

THE APPLICABILITY AND LIMITATIONS
OF THE INDUCED POLARIZATION METHOD
IN THE SEARCH FOR SULPHIDE MINERALIZATION
IN THE TROODOS IGNEOUS COMPLEX, CYPRUS.

VOLUME TWO

BY

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Thesis submitted for the degree of
Doctor of Philosophy
University of Leicester

1978

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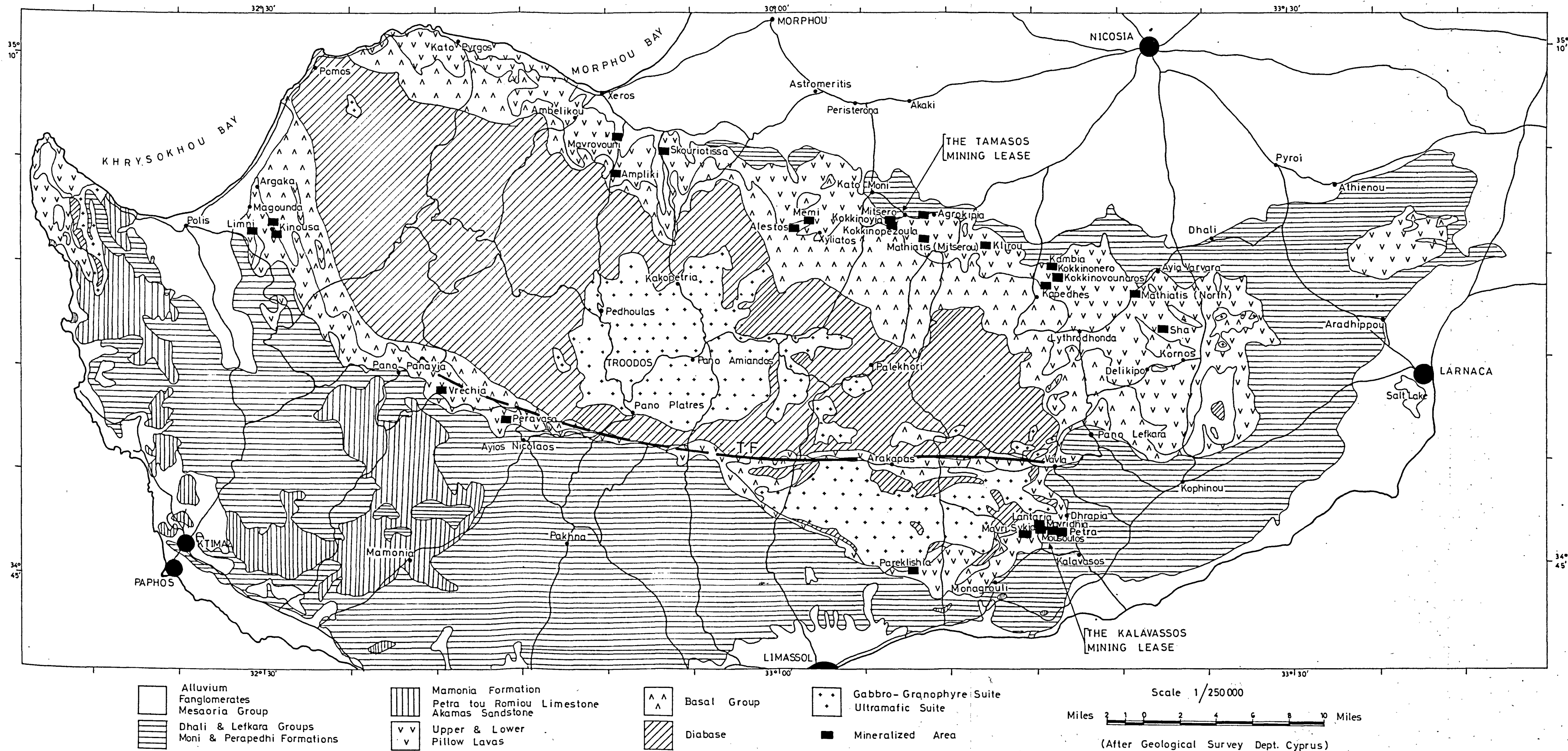


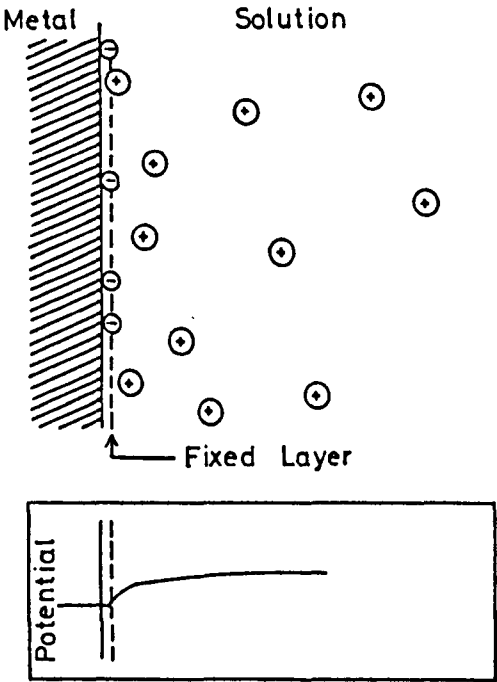
TABLE 1

The common minerals giving polarization effects.
(See page 6 of Volume One).

TABLE 2

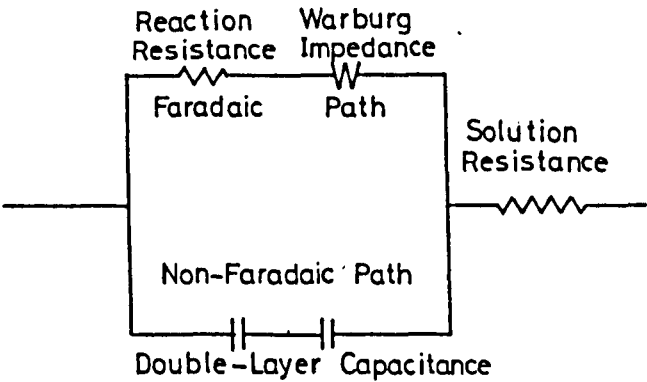
Table giving the size of the Cyprus orebodies.
(See page 52 of Volume One).

FIG. 2



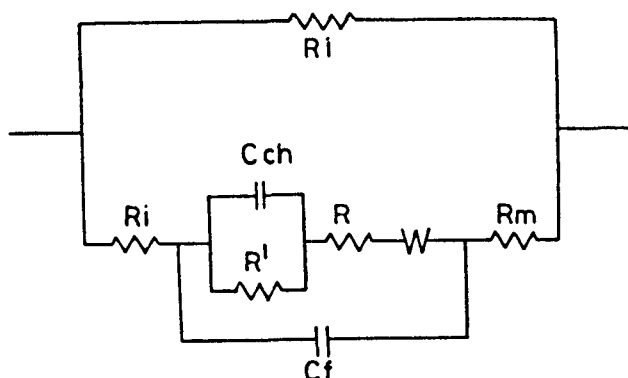
THE ION DISTRIBUTION NEAR A SOLID-LIQUID INTERFACE.

FIG. 3



THE FARADAIC AND NON-FARADAIC CURRENT PATHS
EQUIVALENT ELECTRICAL CIRCUITS

A SIMPLIFIED EQUIVALENT ELECTRICAL CIRCUIT FOR A MINERALIZED ROCK.



R_i : Ionic path Resistance.

W : Warburg Impedance.

C_{ch} : Chemical Capacitance.

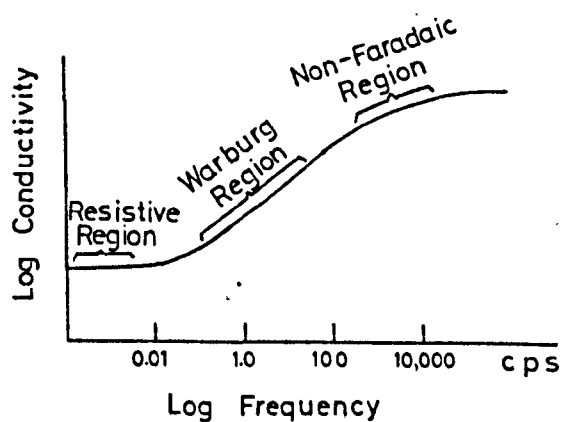
C_f : Double layer Capacitance.

R' : Resistance of higher order reactions.

R_m : Resistance path of metallic vein or particle

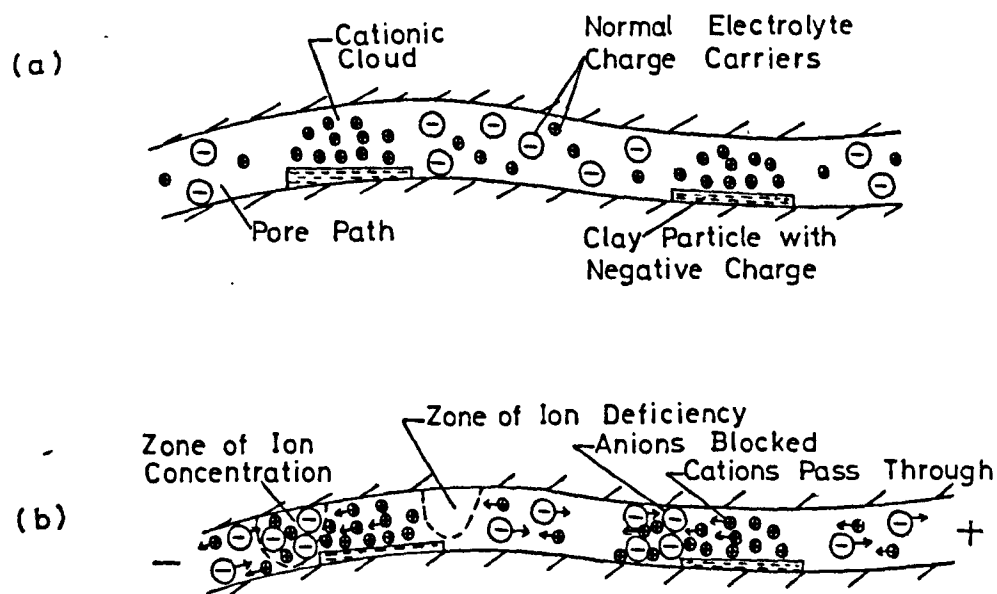
R : Reaction Resistance.

FIG. 5



THE CONDUCTIVITY - FREQUENCY DEPENDENCY

FOR A MINERALIZED ROCK



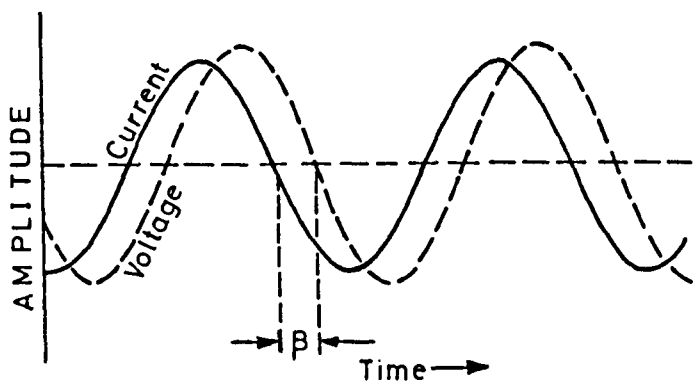
MEMBRANE POLARIZATION. THE EFFECT OF THE NEGATIVELY
CHARGED PARTICLES ALONG PORE PATHS.

(a) PORE PATH BEFORE APPLICATION OF AN ELECTRIC POTENTIAL.

(b) PORE PATH AFTER APPLICATION OF A DIRECT CURRENT
DRIVING FORCE

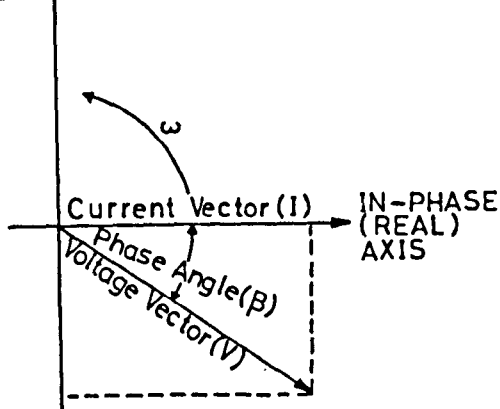
(AFTER WARD AND FRASER 1967)

FIG. 7



a.

OUT-OF-PHASE
(IMAGINARY)
AXIS



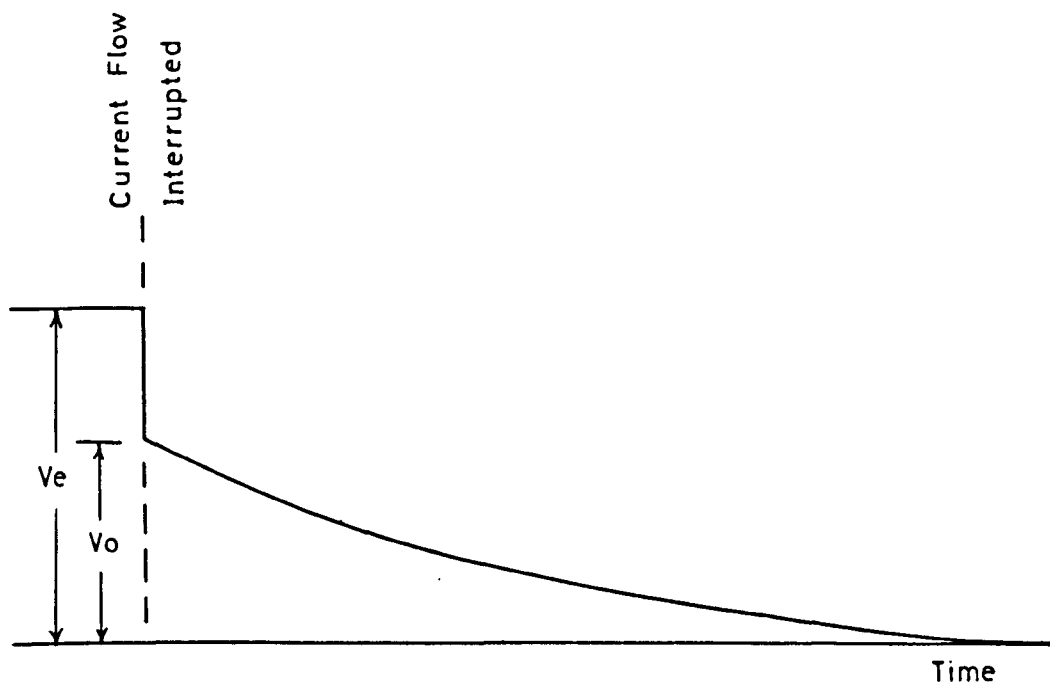
$$\beta = \tan^{-1} \frac{V_{\text{IMAG}}}{V_{\text{REAL}}}$$

b.

DEFINITION OF THE PHASE ANGLE MEASUREMENT.

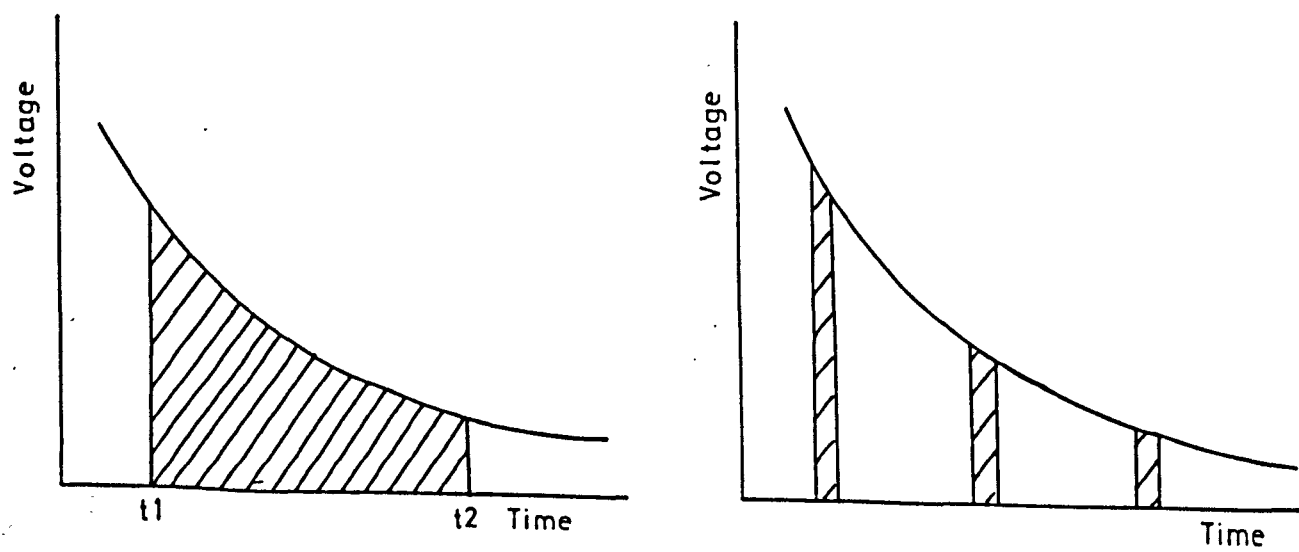
- a. PHASE LAG β BETWEEN INPUT (CURRENT) AND OUTPUT (VOLTAGE) SINUSOIDAL WAVEFORMS.
- b. ROTATING VECTOR DIAGRAM.

FIG. 8

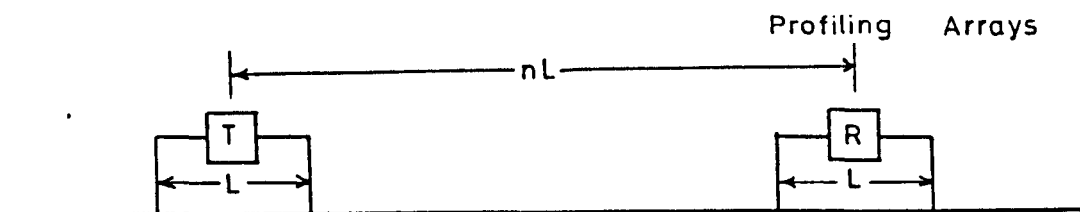


THE TRANSIENT DECAY OF ELECTRIC
FIELD STRENGTH IN A ROCK SAMPLE

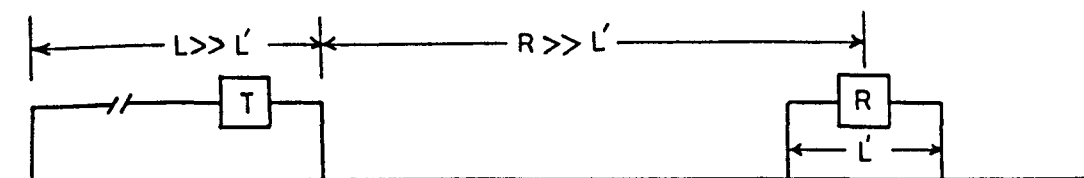
FIG. 9



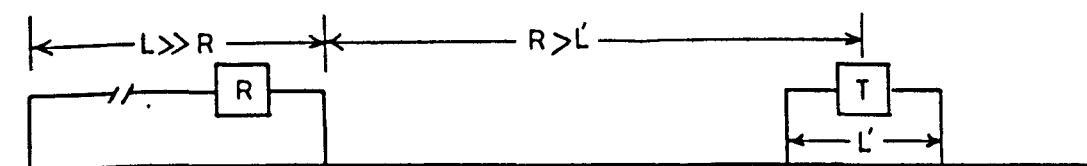
THE TIME - INTEGRAL MEASURE OF I.P.



Dipole - Dipole, Transm. or Receiver move.

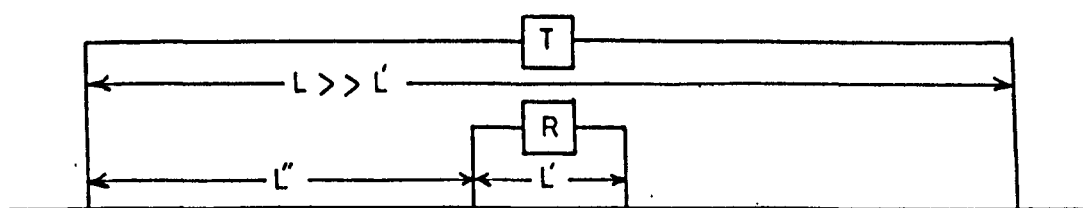
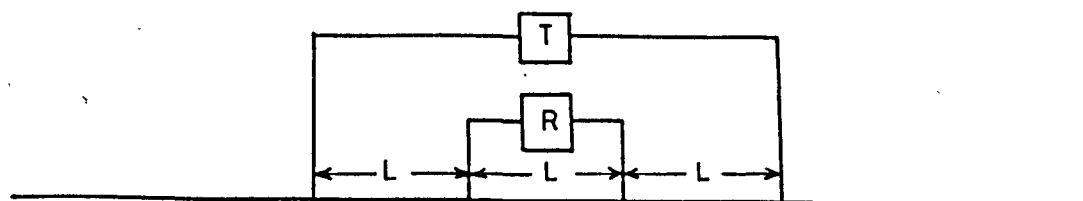


Pole - Dipole, Receiver moves.



Dipole - Pole, Transm. moves.

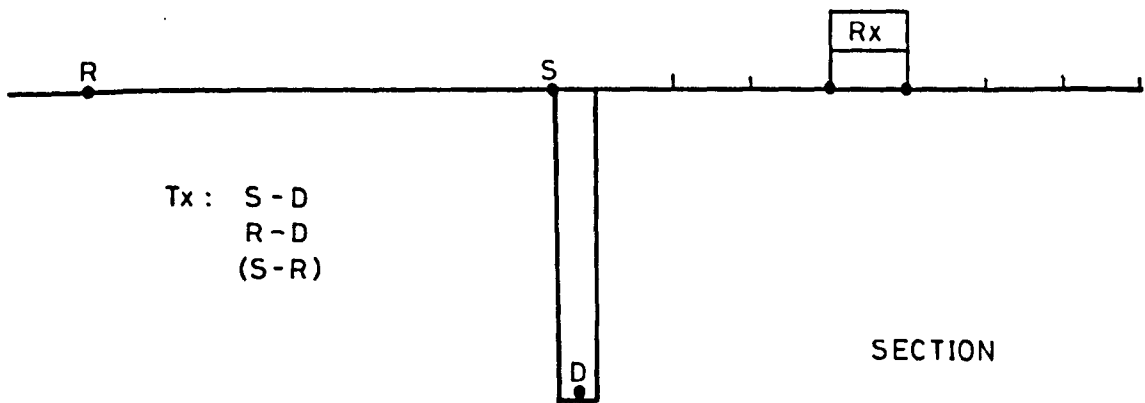
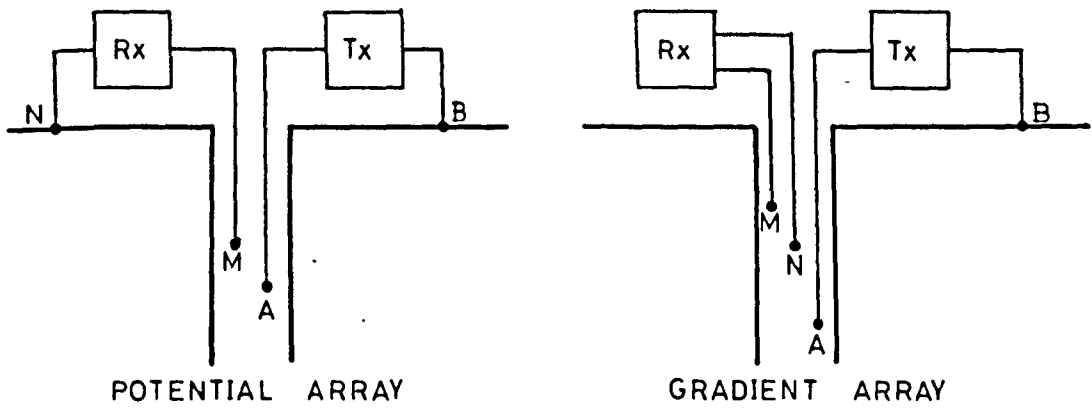
Sounding Arrays

Schlumberger, L Increases.Gradient, L'' Increases. (profiling array).

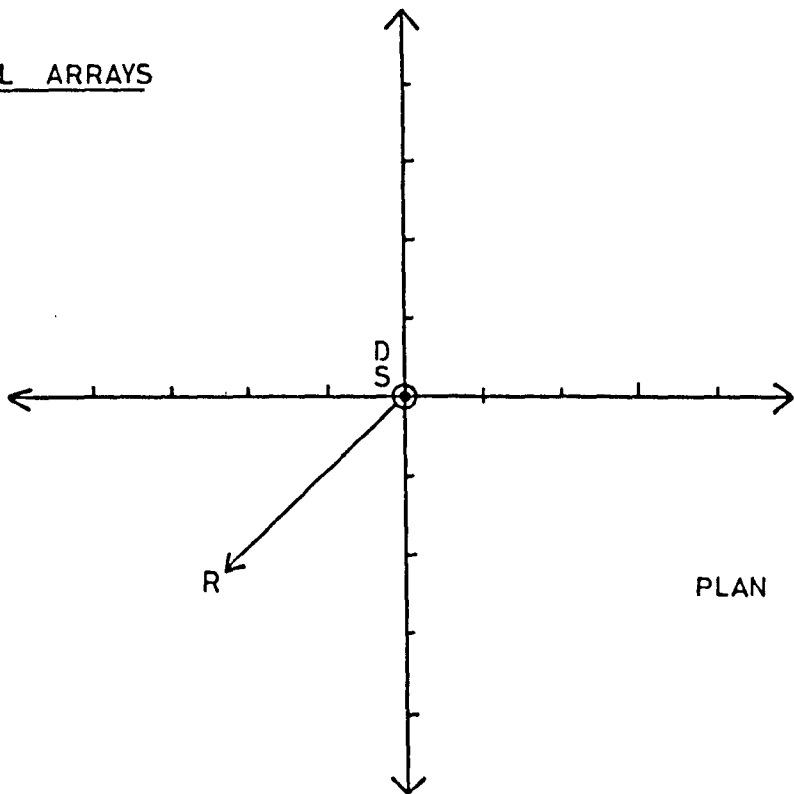
Wenner, both move.

THE MOST COMMONLY USED
ELECTRODE CONFIGURATIONS

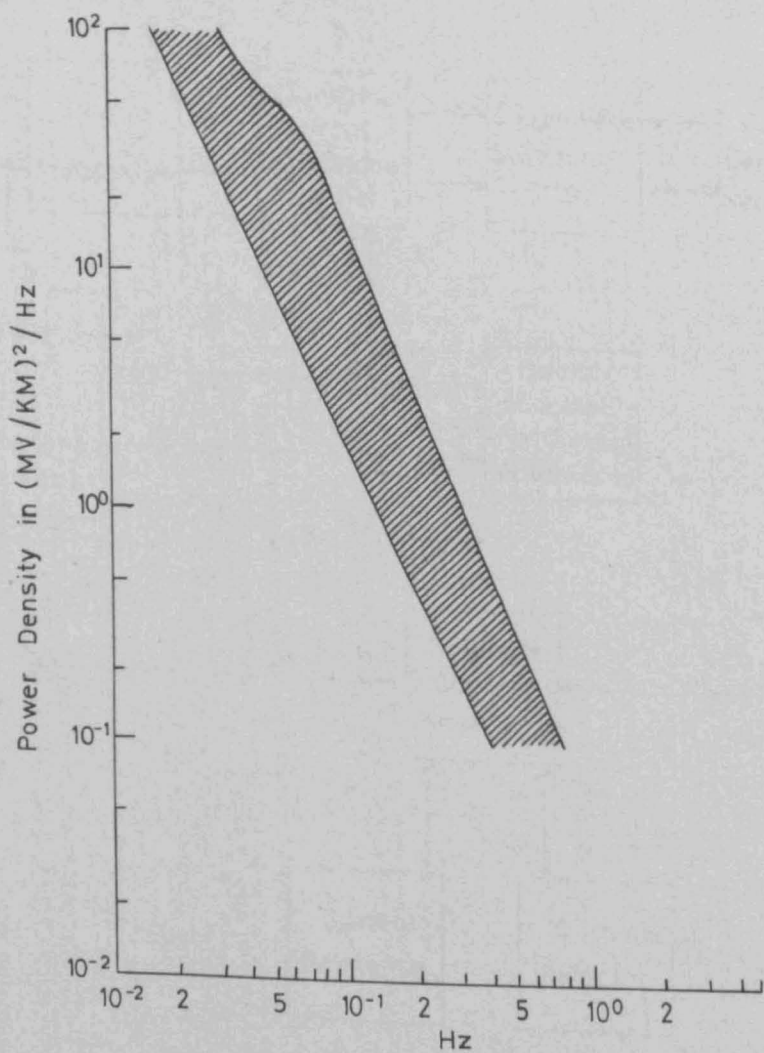
A LOGGING ARRAYS



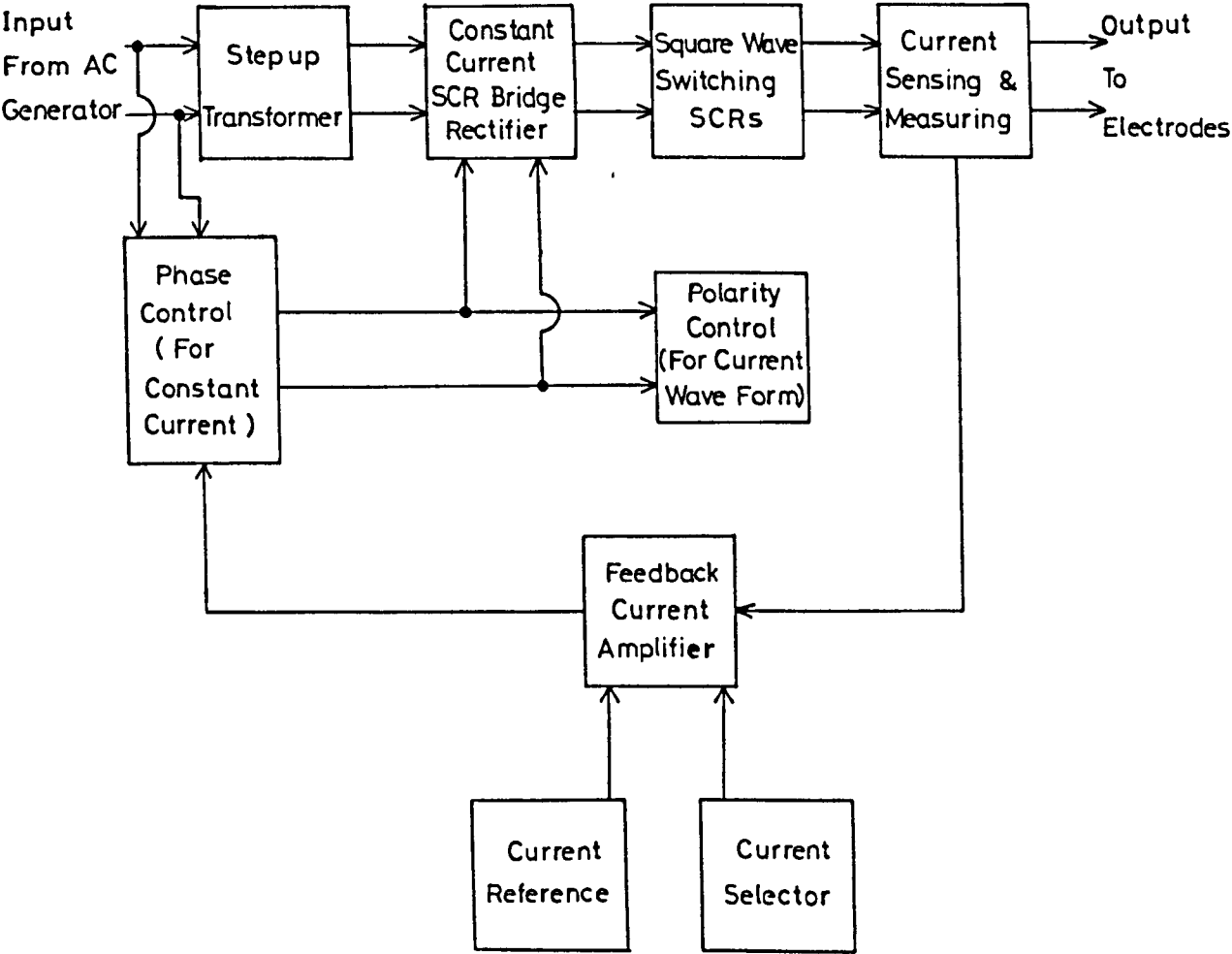
B RADIAL ARRAYS



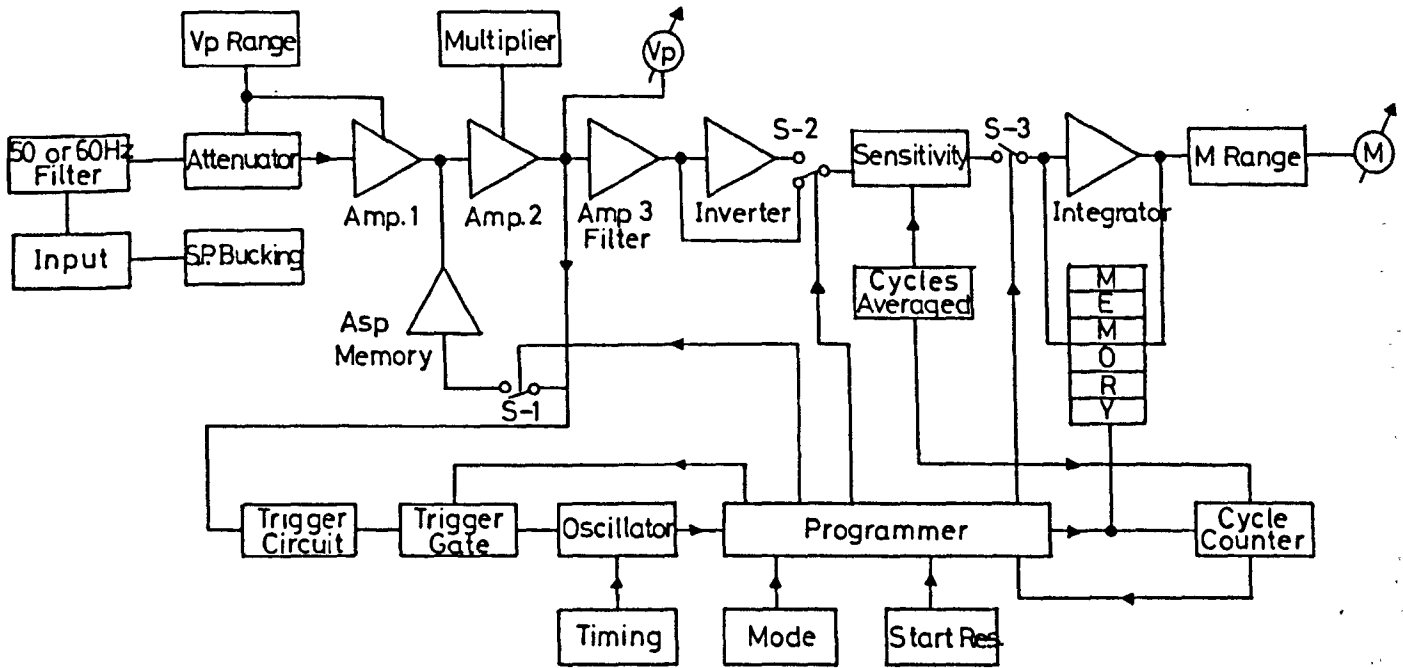
BOREHOLE LOGGING AND BOREHOLE RADIAL CONFIGURATIONS.



MAGNITUDE OF TELLURIC CURRENT VOLTAGES
AGAINST FREQUENCY. (AFTER CANTWELL 1960)

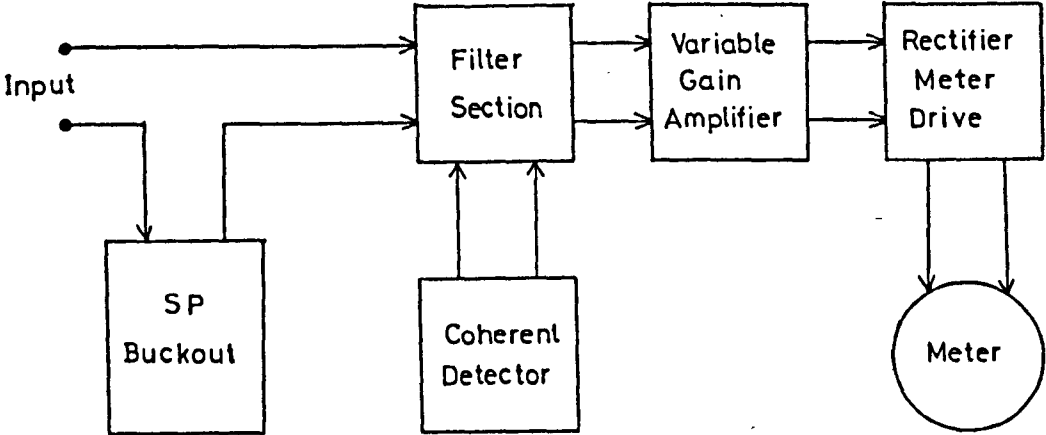


A GENERALIZED BLOCK DIAGRAM FOR AN IP TRANSMITTER (COMBINATION FOR BOTH TIME AND FREQUENCY DOMAINS . AFTER SUMNER 1976)

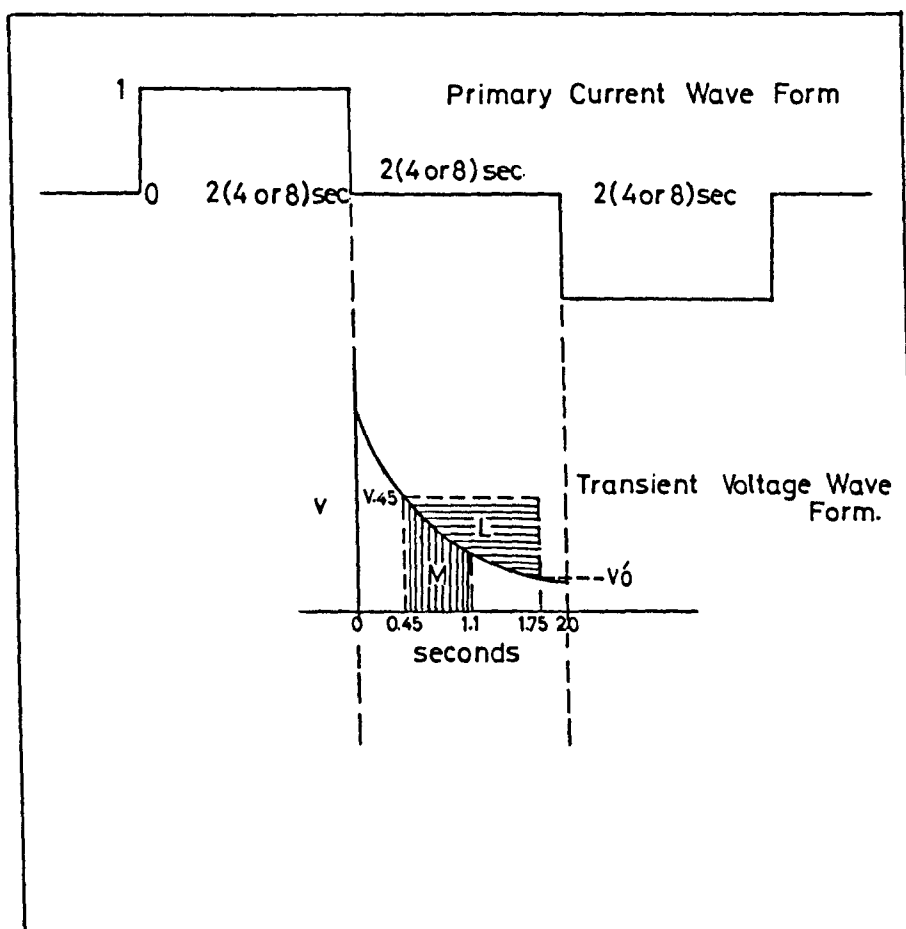


BLOCK DIAGRAM OF TIME DOMAIN IP RECEIVER

THE IPR-8 OF SCINTREX

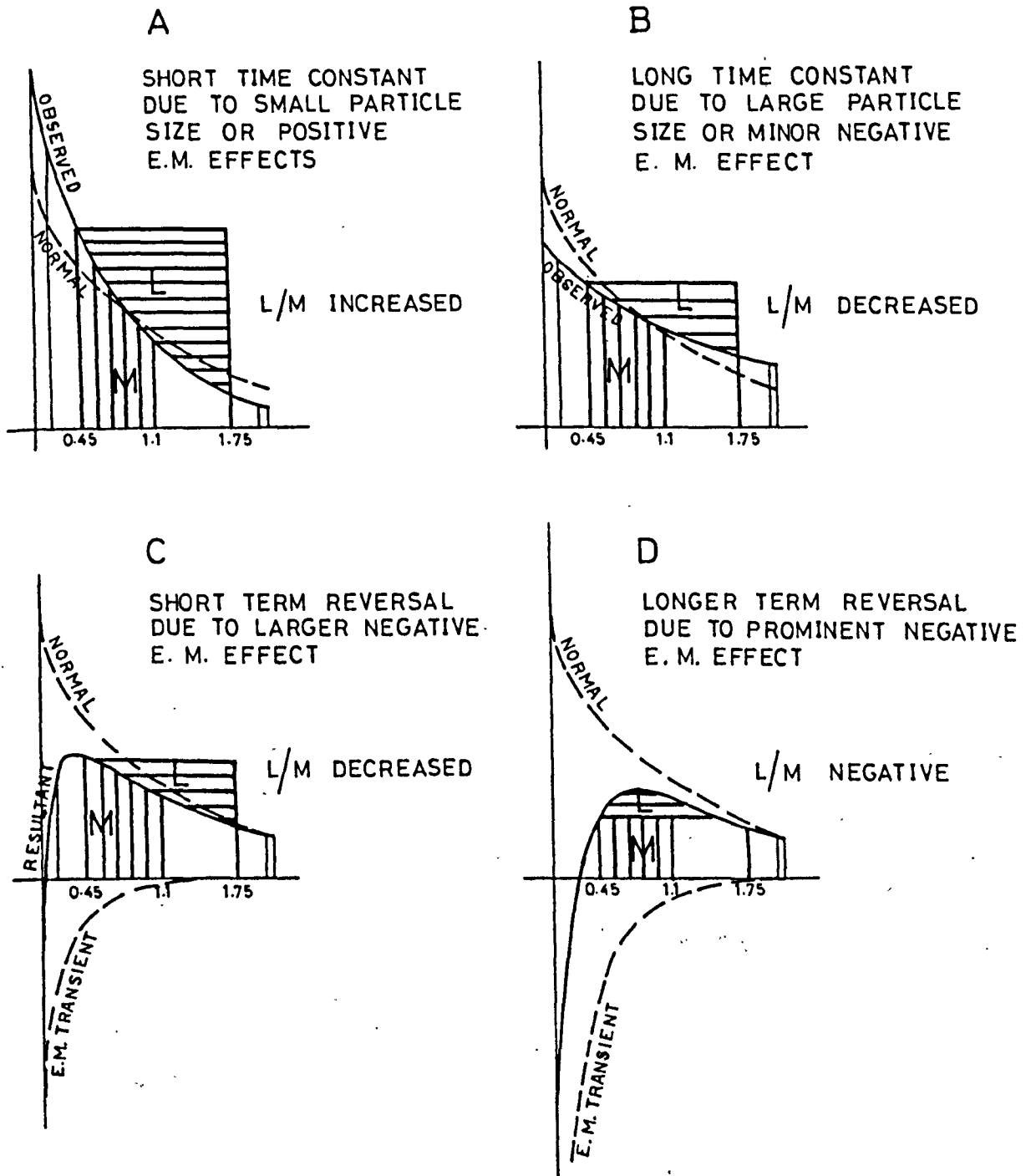


BLOCK DIAGRAM OF A TYPICAL FREQUENCY DOMAIN
RECEIVER. (AFTER SUMNER 1976).



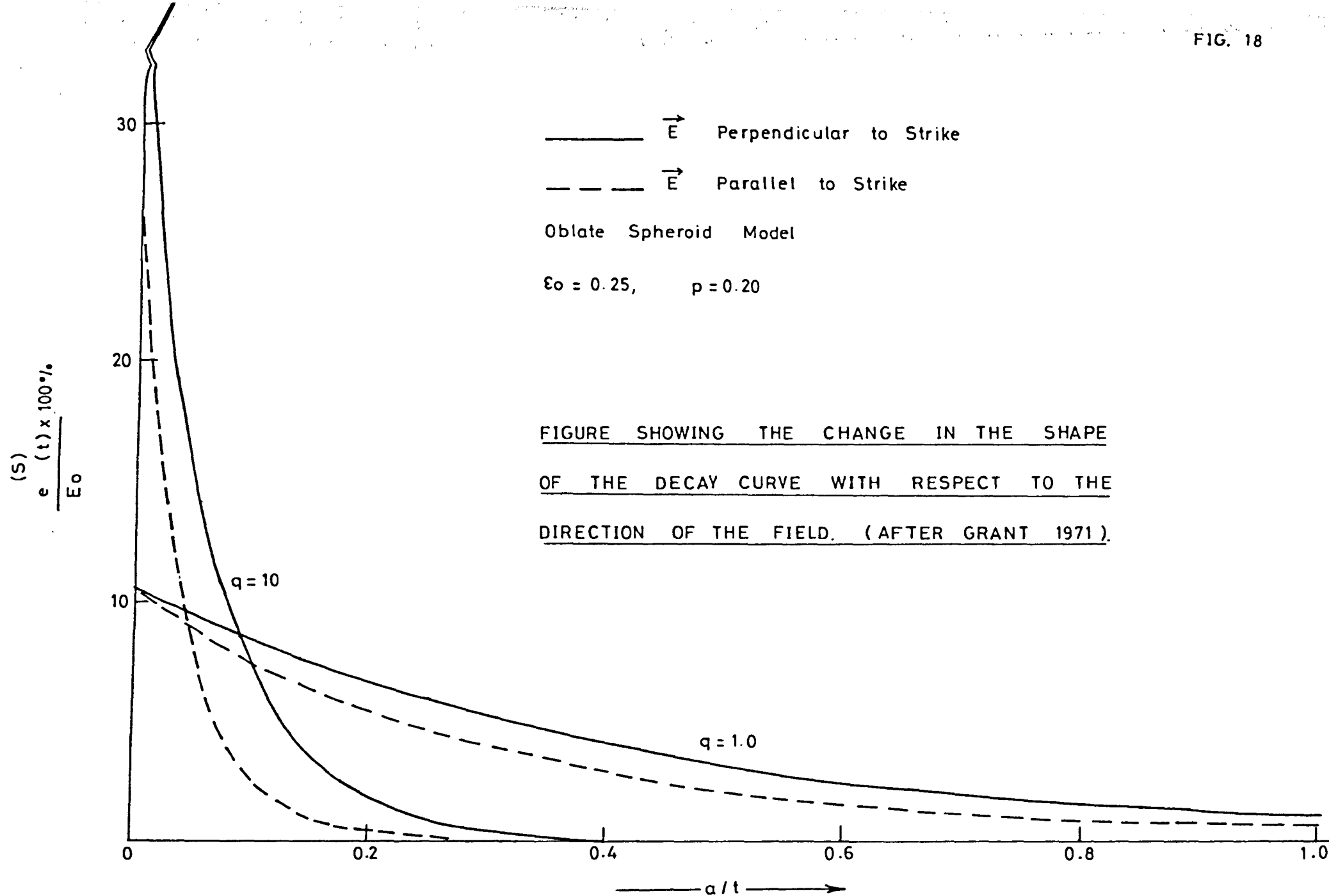
THE DEFINITION OF THE L/M PARAMETER

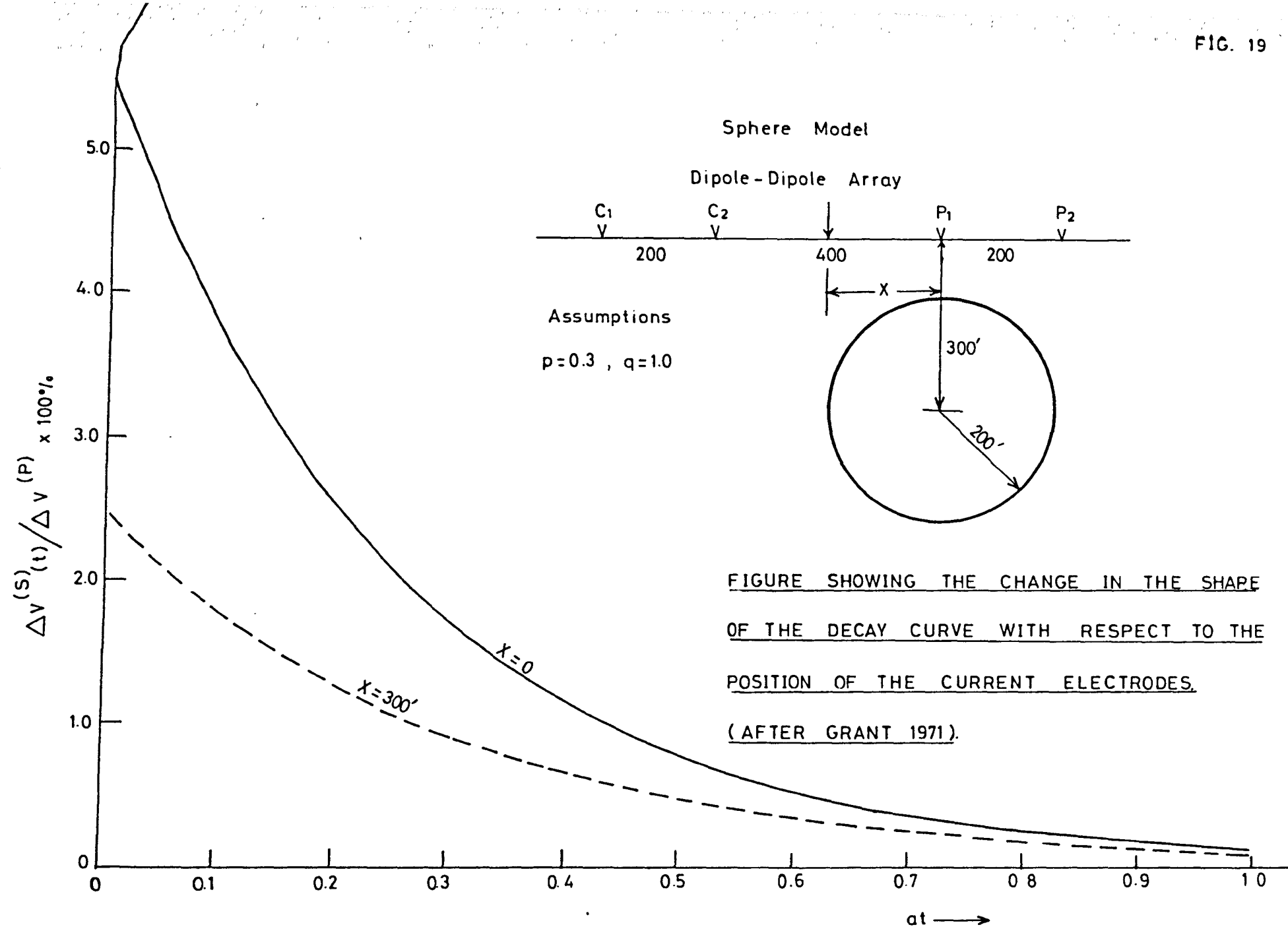
(AFTER SIEGEL 1970)

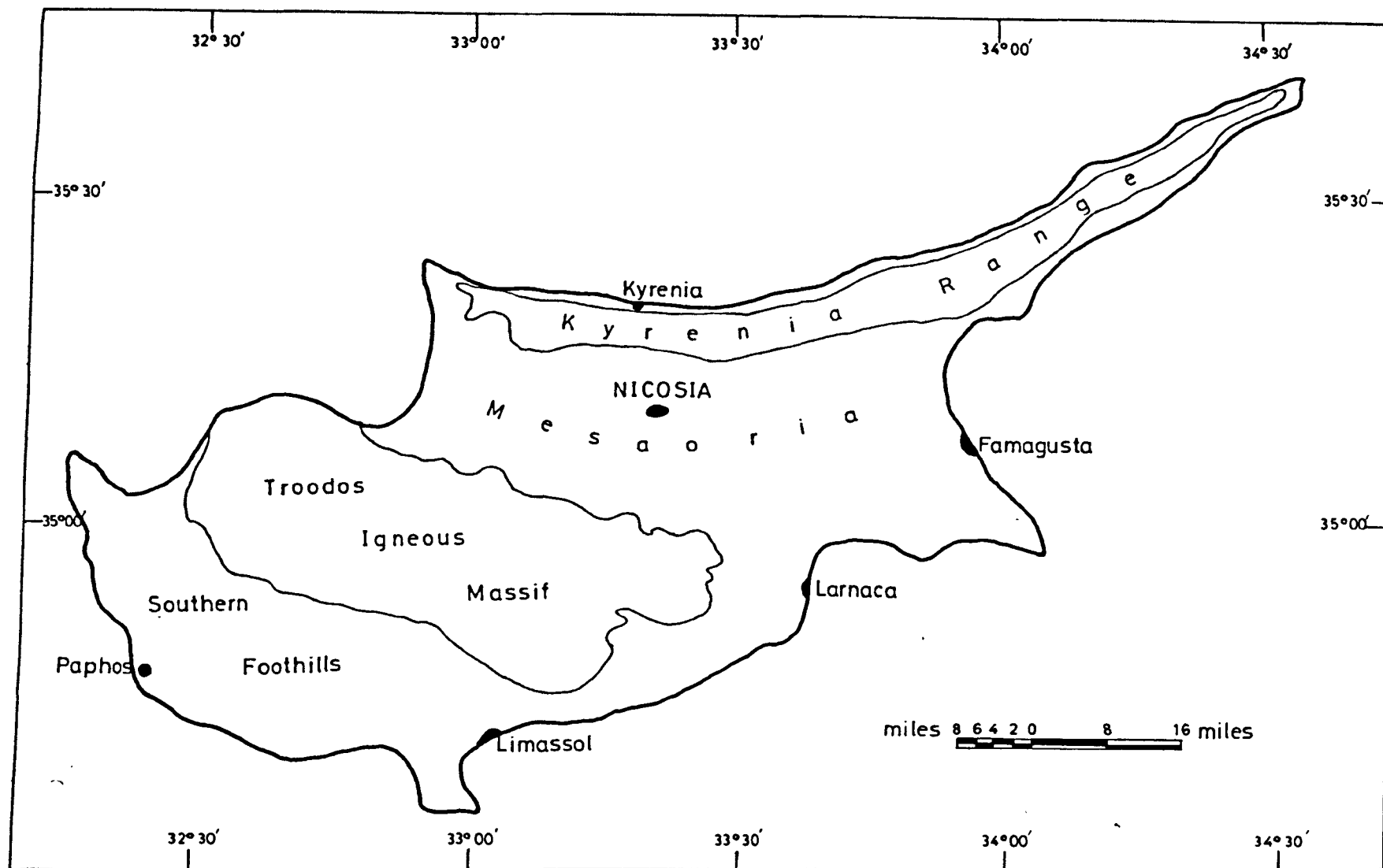


THE SIGNIFICANCE OF THE L/M PARAMETER

(AFTER SIEGEL 1970)

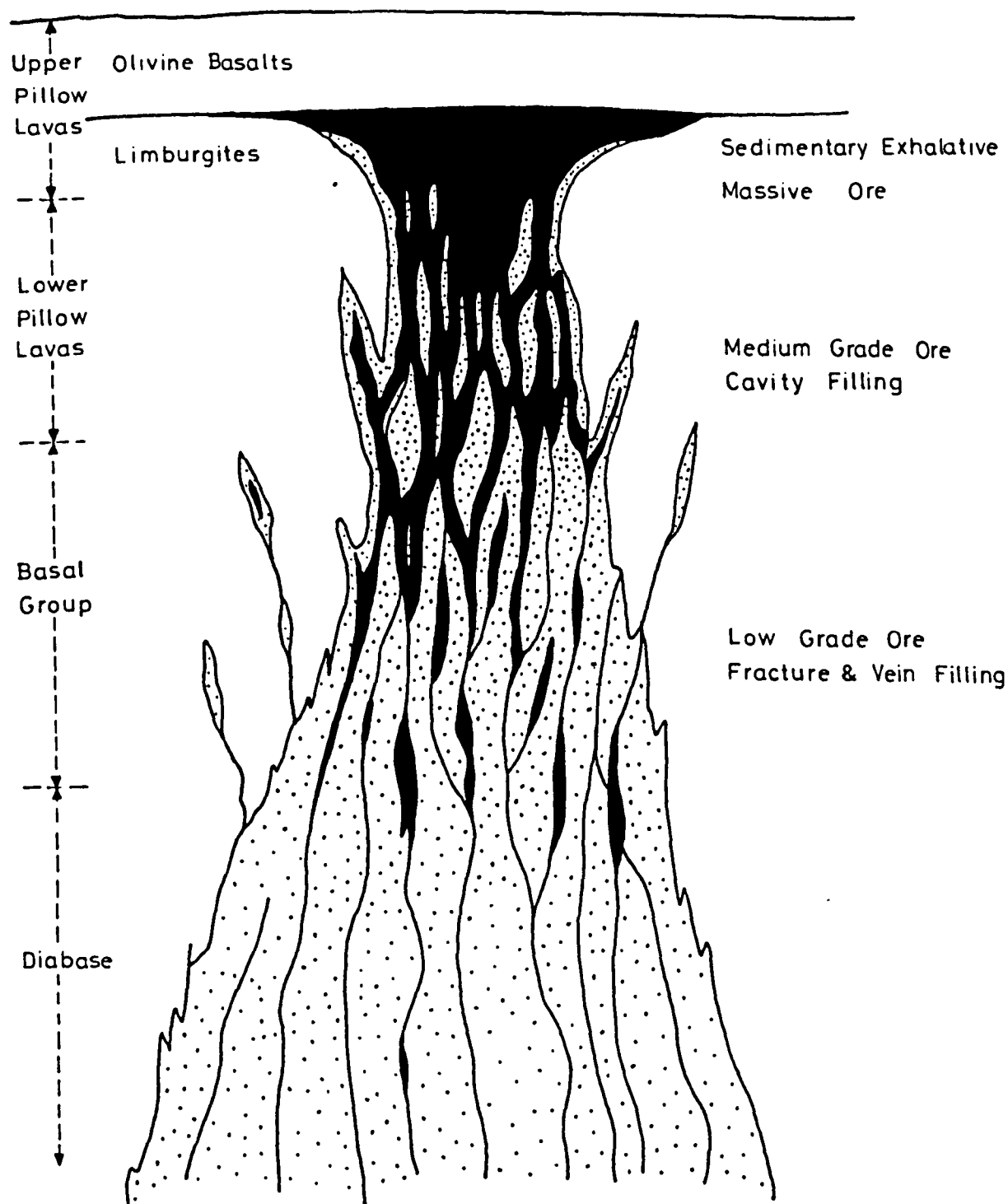






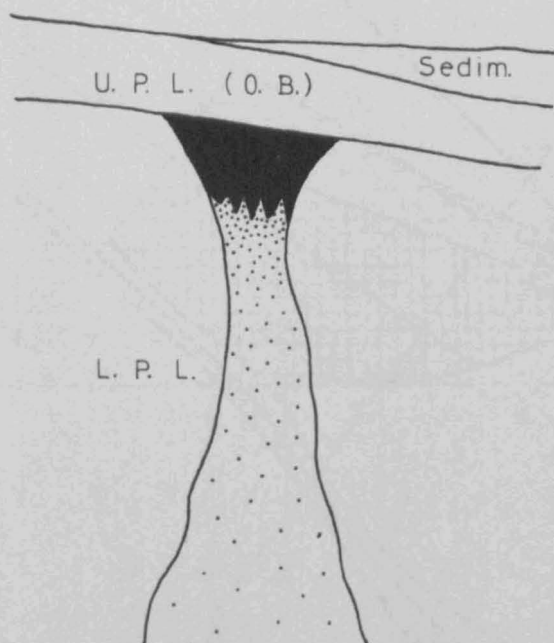
SKETCH MAP SHOWING THE MAIN TOPOGRAPHICAL & GEOLOGICAL FEATURES OF CYPRUS

SCHEMATIC SECTION THROUGH A HYPOTHETICAL
OREBODY INDICATING ITS GENESIS AND THE
DISTRIBUTION OF ORE TYPE AND GRADE

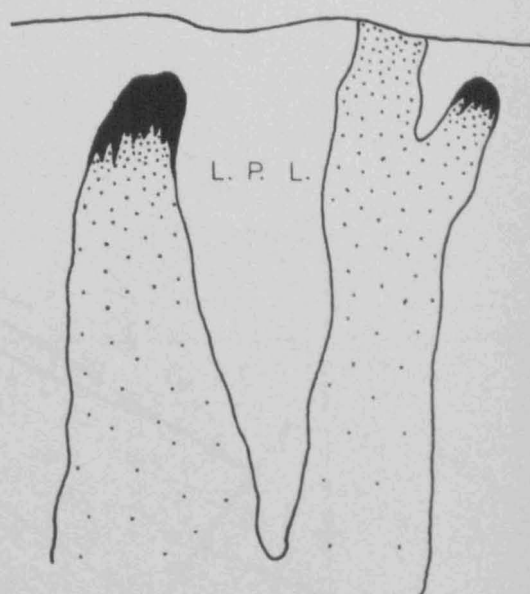


THE DIFFERENT POSSIBLE ENVIRONMENTS
OF SULPHIDE OCCURRENCE.

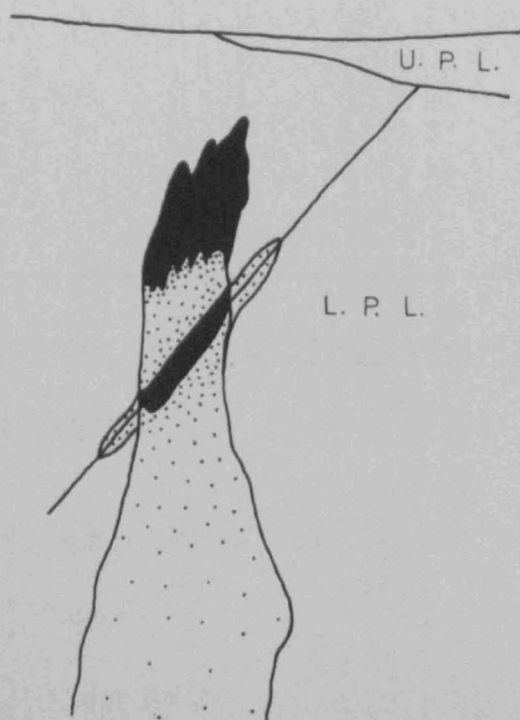
'COMLETE' ZONE



PARALLEL ZONES



BLIND ZONE



MINERALIZED FAULT

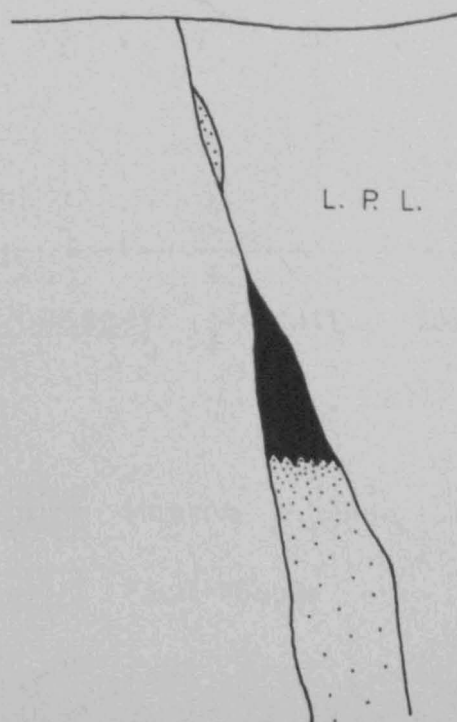
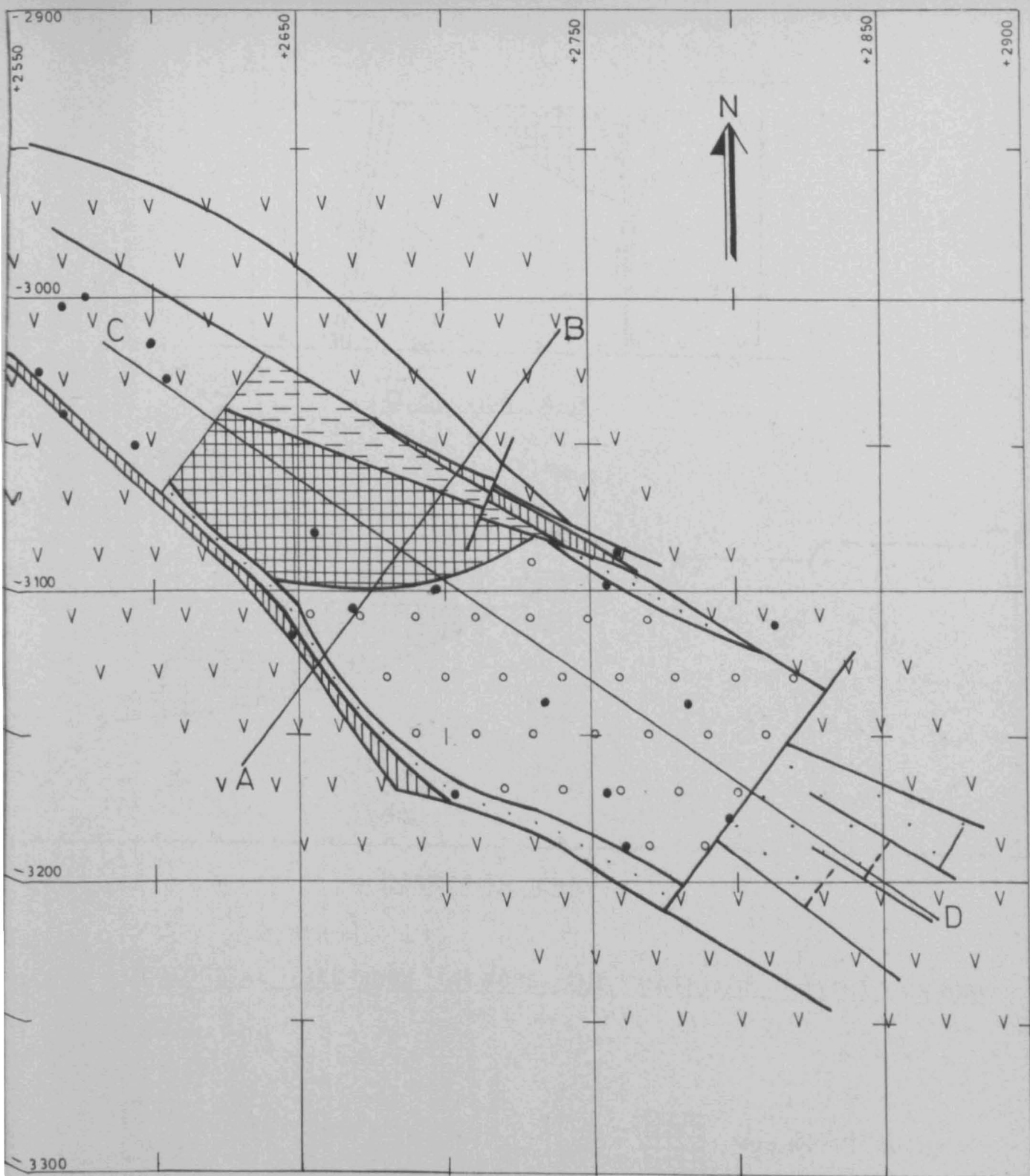



FIG. 23





GEOLOGICAL MAP OF THE MATHIATIS (NORTH) OREBODY


SCALE 1/2000


EXPLANATION


 Upper Pillow Lava

 Ochre


 Propylite


 Medium Grade Mineralization

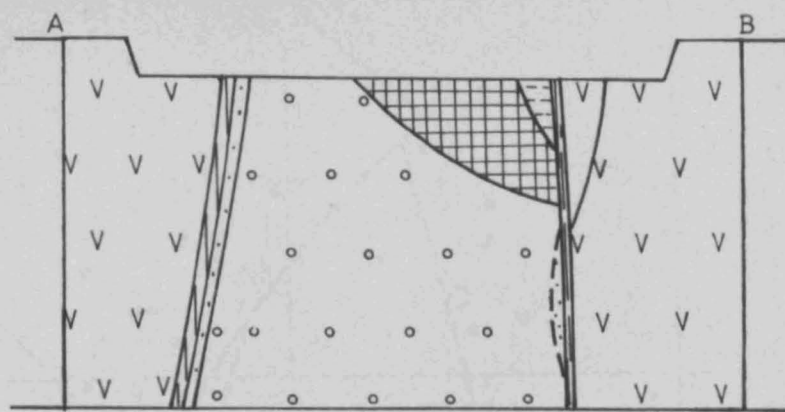
 Massive Sulphide

 Fault Gauge

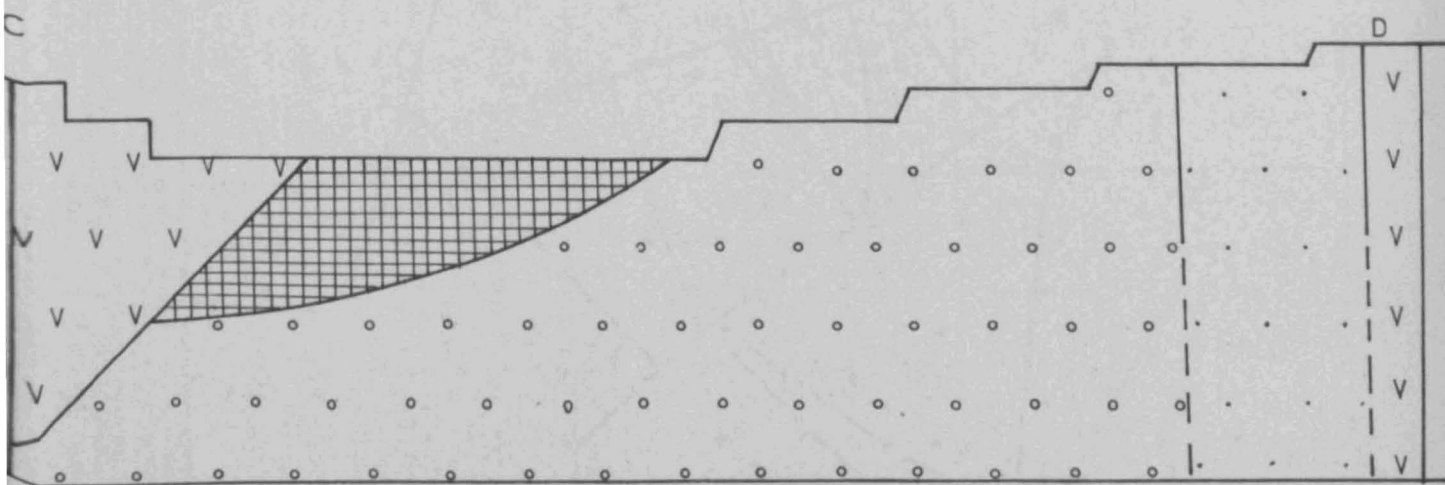
 Fault

 Normal Contact

 Boreholes



a. SECTION A-B



b. SECTION C-D

GEOLOGICAL SECTIONS ACROSS THE MATHIATIS (NORTH) OREBODY

EXPLANATION



Upper Pillow Lava



Massive Sulphide



Ochre



Fault Gauge



Propylite

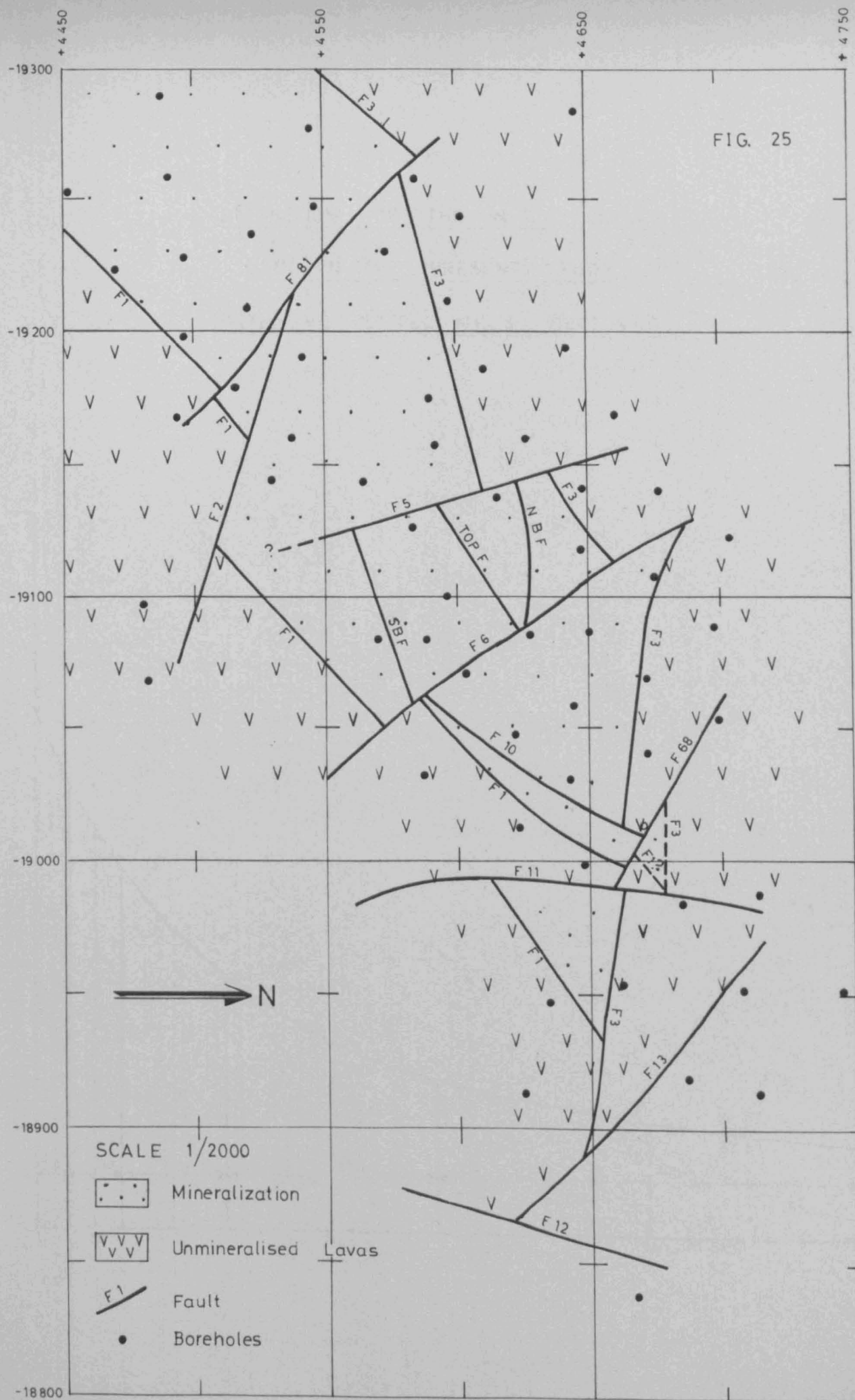


Fault



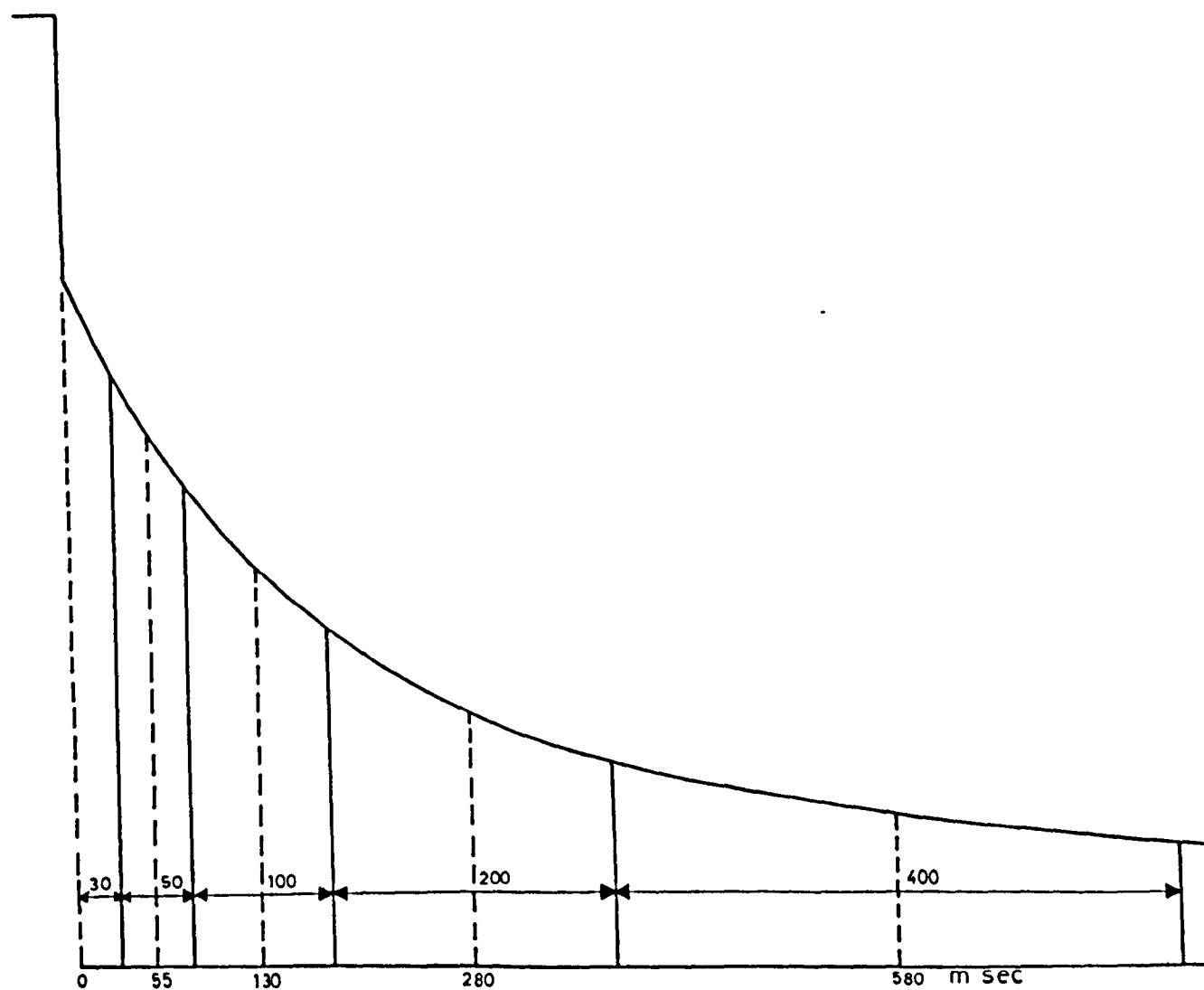
Medium Grade Mineralization

SCALE 1/2000



GEOLOGICAL - TECTONIC MAP OF THE 400m LEVEL OF THE KOKKINOYIA OREZONE.

DEFINITION OF THE N. T. I. VALUES
USED IN THE PRESENT STUDY
WITH THE HUNTEC MK 3 RECEIVER



THE SOLUTION OF EQUATION

$$C = \frac{Z}{1 + e^{-Z}}$$

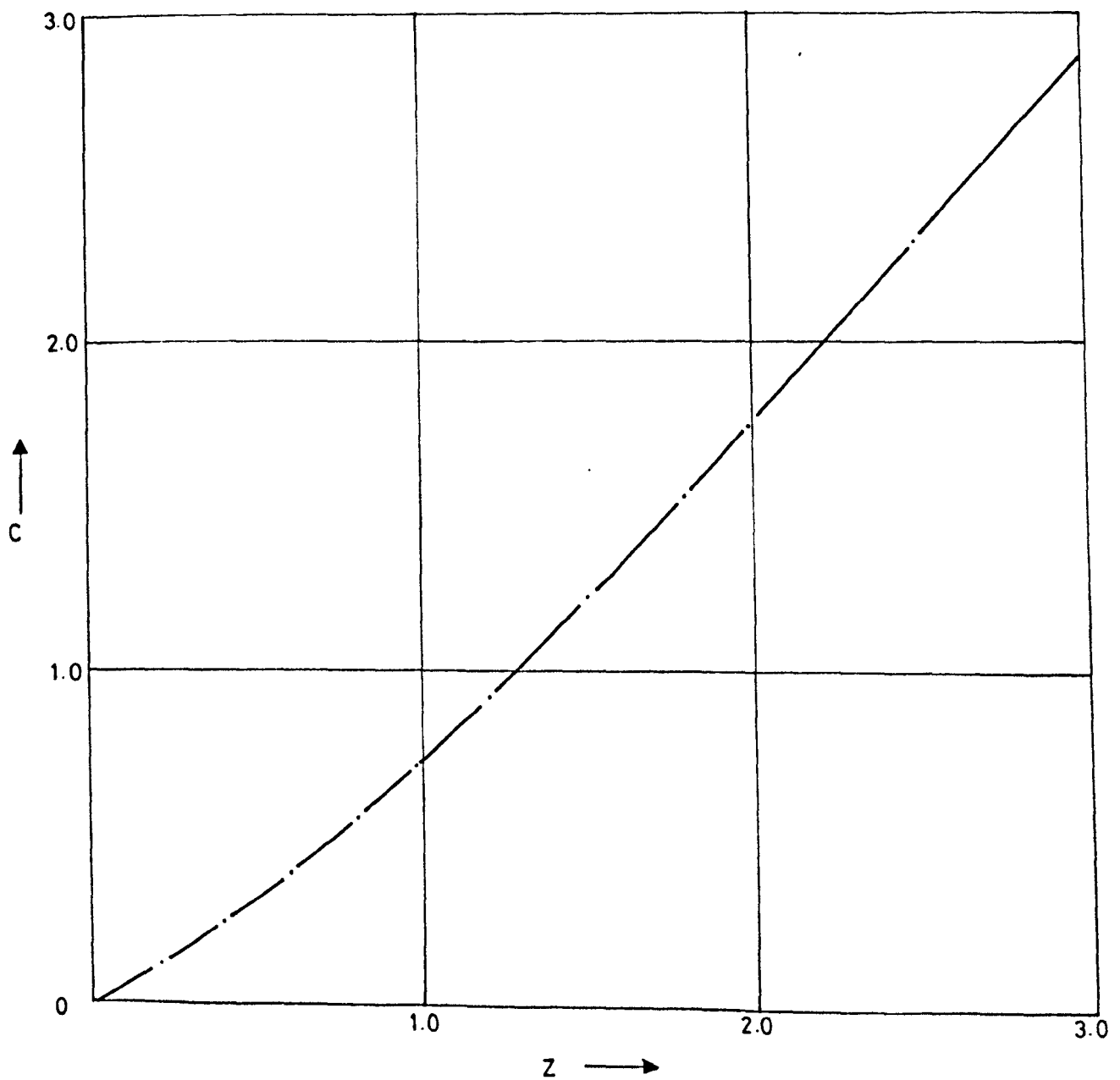


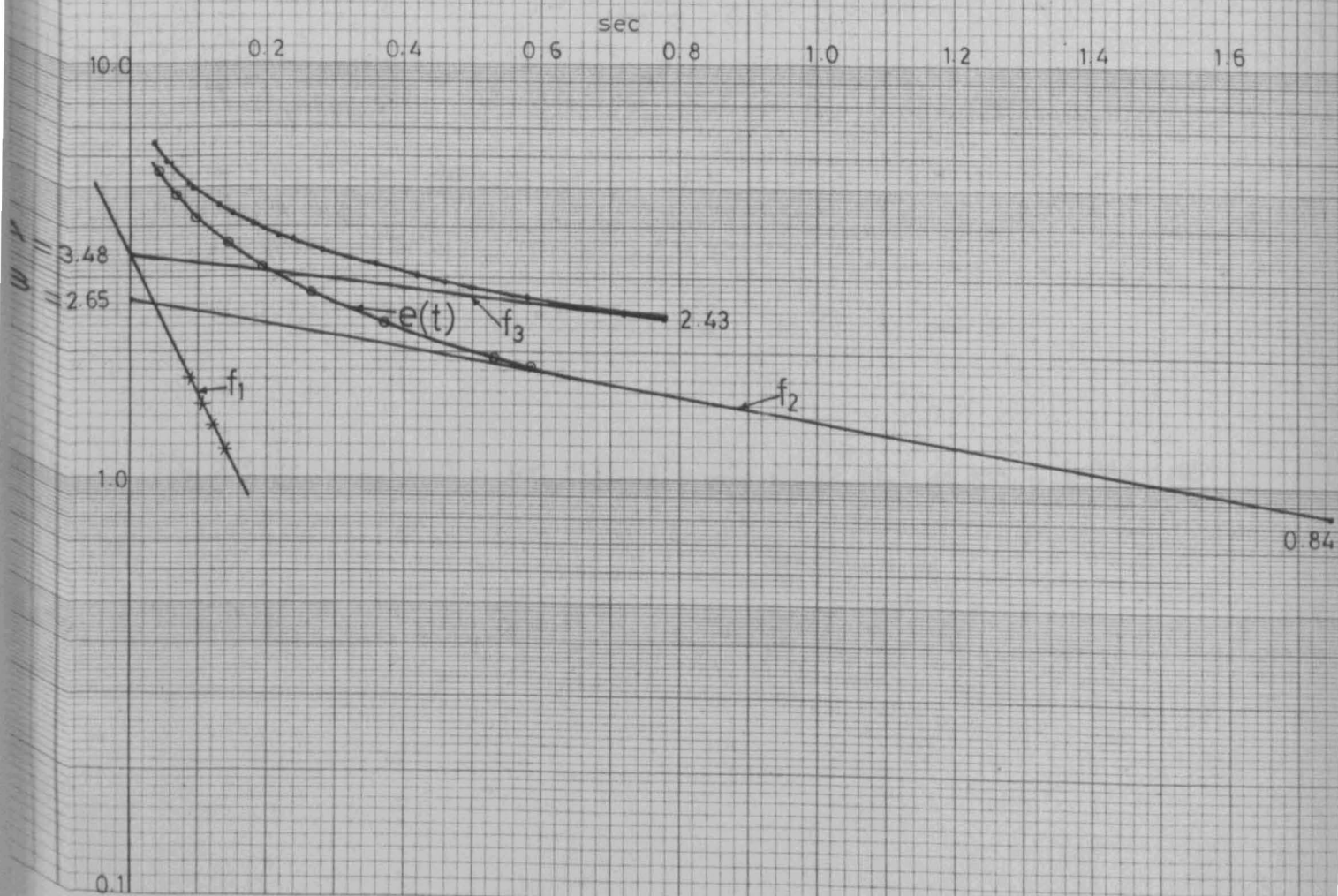
FIG. 28

VRECHIA AREA

LINE 2

$P1 - P2 = 10 - 11$

$C = 13$



THE FACTORATION OF THE DECAY CURVE

Tc = 8

AREA: VRECHIA

OI/OFF = 1.0

LINE: 2

ARRAY: Pole-Dipole

LOC.: 10-11/C13

DECAY CURVE
EQUATION

$$y(t) = 3.48e^{-7.96t} + 2.652e^{-0.656t} + 0.840$$

PROCEDURE:

$$y(t) = Ae^{-\alpha t} + Be^{-\beta t} + P$$

1. Draw a tangent at the largest recorded time, q.

$$2. F(\beta) = -\frac{1}{q}(\log_e f_3(0) - \log_e f_3(q)) = \frac{1}{0.78}(\log 3.4 - \log 2.43) = \frac{1.223 - 0.887}{0.78} =$$

$$= -\frac{0.336}{0.78} = 0.430$$

$$3. ts = tc\left(\frac{15}{32} - \frac{R}{2(R+1)}\right) = 1.75 \quad ts - q = 0.97$$

$$4. F(\beta) = -\frac{\beta}{1 + e^{-\beta(ts-q)}} \quad F(\beta)(ts-q) = -\frac{\beta(ts-q)}{1 + e^{-\beta(ts-q)}} = -0.417$$

$$C = \frac{Z}{1 + e^Z} \quad \beta = \frac{Z}{ts-q} = \frac{0.637}{0.97} = 0.656$$

$$5. B = \frac{y(q)}{e^{-\beta q} + e^{-\beta ts}} = \frac{2.43}{e^{-0.656 \times 0.76} + e^{-0.656 \times 1.75}} = \frac{2.43}{0.599 + 0.317} = \frac{2.43}{0.916} = 2.652$$

$$6. P = Be^{-\beta ts} = 0.840$$

7. Subtract P from all M readings = e(t)

8. Subtract from e(t) the corresponding $Be^{-\beta t}$

$$9. A = 3.48$$

$$10. \alpha = \frac{1}{t_2} (\log_e f_1(0) - \log_e f_1(t_2)) = \frac{1}{0.1} (\log 3.48 - \log 1.57) = \frac{1.247 - 0.451}{0.1} =$$

$$= \frac{0.796}{0.1} = 7.96$$

DEFINITION OF THE VARIOUS PARAMETERS
OF A $\text{LOG}_e T$ PLOTTED DECAY CURVE

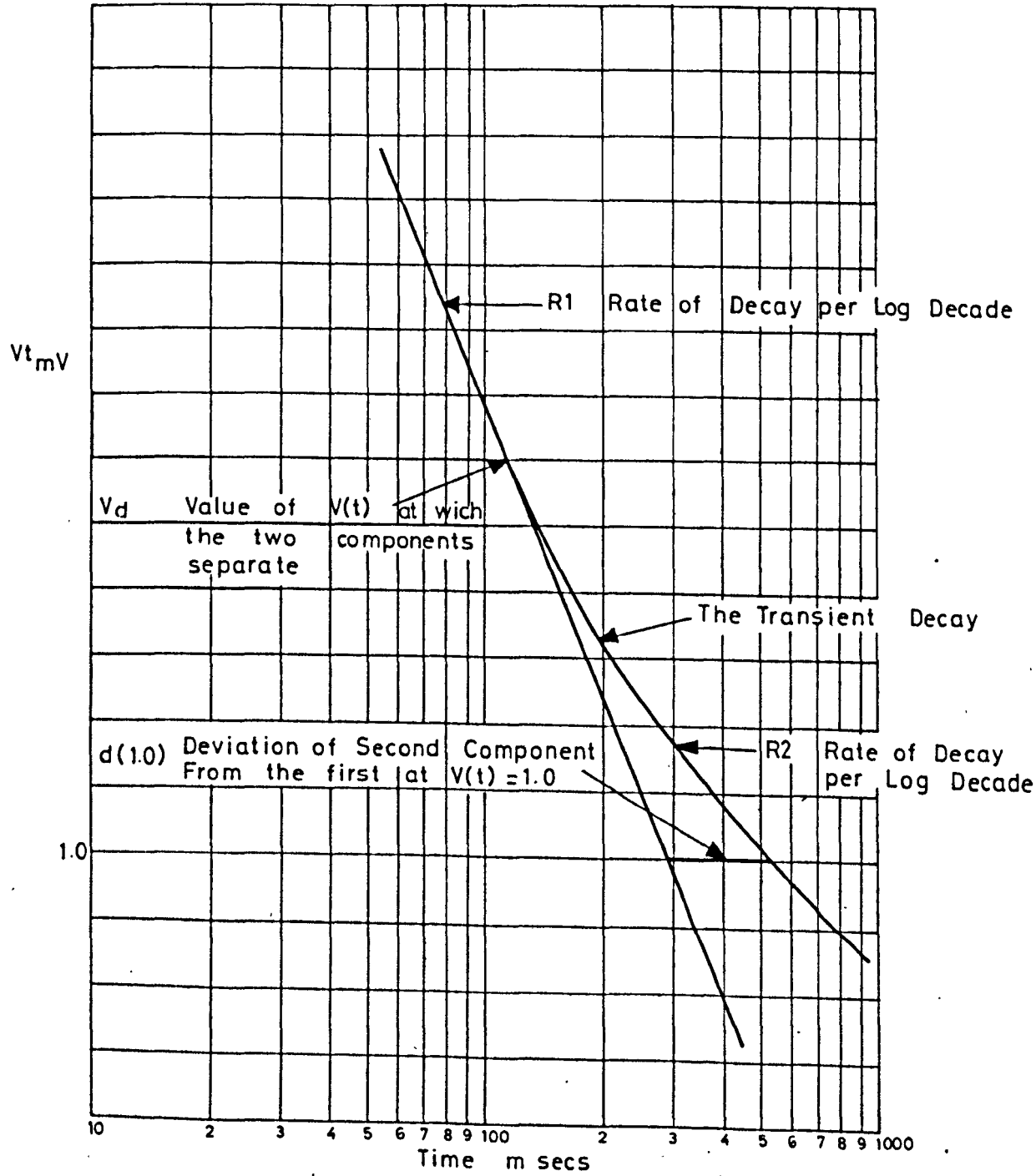
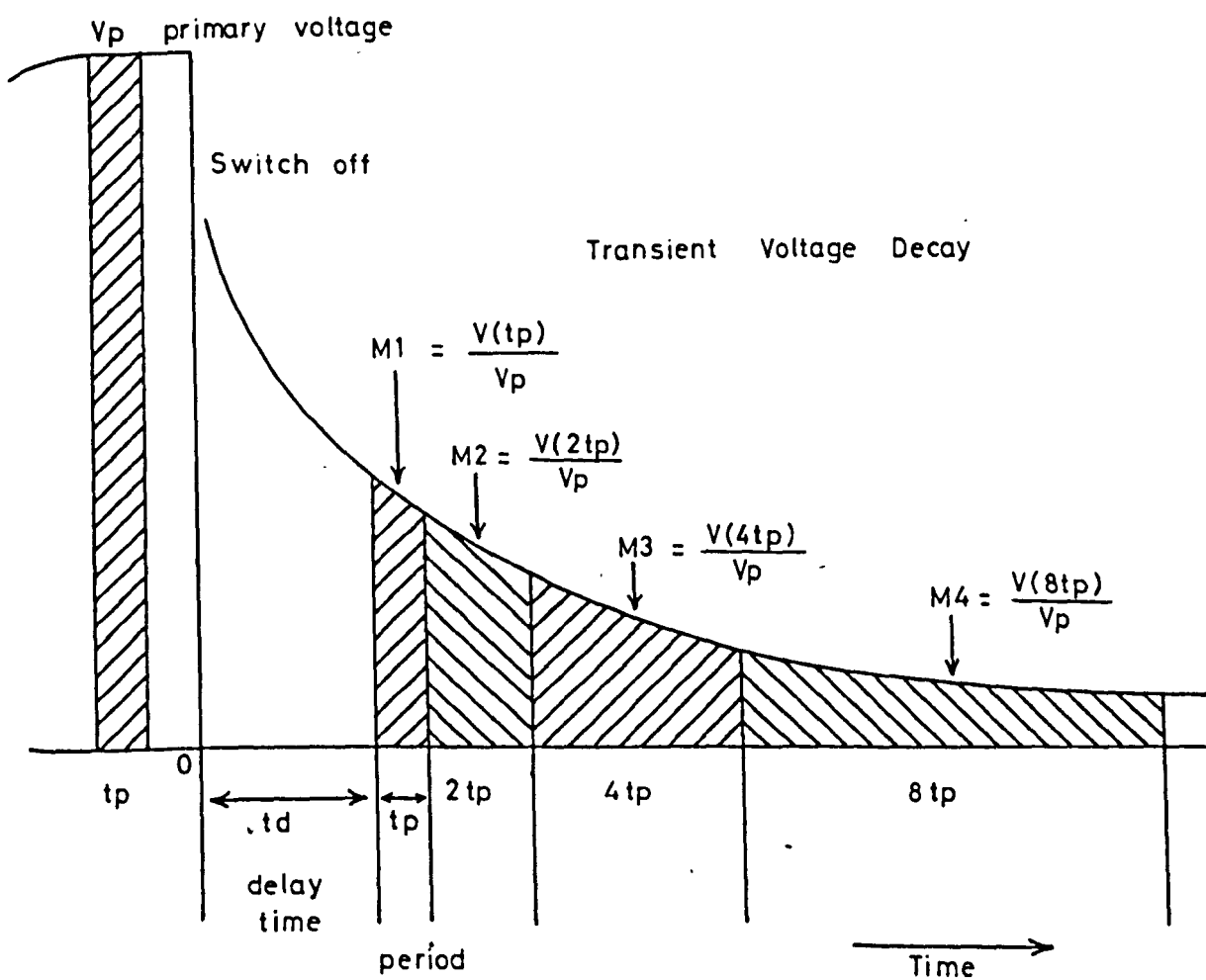


FIG. 31



DEFINITION OF THE M VALUES

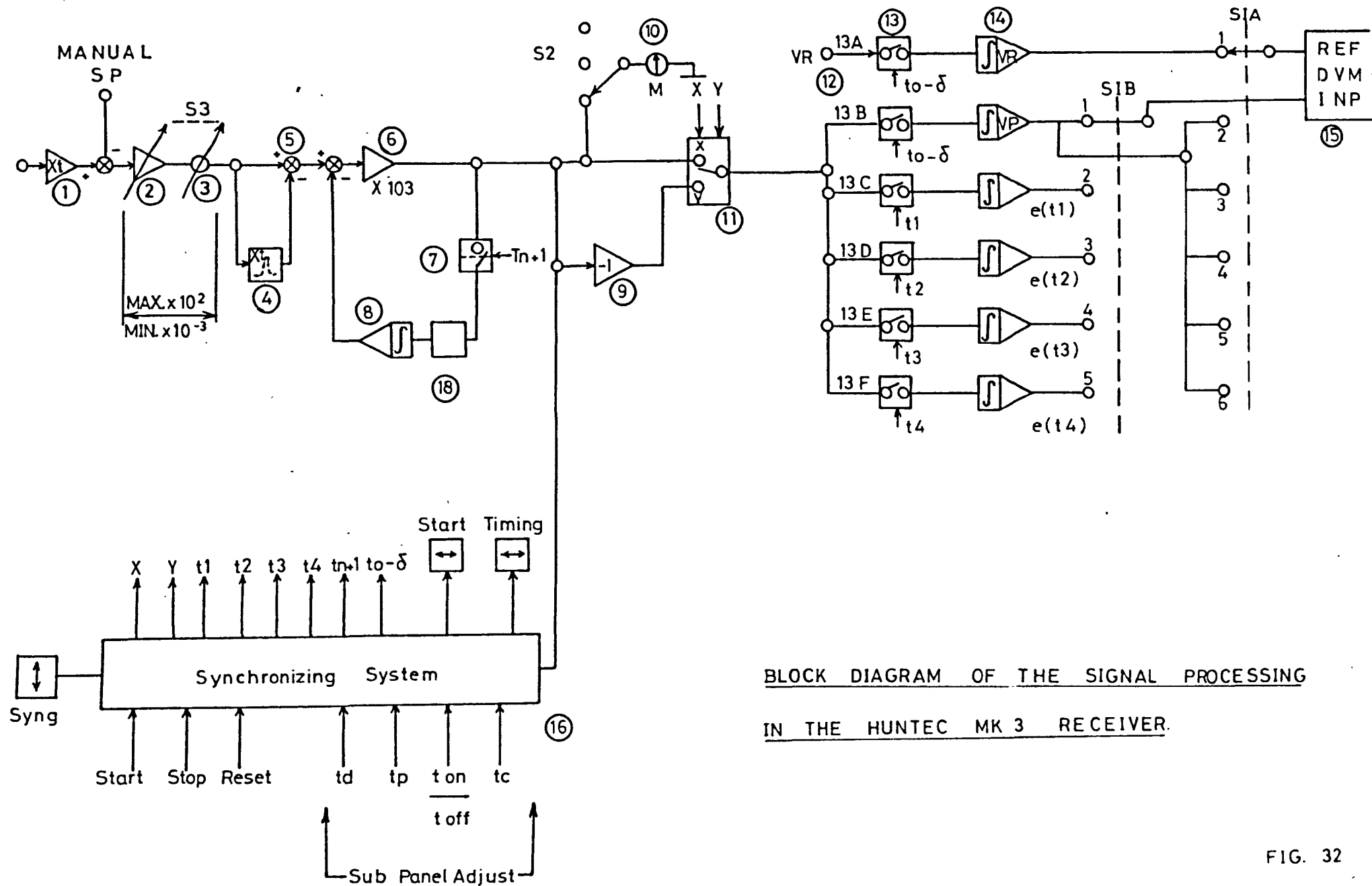
ON THE HUNTEC MK 3 RECEIVER

TABLE 3

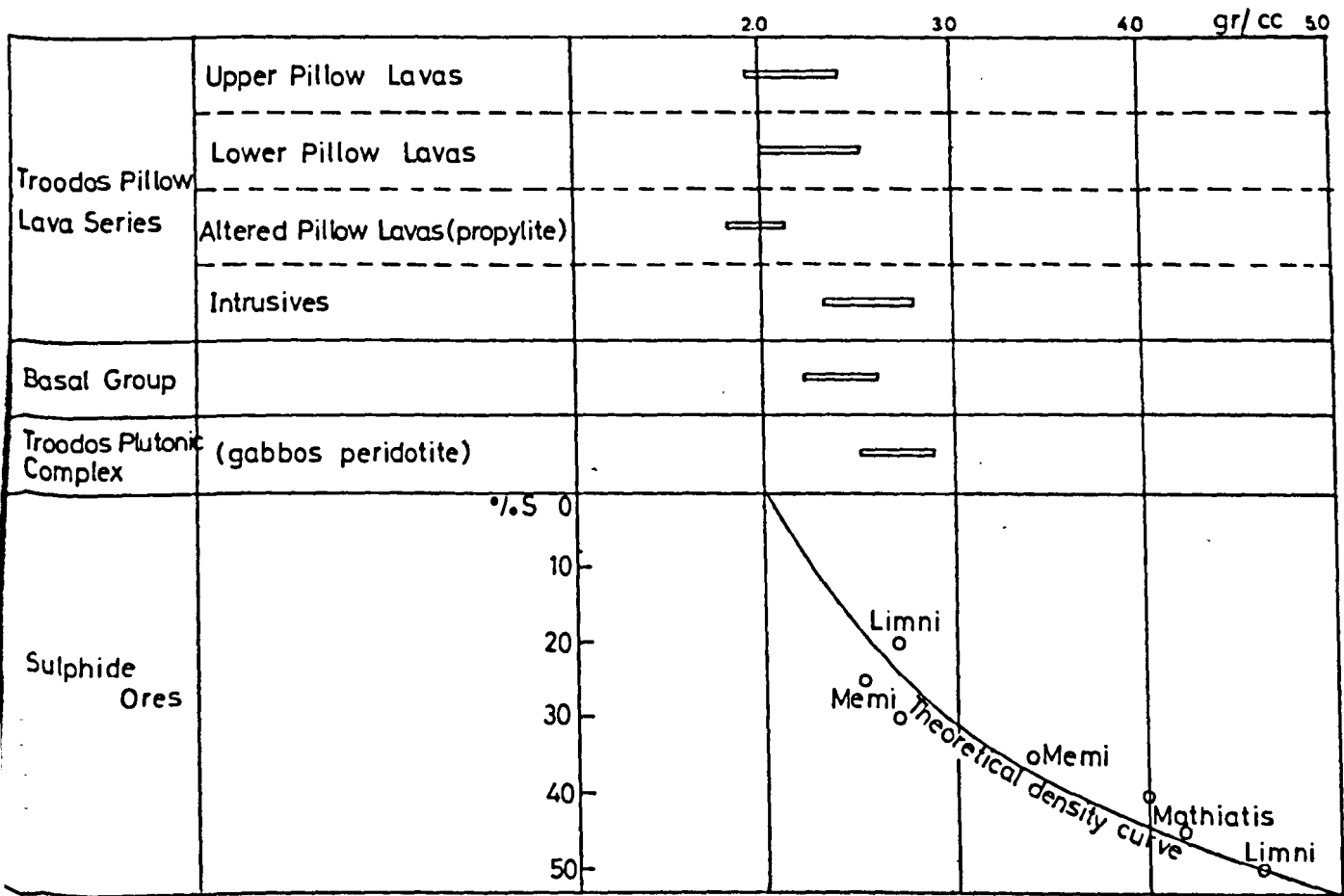
The middle values of the Hunttec MK3 Receiver integrating periods.
(all units in milliseconds).

	<u>td</u>	<u>15</u>	<u>30</u>	<u>60</u>	<u>120</u>	<u>240</u>
<u>tp</u>		25	40	70	130	250
<u>20</u>		55	70	100	160	280
		115	130	160	220	340
		235	250	280	340	460
		30	45	75	135	255
<u>30</u>		75	90	120	180	300
		165	180	210	270	390
		345	360	390	450	570
		35	50	80	140	260
<u>40</u>		95	110	140	200	320
		215	230	260	320	440
		455	470	500	560	680
		40	55	85	145	265
<u>50</u>		115	130	160	220	340
		265	280	310	370	490
		565	580	610	670	790
		45	60	90	150	270
<u>60</u>		135	150	180	240	360
		315	330	360	420	540
		675	690	720	780	900

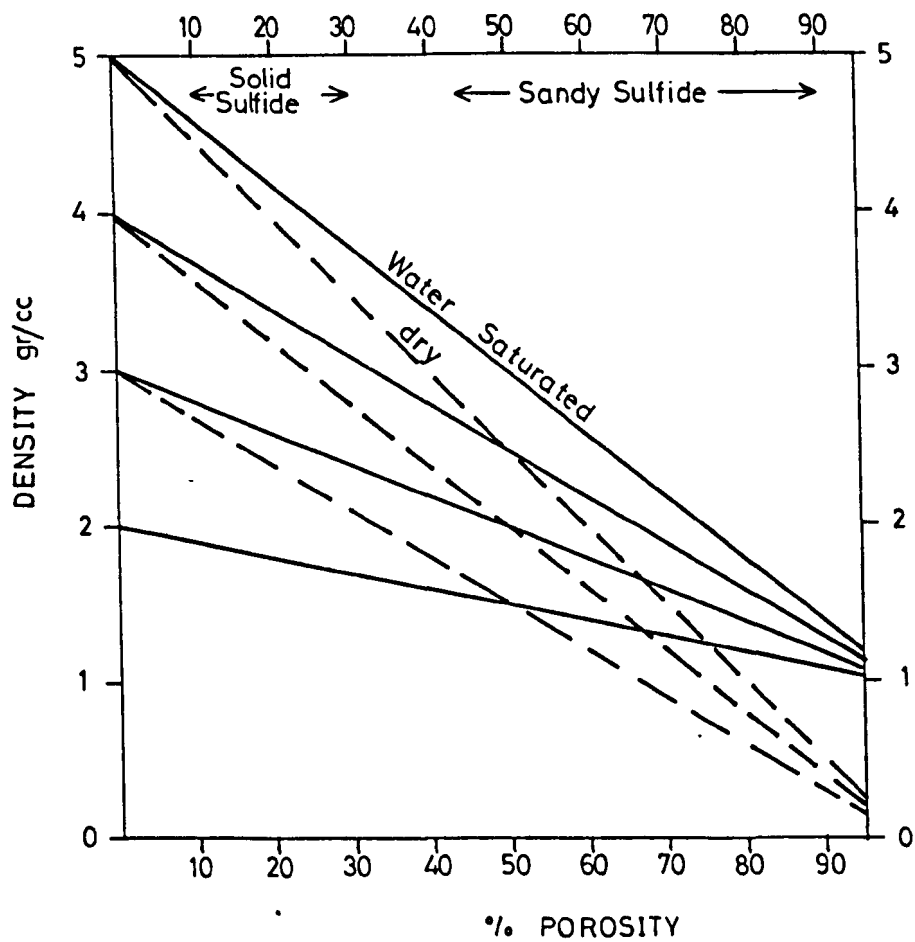
(After the MK3 Manual
HUNTEC 1970).



BLOCK DIAGRAM OF THE SIGNAL PROCESSING
IN THE HUNTEC MK 3 RECEIVER.

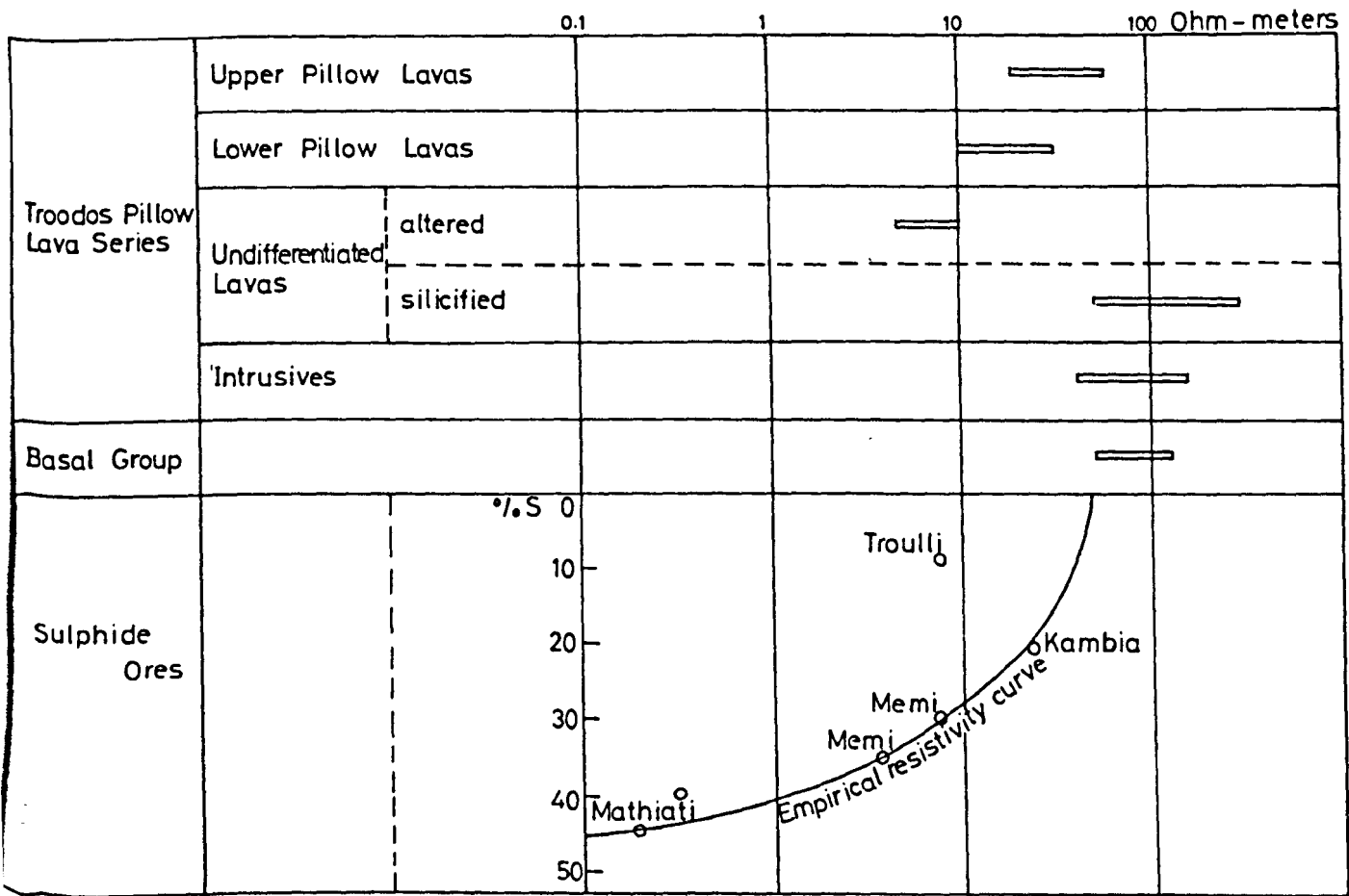


THE BULK DENSITIES OF THE TROODOS VOLCANIC ROCKS AND THE SULPHIDE MINERALIZATION.

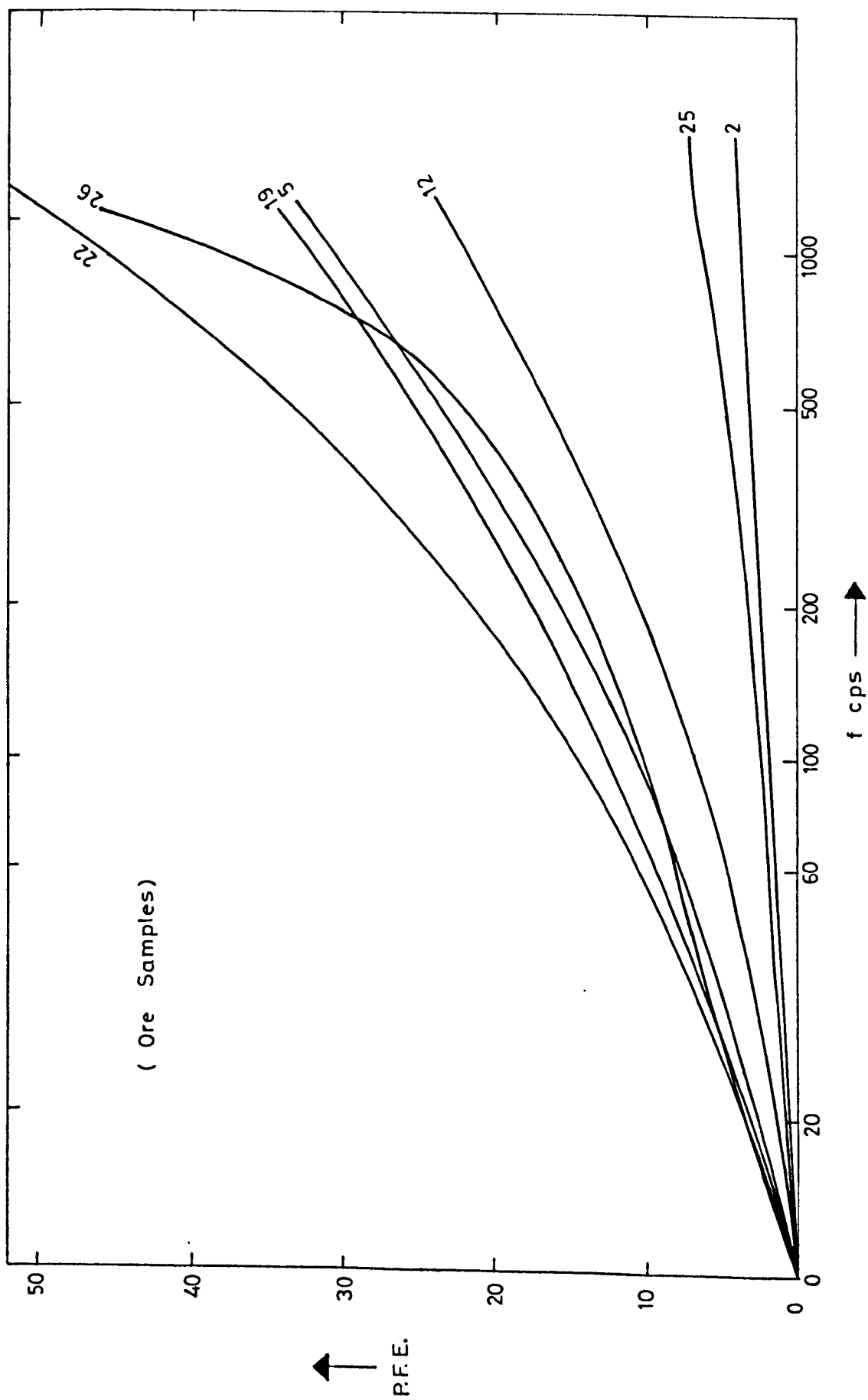


GRAPH SHOWING THE EFFECT OF POROSITY
ON ROCK DENSITY FOR THE PYRITIC ORES.

FIG. 35



THE RESISTIVITIES OF THE TROODOS VOLCANIC ROCKS
AND THE SULPHIDE MINERALIZATION.



PLOT OF P.F.E. AGAINST FREQUENCY

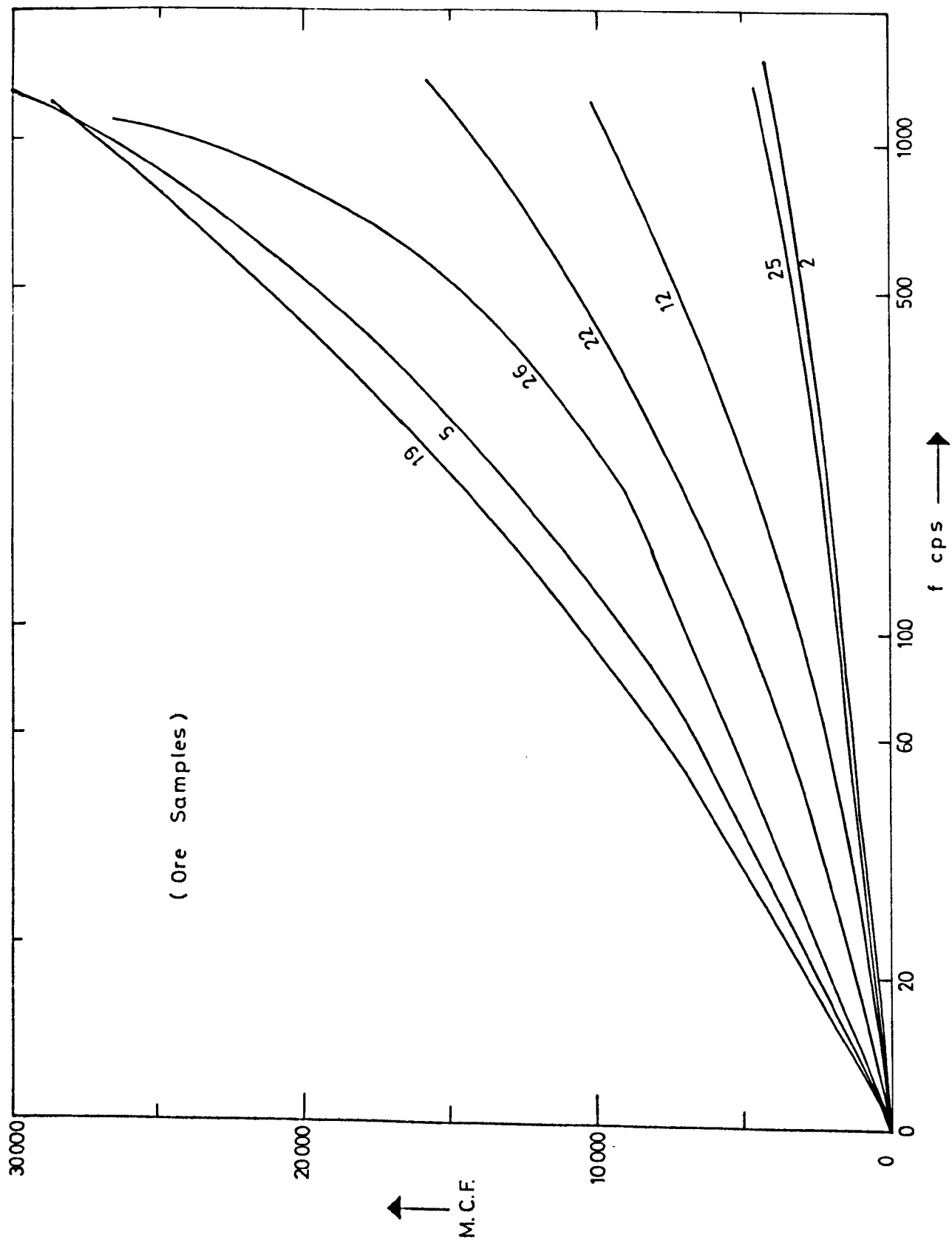
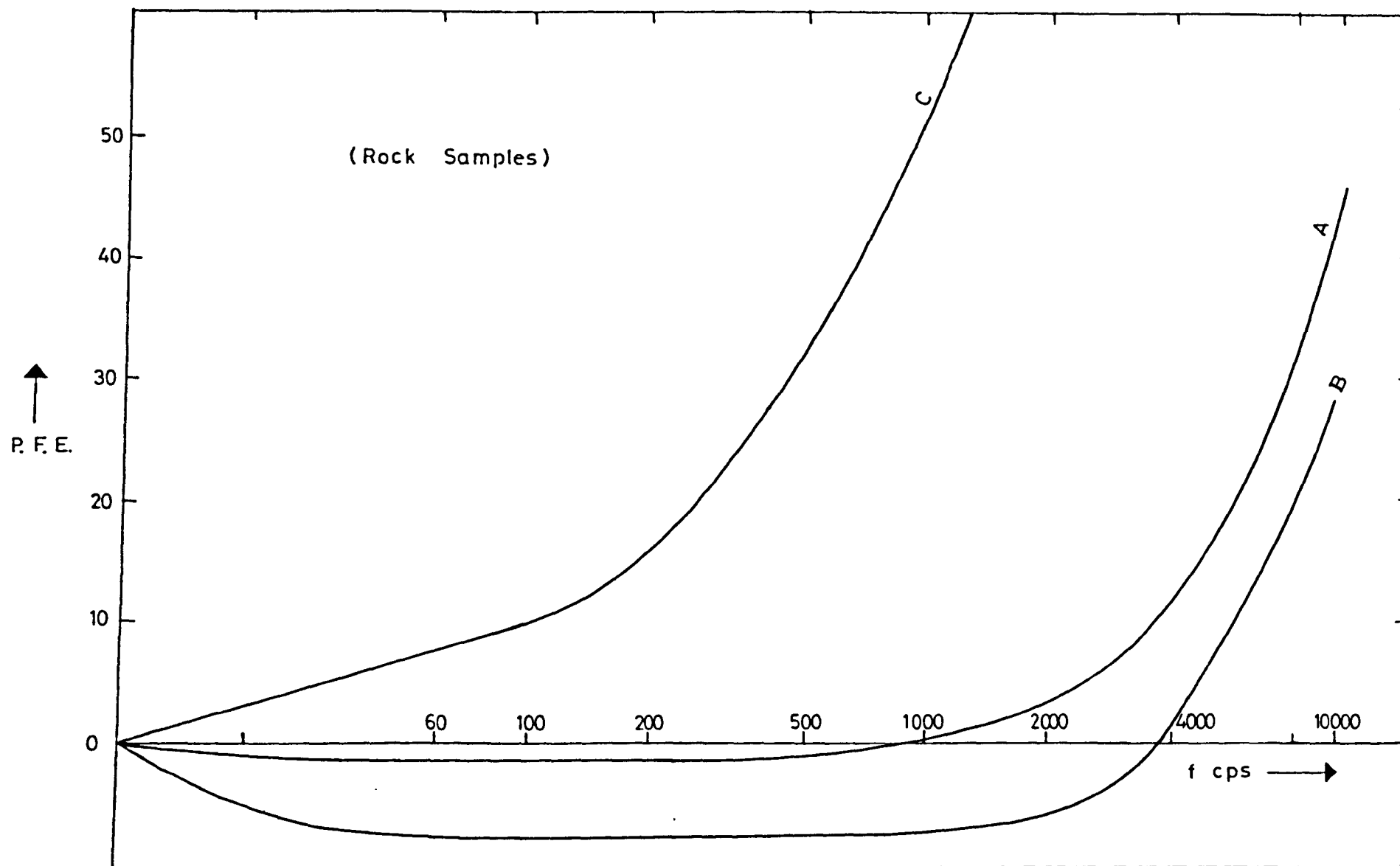
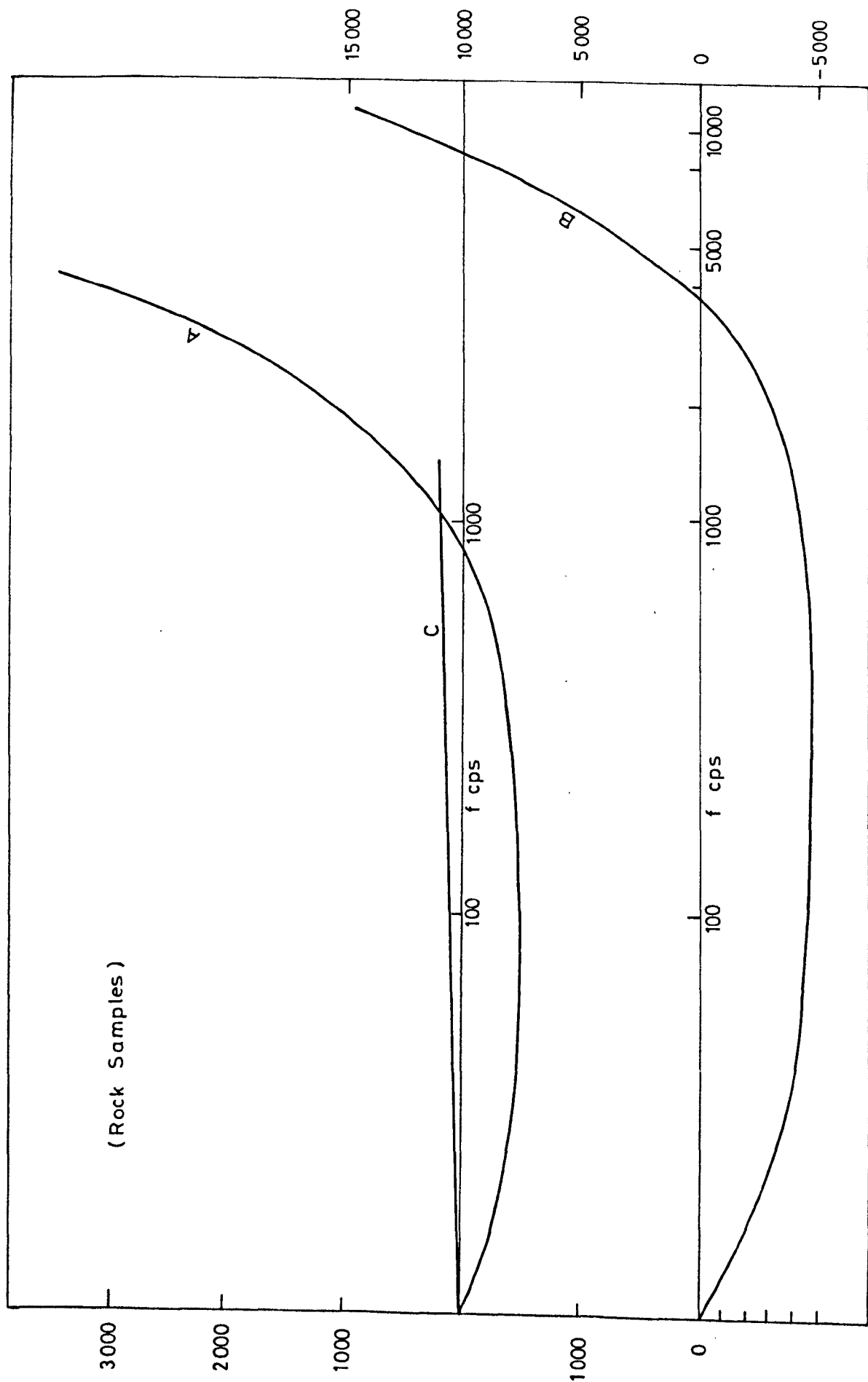


FIG. 37

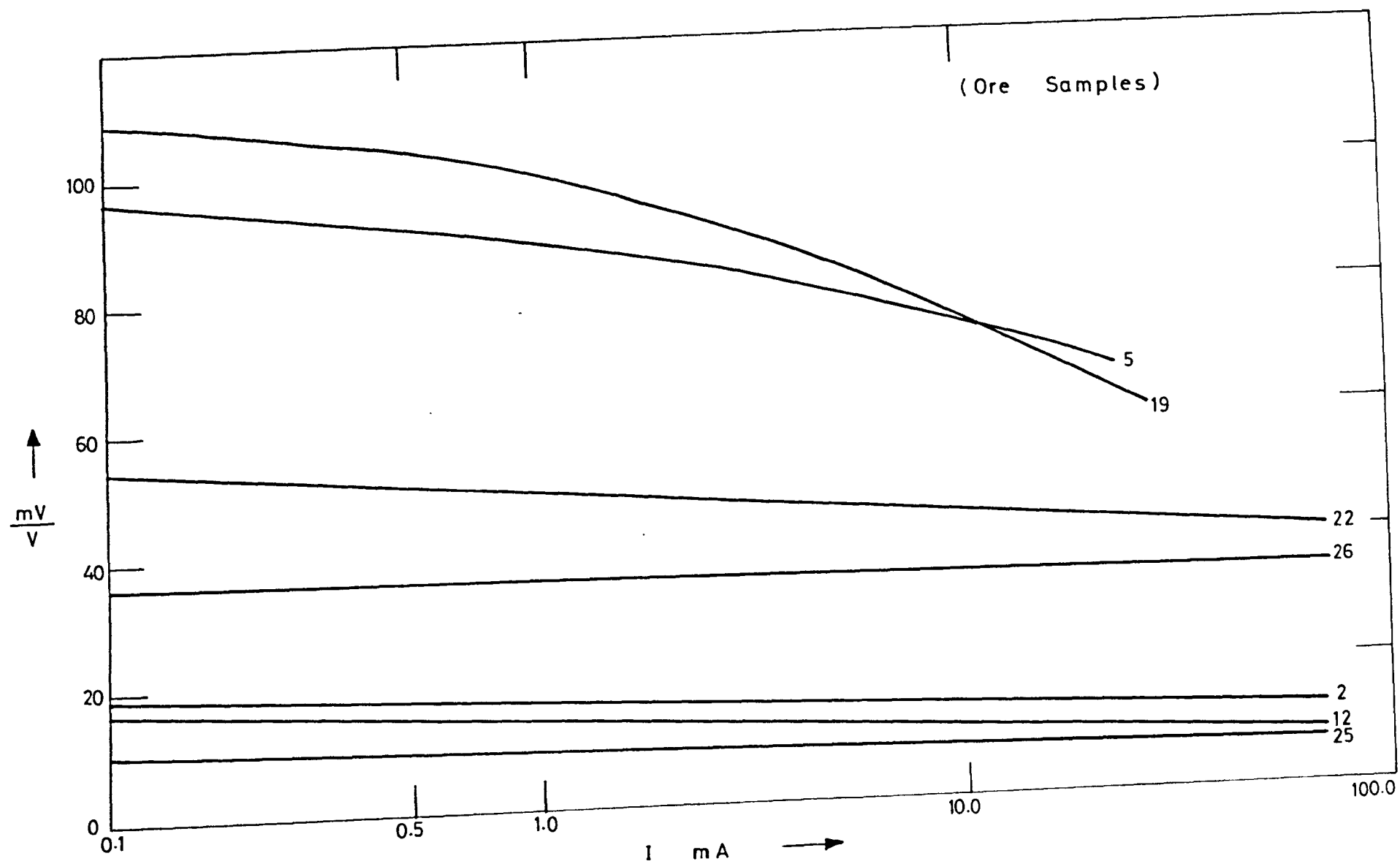
PLOT OF M.C.F. AGAINST FREQUENCY



PLOT OF P.F.E. AGAINST FREQUENCY

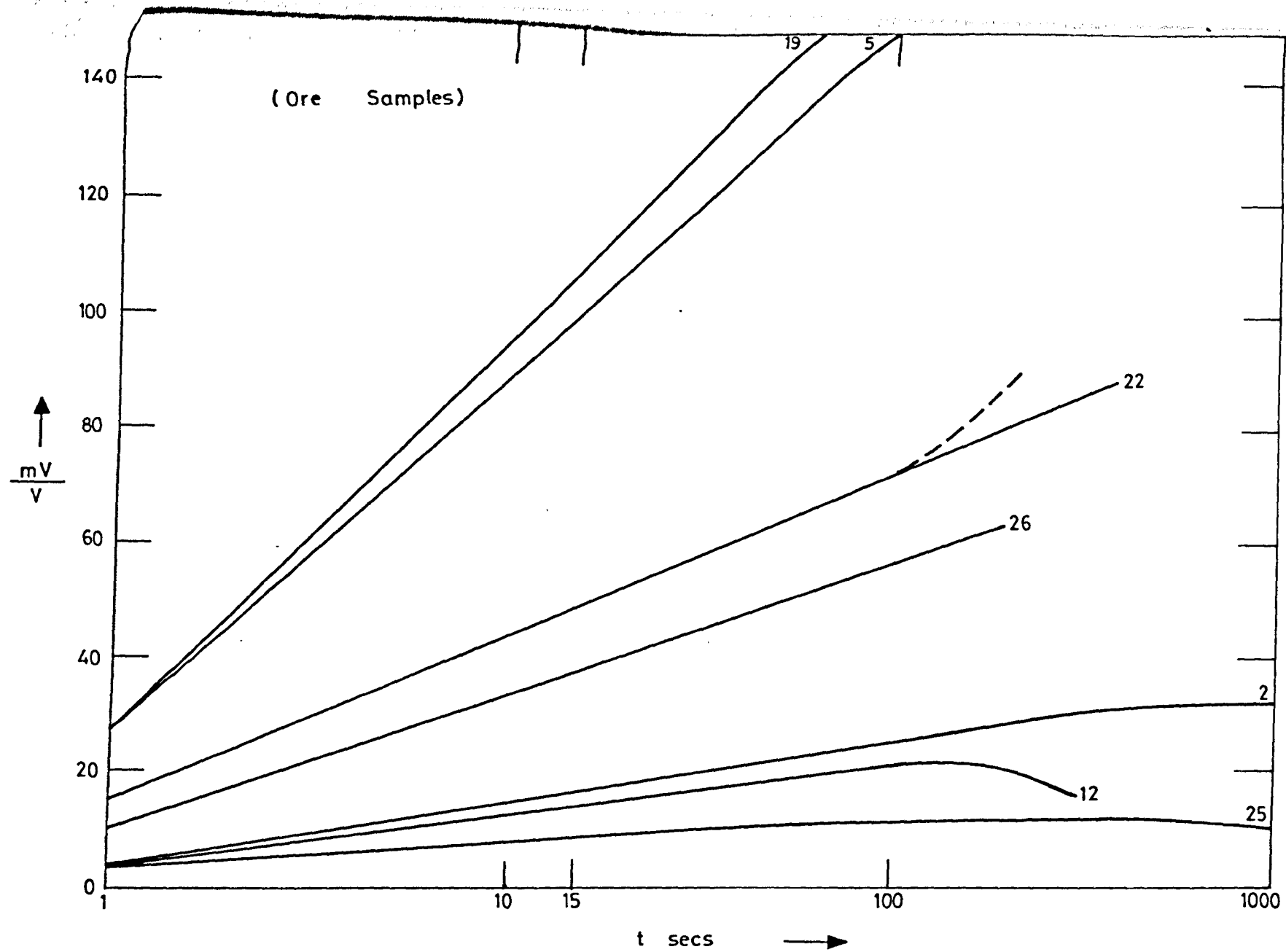


PLOT OF M.C.F. AGAINST FREQUENCY



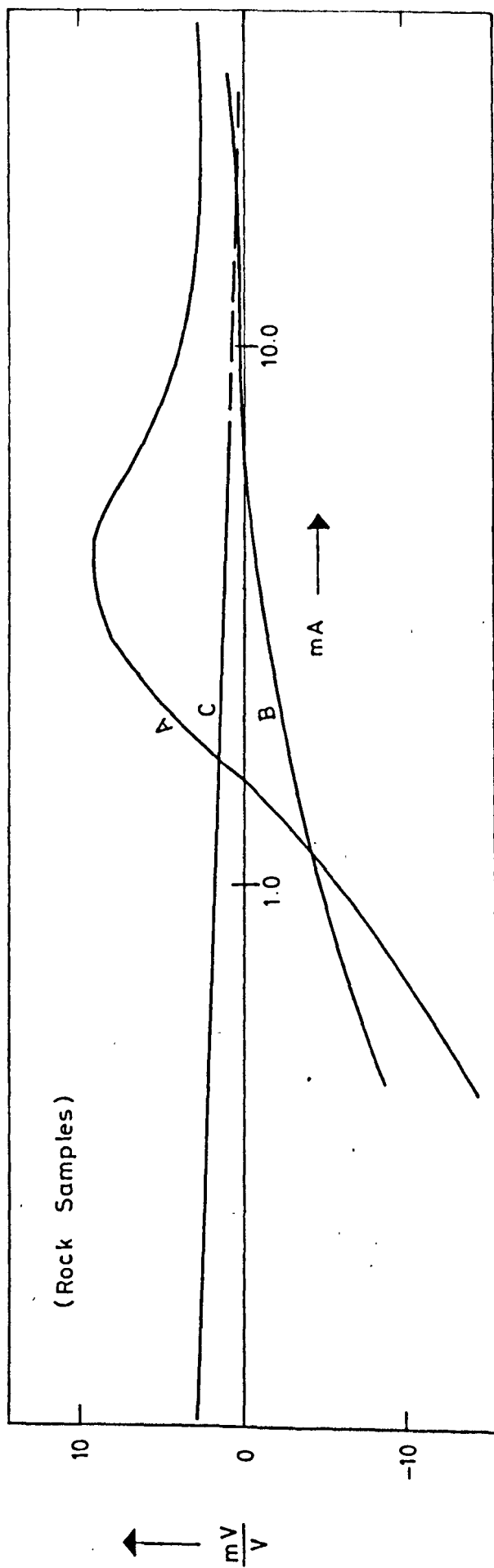
PLOT OF I.P.E. AGAINST CURRENT

FIG. 40

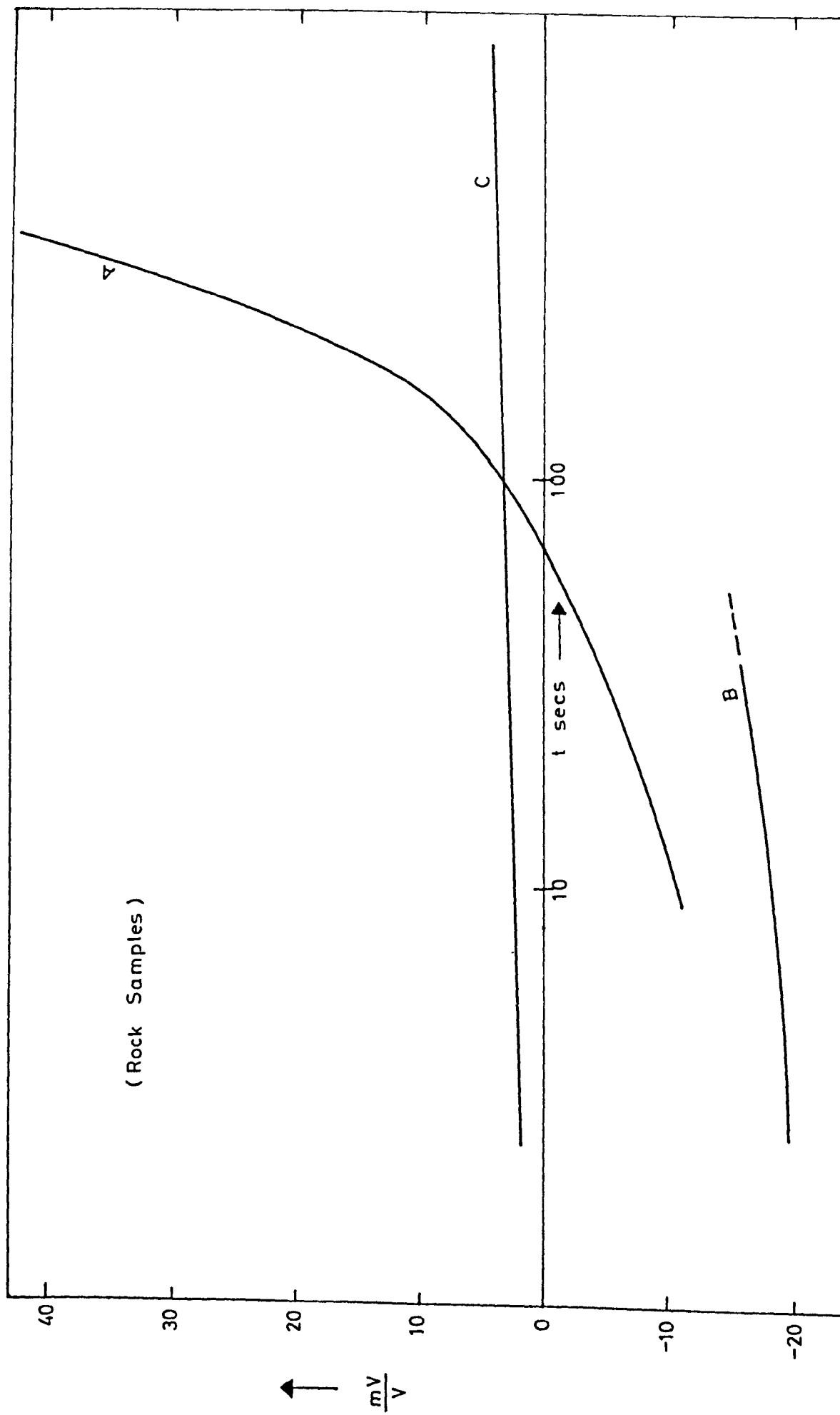


PLOT OF I.P.E. AGAINST TIME

FIG. 41



PLOT OF I.P.E. AGAINST CURRENT



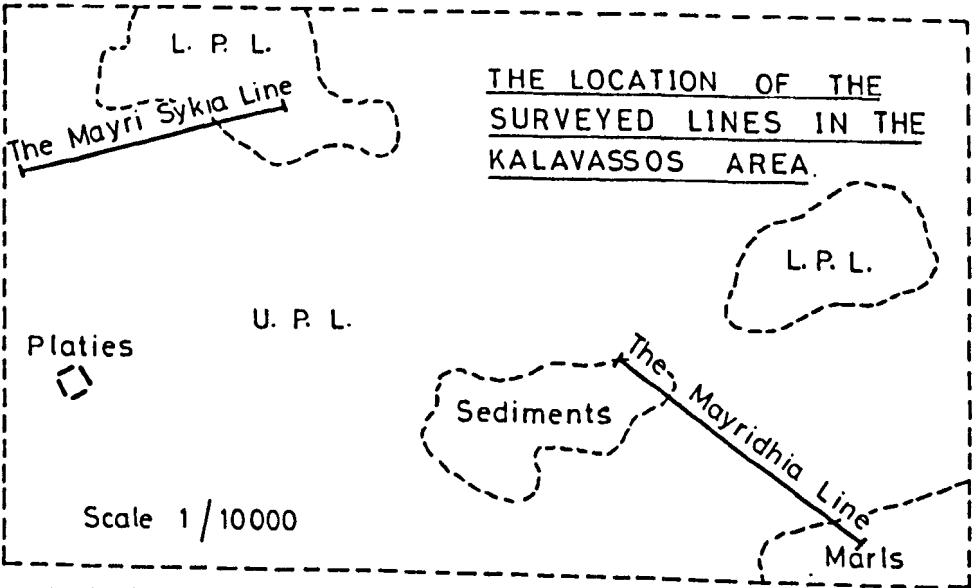
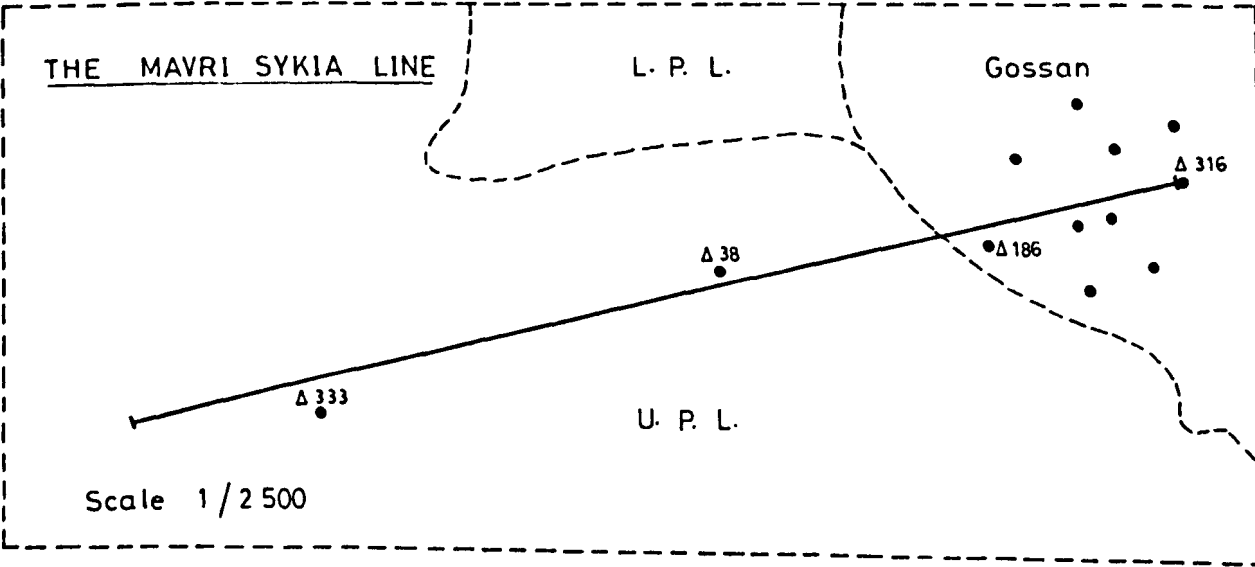
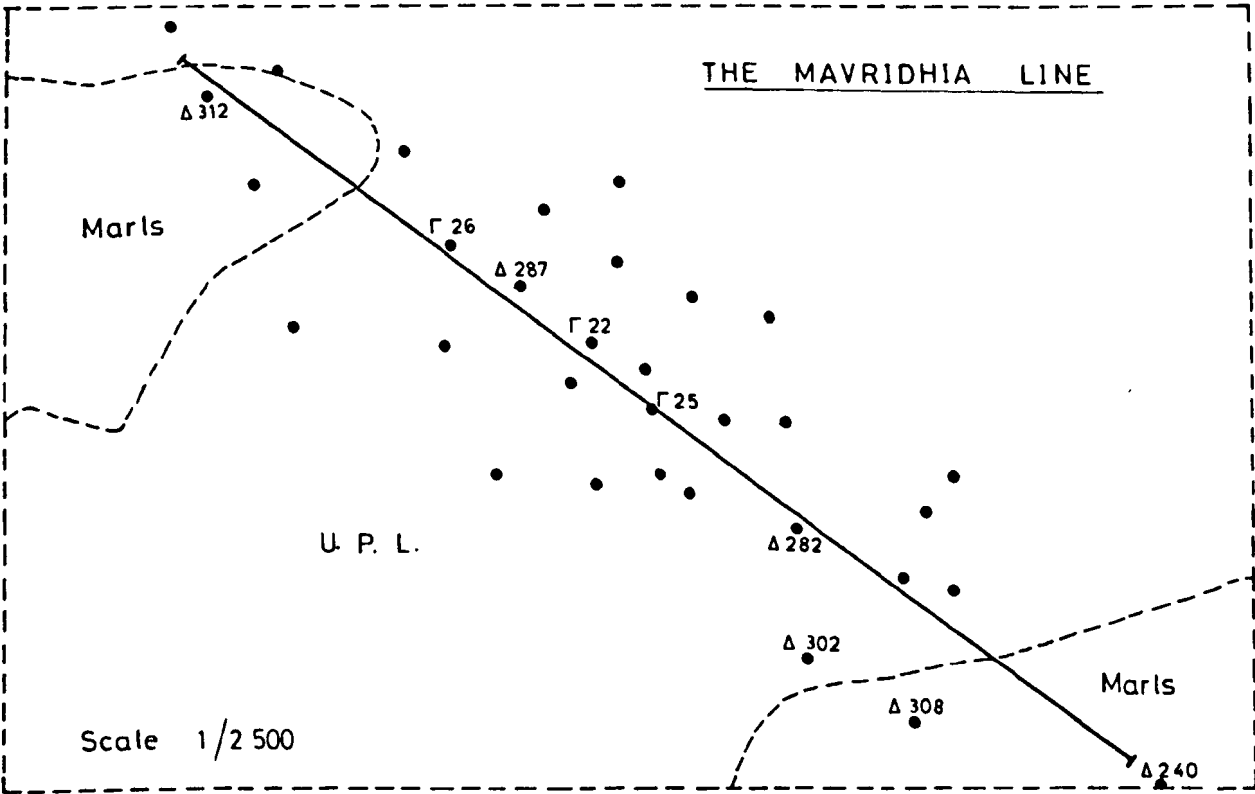
PLOT OF I.P.E. AGAINST TIME

TABLE 4

Table summarizing the results of the I.P. laboratory study.

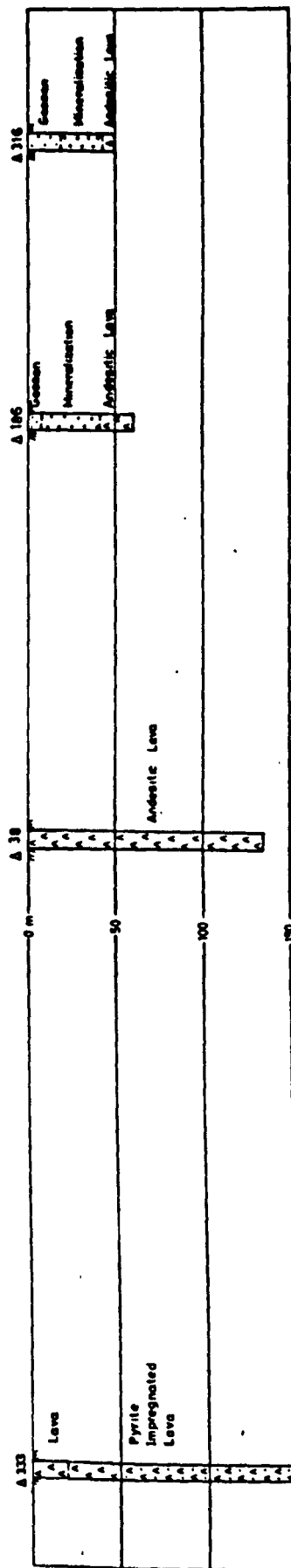
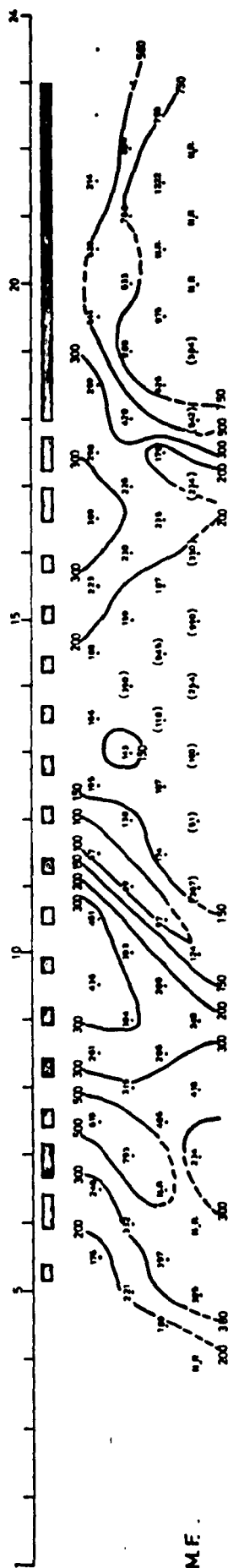
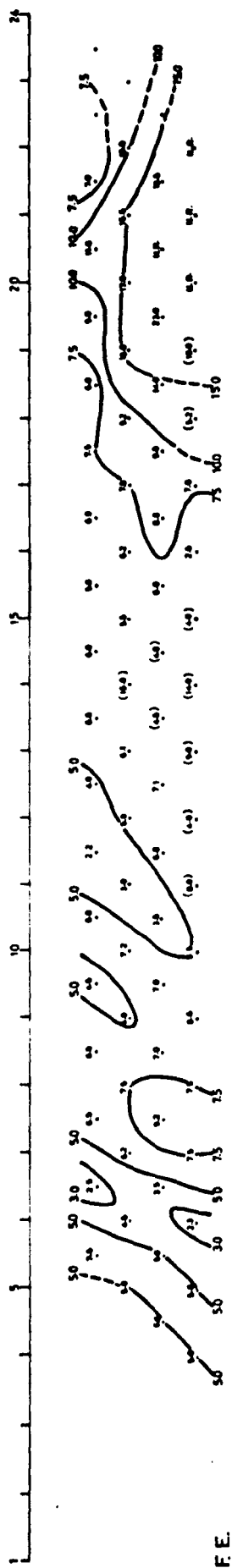
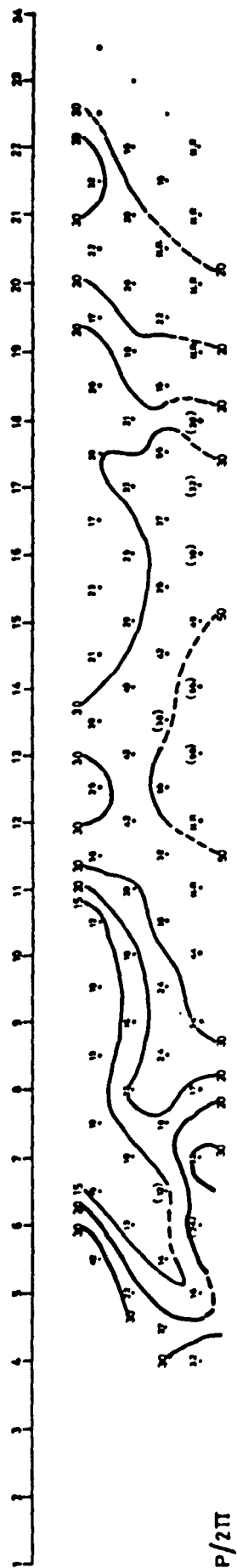
Sample	Sulphide content wt%	PFE (1)	MCF (2)	IPE (3)	ρ ohm meters
2	3.6	1.8	1700	17	6.3
25	3.8	2.5	1900	9	8.0
12	73.0	4.8	3100	14	12.0
26	78.0	10.0	7000	35	10.0
5	60.0	10.5	9000	92	10.5
19	40.0	12.5	10500	104	9.0
22	71.0	14.5	5000	51	18.0
C	basaltic rock	10	50	2	1050.0
A	andesitic rock	-1.8	-470	-12	18.5
B	andesitic rock	-7.5	-4500	-8	10.0

Notes: (1) PFE at 100 cps
(2) MCF at 100 cps
(3) IPE measured at $t = 1$ sec, charging time 15 secs
and energizing current 0.5 mA.





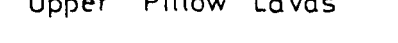








g = 5011

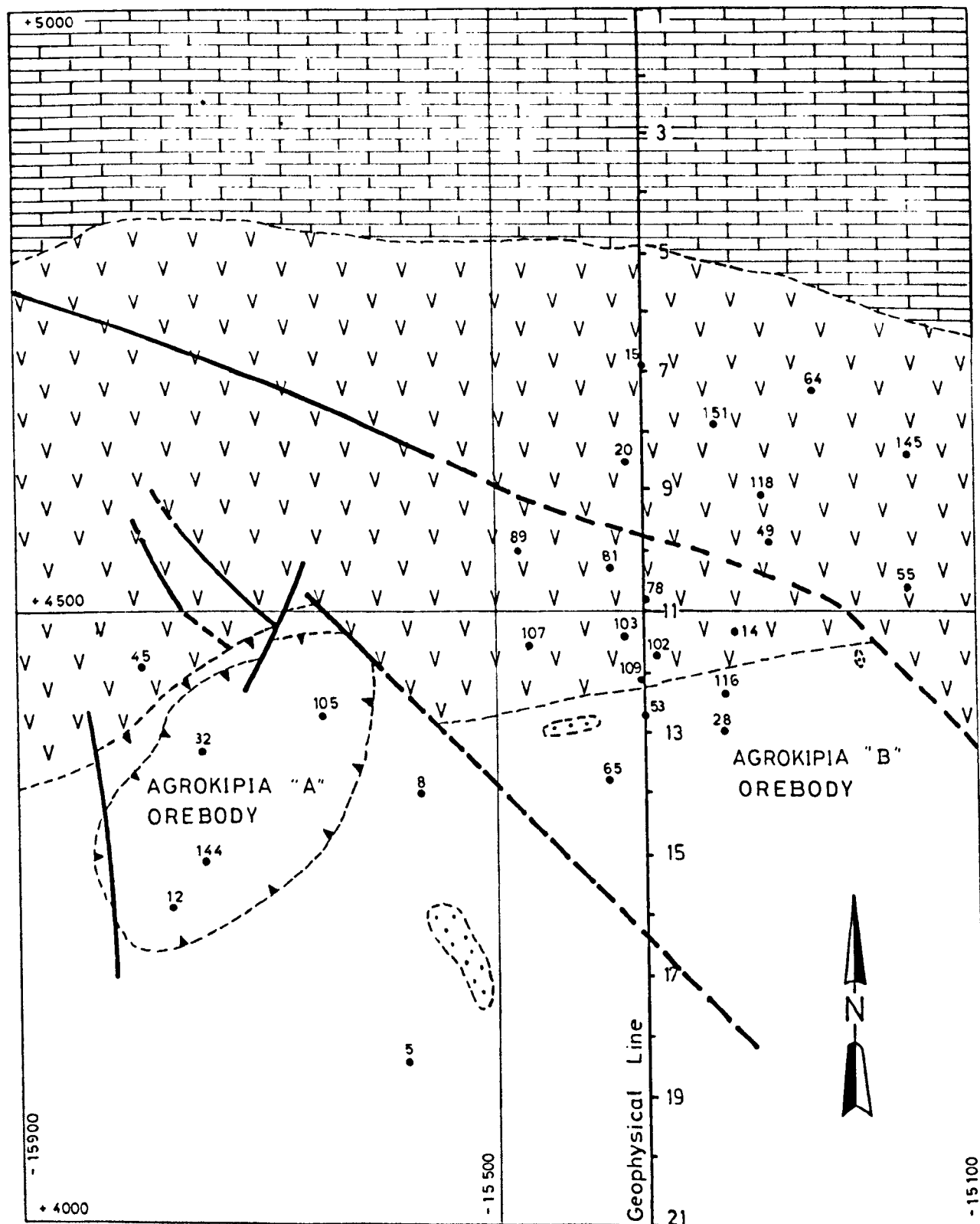


GEOLOGICAL MAP OF THE AGROKIPIA AREA

Scale 1/5000

LEGEND

- 
-  Upper Pillow Lavas
 -  Lower Pillow Lavas
 -  Gossan
 -  Overlying Sediments
 -  Borehole (AΓ series)
 -  Open Pit
 -  Fault
 -  Geological Boundary



AGROKIPIA AREA

GEOLOGICAL SECTION ALONG PART OF THE GEOPHYSICAL LINE

Scale 1/2500

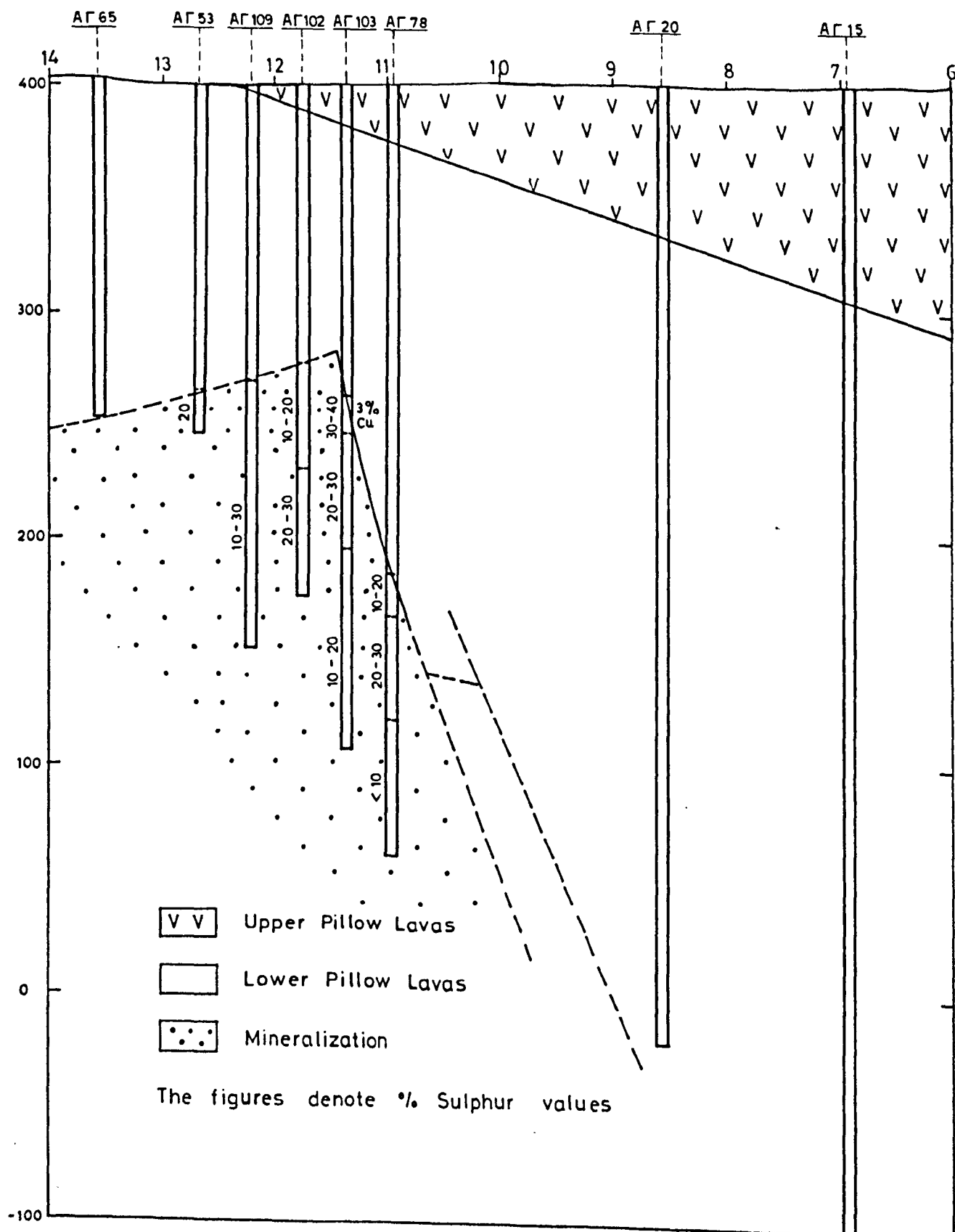


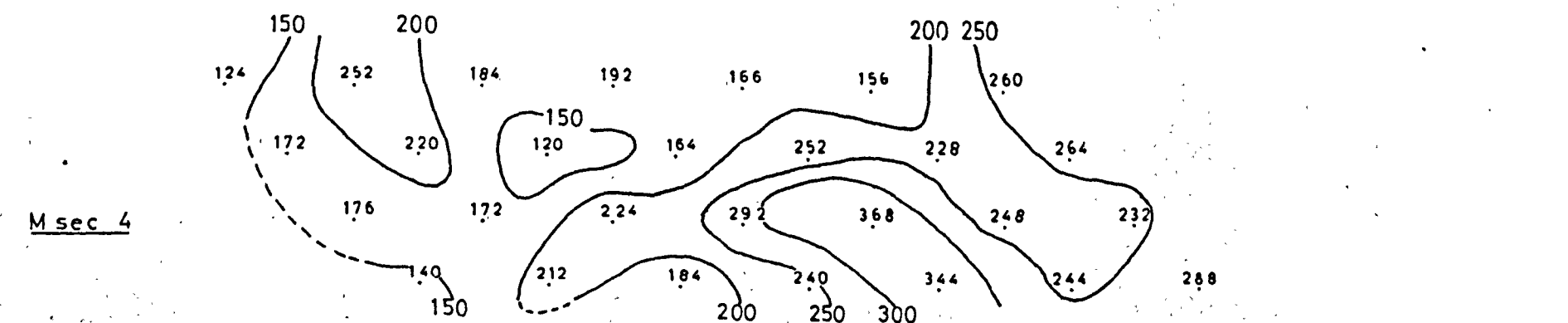
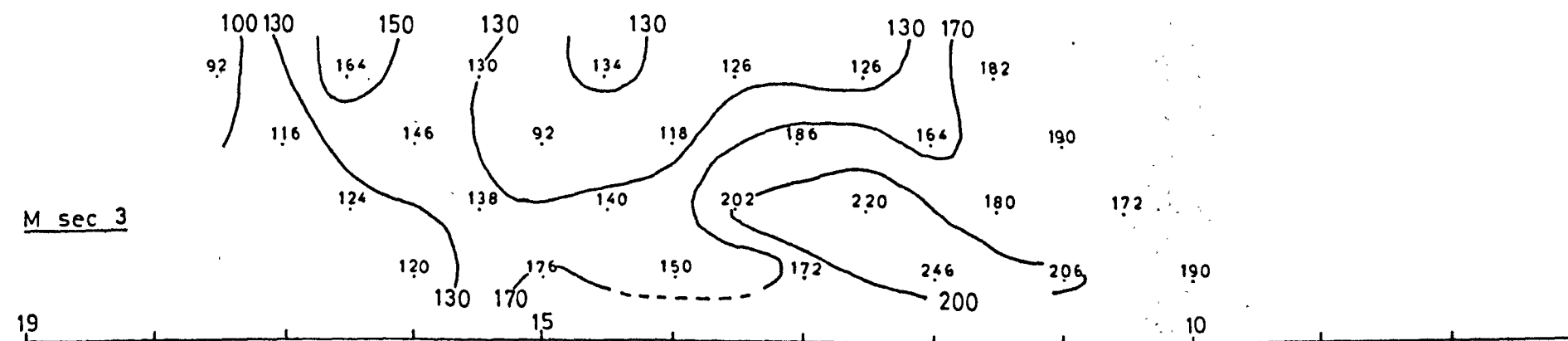
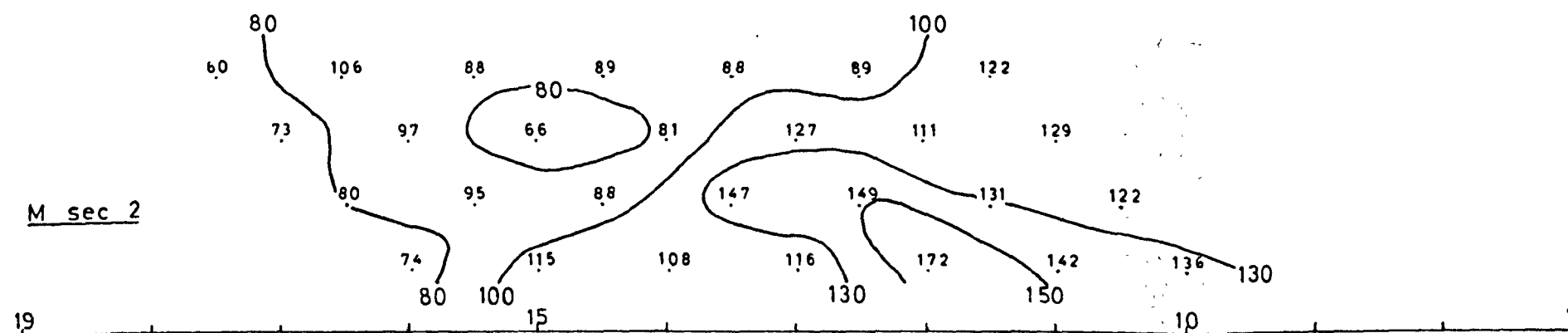
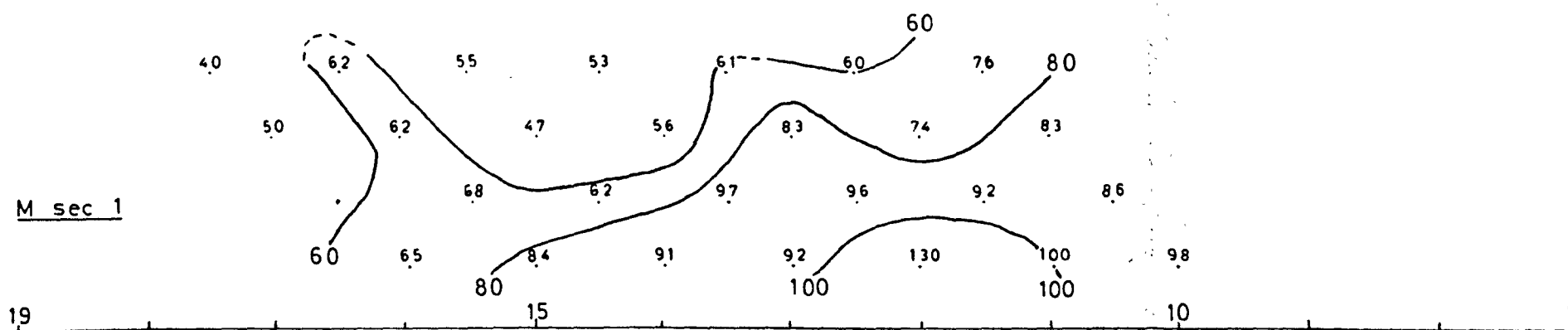
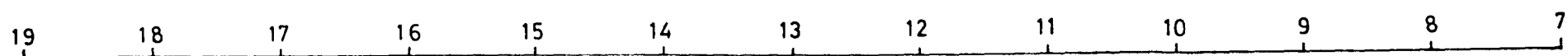
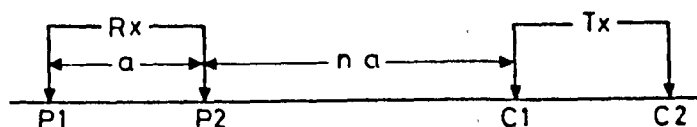
FIG. 49

$t_d = 30$ $t_c = 8$

GEOPHYSICAL LINE

tp = 50 on/off = 1.0

DIPOLE - DIPOLE

 $a = 50 \text{ m}$ 

OKIPIA AREA

PHYSICAL LINE

ISTIVITY $\rho/2\pi$ Ohm - Meters

E - DIPOLE a = 50 m

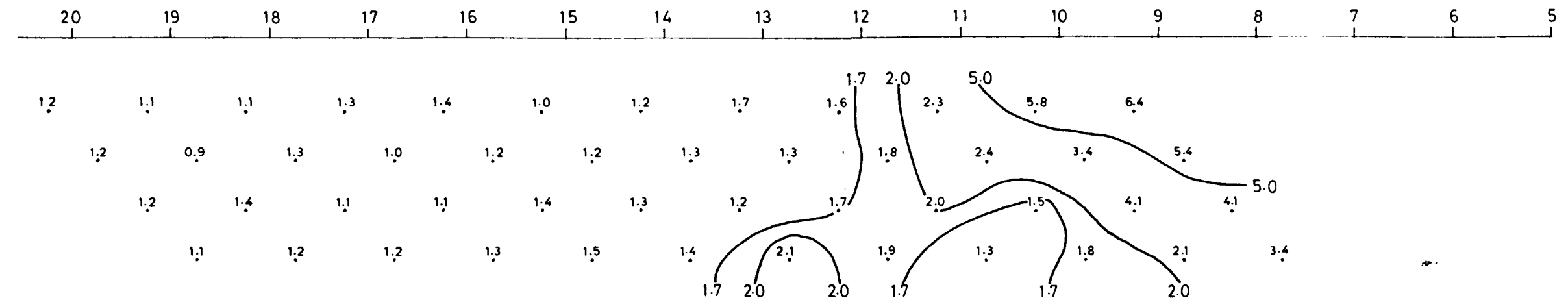
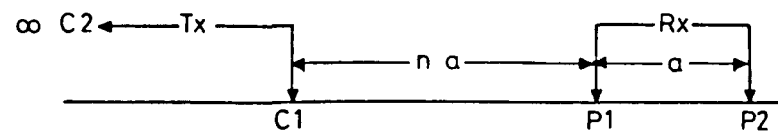
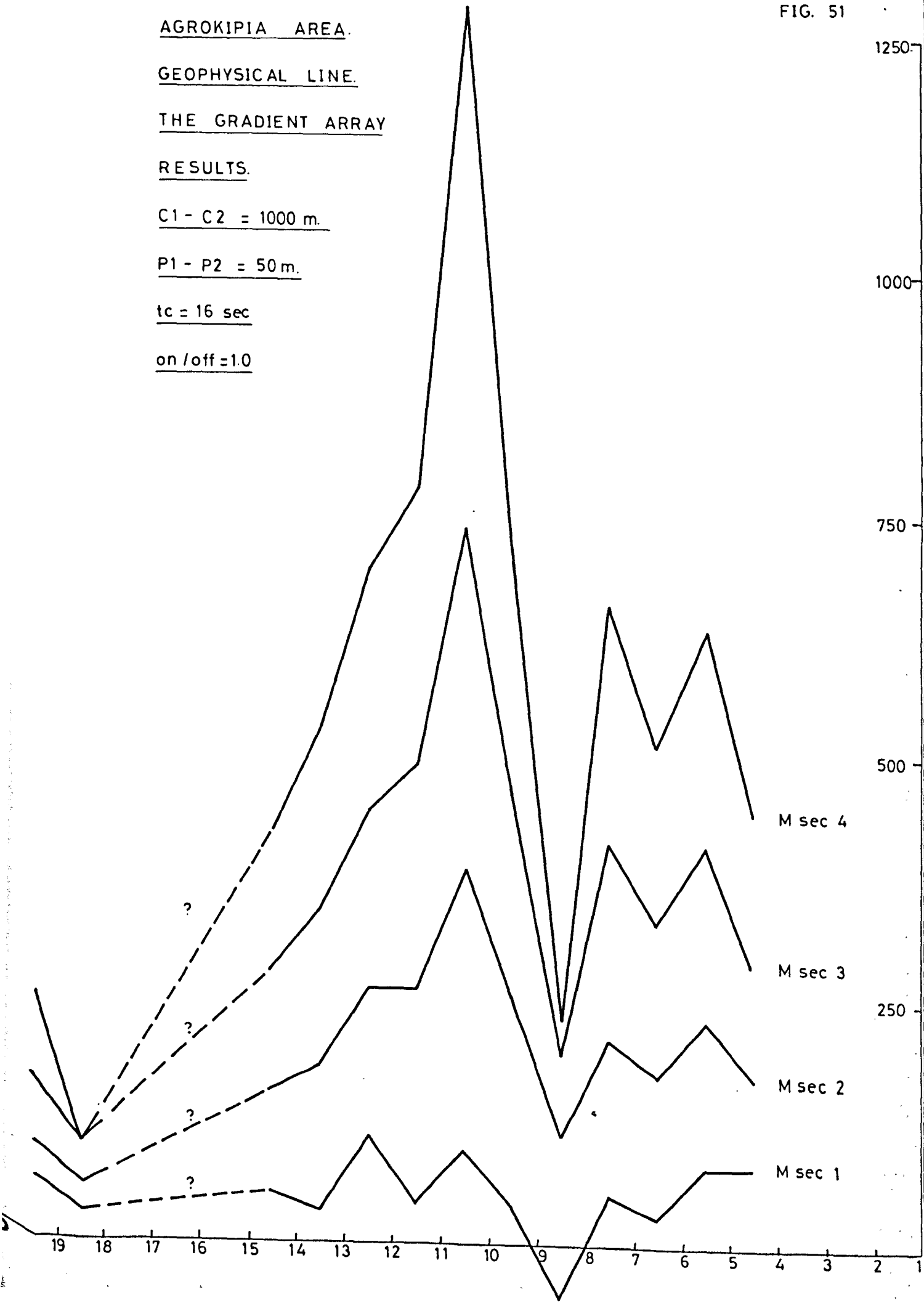


FIG. 51

AGROKIPIA AREA.
GEOPHYSICAL LINE.
THE GRADIENT ARRAY
RESULTS.

C1 - C2 = 1000 m.
P1 - P2 = 50 m.
tc = 16 sec
on / off = 1.0



AGROKIPIA AREA

$t_d = 30$

$t_c = 4$

GEOPHYSICAL LINE

$t_p = 50$

on/off = 1.0

POLE - DIPOLE

$a = 50m$

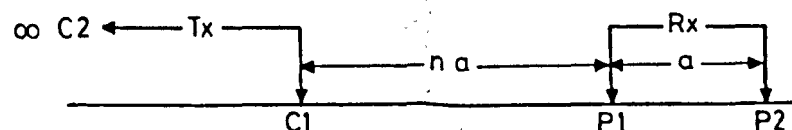
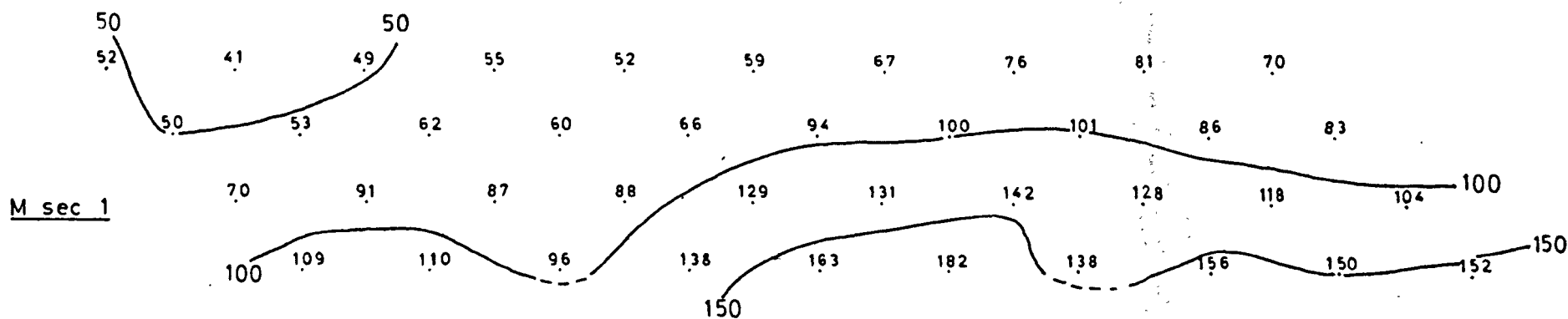
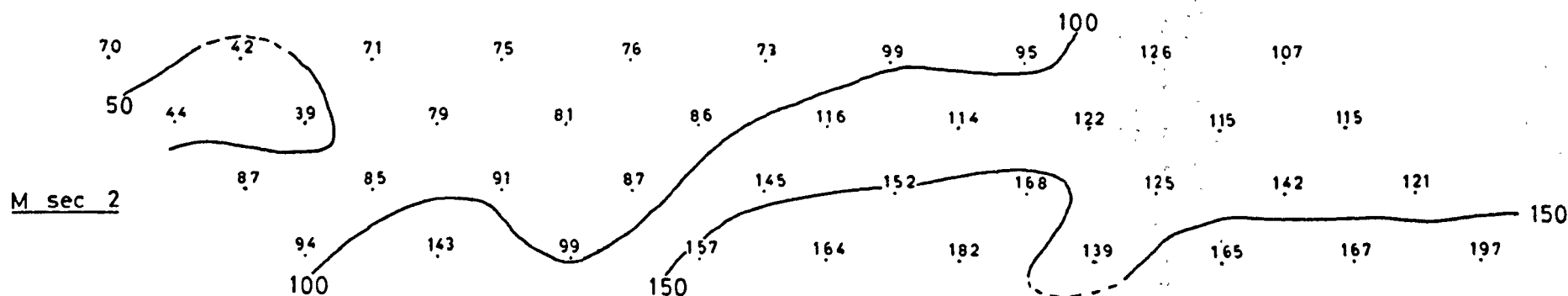


FIG. 52

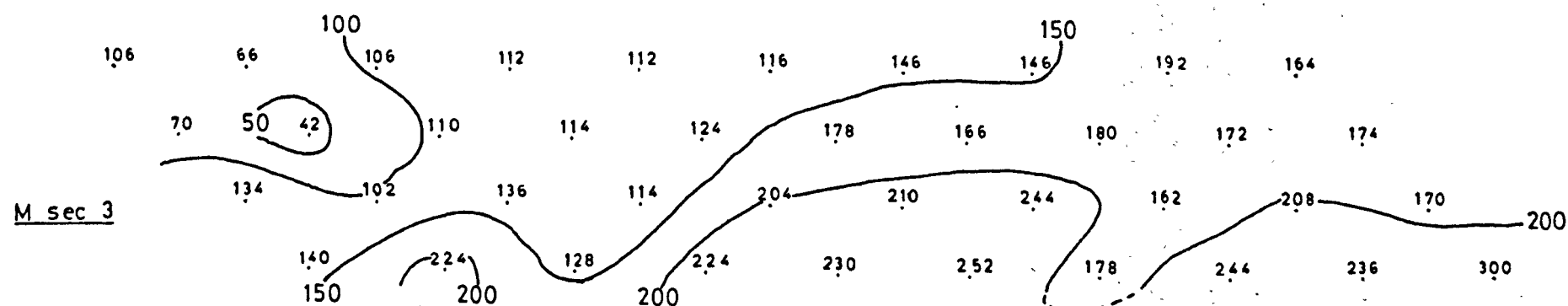
19 18 17 16 15 14 13 12 11 10 9 8 7 6 5



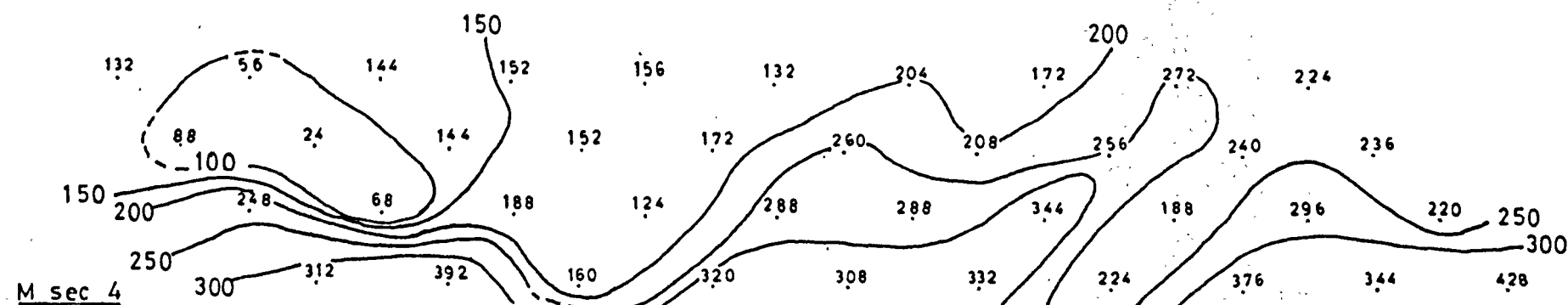
19 15 10 5



19 15 10 5



19 15 10 5



M sec 4

tc = 16

on/off = 1.0

$a = 50 \text{ m}$

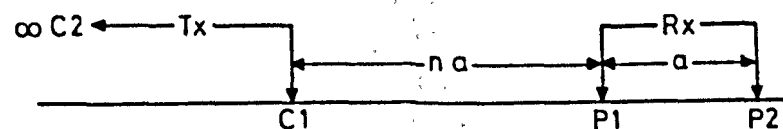
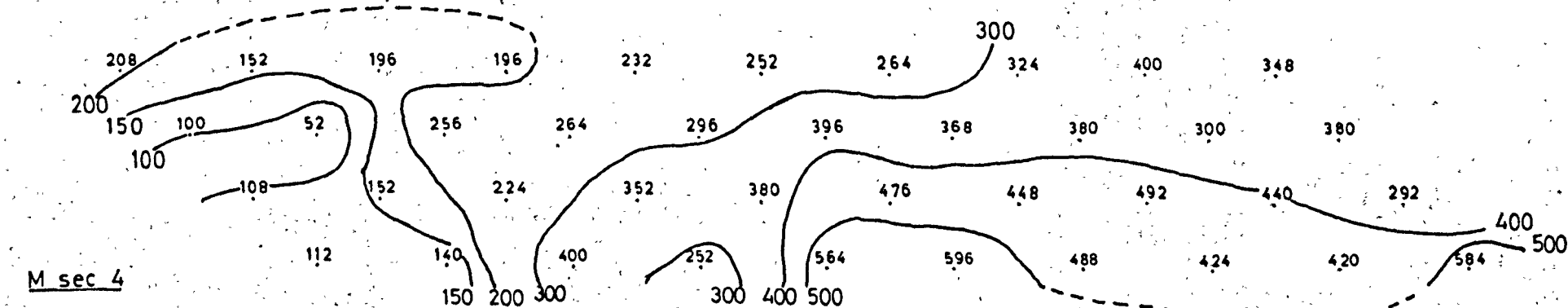
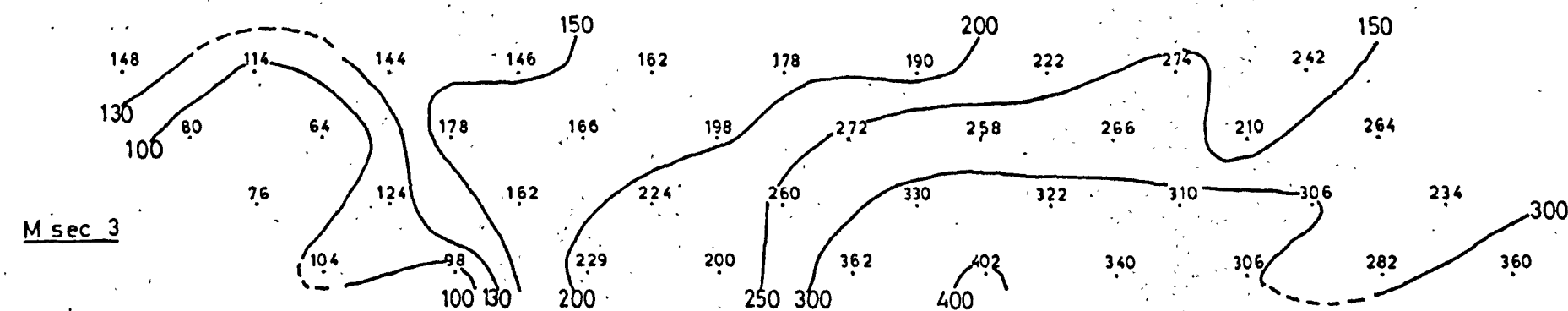
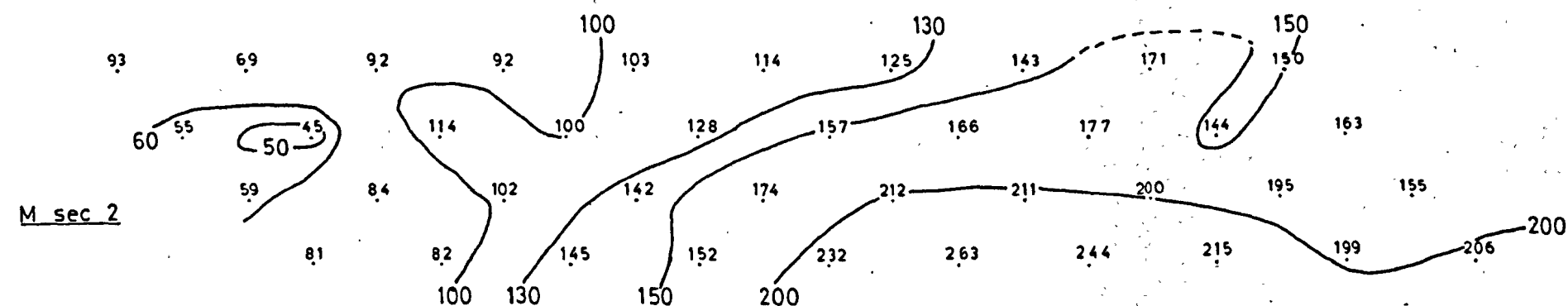
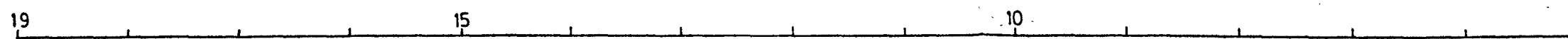
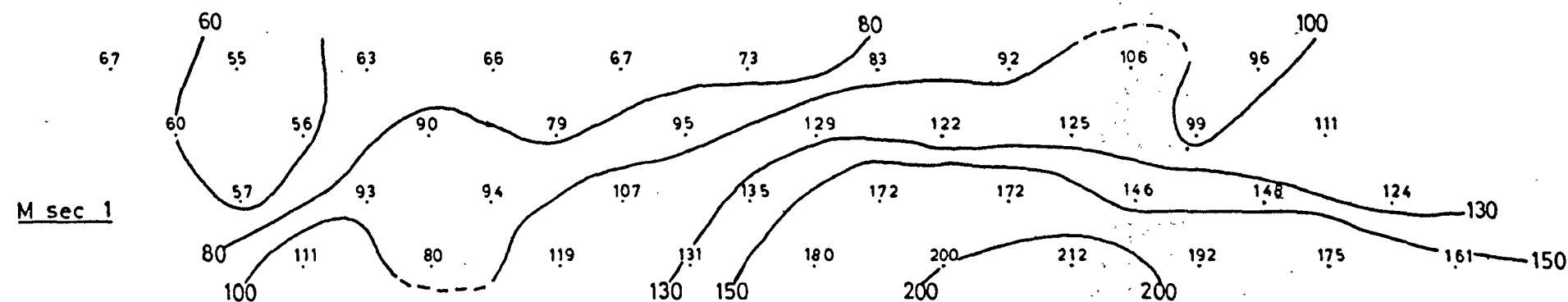
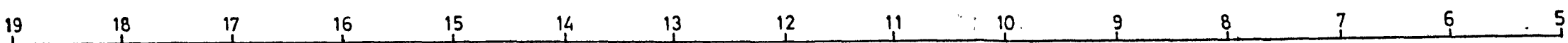


FIG. 53



GEOPHYSICAL LINE

tc

on/off = 1.0

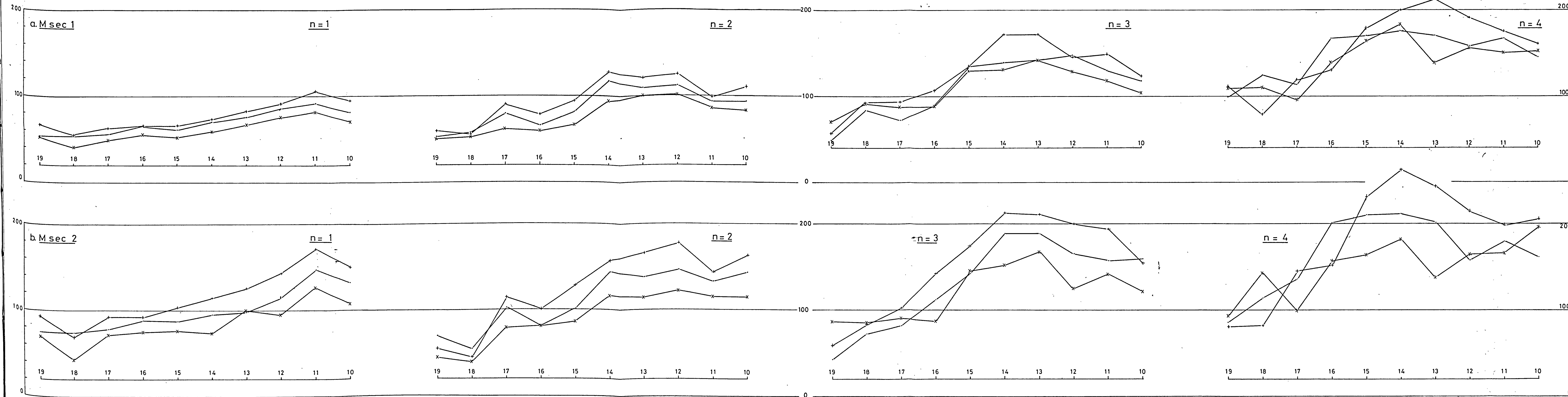
x 4

• 8

POLE - DIPOLE

+ 16

COMPARISON OF THE Msec1 AND Msec2 VALUES WITH DIFFERENT CHARGING TIMES



AGROKIPIA AREA

GEOPHYSICAL LINE

on/off=1.0

POLE - DIPOLE

M sec 3

t_c

$\times 4$

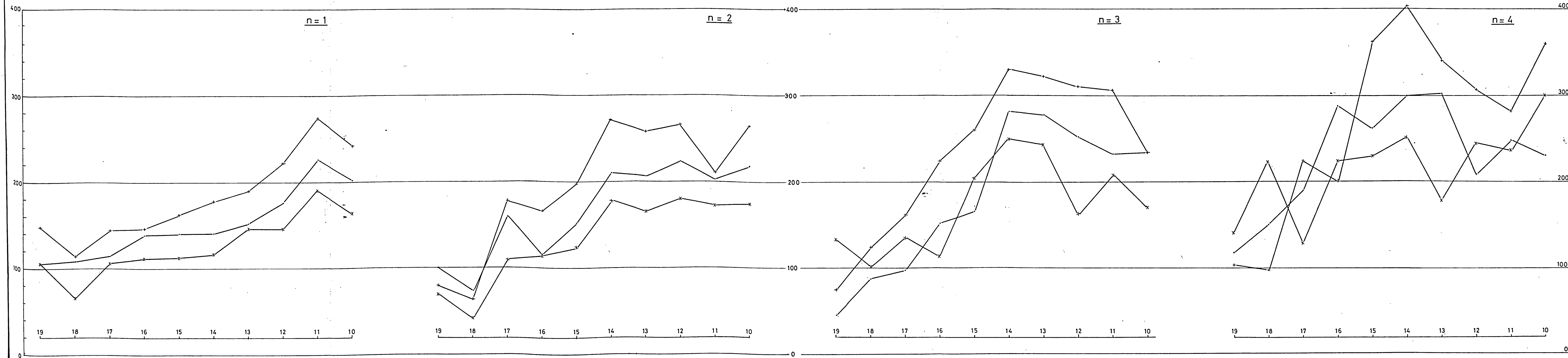
$\cdot 8$

+16

COMPARISON OF THE Msec 3 VALUES WITH DIFFERENT CHARGING TIMES

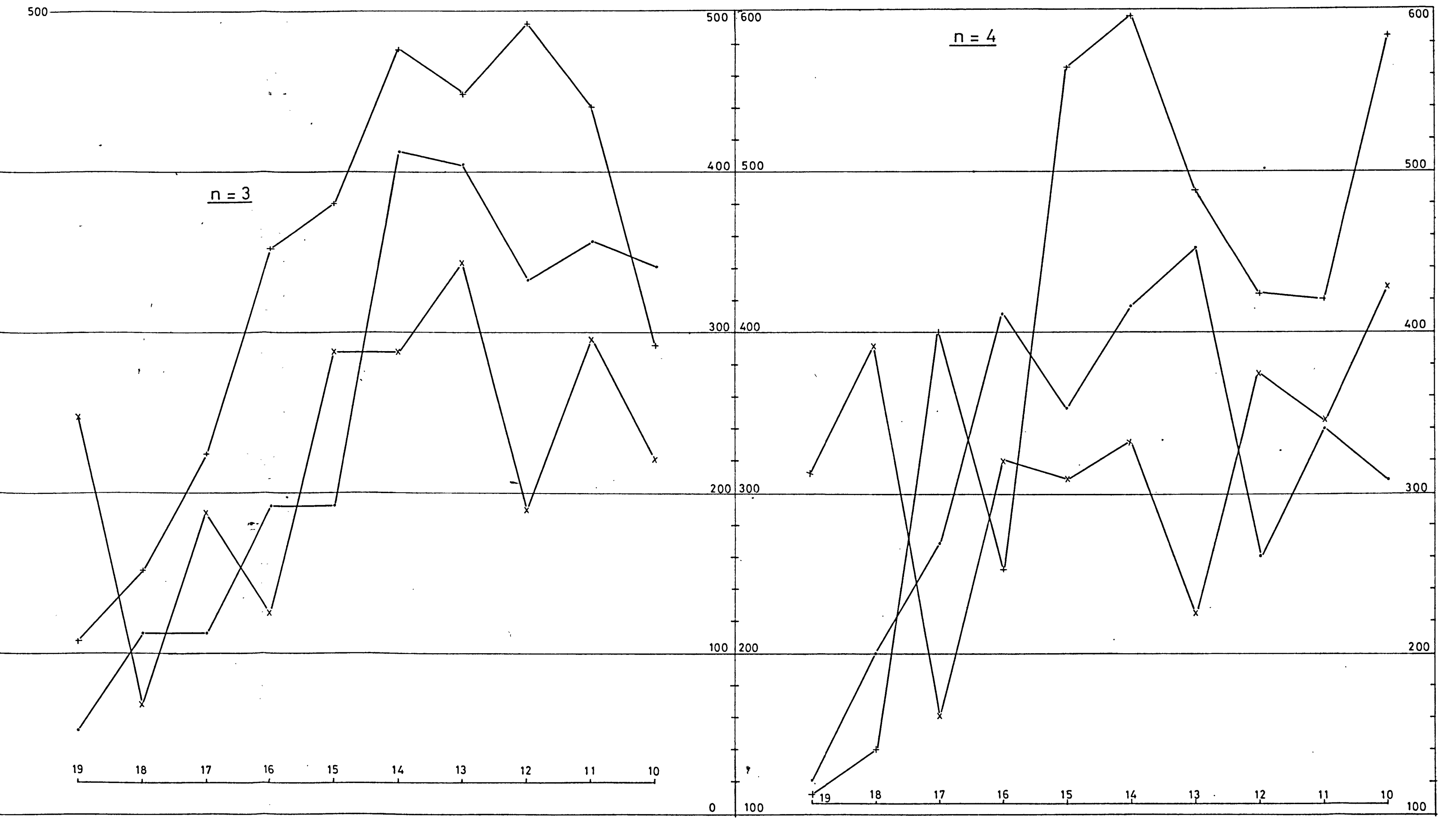
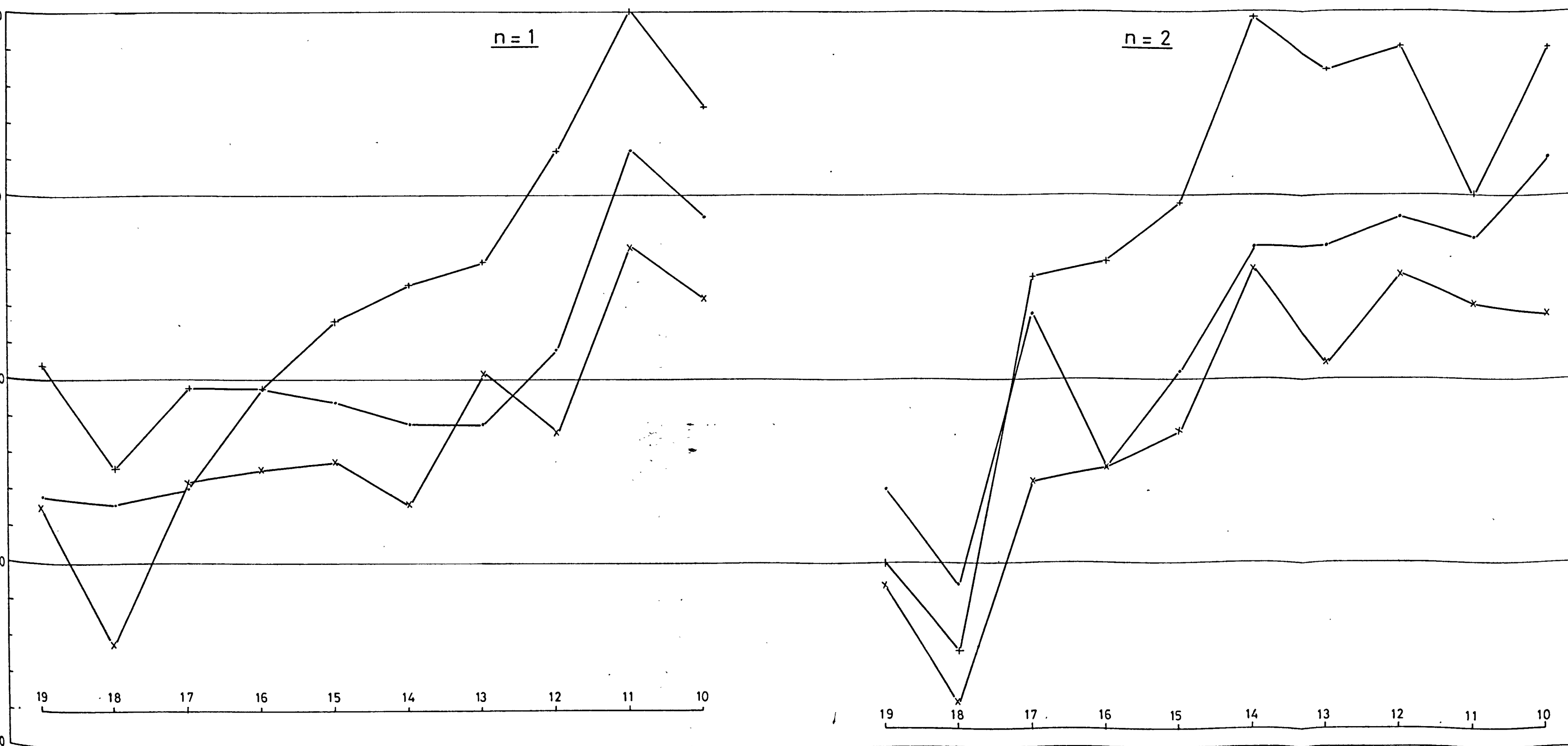
FIG. 55

FIG. 55



tc
x 4
• 8
+ 16

COMPARISON OF THE Msec 4 VALUES WITH DIFFERENT CHARGING TIMES



AGROKIPIA AREA

$t_d = 30$

$t_c = 8$

GEOPHYSICAL LINE

$t_p = 50$

on/off = 1.46

POLE - DIPOLE

$a = 50 \text{ m}$

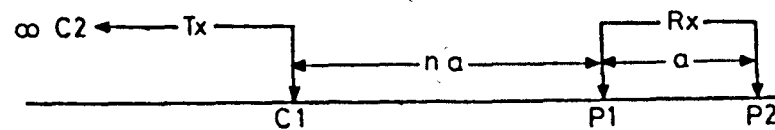
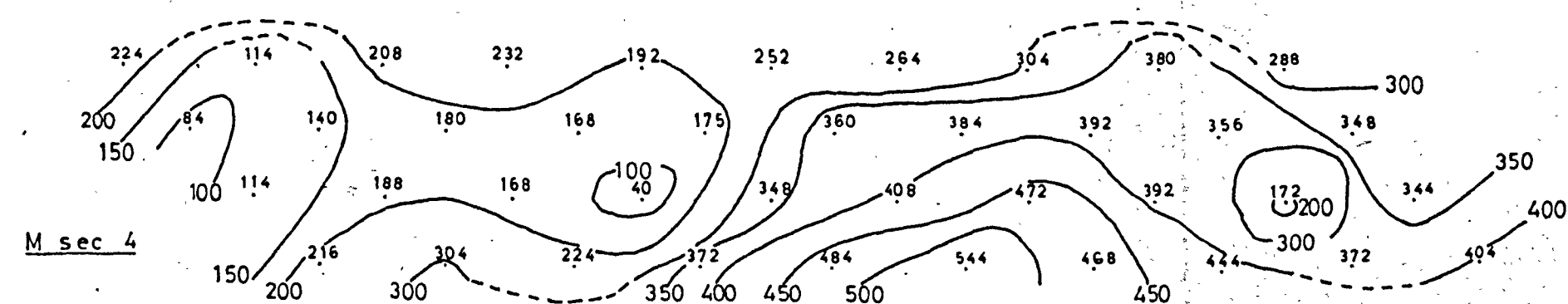
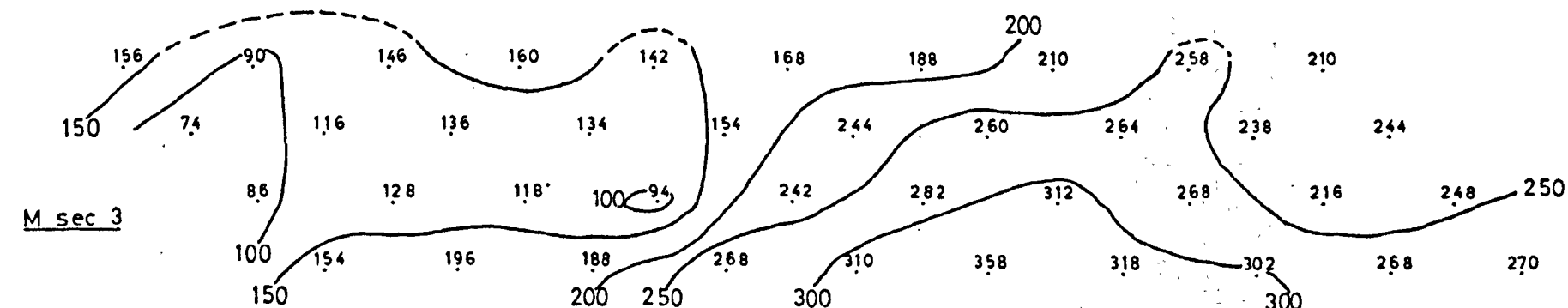
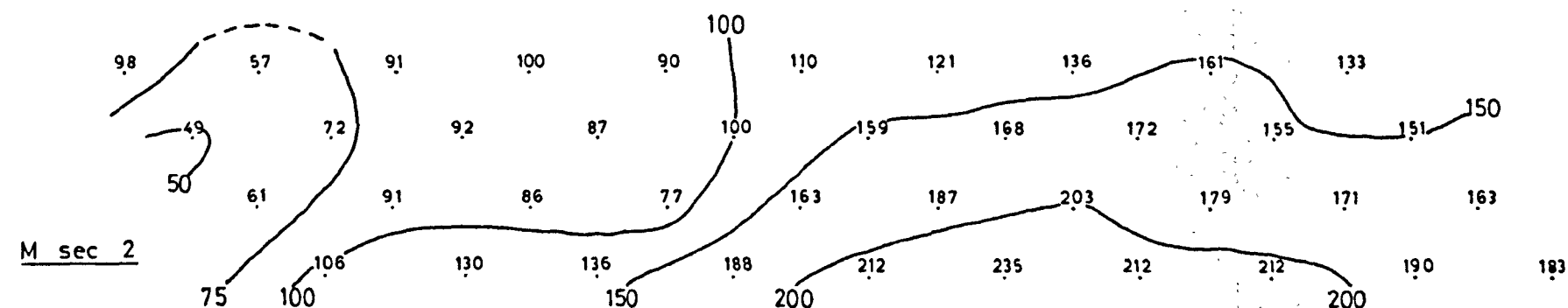
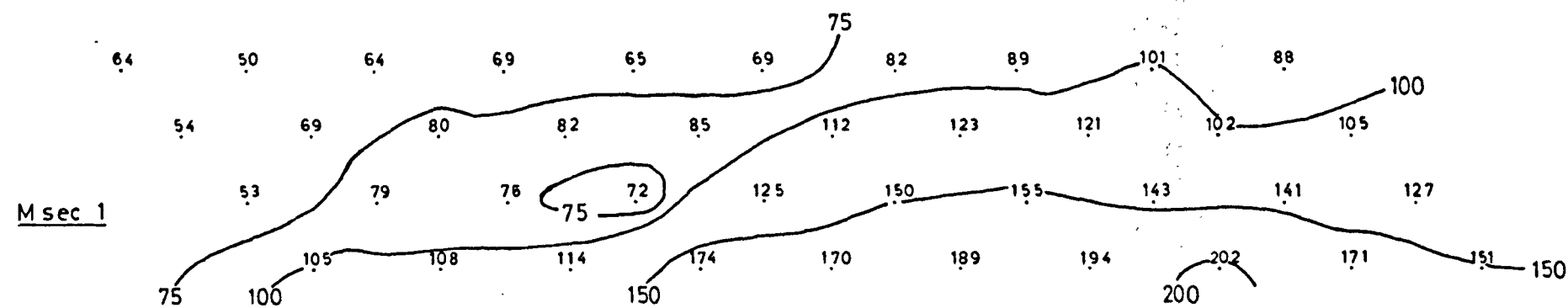
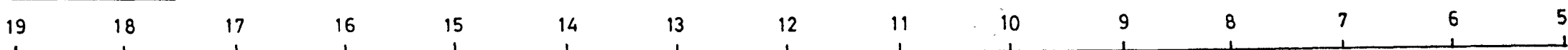


FIG. 57



AGROKIPIA AREA

$td = 30$

$tc = 8$

GEOPHYSICAL LINE

$tp = 50$

$on/off = 1.91$

POLE - DIPOLE

$a = 50m$

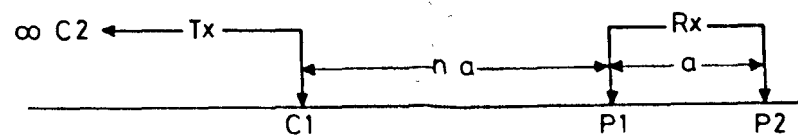
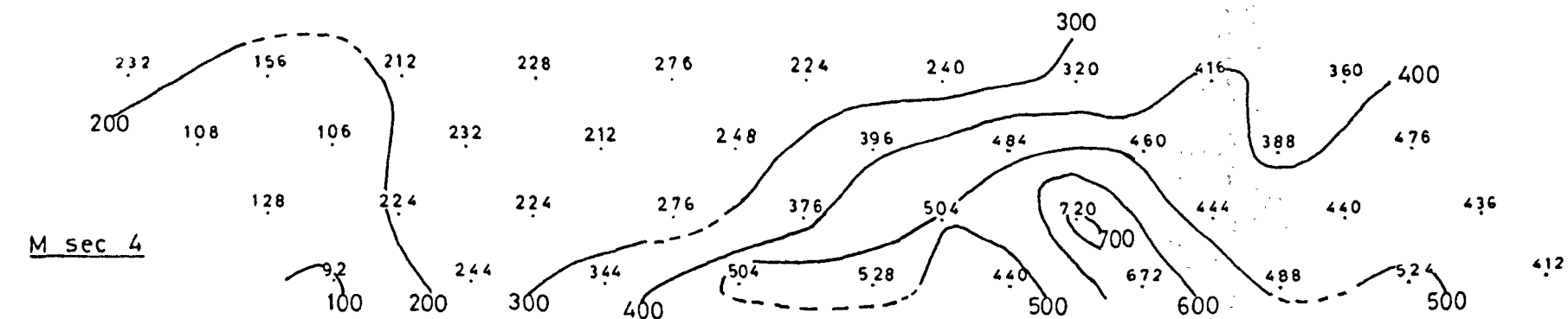
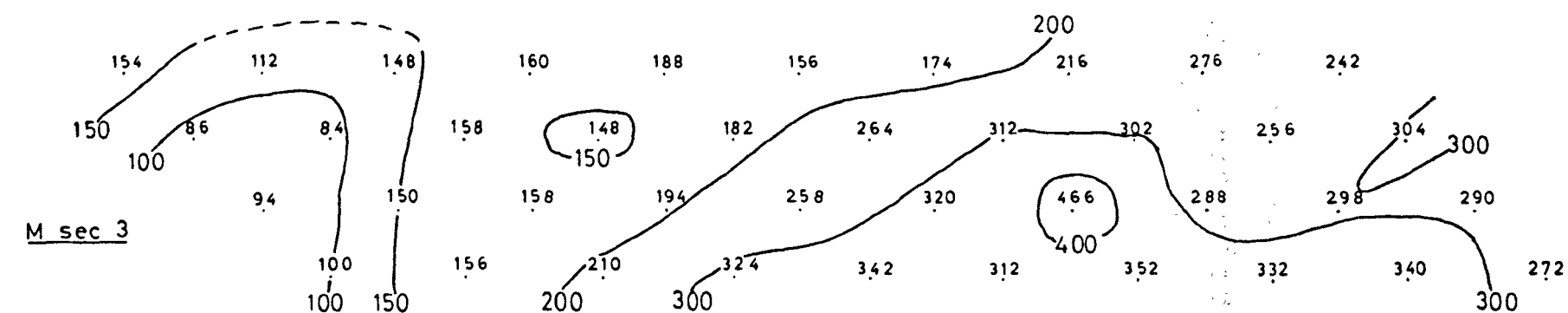
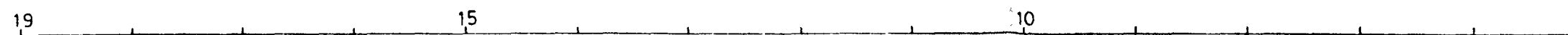
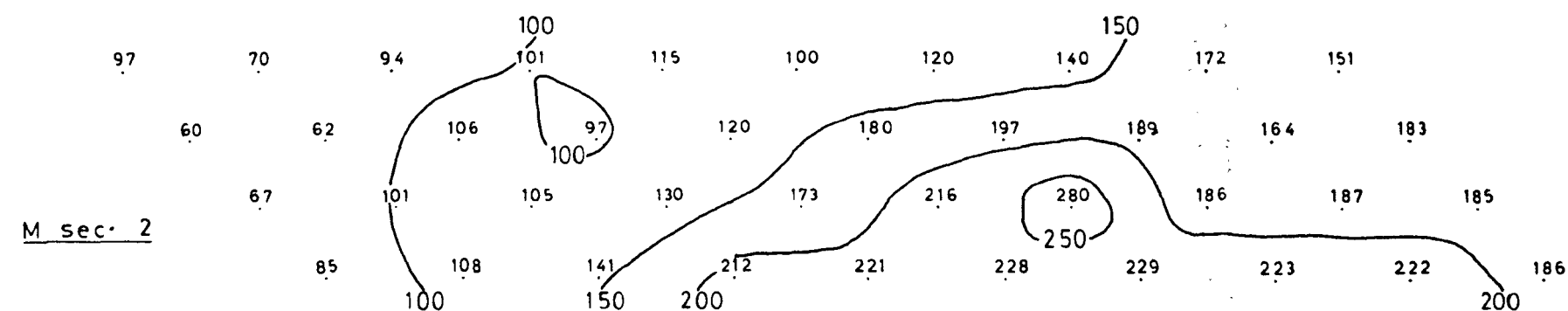
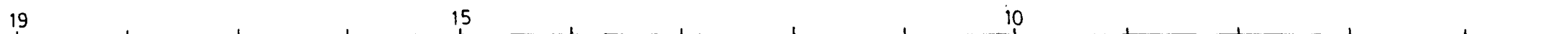
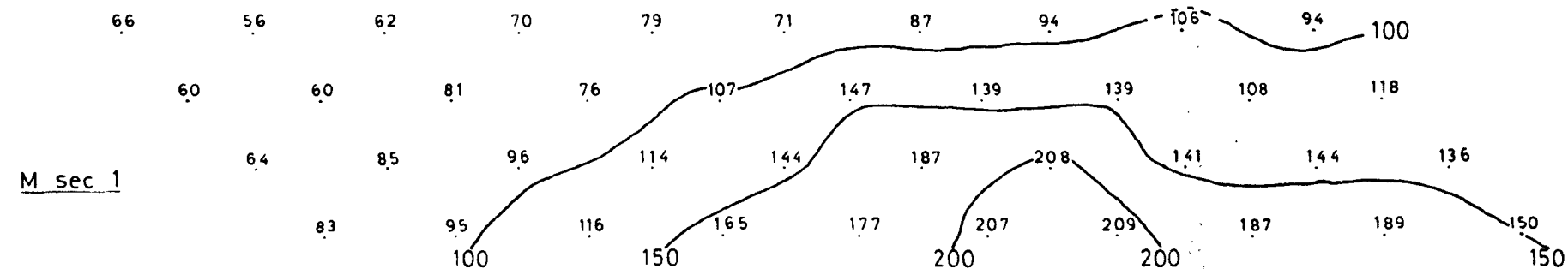
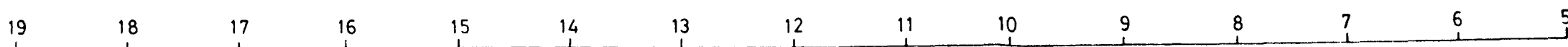


FIG. 58



$t_c = 8$

on/off = 2.55

$a = 50 \text{ m}$

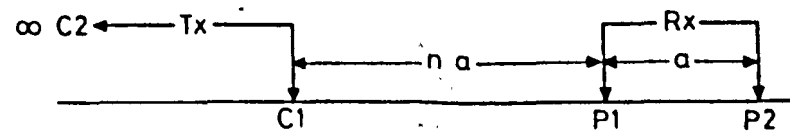


FIG. 59

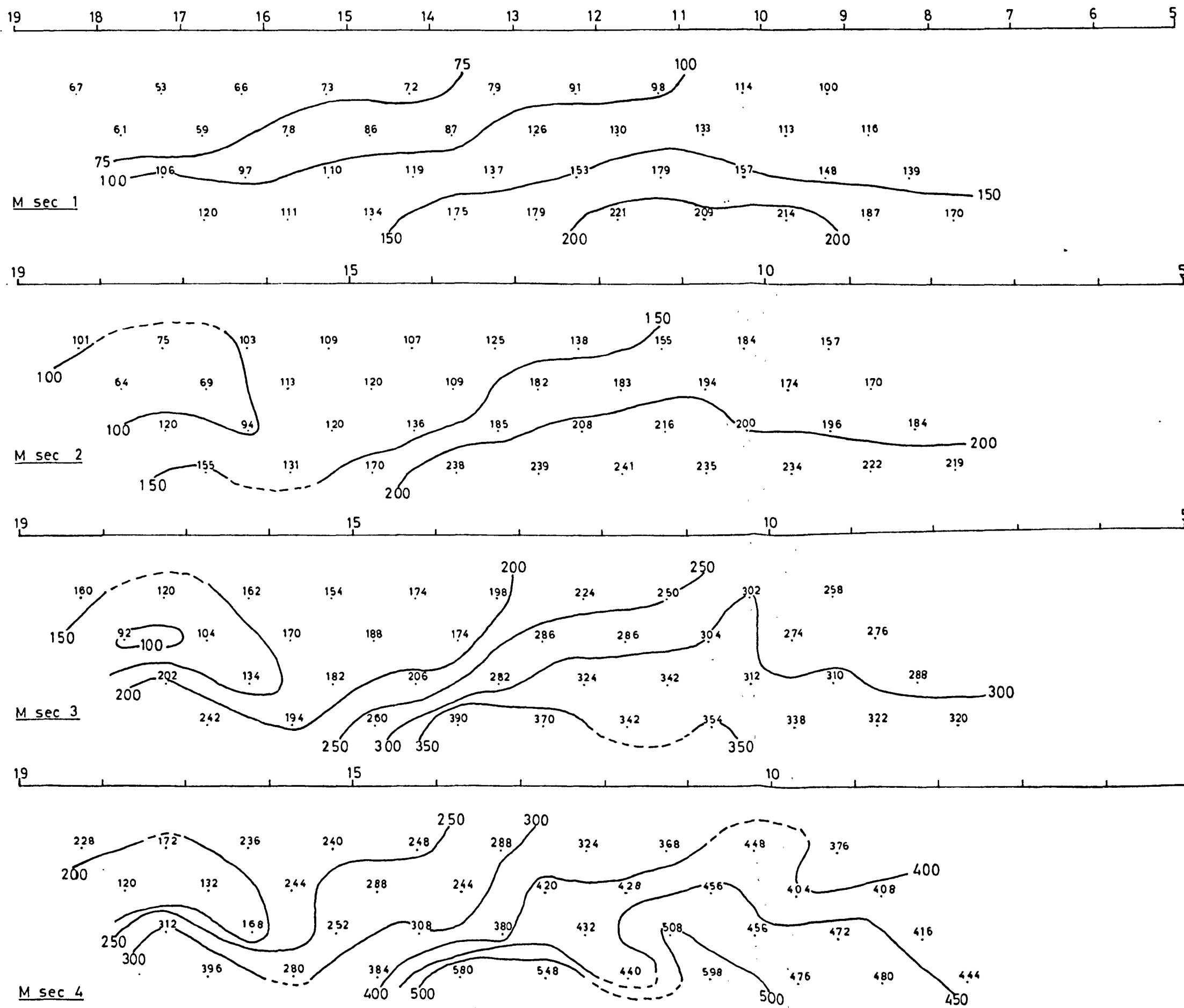


FIG. 60

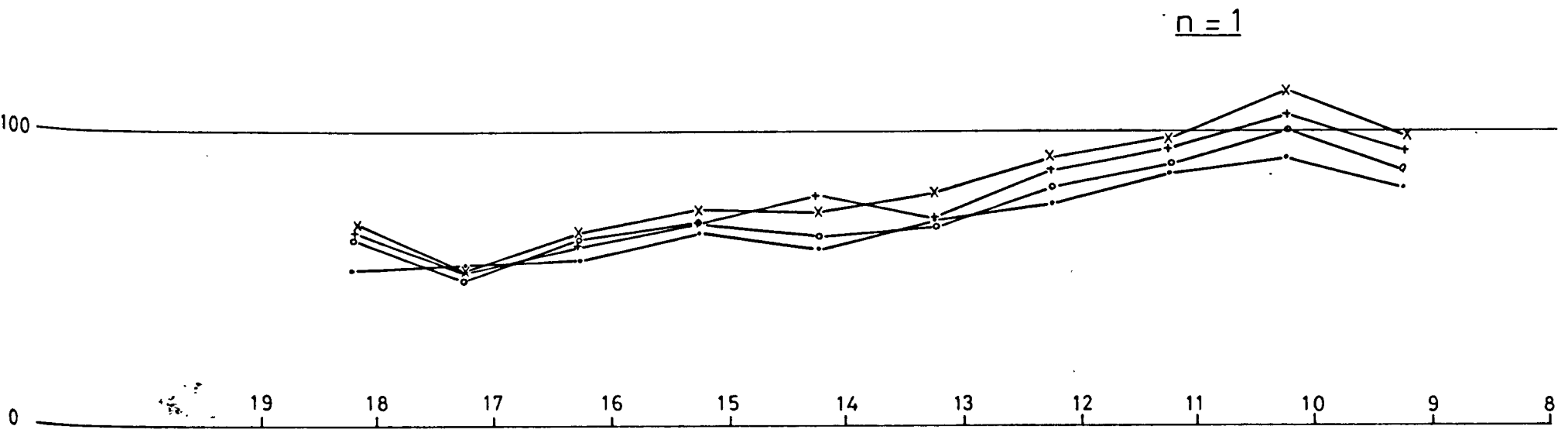
COMPARISON OF THE Msec 1 AND Msec 2 VALUES WITH DIFFERENT ON/OFF RATIOS

AGROKIPIA AREA
GEOPHYSICAL LINE
POLE - DIPOLE

tc = 8

on/off
• 1.0
o 1.46
+ 1.91
x 2.55

a. M sec 1



b. M sec 2

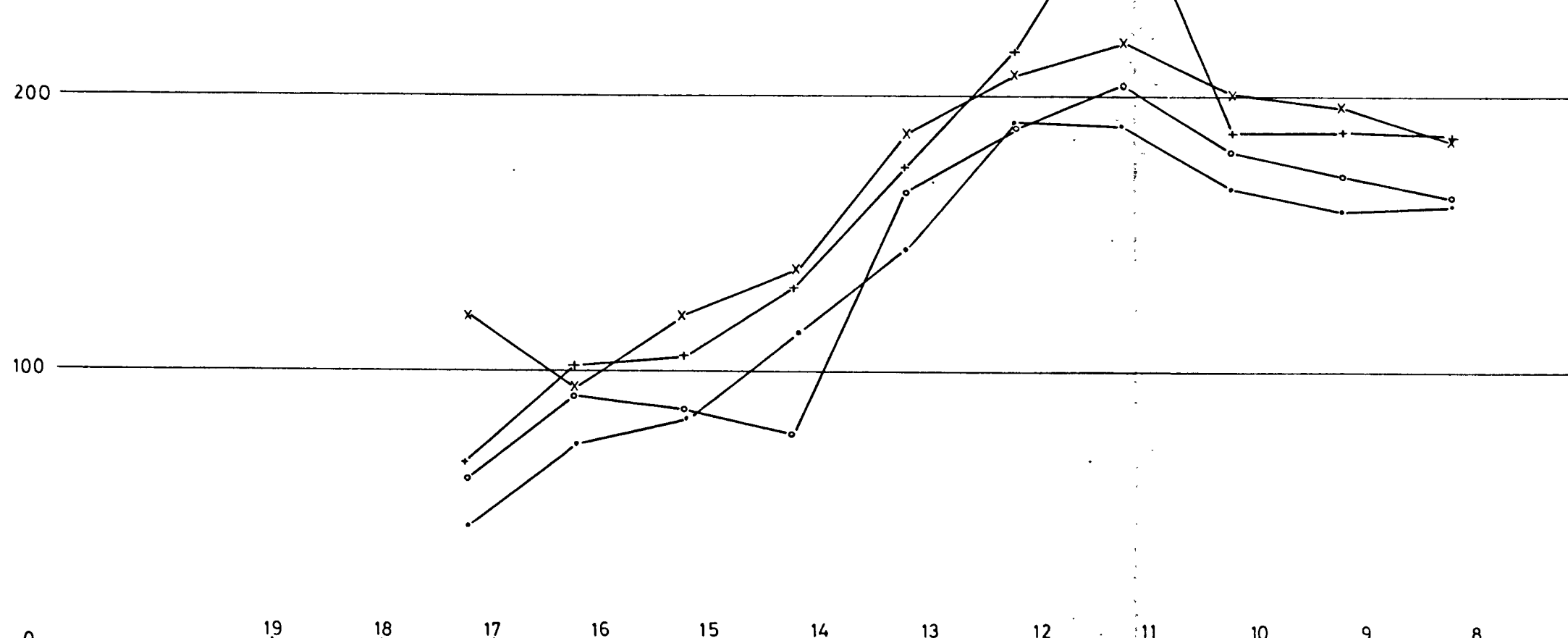
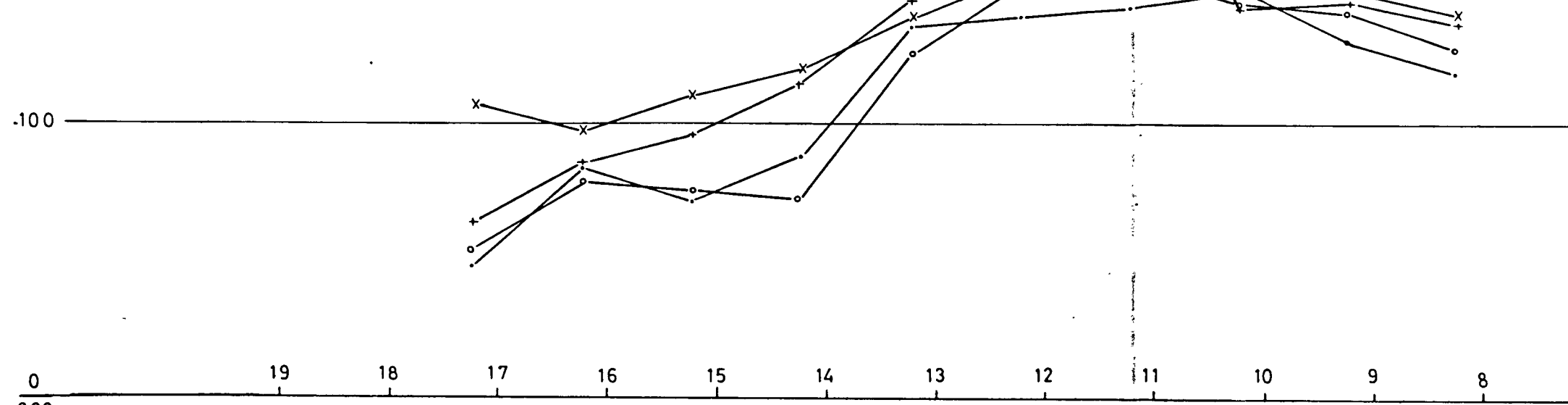
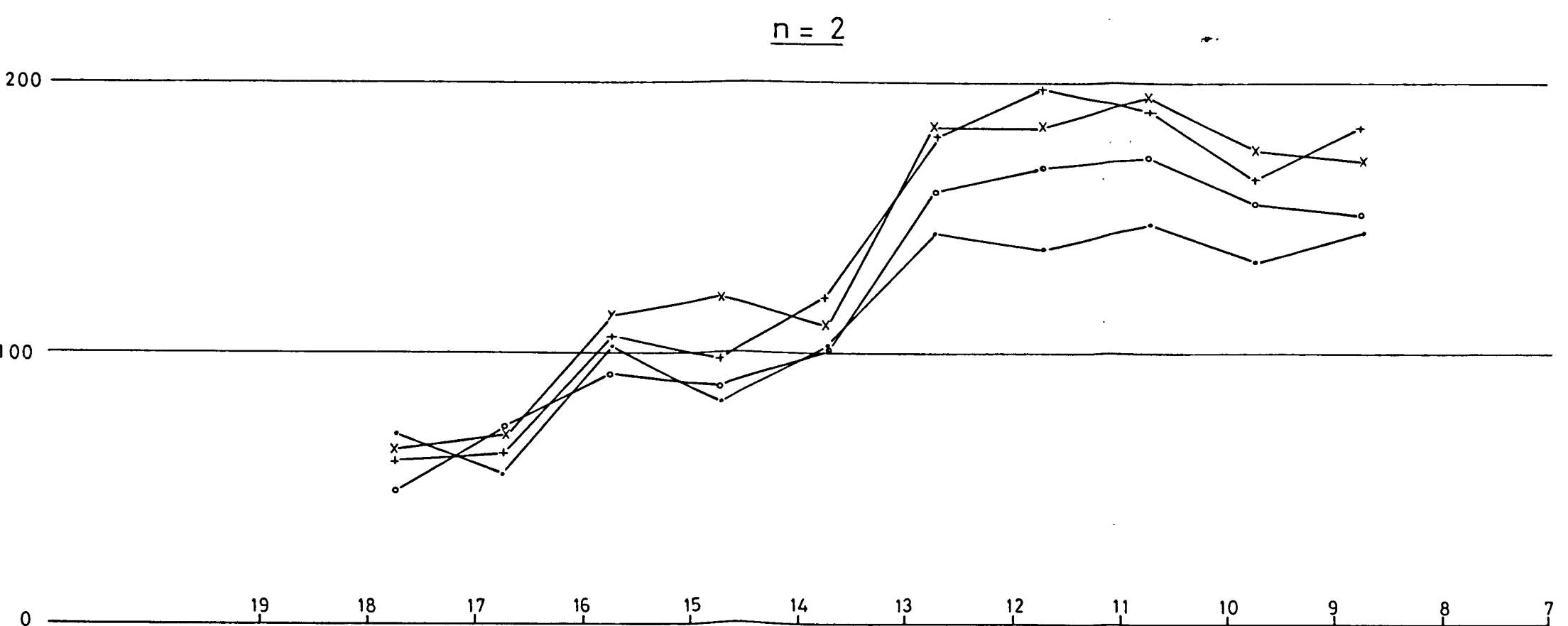
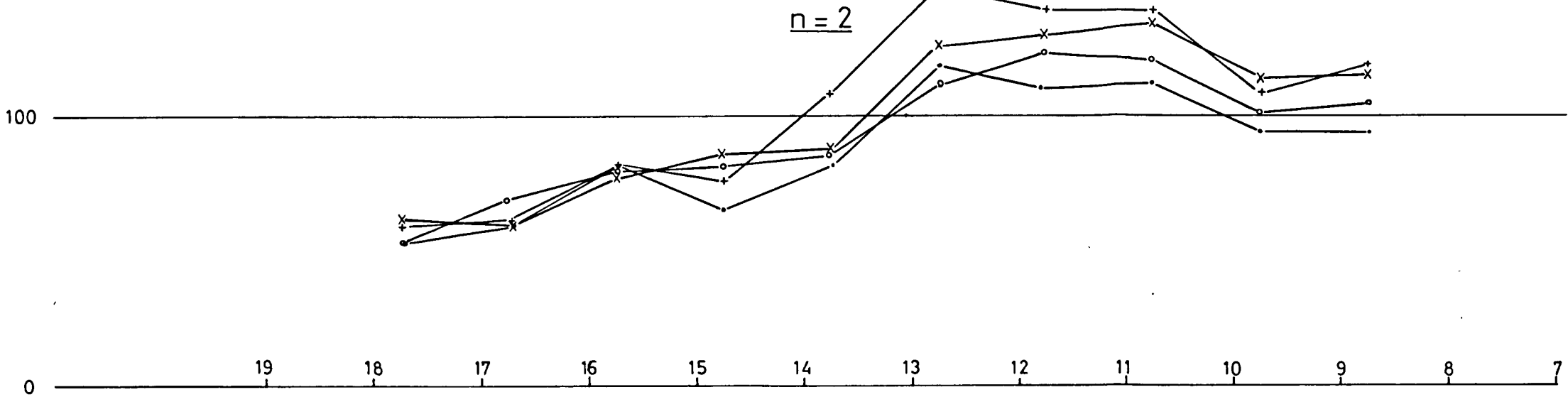
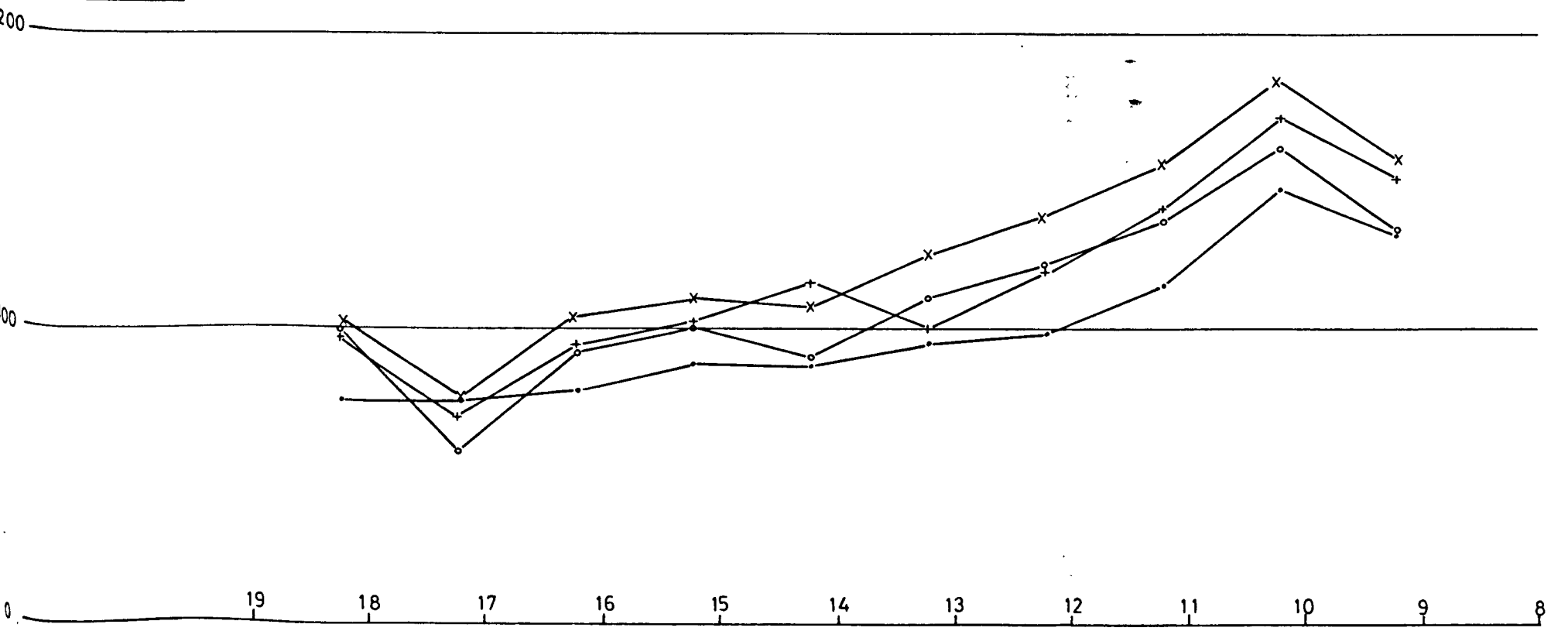


FIG. 60

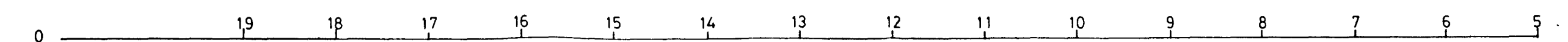
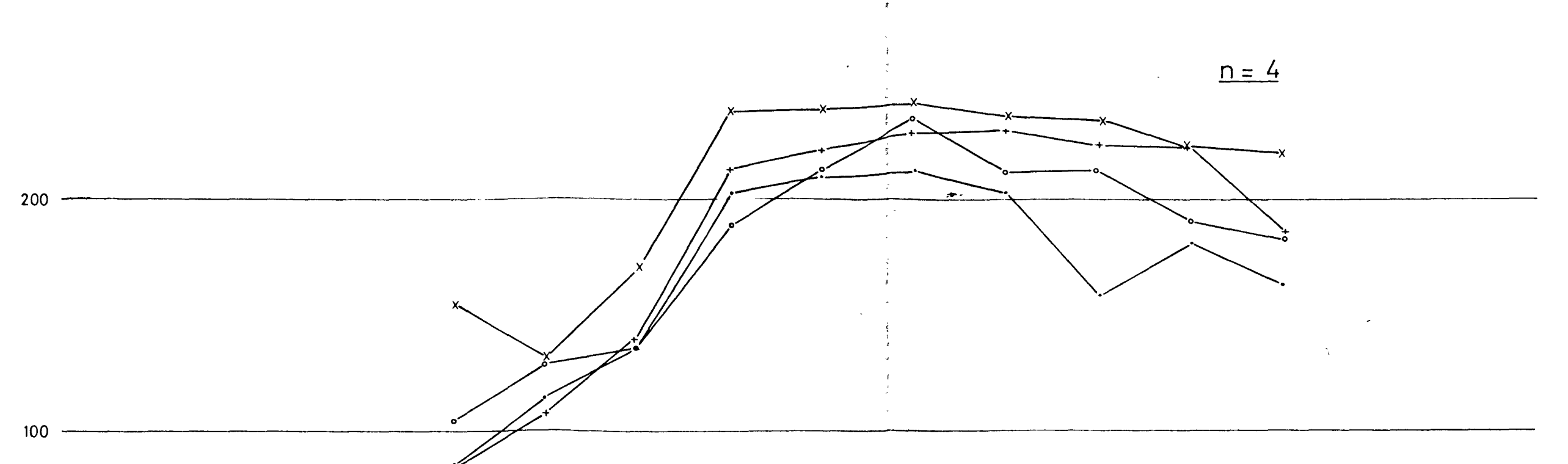
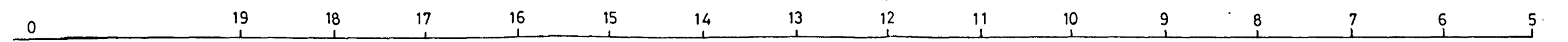
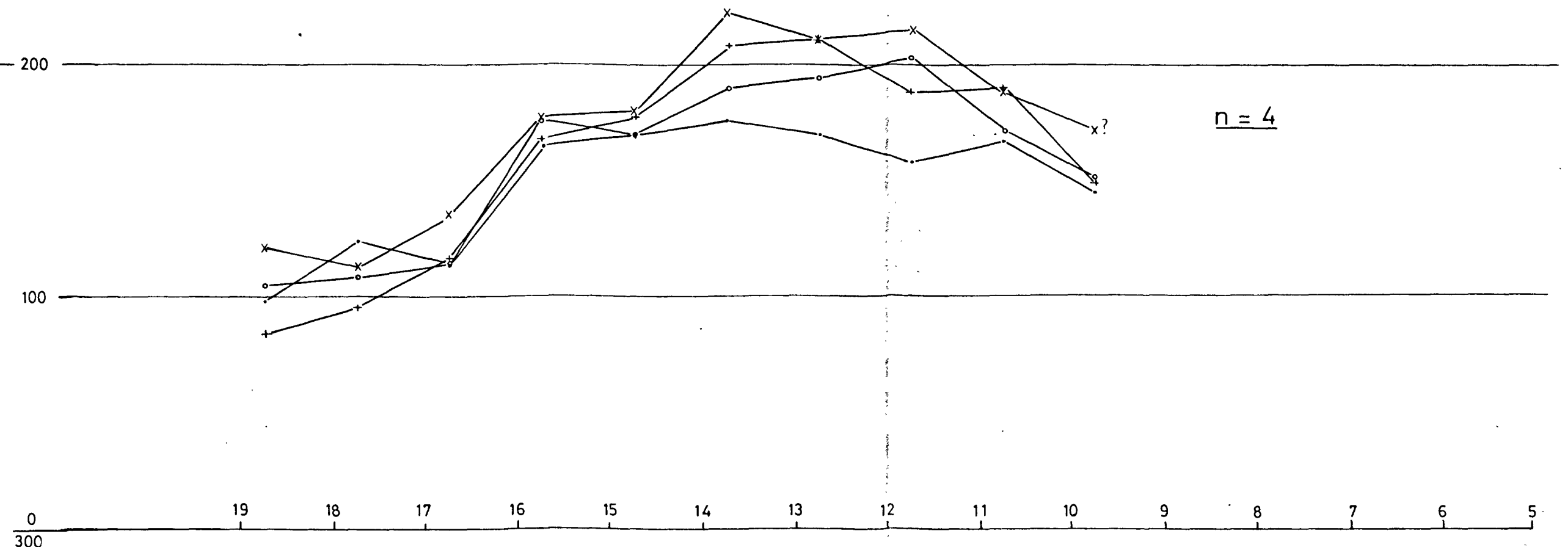
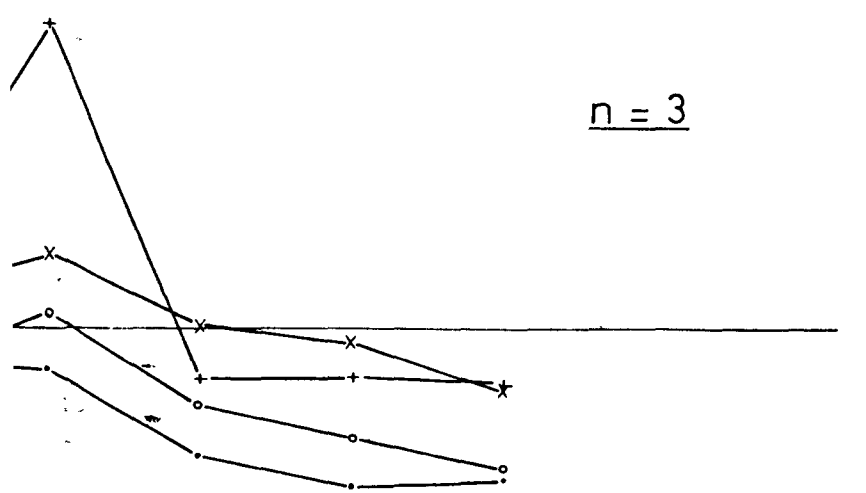
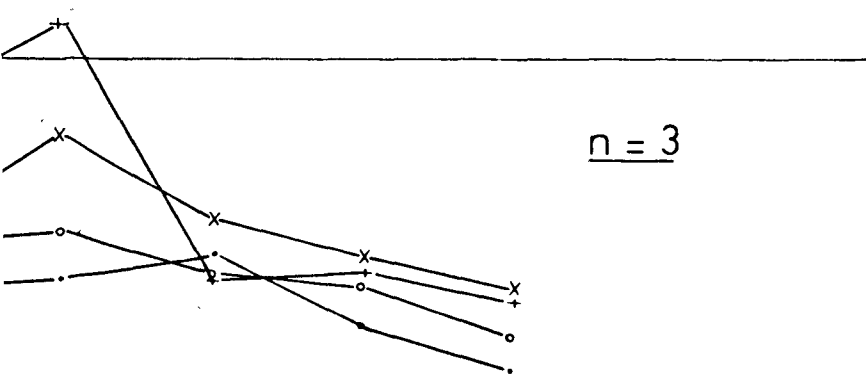


FIG. 61

AGROKIPIA AREA

GEOPHYSICAL LINE

M sec 3

$t_c = 8$

on/off

- 1.0
- o 1.46
- + 1.95
- x 2.55

POLE - DIPOLE

COMPARISON OF THE M sec 3 VALUES WITH DIFFERENT ON/OFF RATIOS

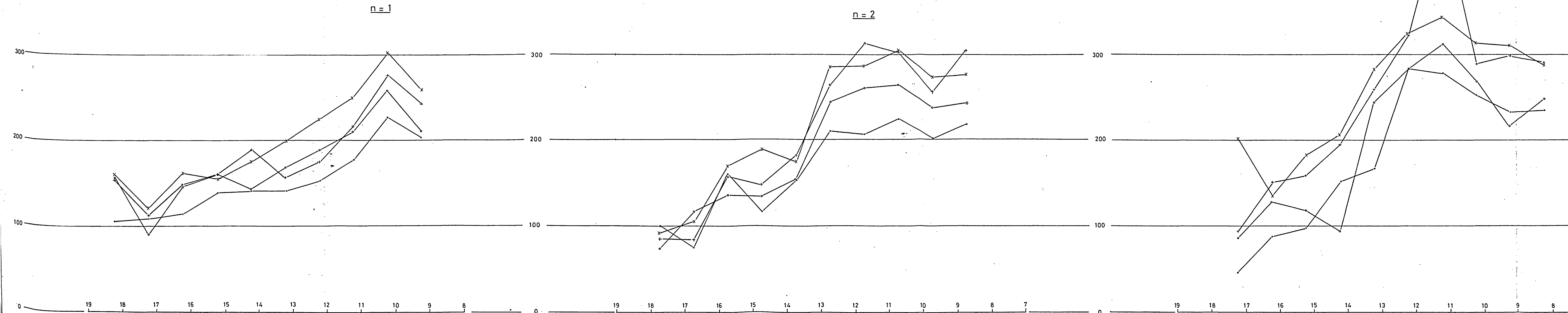


FIG. 61

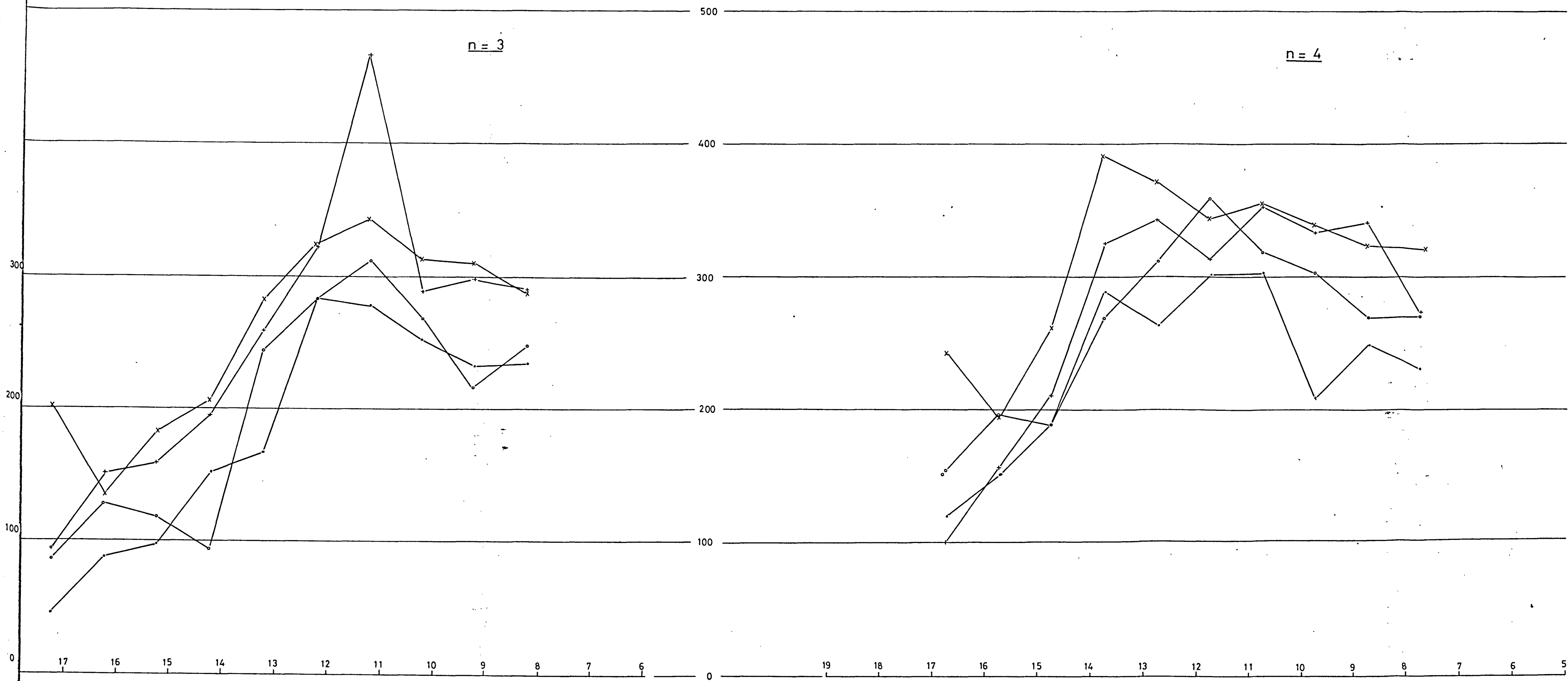
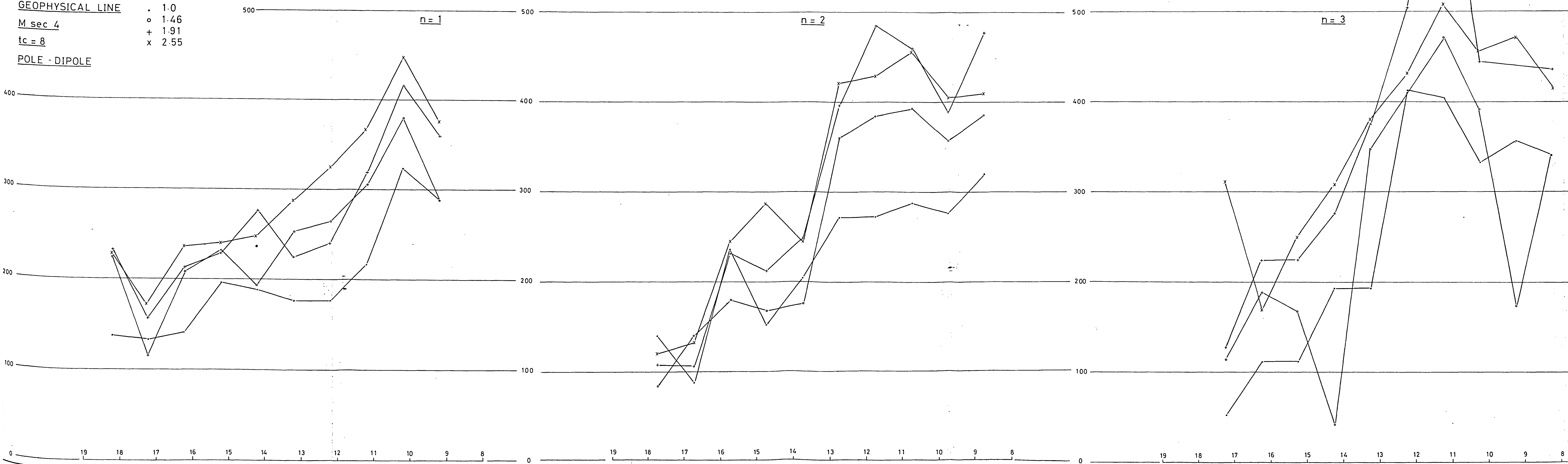


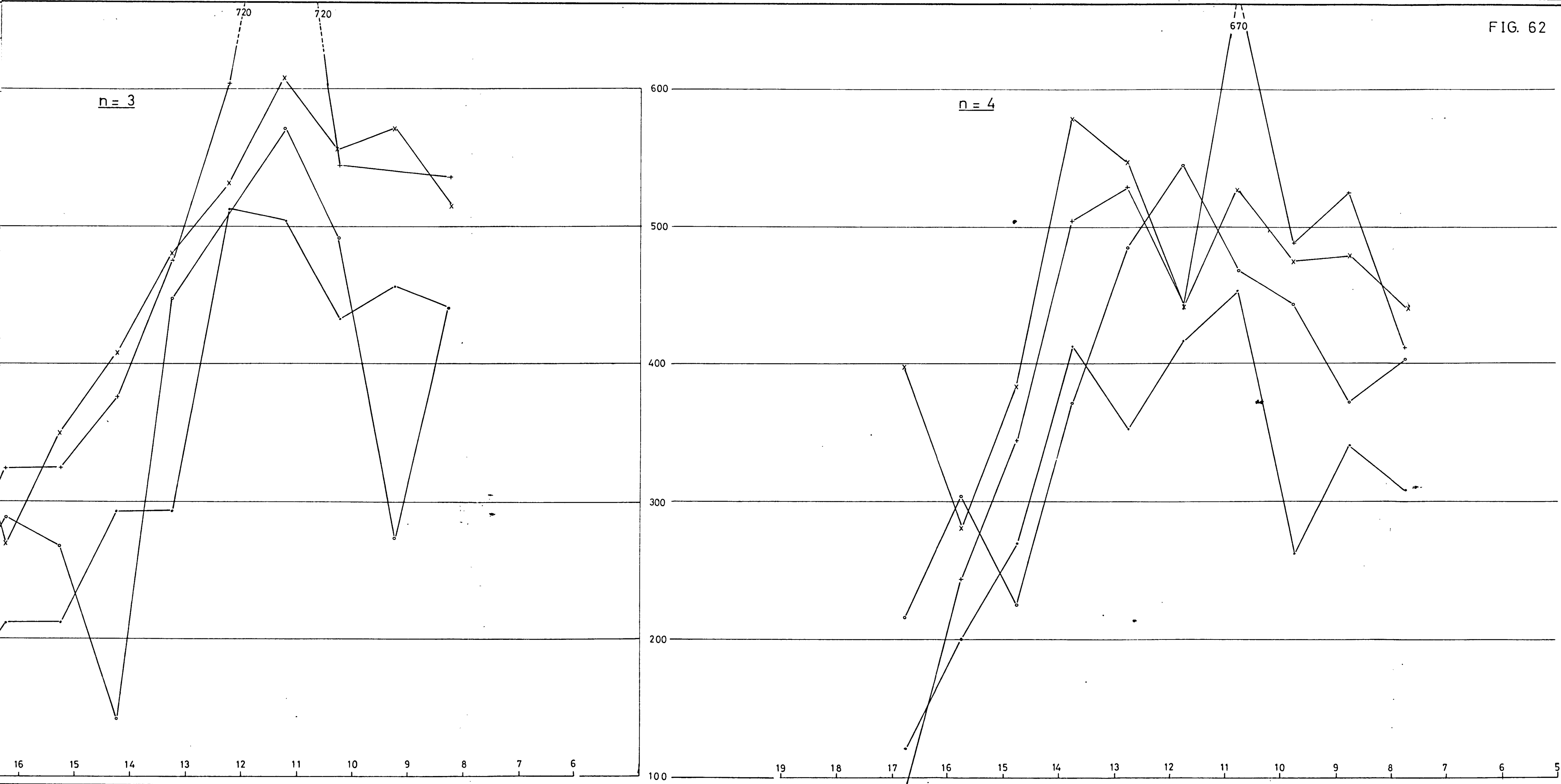
FIG. 62

COMPARISON OF THE Msec 4 VALUES WITH DIFFERENT ON/OFF RATIOS

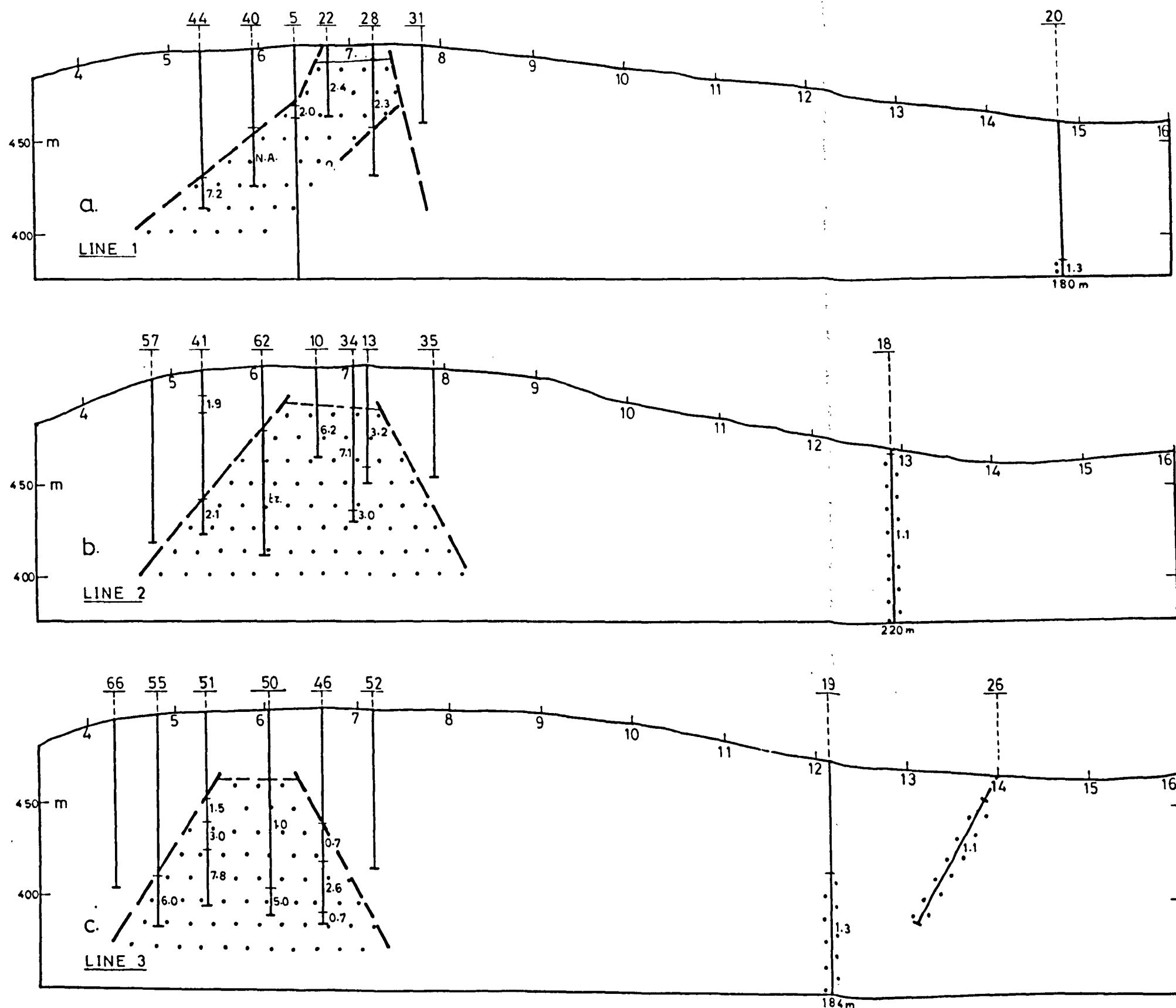
AGROKIPIA AREA
 GEOPHYSICAL LINE
 M sec 4
 $t_c = 8$
 POLE - DIPOLE

on/off
 . 1.0
 o 1.46
 + 1.91
 x 2.55





OF THE MATHIATIS AREA



LEGEND

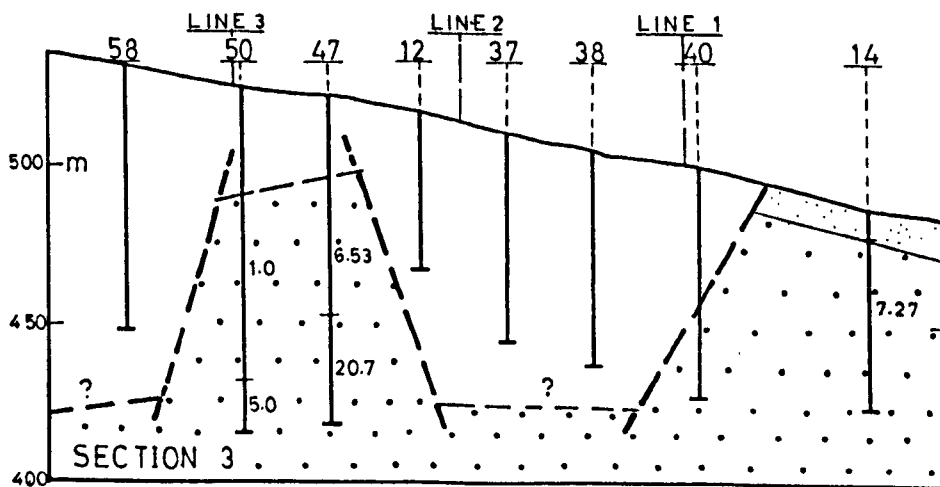
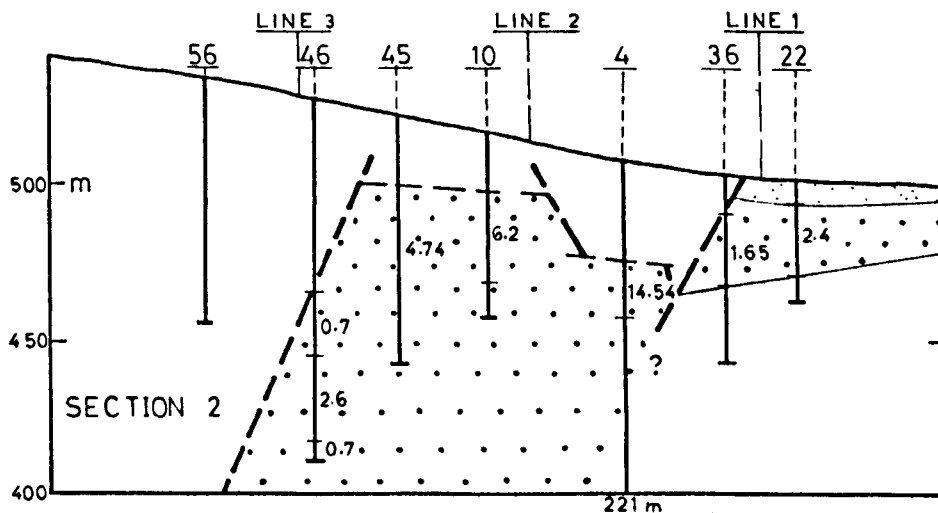
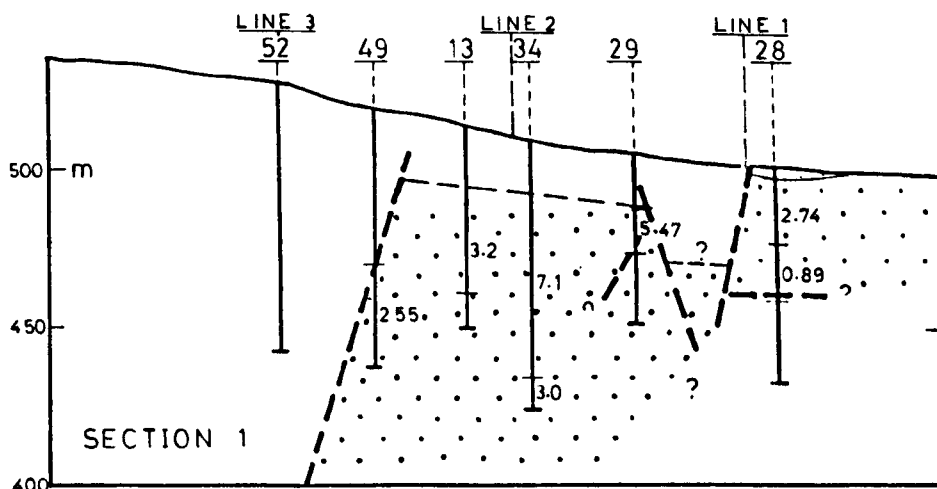
- Lower Pillow Lava
- Mineralized Lava
- Gossan

Boreholes of the Mθ Series

The figures denote % Sulphur values

Scale 1/2500

WESTERN MINERALIZATION



L E G E N D

- Lower Pillow Lava
- Mineralised Lava
- Gossan

Boreholes of the MΘ series.

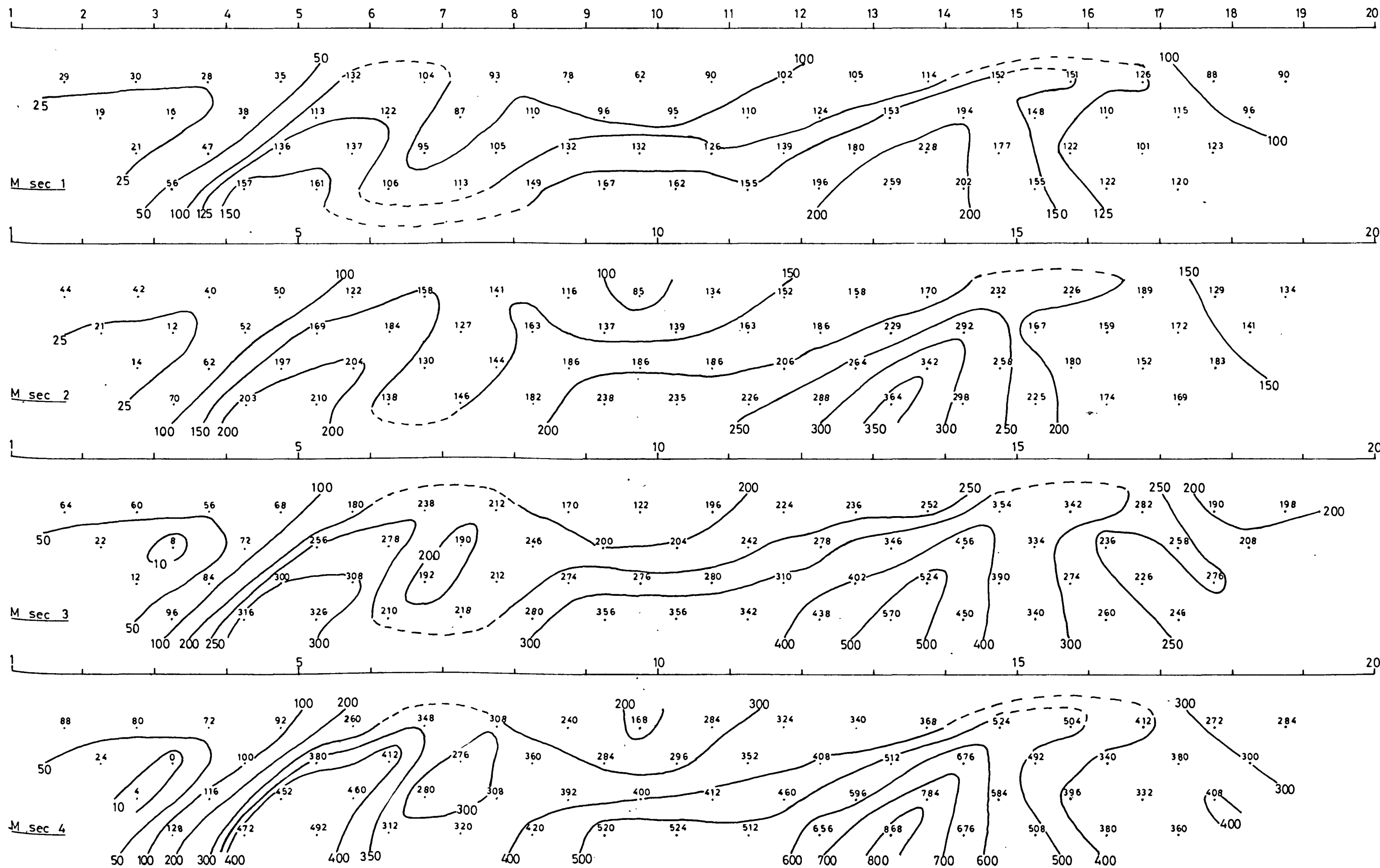
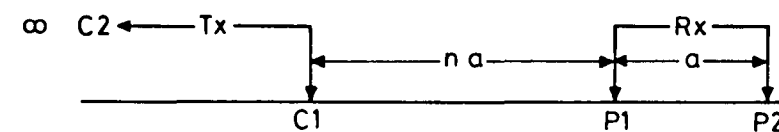
The figures denote % Sulphur.

Scale 1/2500

LINE 1

 $t_p = 50$ $on/off = 1.0$

POLE - DIPOLE

 $a = 50\text{ m}$ 

MATHIATIS MITSEROU AREA

$t_d = 30$

$t_c = 8$

LINE 2

$t_p = 50$

on/off = 1.0

POLE - DIPOLE

$a = 50m$

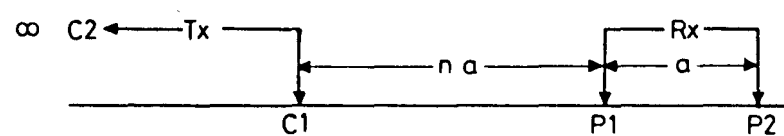
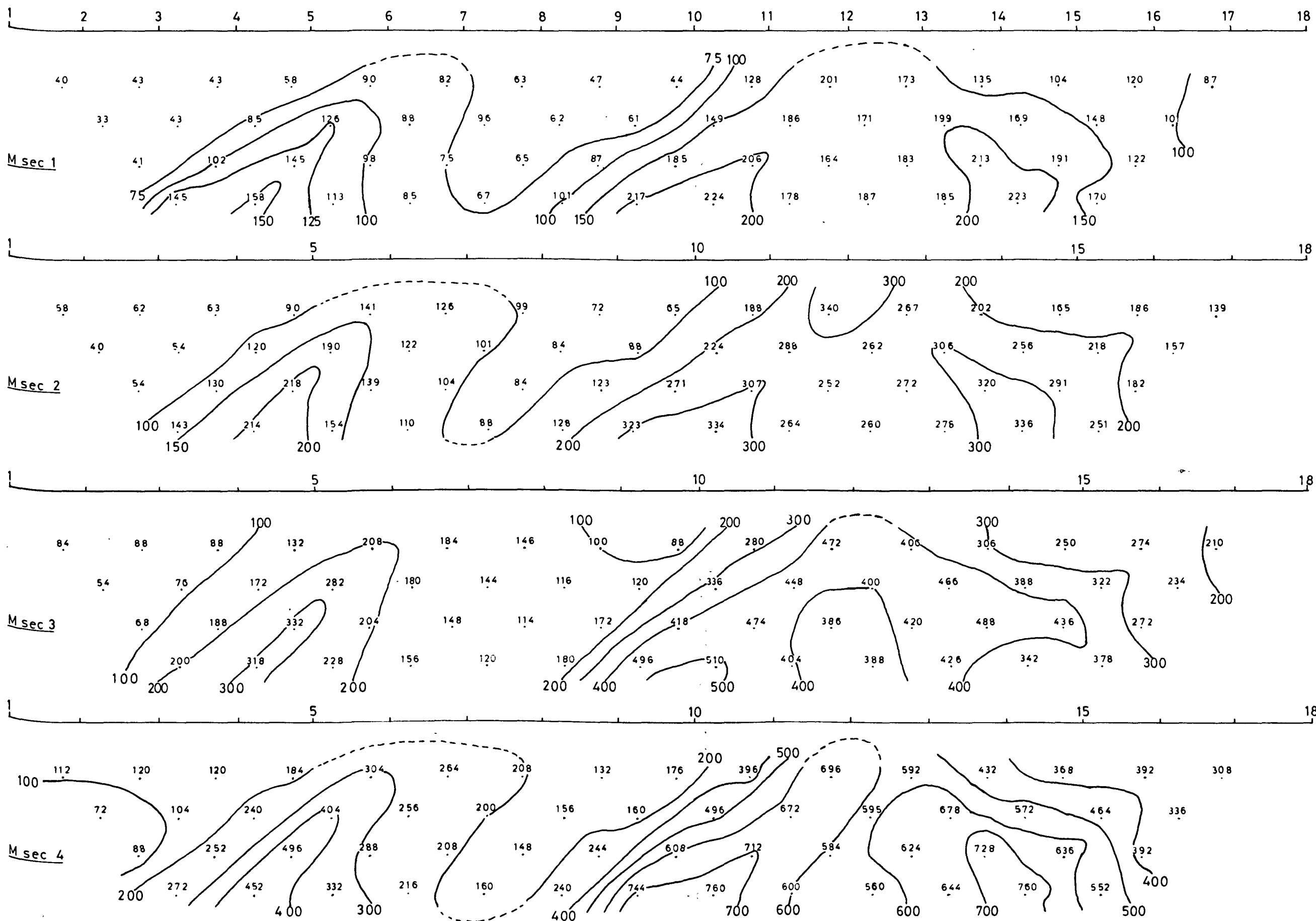


FIG. 67



MATHIATIS MITSEROU AREA

LINE 3

POLE - DIPOLE

$t_d = 30$
 $t_p = 50$
 $a = 50m$

$t_c = 8$
 $on/off = 1.0$

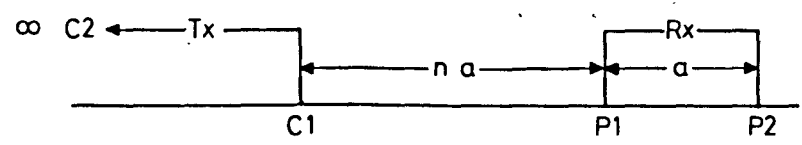
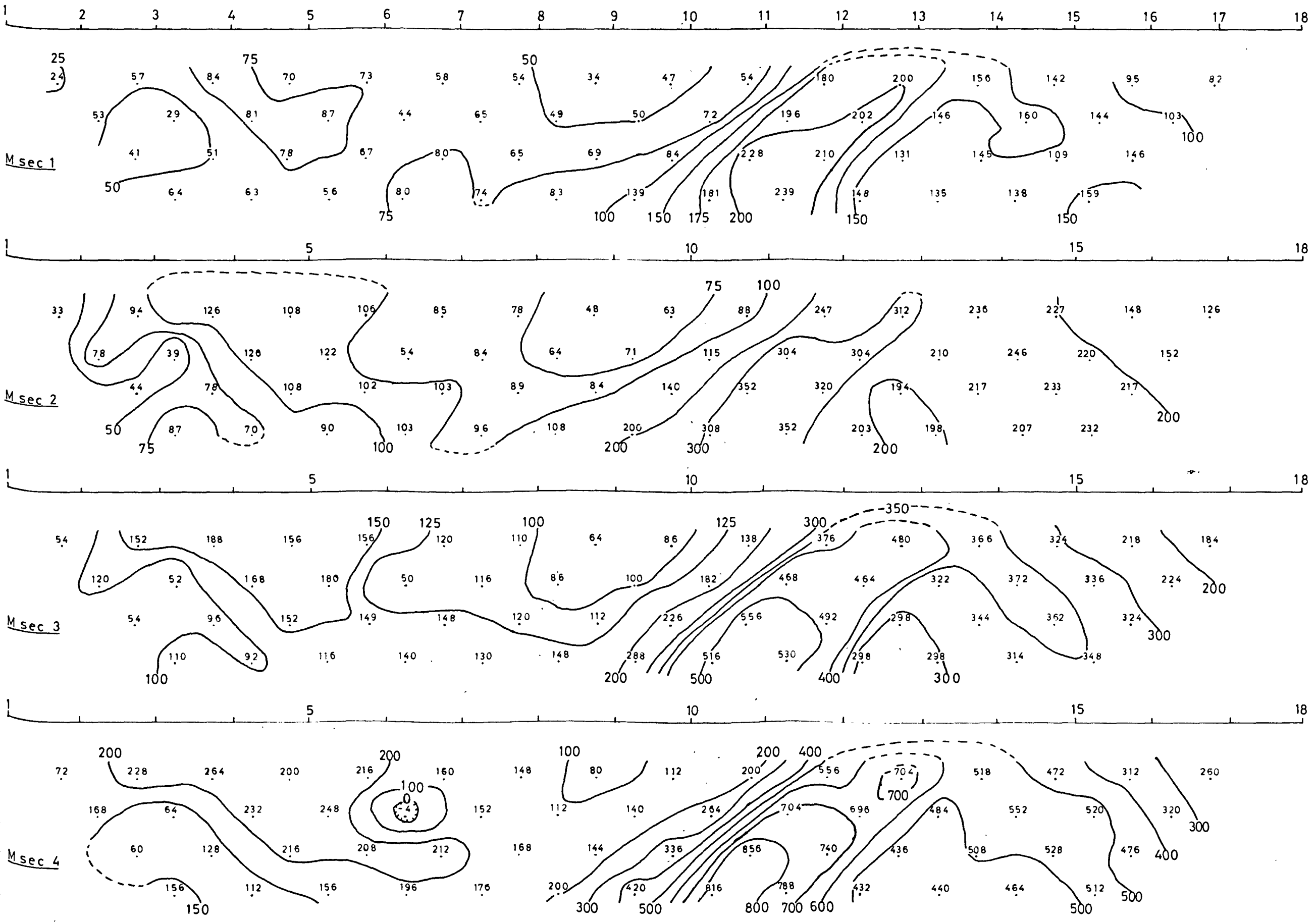


FIG. 68



MATHIATIS MITSEROU AREA

$t_d = 30$

$t_c = 8$

FIG. 69

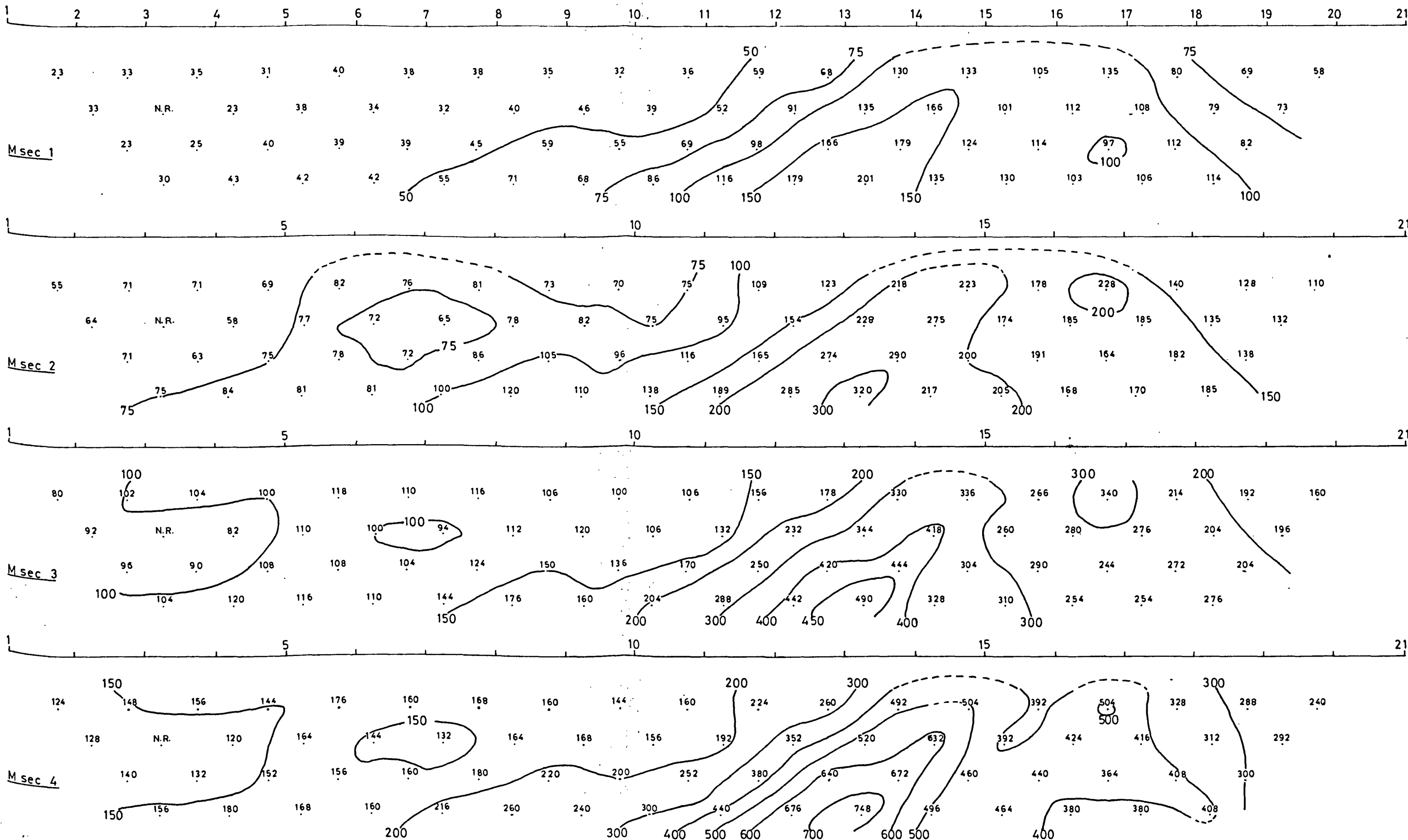
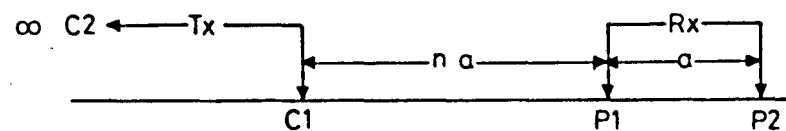
LINE 4

$t_p = 50$

on/off = 1.0

POLE - DIPOLE

$a = 50$ m

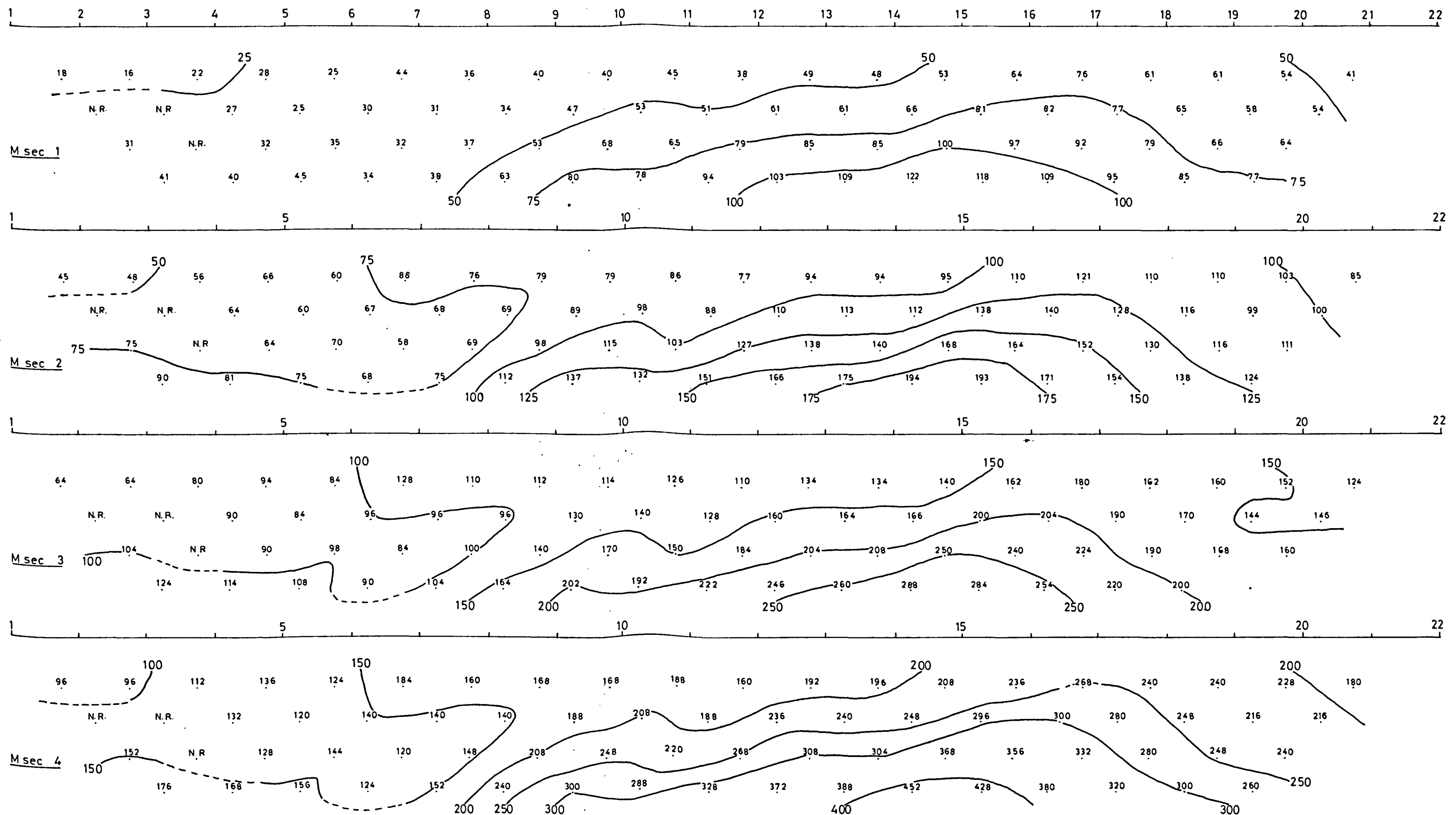
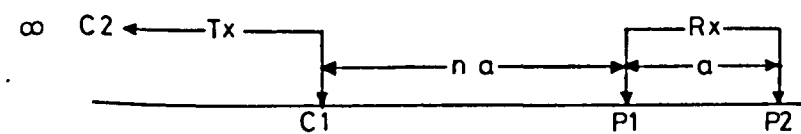


LINE 5

tp = 50 on/off = 1.0

POLE - DIPOLE

a = 50 m



MATHIATIS MITSEROU AREA

$t_d = 30$

$t_c = 8$

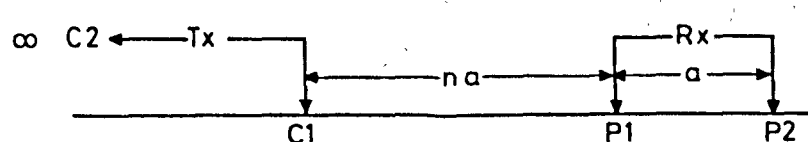


FIG. 71

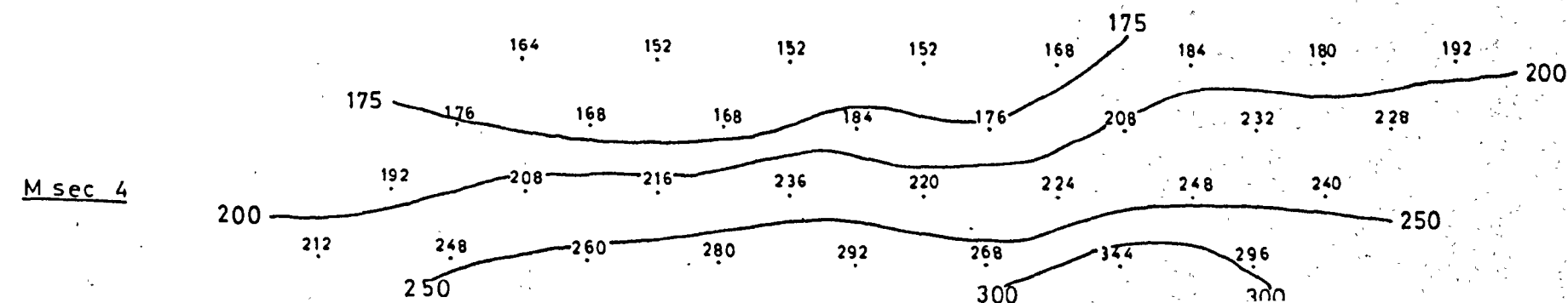
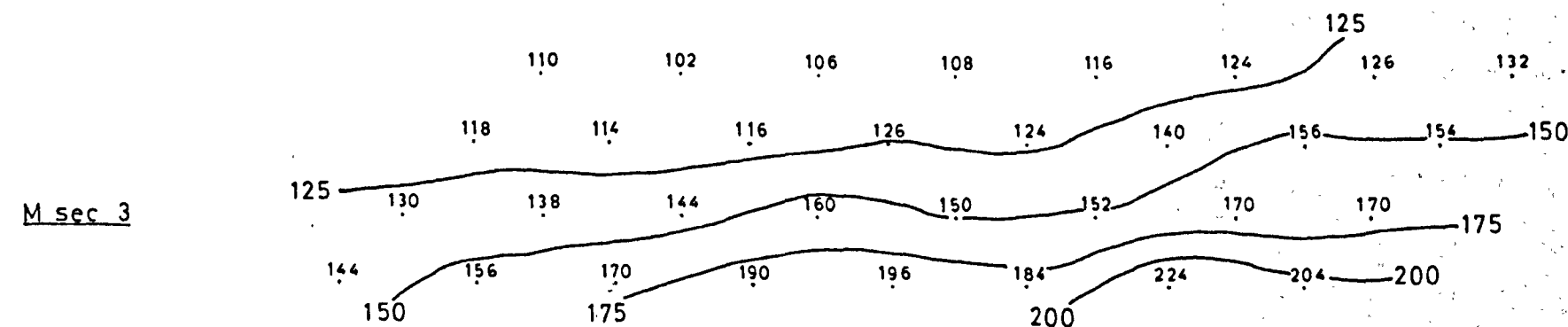
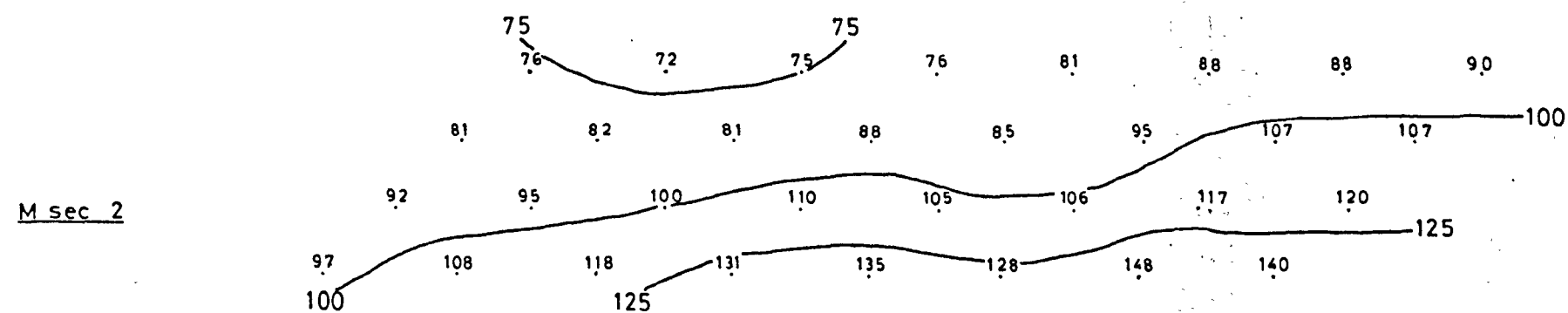
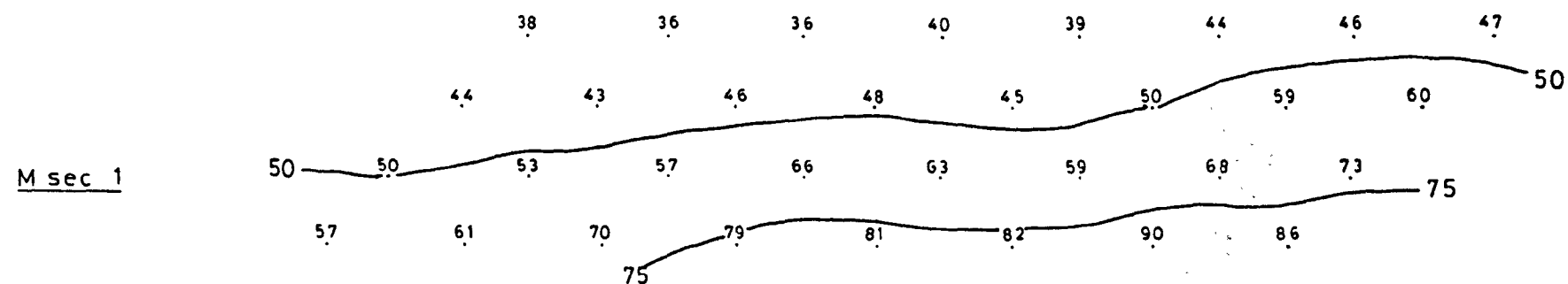
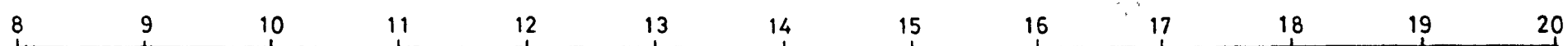
LINE 6

$t_p = 50$

on/off = 1.0

POLE - DIPOLE

$a = 50$ m



LINE 7

$t_p = 50$ on/off = 1.0

POLE - DIPOLE

$a = 50$ m

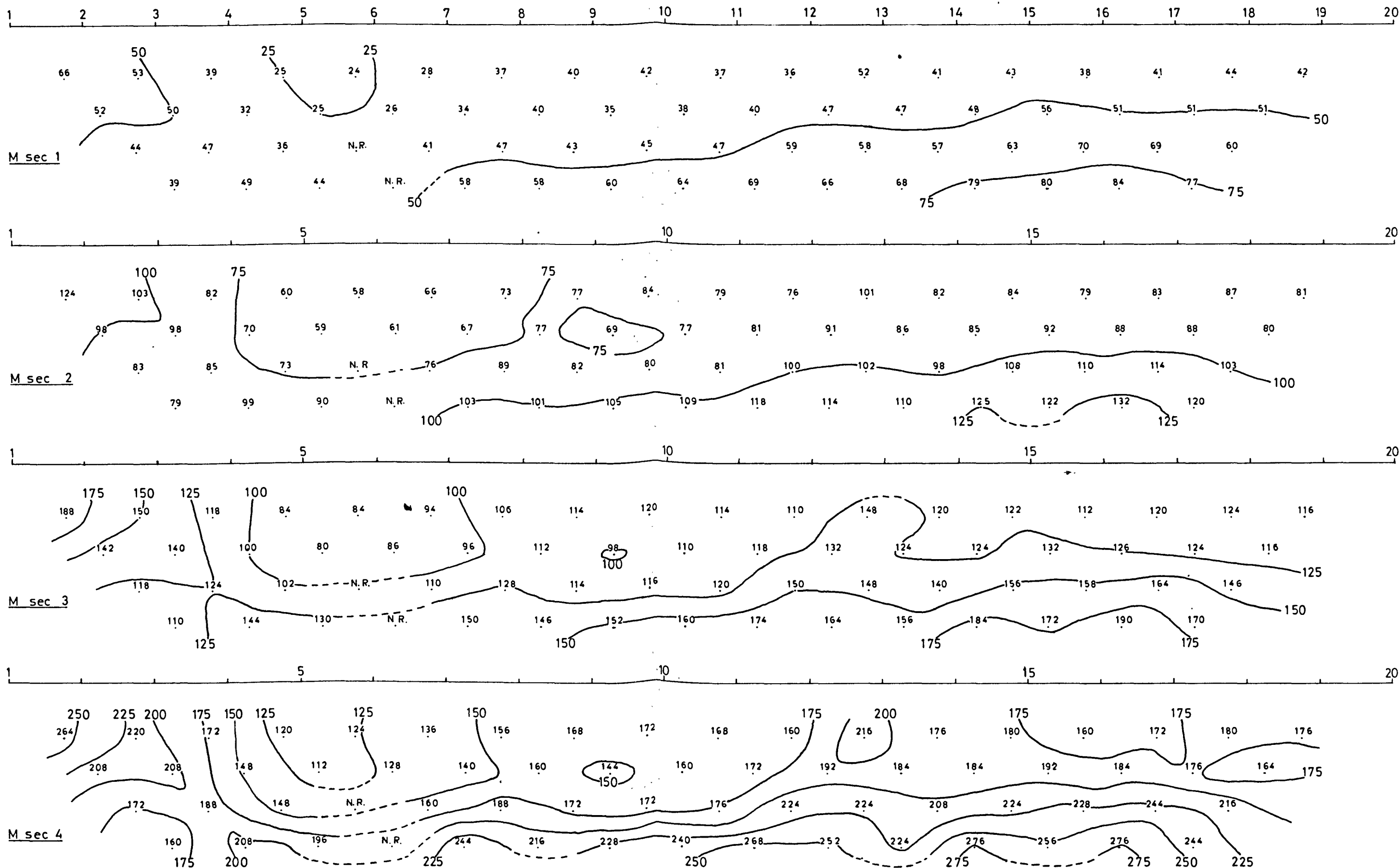
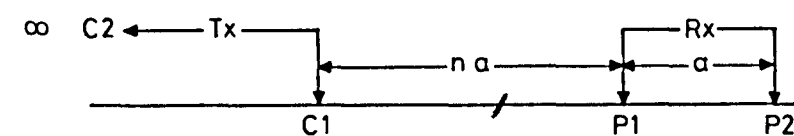


TABLE 5MATHIATIS AREA LINE 1The Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>A</u>	<u>B</u>	<u>α</u>	<u>β</u>	<u>ρ</u>
1	3- 4	0.45	0.10	10.38	1.22	0.01
2	4- 5	--	-	--	-	-
3	5- 6	1.20	0.15	11.94	0.25	0.10
4	6- 7	2.17	0.67	8.58	0.37	0.35
5	7- 8	1.93	0.90	8.52	0.55	0.34
6	8- 9	1.67	0.71	12.36	0.69	0.21
7	9-10	1.82	0.84	8.48	0.61	0.28
8	10-11	1.80	0.86	11.75	0.89	0.18
9	11-12	1.65	0.82	11.68	0.76	0.21
10	12-13	2.20	0.88	13.14	0.70	0.25
11	13-14	2.22	0.91	9.50	0.58	0.32
12	14-15	1.79	1.40	7.74	0.77	0.36
13	15-16	2.50	1.52	7.01	0.57	0.55
14	16-17	1.75	1.28	6.98	0.72	0.36
15	17-18	1.65	0.88	8.82	0.73	0.24
16	18-19	1.48	1.03	7.77	0.81	0.25
17	19-20	1.35	0.76	7.30	0.70	0.22

LINE 1

THE DECAY FACTORS

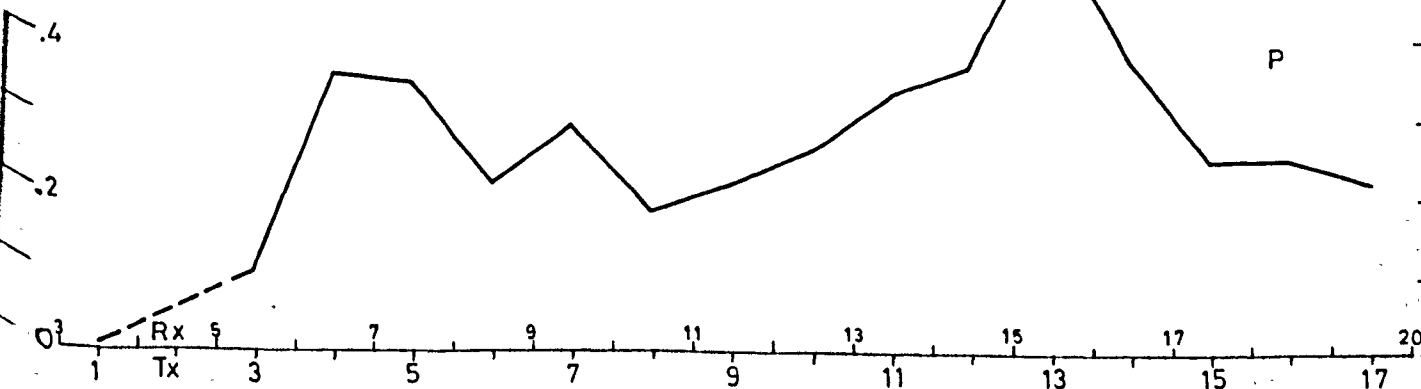
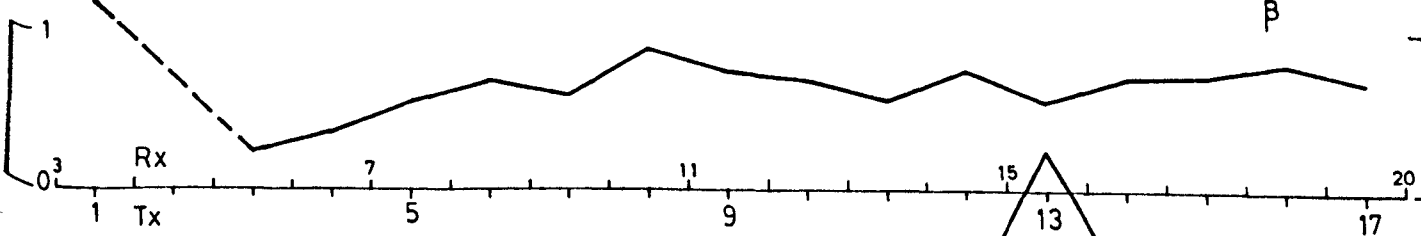
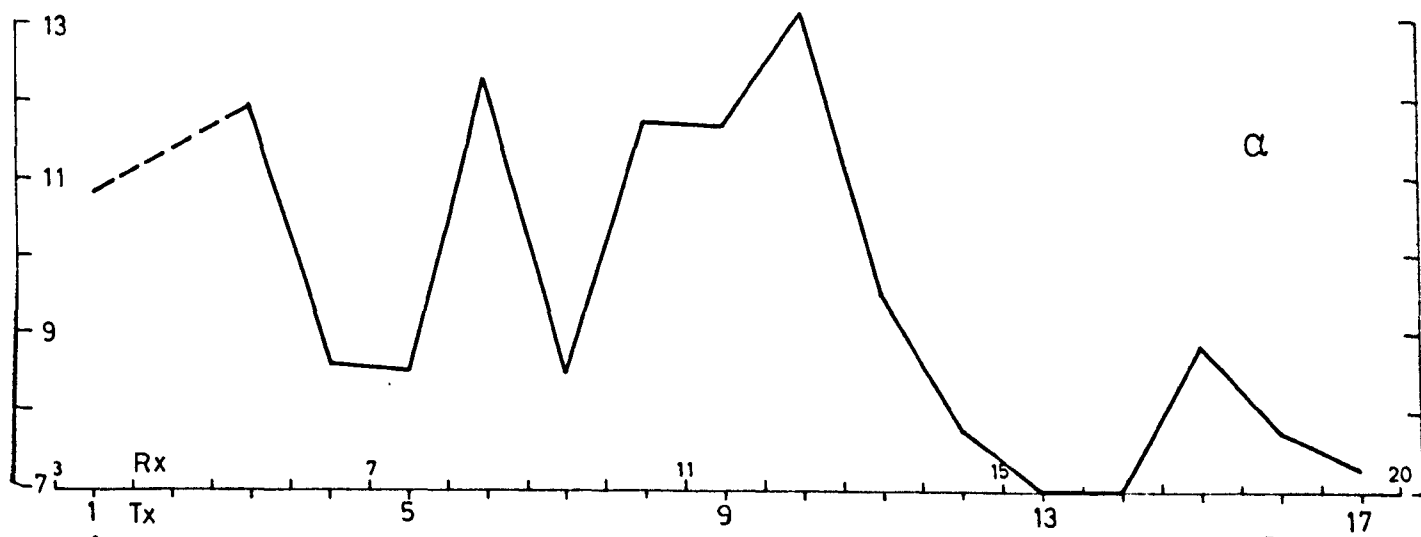
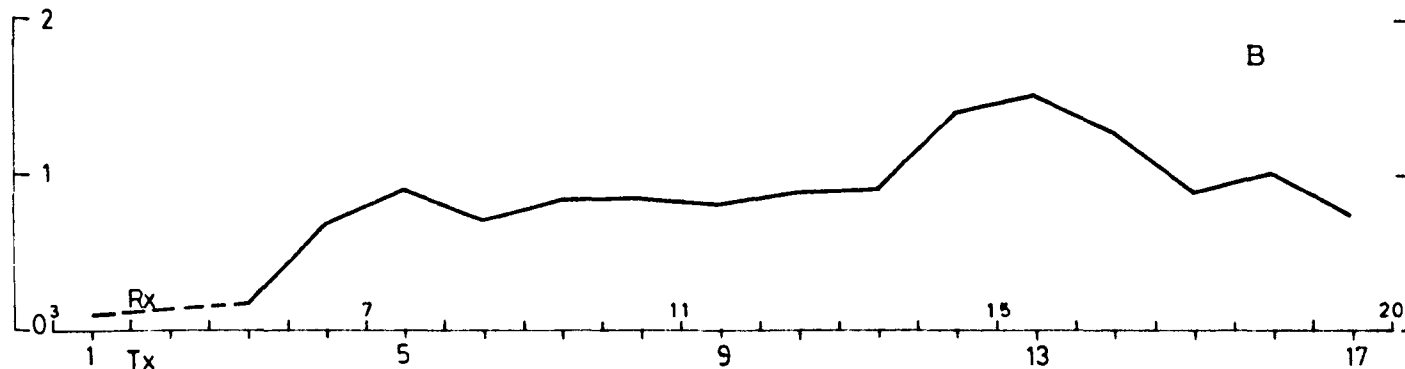
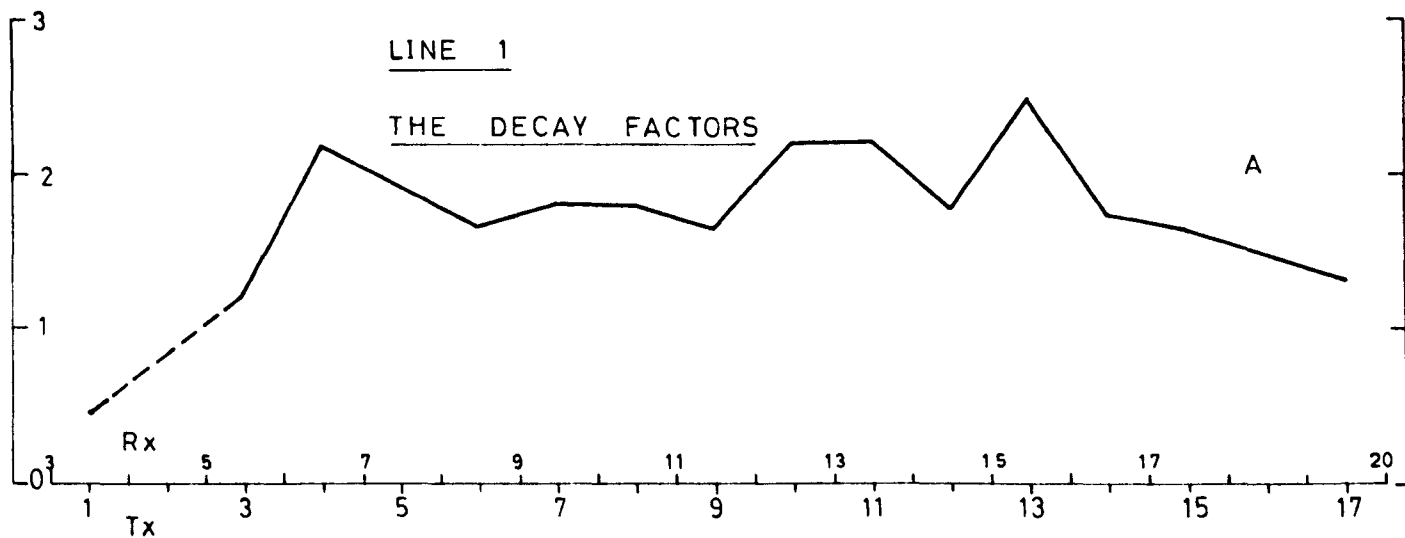


TABLE 6MATHIATIS AREA LINE 2The Decay Factors

<u>C</u>	<u>P1-F2</u>	<u>A</u>	<u>B</u>	<u>α</u>	<u>β</u>	<u>P</u>
2	4- 5	0.61	0.39	7.50	1.01	0.06
3	5-6	1.33	0.61	7.96	0.68	0.18
4	6- 7	2.05	0.98	7.36	0.63	0.32
5	7- 8	1.40	0.60	7.02	0.65	0.19
6	8- 9	0.96	0.71	8.26	1.05	0.11
7	9-10	0.92	0.48	8.74	0.91	0.10
8	10-11	1.00	0.55	8.41	1.02	0.09
9	11-12	1.80	1.09	5.67	0.57	0.40
10	12-13	1.95	1.95	7.78	0.82	0.45
11	13-14	2.10	1.33	6.46	0.58	0.47
12	14-15	2.30	2.34	10.31	0.99	0.41
13	15-16	2.20	1.89	10.76	0.98	0.33
14	16-17	1.95	1.64	10.17	1.04	0.26
15	17-18	1.33	0.90	8.29	0.78	0.22

LINE 2

THE DECAY FACTORS

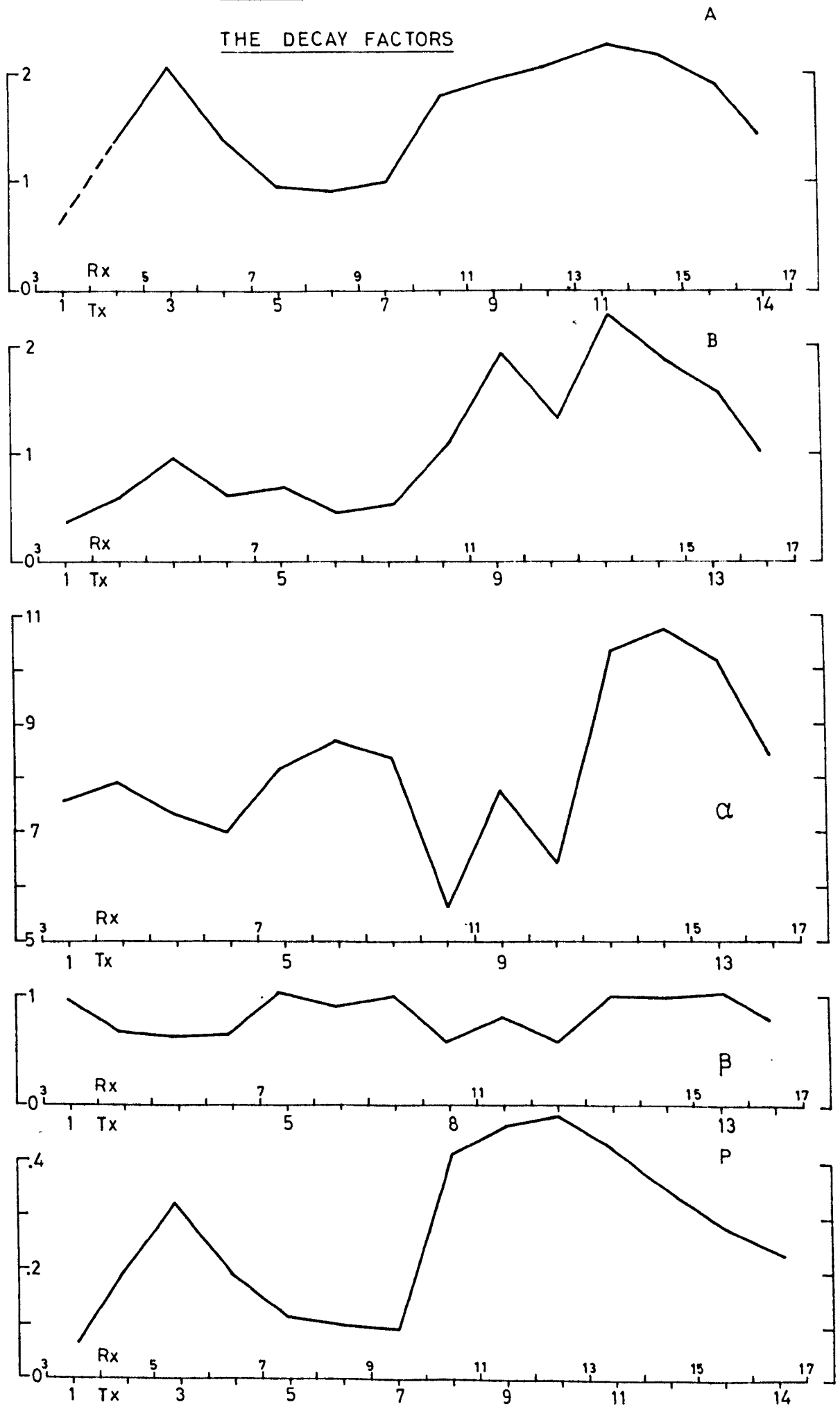


TABLE 7

MATHIAS AREA LINE 3

The Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>A</u>	<u>B</u>	<u>α</u>	<u>β</u>	<u>P</u>
1	4- 5	0.43	0.34	9.27	1.78	0.01
2	5- 6	0.93	0.32	8.06	0.72	0.09
3	6- 7	1.17	0.78	9.44	1.08	0.11
4	7- 8	0.90	0.60	6.93	1.04	0.09
5	8- 9	1.44	0.40	8.75	0.64	0.13
6	9-10	0.76	0.66	7.75	1.42	0.05
7	10-11	1.14	0.63	9.86	1.34	0.06
8	11-12	0.97	0.66	7.03	0.50	0.27
9	12-13	2.70	2.25	8.10	0.72	0.61
10	13-14	2.75	1.63	7.56	0.53	0.63
11	14-15	1.80	0.85	5.87	0.45	0.38
12	15-16	1.83	1.47	9.32	0.93	0.28
13	16-17	2.05	1.46	9.26	0.80	0.36
14	17-18	1.85	1.70	9.86	1.04	0.28

FIG. 7

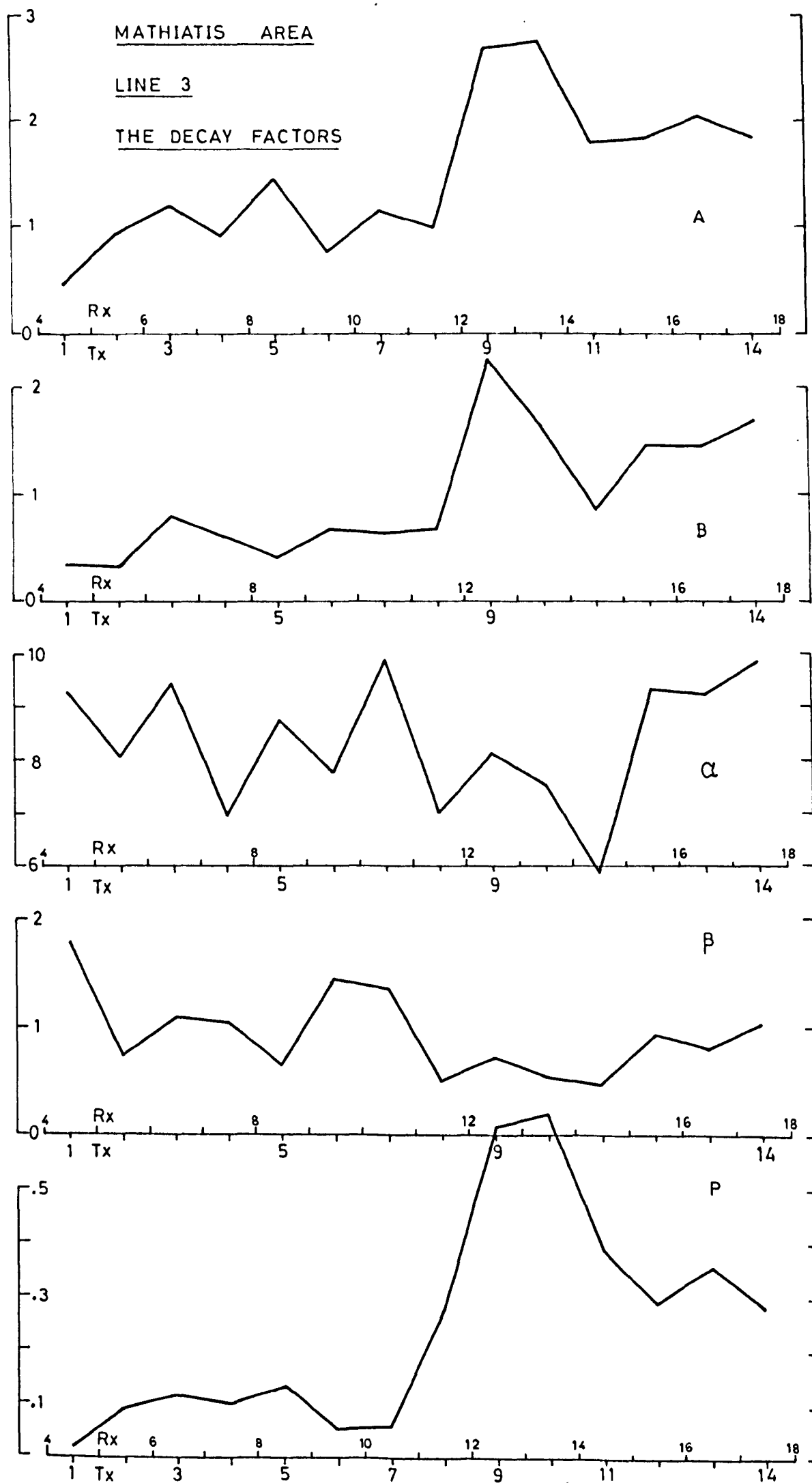


TABLE 8MATHIATIS AREA LINE 4The Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>A</u>	<u>B</u>	<u>α</u>	<u>β</u>	<u>P</u>
3	5- 6	0.53	0.36	9.92	0.92	0.07
4	6- 7	0.73	0.50	9.65	0.93	0.09
5	7- 8	0.65	0.50	9.42	1.04	0.08
6	8- 9	0.74	0.35	8.60	0.74	0.09
7	9-10	0.68	0.47	7.94	0.83	0.10
8	10-11	0.75	0.47	7.39	0.78	0.12
9	11-12	0.85	0.14	8.87	0.86	0.09
10	12-13	0.91	0.61	9.84	0.94	0.11
11	13-14	1.27	0.91	8.18	0.76	0.23
12	14-15	1.68	1.55	8.06	0.85	0.34
13	15-16	2.00	1.57	7.22	0.64	0.50
14	16-17	1.32	1.11	7.55	0.81	0.26
15	17-18	1.48	1.00	6.66	0.66	0.31
16	18-19	1.40	1.07	6.93	0.72	0.30
17	19-20	1.14	1.02	11.66	0.99	0.17
18	20-21	1.30	0.90	10.60	0.91	0.18

LINE 4

THE DECAY FACTORS

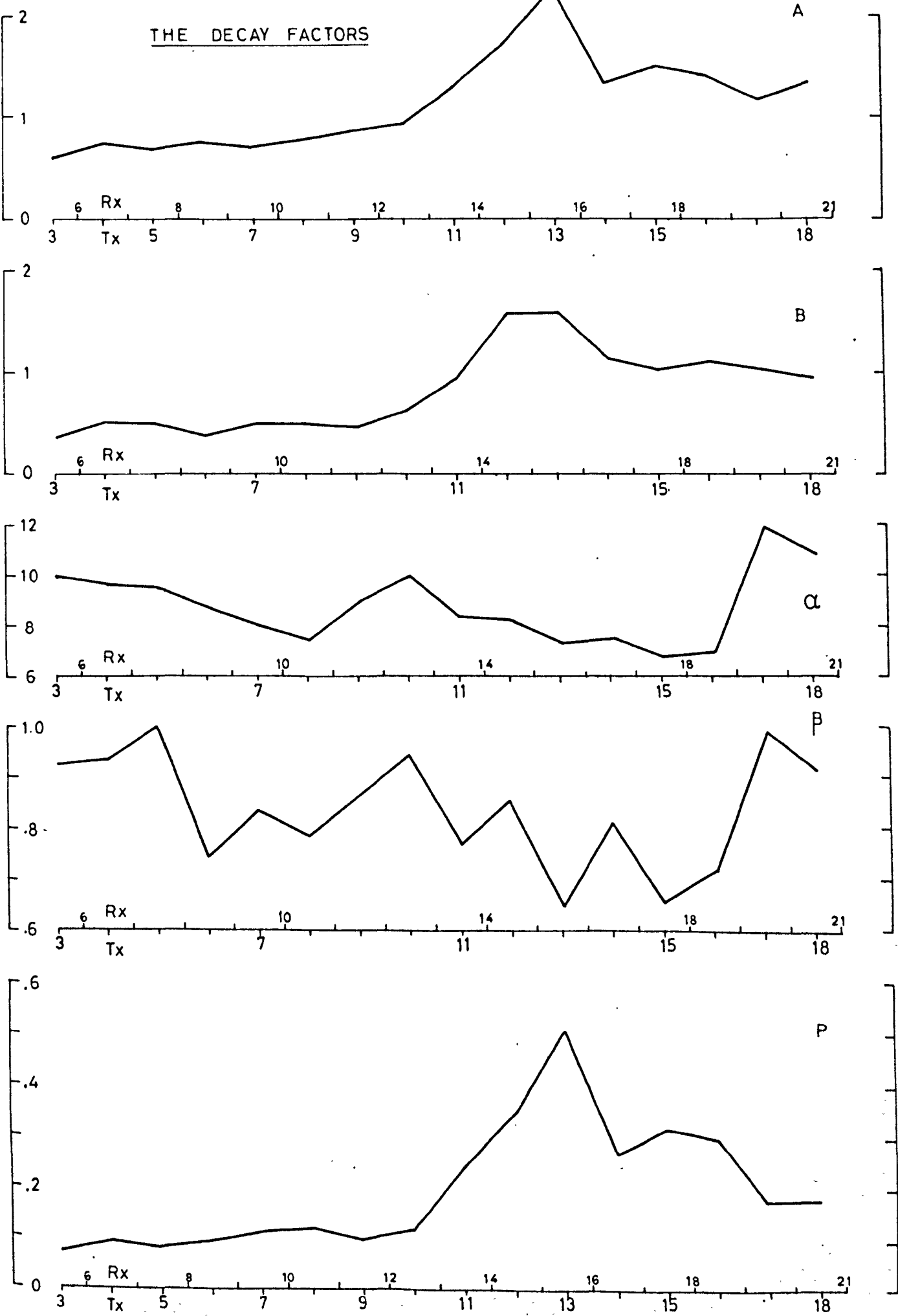


TABLE 9

MATHIATIS AREA LINE 5

The Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>A</u>	<u>B</u>	<u>α</u>	<u>β</u>	<u>P</u>
3	5- 6	0.80	0.37	8.87	0.89	0.08
4	6- 7	0.70	0.26	8.47	0.52	0.10
5	7- 8	0.37	0.38	10.64	0.79	0.09
6	8- 9	0.85	0.36	7.31	0.71	0.10
7	9-10	0.81	0.28	7.62	0.50	0.11
8	10-11	0.92	0.46	7.89	0.68	0.14
9	11-12	0.96	0.55	8.31	0.78	0.14
10	12-13	0.76	0.44	6.80	0.65	0.14
11	13-14	1.05	0.74	9.77	0.92	0.14
12	14-15	0.94	0.65	7.98	0.76	0.17
13	15-16	0.87	0.58	6.54	0.65	0.18
14	16-17	1.15	0.62	5.86	0.53	0.24
15	17-18	1.25	0.71	7.17	0.59	0.25
16	18-19	1.14	0.70	7.47	0.68	0.21
17	19-20	1.10	0.66	7.88	0.77	0.16
18	20-21	1.07	0.53	8.39	0.66	0.16
19	21-22	1.17	0.51	8.21	0.71	0.14

FIG. 77

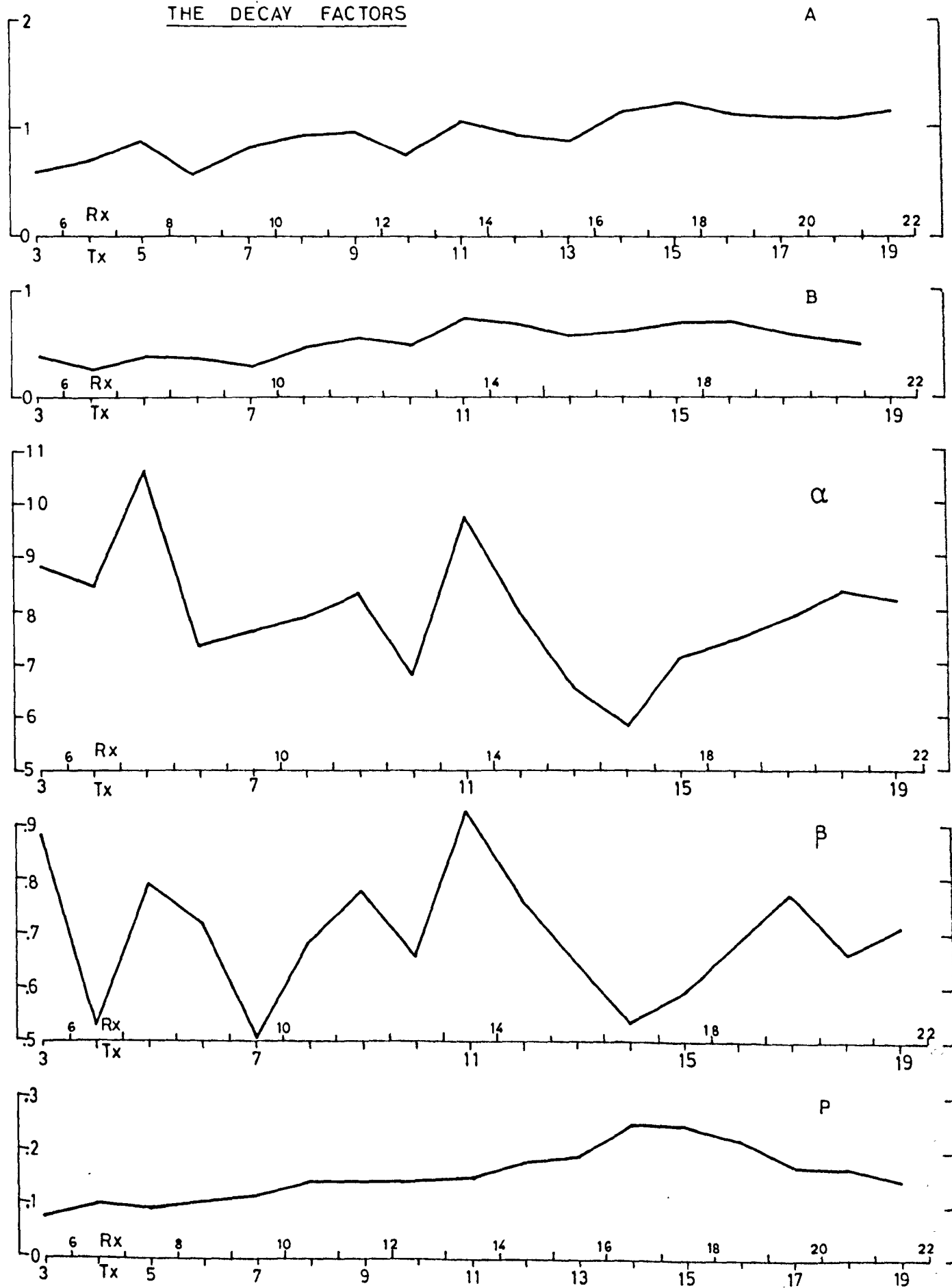
MATHIATIS AREALINE 5THE DECAY FACTORS

TABLE 10

MATHIATIS AREA LINE 6

The Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>A</u>	<u>B</u>	<u>α</u>	<u>β</u>	<u>P</u>
10	12-13	0.70	0.51	9.16	0.93	0.09
11	13-14	0.95	0.59	12.95	1.14	0.07
12	14-15	0.68	0.46	7.21	0.77	0.11
13	15-16	0.81	0.45	7.27	0.70	0.13
14	16-17	0.63	0.59	8.58	1.06	0.09
15	17-18	0.72	0.66	9.30	0.98	0.11
16	18-19	1.04	0.71	10.47	0.90	0.14
17	19-20	0.97	0.55	7.13	0.62	0.18

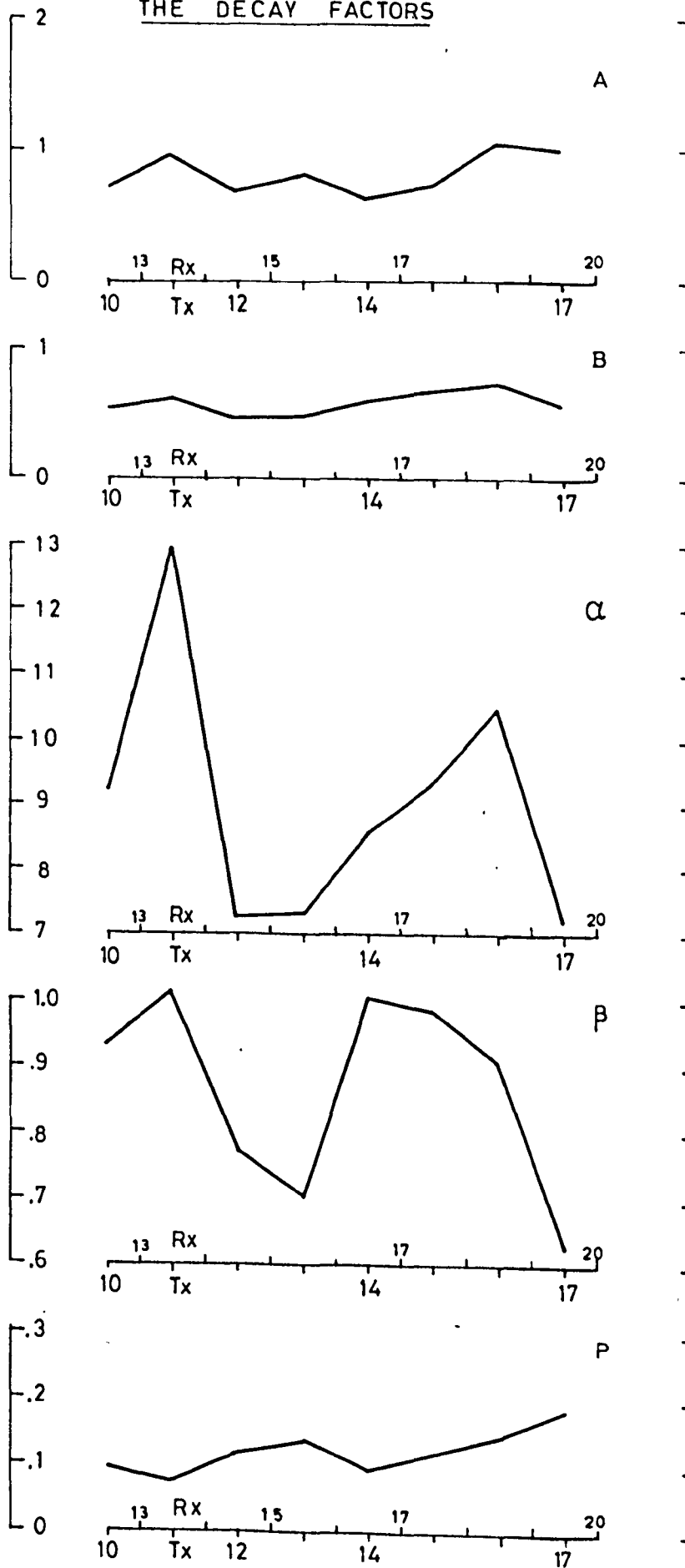
MATHIATIS AREALINE 6THE DECAY FACTORS

TABLE 11

MATHIATIS AREA LINE 7

The Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>A</u>	<u>B</u>	<u>α</u>	<u>β</u>	<u>P</u>
1	3- 4	0.81	0.47	6.33	0.58	0.17
2	4- 5	0.72	0.51	6.39	0.70	0.15
3	5- 6	0.66	0.31	6.93	0.54	0.12
4	6- 7	0.56	0.37	8.47	0.95	0.07
5	7- 8	0.66	0.33	9.31	0.73	0.09
6	8- 9	0.70	0.37	7.82	0.76	0.09
7	9-10	0.69	0.37	6.98	0.60	0.12
8	10-11	0.72	0.31	7.21	0.52	0.12
9	11-12	0.73	0.43	8.12	0.76	0.11
10	12-13	0.82	0.39	7.53	0.61	0.13
11	13-14	0.97	0.53	8.98	0.81	0.12
12	14-15	0.91	0.42	8.01	0.58	0.15
13	15-16	0.84	0.56	9.87	0.94	0.10
14	16-17	1.12	0.45	8.89	0.61	0.15
15	17-18	0.99	0.53	10.20	0.83	0.12
16	18-19	0.91	0.61	9.19	1.08	0.09
17	19-20	0.77	0.49	8.47	0.85	0.10

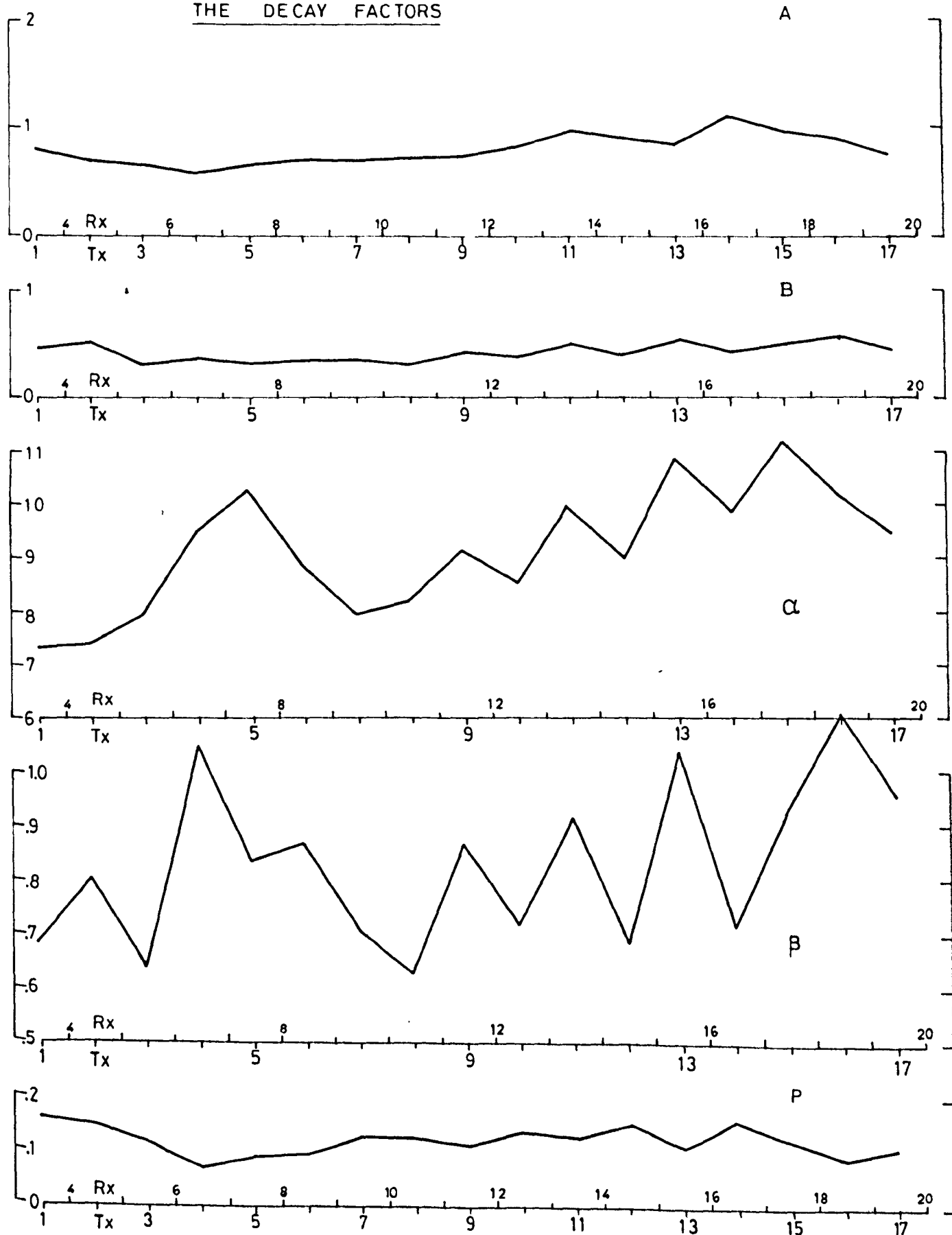
MATHIATIS AREALINE 7THE DECAY FACTORS

TABLE 12

MATHIAS AREA

Table summarizing the Decay Factors over the mineralizations and the barren rocks.

	<u>Western Mineralization</u>	<u>Eastern Mineralization</u>	<u>Barren Rocks</u>
A	2.05 - 2.17	2.3 - 2.5	0.5 - 1.0
B	1.0	1.5 - 2.3	0.5
α	< 8.0	< 8.0	> 8.0
β	0.5 - 1.0	0.5 - 1.0	0.5 - 1.0
P	0.3	0.4 - 0.5	0.1

TABLE 13MATHIATIS AREA LINE 1The Log_et Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>R1</u>	<u>R2</u>	<u>R1/R2</u>	<u>V_d</u>	<u>t_d</u>	<u>d0.5</u>	<u>d1.0</u>
1	3- 4	0.64	0.21	2.97	0.30	80	0	0
2	4- 5	0.67	0.16	4.06	0.18	90	0	0
3	5- 6	1.07	0.38	2.81	0.74	60	45	0
4	6- 7	1.85	1.08	1.71	2.00	75	1500	260
5	7- 8	1.94	1.21	1.60	2.25	70	1900	340
6	8- 9	1.67	0.84	1.98	1.55	75	900	90
7	9-10	1.89	1.08	1.75	2.00	75	1300	230
8	10-11	1.67	1.02	1.63	1.80	65	620	90
9	11-12	1.64	0.96	1.70	1.85	60	1010	120
10	12-13	1.68	1.12	1.50	1.90	80	1150	150
11	13-14	1.96	1.25	1.56	2.30	70	1520	310
12	14-15	2.40	1.46	1.64	3.70	75	3200	680
13	15-16	2.72	1.87	1.45	3.40	85	6500	1650
14	16-17	2.24	1.42	1.11	2.50	90	3100	570
15	17-18	1.70	1.07	1.58	1.85	80	1150	160
16	18-19	1.68	1.15	1.46	1.90	95	1100	180
17	19-20	1.50	0.98	1.53	1.60	90	900	85

FIG. 80 (a)

MATHIATIS AREA

LINE 1

THE LOG_e T DECAY FACTORS

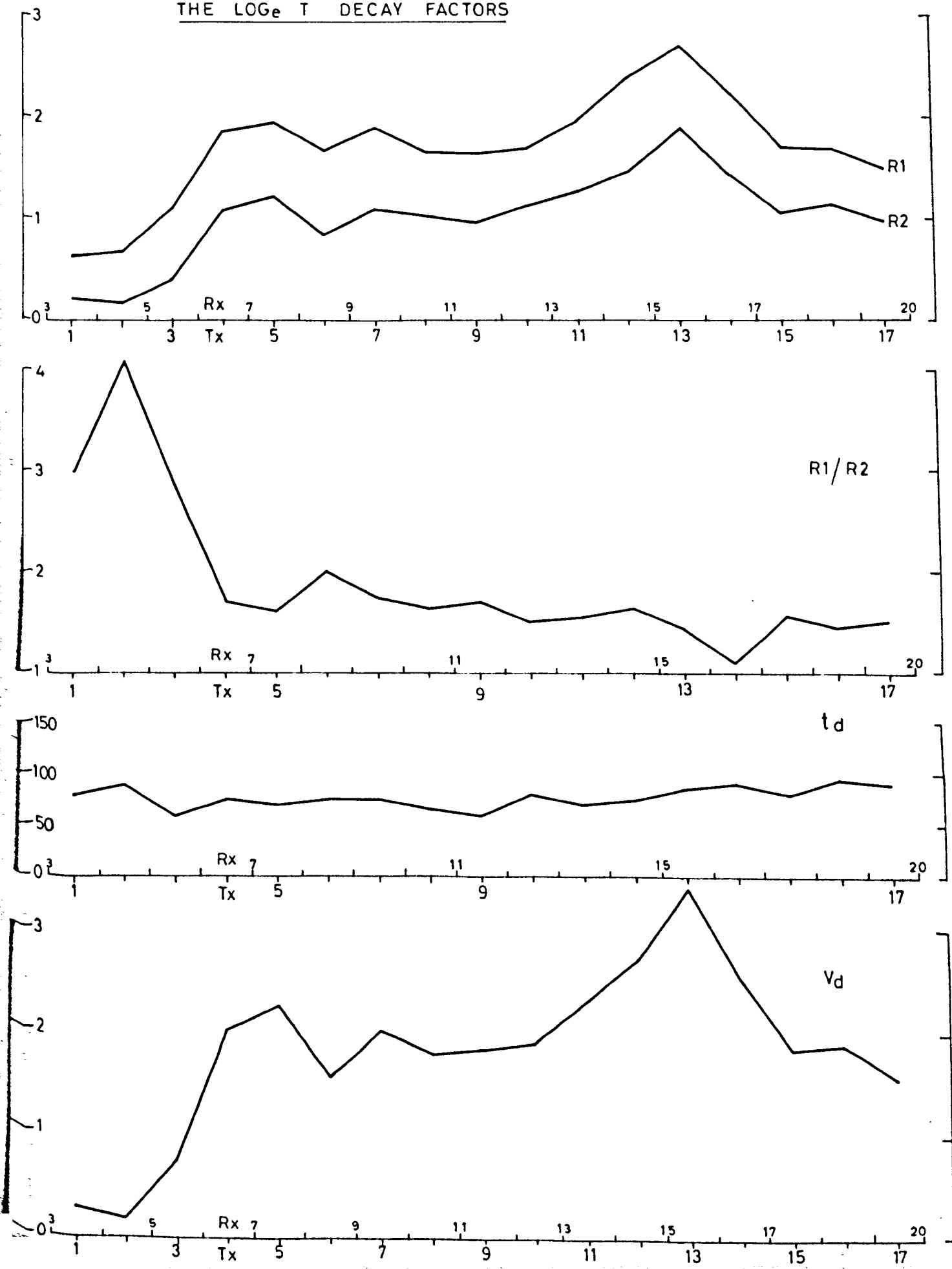


FIG. 80(b)

MATHIATIS AREA

LINE 1

THE LOG_e T DECAY FACTORS

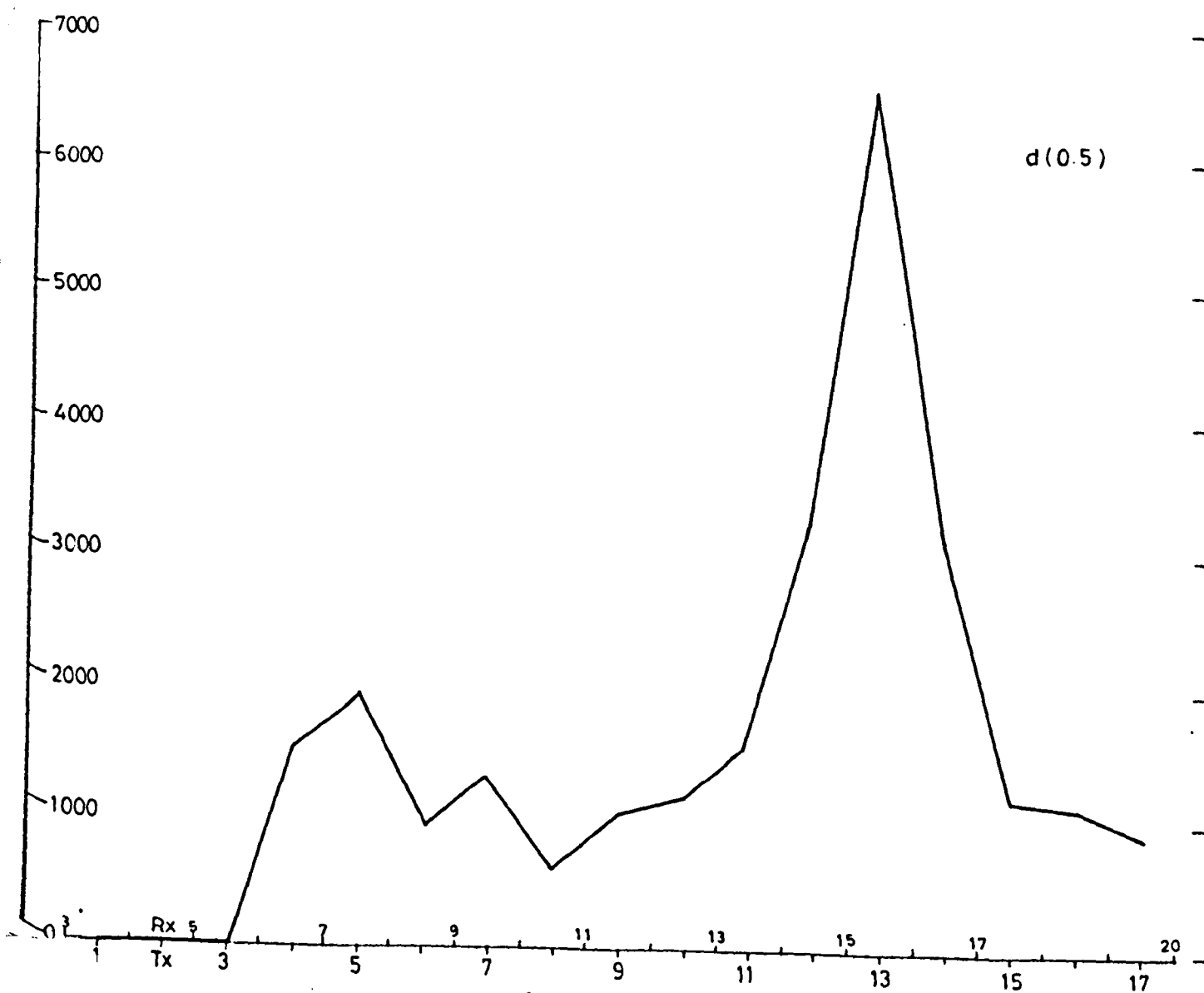
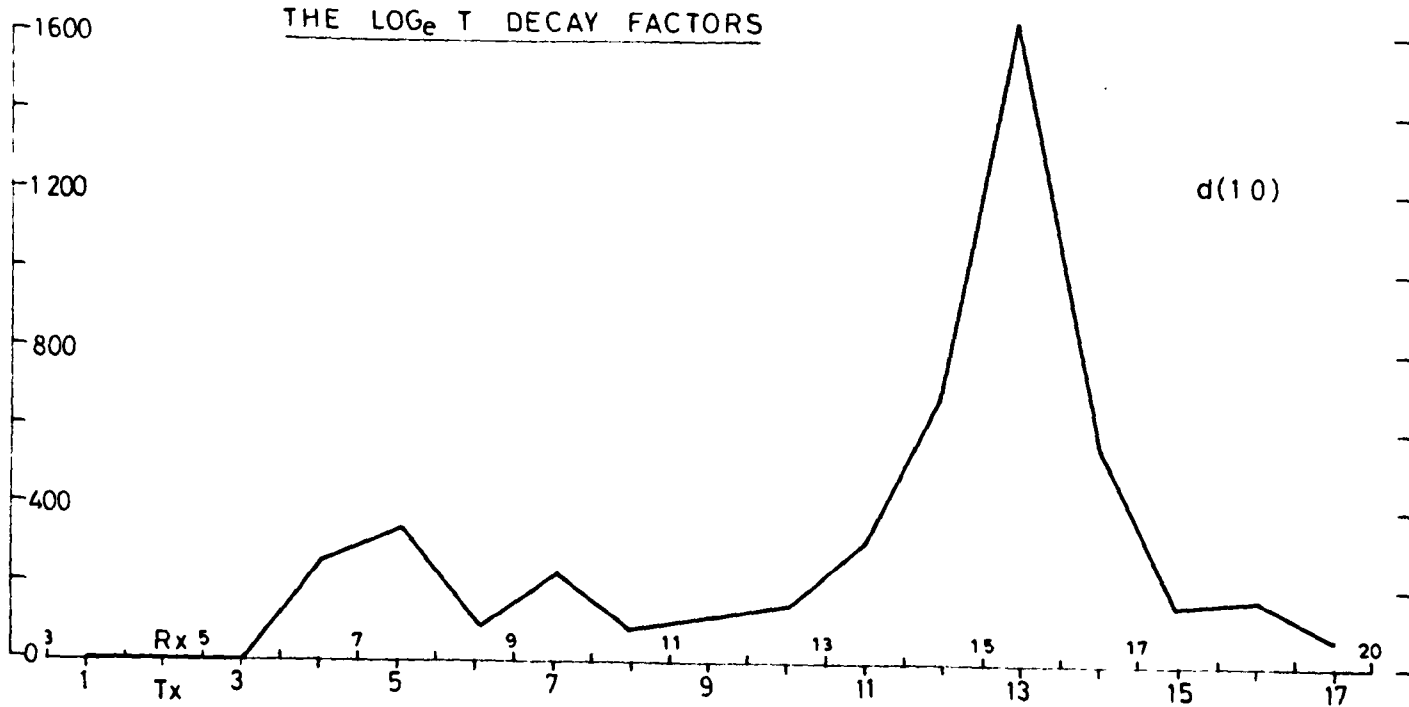


TABLE 14

MATHIAS AREA LINE 2

The Log_et Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>R1</u>	<u>R2</u>	<u>R1/R2</u>	<u>V_d</u>	<u>t_d</u>	<u>d1.0</u>	<u>d1.5</u>
2	4- 5	0.57	0.42	1.35	0.43	300	0	0
3	5- 6	1.09	0.68	1.60	1.28	110	18	0
4	6- 7	1.46	1.06	1.37	1.50	230	130	5
5	7- 8	1.31	0.74	1.77	1.14	155	15	0
6	8- 9	1.04	0.60	1.73	0.85	195	0	0
7	9-10	0.82	0.56	1.46	0.83	140	0	0
8	10-11	0.88	0.54	1.62	0.64	250	0	0
9	11-12	2.02	1.41	1.43	2.30	120	400	65
10	12-13	2.15	1.56	1.37	2.40	200	1200	170
11	13-14	2.18	1.60	1.36	2.40	160	900	140
12	14-15	2.53	1.90	1.33	2.90	140	2200	320
13	15-16	2.10	1.64	1.28	2.30	170	750	90
14	16-17	1.96	1.46	1.34	1.90	180	330	30
15	17-18	1.22	0.88	1.38	1.10	290	15	0

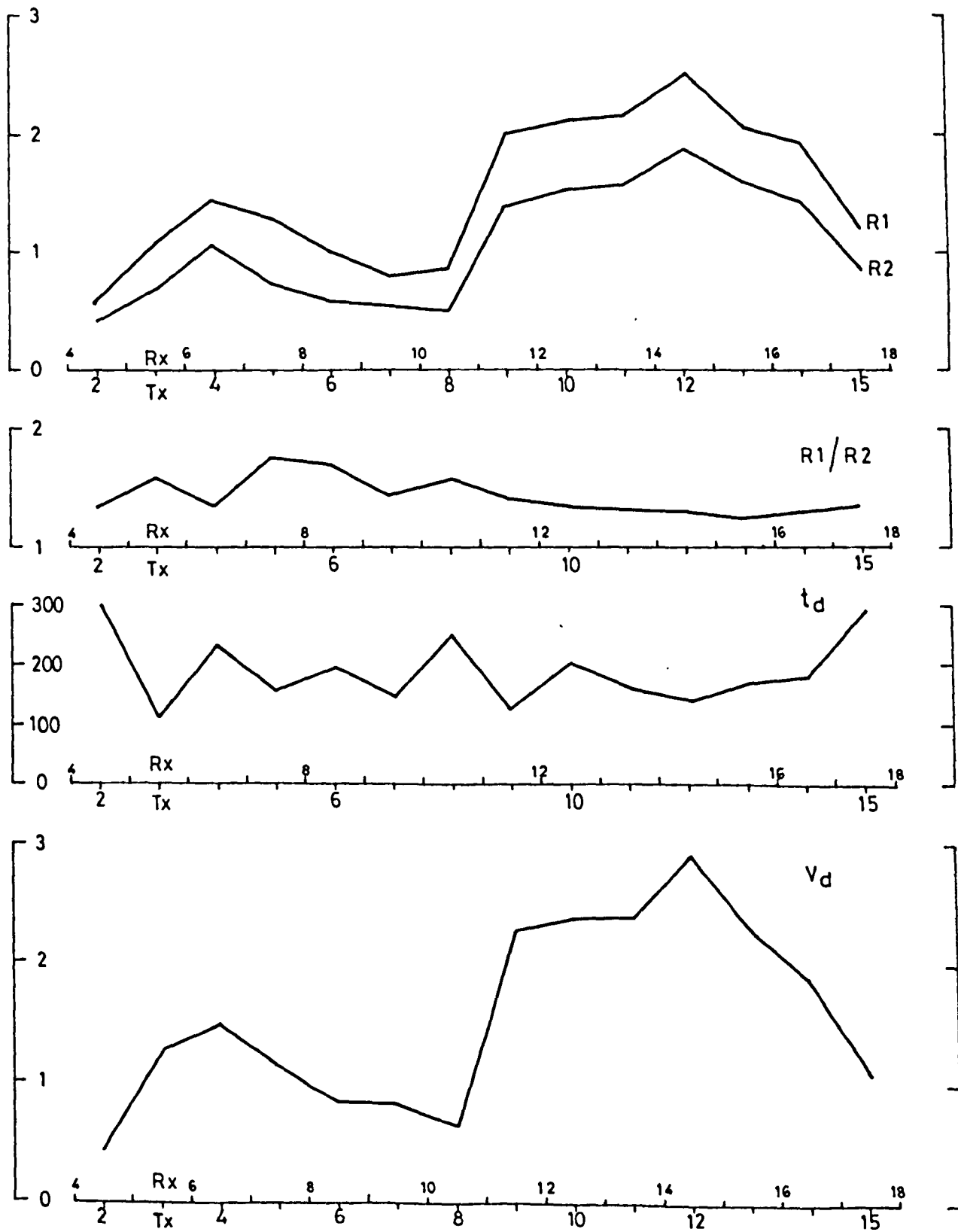
MATHIATIS AREALINE 2THE LOG_e T DECAY FACTORS

FIG. 81(b)

MATHIATIS AREA

LINE 2

THE LOG_e T DECAY FACTORS

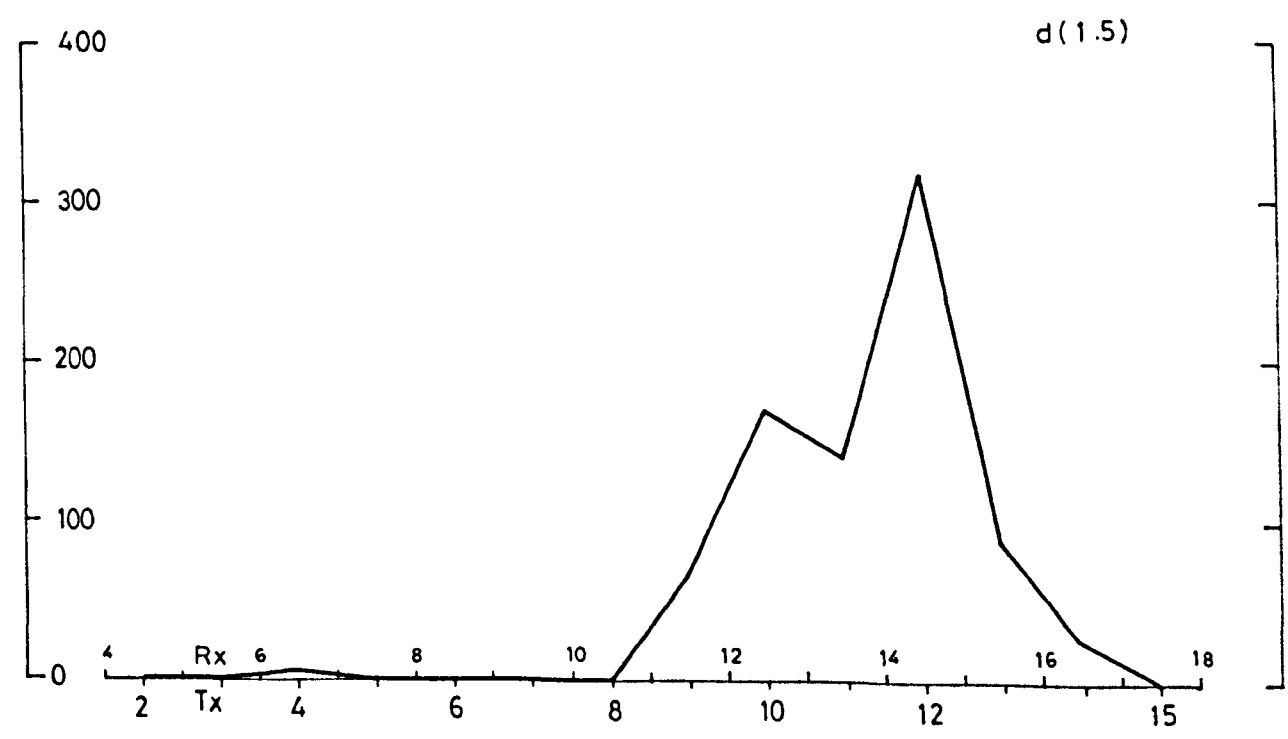
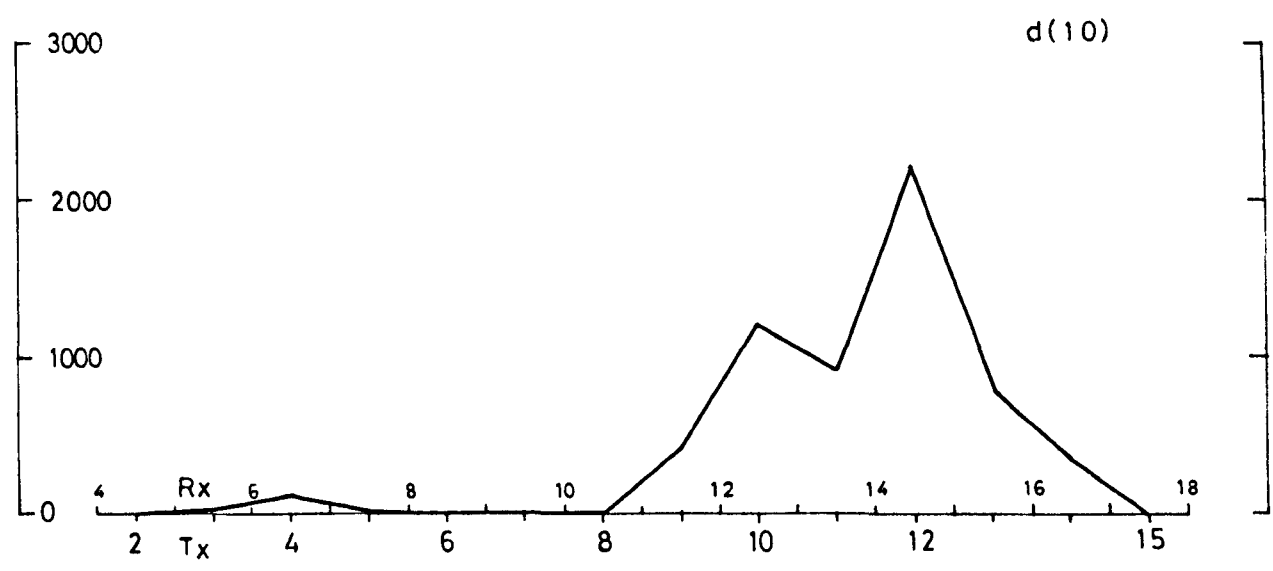


TABLE 15

MATHIAS AREA LINE 3

The Log_et Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>R1</u>	<u>R2</u>	<u>R1/R2</u>	<u>Vd</u>	<u>t_d</u>	<u>d0.5</u>	<u>d1.0</u>
1	4- 5	1.03	0.49	2.10	0.70	70	15	0
2	5- 6	0.91	0.60	1.51	0.84	86	65	0
3	6- 7	1.31	0.86	1.52	1.27	90	300	20
4	7- 8	0.94	0.78	1.20	1.00	120	100	0
5	8- 9	1.82	0.79	2.30	1.20	80	205	11
6	9-10	1.10	0.77	1.42	0.80	150	70	0
7	10-11	1.60	0.75	2.13	1.60	85	165	7
8	11-12	0.81	0.57	1.52	1.20	120	1650	15
9	12-13	2.84	2.22	1.27	3.80	100	2600	1100
10	13-14	2.61	2.04	1.27	3.50	100	3500	1100
11	14-15	1.76	1.27	1.38	2.00	100	2150	260

FIG. 82 (a)

MATHIATIS AREA

LINE 3

THE LOG_e T DECAY FACTORS

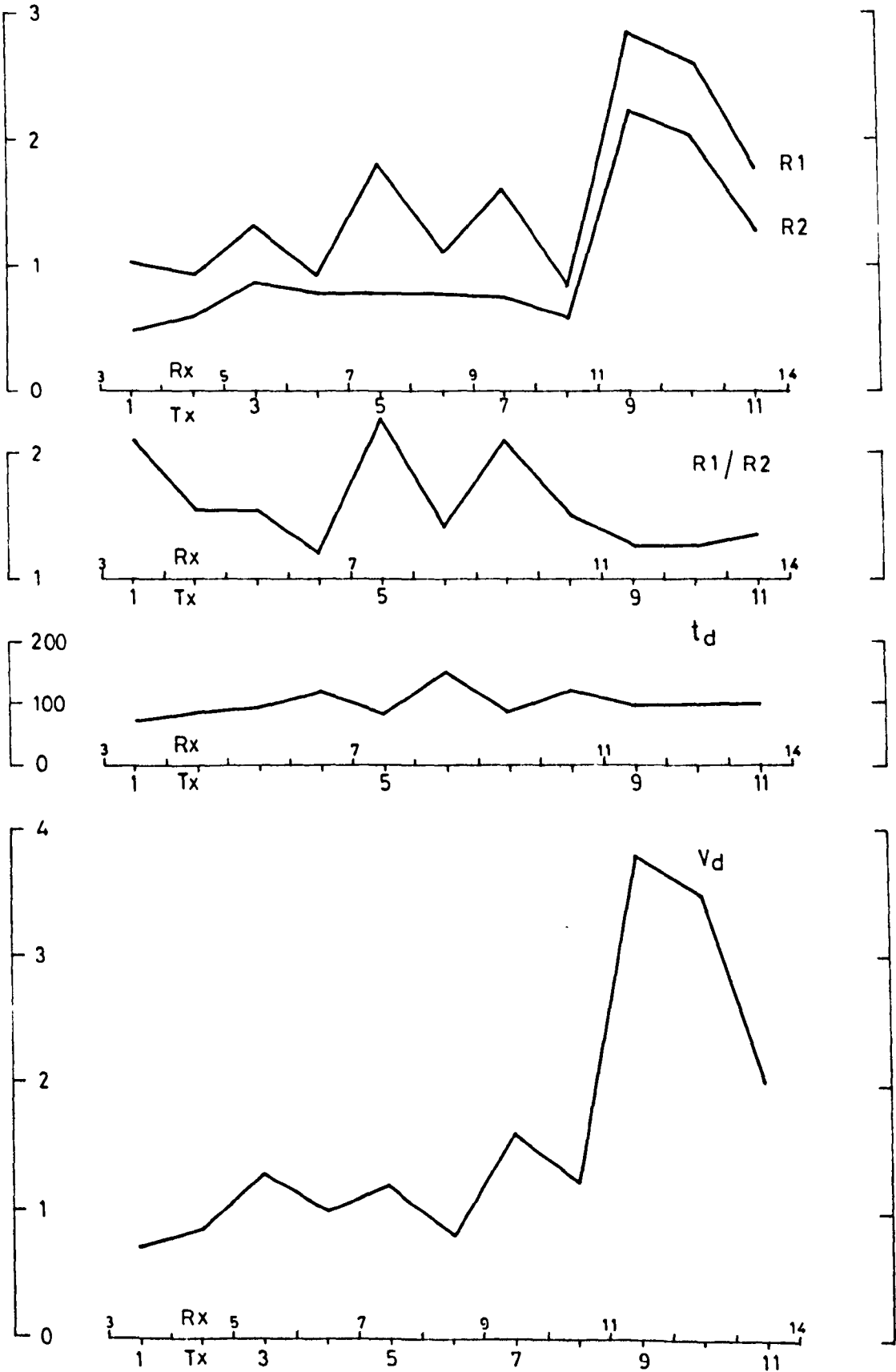


FIG. 82 (b)

MATHIATIS AREA

LINE 3

THE LOG_e T DECAY FACTORS

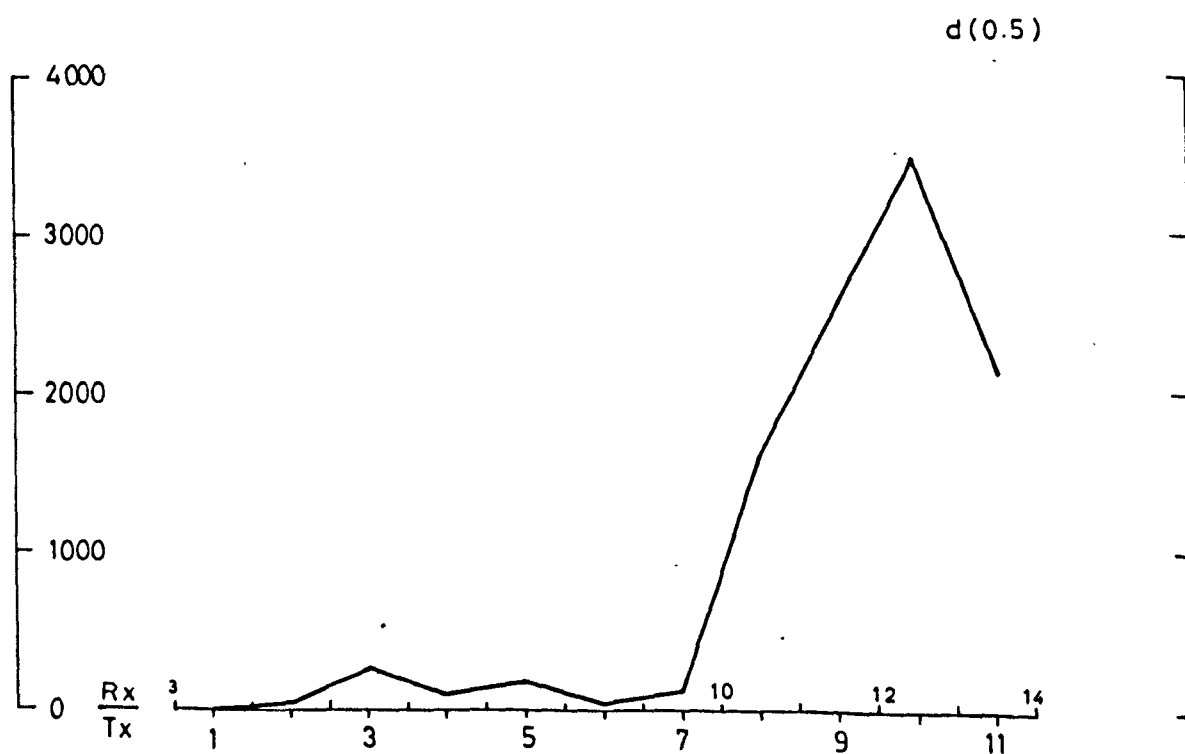
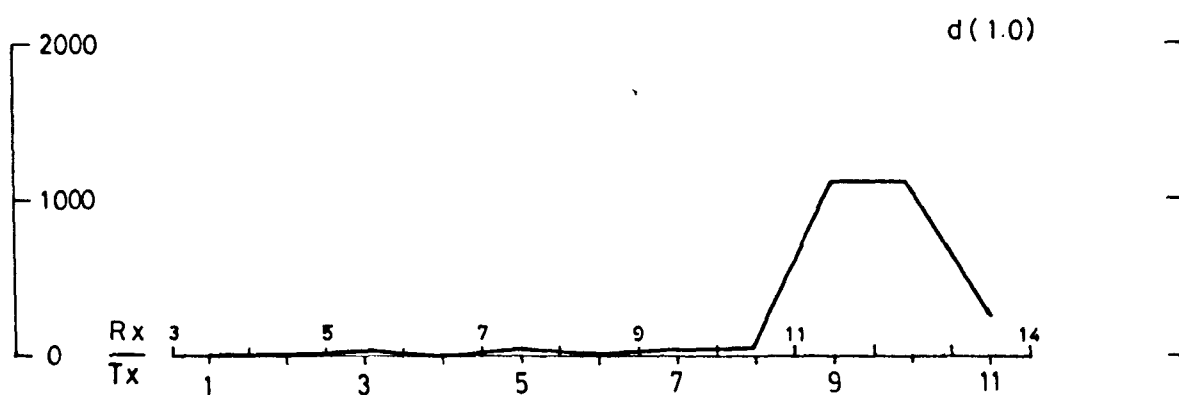


TABLE 16MATHIATIS AREA LINE 4The Log_et Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>R1</u>	<u>R2</u>	<u>R1/R2</u>	<u>V_d</u>	<u>t_d</u>	<u>d0.5</u>	<u>d1.0</u>
3	5- 6	0.69	0.43	1.60	0.60	120	10	0
4	6- 7	1.10	0.55	2.00	0.95	75	140	0
5	7- 8	1.46	0.57	2.56	1.05	55	140	2
6	8- 9	1.12	0.47	2.38	0.87	90	80	0
7	9-10	1.26	0.57	2.21	0.92	90	180	0
8	10-11	2.14	0.61	3.50	1.20	55	310	10
9	11-12	1.41	0.56	2.51	0.90	90	150	0
10	12-13	1.74	0.75	2.32	1.20	75	330	15
11	13-14	1.86	0.99	1.87	1.70	90	1300	180
12	14-15	2.64	1.51	1.24	2.65	80	2900	720
13	15-16	2.99	1.69	1.76	3.10	90	6750	1550
14	16-17	2.40	1.11	2.16	2.14	70	2080	340
15	17-18	2.26	1.28	1.76	2.10	90	1750	360
16	18-19	2.12	1.19	1.78	2.08	90	2000	400
17	19-20	1.88	0.88	2.13	1.75	60	1400	130
18	20-21	1.77	0.85	2.08	1.55	80	1140	90

FIG. 83(a)

MATHIATIS AREA

LINE 4

THE LOG_e T DECAY FACTORS

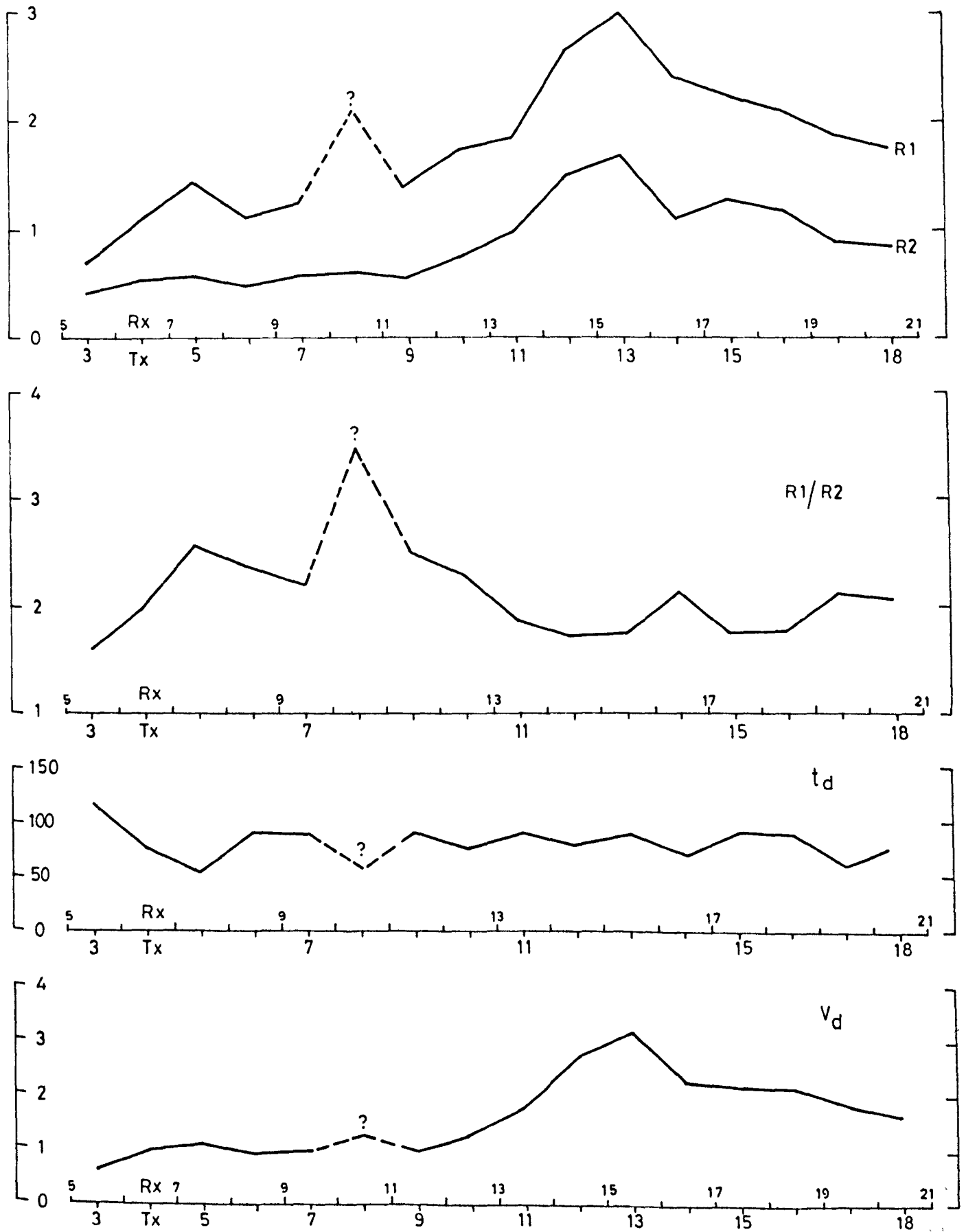


FIG. 83(b)

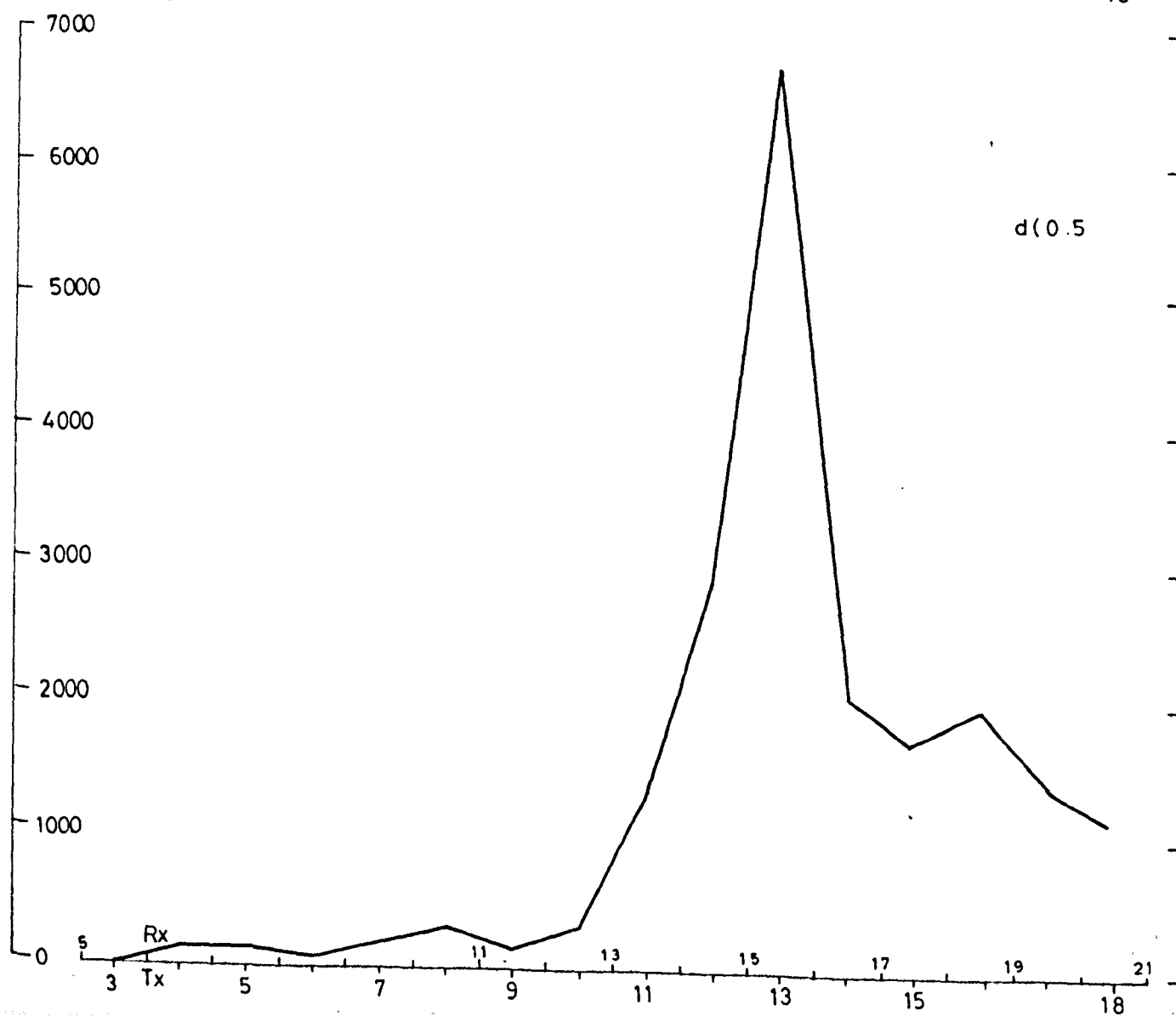
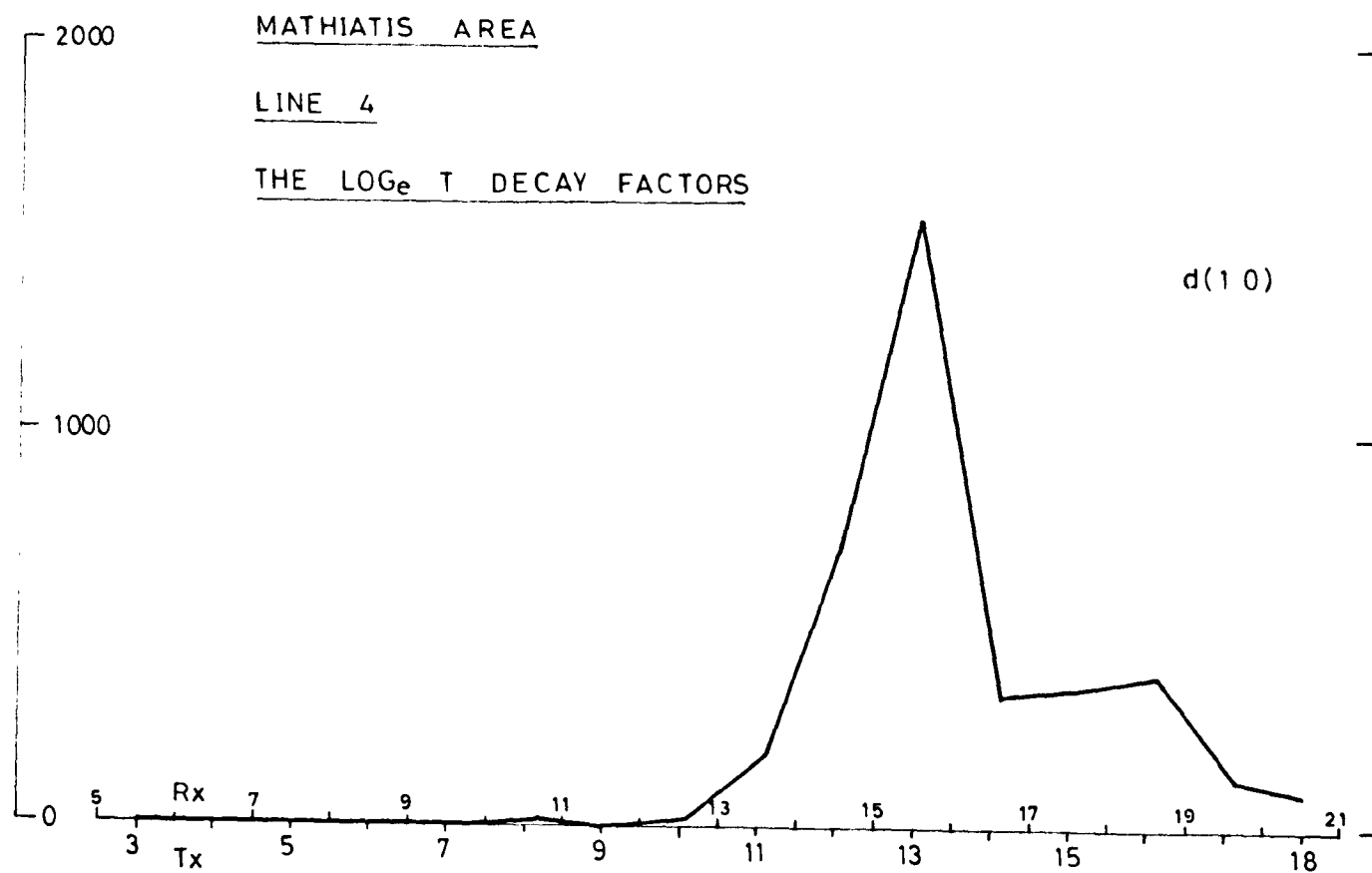


TABLE 17MATHIATIS AREA LINE 5The Log_et Decay Factors

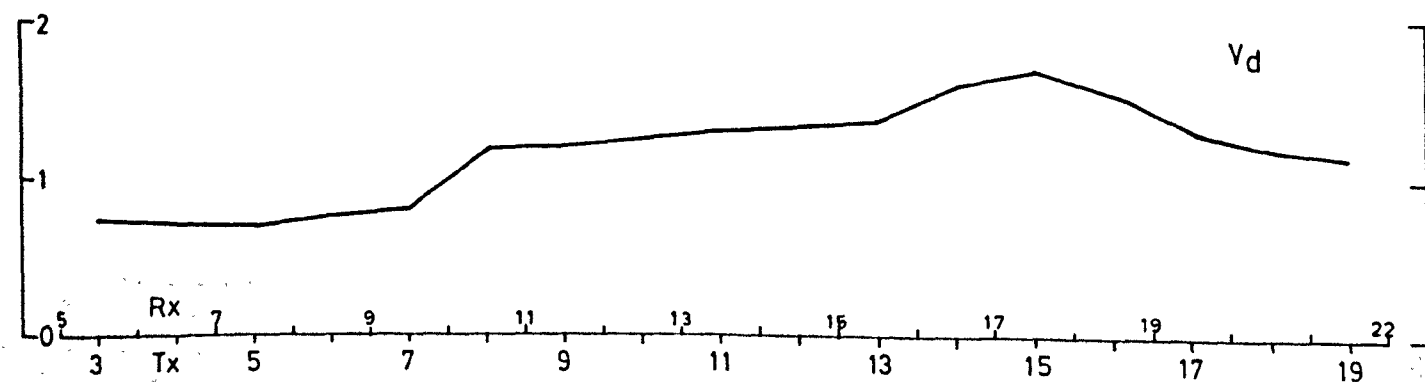
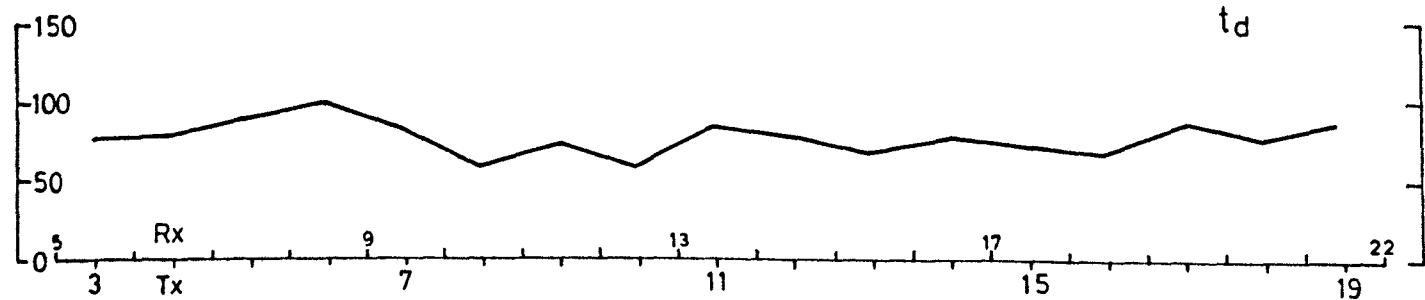
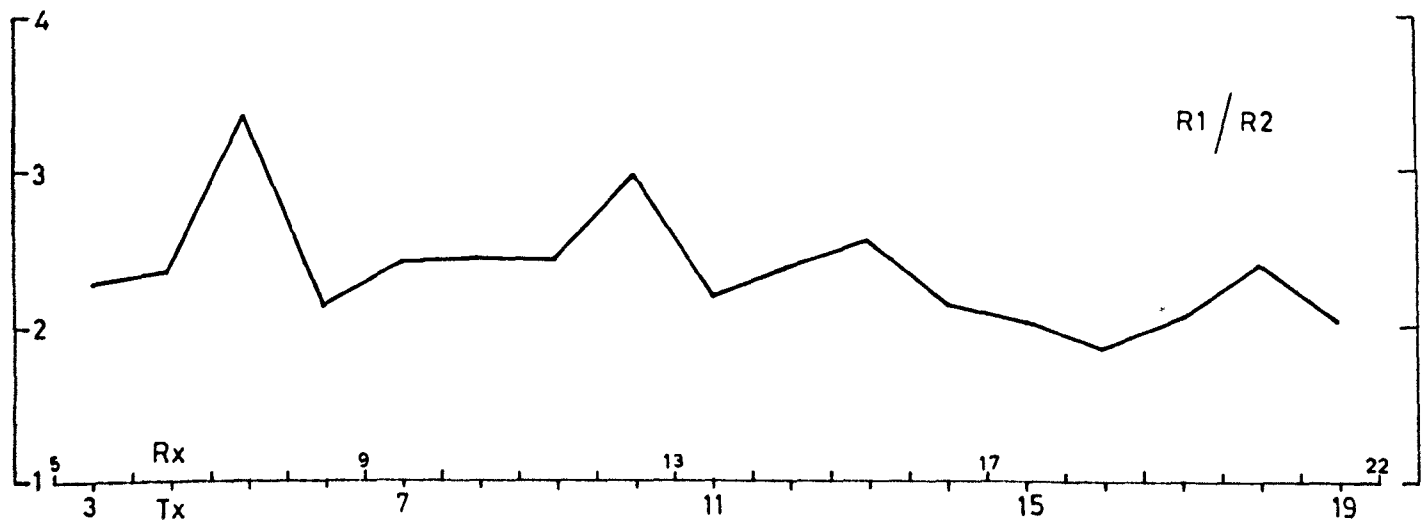
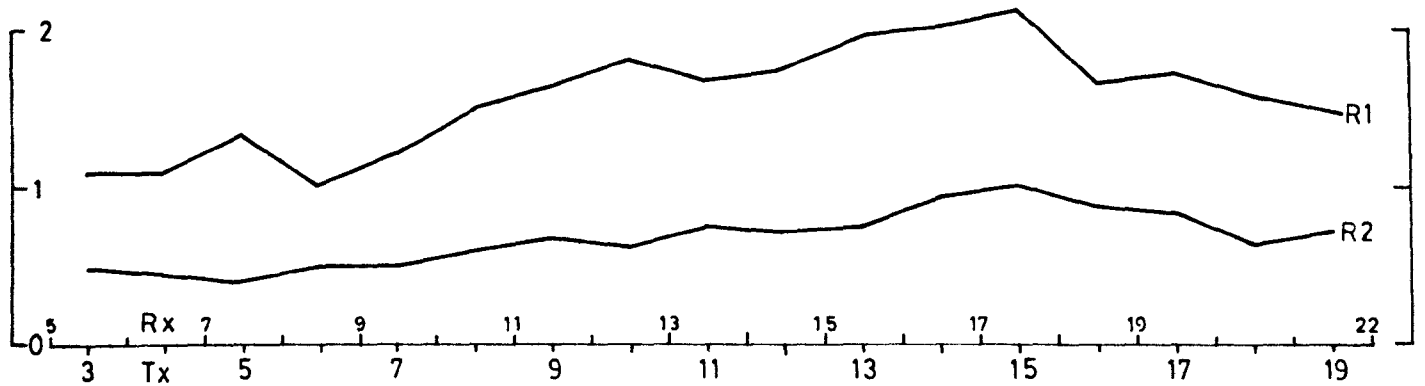
<u>C</u>	<u>P1-P2</u>	<u>R1</u>	<u>R2</u>	<u>P1/P2</u>	<u>V_d</u>	<u>t₁</u>	<u>d0.5</u>	<u>d1.0</u>
3	5- 6	1.11	0.48	2.31	0.76	80	65	0
4	6- 7	1.10	0.46	2.39	0.71	80	55	0
5	7- 8	1.36	0.40	3.40	0.68	90	60	0
6	8- 9	1.04	0.48	2.16	0.76	100	70	0
7	9-10	1.22	0.50	2.44	0.82	85	110	0
8	10-11	1.51	0.61	2.47	1.20	60	320	12
9	11-12	1.65	0.67	2.46	1.20	75	440	20
10	12-13	1.83	0.61	3.00	1.25	60	350	14
11	13-14	1.68	0.76	2.21	1.30	85	590	32
12	14-15	1.76	0.73	2.41	1.32	80	720	50
13	15-16	1.97	0.76	2.59	1.36	70	700	60
14	16-17	2.04	0.94	2.17	1.60	80	1080	130
15	17-18	2.14	1.04	2.05	1.70	75	1030	155
16	18-19	1.68	0.89	1.88	1.55	70	850	100
17	19-20	1.76	0.84	2.09	1.32	90	590	43
18	20-21	1.61	0.66	2.43	1.20	80	500	23
19	21-22	1.51	0.73	2.06	1.14	90	380	13

FIG. 84 (a)

MATHIATIS AREA

LINE 5

THE LOG_e T DECAY FACTORS



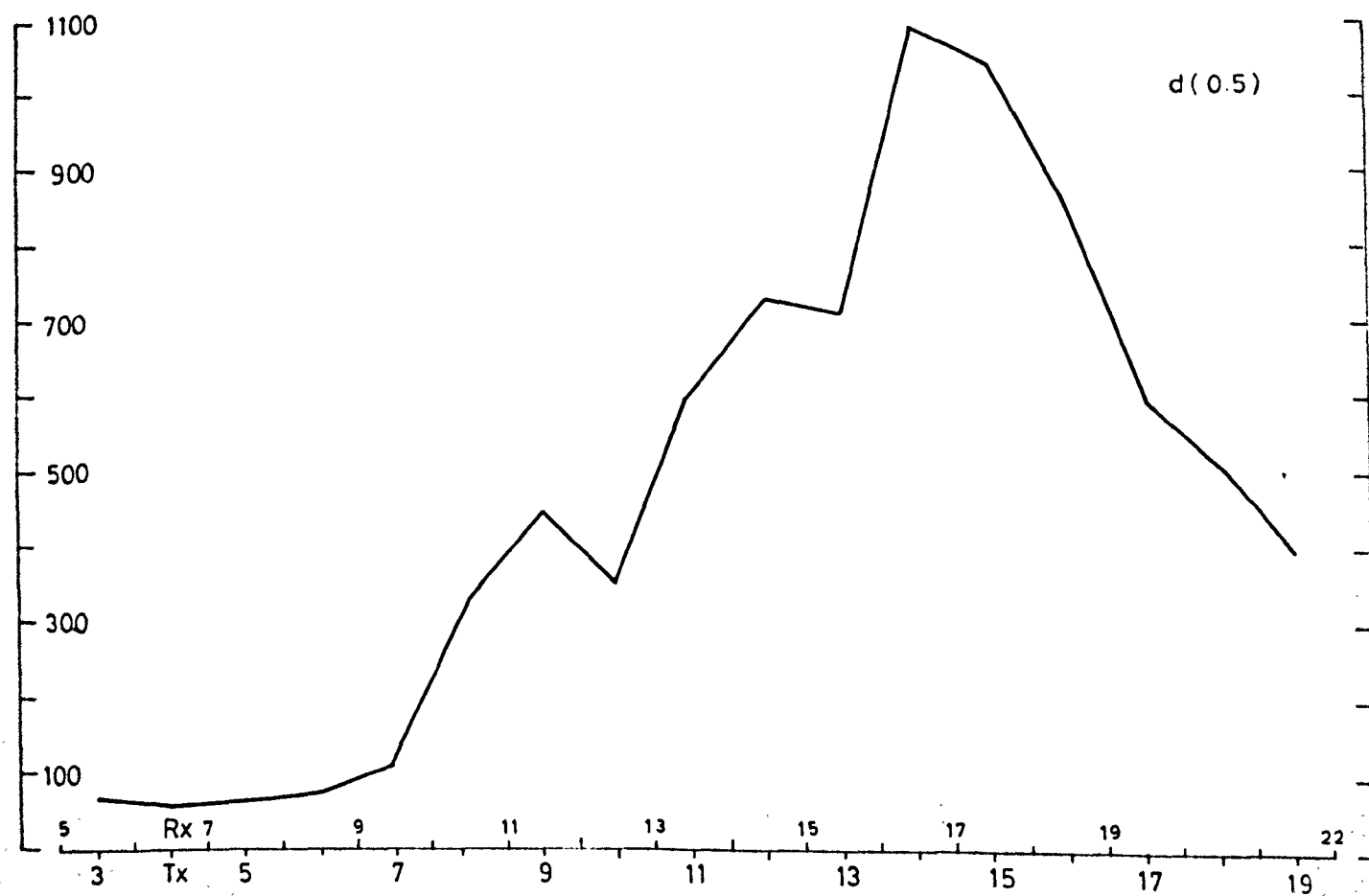
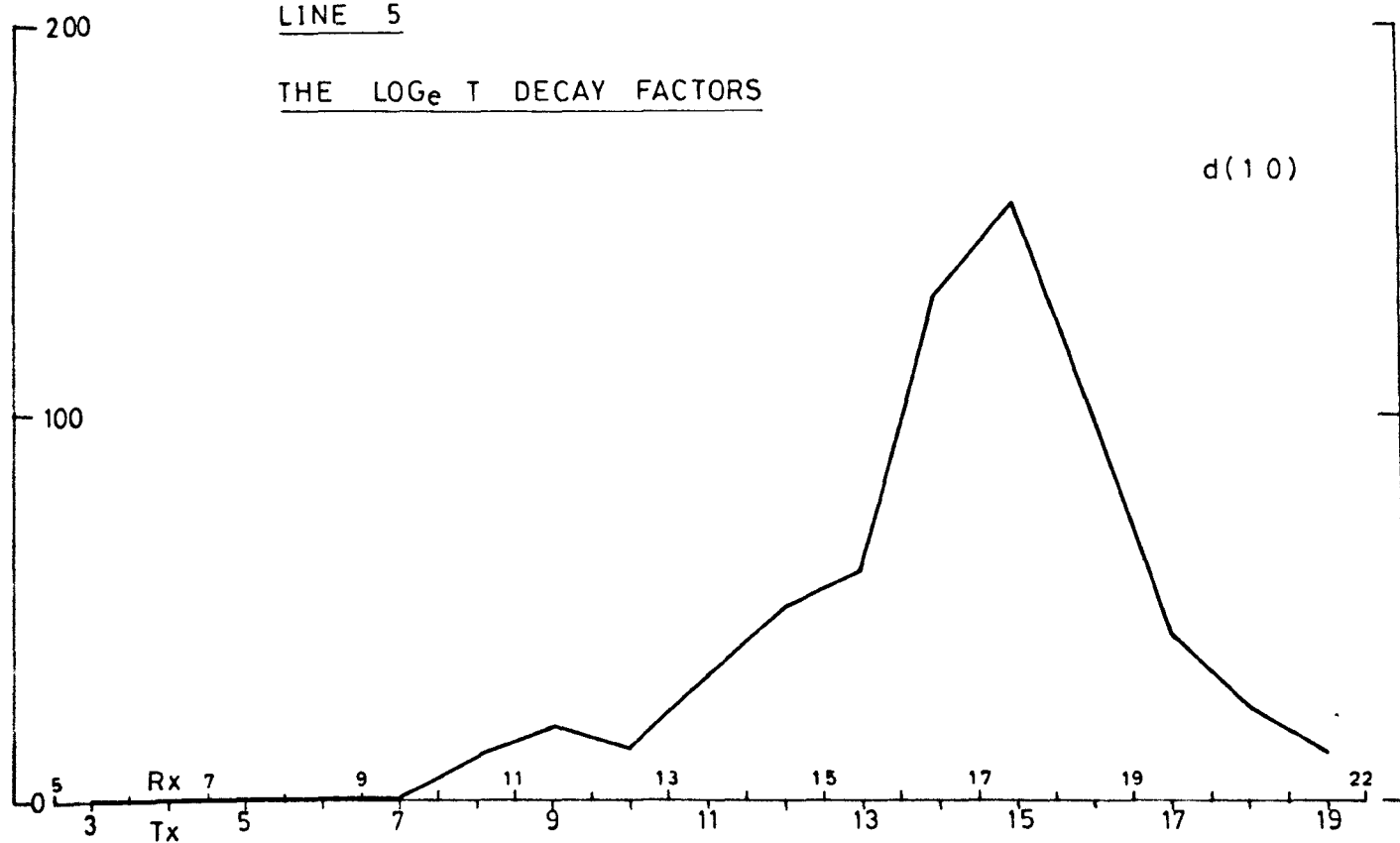
MATHIATIS AREALINE 5THE LOG_e T DECAY FACTORS

TABLE 18

MATHIATIS AREA LINE 6

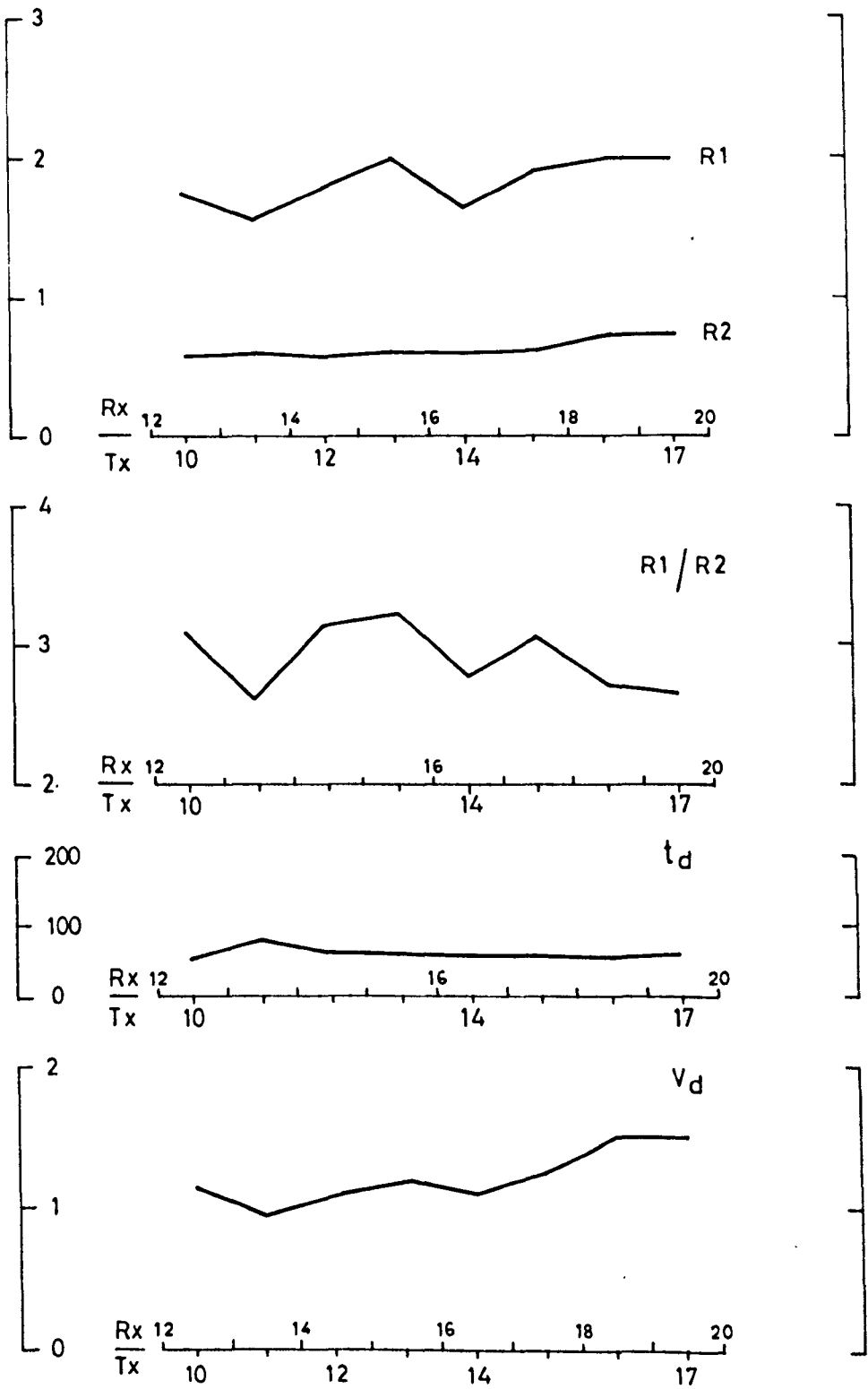
The Log_et Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>R1</u>	<u>R2</u>	<u>R1/R2</u>	<u>V_d</u>	<u>t_d</u>	<u>d0.5</u>	<u>d1.0</u>
10	12-13	1.75	0.57	3.07	1.15	55	230	10
11	13-14	1.56	0.60	2.60	0.95	85	180	0
12	14-15	1.79	0.57	3.14	1.10	65	260	7
13	15-16	2.00	0.62	3.22	1.20	60	385	20
14	16-17	1.65	0.60	2.75	1.10	60	260	10
15	17-18	1.89	0.62	3.04	1.25	55	440	25
16	18-19	1.97	0.73	2.69	1.50	55	600	43
17	19-20	1.98	0.75	2.64	1.50	60	610	45

MATHIATIS AREA

LINE 6

THE LOG_e T DECAY FACTORS

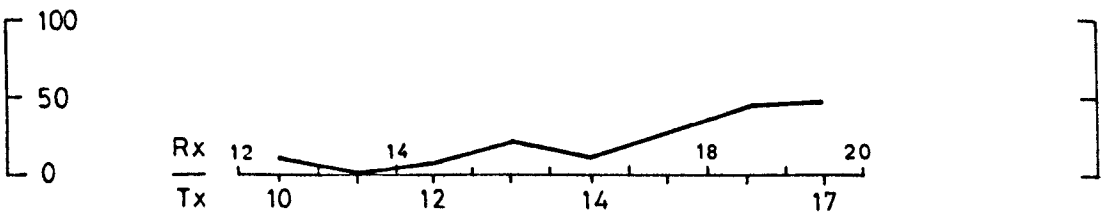


MATHIATIS AREA

LINE 6

THE LOG_e T DECAY FACTORS

d(1.0)



d(0.5)

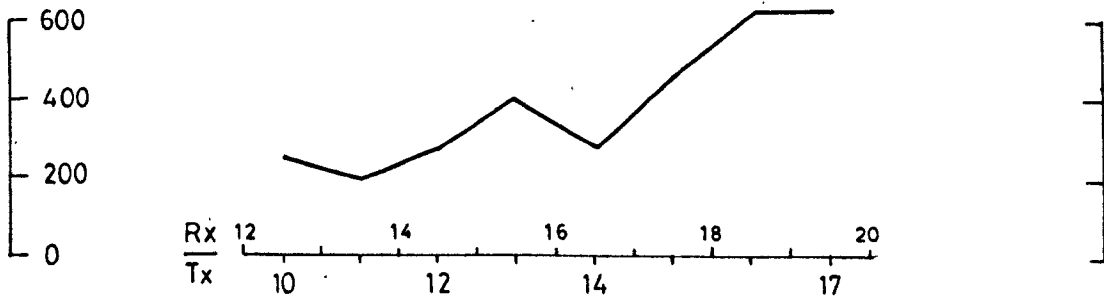


TABLE 19

MATHIAS AREA LINE 7

The Log_et Decay Factors

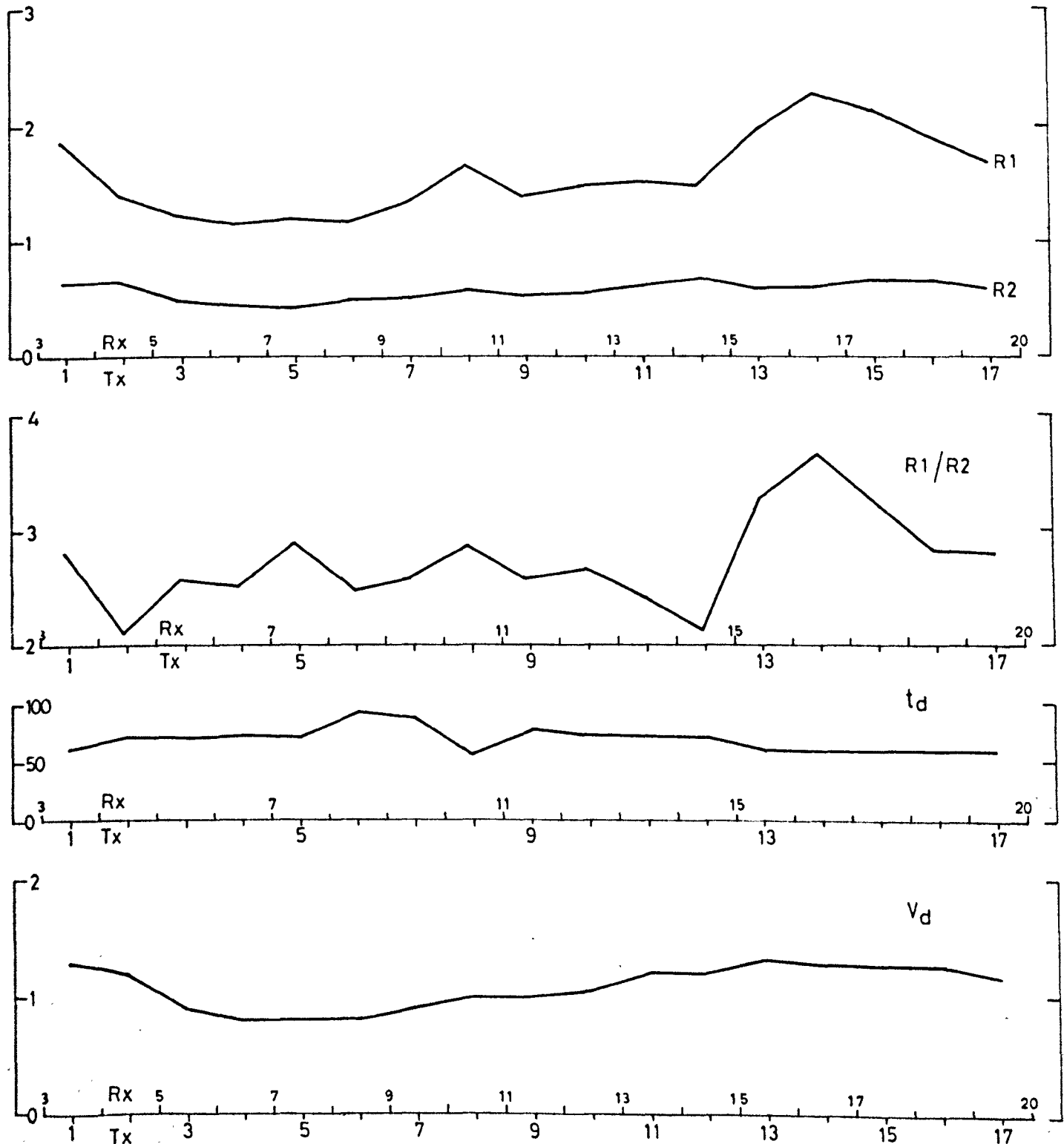
<u>C</u>	<u>P1-P2</u>	<u>R1</u>	<u>R2</u>	<u>R1/R2</u>	<u>V_d</u>	<u>t_d</u>	<u>d0.5</u>	<u>d1.0</u>
1	3- 4	1.87	0.66	2.83	1.30	58	480	35
2	4- 5	1.41	0.67	2.10	1.22	70	370	17
3	5- 6	1.25	0.49	2.55	0.90	68	130	0
4	6- 7	1.17	0.45	2.50	0.80	70	65	0
5	7- 8	1.22	0.42	2.90	0.80	68	75	0
6	8- 9	1.19	0.48	2.47	0.80	90	73	0
7	9-10	1.35	0.52	2.59	0.90	85	190	0
8	10-11	1.66	0.58	2.86	1.00	56	170	0
9	11-12	1.39	0.54	2.57	0.97	75	200	0
10	12-13	1.49	0.56	2.66	1.04	70	260	3
11	13-14	1.53	0.63	2.42	1.20	70	360	10
12	14-15	1.49	0.69	2.15	1.18	70	280	12
13	15-16	1.96	0.60	3.26	1.30	60	300	10
14	16-17	2.28	0.62	3.67	1.26	60	450	25
15	17-18	2.14	0.66	3.24	1.26	60	360	20
16	18-19	1.88	0.66	2.84	1.26	60	320	16
17	19-20	1.67	0.59	2.83	1.14	60	250	8

FIG. 86 (a)

MATHIATIS AREA

LINE 7

THE LOG_e T DECAY FACTORS



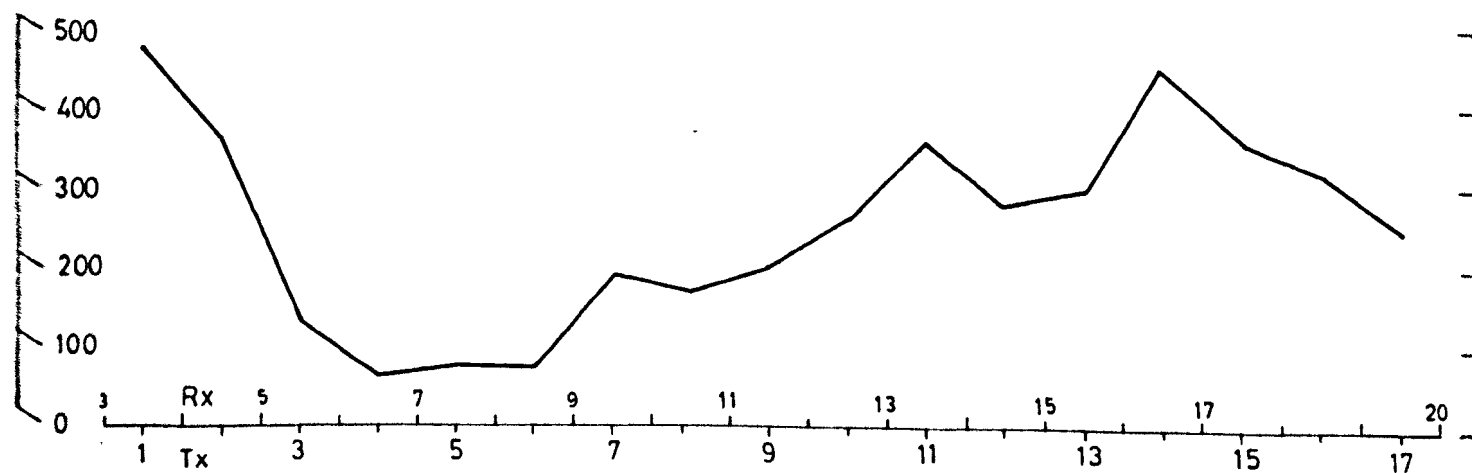
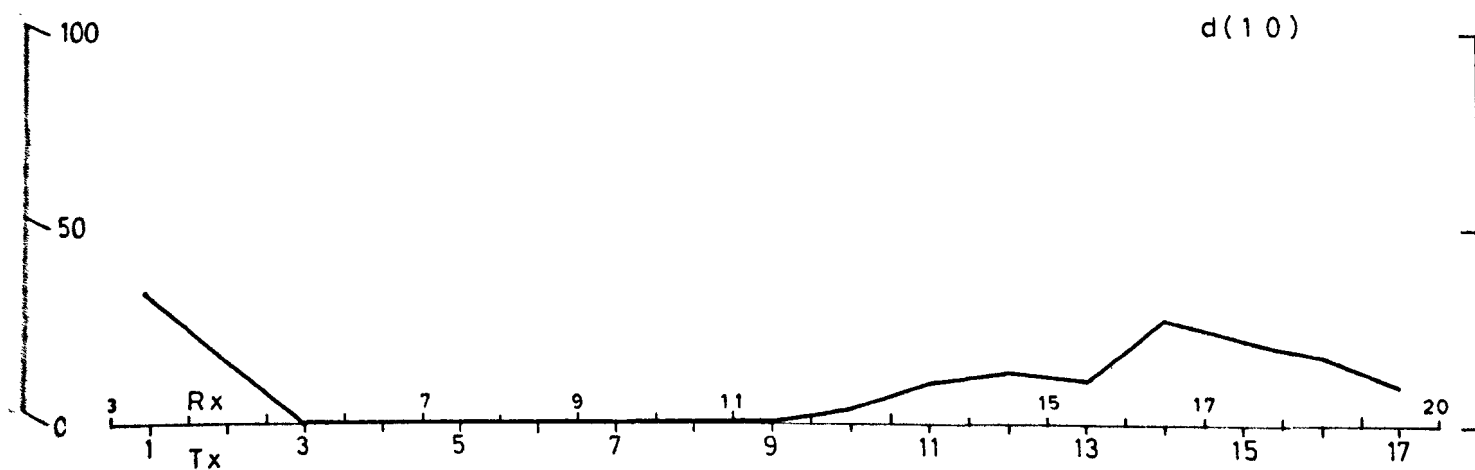
MATHIATIS AREALINE 7THE LOG_e T DECAY FACTORS

TABLE 20

NATHIATIS AREA

Table summarizing the Log_{10} Decay Factors over the mineralizations and the barren rocks.

	<u>Western Mineralization</u>	<u>Eastern Mineralization</u>	<u>Barren Rocks</u>
R1	1.5-2.0	2.9	1.5
R2	1.0	1.5	0.5
R1/R2	<2.0	<2.0	>2.0
V_d	2.25	3.3	1.5
d0.5	1900	6000	<300
d1.0	350	1500-2200	0-10
d1.5	5	320	0

TABLE 21MATHIAS AREA LINE 1The Bertin and Loeb's (modified) Functions

<u>C</u>	<u>P1-P2</u>	<u>$\rho/2\pi$</u>	<u>A1</u>	<u>A2</u>	<u>A1/A2</u>
1	3- 4	1.90	0.23	0.05	4.53
2	4- 5	1.65	-	-	-
3	5- 6	1.52	0.78	0.10	7.65
4	6- 7	3.37	0.64	0.20	3.19
5	7- 8	5.13	0.37	0.17	2.13
6	8- 9	4.03	0.41	0.17	2.33
7	9-10	5.95	0.30	0.14	2.14
8	10-11	9.73	0.18	0.08	2.09
9	11-12	14.41	0.11	0.05	2.03
10	12-13	13.60	0.16	0.06	2.51
11	13-14	15.10	0.14	0.06	2.45
12	14-15	18.48	0.09	0.07	1.28
13	15-16	20.58	0.12	0.07	1.63
14	16-17	16.44	0.10	0.07	1.37
15	17-18	12.48	0.13	0.07	1.85
16	18-19	15.96	0.09	0.06	1.43
17	19-20	15.75	0.08	0.04	1.77

LINE 1

THE BERTIN AND LOEB'S (MODIFIED) FUNCTIONS

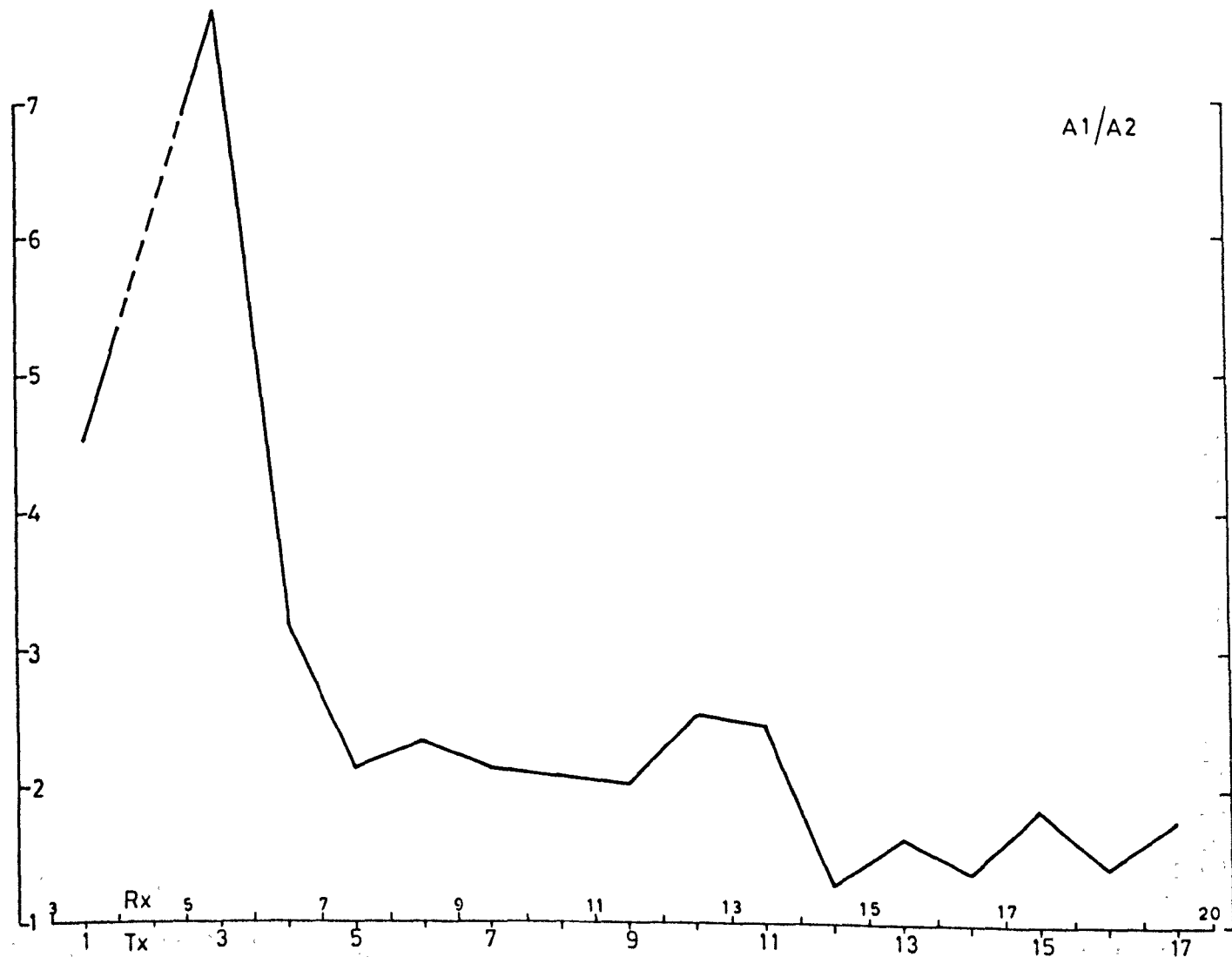
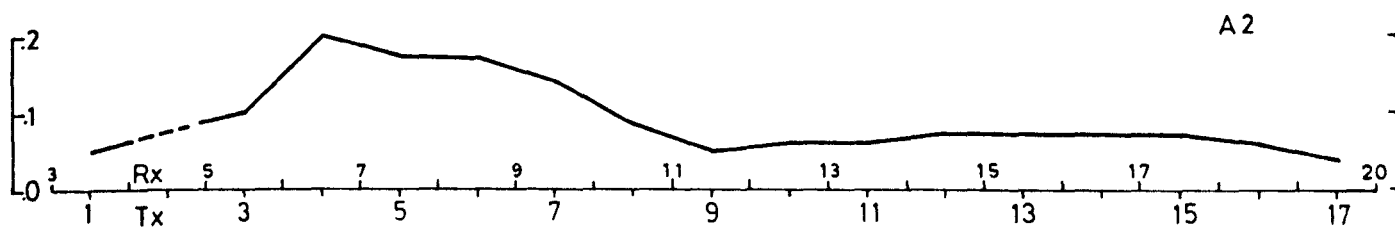
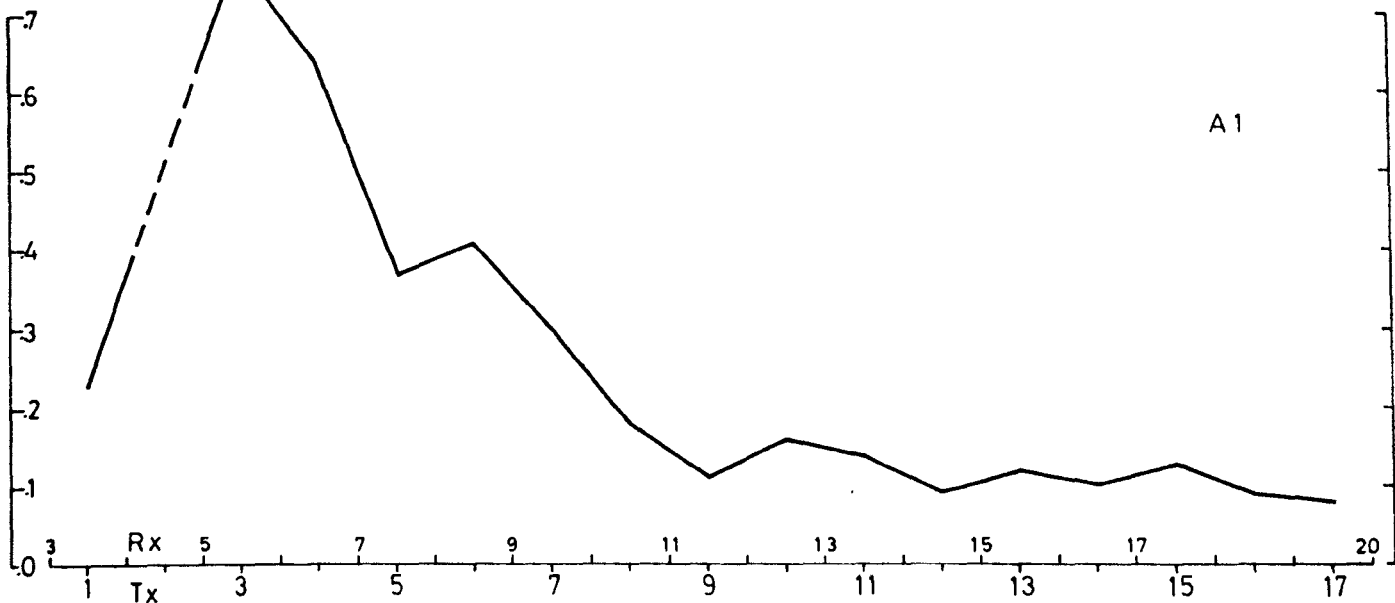


TABLE 22

MATHIATIS AREA LINE 2

The Bertin and Loeb's (modified) Functions

<u>C</u>	<u>P1-P2</u>	<u>$\rho/2\pi$</u>	<u>A1</u>	<u>A2</u>	<u>A1/A2</u>
2	4- 5	2.76	0.22	0.14	1.56
3	5- 6	2.07	0.64	0.29	2.17
4	6- 7	3.09	0.66	0.31	2.09
5	7- 8	4.50	0.31	0.13	2.33
6	8- 9	5.28	0.18	0.13	1.32
7	9-10	5.28	0.17	0.09	1.90
8	10-11	7.65	0.13	0.07	1.80
9	11-12	11.70	0.15	0.09	1.64
10	12-13	10.85	0.17	0.17	1.00
11	13-14	13.92	0.15	0.09	1.56
12	14-15	11.70	0.19	0.20	0.98
13	15-16	11.64	0.18	0.16	1.16
14	16-17	21.50	0.09	0.07	1.17
15	17-18	20.00	0.06	0.04	1.46

LINE 2

THE BERTIN AND LOEB'S (MODIFIED) FUNCTIONS

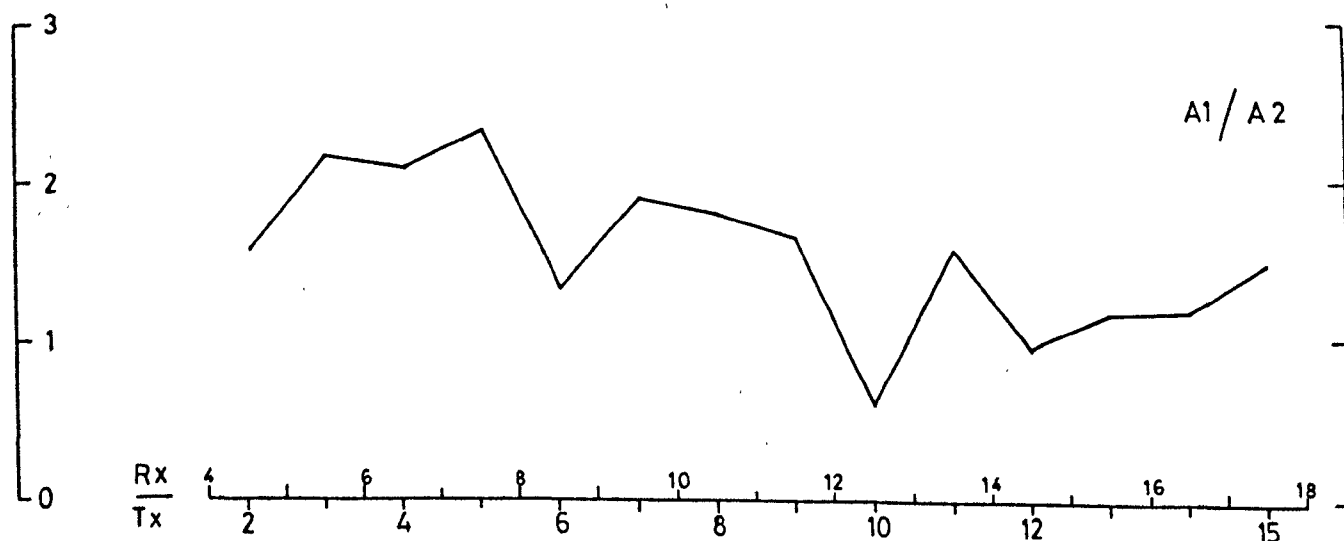
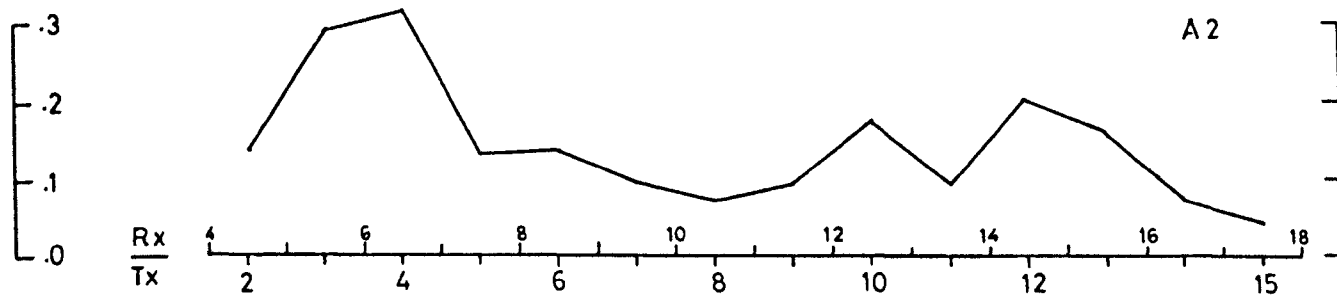
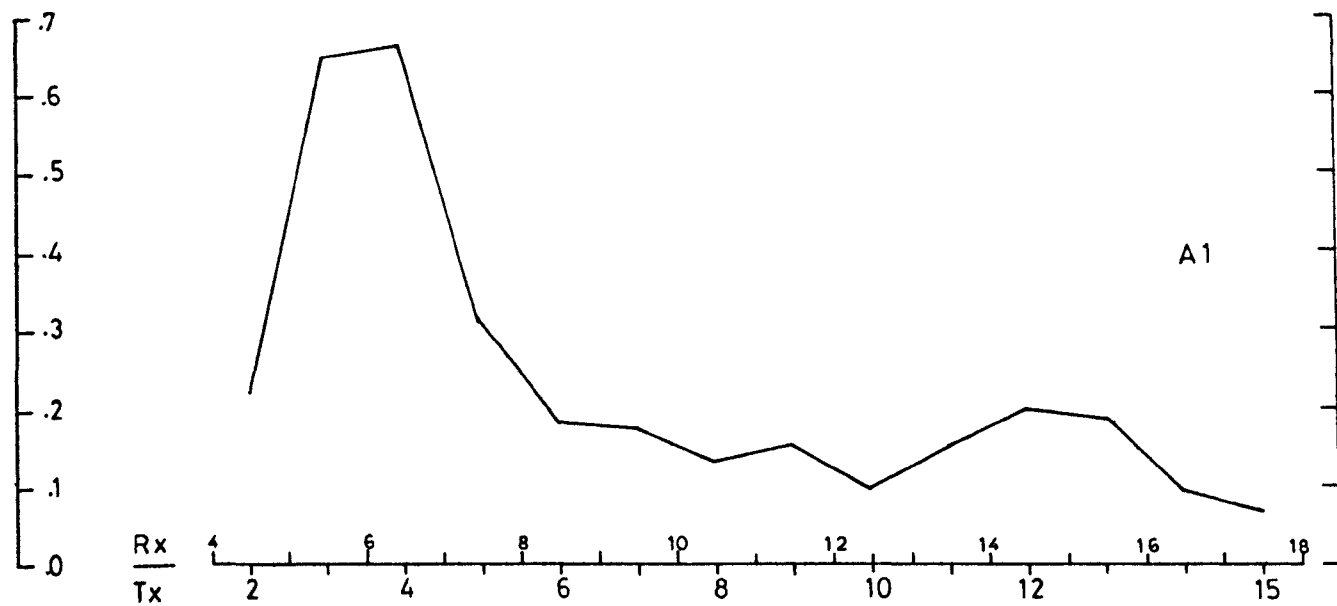


TABLE 23

MATHIAS AREA LINE 3

The Bertin and Loeb's (modified) Functions

<u>C</u>	<u>P1-P2</u>	<u>$\rho/2\pi$</u>	<u>A1</u>	<u>A2</u>	<u>A1/A2</u>
1	4- 5	2.30	0.18	0.14	1.26
2	5- 6	3.50	0.26	0.09	2.90
3	6- 7	3.00	0.39	0.26	1.50
4	7- 8	4.20	0.21	0.14	1.50
5	8- 9	5.00	0.28	0.08	3.60
6	9-10	6.00	0.12	0.11	1.15
7	10-11	6.30	0.18	0.10	1.80
8	11-12	7.90	0.12	0.08	1.16
9	12-13	8.10	0.33	0.27	1.19
10	13-14	9.60	0.28	0.16	1.68
11	14-15	10.20	0.17	0.08	2.11
12	15-16	10.50	0.17	0.14	1.24
13	16-17	10.70	0.19	0.13	1.40
14	17-18	13.90	0.13	0.12	1.08

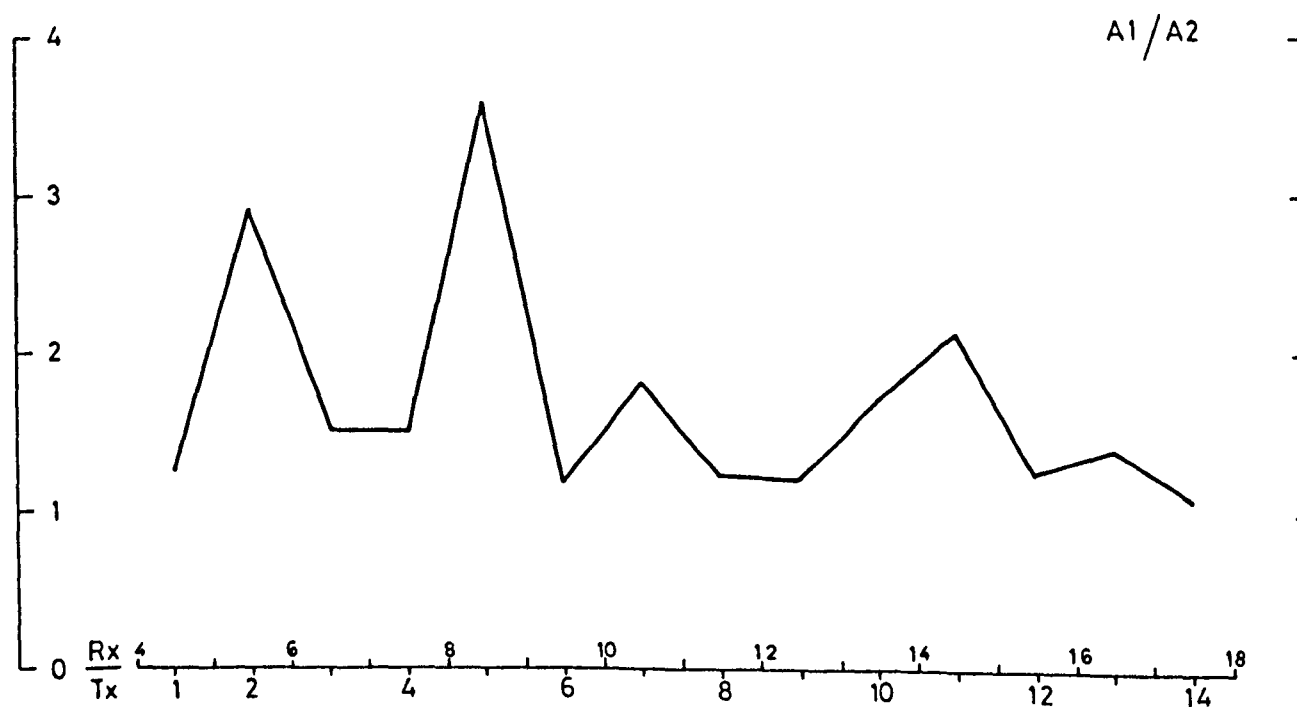
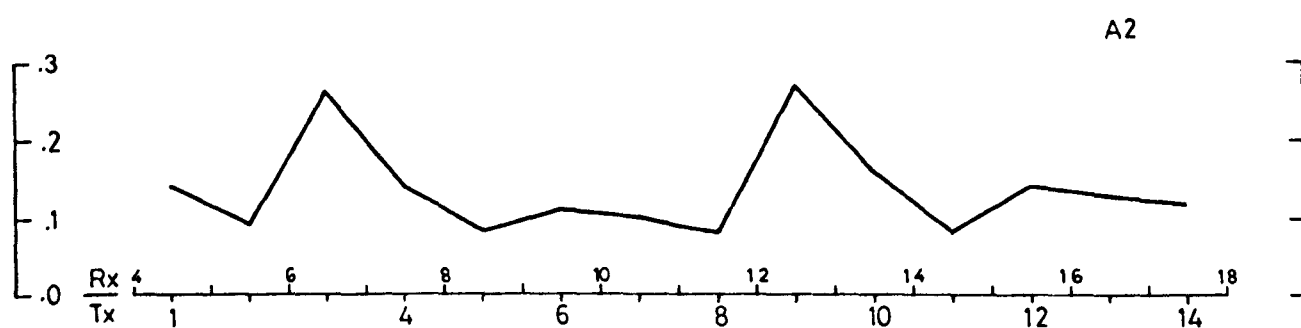
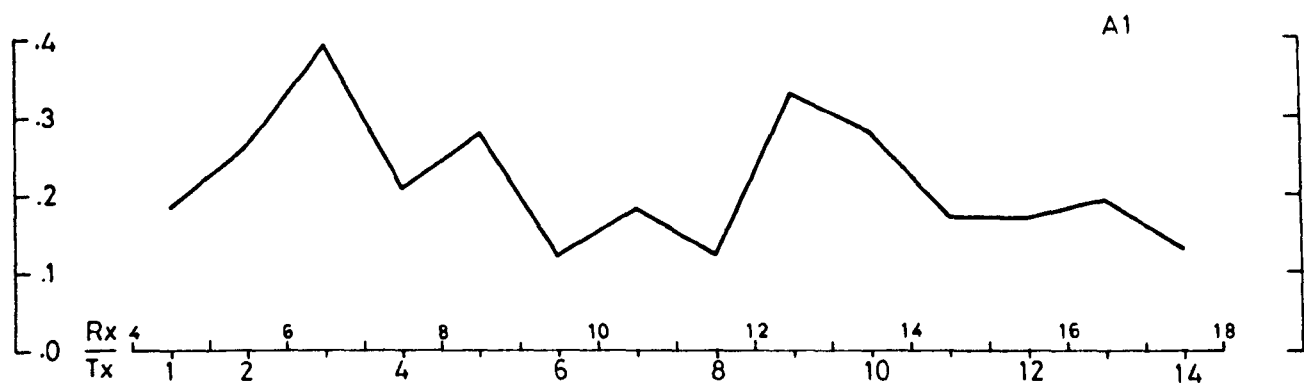
MATHIATIS AREALINE 3THE BERTIN AND LOEB'S (MODIFIED) FUNCTIONS

TABLE 24

MATHIATLS AREA LINE 4

The Bertin and Loeb's (modified) Functions

<u>C</u>	<u>P1-P2</u>	<u>$\rho/2\pi$</u>	<u>A1</u>	<u>A2</u>	<u>A1/A2</u>
3	5- 6	3.75	0.15	0.09	1.58
4	6- 7	3.99	0.18	0.12	1.46
5	7- 8	3.28	0.19	0.15	1.30
6	8- 9	3.35	0.22	0.10	2.12
7	9-10	3.35	0.20	0.14	1.45
8	10-11	2.64	0.28	0.18	1.56
9	11-12	4.46	0.19	0.09	1.90
10	12-13	7.12	0.12	0.08	1.47
11	13-14	7.13	0.17	0.12	1.39
12	14-15	10.03	0.16	0.15	1.08
13	15-16	12.64	0.15	0.12	1.27
14	16-17	15.17	0.08	0.07	1.17
15	17-18	10.01	0.14	0.09	1.47
16	18-19	11.23	0.12	0.09	1.29
17	19-20	17.60	0.06	0.05	1.10
18	20-21	15.08	0.08	0.05	1.44

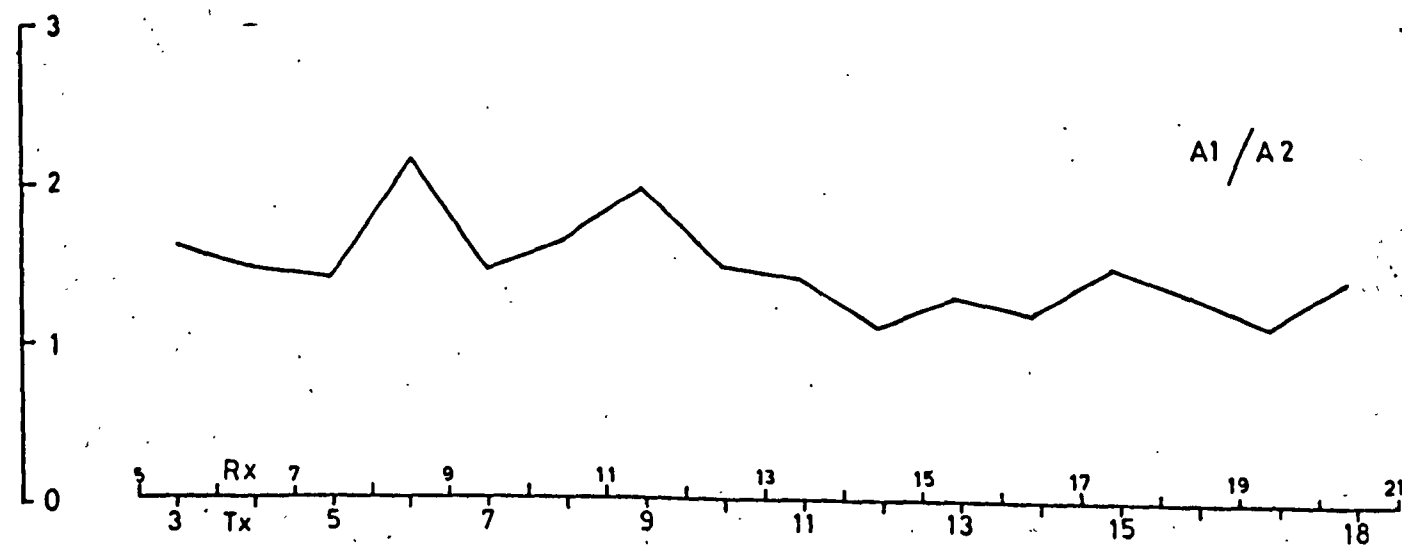
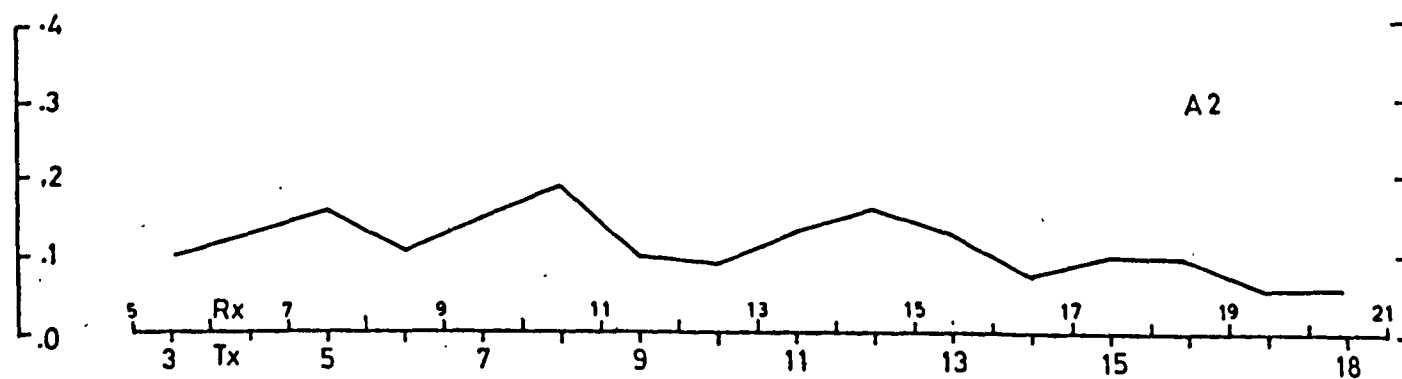
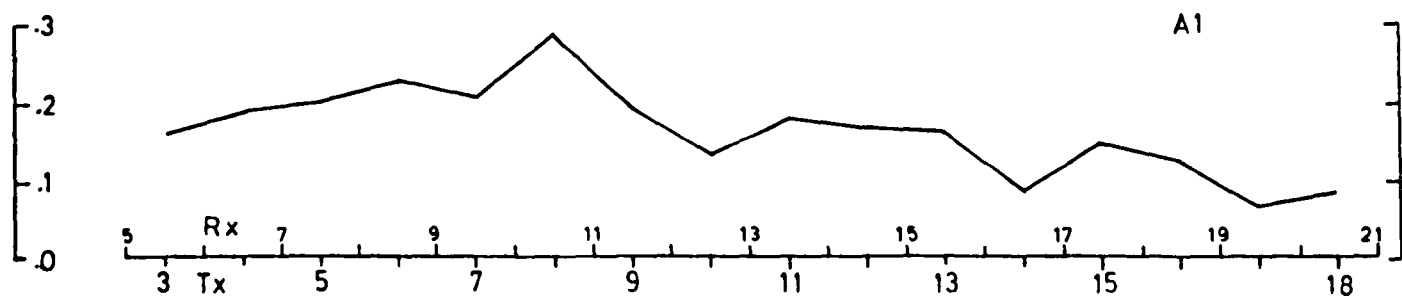
MATHIATIS AREALINE 4THE BERTIN AND LOEB'S (MODIFIED) FUNCTIONS

TABLE 25

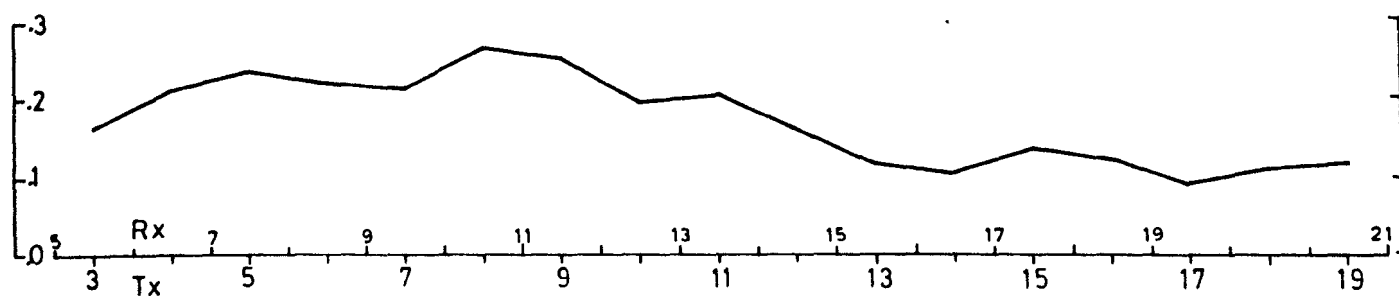
MATHIAS AREA LINE 5

The Bertin and Loeb's (modified) Functions

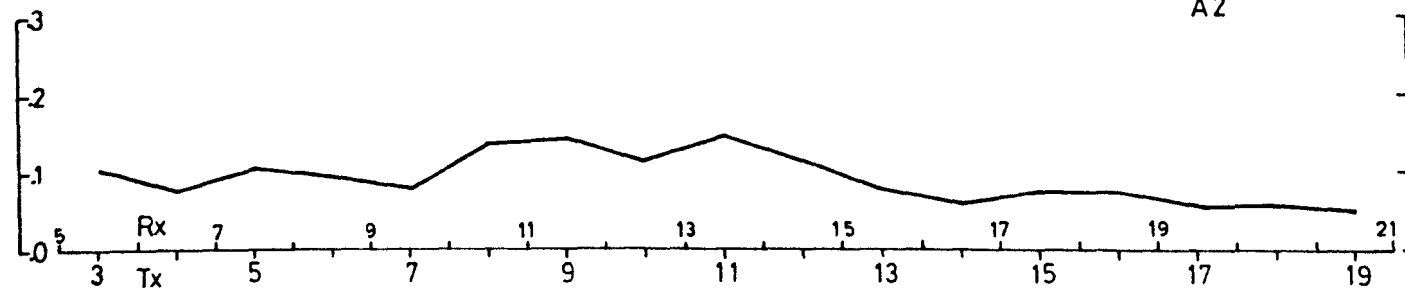
<u>C</u>	<u>P1-P2</u>	<u>$\rho/2\pi$</u>	<u>A1</u>	<u>A2</u>	<u>A1/A2</u>
3	5- 6	3.59	0.22	0.10	2.13
4	6- 7	3.31	0.21	0.07	2.67
5	7- 8	3.66	0.23	0.10	2.26
6	8- 9	3.79	0.22	0.09	2.35
7	9-10	3.76	0.21	0.07	2.83
8	10-11	3.43	0.26	0.13	1.98
9	11-12	3.77	0.25	0.14	1.74
10	12-13	3.82	0.19	0.11	1.68
11	13-14	5.03	0.20	0.14	1.39
12	14-15	5.59	0.16	0.11	1.42
13	15-16	7.33	0.11	0.07	1.47
14	16-17	10.81	0.10	0.05	1.81
15	17-18	9.19	0.13	0.07	1.74
16	18-19	9.39	0.12	0.07	1.60
17	19-20	11.86	0.09	0.05	1.65
18	20-21	9.30	0.11	0.05	1.98
19	21-22	9.79	0.11	0.05	2.25

MATHIATIS AREALINE 5THE BERTIN AND LOEB'S (MODIFIED) FUNCTIONS

A1



A2



A1/A2

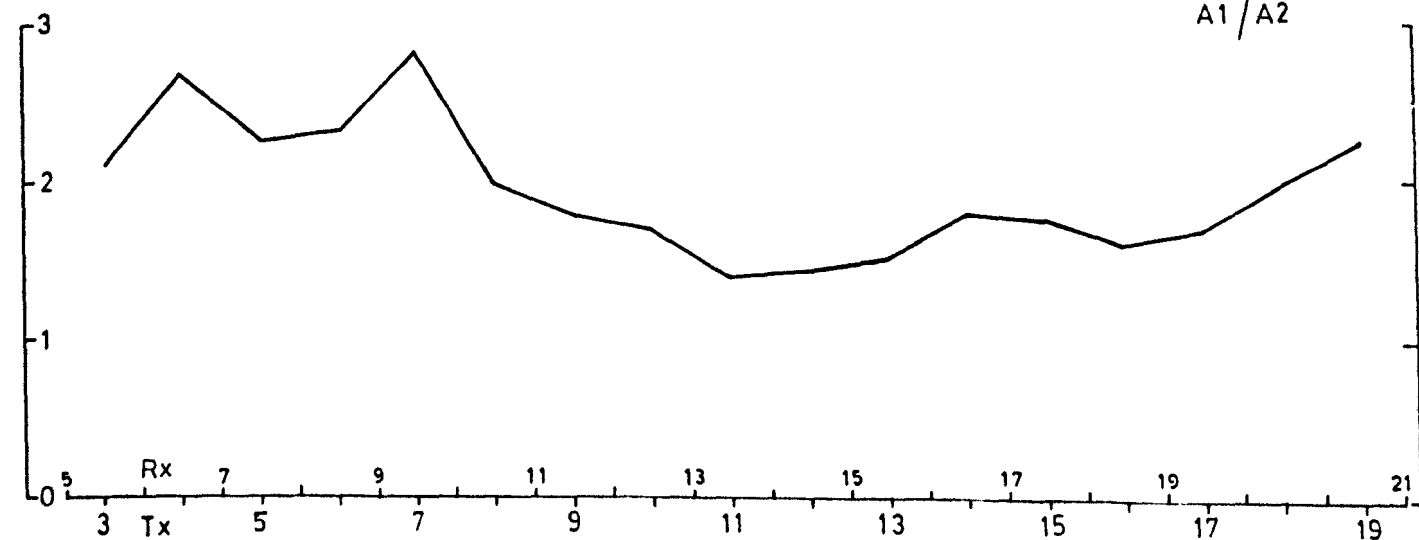


TABLE 26

MATHIAS AREA LINE 6

The Bertin and Loeb's (modified) Functions

<u>C</u>	<u>P1-P2</u>	<u>$\rho/2\pi$</u>	<u>A1</u>	<u>A2</u>	<u>A1/A2</u>
10	12-13	2.63	0.26	0.19	1.61
11	13-14	2.84	0.33	0.20	1.61
12	14-15	2.70	0.25	0.17	1.48
13	15-16	3.86	0.21	0.11	1.78
14	16-17	6.83	0.09	0.08	1.05
15	17-18	11.02	0.06	0.06	1.08
16	18-19	7.69	0.13	0.09	1.45
17	19-20	7.95	0.12	0.06	1.75

MATHIATIS AREA

LINE 6

THE BERTIN AND LOEB'S (MODIFIED) FUNCTIONS

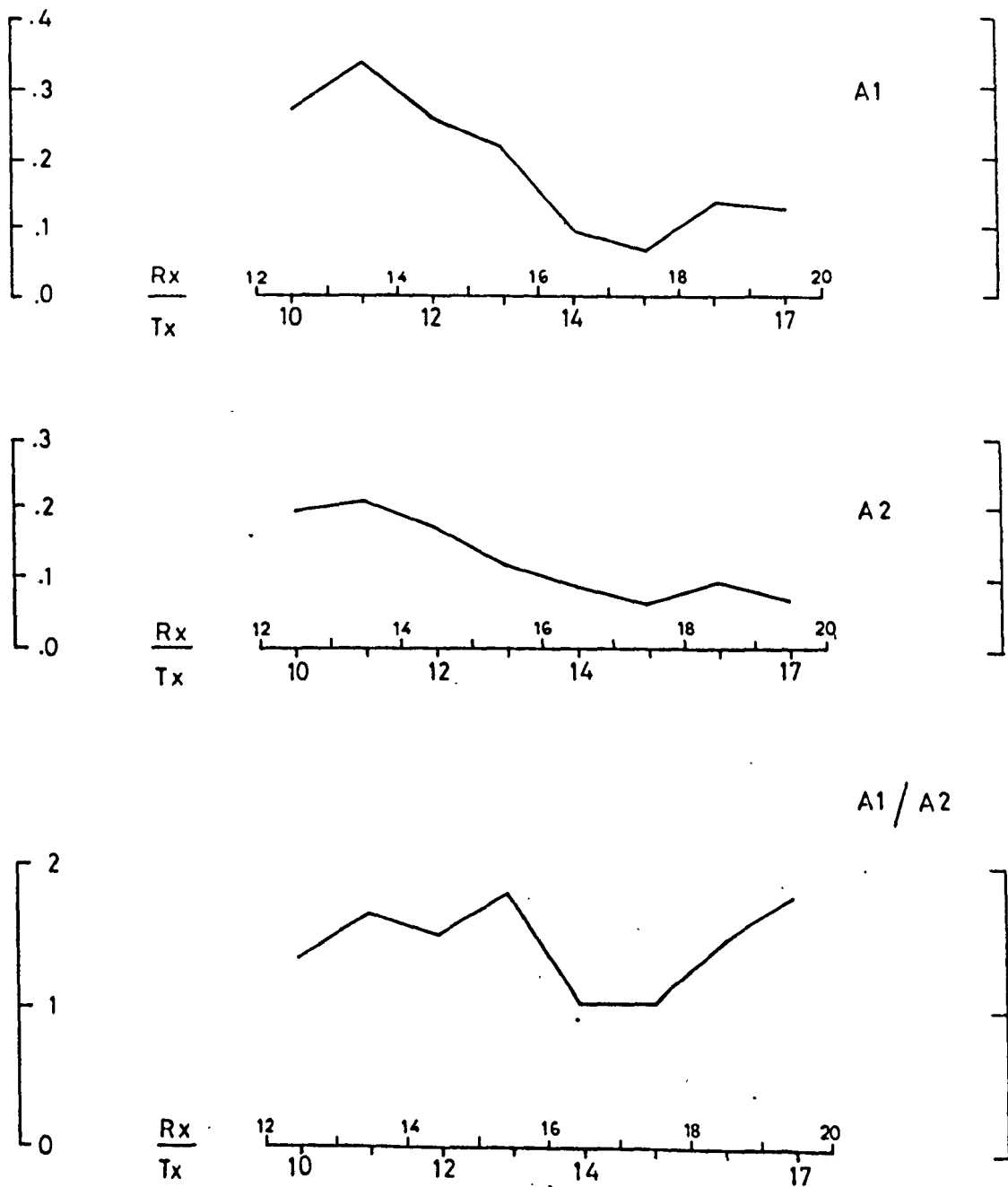


TABLE 27MATHIAS AREA LINE 7The Bertin and Loeb's (modified) Functions

<u>C</u>	<u>P1-P2</u>	<u>$\rho/2\pi$</u>	<u>Λ_1</u>	<u>Λ_2</u>	<u>Λ_1/Λ_2</u>
1	3- 4	5.06	0.16	0.09	1.72
2	4- 5	7.12	0.10	0.07	1.38
3	5- 6	5.83	0.11	0.05	2.08
4	6- 7	4.45	0.12	0.08	1.49
5	7- 8	5.01	0.13	0.06	1.99
6	8- 9	5.61	0.12	0.06	1.89
7	9-10	6.76	0.10	0.05	1.86
8	10-11	2.95	0.24	0.10	2.32
9	11-12	4.22	0.17	0.10	1.66
10	12-13	5.09	0.16	0.07	2.10
11	13-14	4.04	0.24	0.13	1.83
12	14-15	4.23	0.21	0.09	2.18
13	15-16	6.50	0.12	0.08	1.48
14	16-17	6.07	0.18	0.07	2.44
15	17-18	4.02	0.24	0.13	1.84
16	18-19	7.16	0.12	0.08	1.48
17	19-20	9.21	0.08	0.05	1.57

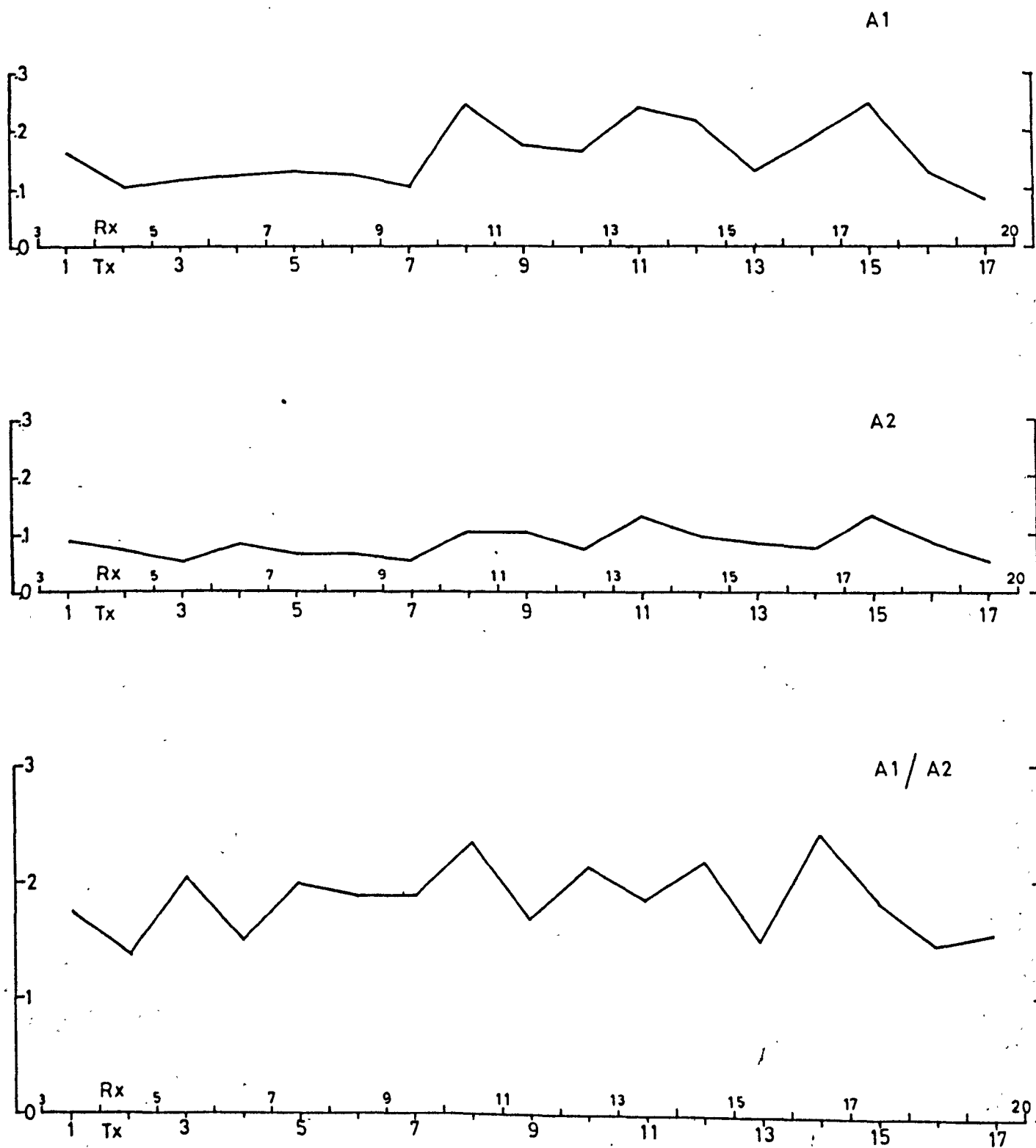
MATHIATIS AREALINE 7THE BERTIN AND LOEB'S (MODIFIED) FUNCTIONS

TABLE 28

MATHIATIS AREA

Table summarizing the Bertin and Loeb's (Modified) Functions over the mineralization and the barren rocks.

	<u>Western Mineralization</u>	<u>Eastern Mineralization</u>	<u>Barren Rocks</u>
A1	0.4-0.6	< 0.2	0.2
A2	0.2-0.3	< 0.2	0.1-0.2
A1/A2	3.1	1.0-2.0	1.5-2.8

MATHIATIS MITSEROU AREA

POLE - DIPOLE $a = 50 \text{ m}$

RESISTIVITY $\rho / 2\pi$ (Ohm-meters)

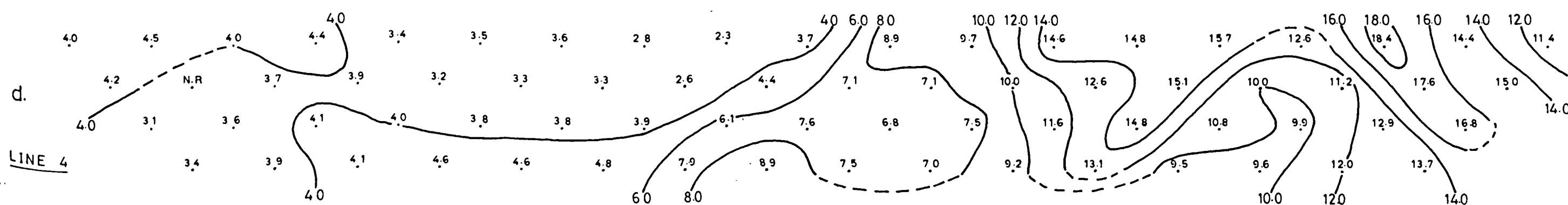
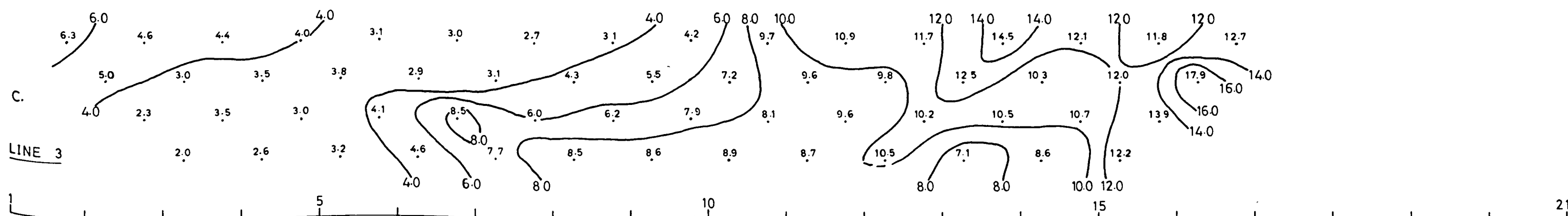
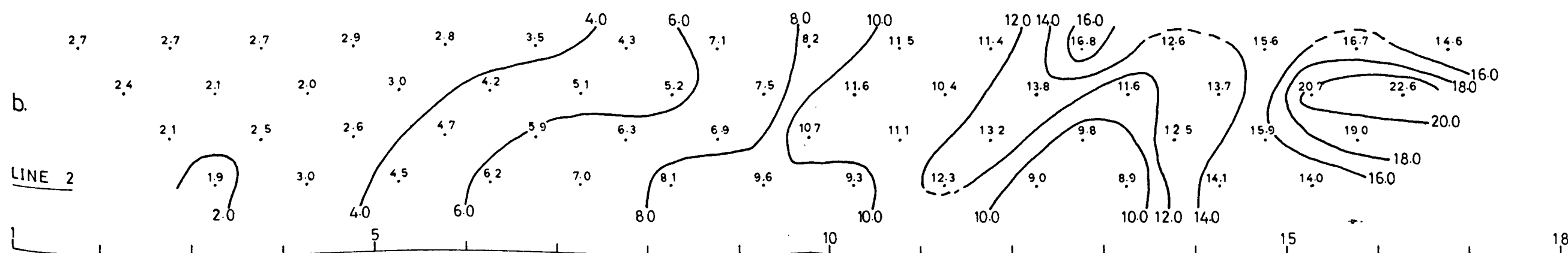
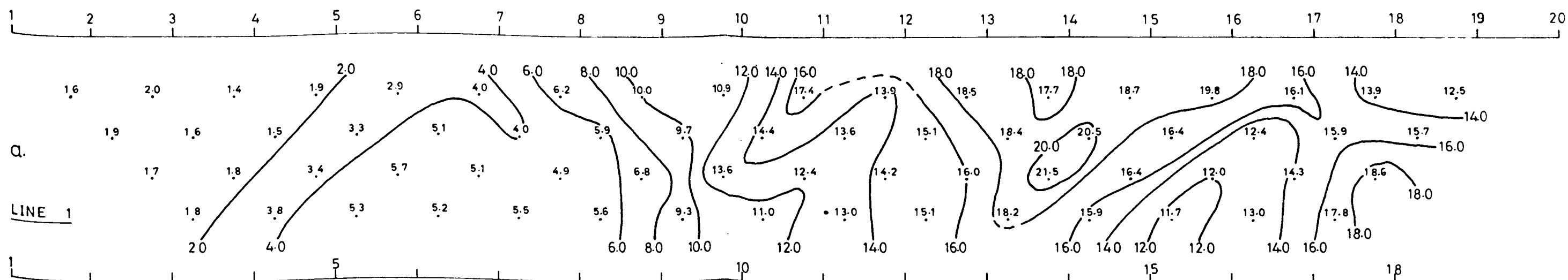
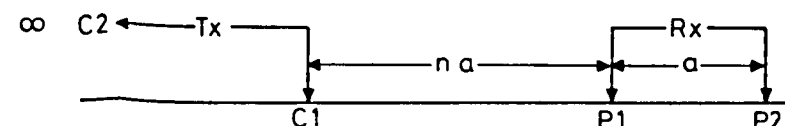


FIG. 96

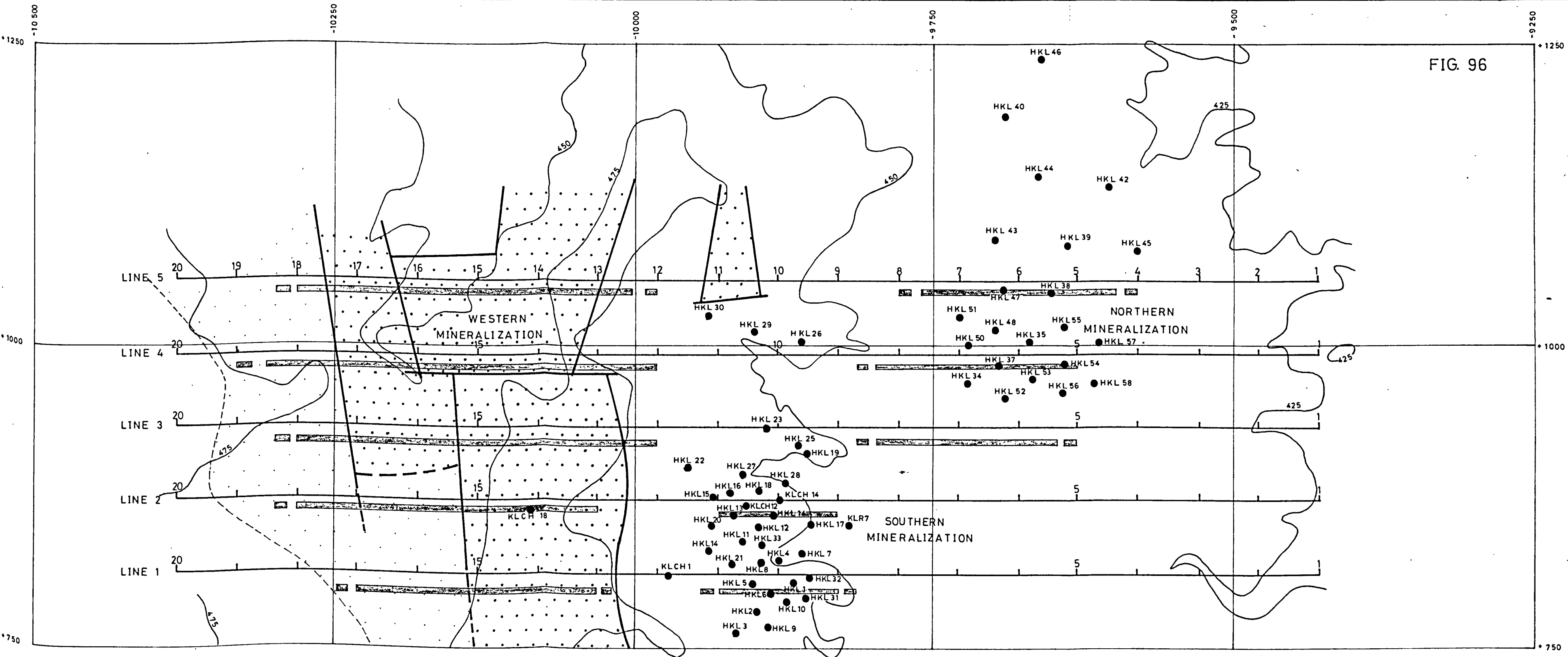


FIG. 96
GEOLOGICAL — GEOPHYSICAL MAP
OF THE KLIROU AREA

Scale 1/2500



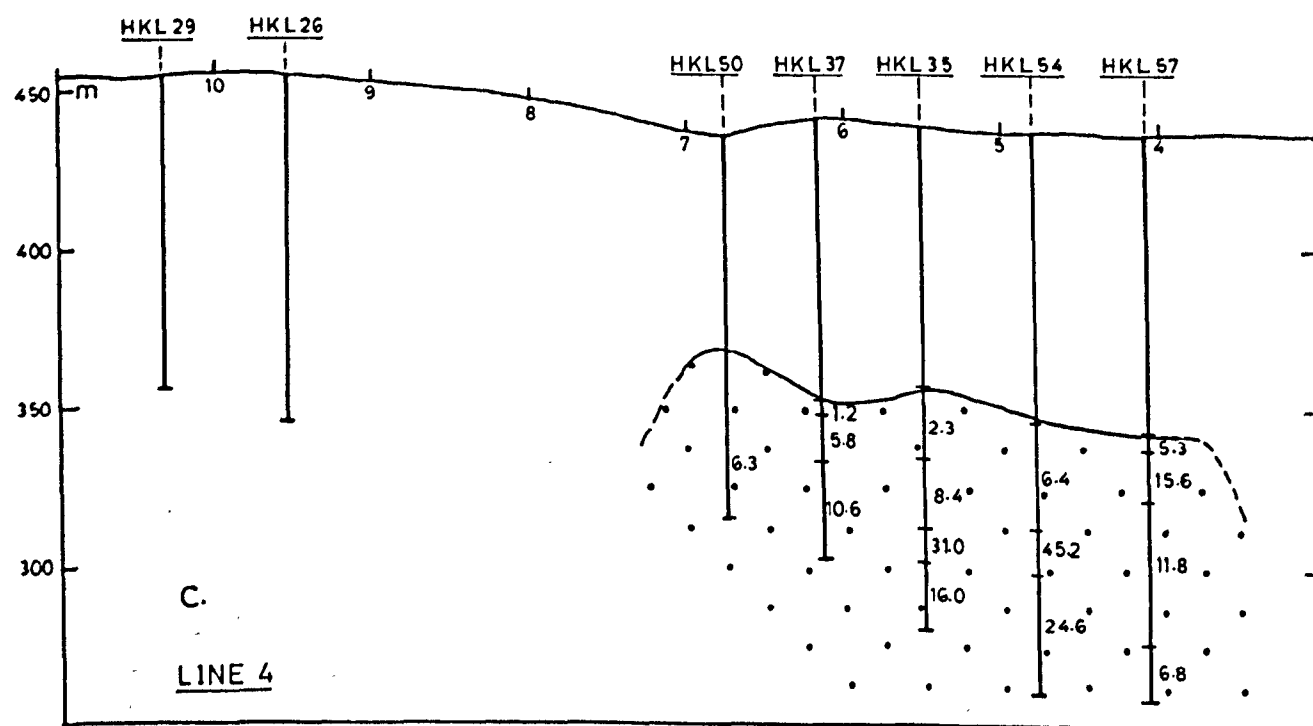
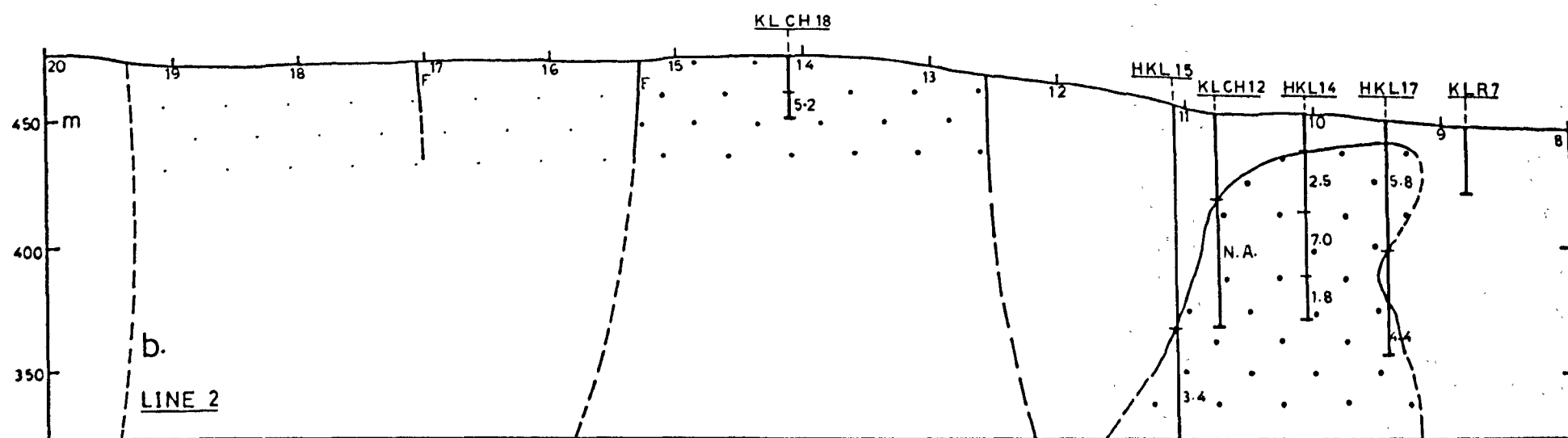
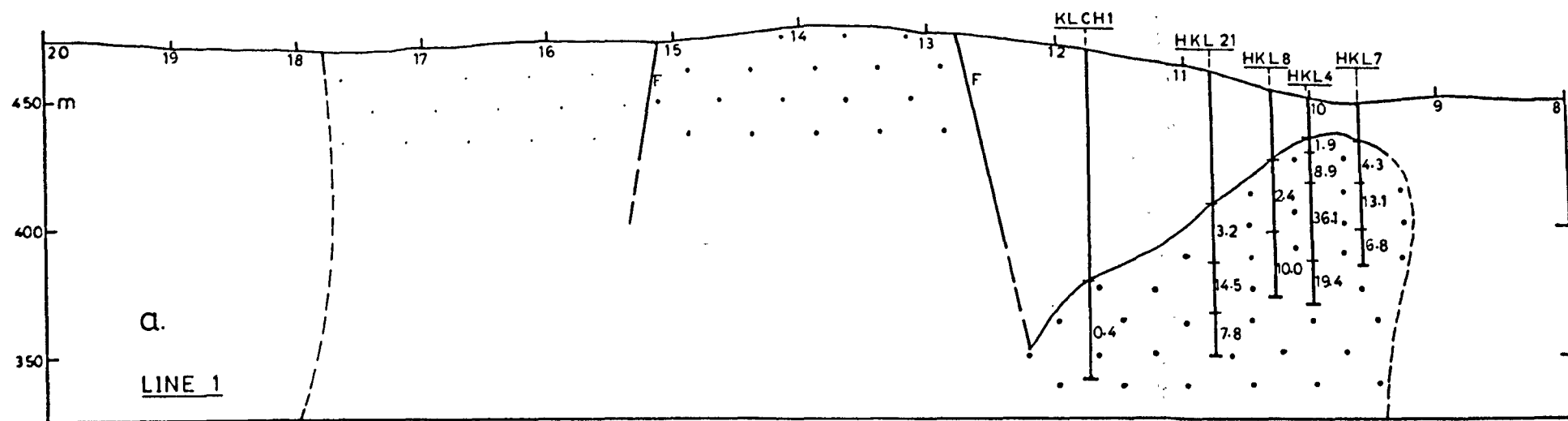
L E G E N D

- | | | |
|------------------------------------|---------------------------------------|----------|
| Lower Pillow Lavas | Fault | Borehole |
| Strong Oxidation (Gossan) | Geological Boundary | |
| Limonite Stained (Weakly Oxidised) | Contour Line (Vertical interval 25m.) | |

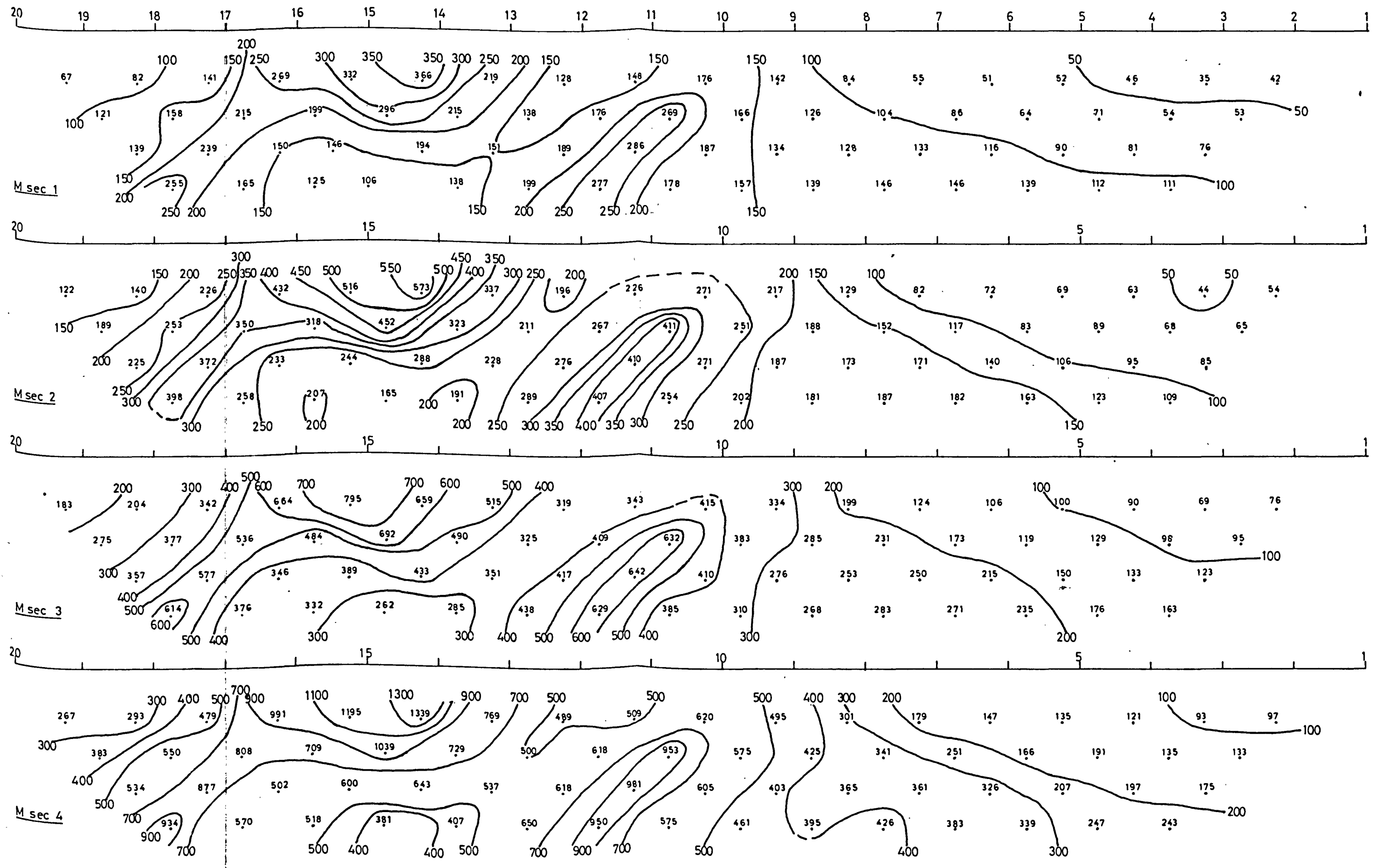
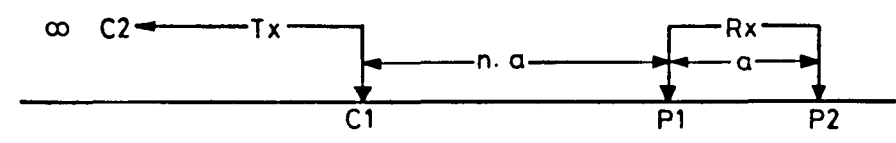
GEOLOGICAL SECTIONS ALONG THE GEOPHYSICAL LINES

Scale 1/2500

The figures denote % Sulphur values



KLIROU AREA $t_d = 30$ $t_c = 8$
LINE 1 $t_p = 50$ on/off = 1.0
POLE - DIPOLE $a = 50\text{m}$



KLIROU AREA

$t_d = 30$ $t_c = 8$

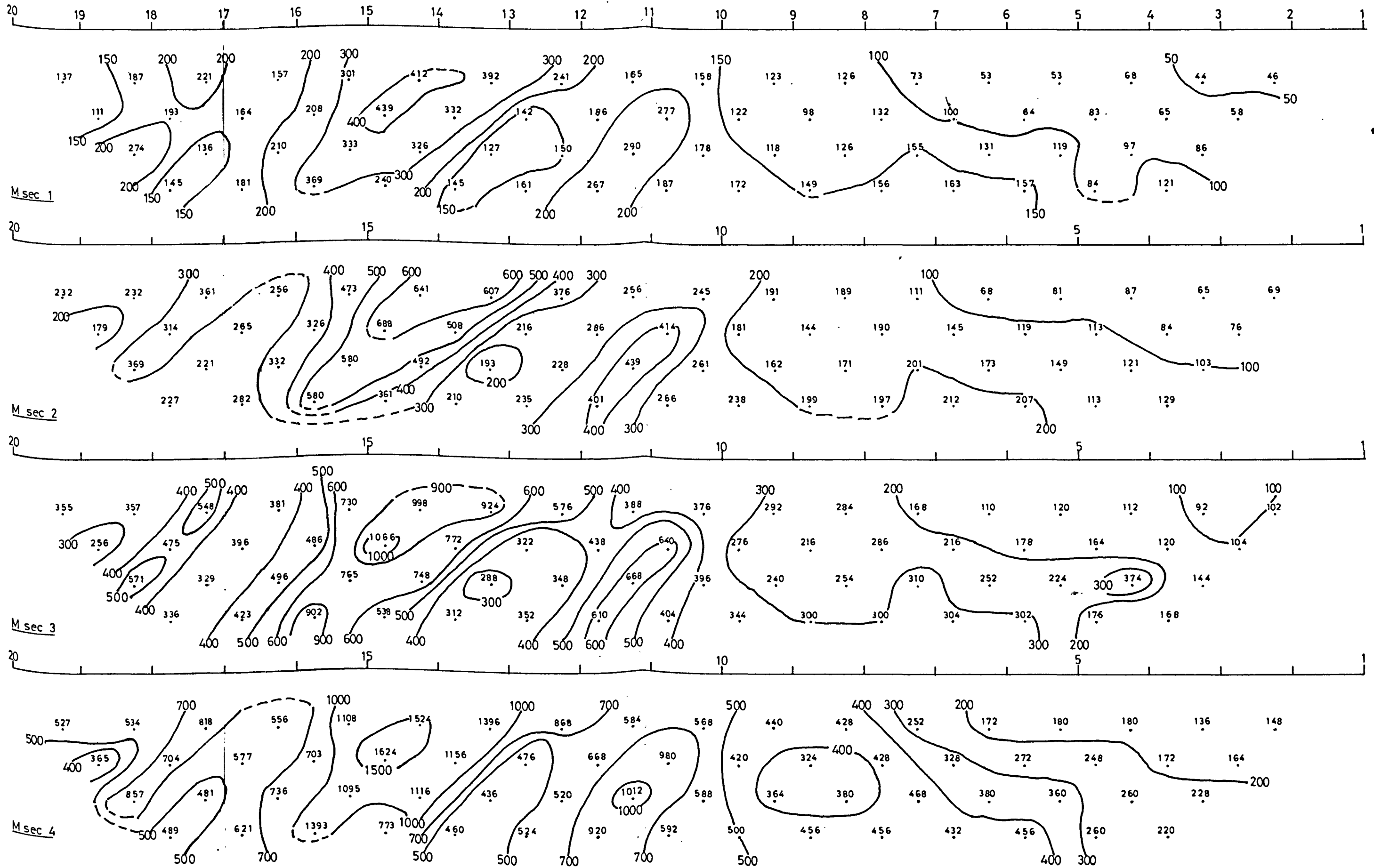
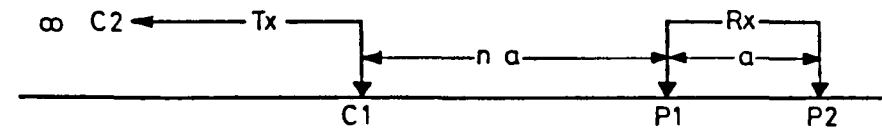
FIG. 99

LINE 2

$t_p = 50$ $on/off = 1.0$

POLE - DIPOLE

$a = 50$ m



KLIROU AREA

td = 30

tc = 8

FIG. 100

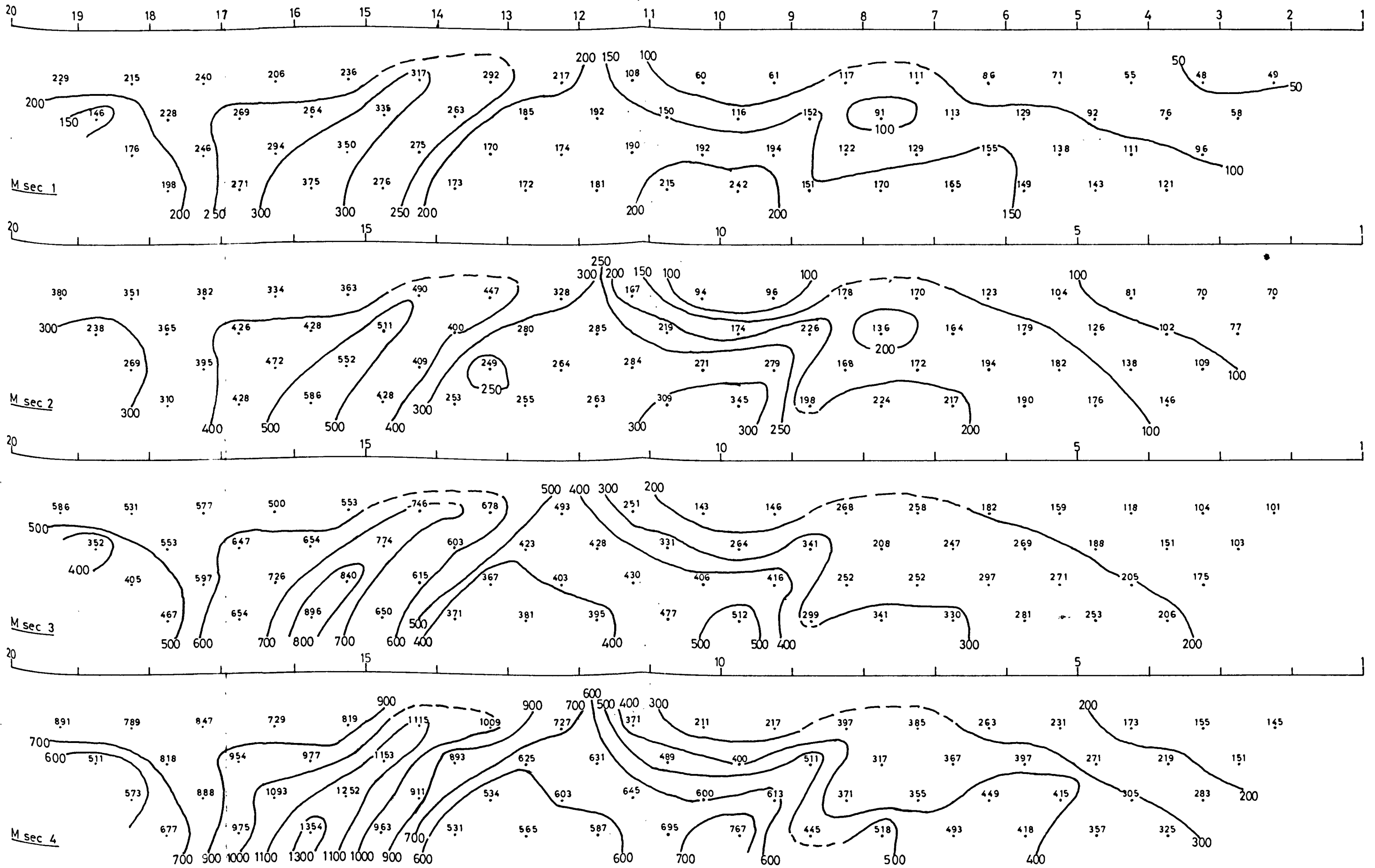
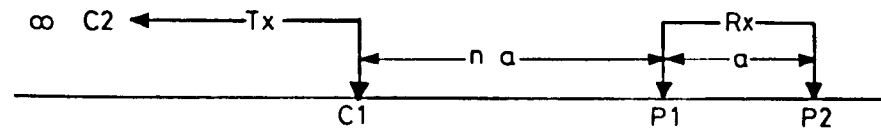
LINE 3

tp = 50

on/off = 1.0

POLE - DIPOLE

a = 50 m



KLIROU AREA

$t_d = 30$

$t_c = 8$

LINE 4

$t_p = 50$

$on/off = 1.0$

POLE - DIPOLE

$a = 50m$

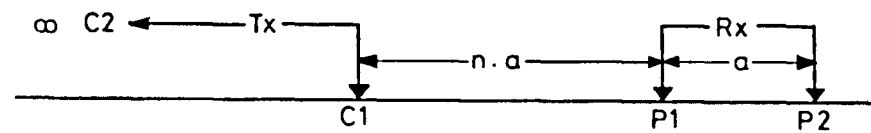
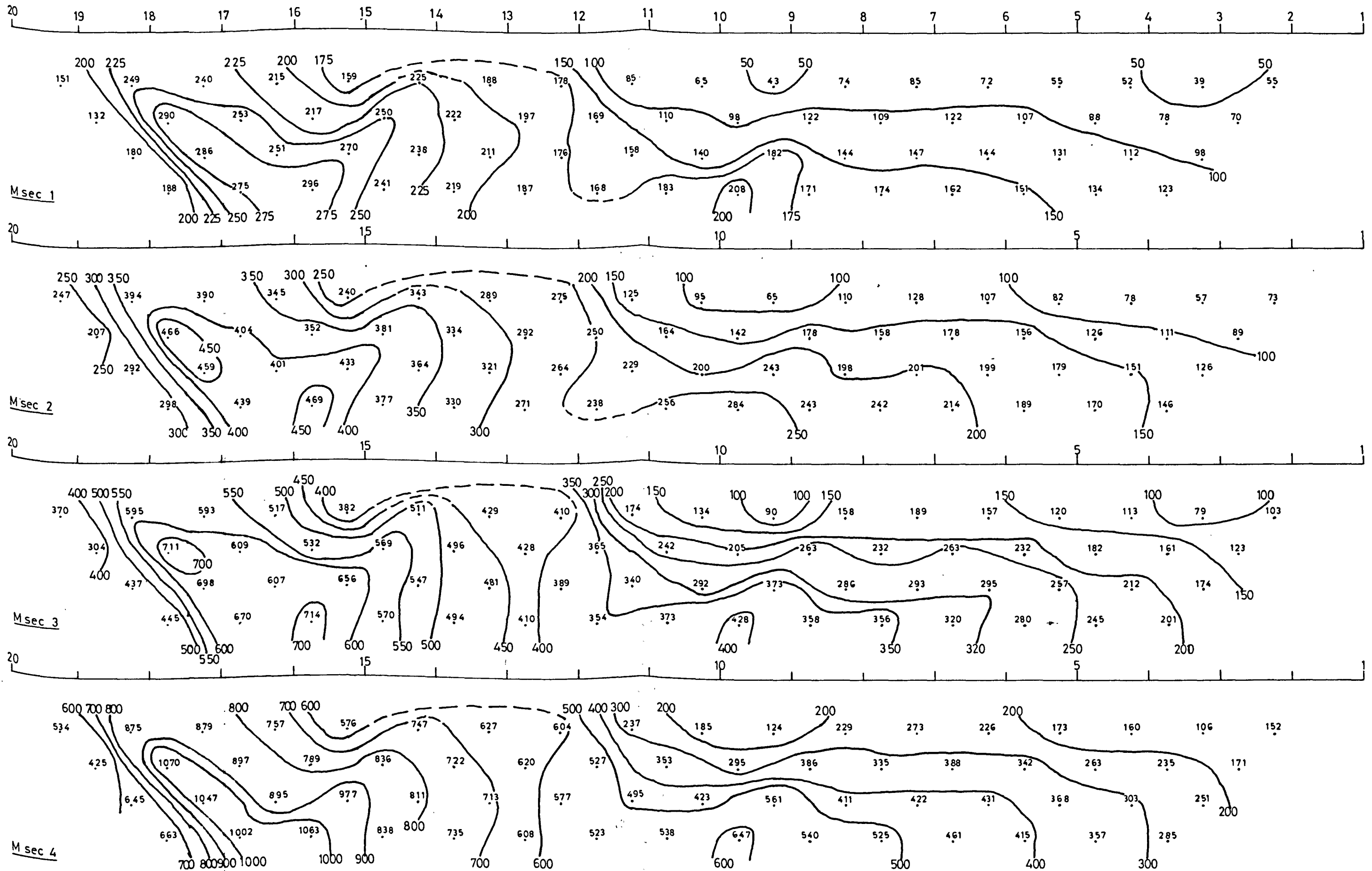


FIG. 101



KLIROU AREA
LINE 5
POLE-DIPOLE

$t_d = 30$
 $t_p = 50$
 $a = 50 \text{ m}$

$t_c = 8$
 $\text{on/off} = 1.0$

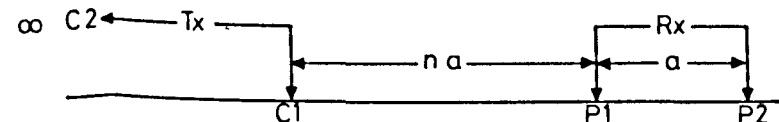


FIG. 102

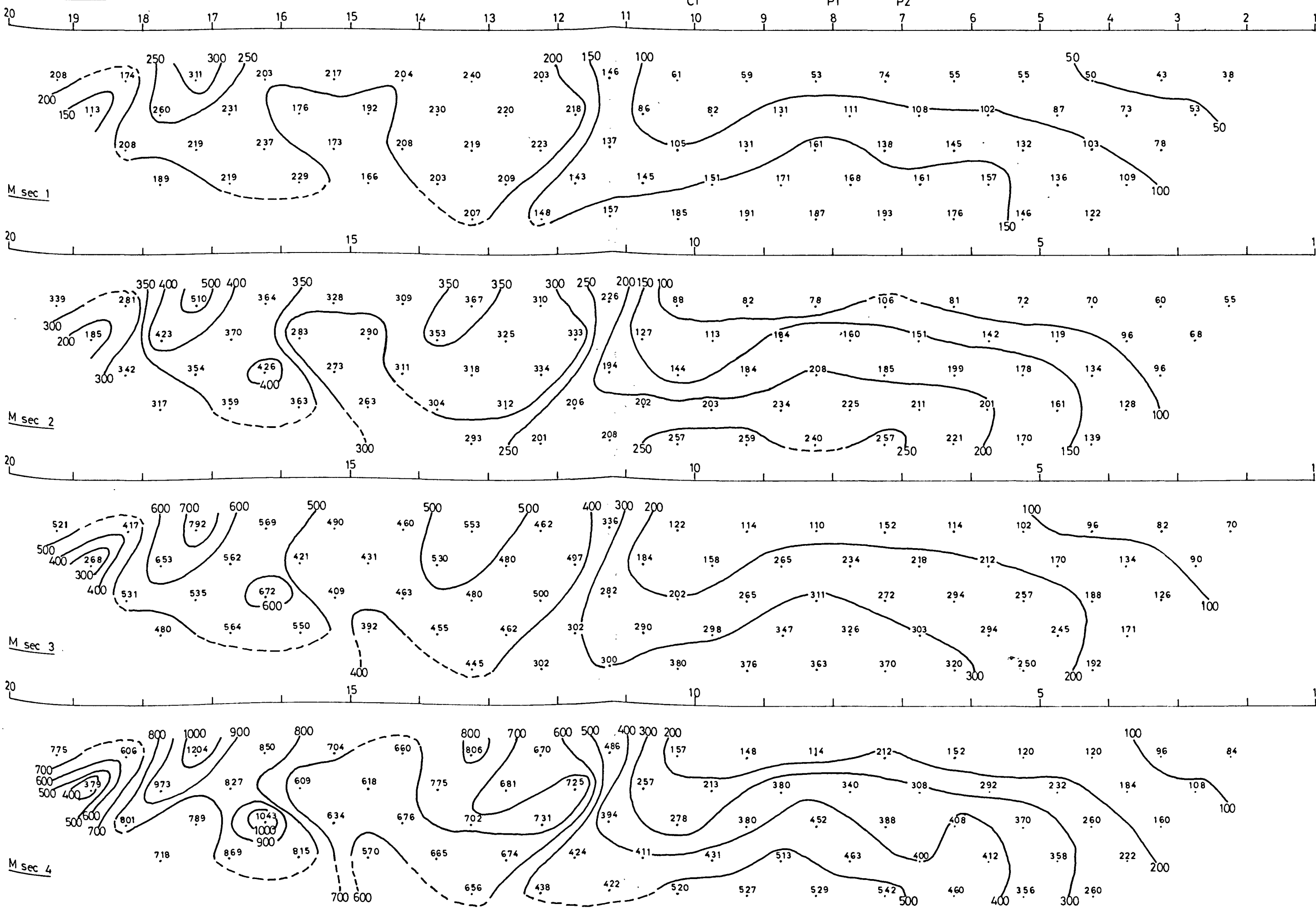


TABLE 29

KLIROU AREA LINE 1

The Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>A</u>	<u>B</u>	<u>α</u>	<u>β</u>	<u>P</u>
4	1- 2	1.40	0.33	13.03	0.71	0.09
5	2- 3	1.70	0.38	15.79	0.84	0.08
6	3- 4	2.20	0.43	17.82	0.62	0.14
7	4- 5	1.70	0.35	12.43	0.52	0.14
8	5- 6	1.80	0.79	15.03	1.00	0.13
9	6- 7	1.70	0.93	9.76	0.69	0.27
10	7- 8	2.15	1.04	9.15	0.61	0.35
11	8- 9	2.45	1.66	10.70	0.79	0.41
12	9-10	4.30	2.37	9.50	0.65	0.75
13	10-11	3.50	1.80	12.10	0.82	0.42
14	11-12	2.35	1.34	9.00	0.72	0.38
15	12-13	3.35	1.79	8.00	0.64	0.58
16	13-14	4.30	3.02	10.50	0.81	0.72
17	14-15	2.95	1.78	8.99	0.68	0.53
18	15-16	3.00	2.18	10.79	0.76	0.57
19	16-17	3.10	1.22	9.74	0.59	0.43
20	17-18	2.40	0.89	10.02	0.63	0.29

LINE 1

THE DECAY FACTORS

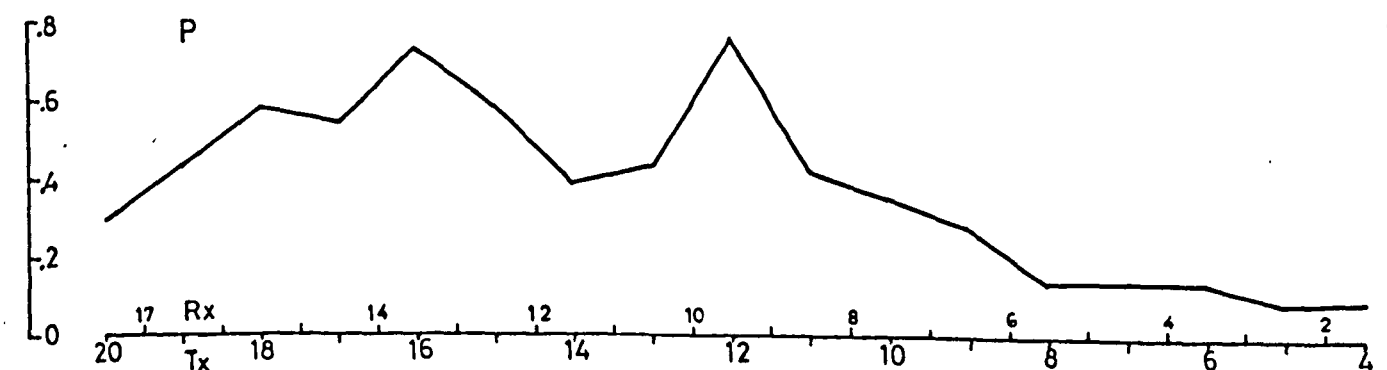
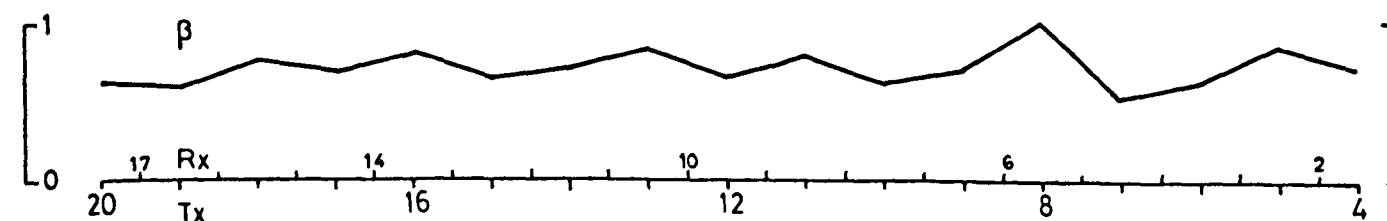
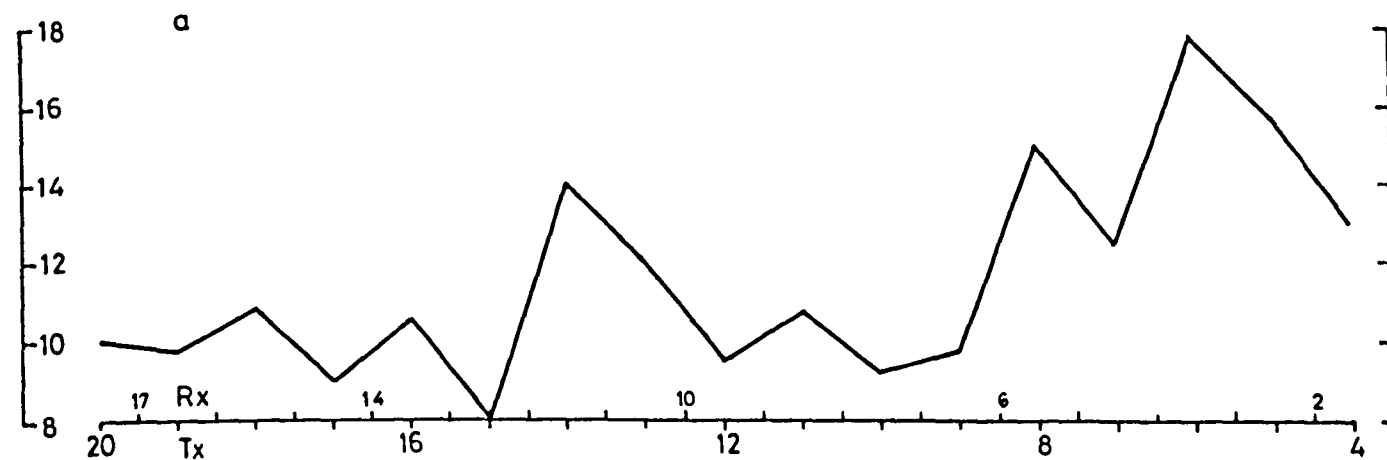
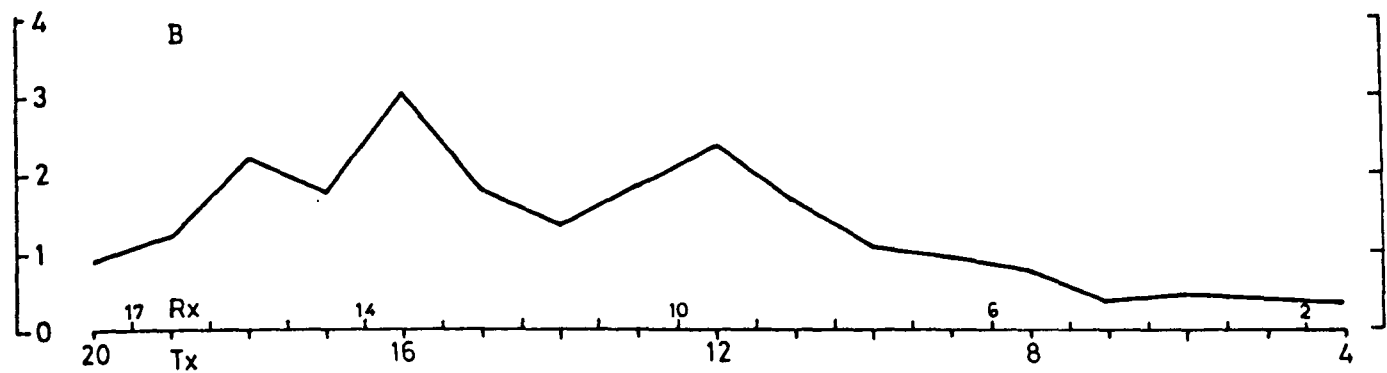
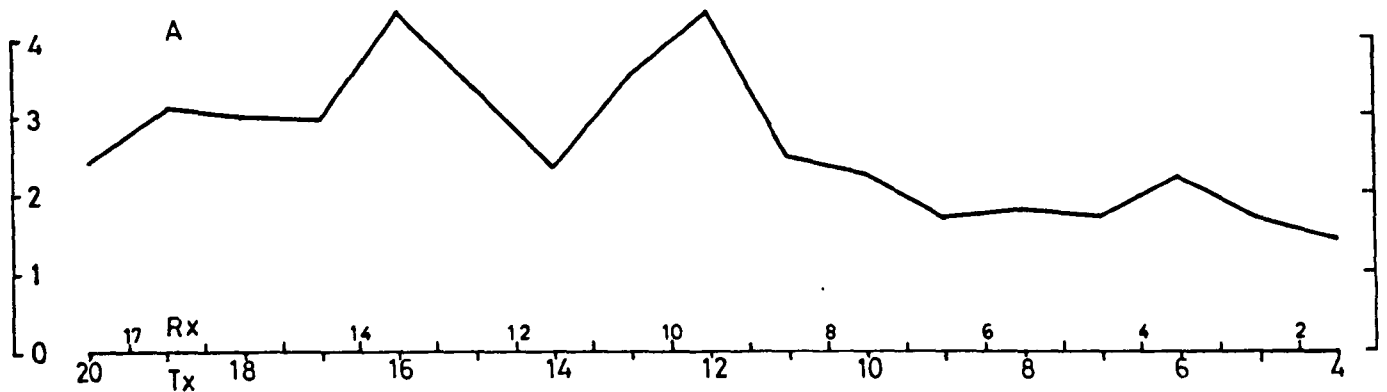


TABLE 30KLIROU AREA LINE 2The Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>A</u>	<u>B</u>	<u>α</u>	<u>β</u>	<u>P</u>
4	1- 2	1.3	0.37	10.60	0.60	0.12
5	2- 3	1.4	0.59	14.40	0.81	0.14
6	3- 4	1.3	0.83	10.55	0.99	0.14
7	4- 5	1.8	0.60	12.80	0.56	0.22
8	5- 6	1.8	0.84	11.59	0.70	0.24
9	6- 7	2.0	0.91	8.91	0.63	0.32
10	7- 8	1.9	0.81	11.19	0.65	0.25
11	8- 9	2.0	1.11	9.41	0.73	0.30
12	9-10	4.3	2.42	9.88	0.66	0.75
13	10-11	2.5	1.77	9.16	0.73	0.50
14	11-12	2.6	1.14	9.55	0.64	0.36
15	12-13	4.9	3.33	10.59	0.81	0.79
16	13-14	6.2	4.03	9.03	0.68	1.22
17	14-15	3.8	1.64	9.17	0.63	0.54
18	15-16	3.0	1.28	9.00	0.58	0.46
19	16-17	3.1	1.55	7.81	0.57	0.56
20	17-18	2.3	0.73	13.76	0.50	0.30

LINE 2

THE DECAY FACTORS

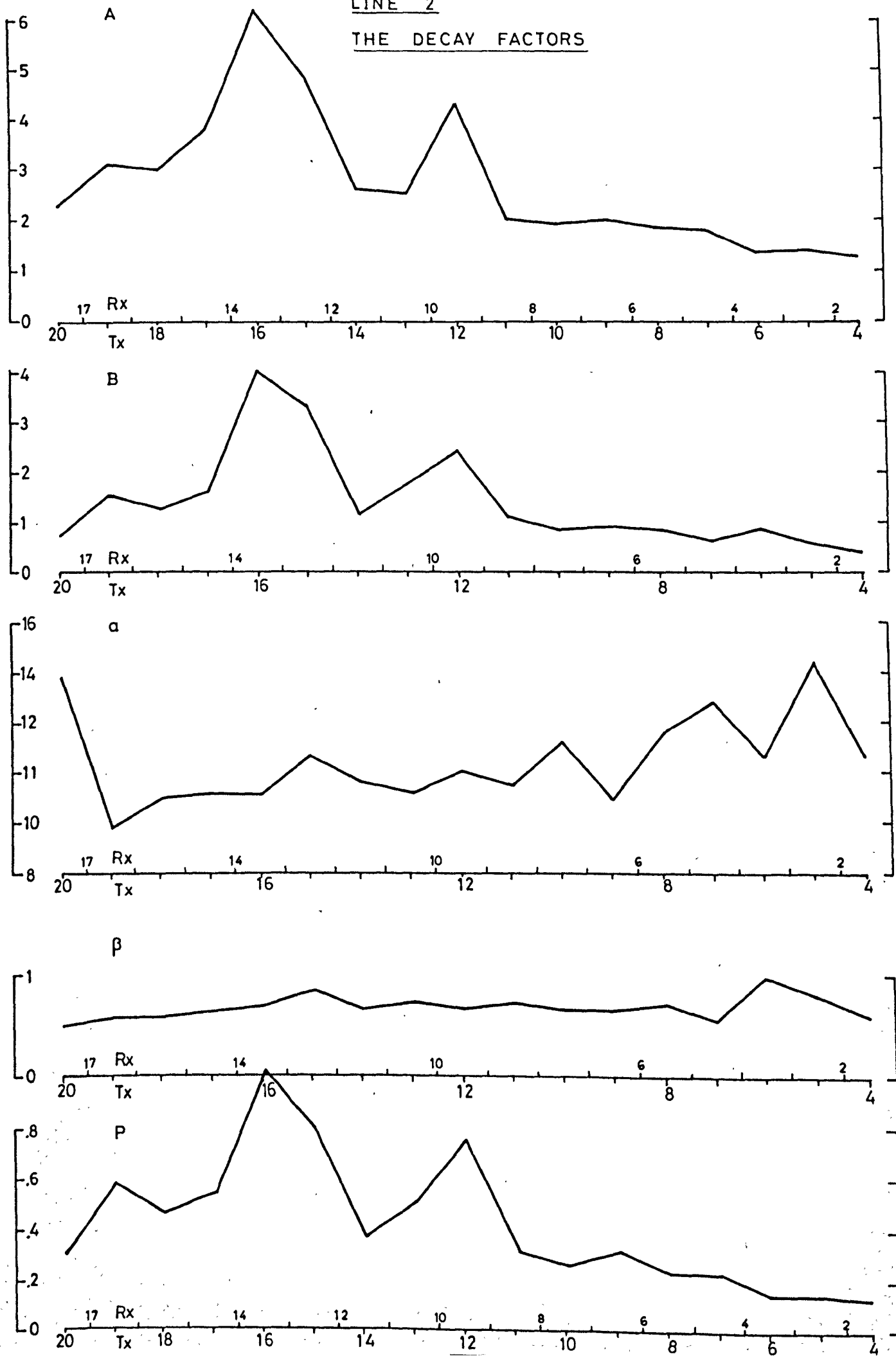


TABLE 31KLIROU AREA LINE 3The Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>A</u>	<u>B</u>	<u>α</u>	<u>β</u>	<u>P</u>
4	1- 2	1.4	0.53	16.45	1.79	0.02
5	2- 3	1.6	0.61	12.90	1.31	0.06
6	3- 4	2.1	0.76	15.84	1.21	0.09
7	4- 5	2.7	1.22	15.03	1.13	0.16
8	5- 6	2.1	1.09	13.10	1.13	0.14
9	6- 7	1.7	0.69	9.30	1.02	0.11
10	7- 8	2.6	1.50	12.29	1.03	0.24
11	8- 9	1.9	1.13	14.39	1.07	0.17
12	9-10	2.7	1.44	11.20	1.08	0.21
13	10-11	3.7	1.75	10.36	0.94	0.33
14	11-12	2.3	1.90	8.03	1.02	0.31
15	12-13	3.7	2.49	9.03	0.88	0.50
16	13-14	5.3	3.02	9.74	0.81	0.72
17	14-15	3.4	2.60	7.23	0.74	0.70
18	15-16	4.2	2.31	9.05	0.66	0.72
19	16-17	4.0	1.90	10.15	0.62	0.63
20	17-18	3.0	1.32	12.03	0.71	0.38

LINE 3

THE DECAY FACTORS

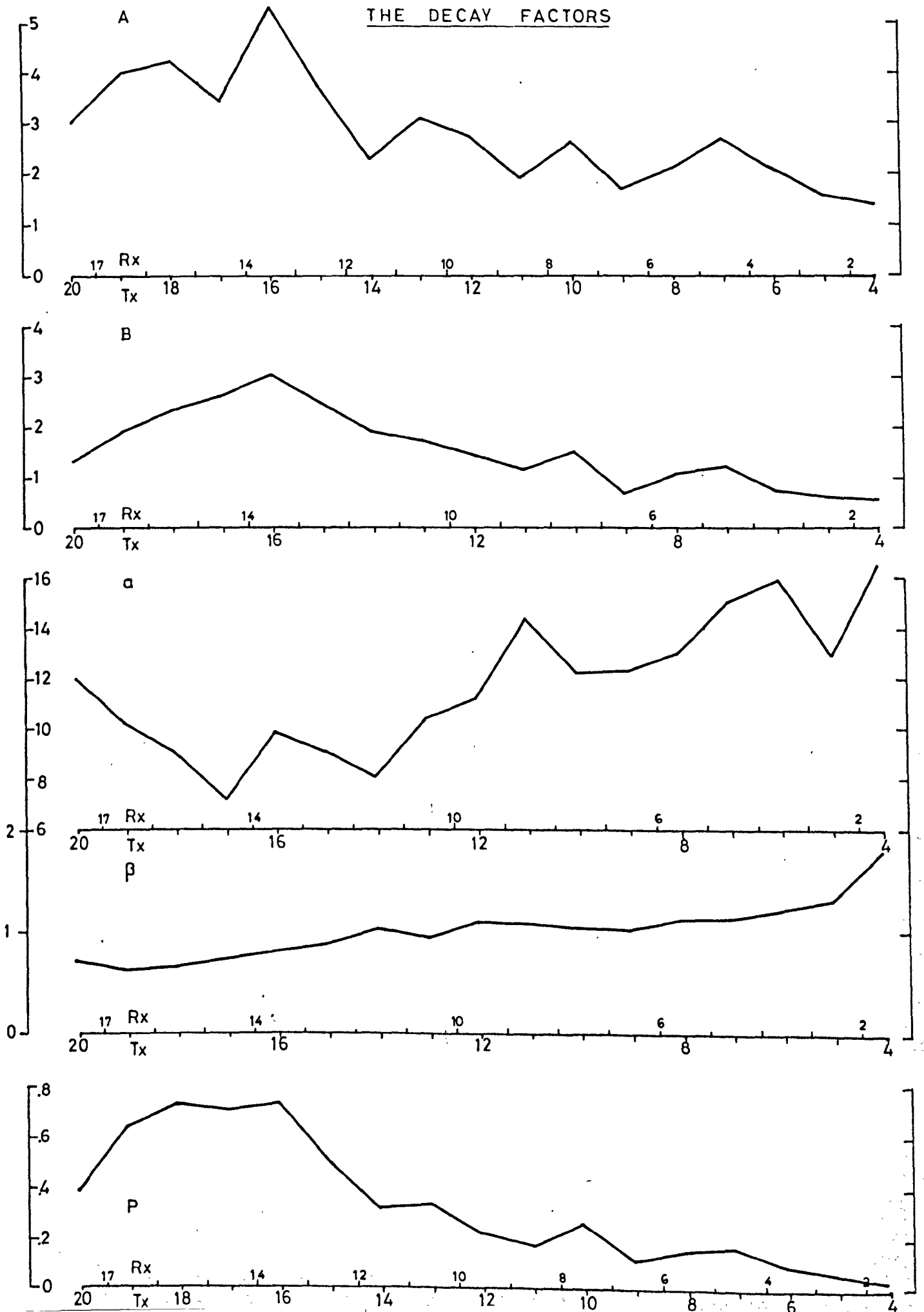


TABLE 32KLIROU AREA LINE 4The Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>A</u>	<u>B</u>	<u>α</u>	<u>β</u>	<u>P</u>
4	1- 2	1.6	0.56	15.49	1.81	0.02
5	2- 3	1.7	0.79	15.24	1.54	0.05
6	3- 4	1.9	0.83	13.34	1.32	0.08
7	4- 5	2.3	0.75	10.55	0.91	0.18
8	5- 6	2.3	1.20	13.42	1.13	0.16
9	6-7	2.3	0.82	11.06	0.90	0.17
10	7- 8	2.5	1.25	13.01	1.17	0.15
11	8- 9	1.7	0.66	8.13	0.82	0.15
12	9-10	1.8	1.28	13.60	1.32	0.12
13	10-11	2.8	1.41	9.34	0.89	0.29
14	11-12	3.6	1.57	10.18	0.84	0.35
15	12-13	3.8	1.73	8.91	0.76	0.44
16	13-14	5.2	2.06	13.12	0.76	0.53
17	14-15	4.5	1.99	12.42	0.69	0.58
18	15-16	5.0	2.42	12.73	0.77	0.62
19	16-17	7.6	2.72	16.92	0.71	0.78
20	17-18	3.3	1.00	11.90	0.63	0.32

KLIROU AREA

FIG. 106

LINE 4

THE DECAY FACTORS

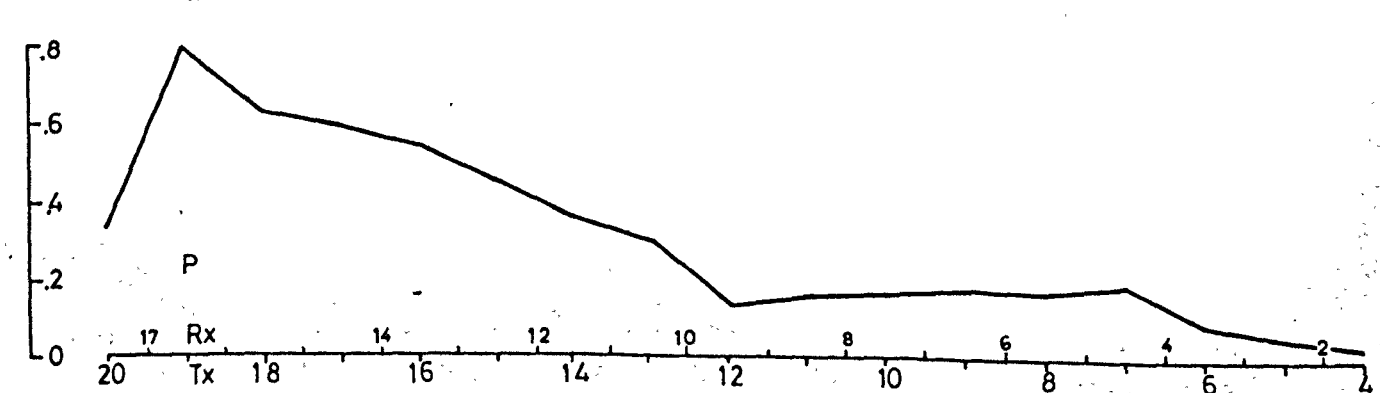
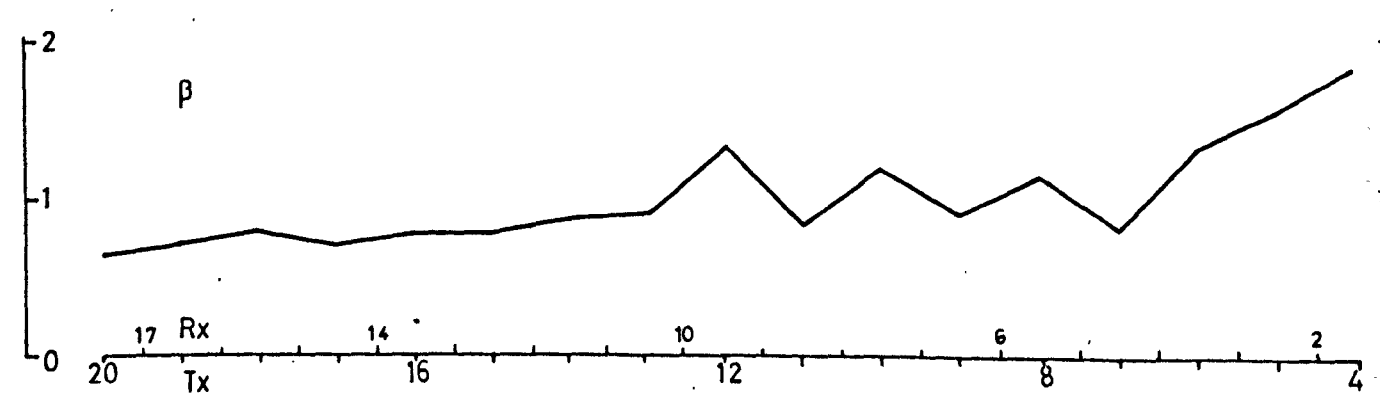
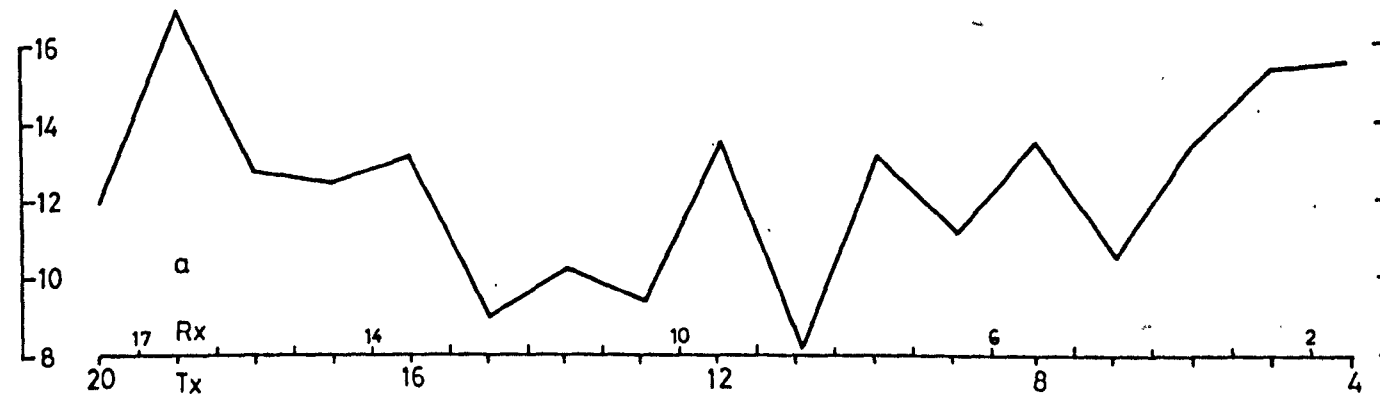
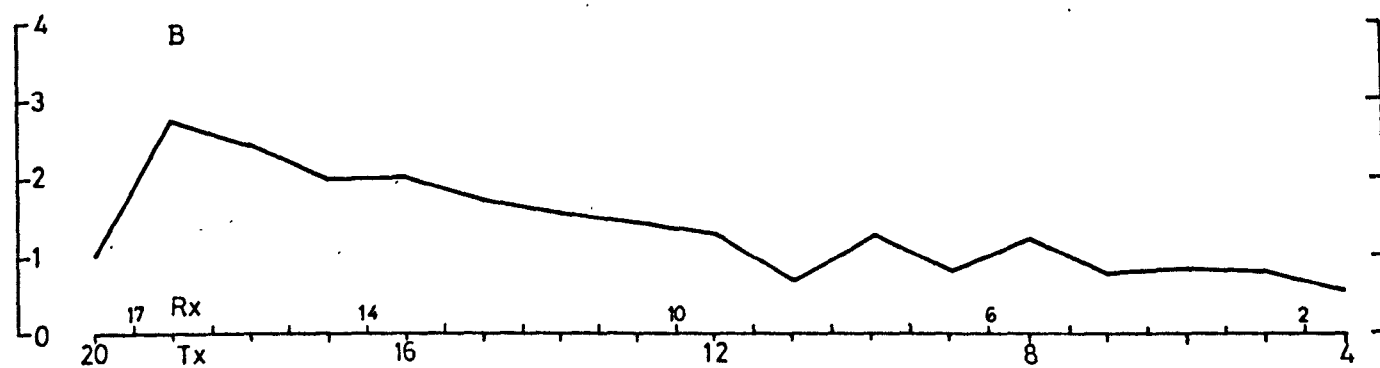
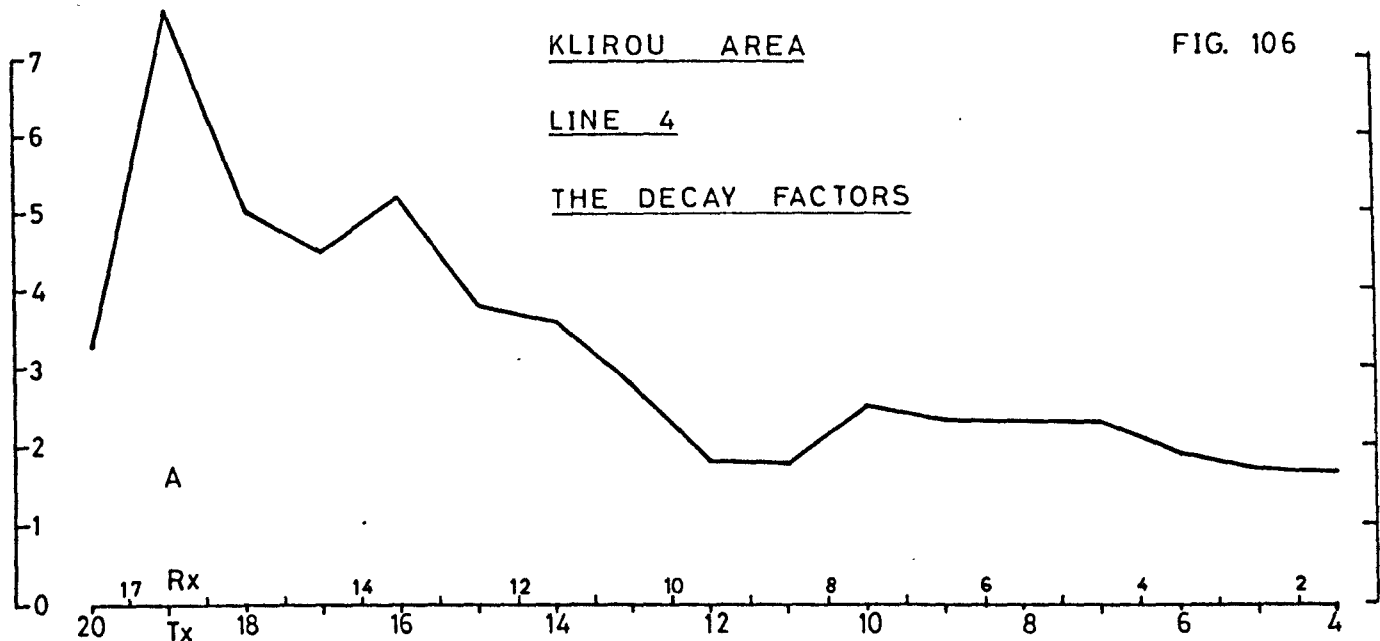


TABLE 33

KLIROU AREA

Table summarizing the Decay Factors over the mineralizations and the barren rocks.

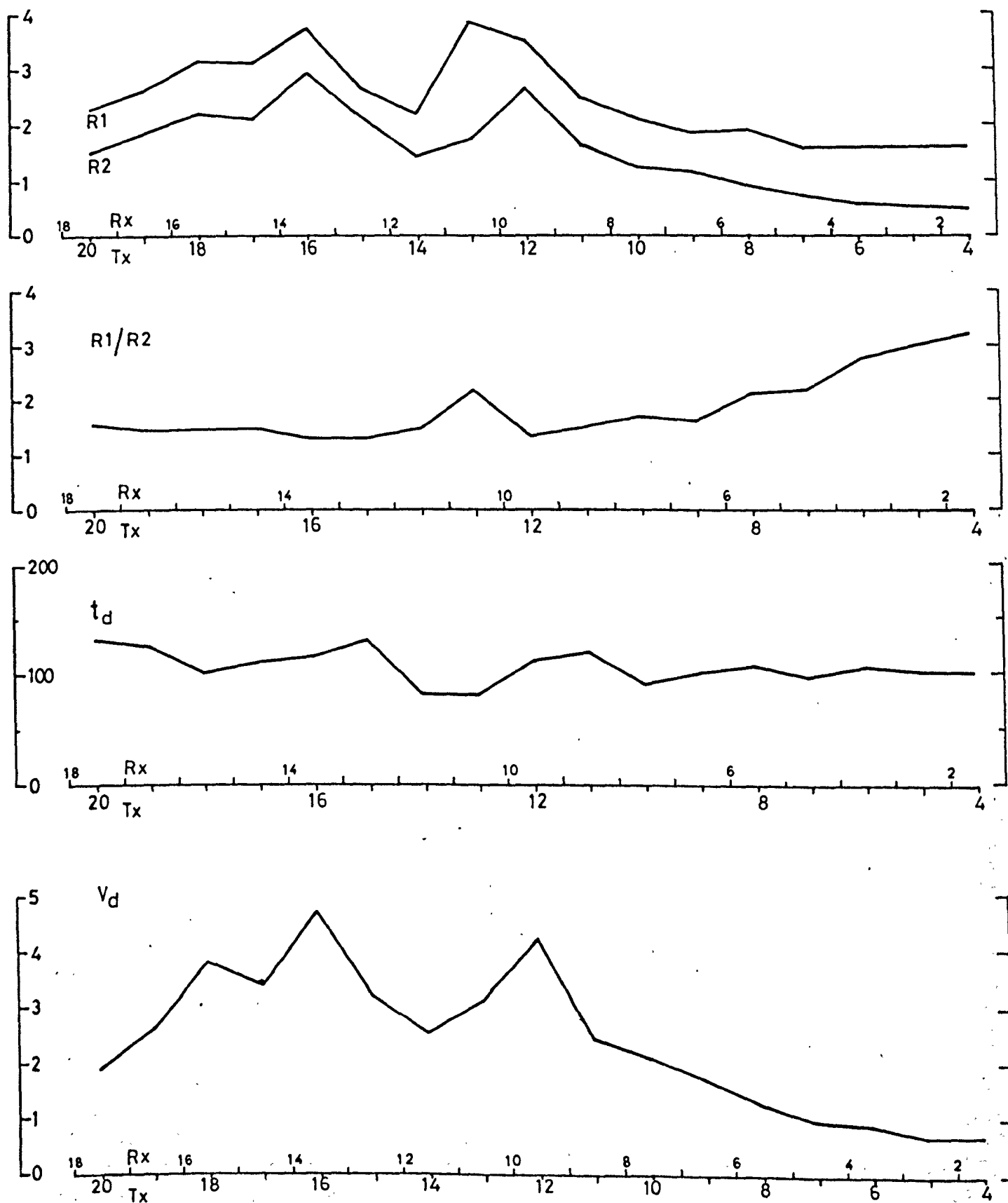
	Western Mineralization		Southern Mineralization	Northern Mineralization	Barren Rocks
	<u><1% S</u>	<u>1-5% S</u>			
A	2.3 - 3.3	3.0 - 7.6	2.5 - 4.3	1.7 - 2.7	1.3 - 2.0
B	0.73- 2.18	1.6 - 4.03	1.77- 2.42	0.82- 1.5	0.33- 0.9
α	7.8 -13.7	7.0 -13.2	9.1 - 9.8	11.0 -13.4	8.9-17.0
β	0.5 - 0.76	0.63- 0.88	0.65- 0.73	0.9 - 1.13	0.52- 1.8
P	0.29- 0.57	0.50- 1.22	0.50- 0.75	0.11- 0.17	0.02- 0.24

TABLE 34

KLIROU AREA LINE 1

The Log_et Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>R1</u>	<u>R2</u>	<u>R1/R2</u>	<u>V_d</u>	<u>t_d</u>	<u>d0.5</u>	<u>d1.0</u>
4	1- 2	1.60	0.50	3.20	0.7	100	50	0
5	2- 3	1.62	0.54	3.00	0.7	100	70	0
6	3- 4	1.60	0.59	2.71	0.9	105	180	0
7	4- 5	1.58	0.73	2.16	0.9	95	200	0
8	5- 6	1.90	0.90	2.11	1.2	105	480	30
9	6- 7	1.85	1.15	1.60	1.7	100	720	170
10	7- 8	2.10	1.25	1.68	2.1	90	1150	300
11	8- 9	2.50	1.66	1.50	2.4	135	1700	600
12	9-10	3.53	2.67	1.32	4.2	120	2100	1200
13	10-11	3.80	1.76	2.15	3.1	80	1930	880
14	11-12	2.18	1.46	1.49	2.5	80	1070	430
15	12-13	2.72	2.13	1.27	3.2	130	1500	700
16	13-14	3.75	2.95	1.27	4.7	115	1900	1200
17	14-15	3.10	2.10	1.47	3.4	110	2600	1000
18	15-16	3.15	2.20	1.43	3.8	100	3000	1100
19	16-17	2.63	1.85	1.42	2.6	125	1600	550
20	17-18	2.30	1.50	1.53	1.9	130	800	200

KLIROU AREALINE 1THE $\text{LOG}_e T$ DECAY FACTORS

KLIROU AREA

LINE 1

THE LOG_e T DECAY FACTORS

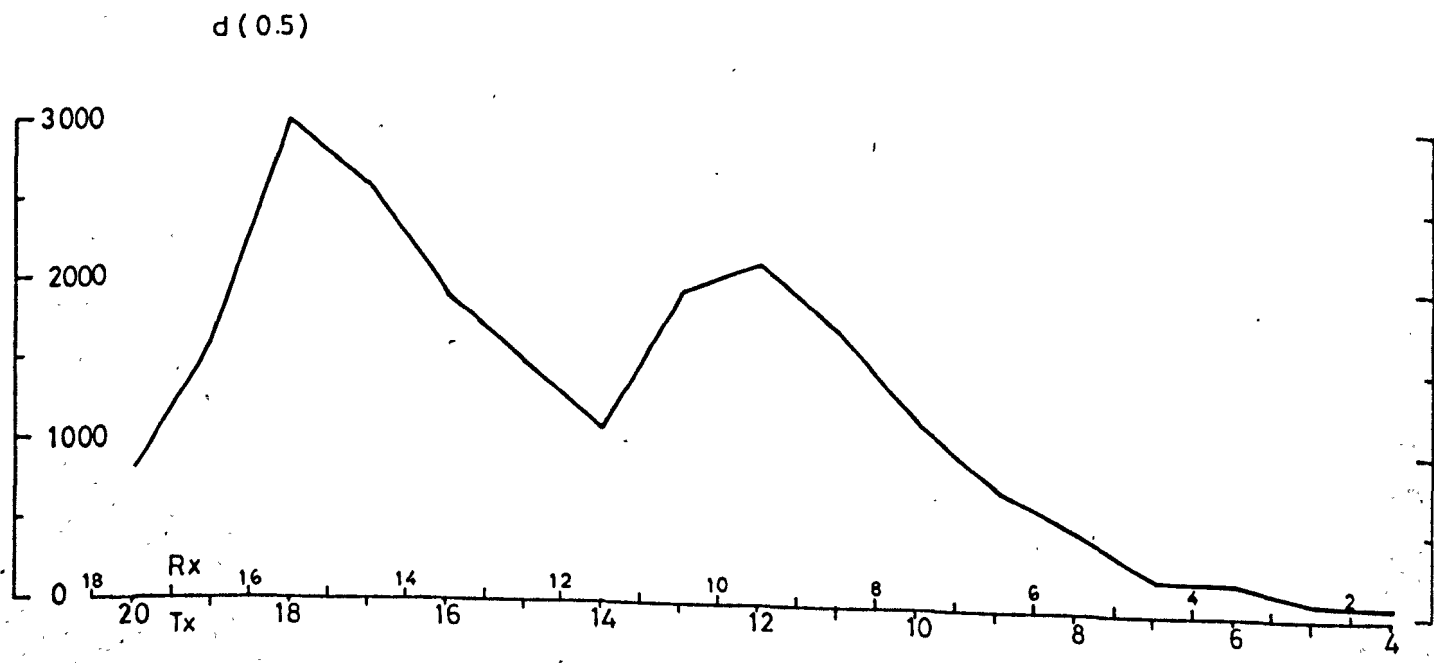
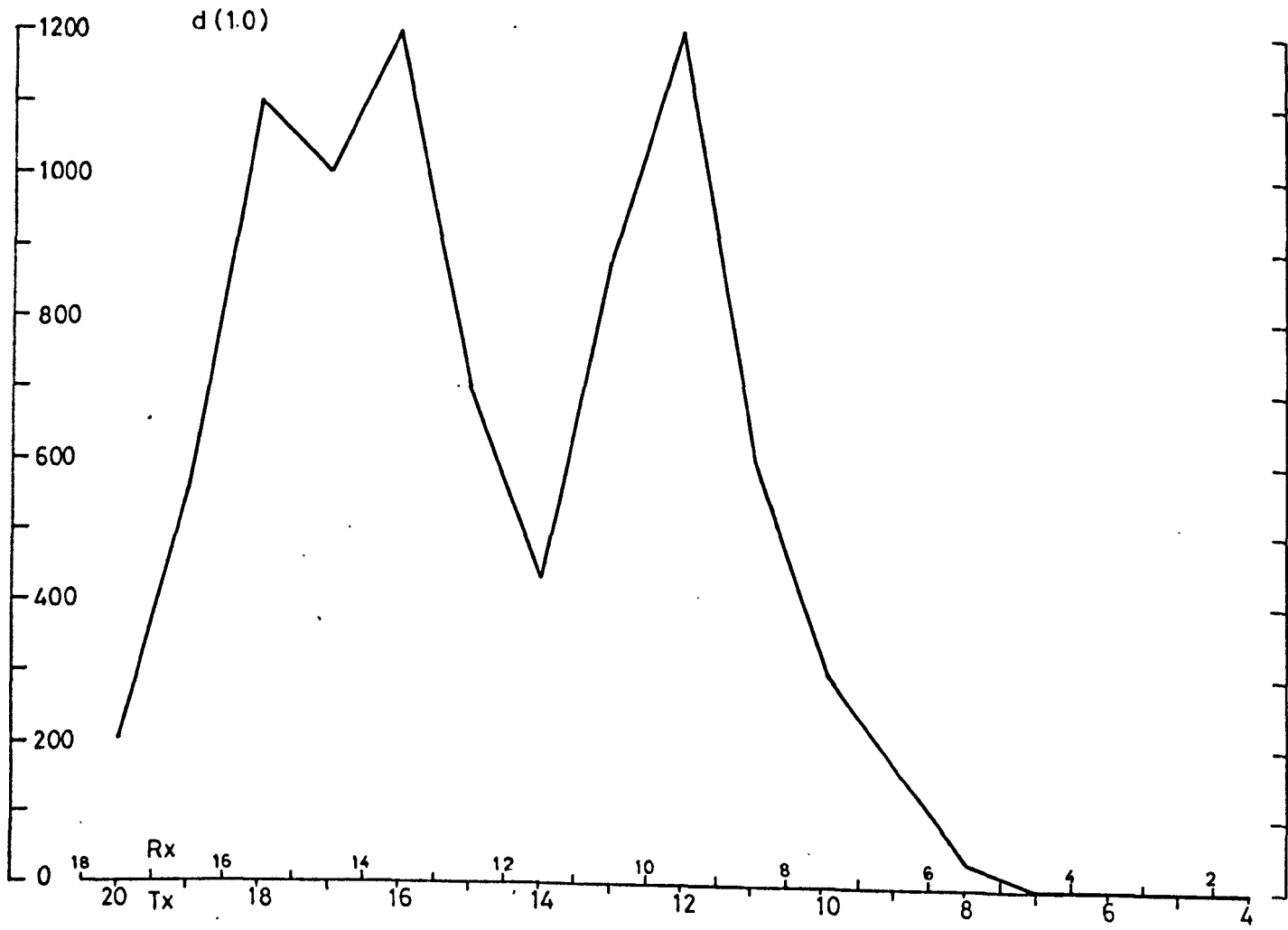


TABLE 35

KLIROU AREA LINE 2

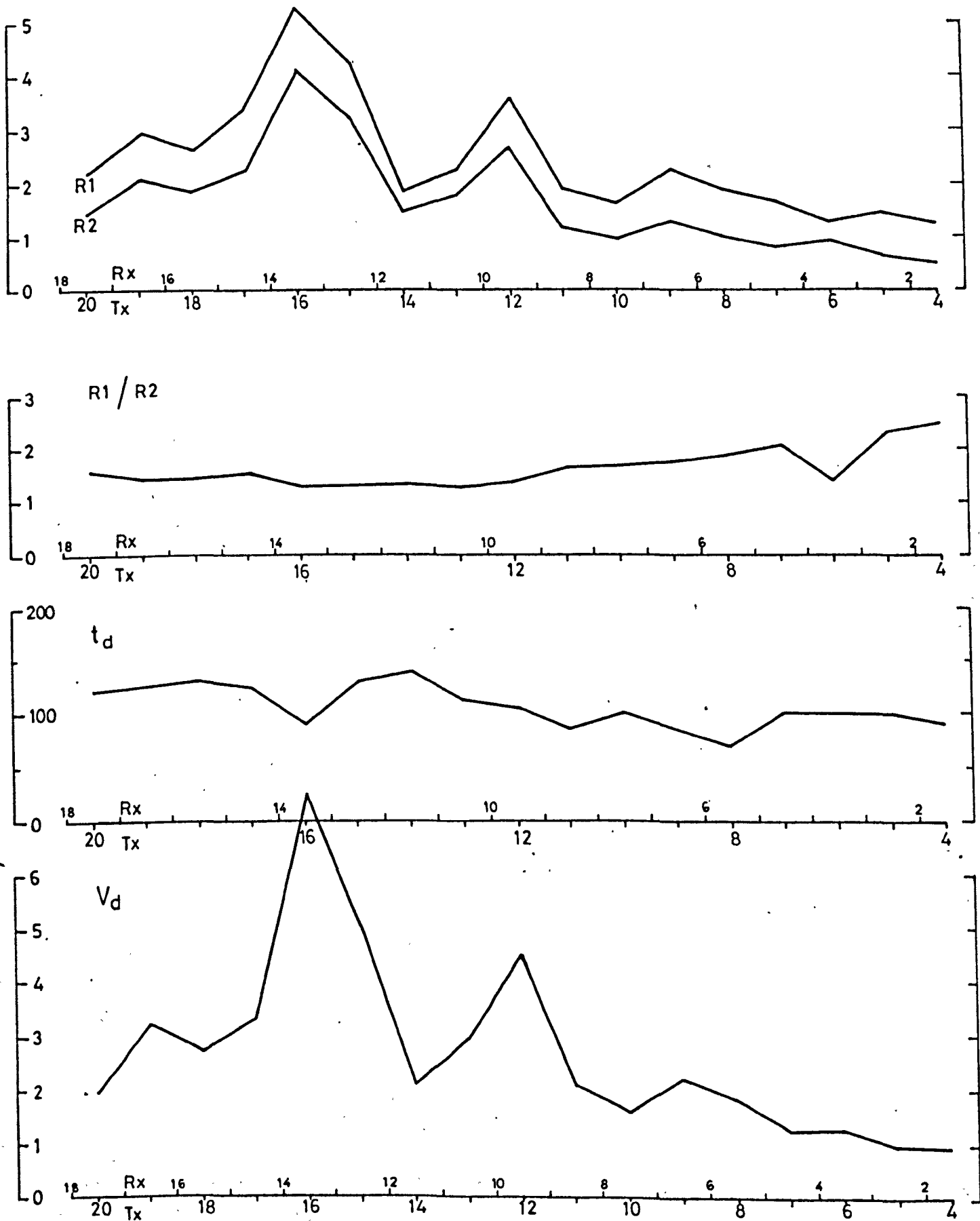
The Log_et Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>R1</u>	<u>R2</u>	<u>R1/R2</u>	<u>V_d</u>	<u>t_d</u>	<u>d0.5</u>	<u>d1.0</u>
4	1- 2	1.25	0.50	2.50	0.95	90	120	0
5	2- 3	1.45	0.63	2.30	1.00	100	280	0
6	3- 4	1.26	0.91	1.38	1.28	100	630	50
7	4- 5	1.67	0.80	2.08	1.25	100	550	35
8	5- 6	1.89	1.00	1.89	1.85	70	1000	180
9	6- 7	2.26	1.30	1.73	2.20	85	1300	340
10	7- 8	1.62	0.97	1.67	1.60	100	1040	130
11	8- 9	1.90	1.18	1.61	2.10	85	1400	360
12	9-10	3.60	2.68	1.34	4.50	105	2400	1300
13	10-11	2.28	1.79	1.27	2.90	125	2400	900
14	11-12	1.89	1.43	1.32	2.10	140	1200	360
15	12-13	4.23	3.25	1.30	5.00	130	3400	1900
16	13-14	5.30	4.15	1.27	7.50	90	3200	2300
17	14-15	3.40	2.25	1.51	3.30	125	2400	1000
18	15-16	2.60	1.85	1.40	2.70	130	2500	700
19	16-17	2.95	2.10	1.40	3.20	125	2000	900
20	17-18	2.20	1.40	1.57	1.90	120	900	180

KLIROU AREA

LINE 2

THE LOG_e T DECAY FACTORS



KLIROU AREA

LINE 2

THE LOG_e T DECAY FACTORS

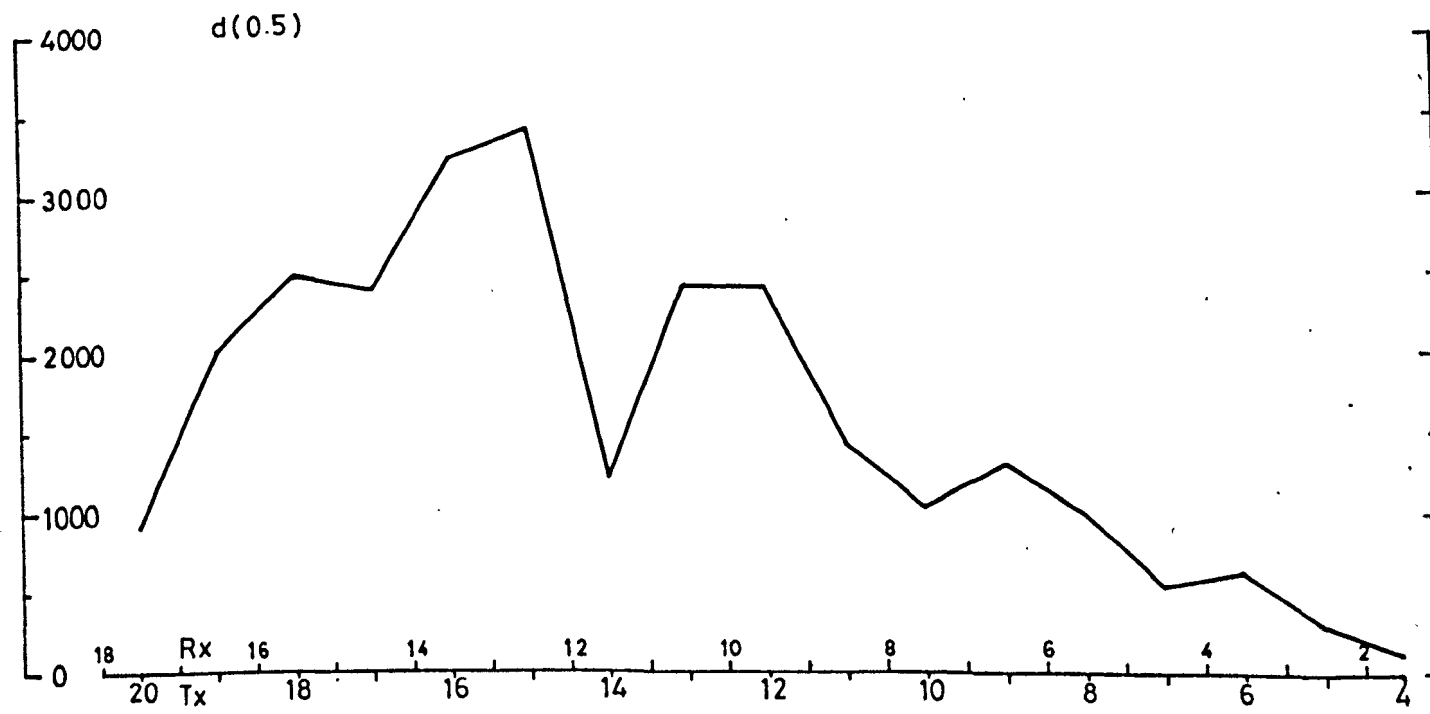
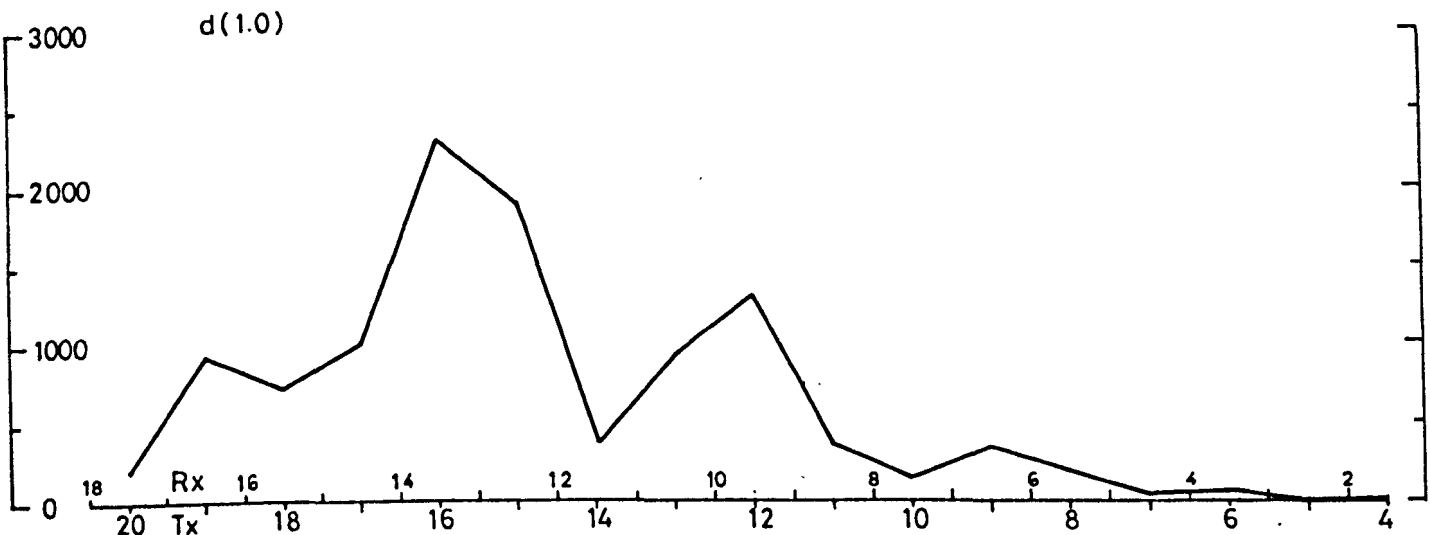


TABLE 36

KLIROU AREA LINE 3

The Log_et Decay Factors

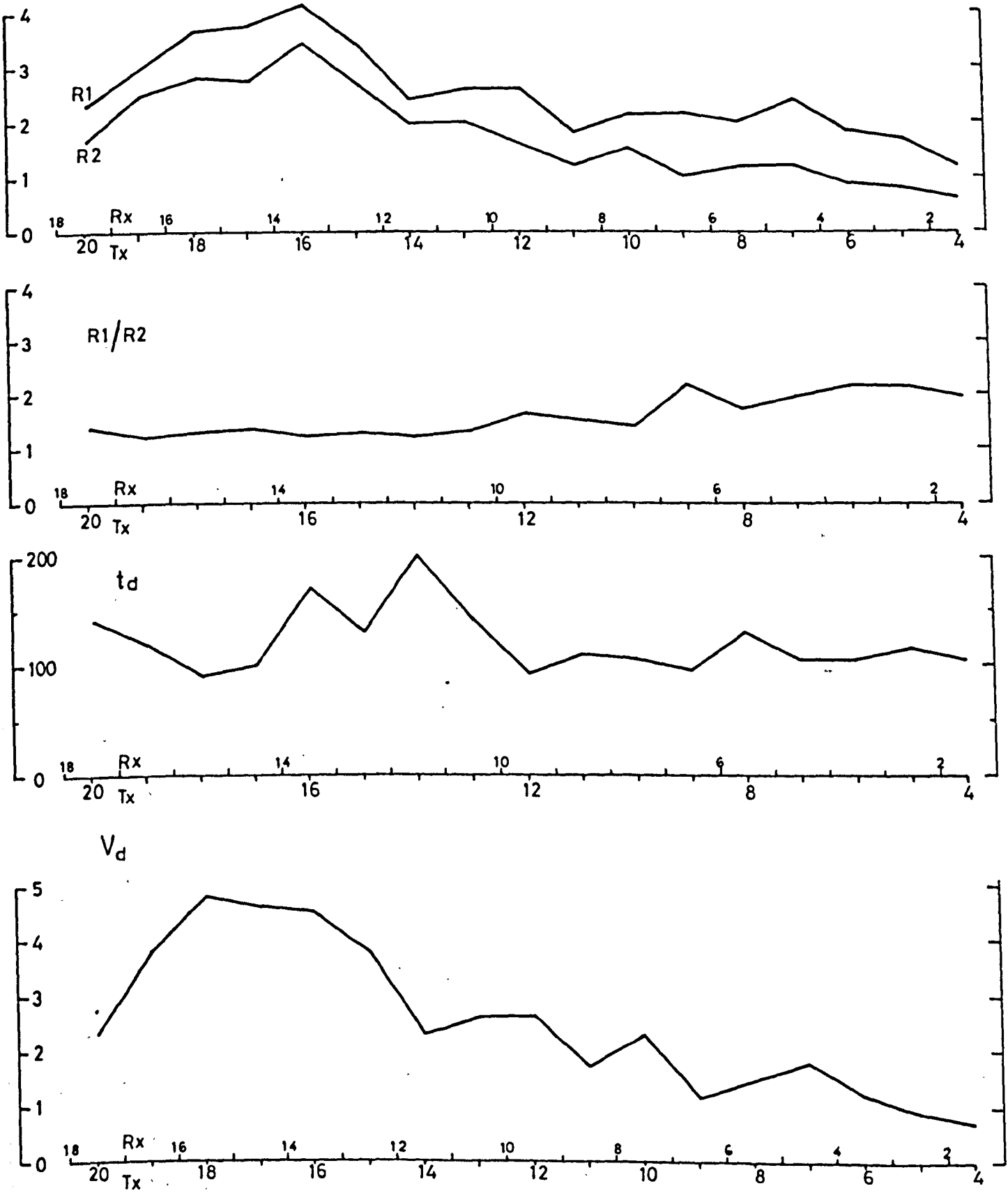
<u>C</u>	<u>P1-P2</u>	<u>R1</u>	<u>R2</u>	<u>R1/R2</u>	<u>V_d</u>	<u>t_d</u>	<u>d1.0</u>	<u>d0.5</u>
4	1- 2	1.20	0.62	1.93	0.7	105	0	30
5	2- 3	1.70	0.80	2.12	0.9	115	0	120
6	3- 4	1.85	0.87	2.12	1.2	105	15	330
7	4- 5	2.38	1.22	1.95	1.8	105	150	800
8	5- 6	2.00	1.16	1.72	1.4	130	100	650
9	6- 7	2.15	1.00	2.15	1.1	95	120	1000
10	7- 8	2.12	1.52	1.39	2.3	105	300	1050
11	8- 9	1.80	1.20	1.50	1.7	110	120	620
12	9-10	2.60	1.60	1.62	2.6	90	500	1550
13	10-11	2.60	2.00	1.30	2.6	140	400	1000
14	11-12	2.40	2.00	1.20	2.3	200	370	1000
15	12-13	3.45	2.70	1.27	3.8	130	750	1600
16	13-14	4.15	3.45	1.20	4.5	170	1200	2100
17	14-15	3.75	2.75	1.36	4.6	100	1600	3000
18	15-16	3.67	2.80	1.31	4.8	90	1400	2800
19	16-17	3.00	2.50	1.20	3.8	120	700	1300
20	17-18	2.30	1.55	1.39	2.3	140	460	1450

FIG. 109 (a)

KLIROU AREA

LINE 3

THE LOG_e T DECAY FACTORS



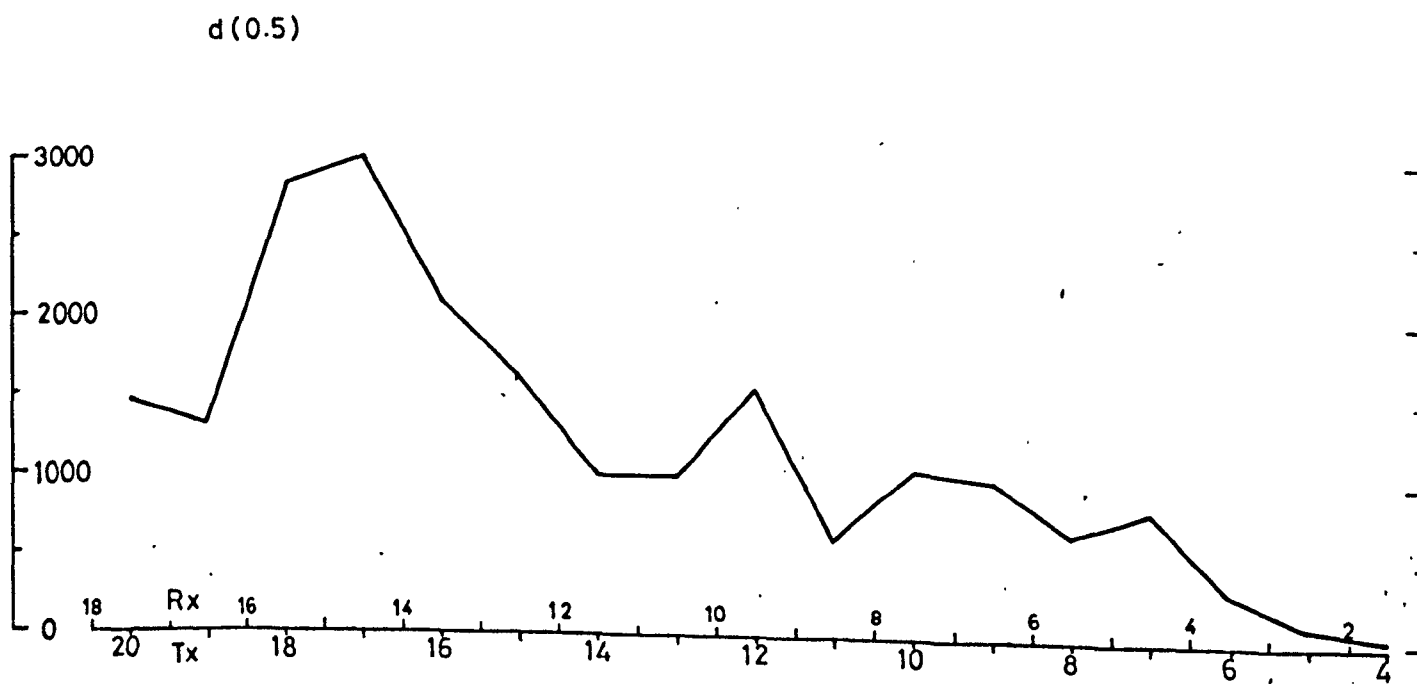
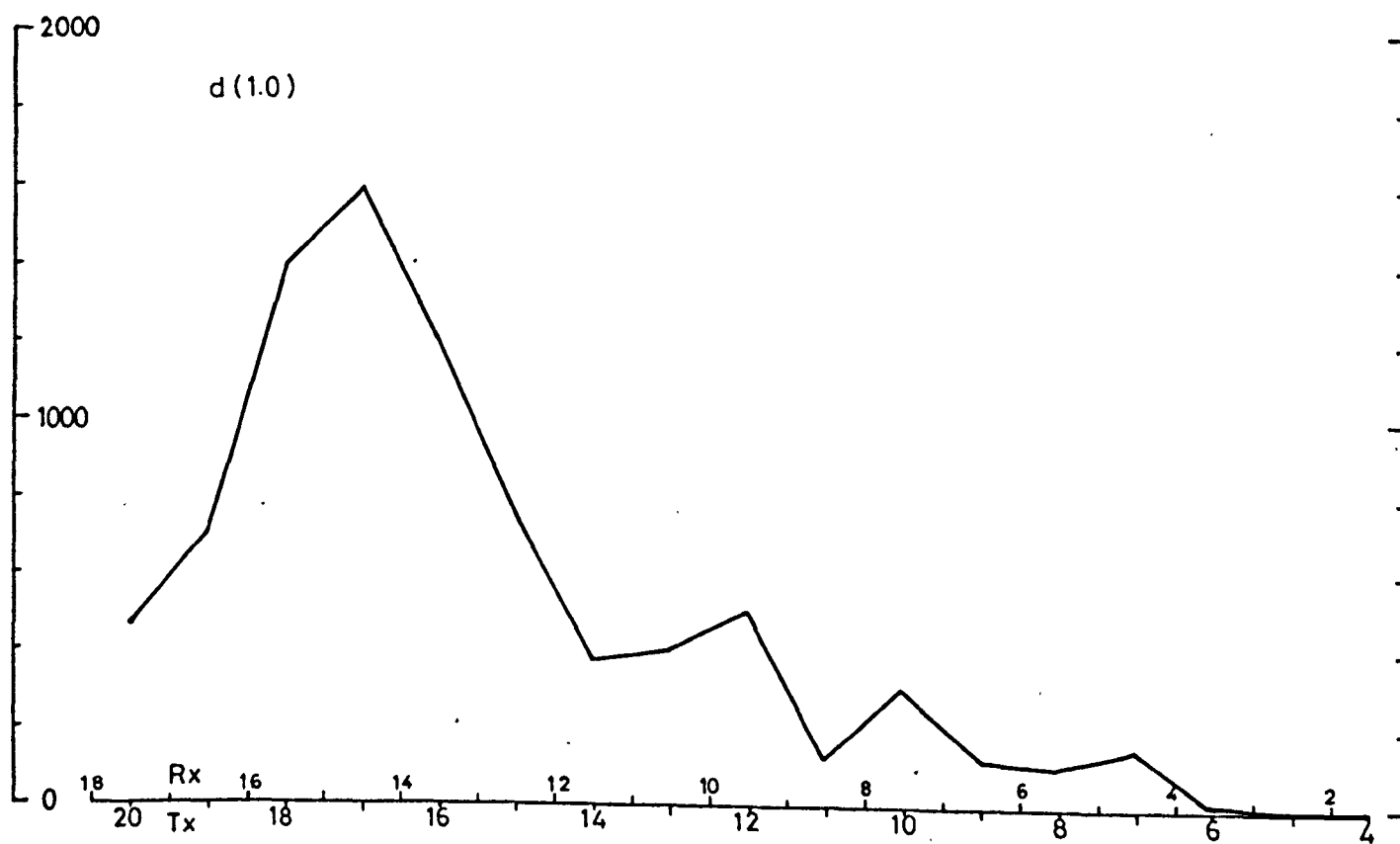
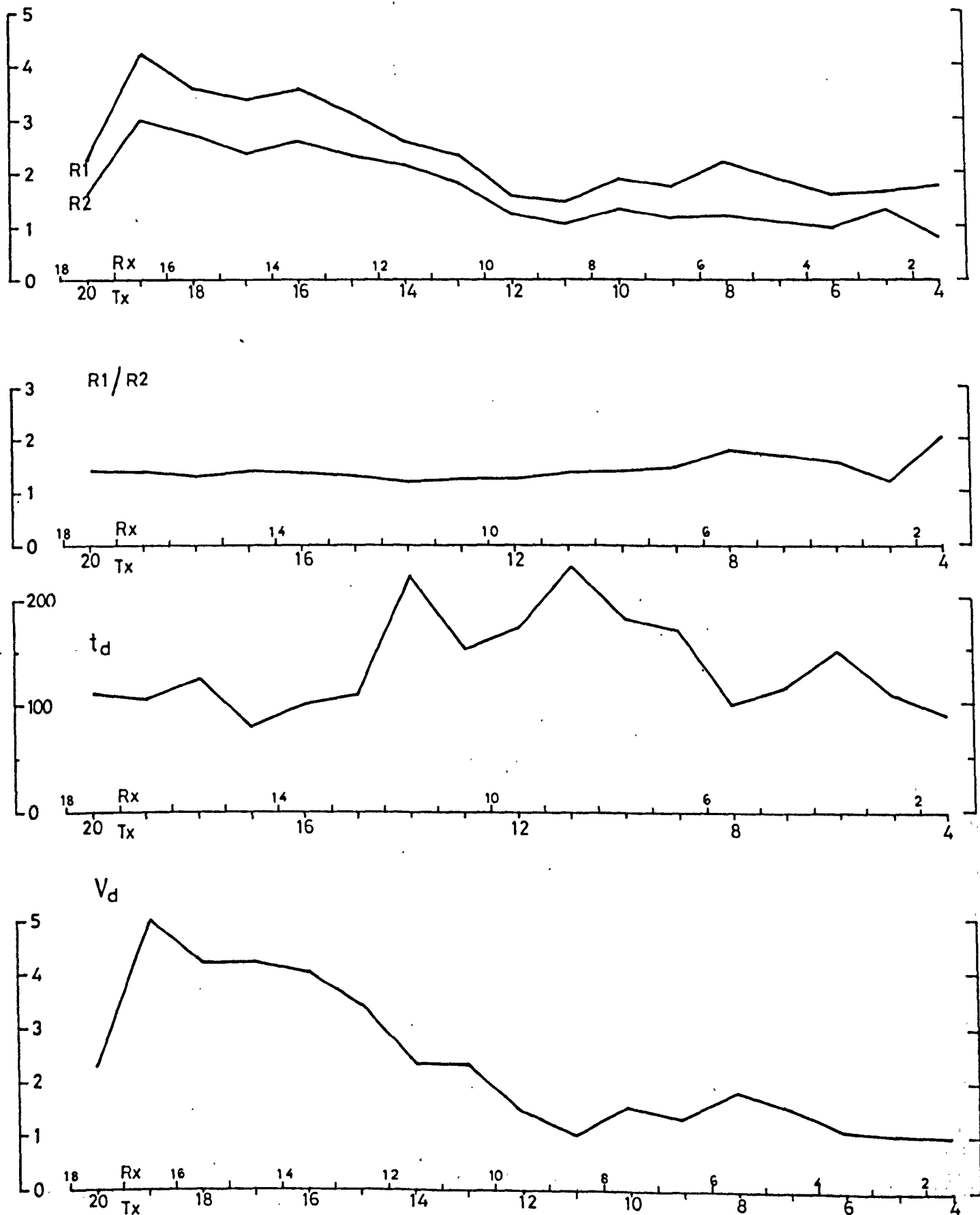
KLIROU AREALINE 3THE LOG_e T DECAY FACTORS

TABLE 37KLIROU AREA LINE 4The Log_et Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>R1</u>	<u>R2</u>	<u>R1/R2</u>	<u>Vd</u>	<u>t_d</u>	<u>d1.0</u>	<u>d0.5</u>
4	1- 2	1.75	0.85	2.05	1.0	90	0	70
5	2- 3	1.65	1.35	1.22	1.0	110	0	180
6	3- 4	1.58	1.00	1.58	1.1	150	10	200
7	4- 5	1.87	1.10	1.70	1.5	115	70	630
8	5- 6	2.20	1.22	1.80	1.8	100	120	780
9	6- 7	1.75	1.18	1.48	1.3	170	50	600
10	7- 8	1.87	1.35	1.38	1.5	190	100	700
11	8- 9	1.48	1.06	1.39	1.0	230	0	330
12	9-10	1.58	1.25	1.26	1.4	170	50	370
13	10-11	2.32	1.83	1.26	2.3	150	240	860
14	11-12	2.60	2.17	1.19	2.3	220	300	980
15	12-13	3.08	2.34	1.31	3.4	110	630	1400
16	13-14	3.55	2.58	1.37	4.0	100	950	1800
17	14-15	3.35	2.37	1.41	4.2	78	1200	2600
18	15-16	3.57	2.73	1.30	4.2	125	1500	3200
19	16-17	4.20	3.00	1.40	5.0	105	2000	3600
20	17-18	2.25	1.60	1.40	2.3	110	230	1300

KLIROU AREALINE 4THE LOG_e T DECAY FACTORS

KLIROU AREA

LINE 4

THE LOG_e T DECAY FACTORS

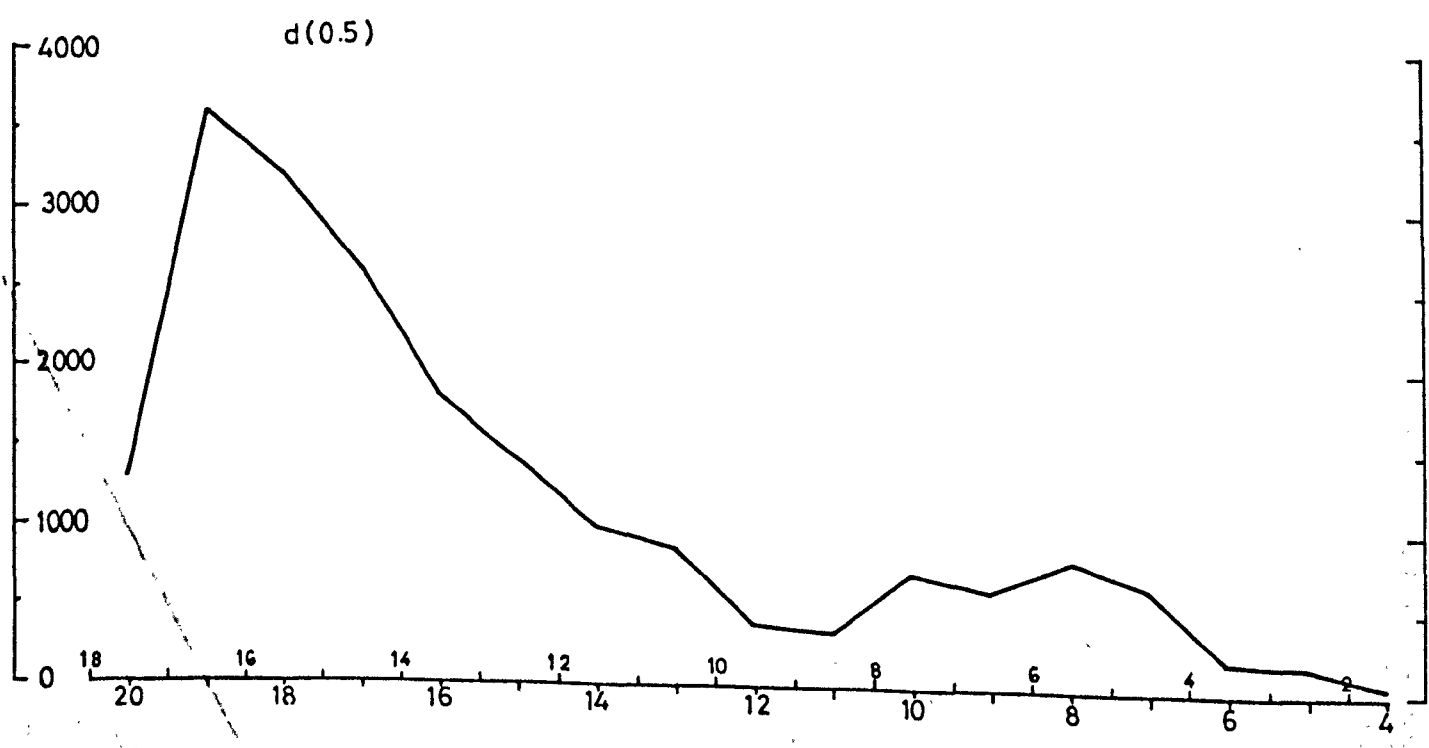
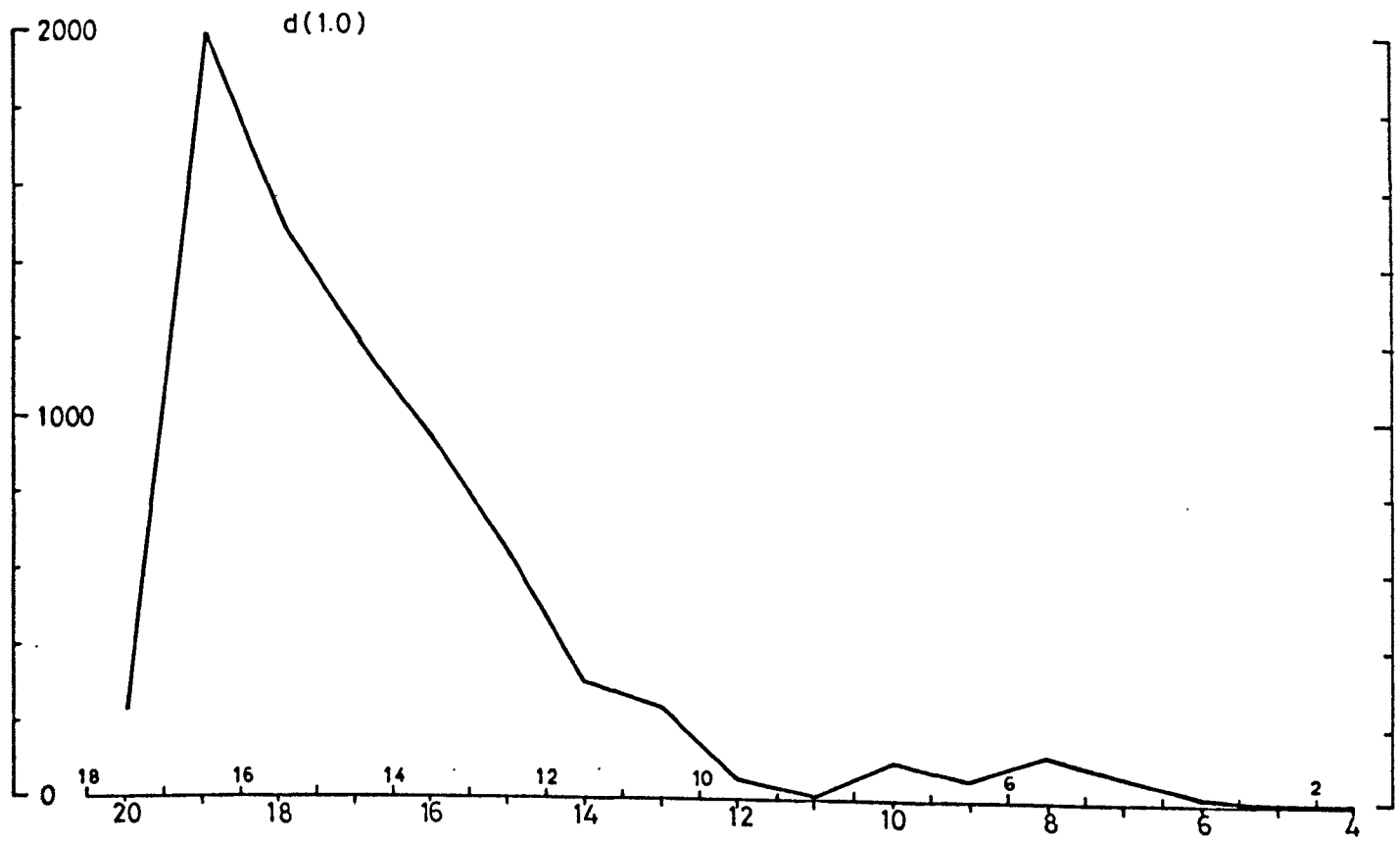


TABLE 38

KLIROU AREA

Table summarizing the $\text{Log}_e t$ Decay Factors over the mineralizations and the barren rocks.

	Western Mineralization		Southern Mineralization	Northern Mineralization	Barren Rocks
	<1% S	1-5% S			
R1	2.2-2.45	3.1-5.3	2.28-3.6	1.75-2.38	1.20-1.45
R2	1.4-2.1	2.1-4.15	1.79-2.68	1.18-1.52	0.5 -0.9
R1/R2	1.4-1.57	1.2-1.51	1.27-1.34	1.39-1.95	1.2 -3.2
V_d	1.9-3.2	3.3-7.5	2.9- 4.5	1.16-2.3	0.7 -1.0
t_d	120-140	78- 170	105- 125	95- 170	90- 105
d0.5	800-2000	1900-3200	2100-2400	600-1050	30 -630
d1.0	180- 900	1200-2300	900-1300	50- 300	0 - 50
Ratio	2.2-5.0	1.39- 2.6	1.84-2.66	3.5- 12	∞ -12.6

TABLE 39KLIROU AREA LINE 1The Bertin and Loeb's (modified) Functions

<u>C</u>	<u>P1-P2</u>	<u>$\rho/2\pi$</u>	<u>A1</u>	<u>A2</u>	<u>A1/A2</u>
4	1- 2	1.50	0.93	0.22	4.16
5	2- 3	1.67	1.01	0.23	4.38
6	3- 4	1.29	1.70	0.33	5.10
7	4- 5	1.63	1.04	0.21	4.80
8	5- 6	1.55	1.16	0.51	2.27
9	6- 7	1.85	0.91	0.50	1.82
10	7- 8	2.09	1.02	0.49	2.06
11	8- 9	1.99	1.23	0.83	1.47
12	9-10	2.12	2.02	1.11	1.81
13	10-11	2.86	1.22	0.62	1.94
14	11-12	2.88	0.81	0.46	1.75
15	12-13	3.65	0.91	0.49	1.87
16	13-14	4.72	0.91	0.63	1.42
17	14-15	2.39	1.23	0.74	1.65
18	15-16	5.27	0.56	0.41	1.37
19	16-17	5.16	0.60	0.23	2.54
20	17-18	2.94	0.81	0.30	2.68

LINE 1

THE BERTIN AND LOEB'S (MODIFIED) FUNCTIONS

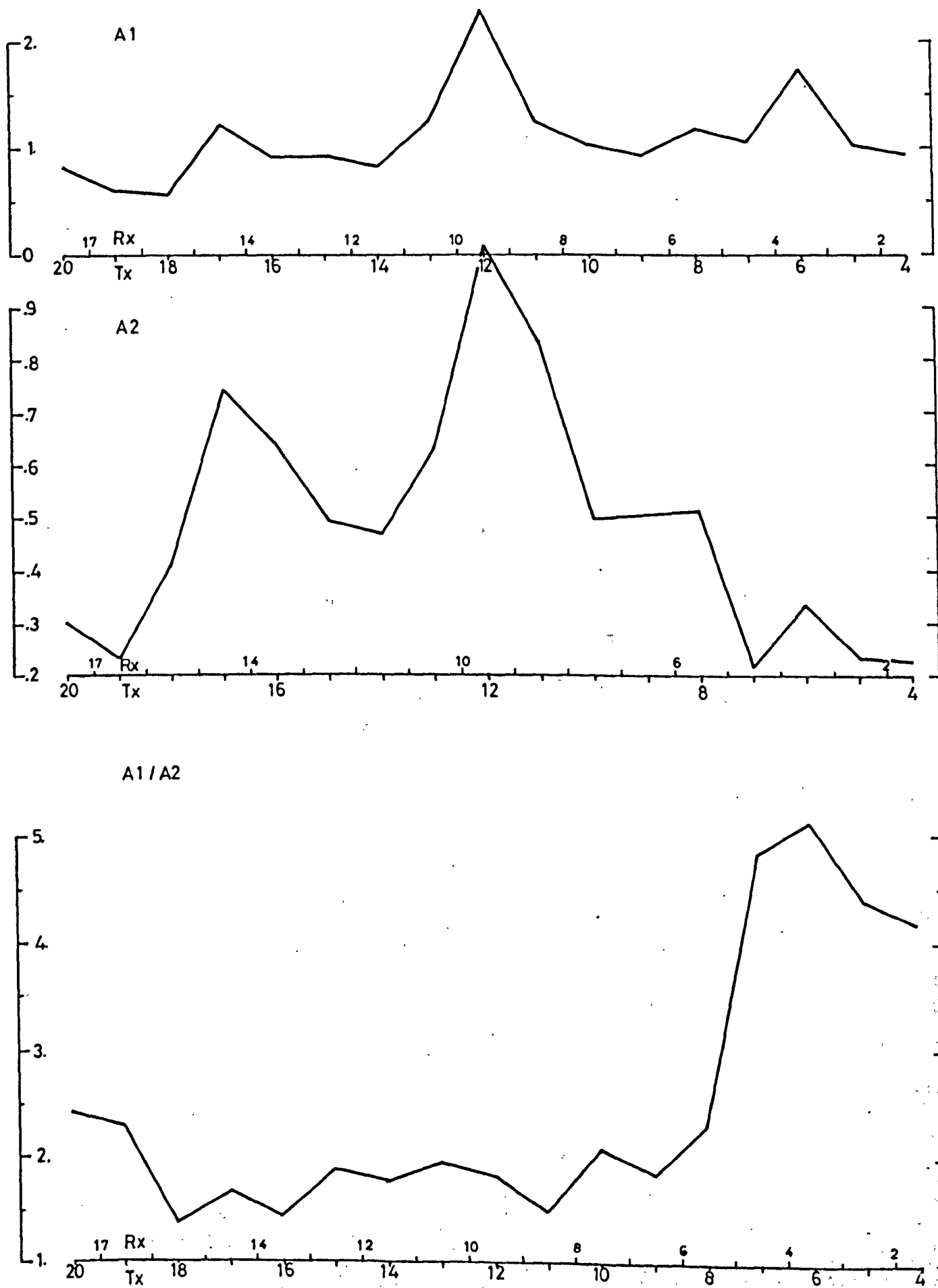


TABLE 40KLIROU AREA LINE 2The Bertin and Loeb's (modified) Functions

<u>C</u>	<u>P1-P2</u>	<u>$\rho/2\pi$</u>	<u>Λ_1</u>	<u>Λ_2</u>	<u>Λ_1/Λ_2</u>
4	1- 2	1.60	0.81	0.23	3.50
5	2- 3	1.39	1.00	0.42	2.35
6	3- 4	1.39	0.97	0.60	1.61
7	4- 5	1.85	0.97	0.32	2.96
8	5- 6	1.68	1.10	0.50	2.19
9	6- 7	1.50	1.33	0.60	2.19
10	7- 8	1.89	1.00	0.43	2.33
11	8- 9	1.94	1.03	0.57	1.80
12	9-10	2.02	2.12	1.19	1.77
13	10-11	2.88	0.86	0.61	1.41
14	11-12	4.64	0.56	0.24	2.28
15	12-13	6.41	0.76	0.51	1.47
16	13-14	3.75	1.65	1.07	1.53
17	14-15	3.67	1.03	0.44	2.32
18	15-16	8.30	0.36	0.15	2.34
19	16-17	7.00	0.44	0.22	2.00
20	17-18	2.82	0.81	0.25	3.15

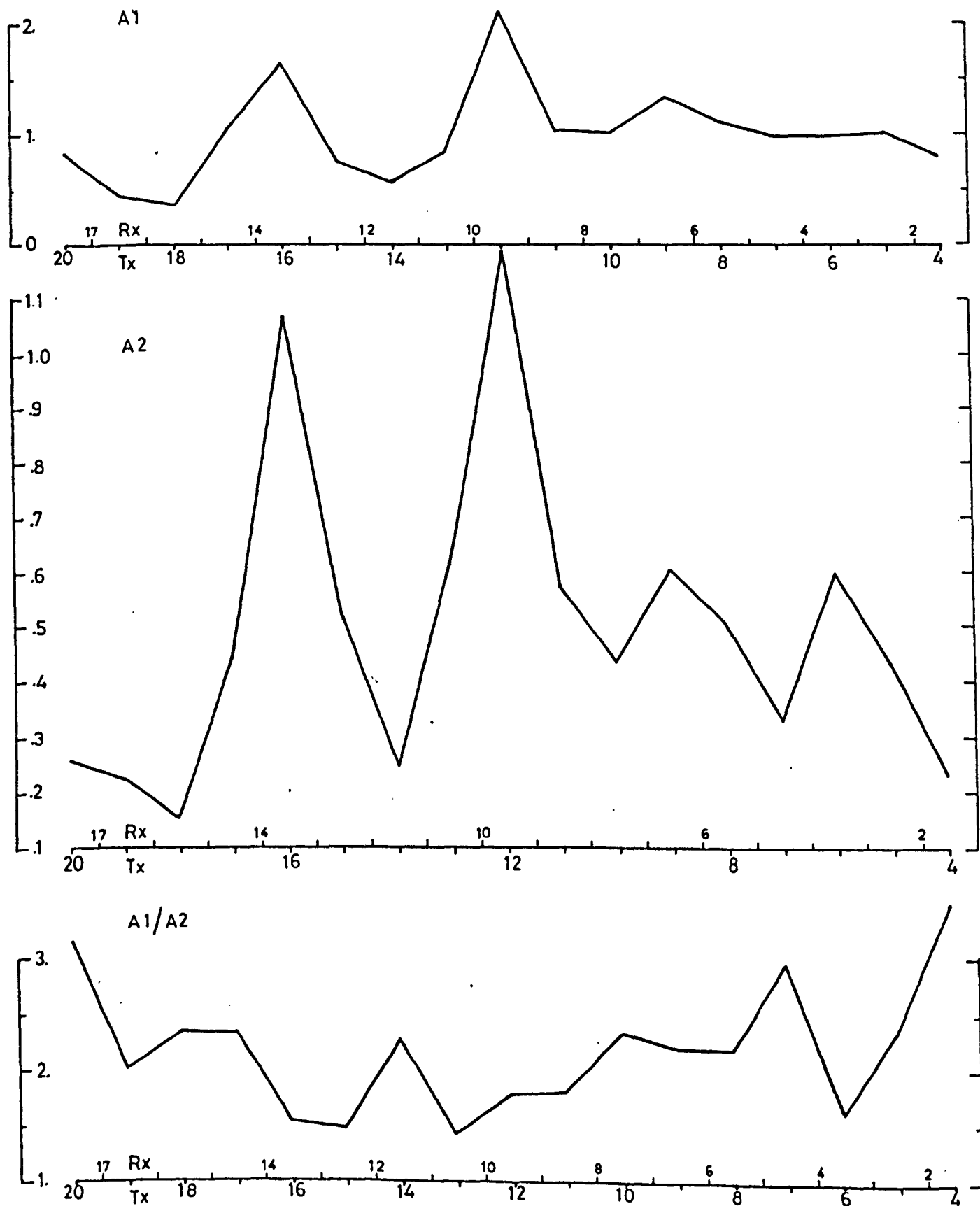
KLIROU AREALINE 2THE BERTIN AND LOEB'S (MODIFIED) FUNCTIONS

TABLE 41KLIROU AREA LINE 3The Bertin and Loeb's (modified) Functions

<u>C</u>	<u>P1-P2</u>	<u>$\rho/2\pi$</u>	<u>A1</u>	<u>A2</u>	<u>A1/A2</u>
4	1- 2	1.86	0.75	0.28	2.61
5	2- 3	1.38	1.15	0.44	2.62
6	3- 4	1.42	1.47	0.54	2.73
7	4- 5	1.41	1.91	0.64	2.98
8	5- 6	1.80	1.16	0.60	1.99
9	6- 7	1.97	0.86	0.35	2.43
10	7- 8	2.05	1.26	0.73	1.72
11	8- 9	2.03	0.93	0.55	1.67
12	9-10	1.78	1.51	0.81	1.86
13	10-11	3.15	0.93	0.55	1.76
14	11-12	4.88	0.47	0.38	1.21
15	12-13	5.05	0.73	0.49	1.48
16	13-14	3.39	1.56	0.89	1.75
17	14-15	8.78	0.38	0.29	1.30
18	15-16	4.35	0.96	0.53	1.81
19	16-17	5.01	0.79	0.38	2.10
20	17-18	5.68	0.52	0.23	2.27

KLIROU AREA

LINE 3

THE BERTIN AND LOEB'S (MODIFIED) FUNCTIONS

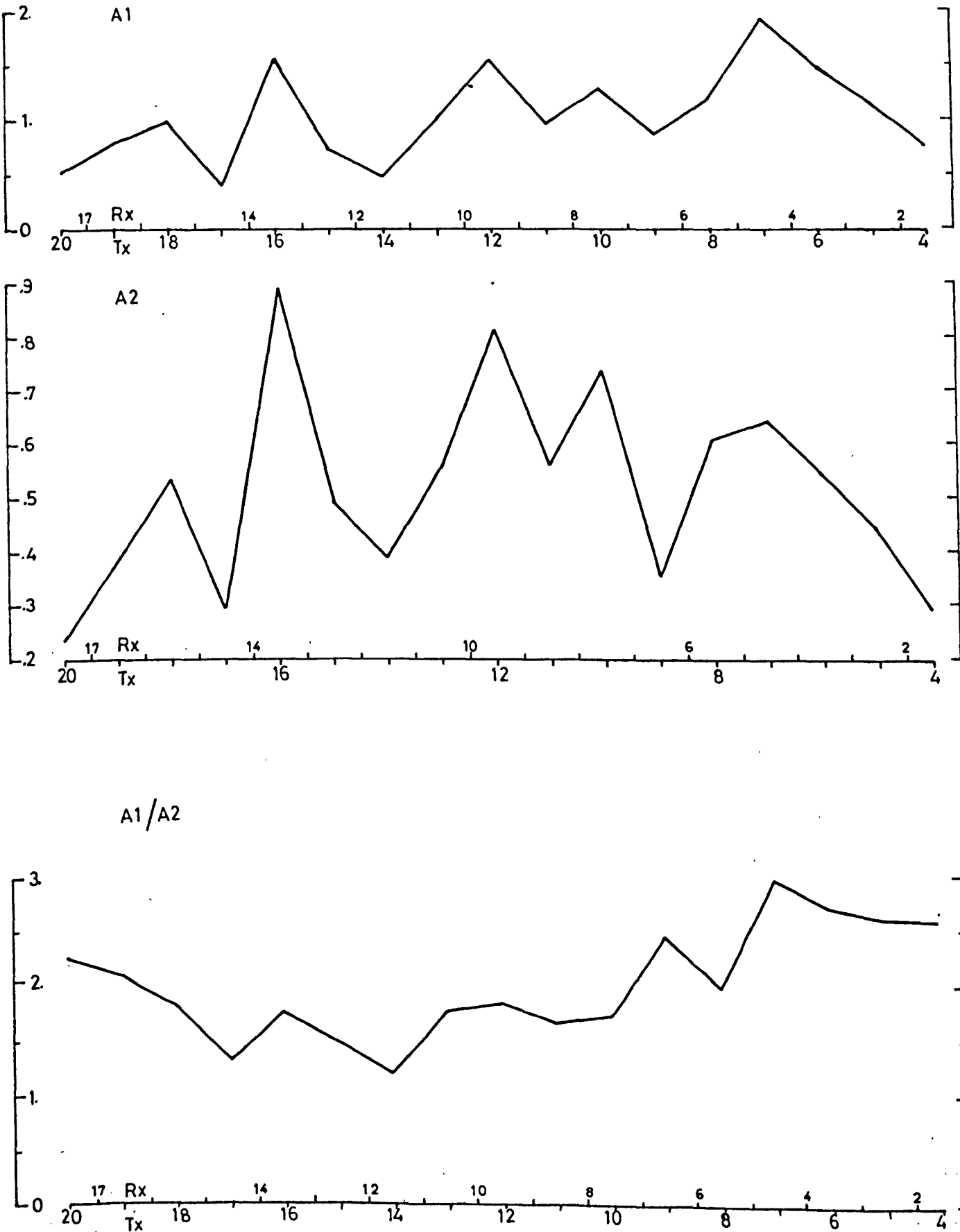


TABLE 42KLIROU AREA LINE 4The Bertin and Loeb's (modified) Functions

<u>C</u>	<u>P1-P2</u>	<u>$\rho/2\pi$</u>	<u>A1</u>	<u>A2</u>	<u>A1/A2</u>
4	1- 2	1.39	1.18	0.40	2.91
5	2- 3	1.94	0.87	0.40	2.14
6	3- 4	1.98	0.95	0.42	2.26
7	4- 5	2.04	1.12	0.37	3.03
8	5- 6	1.64	1.40	0.73	1.91
9	6- 7	1.69	1.36	0.48	2.78
10	7- 8	1.82	1.37	0.68	1.99
11	8- 9	2.08	0.84	0.31	2.66
12	9-10	2.39	0.75	0.53	1.39
13	10-11	3.34	0.83	0.42	1.98
14	11-12	3.72	0.96	0.42	2.29
15	12-13	4.30	0.88	0.40	2.19
16	13-14	6.50	0.80	0.31	2.53
17	14-15	10.12	0.44	0.19	2.25
18	15-16	4.83	1.03	0.50	2.06
19	16-17	6.21	1.22	0.43	2.79
20	17-18	7.32	0.45	0.13	3.30

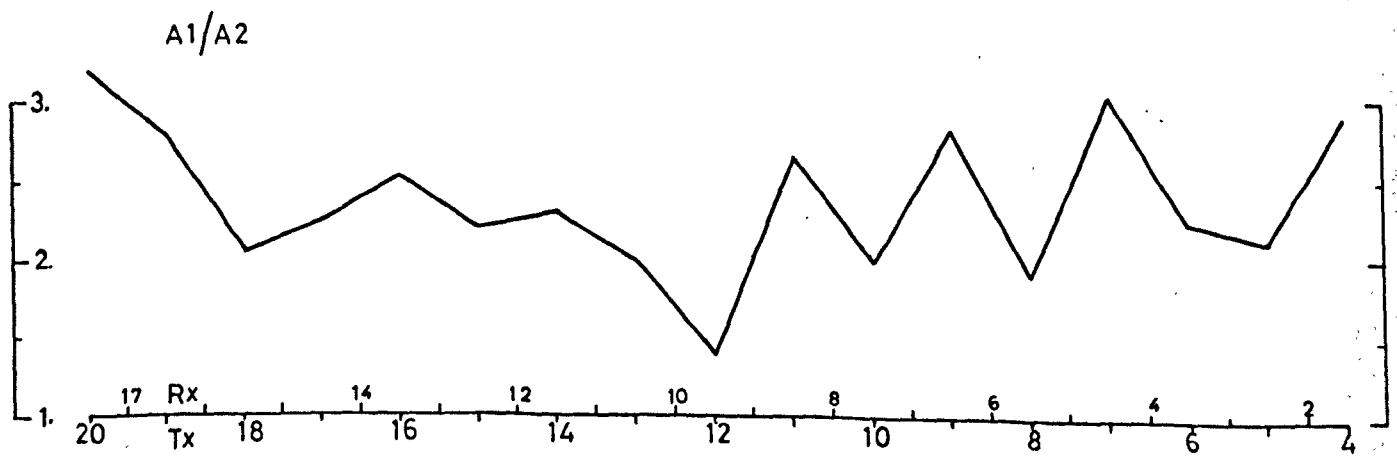
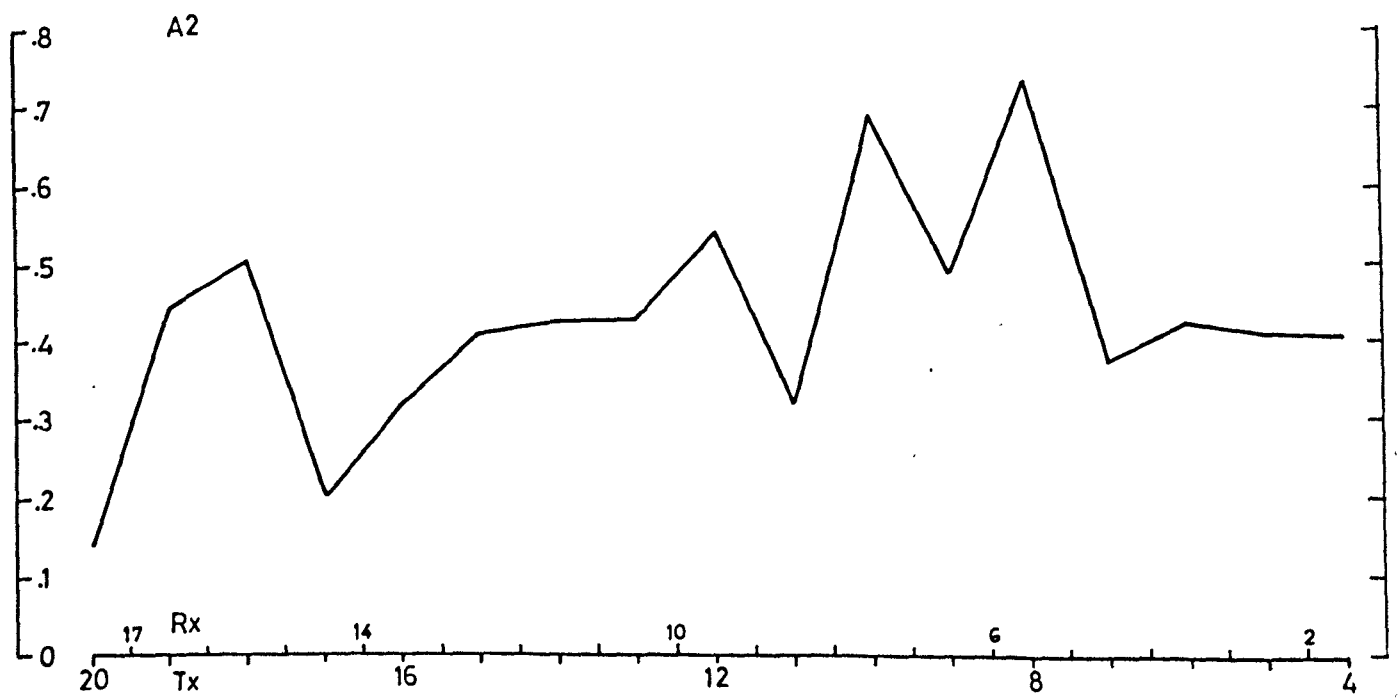
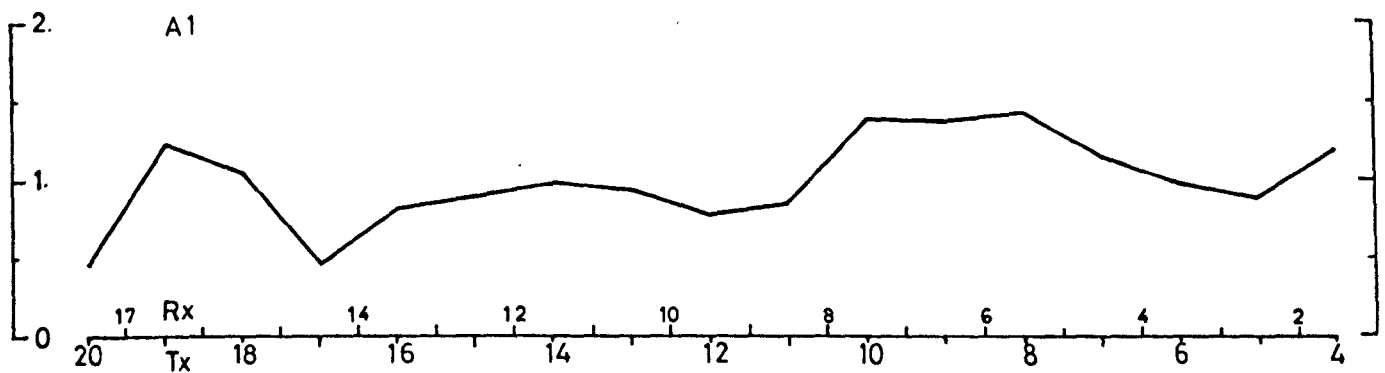
KLIROU AREALINE 4THE BERTIN AND LOEB'S (MODIFIED) FUNCTIONS

TABLE 43

KLIROU AREA

Table summarizing the Bertin and Loeb's (modified) Functions over the mineralizations and the barren rocks.

	Western Mineralization		Southern Mineralization	Northern Mineralization	Barren Rocks
	<u><1% S</u>	<u>1-5% S</u>			
A1	max.0.6	0.9-1.65	2.0 +	1.4	1.0
A2	0.15-0.4	0.4-1.07	1 - 1.19	0.5-0.73	0.2-0.6
A1/A2	2.0 +	1.5	1.8	2.0-2.8	2.0-5.0

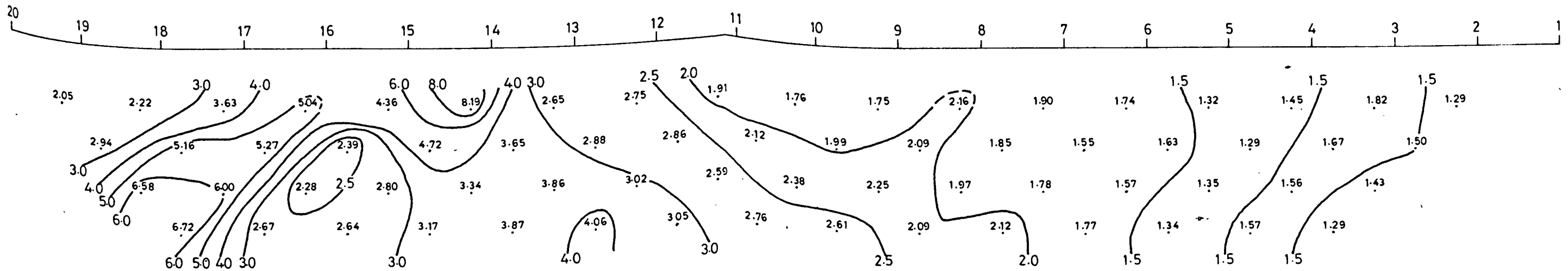
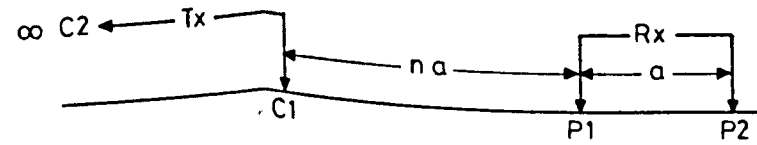
KLIROU AREA

LINE 1

POLE - DIPOLE

$a = 50m$

RESISTIVITY $\rho/2\pi$ (Ohm-meters)



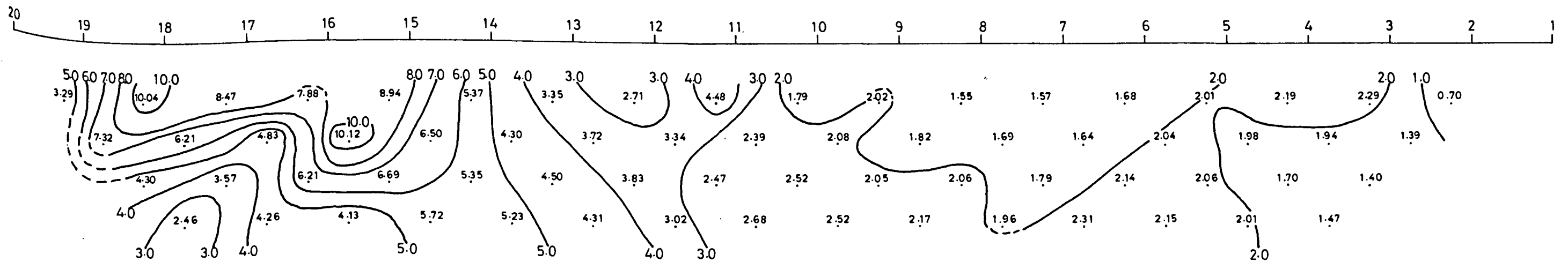
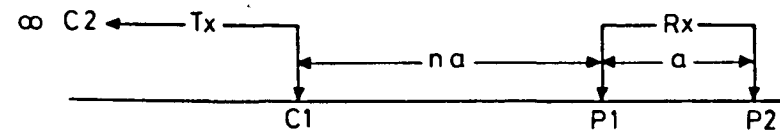
KLIROU AREA

LINE 4

POLE - DIPOLE

$a = 50\text{ m}$

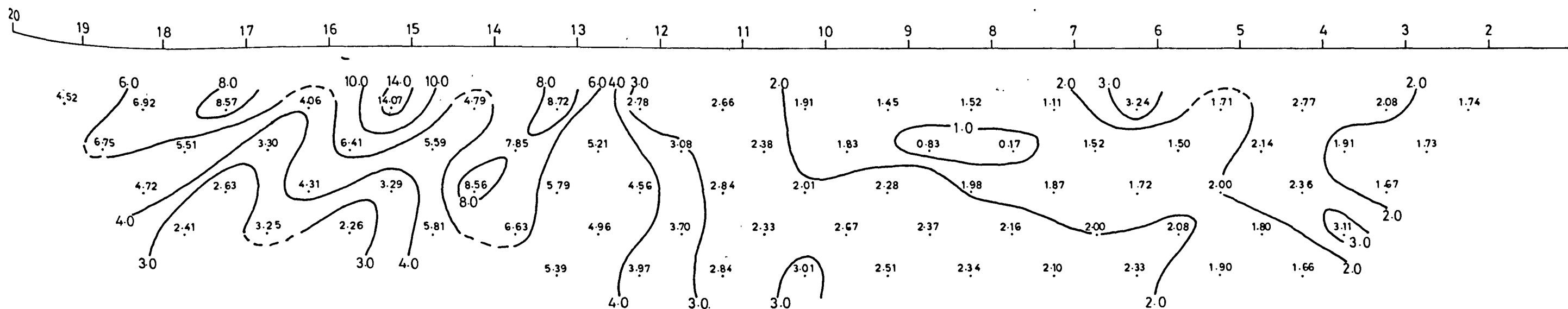
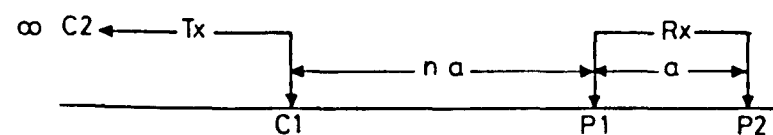
RESISTIVITY $\rho/2\pi$ (Ohm-meters)



KLIROU AREA

LINE 5

POLE - DIPOLE










 $a = 50\text{ m}$ RESISTIVITY $\rho/2\pi$ (Ohm - meters)

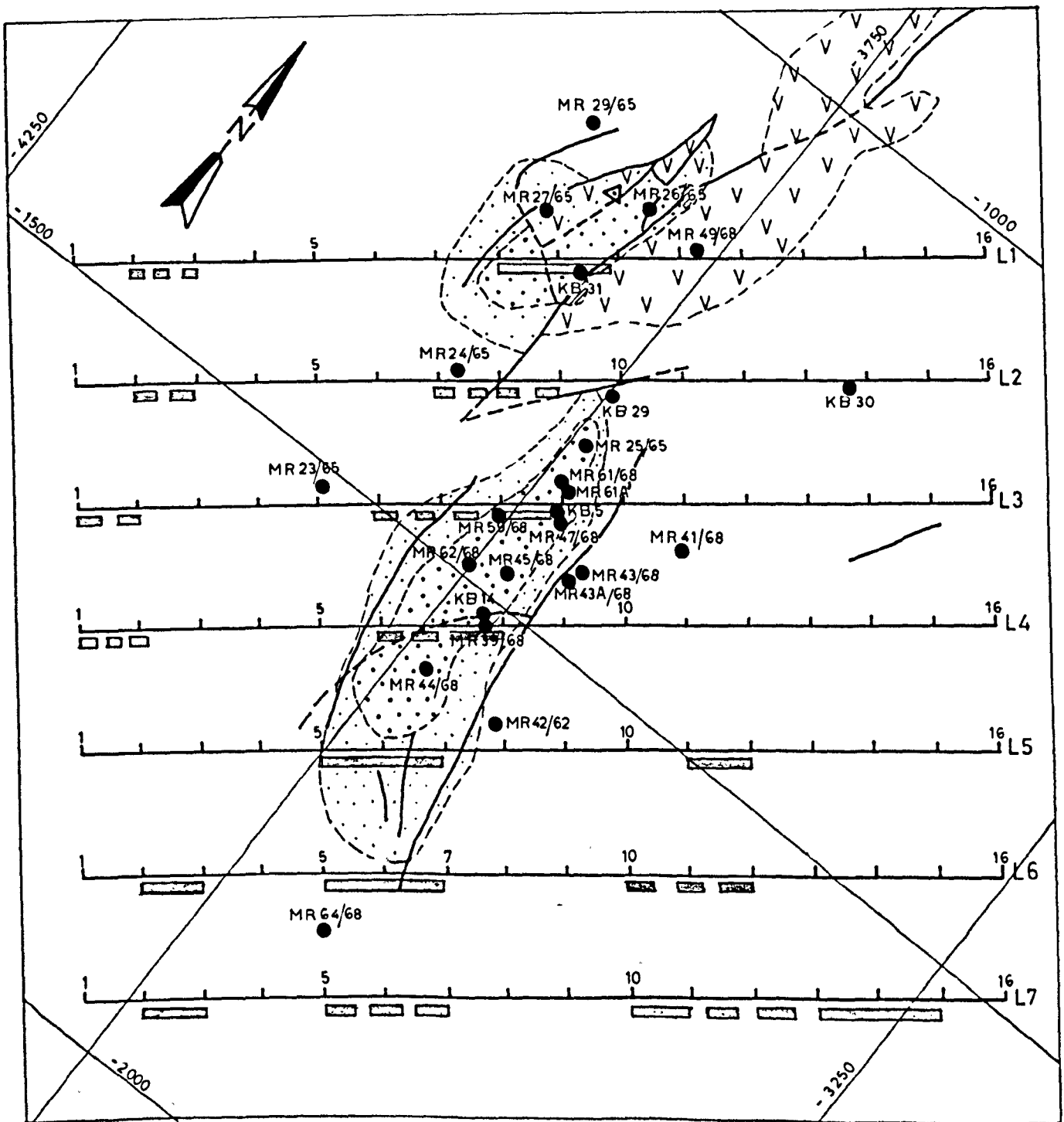
GEOLOGICAL - GEOPHYSICAL MAP
OF THE KOKKINOVOUNAROS AREA

FIG. 120

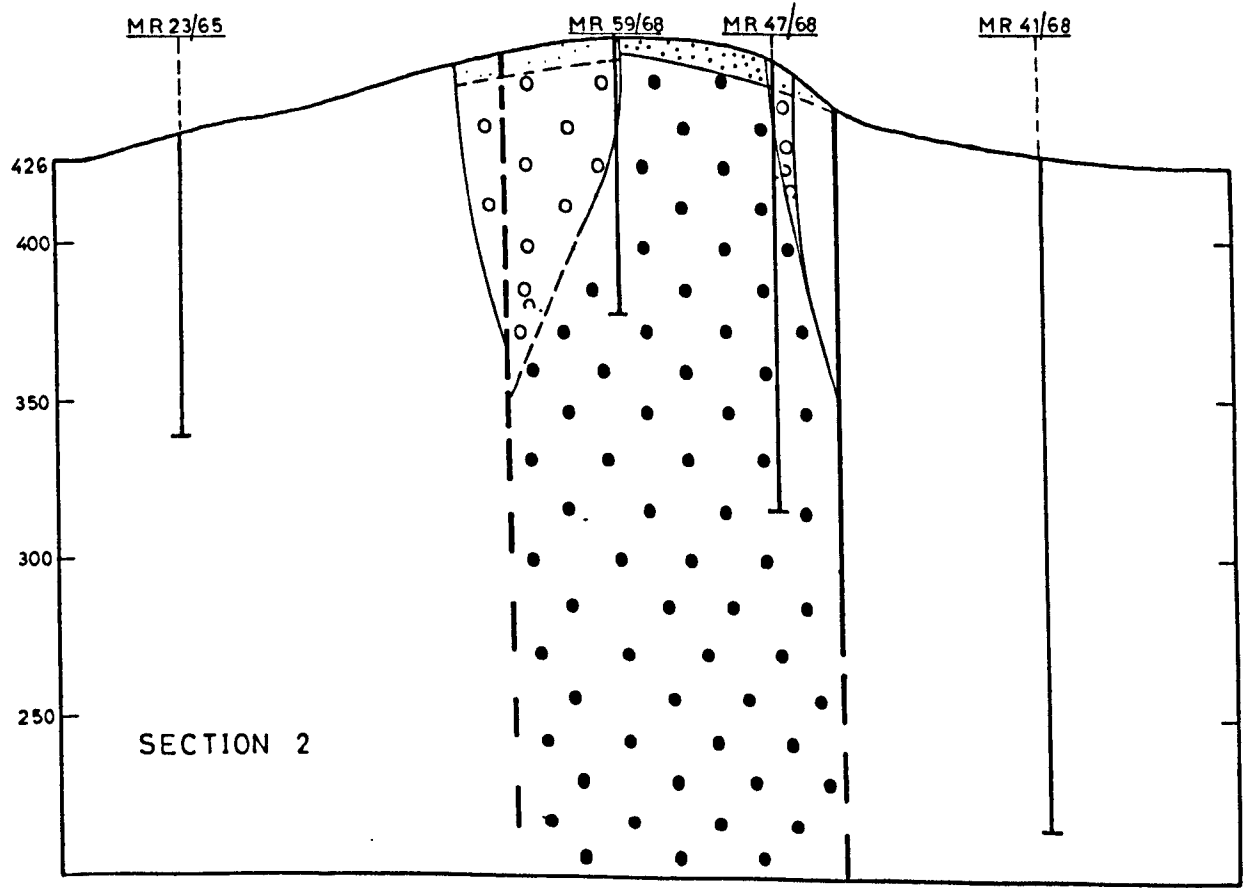
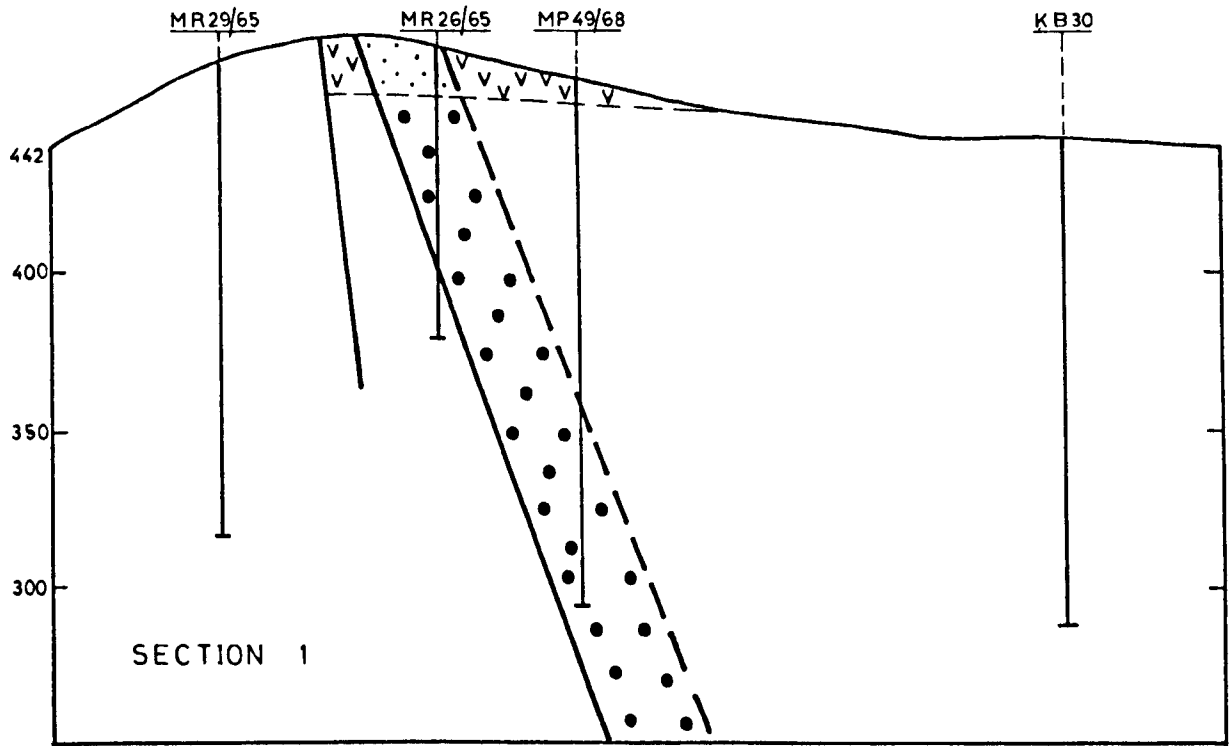
Scale 1/5000







LEGEND

- | | |
|--|--|
| <p> Umbers and Mn Cherts</p> <p> Upper Pillow Lavas</p> <p> Leached</p> <p> Lower Pillow Lavas</p> <p> Weak Alteration (Limonitic Staining)</p> | <p> Gossan</p> <p> Faults</p> <p> Geological Boundaries</p> <p> Boreholes</p> |
|--|--|



Scale 1/2 500



- | | |
|--|--|
|  Lower Pillow Lavas |  Gossan |
|  Weakly Mineralized |  Limonite Stained Lavas |
|  Strongly Mineralized |  Upper Pillow Lavas |

KOKKINOVOUNAROS AREA

td = 30 tc = 8

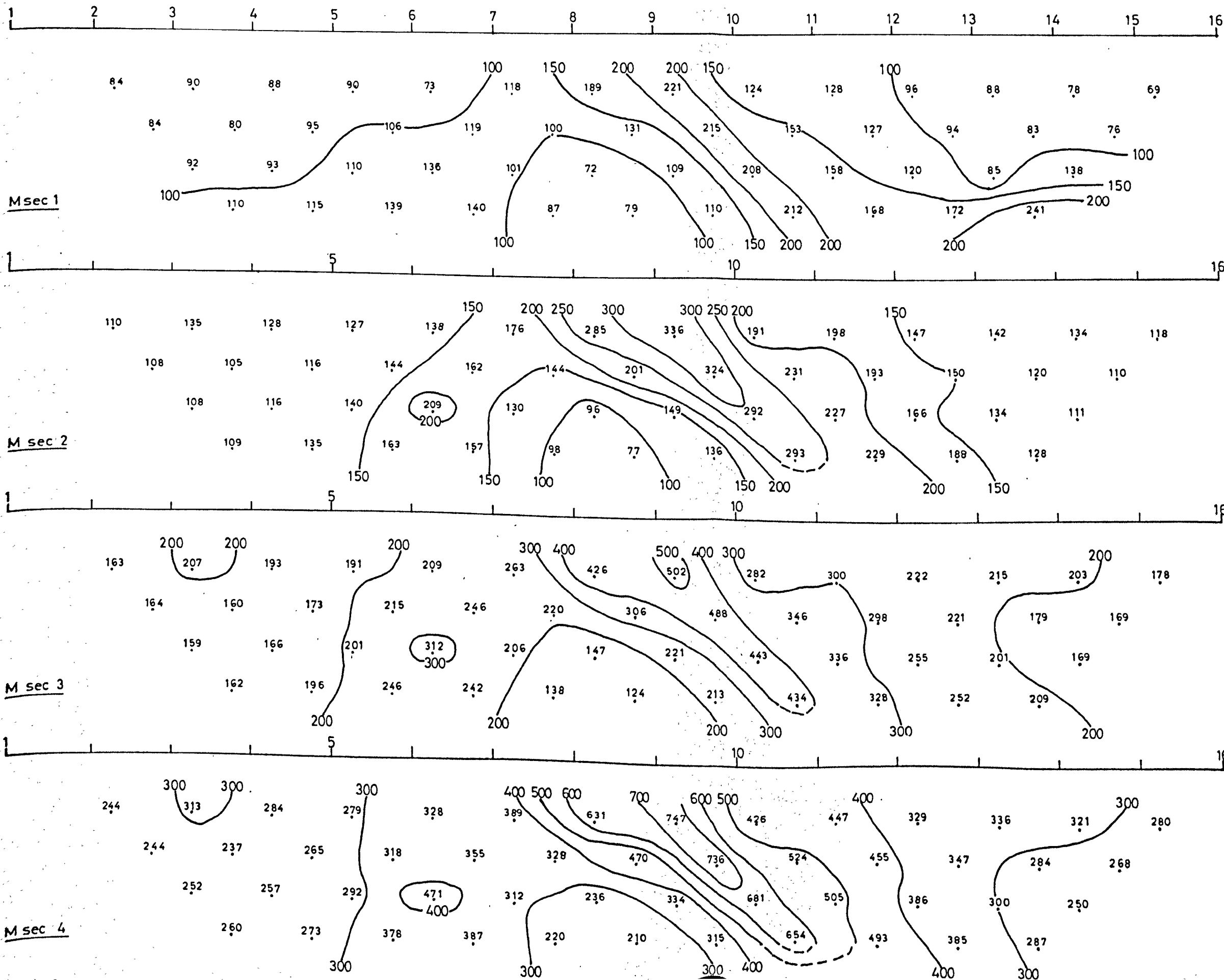
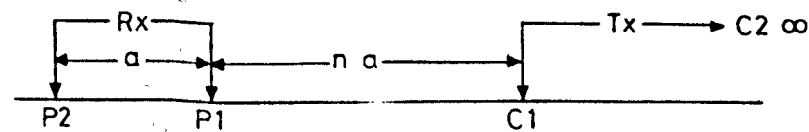
FIG. 122

LINE 1

tp = 50 on/off = 1.0

POLE - DIPOLE

a = 50m



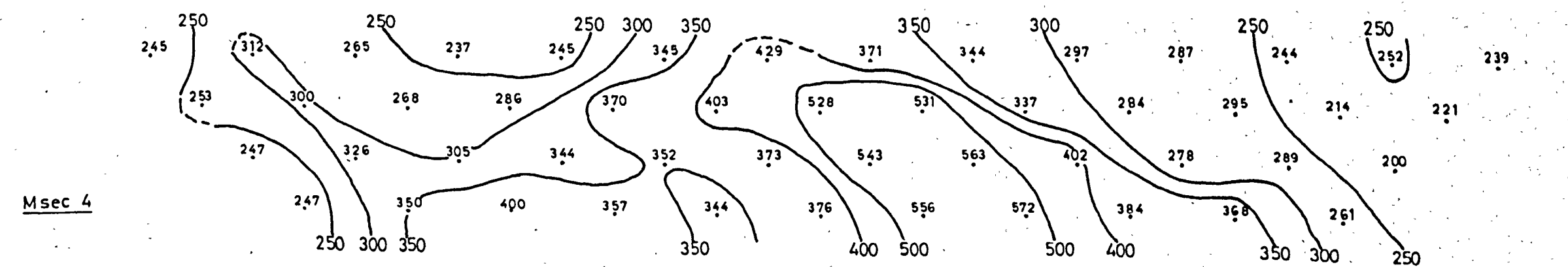
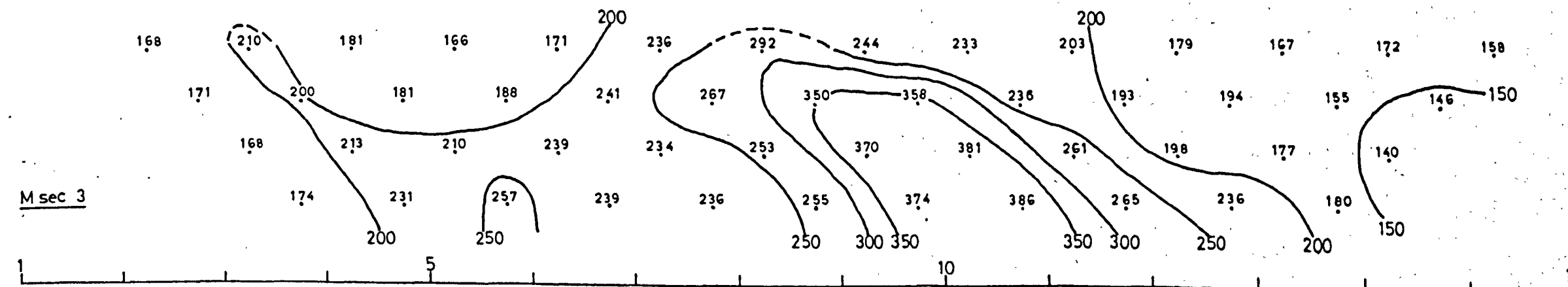
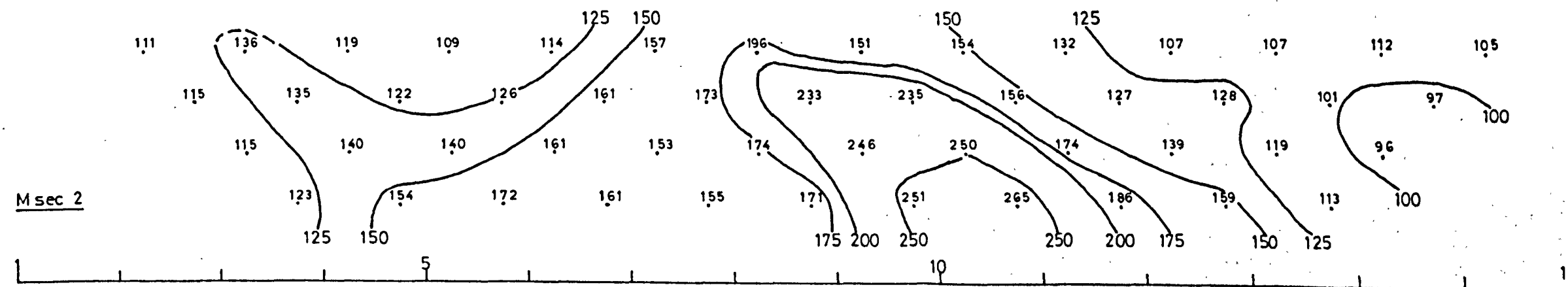
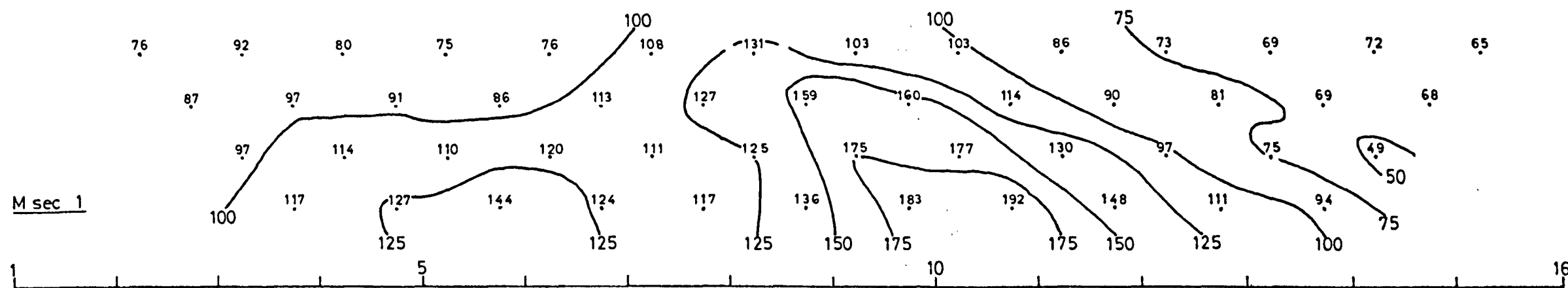
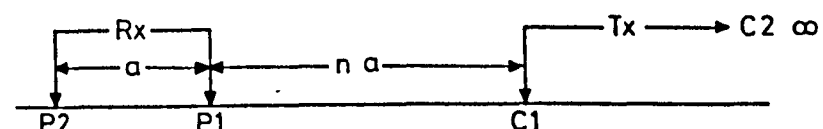
KOKKINOVOUNAROS AREA

 $t_d = 30$ $t_c = 8$

LINE 2

 $t_p = 50$ $on/off = 1.0$

POLE - DIPOLE

 $a = 50\text{ m}$ 

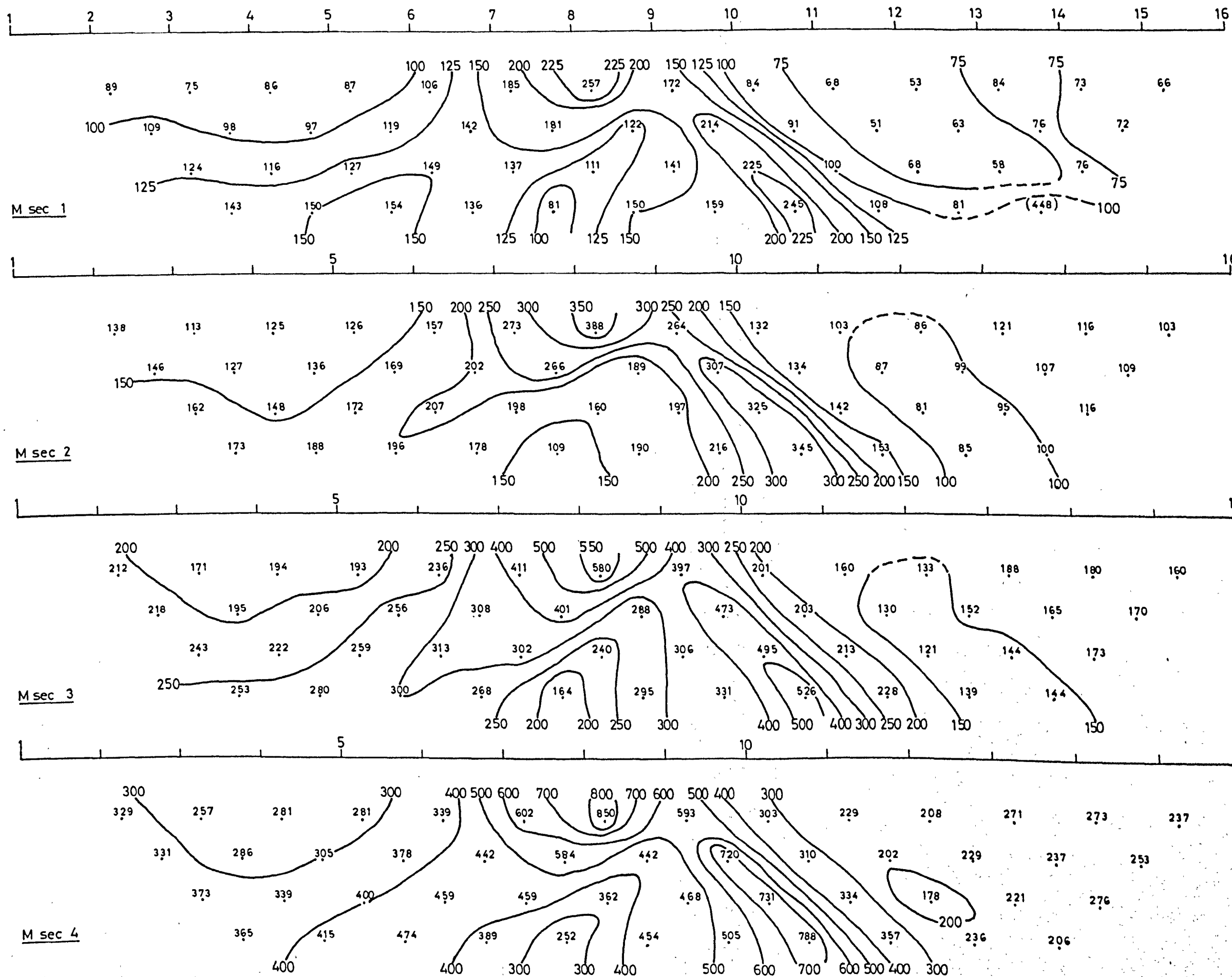
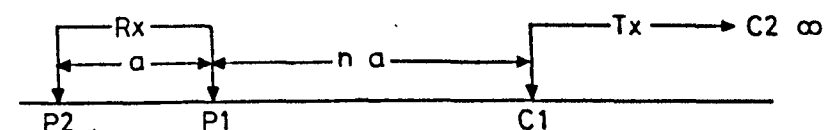
KOKKINOVOUNAROS AREA

 $t_d = 30$ $t_c = 8$

LINE 3

 $t_p = 50$ $on/off = 1.0$

POLE - DIPOLE

 $a = 50$ m

KOKKINOVOUNAROS AREA

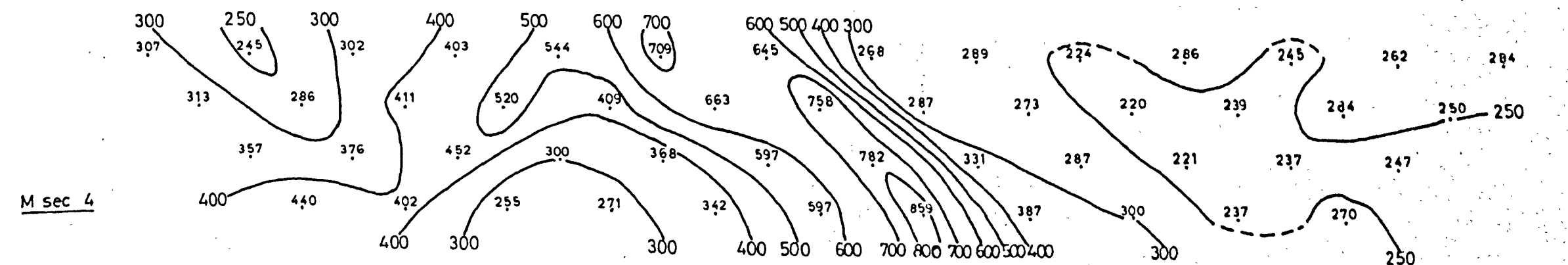
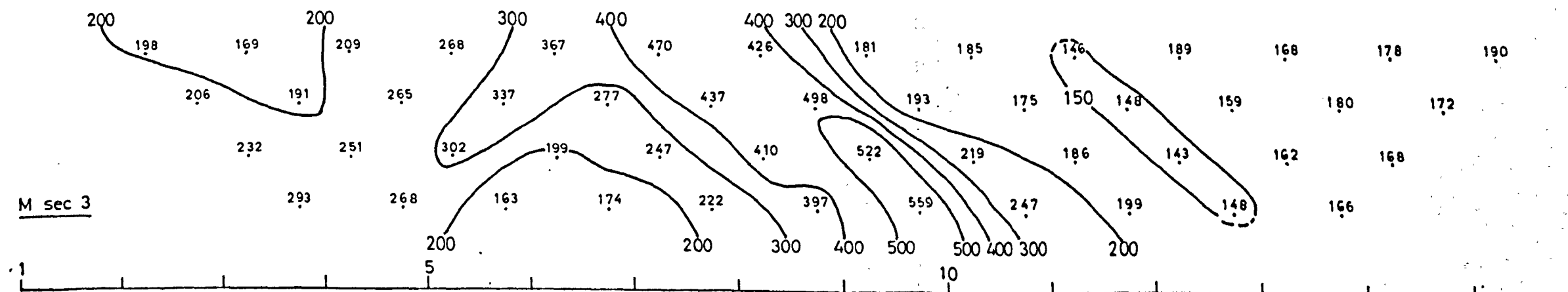
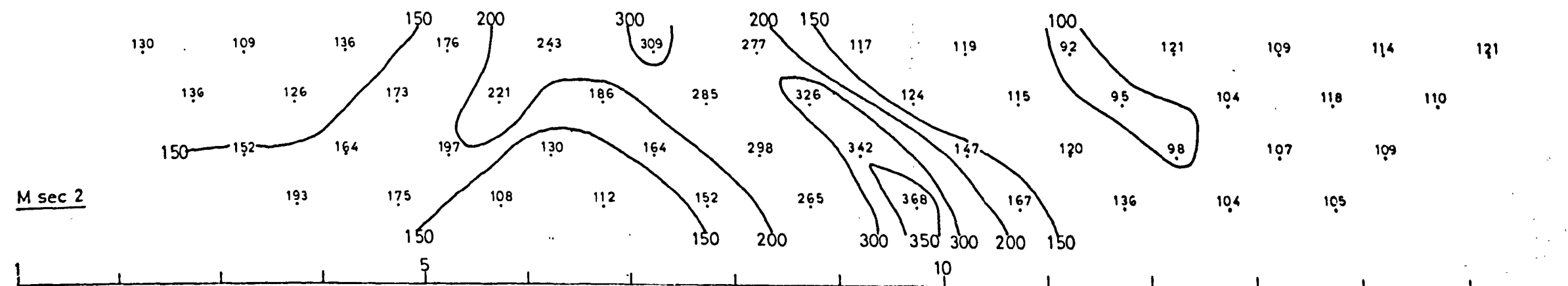
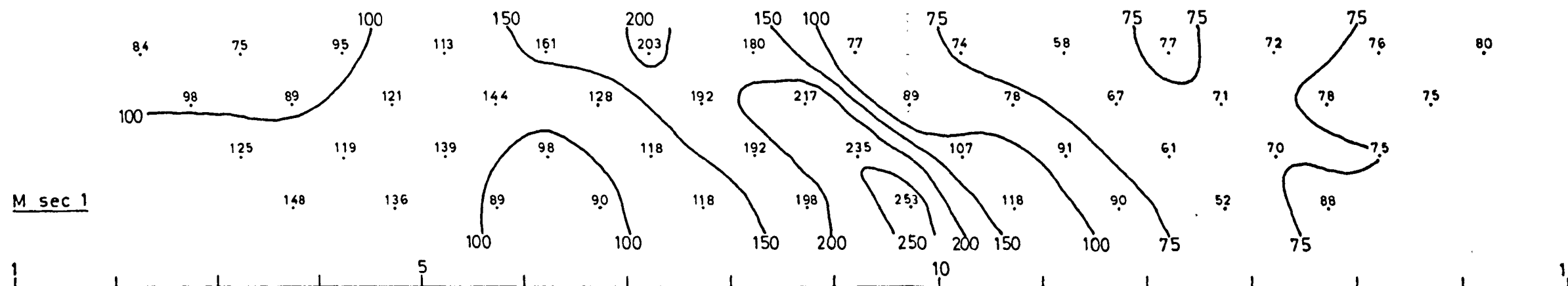
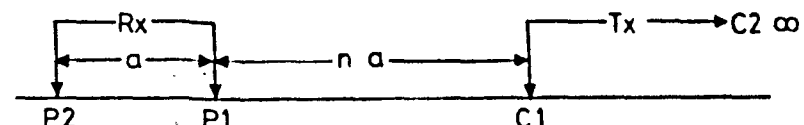
 $t_d = 30$ $t_c = 8$

LINE 4

 $t_p = 50$

on/off = 1 0

POLE - DIPOLE

 $a = 50$ m

KOKKINOVOUNAROS AREA

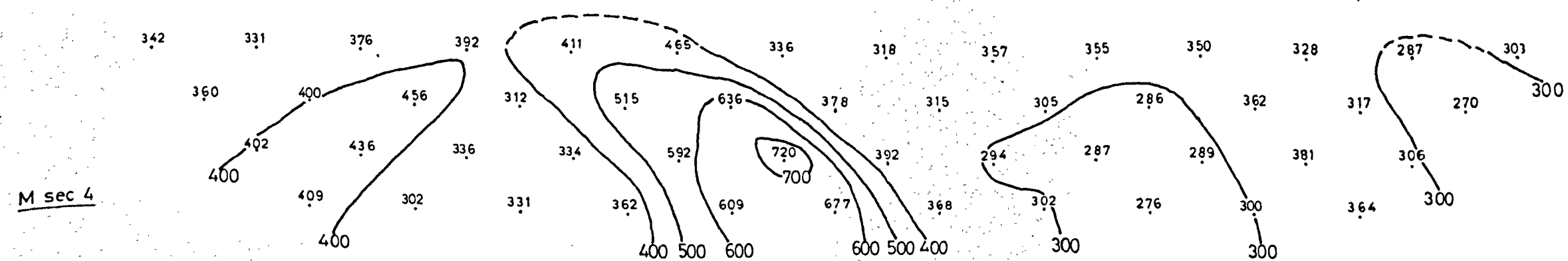
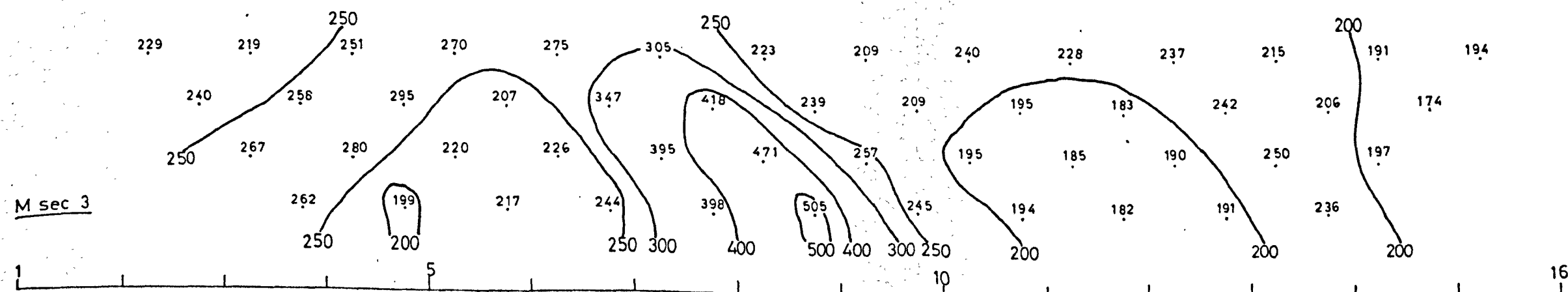
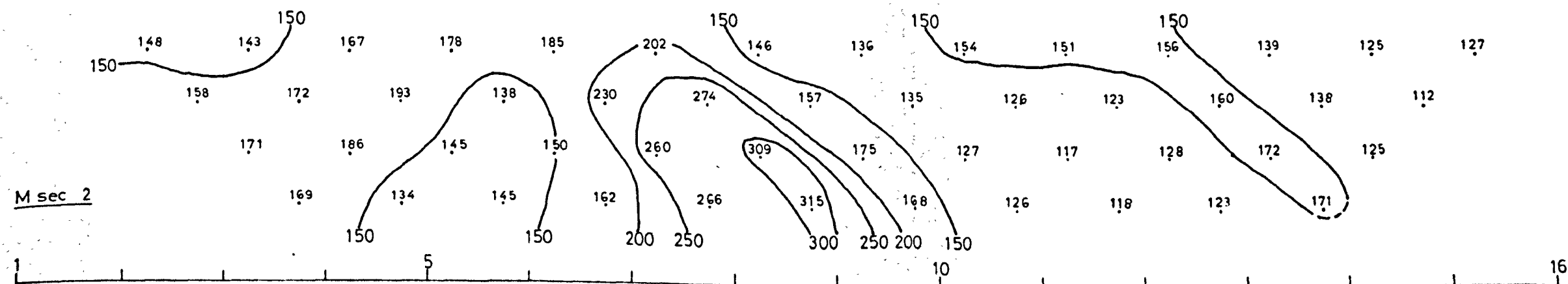
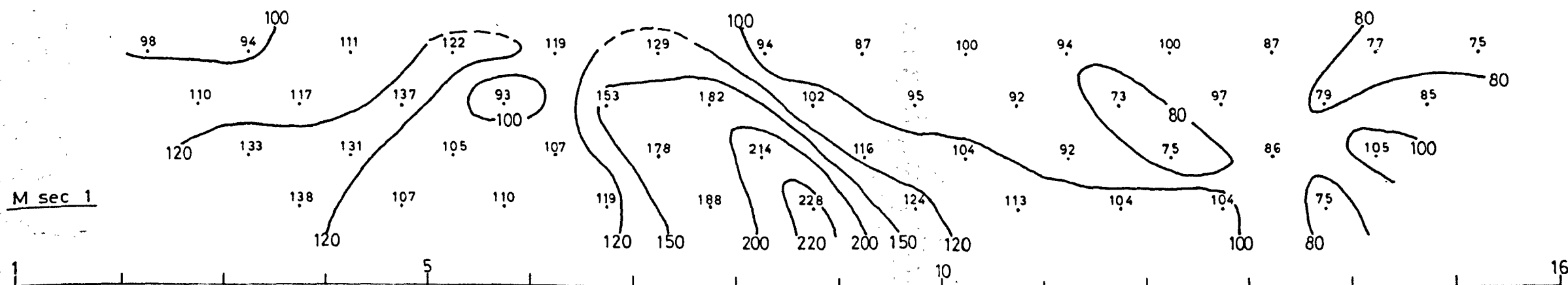
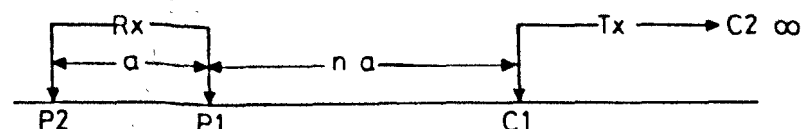
 $t_d = 30$ $t_c = 8$

LINE 5

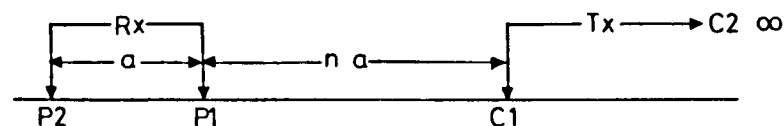
 $t_p = 50$

on/off = 1.0

POLE - DIPOLE

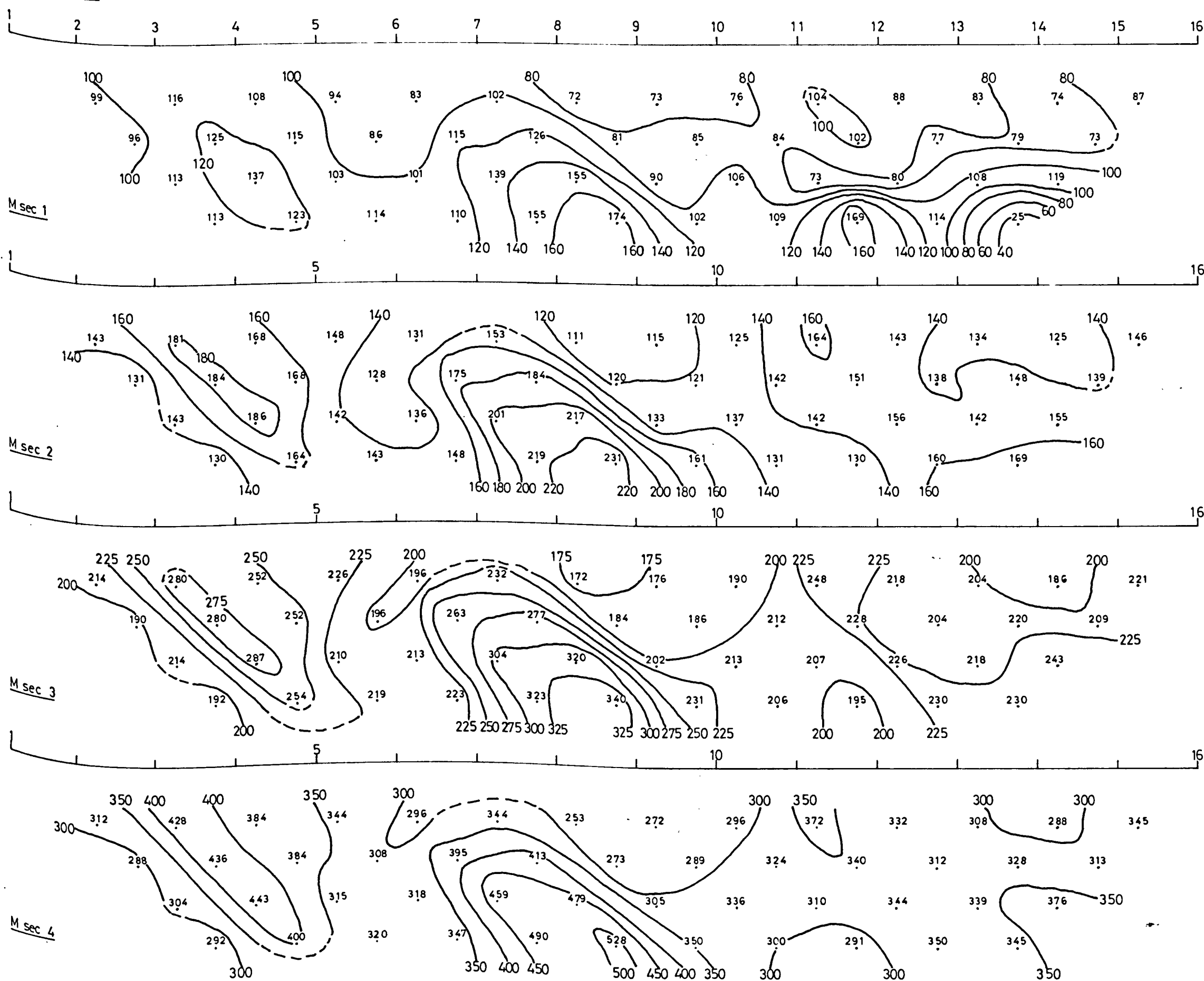
 $a = 50 \text{ m}$ 

tp = 50 on/off = 10

 $a = 50 \text{ m}$ 

LINE 6

POLE - DIPOLE



KOKKINOVOUNAROS AREA

$t_d = 30$ $t_c = 8$

LINE 7

$t_p = 50$ $on/off = 1.0$

POLE - DIPOLE

$a = 50m$

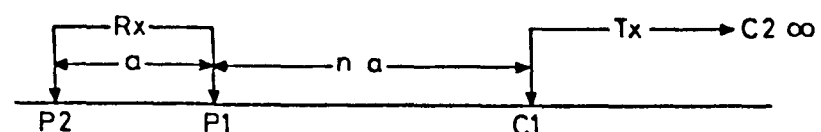


FIG. 128

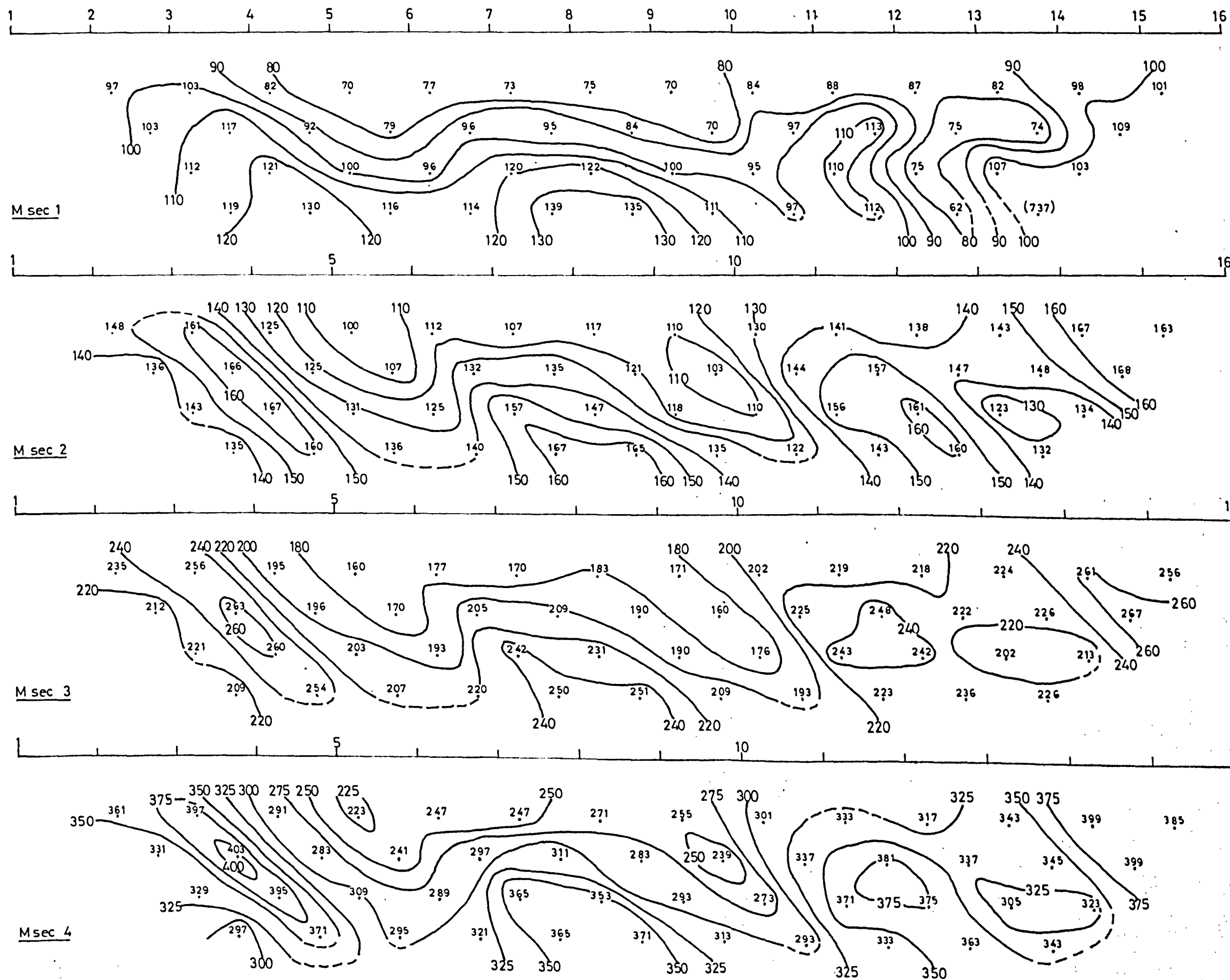


TABLE 44

KOKKINOVOUNAROS AREA LINE 1

The Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>A</u>	<u>R</u>	<u>α</u>	<u>β</u>	<u>P</u>
4	1- 2	1.60	0.54	10.49	0.56	0.20
5	2- 3	1.56	0.49	10.60	0.50	0.20
6	3- 4	1.70	0.59	10.57	0.57	0.21
7	4- 5	1.40	0.74	7.51	0.64	0.23
8	5 -6	2.26	0.74	9.54	0.53	0.29
9	6- 7	1.70	0.98	12.23	0.94	0.18
10	7- 8	2.05	1.21	10.18	0.71	0.35
11	8- 9	3.20	2.08	10.24	0.78	0.52
12	9-10	2.30	1.35	9.04	0.70	0.39
13	10-11	1.88	0.80	7.03	0.40	0.39
14	11-12	1.65	0.76	8.56	0.55	0.28
15	12-13	1.33	0.50	7.95	0.37	0.26
16	13-14	1.05	0.58	5.58	0.56	0.21

LINE 1

THE DECAY FACTORS

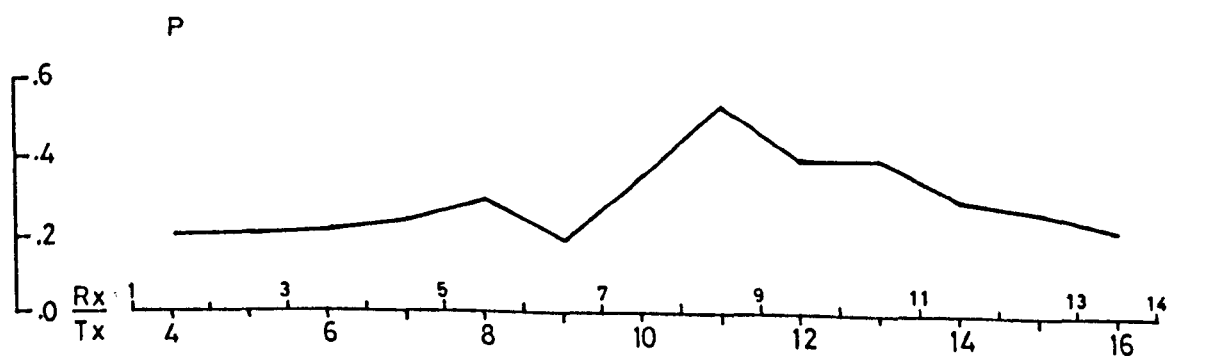
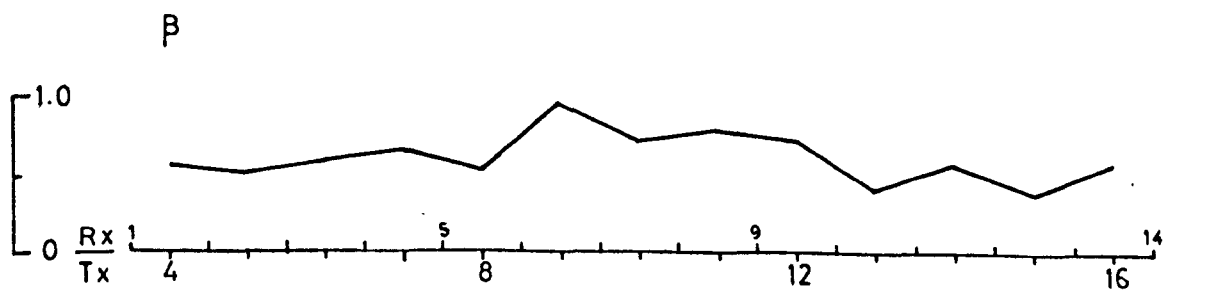
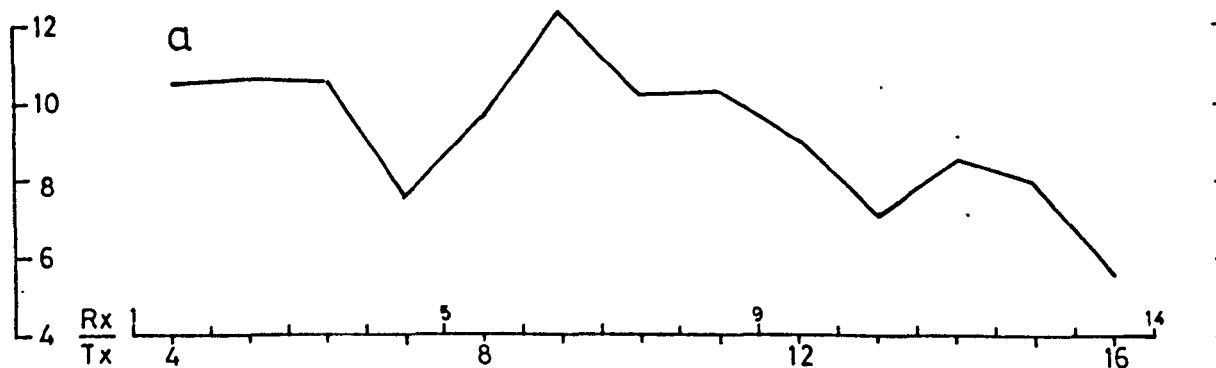
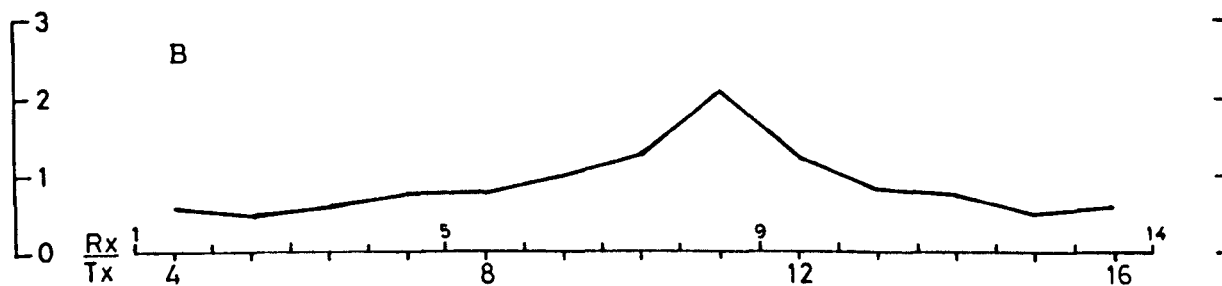
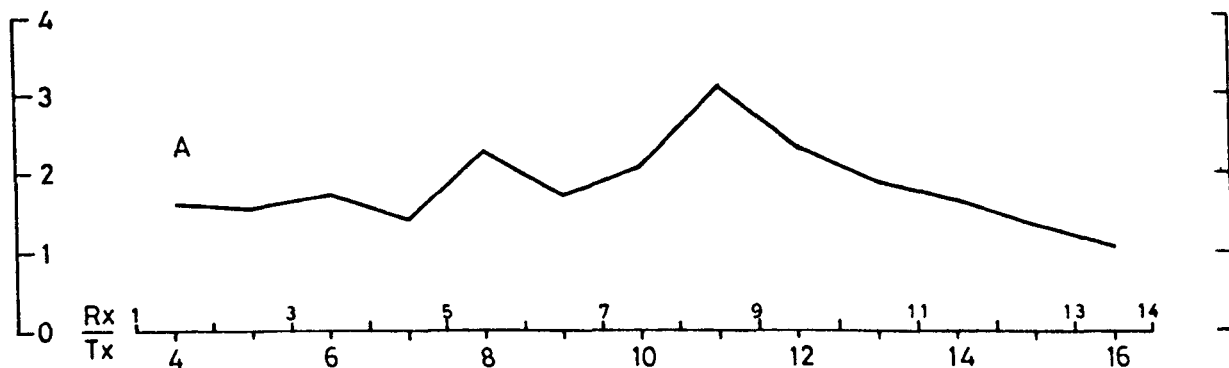


TABLE 45KOKKINOVOUNAROS AREA LINE 2The Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>A</u>	<u>B</u>	<u>α</u>	<u>β</u>	<u>P</u>
4	1- 2	1.40	0.62	9.15	0.70	0.18
5	2- 3	1.78	0.64	9.61	0.48	0.27
6	3- 4	1.65	0.52	9.78	0.45	0.23
7	4- 5	1.37	0.71	10.58	0.65	0.22
8	5- 6	1.78	1.05	11.20	0.77	0.27
9	6- 7	2.10	1.03	11.26	0.66	0.31
10	7- 8	2.25	1.30	8.30	0.64	0.41
11	8- 9	3.10	1.57	12.93	0.84	0.36
12	9-10	2.17	0.89	11.89	0.71	0.25
13	10-11	1.58	0.68	10.36	0.61	0.23
14	11-12	1.40	0.58	10.29	0.54	0.26
15	12-13	1.13	0.56	9.42	0.68	0.16
16	13-14	1.12	0.56	11.68	0.70	0.16

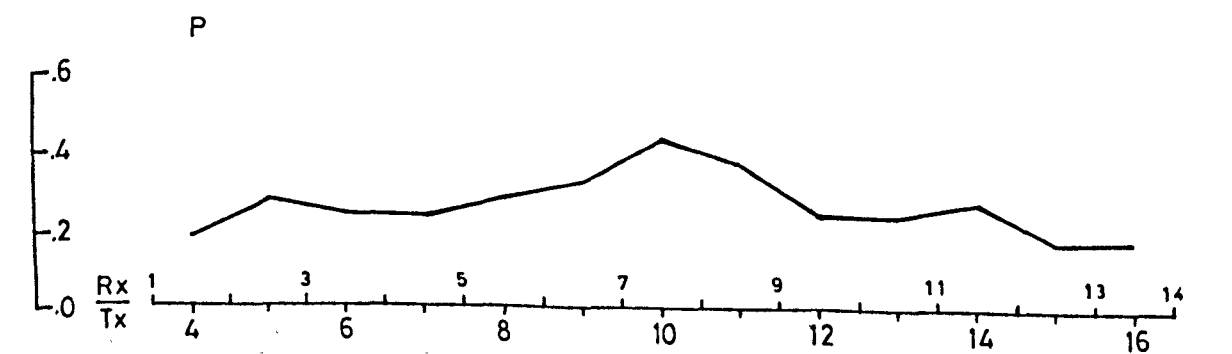
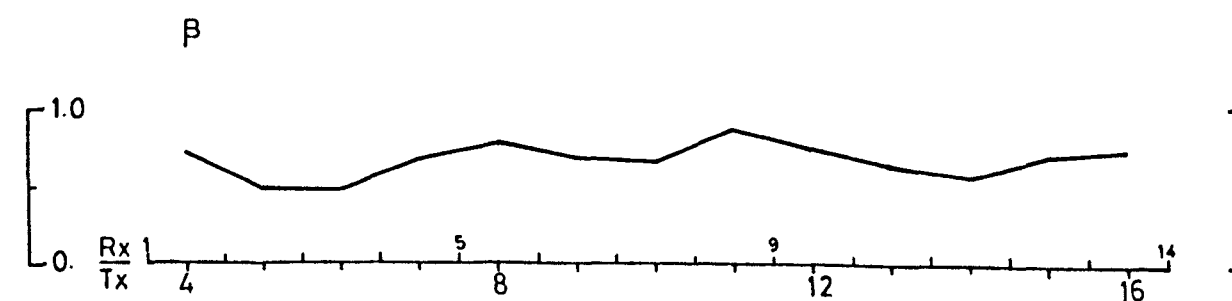
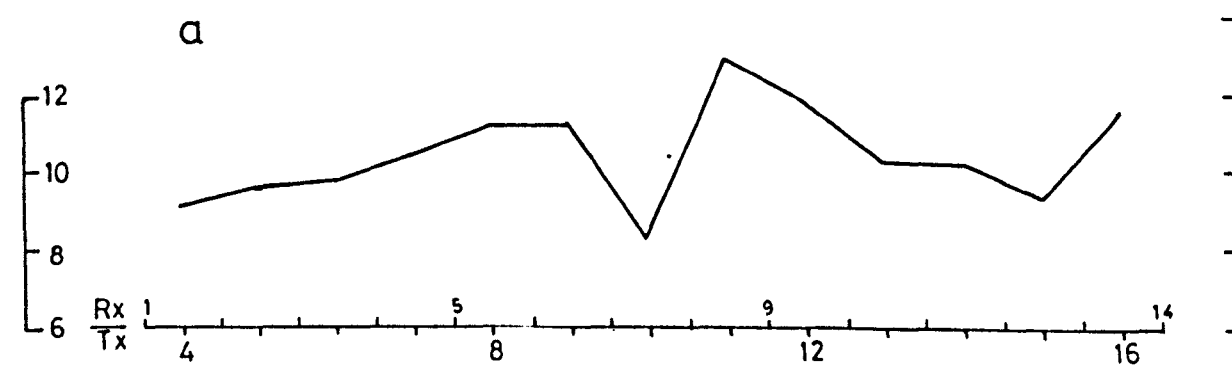
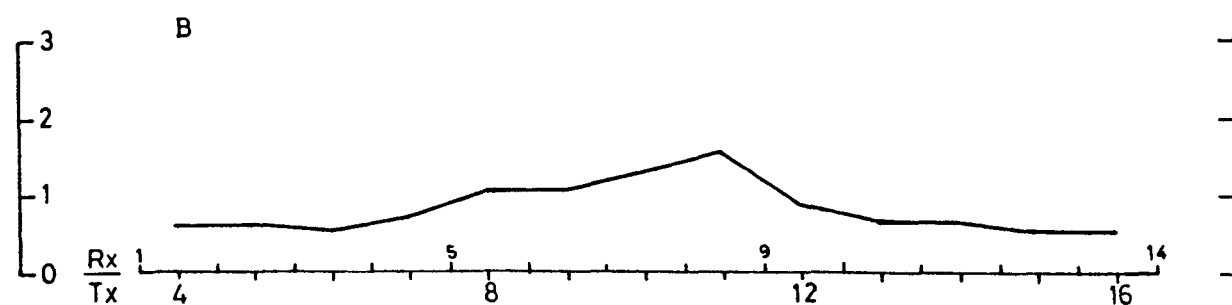
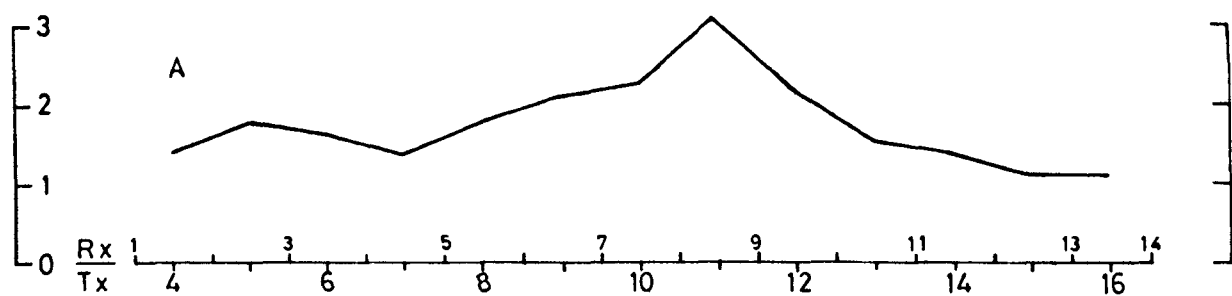
LINE 2THE DECAY FACTORS

TABLE 46

KOKKINOVOUNAROS AREA LINE 3

The Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>A</u>	<u>B</u>	<u>α</u>	<u>β</u>	<u>P</u>
4	1- 2	2.15	1.02	13.44	0.89	0.21
5	2- 3	1.95	0.87	12.83	0.87	0.17
6	3- 4	1.92	0.66	10.82	0.56	0.24
7	4- 5	2.00	1.02	10.21	0.78	0.25
8	5- 6	2.50	0.98	8.21	0.56	0.36
9	6- 7	2.60	1.38	7.24	0.63	0.45
10	7- 8	1.95	0.98	8.77	0.55	0.37
11	8- 9	3.10	1.60	9.31	0.57	0.59
12	9-10	1.35	0.70	7.94	0.55	0.26
13	10-11	0.97	0.35	7.35	0.34	0.19
14	11-12	1.03	0.39	6.44	0.30	0.23
15	12-13	1.16	0.70	9.91	0.87	0.15
16	13-14	0.97	0.76	9.50	0.89	0.15

KOKKINOVOUNAROS AREA

LINE 3

THE DECAY FACTORS

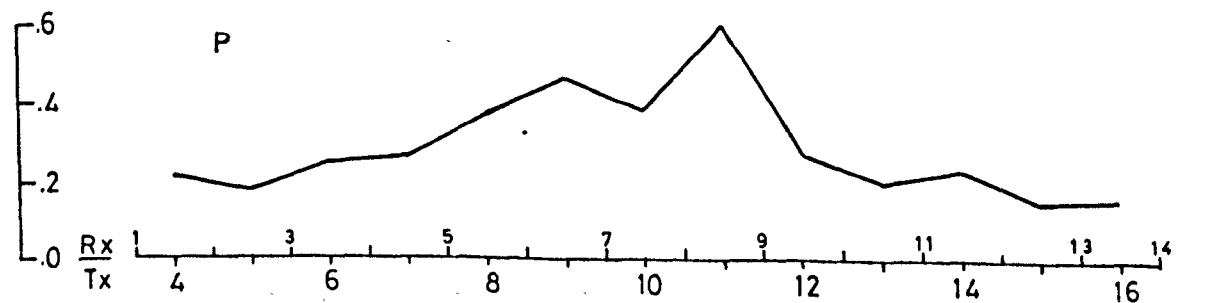
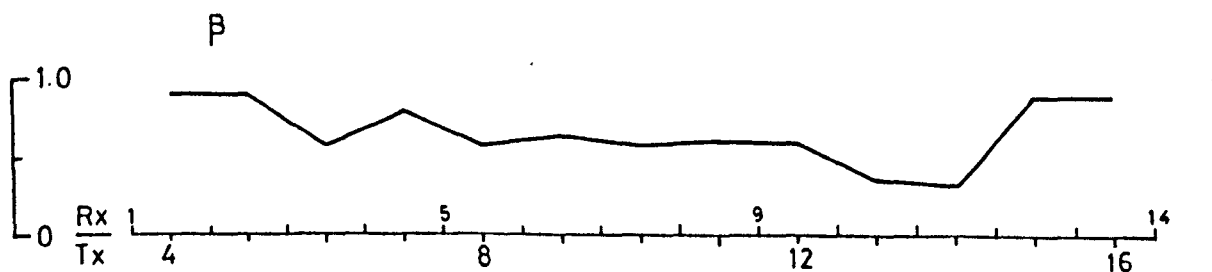
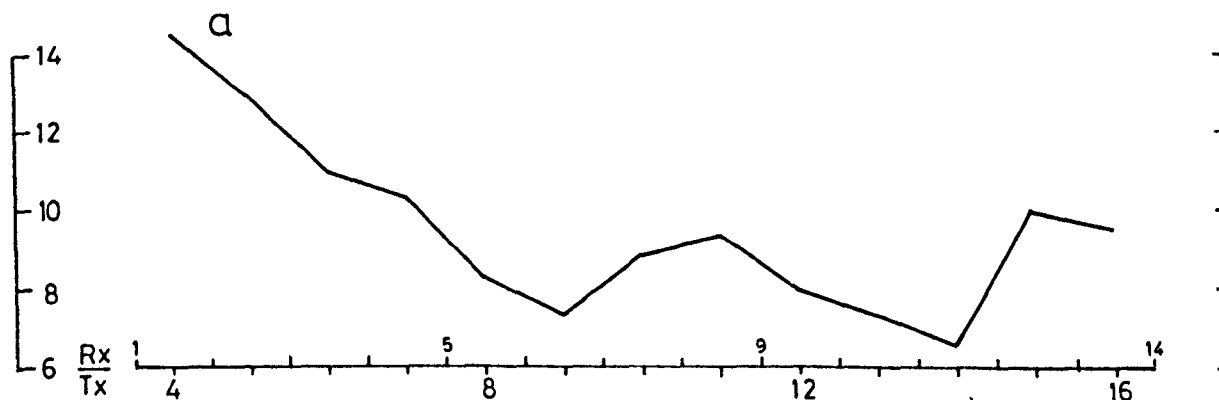
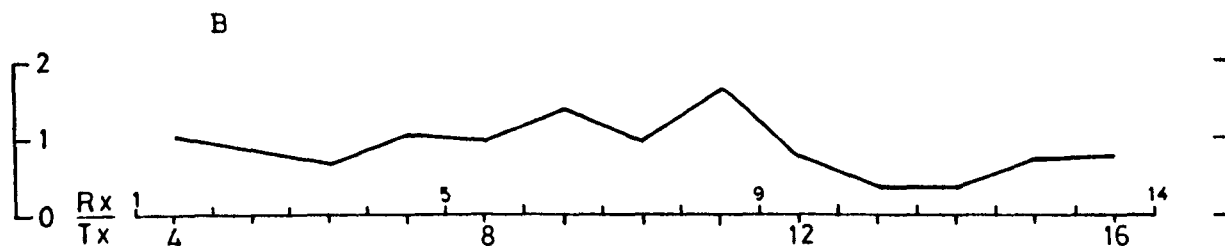
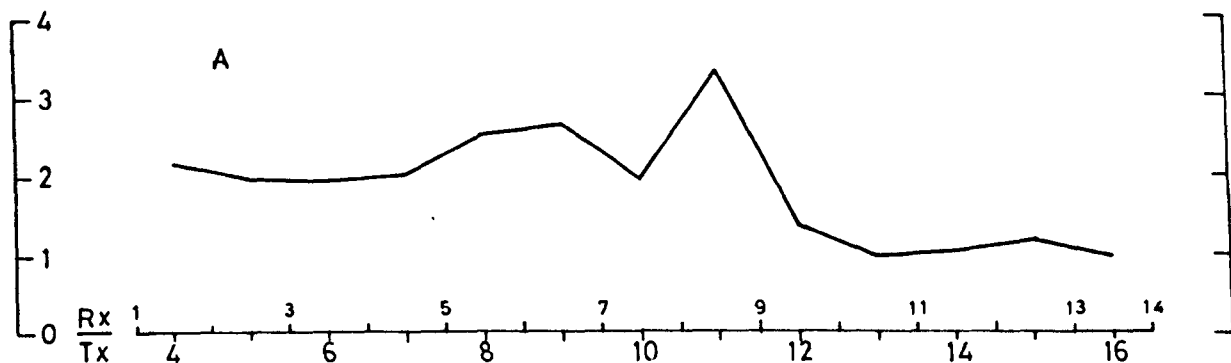


TABLE 47

KOKKINOVOULIAROS AREA LINE 4

The Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>A</u>	<u>B</u>	<u>α</u>	<u>β</u>	<u>P</u>
4	1- 2	1.36	0.77	8.51	0.64	0.25
5	2- 3	1.59	0.69	10.97	0.63	0.22
6	3- 4	1.65	0.82	7.61	0.45	0.37
7	4- 5	2.00	1.20	8.67	0.62	0.40
8	5- 6	1.83	0.84	7.20	0.50	0.34
9	6- 7	2.68	1.68	11.12	0.68	0.51
10	7- 8	2.42	1.93	7.61	0.67	0.59
11	8- 9	1.80	0.86	14.73	0.87	0.18
12	9-10	1.19	0.60	9.28	0.60	0.24
13	10-11	1.18	0.47	8.98	0.47	0.20
14	11-12	0.99	0.63	9.18	0.69	0.18
15	12-13	1.08	0.70	8.74	0.70	0.20
16	13-14	0.79	0.70	6.81	0.79	0.17

KOKKINOVOUNAROS AREA

LINE 4

THE DECAY FACTORS

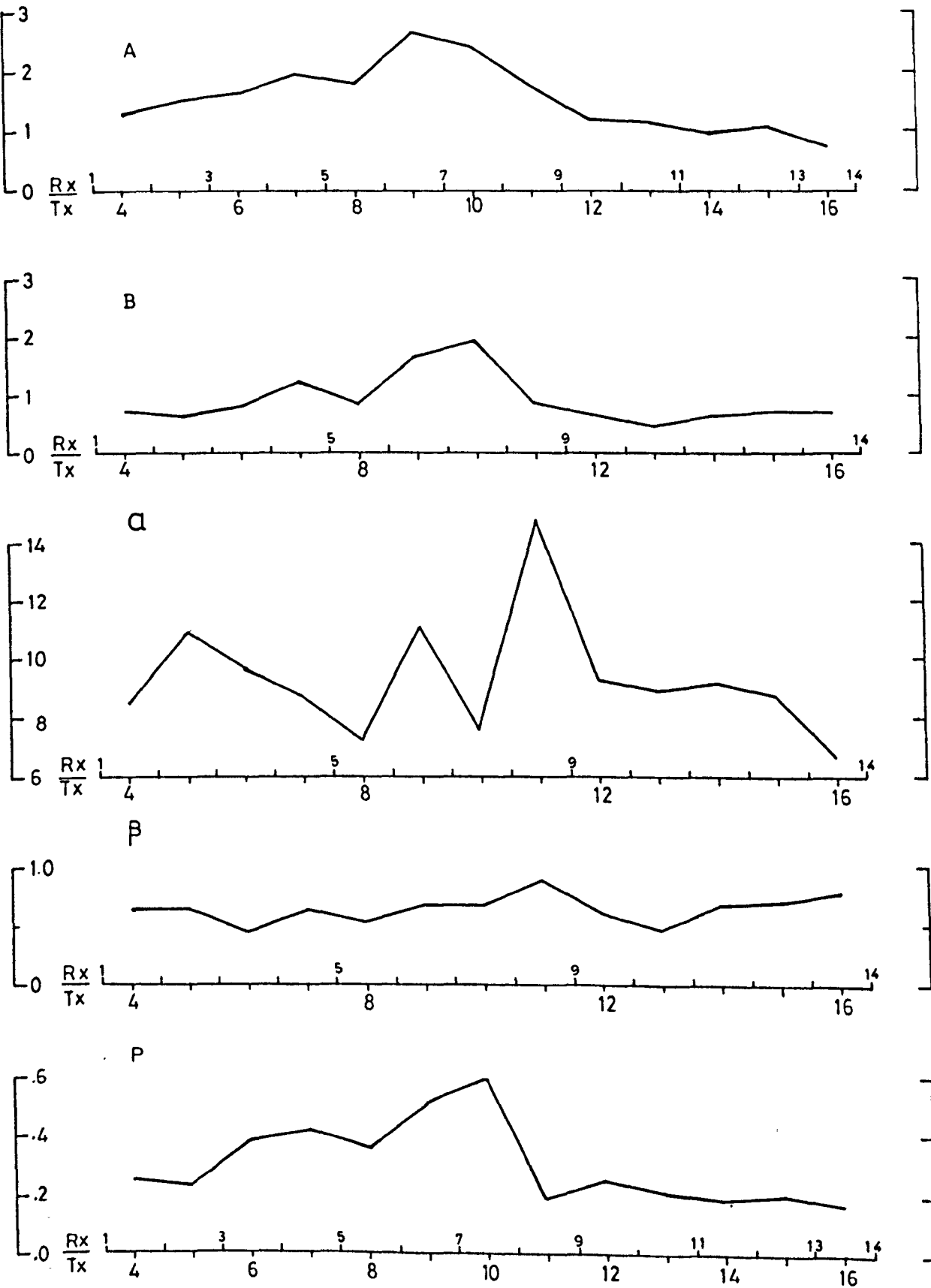


TABLE 48

KOKKINOVOUNAROS AREA LINE 5

The Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>A</u>	<u>B</u>	<u>α</u>	<u>β</u>	<u>P</u>
4	1- 2	1.50	0.88	8.83	0.65	0.28
5	2- 3	1.60	0.91	7.98	0.57	0.33
6	3- 4	2.07	1.08	9.62	0.64	0.35
7	4- 5	1.20	0.74	8.07	0.60	0.25
8	5- 6	1.72	1.24	6.36	0.64	0.39
9	6- 7	2.10	1.53	7.12	0.63	0.49
10	7- 8	1.44	0.76	8.06	0.48	0.32
11	8- 9	1.35	0.95	10.44	0.85	0.21
12	9-10	1.12	0.78	8.68	0.67	0.24
13	10-11	1.14	0.70	8.54	0.66	0.21
14	11-12	1.43	0.84	7.42	0.59	0.29
15	12-13	1.12	0.77	7.29	0.64	0.25
16	13-14	0.99	0.57	6.83	0.45	0.25

KOKKINOVOUNAROS AREA

LINE 5

THE DECAY FACTORS

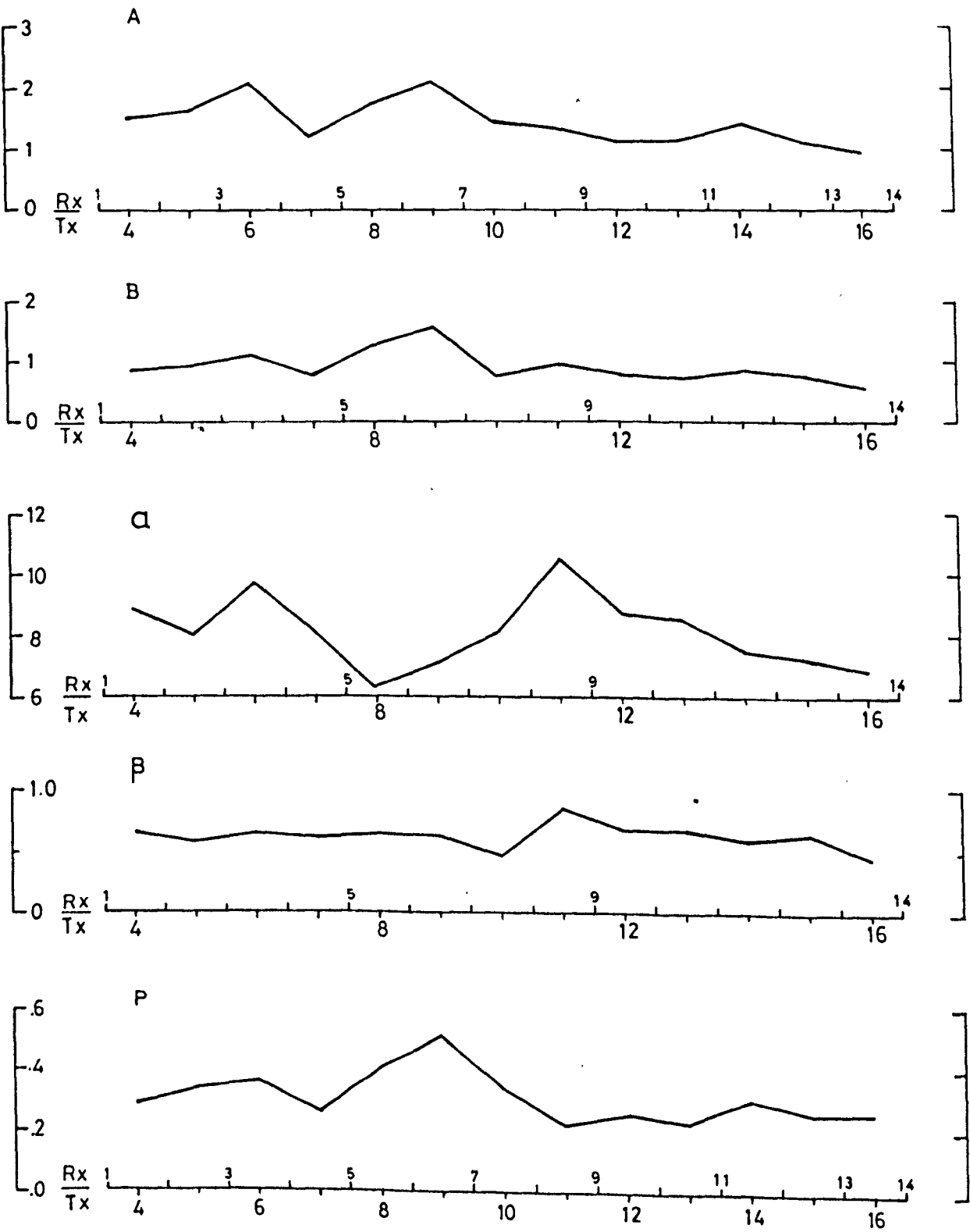


TABLE 49KOKKINOVOUNAROS AREA LINE 6The Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>A</u>	<u>B</u>	<u>α</u>	<u>β</u>	<u>P</u>
4	1- 2	1.37	0.98	10.69	0.98	0.17
5	2- 3	1.63	1.17	10.58	0.74	0.32
6	3- 4	1.53	0.85	7.31	0.55	0.32
7	4- 5	1.16	0.71	8.81	0.61	0.24
8	5- 6	1.50	0.89	7.47	0.54	0.34
9	6- 7	1.85	0.96	7.89	0.59	0.34
10	7- 8	1.06	0.68	6.92	0.66	0.21
11	8- 9	1.27	0.68	9.52	0.65	0.21
12	9-10	1.13	0.76	7.56	0.58	0.27
13	10-11	1.52	0.89	8.44	0.71	0.25
14	11-12	1.19	0.84	7.35	0.74	0.22
15	12-13	1.48	0.74	9.02	0.61	0.25
16	13-14	1.73	0.72	12.01	0.60	0.25

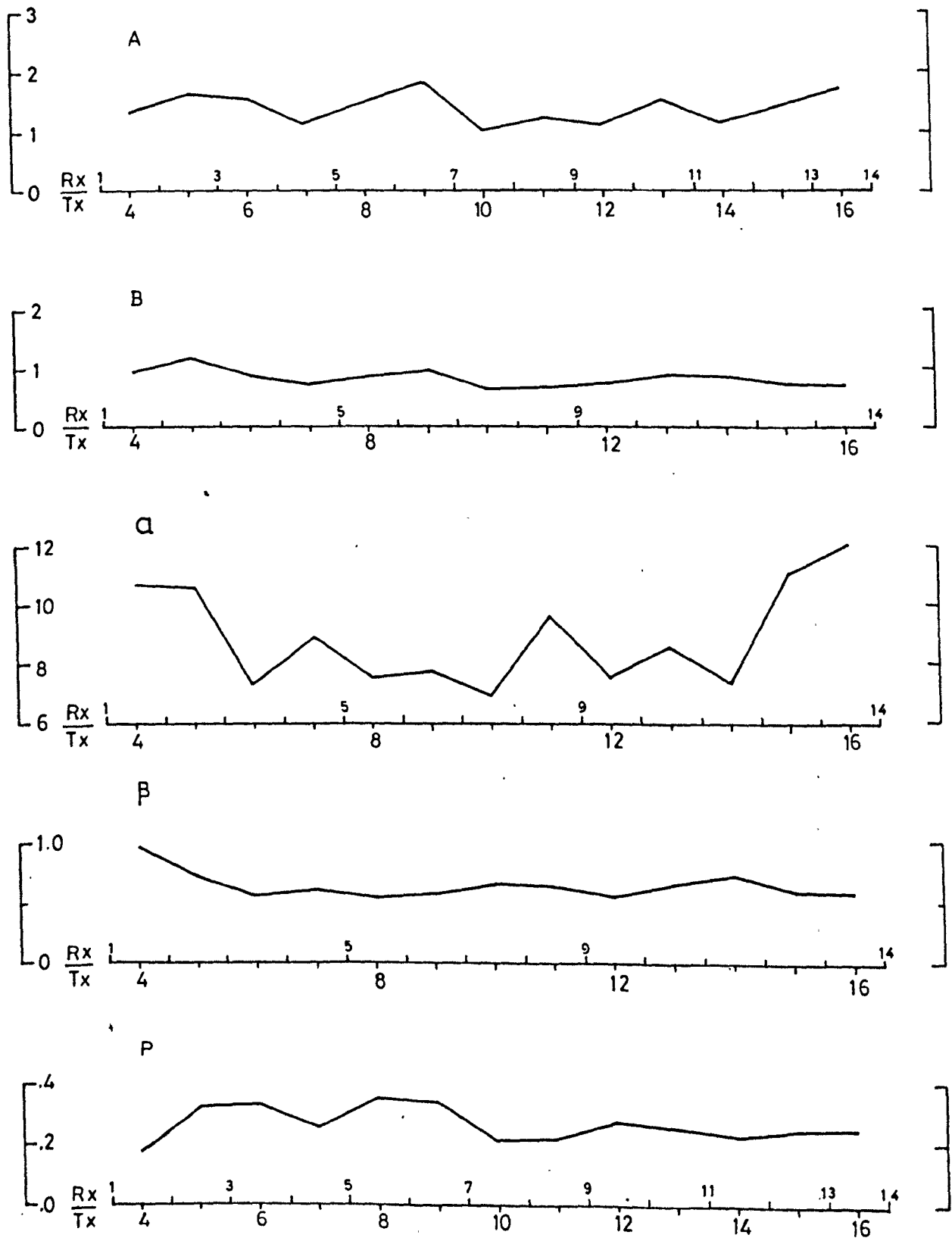
KOKKINOVOUNAROS AREALINE 6THE DECAY FACTORS

TABLE 50KOKKINOVOUNAROS AREA LINE 7The Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>A</u>	<u>B</u>	<u>α</u>	<u>β</u>	<u>P</u>
4	1- 2	1.40	0.77	9.15	0.58	0.27
5	2- 3	1.55	0.83	8.53	0.49	0.35
6	3- 4	1.20	0.70	7.44	0.65	0.22
7	4- 5	1.14	0.70	10.59	0.82	0.16
8	5- 6	1.32	0.83	8.93	0.76	0.21
9	6- 7	1.20	0.79	7.88	0.66	0.24
10	7- 8	1.10	0.63	8.18	0.61	0.23
11	8- 9	0.85	0.66	8.18	0.72	0.18
12	9-10	1.23	0.84	8.08	0.66	0.26
13	10-11	1.35	0.87	8.09	0.57	0.32
14	11-12	1.24	0.81	7.94	0.60	0.28
15	12-13	1.30	0.79	7.40	0.57	0.29
16	13-14	1.43	0.87	6.99	0.53	0.34

KOKKINOVOUNAROS AREA

LINE 7

THE DECAY FACTORS

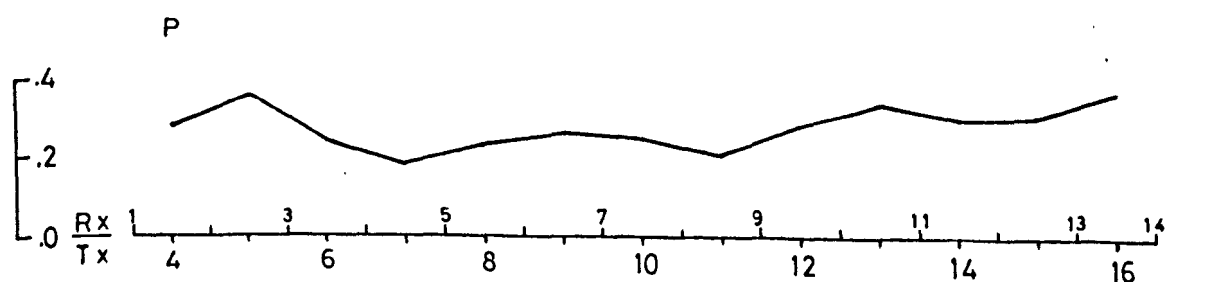
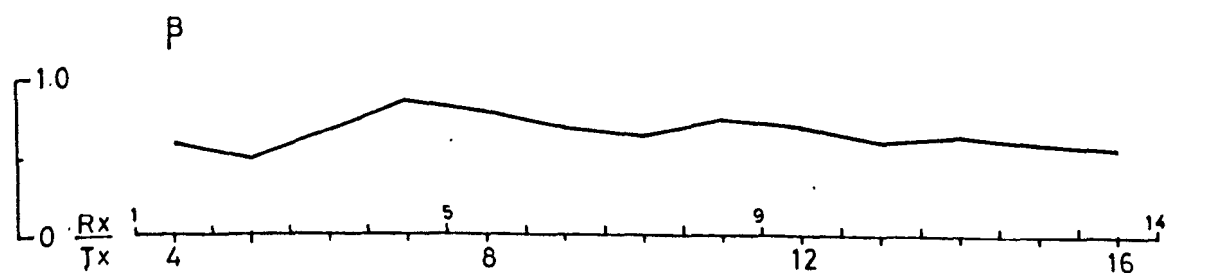
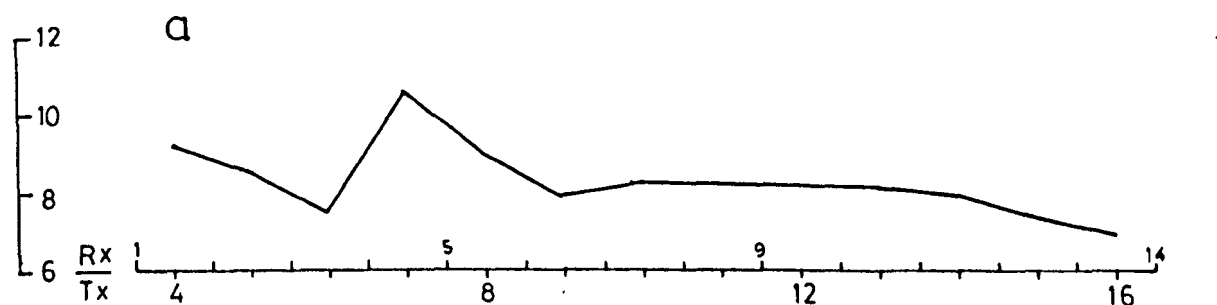
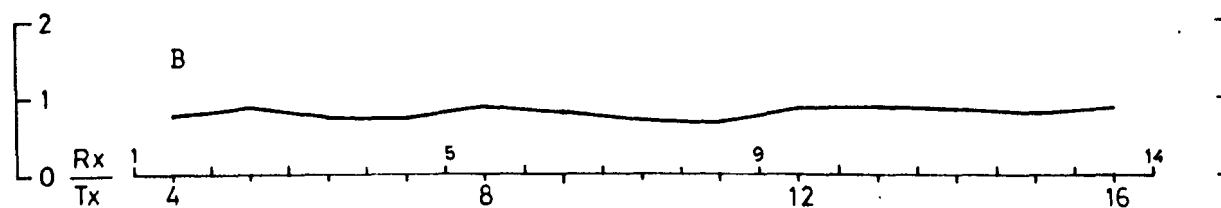
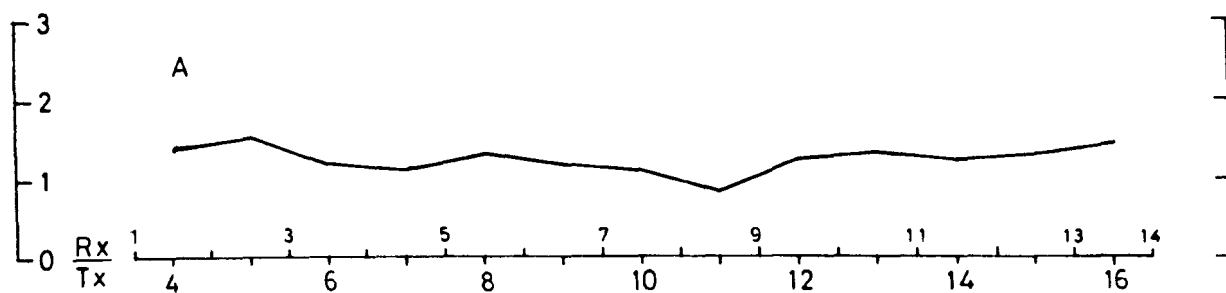


TABLE 51

KOKKINOVOUNAROS AREA

Table summarizing the Decay Factors over the mineralization and the barren rocks.

	<u>Mineralization</u>	<u>Barren Rocks</u>
A	2.0-3.2	1.1-1.5
B	1.5-2.0 ⁸	0.5-0.7
α	5.5 - 14.7	
β	0.37- 0.98	
P	0.30-0.59	0.16-0.30

TABLE 52KOKKINOVOUNAROS AREA NINE 1The Log_et Decay Factors

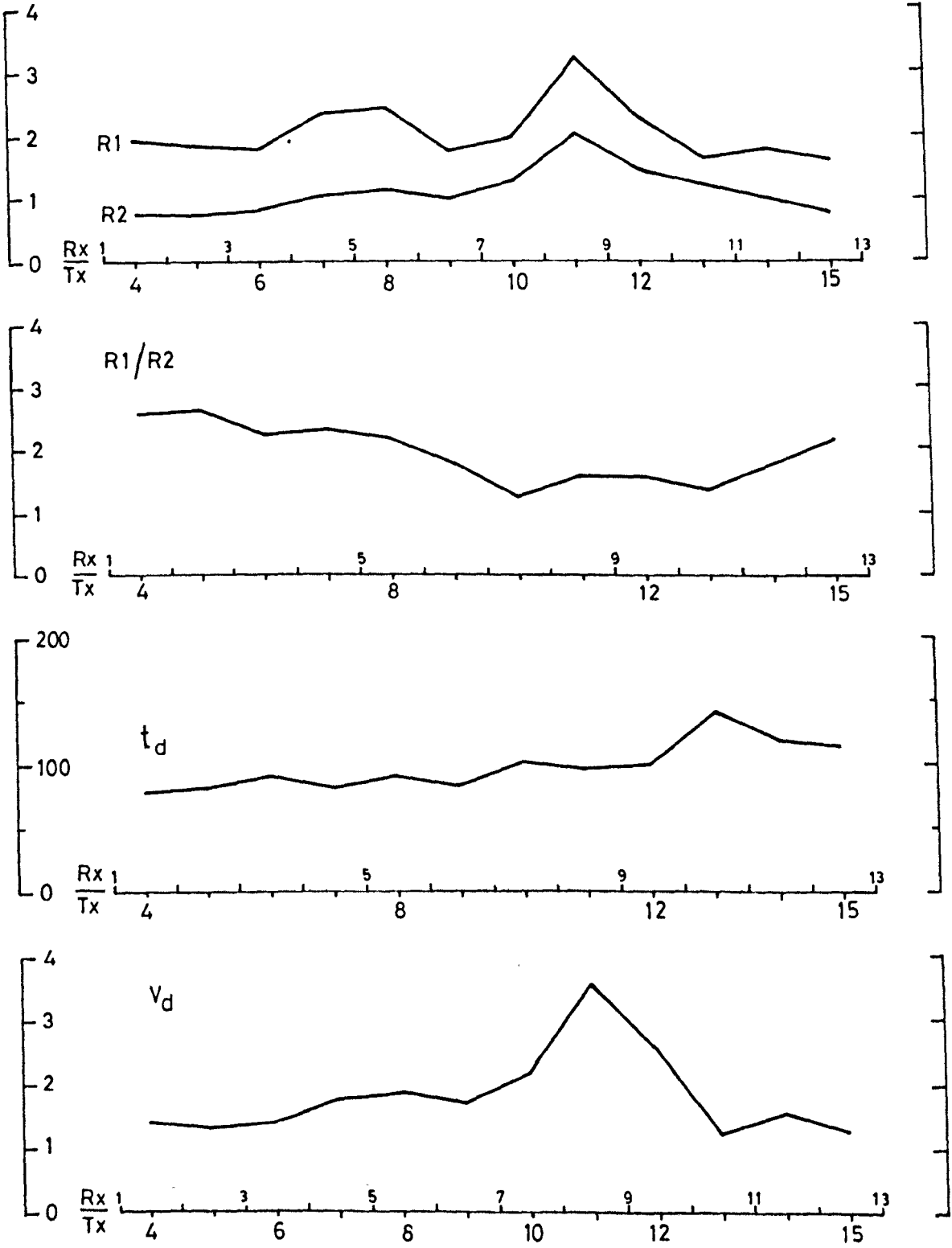
<u>C</u>	<u>P1-P2</u>	<u>R1</u>	<u>R2</u>	<u>R1/R2</u>	<u>V_d</u>	<u>t_d</u>	<u>d1.0</u>	<u>d0.5</u>
4	1- 2	1.95	0.76	2.56	1.40	78	45	658
5	2- 3	1.85	0.71	2.60	1.30	81	40	670
6	3- 4	1.78	0.80	2.22	1.39	90	62	860
7	4- 5	2.33	1.01	2.30	1.76	81	168	1100
8	5- 6	2.42	1.12	2.16	1.87	90	245	1350
9	6- 7	1.77	0.99	1.78	1.70	83	135	840
10	7- 8	1.94	1.23	1.57	2.17	100	465	2630
11	8- 9	3.19	2.02	1.57	3.57	95	1600	4740
12	9-10	2.25	1.46	1.54	2.53	100	685	3000
13	10-11	1.63	1.21	1.34	1.87	140	295	2380
14	11-12	1.78	1.01	1.76	1.58	117	150	1485
15	12-13	1.61	0.75	2.14	1.28	113	38	1080

FIG. 136 (a)

KOKKINOVOUNAROS AREA

LINE 1

THE LOG_e T DECAY FACTORS



LINE 1

THE $\text{LOG}_e T$ DECAY FACTORS

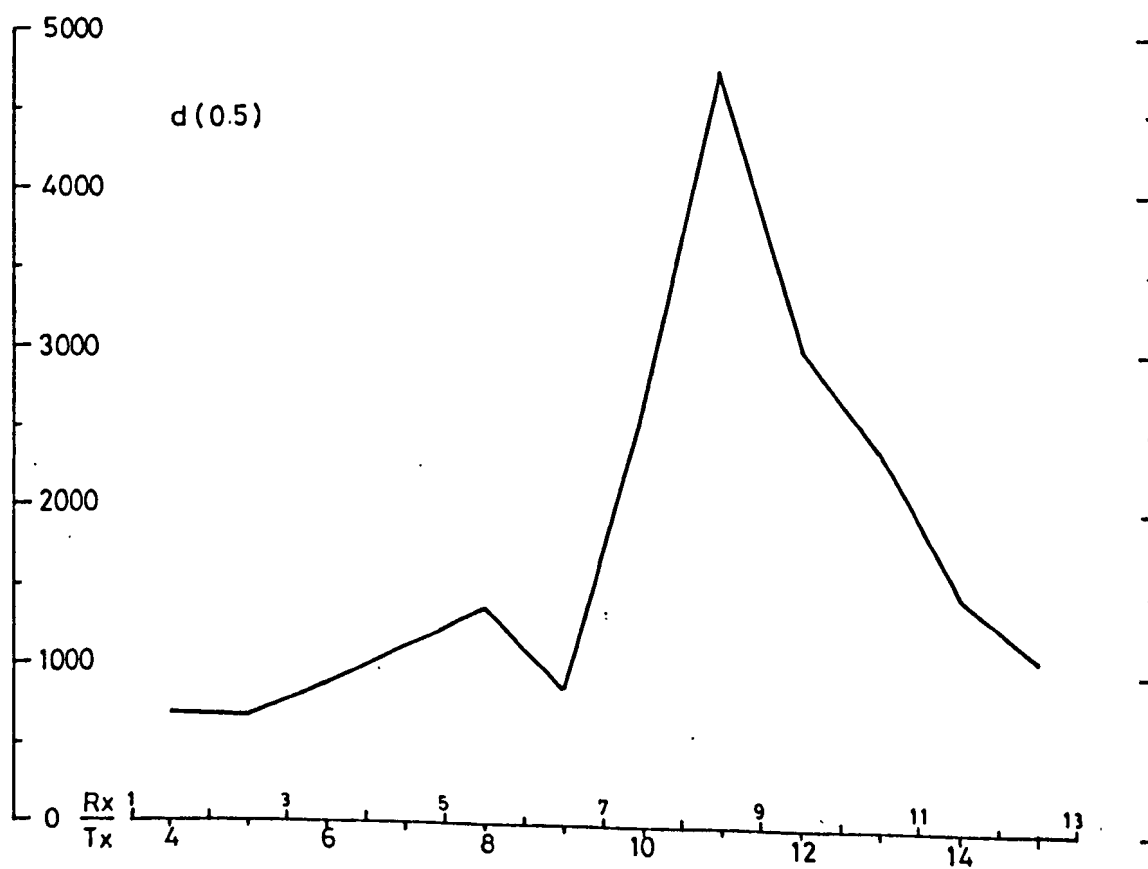
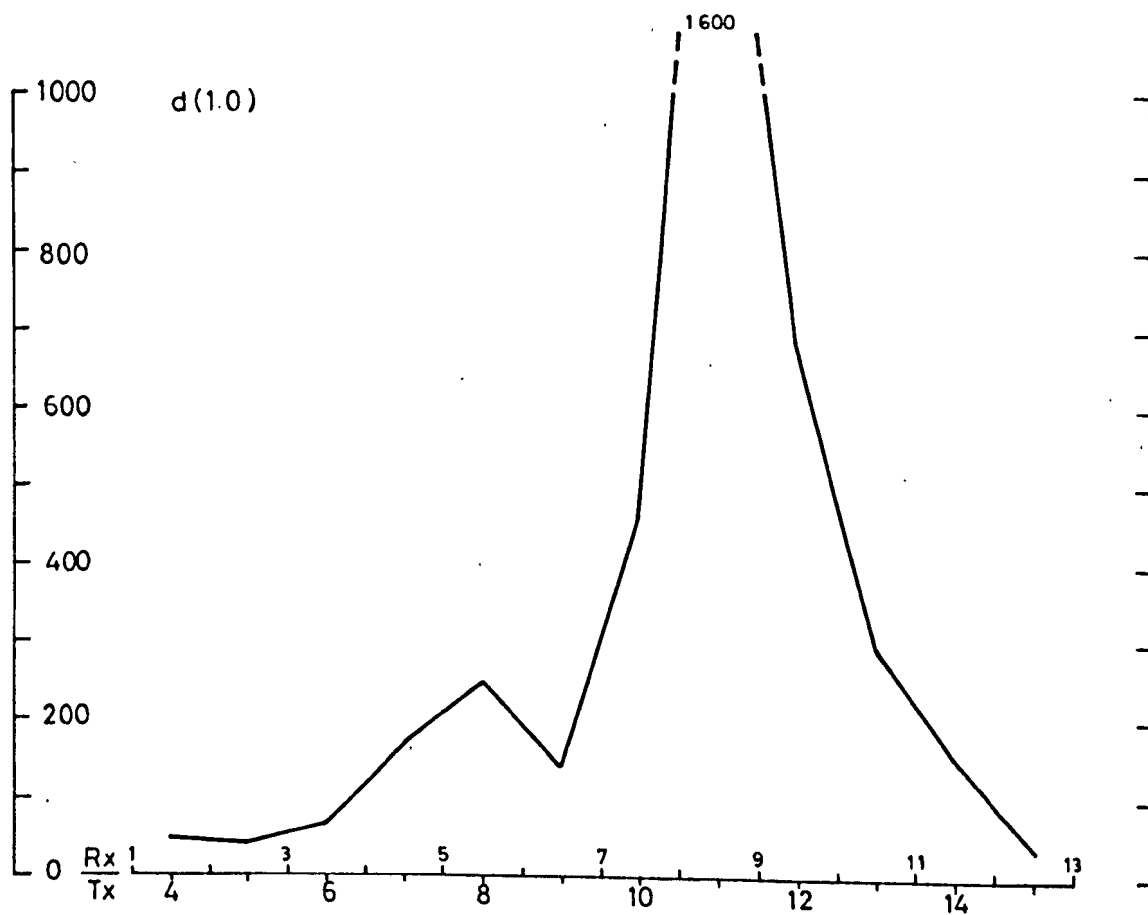


TABLE 53

KOKKINOVOUNAROS AREA LINE 2

The Log_et Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>R1</u>	<u>R2</u>	<u>R1/R2</u>	<u>V_d</u>	<u>t_d</u>	<u>d1.0</u>	<u>d0.5</u>
4	1- 2	1.82	0.80	2.275	1.36	83	51	640
5	2- 3	2.52	0.87	2.896	1.82	62	162	1395
6	3- 4	2.43	0.79	3.075	1.58	70	80	1058
7	4- 5	1.85	0.76	2.434	1.61	65	112	1245
8	5- 6	2.19	0.99	2.212	1.95	79	290	1995
9	6- 7	1.91	1.10	1.736	1.92	95	290	2230
10	7- 8	2.46	1.45	1.696	2.60	90	800	3560
11	8- 9	2.60	1.46	1.780	2.56	98	800	2850
12	9-10	2.21	1.06	2.084	1.92	80	194	1505
13	10-11	1.81	0.82	2.207	1.68	66	138	1300
14	11-12	1.62	0.75	2.160	1.60	68	104	1585
15	12-13	1.13	0.74	1.527	1.26	74	28	375
16	13-14	1.07	0.66	1.621	1.10	100	10	380

FIG. 137 (a)

KOKKINOVOUNAROS AREA

LINE 2

THE LOG_e T DECAY FACTORS

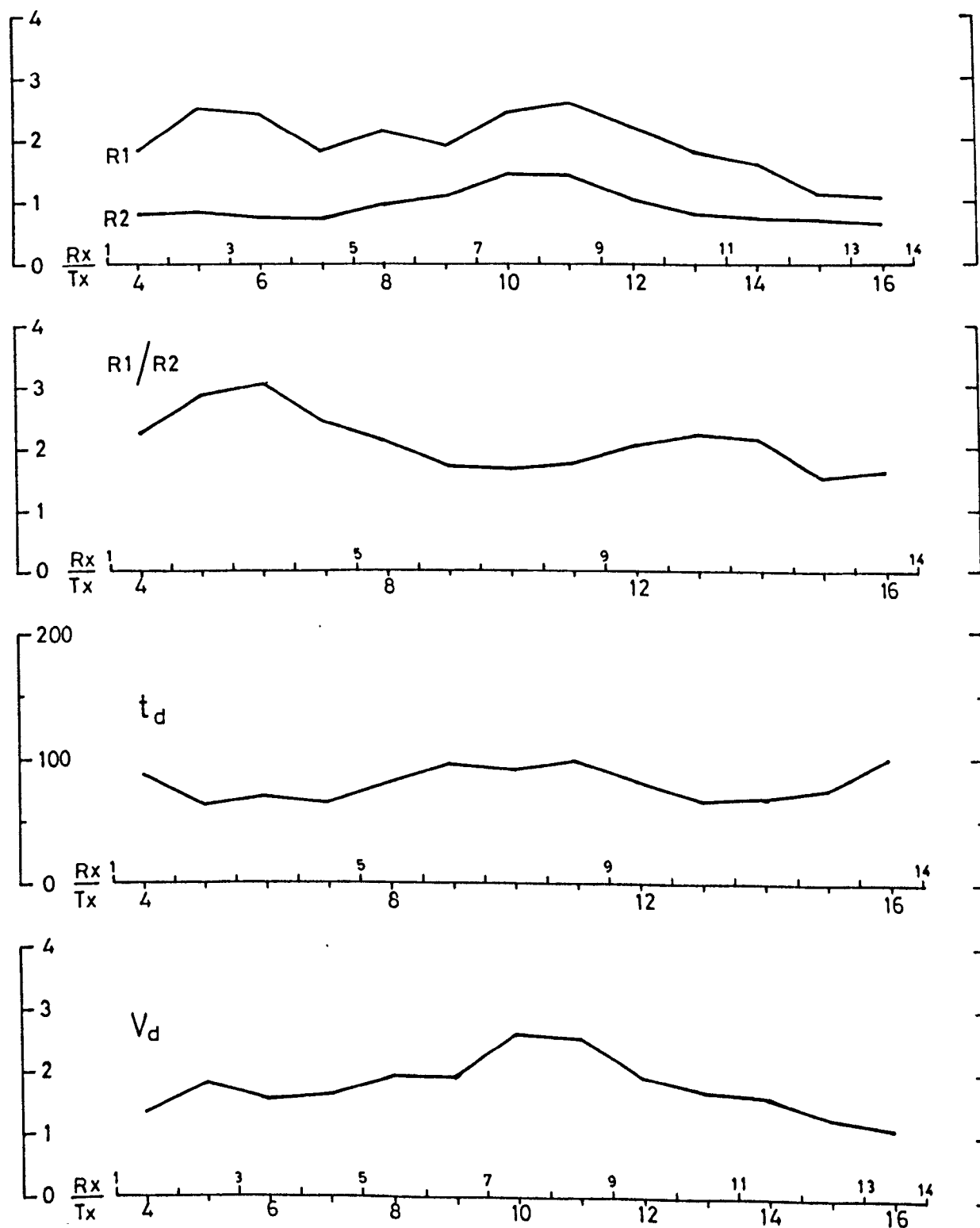


FIG. 137(b)

KOKKINOVOUNAROS AREA

LINE 2

THE LOG_e T DECAY FACTORS

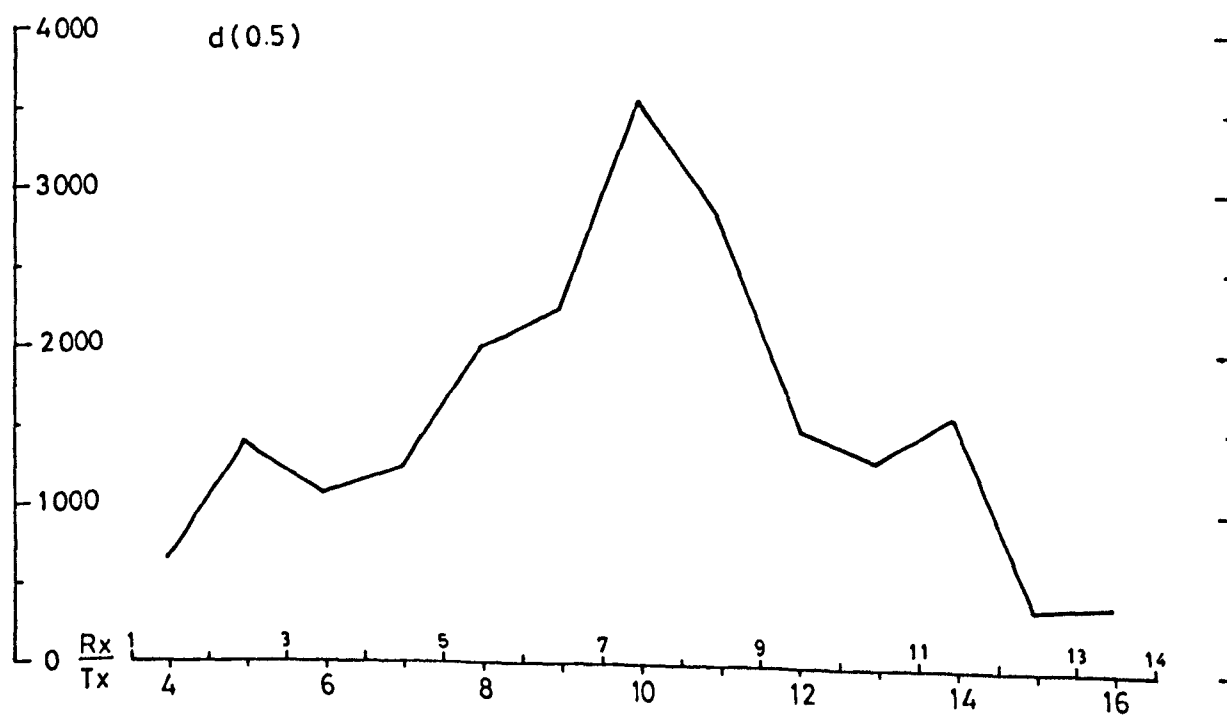
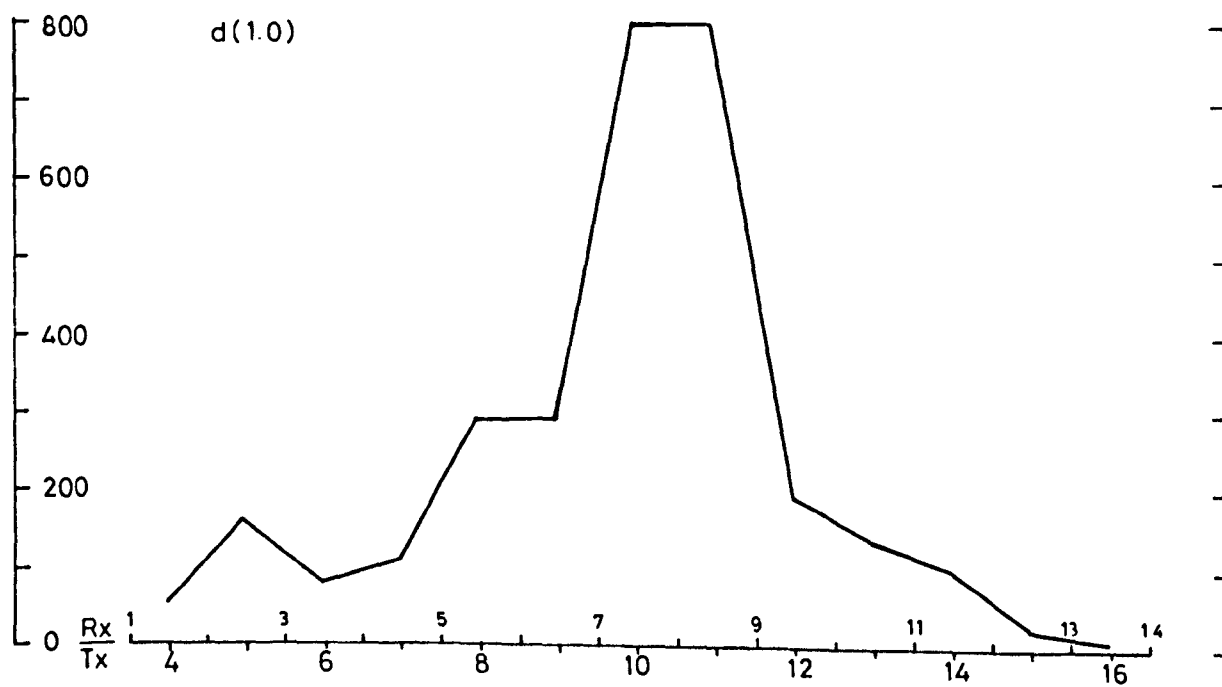
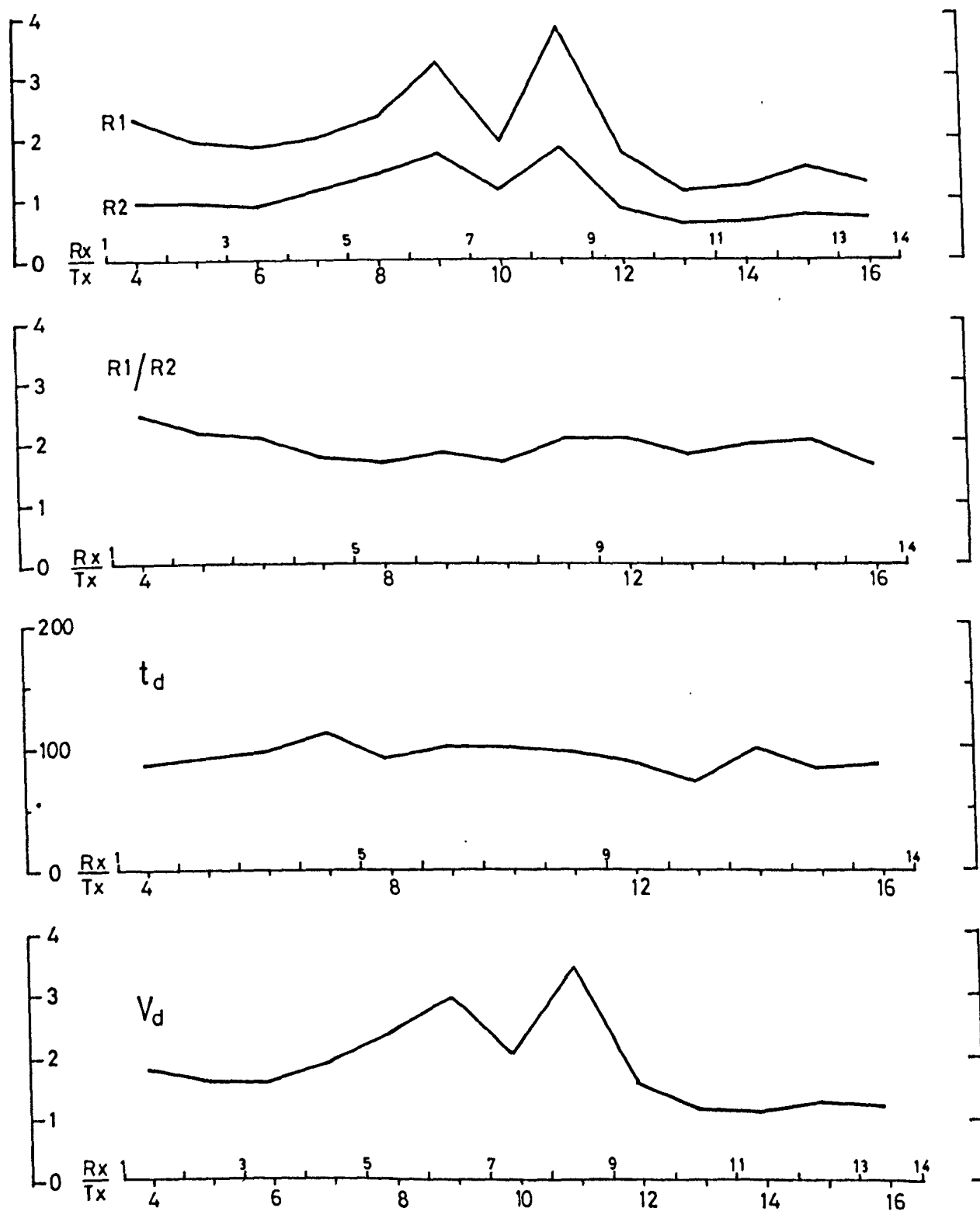


TABLE 54KOKKINOVOUNAROS AREA LINE 3The Log_et Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>R1</u>	<u>R2</u>	<u>R1/R2</u>	<u>V_d</u>	<u>t_d</u>	<u>d1.0</u>	<u>d0.5</u>
4	1- 2	2.34	0.96	2.437	1.78	84	205	1510
5	2- 3	1.98	0.93	2.129	1.54	90	90	930
6	3- 4	1.85	0.89	2.078	1.54	95	123	1260
7	4- 5	2.01	1.15	1.747	1.82	110	233	1510
8	5- 6	2.36	1.42	1.661	2.38	90	415	2035
9	6- 7	3.23	1.76	1.835	2.90	100	910	3230
10	7- 8	1.93	1.14	1.692	2.06	100	380	2970
11	8- 9	3.80	1.84	2.065	3.39	96	2550	10455
12	9-10	1.73	0.83	2.084	1.53	88	125	1555
13	10-11	1.14	0.60	1.900	1.14	72	6	305
14	11-12	1.23	0.62	1.983	1.11	100	8	600
15	12-13	1.54	0.75	2.053	1.29	84	40	590
16	13-14	1.29	0.70	1.842	1.24	87	32	625

KOKKINOVOUNAROS AREALINE 3THE LOG_e T DECAY FACTORS

LINE 3

THE LOG_e T DECAY FACTORS

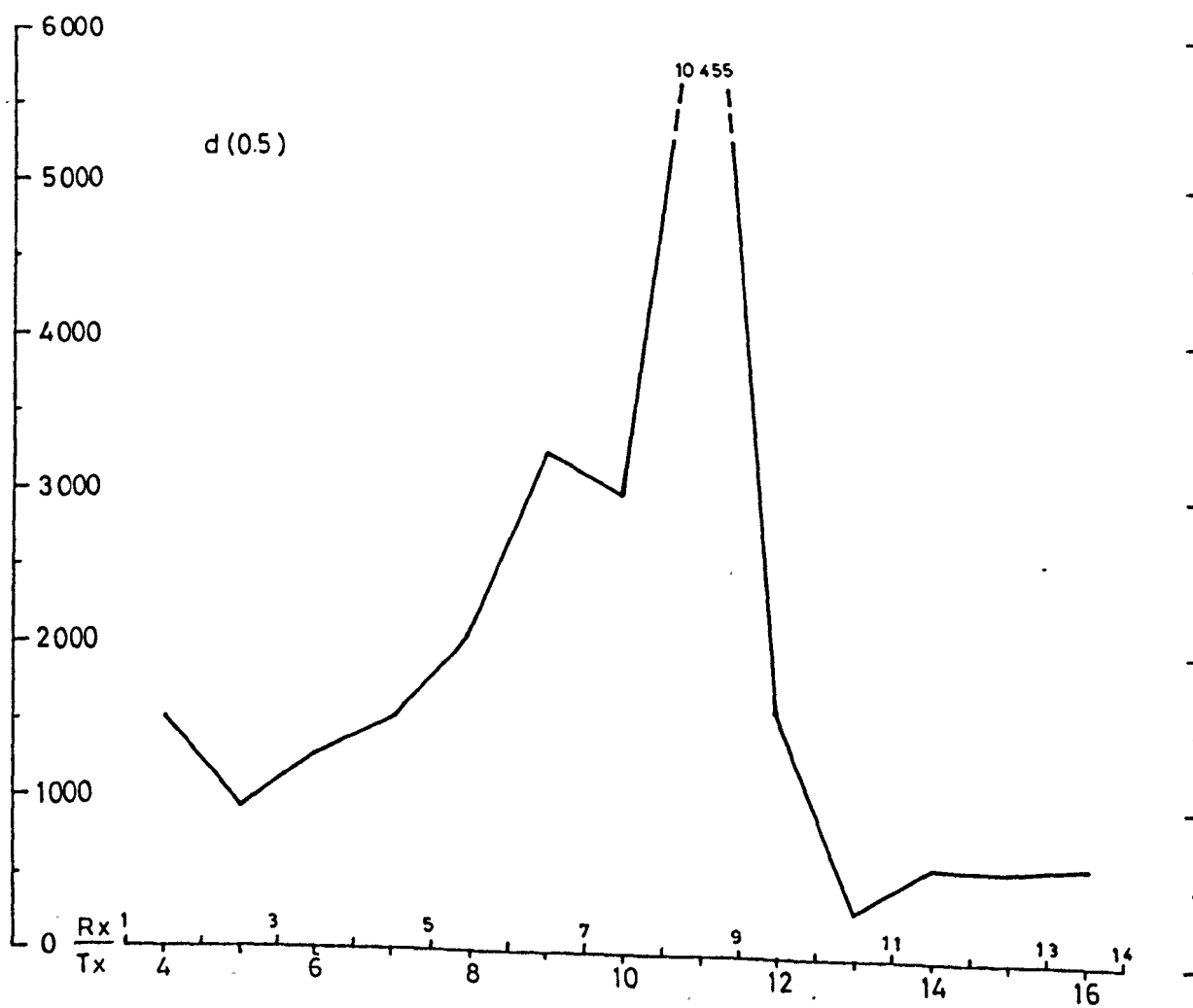
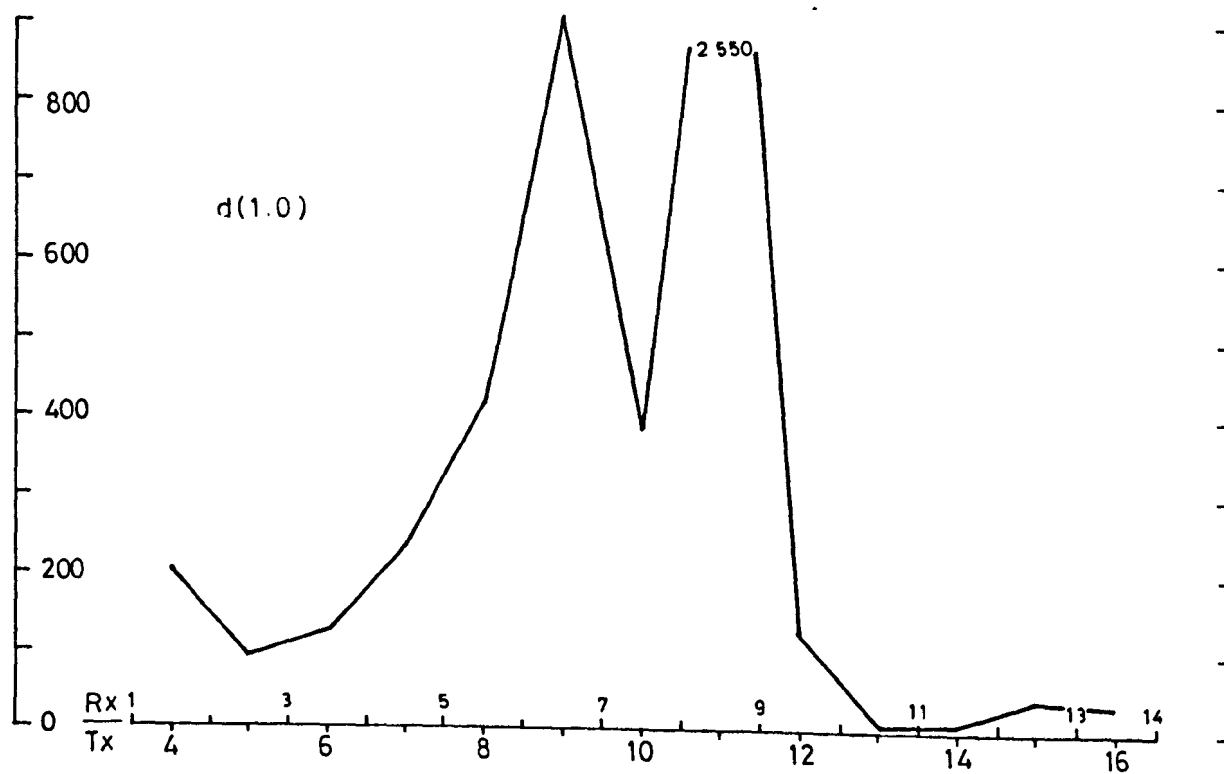


TABLE 55KOKKINOVOUNAROS AREA LINE 4The Log_et Decay Factors

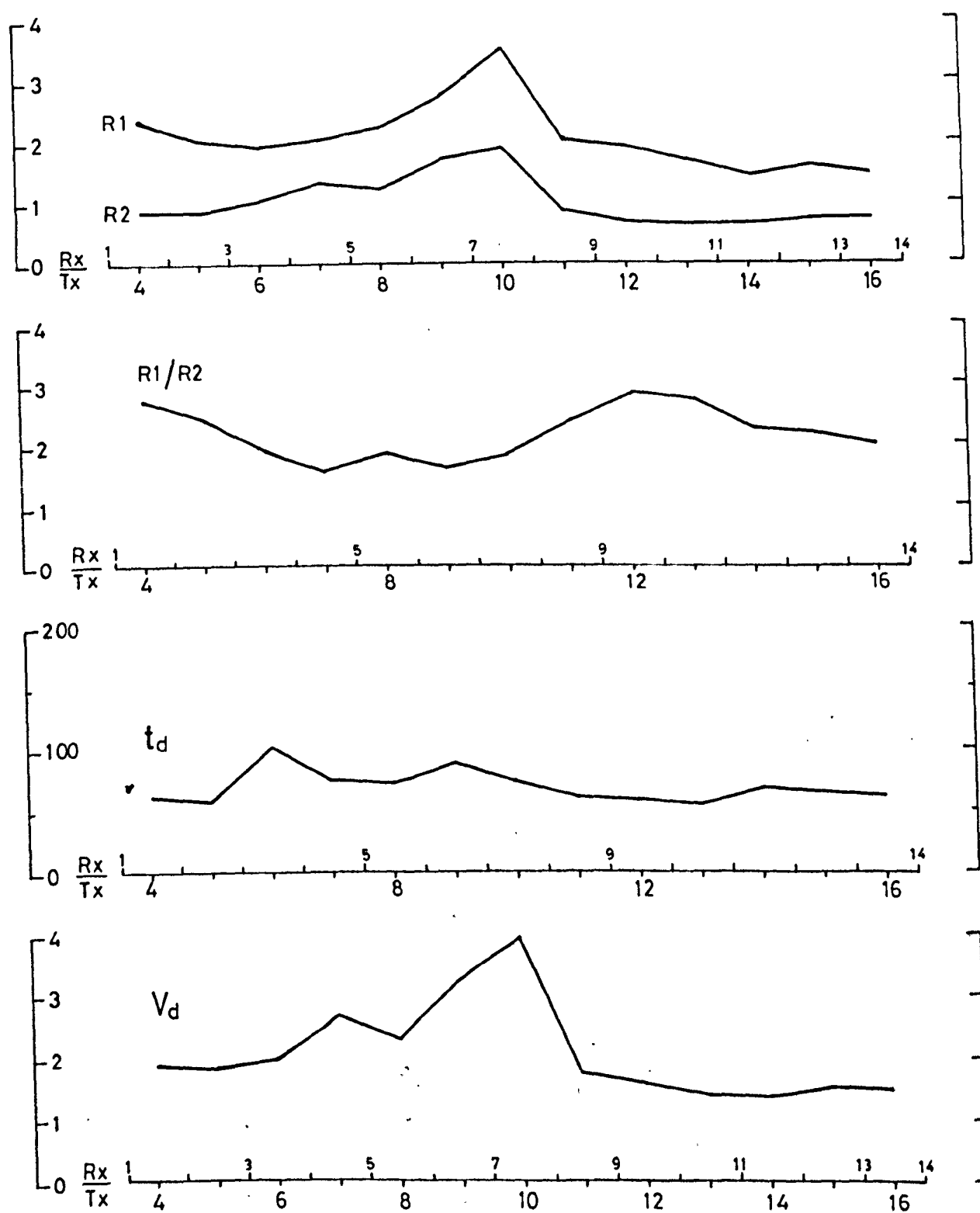
<u>C</u>	<u>P1-P2</u>	<u>R1</u>	<u>R2</u>	<u>R1/R2</u>	<u>V_d</u>	<u>t_d</u>	<u>d1.0</u>	<u>d0.5</u>
4	1- 2	2.38	0.88	2.704	1.88	60	188	1575
5	2- 3	2.02	0.84	2.404	1.79	55	125	965
6	3- 4	1.91	1.02	1.872	1.90	100	345	4660
7	4- 5	2.09	1.33	1.571	2.60	74	675	3720
8	5- 6	2.24	1.24	1.806	2.29	70	355	1870
9	6- 7	2.77	1.73	1.601	3.20	88	1630	5660
10	7- 8	3.56	1.96	1.816	3.92	72	2385	9350
11	8- 9	2.02	0.85	2.376	1.70	59	130	970
12	9-10	1.91	0.68	2.809	1.54	58	105	1567
13	10-11	1.70	0.61	2.786	1.38	54	48	824
14	11-12	1.45	0.65	2.230	1.32	68	47	755
15	12-13	1.61	0.74	2.175	1.50	64	81	915
16	13-14	1.48	0.75	1.973	1.47	60	65	680

FIG. 139 (a)

KOKKINOVOUNAROS AREA

LINE 4

THE $\log_e T$ DECAY FACTORS



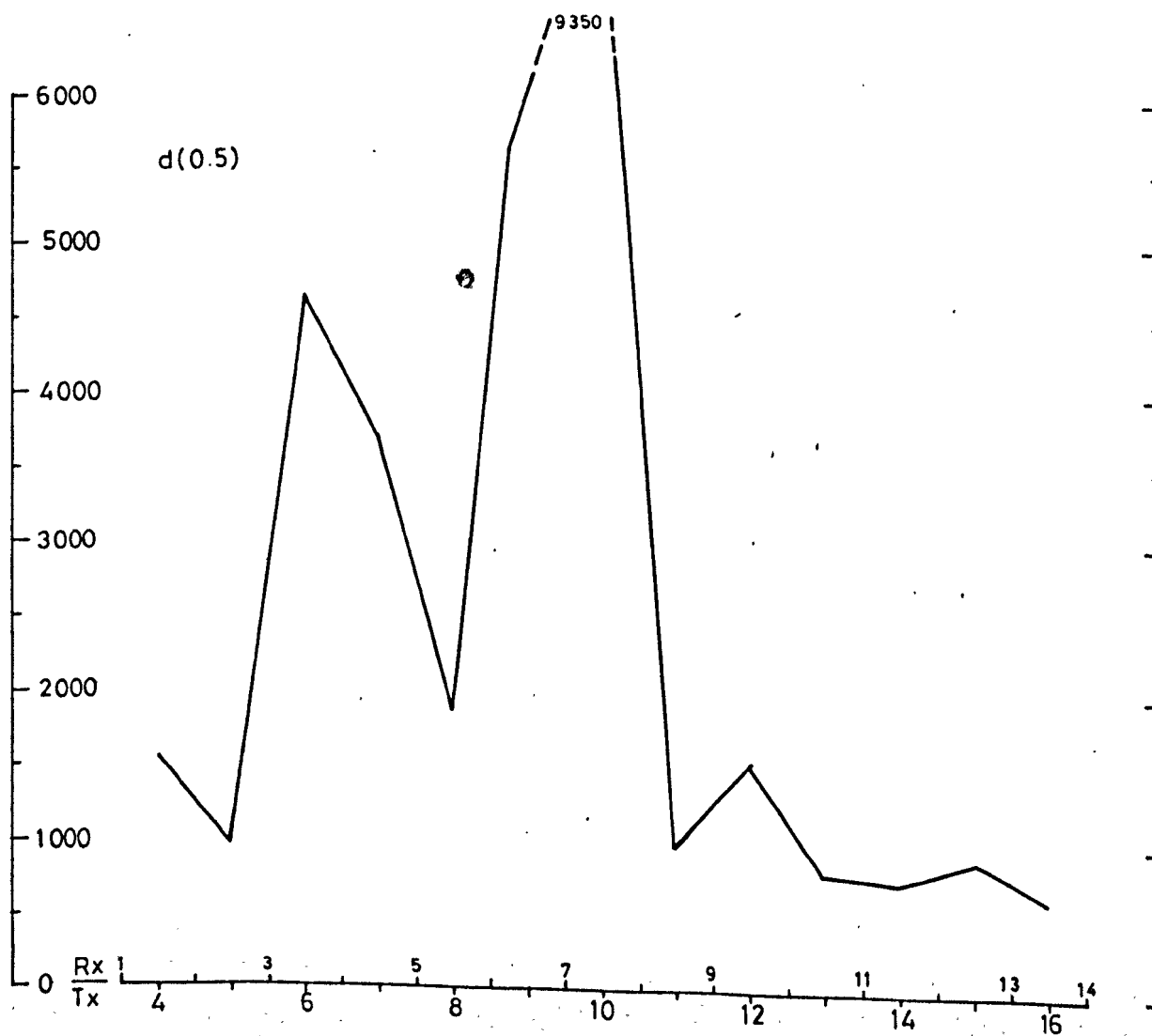
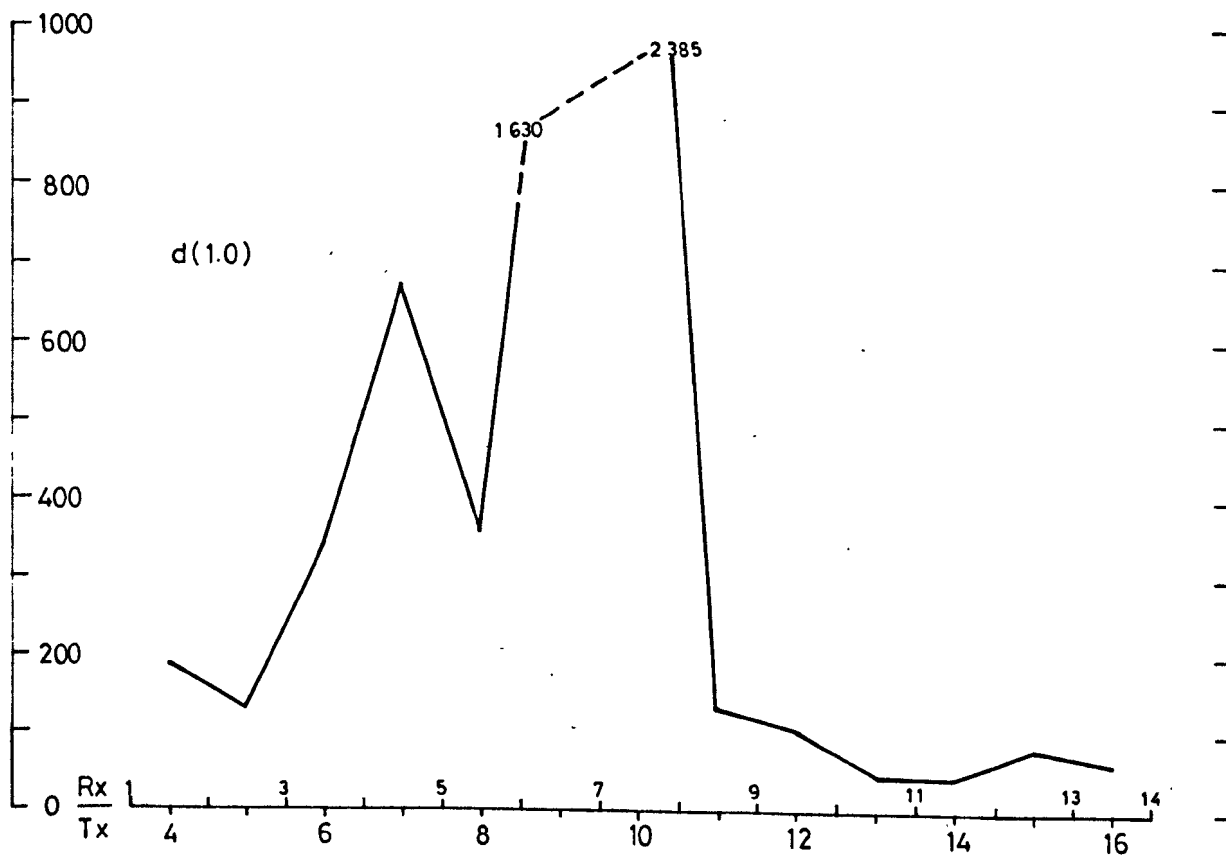
LINE 4THE LOG_e T DECAY FACTORS

TABLE 56KOKKINOVOUNAROS AREA LINE 5The Log_e t Decay Factors

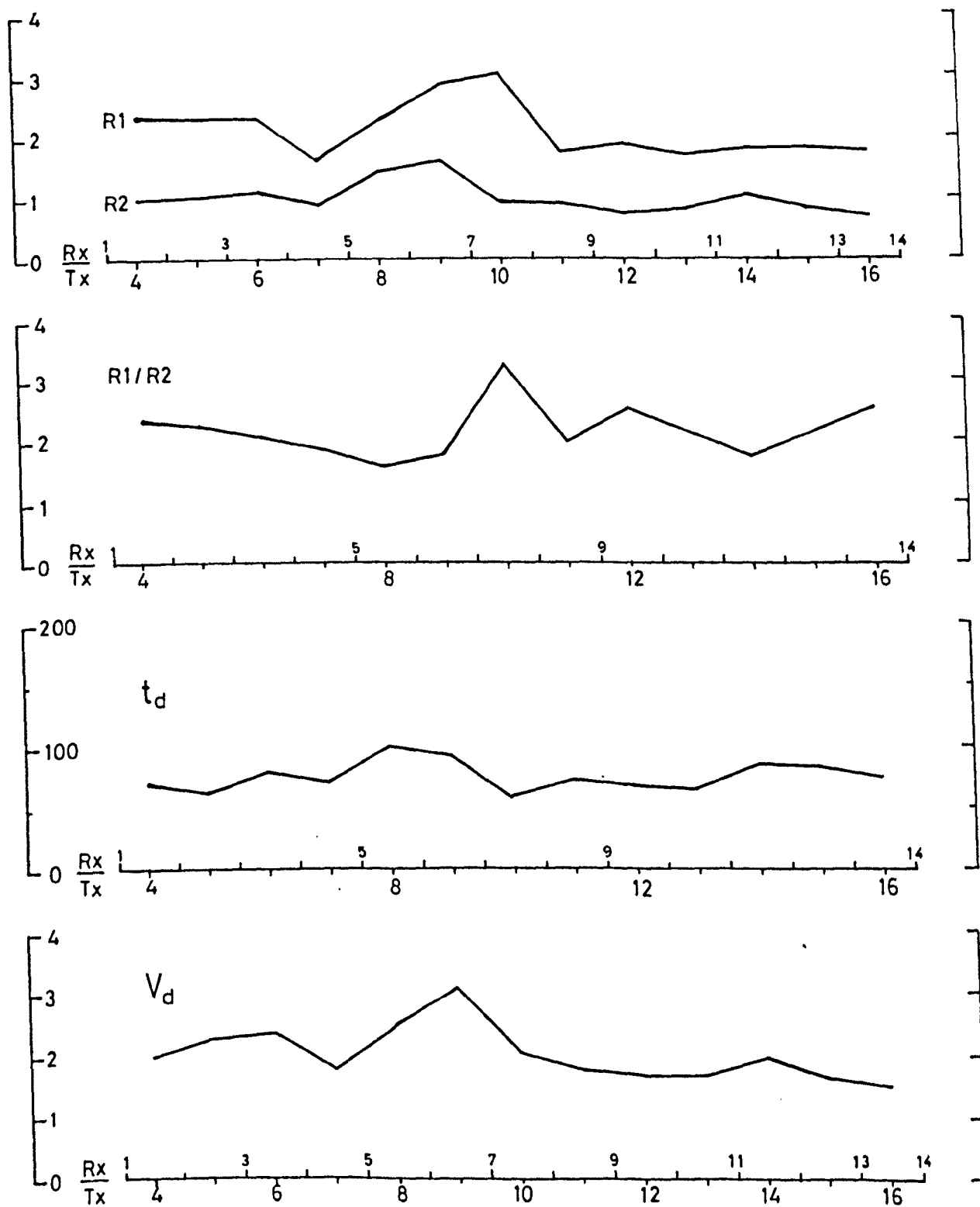
<u>C</u>	<u>P1-P2</u>	<u>R1</u>	<u>R2</u>	<u>R1/R2</u>	<u>V_d</u>	<u>t_d</u>	<u>d1.0</u>	<u>d0.5</u>
4	1- 2	2.36	1.00	2.360	1.96	69	280	1795
5	2- 3	2.32	1.04	2.230	2.27	60	390	3055
6	3- 4	2.35	1.12	2.098	2.34	78	518	3230
7	4- 5	1.67	0.89	1.876	1.72	69	135	1140
8	5- 6	2.30	1.44	1.597	2.48	38	640	2880
9	6- 7	2.89	1.66	1.740	3.05	90	1390	5100
10	7- 8	3.06	0.93	3.290	2.03	56	352	2020
11	8- 9	1.78	0.92	1.934	1.74	70	158	1055
12	9-10	1.90	0.76	2.500	1.64	65	140	1464
13	10-11	1.72	0.81	2.123	1.66	63	70	970
14	11-12	1.82	1.05	1.733	1.97	72	235	1655
15	12-13	1.84	0.86	2.139	1.62	80	145	1478
16	13-14	1.75	0.69	2.536	1.49	70	76	1348

FIG. 140 (a)

KOKKINOVOUNAROS AREA

LINE 5

THE LOG_e T DECAY FACTORS



LINE 5

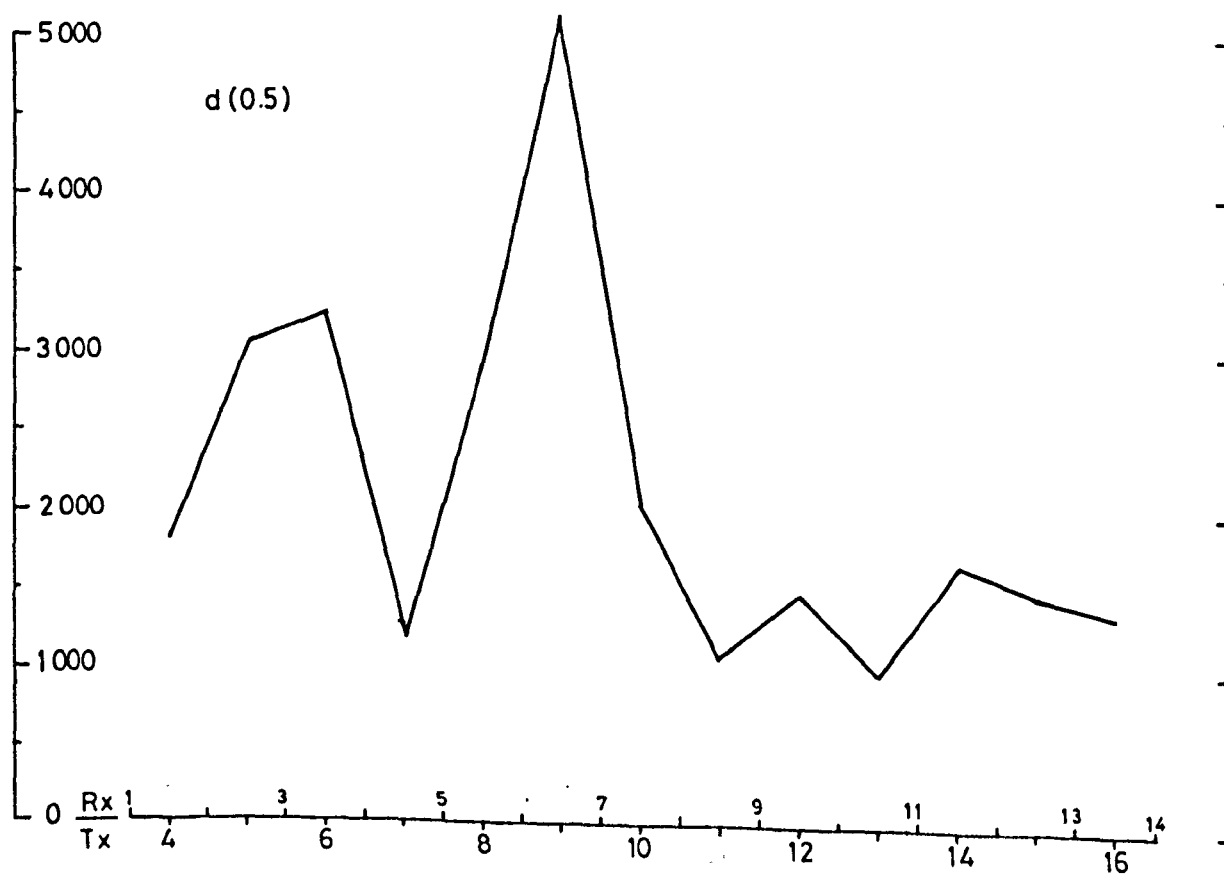
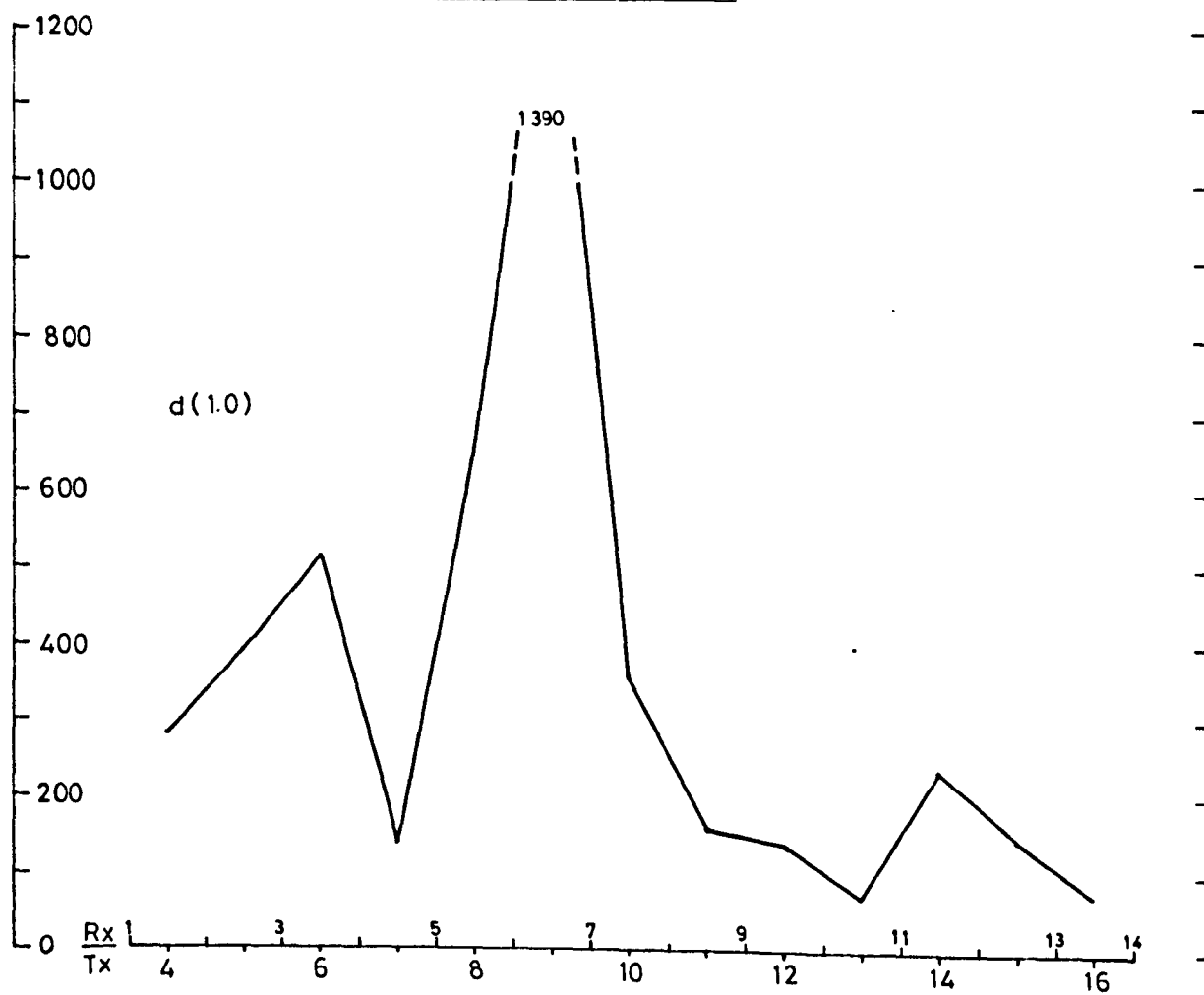
THE $\text{LOG}_e T$ DECAY FACTORS

TABLE 57

KOKKINOVOUNAROS AREA LINE 6

The Log_et Decay Factors

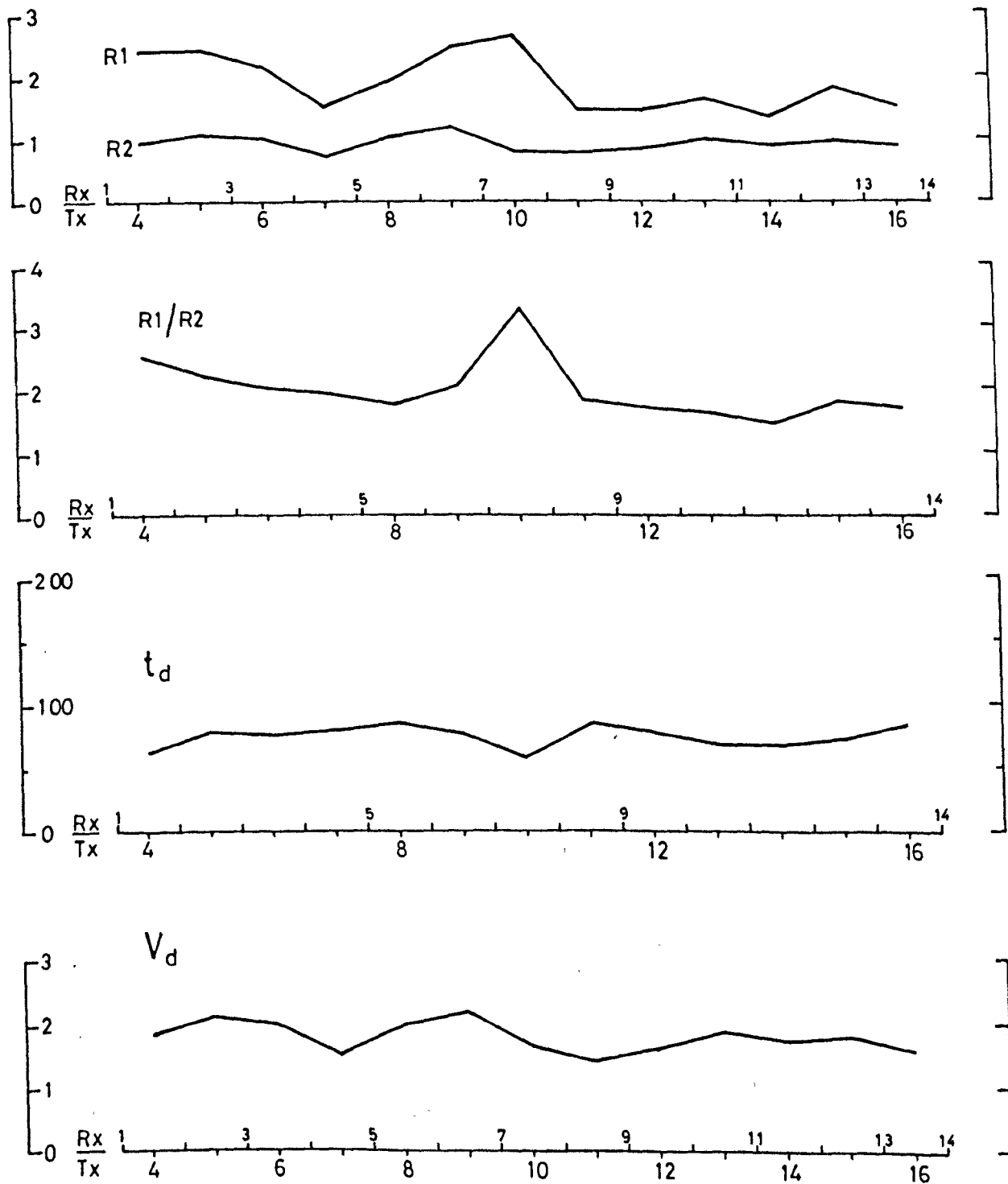
<u>C</u>	<u>P1-P2</u>	<u>R1</u>	<u>R2</u>	<u>R1/R2</u>	<u>V_d</u>	<u>t_d</u>	<u>d1.0</u>	<u>d0.5</u>
4	1- 2	2.45	0.96	2.552	1.83	62	135	934
5	2- 3	2.47	1.10	2.245	2.12	80	493	2840
6	3- 4	2.20	1.07	2.056	2.01	77	320	1830
7	4- 5	1.53	0.78	1.961	1.51	80	100	1200
8	5- 6	1.94	1.08	1.796	2.00	85	343	1750
9	6- 7	2.48	1.21	2.049	2.20	78	425	1775
10	7- 8	2.67	0.81	3.296	1.64	58	138	900
11	8- 9	1.47	0.80	1.837	1.41	85	74	850
12	9-10	1.48	0.87	1.701	1.64	79	140	1280
13	10-11	1.67	1.02	1.637	1.90	69	130	1295
14	11-12	1.37	0.92	1.489	1.74	69	88	940
15	12-13	1.83	1.01	1.811	1.84	73	135	1360
16	13-14	1.55	0.91	1.703	1.60	85	110	1000

FIG. 141(a)

KOKKINOVOUNAROS AREA

LINE 6

THE LOG_e T DECAY FACTORS



KOKKINOVOUNAROS AREA

LINE 6

THE LOG_e T DECAY FACTORS

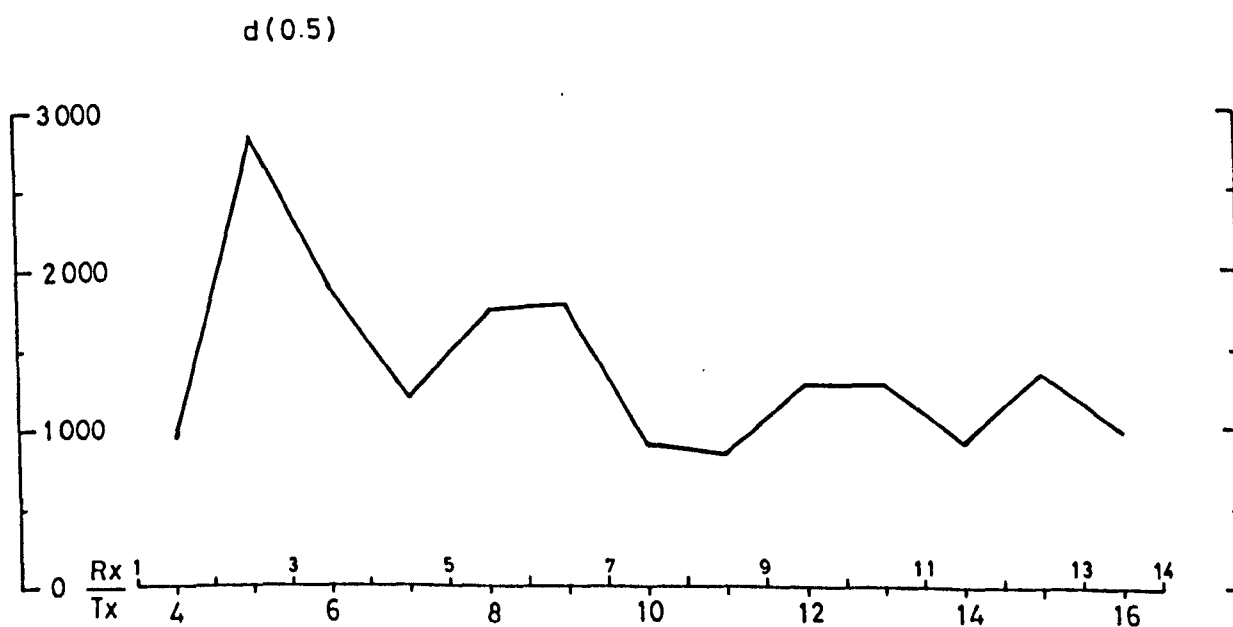
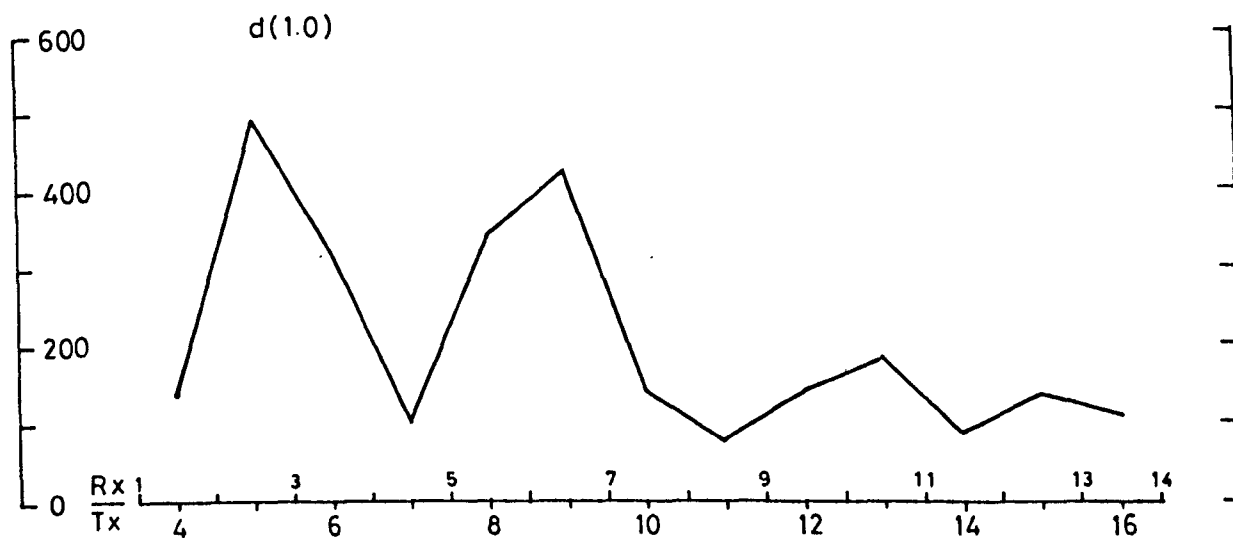


TABLE 58KOKKINOVOUNAROS AREA LINE 7The Log_et Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>R1</u>	<u>R2</u>	<u>R1/R2</u>	<u>V_d</u>	<u>t_d</u>	<u>d1.0</u>	<u>d0.5</u>
4	1- 2	2.18	0.86	2.534	1.62	88	176	1715
5	2- 3	2.10	1.01	2.079	1.90	92	360	2480
6	3- 4	2.00	0.87	2.298	1.51	86	113	1024
7	4- 5	1.90	0.73	2.602	1.30	83	53	655
8	5- 6	2.02	0.90	2.244	1.60	82	140	1115
9	6- 7	2.20	0.88	2.500	1.66	76	178	1340
10	7- 8	1.75	0.78	2.243	1.58	66	110	1228
11	8- 9	1.48	0.66	2.242	1.35	64	48	830
12	9-10	1.72	0.91	1.890	1.75	74	182	1355
13	10-11	1.89	0.94	2.010	1.89	78	284	2585
14	11-12	1.41	0.92	1.532	1.80	70	123	1320
15	12-13	1.40	0.93	1.505	1.67	90	125	1380
16	13-14	1.37	1.05	1.304	2.06	70	210	1470

FIG. 142 (a)

KOKKINOVOUNAROS AREA

LINE 7

THE LOG_e T DECAY FACTORS

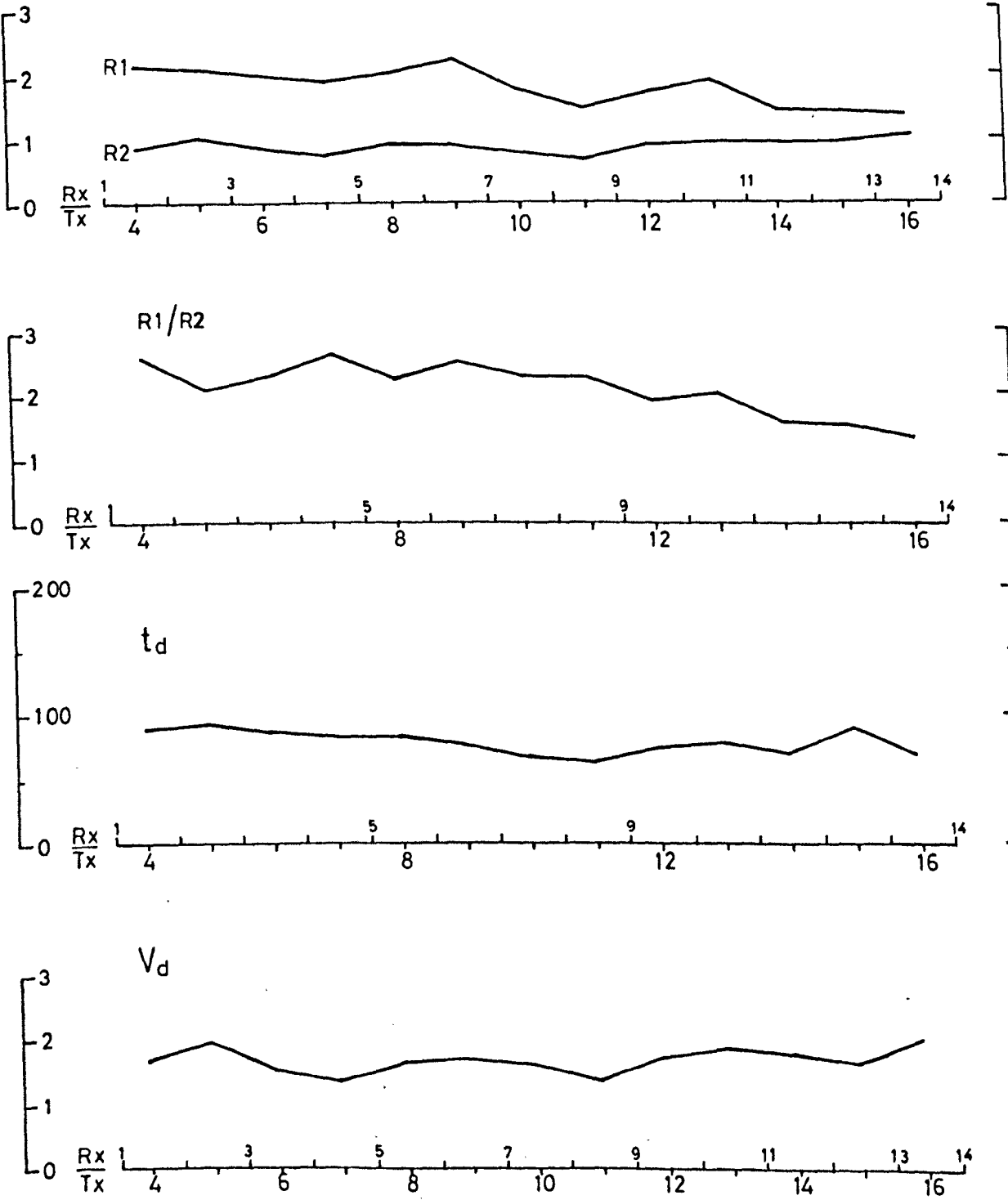


FIG. 142(b)

KOKKINOVOUNAROS AREA

LINE 7

THE LOG_e T DECAY FACTORS

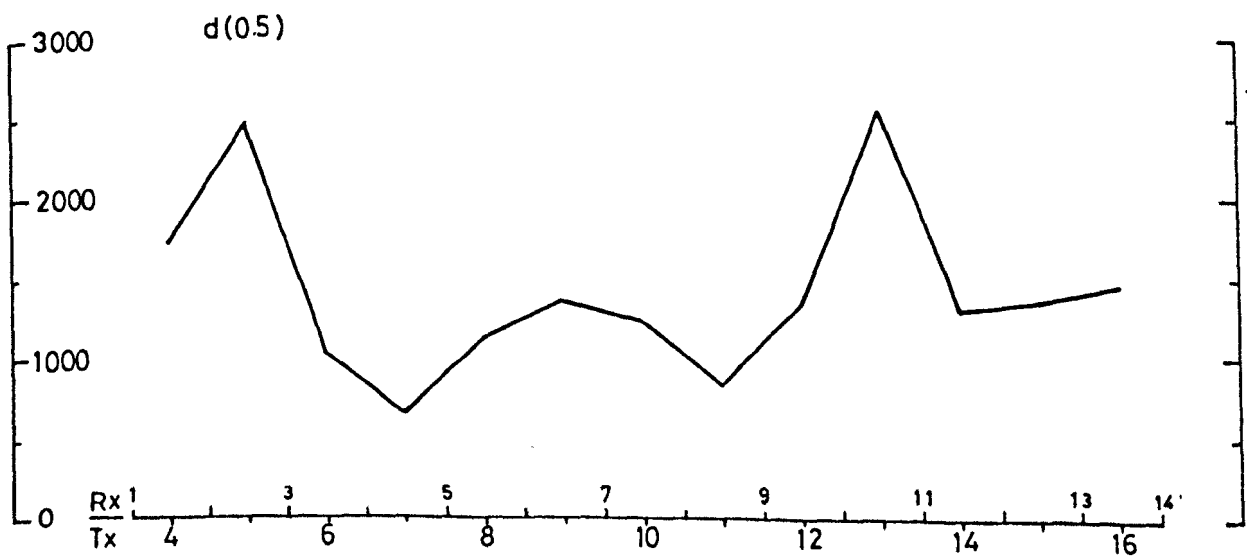
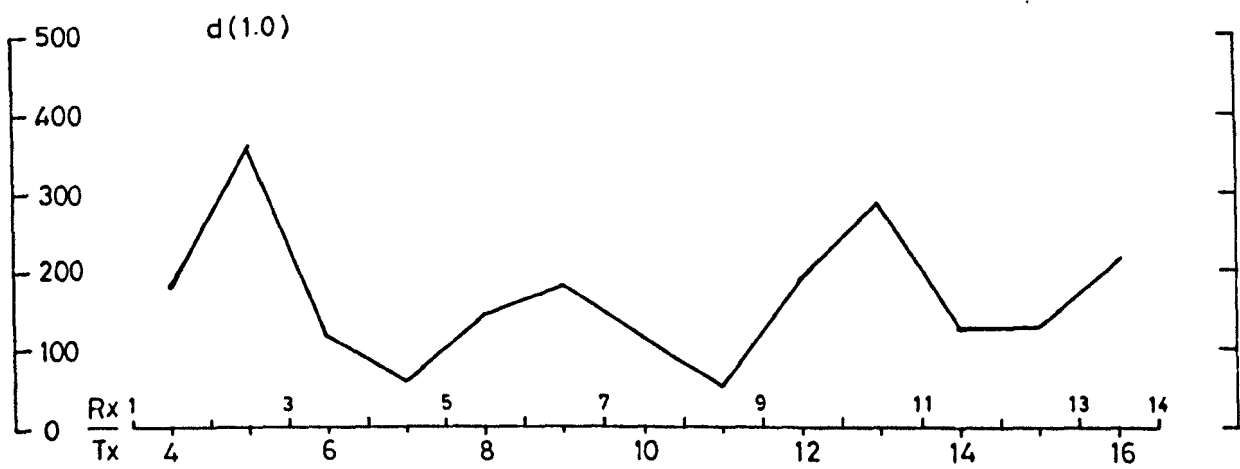


TABLE 59

KOKKINOVOUNAROS AREA

Table summarizing the Log_et Decay Factor over the mineralization and the barren rocks.

	<u>Mineralization</u>	<u>Barren Rocks</u>
R1	2.0-3.0	2.0
R2	1.0-2.0	1.0
R1/R2	2.0	2.0
V _d	3.5	2.0
d0.5	2200-10400	600-2000
d1.0	800- 2300	0- 300

TABLE 60

KOKKINOVOUNAROS AREA LINE 1

The Bertin and Loeb's (modified) Functions

<u>C</u>	<u>P1-P2</u>	<u>$\rho/2\pi$</u>	<u>A1</u>	<u>A2</u>	<u>λ_1/λ_2</u>
4	1- 2	1.19	1.34	0.45	2.96
5	2- 3	1.22	1.27	0.40	3.16
6	3- 4	1.11	1.53	0.53	2.85
7	4- 5	1.31	1.06	0.57	1.87
8	5- 6	1.31	1.72	0.56	3.04
9	6- 7	1.85	0.91	0.53	1.71
10	7- 8	2.69	0.76	0.45	1.68
11	8- 9	2.49	1.28	0.83	1.53
12	9-10	2.65	0.86	0.50	1.70
13	10-11	1.60	1.17	0.50	2.35
14	11-12	1.11	1.48	0.68	2.17
15	12-13	0.96	1.38	0.52	2.62
16	13-14	1.02	1.02	0.57	1.78

KOKKINOVOUNAROS AREA

LINE 1

THE BERTIN AND LOEB'S (MODIFIED) FUNCTIONS

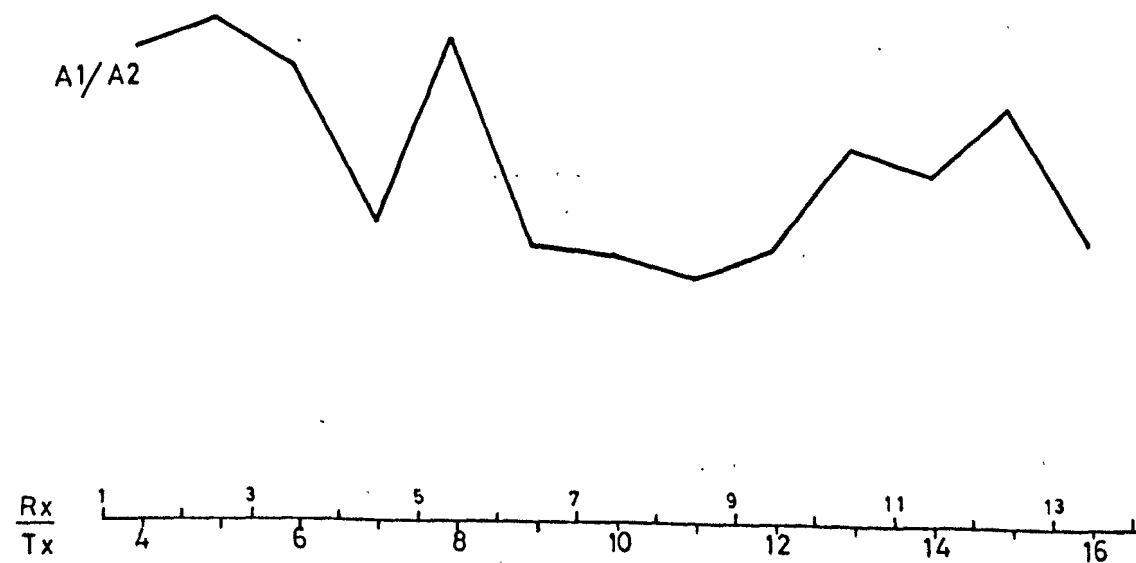
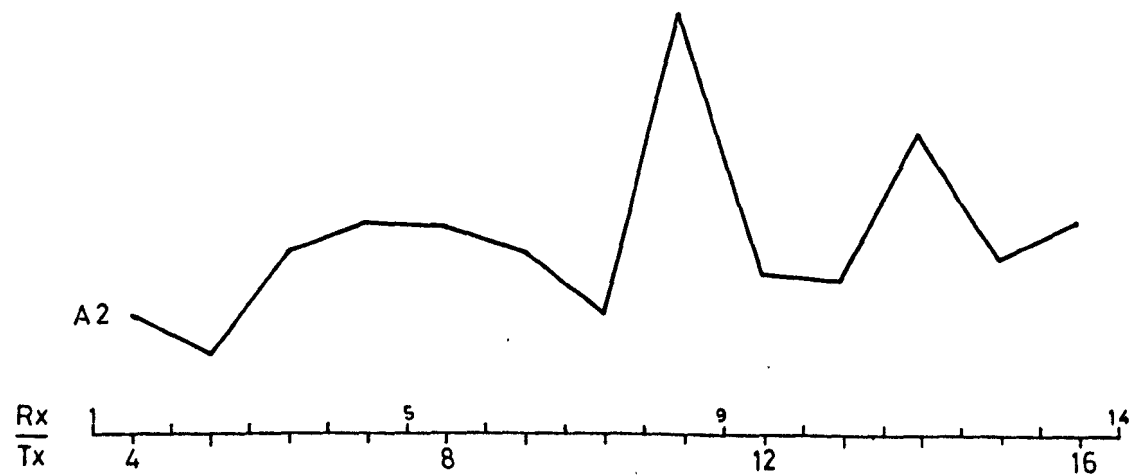
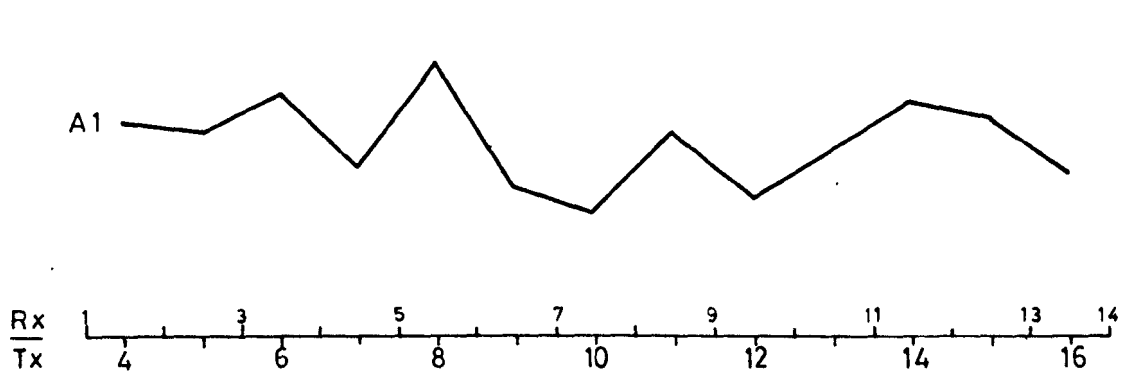


TABLE 61

KOYKINOVOUNAROS AREA LINE 2

The Bertin and Loeb's (modified) Functions

<u>C</u>	<u>P1-P2</u>	<u>$\rho/2\pi$</u>	<u>A1</u>	<u>A2</u>	<u>A1/A2</u>
4	1- 2	1.07	1.30	0.57	2.25
5	2- 3	1.31	1.35	0.48	2.77
6	3- 4	1.29	1.27	0.41	3.11
7	4- 5	1.42	0.96	0.50	1.91
8	5- 6	1.07	1.66	0.98	1.68
9	6- 7	1.25	1.68	0.82	2.03
10	7- 8	2.64	0.85	0.49	1.73
11	8- 9	1.67	1.85	0.94	1.96
12	9-10	1.30	1.66	0.69	2.41
13	10-11	1.29	1.22	0.53	2.30
14	11-12	1.10	1.27	0.62	2.04
15	12-13	1.45	0.77	0.38	2.01
16	13-14	1.30	0.86	0.43	1.97

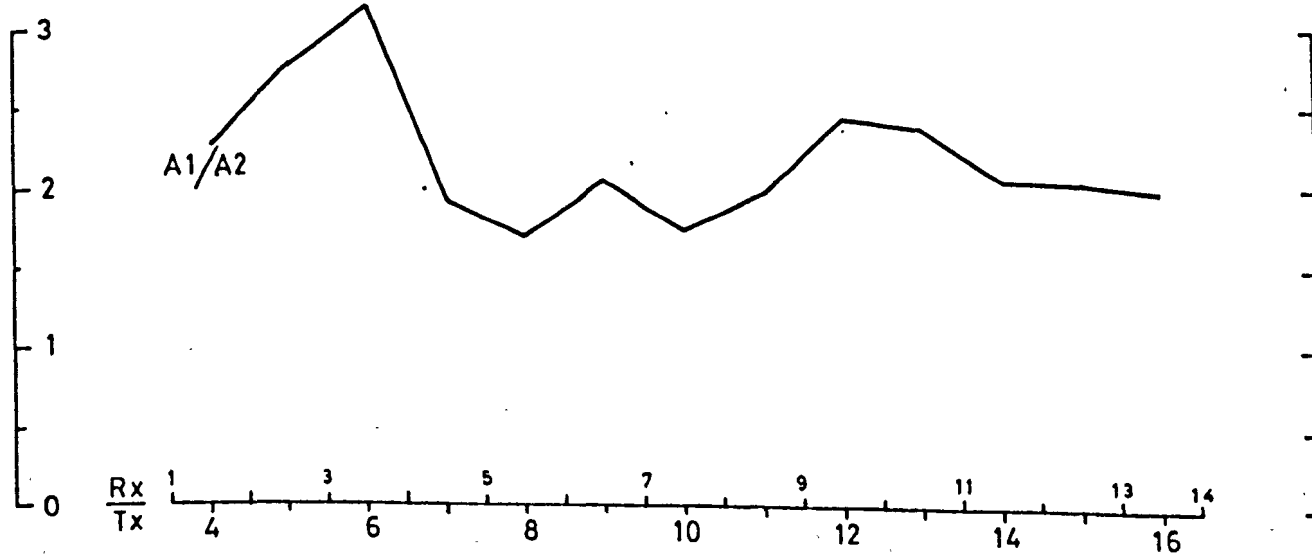
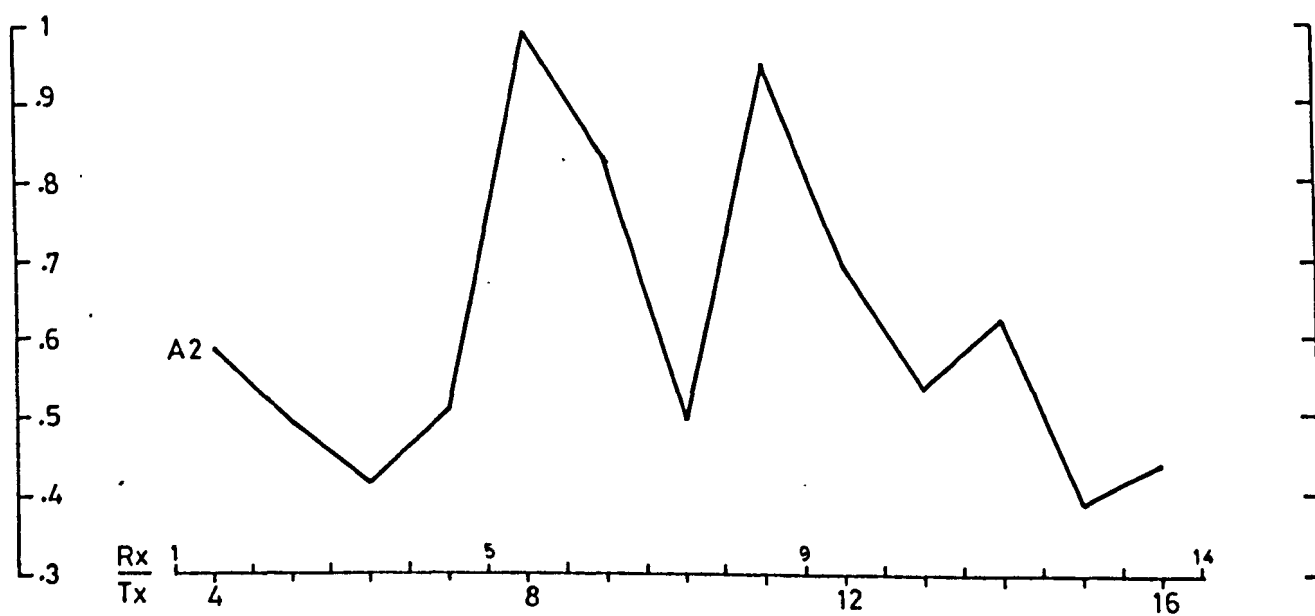
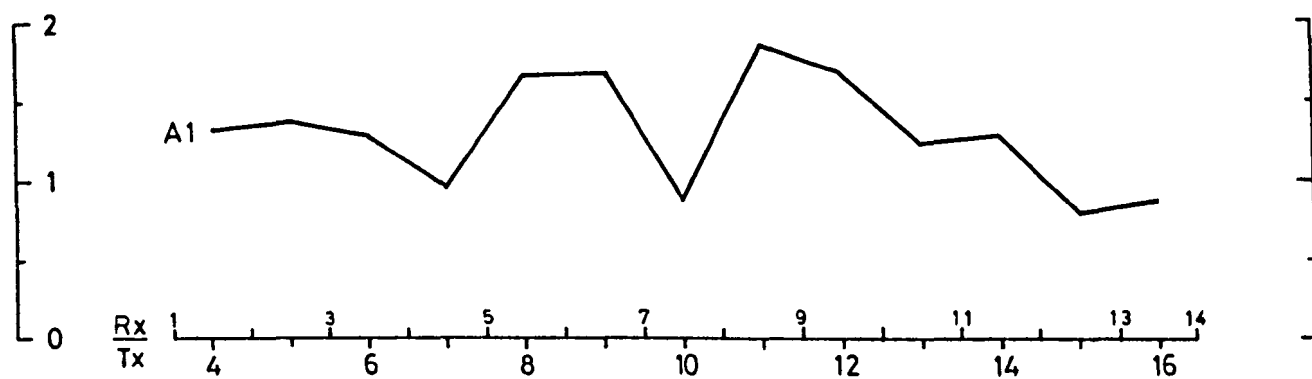
KOKKINOVOUNAROS AREALINE 2THE BERTIN AND LOEB'S (MODIFIED) FUNCTIONS

TABLE 62KOKKINOVOUNAROS AREA LINE 3The Bertin and Loeb's (modified) Functions

<u>C</u>	<u>P1-P2</u>	<u>$\rho/2\pi$</u>	<u>A1</u>	<u>A2</u>	<u>A1/A2</u>
4	1- 2	1.17	1.83	0.87	2.10
5	2- 3	1.39	1.40	0.62	2.23
6	3- 4	1.51	1.27	0.44	2.88
7	4- 5	1.19	1.68	0.86	1.95
8	5- 6	1.86	1.34	0.52	2.55
9	6- 7	5.55	0.46	0.24	1.87
10	7- 8	2.73	0.71	0.36	1.97
11	8- 9	2.40	1.37	0.67	2.05
12	9-10	1.32	1.02	0.53	1.92
13	10-11	0.92	1.05	0.38	2.70
14	11-12	0.95	1.08	0.41	2.63
15	12-13	1.34	0.86	0.52	1.64
16	13-14	1.55	0.62	0.49	1.27

KOKKINOVOUNAROS AREA

LINE 3

THE BERTIN AND LOEB'S (MODIFIED) FUNCTIONS

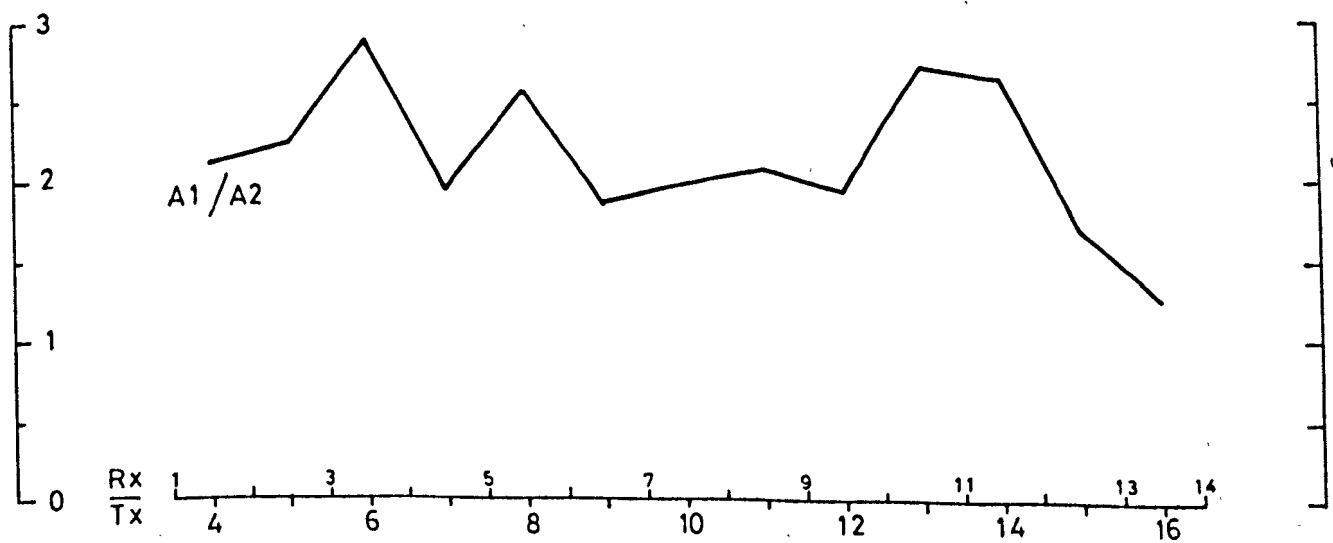
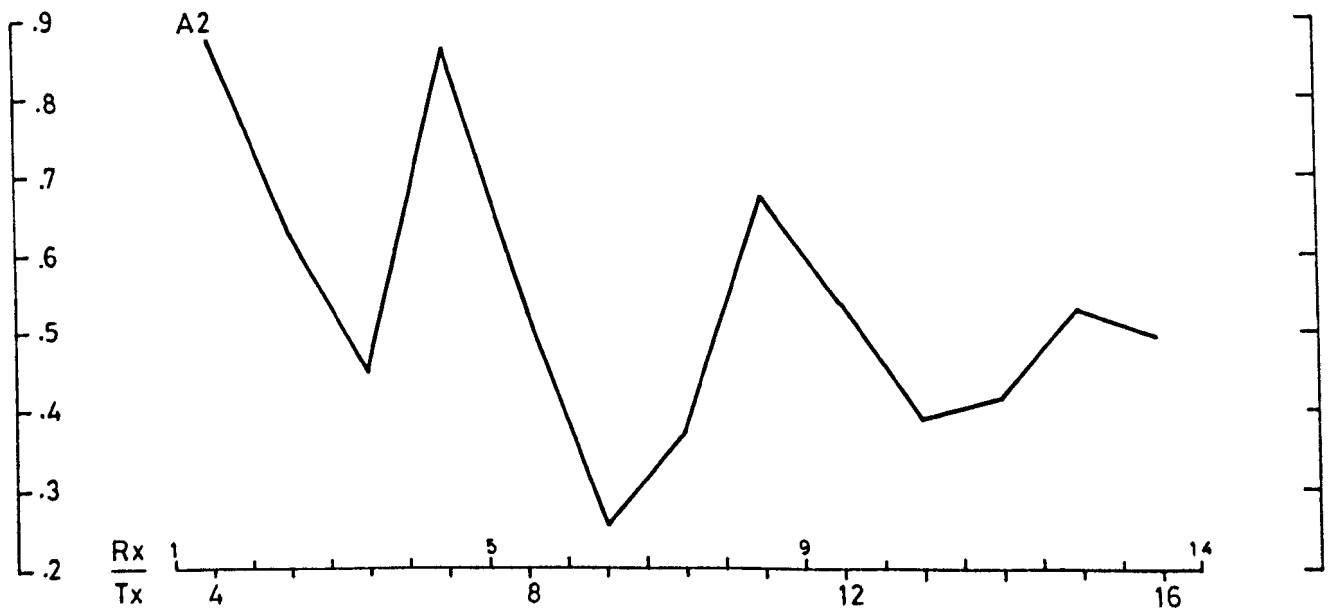
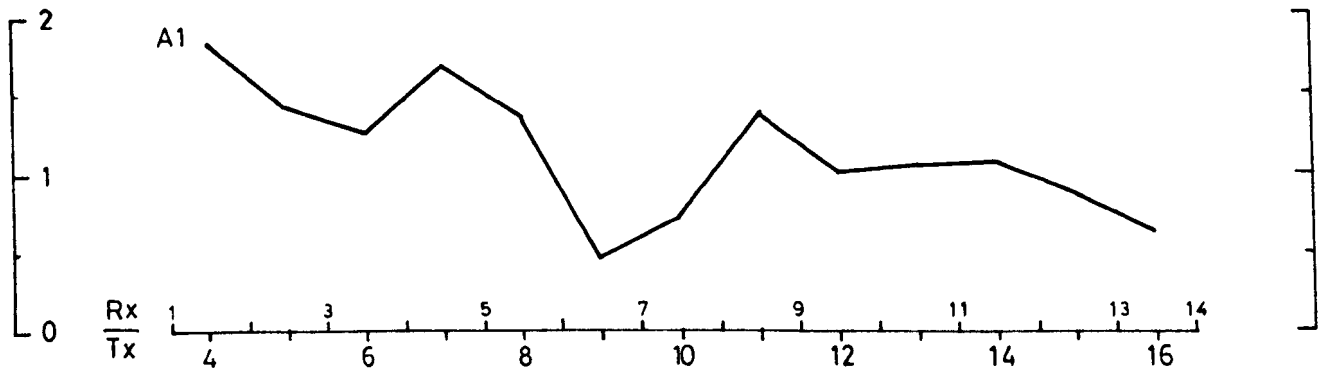


TABLE 63

KOKKINOVOUNAROS AREA LINE A

The Bertin and Loeb's (modified) Functions

<u>C</u>	<u>P1-P2</u>	<u>$\rho/2\pi$</u>	<u>A1</u>	<u>A2</u>	<u>A1/A2</u>
4	1- 2	2.02	0.67	0.38	1.76
5	2- 3	1.40	1.13	0.49	2.28
6	3- 4	1.80	0.91	0.45	2.00
7	4- 5	1.85	1.08	0.65	1.65
8	5- 6	2.45	0.74	0.34	2.16
9	6- 7	2.19	1.22	0.76	1.59
10	7- 8	2.11	1.14	0.91	1.25
11	8- 9	1.03	1.74	0.83	2.08
12	9-10	0.83	1.43	0.73	1.95
13	10-11	1.67	0.70	0.28	2.46
14	11-12	1.11	0.89	0.57	1.55
15	12-13	1.04	1.03	0.67	1.53
16	13-14	1.15	0.68	0.60	1.12

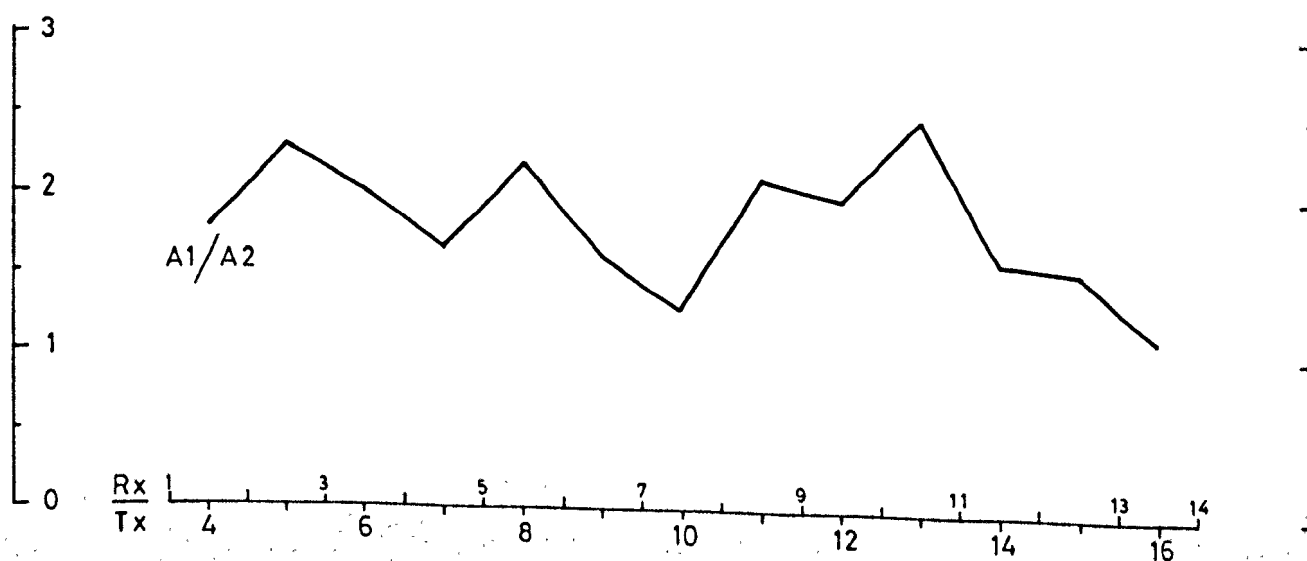
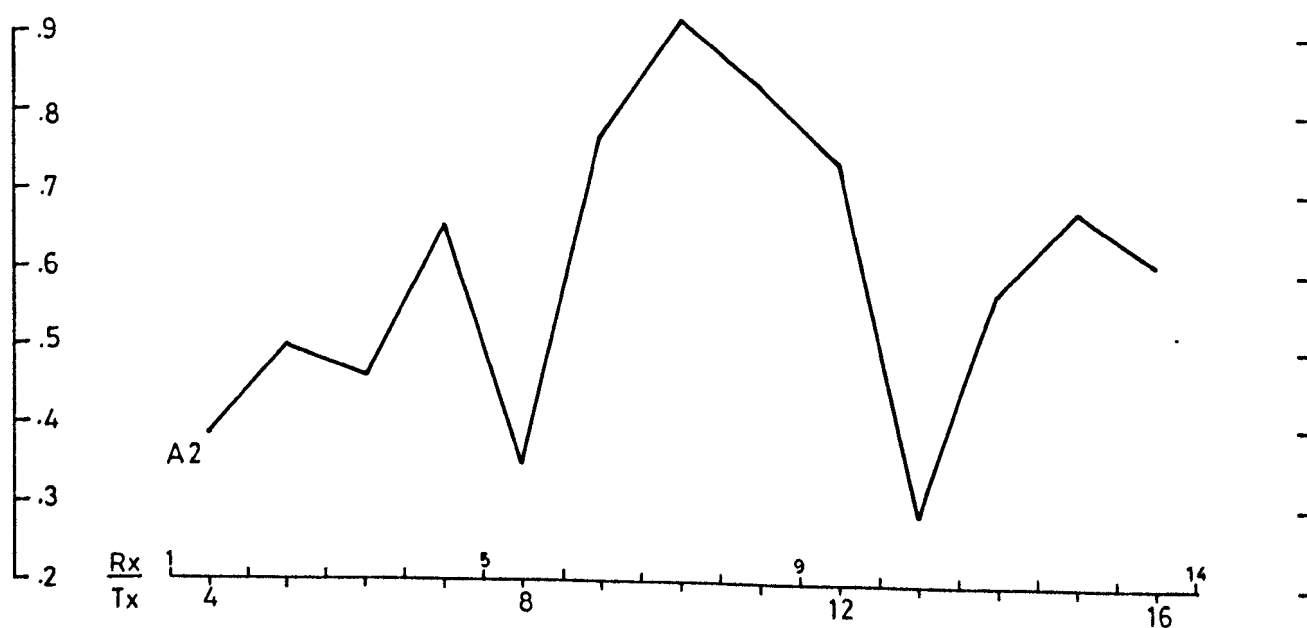
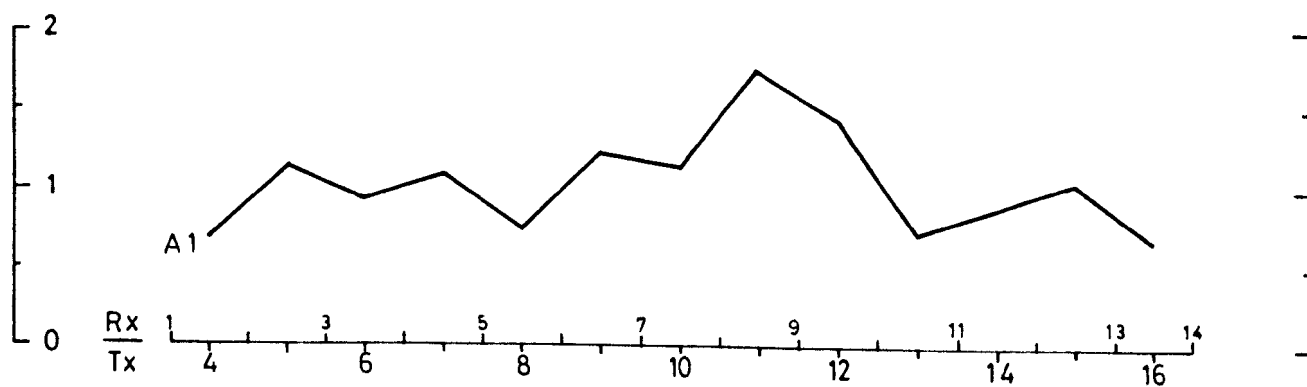
KOKKINOVOUNAROS AREALINE 4THE BERTIN AND LOEB'S (MODIFIED) FUNCTIONS

TABLE 64

KOKKI'OVOUNAROS AREA LINE 5

The Bertin and Loeb's (modified) Functions

<u>C</u>	<u>P1-P2</u>	<u>$\rho/2\pi$</u>	<u>A1</u>	<u>A2</u>	<u>A1/A2</u>
4	1- 2	1.29	1.16	0.68	1.70
5	2- 3	1.27	1.25	0.72	1.74
6	3- 4	1.20	1.72	0.90	1.90
7	4- 5	1.79	0.67	0.41	1.61
8	5- 6	1.40	1.22	0.88	1.38
9	6- 7	1.92	1.09	0.79	1.37
10	7- 8	0.93	1.54	0.82	1.88
11	8- 9	1.25	1.08	0.76	1.40
12	9-10	1.09	1.02	0.72	1.42
13	10-11	1.19	0.95	0.59	1.61
14	11-12	1.26	1.13	0.67	1.69
15	12-13	1.49	0.75	0.52	1.44
16	13-14	1.02	0.97	0.56	1.73

KOKKINOVOUNAROS AREA

LINE 5

THE BERTIN AND LOEB'S (MODIFIED) FUNCTIONS

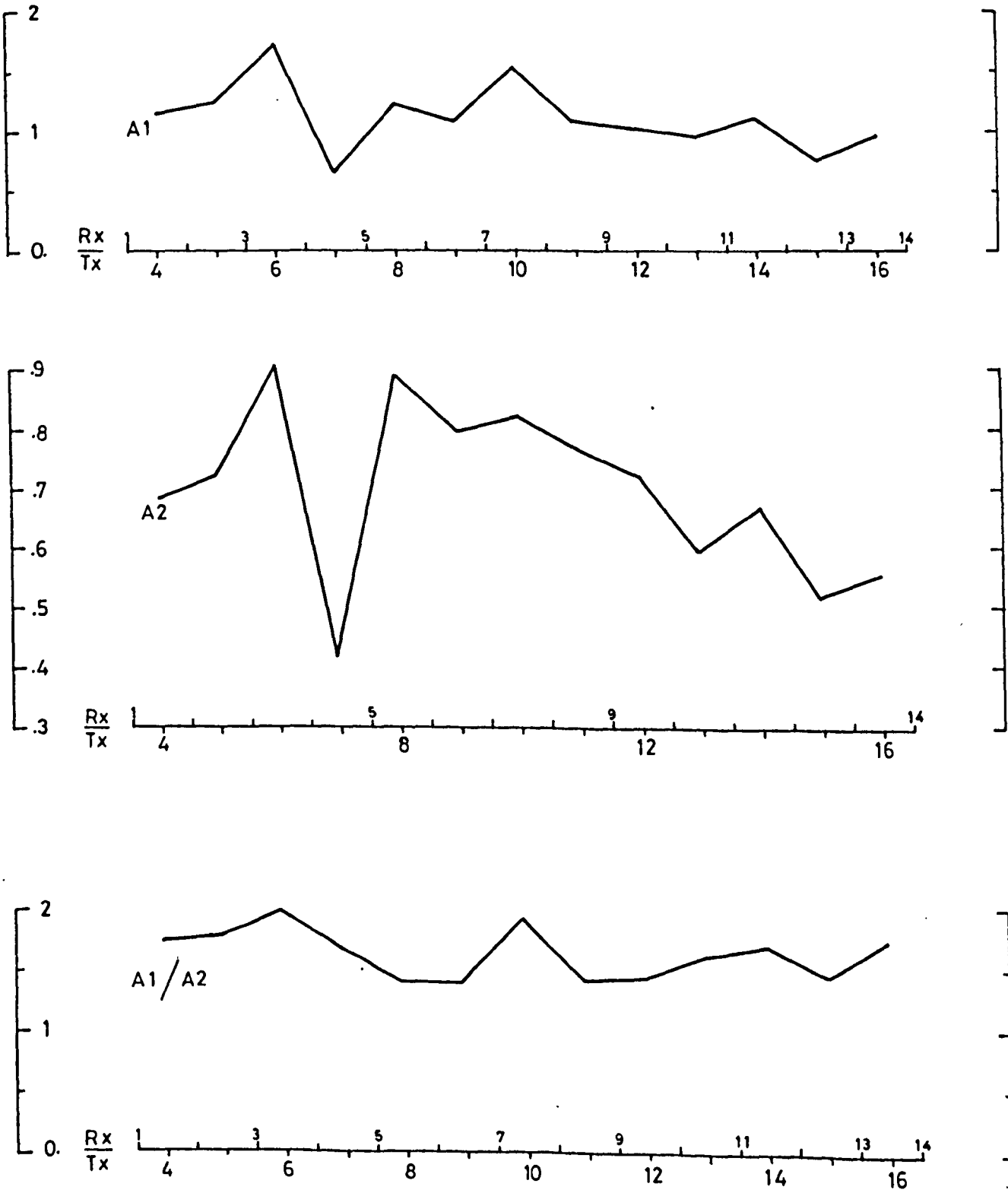


TABLE 65

KOKKINOVOUNAROS AREA LINE 6

The Bertin and Loeb's (modified) Functions

<u>C</u>	<u>P1-P2</u>	<u>$\rho/2\pi$</u>	<u>λ_1</u>	<u>λ_2</u>	<u>λ_1/λ_2</u>
4	1- 2	1.17	1.17	0.83	0.83
5	2- 3	1.15	1.41	1.02	1.38
6	3- 4	1.86	0.84	0.45	1.85
7	4- 5	1.62	0.71	0.44	1.62
8	5- 6	1.80	0.83	0.49	1.67
9	6- 7	1.61	1.14	0.59	1.91
10	7- 8	1.39	0.76	0.49	1.55
11	8- 9	1.11	1.14	0.61	1.85
12	9-10	1.89	0.59	0.40	1.48
13	10-11	1.23	1.23	0.73	1.69
14	11-12	1.45	0.82	0.58	1.40
15	12-13	1.23	1.20	0.60	1.98
16	13-14	1.29	1.34	0.56	2.37

KOKKINOVOUNAROS AREA

LINE 6

THE BERTIN AND LOEB'S (MODIFIED) FUNCTIONS

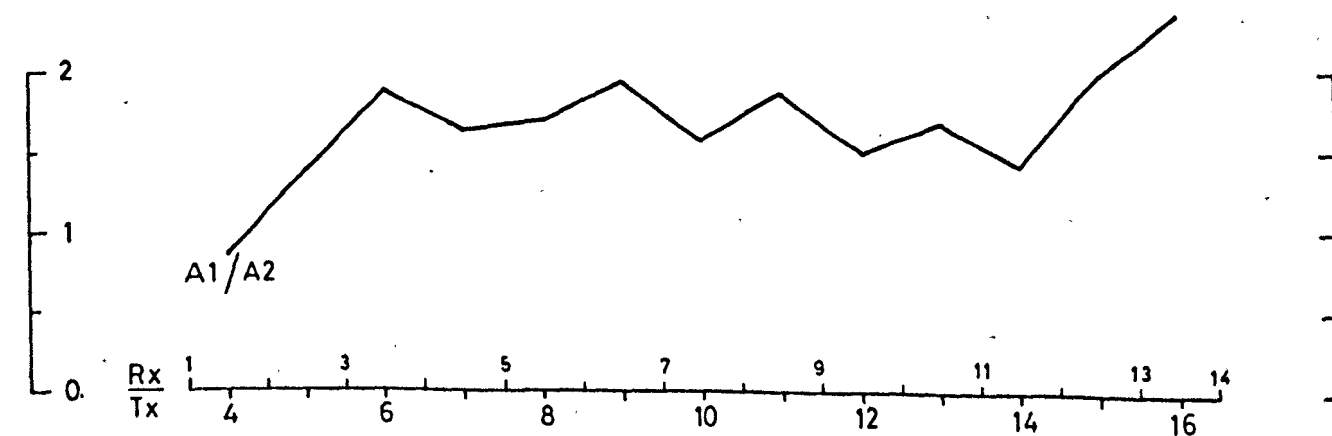
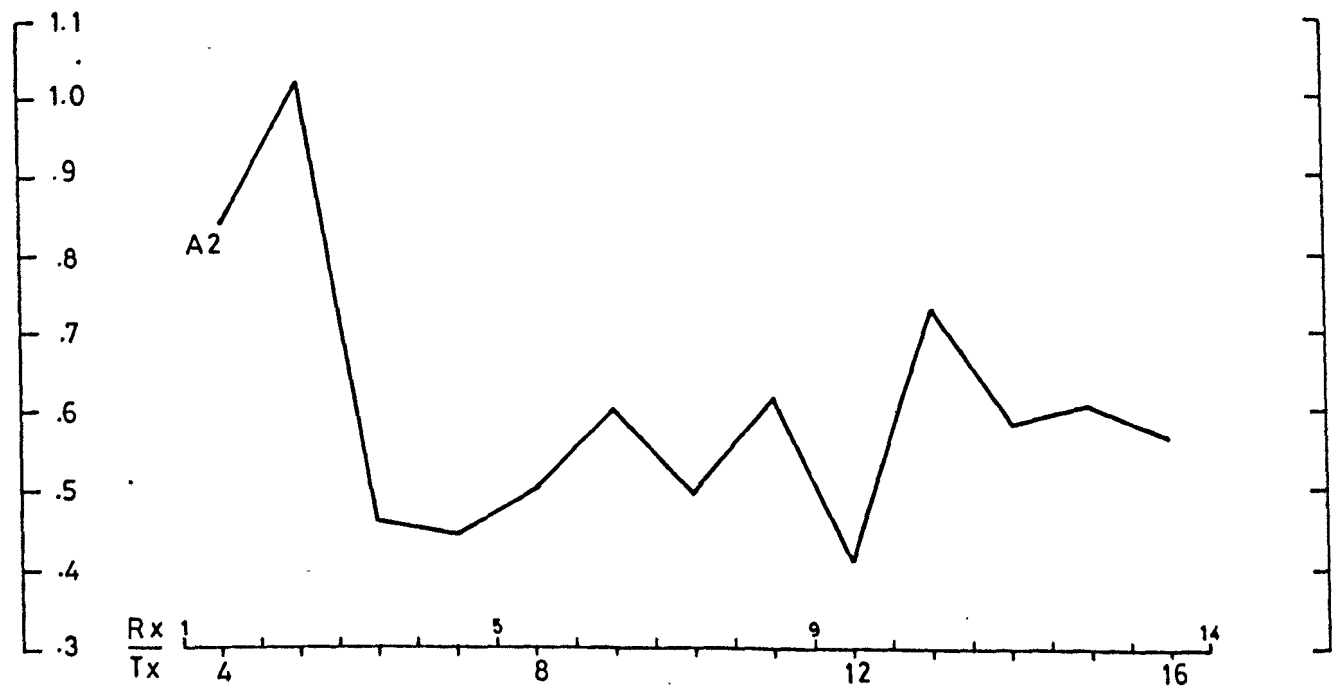
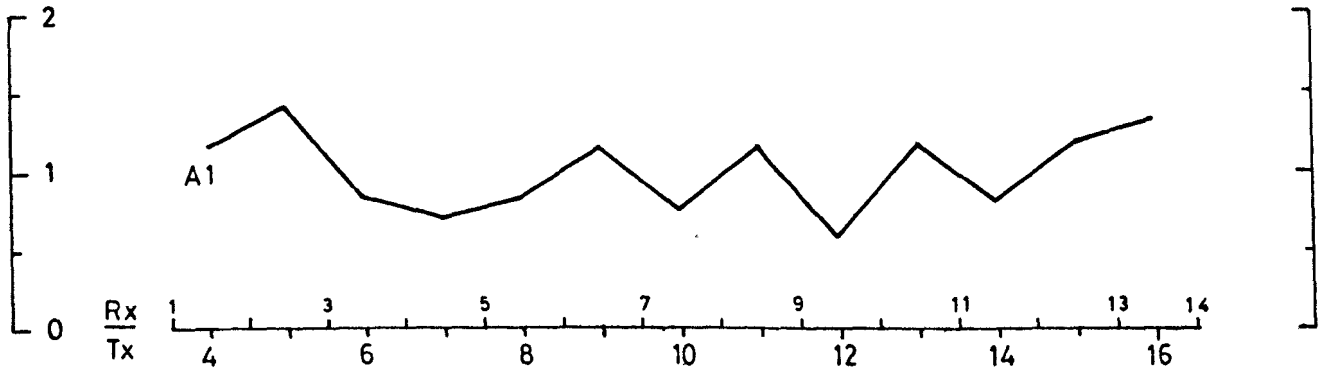


TABLE 66

KOKKINOVOUNAROS AREA LINE 7

The Bertin and Loeb's (modified) Functions

<u>C</u>	<u>P1-P2</u>	<u>$\rho/2\pi$</u>	<u>A1</u>	<u>A2</u>	<u>A1/A2</u>
4	1- 2	1.22	1.14	0.63	1.81
5	2- 3	1.07	1.44	0.78	1.85
6	3- 4	1.43	0.83	0.49	1.69
7	4- 5	1.43	0.79	0.49	1.61
8	5- 6	1.08	1.22	0.77	1.57
9	6- 7	1.40	0.85	0.56	1.51
10	7- 8	1.56	0.70	0.43	1.60
11	8- 9	1.70	0.50	0.38	1.28
12	9-10	1.72	0.74	0.49	1.50
13	10-11	1.67	0.81	0.52	1.55
14	11-12	1.20	1.03	0.67	1.53
15	12-13	1.17	1.11	0.68	1.62
16	13-14	1.92	0.74	0.45	1.62

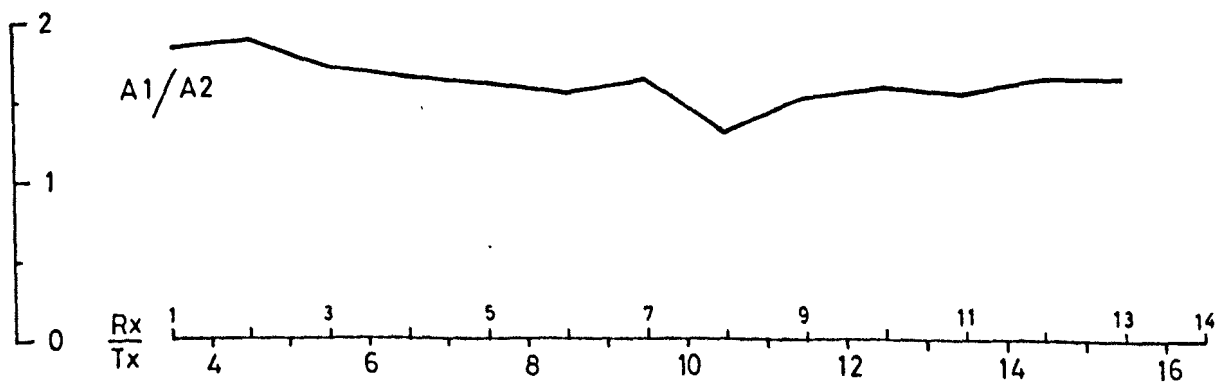
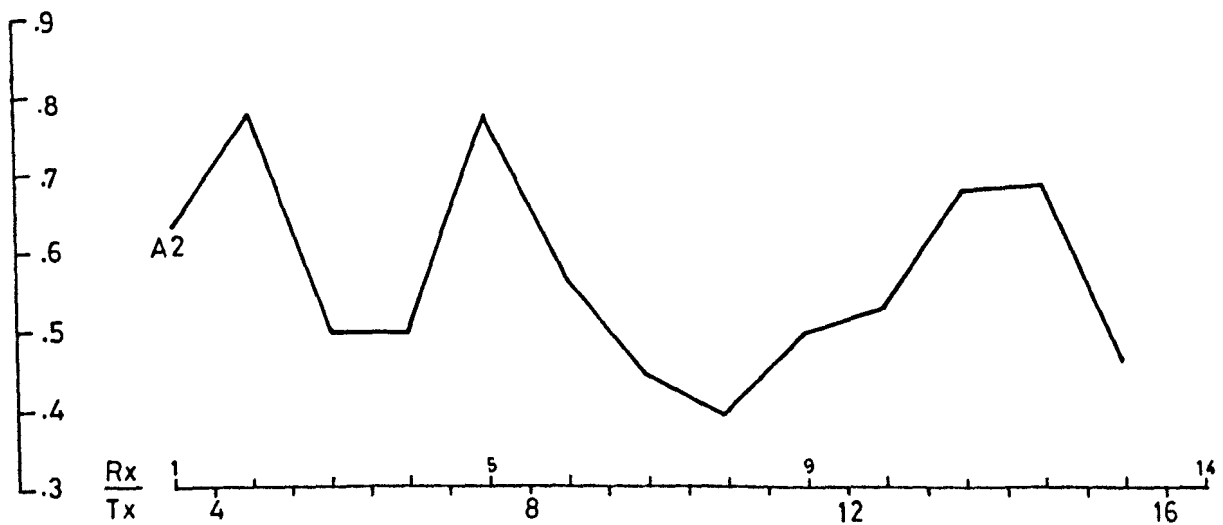
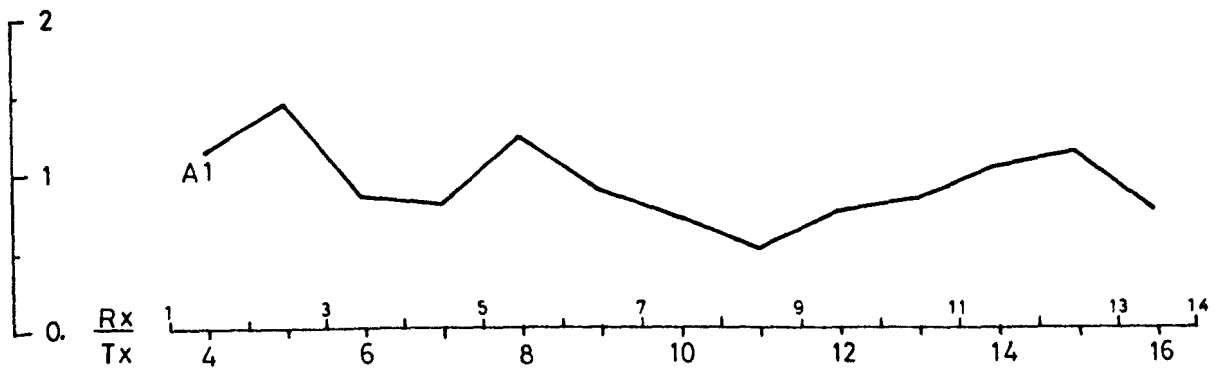
KOKKINOVOUNAROS AREALINE 7THE BERTIN AND LOEB'S (MODIFIED) FUNCTIONS

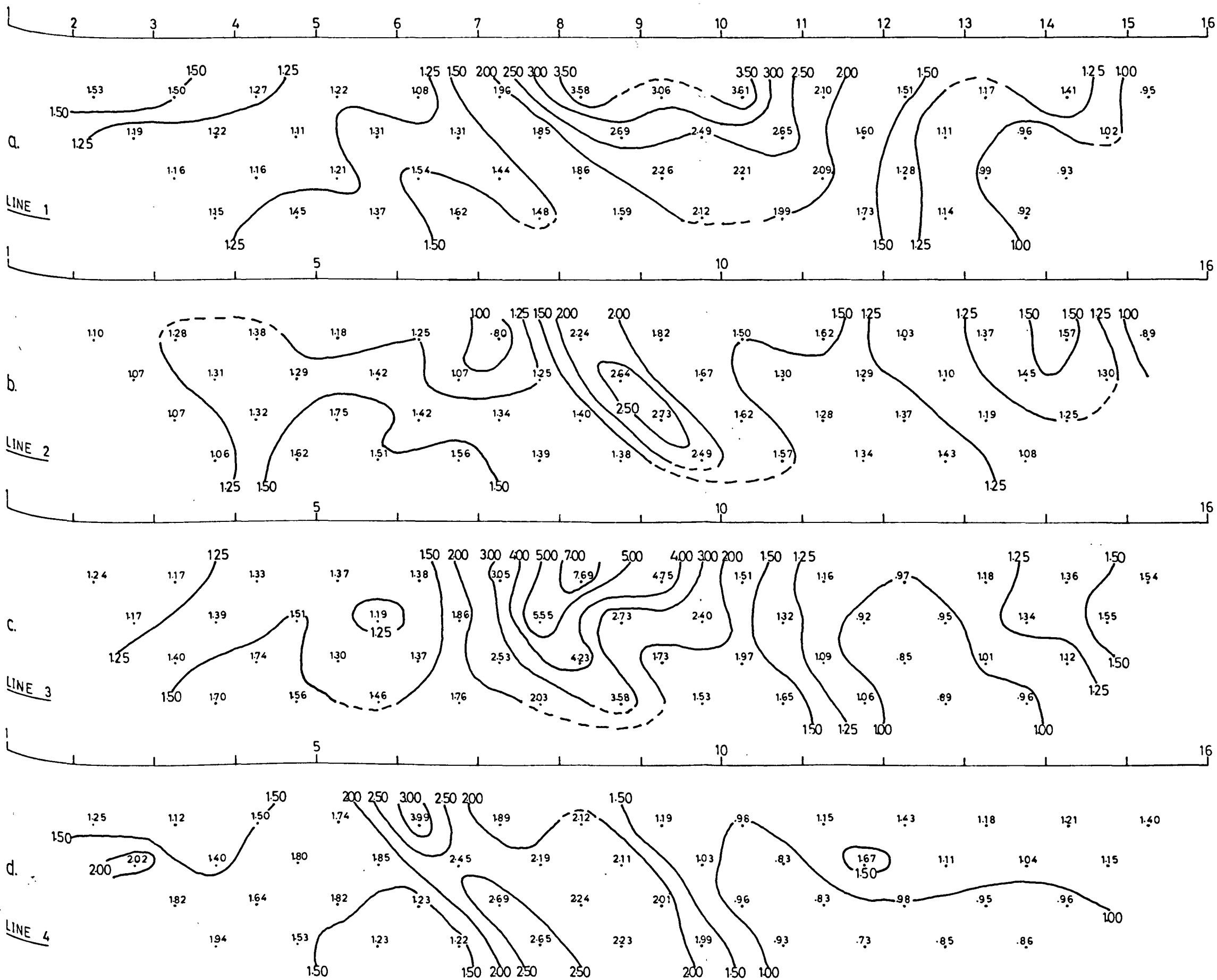
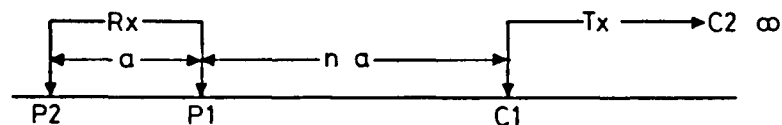
TABLE 67

KOKKINOVOUNAROS AREA

Table summarizing the Bertin and Loeb's (modified) Functions over the mineralization and the barren rocks.

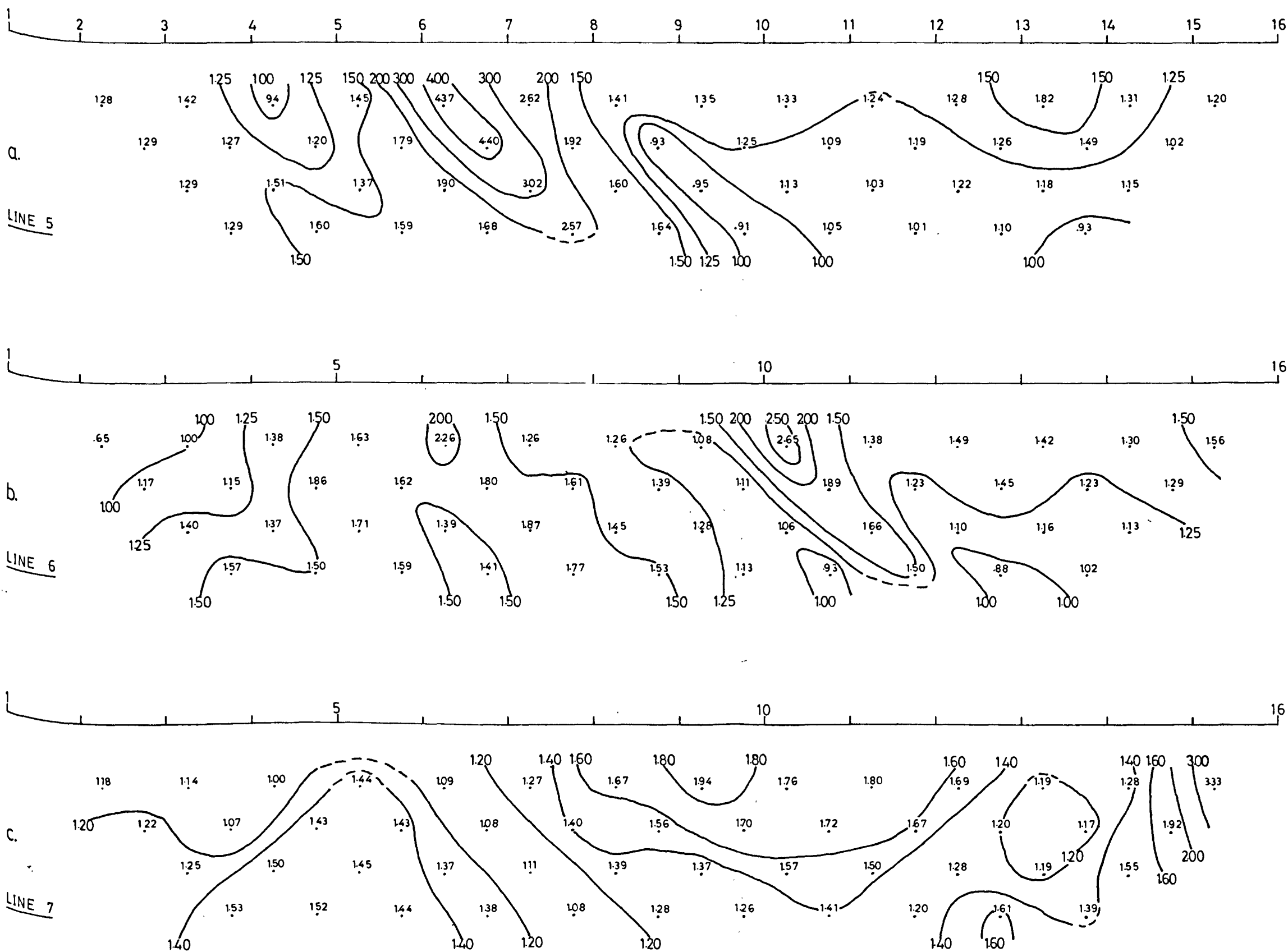
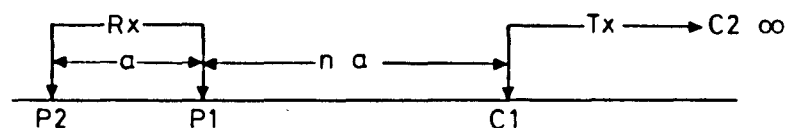
	<u>Mineralization</u>	<u>Barren Rocks</u>
A1	0.7-1.3	0.6-1.7
A2	0.3-0.9	0.4-0.9
A1/A2	1.5-2.4	1.0-3.1

POLE - DIPOLE

 $a = 50\text{m}$ RESISTIVITY $\rho / 2\pi$ (Ohm-meters)

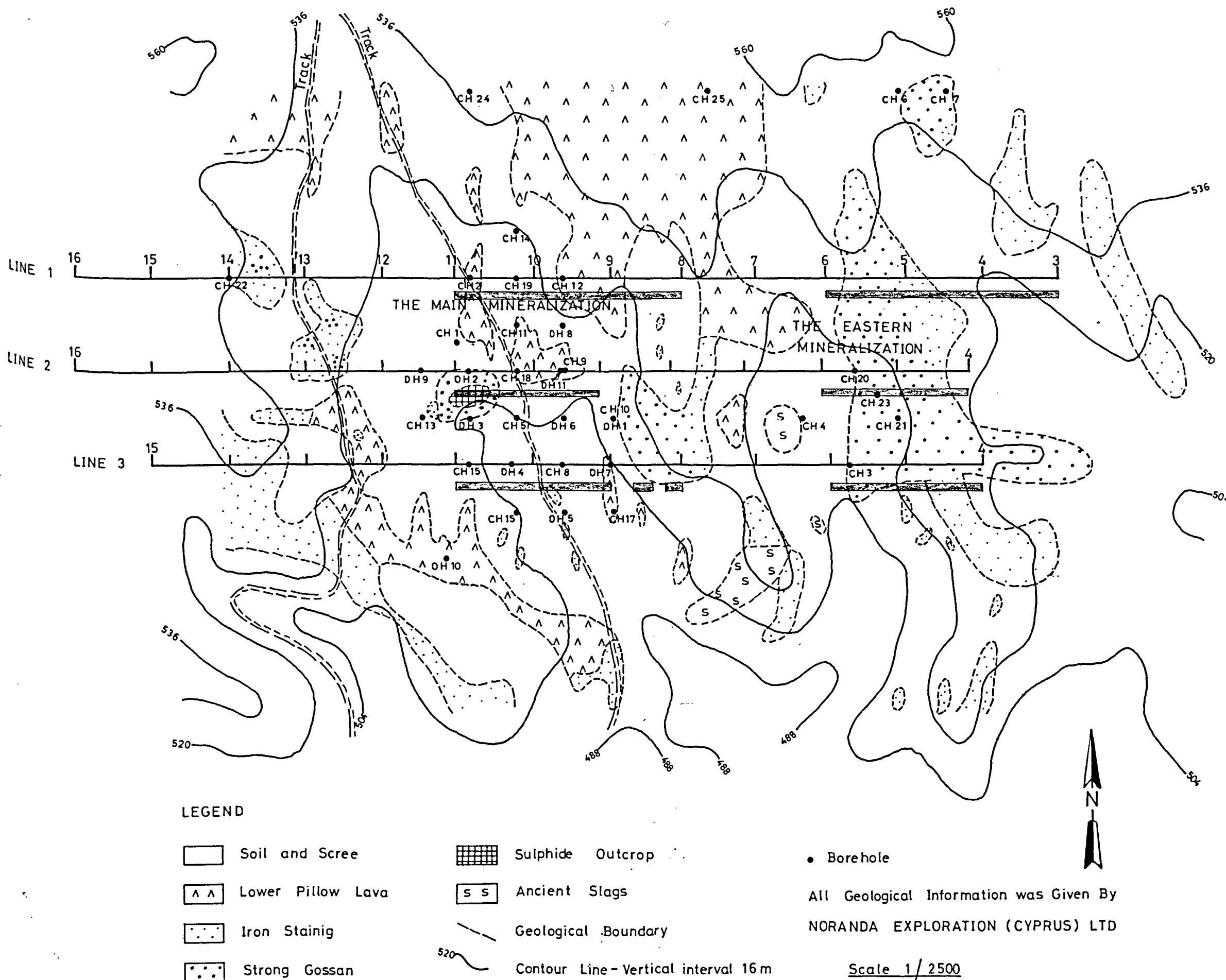
KOKKINOVOUNAROS AREA

POLE - DIPOLE

RESISTIVITY $\rho/2\pi$ (Ohm-meters) $a = 50$ m

GEOLOGICAL- GEOPHYSICAL MAP OF THE VRECHIA AREA

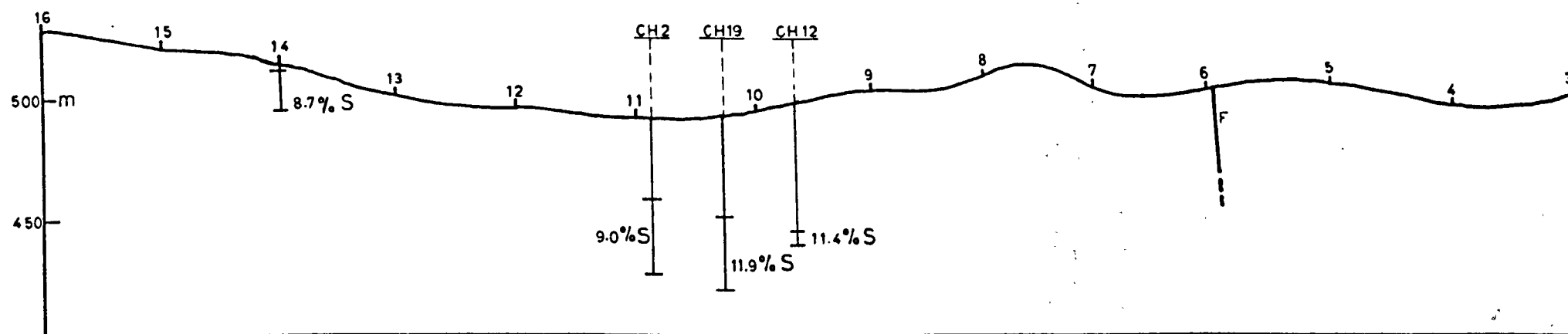
FIG. 152



VRECHIA AREA
GEOLOGICAL SECTIONS ALONG THE GEOPHYSICAL LINES
Scale 1/2500

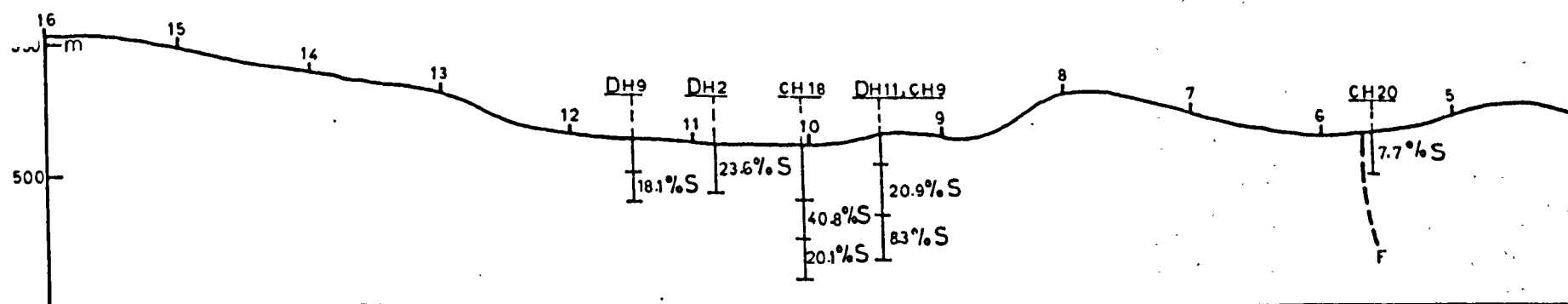
a.

LINE 1



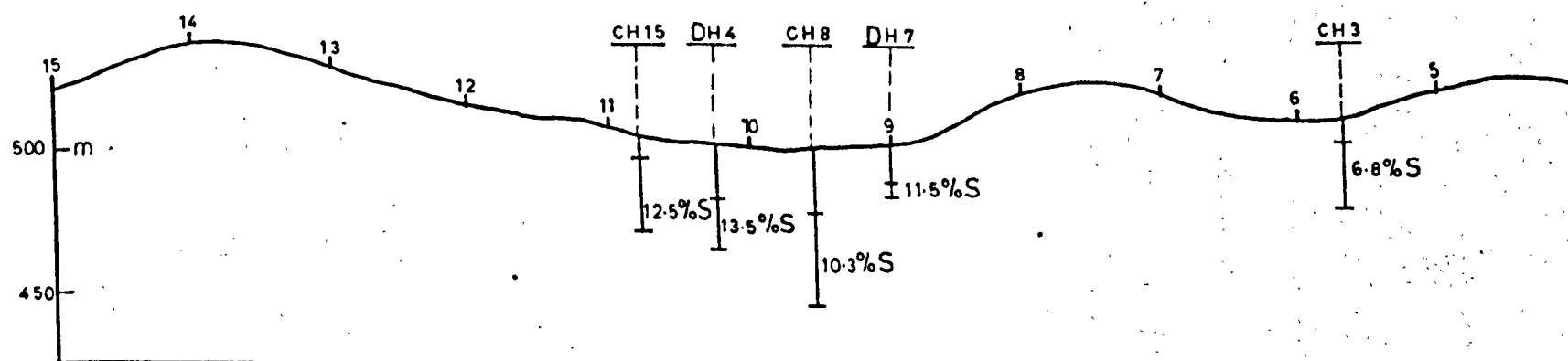
b.

LINE 2



c.

LINE 3



VRECHIA AREA

LINE 1

POLE - DIPOLE

$t_d = 30$

$t_c = 8$

$t_p = 50$

on/off = 1.0

$a = 50$ m

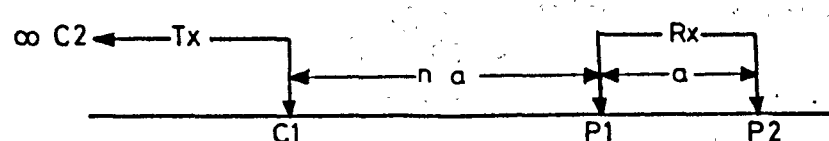
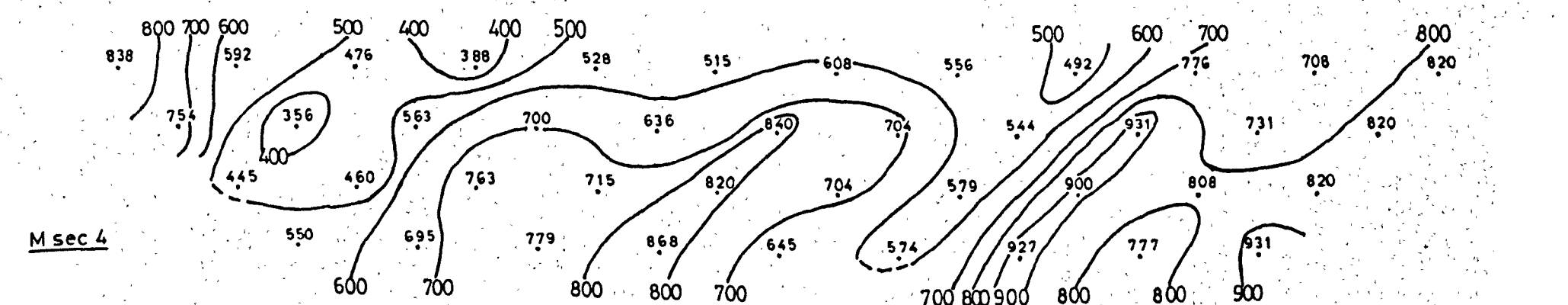
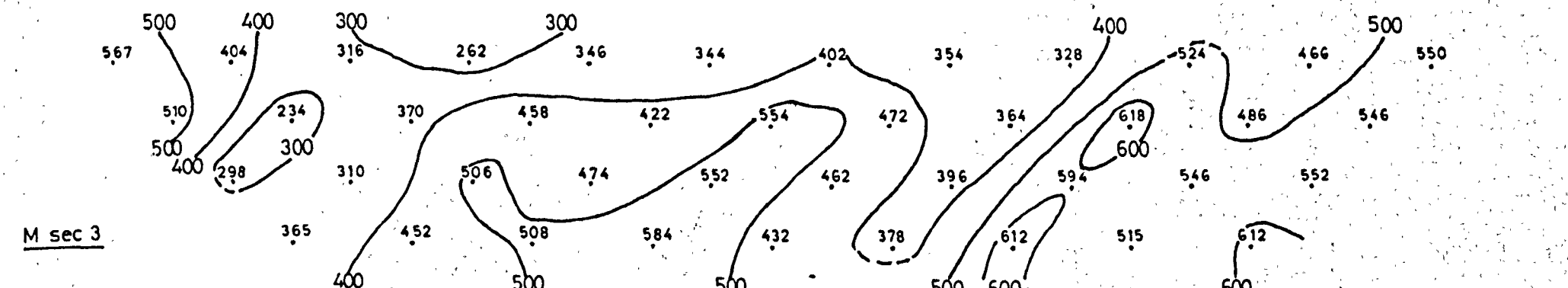
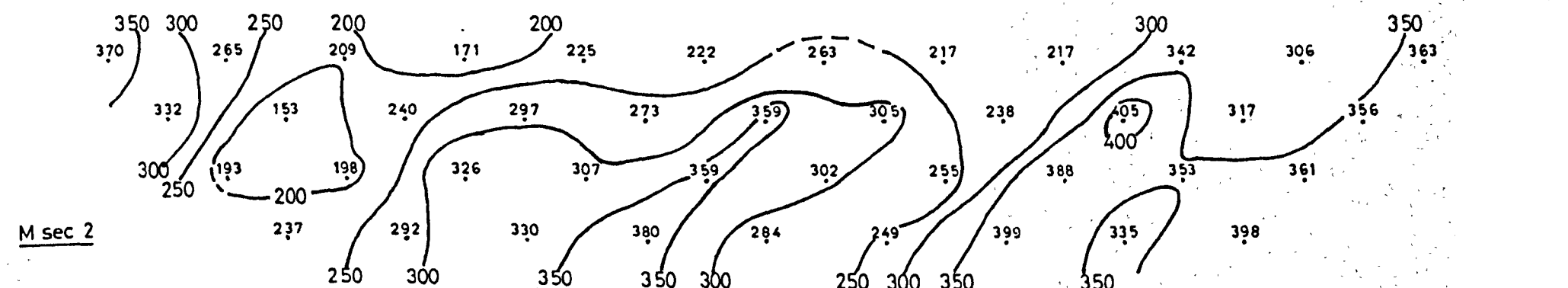
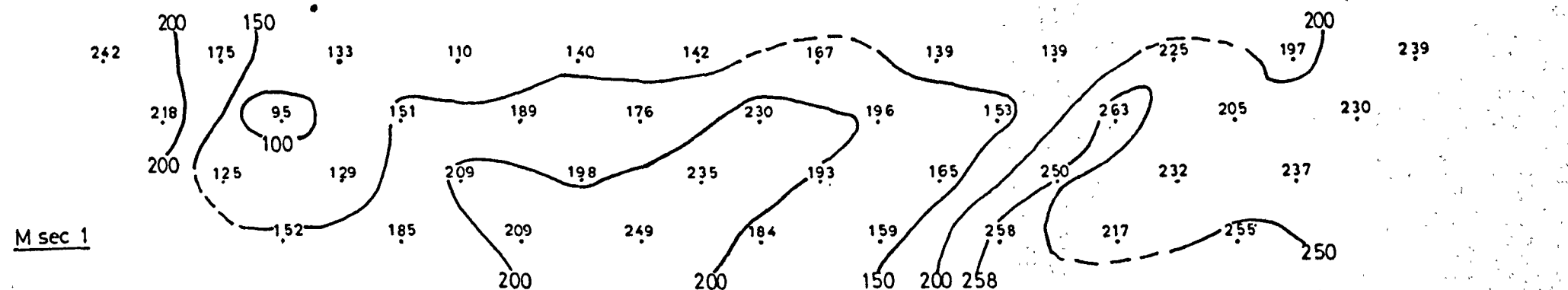


FIG. 154



VRECHIA AREA

$t_d = 30$

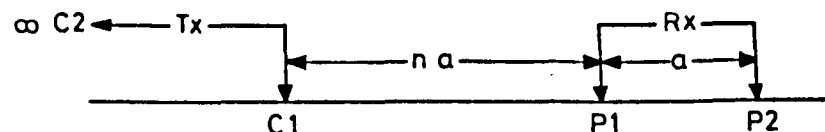
$t_c = 8$

FIG. 155

LINE 2

$t_p = 50$

on/off = 1.0



POLE - DIPOLE

$a = 50m$

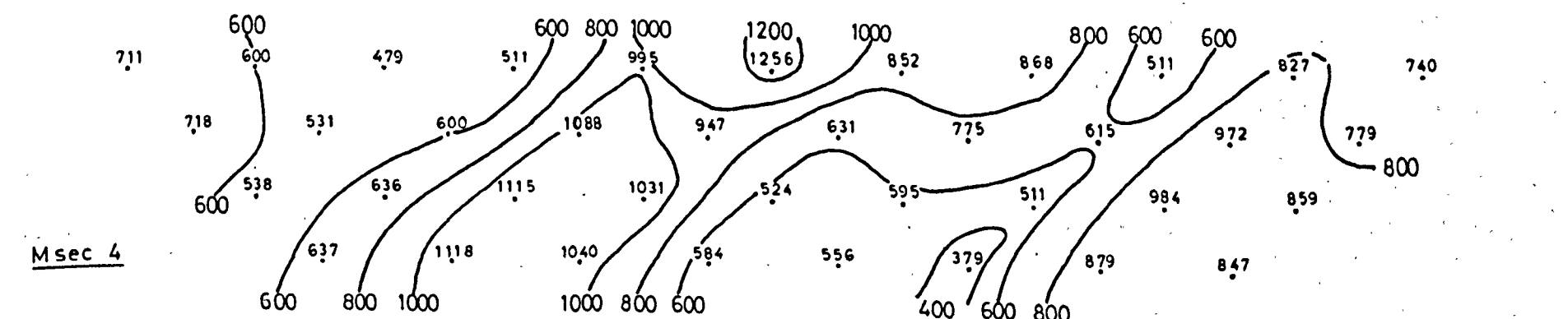
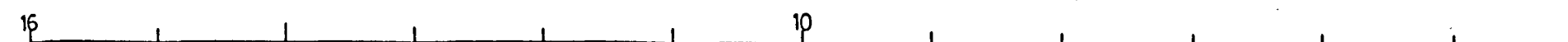
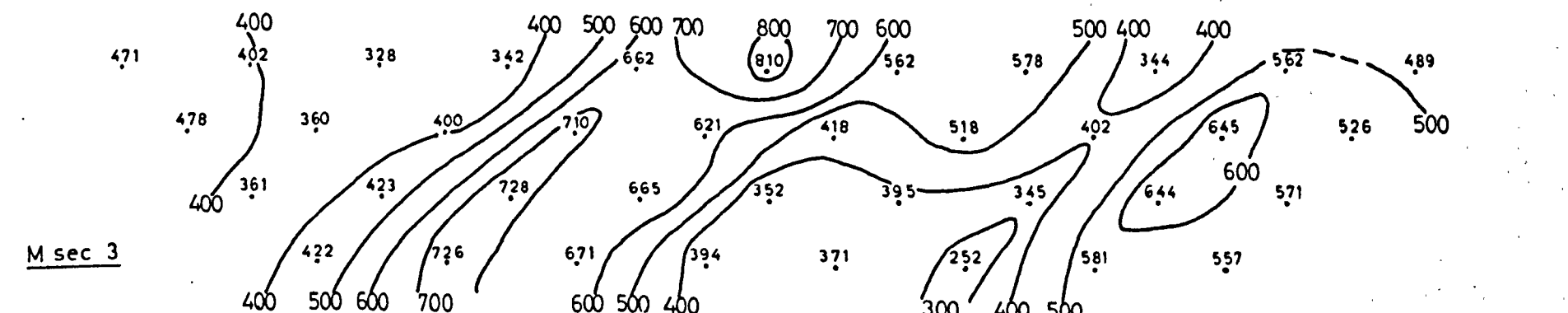
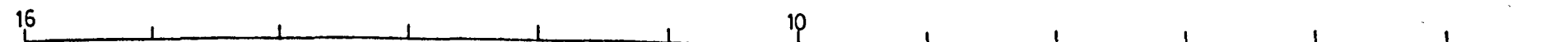
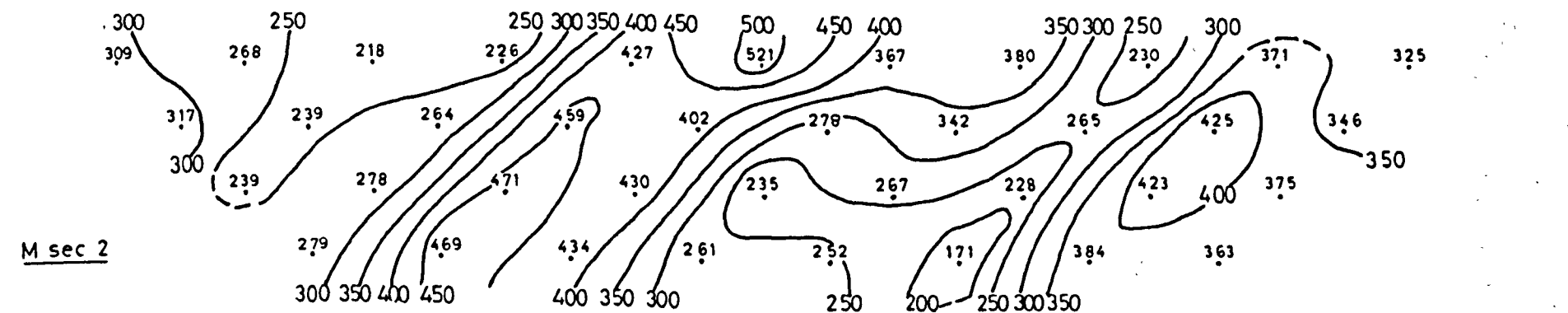
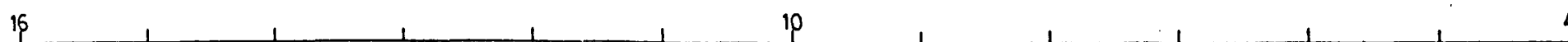
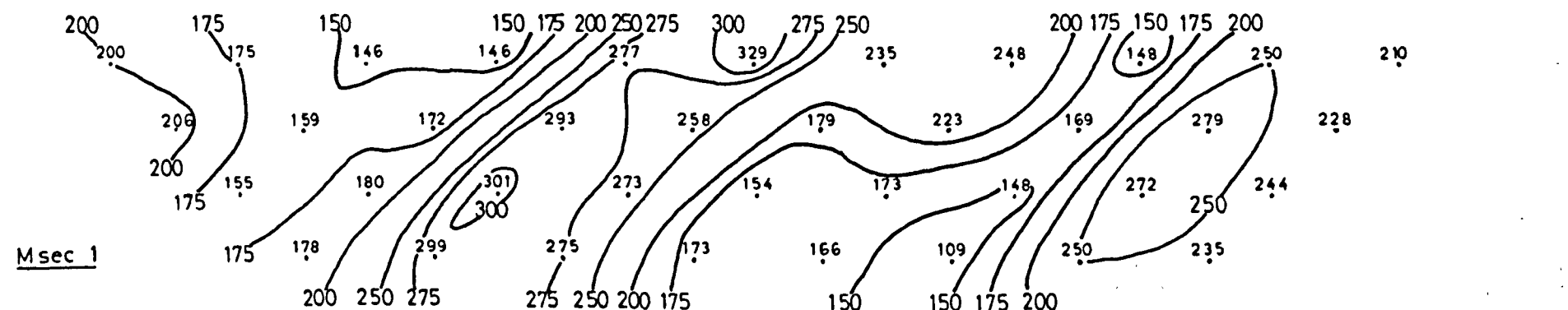
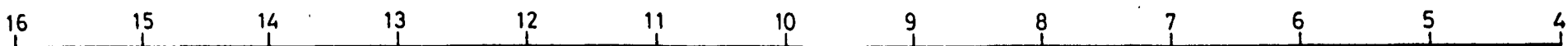


FIG. 156

VRECHIA - AREA

 $t_d = 30$ $t_c = 8$

LINE 3

 $t_p = 50$

on/off = 1.0

POLE - DIPOLE

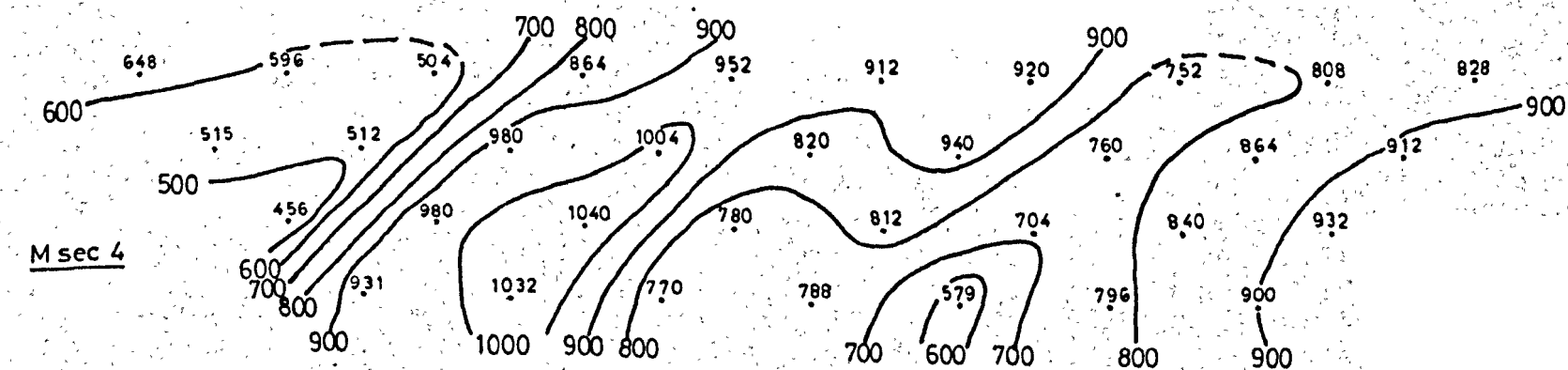
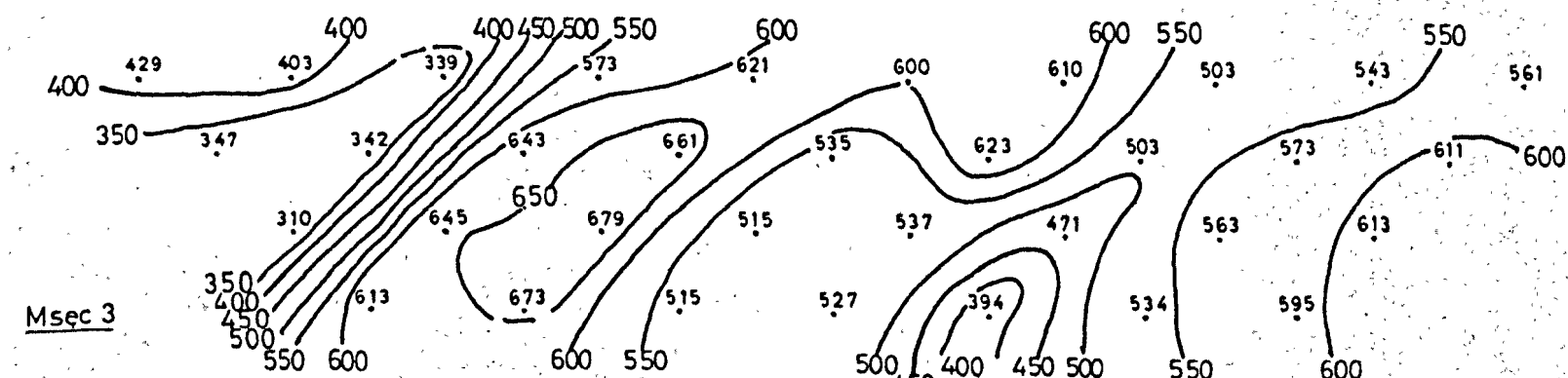
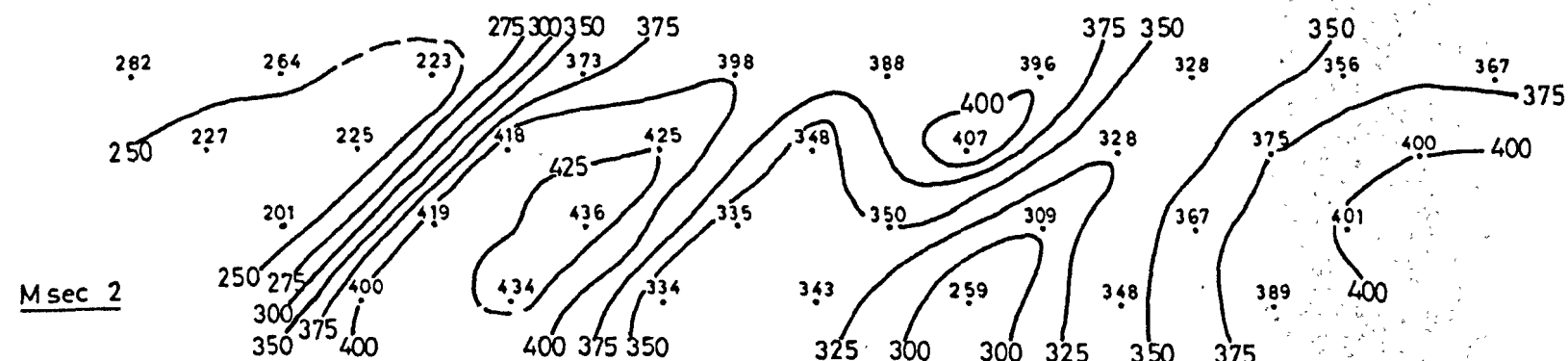
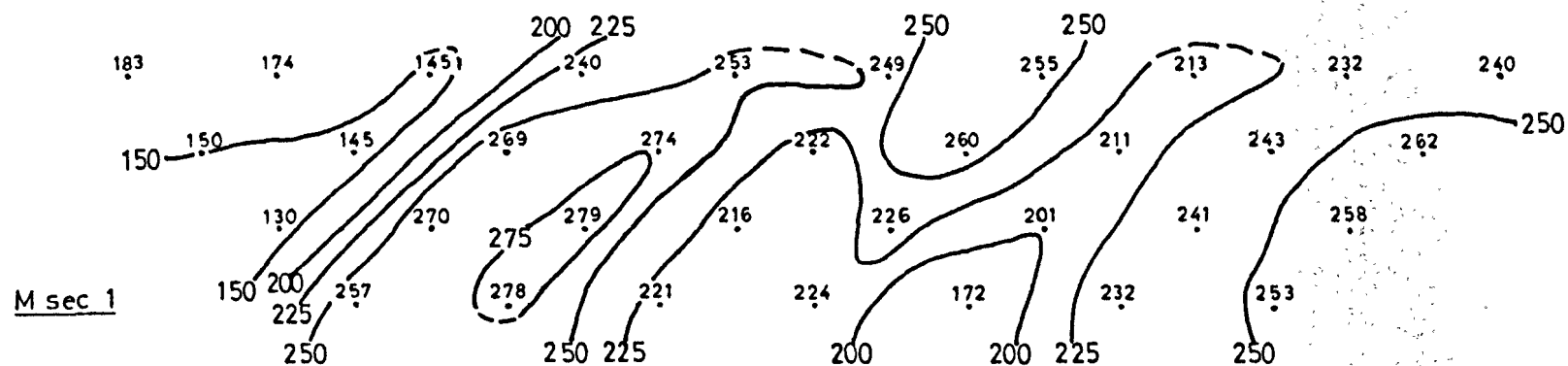
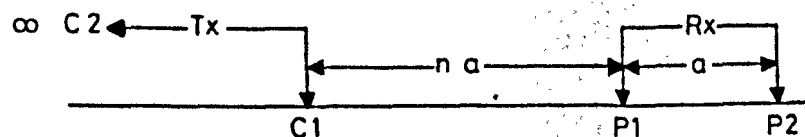
 $a = 50\text{ m}$ 

TABLE 68

VRECHIA AREA LINE 1

The Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>A</u>	<u>B</u>	<u>α</u>	<u>β</u>	<u>P</u>
6	3- 4	3.00	1.95	7.20	0.63	0.63
7	4- 5	2.95	1.96	9.24	0.74	0.53
8	5- 6	3.28	2.54	8.02	0.76	0.66
9	6- 7	1.78	1.38	6.92	0.70	0.40
10	7- 8	2.45	1.76	7.7 ^A	0.68	0.53
11	8- 9	3.38	1.76	7.79	0.51	0.71
12	9-10	2.20	1.70	8.49	0.76	0.46
13	10-11	2.38	1.96	9.39	0.78	0.49
14	11-12	1.90	1.28	7.35	0.59	0.45
15	12-13	1.20	0.84	7.18	0.62	0.28
16	13-14	3.00	2.06	8.75	0.77	0.53

VRECHIA AREA

LINE 1

THE DECAY FACTORS

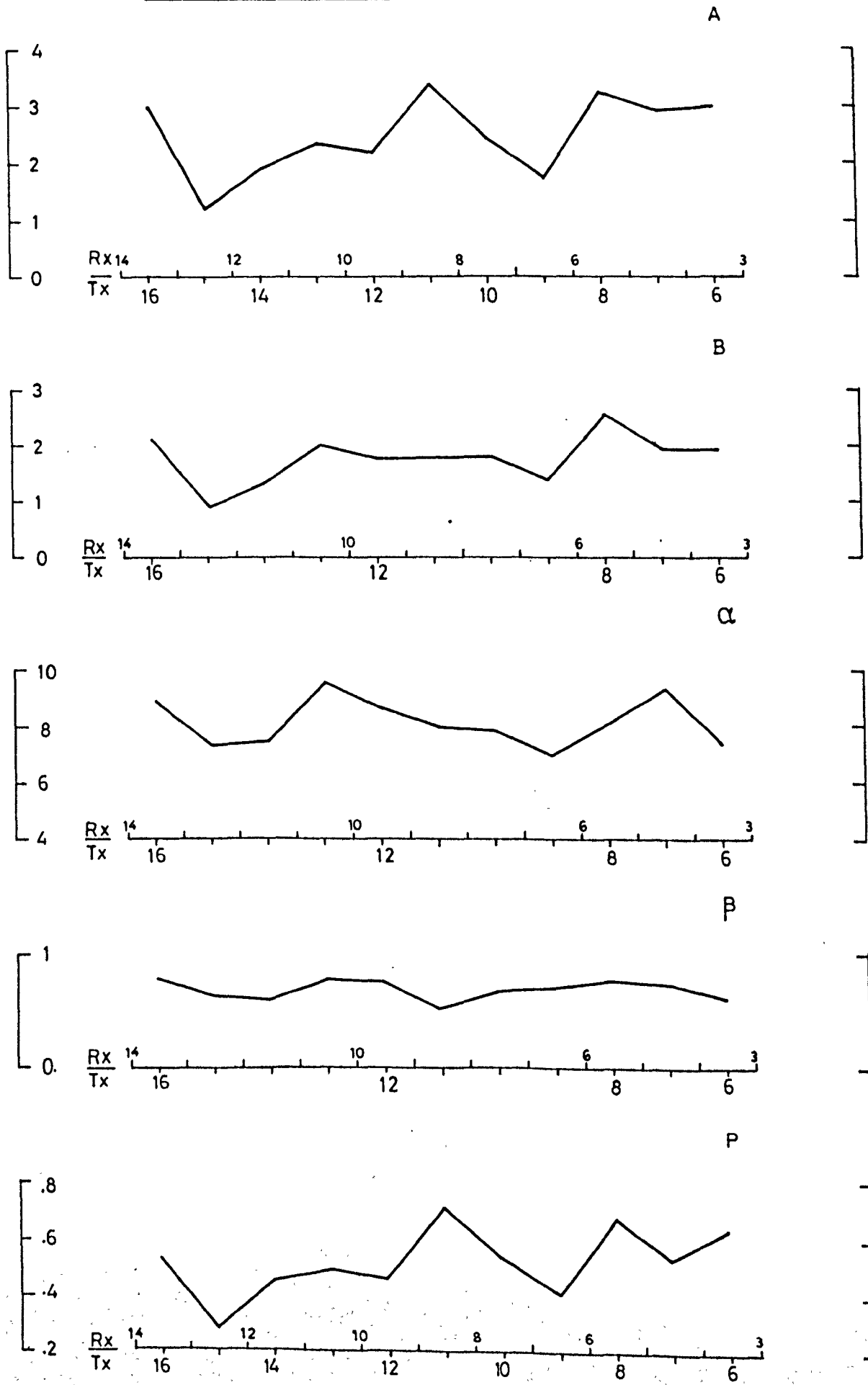


TABLE 69

VRECHIA AREA LINE 2

The Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>A</u>	<u>B</u>	<u>α</u>	<u>β</u>	<u>P</u>
7	4- 5	2.78	2.29	8.24	0.81	0.55
8	5- 6	3.27	2.52	6.96	0.71	0.71
9	6- 7	2.05	1.49	7.37	0.64	0.48
10	7- 8	2.85	1.89	7.11	0.65	0.59
11	8- 9	2.35	1.55	7.50	0.66	0.48
12	9-10	3.20	2.17	7.25	0.60	0.75
13	10-11	3.48	2.65	7.96	0.65	0.84
14	11-12	2.00	1.55	7.65	0.71	0.44
15	12-13	1.80	1.34	6.27	0.70	0.39
16	13-14	2.53	1.67	6.43	0.61	0.57

VRECHIA AREA

LINE 2

THE DECAY FACTORS

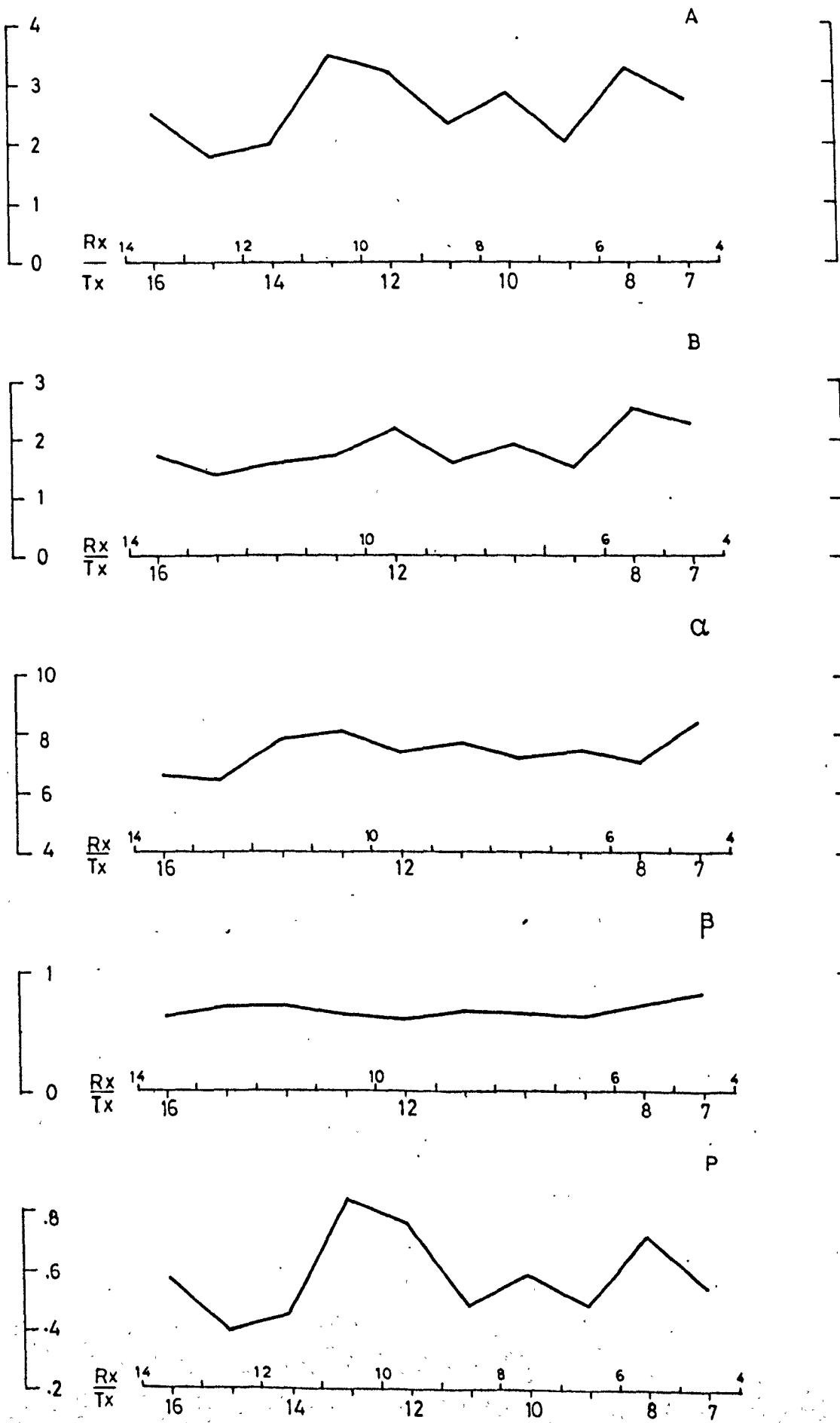


TABLE 70

VRECHIA AREA LINE 3

The Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>A</u>	<u>B</u>	<u>α</u>	<u>β</u>	<u>P</u>
7	4- 5	3.40	2.22	7.72	0.65	0.71
8	5- 6	3.75	1.93	8.21	0.57	0.71
9	6- 7	2.70	1.97	7.70	0.70	0.57
10	7- 8	3.03	2.24	6.51	0.60	0.77
11	8- 9	2.90	2.00	7.94	0.64	0.64
12	9-10	3.03	2.36	8.69	0.79	0.71
13	10-11	3.64	2.44	8.73	0.67	0.75
14	11-12	1.50	1.44	7.06	0.80	0.35
15	12-13	1.80	1.40	7.73	0.77	0.36

VRECHIA AREA

LINE 3

THE DECAY FACTORS

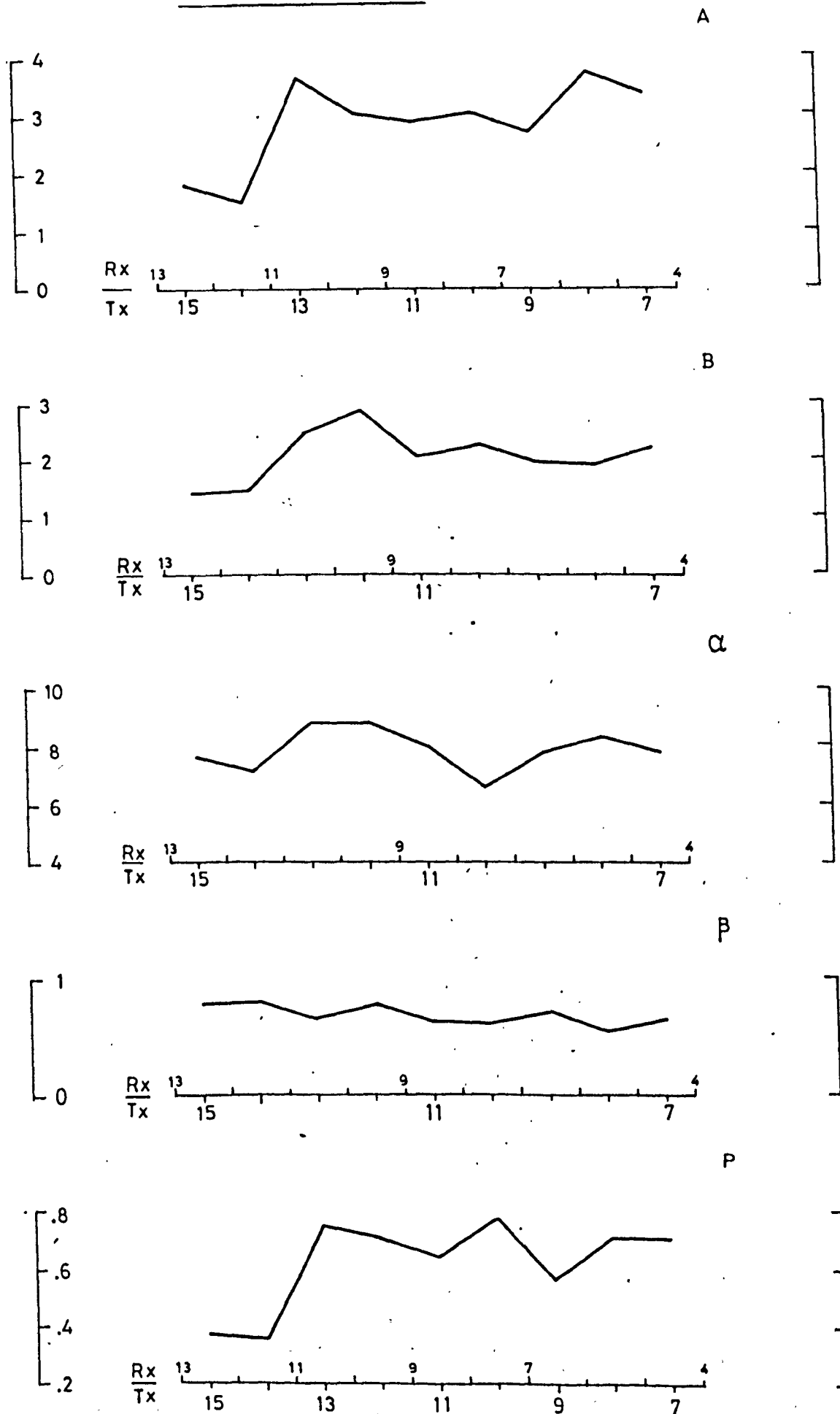


TABLE 71

VRECHIA AREA

Table summarizing the Decay Factors over the mineralizations and the barren rocks.

	Main Mineralization	Eastern Mineralization	St.14, Line 1 Mineralization	Barren Rocks
A	3.0 -3.6 (2.2 concealed)	2.8 -3.7	3.0	1.2 -1.8
B	1.6 -2.8	1.9 -2.5	2.0	0.8 -1.4
α	7.2 -9.4	6.9 -9.2	8.7	6.2 -7.5
β	0.5 -0.8	0.55-0.80	0.75	0.6 -0.8
P	0.72-0.84 (0.5 concealed)	0.53-0.75	0.53	0.28-0.45

TABLE 72VRECHIA AREA LINE 1The Log_et Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>R1</u>	<u>R2</u>	<u>R1/R2</u>	<u>V_d</u>	<u>t_d</u>	<u>d2.0</u>	<u>d1.5</u>
6	3- 4	3.03	2.20	1.37	3.80	103	220	590
7	4- 5	2.70	1.95	1.38	3.40	100	135	420
8	5- 6	3.55	2.56	1.38	4.50	89	400	780
9	6- 7	1.97	1.50	1.31	2.60	95	33	120
10	7- 8	2.49	1.92	1.29	3.12	118	90	305
11	8- 9	2.92	2.16	1.35	3.85	100	230	650
12	9-10	2.17	1.71	1.26	3.00	95	60	220
13	10-11	2.29	1.83	1.25	3.00	124	80	275
14	11-12	1.78	1.45	1.22	2.40	130	20	80
15	12-13	1.20	0.92	1.30	1.60	110	0	10
16	13-14	3.05	2.08	1.46	3.58	100	180	525

VRECHIA AREA

LINE 1

THE LOG_e T DECAY FACTORS

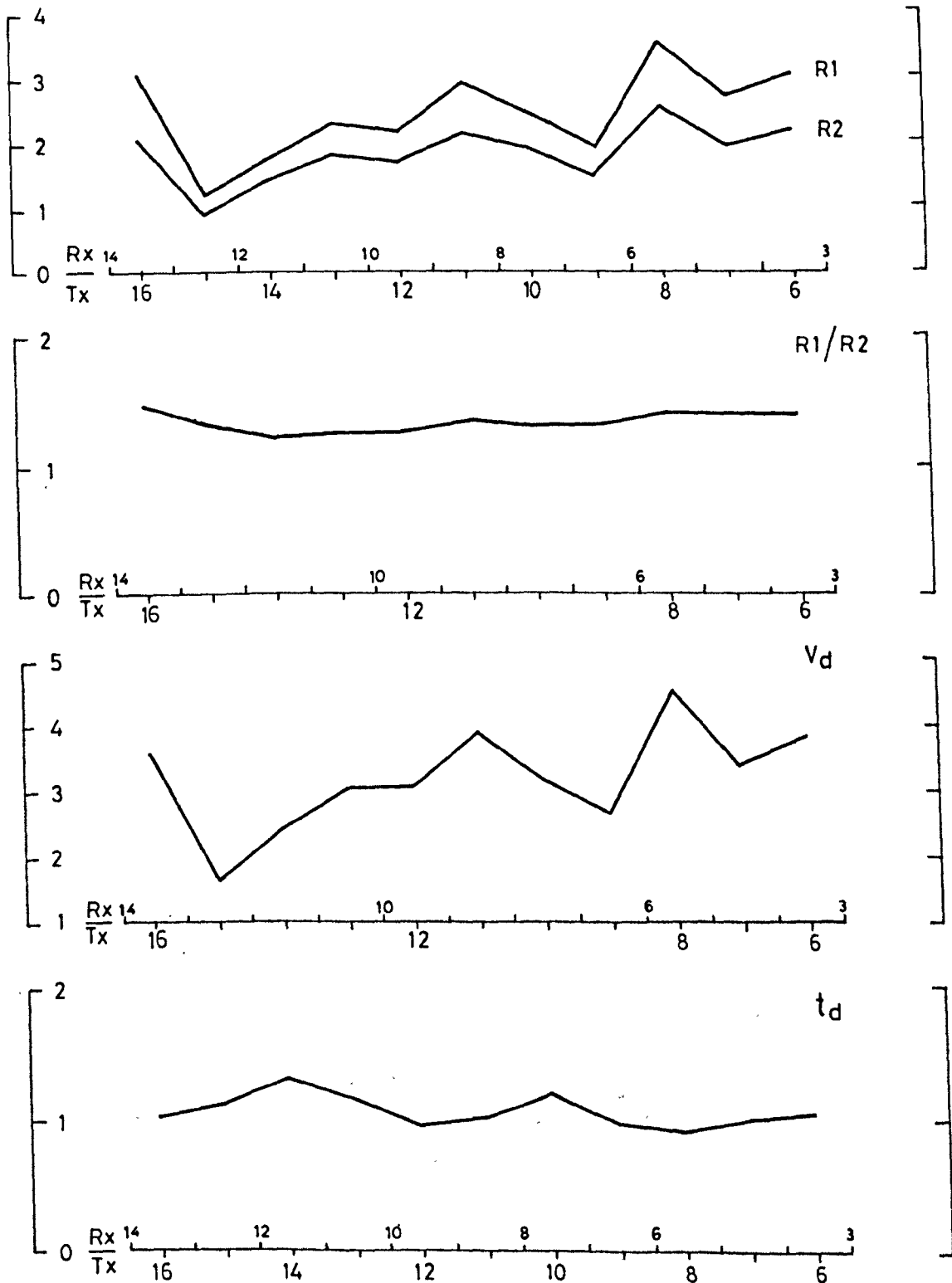


FIG. 160(b)

VRECHIA AREA

LINE 1

THE LOG_e T DECAY FACTORS

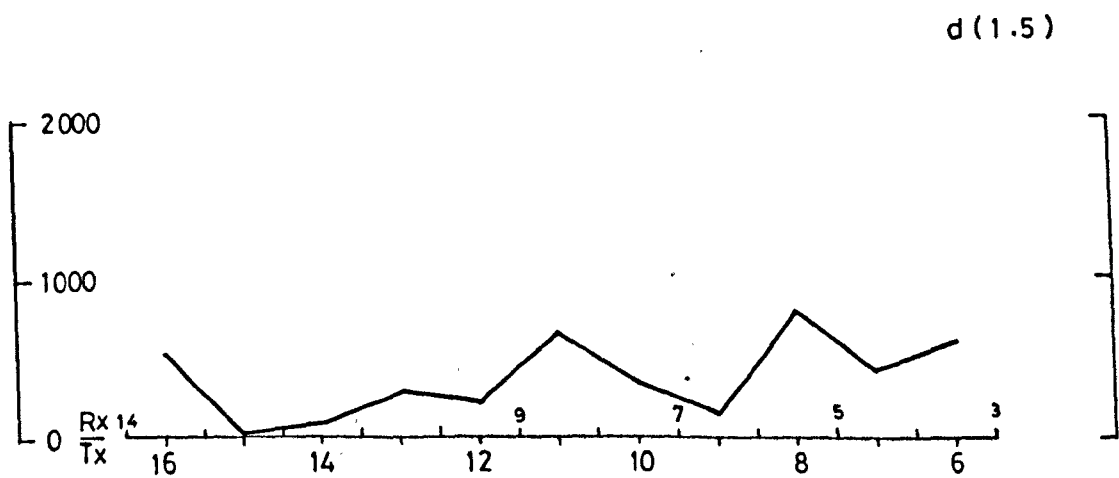
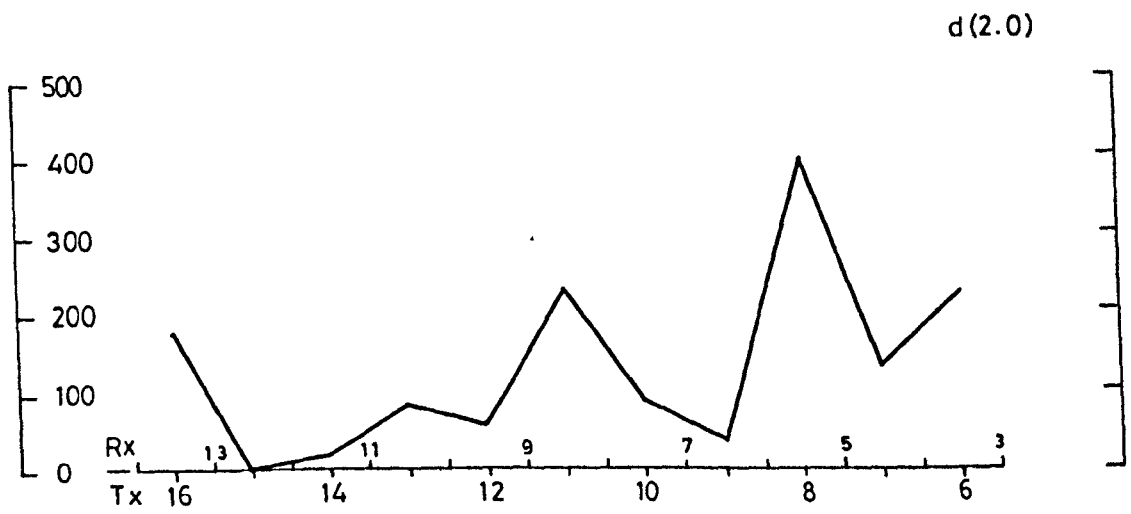
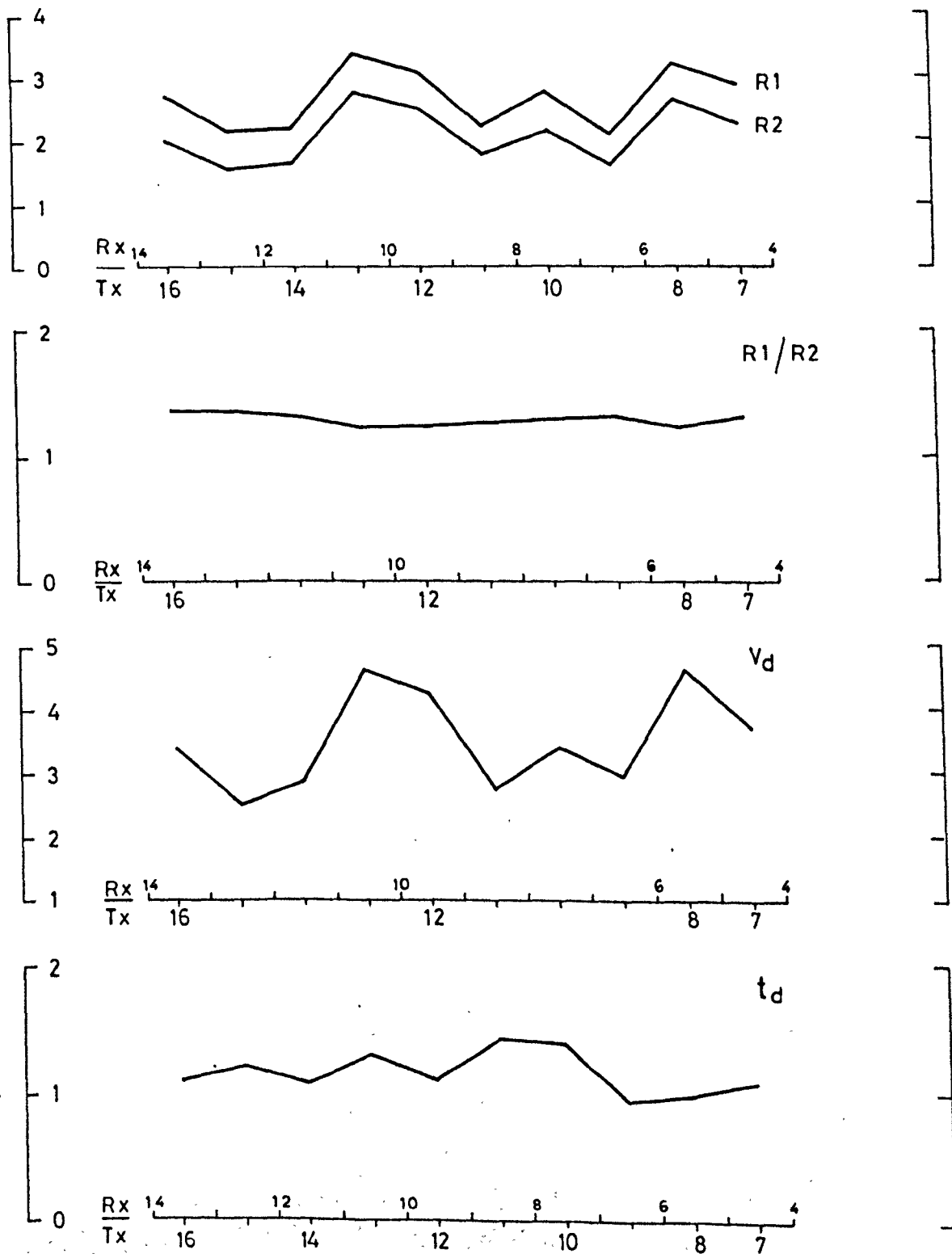


TABLE 73

VRECHIA AREA LINE 2

The Log_et Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>R1</u>	<u>R2</u>	<u>R1/R2</u>	<u>V_d</u>	<u>t_d</u>	<u>d2.0</u>	<u>d1.5</u>
7	4- 5	2.88	2.22	1.29	3.70	110	160	450
8	5- 6	3.20	2.61	1.22	4.58	100	320	1380
9	6- 7	2.10	1.62	1.29	2.89	95	49	198
10	7- 8	2.77	2.16	1.28	3.32	140	130	470
11	8- 9	2.23	1.75	1.27	2.68	143	35	175
12	9-10	3.08	2.49	1.23	4.20	110	235	600
13	10-11	3.38	2.77	1.22	4.58	130	340	700
14	11-12	2.19	1.65	1.32	2.81	106	43	165
15	12-13	2.15	1.57	1.36	2.44	122	25	110
16	13-14	2.71	2.00	1.35	3.33	110	108	400

VRECHIA AREALINE 2THE LOG_e T DECAY FACTORS

VRECHIA AREA

LINE 2

THE LOG_e T DECAY FACTORS

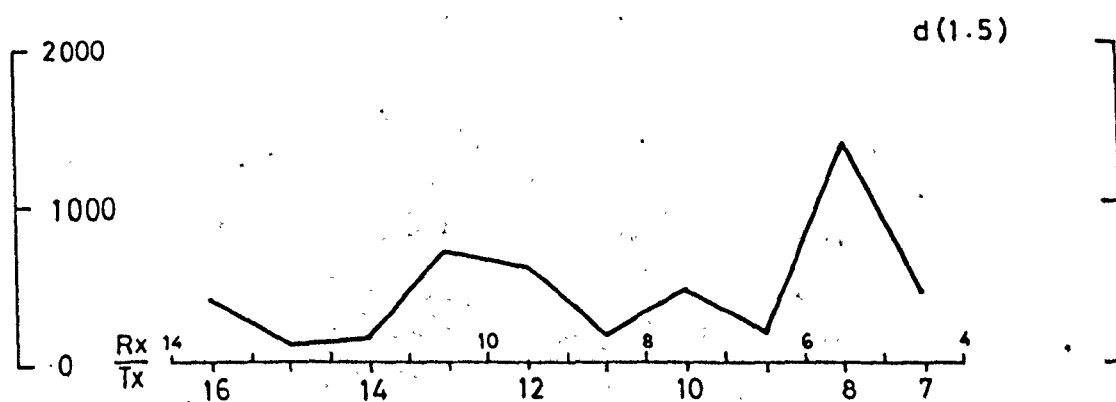
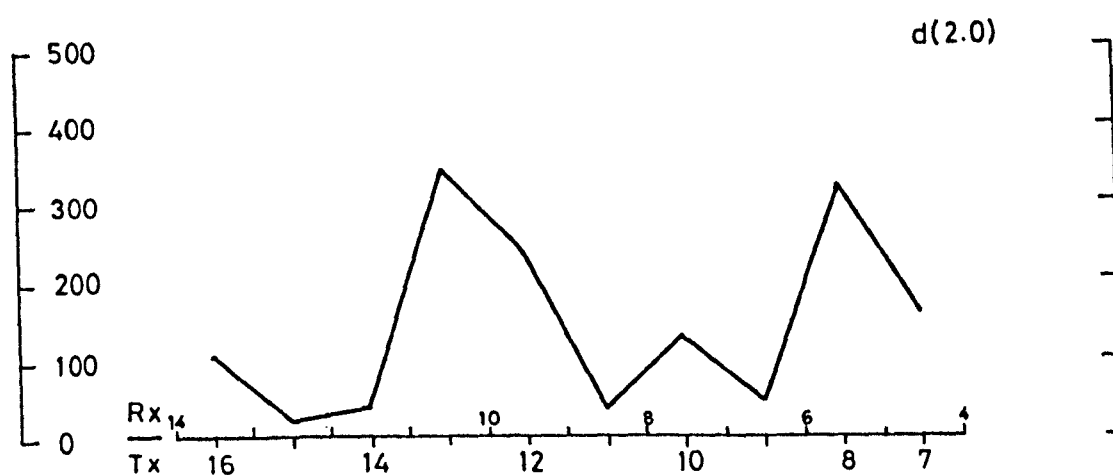
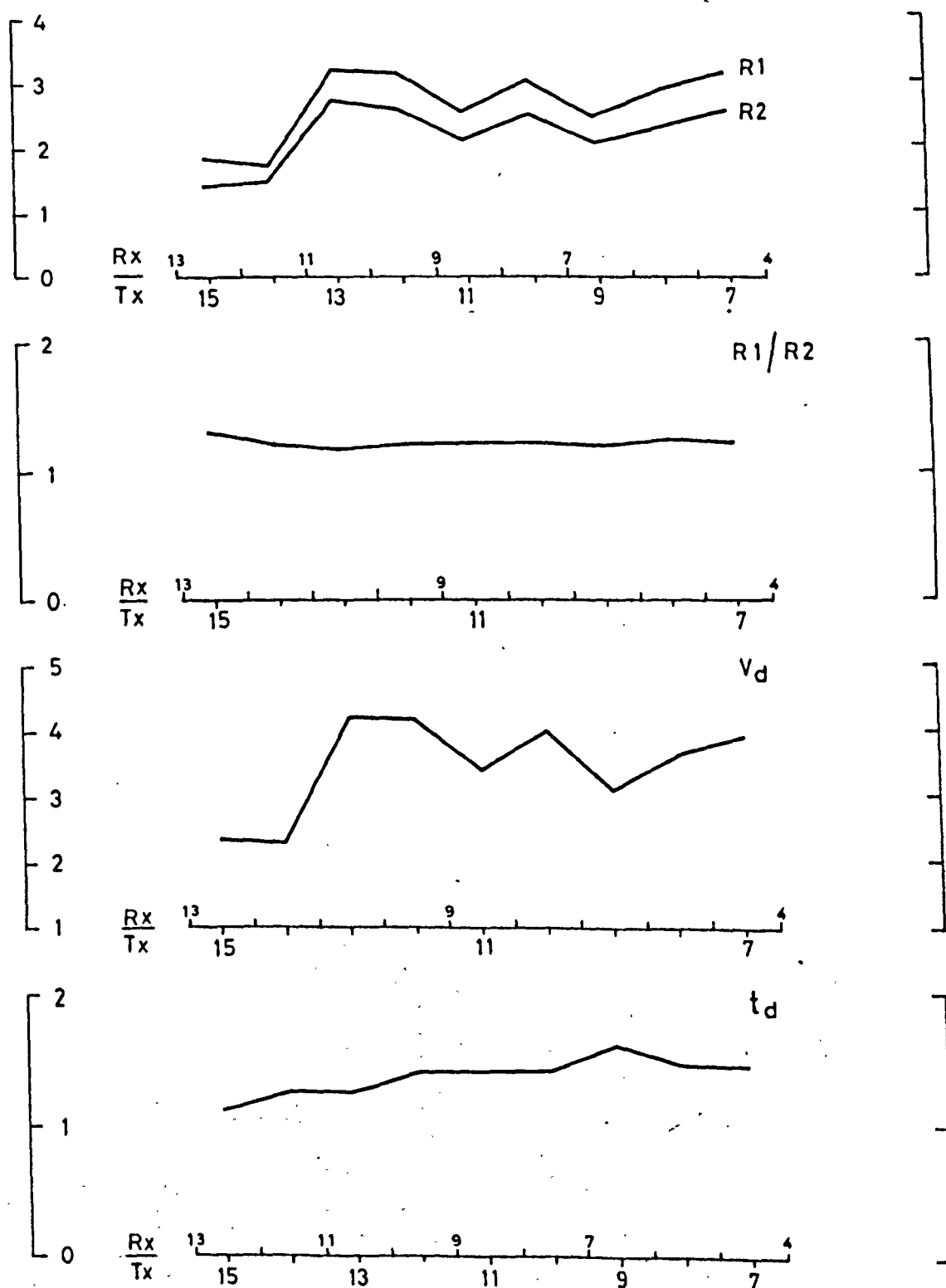


TABLE 74

VRECHIA AREA LINE 3

The Log_et Decay Factors

<u>C</u>	<u>P1-P2</u>	<u>R1</u>	<u>R2</u>	<u>R1/R2</u>	<u>V_d</u>	<u>t_d</u>	<u>d2.0</u>	<u>d1.5</u>
7	4- 5	3.11	2.57	1.21	3.90	145	220	550
8	5- 6	2.84	2.30	1.23	3.64	145	180	600
9	6- 7	2.44	2.06	1.18	3.08	160	80	330
10	7- 8	3.00	2.50	1.20	4.00	140	280	650
11	8- 9	2.55	2.10	1.21	3.40	140	125	500
12	9-10	3.13	2.61	1.19	4.20	140	330	680
13	10-11	3.12	2.72	1.14	4.22	125	270	600
14	11-12	1.70	1.43	1.18	4.30	125	10	30
15	12-13	1.81	1.40	1.29	2.40	110	10	50

VRECHIA AREALINE 3THE LOG_e T DECAY FACTORS

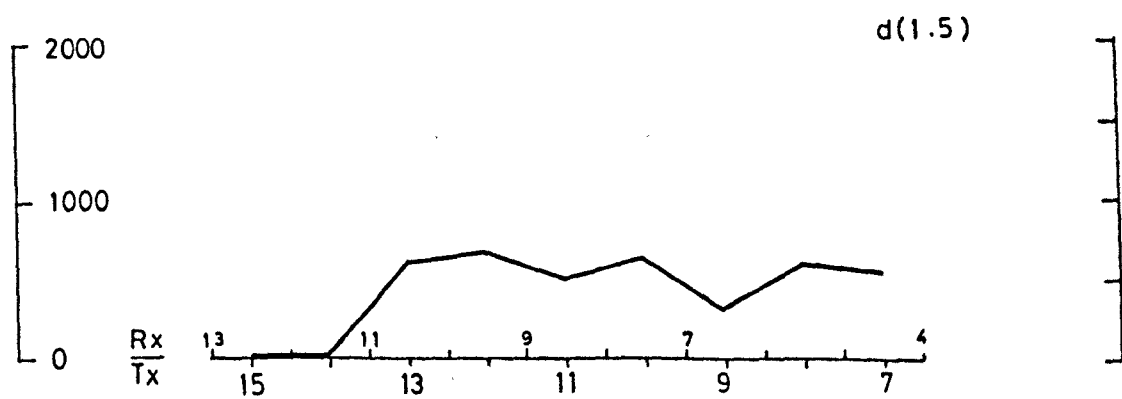
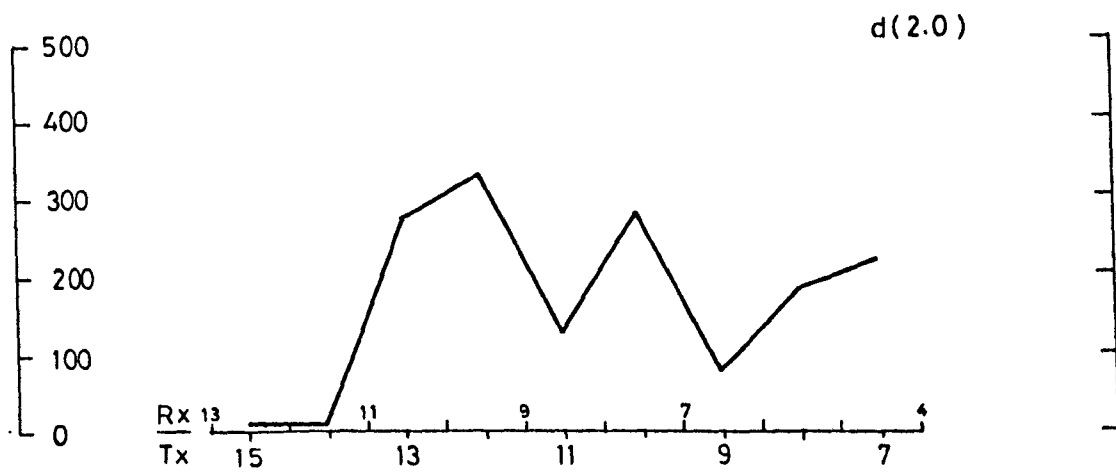
VRECHIA AREALINE 3THE LOG_e T DECAY FACTORS

TABLE 75VRECHIA AREA

Table summarizing the Log_et Decay Factors over the mineralizations and the barren rocks.

Factor	Main Mineraliz.	Eastern Mineraliz.	St.14, Line 1 Mineralization	Barren Rocks
R 1	3.1-3.4 (2.2-2.9 concealed)	2.7 -3.5	3.0	1.2-1.8
R 2	2.5-2.75 (1.7 concealed)	1.9 -2.6	2.05	0.9-1.6
R1/R2	1.14-1.3	1.28-1.4	1.45	1.2-1.35
V _d	4.2 -4.6 (3 concealed)	3.4-4.5	3.5	1.6-2.4
d2.0	230 - 330 (60 concealed)	130 - 400	180	0 - 30
d1.5	600 - 700 (200 concealed)	400 - 1400	500	10 - 110

TABLE 76

VPECHIA AREA LINE 1

The Bertin and Loeb's (modified) Functions

<u>C</u>	<u>P1-P2</u>	<u>$\rho/2\pi$</u>	<u>A1</u>	<u>A2</u>	<u>A1/A2</u>
6	3- 4	10.04	0.29	0.19	1.53
7	4- 5	8.77	0.35	0.23	1.49
8	5- 6	7.54	0.43	0.33	1.29
9	6- 7	8.18	0.20	0.16	1.28
10	7- 8	5.31	0.42	0.30	1.39
11	8 -9	8.11	0.40	0.20	1.91
12	9-10	7.34	0.27	0.21	1.28
13	10-11	9.55	0.24	0.20	1.21
14	11-12	8.90	0.21	0.14	1.47
15	12-13	21.70	0.05	0.03	1.44
16	13-14	14.26	0.21	0.14	1.45

VRECHIA AREA

LINE 1

THE BERTIN AND LOEB'S (MODIFIED) FUNCTIONS

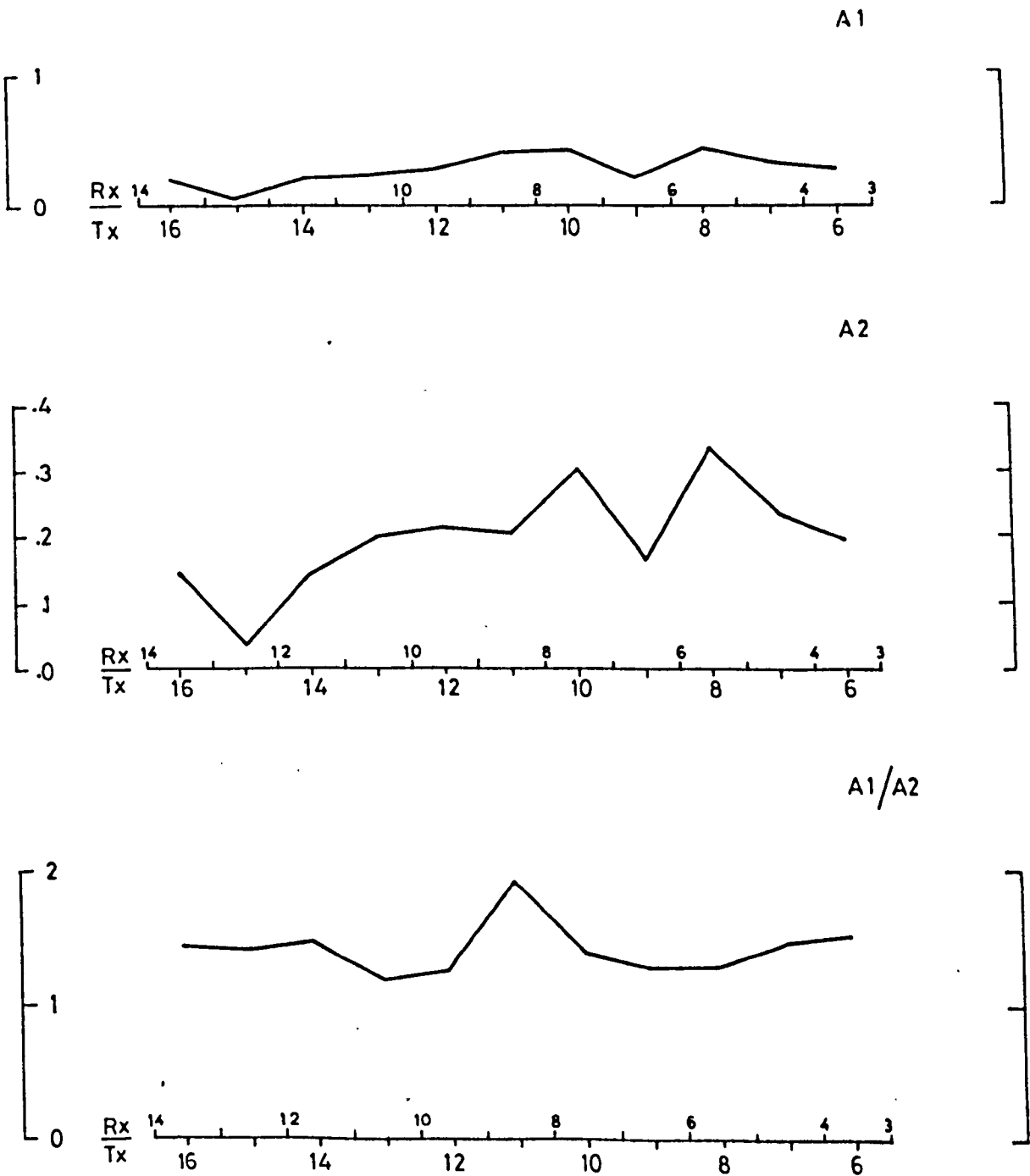


TABLE 77

VRECHIA AREA LINE 2

The Bertin and Loeb's (modified) Functions

<u>C</u>	<u>P1-P2</u>	<u>$\rho/2\pi$</u>	<u>A1</u>	<u>A2</u>	<u>A1/A2</u>
7	4- 5	6.61	0.42	0.34	1.21
8	5- 6	10.11	0.32	0.24	1.29
9	6- 7	9.95	0.20	0.15	1.37
10	7- 8	6.56	0.43	0.28	1.50
11	8- 9	11.71	0.20	0.13	1.51
12	9-10	6.81	0.46	0.31	1.47
13	10-11	8.83	0.39	0.30	1.31
14	11-12	16.51	0.12	0.09	1.28
15	12-13	21.14	0.08	0.06	1.34
16	13-14	15.88	0.15	0.10	1.51

VRECHIA AREA

LINE 2

THE BERTIN AND LOEB'S (MODIFIED) FUNCTIONS

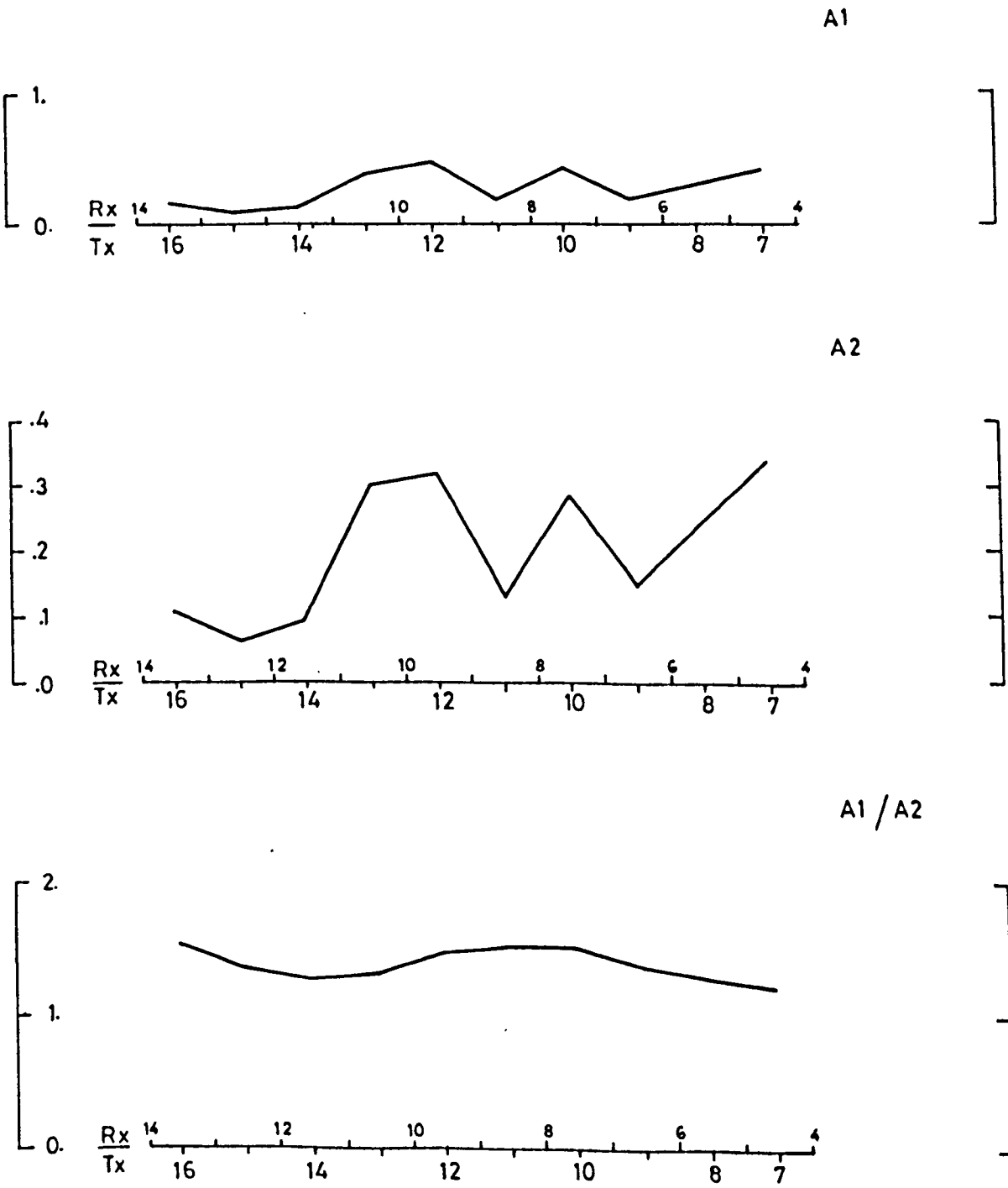


TABLE 78

VRECHIA AREA LINE 3

The Bertin and Loeb's (modified) Functions

<u>C</u>	<u>P1-P2</u>	<u>$\rho/2\pi$</u>	<u>A1</u>	<u>A2</u>	<u>A1/A2</u>
7	4- 5	8.11	0.41	0.27	1.52
8	5- 6	11.04	0.33	0.17	1.93
9	6-7	10.70	0.25	0.18	1.36
10	7- 8	9.63	0.31	0.23	1.34
11	8- 9	10.39	0.27	0.19	1.45
12	9-10	11.69	0.25	0.24	1.06
13	10-11	10.03	0.36	0.24	1.48
14	11-12	21.90	0.06	0.06	1.03
15	12-13	21.83	0.08	0.06	1.28

VRECHIA AREA

LINE 3

THE BERTIN AND LOEB'S (MODIFIED) FUNCTIONS

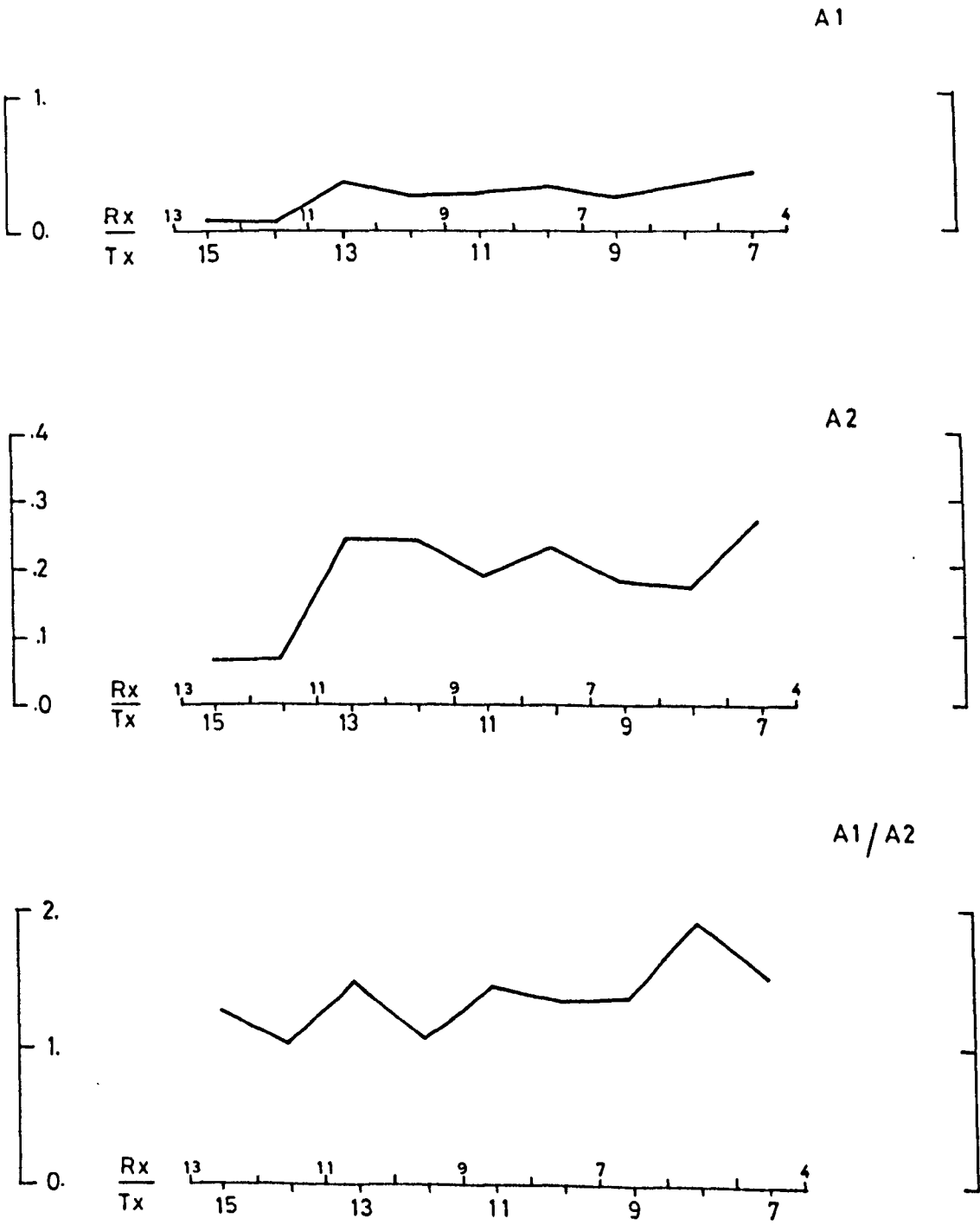


TABLE 79

VRECHIA AREA
















Table summarizing the Bertin and Loeb's (modified) Functions over the mineralizations and the barren rocks.

Factor	Main Mineraliz.	Eastern Mineraliz.	St.14 Line 1 Mineralization	Barren Rocks
A1	0.25-0.46 (0.24 concealed)	0.3 -0.43	0.21	0.06-0.08
A2	0.24-0.31 (0.20 concealed)	0.17-0.34	0.14	0.03-0.06
A1/A2	1.06-1.48	1.21-1.43	1.45	1.03-1.44

FIG. 167
GEOLOGICAL-GEOPHYSICAL MAP
OF THE PETRA AREA

Scale 1/2500

L E G E N D

-  Drift and Fanglomerate
-  Chalk Scree
-  Ancient Slag
-  Lapithos Marls & Chalks
-  Moni & Perapedhi Formations
-  Upper Pillow Lavas (Breccia)
-  Upper Pillow Lavas (Olivine basalts)
-  Upper Pillow Lavas (Limburgites)
-  Lower Pillow Lavas
-  Strong Oxidation (Gossan)
-  Fault
-  Geological Boundary
-  Contour Line
-  Borehole
-  (57-67) Depth in meters of Mavridia Fault Mineralization

Geologically Surveyed by
N. G. Adamides

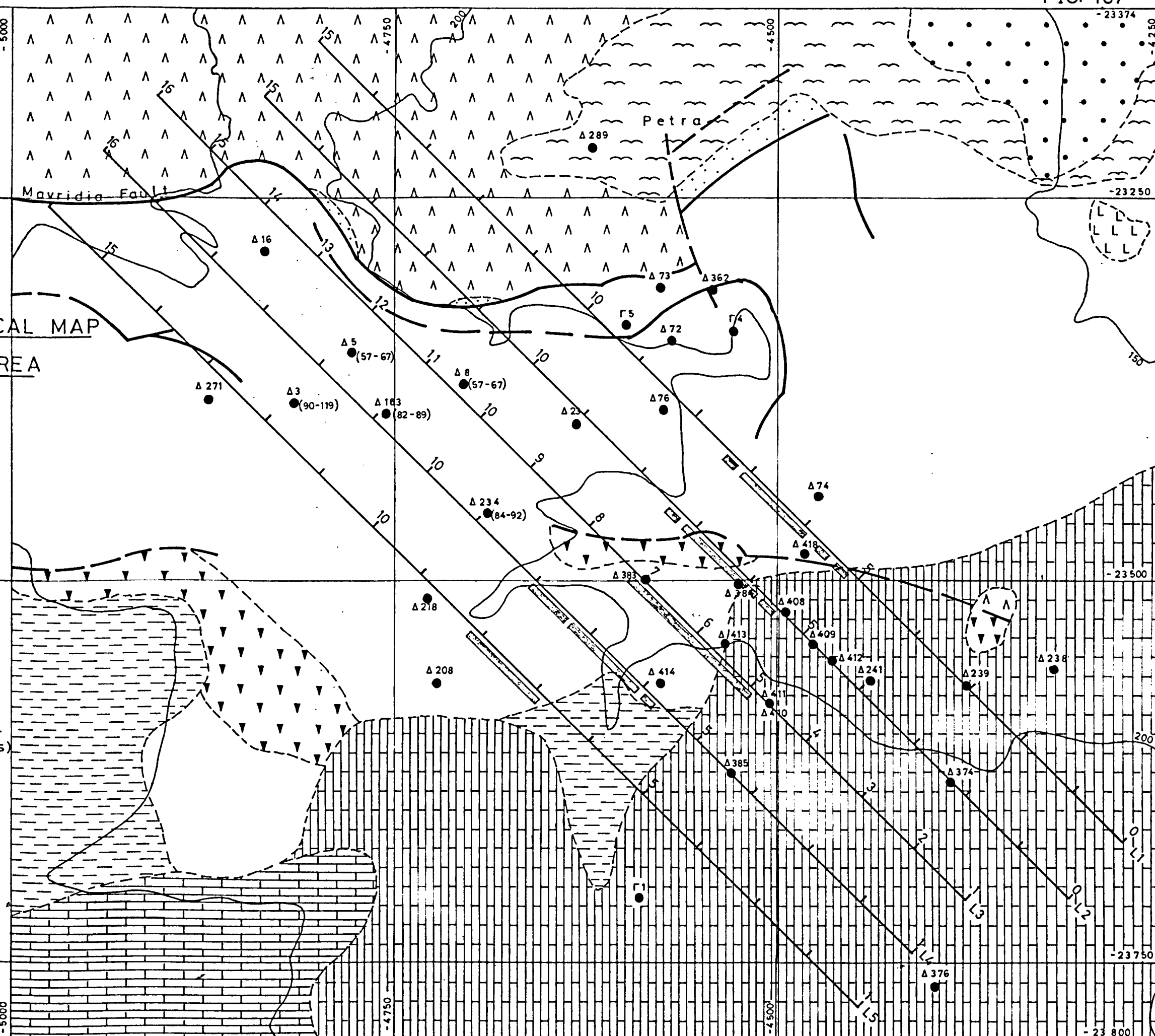


FIG. 168

PETRA AREA

GEOLOGICAL SECTIONS ALONG THE
GEOPHYSICAL LINES 2, 3 AND 4

Scale 1/2500

(The figures denote % Sulphur values)

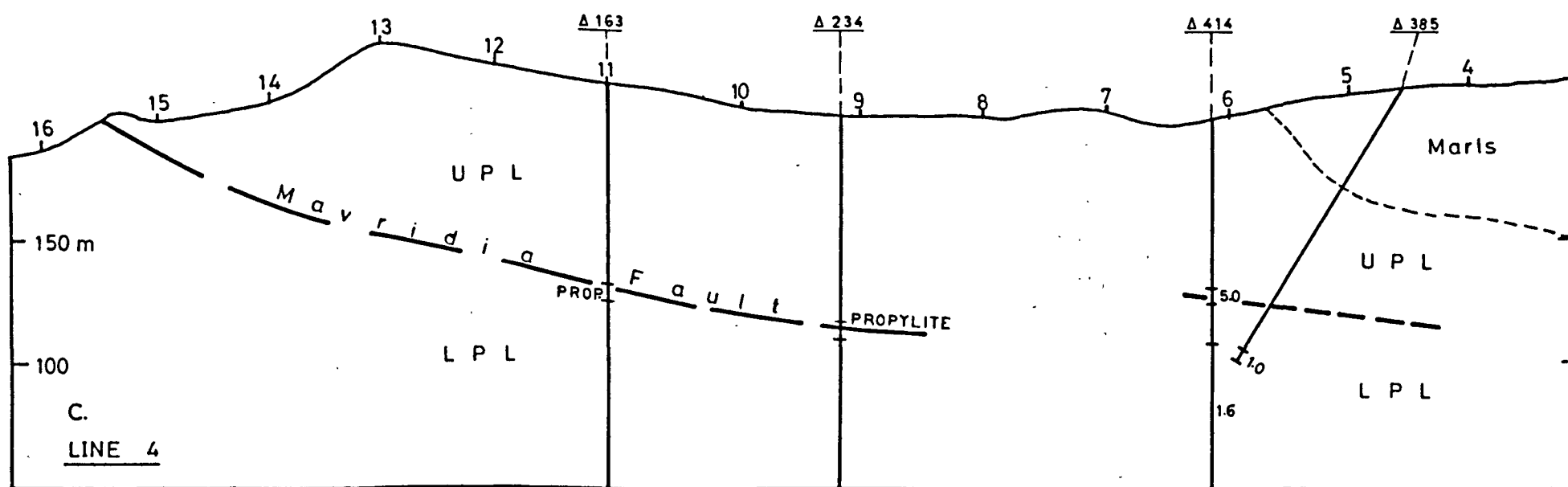
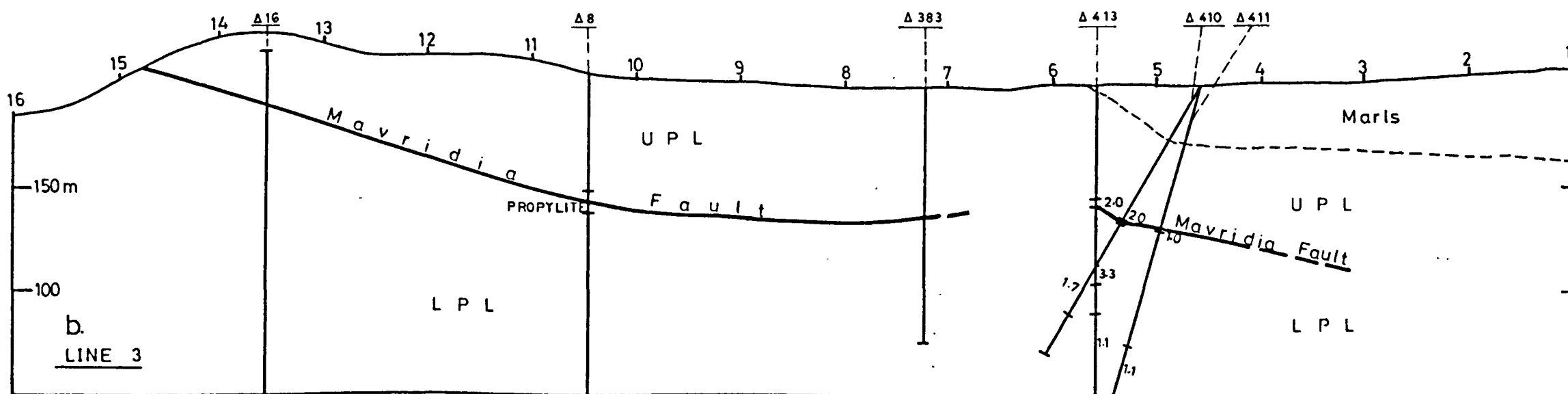
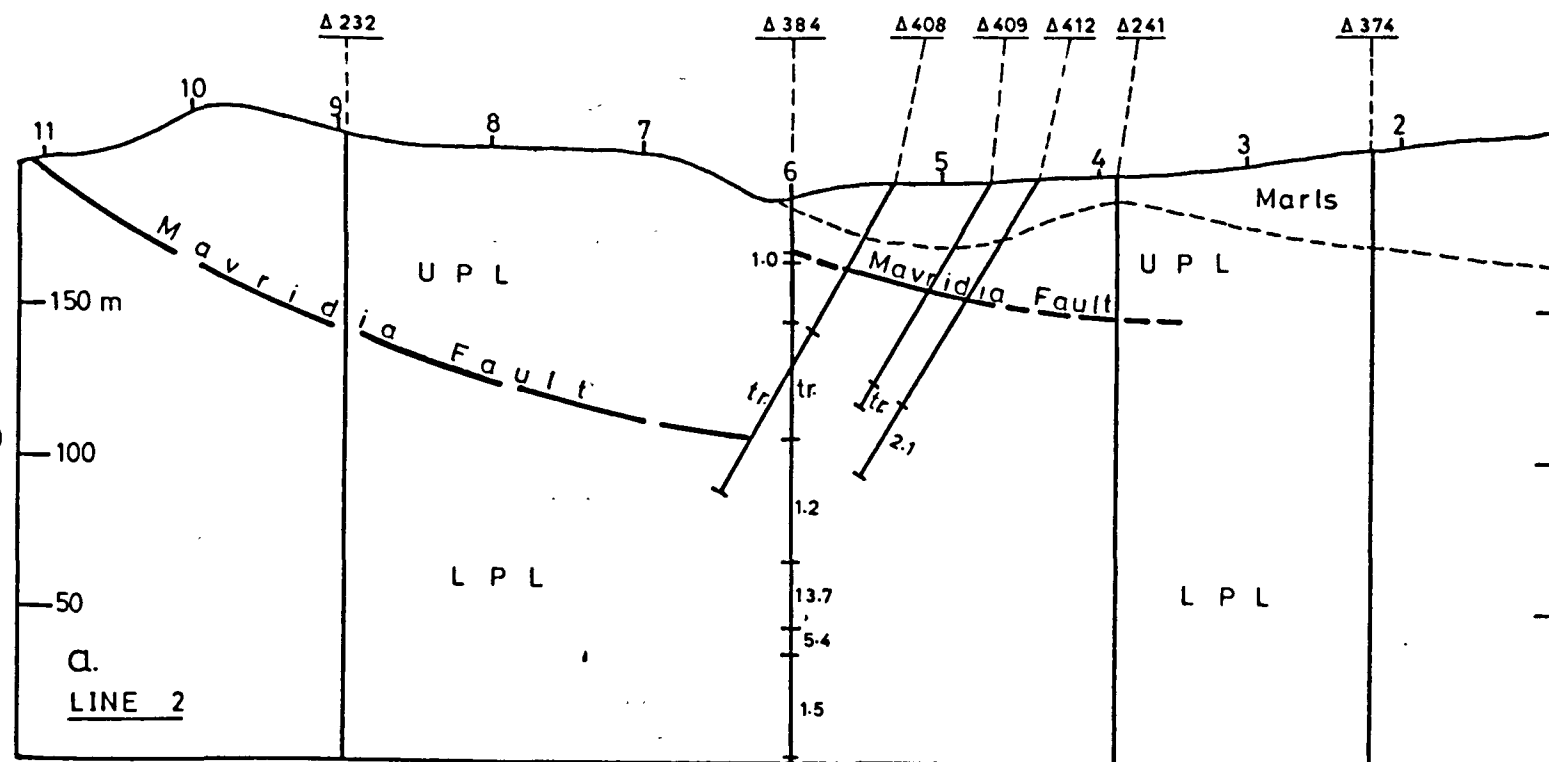
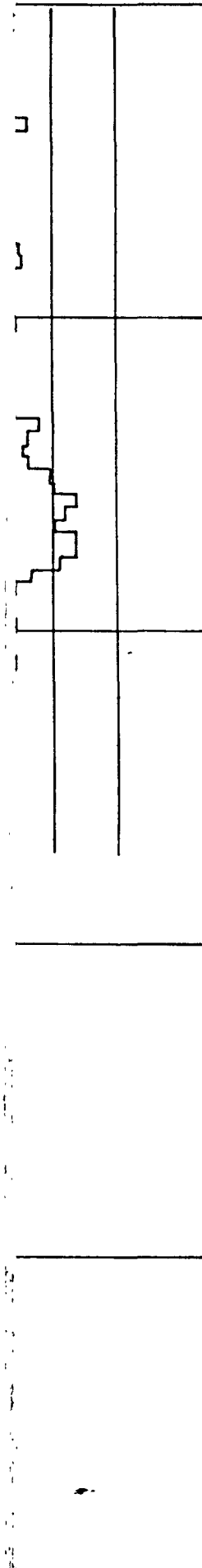


FIG. 178

% 10% 20%



PETRA AREA

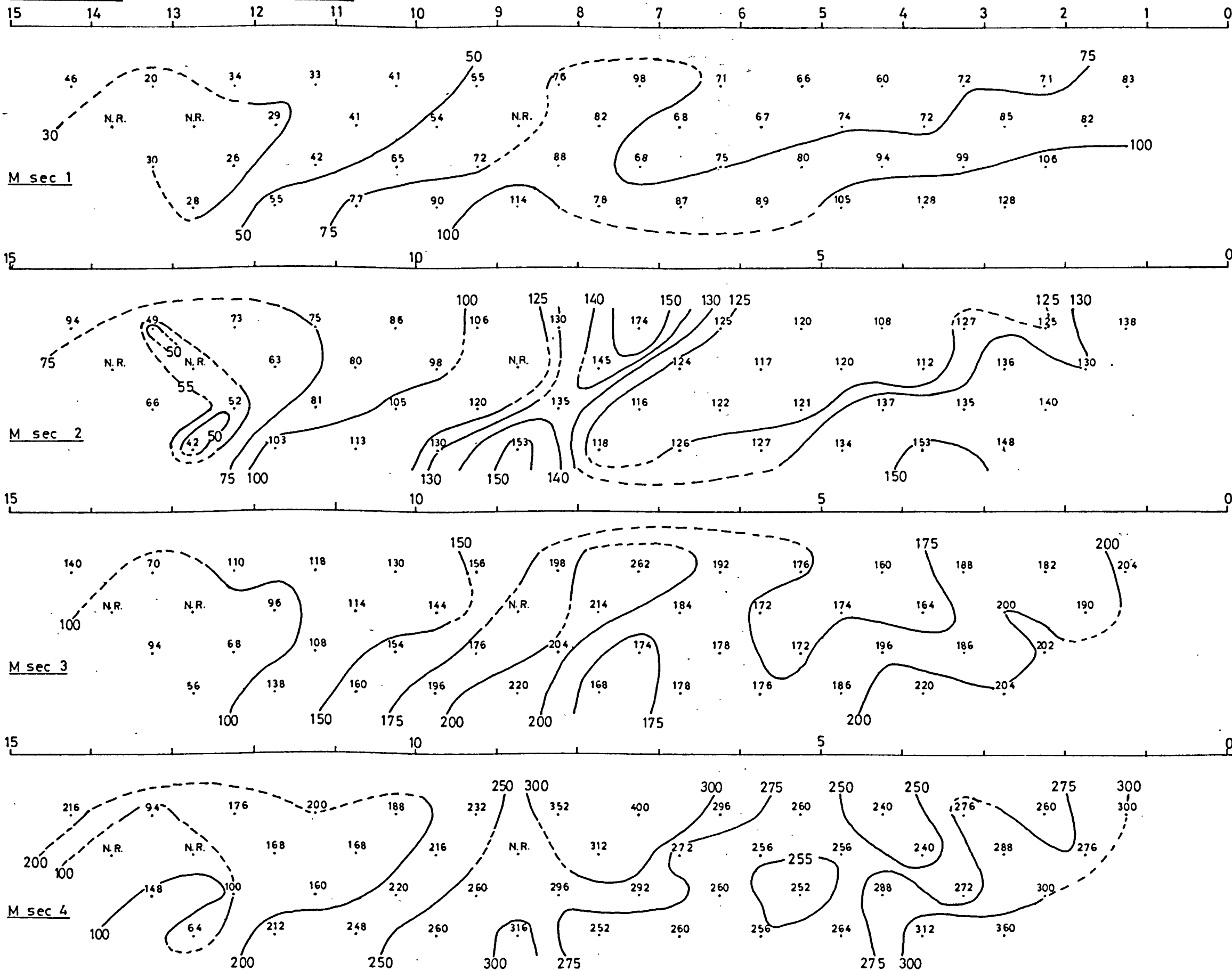
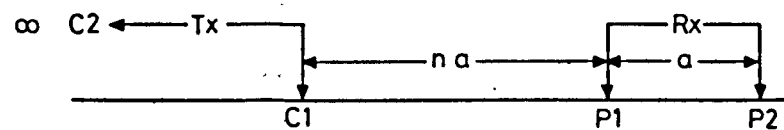
td = 30 tc = 8

LINE 1

tp = 50 on/off = 1.0

POLE - DIPOLE

$a = 50 \text{ m}$



PETRA AREA

$t_d = 30$ $t_c = 8$

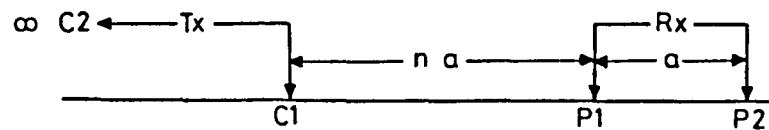


FIG. 170

LINE 2

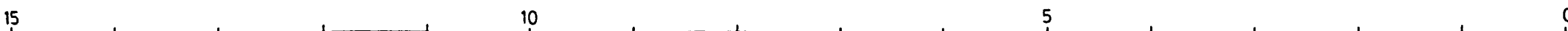
$t_p = 50$ $on/off = 1.0$

POLE - DIPOLE

$a = 50$ m



M sec 1



M sec 2



M sec 3



M sec 4



PETRA AREA

$t_d = 30$ $t_c = 8$

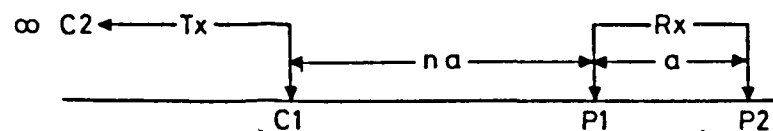


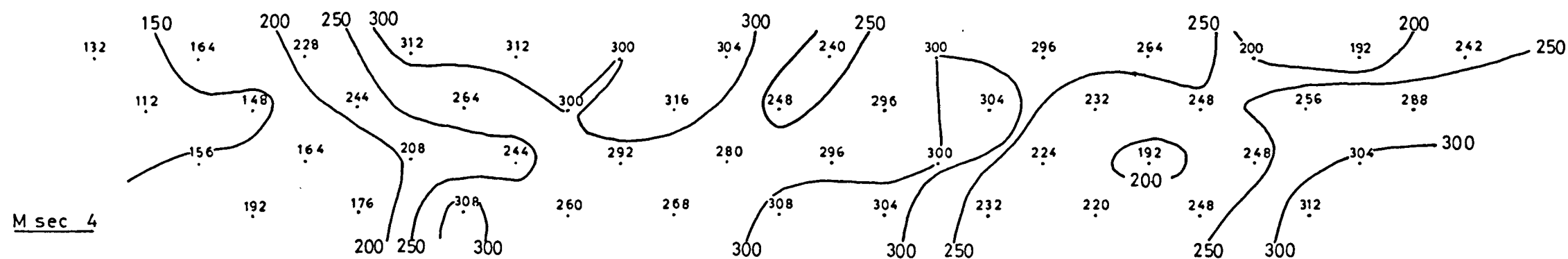
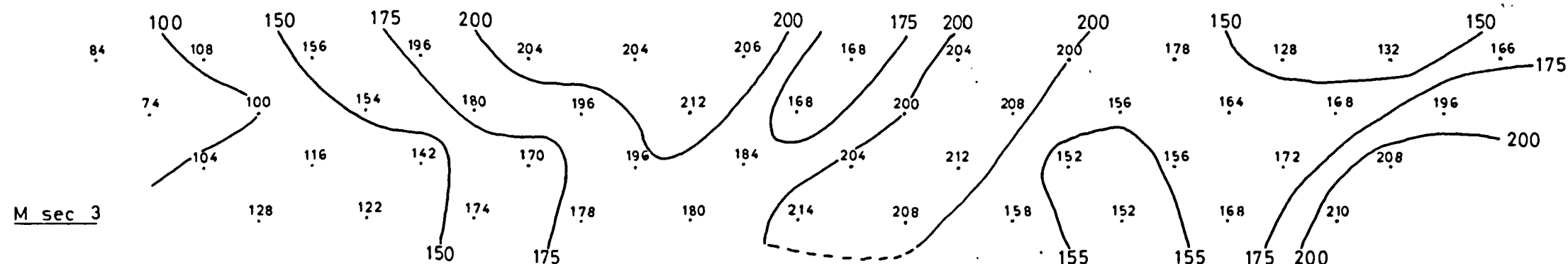
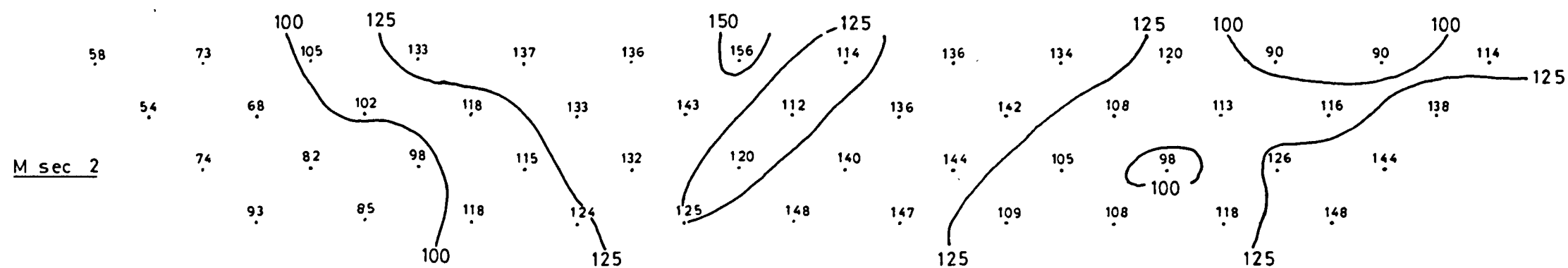
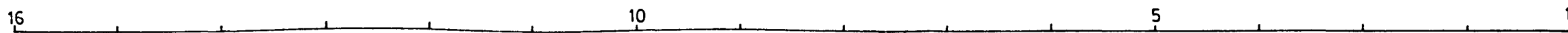
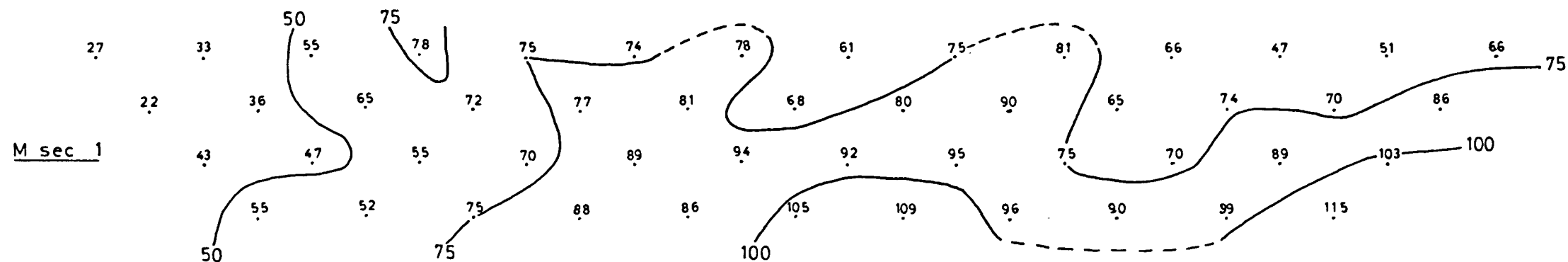
FIG. 171

LINE 3

$t_p = 50$ $on/off = 1.0$

POLE - DIPOLE

$a = 50\text{ m}$



PETRA AREA

$t_d = 30$ $t_c = 8$

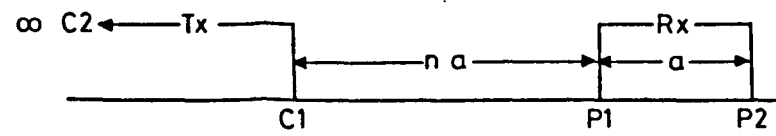


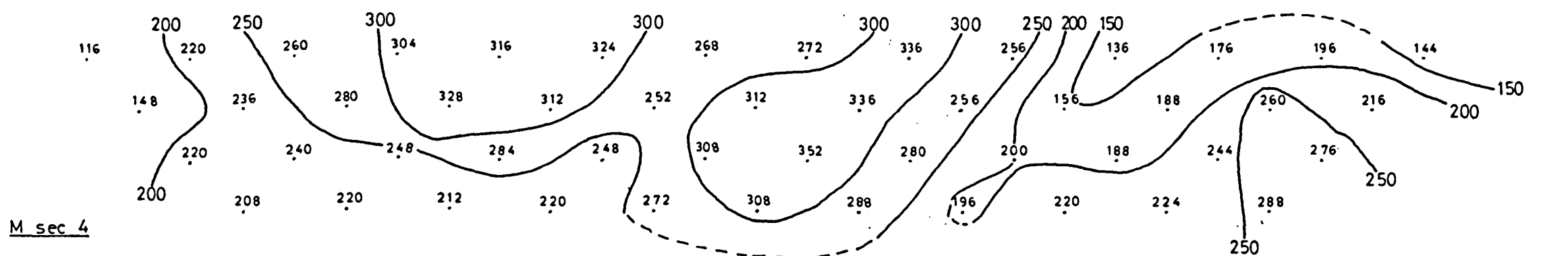
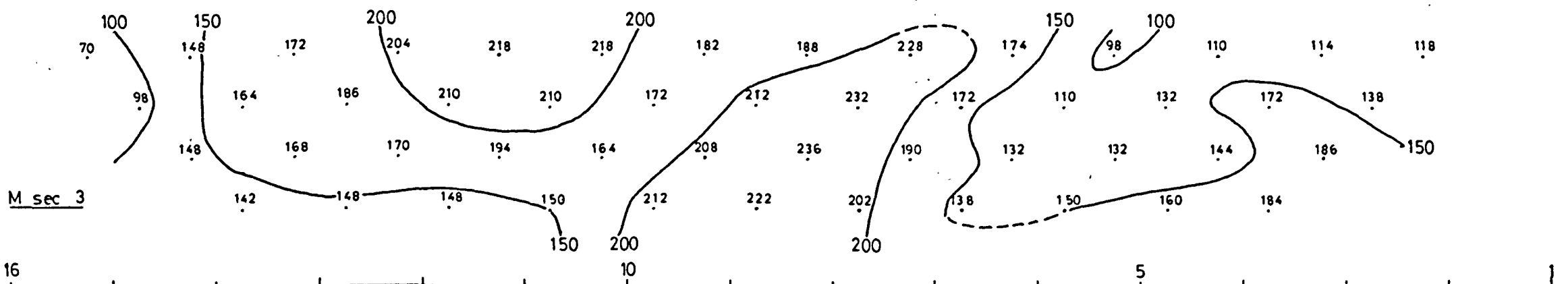
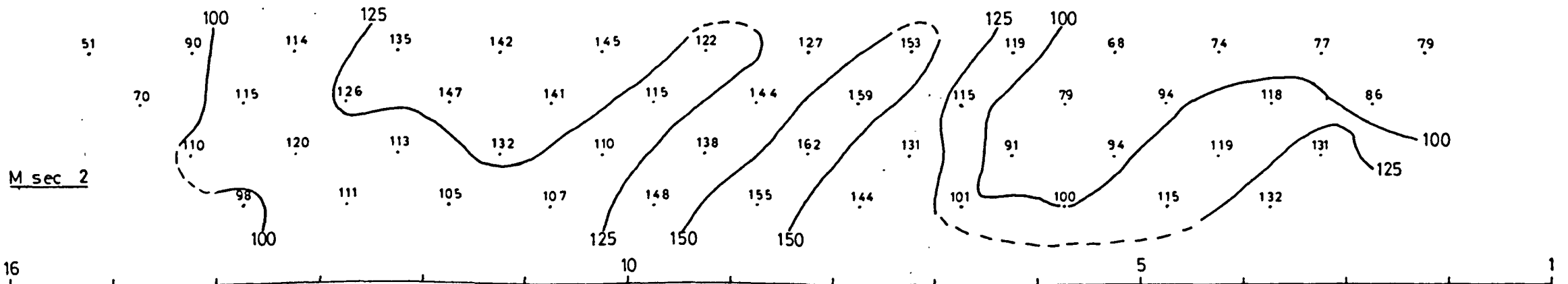
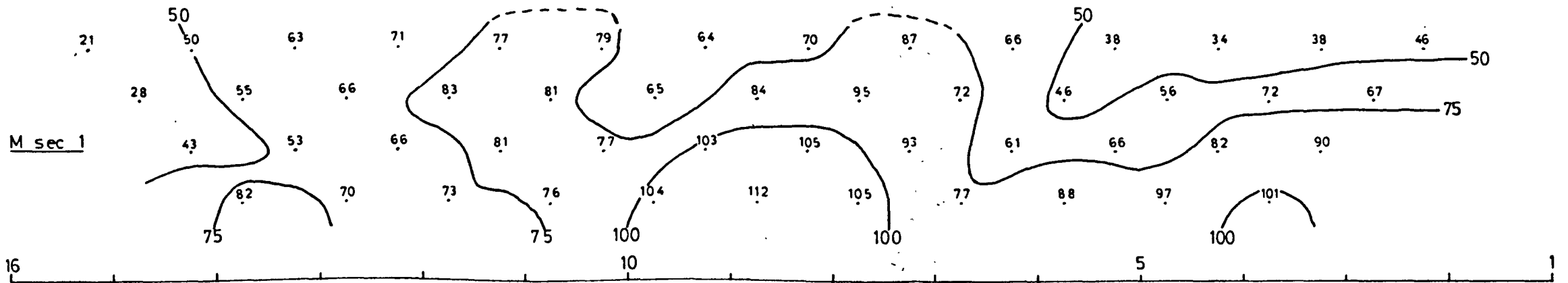
FIG. 172

LINE 4

$t_p = 50$ $on/off = 1.0$

POLE - DIPOLE

$a = 50m$



PETRA AREA

$t_d = 30$

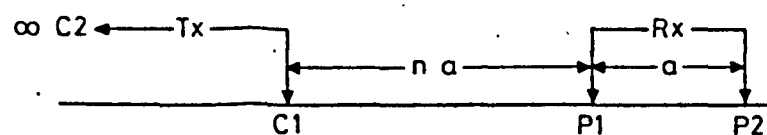
$t_c = 8$

FIG. 173

LINE 5

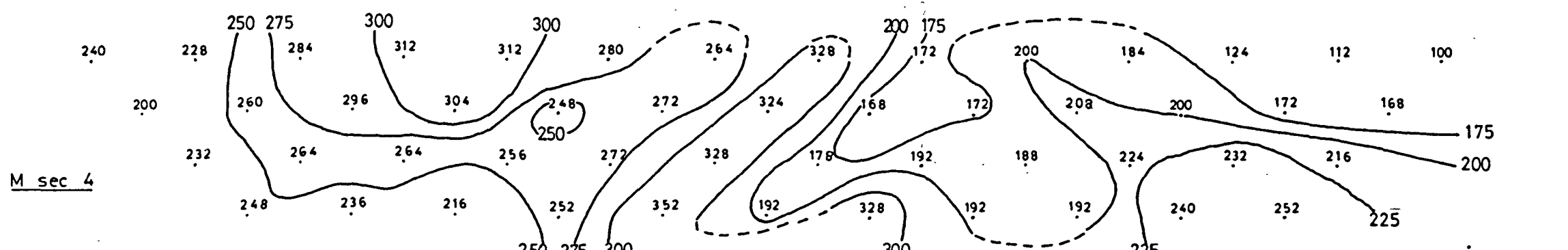
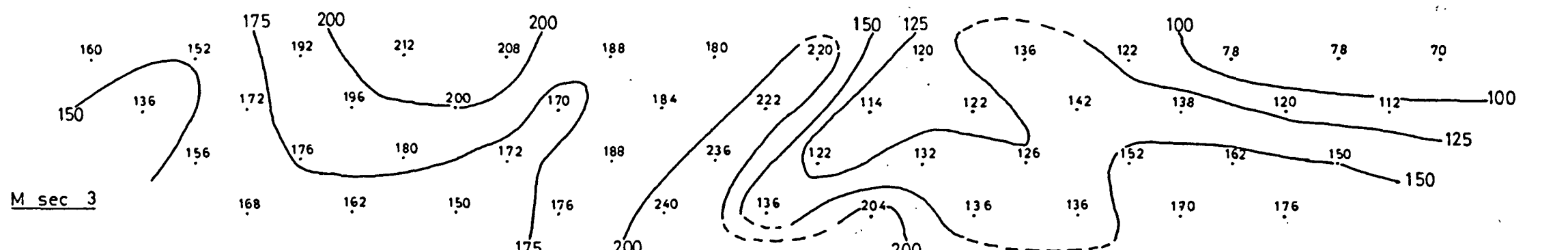
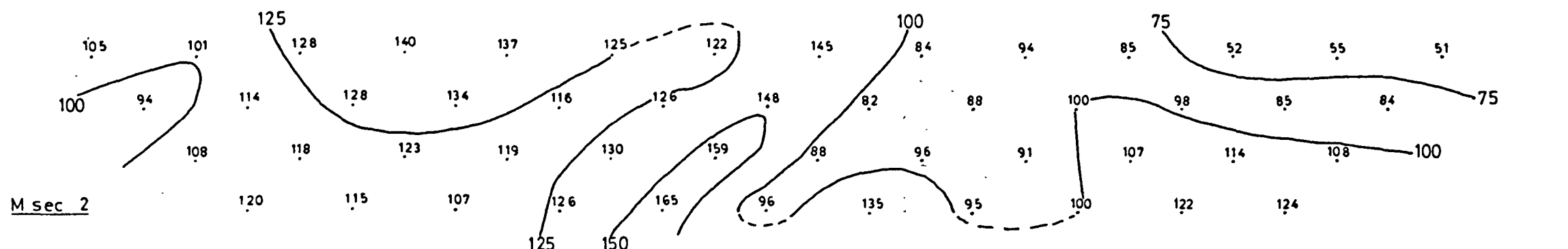
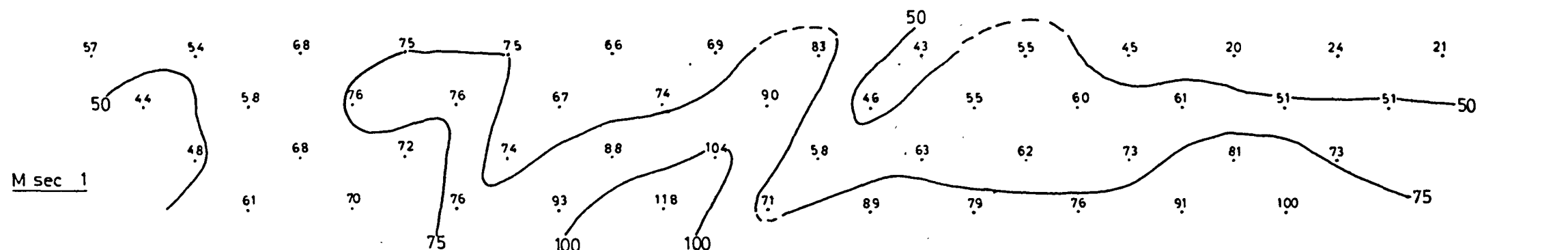
$t_p = 50$

on/off = 1.0



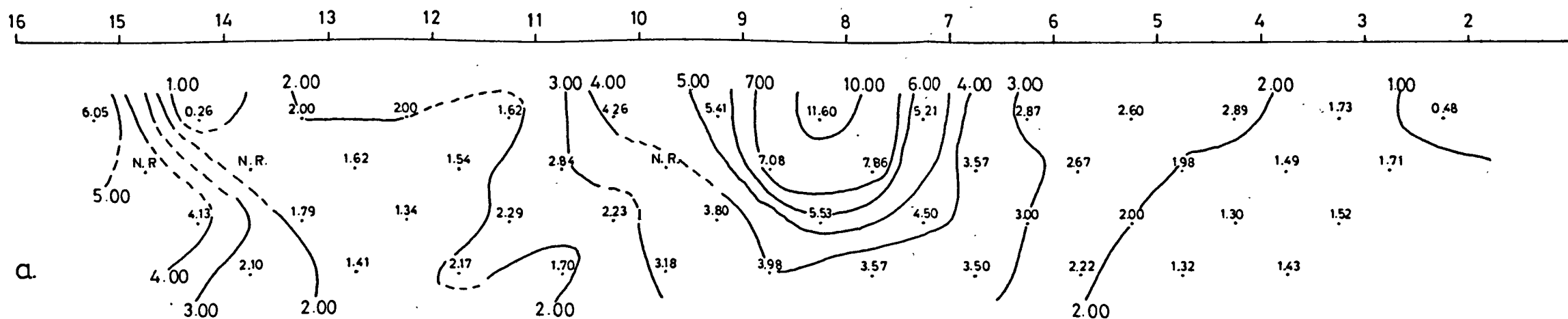
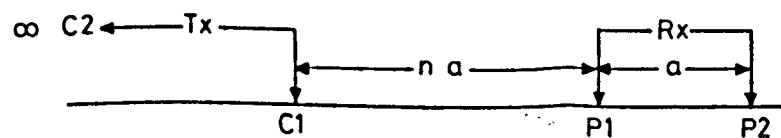
POLE - DIPOLE

$a = 50$ m

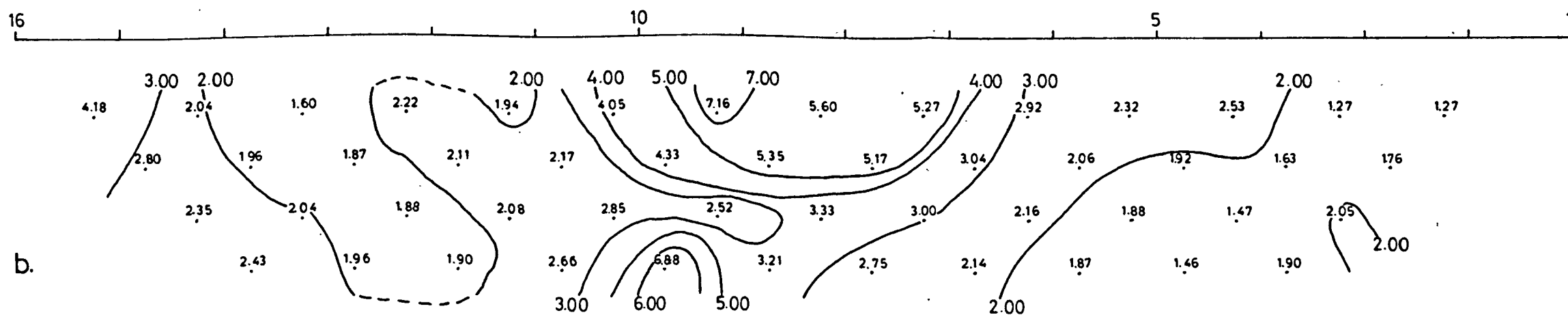


$a = 50 \text{ m}$

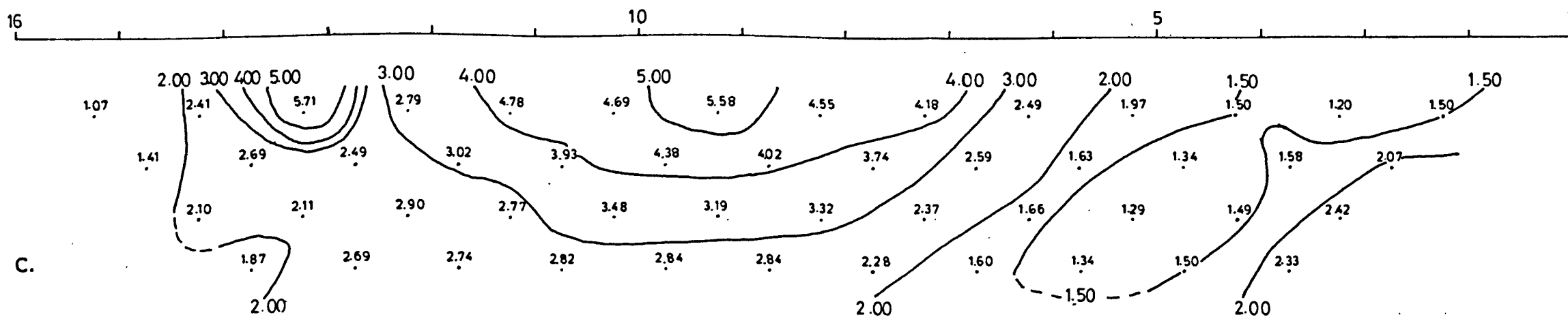
RESISTIVITY $\rho/2\pi$ (Ohm-meters)



LINE 1

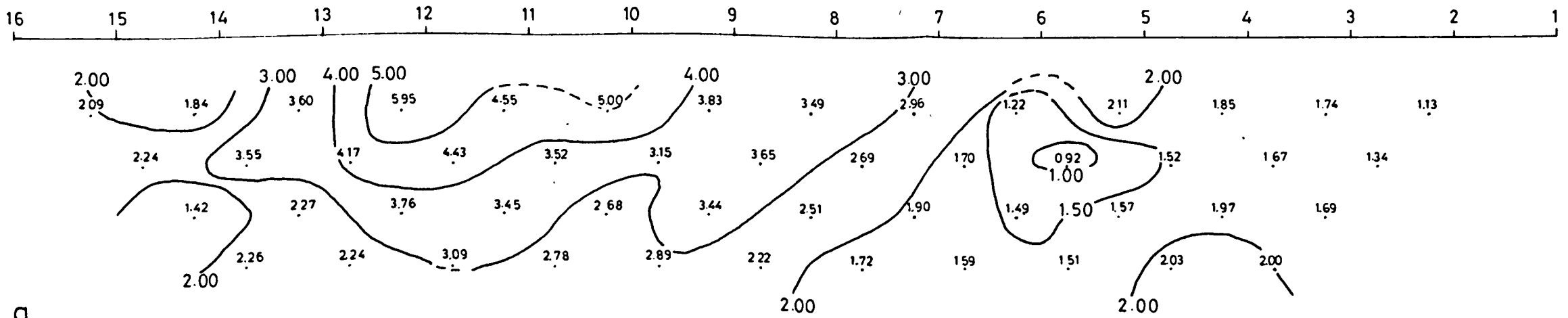
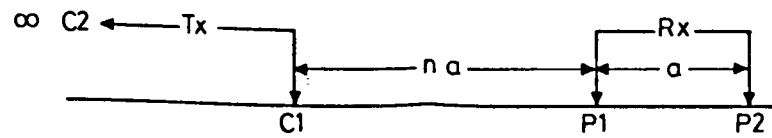


LINE 2

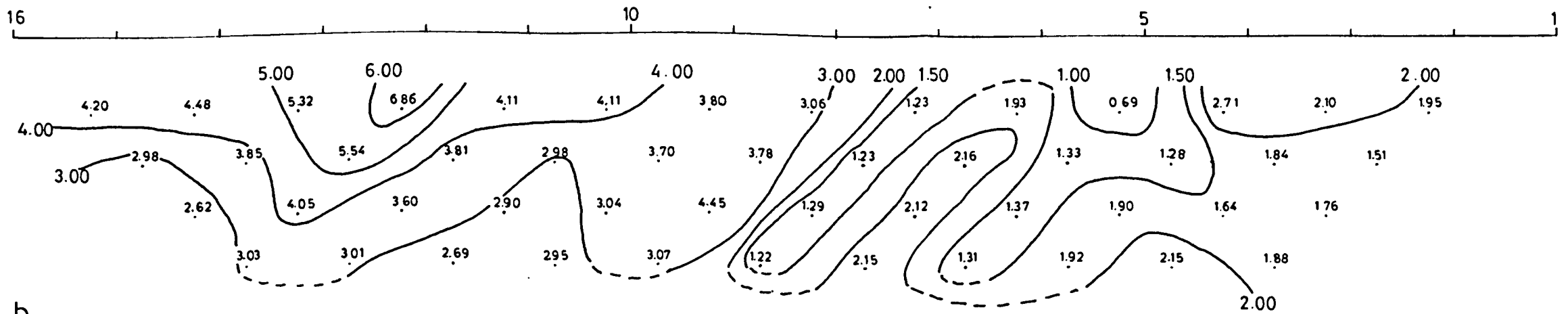


LINE 3

RESISTIVITY $\rho/2\pi$ (Ohm-meters)



LINE 4



LINE 5

GEOLOGICAL - GEOPHYSICAL · MAP

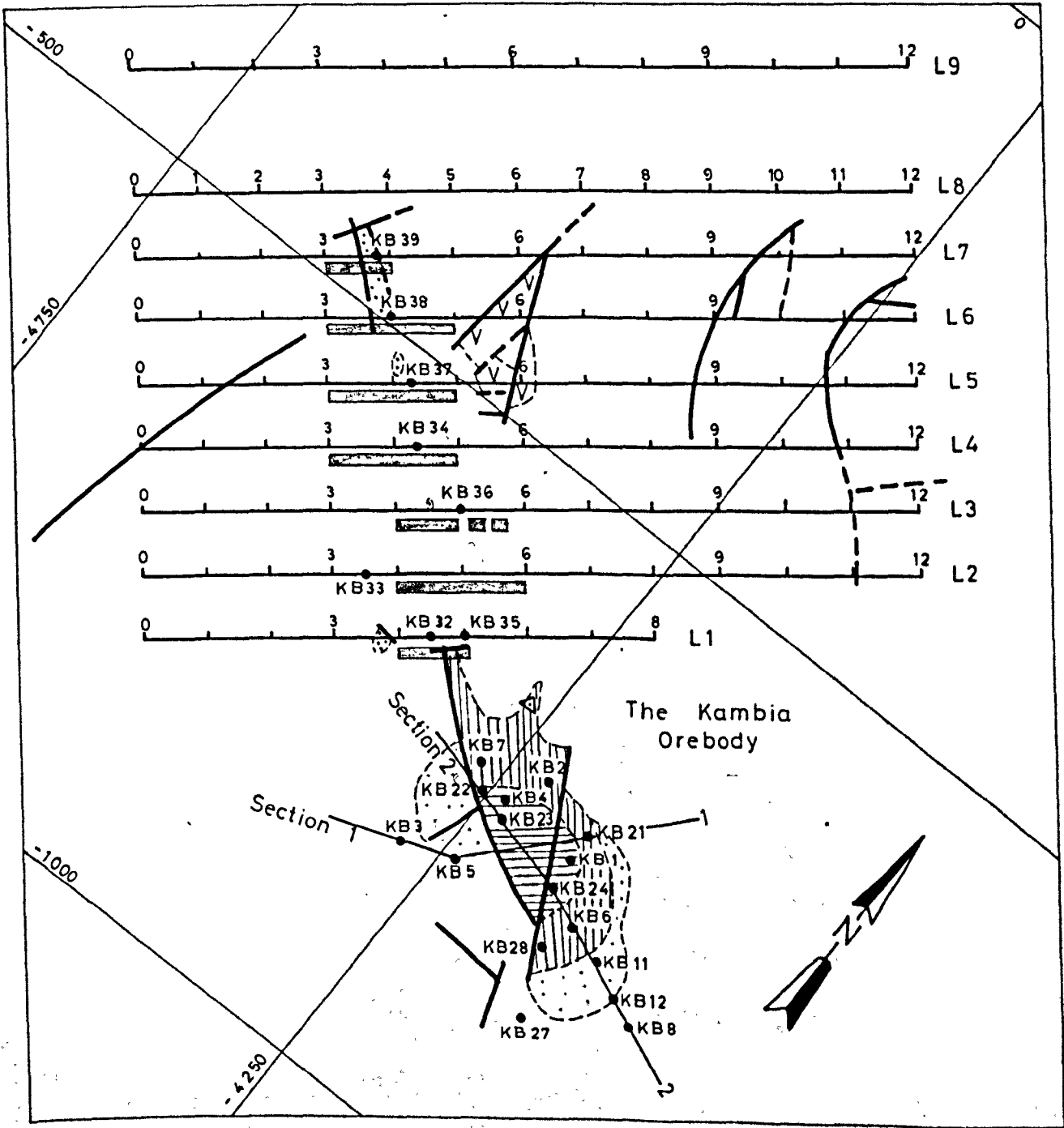
OF THE KAMPIA AREA

Scale 1/5000

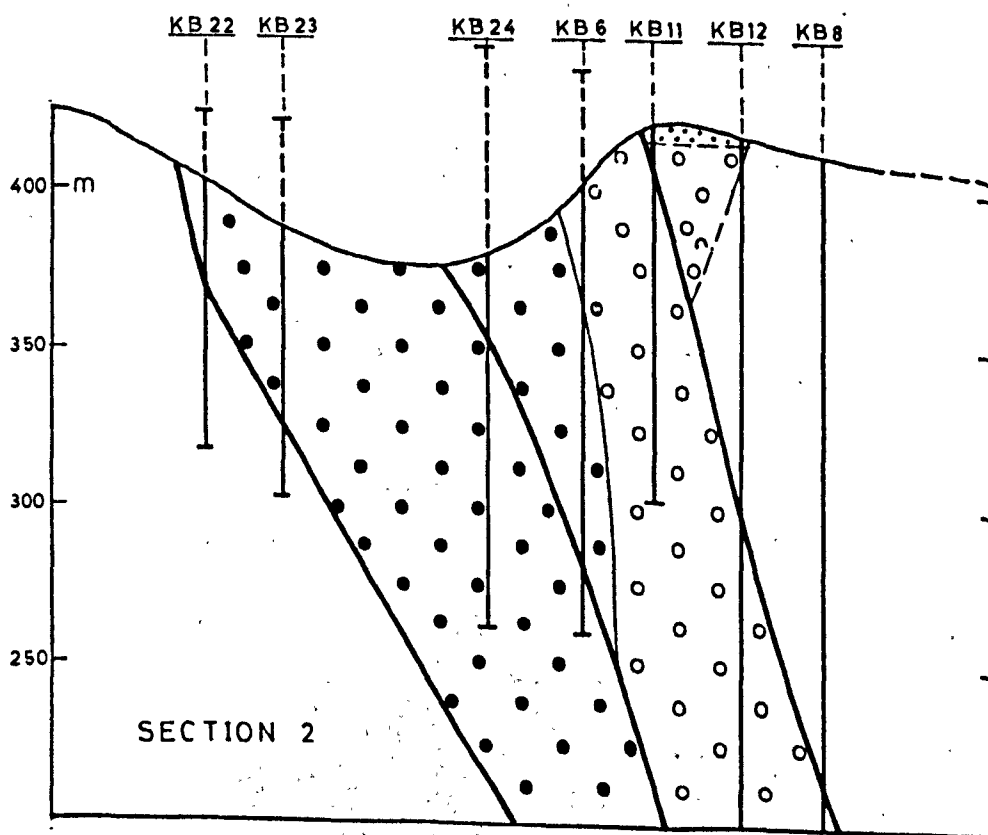
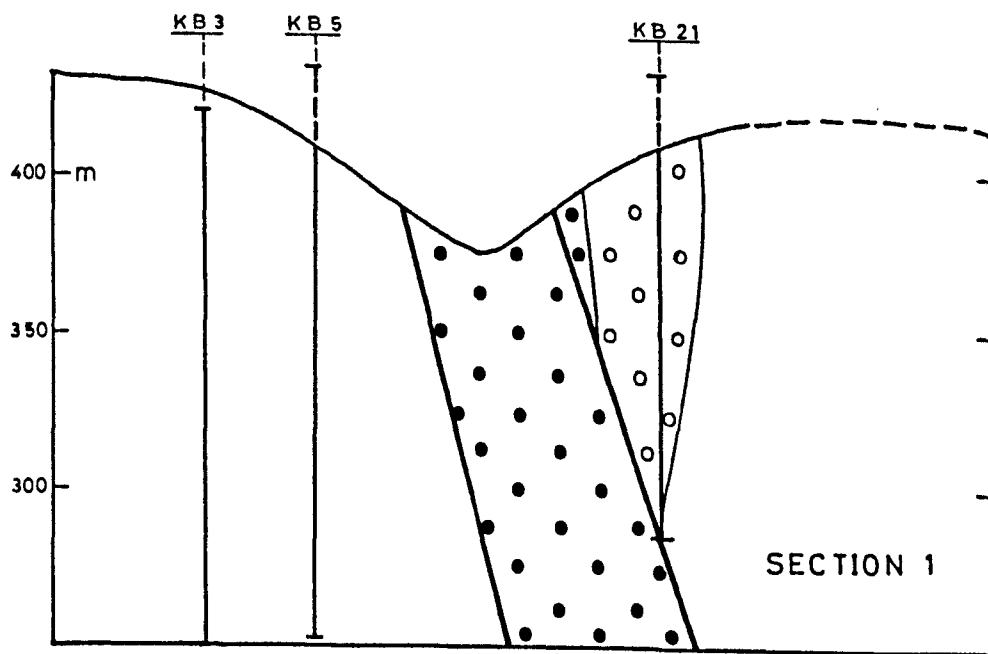
LEGEND

- V V





Upper Pillow Lavas
- Lower Pillow Lavas
- Weak Alteration (Limonitic Staining)
- Gossan
- High Grade Mineralization
- Low Grade Mineralization
- Faults
- Geological Boundaries
- Boreholes

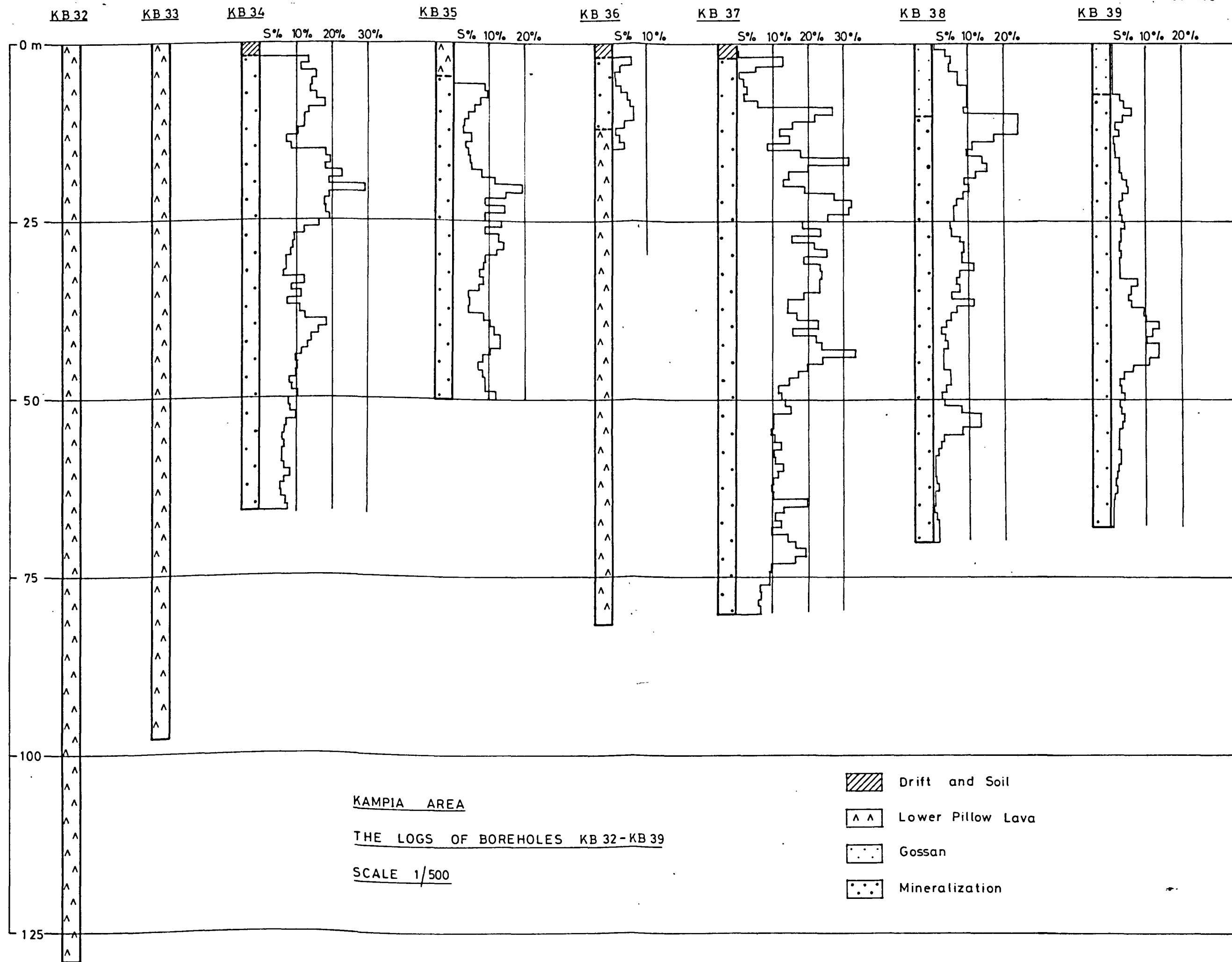


Scale 1/2500



L E G E N D

- | | | | |
|---|----------------------|---|--------|
|  | Lower Pillow Lavas |  | Gossan |
|  | Weakly Mineralized | | |
|  | Strongly Mineralized | | |



KAMPIA AREA

$t_d = 30$

$t_c = 8$

LINE 1

$t_p = 50$

on/off = 1.0

POLE - DIPOLE

$a = 50$ m

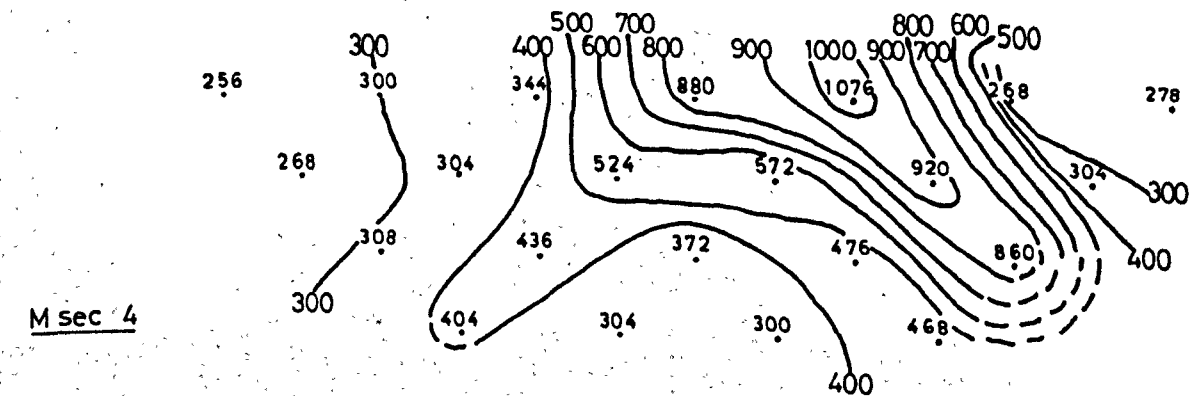
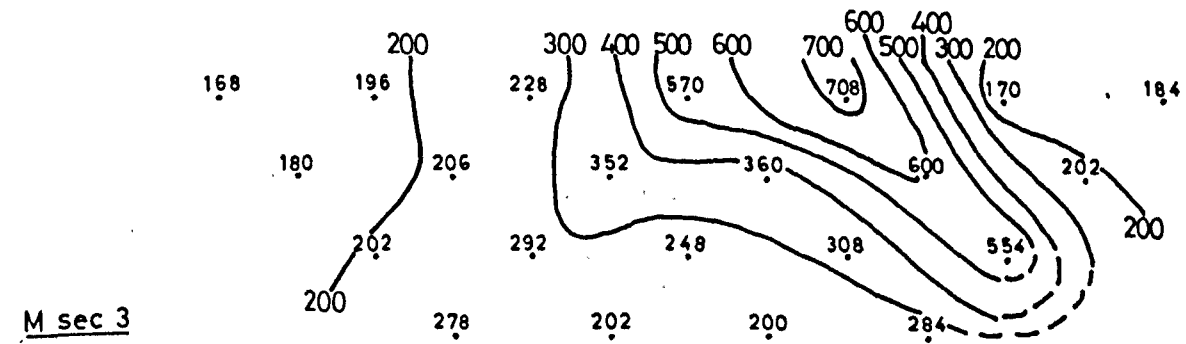
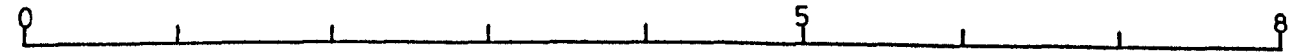
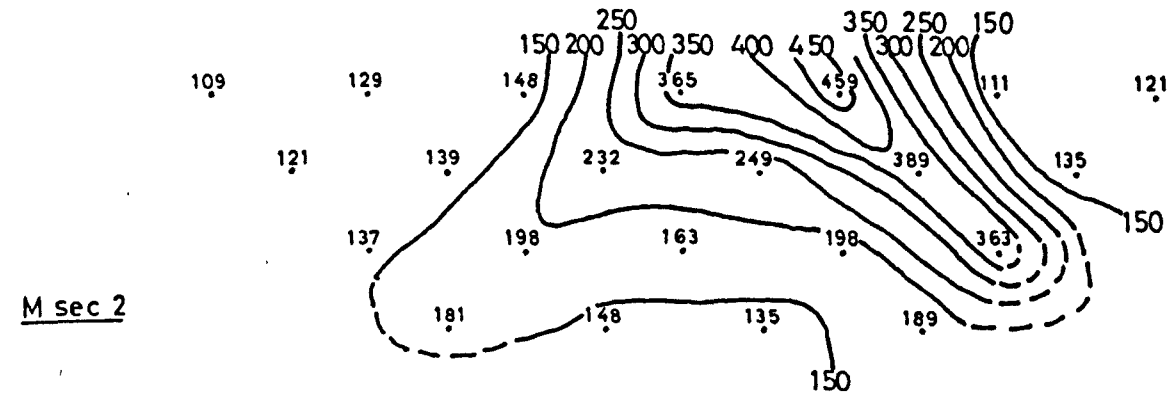
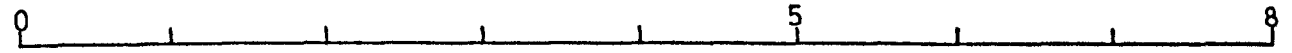
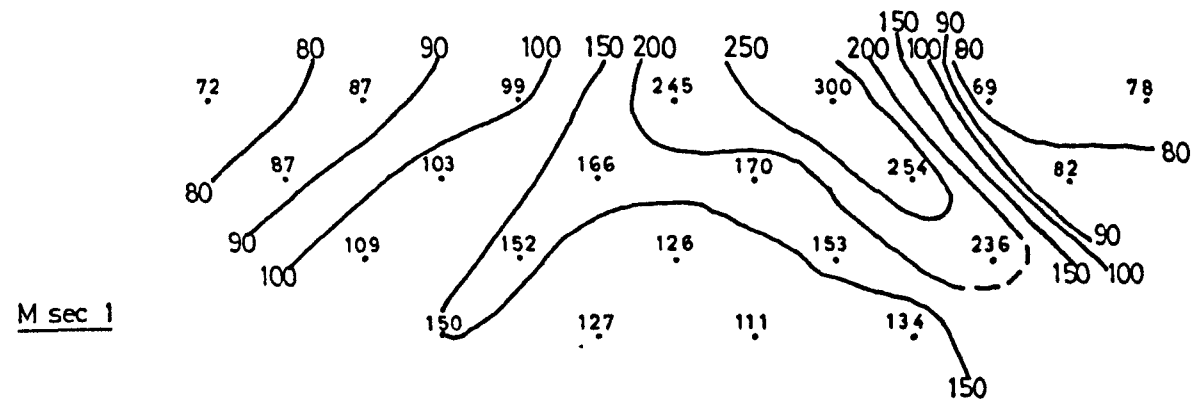
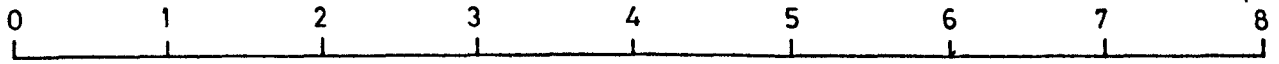
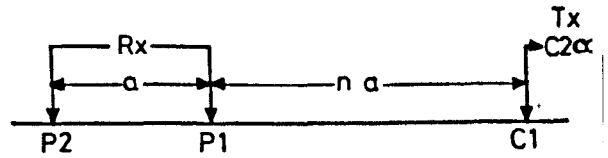


FIG. 180

KAMPIA AREA

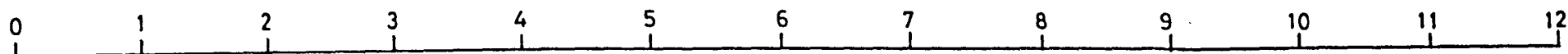
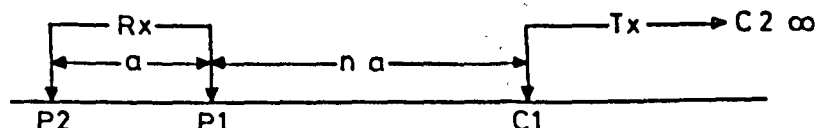
 $t_d = 30$ $t_c = 8$

LINE 2

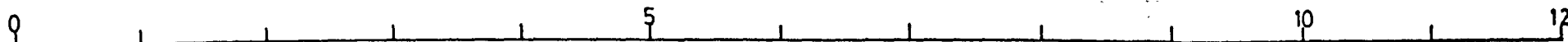
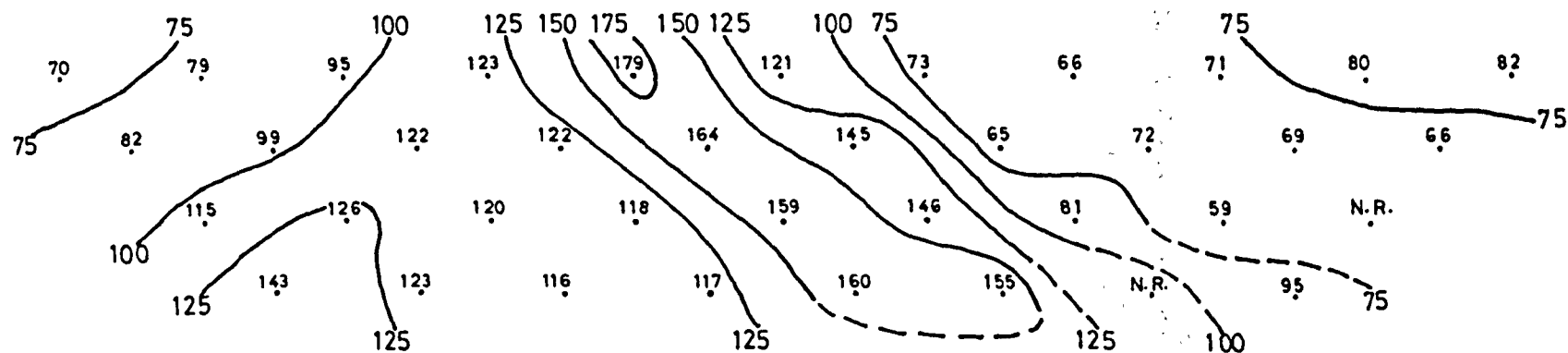
 $t_p = 50$

on/off = 1.0

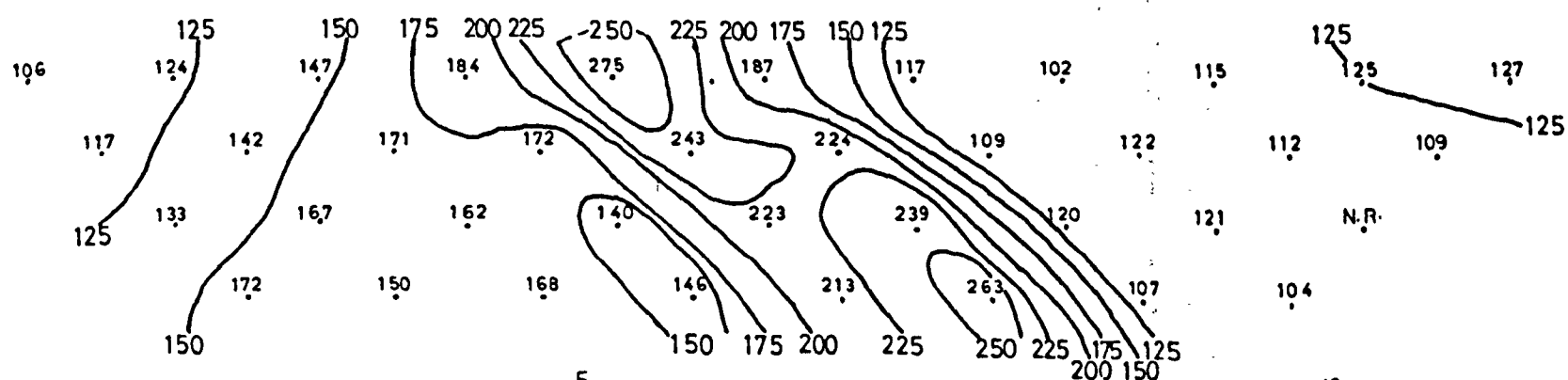
POLE - DIPOLE

 $a = 50 \text{ m}$ 

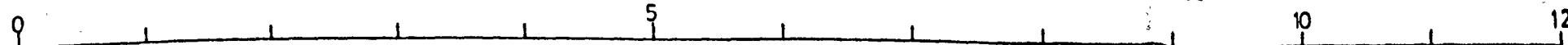
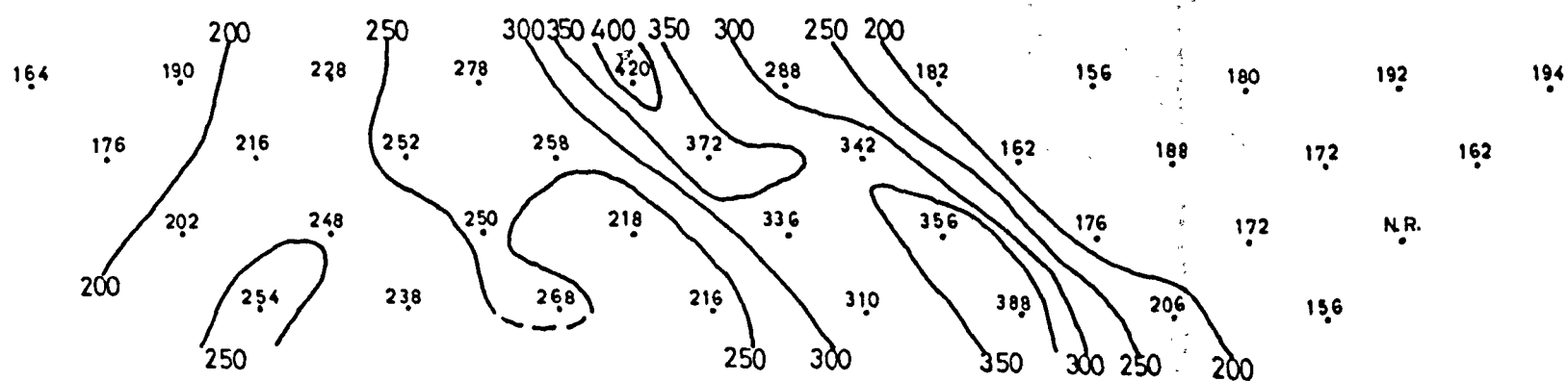
M sec 1



M sec 2



M sec 3



M sec 4

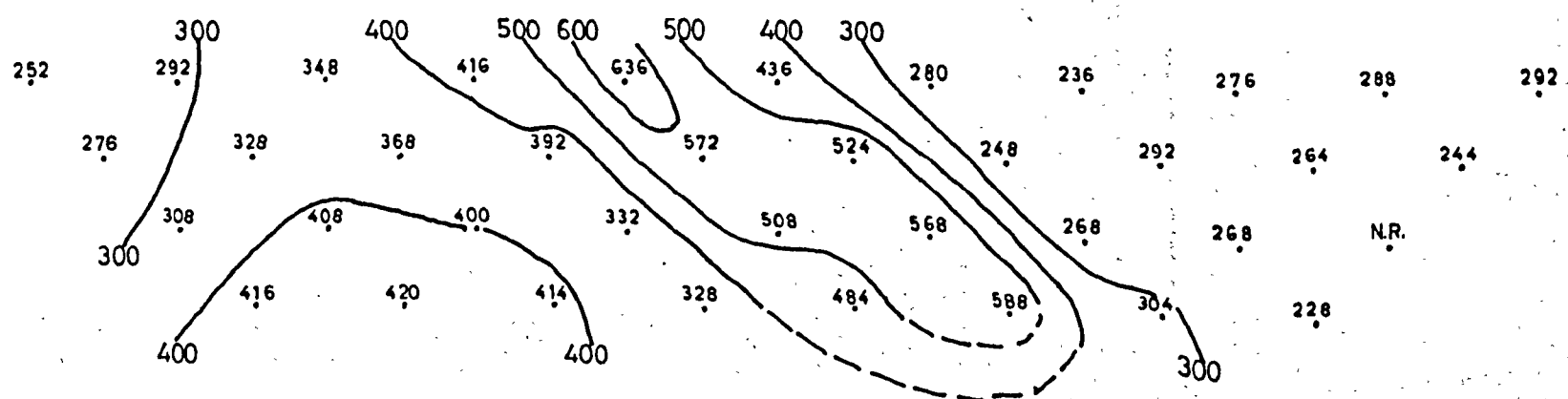


FIG. 181

KAMPIA AREA

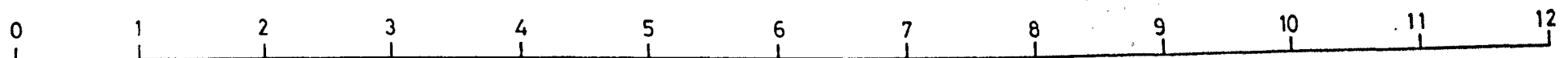
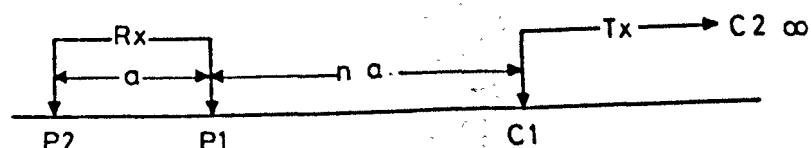
 $t_d = 30$ $t_c = 8$

LINE 3

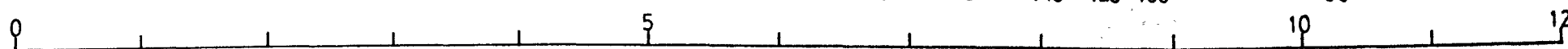
 $t_p = 50$

on/off = 1.0

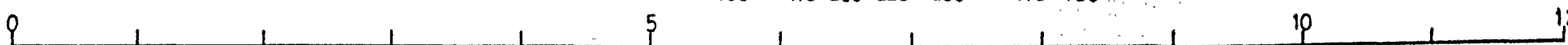
POLE - DIPOLE

 $a = 50\text{ m}$ 

M sec 1



M sec 2



M sec 3



M sec 4



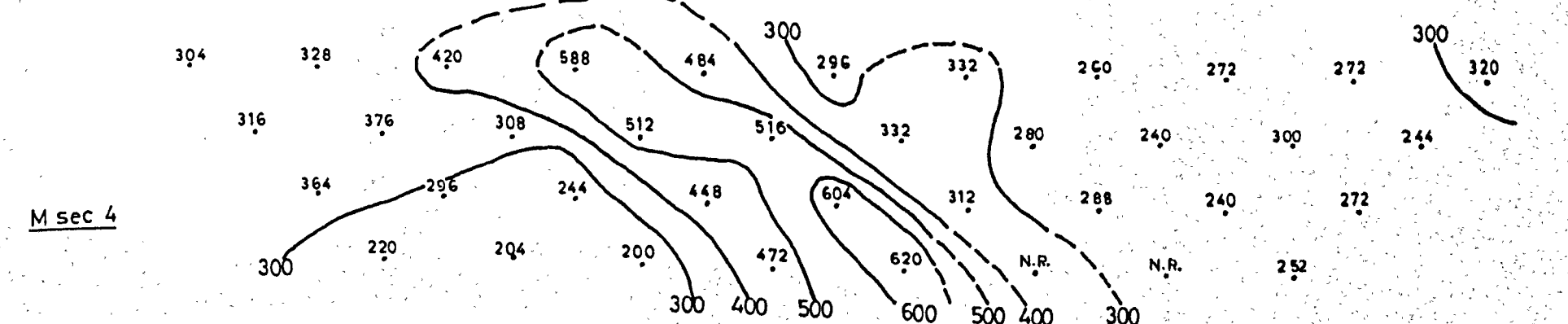
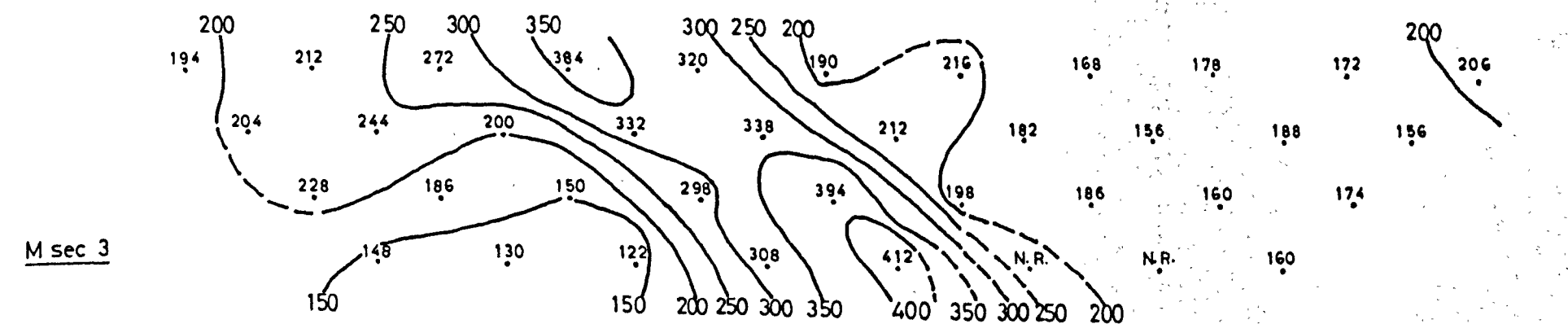
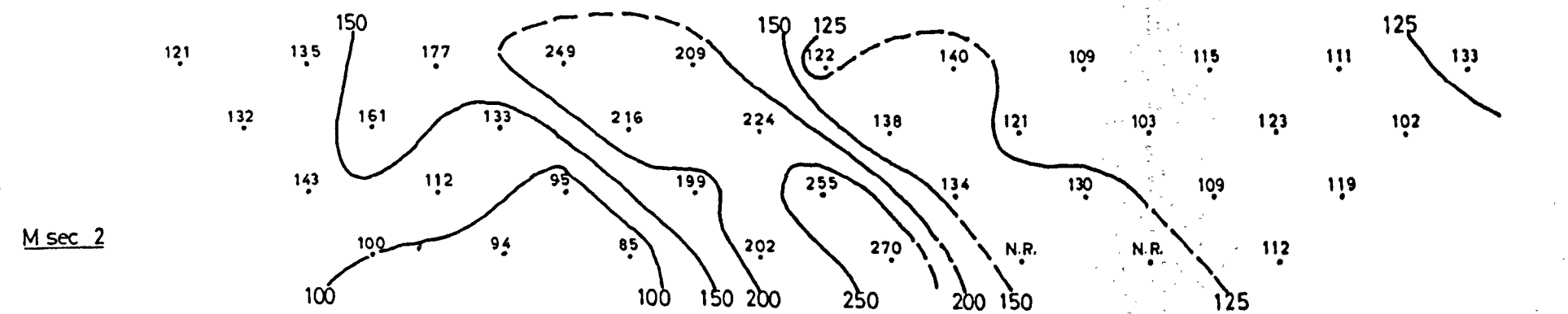
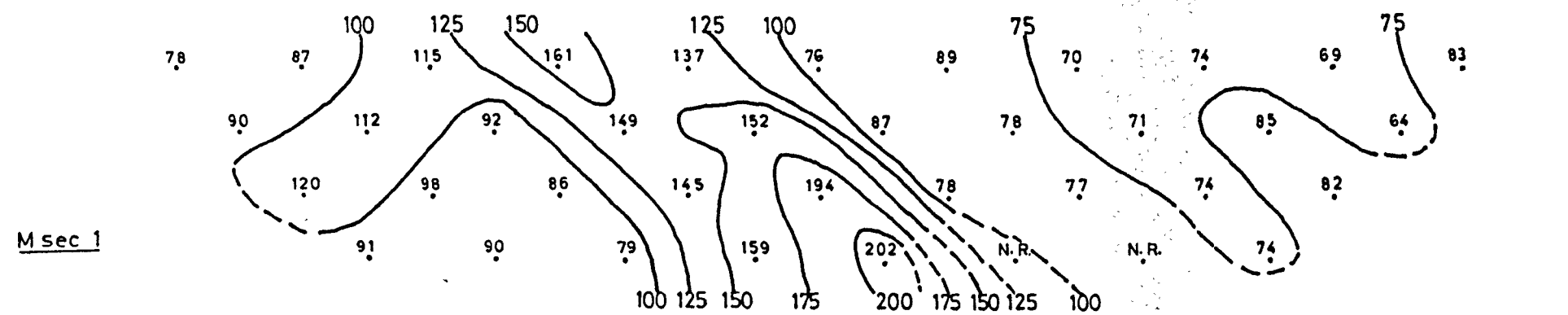
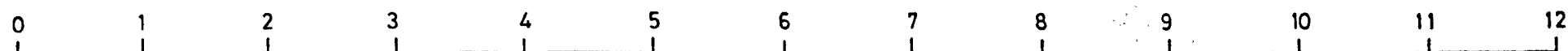
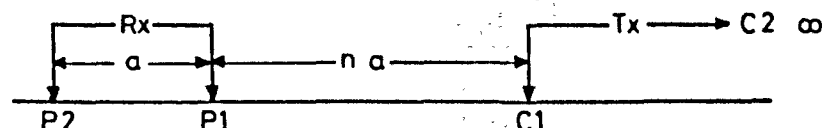
KAMPIA AREA

 $t_d = 30$ $t_c = 8$

LINE 4

 $t_p = 50$ $\text{on/off} = 1.0$

POLE - DIPOLE

 $a = 50 \text{ m}$ 

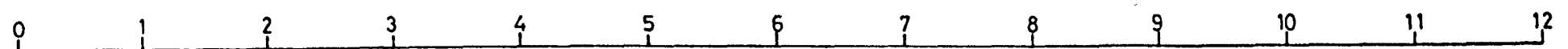
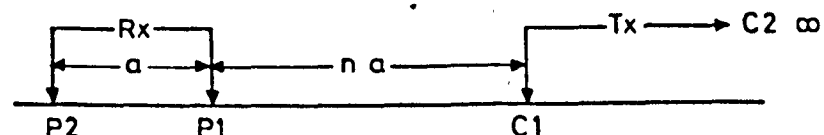
KAMPIA AREA

 $t_d = 30$ $t_c = 8$

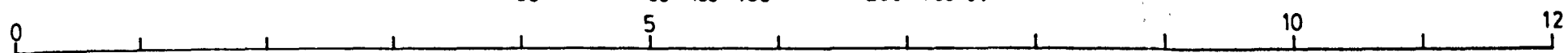
LINE 5

 $t_p = 50$ $on/off = 1.0$

POLE - DIPOLE

 $a = 50m$ 

M sec 1



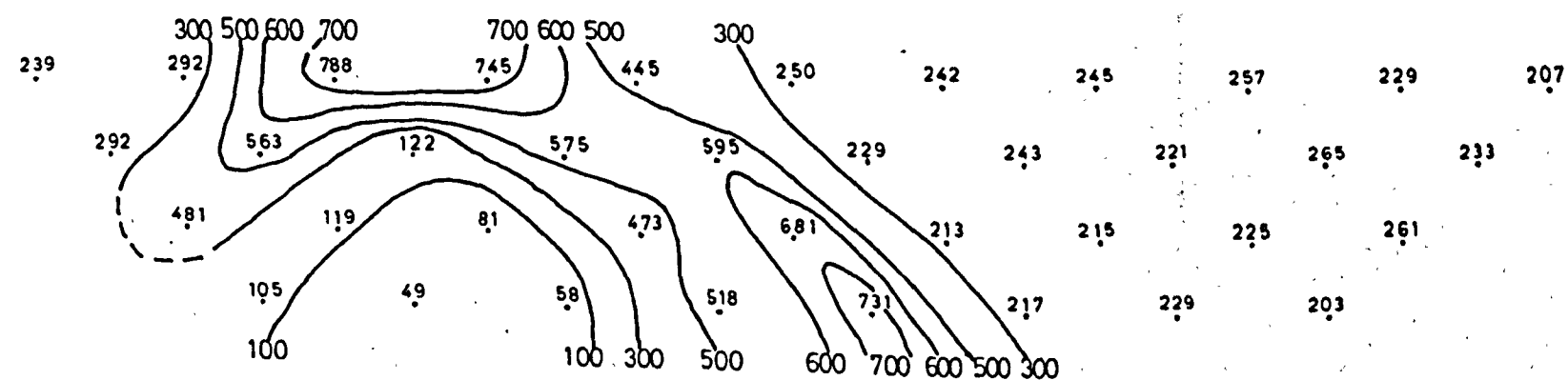
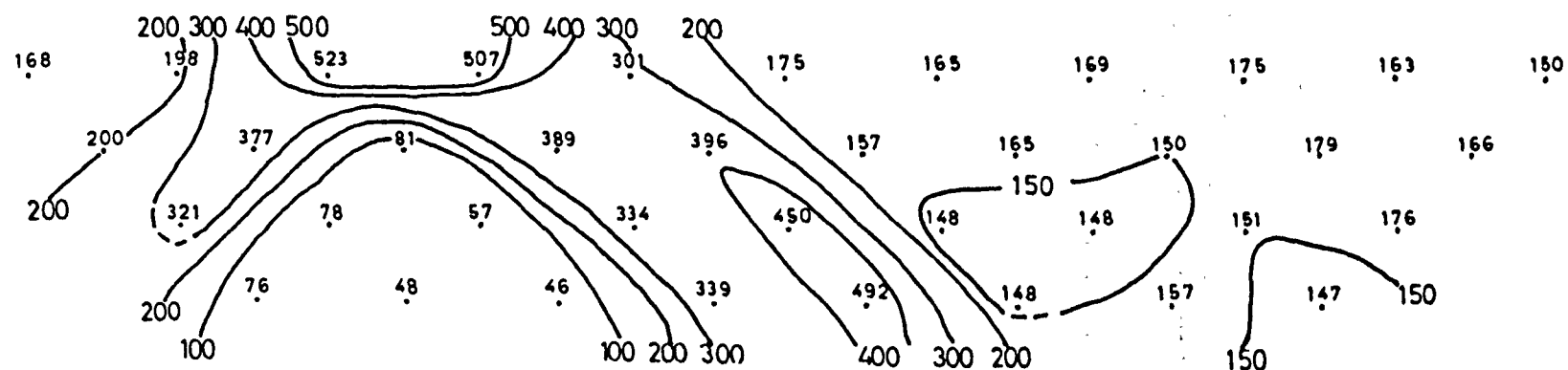
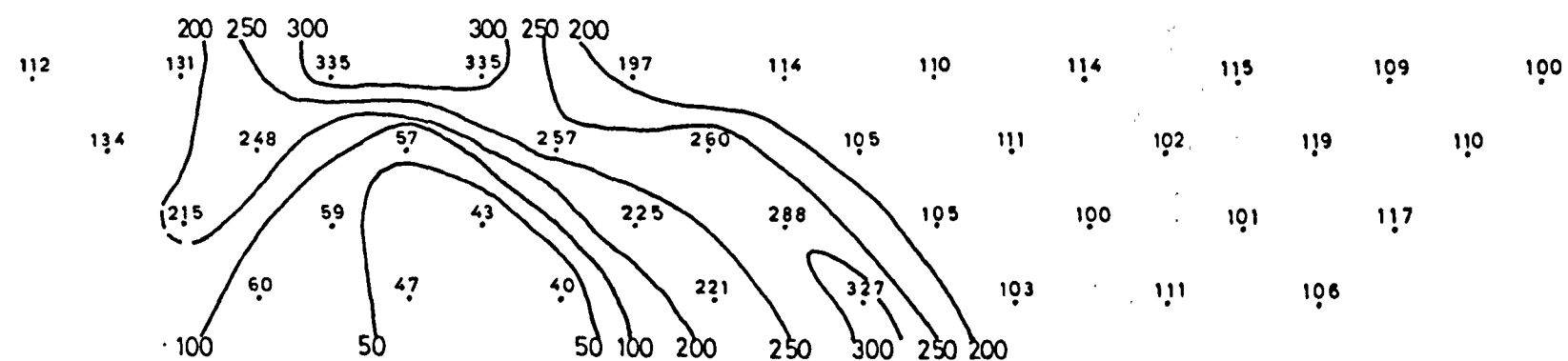
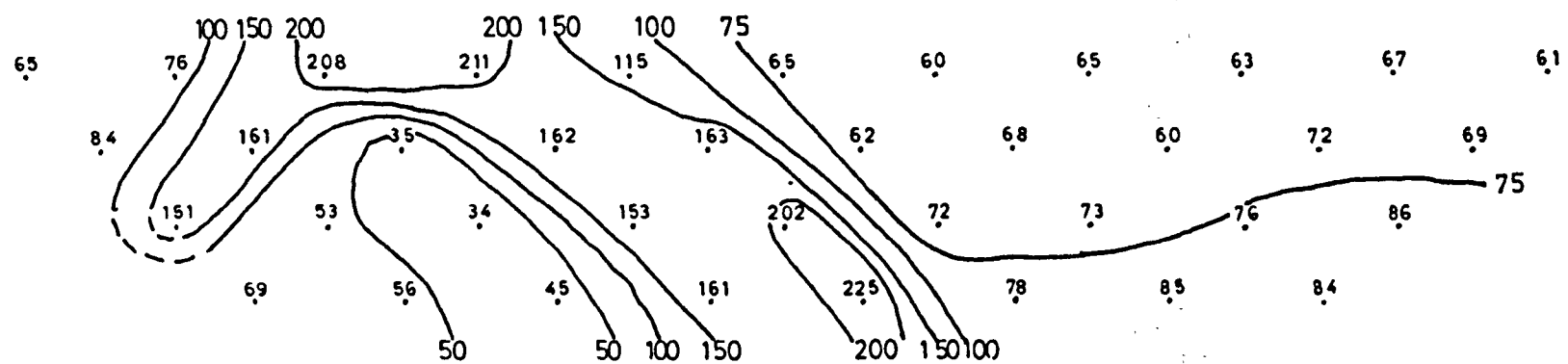
M sec 2



M sec 3



M sec 4



KAMPIA AREA

$t_d = 30$

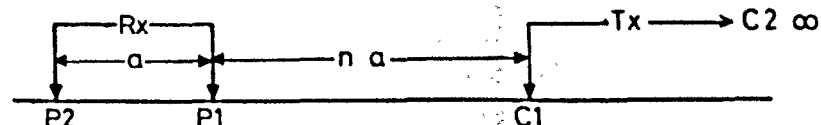
$t_c = 8$

FIG. 184

LINE 6

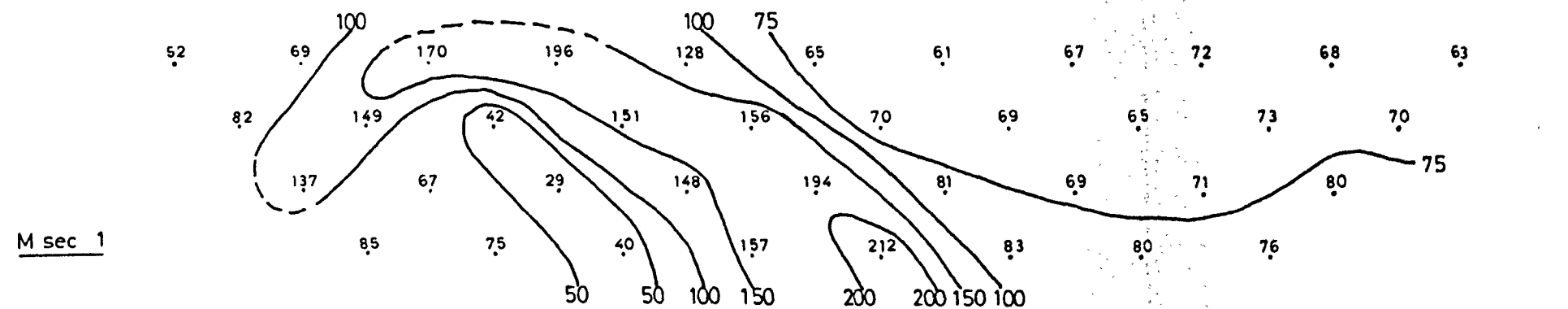
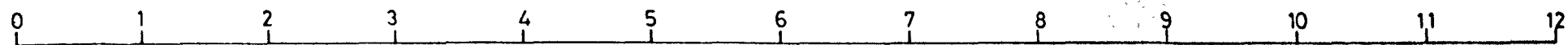
$t_p = 50$

on/off = 1.0

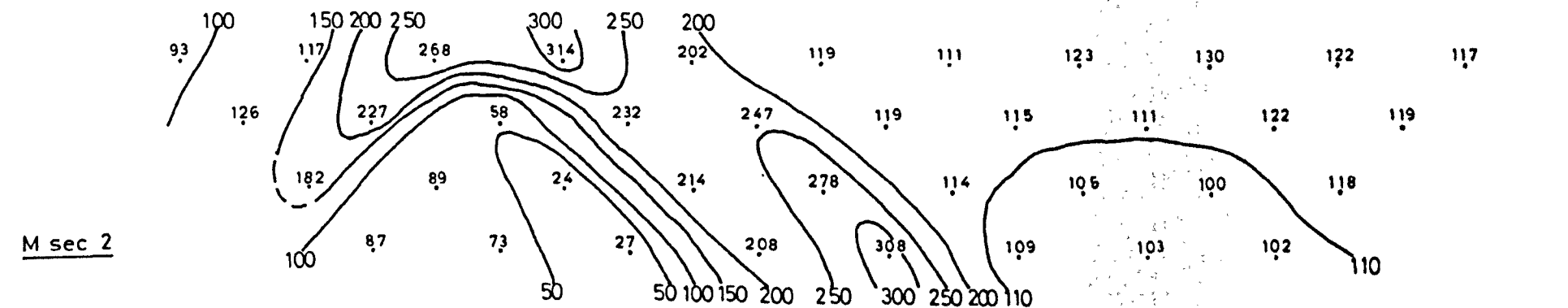


POLE - DIPOLE

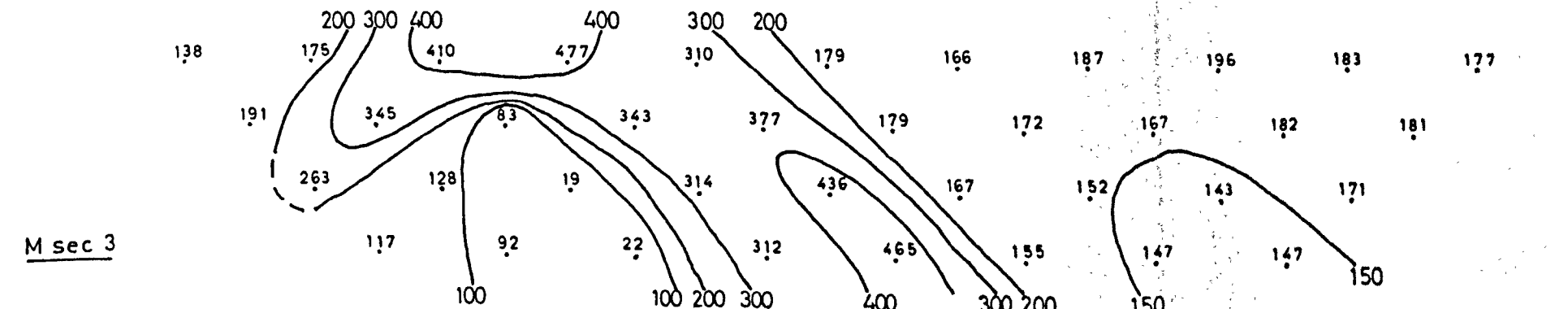
$a = 50m$



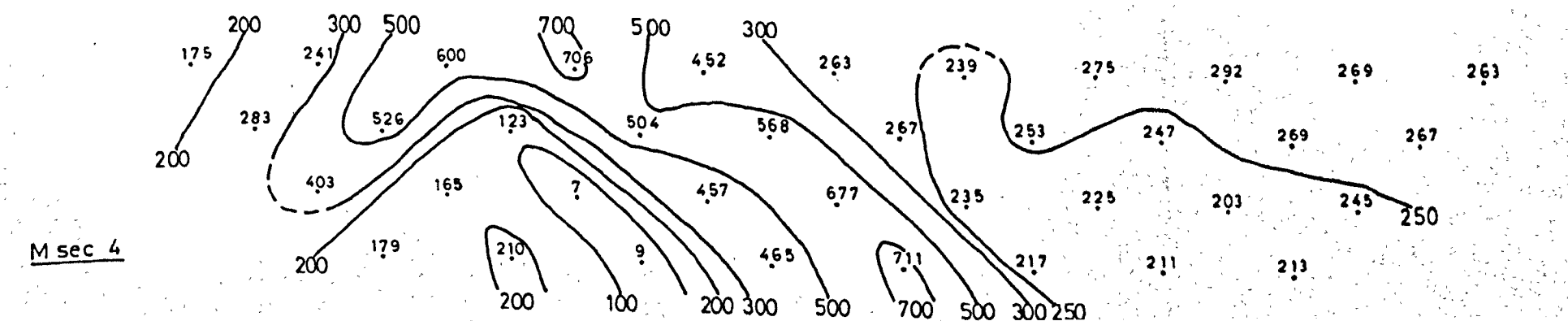
M sec 1



M sec 2



M sec 3



M sec 4

KAMPIA AREA

$t_d = 30$

$t_c = 8$

FIG. 185

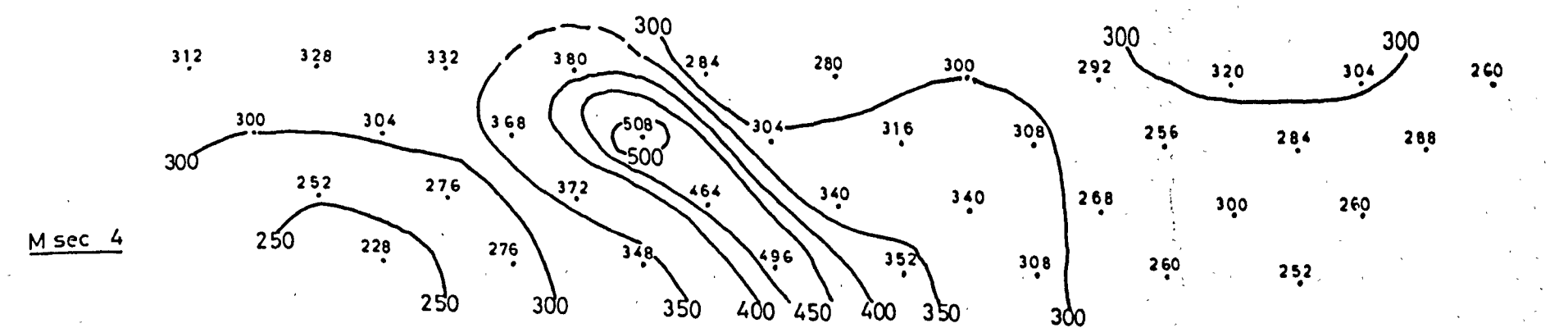
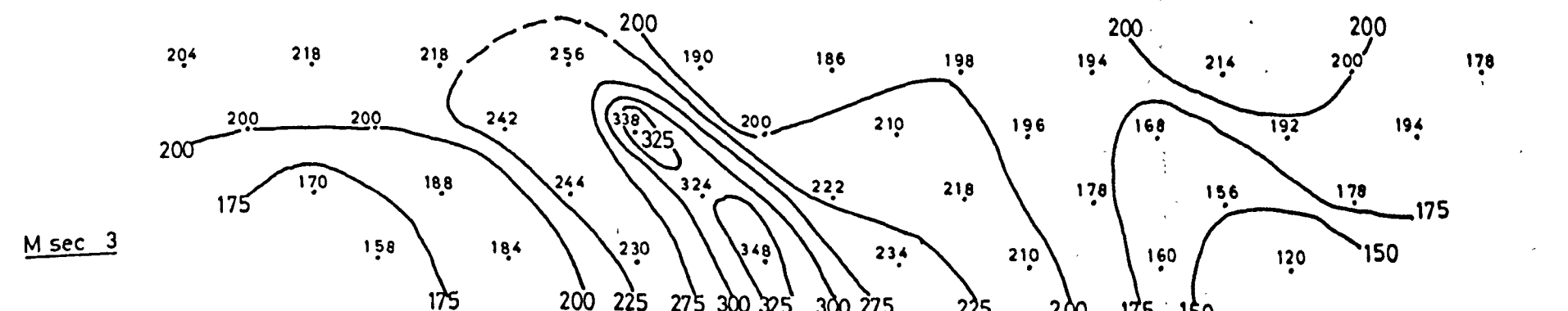
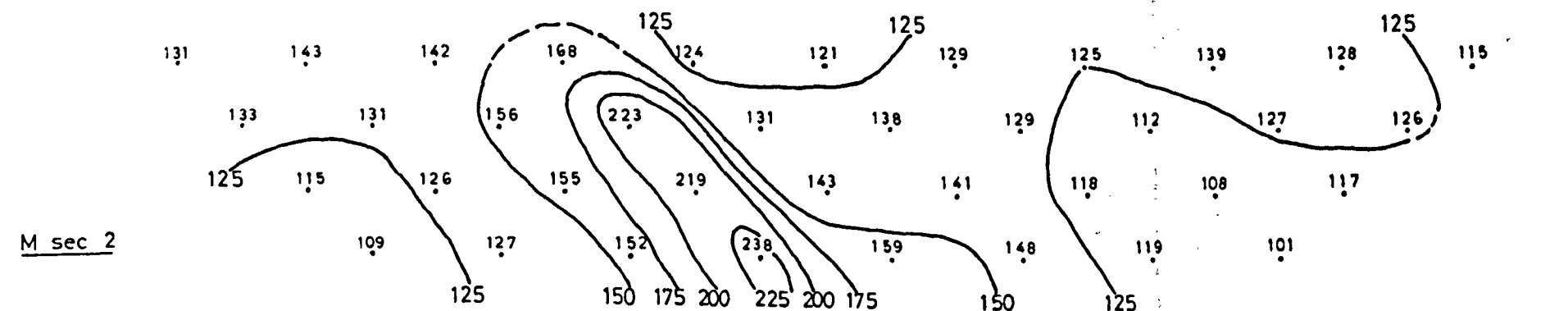
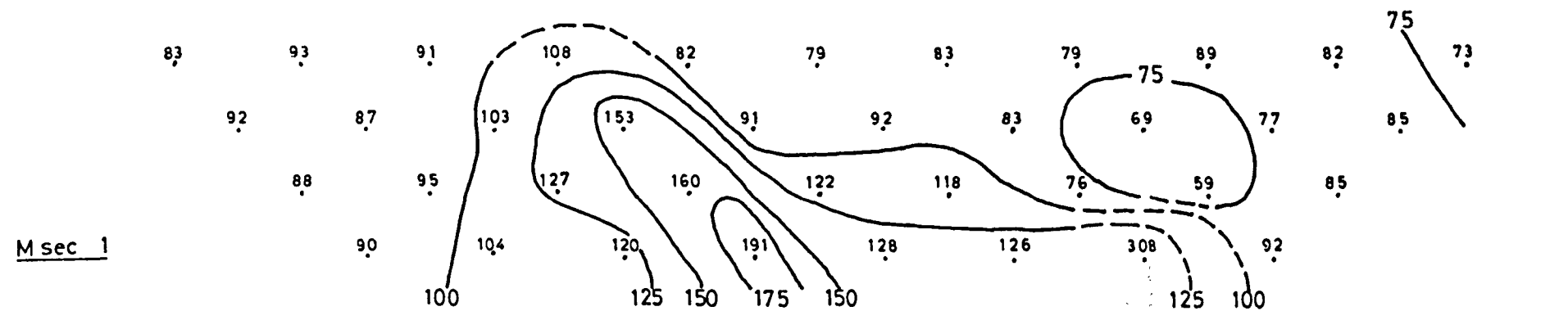
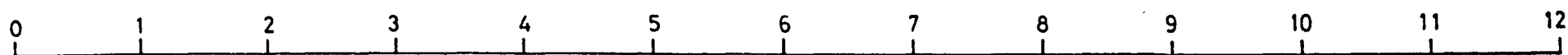
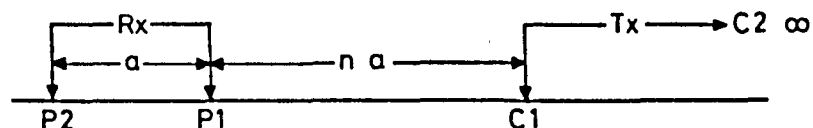
LINE 7

$t_p = 50$

on/off = 1.0

POLE - DIPOLE

$a = 50$ m



KAMPIA AREA

$t_d = 30$

$t_c = 8$

FIG. 186

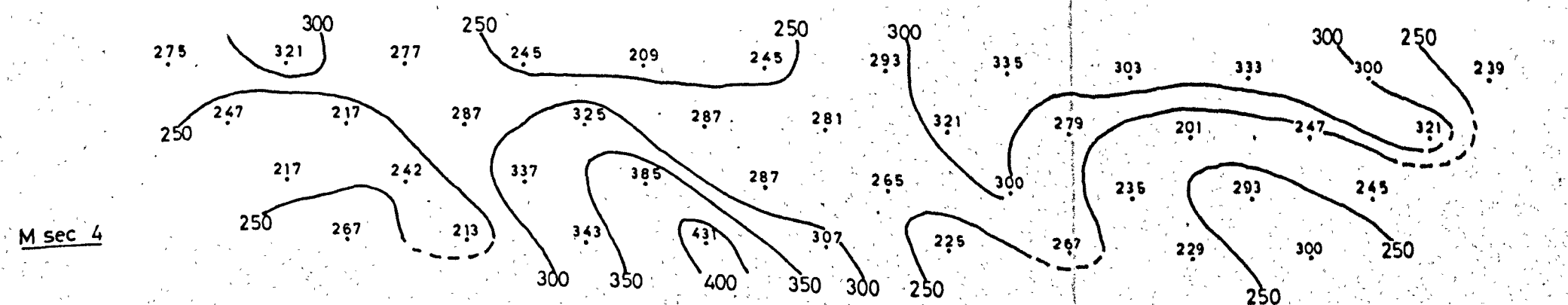
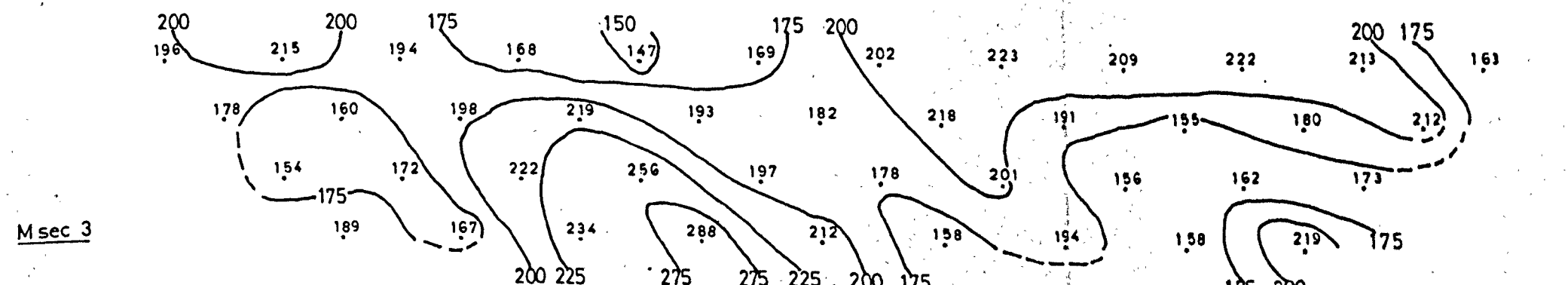
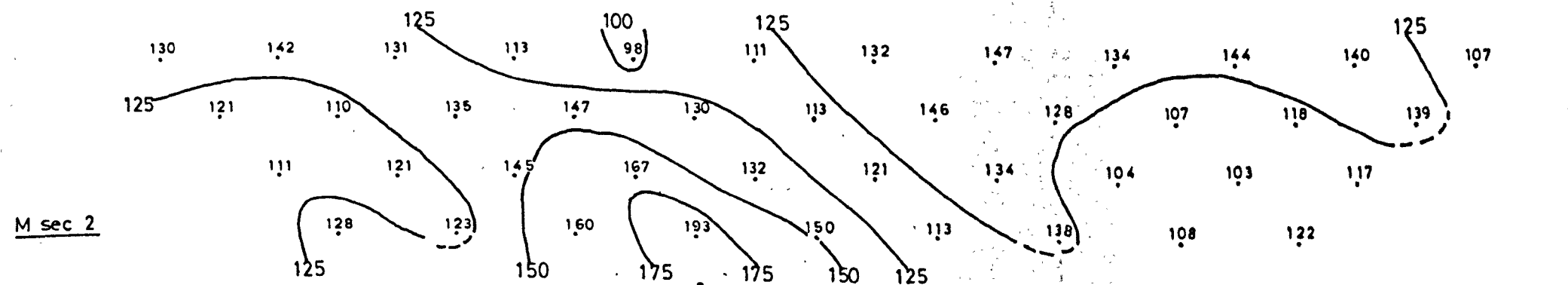
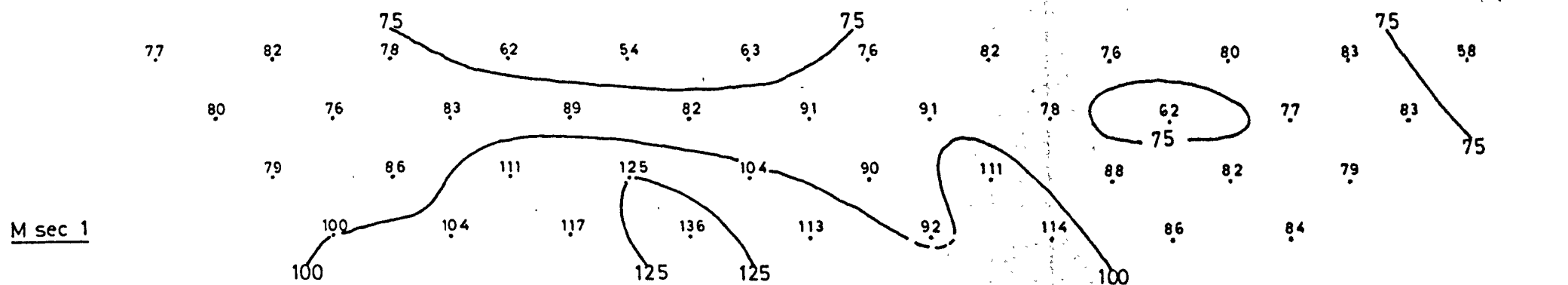
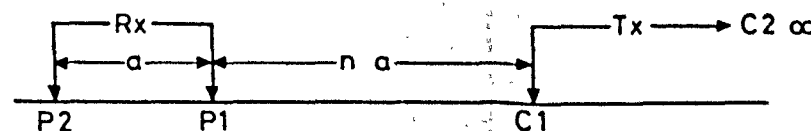
LINE 8

$t_p = 50$

on/off = 1.0

POLE - DIPOLE

$a = 50m$



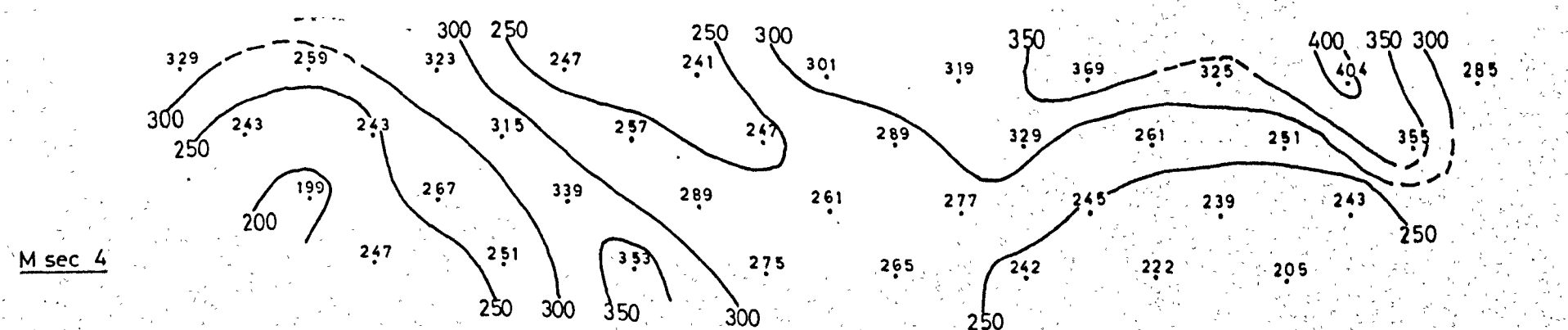
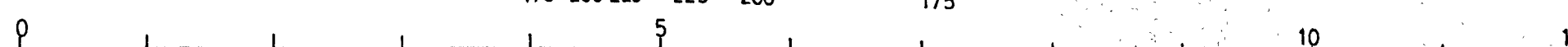
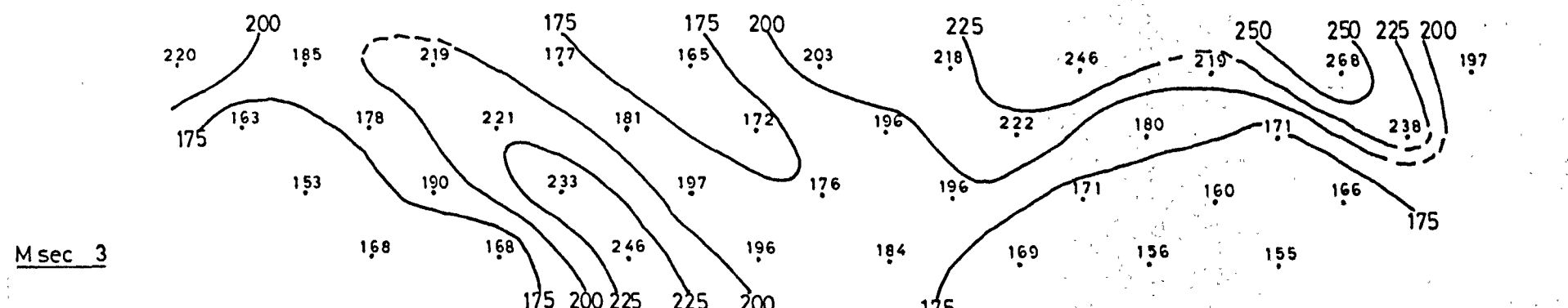
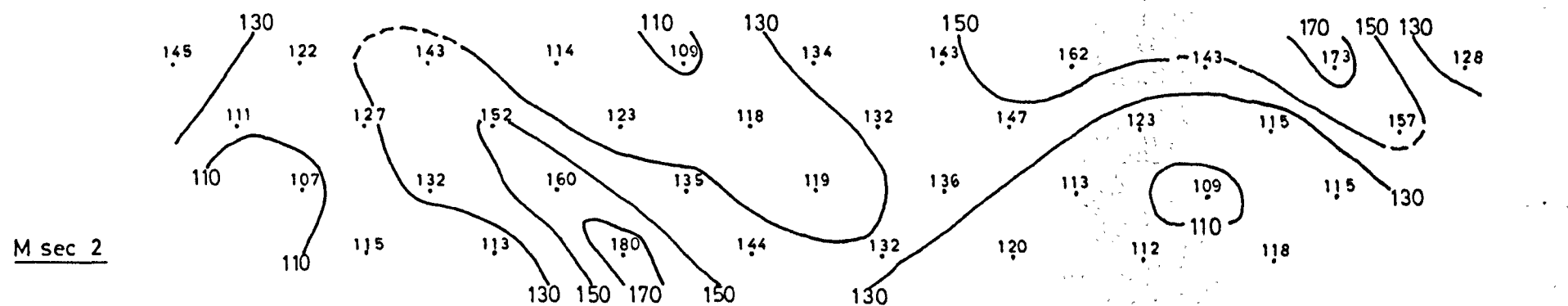
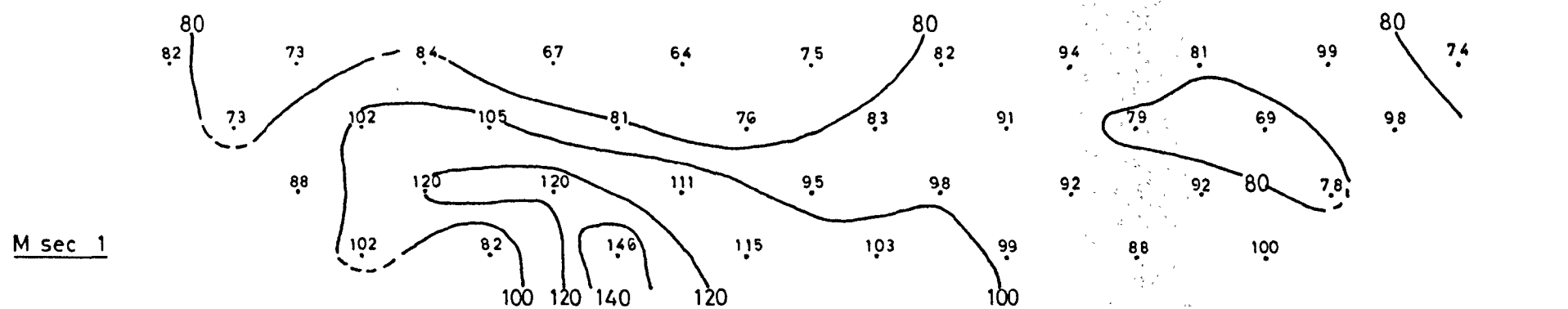
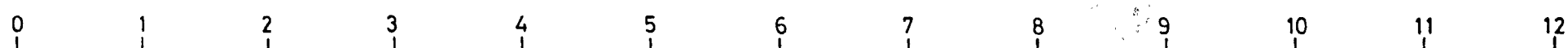
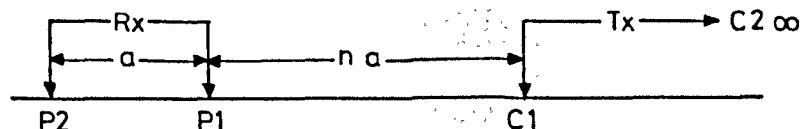
KAMPIA AREA

 $t_d = 30$ $t_c = 8$

LINE 9

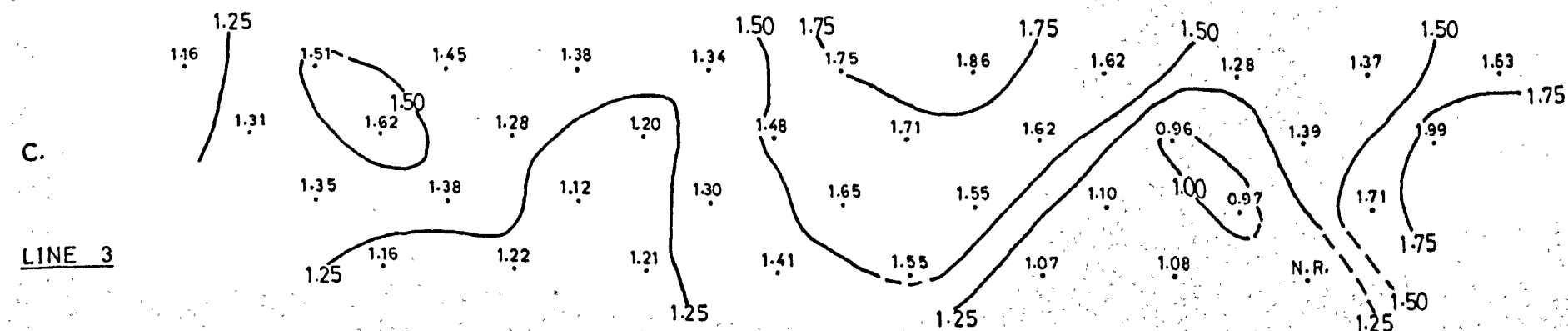
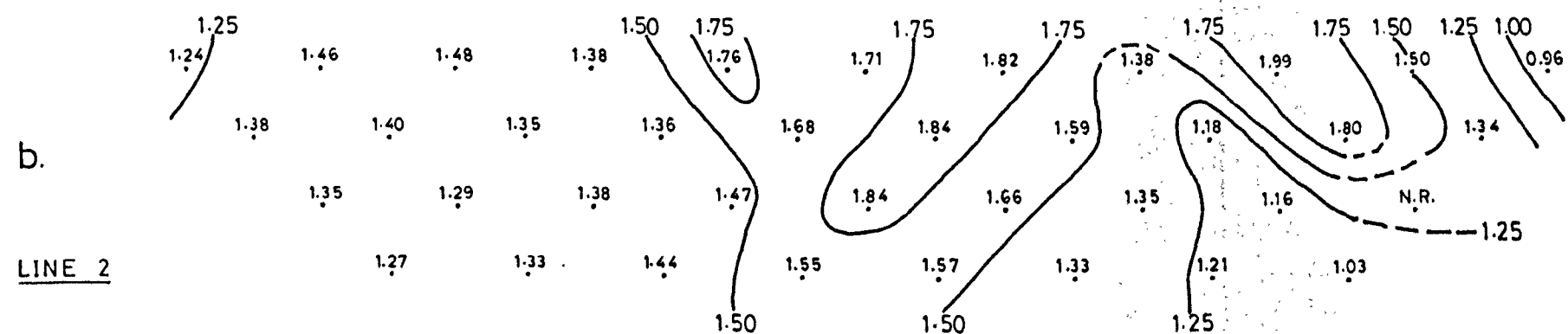
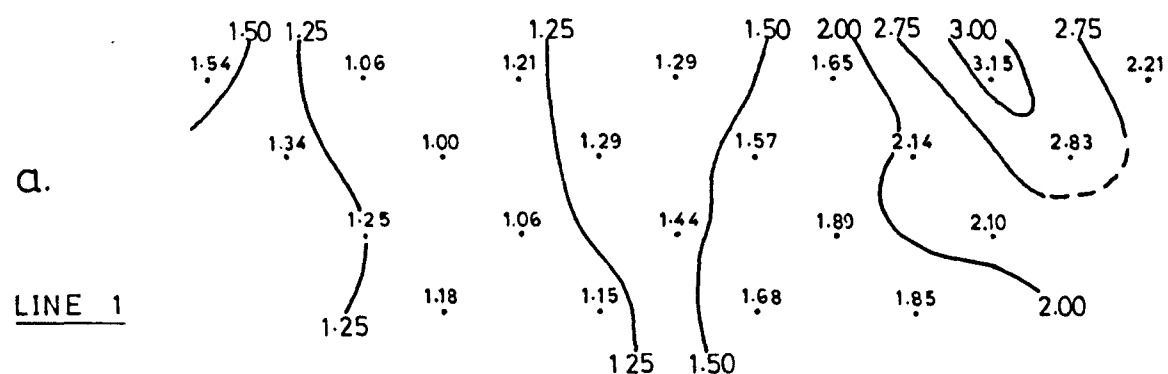
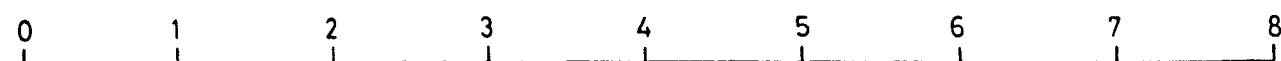
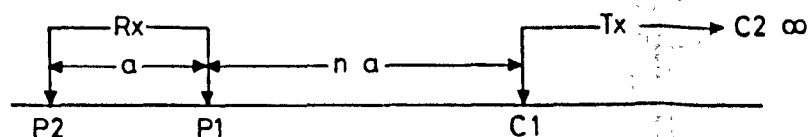
 $t_p = 50$ $\text{on/off} = 1.0$

POLE - DIPOLE

 $a = 50 \text{ m}$ 

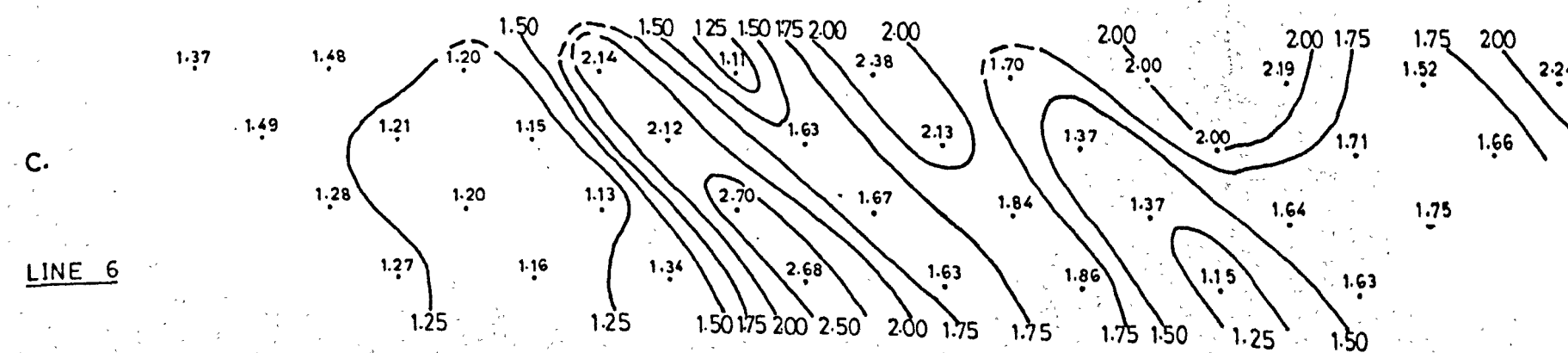
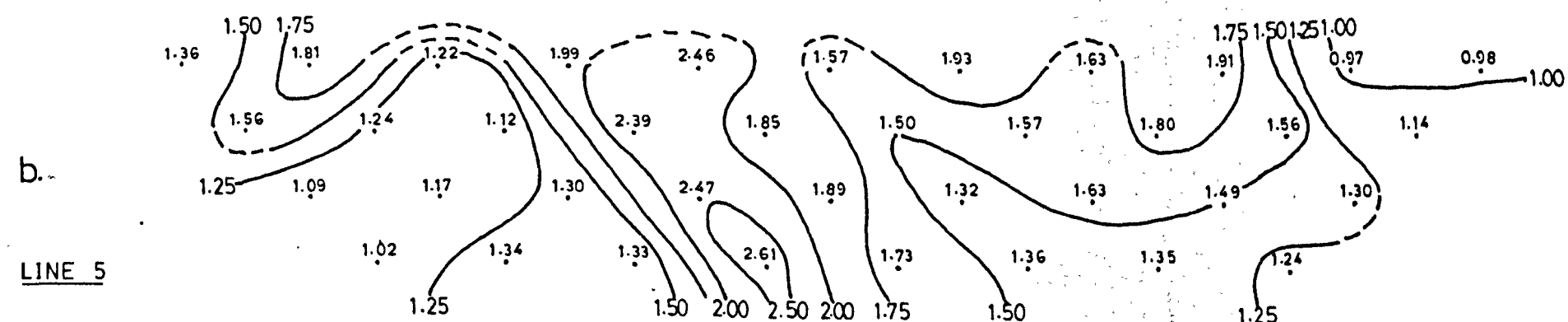
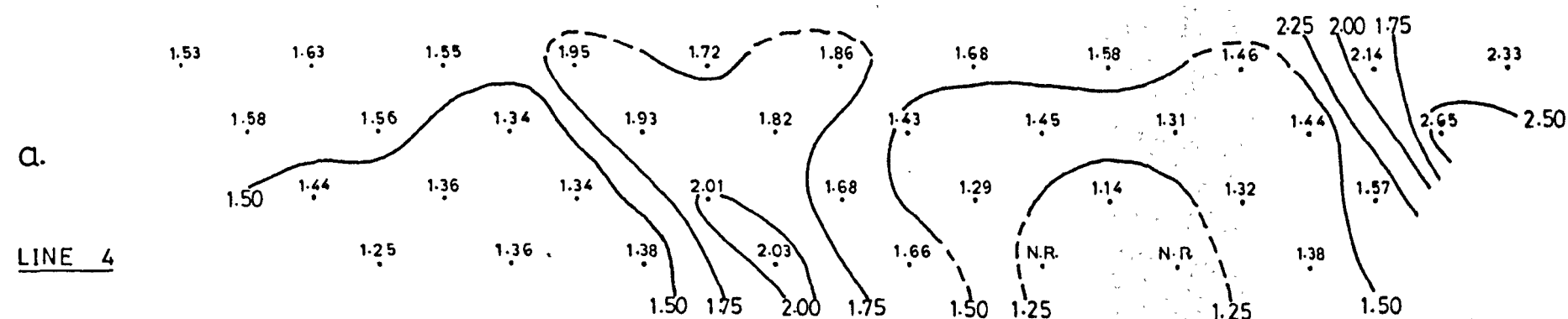
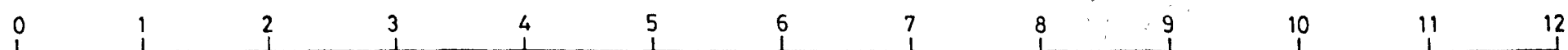
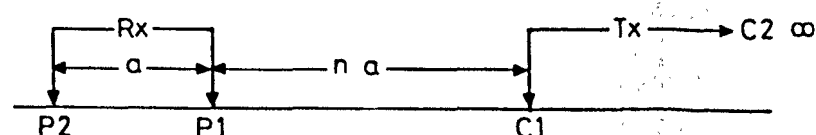
KAMPIA AREA

POLE - DIPOLE

 $a = 50 \text{ m}$ RESISTIVITY $\rho / 2\pi$ (Ohm-meters)

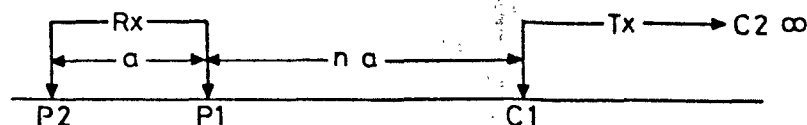
KAMPIA AREA

POLE - DIPOLE

 $a = 50 \text{ m}$ RESISTIVITY $\rho/2\pi$ (Ohm-meters)

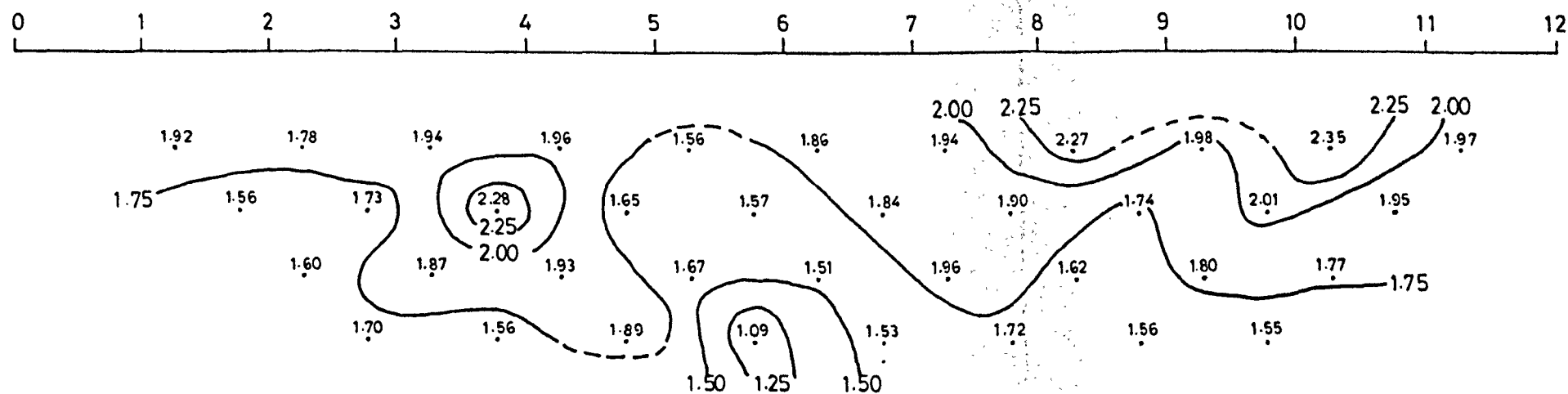
KAMPIA AREA

POLE - DIPOLE

 $a = 50 \text{ m}$ RESISTIVITY $\rho / 2\pi$ (Ohm-meters)

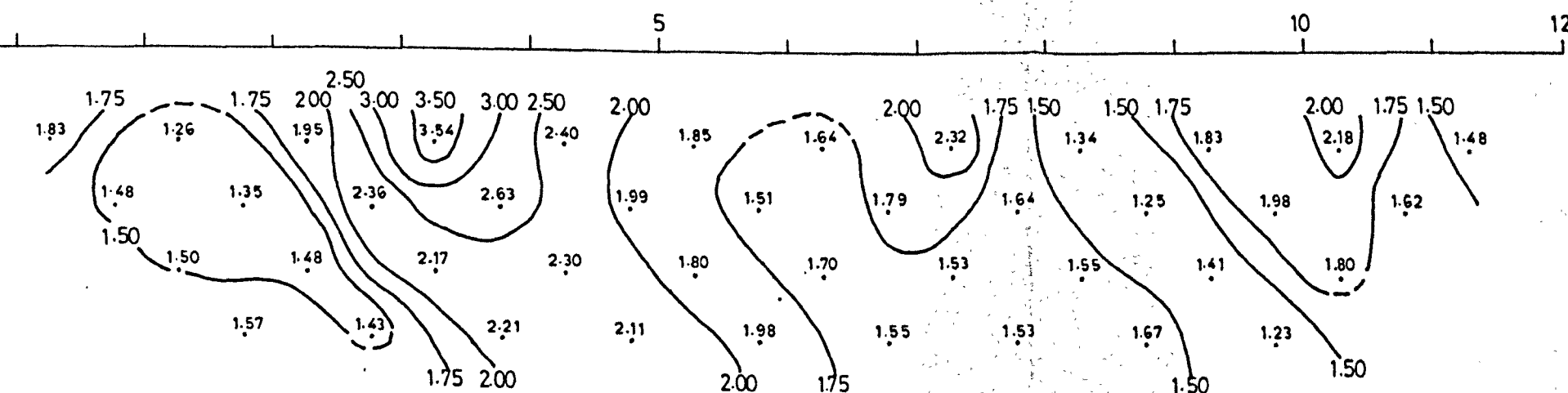
a.

LINE 7



b.

LINE 8



c.

LINE 9

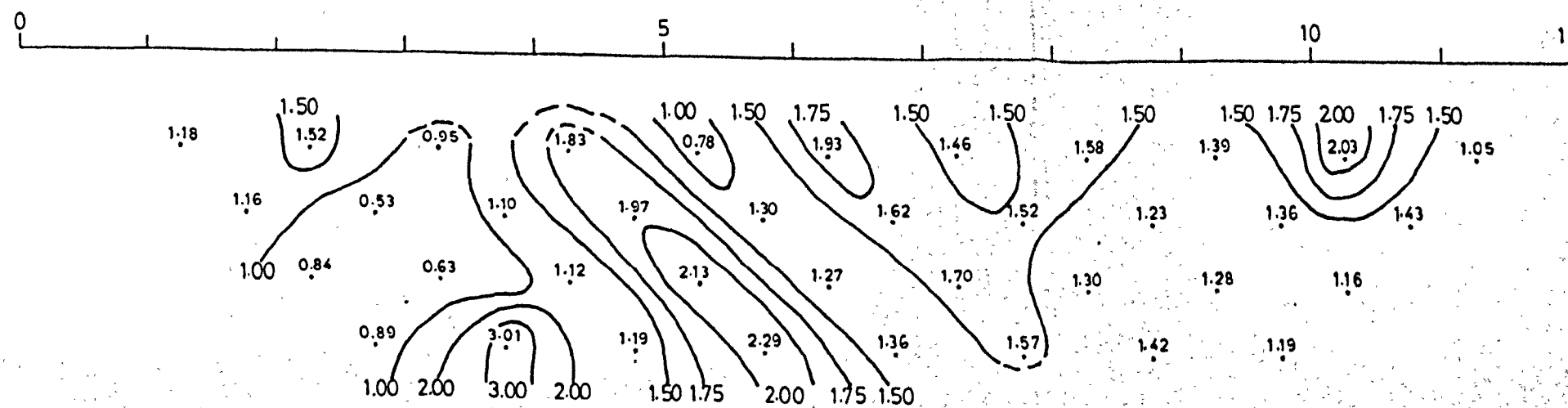
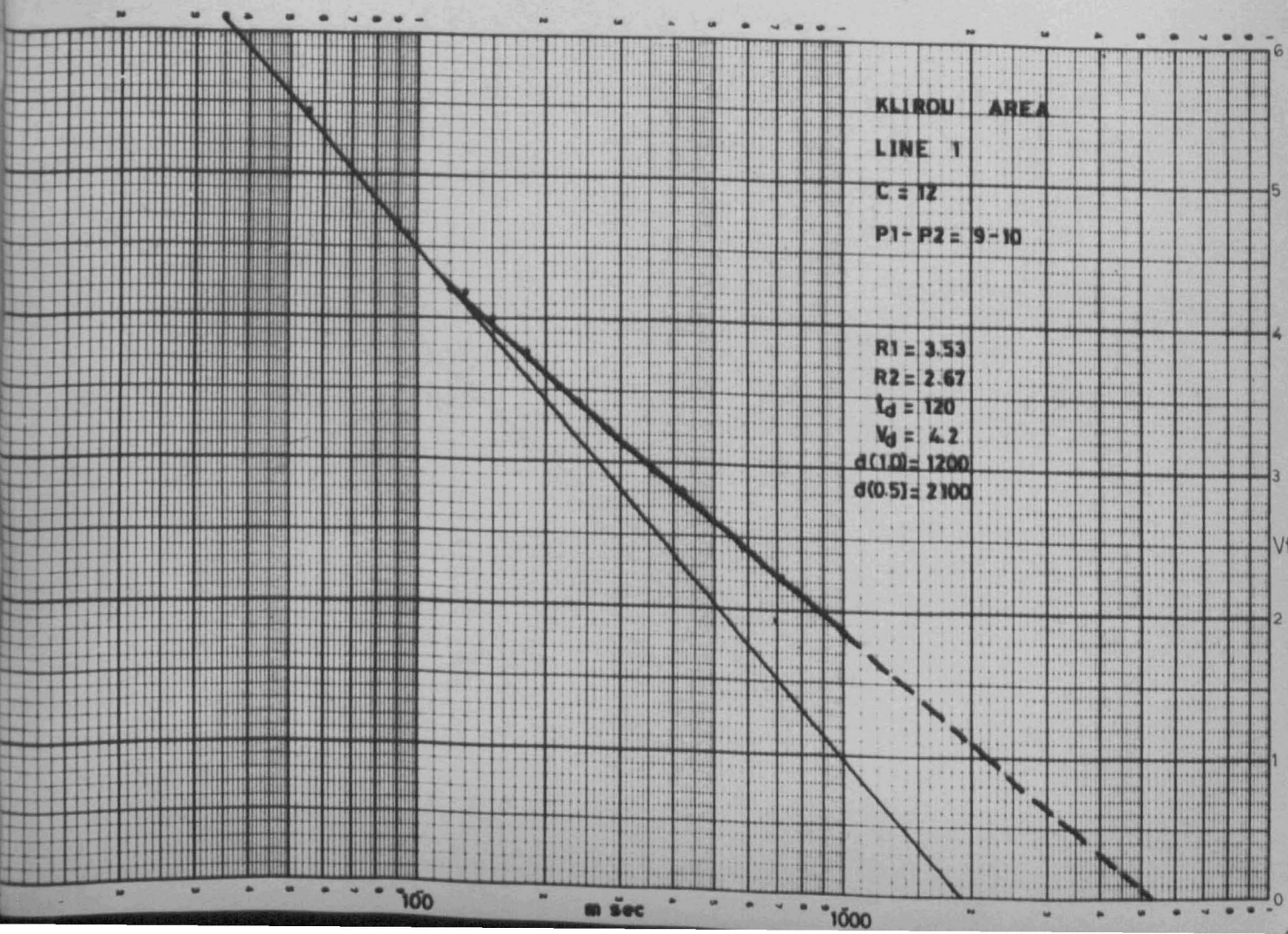
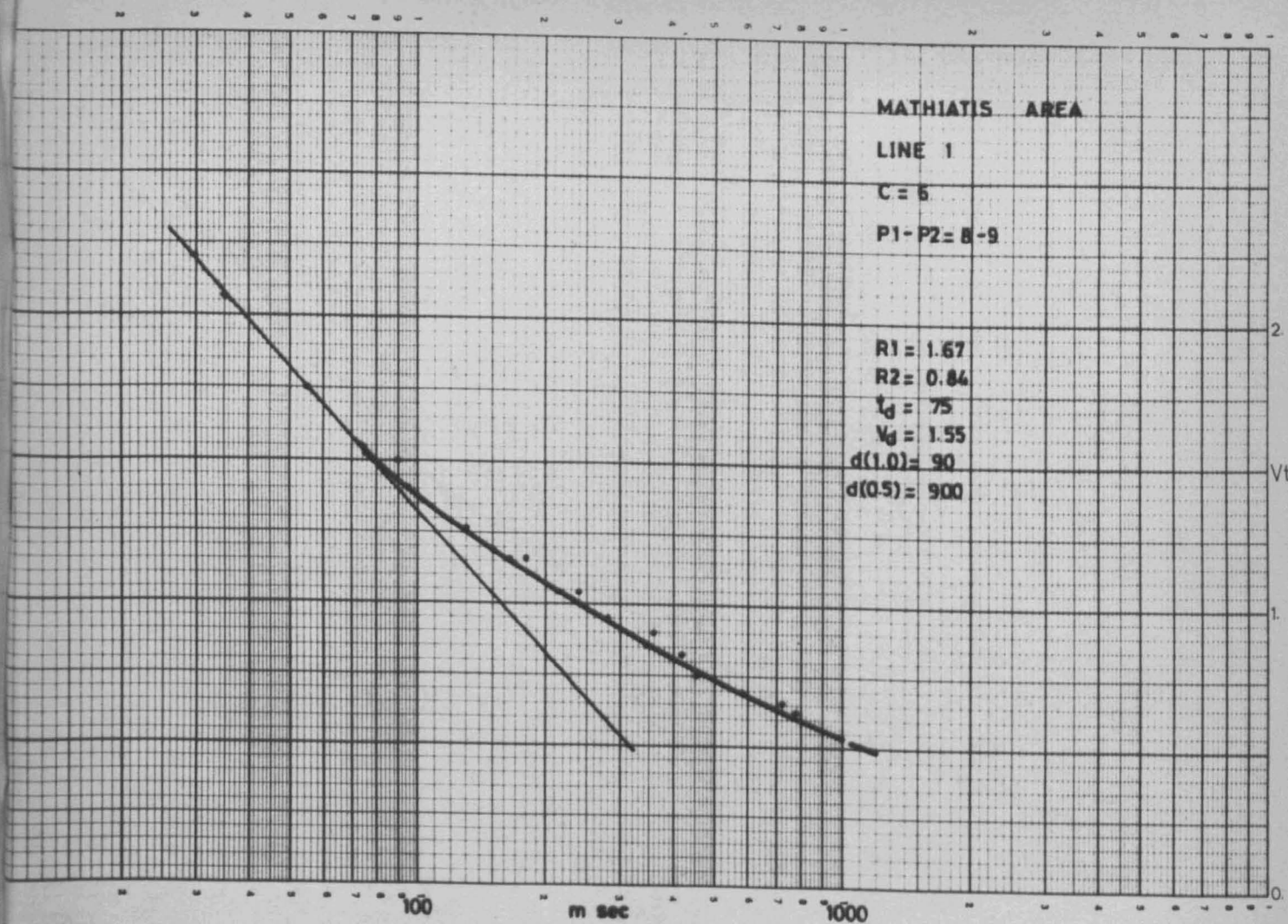


TABLE 80

TABLE SUMMARIZING THE DECAY FACTORS AND
THE BERTIN AND LOEB'S (MODIFIED) FUNCTIONS
OBTAINED IN THE DIFFERENT AREAS

	MATHIATIS WESTERN MINERALIZ.	KLIROU SOUTHERN MINERALIZ.	VRECHIA MAIN MINERALIZ.	KOKKINO- VOUNAROS MINERALIZ.	MATHIATIS EASTERN MINERALIZ.	KLIROU 1 - 5% S	VRECHIA EASTERN	KLIROU < 1%	MATHIATIS BARREN ROCKS	KLIROU BARREN ROCKS	KOKKINO- VOUNAROS BARREN ROCKS	VRECHIA BARREN ROCKS
A	2.05-2.17	2.5-4.3	3.0-3.6	2.0-3.2	2.3-2.5	3.0-7.6	2.8-3.7	2.3-3.3	0.5-1.0	1.3-2.0	1.0-1.5	1.2-1.8
B	1.0	1.77-2.42	1.6-2.8	1.5-2.0	1.5-2.3	1.6-4.0	1.9-2.5	0.73-2.18	0.5	0.33-0.9	0.5-0.7	0.8-1.4
P	0.3	0.5-0.75	0.72-0.84	0.3-0.59	0.4-0.5	0.5-1.22	0.53-0.75	0.29-0.57	0.1	0.02-0.24	0.16-0.30	0.28-0.45
A1	0.4-0.6	> 2.0	0.25-0.46	0.7-1.8	< 0.2	0.9-1.65	0.3-0.43	0.6	0.2	1.0	0.6-1.7	0.05-0.08
A2	0.2-0.3	1.0-1.19	0.24-0.31	0.3-0.9	< 0.2	0.4-1.07	0.17-0.34	0.15-0.4	0.1-0.2	0.2-0.6	0.4-0.9	0.03-0.06
A1/A2	3.1	1.8	1.06-1.48	1.5-2.4	1.0-2.0	1.5	1.21-1.93	> 2.0	1.5-2.8	2.0-5.0	1.0-3.1	1.03-1.44



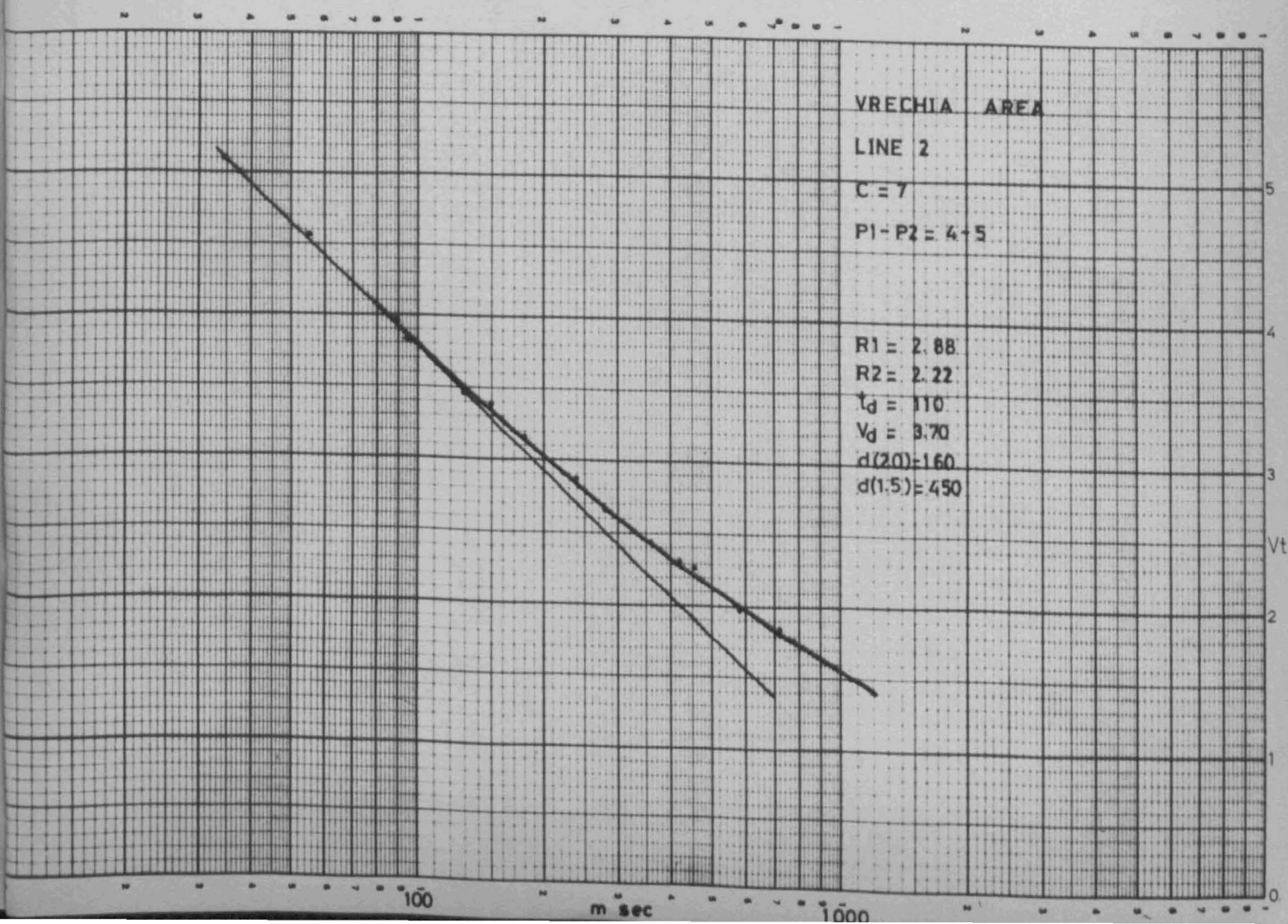
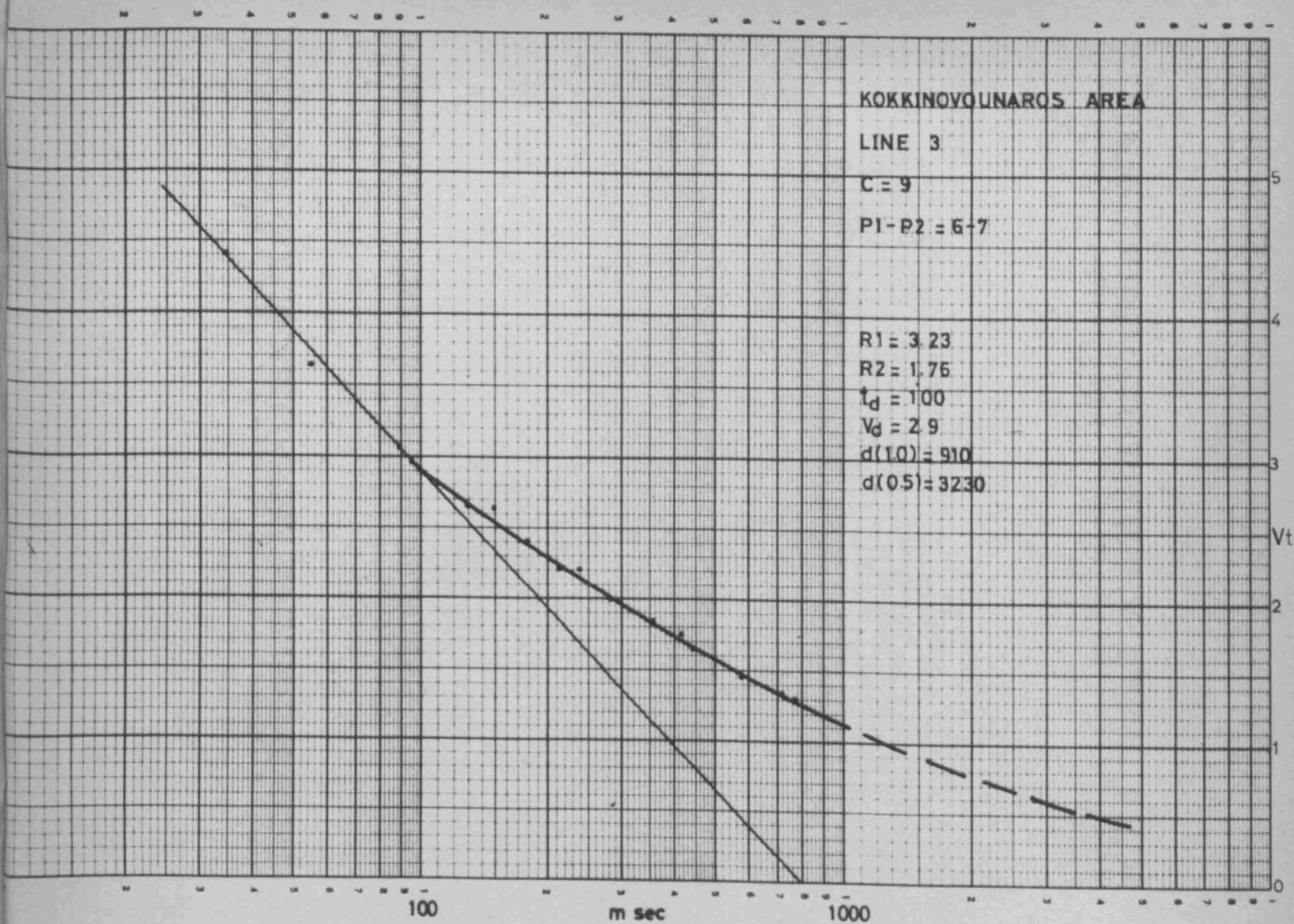
AMPLES OF $\log_e t$ PLOTTED TRANSIENTS FROM THE KOKKINOVOUNAROS AND VRECHIA AREAS

TABLE 81

TABLE SUMMARIZING THE $\text{LOG}_e T$ DECAY FACTORS
OBTAINED IN THE DIFFERENT AREAS

	MATHIATIS WESTERN MINERALIZ.	KLIROU SOUTHERN MINERALIZ.	VRECHIA MAIN MINERALIZ.	KOKKINO- VOUNAROS MINERALIZ.	MATHIATIS EASTERN MINERALIZ.	KLIROU 1-5 % S	VRECHIA EASTERN	KLIROU < 1 %	MATHIATIS BARREN	KLIROU BARREN	KOKKINO- VOUNAROS BARREN	VRECHIA BARREN
R1	1.5 - 2.0	2.28 - 3.6	3.1 - 3.4	2.0 - 3.0	2.9	3.1 - 5.3	2.7 - 3.5	2.2 - 2.45	1.5	1.20 - 1.45	< 2.0	1.2 - 1.8
R2	1.0	1.79 - 2.68	2.5 - 2.75	1.0 - 2.0	1.5	2.1 - 4.15	1.9 - 2.6	1.4 - 2.1	0.5	0.5 - 0.9	< 1.0	0.9 - 1.6
R1/R2	< 2.0	1.27 - 1.34	1.14 - 1.13	< 2.0	< 2.0	1.2 - 1.5	1.28 - 1.4	1.4 - 1.57	> 2.0	1.2 - 3.2	> 2.0	1.2 - 1.35
V _d	2.25	2.9 - 4.5	4.2 - 4.6	3.5	3.8	3.3 - 7.5	3.4 - 4.5	1.9 - 3.2	1.5	0.7 - 1.0	2.0	1.6 - 2.4
d(0.5)	1900	2100 - 2400		2200 - 10400	6000	1900 - 3200		800 - 2000	< 300	30 - 630	600 - 2000	
d(1.0)	350	900 - 1300		800 - 2300	1500 - 2200	1200 - 2300		180 - 900	0 - 10	0 - 50	0 - 300	
d(1.5)	5 (Line 2)		600 - 700		320 (Line 2)		400 - 1400		0 (Line 2)			10 - 110
d(2.0)			230 - 330				130 - 400					0 - 30