

Schlumberger

FOUR-ARM
HIGH RESOLUTION
CONTINUOUS DIPMETER
COMPUTED
SCHLUMBERGER OF CANADA
Calgary, Alberta

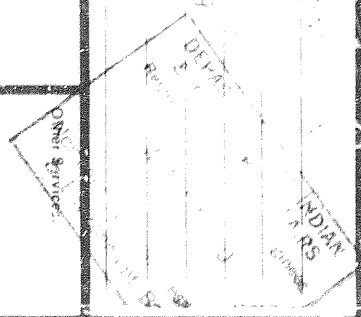
PROVINCE _____
FIELD _____
WELL _____
COMPANY _____

LOCATION
LSD _____ SEC _____ TWP _____ RANGE _____
COMPANY _____
WELL _____
FIELD _____
PROVINCE _____

Permanent Datum _____ Elev _____
Log Measured From _____ m Above Perm Datum
Drilling Measured From _____

Elev K B _____
D F _____
G L _____

Date	One	Two	Three	Four
Run No.				
Depth - Driller	m	m	m	m
Depth - Logger (Sch)	m	m	m	m
Bitm. Log Interval	m	m	m	m
Top. Log Interval	m	m	m	m
Casing - Driller	m	m	m	m
Casing - Logger	m	m	m	m
Bit Size	mm	mm	mm	mm
Type Fluid in Hole				
Dens (kg/cm ³)				
Visc				
pH				
Fluid Loss (cm ³)				
Source of Sample				
Rm @ Meas Temp	@	@	@	@
Rmt @ Meas Temp	@	@	@	@
Source Rmt	@	@	@	@
Rm @ BH1	@	@	@	@
TIME				
Tool Last on Bottom	C	C	C	C
Max Rec Temp #1 #2	C	C	C	C
Unit				
Recorder By				
Witnessed By				



FOLD HERE

Run No.	Tool Type	HDM No.	HDE No.	HDP No.	HDS No.	Computed By	Correlation Interval	Step	Search

REMARKS
 DRILLING STOPPED
 Services Order No. _____
 Magnetic Declination _____

"Any directional computations made from the dipmeter must be regarded as approximate only. This is because the dipmeter log indicates the orientation of the instrument itself, rather than the direction and amount of the wall drift. Therefore, we do not and cannot guarantee the accuracy of such directional computations, and we shall not be liable nor responsible for any loss, costs, damages or expenses incurred or sustained that may result from any such computations."

TO OBTAIN THE FORMATION VERTICAL DISPLACEMENT CORRESPONDING TO A CERTAIN DISTANCE FROM THE WELL AND A PARTICULAR FORMATION DIP, USE THE FOLLOWING EQUATION:

$$\text{VERTICAL DISPLACEMENT (m)} = \text{DISTANCE (m)} \times \tan (\text{FORMATION DIP in degrees})$$

Example: The formation dip is 16 degrees. The vertical displacement occurring at a spot 660 m away from the well is desired. The vertical displacement is $660 \times \tan 16^\circ = 660 \times 0.2867 = 189 \text{ m}$



GRAPHIC PRESENTATION

DEPTH

DIP &

CU

Example: The formation dip is 16 degrees. The vertical displacement occurring at a spot 660 m away from the well is desired. The vertical displacement is = $660 \times \tan 16^\circ = 660 \times .2867 = 189 \text{ m}$



GRAPHIC PRESENTATION

CORRELATION CURVE	DEPTH METRES	TRUE DIP ANGLE AND DIRECTION	DRIFT & DIRECTION OF SONDE
	0°	10° 20° 30° 40° 50° 60° 70° 80° 90°	0°

0012 X

COLUMBIA GAS DEV CANADA LTD
 COLUMBIA ET AL KOTANELEE
 WILDCAT 60.07.35.917N.
 YUKON, 124.07.36.45M.
 RUN NO ONE
 DEC 14, 1979
 ARROW PLOT FROM CLUSTER PROGRAM

CORRELATION LENGTH 1.2 M.
 STEP LENGTH 0.3 M.
 SEARCH ANGLE 45 DEGREES X1
 HDT-D TTR 11/45

JOB 3375.00

CORRELATION CURVE	DEPTH	DIP ANGLE AND DIRECTION	BOREHOLE DRIFT
	0	10 20 30 40 50 60 70 80 90	0 20

ALL QUALITY ARROW PLOT 03375
 FROM THE CLUSTER PROGRAM
 BLACK ARROWS ARE HIGHEST QUALITY

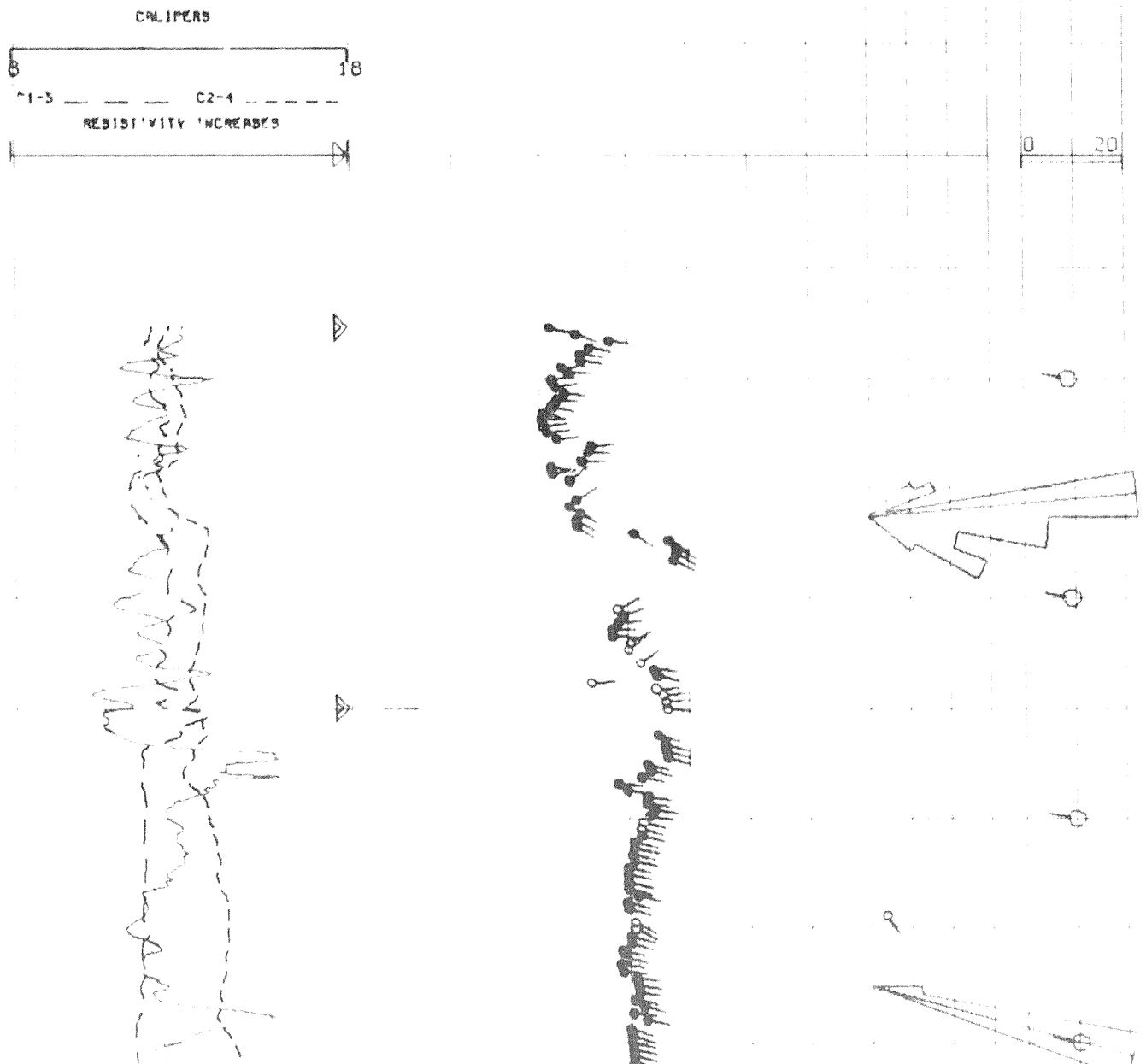
CORRELATION LENGTH 1.2 M.
 STEP LENGTH 0.3 M.

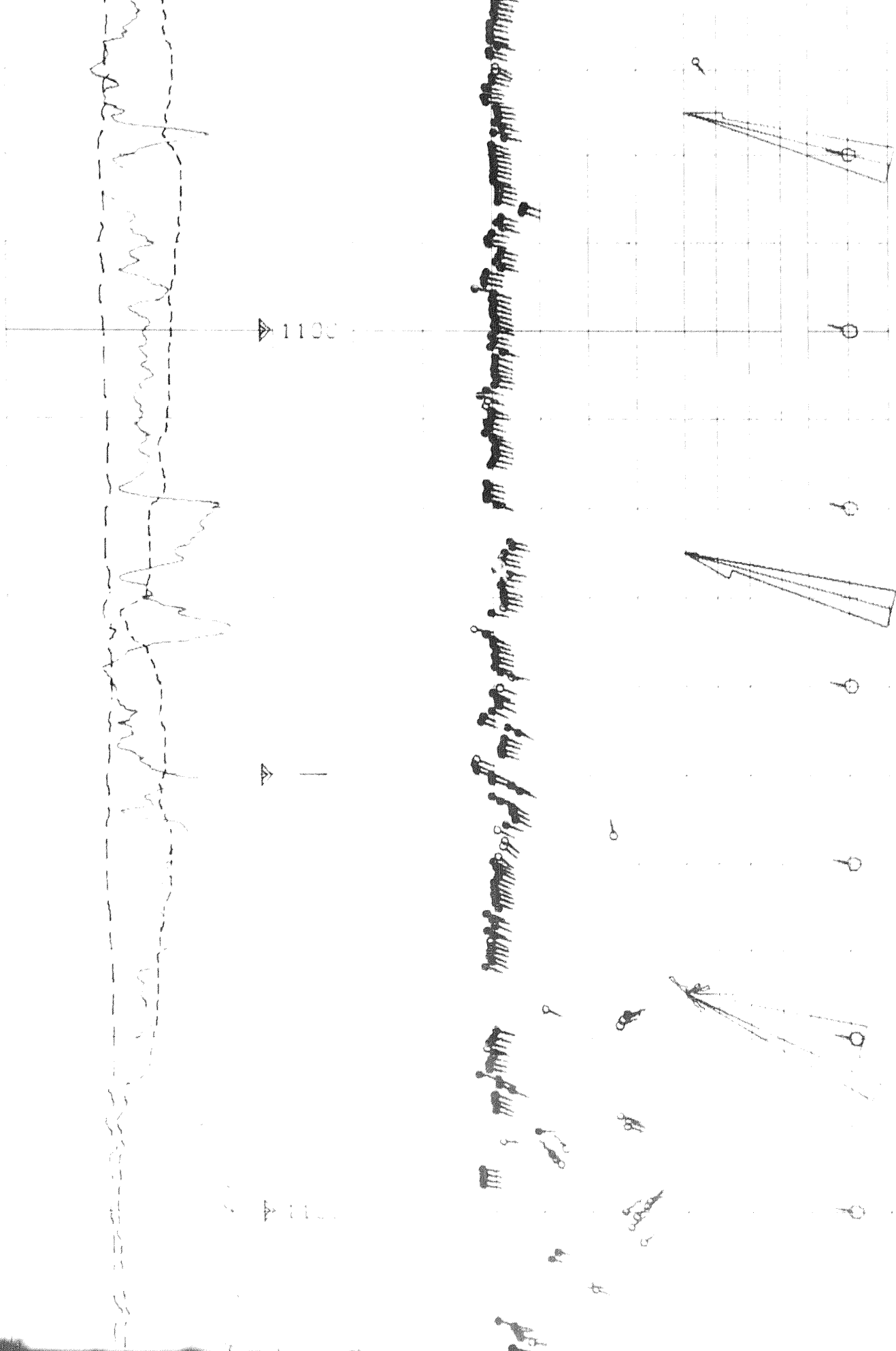
101

FROM THE CLUSTER PROGRAM
BLACK ARROWS ARE HIGHEST QUALITY

CORRELATION LENGTH 1.2 M.
STEP LENGTH 0.3 M.
SEARCH ANGLE 45 DEGREES X1
PC0130043518307001020420

ZONE FROM 1058 TO 3261

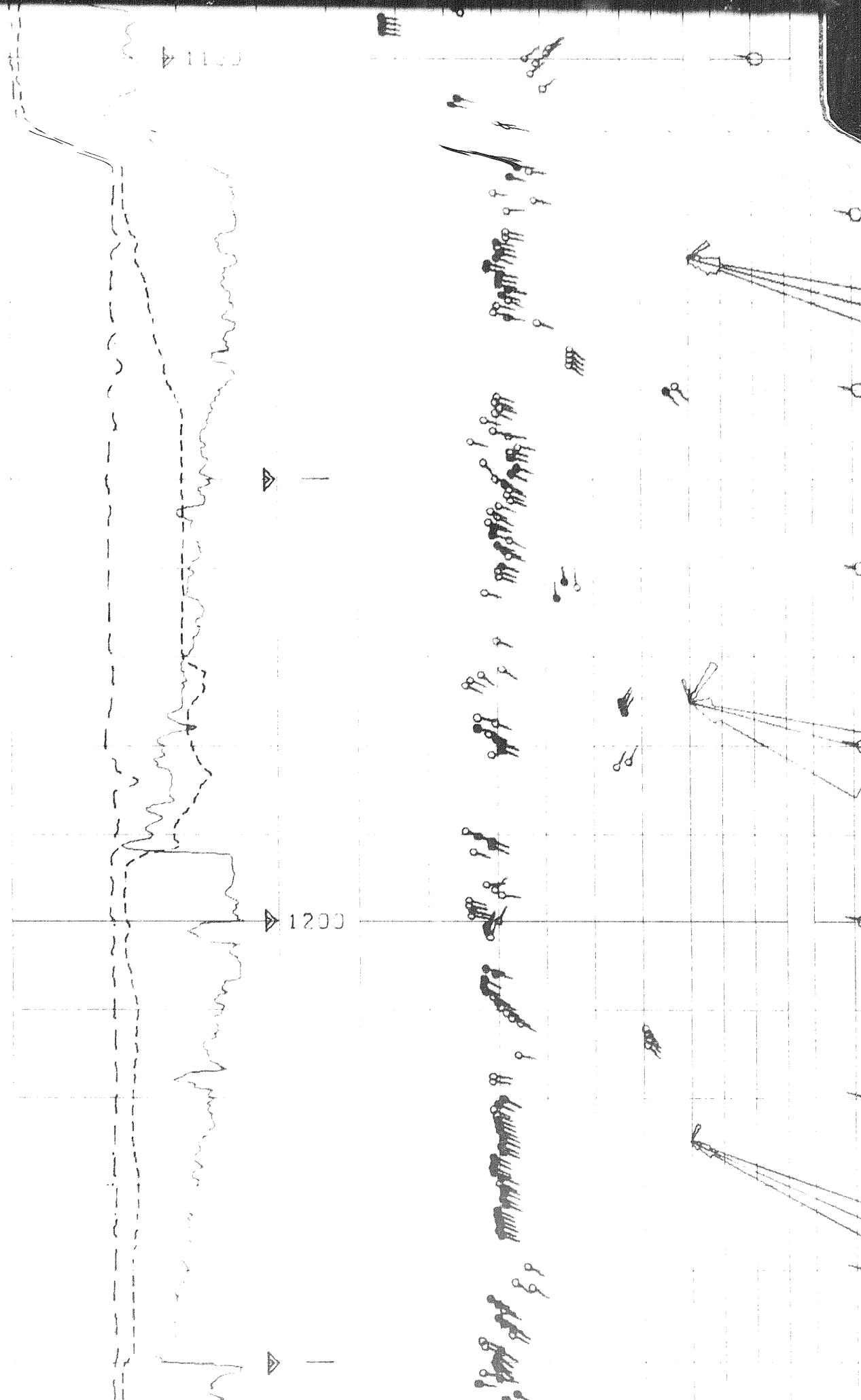




2 of

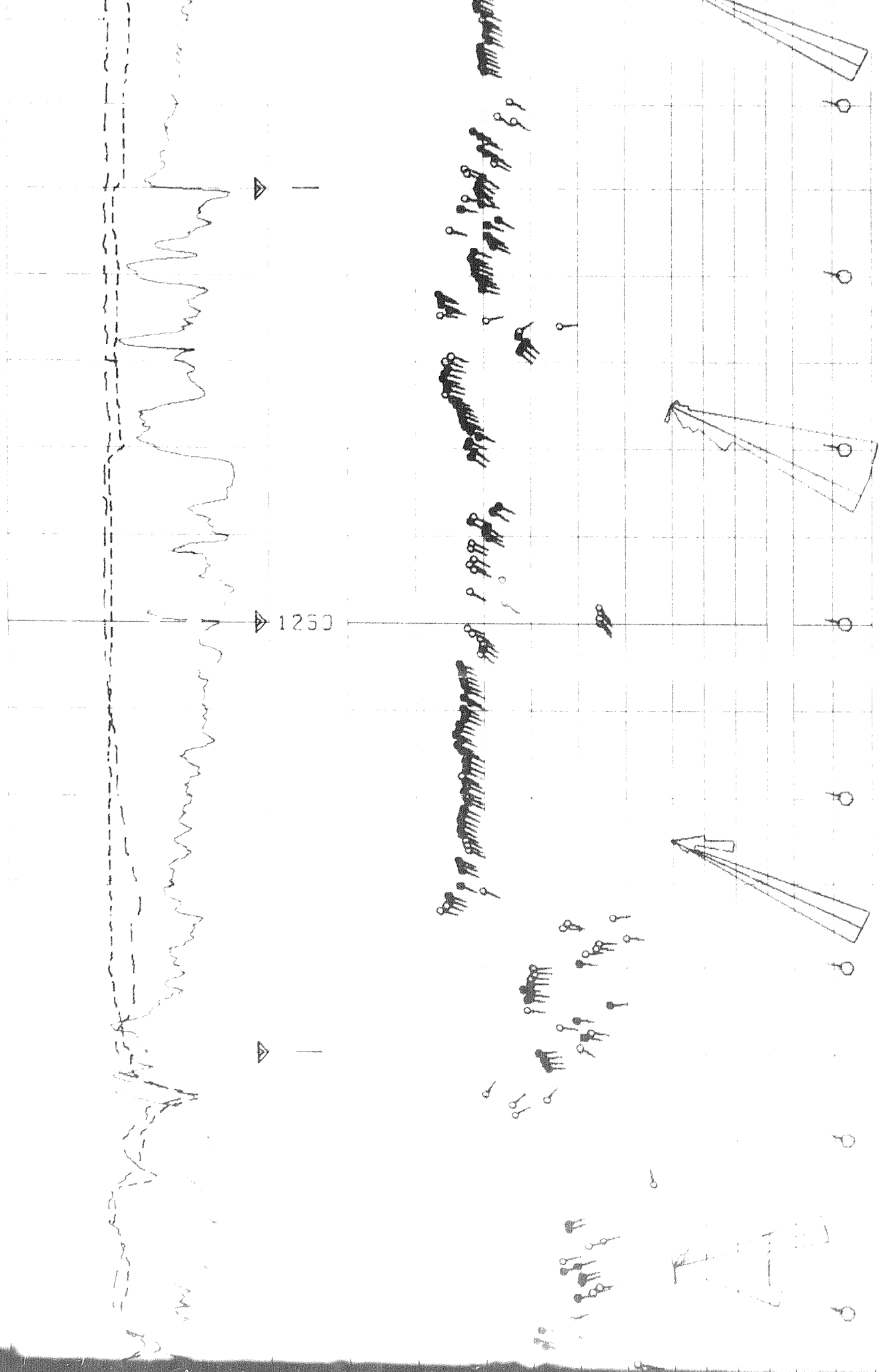
METRIC 2.5 IN. 1:62500

METRIC 2.5 IN. 1:62500



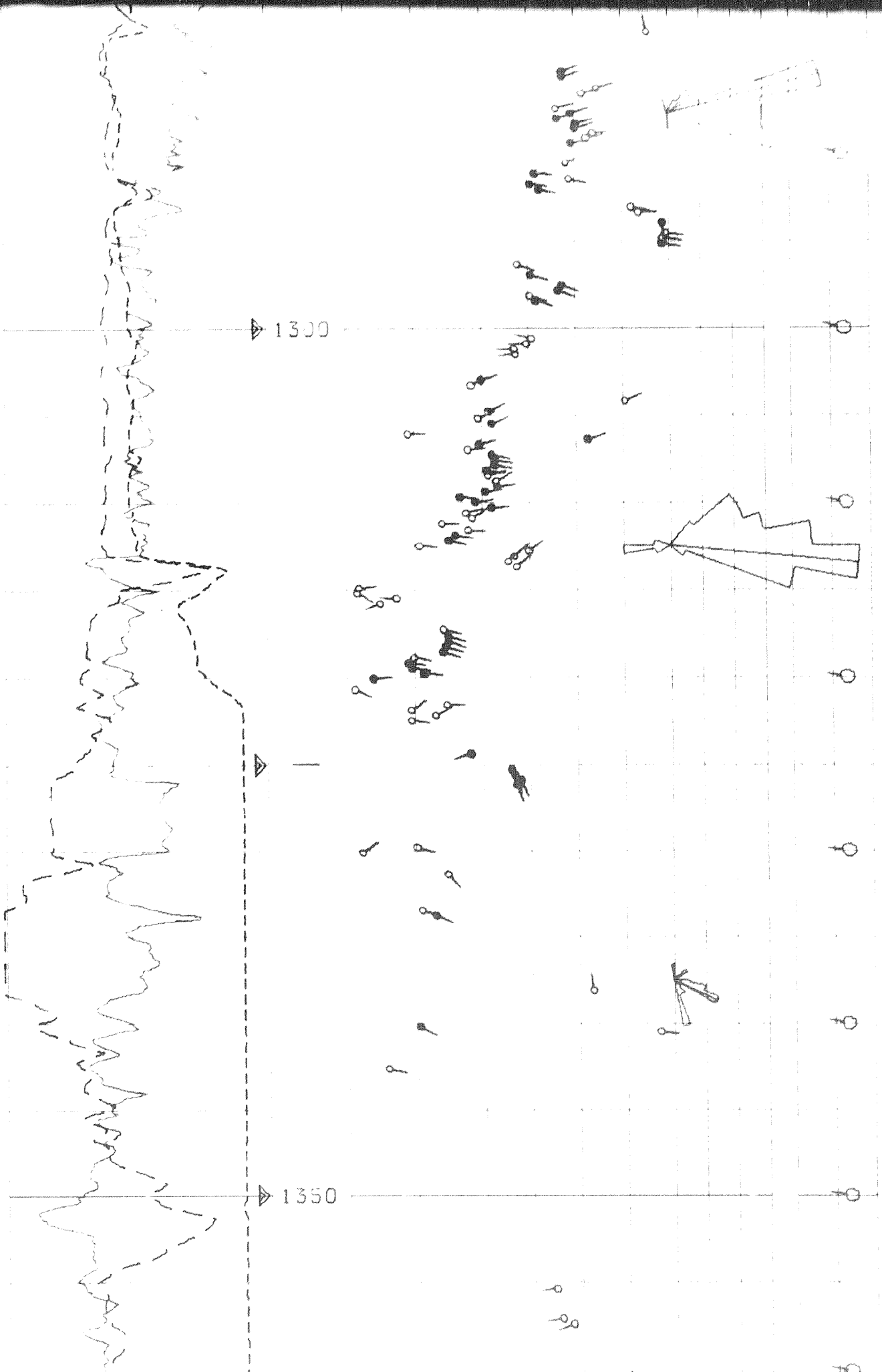
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MEIER 826 IN GRID

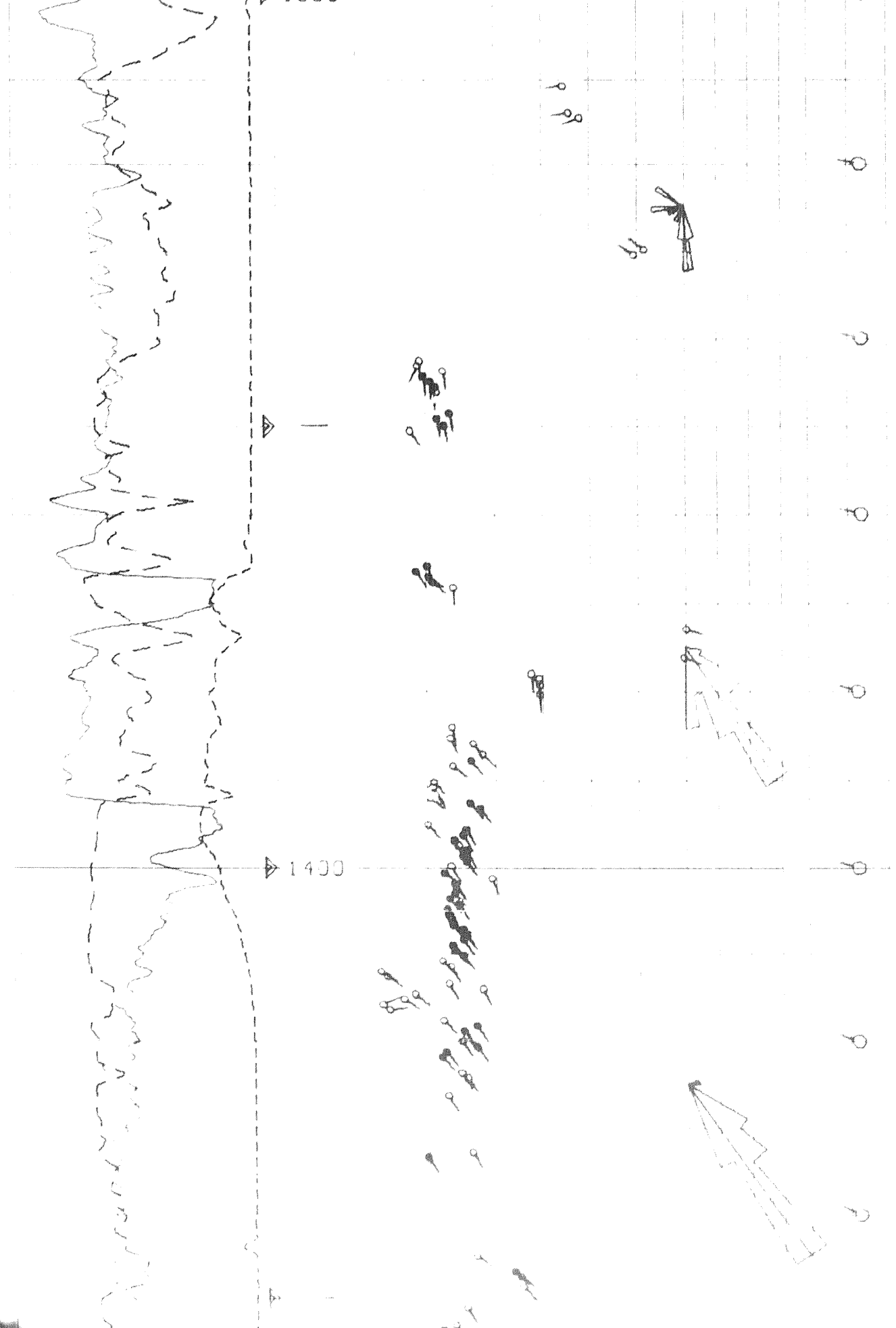


MEIER 826 IN GRID

0150-11-20-411-10

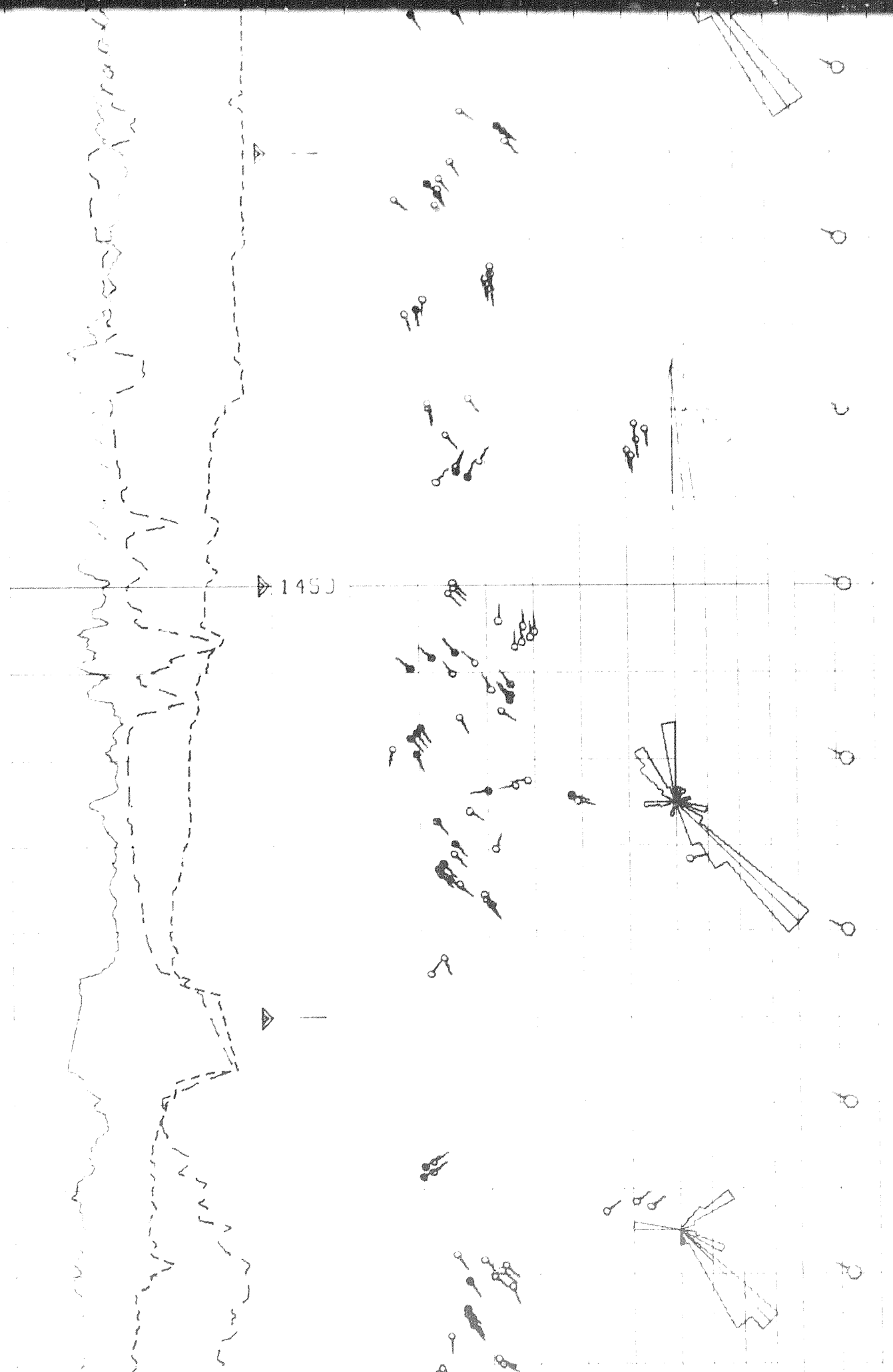


MAP OF B.S. IN GRID



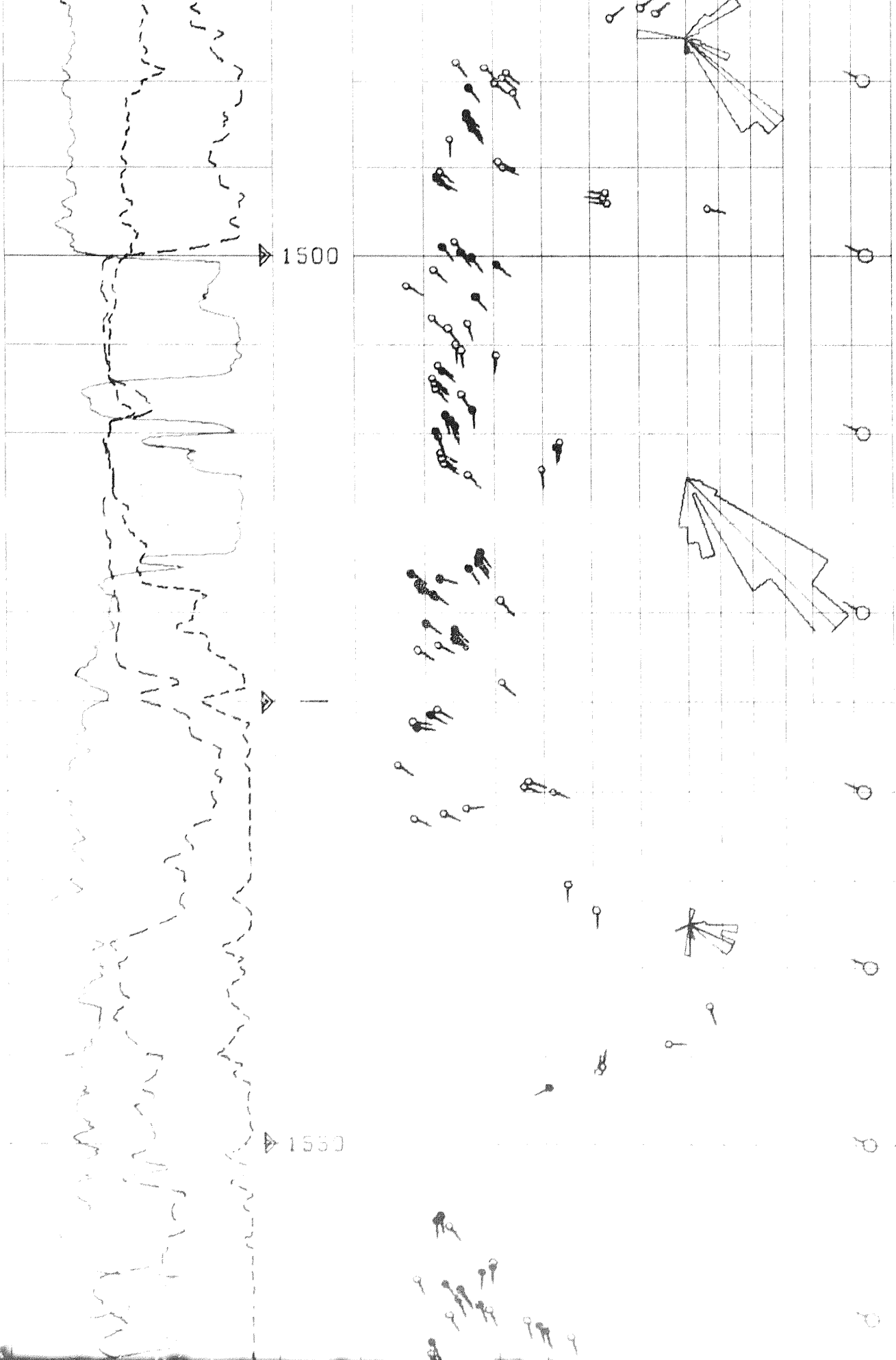
4 of 4

WATER SOUTH



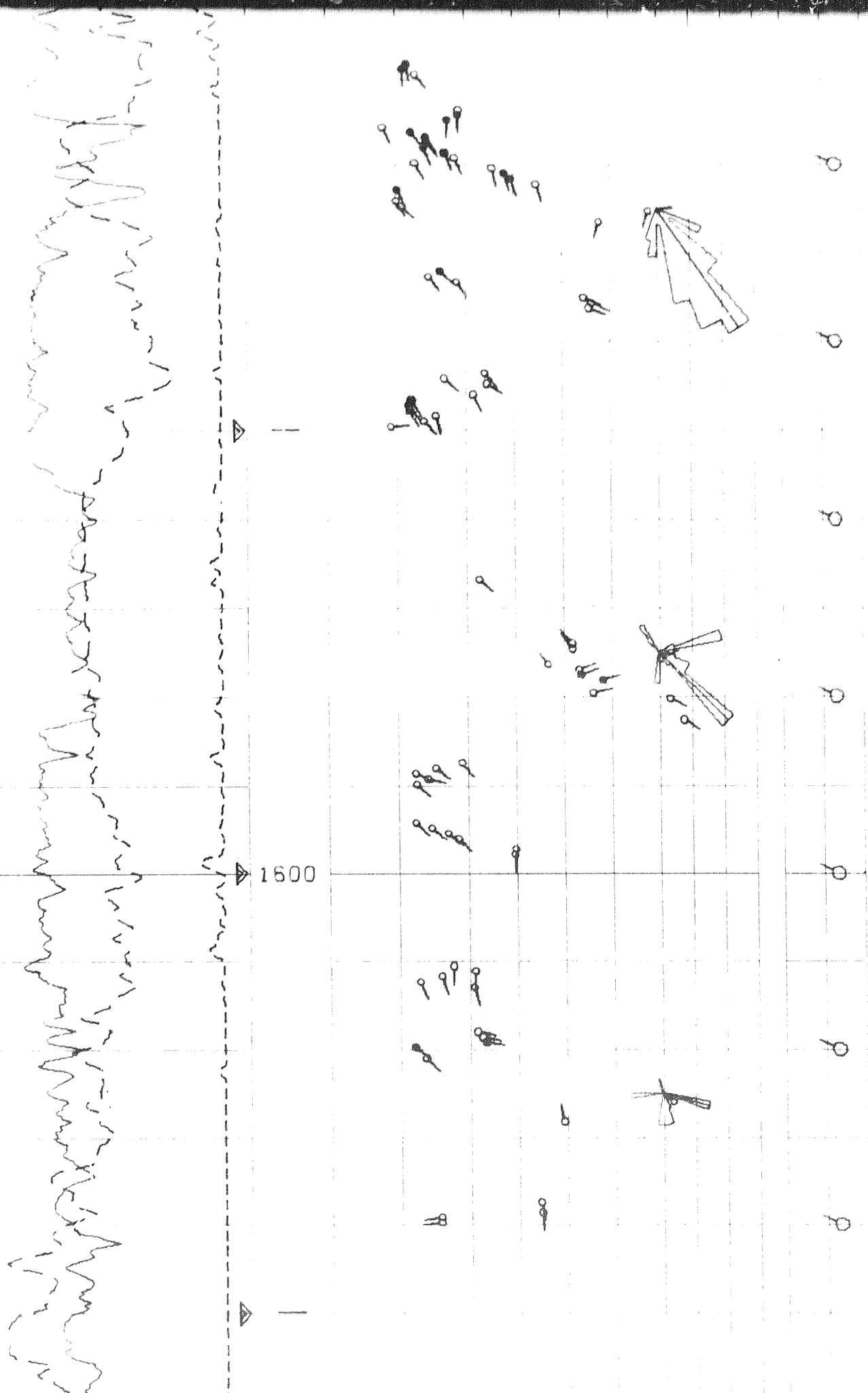
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METER 825 IN GRID



METER - 50 IN. GRID

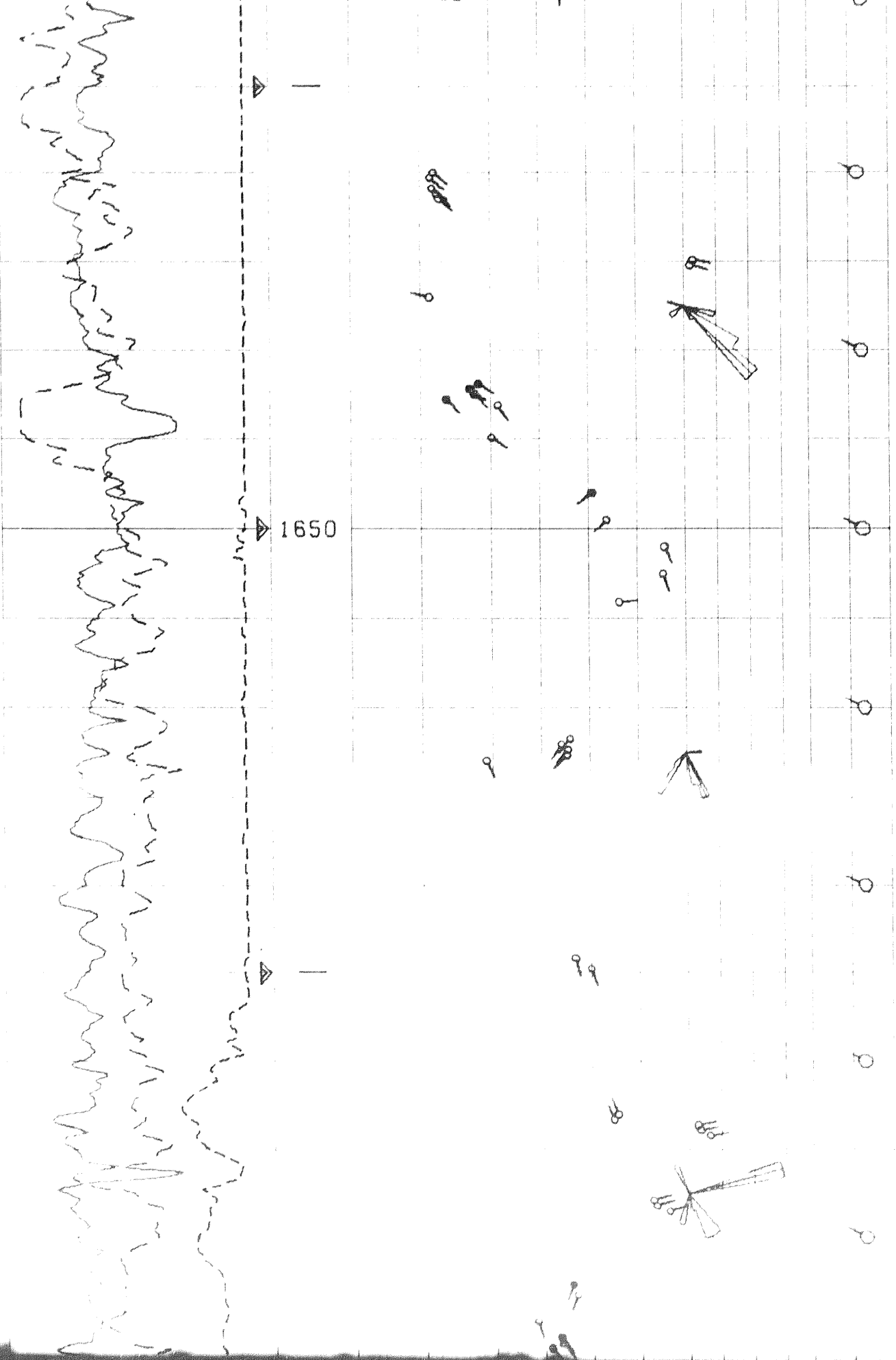
METER - 50 IN. GRID



METER 8.25 IN GRID

METER 8.14 IN GRID

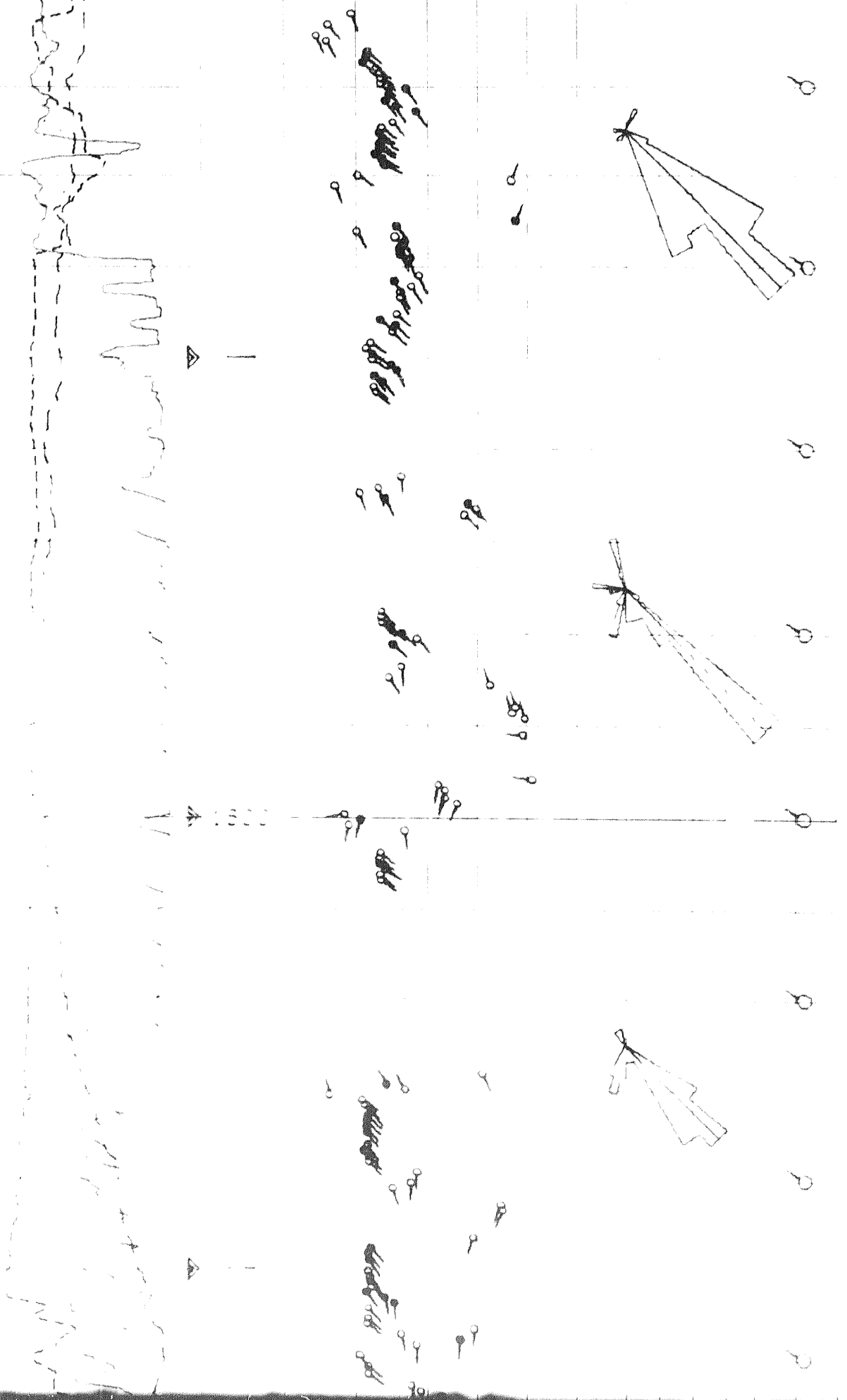
6/9

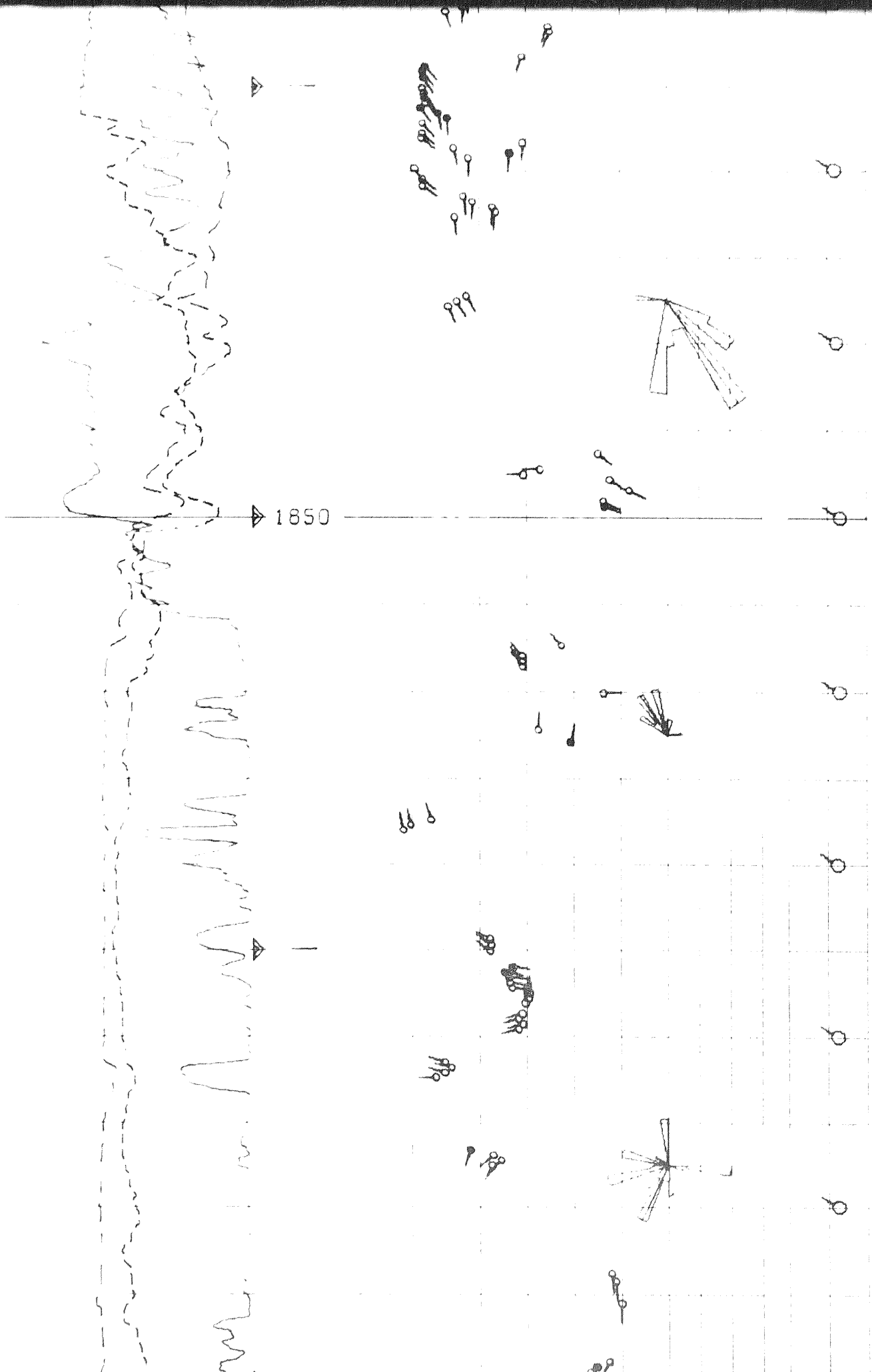




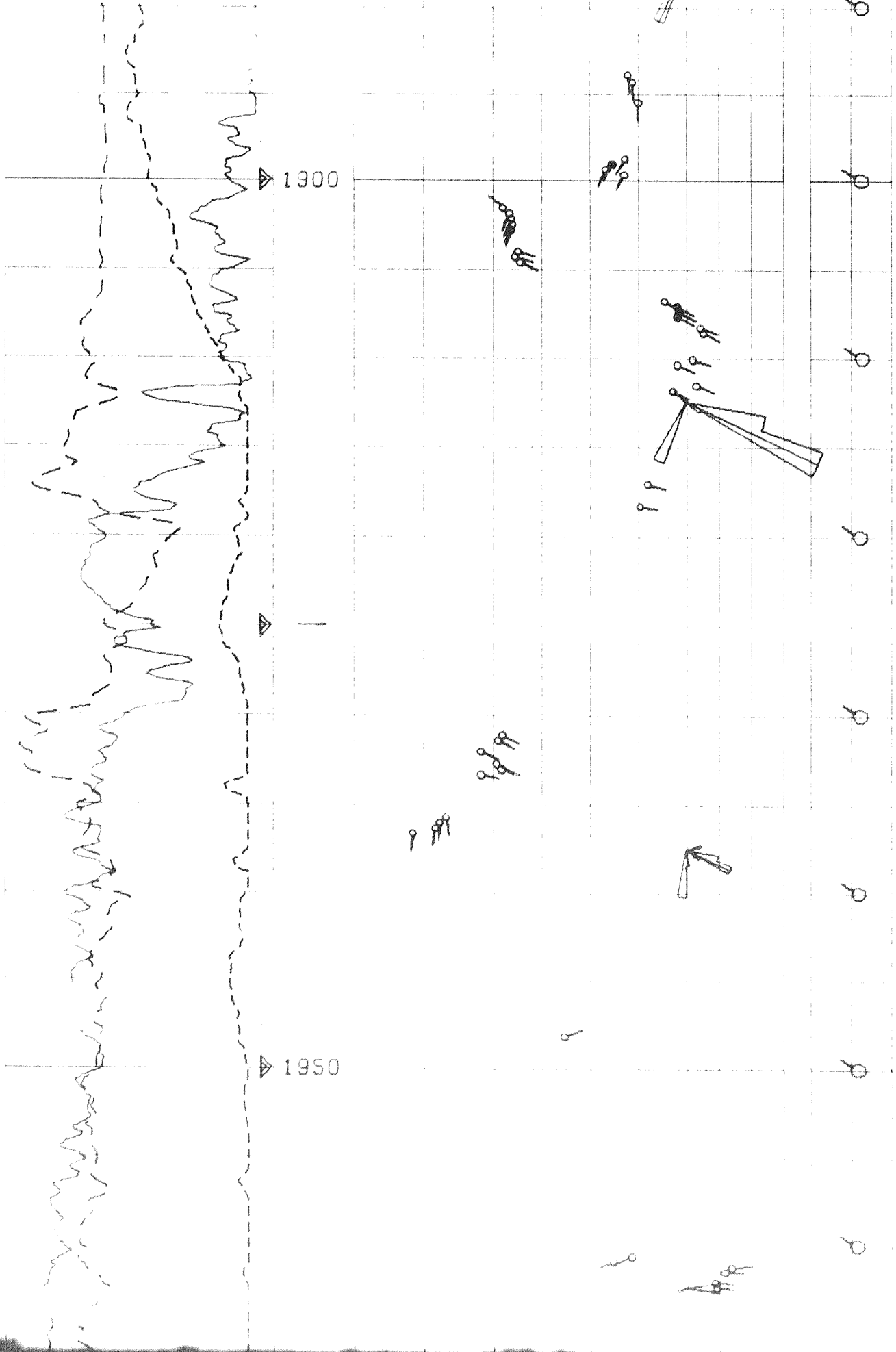
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CHRYSTAL MOUNTAIN



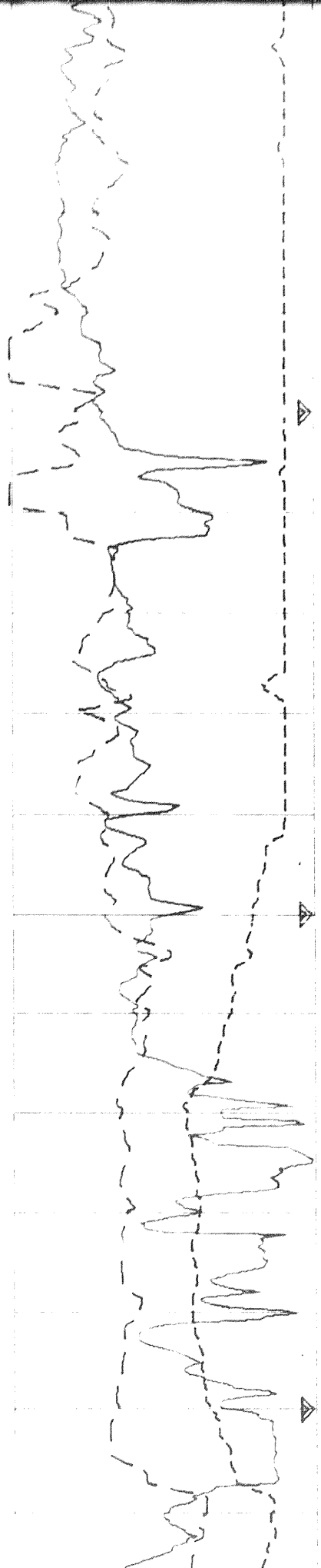


MILLER 20 IN GRID

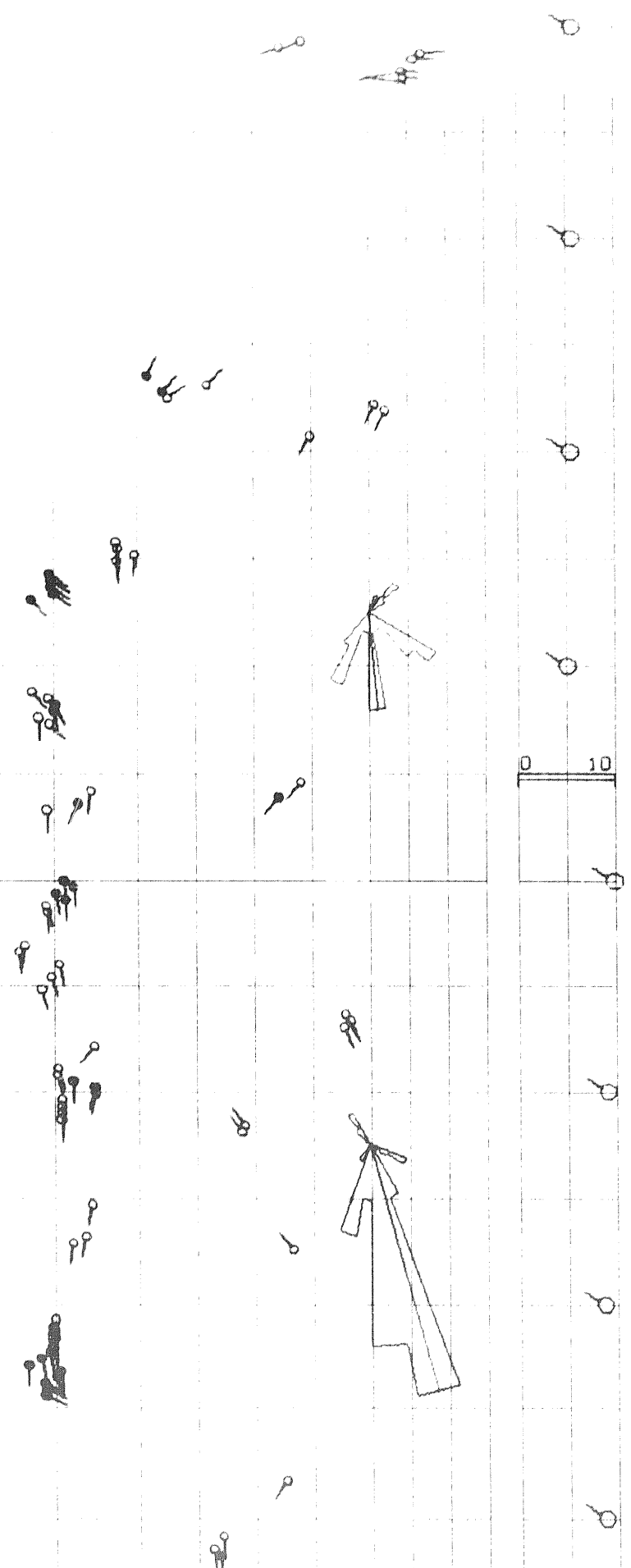


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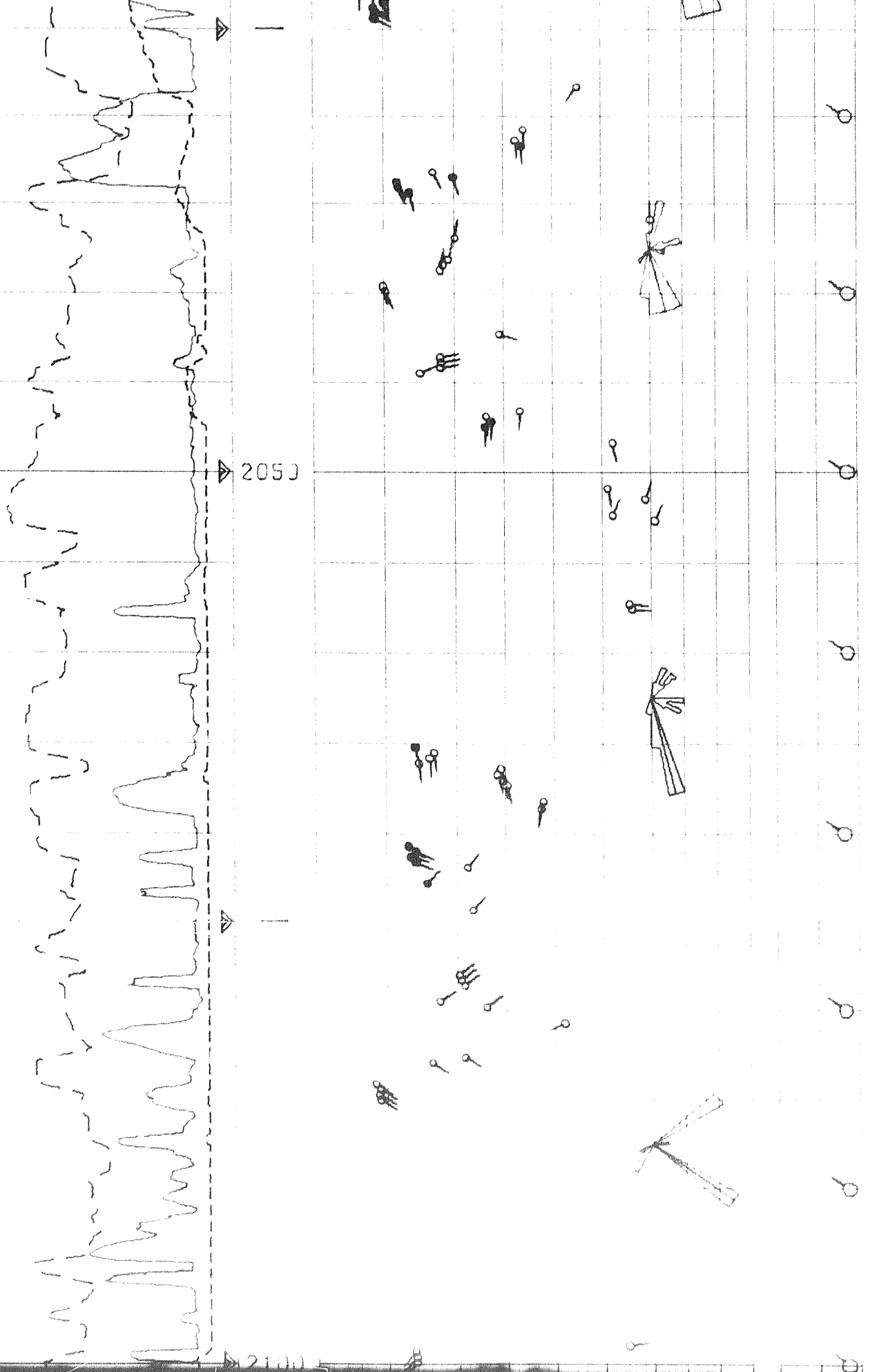
MS. 100. 10. 10. 10. 10. 10.



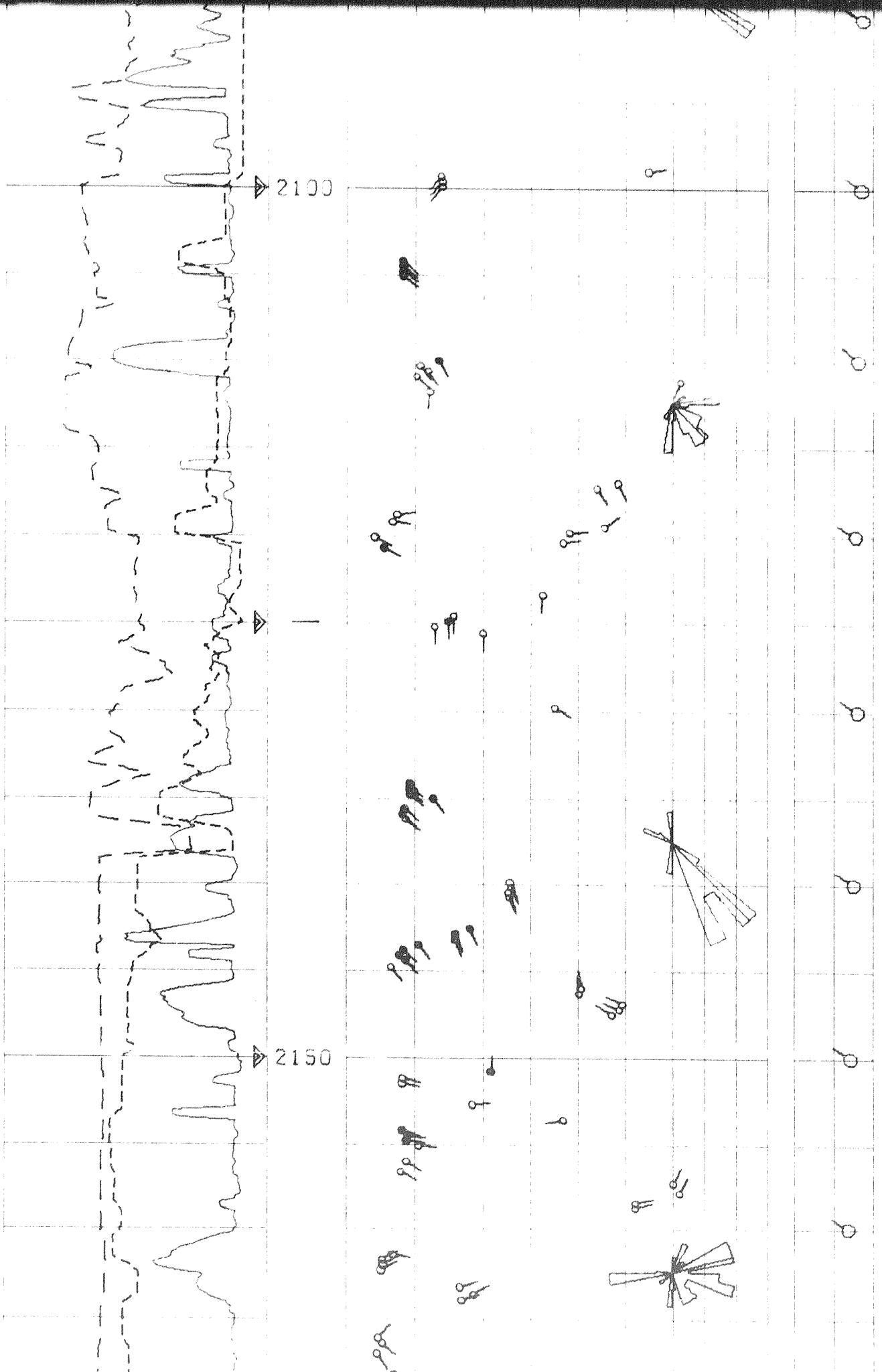
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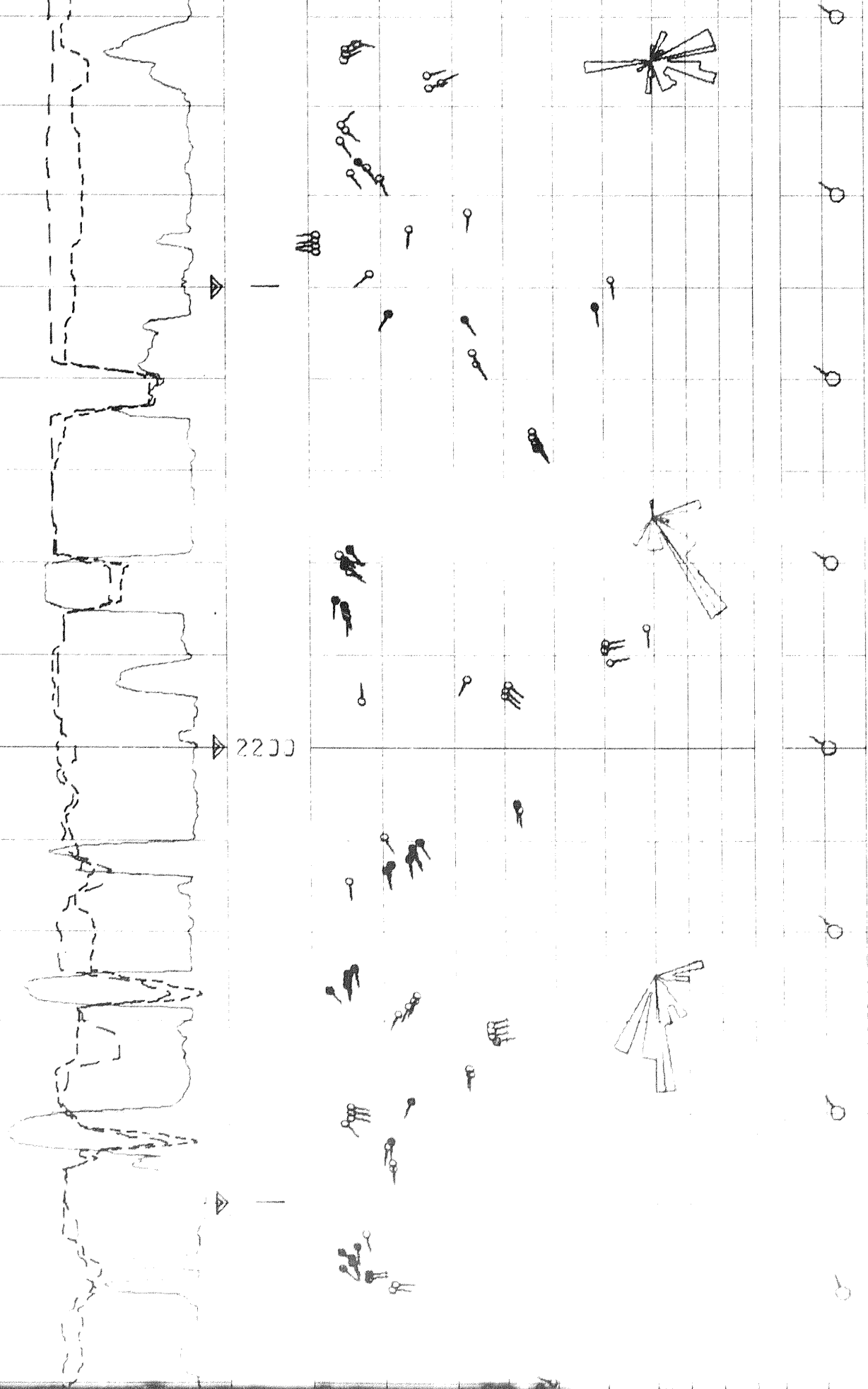
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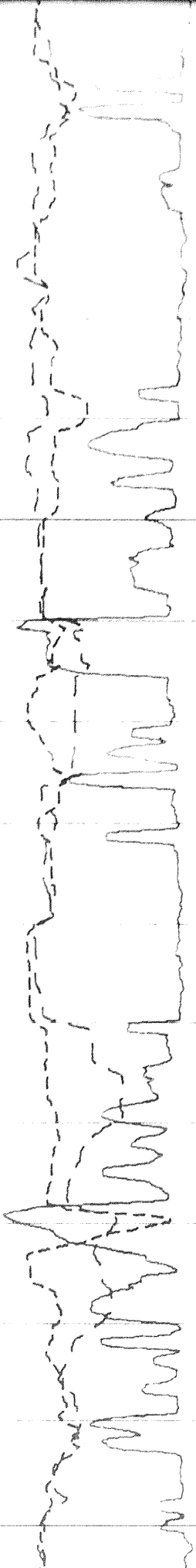


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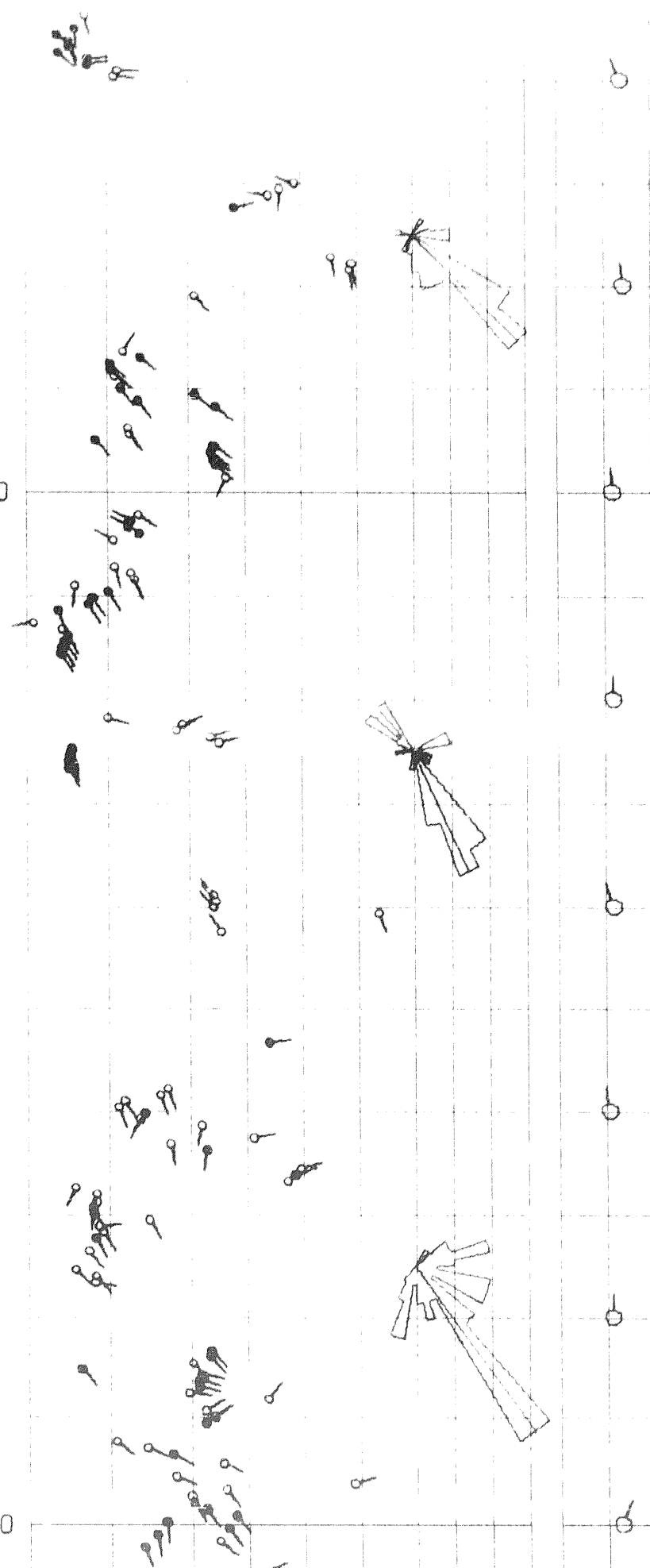
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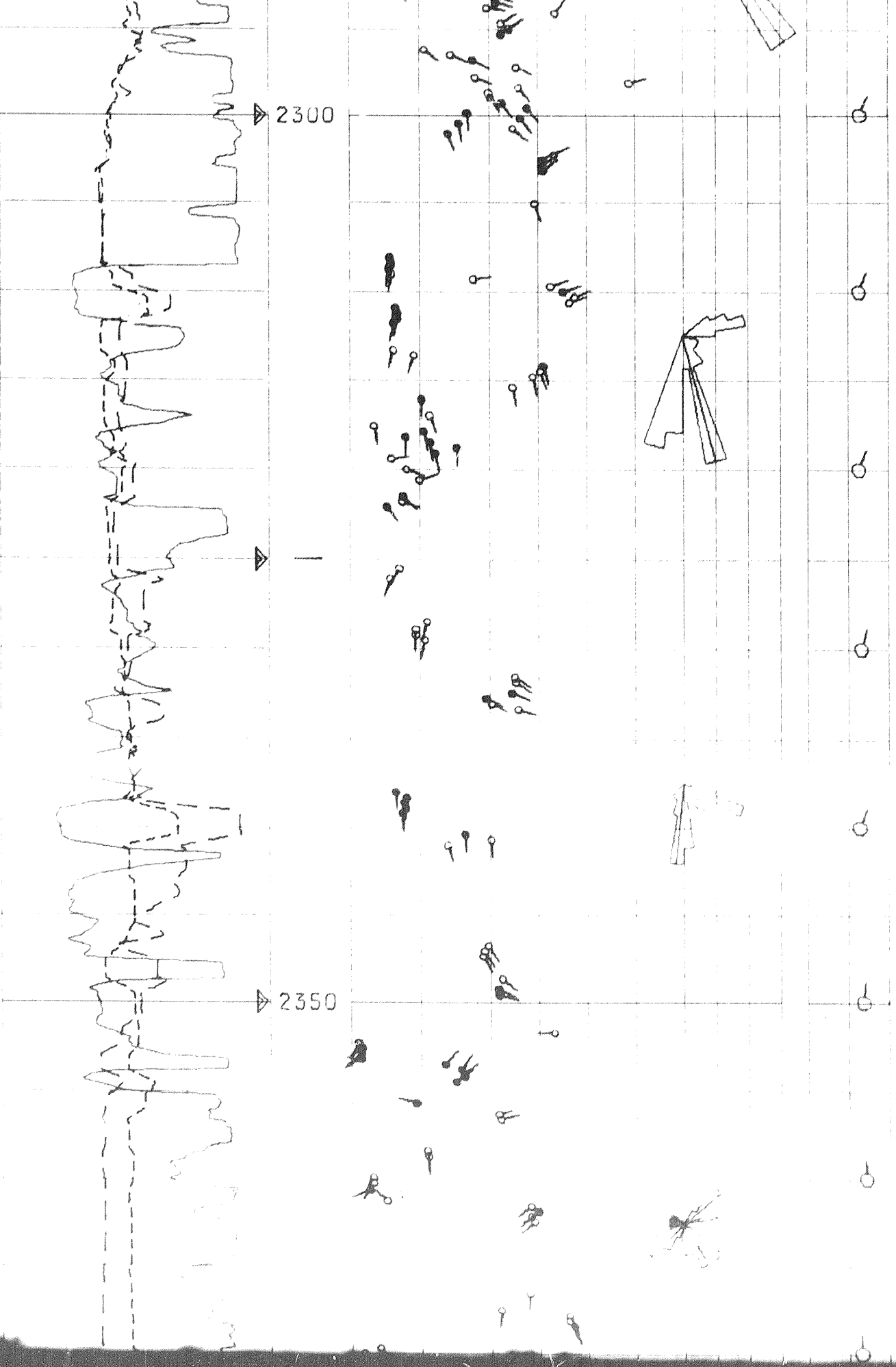


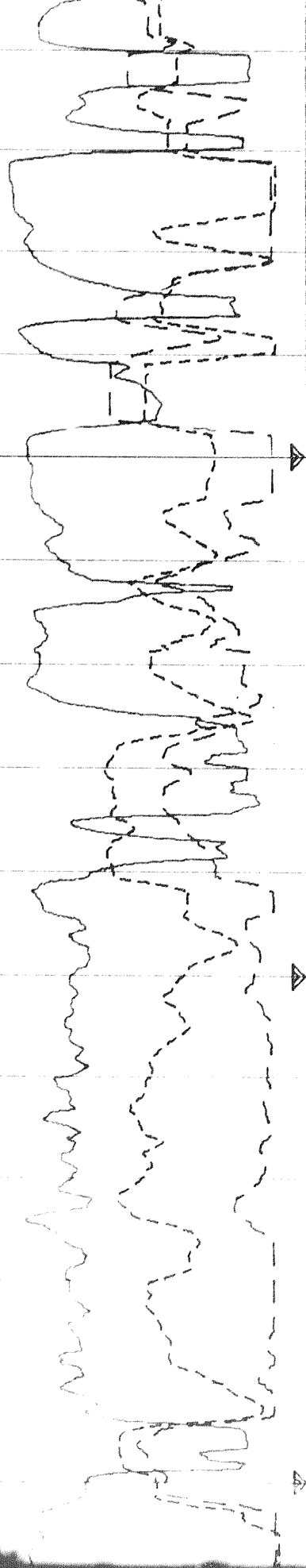
2250

2300



110

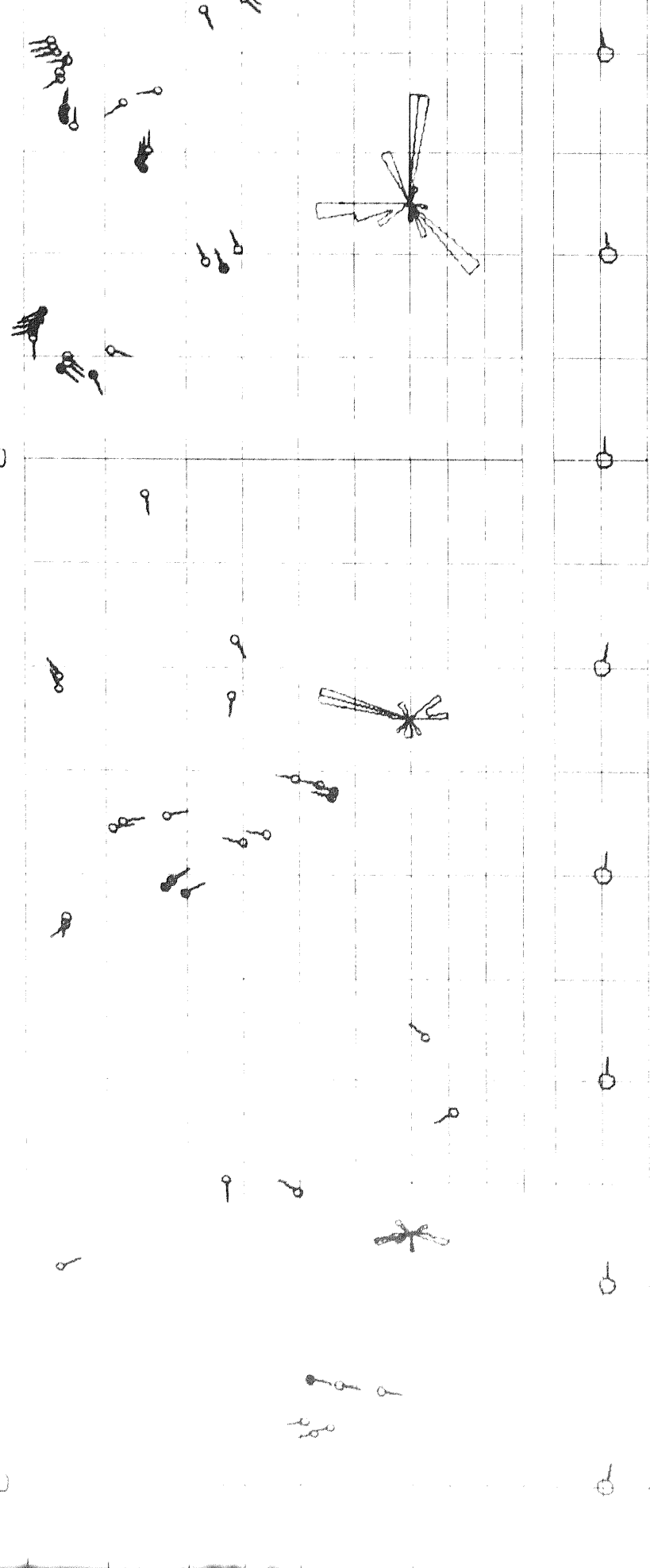




▶ 2450

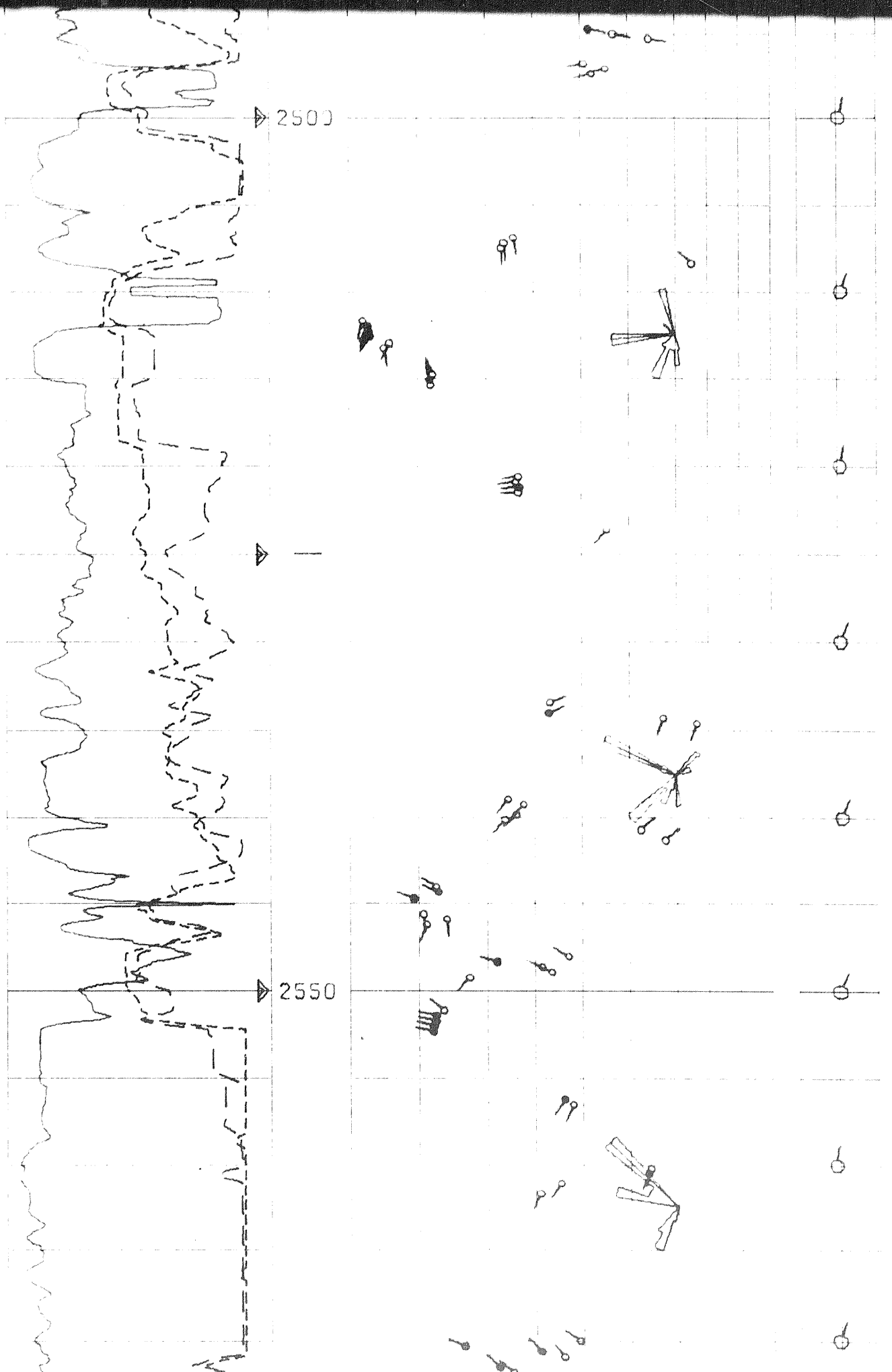
▶ —

▶ 2500



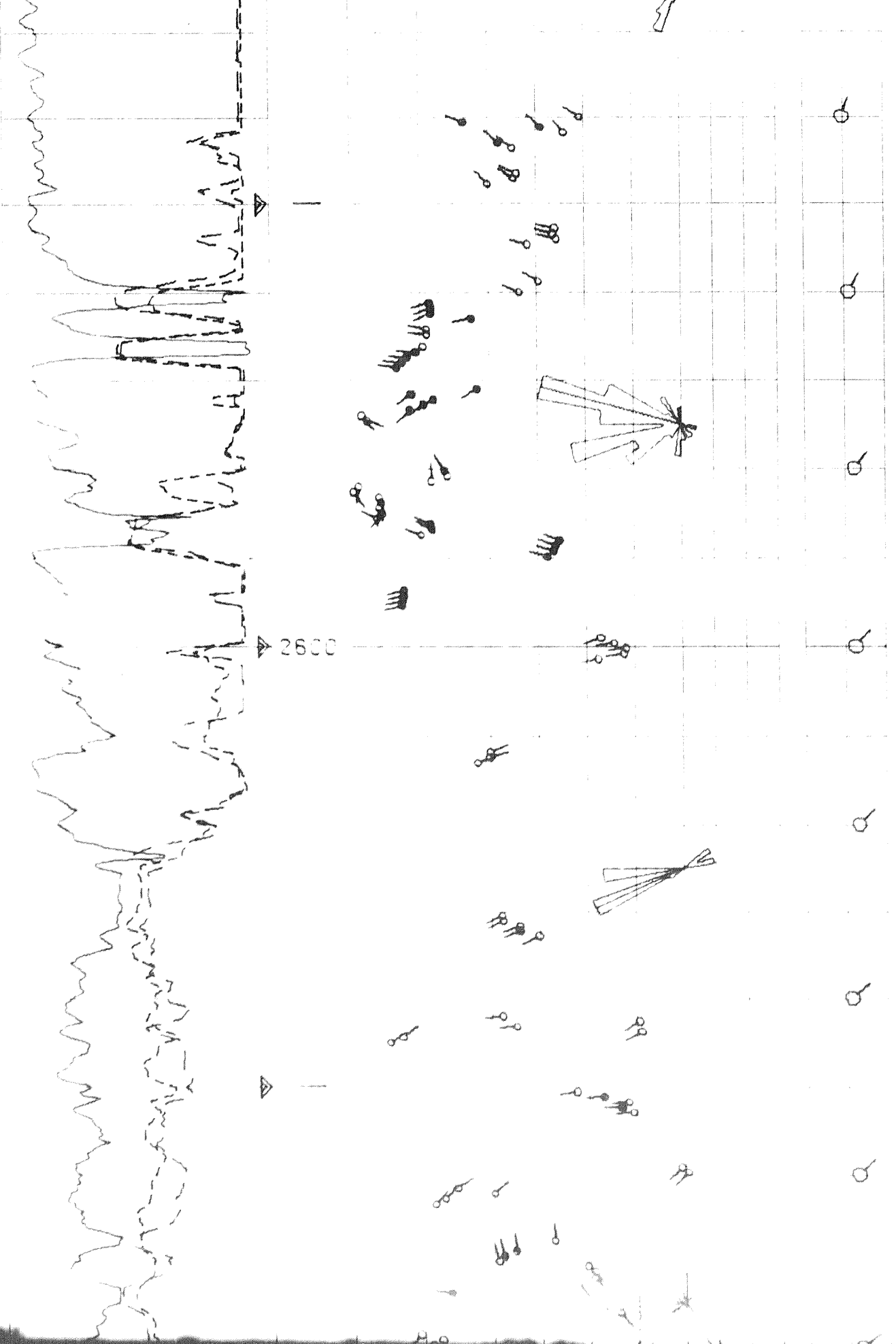
12 of

MILLER 829 IN 689



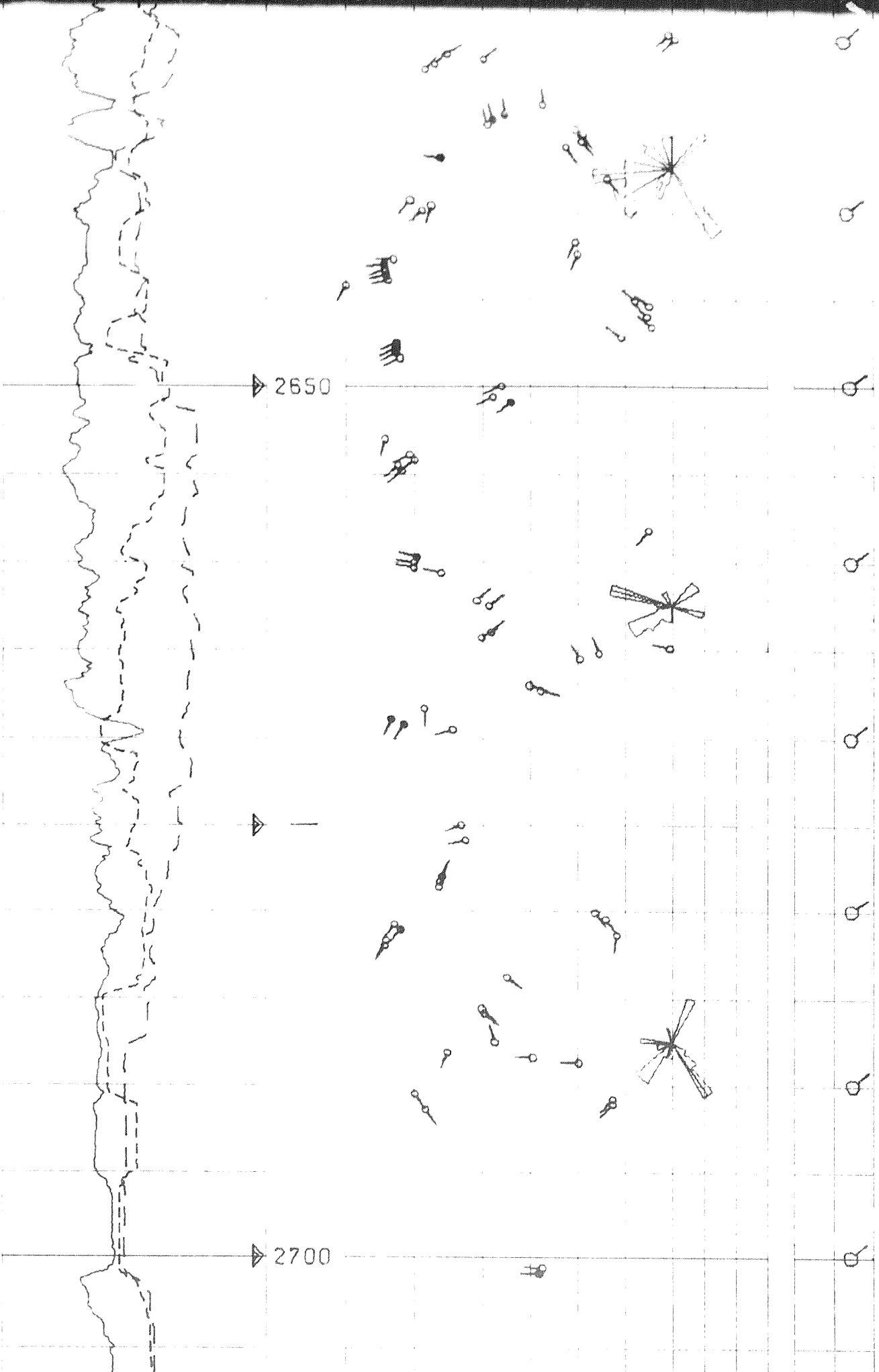
METER 825 IN GRID

2500



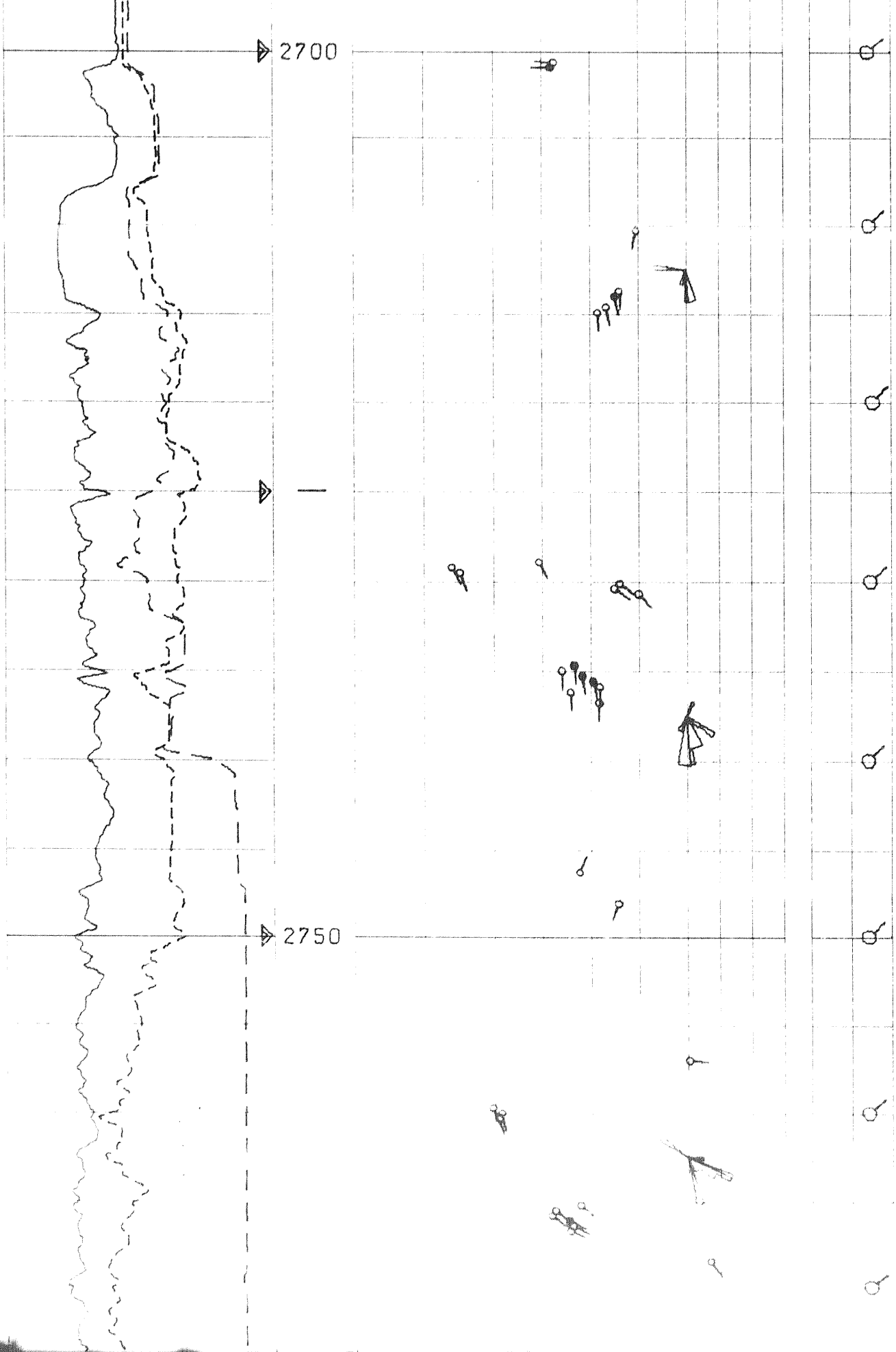
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ME L.F. 825 IN GRID



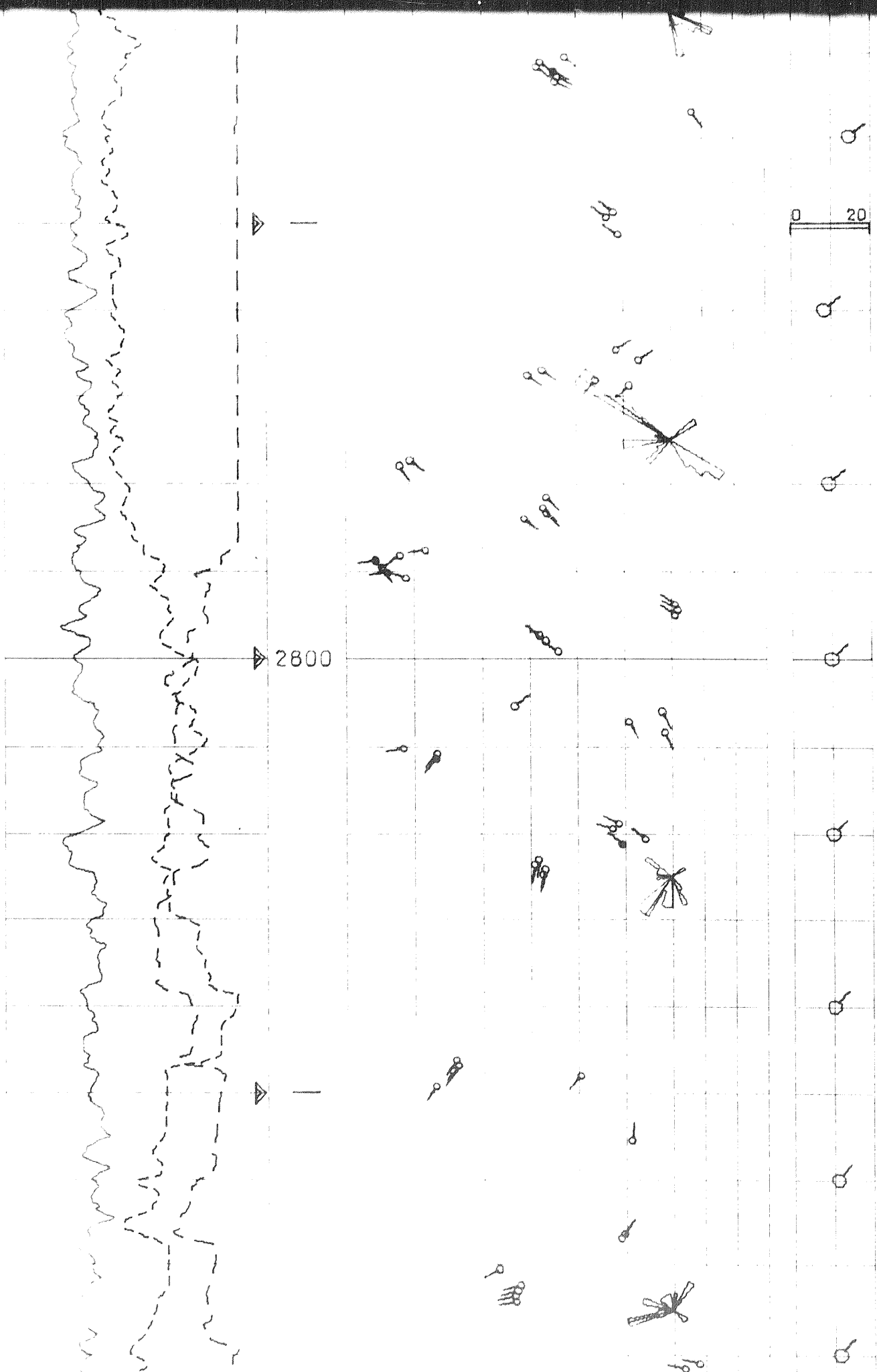
14 of

METER 825 IN. GRID



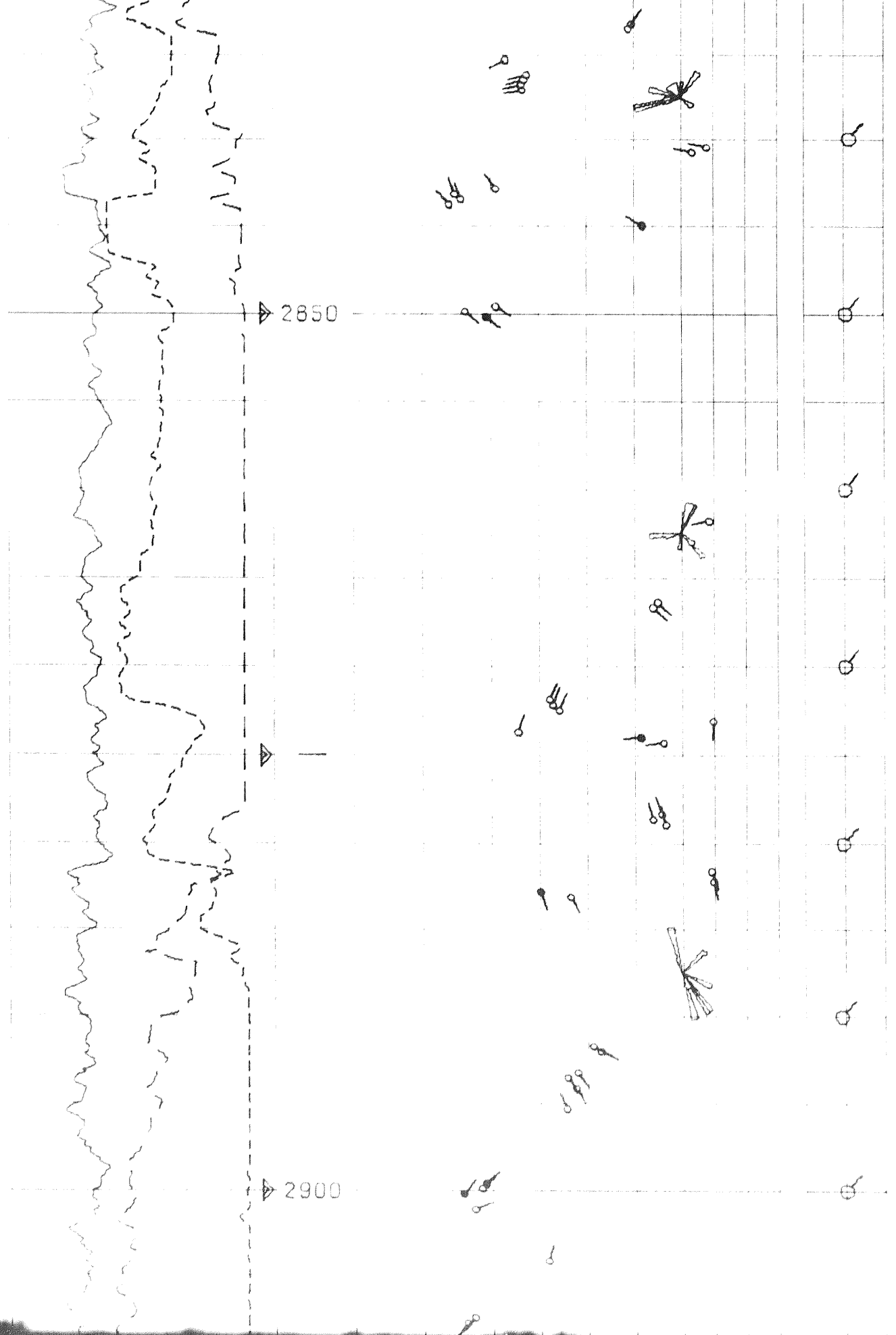
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CHS 11/12/13/14/15/16/17/18/19/20/21/22/23/24/25/26/27/28/29/30/31/32/33/34/35/36/37/38/39/40/41/42/43/44/45/46/47/48/49/50/51/52/53/54/55/56/57/58/59/60/61/62/63/64/65/66/67/68/69/70/71/72/73/74/75/76/77/78/79/80/81/82/83/84/85/86/87/88/89/90/91/92/93/94/95/96/97/98/99/100

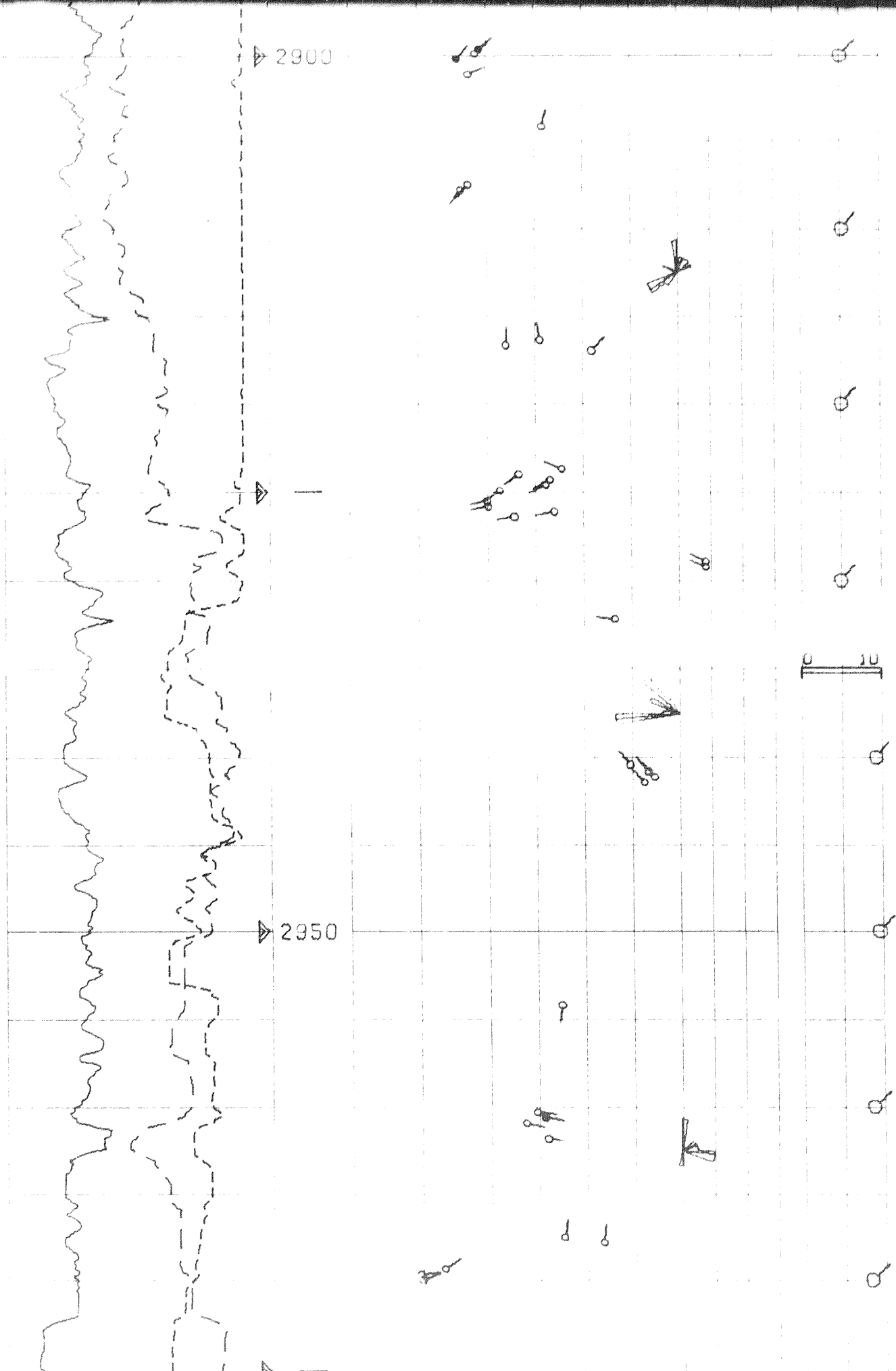


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WELL 825 IN GRID



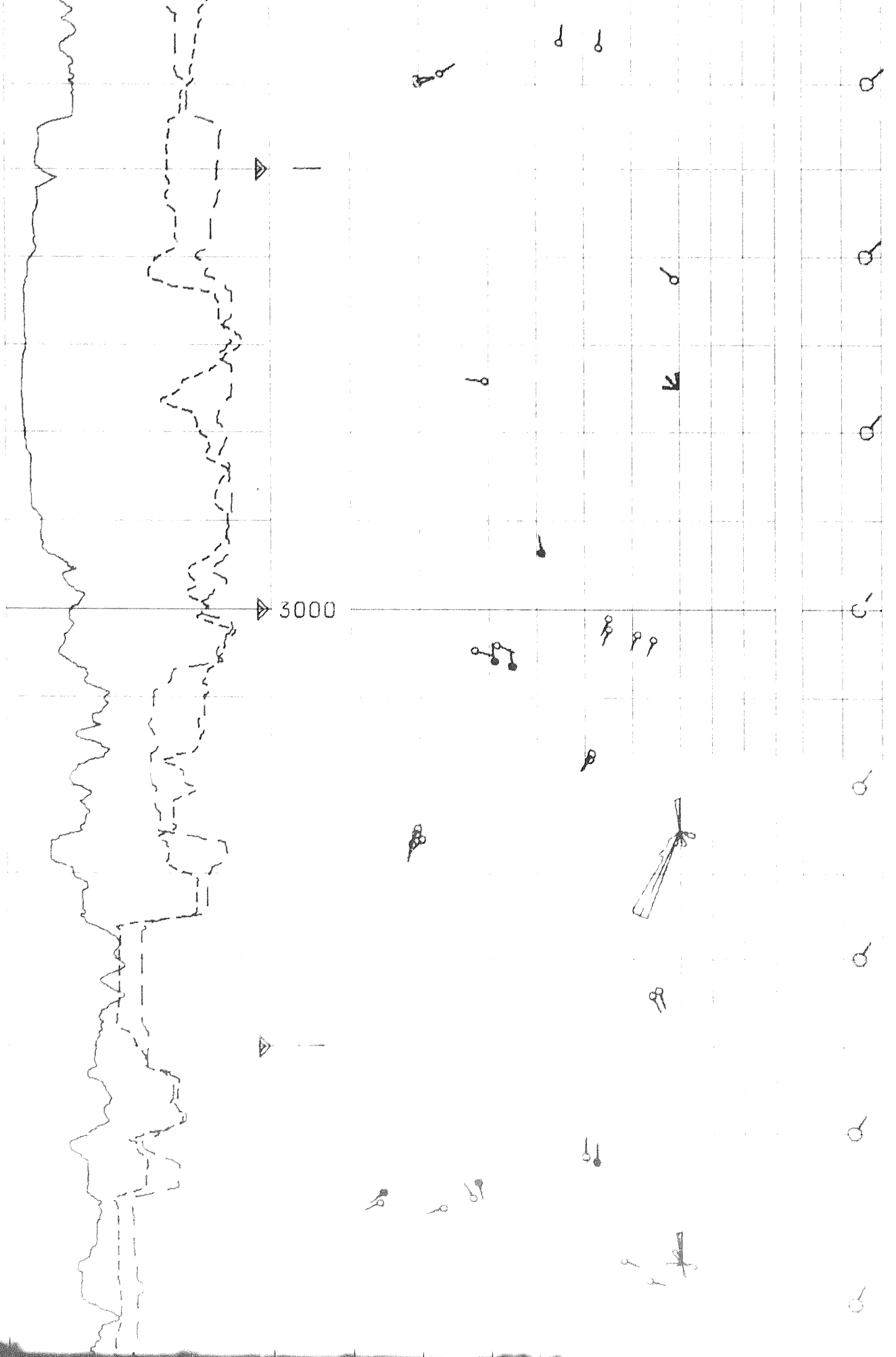
WELLS IN AREA

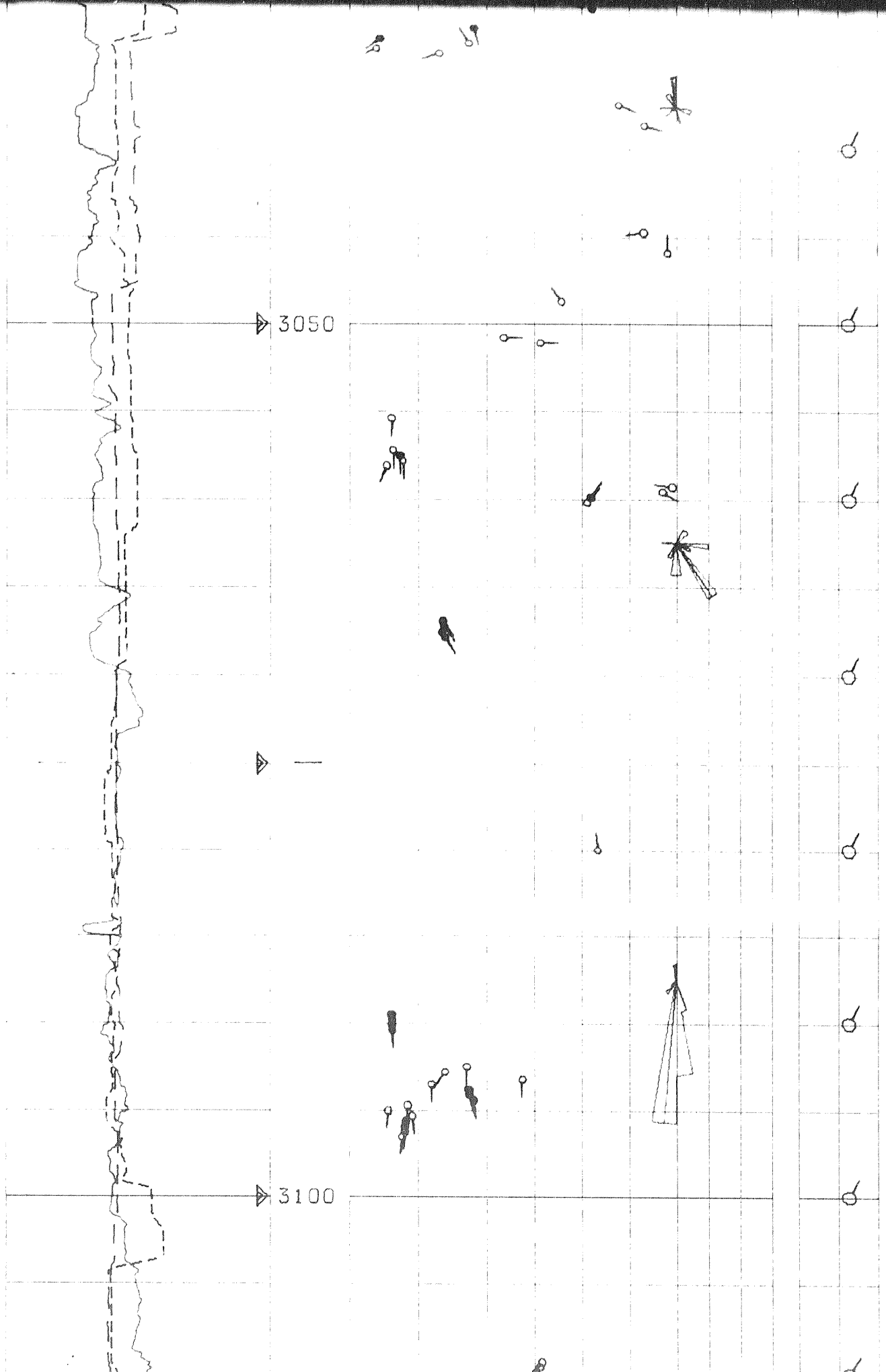


2900

2950

1691



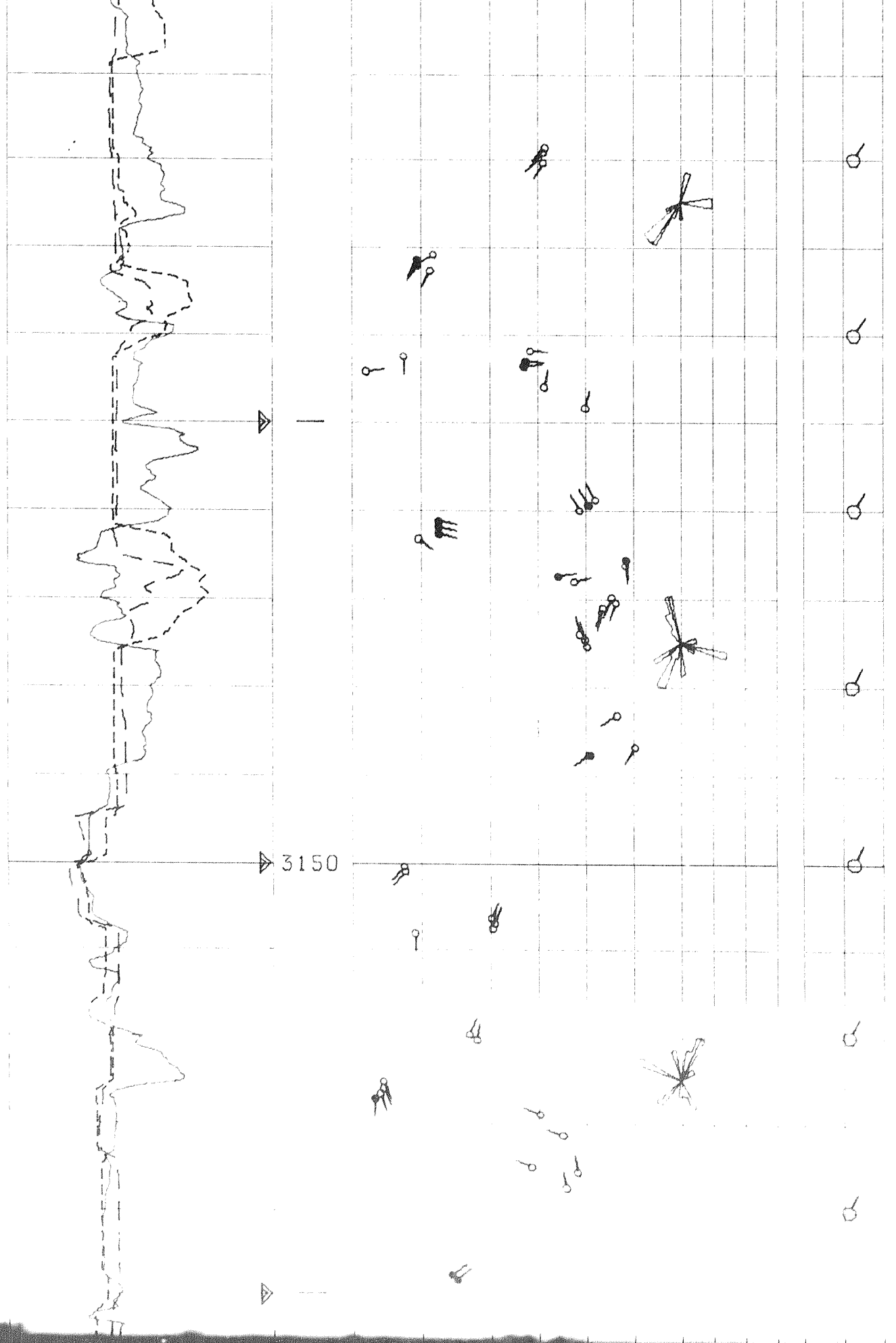


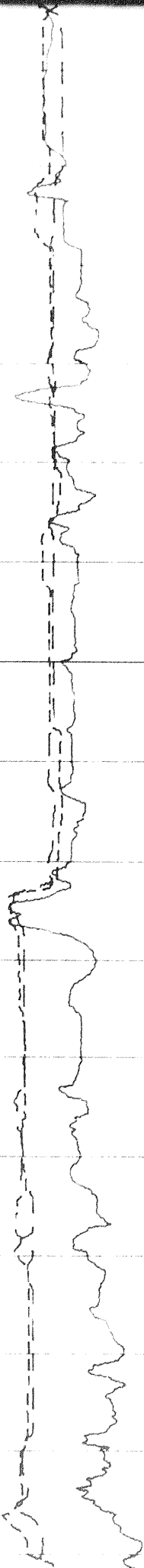
▷ 3050

▷ |

▷ 3100

1904

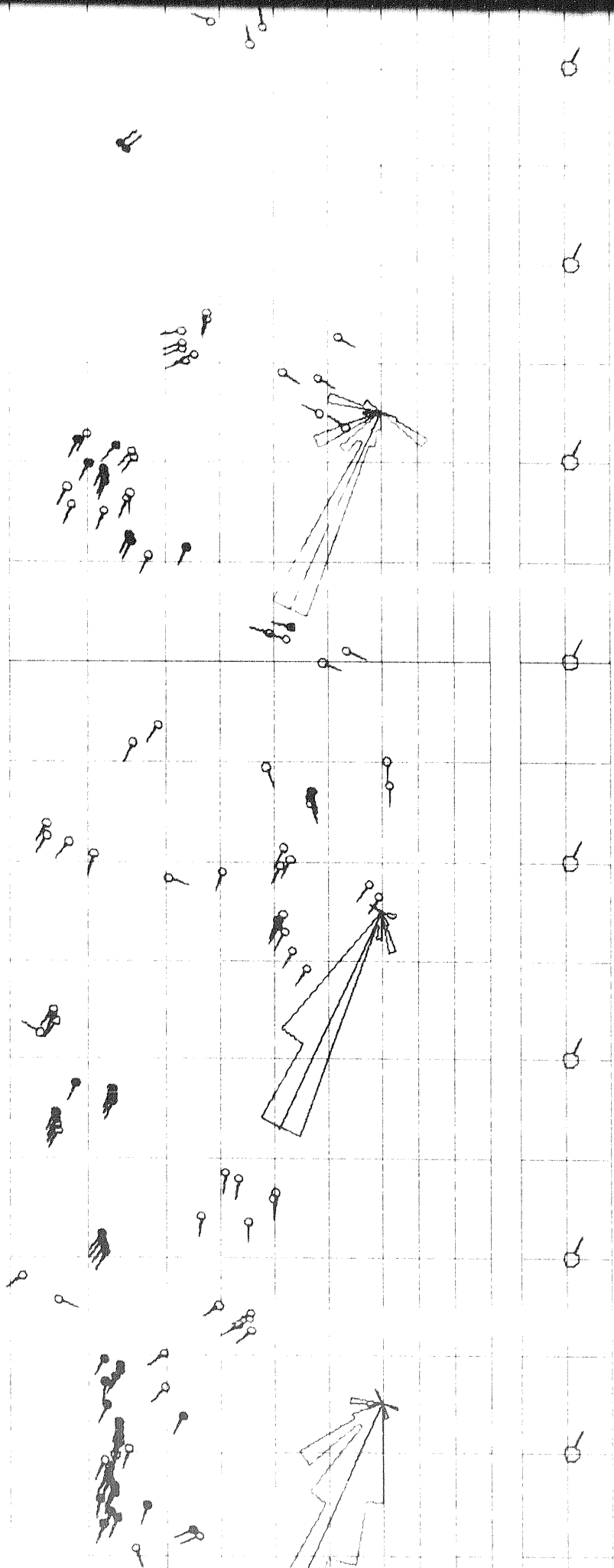




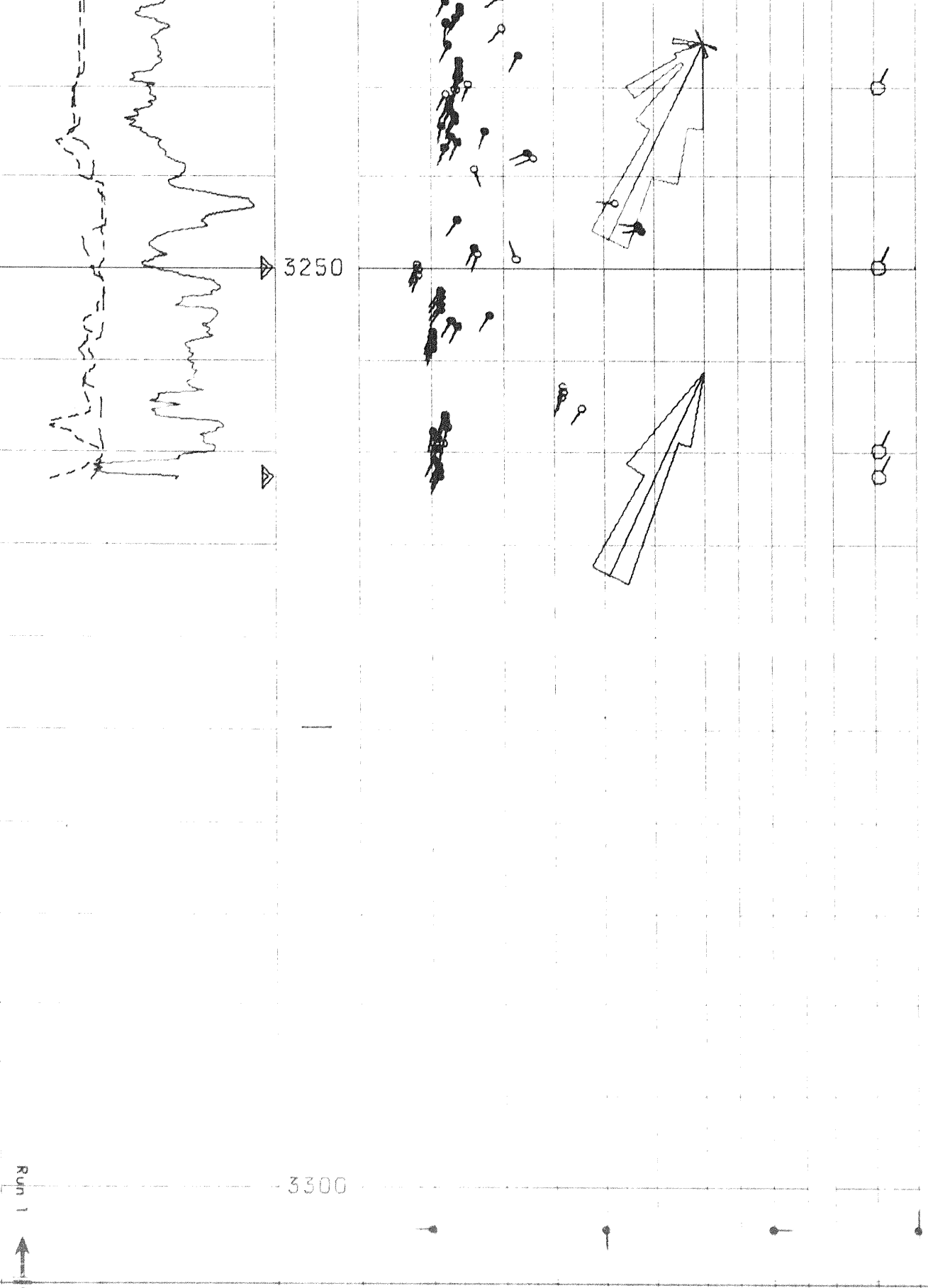
▶ —

▶ 3200

▶ —



18 of



Run 1 → → Run 2

HDT-D

SEARCH

STEP L

CORREL

3300

3250

GRGM

FEB 15

RUN NG

YUKON

KILDCA

CECUMB

CECUMB

1
↑
↓

Run 2

CORRELATION LENGTH 1.2 M.
STEP LENGTH 0.3 M.
SEARCH ANGLE 45 DEGREES X1
HDT-D TTR 11/45

ARROW PLOT FROM CLUSTER PROGRAM
FEB 15, 1980
RUN NO TWO
YUKON
WILDCAT 60,07,35.917N,124,07,3
COLUMBIA GAS DEV OF CAN LTD
COLUMBIA ET AL KOTANEELEE YI-48

JOB 3554.00

CORRELATION CURVE DEPTHS DIP ANGLE AND DIRECTION BOREHOLE DRAFT

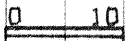
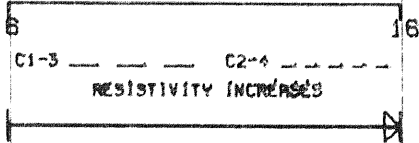
0 10 20 30 40 50 60 70 80 90 10

ALL QUALITY ARROW PLOT 03554
FROM THE CLUSTER PROGRAM
BLACK ARROWS ARE HIGHEST QUALITY

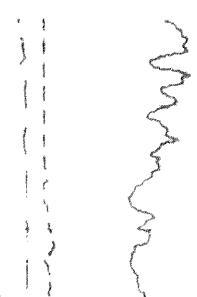
CORRELATION LENGTH 1.2 M.
STEP LENGTH 0.3 M.
SEARCH ANGLE 45 DEGREES X1
PC0130043518307001020420

ZONE FROM 3292 TO 4417

CALIPERS



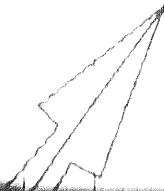
1961



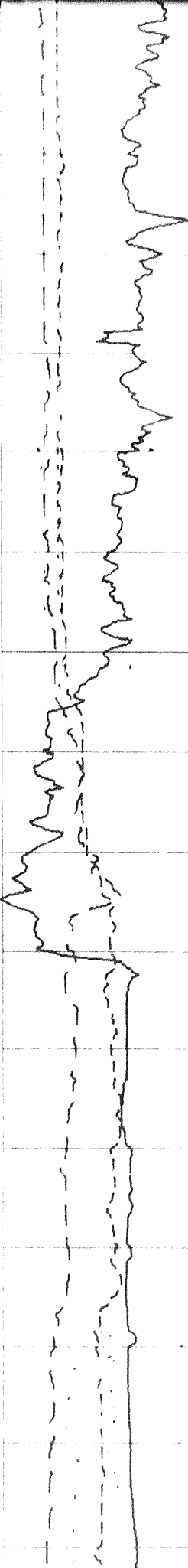
▷ 3300



δ

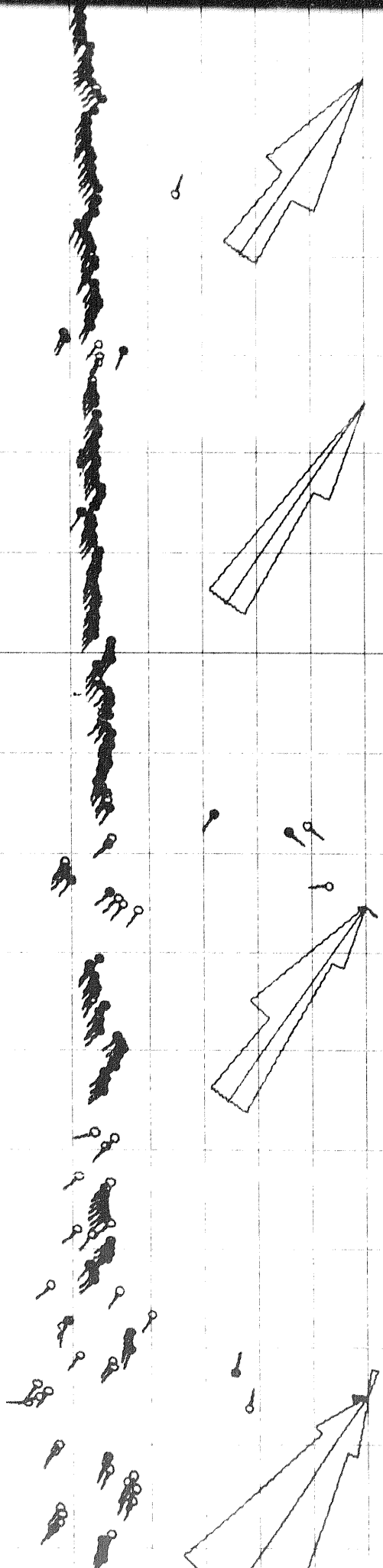


δ



▶ 3300

▶ 3350



○

○

○

○

○

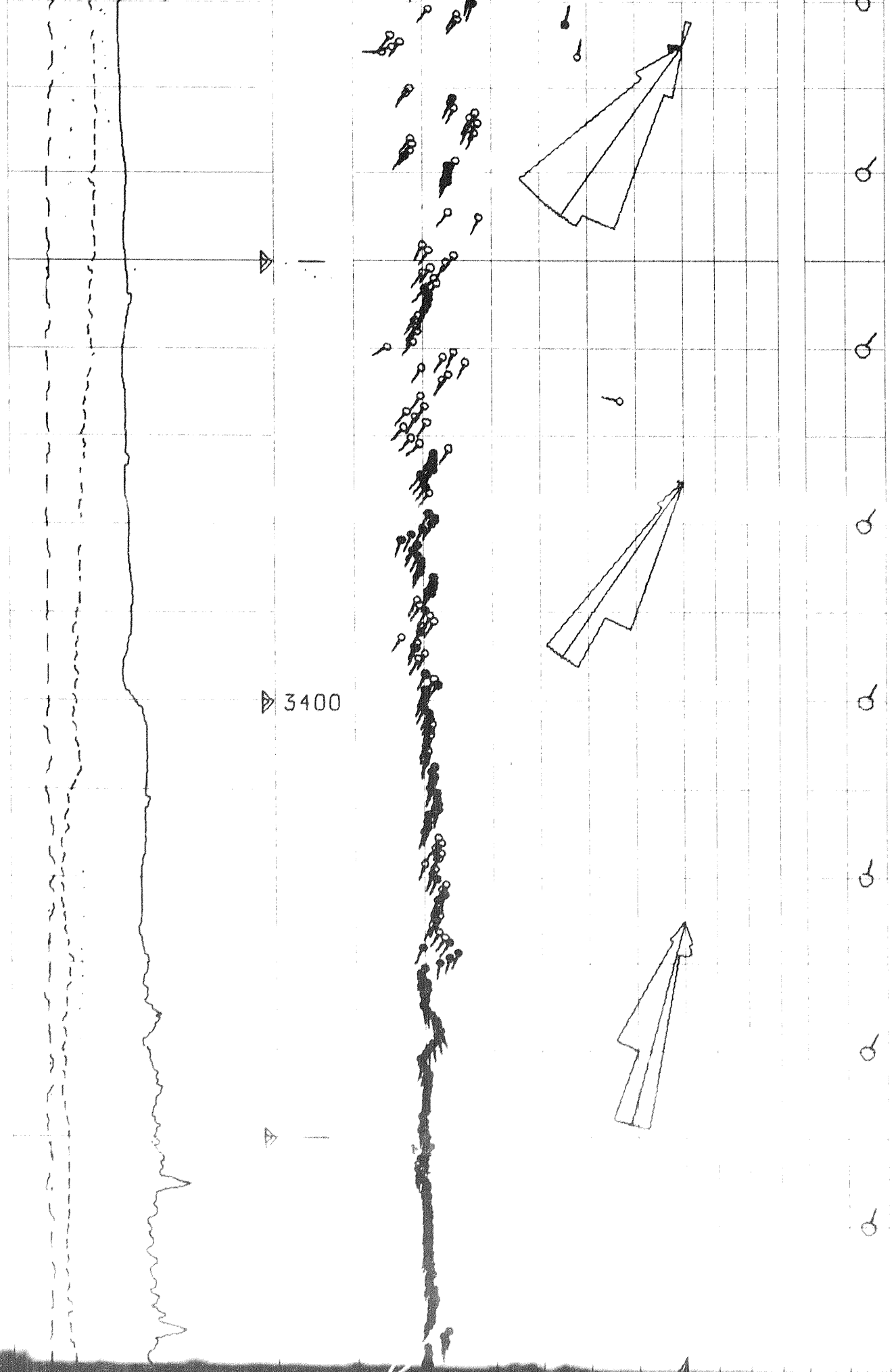
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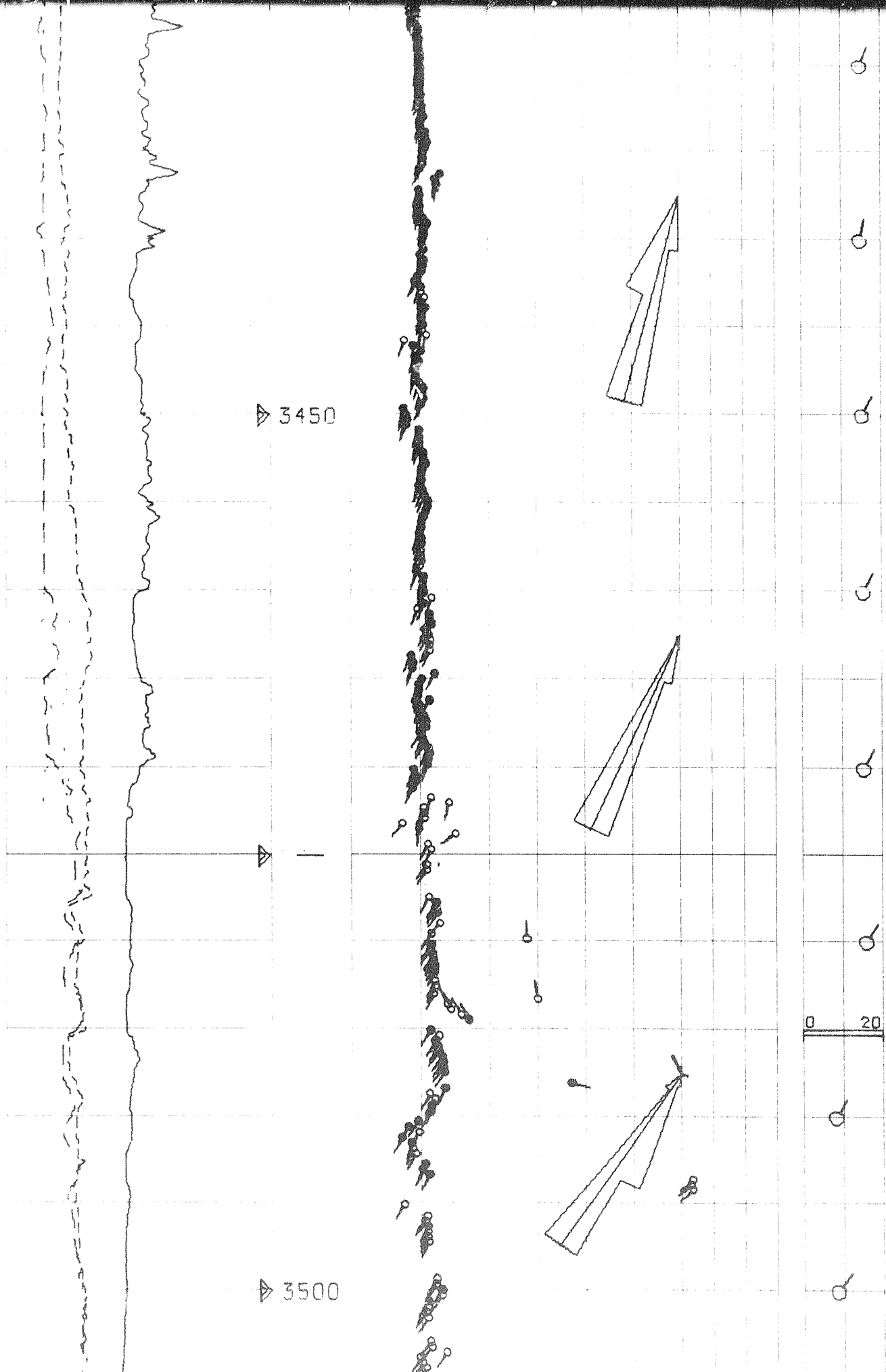
○

○

Vertical text along the right edge of the map, likely a scale or coordinate indicator.

20 of





▷ 3450

▷ 3500

0 20

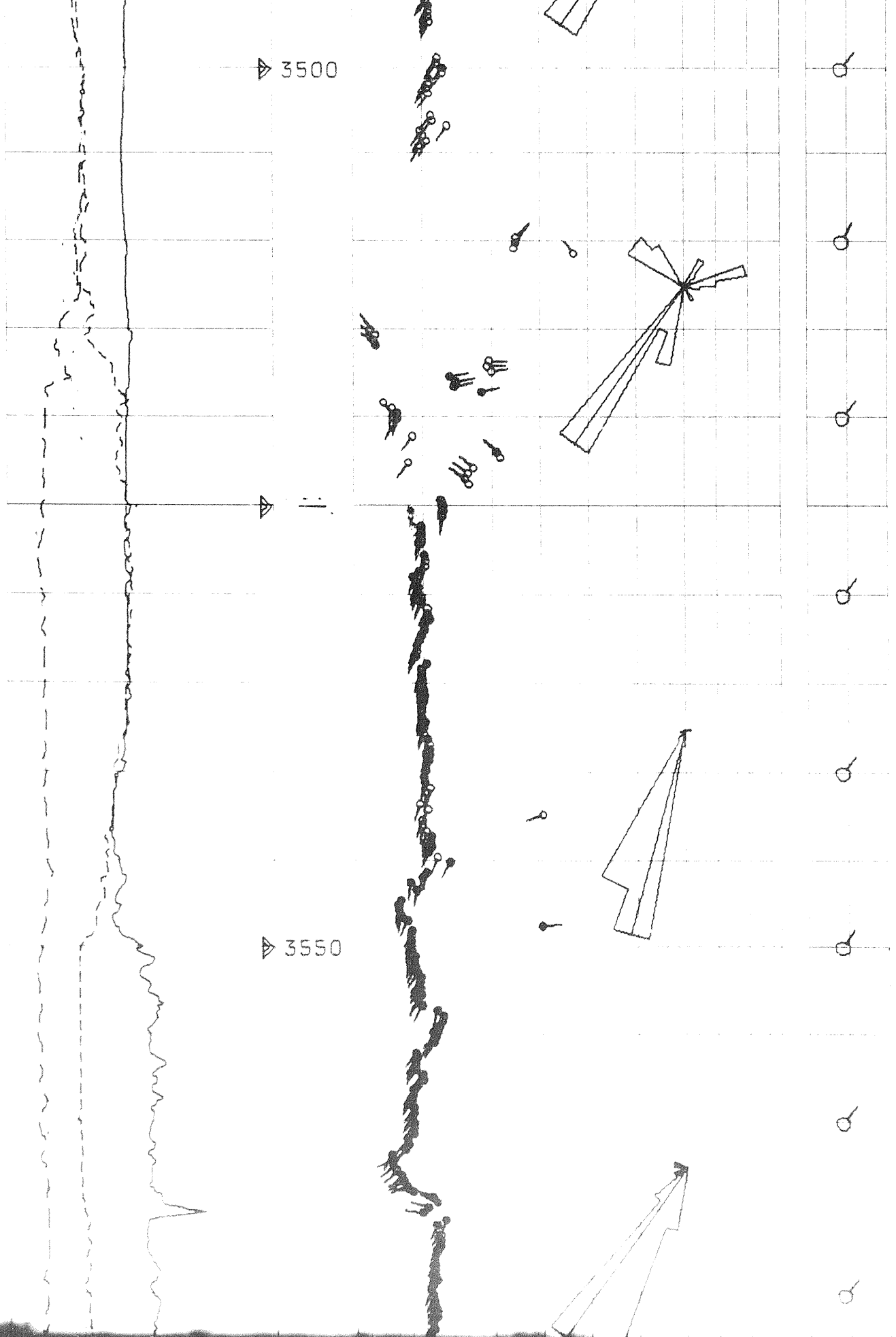
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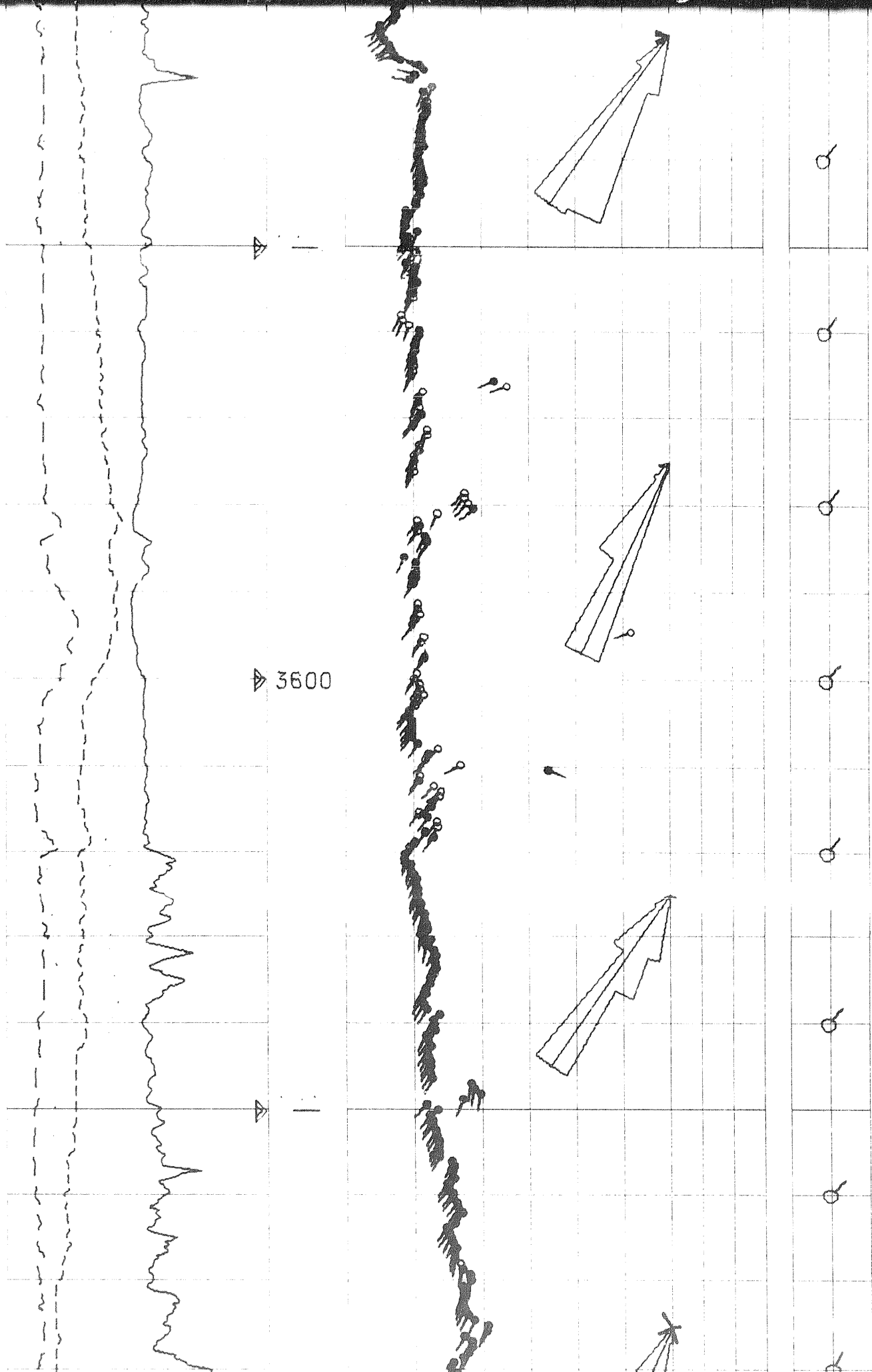
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▷ 3550

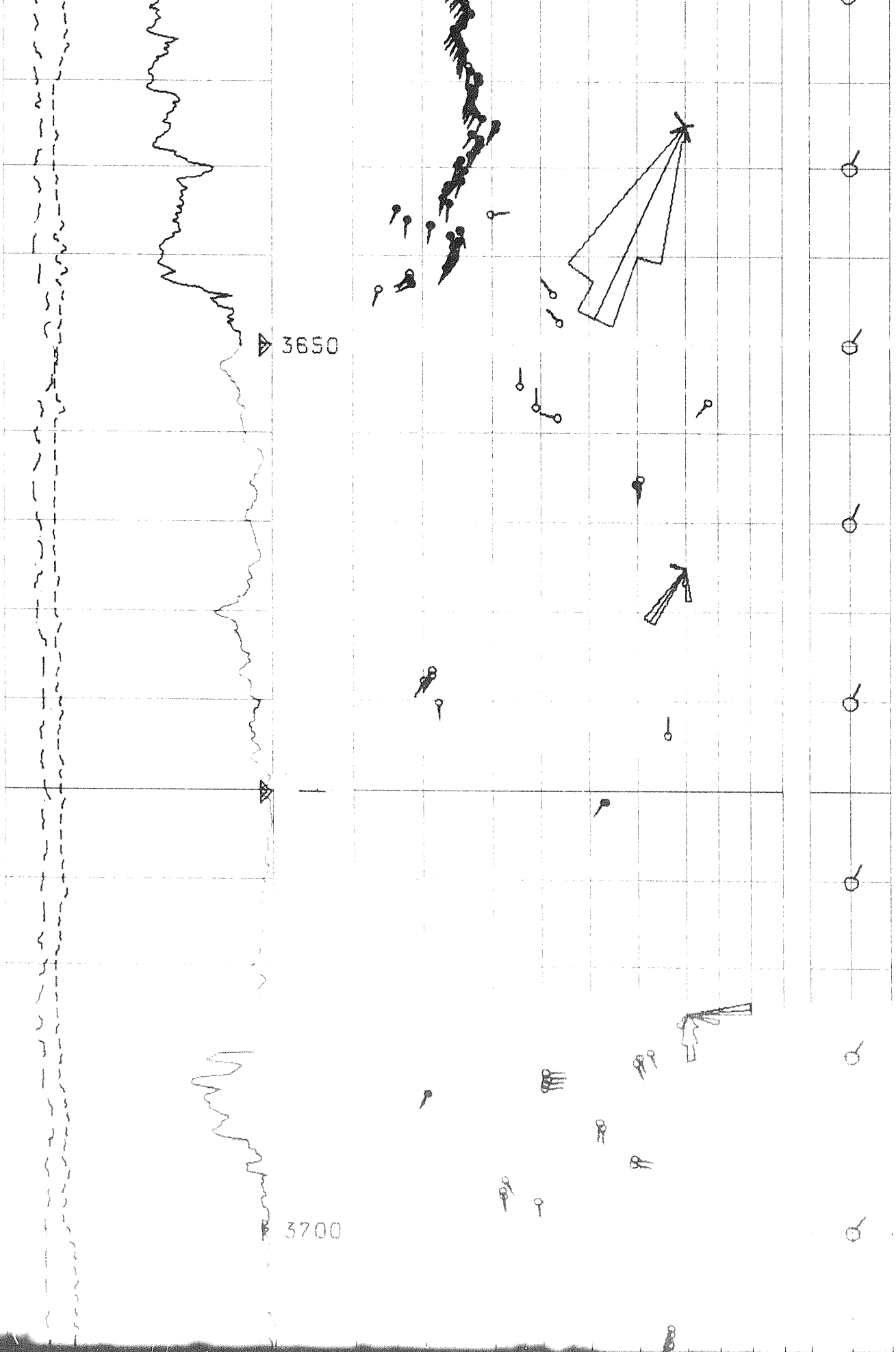
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219





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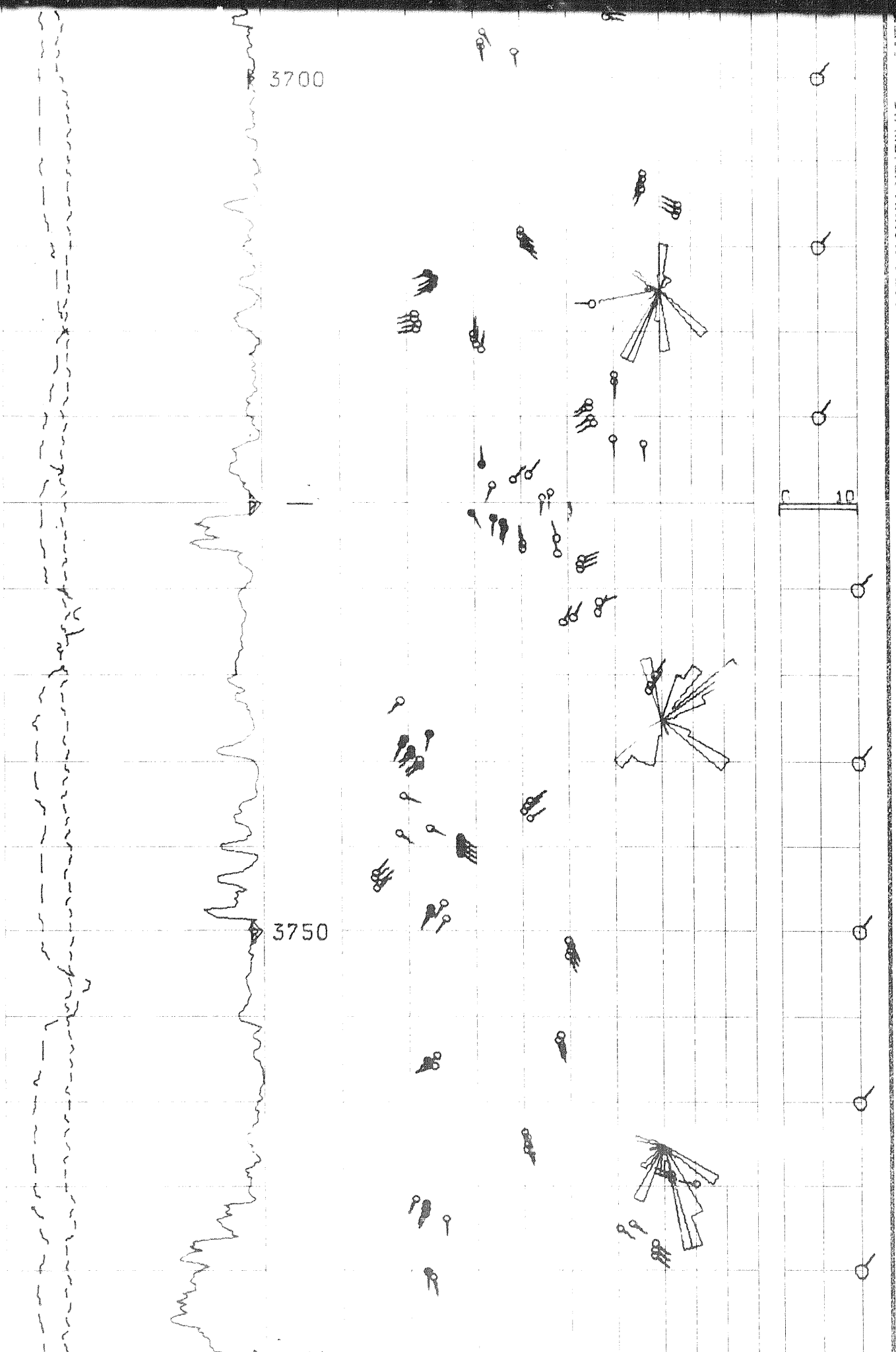


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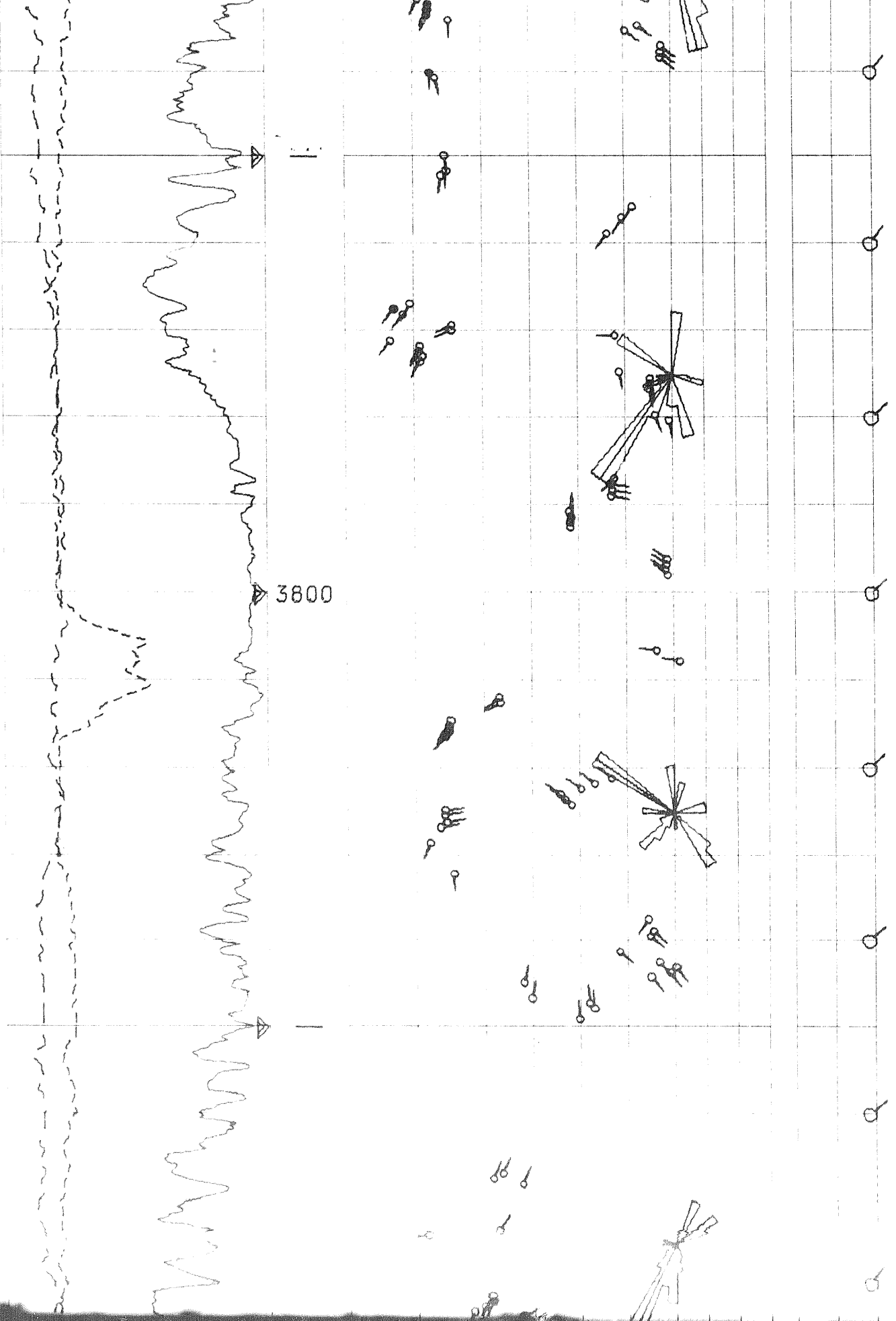
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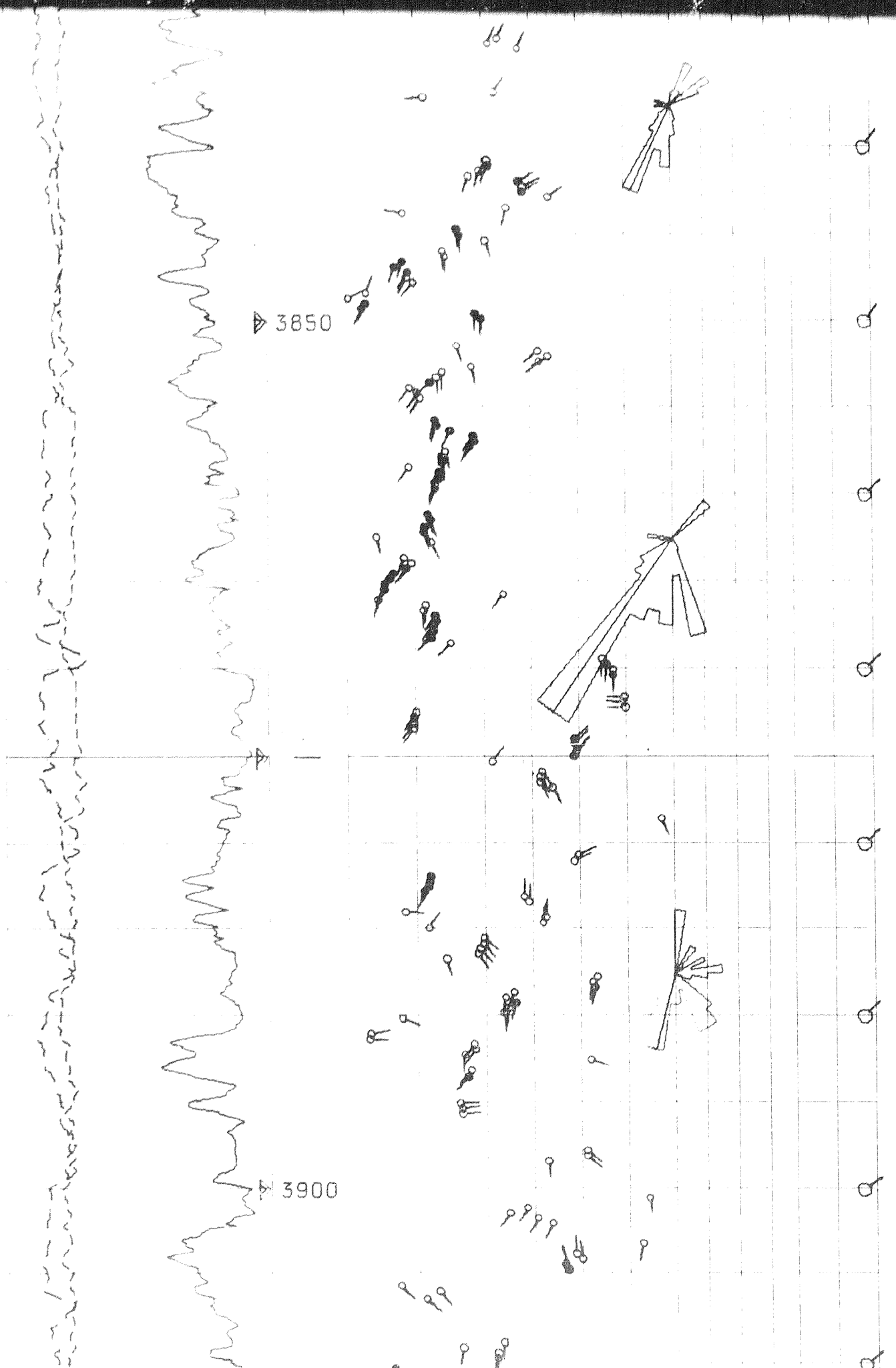
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3750

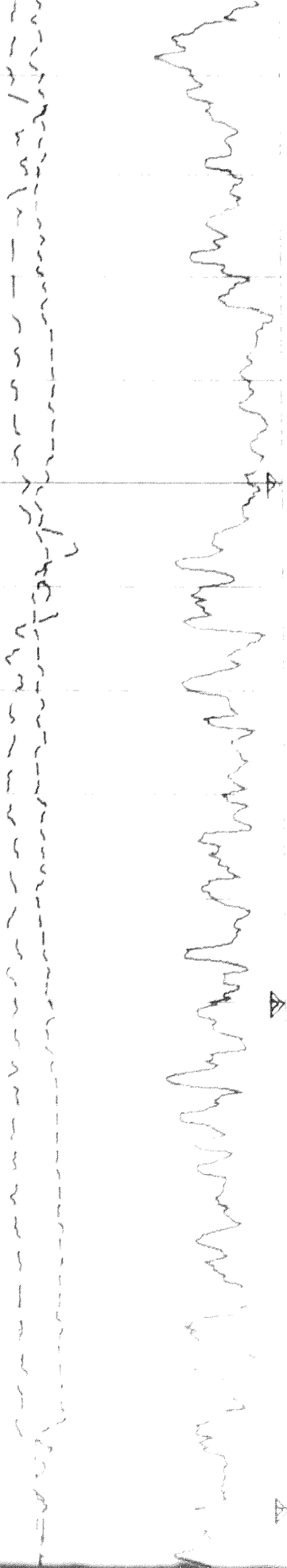


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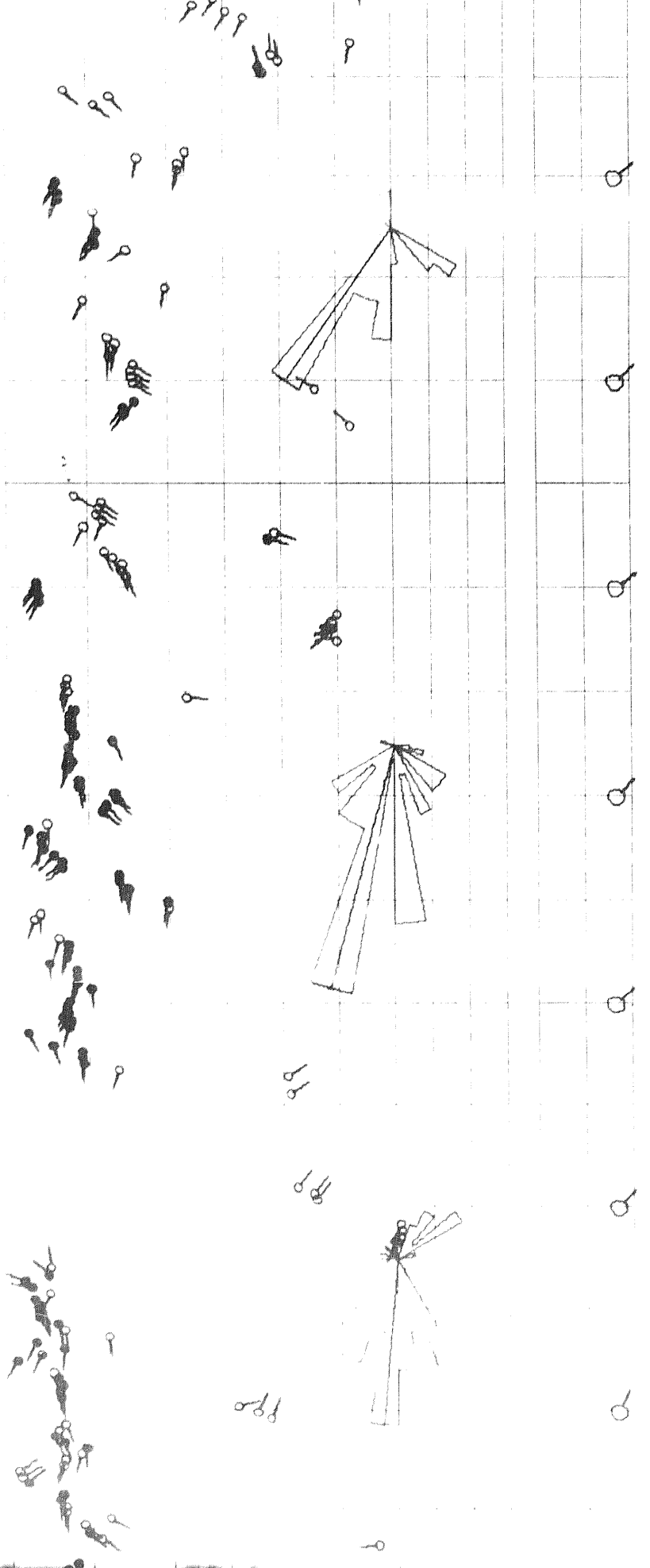


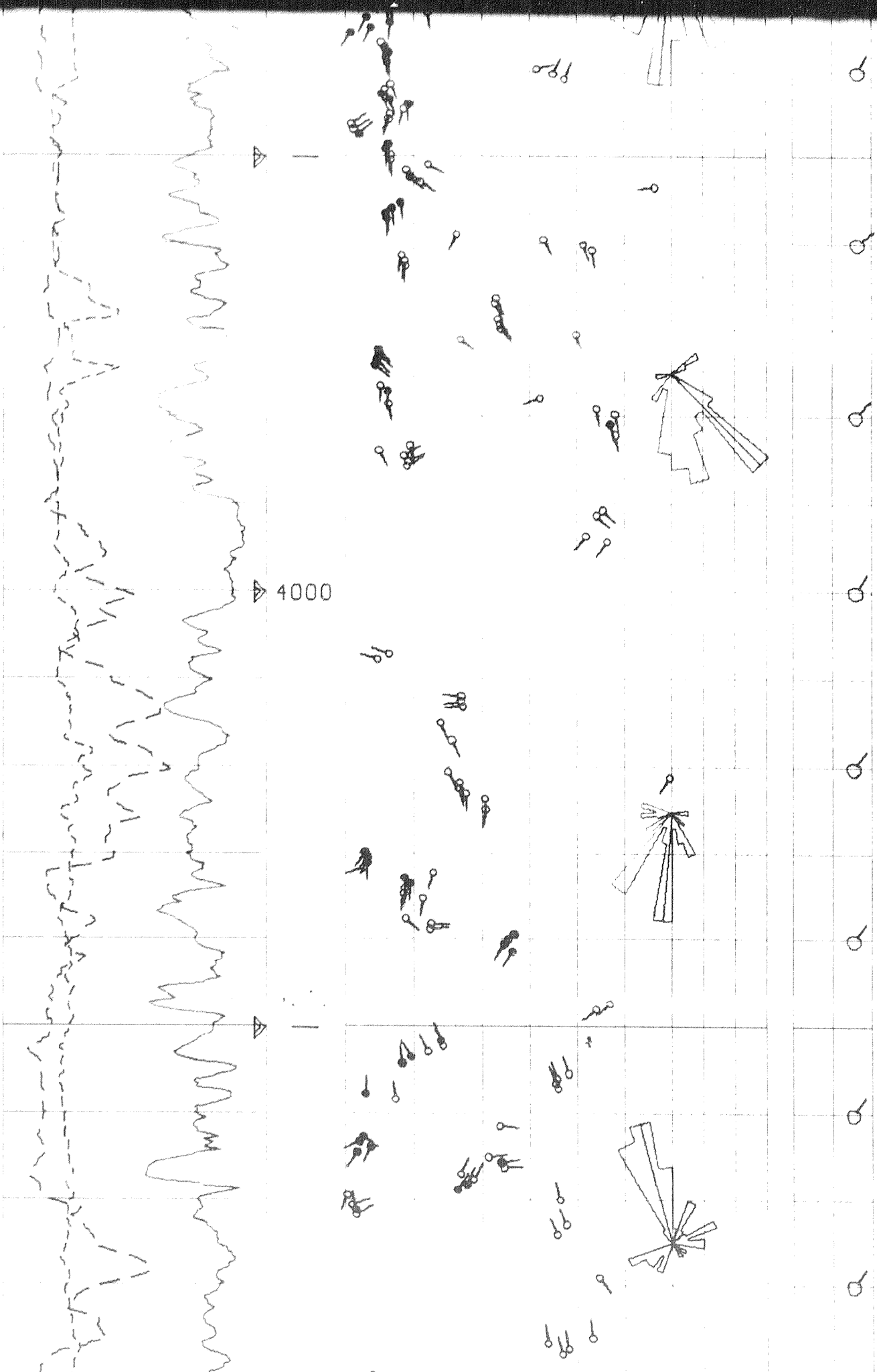


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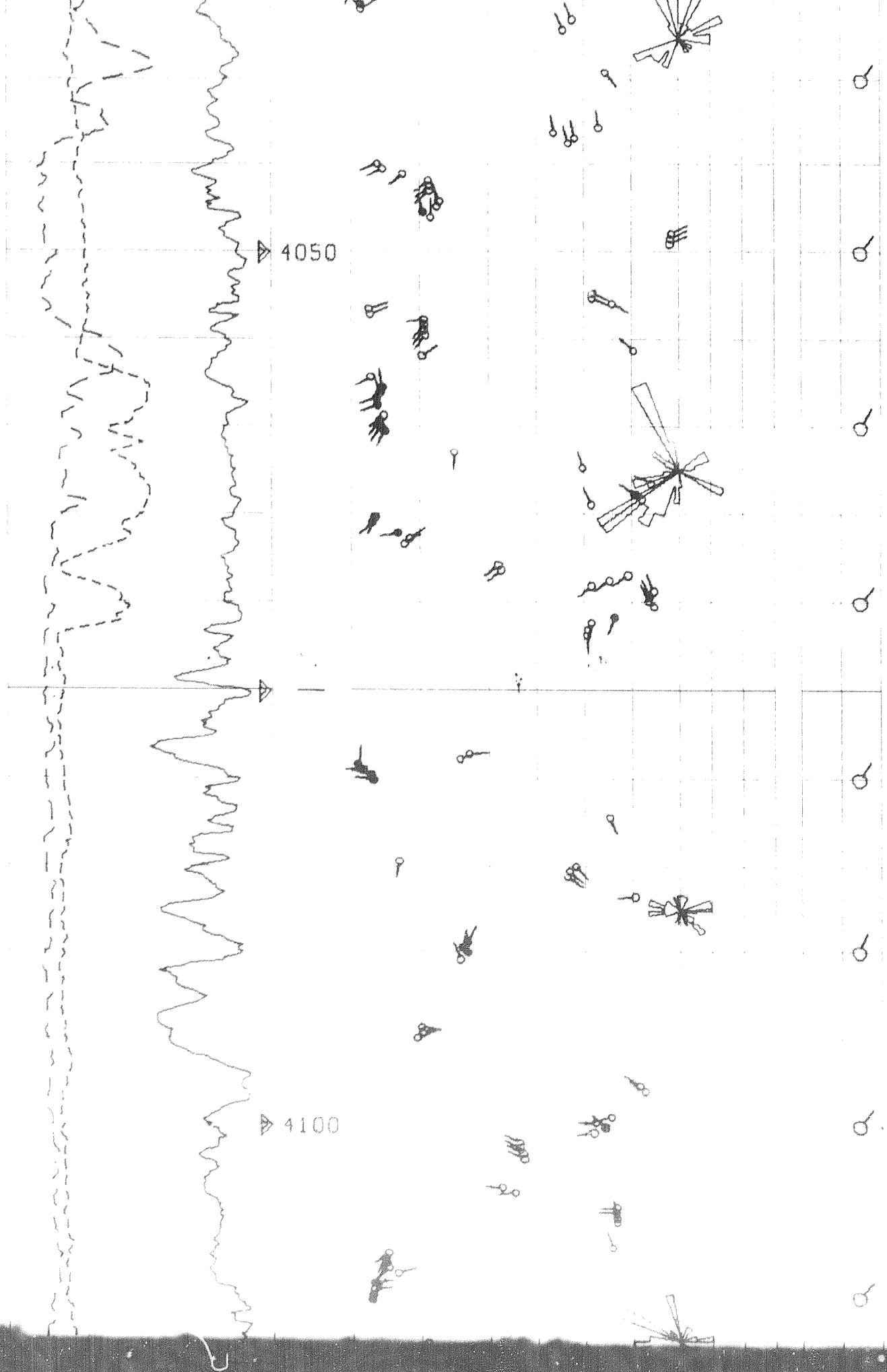


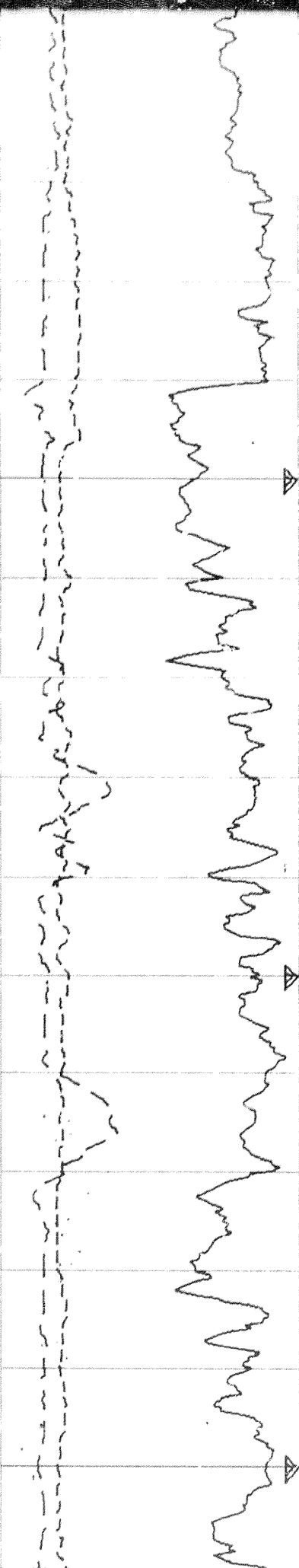
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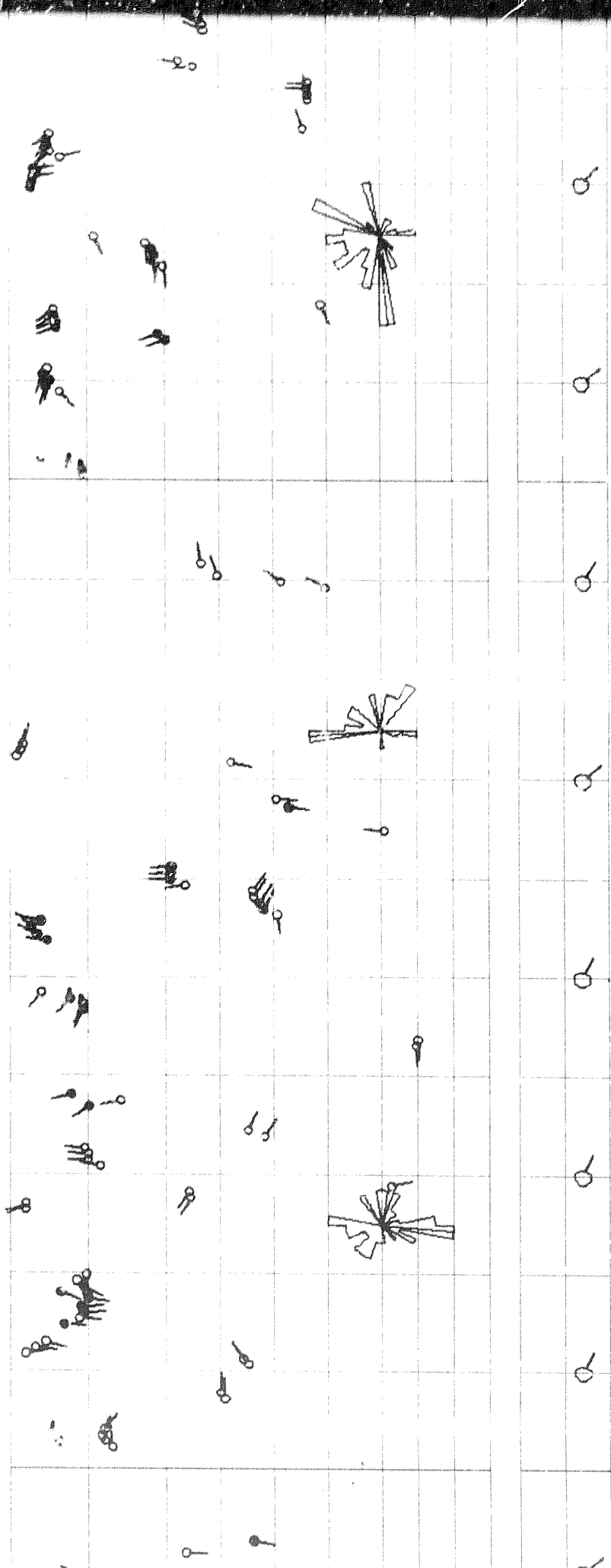


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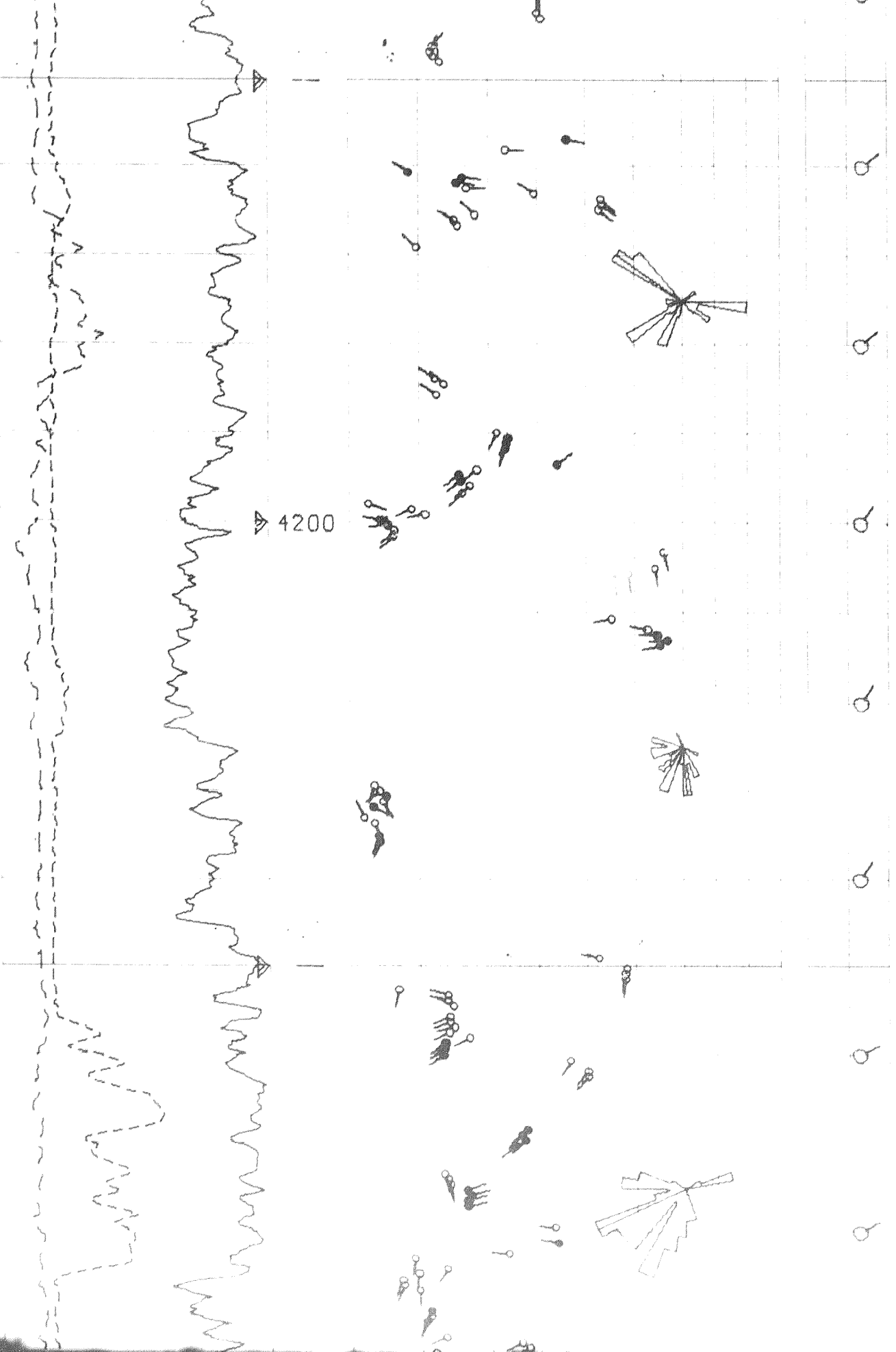




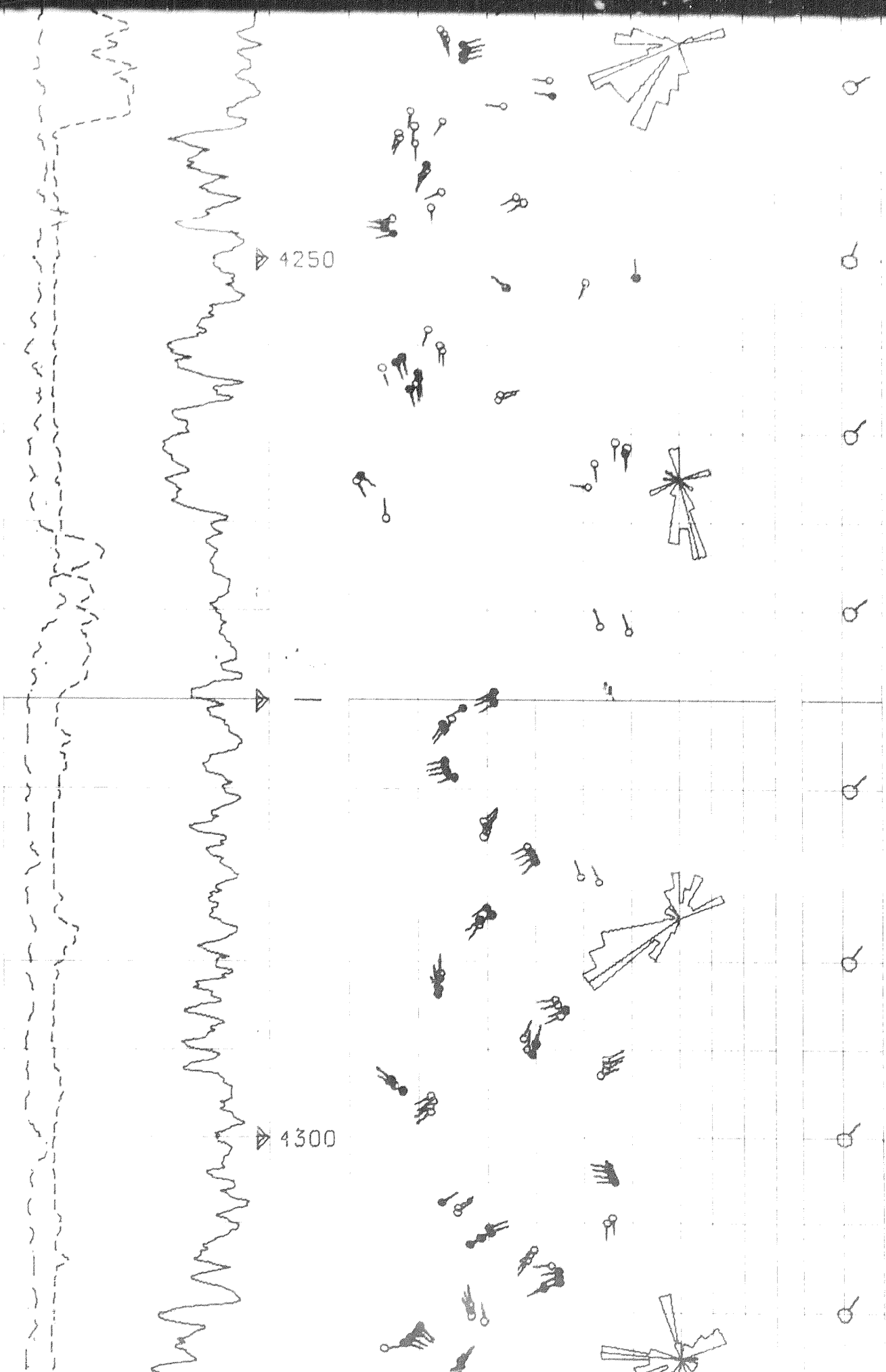
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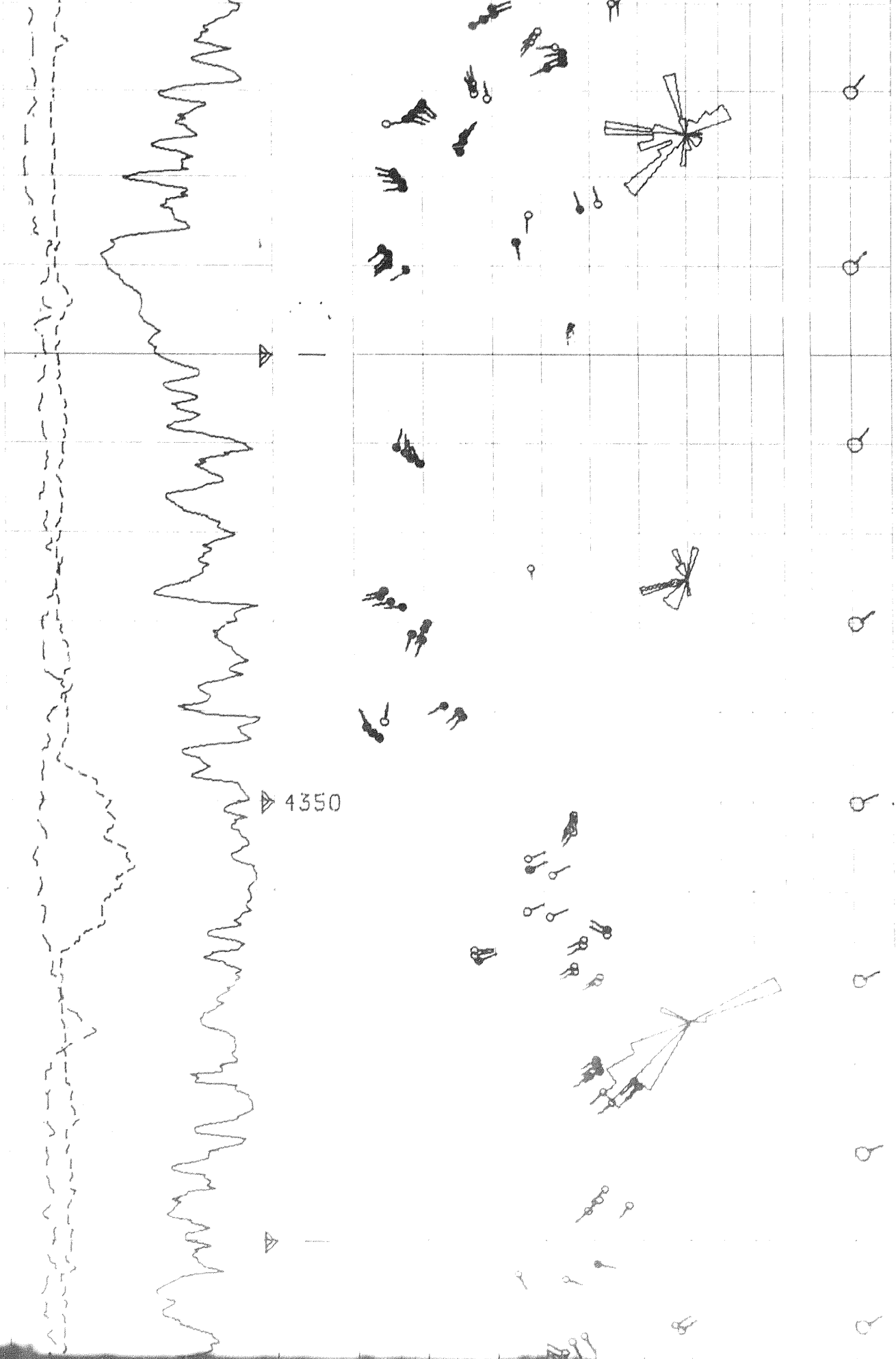


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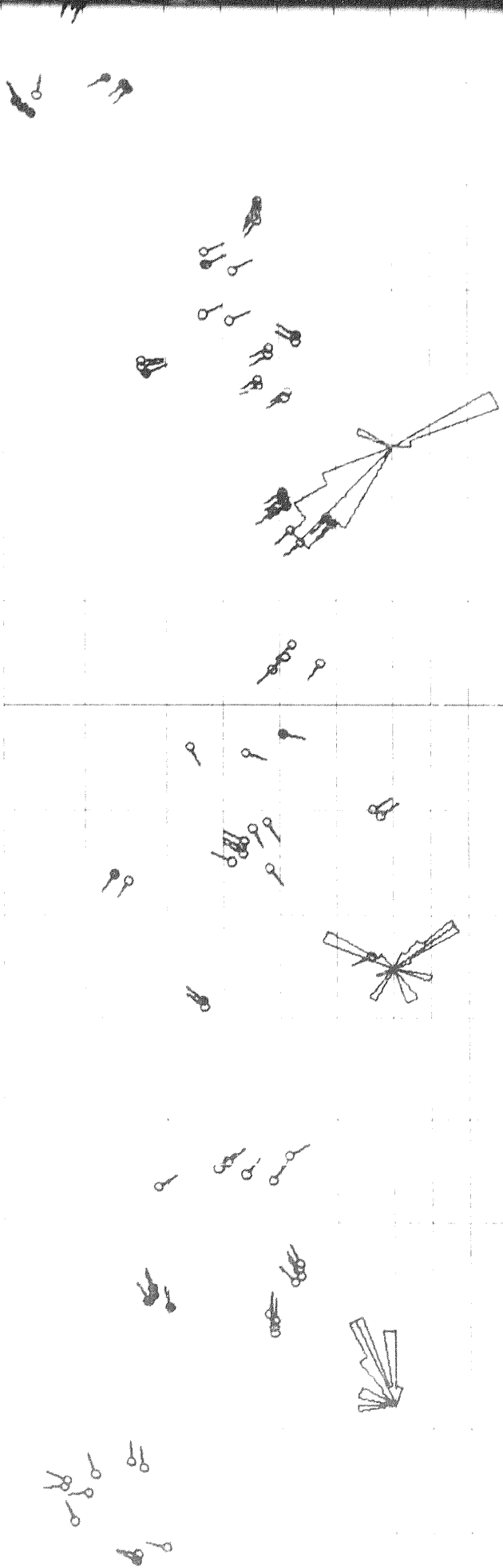
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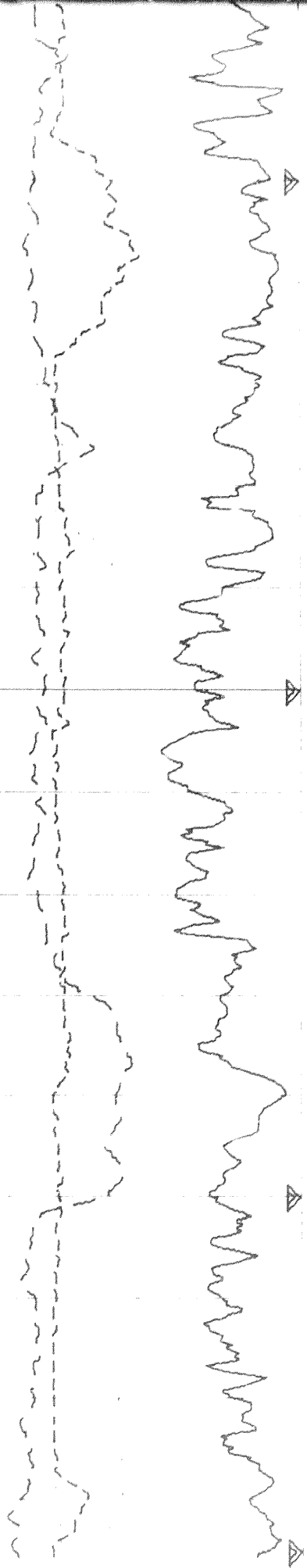
27 of

6 6 6 6 6 6 6 6 6 6

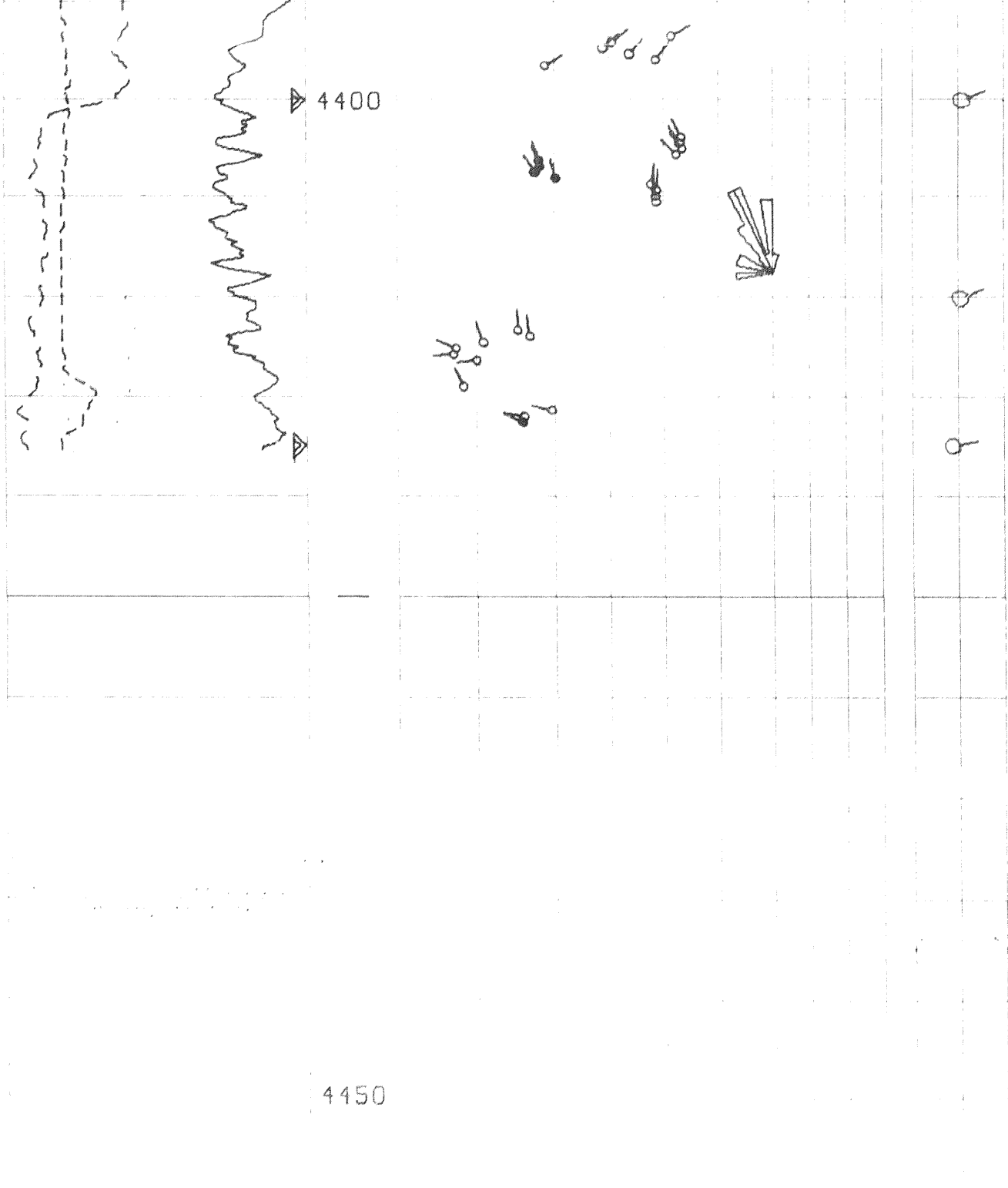


4350

4400



27



4450

CORRELATION CURVE	DEPTH METRES	TRUE DIP ANGLE AND DIRECTION	DRIFT & DIRECTION OF SONDE
COMPANY _____			SCHL. FR. _____ m
WELL _____			SCHL. TD. _____ m
FIELD _____			DRLR. TD. _____ m
PROVINCE _____			Elev.: KB. _____ m
			DF. _____ m
			GL. _____ m

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