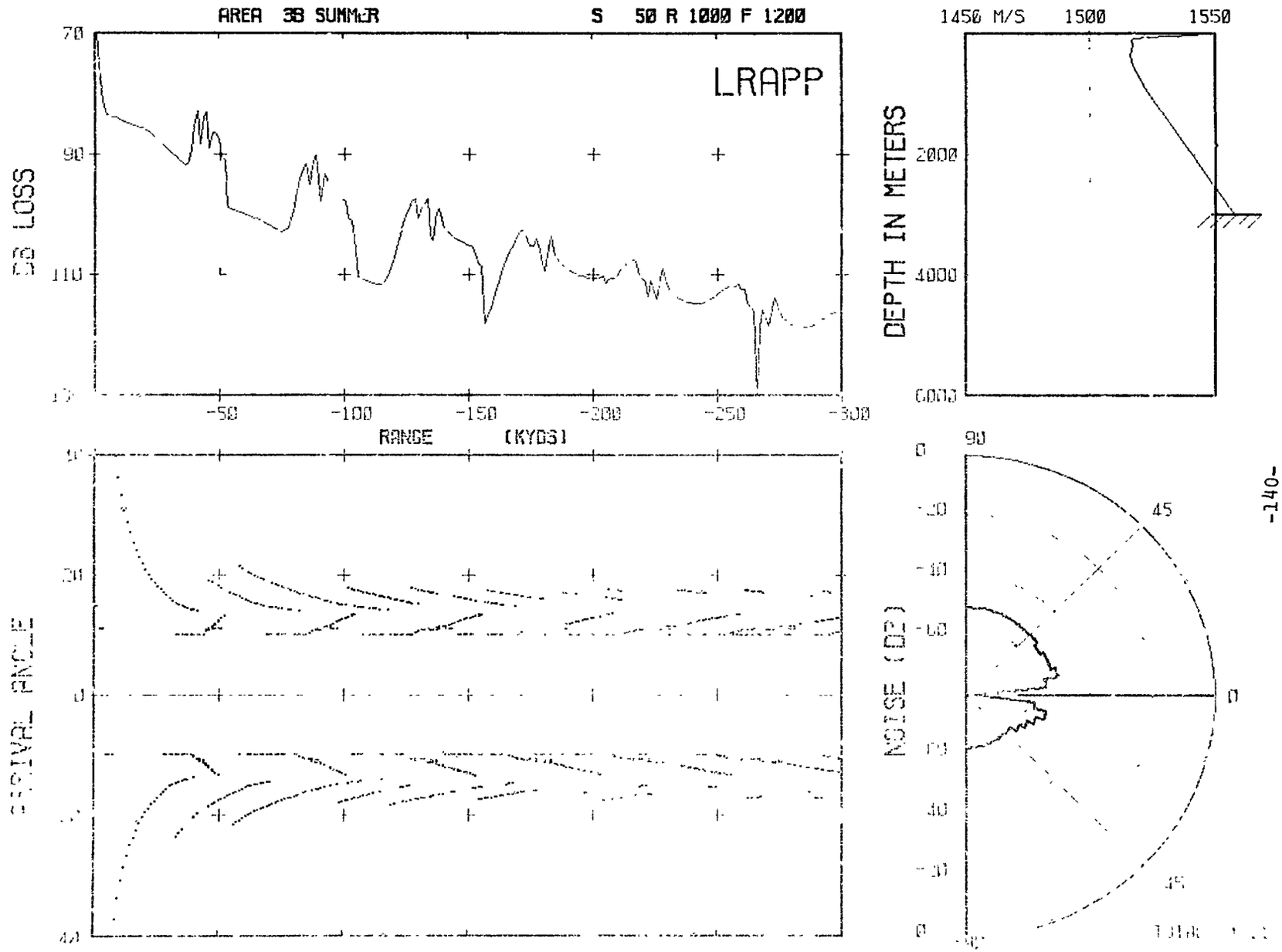
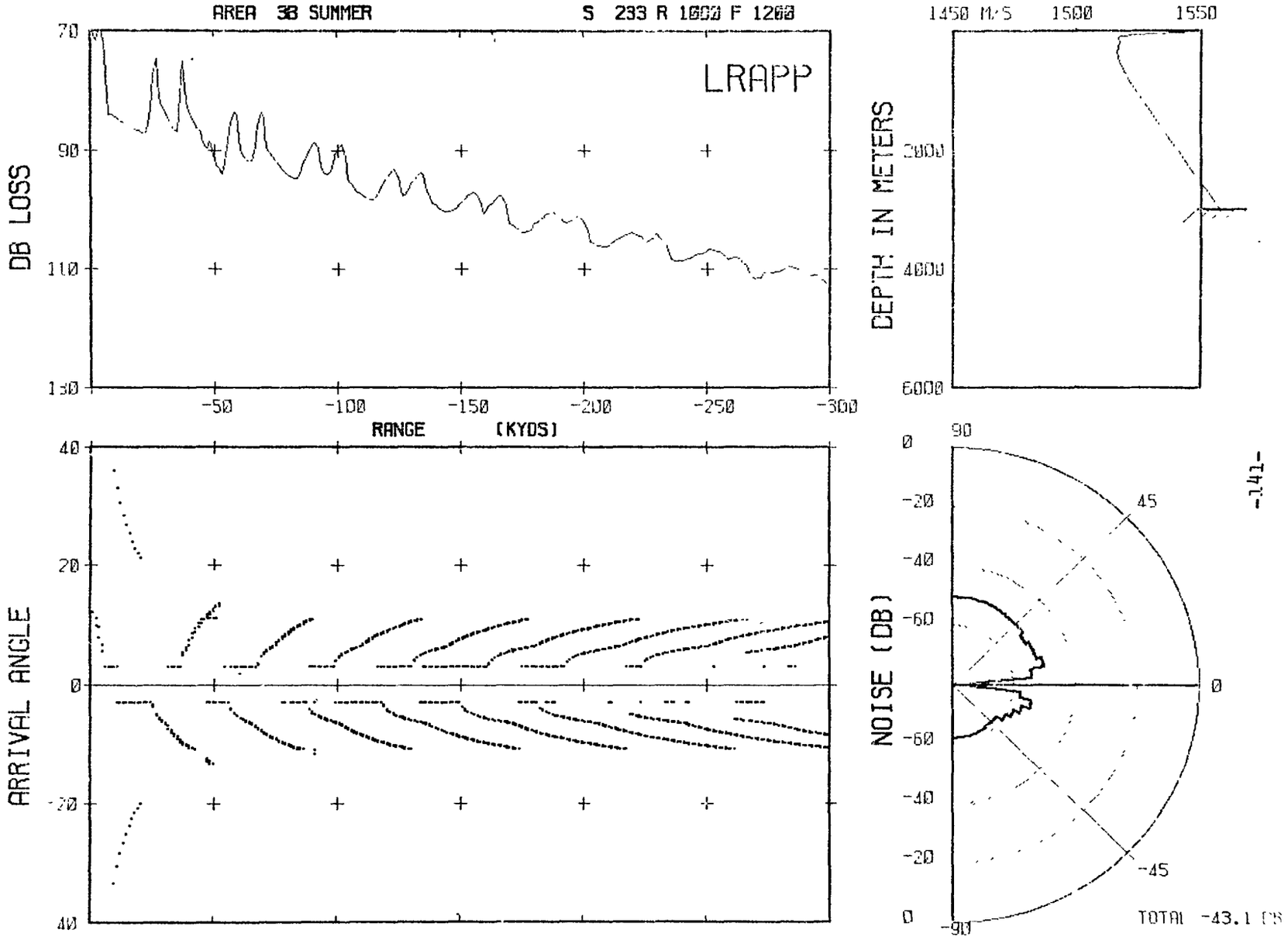
-20
-40
-60
-60
-40
-20
0
90
45
0
-45
-90


AREA 3B SUMMER
S 50 R 1000 F 1200
LRAPP
TB LOSS
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
NOISE (DB)
90
45
0


AREA 3B SUMMER
S 233 R 1000 F 1200
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
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RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
40
NOISE (DB)
90
0
-20
-40
-60
-60
-40
-20
0
-90
45
-45
TOTAL -43.1 DB

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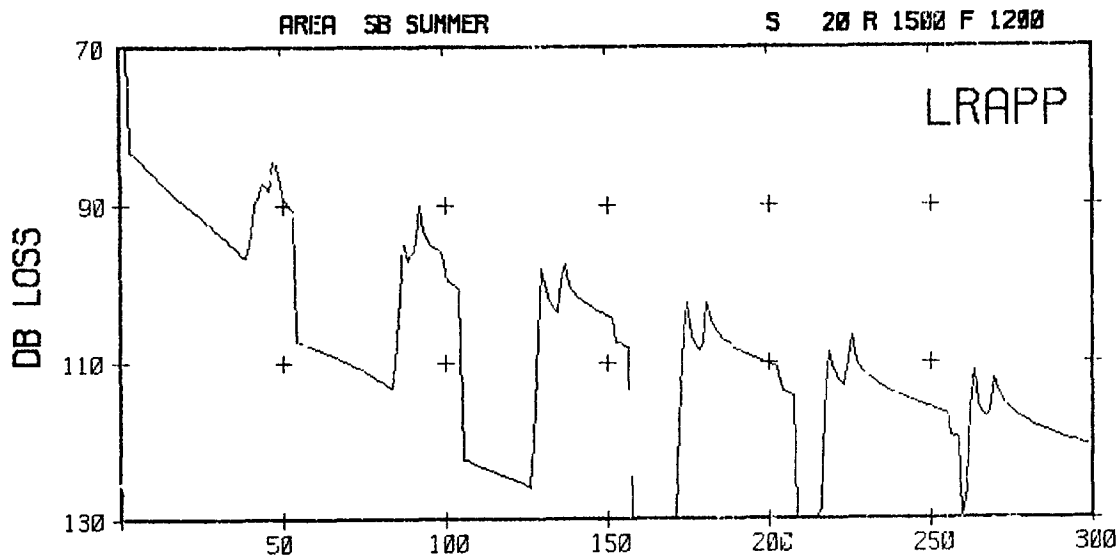
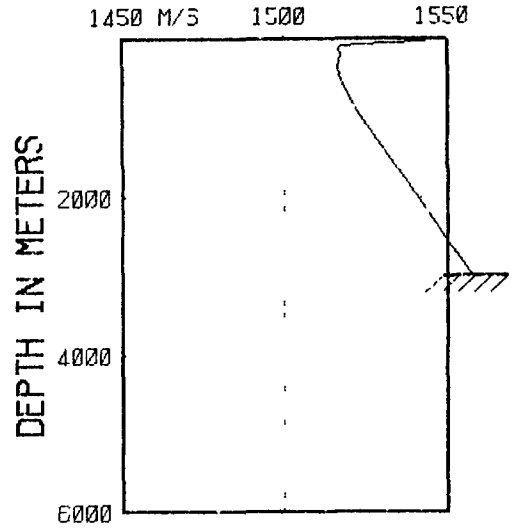
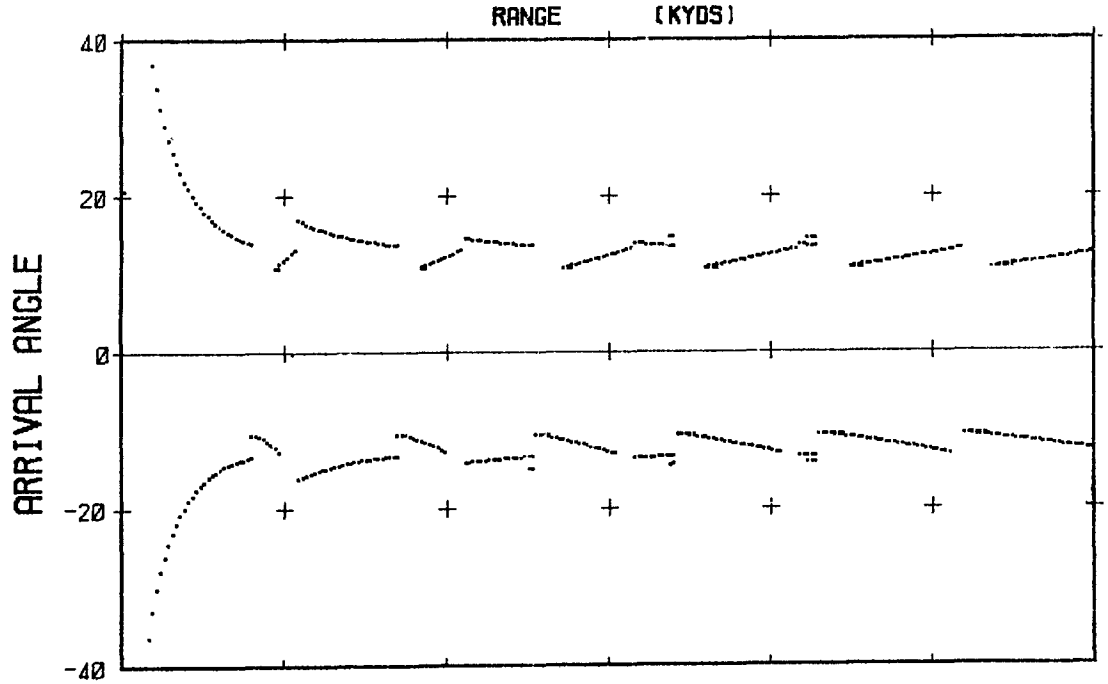
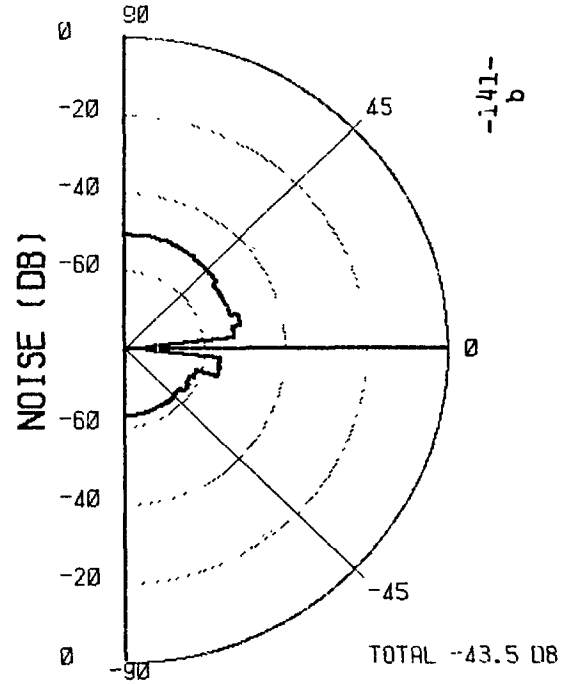
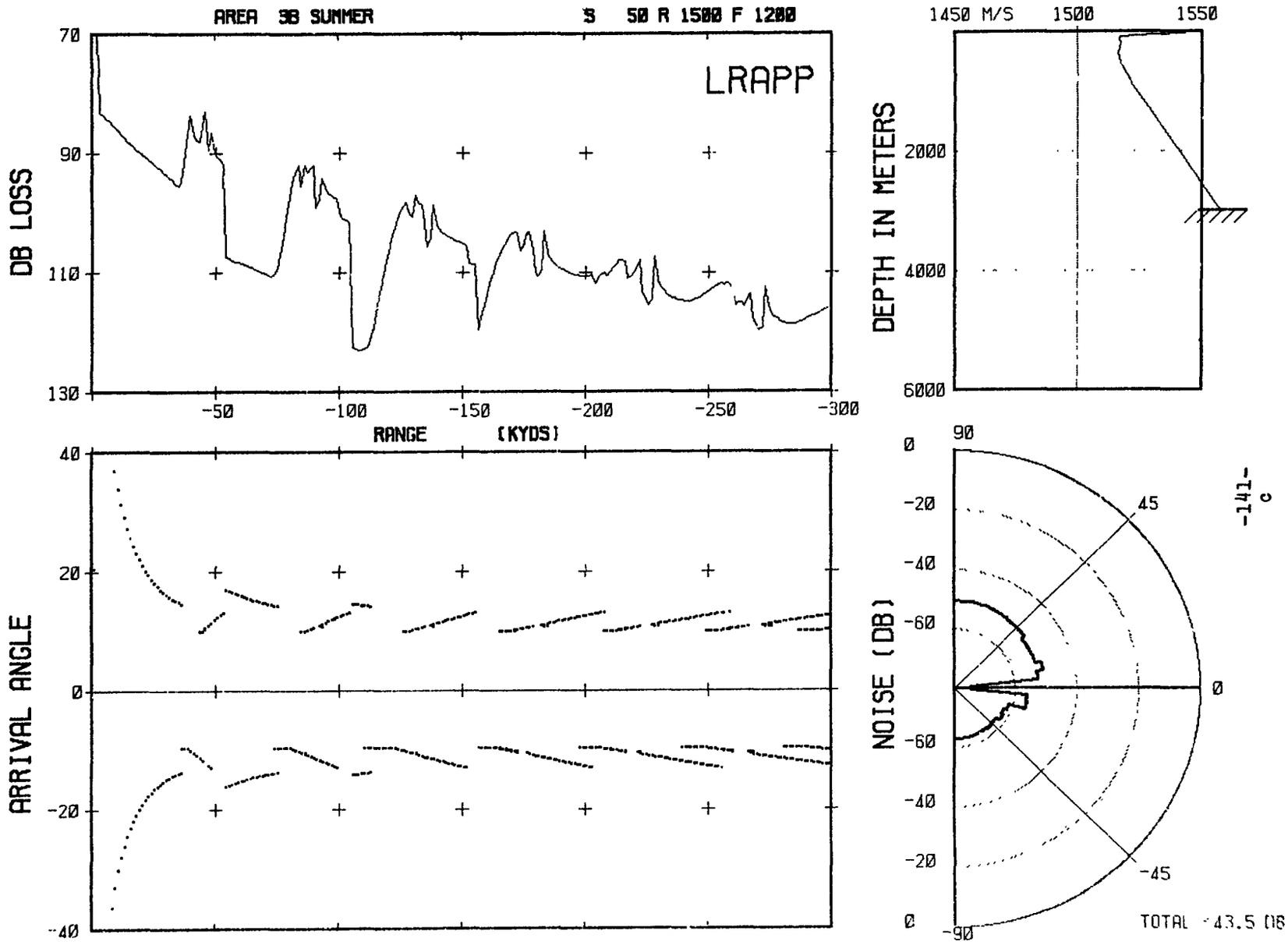
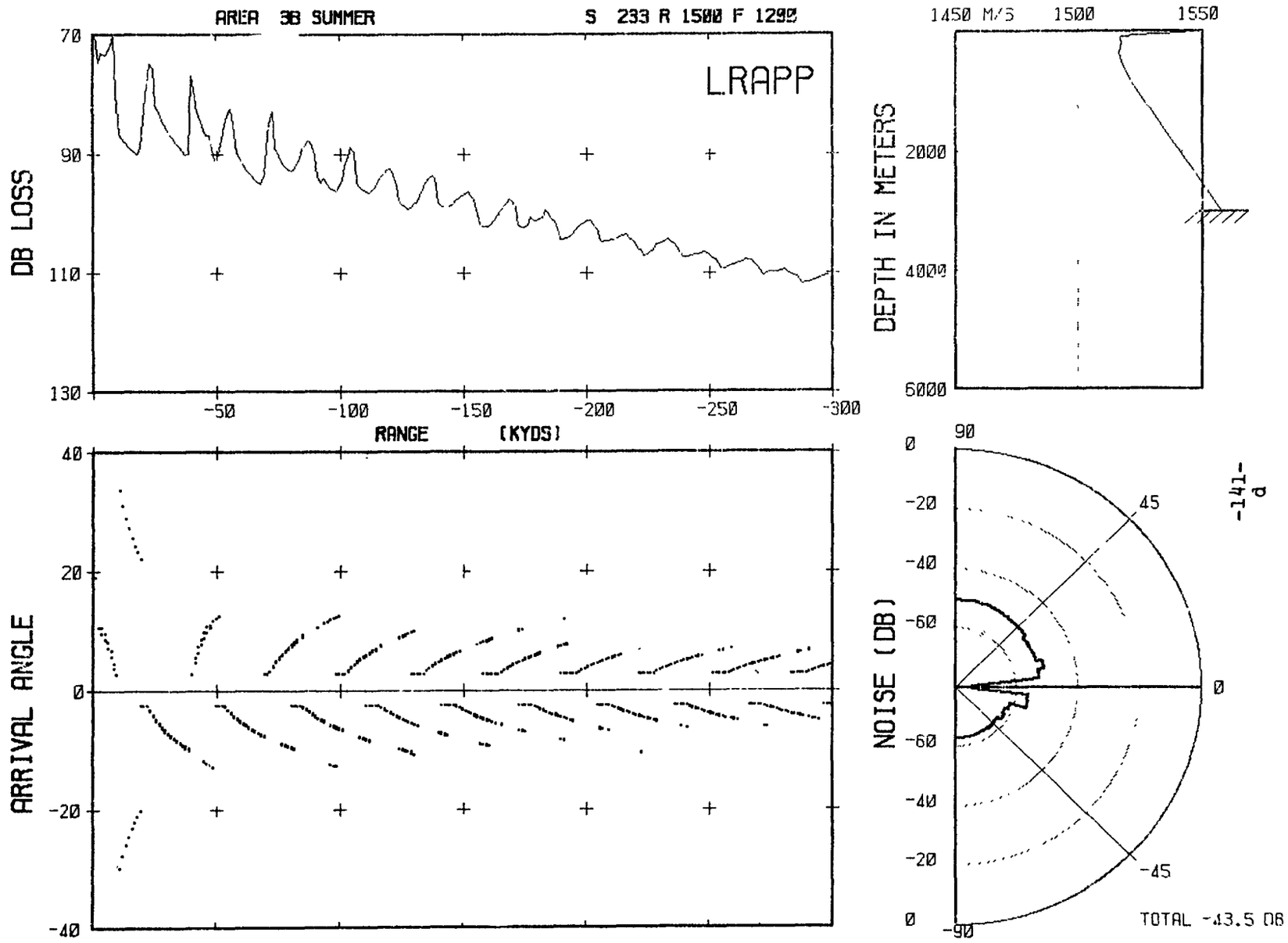


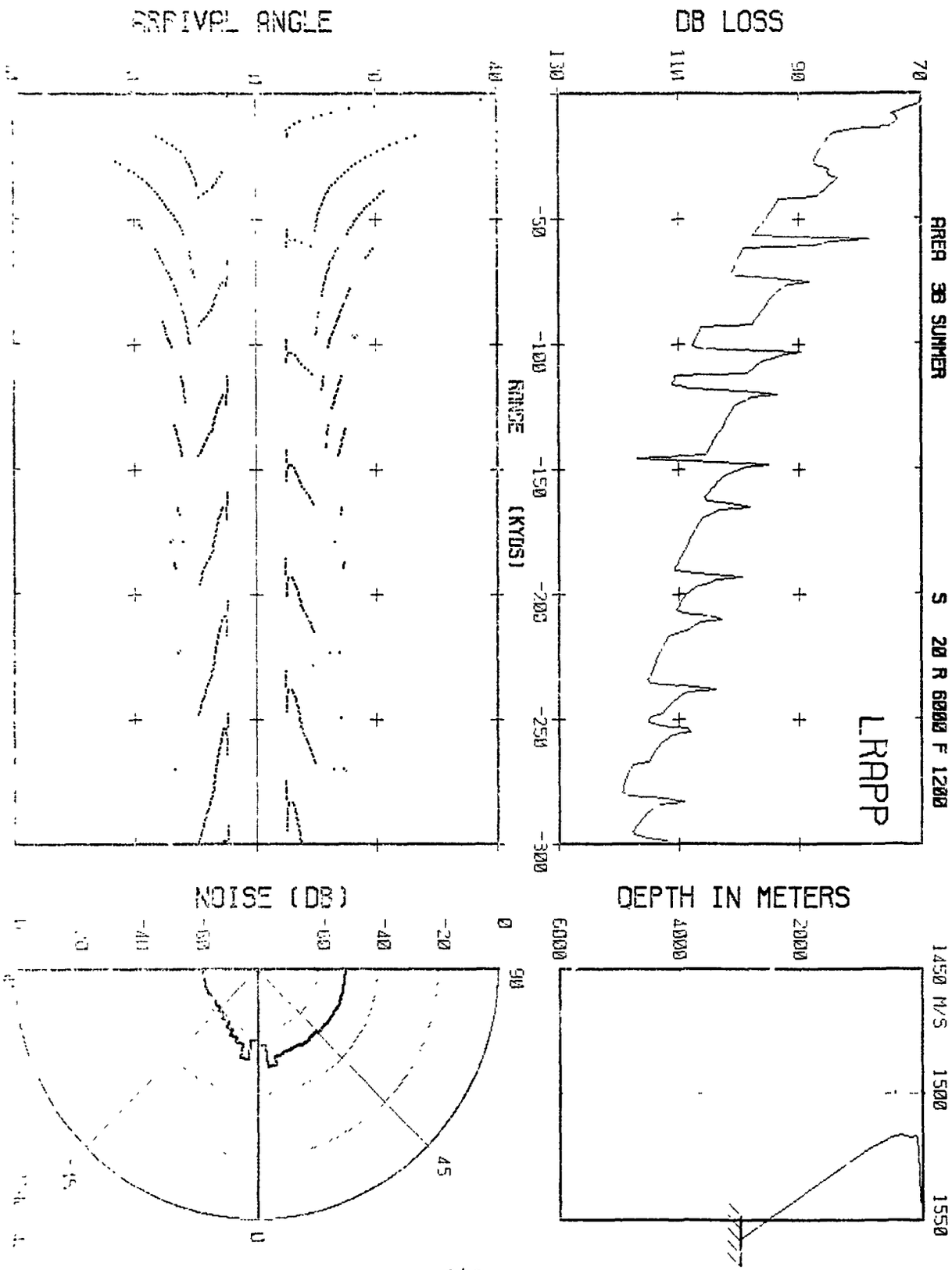


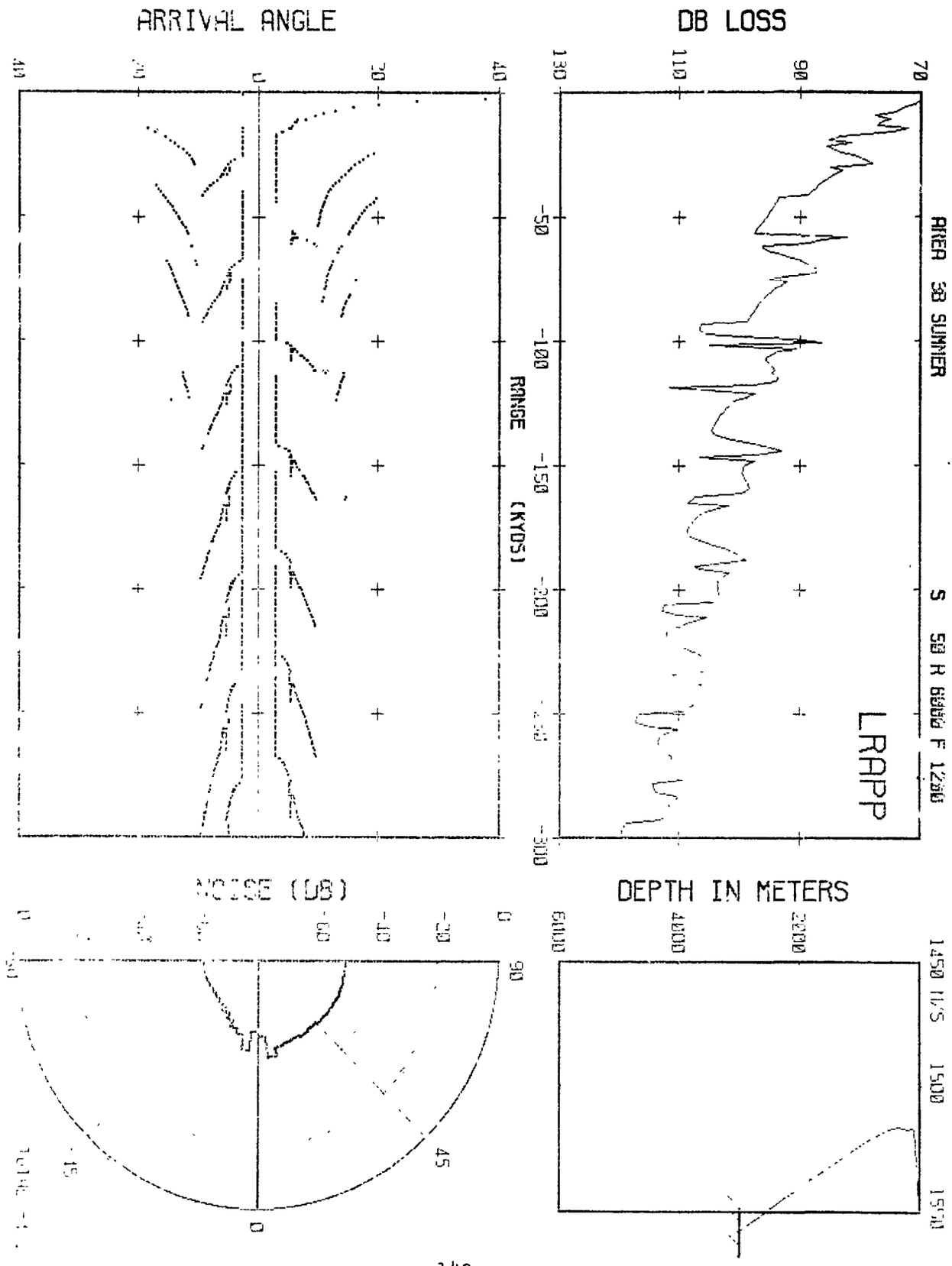


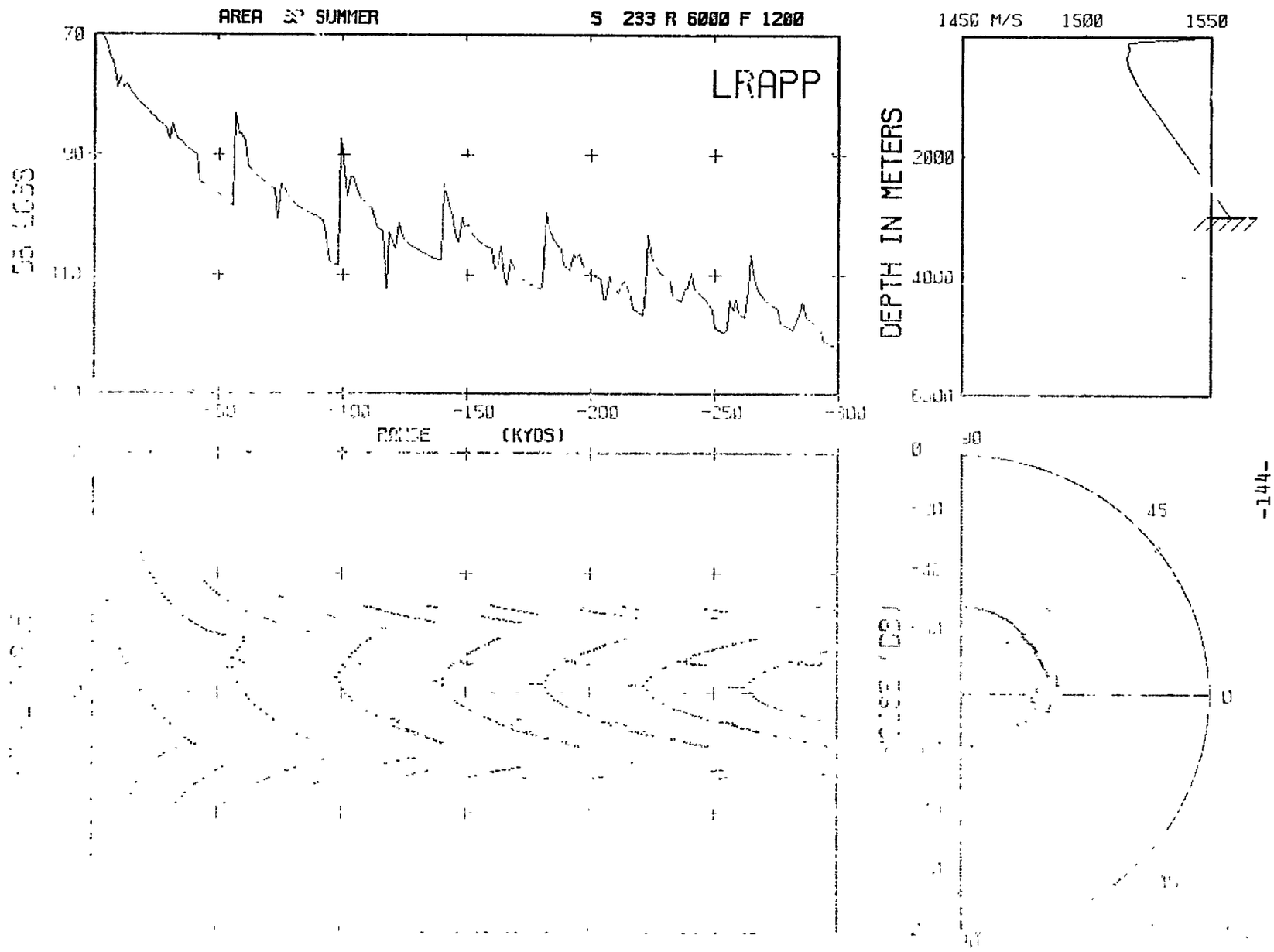



AREA 3B SUMMER
S 50 R 1500 F 1200
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
-45
-90
TOTAL -43.5 DB


AREA 3B SUMMER
S 233 R 1500 F 1290
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
0
-20
-40
-60
45
-45
-90
TOTAL -43.5 DB


ARRIVAL ANGLE
DB LOSS
AREA 3B SUMMER
S 20 R 6000 F 1200
LRAPP
RANGE (KYDS)
NOISE (DB)
DEPTH IN METERS
1450 M/S
1500
1550


ARRIVAL ANGLE
DB LOSS
AREA 3B SUMMER
S 50 R 6000 F 1200
LRAPP
RANGE (KYDS)
NOISE (DB)
DEPTH IN METERS
1450 M/S
1500
1550


AREA SP SUMMER
S 233 R 6000 F 1200
LRAPP
TL LOSS
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90
110
-50
-100
-150
-200
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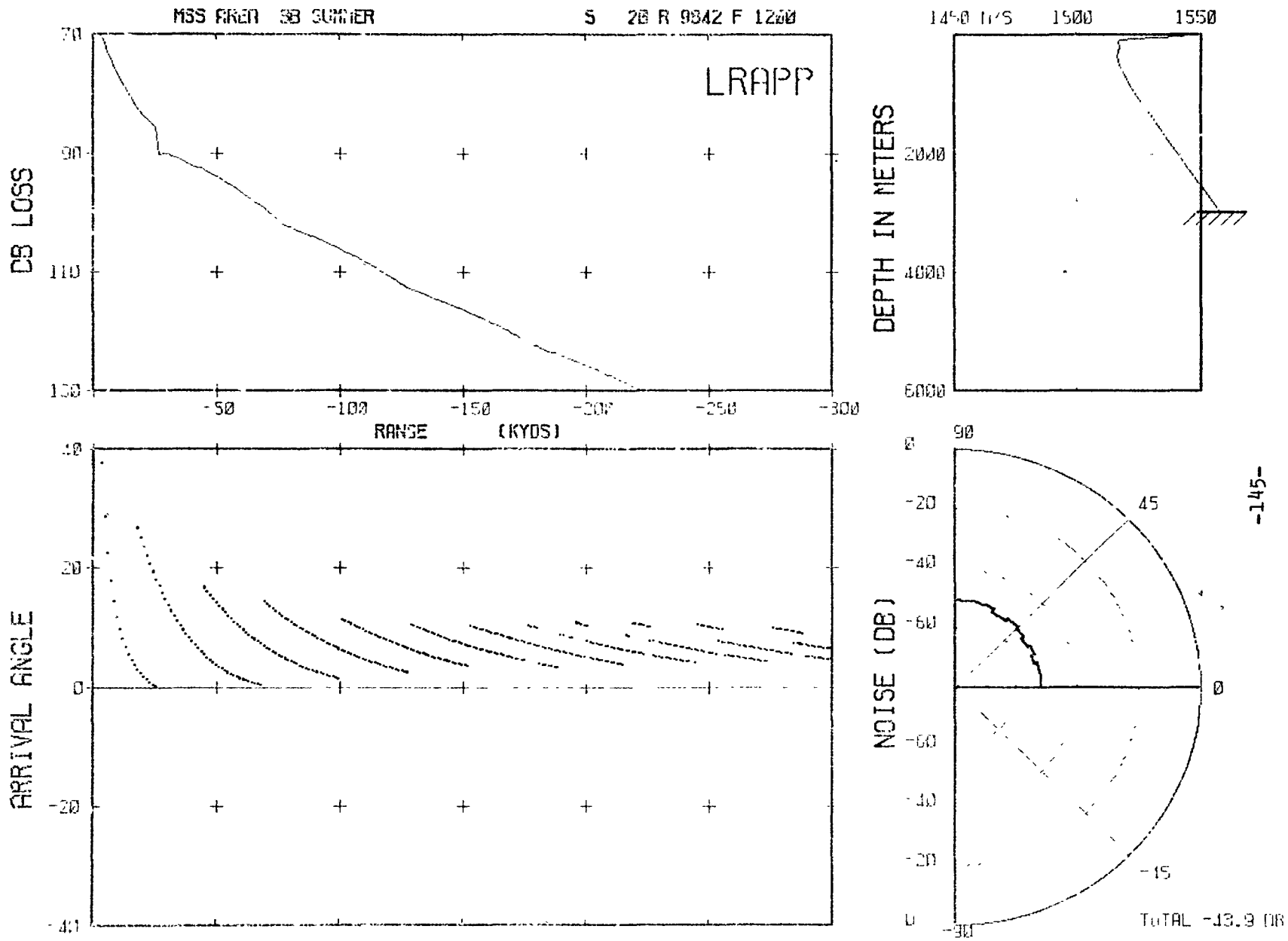
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
0
90
45
0


MSS AREA 3B SUMMER
S 20 R 9842 F 1200
LRAPP
DB LOSS
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90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
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NOISE (DB)
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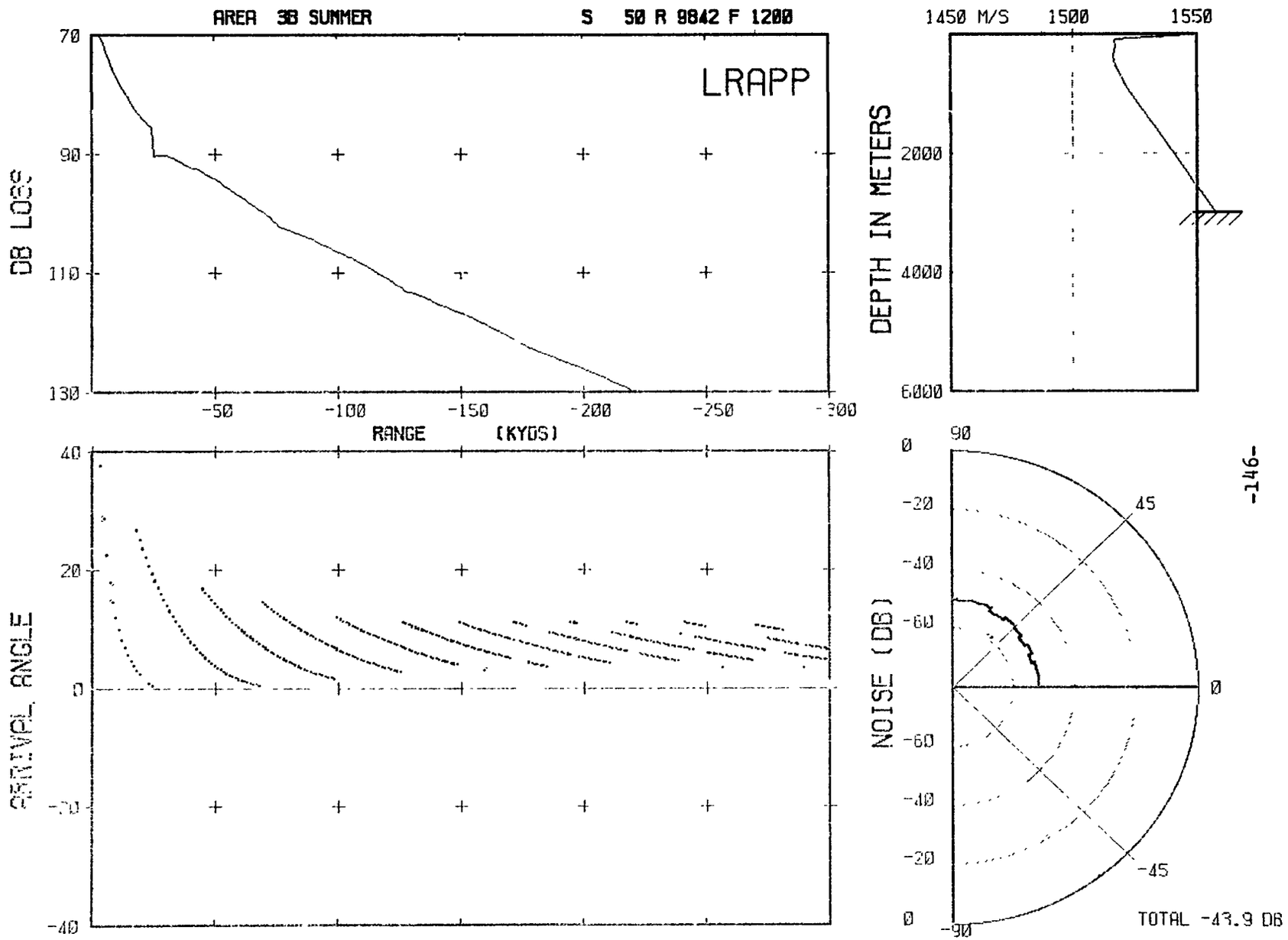
0
-20
-40
-60
TOTAL -13.9 DB


AREA 3B SUMMER
S 50 R 9842 F 1200
LRAPP
DB LOSS
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90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
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20
0
-20
-40
NOISE (DB)
90
45
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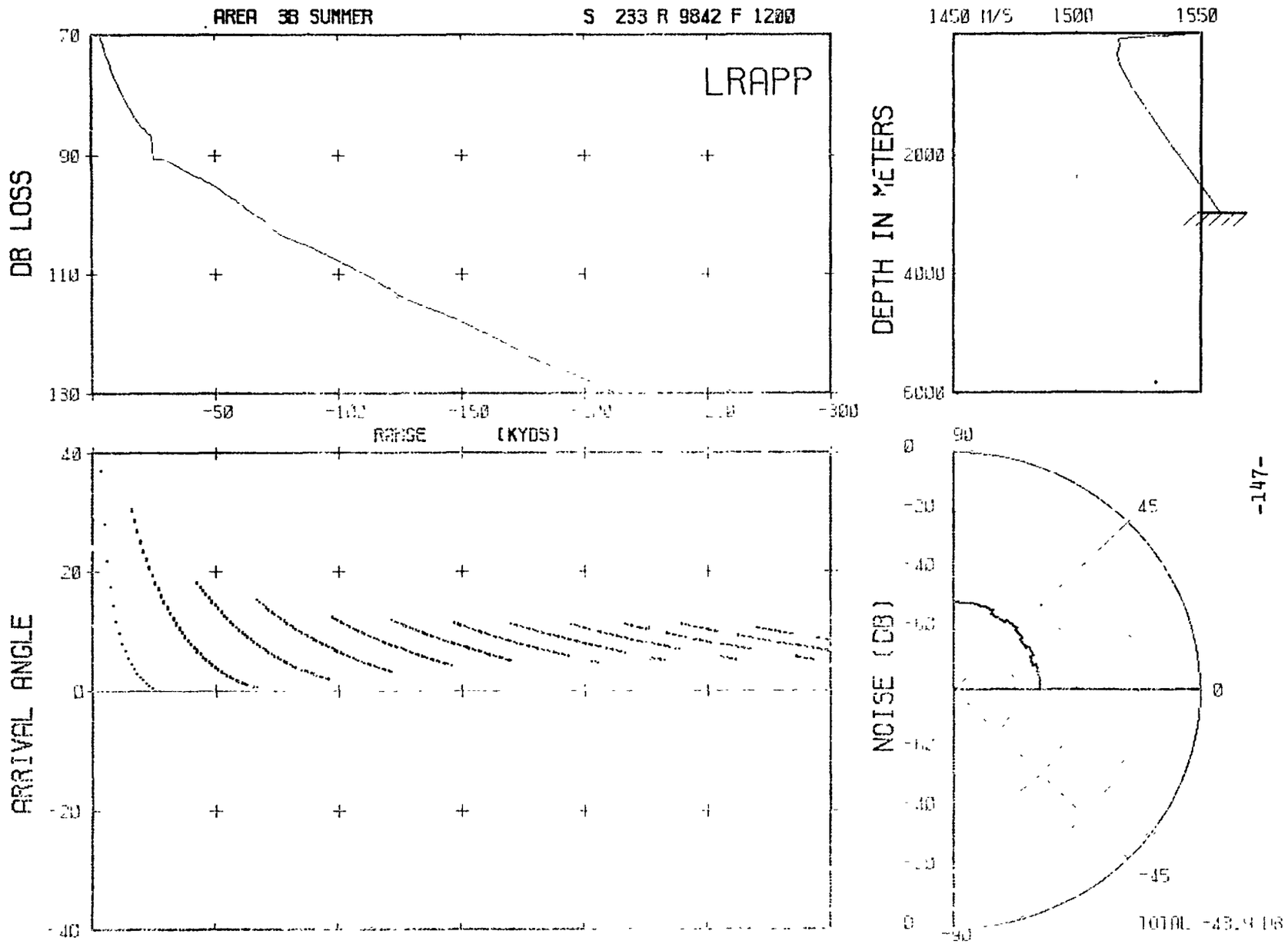
-90
TOTAL -43.9 DB


AREA 3B SUMMER
S 233 R 9842 F 1200
LRAPP
DB LOSS
70
90
110
130
-50
-150
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
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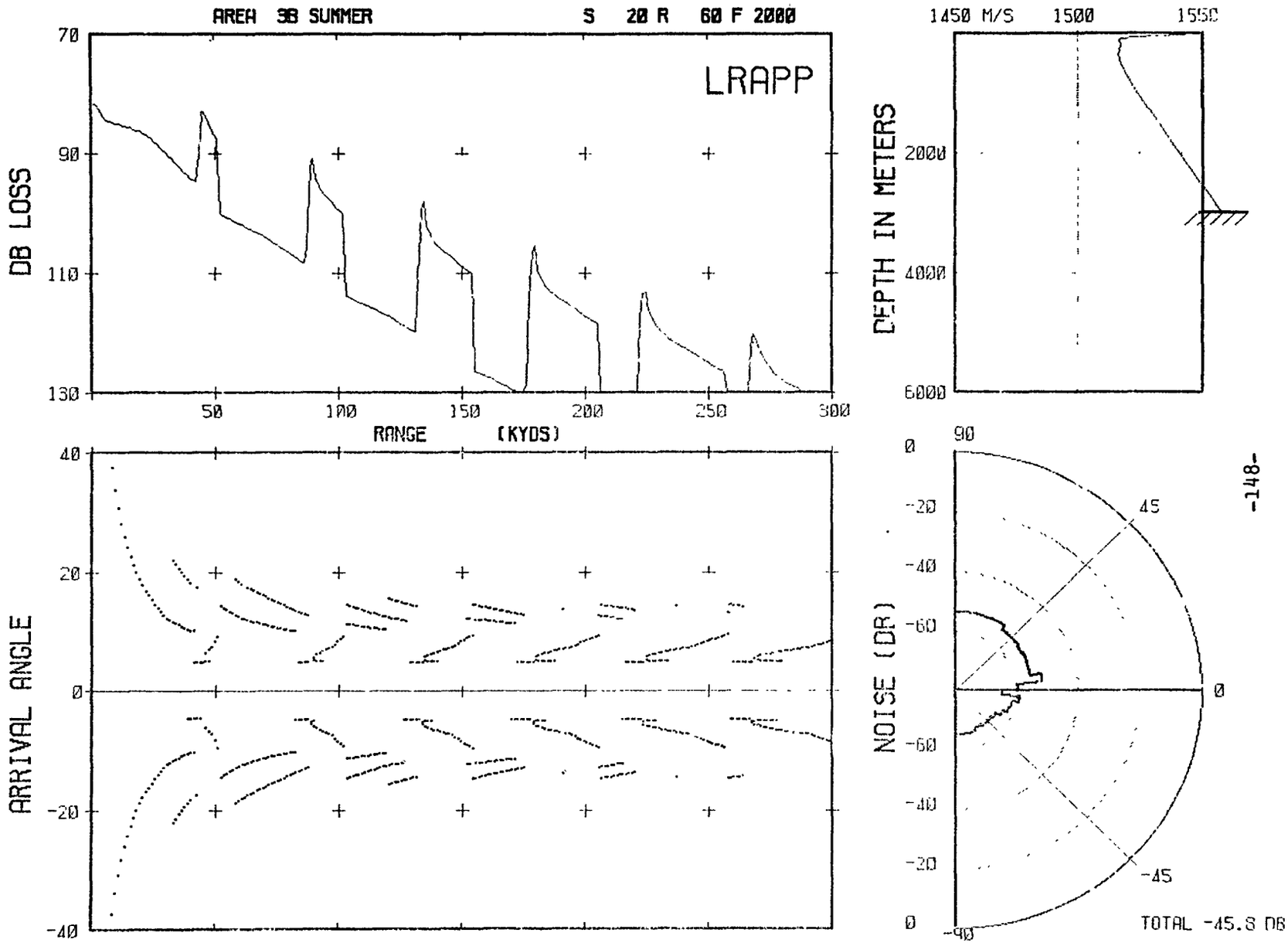
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
0
-45
-90
TOTAL


AREA 3B SUMMER
S 20 R 60 F 2000
LRAPP
DB LOSS
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90
110
130
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100
150
200
250
300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
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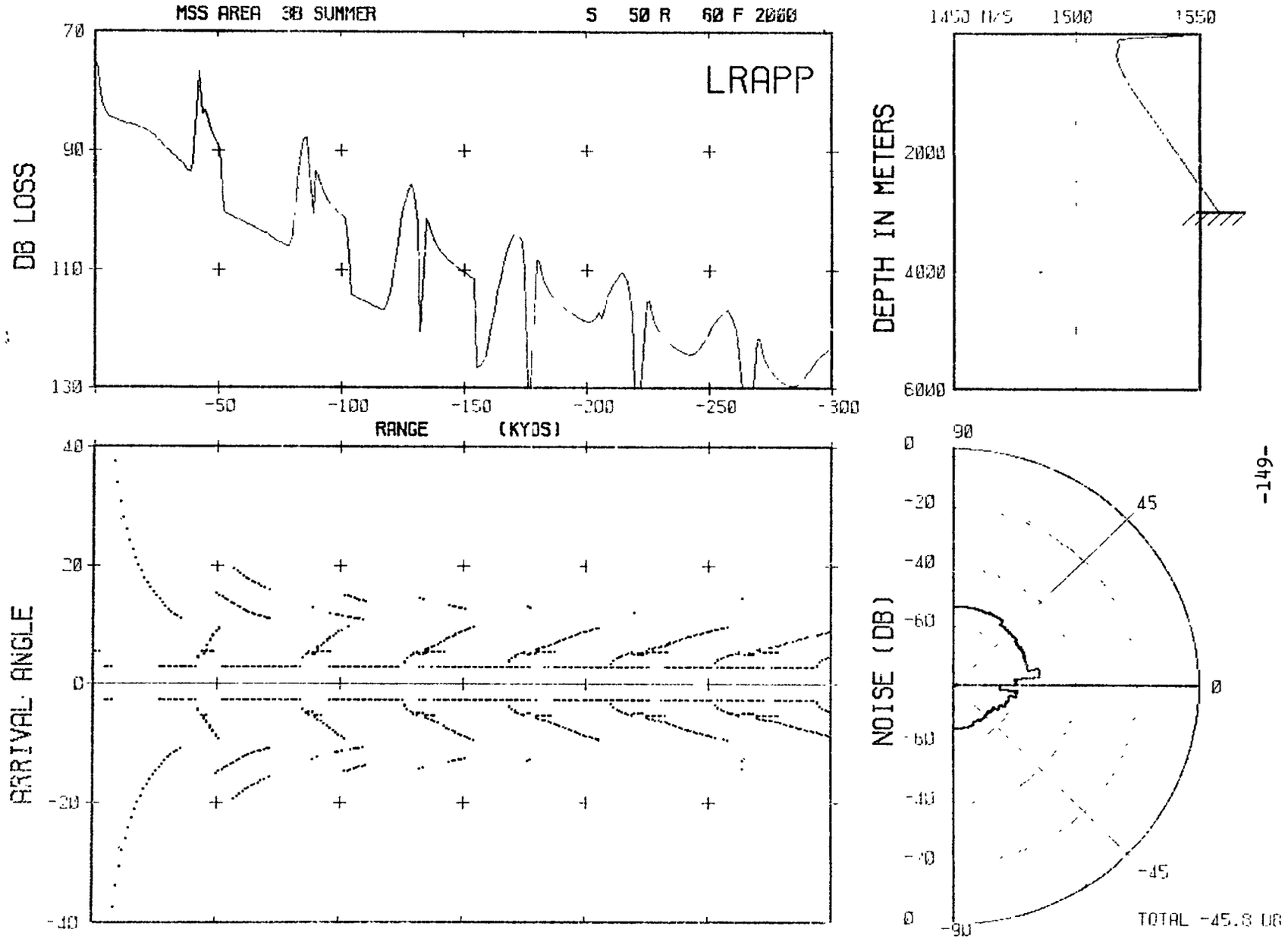
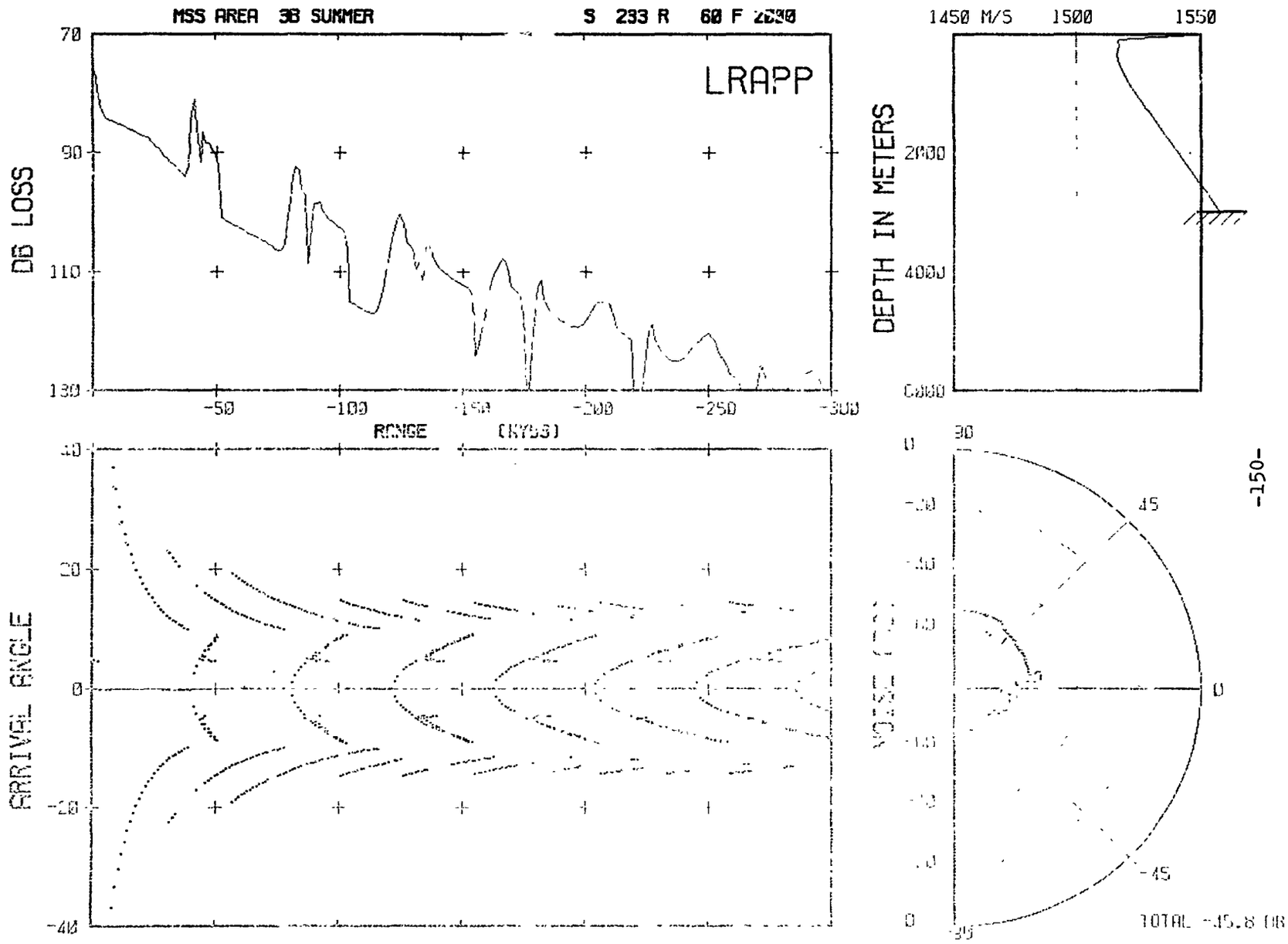
TOTAL -45.8 DB


MSS AREA 3B SUMMER S 50 R 60 F 2000
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
DEPTH IN METERS
1450 M/S
1500
1550
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
-45
-90
TOTAL -45.8 DB


MSS AREA 3B SUMMER
S 233 R 60 F 2030
LRAPP
DB LOSS
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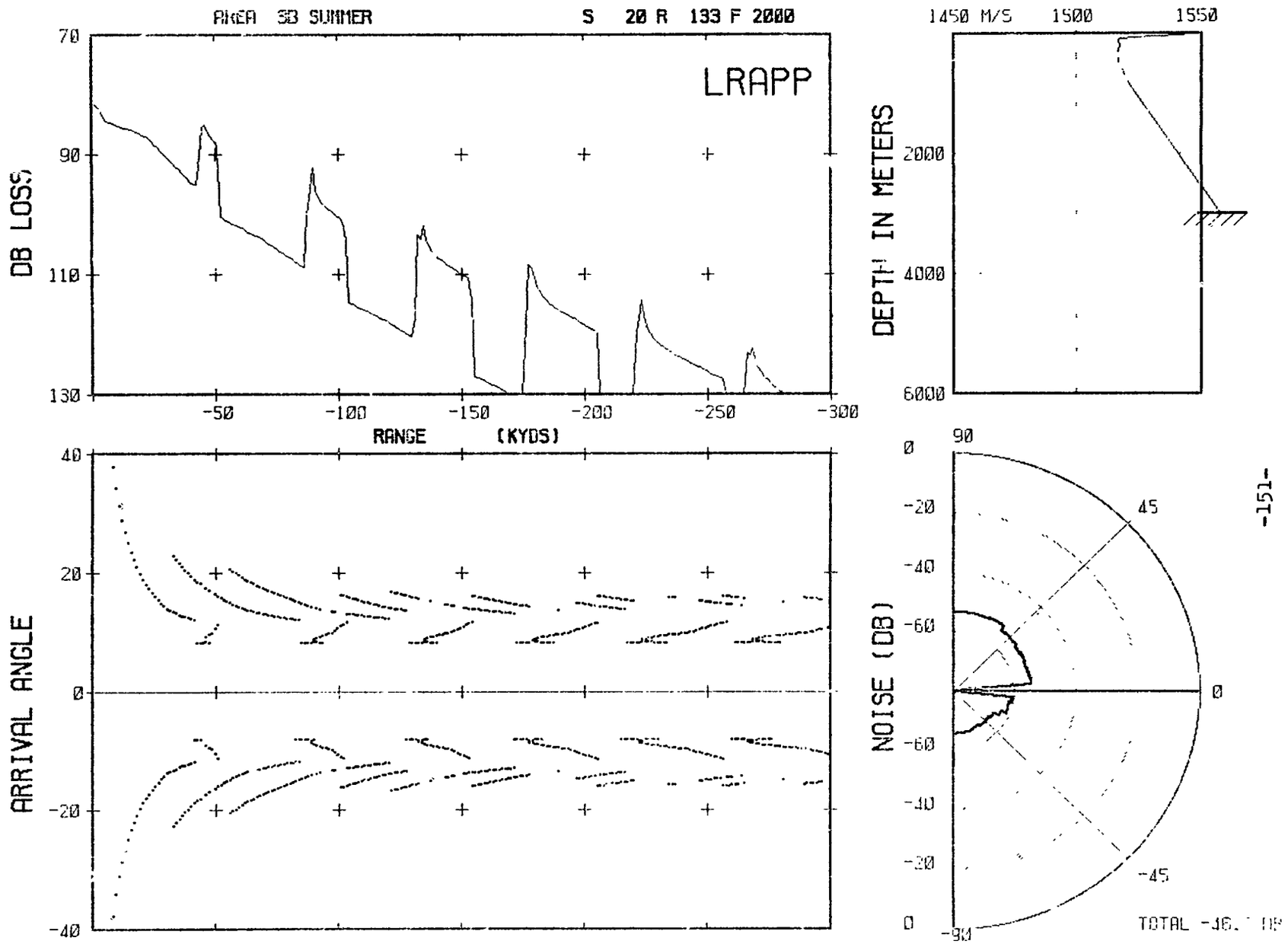
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
90
45
0
-45
-90
TOTAL -45.8 DB


AREA 3B SUMMER
S 20 R 133 F 2000
LRAPP
DB LOSS
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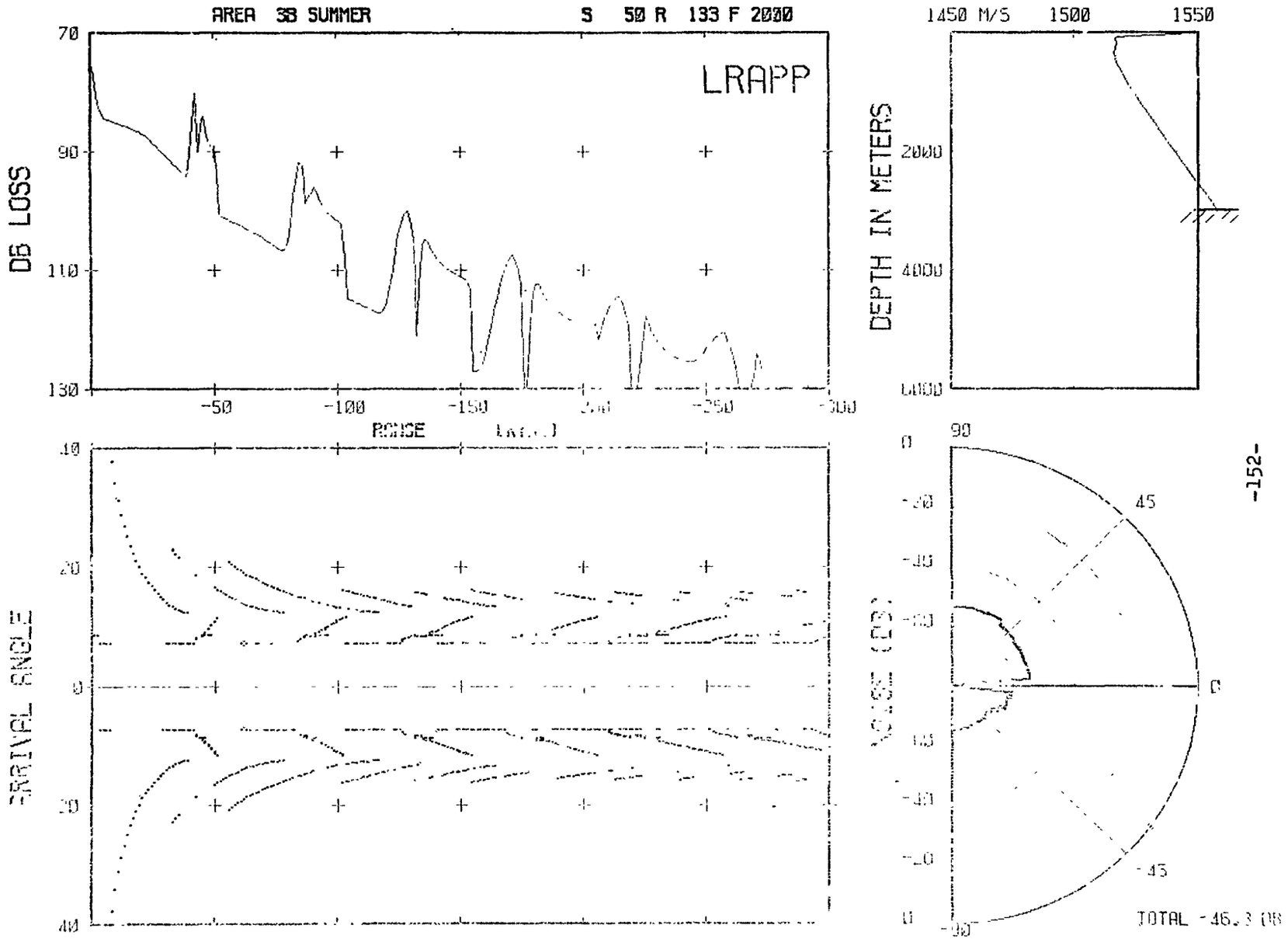
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
-45
-90
TOTAL


AREA 3B SUMMER
S 50 R 133 F 2000
LRAPP
DB LOSS
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90
110
130
-50
-100
-150
-250
RANGE
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
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-20
-40
90
45
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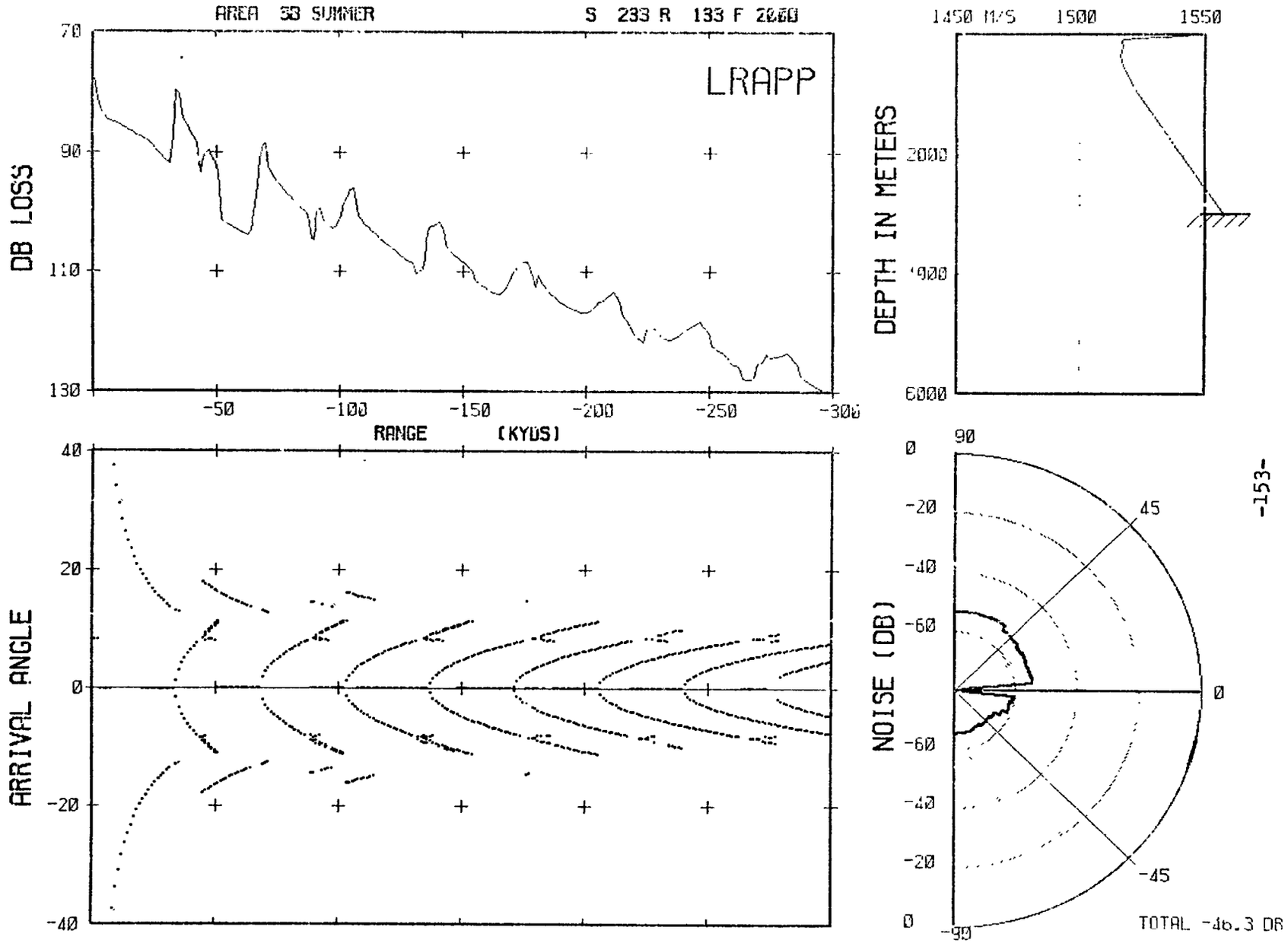
-45
-90
TOTAL -46.3 DB


AREA 33 SUMMER
S 233 R 133 F 2000
LRAPP
DB LOSS
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90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
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-60
-60
-40
-20
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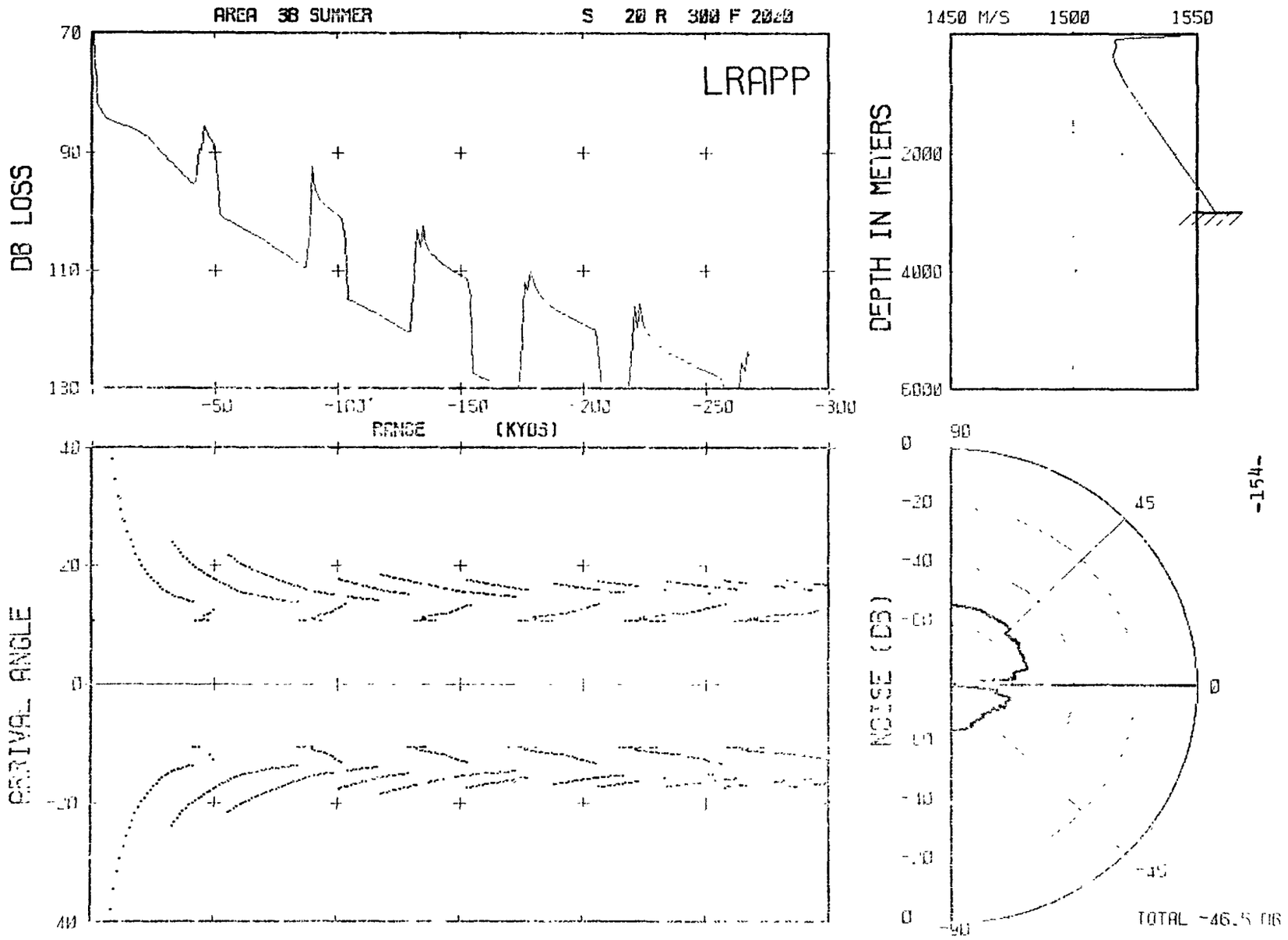
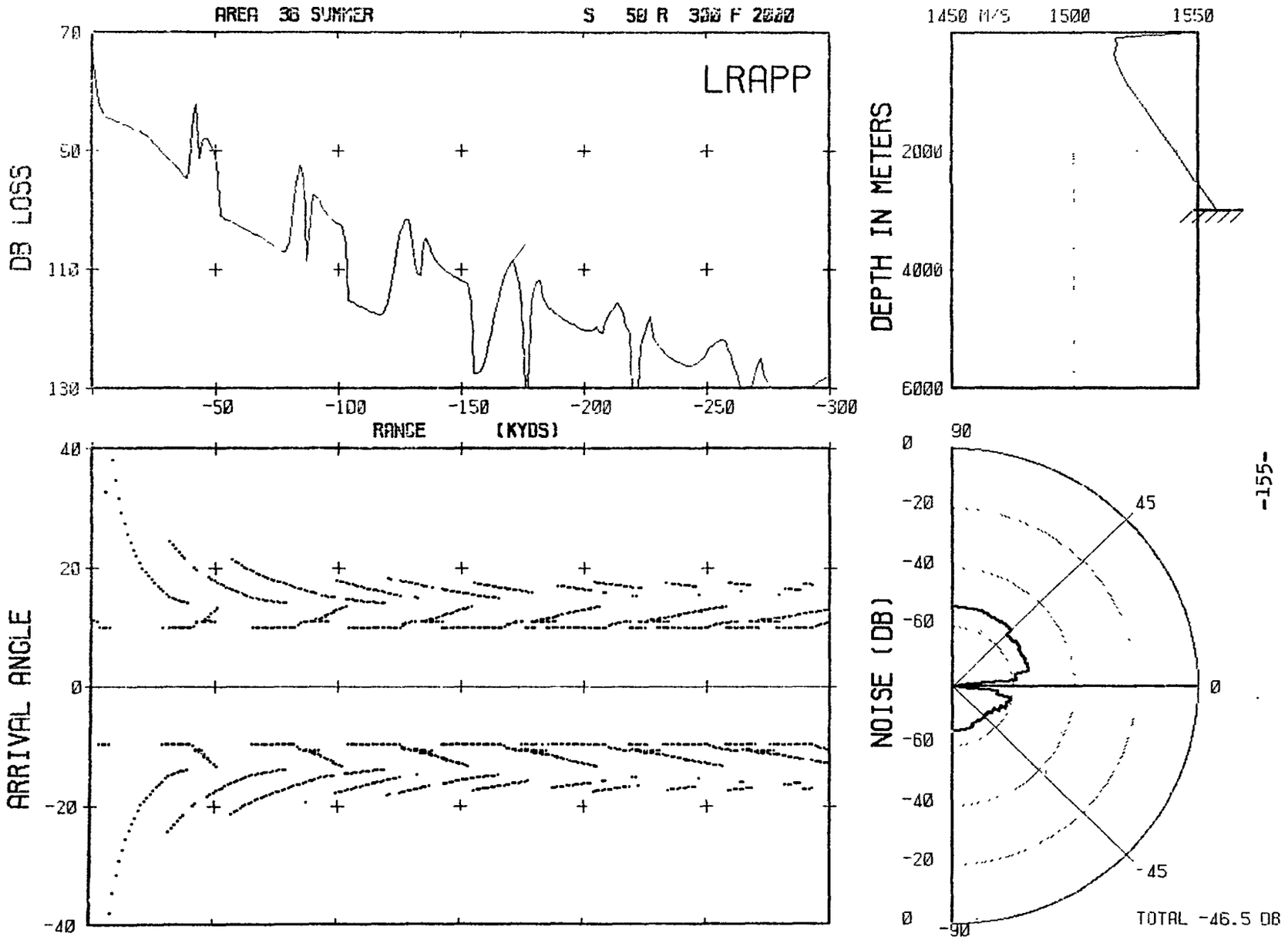
45
0
-45
-90
TOTAL -46.3 DB


AREA 3B SUMMER
S 20 R 300 F 2020
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
0
-45
-90
TOTAL -46.5 DB


AREA 36 SUMMER S 50 R 300 F 2000
LRAPP
DB LOSS
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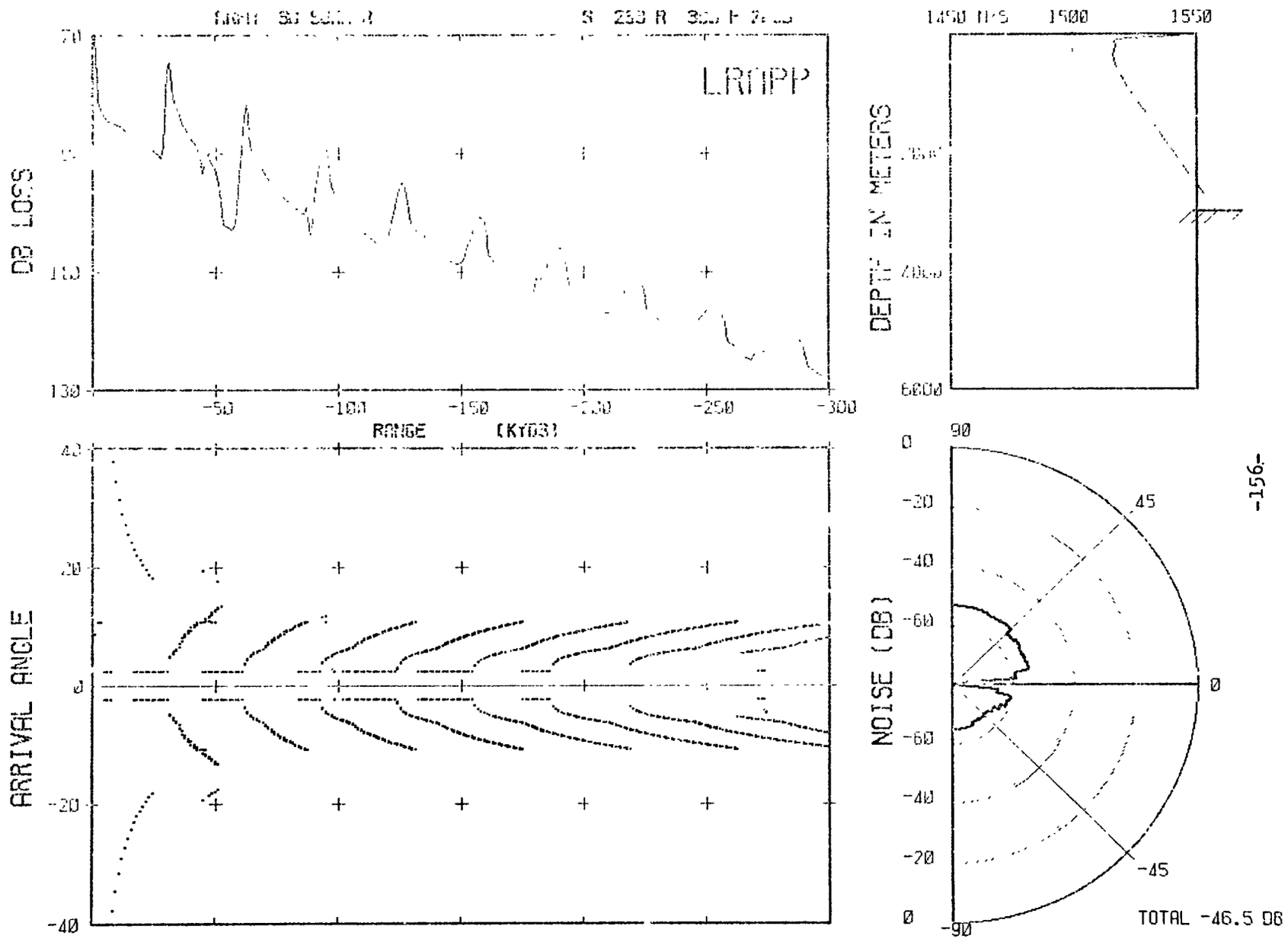
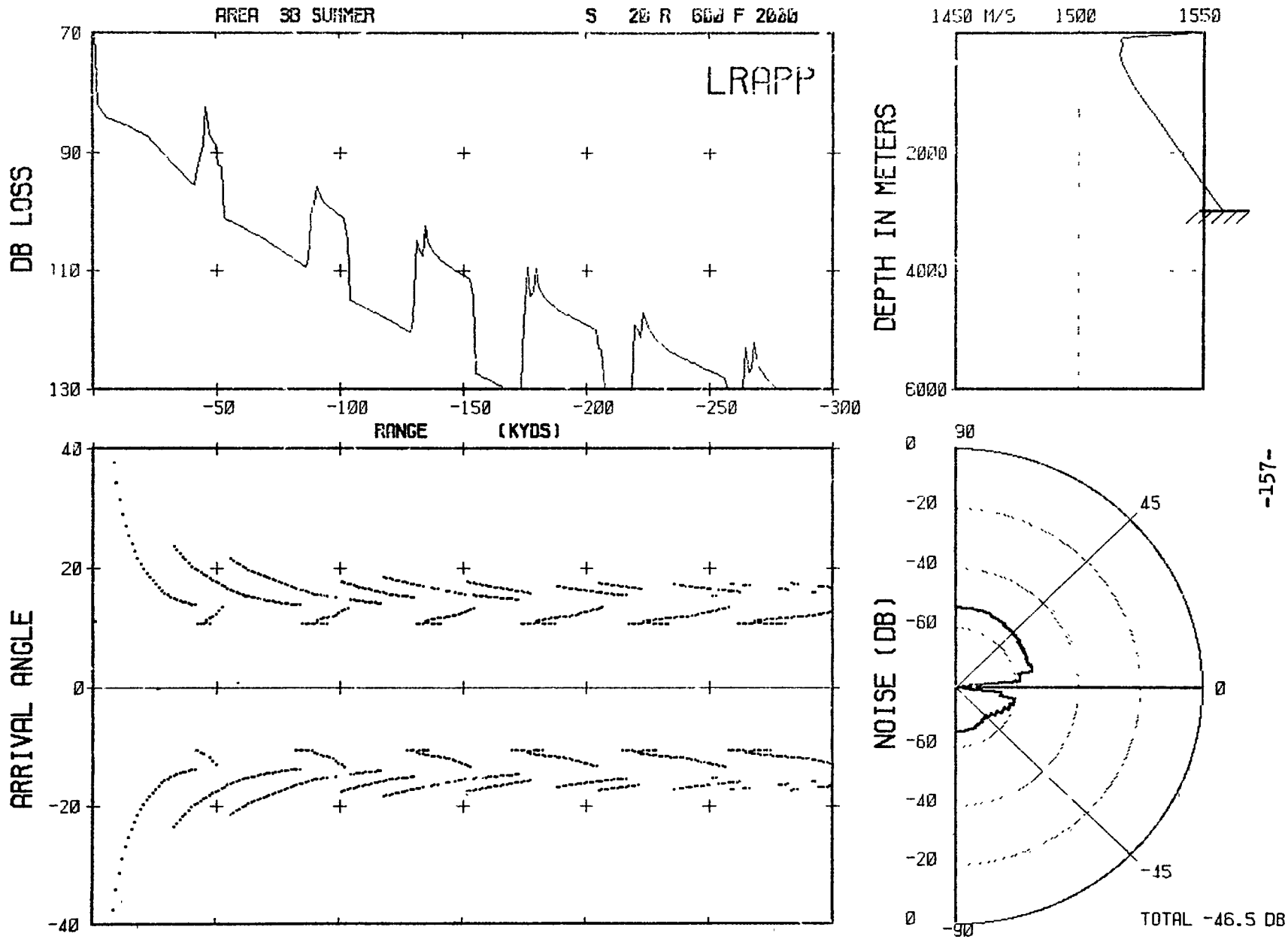
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
-45
-90
TOTAL -46.5 DB


LRAPP
DB LOSS
RANGE (KYDS)
ARRIVAL ANGLE
DEPTH IN METERS
1450 M/S
1500
1550
NOISE (DB)
TOTAL -46.5 DB


AREA 33 SUMMER
S 20 R 600 F 2000
LRAPP
DB LOSS
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90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
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4000
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ARRIVAL ANGLE
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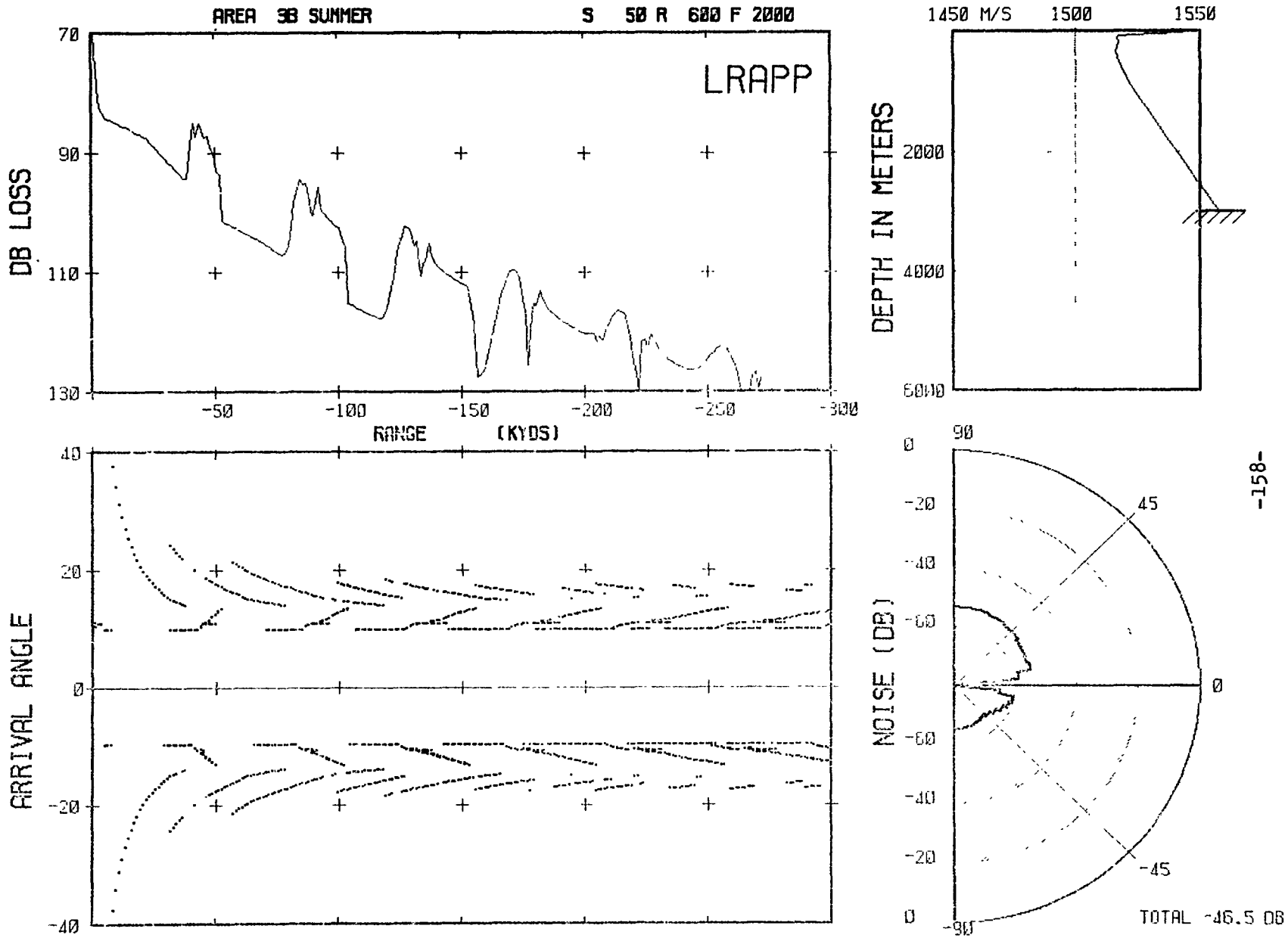
-20
-40
NOISE (DB)
90
45
-45
-90
TOTAL -46.5 DB


AREA 3B SUMMER
S 50 R 600 F 2000
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
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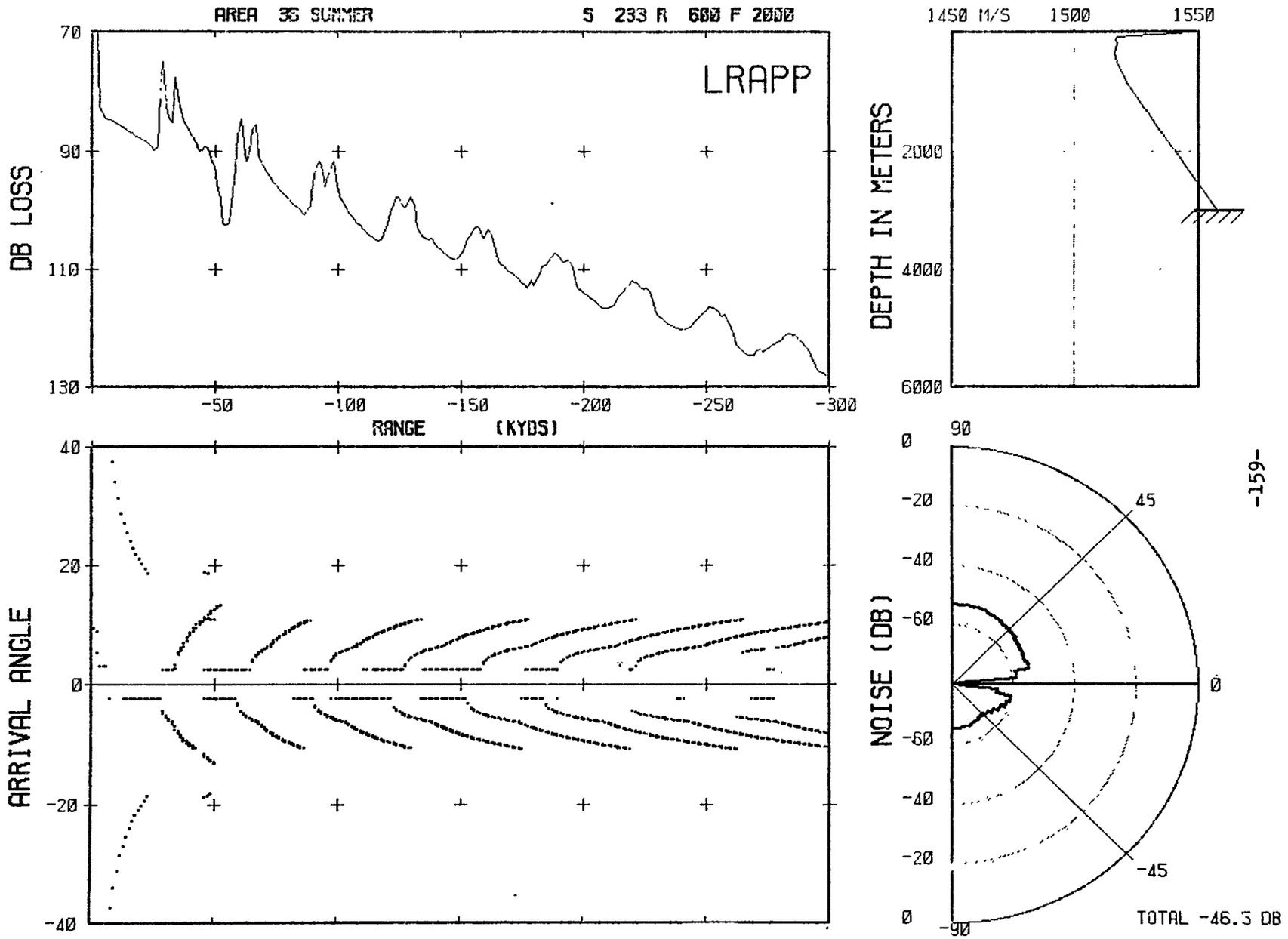
-20
-40
NOISE (DB)
90
45
-45
-90
TOTAL -46.5 DB


AREA 36 SUMMER
S 233 R 600 F 2000
LRAPP
DB LOSS
70
90
110
130
-50
-100
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-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
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-40
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-60
-40
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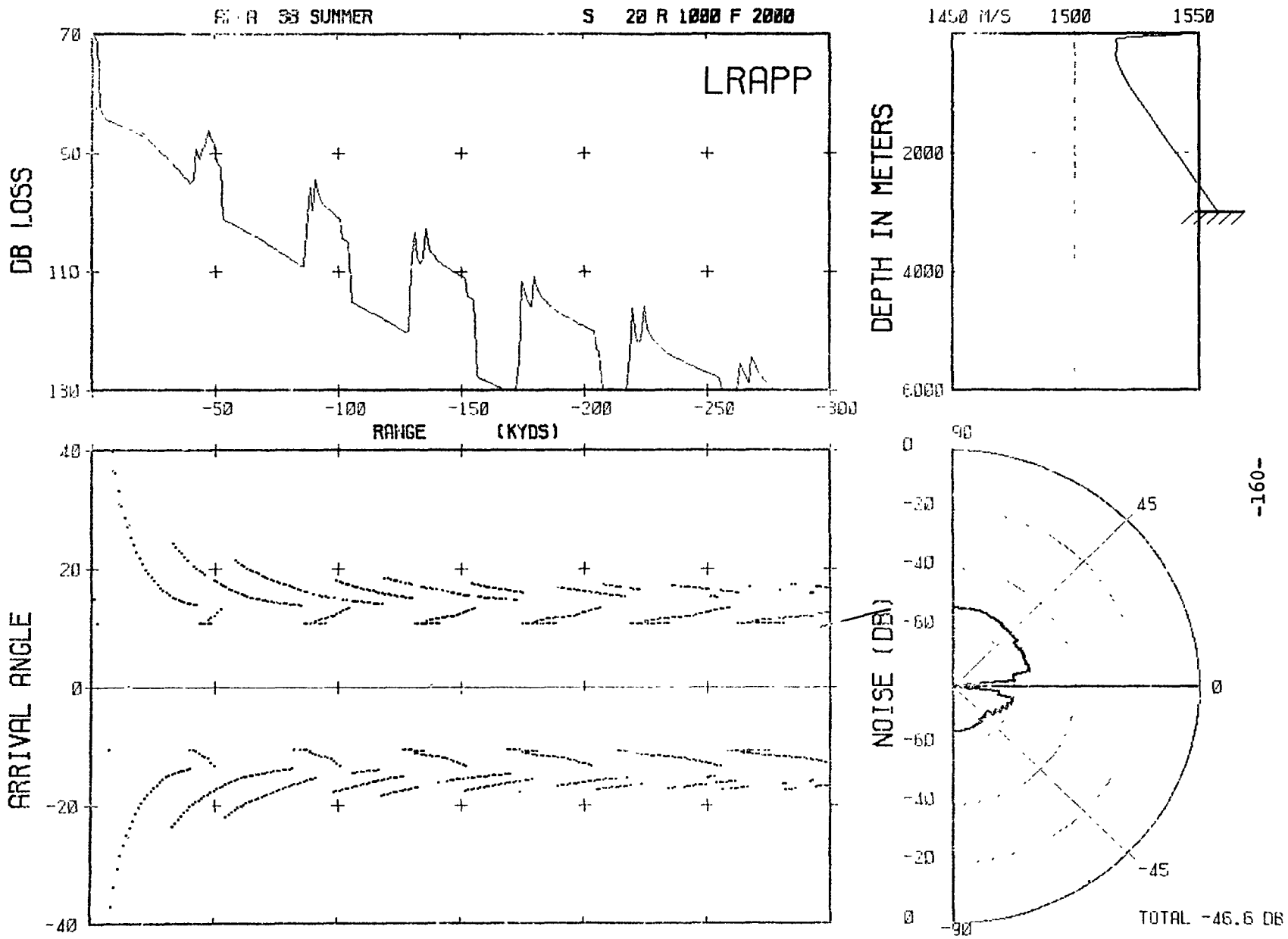
90
45
0
-45
-90
TOTAL -46.3 DB


A R 33 SUMMER
S 20 R 1000 F 2000
LRAPP
DB LOSS
70
90
110
130
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-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
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-40
-60
-60
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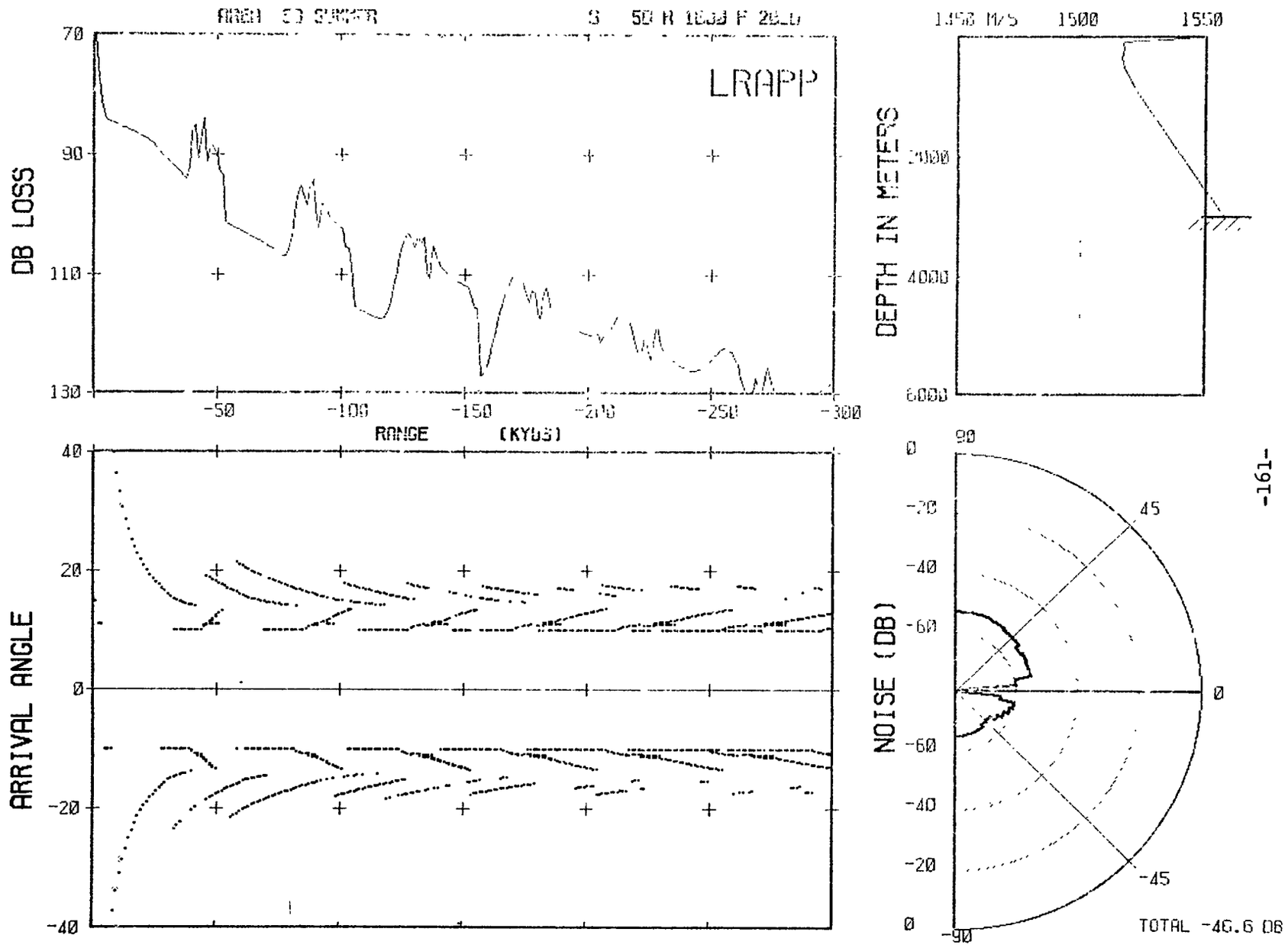
-20
0
90
45
-45
-90
TOTAL -46.6 DB


LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
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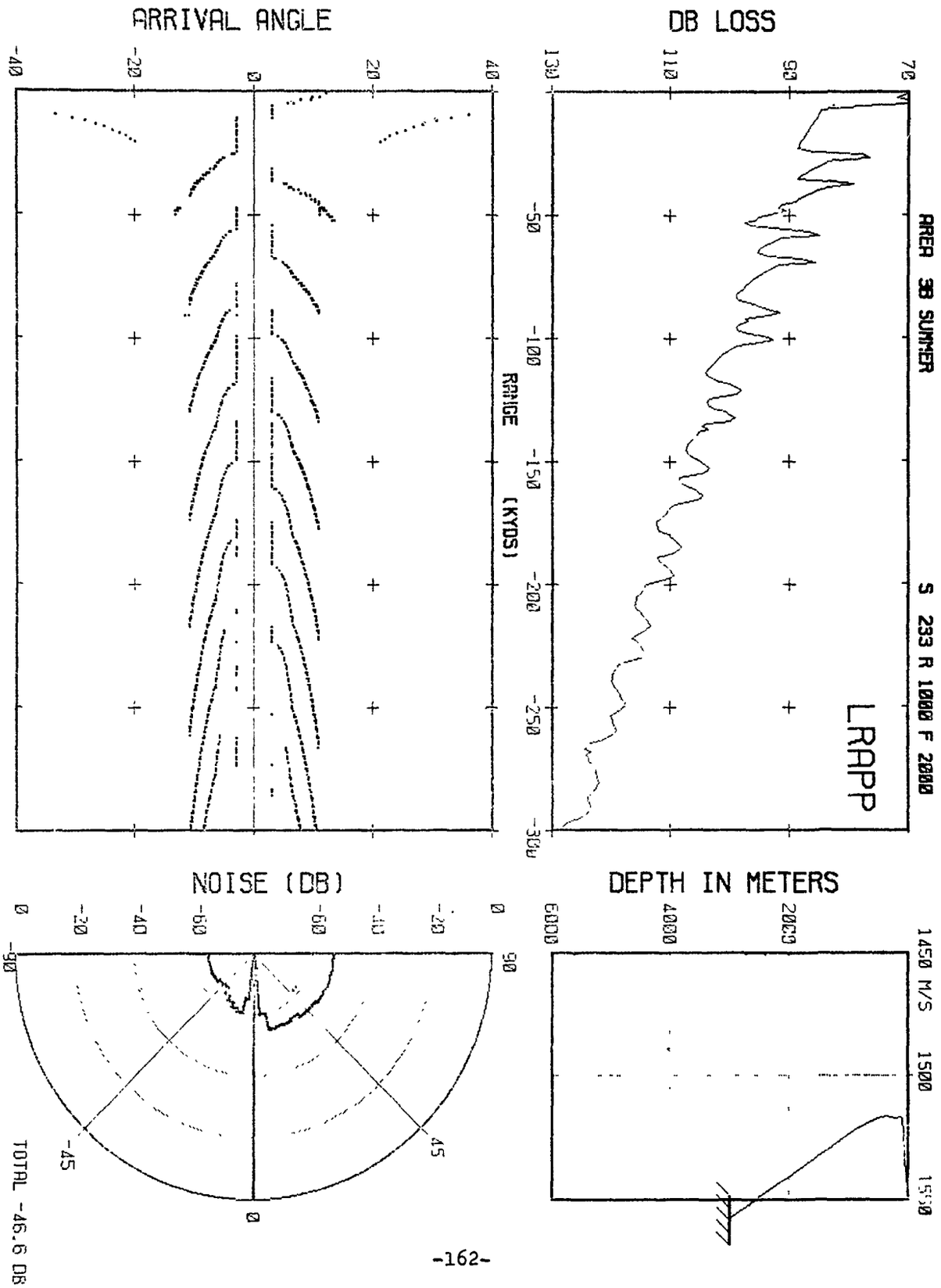
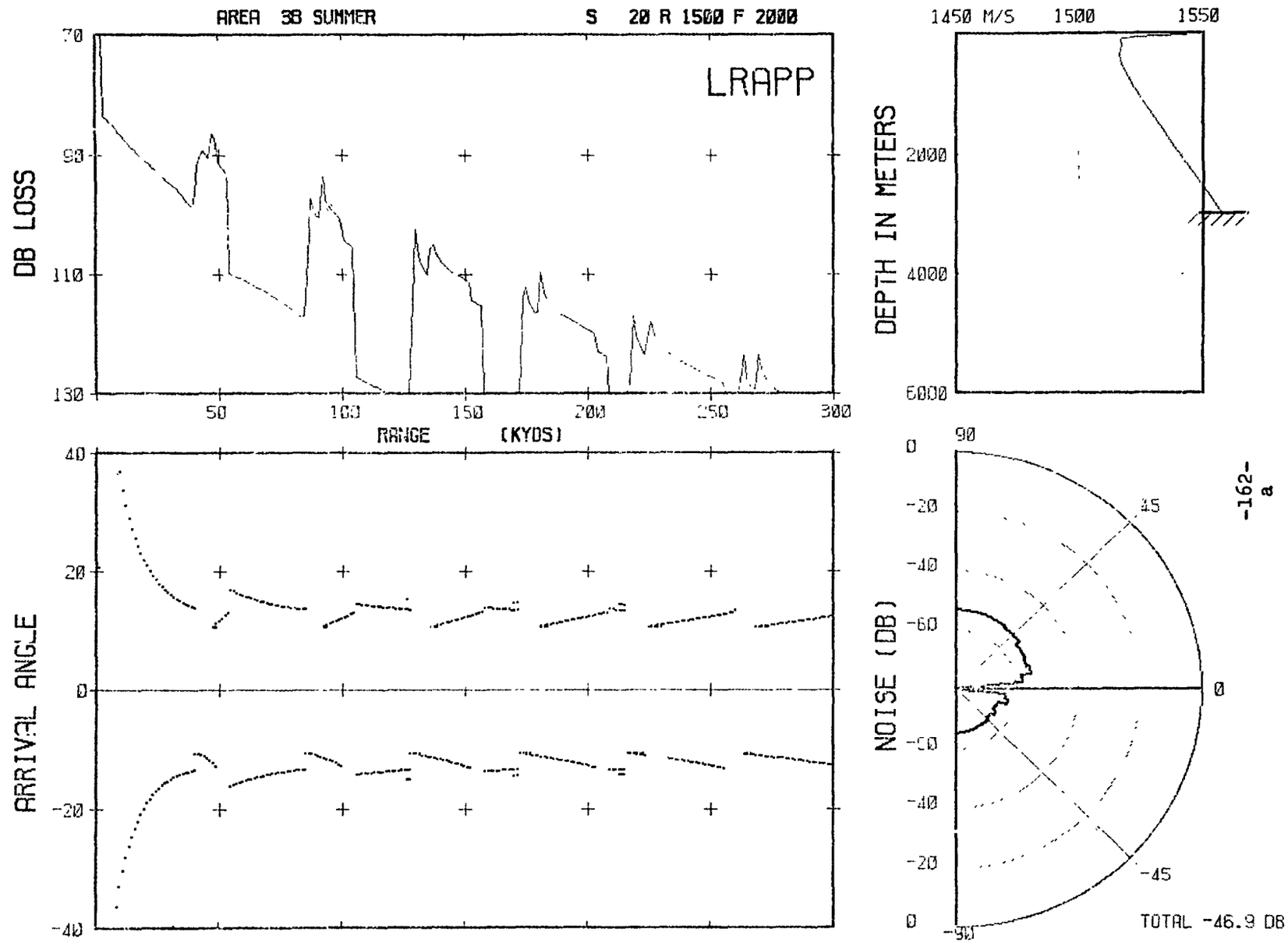
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
-45
-90
TOTAL -46.6 DB


ARRIVAL ANGLE
DB LOSS
AREA 3B SUMMER
S 233 R 1000 F 2000
LRAPP
RANGE (KYDS)
NOISE (DB)
DEPTH IN METERS
1450 M/S
1500
1550
TOTAL -46.6 DB


AREA 3B SUMMER
S 20 R 1500 F 2000
LRAPP
DB LOSS
70
90
110
130
50
100
150
200
250
300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
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-40
NOISE (DB)
90
45
0
-45
-90
TOTAL -46.9 DB

-162-
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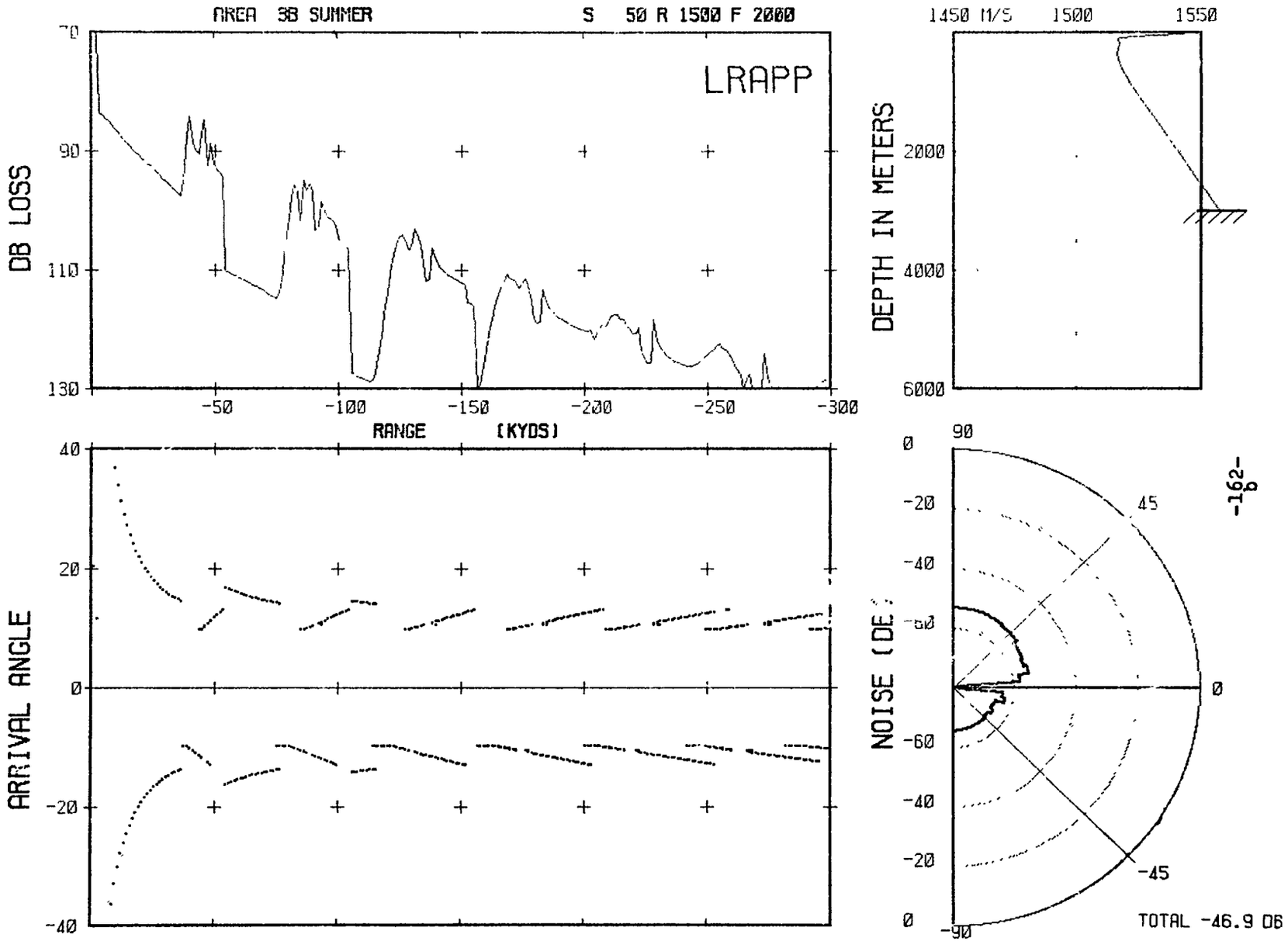
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S 50 R 1500 F 2000
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DB LOSS
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-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
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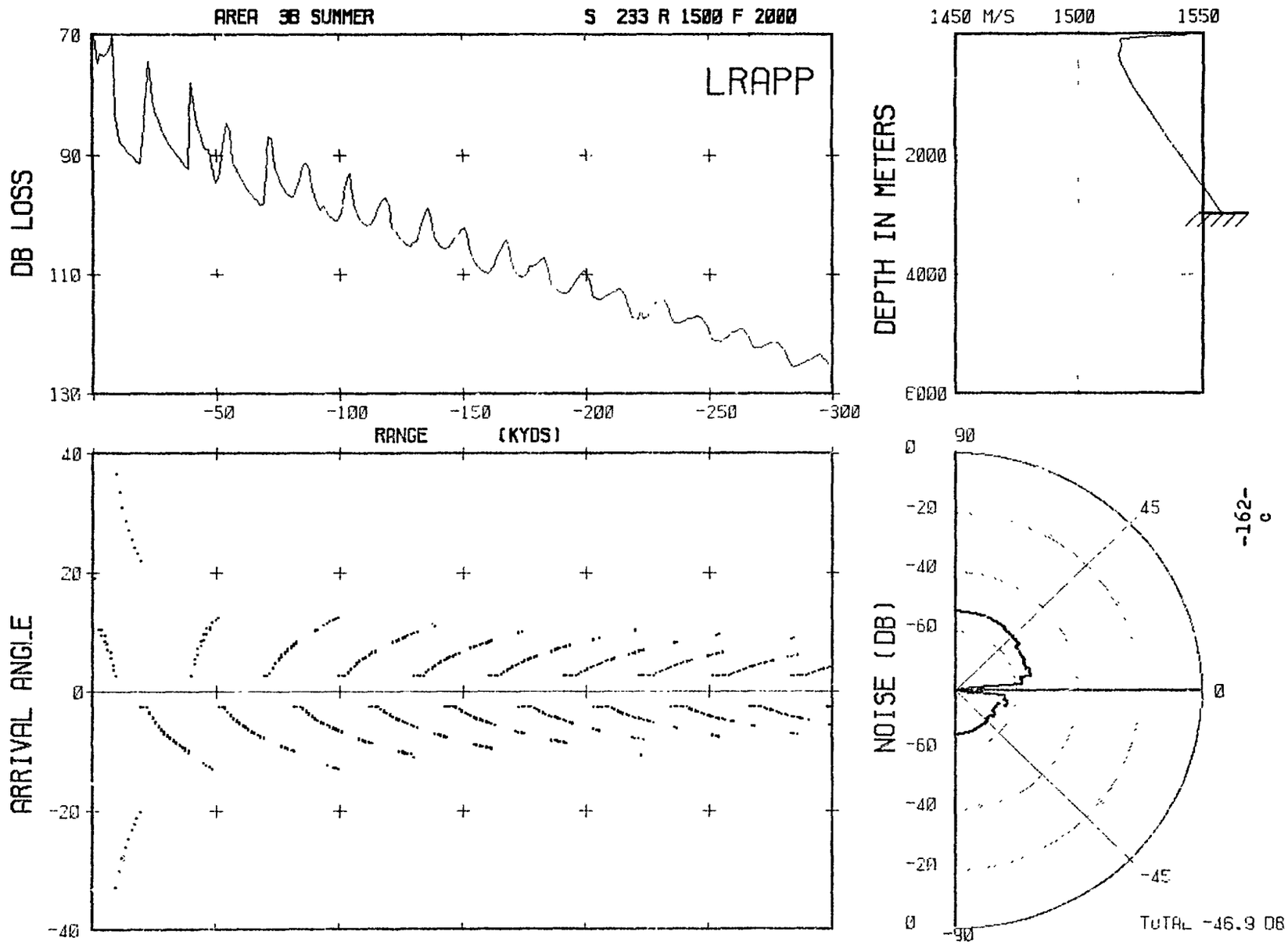
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RANGE (KYDS)
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DEPTH IN METERS
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ARRIVAL ANGLE
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NOISE (DB)
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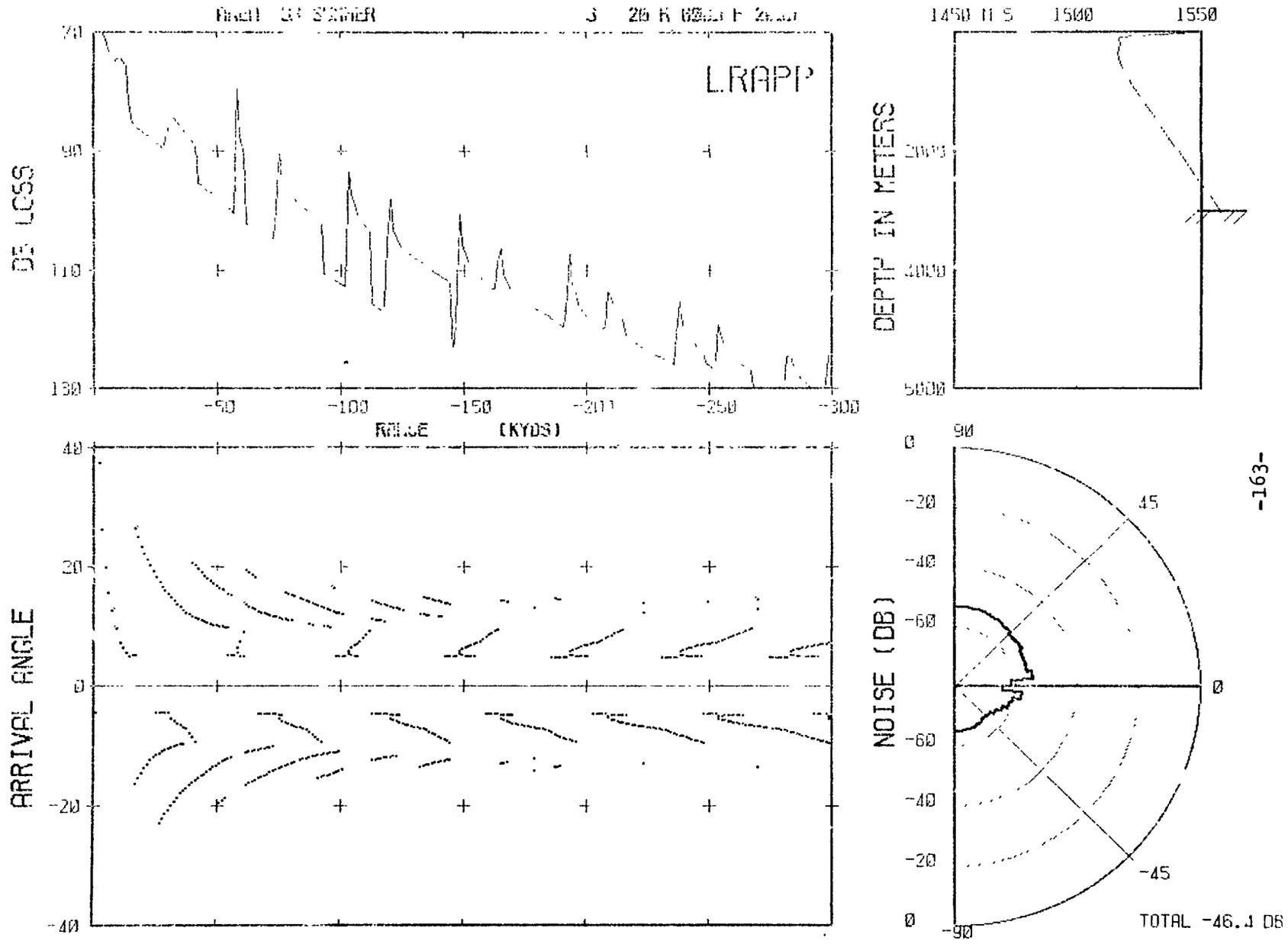

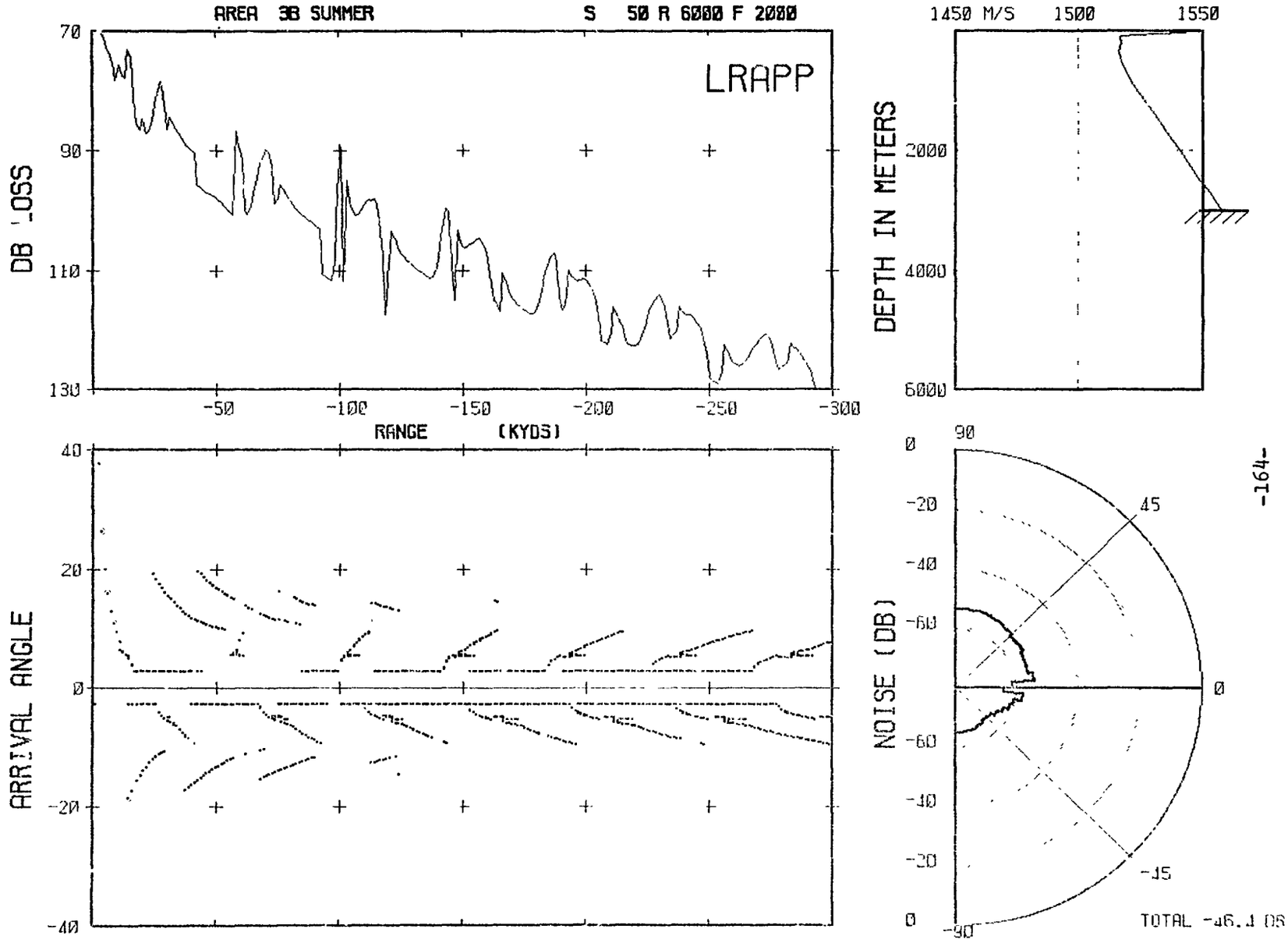
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DEPTH IN METERS
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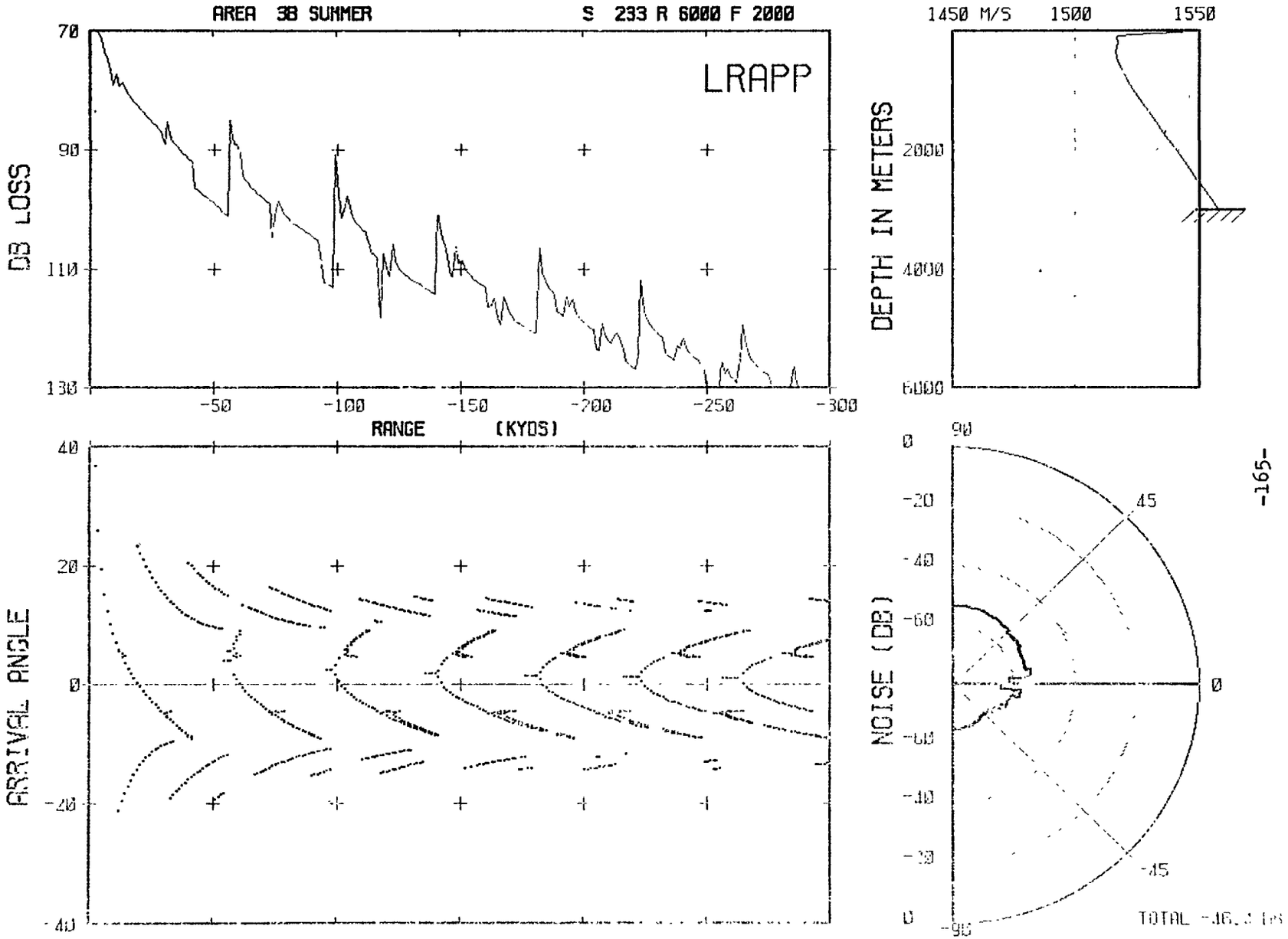
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DEPTH IN METERS
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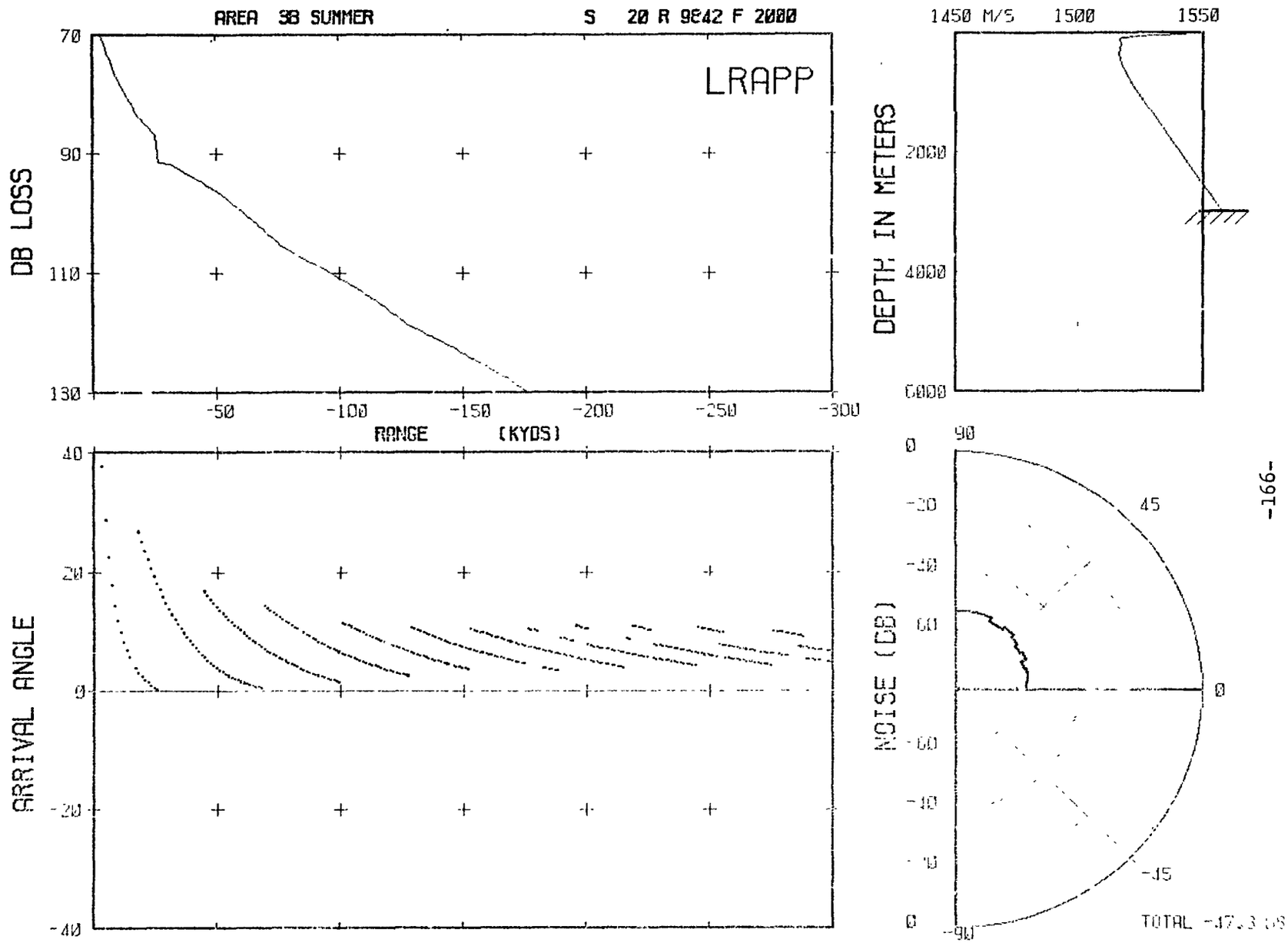
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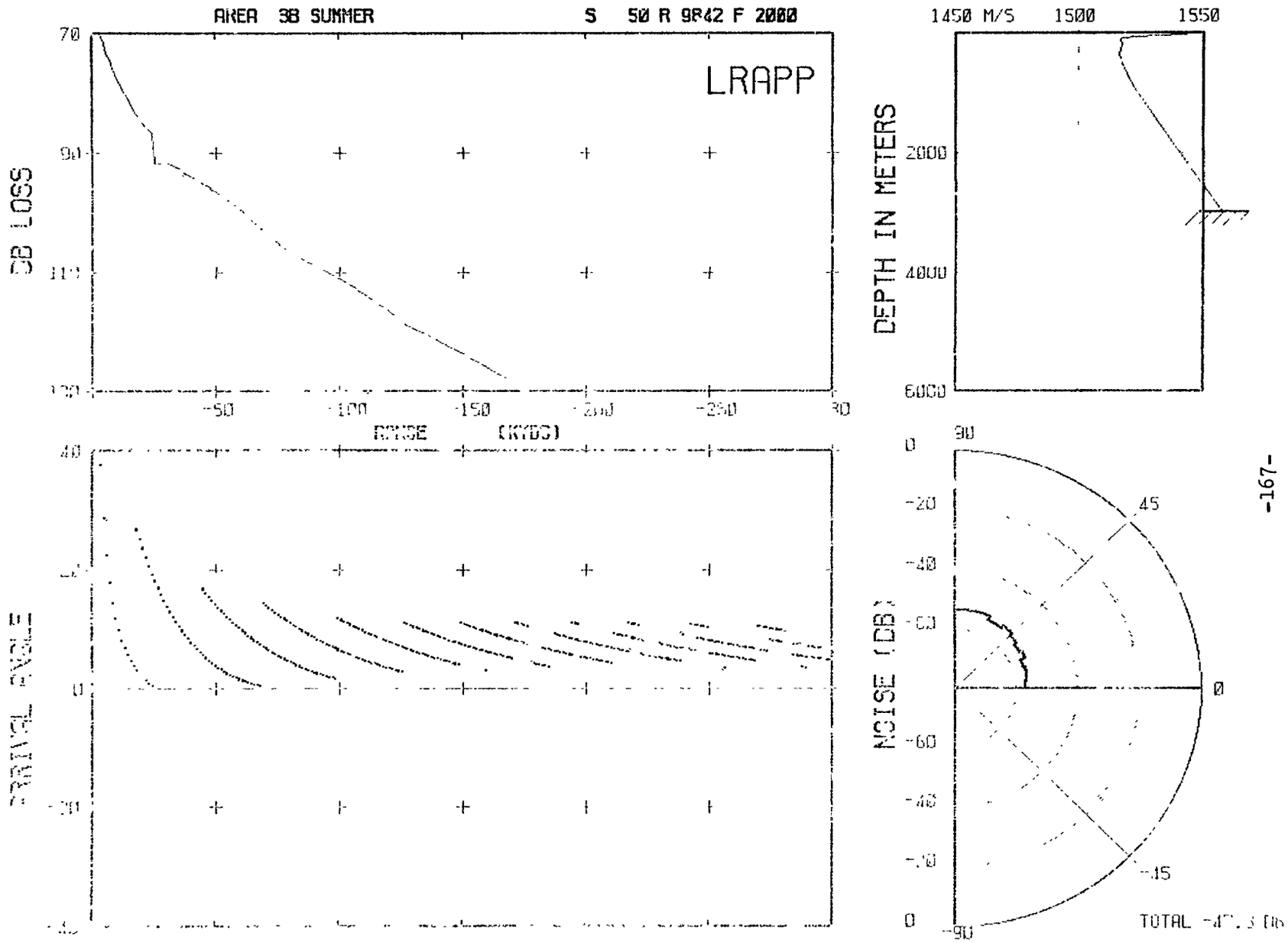
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DB LOSS
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ARRIVAL ANGLE
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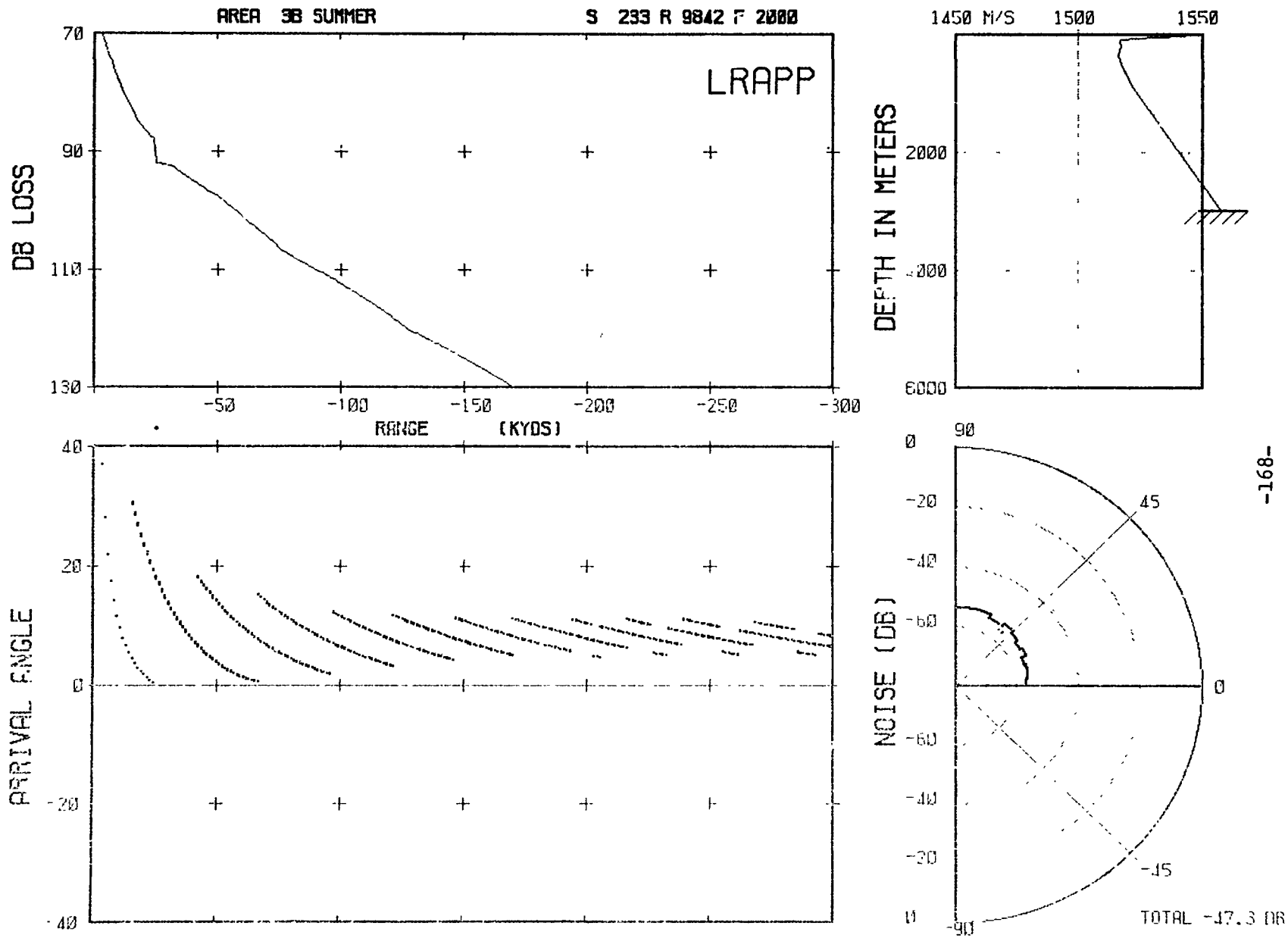
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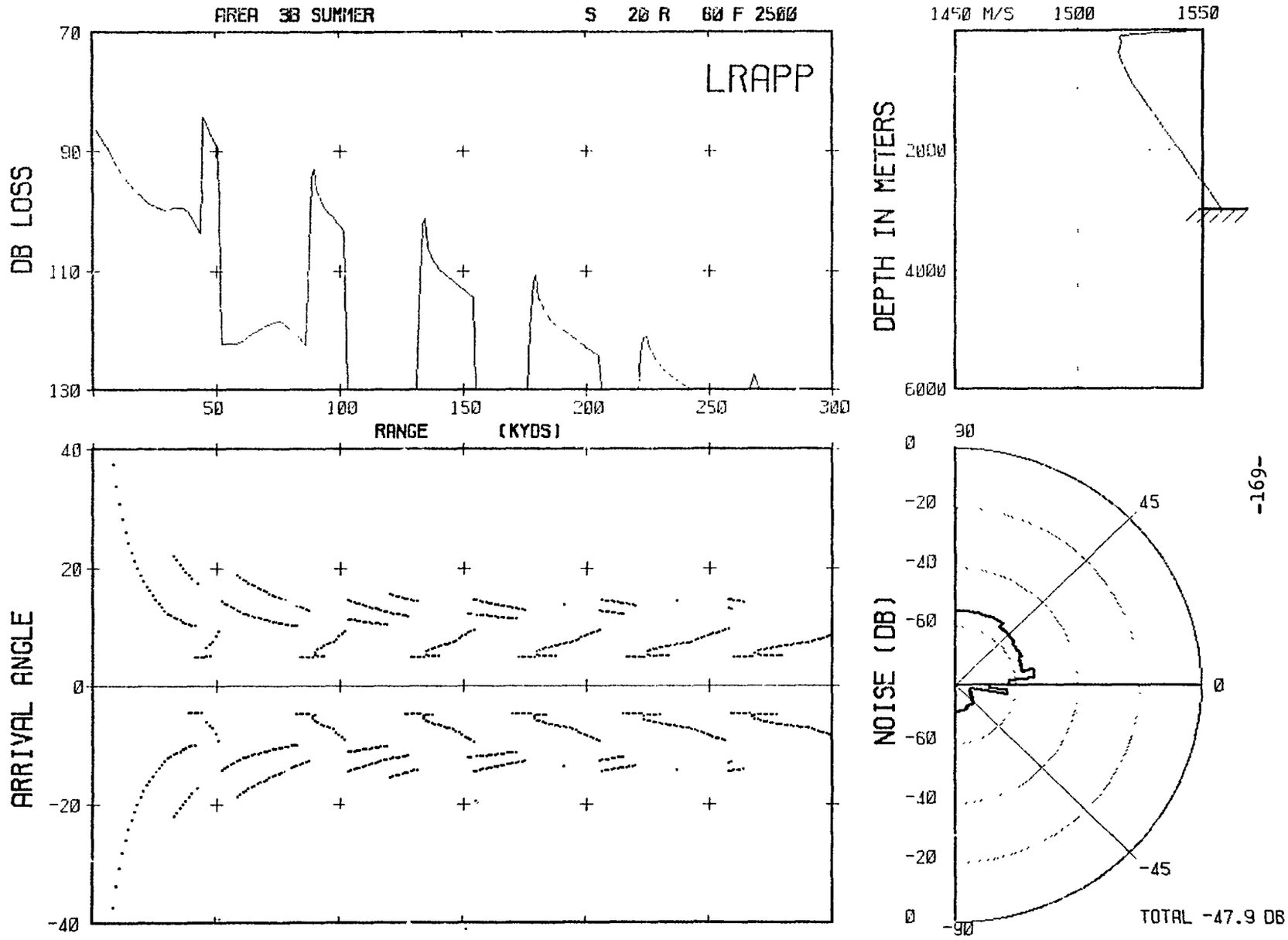
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ARRIVAL ANGLE
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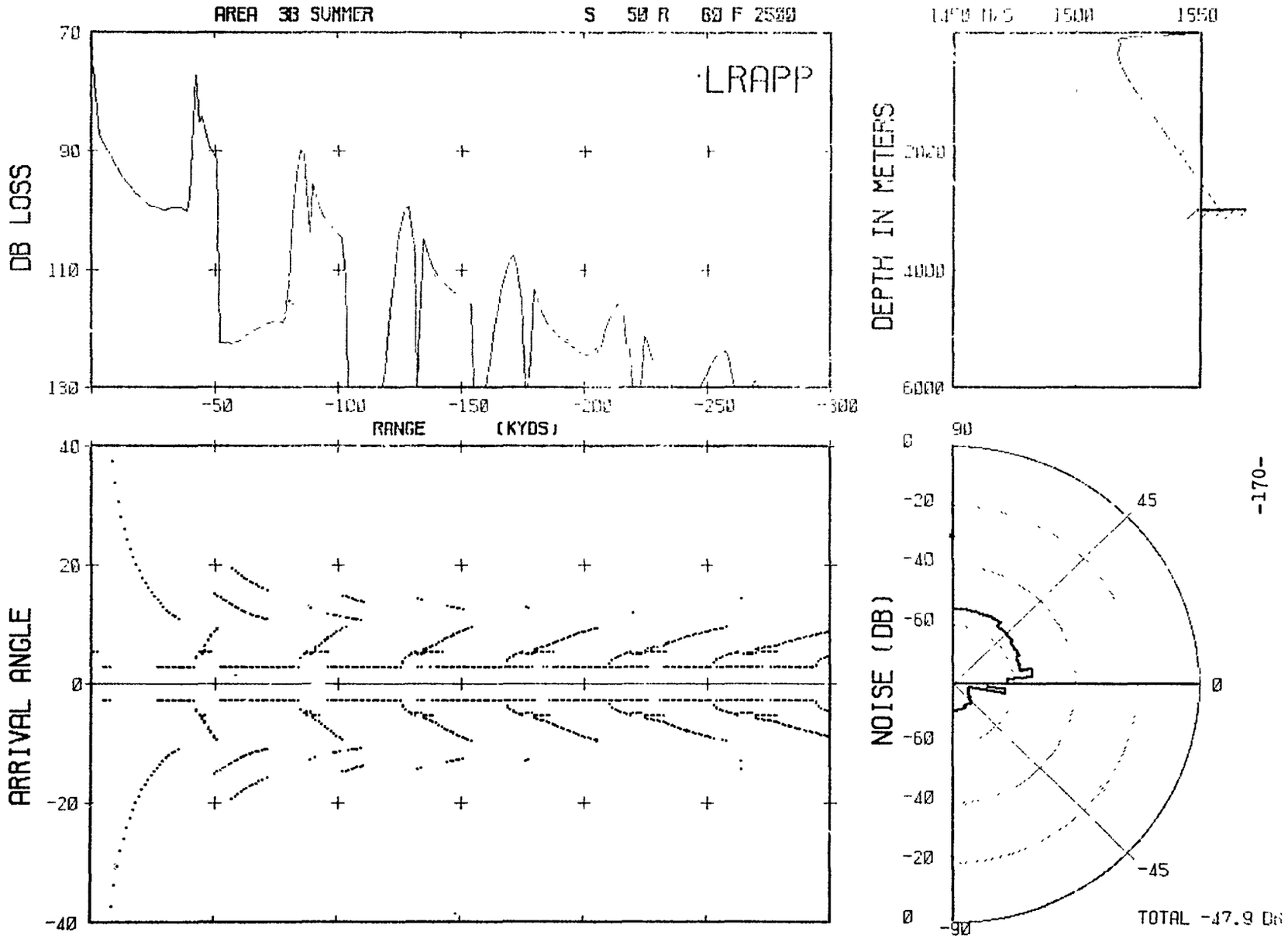
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DEPTH IN METERS
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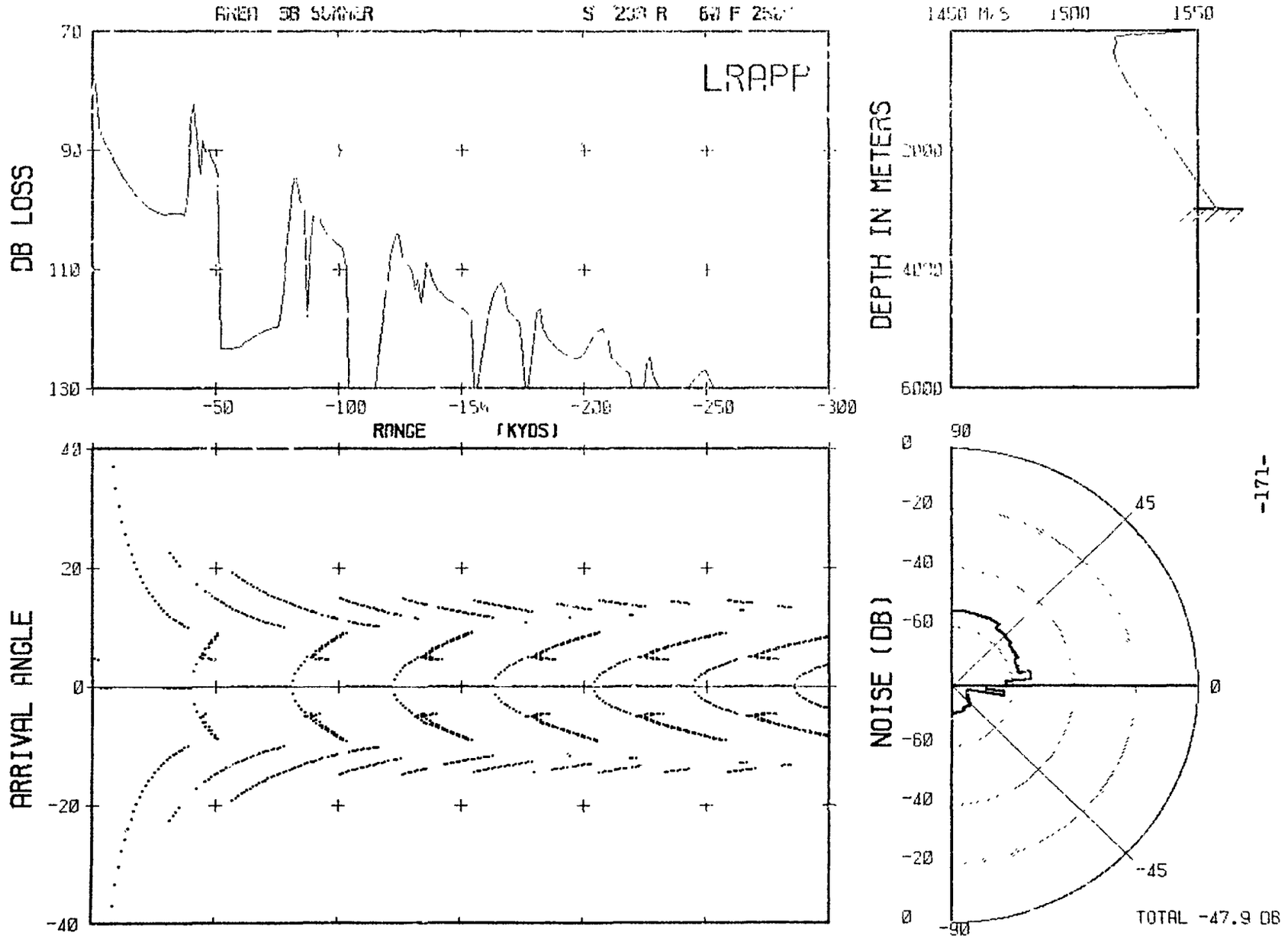
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DEPTH IN METERS
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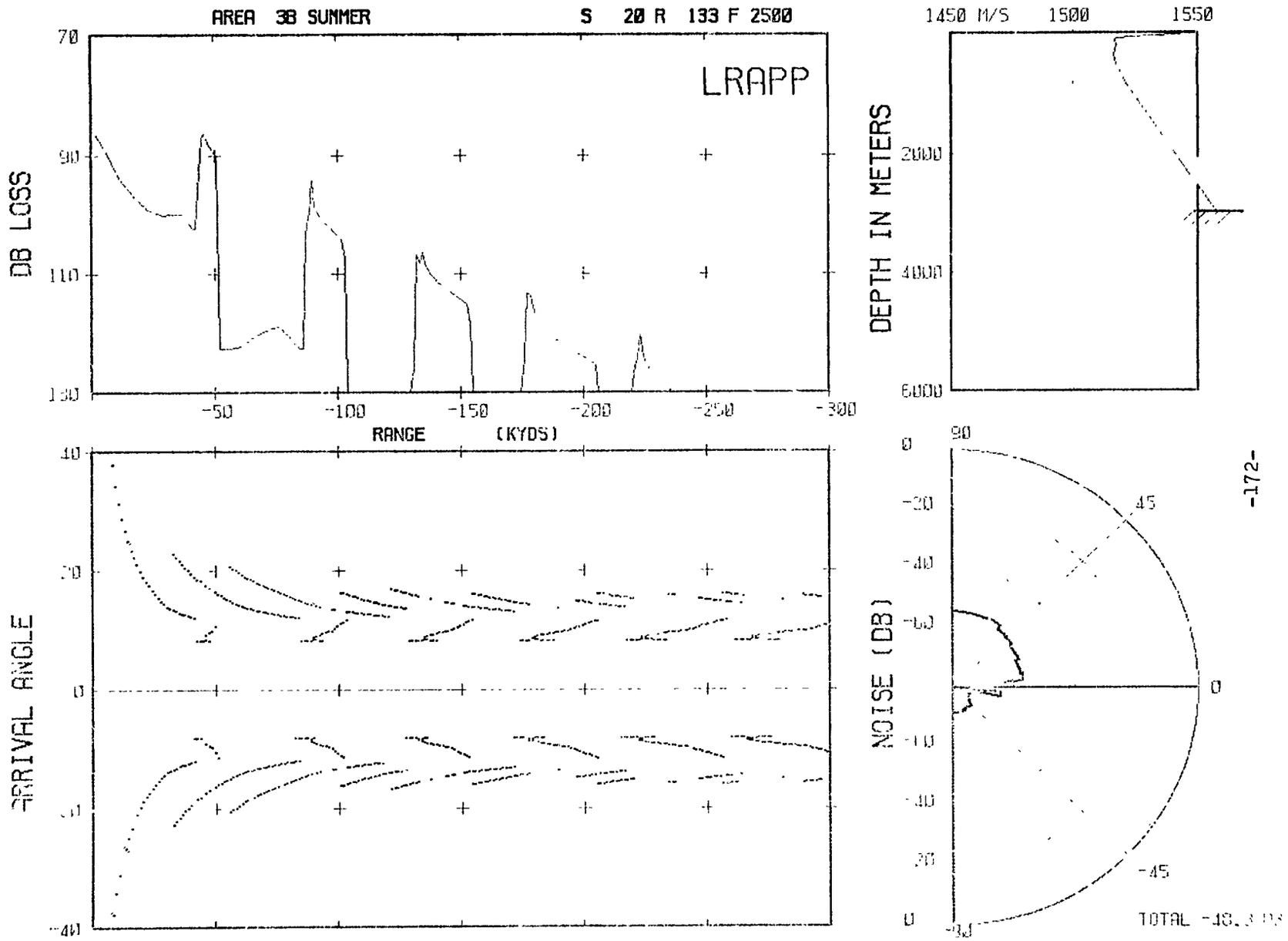
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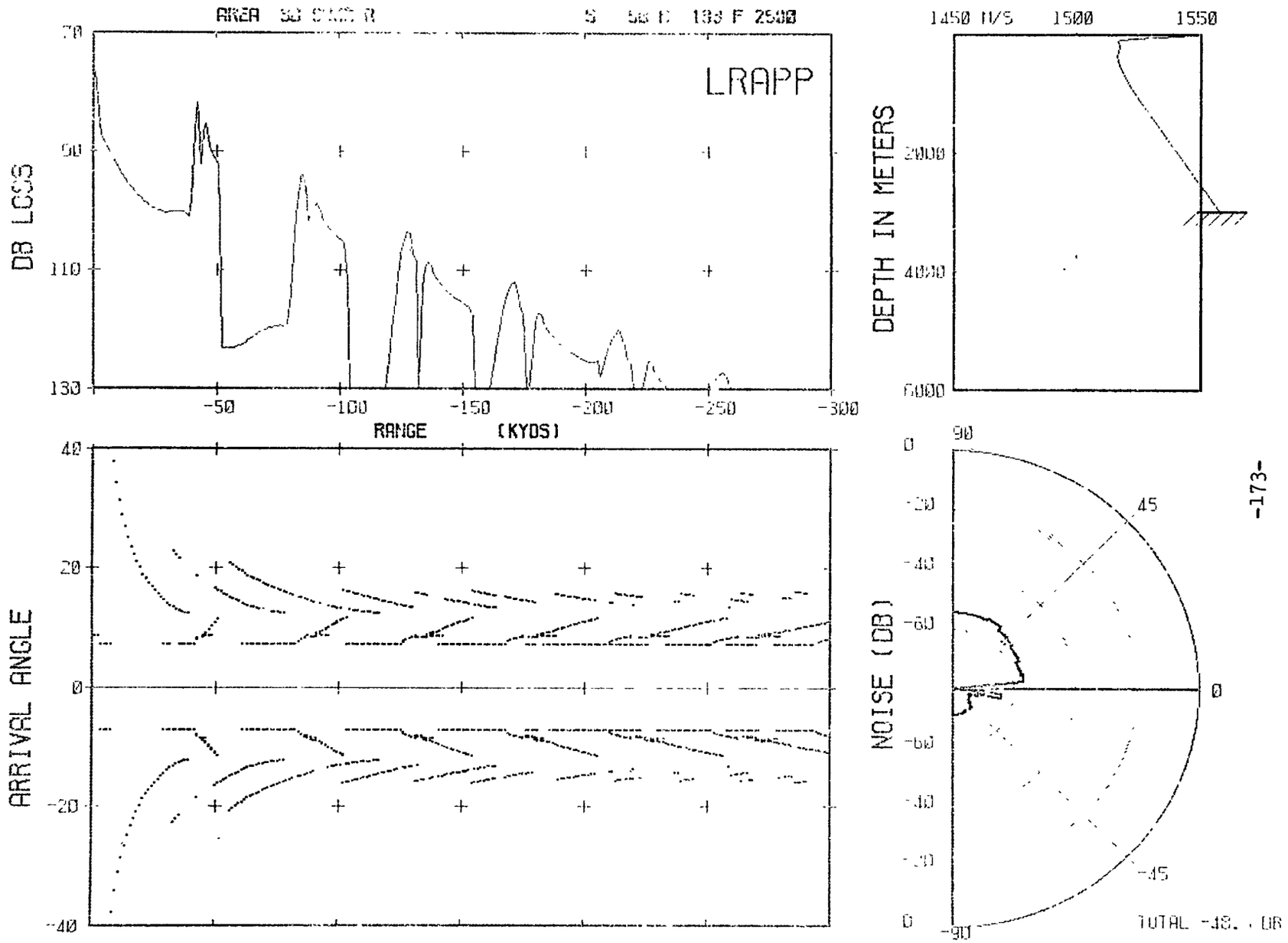
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RANGE (KYDS)
DEPTH IN METERS
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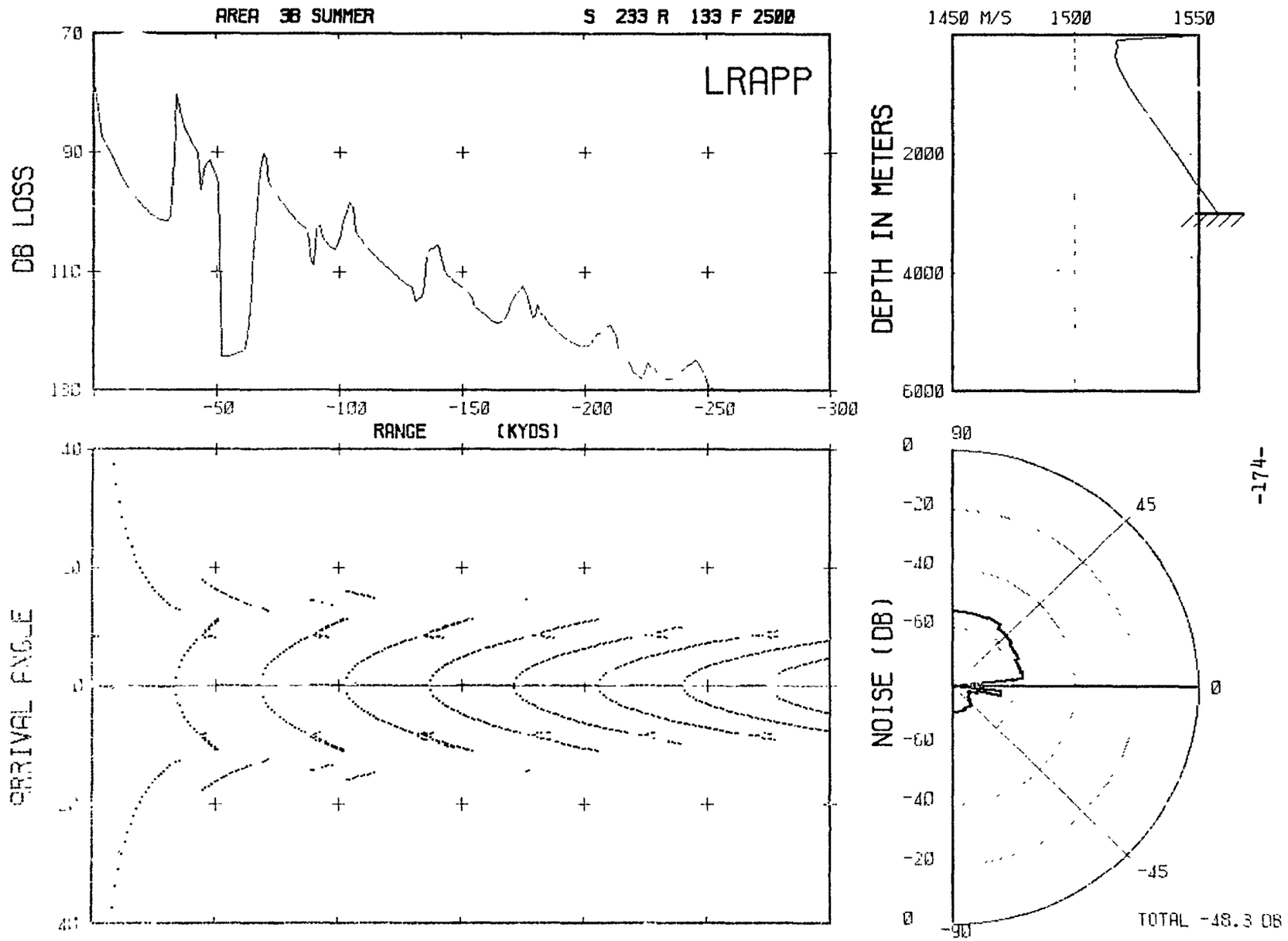
AREA 3B SUMMER
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DEPTH IN METERS
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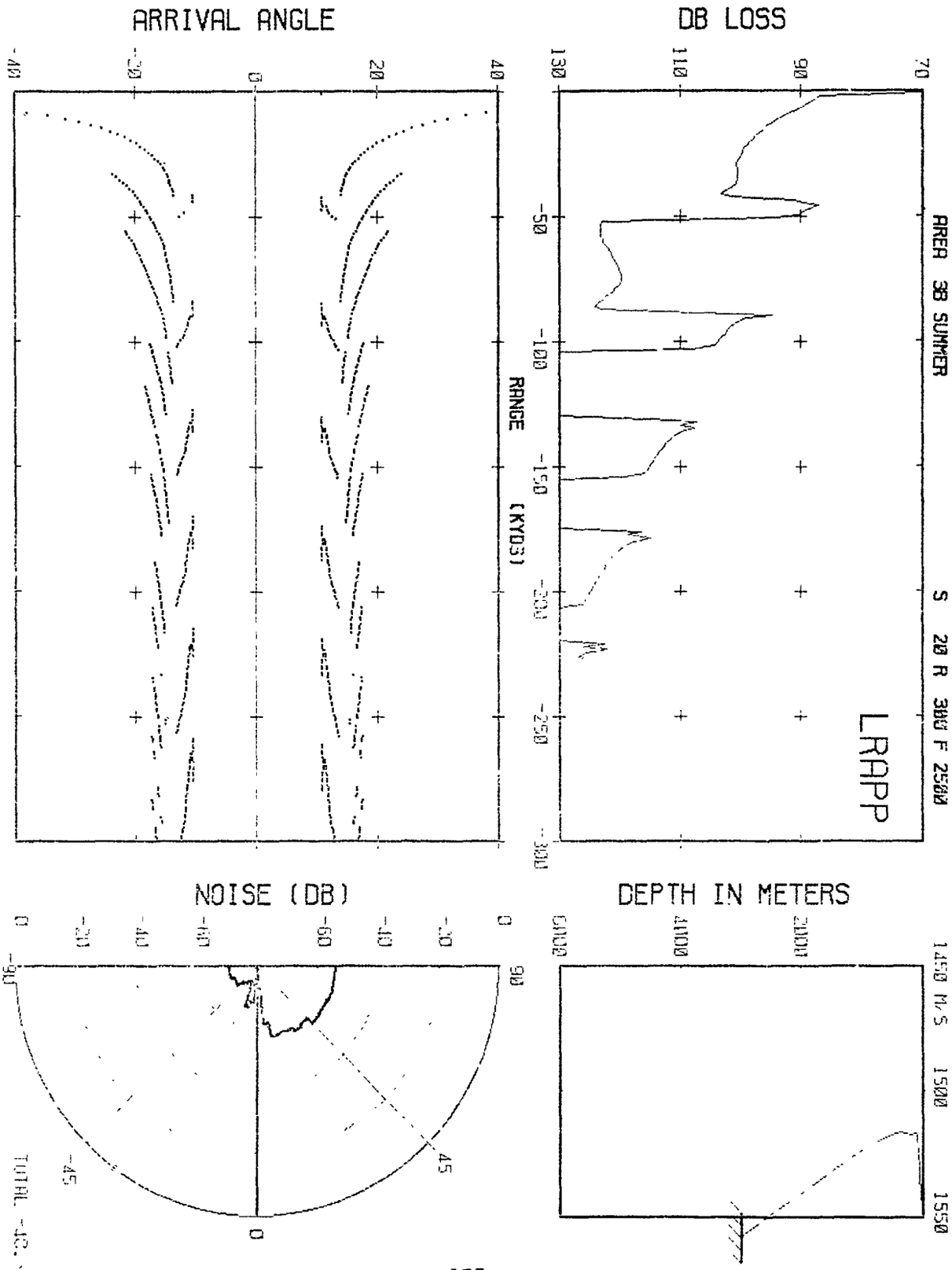
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RANGE (KYDS)
ARRIVAL ANGLE
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DEPTH IN METERS
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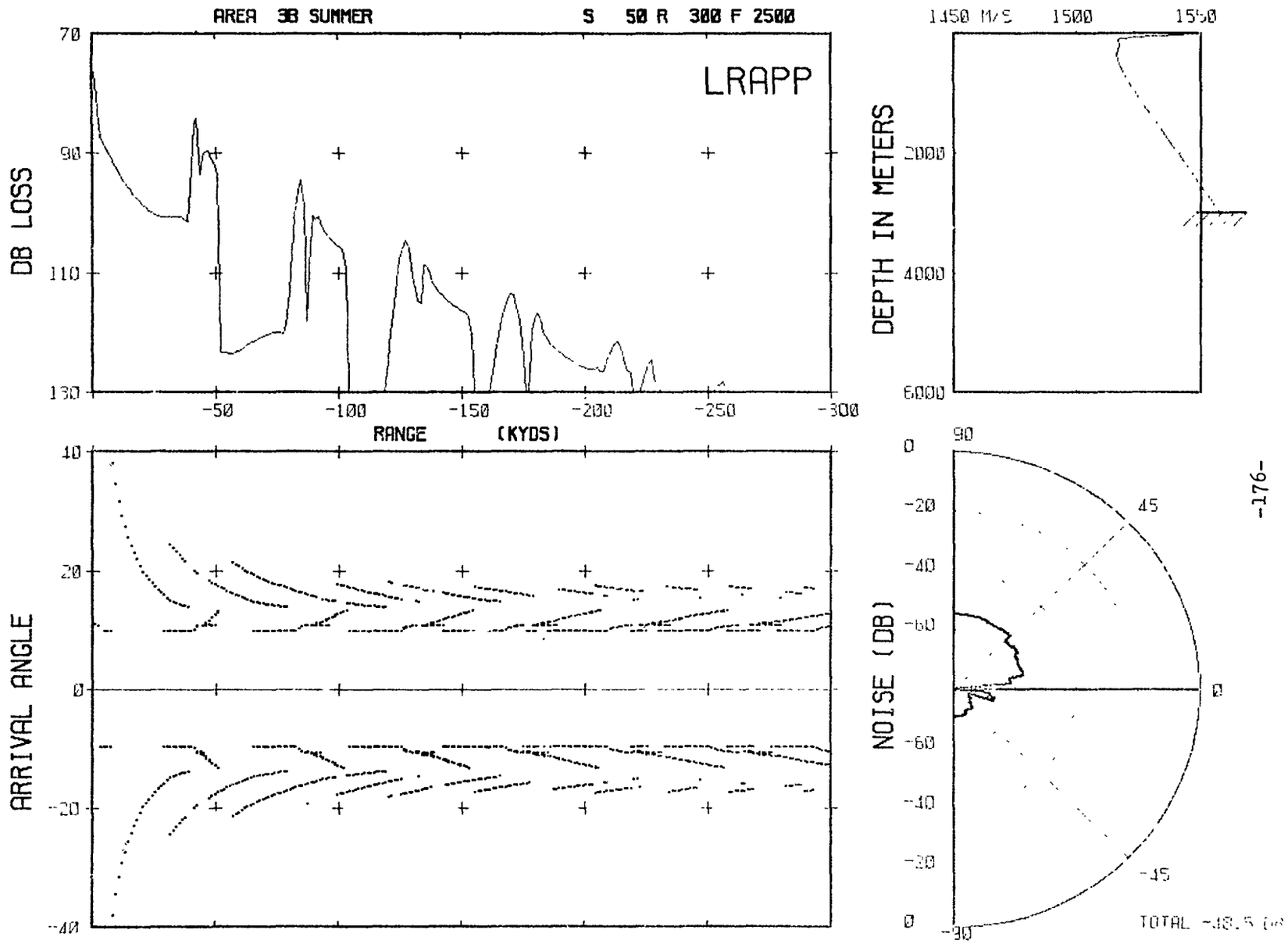
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RANGE (KYDS)
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DEPTH IN METERS
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ARRIVAL ANGLE
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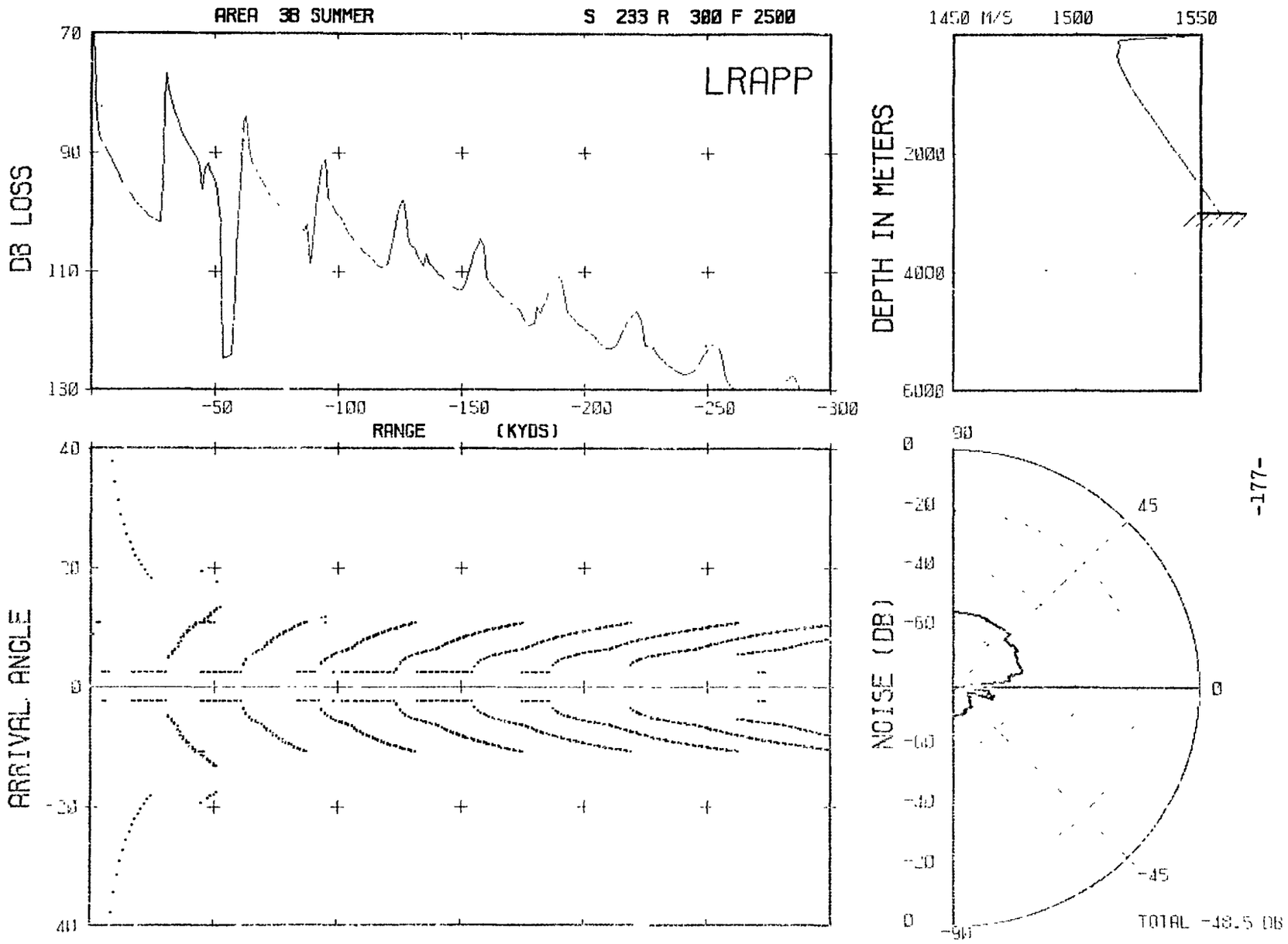
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RANGE (KYDS)
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DEPTH IN METERS
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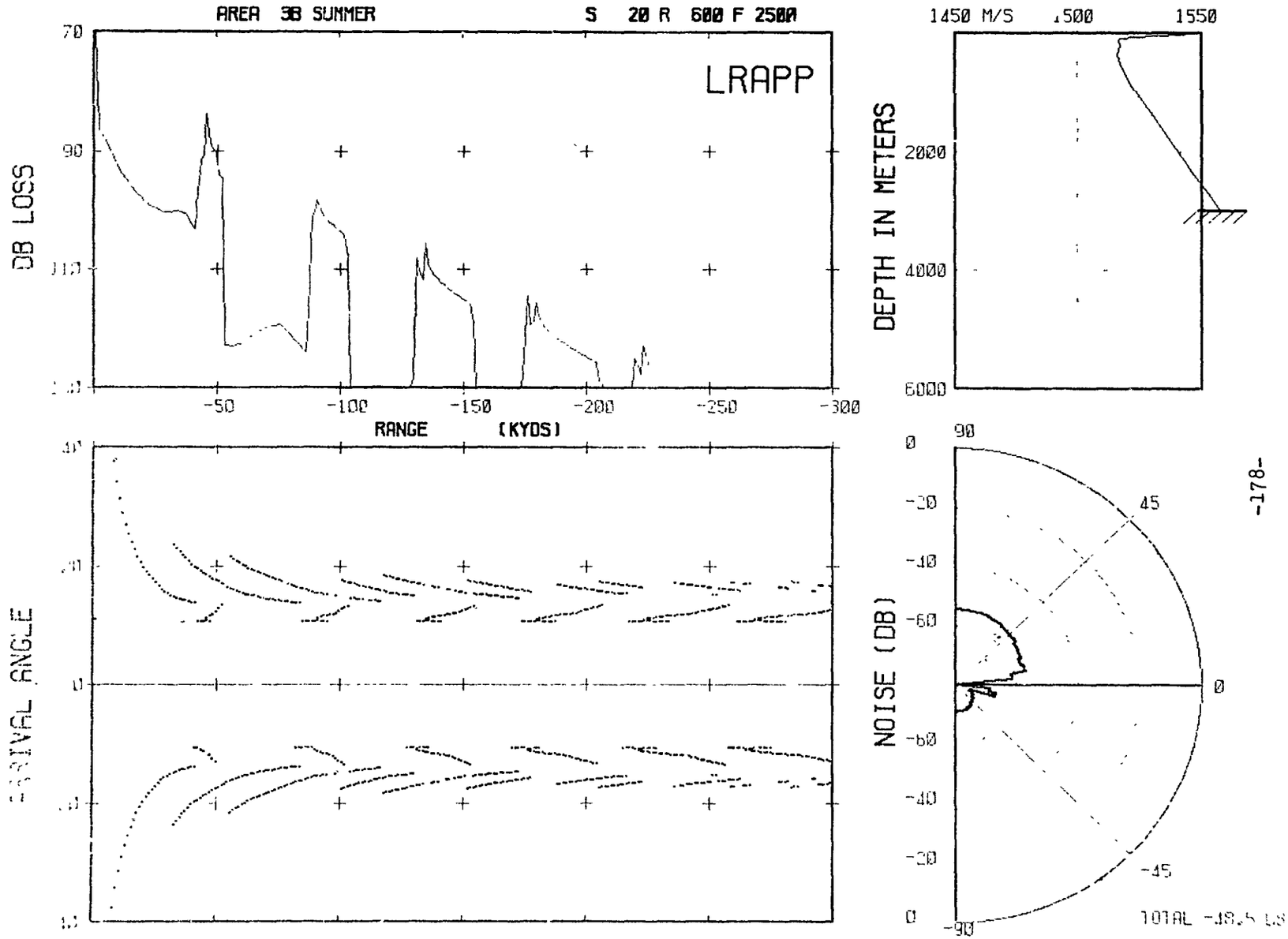
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RANGE (KYDS)
ARRIVAL ANGLE
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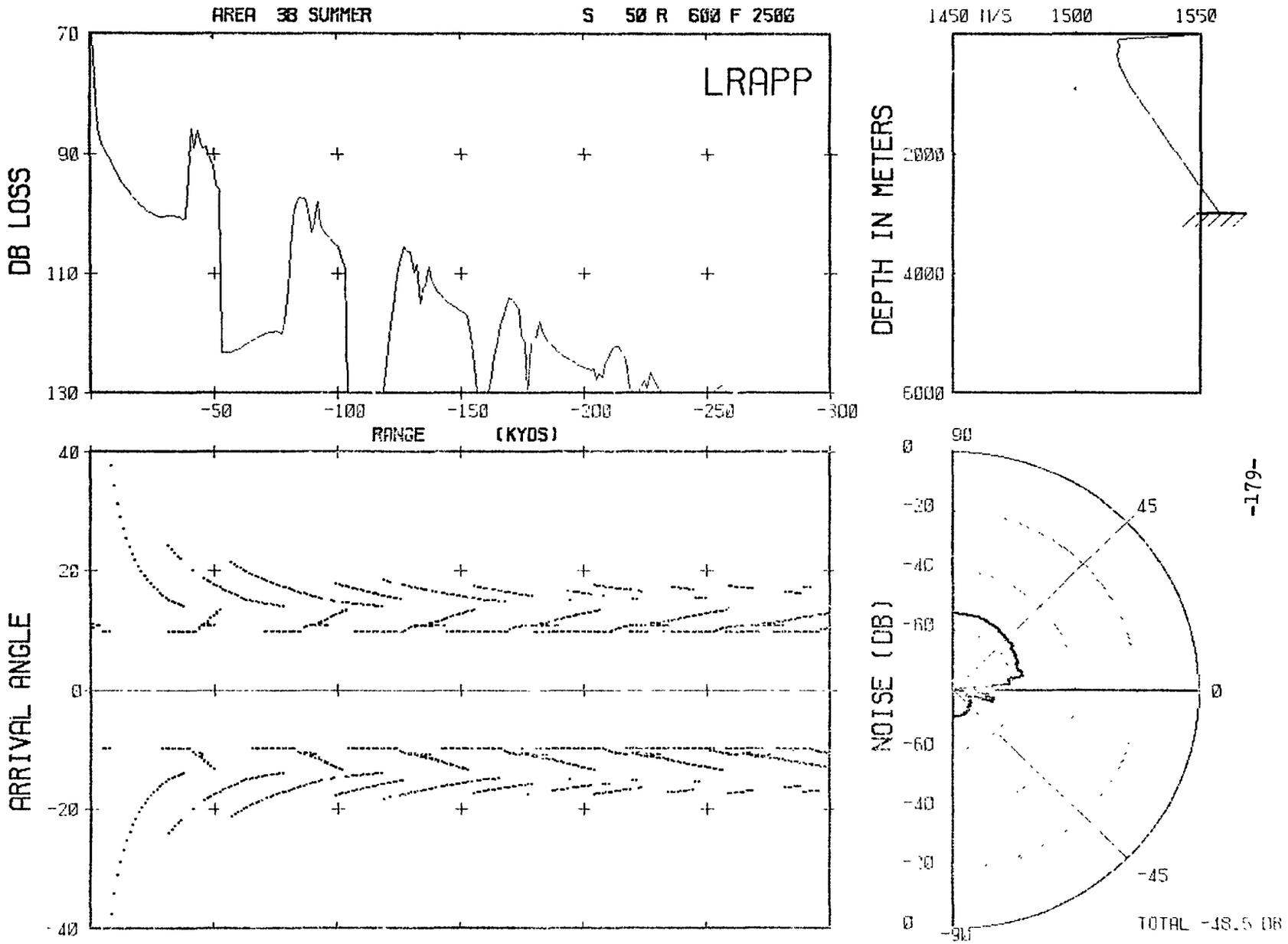
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RANGE (KYDS)
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DEPTH IN METERS
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NOISE (DB)
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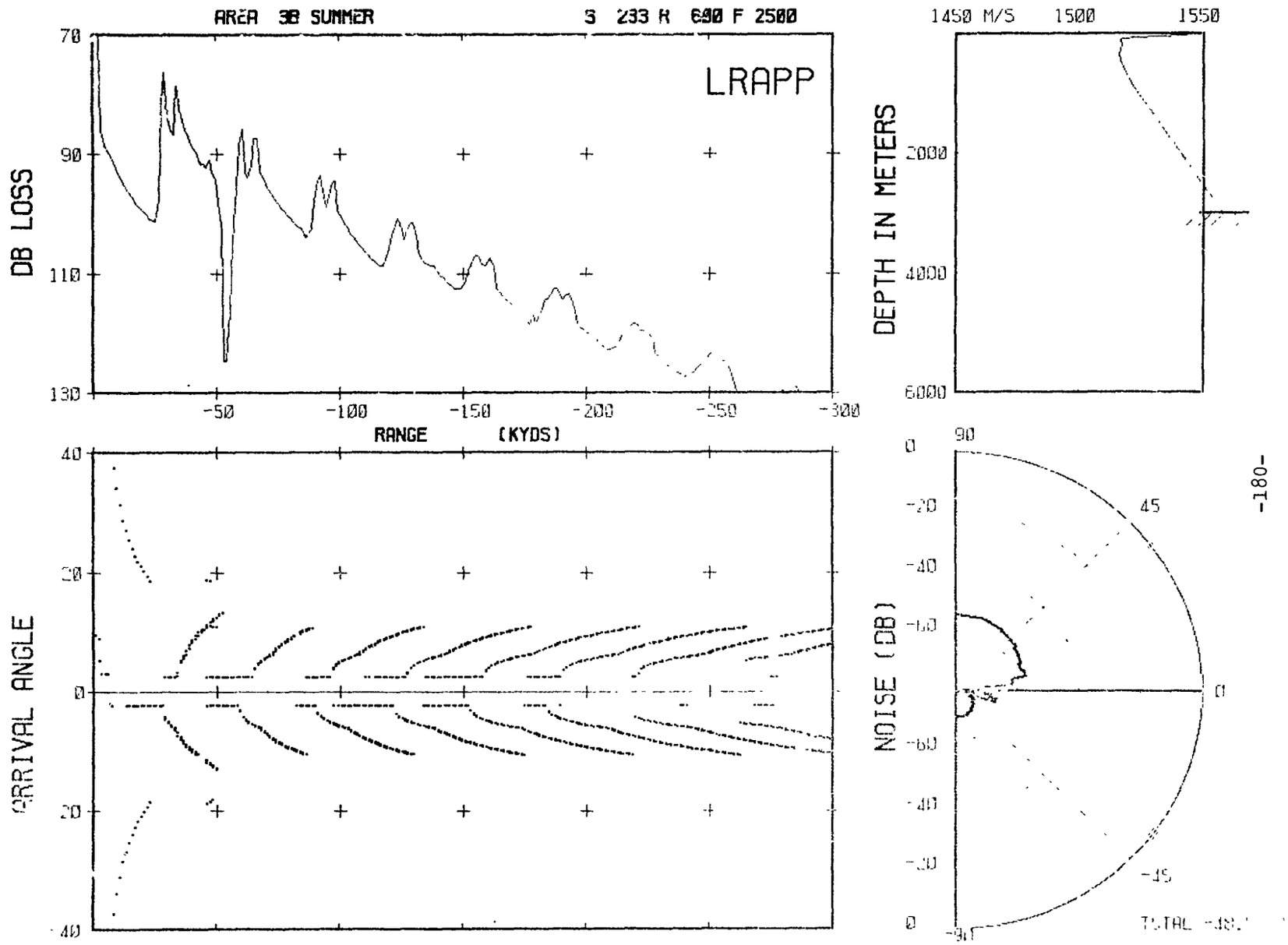
TOTAL -48.5 DB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RANGE (KYDS)
ARRIVAL ANGLE
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DEPTH IN METERS
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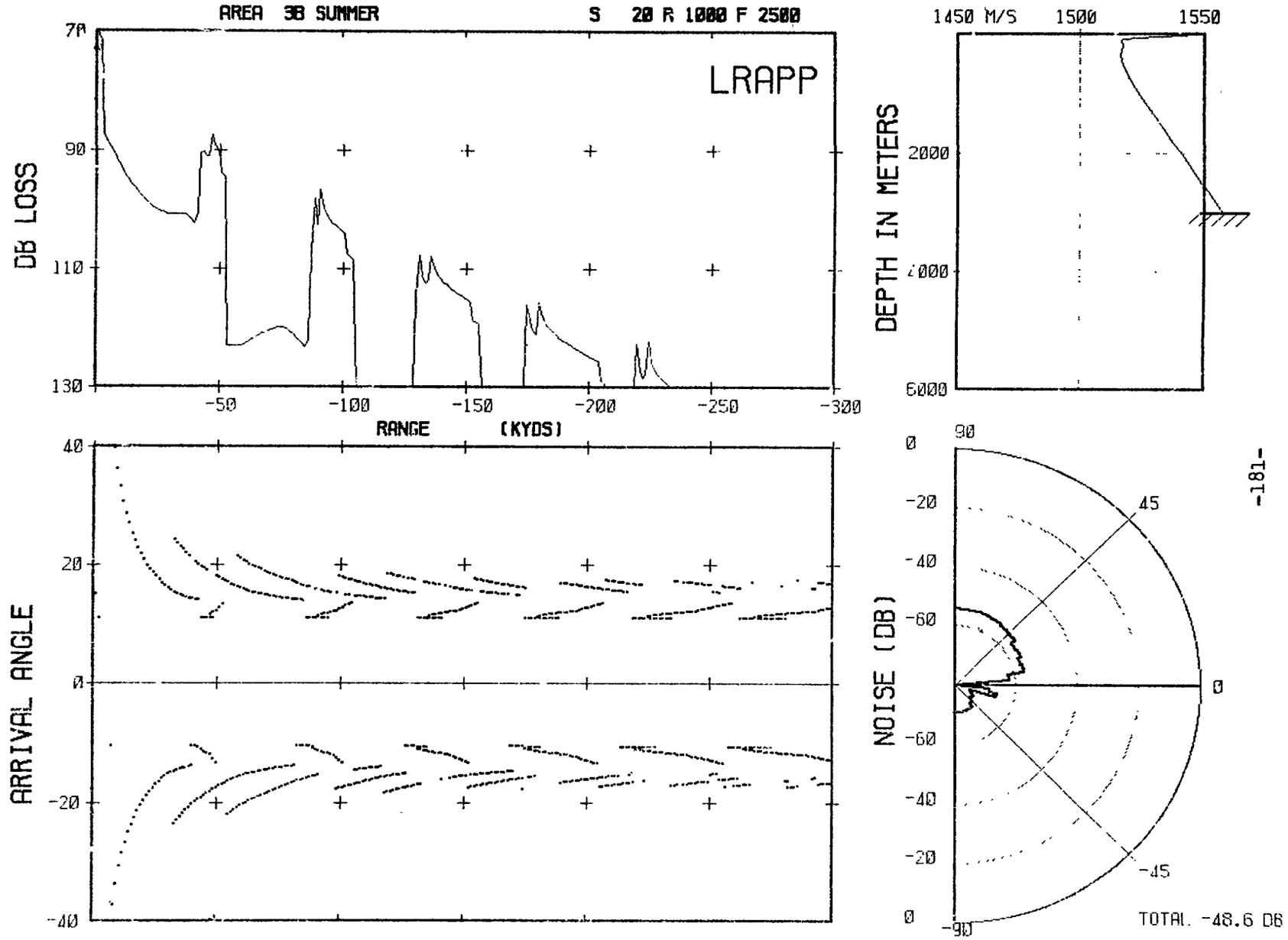
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RANGE (KYDS)
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DEPTH IN METERS
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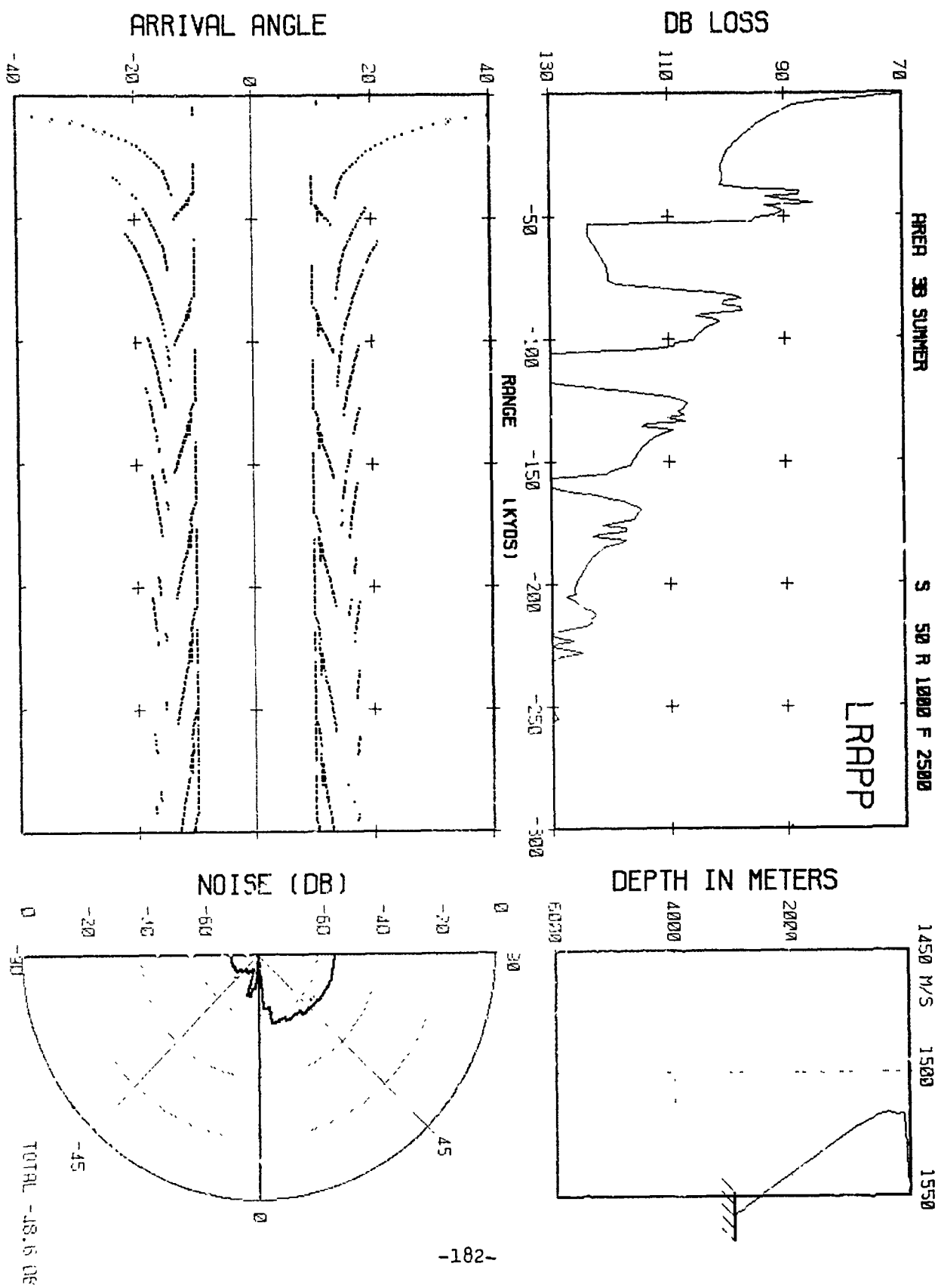
ARRIVAL ANGLE
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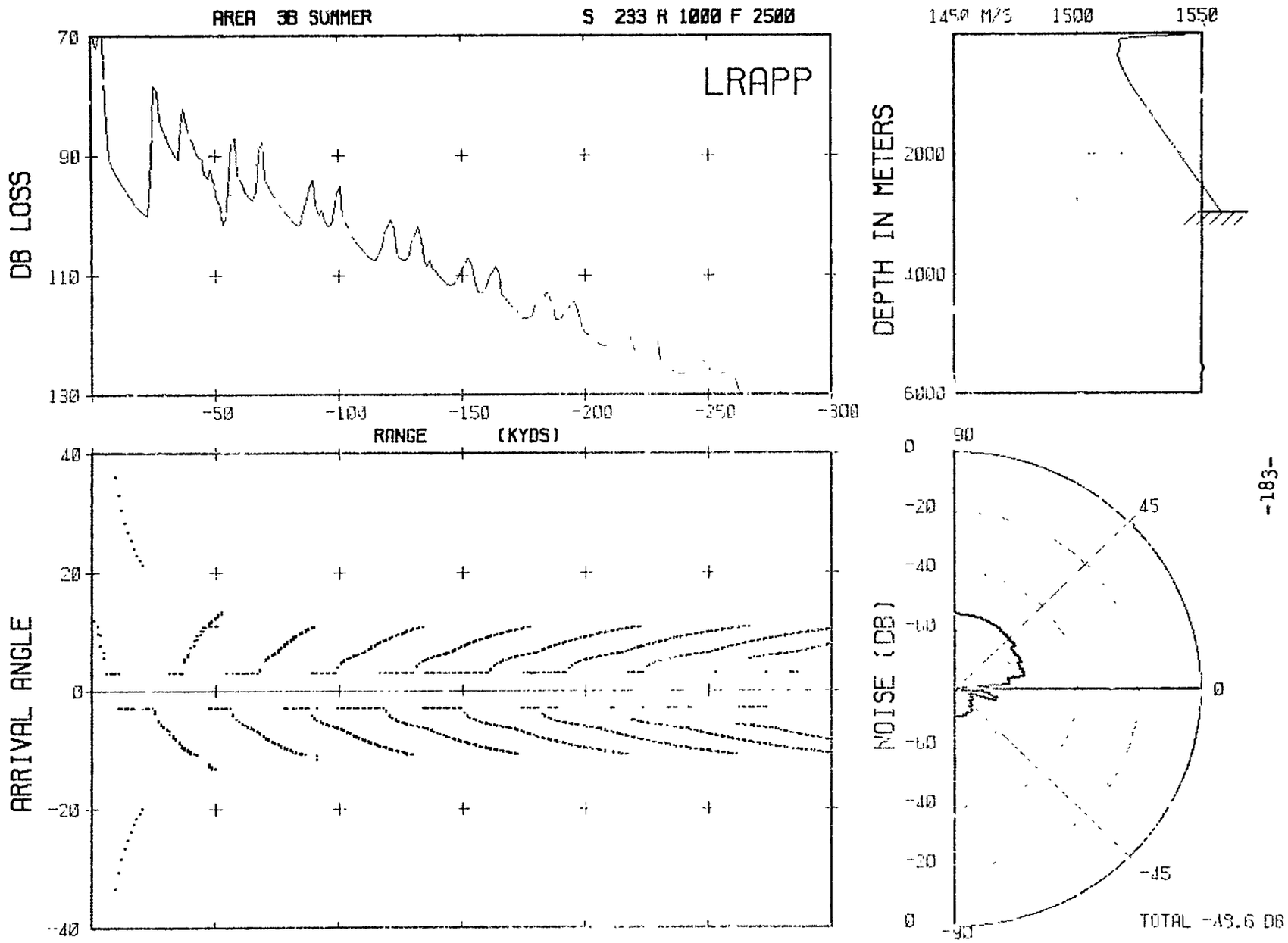
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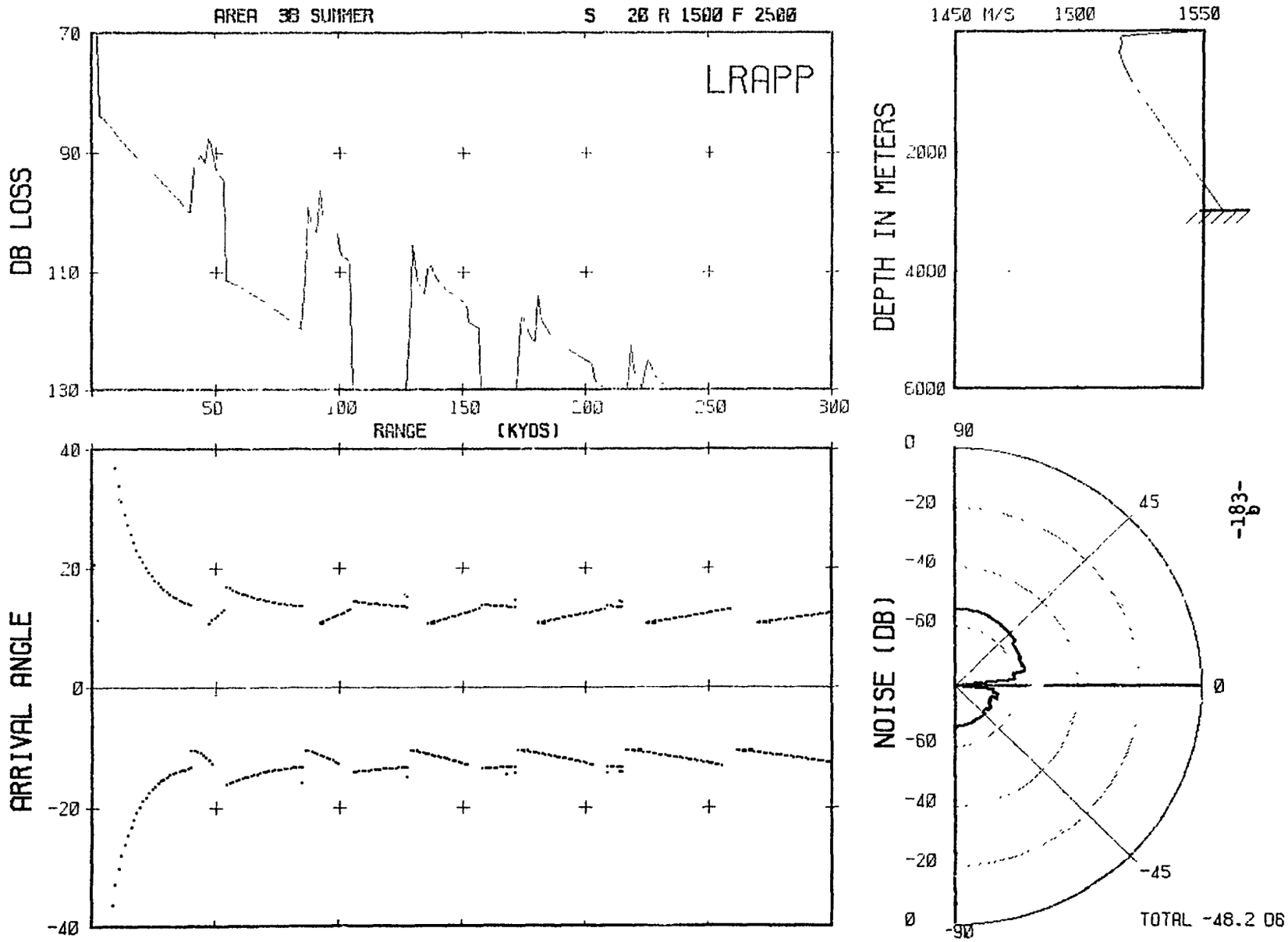
TOTAL -49.6 DB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RANGE (KYDS)
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DEPTH IN METERS
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ARRIVAL ANGLE
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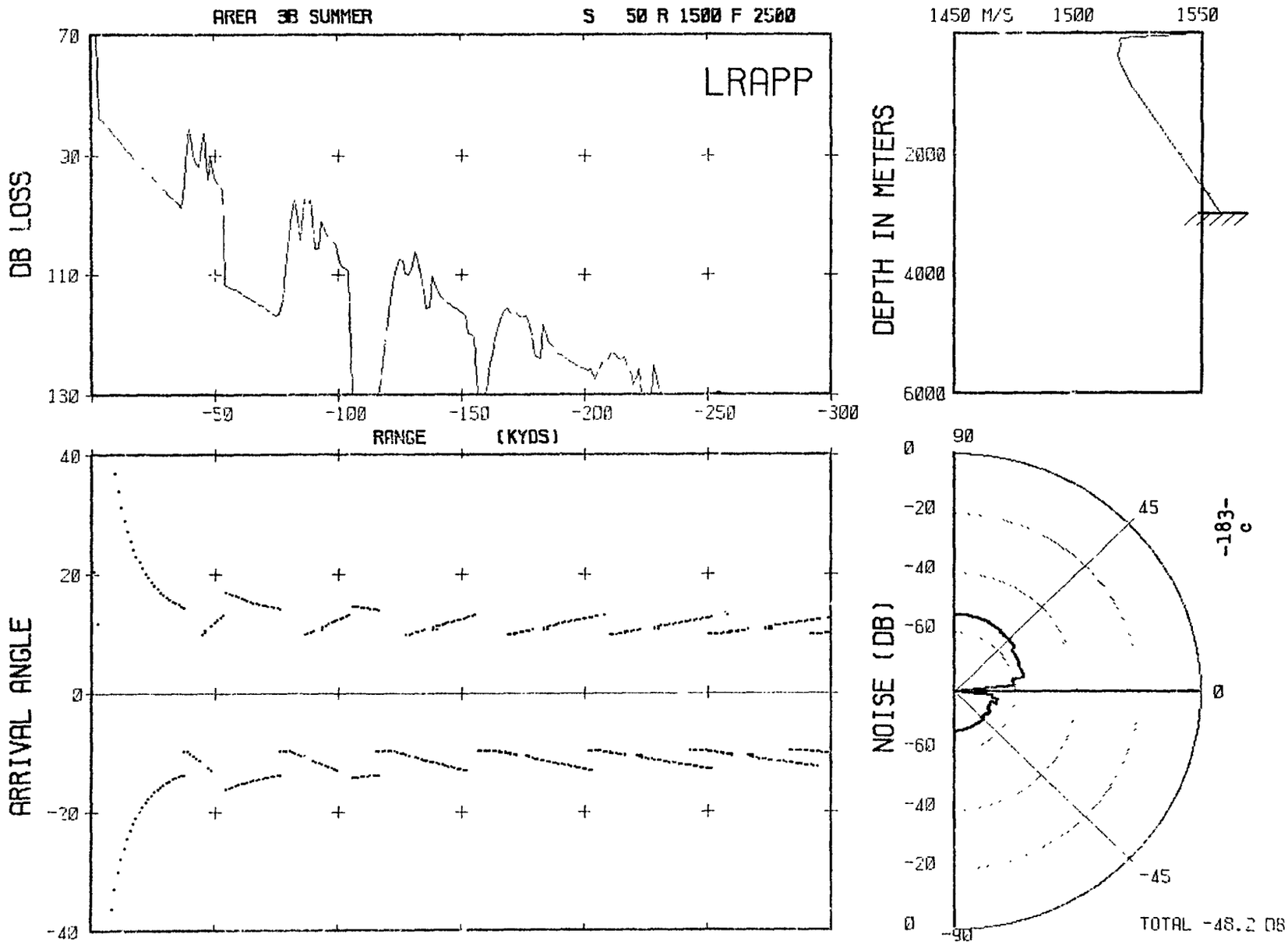
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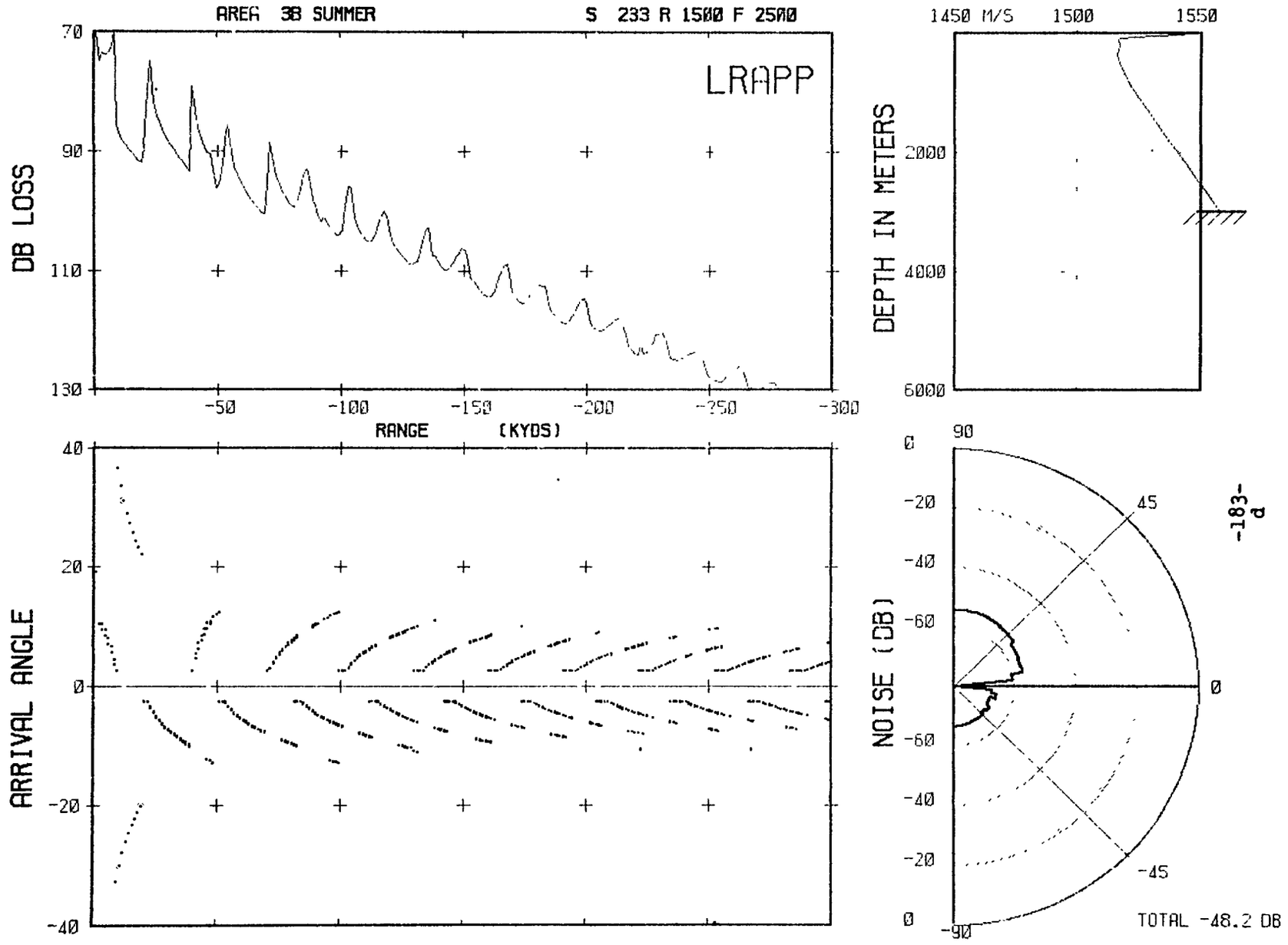
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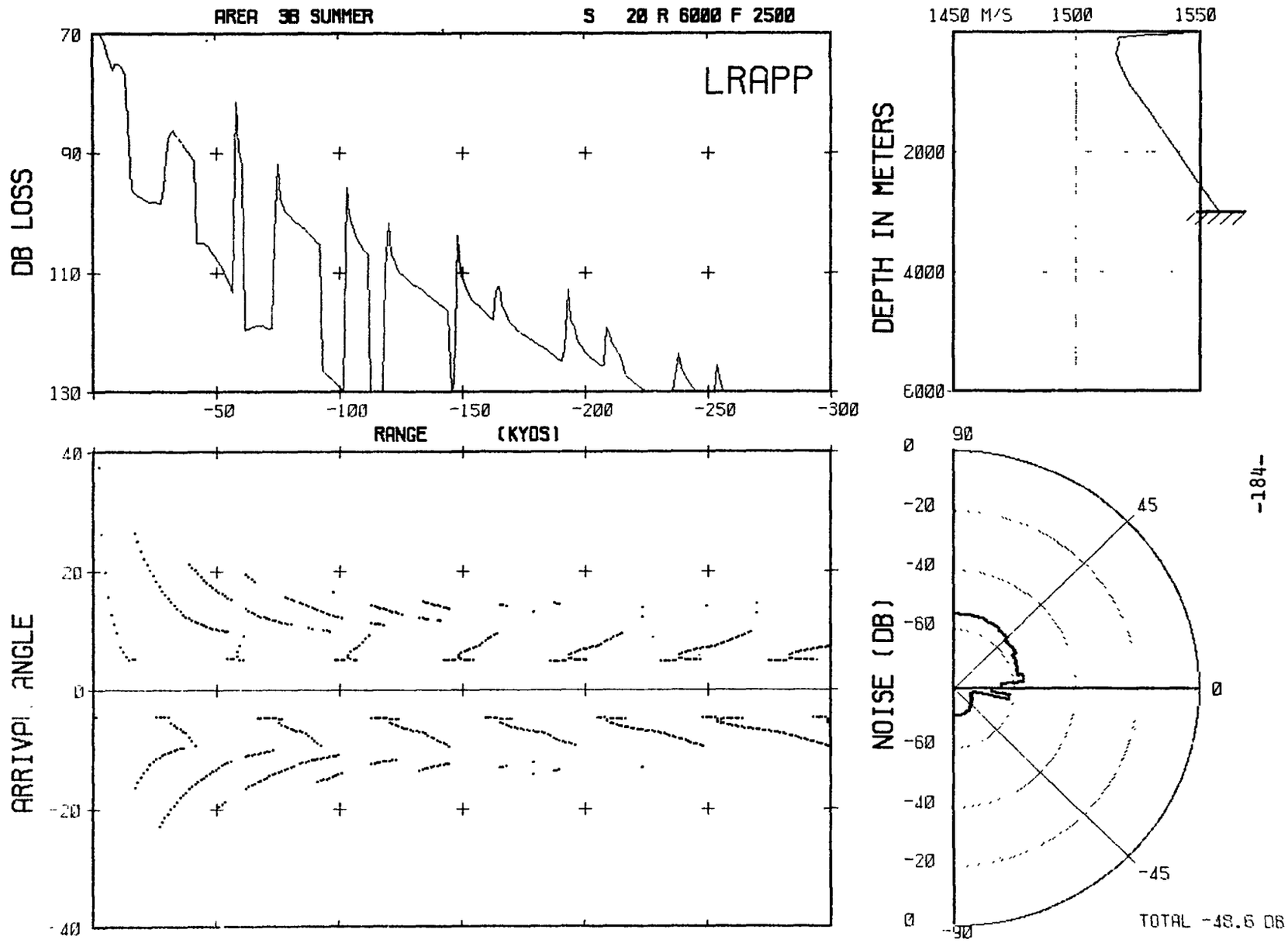
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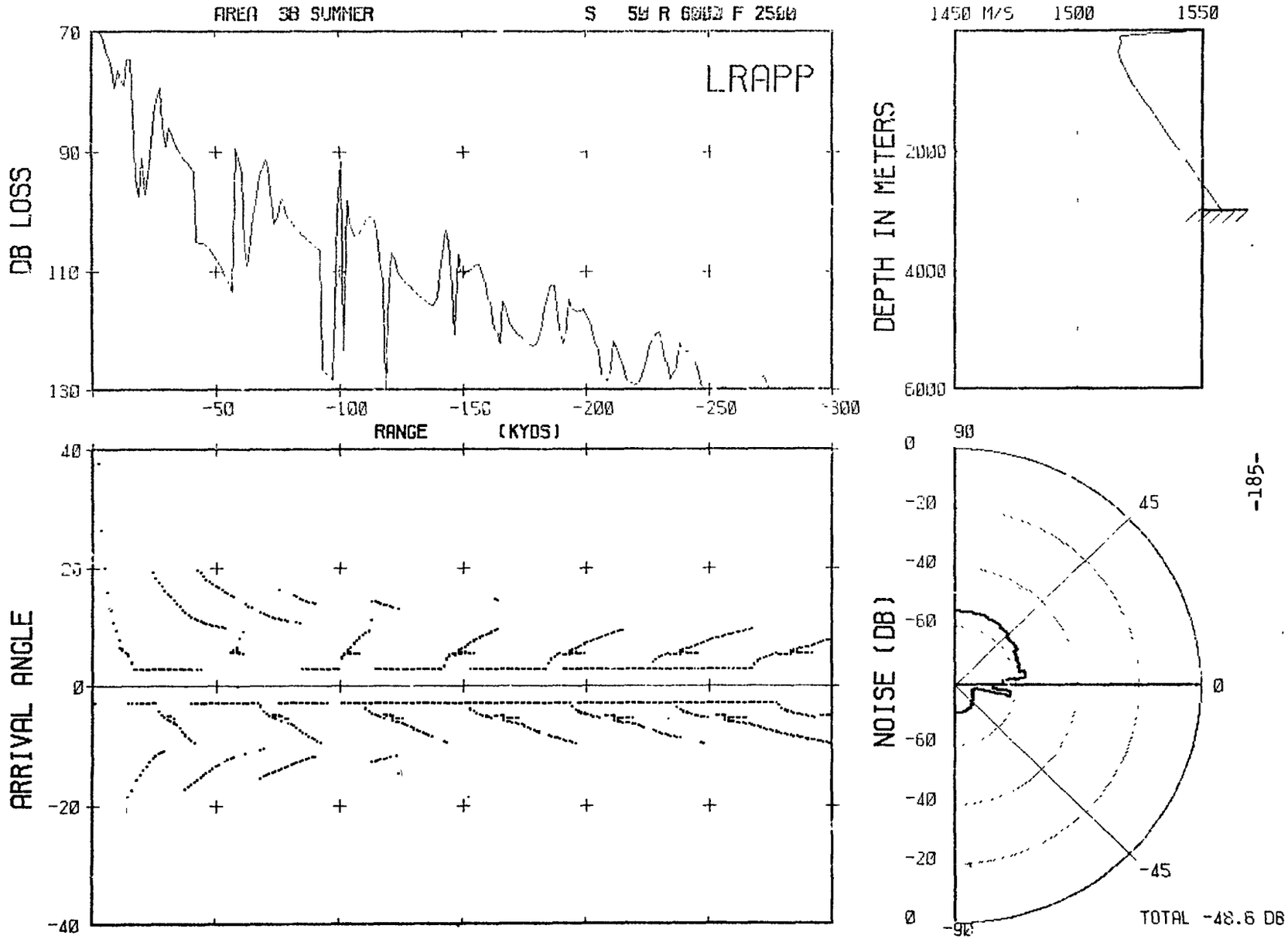
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ARRIVAL ANGLE
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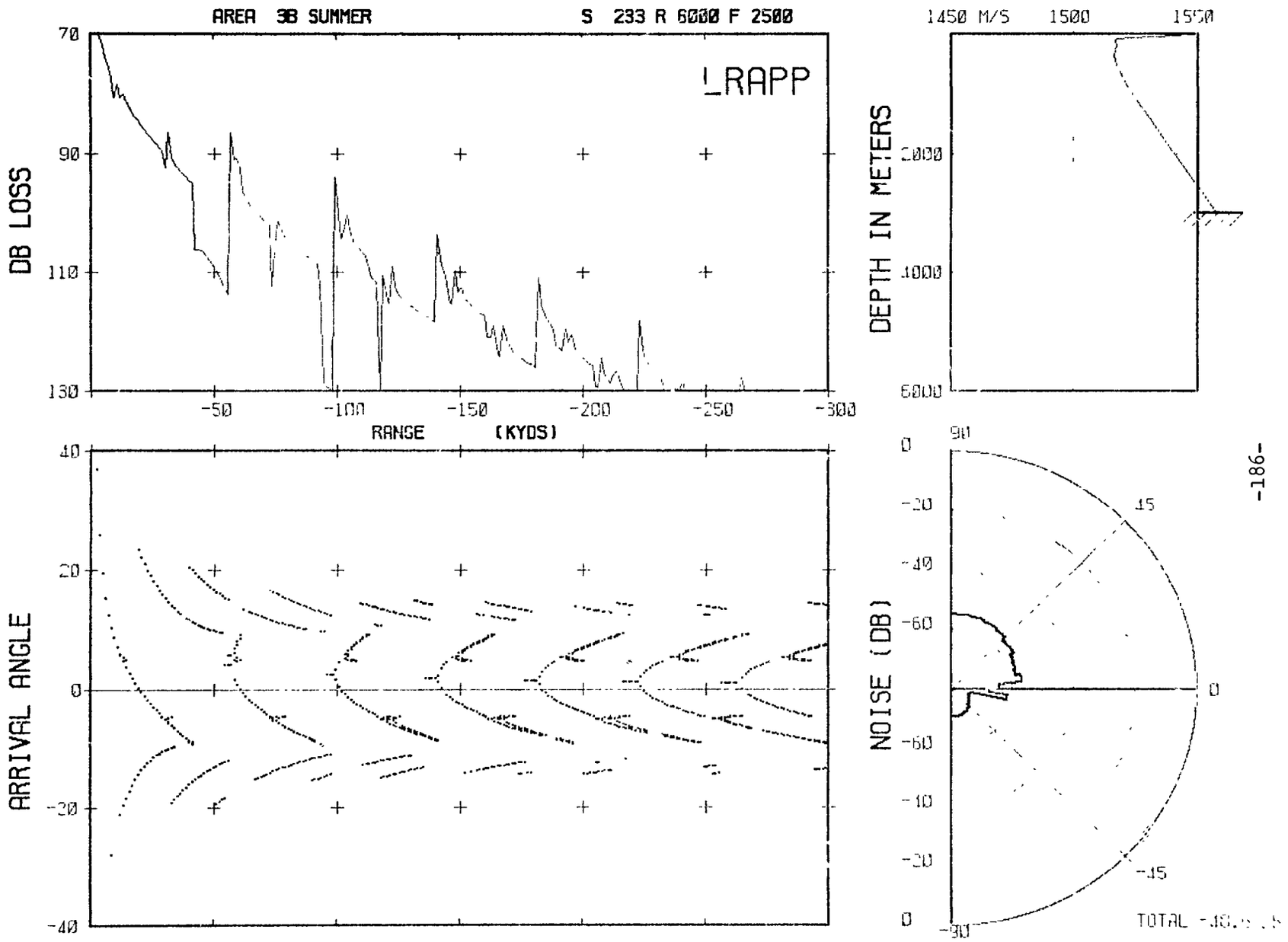
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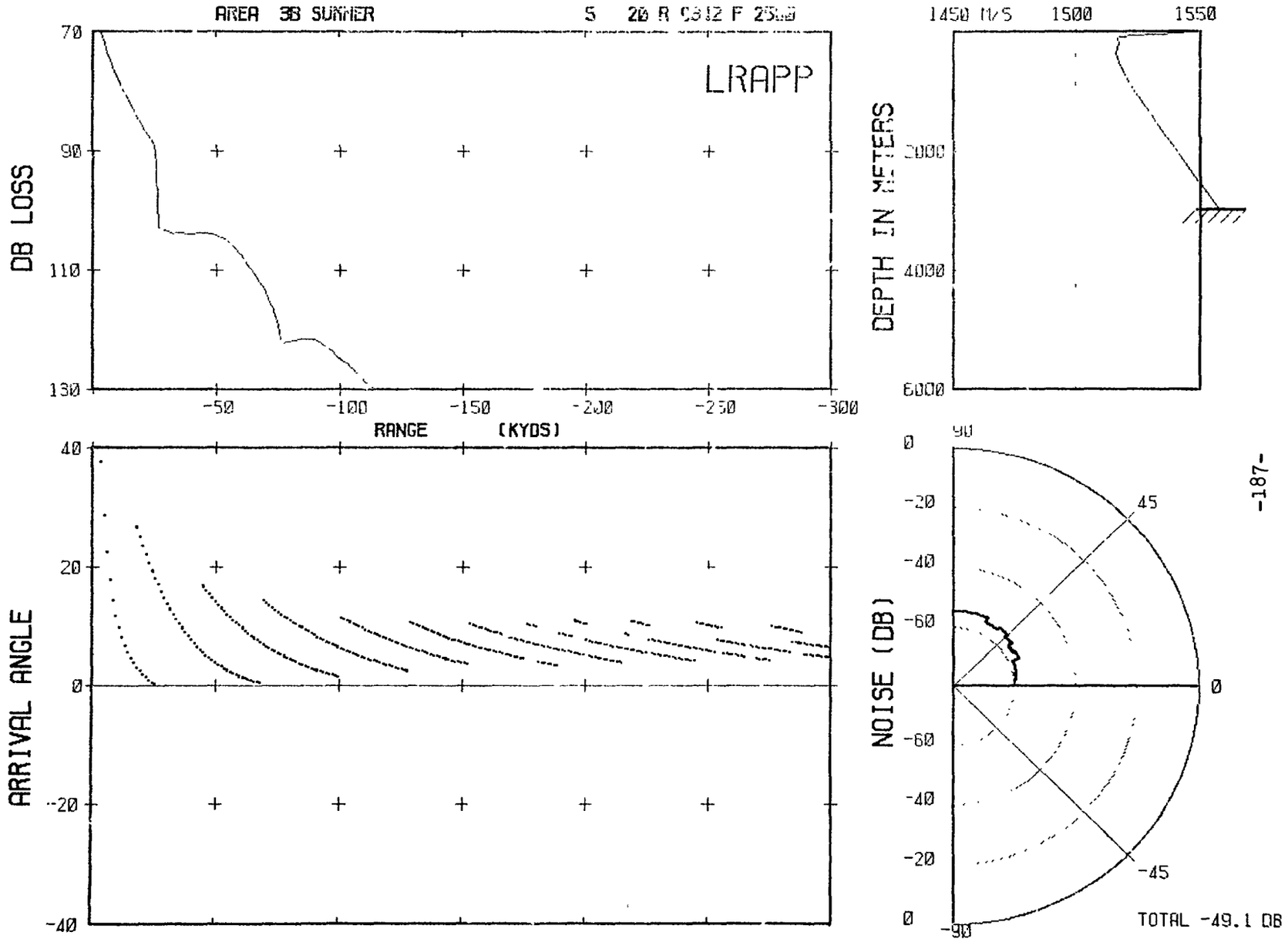
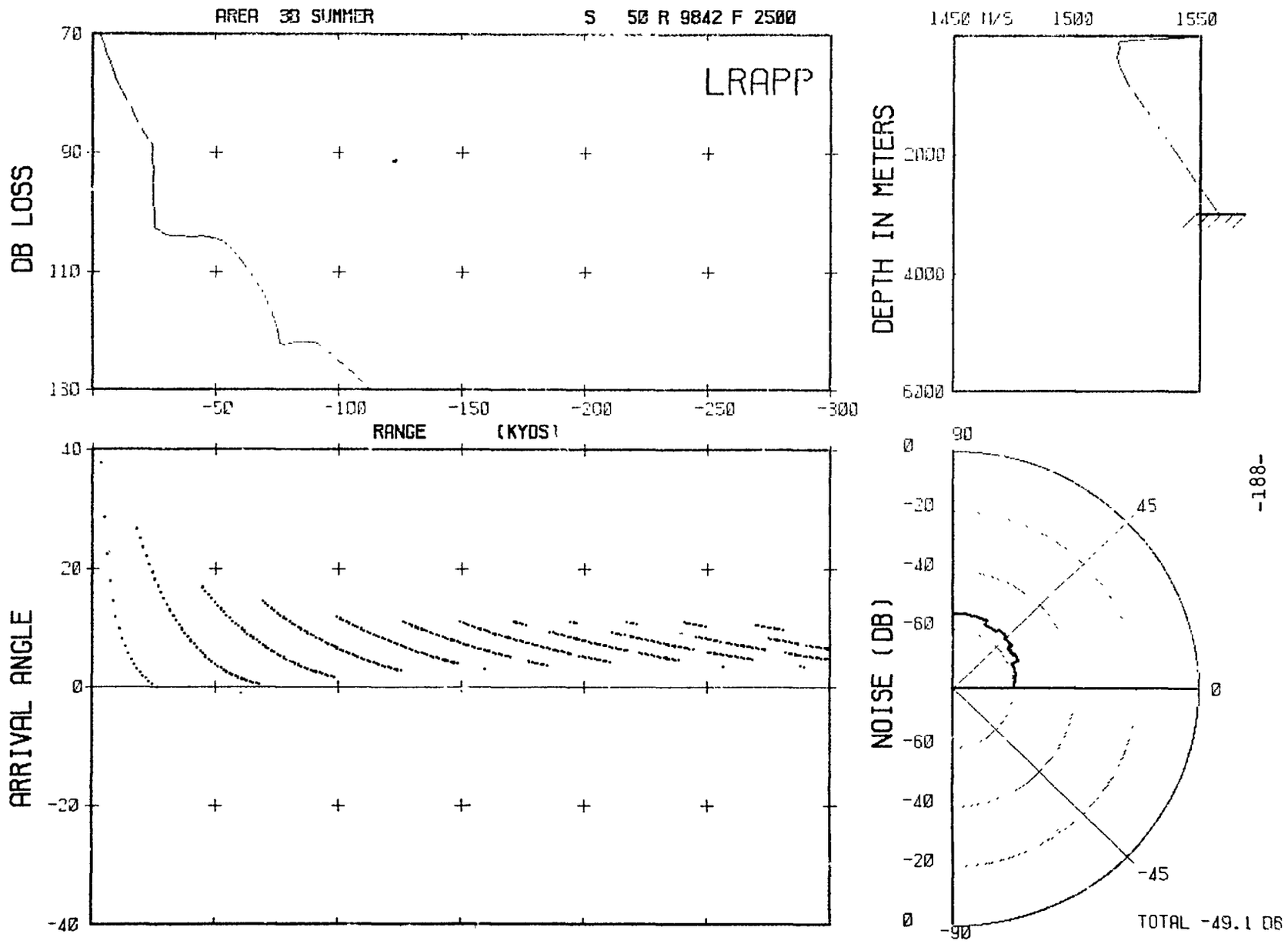
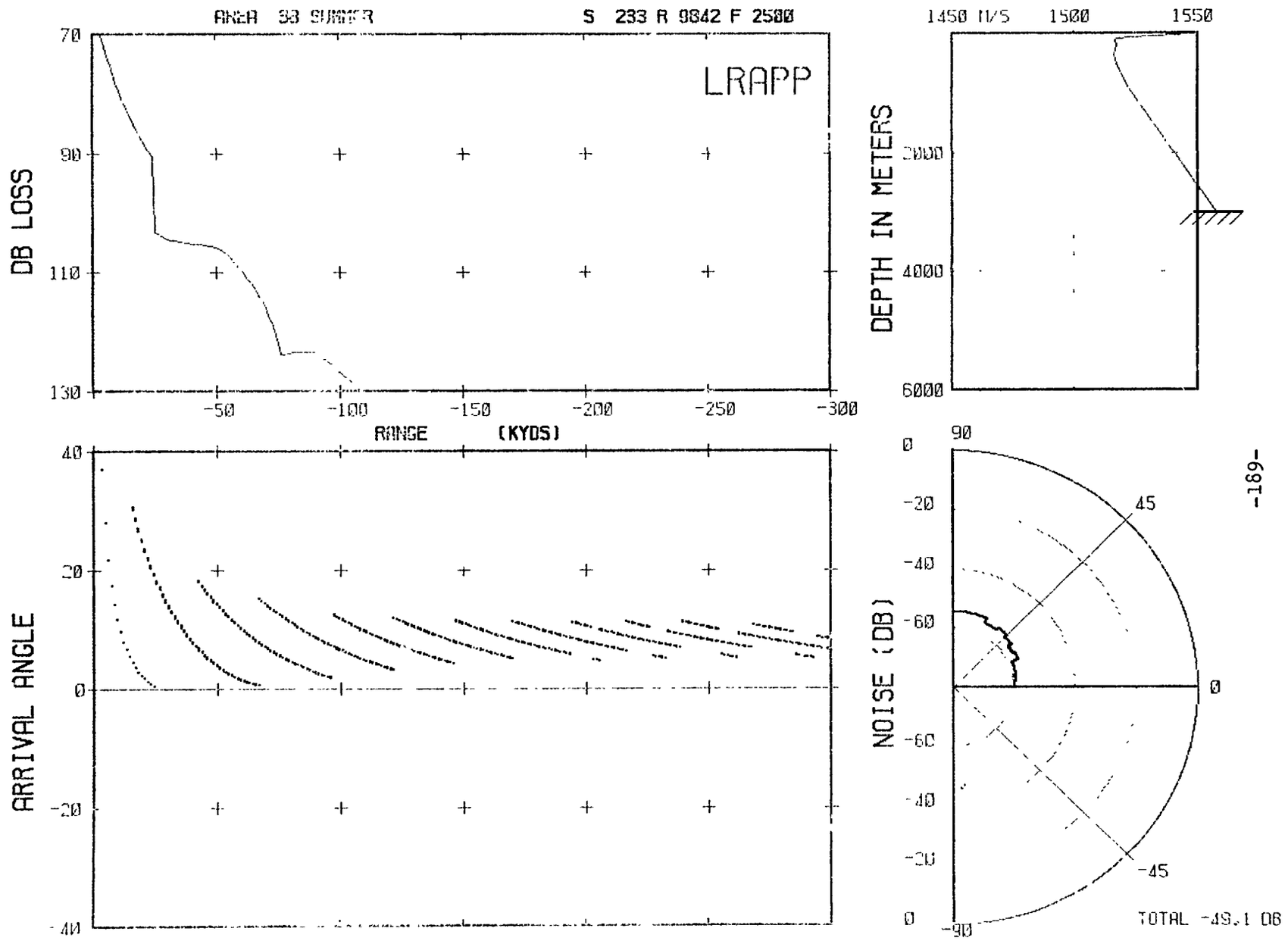
TOTAL


AREA 3B SUMMER
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
-45
-90
TOTAL -49.1 DB


AREA 33 SUMMER
S 50 R 9842 F 2500
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
90
45
0
-45
-90
TOTAL -49.1 DB


AREA 33 SUMMER
S 233 R 9842 F 2500
LRAPP
DB LOSS
70
90
110
130
-50
-100
-150
-200
-250
-300
RANGE (KYDS)
1450 M/S
1500
1550
DEPTH IN METERS
2000
4000
6000
ARRIVAL ANGLE
40
20
0
-20
-40
NOISE (DB)
0
-20
-40
-60
90
45
0
-45
-90
TOTAL -49.1 DB

DEPARTMENT OF THE NAVY
OFFICE OF NAVAL RESEARCH
875 NORTH RANDOLPH STREET
SUITE 1425
ARLINGTON VA 22203-1995

IN REPLY REFER TO:

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Subj: DECLASSIFICATION OF LONG RANGE ACOUSTIC PROPAGATION PROJECT (LRAPP) DOCUMENTS

Ref: (a) SECNAVINST 5510.36

Encl: (1) List of DECLASSIFIED LRAPP Documents

1. In accordance with reference (a), a declassification review has been conducted on a number of classified LRAPP documents.

2. The LRAPP documents listed in enclosure (1) have been downgraded to UNCLASSIFIED and have been approved for public release. These documents should be remarked as follows:

   Classification changed to UNCLASSIFIED by authority of the Chief of Naval Operations (N772) letter N772A/6U875630, 20 January 2006.

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Report Number	Personal Author	Title	Publication Source (Originator)	Pub. Date	Current Availability	Class.
Unavailable	Unavailable	ACOUSTIC ENVIRONMENTAL SCENARIOS AND PREDICTIONS FOR ASW. VOLUME VII. AREA 3A SUMMER PREDICTIONS FOR PASSIVE SONAR	Maury Center for Ocean Science	721001	AD0910342	U
Unavailable	Unavailable	ACOUSTIC ENVIRONMENTAL SCENARIOS AND PREDICTIONS FOR ASW. VOLUME VIII. AREA 3B WINTER PREDICTIONS FOR PASSIVE SONAR	Maury Center for Ocean Science	721001	AD0910343	U
Unavailable	Unavailable	ACOUSTIC ENVIRONMENTAL SCENARIOS AND PREDICTIONS FOR ASW. VOLUME IX. AREA 3B SUMMER PREDICTIONS FOR PASSIVE SONAR	Maury Center for Ocean Science	721001	AD0910344	U
Unavailable	Unavailable	ACOUSTIC ENVIRONMENTAL SCENARIOS AND PREDICTIONS FOR ASW. VOLUME V. AREA 2 SUMMER PREDICTIONS FOR PASSIVE SONAR	Maury Center for Ocean Science	721001	AD0911224	U
Unavailable	Unavailable	ACOUSTIC ENVIRONMENTAL SCENARIOS AND PREDICTIONS FOR ASW. VOLUME XI. AREA 4A SUMMER PREDICTIONS FOR PASSIVE SONAR	Maury Center for Ocean Science	721001	AD0912560	U
Unavailable	Unavailable	ACOUSTIC ENVIRONMENTAL SCENARIOS AND PREDICTIONS FOR ASW. VOLUME X. AREA 4A WINTER PREDICTIONS FOR PASSIVE SONAR	Maury Center for Ocean Science	721001	AD0916556	U
MC-011 VOL. 14	Unavailable	ACOUSTIC ENVIRONMENTAL SCENARIOS AND PREDICTIONS FOR ASW. VOLUME XIV. AREA 5 WINTER PREDICTIONS FOR PASSIVE SONAR	Maury Center for Ocean Science	721001	AD0916557; ND	U
MC-011 VOL. 13	Unavailable	ACOUSTIC ENVIRONMENTAL SCENARIOS AND PREDICTIONS FOR ASW. VOLUME XIII. AREA 4B SUMMER PREDICTIONS FOR PASSIVE SONAR	Maury Center for Ocean Science	721001	AD0916610; ND	U
MCR008	Goodman, R. R., et al.	THE NEAT 1 EXPERIMENT (U)	Maury Center for Ocean Science	721001	NS; ND	U
Unavailable	Cherry, W. R.	LRAPP BEAMFORMER	Scripps Institution of Oceanography Marine Physical Laboratory	721015	ADA081876	U
ONR ACR-186	Gregory, J. B.	PROJECT LRAPP TEST BED- TECHNOLOGY USED IN THE DEVELOPMENT OF A DEEP-OCEAN STABLE PLATFORM (U)	Office of Naval Research	721024	AD052370 ~~AD052370~~; ND	U
MC-010	Unavailable	CHURCH GABBRO EXERCISE PLAN- LRAPP (U)	Maury Center for Ocean Science	721026	ND	U
WHOI-72-87	Daubin, S. C., et al.	THE ACODAC SYSTEM	Woods Hole Oceanographic Institution	721101	AD0756628; ND	U
NRLR7516	Fleming, H. S., et al.	PROJECT NEAT 1 ENVIRONMENTAL DATA REPORT (U) (USNS J.W. GIBBS)	Naval Research Laboratory	721129	NS; ND AD523746	U