

CAP 4.3  
(0128)  
(e)

REPUBLIQUE DU SENEGAL  
MINISTERE DU DEVELOPPEMENT RURAL

INSTITUT DE RECHERCHES  
AGRONOMIQUES TROPICALES ET DES CULTURES  
VIVRIERES

COMPTE RENDU DE L'ETUDE DES "SOL GRIS"  
DE CASAMANCE (Sénégal)  
Campagne 1972-1973  
par S. GUILLOBEZ

A N N E X E S : Figures et schémas

Octobre 1973

Centre National de Recherches Agronomiques  
BAMBEY







Centre National de Recherches Agronomiques  
BAMBACOUR

Octobre 1973

ANNEXES : Figures et schémas  
par S. GUILLOBEZ  
Campagne 1972-1973  
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CA 044.3  
(0128)  
(2)



Compte rendu de  
l'étude des "sols gris" de Casamance  
(Sénégal)

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16.	BALINGOR-FENDIMANE	BALINGOR-FENDIMANE
17.	DIOUROU	DIOUROU
18.	INOR	INOR
19.	KANDIADIOU	KANDIADIOU
20.	DIANA-BA	DIANA-BA
21.	KARCIA	KARCIA
22.	SARE-BAKARY	SARE-BAKARY
23.	SARE-MANSALY	SARE-MANSALY
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"	44 et 45.	INOR

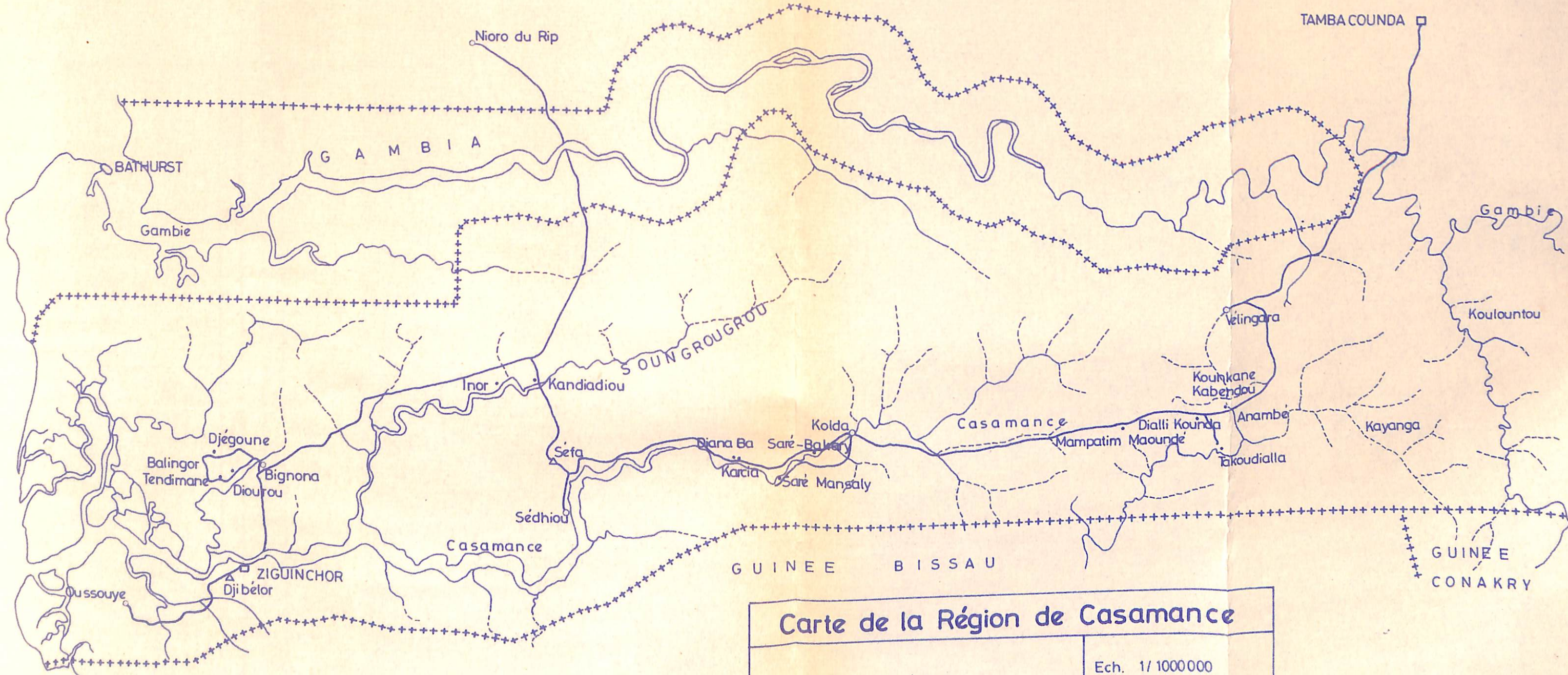


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" 48	:	" " " "	DIANA-BA
" 49	:	" " " "	KARCIA
" 50	:	" " " "	SARE-BAKARY
" 51	:	" " " "	SARE-MANSALY
" 52	:	" " " "	MAMPATIM-MAOUNDE
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" 107	:	" " " "	DIANA-BA
" 108	:	" " " "	KARCIA
" 109	:	" " " "	SARE-BAKARY
" 110	:	" " " "	SARE-MANSALY
" 111	:	" " " "	MAMPATIM-MAOUNDE
" 112	:	" " " "	DIALLI-KOUNDA
" 113	:	" " " "	TAKOUDIALLA
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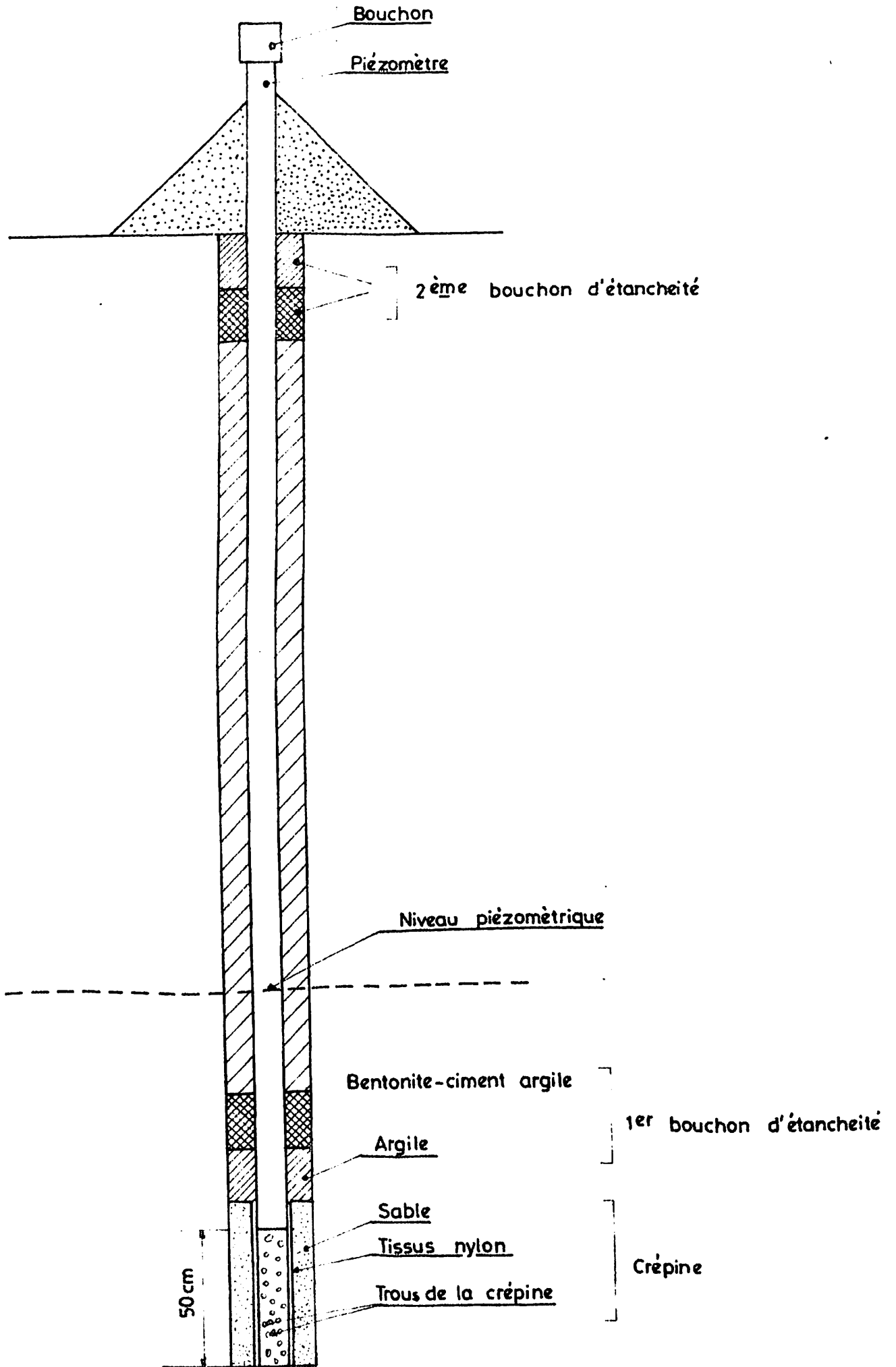




Carte de la Région de Casamance	
+++++	Limite d'Etats
-----	Marigots
————	Routes et pistes
□	Chef lieu de Région
○	Préfecture
△	Station I.R.A.T.
•	Toposéquence
Ech. 1/1000000	



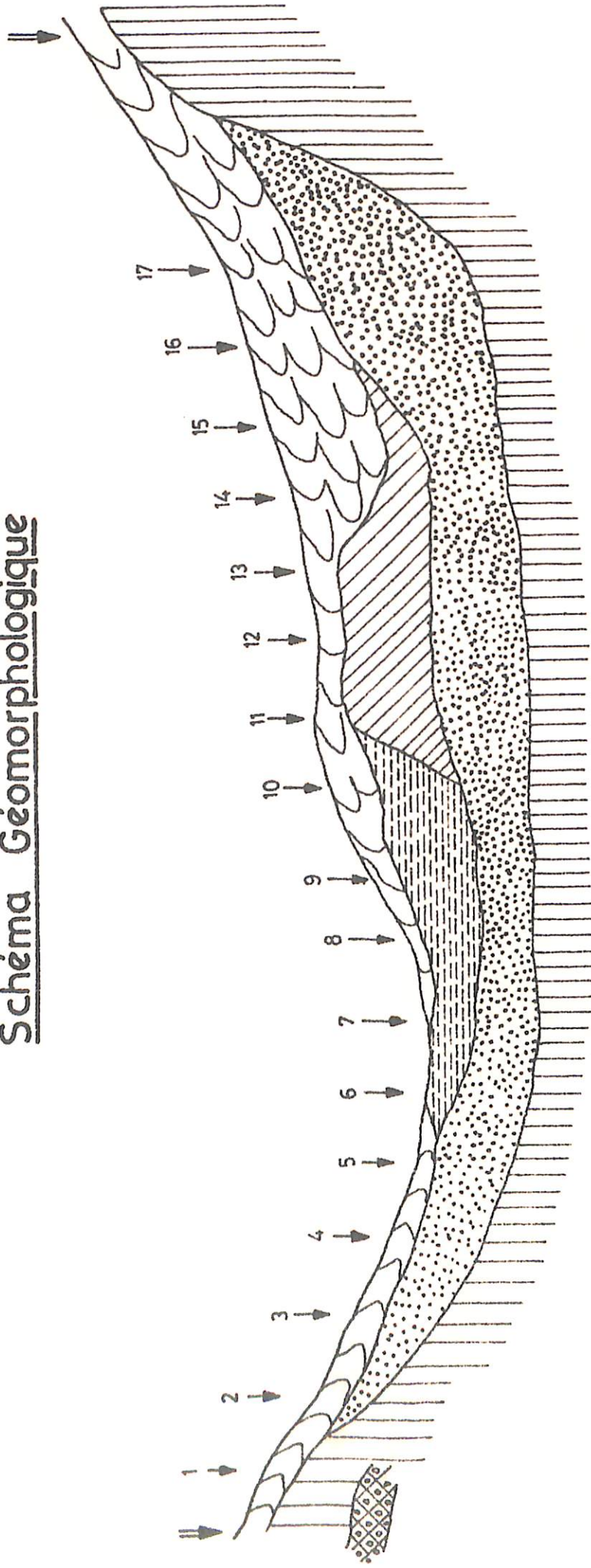
# Mode d'implantation des piézomètres











# DJEGOUNE

## Schéma Géomorphologique



### LEGENDE

-  Colluvion récent (sableux)
-  Nouakchottien récent (argileux)
-  Glacis terrasse ancien (limono-argileux)
-  Nouakchottien ancien (sableux)
-  Continental terminal
-  Cuirasse

L = 1/4.000

H = 1/100

ECH.

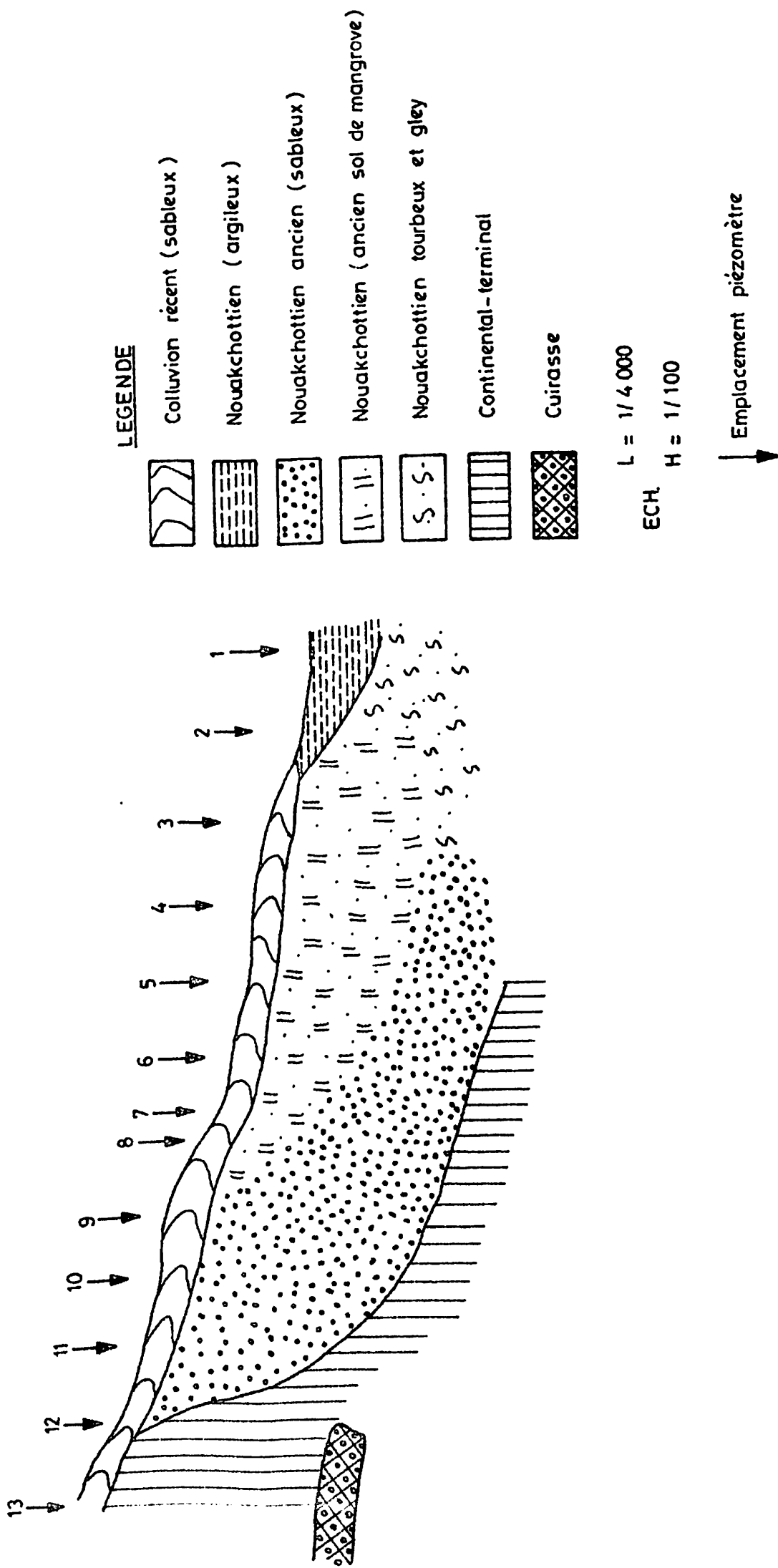
↓ Emplacement Piézomètre

⇓ Puits



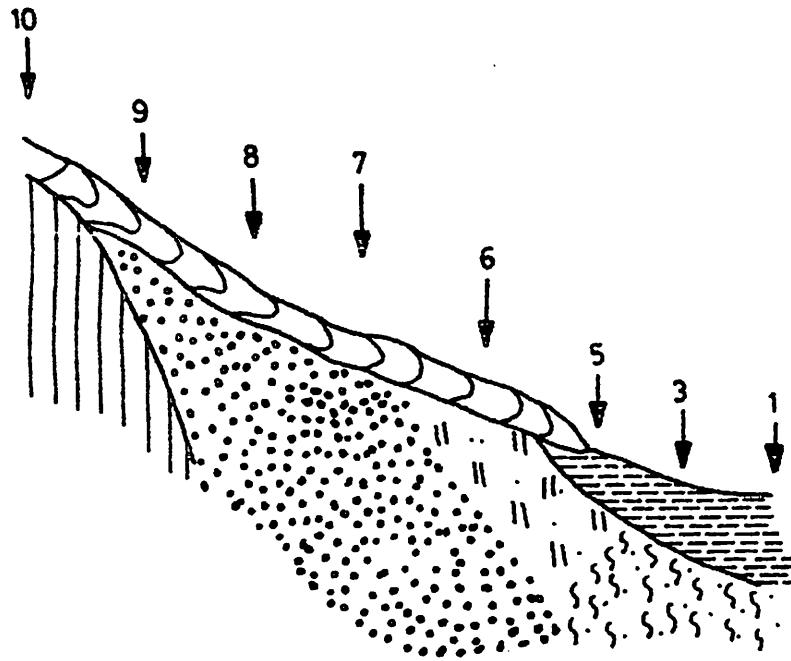
# BALINGOR - TENDIMANE

## Schéma Géomorphologique



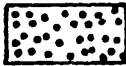
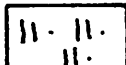
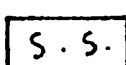



# DIOUROU

## Schéma Géomorphologique



### LEGENDE

-  Colluvion récent
-  Nouakchottien récent (argileux et sale)
-  Nouakchottien ancien (sableux)
-  Nouakchottien (ancien sol de mangrove)
-  Nouakchottien (gley, tourbe, très salé)
-  Continental-terminal

L = 1/4000

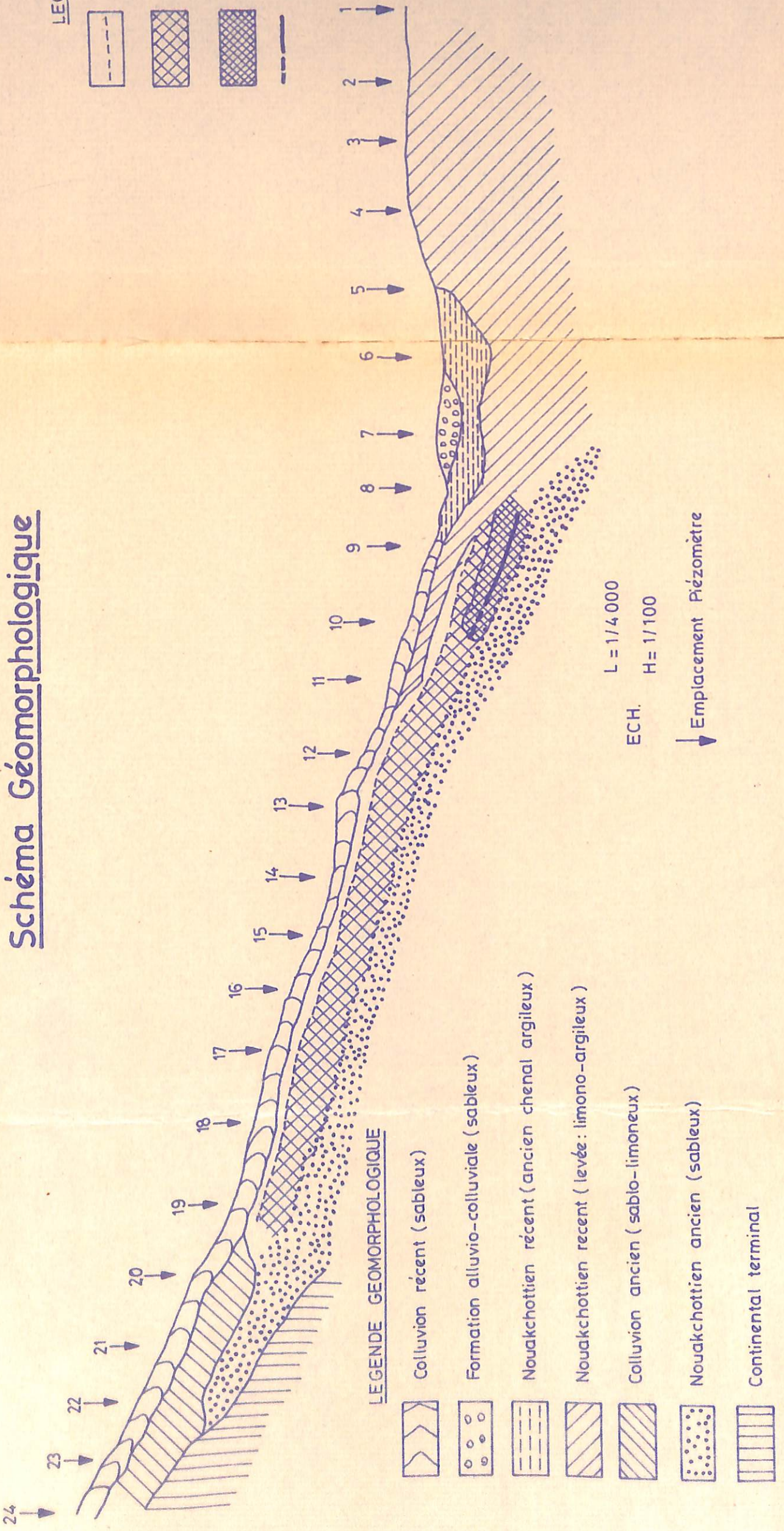
ECH.

H = 1/100

 Emplacement piézomètre



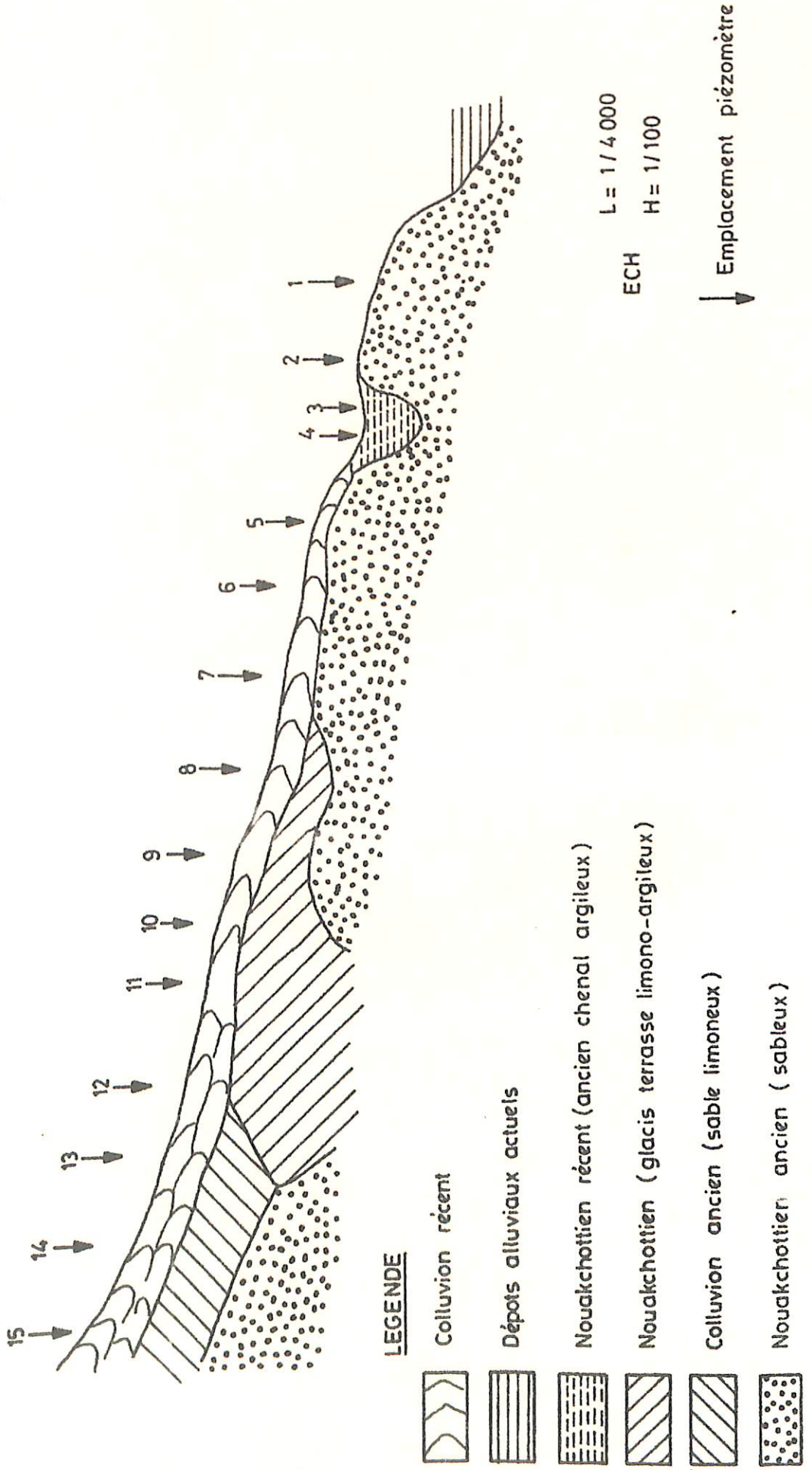
Schéma Géomorphologique





KARCIA

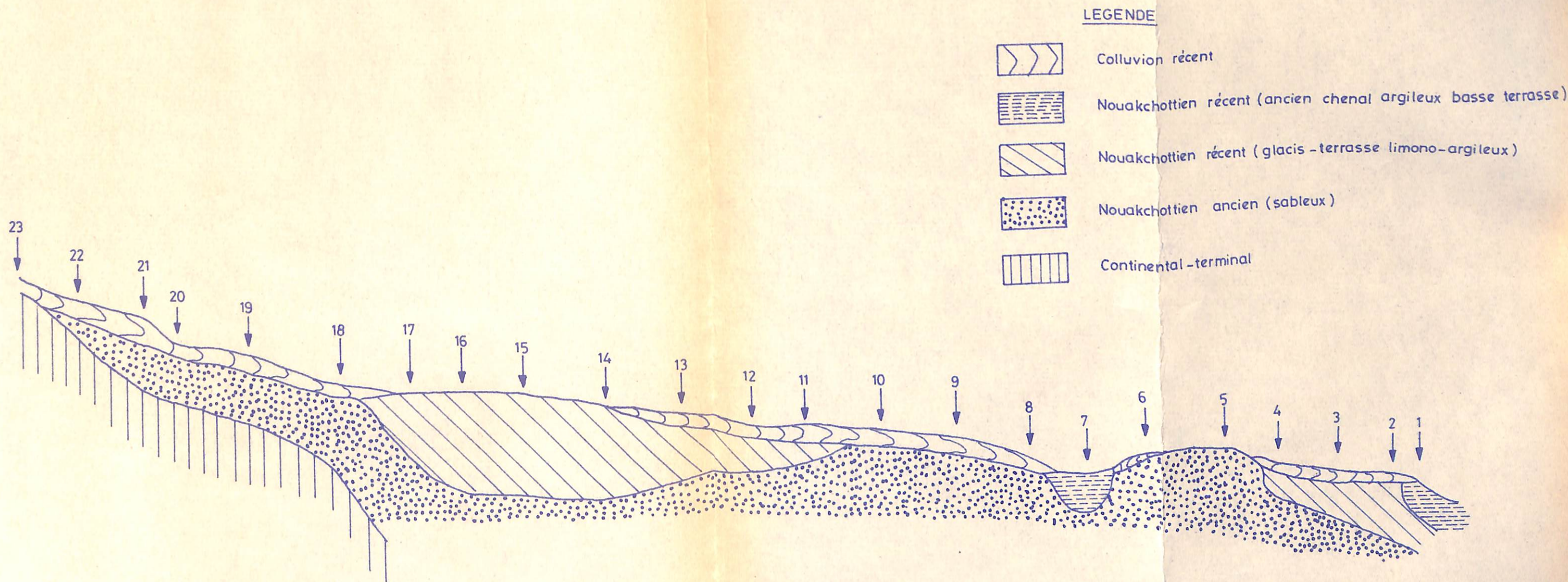
Schéma Géomorphologique










# SARE BAKARY

## Schéma Géomorphologique



### LEGENDE

-  Colluvion récent
-  Nouakchottien récent (ancien chenal argileux basse terrasse)
-  Nouakchottien récent (glacis -terrasse limono-argileux)
-  Nouakchottien ancien (sableux)
-  Continental-terminal

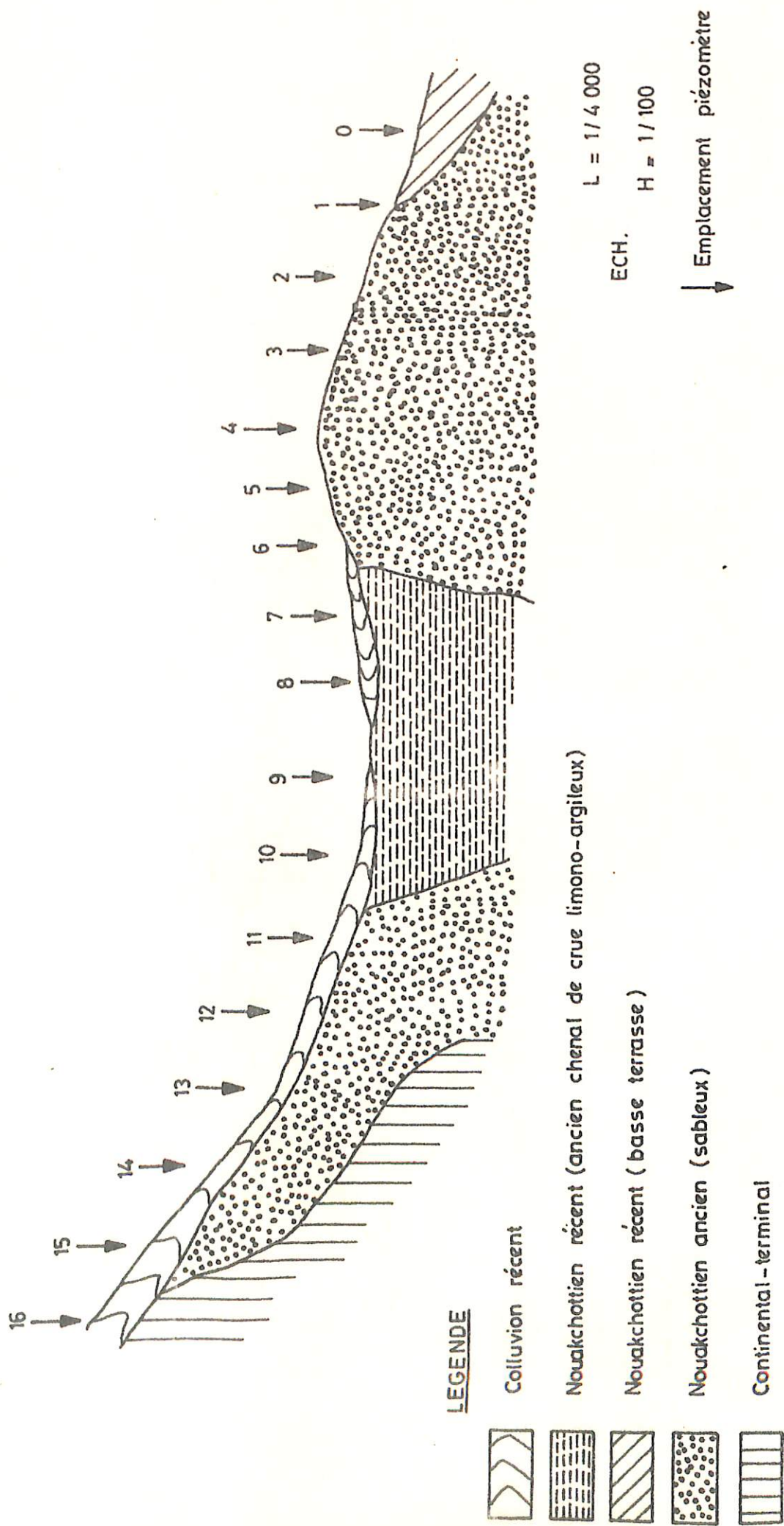
ECH. L = 1/4000  
H = 1/100

↓ Emplacement piézomètre



SARE MANSALY

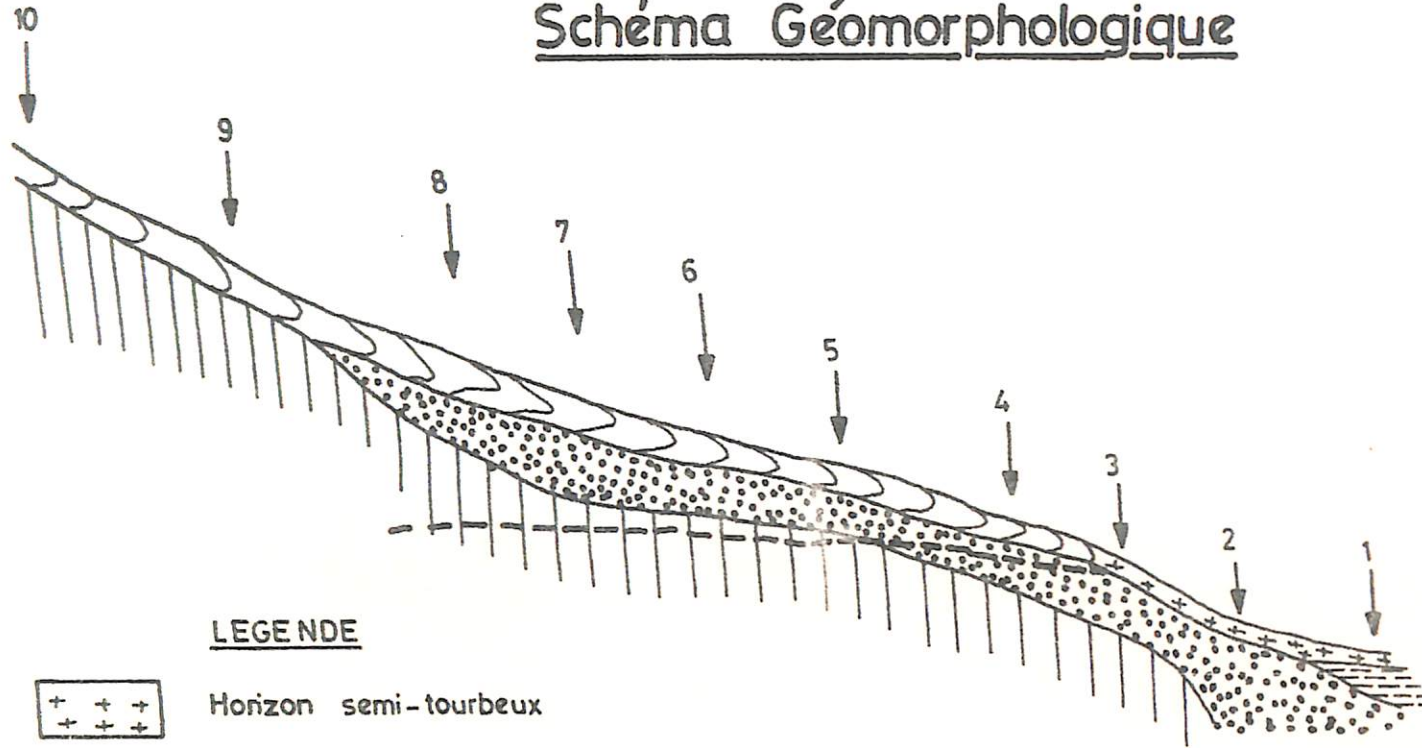
Schéma Géomorphologique



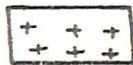







# MAMPATIM MAOUNDE

## Schéma Géomorphologique



LEGENDE

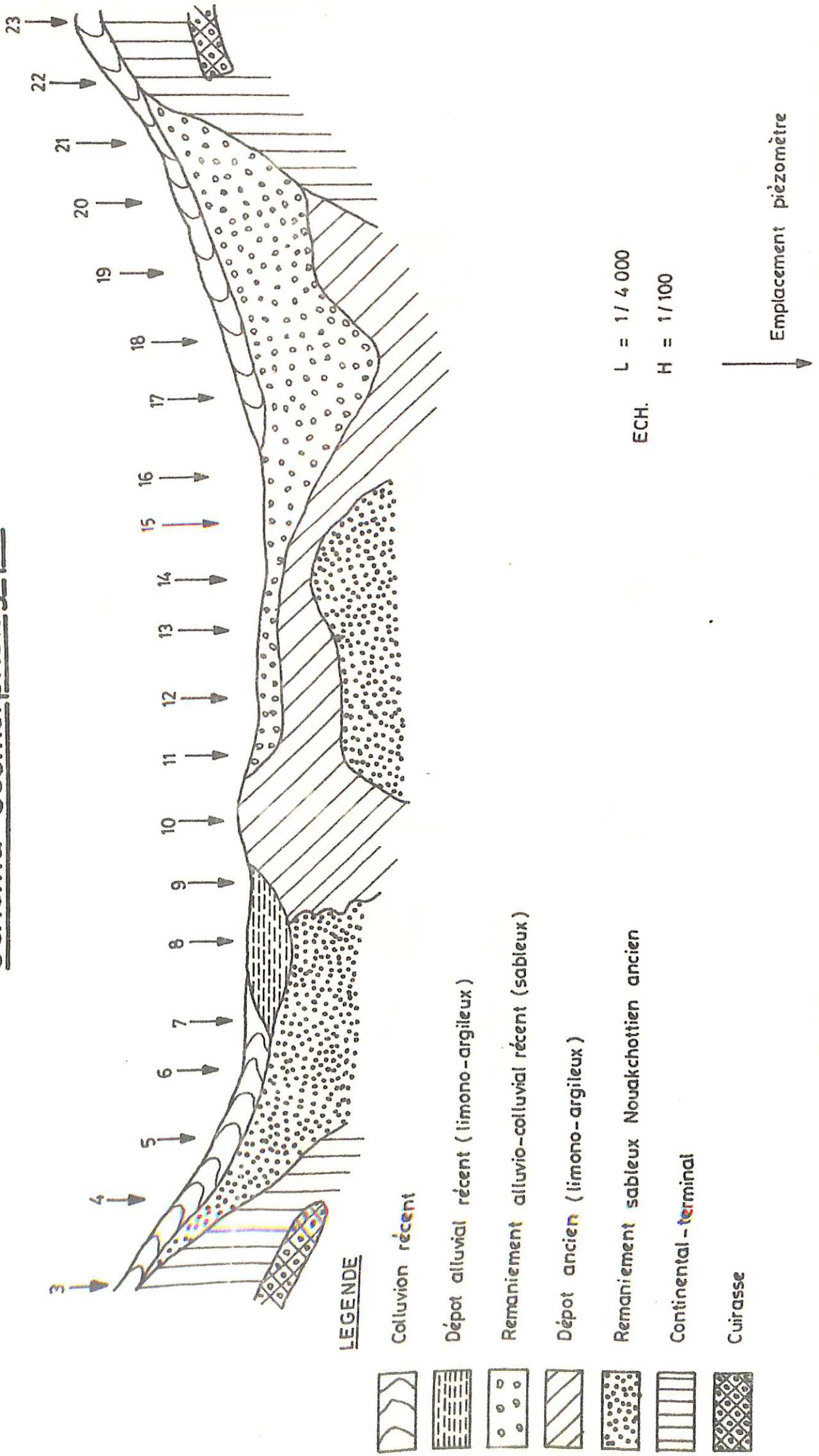
-  Horizon semi-tourbeux
-  Colluvion récent
-  Dépôt alluvio-colluvial récent (sablo-argileux)
-  Remaniement sableux, Nouakchottien ancien
-  Continental-terminal
-  Limite supérieure horizon de gley

L = 1 / 4 000  
 ECH  
 H = 1 / 100

↓ Emplacement piézomètre

DIALLI-KOUNDA

Schéma Géomorphologique








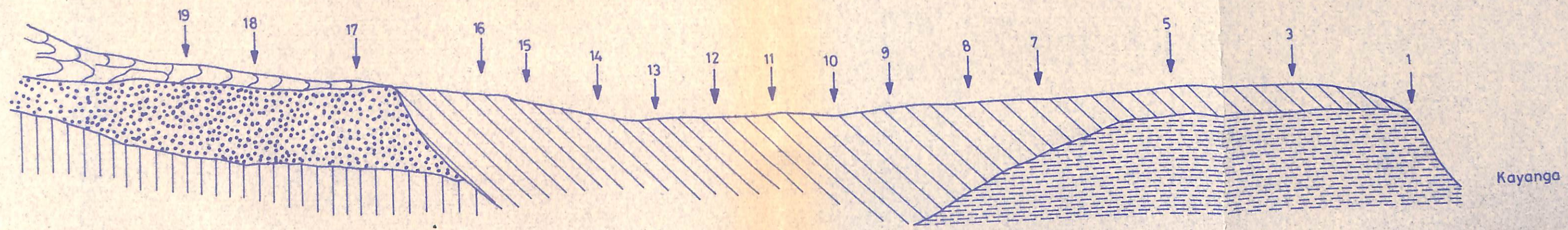


# TAKOUDIALLA

## Schéma Géomorphologique

### LEGENDE

-  Colluvion récent
-  Dépôt limono-argileux récent
-  Bourrelet de berge argileux ancien
-  Colluvion sableux ancien
-  Continental terminal



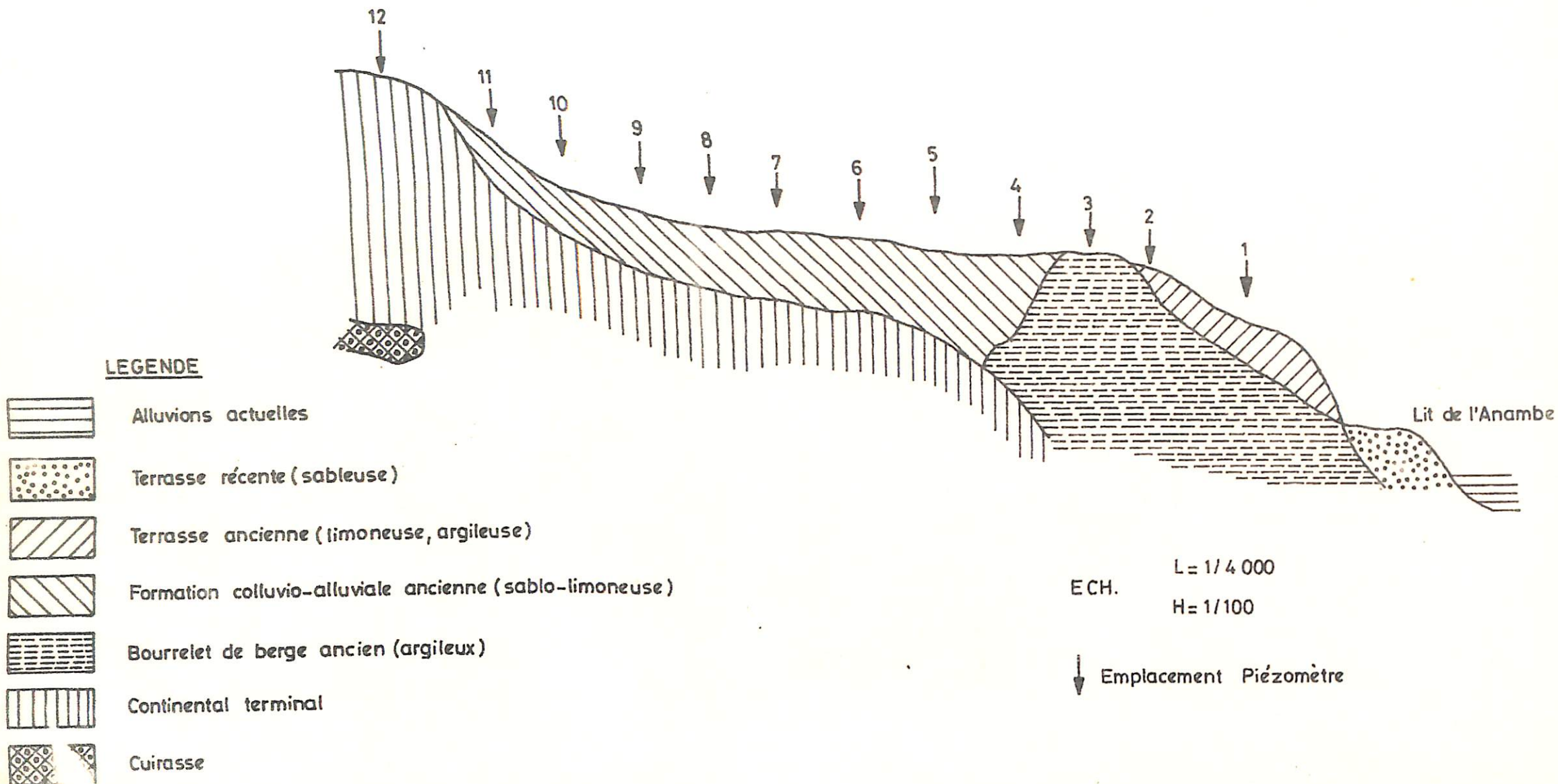
ECH L = 1/4 000  
H = 1/100

↓ Emplacement piézomètre



# KABENDOU KOUNKANE

## Schéma Géomorphologique

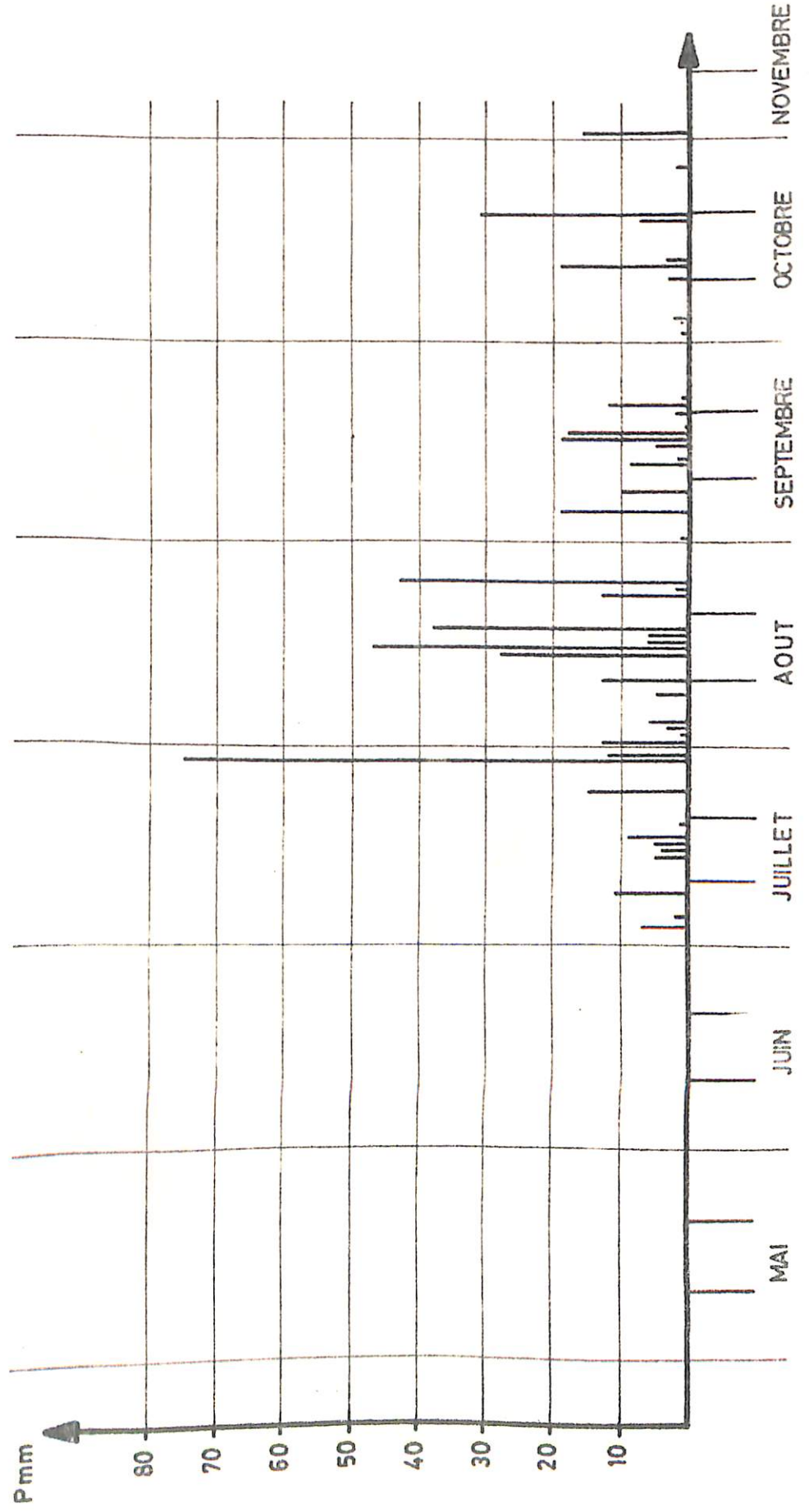






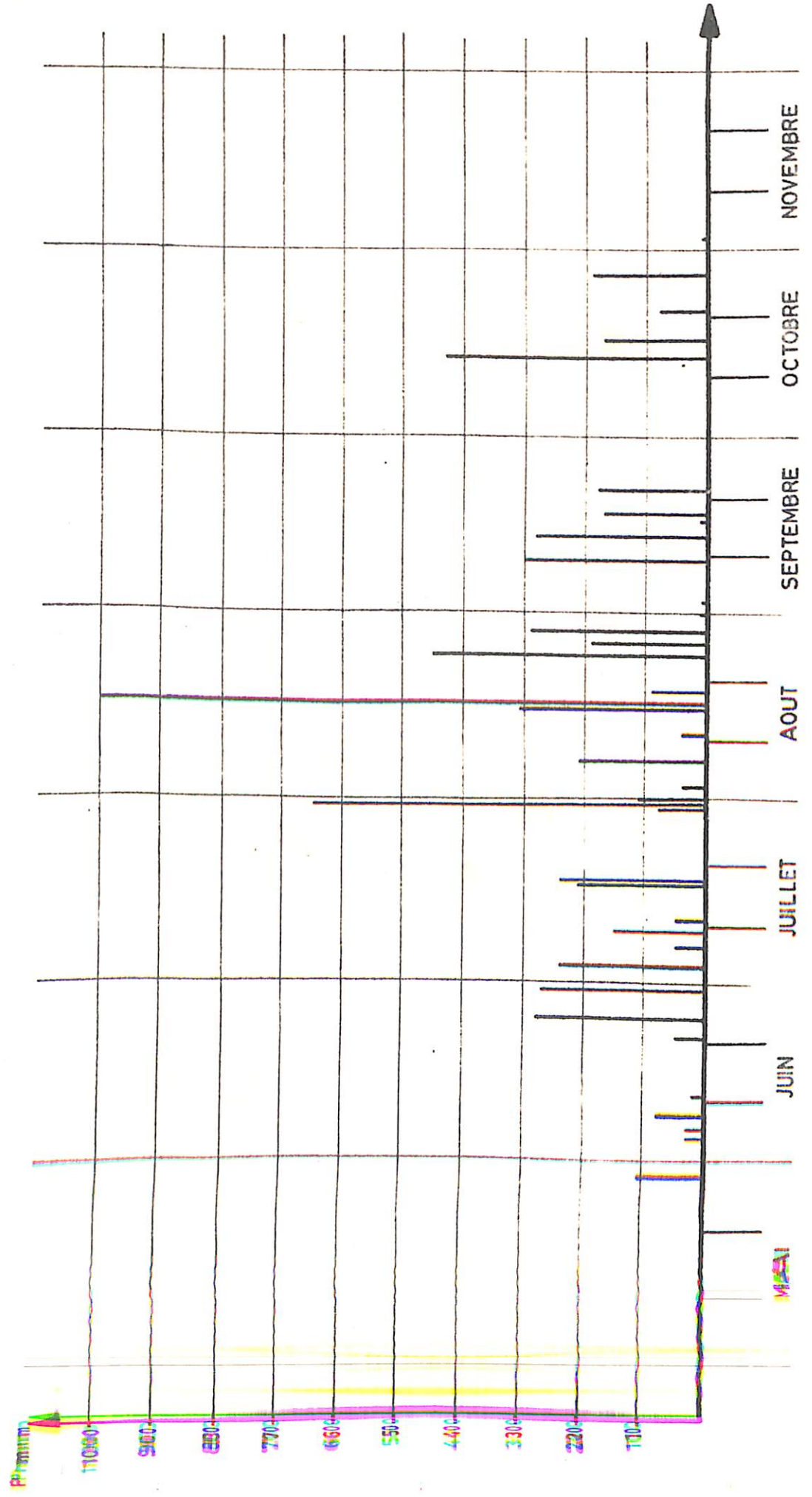
PLUVIOMETRIE JOURNALIERE A DIOUROU 1972

Total des pluies : 595mm



# PLUVIOMETRIE JOURNALIERE A INOR 1972

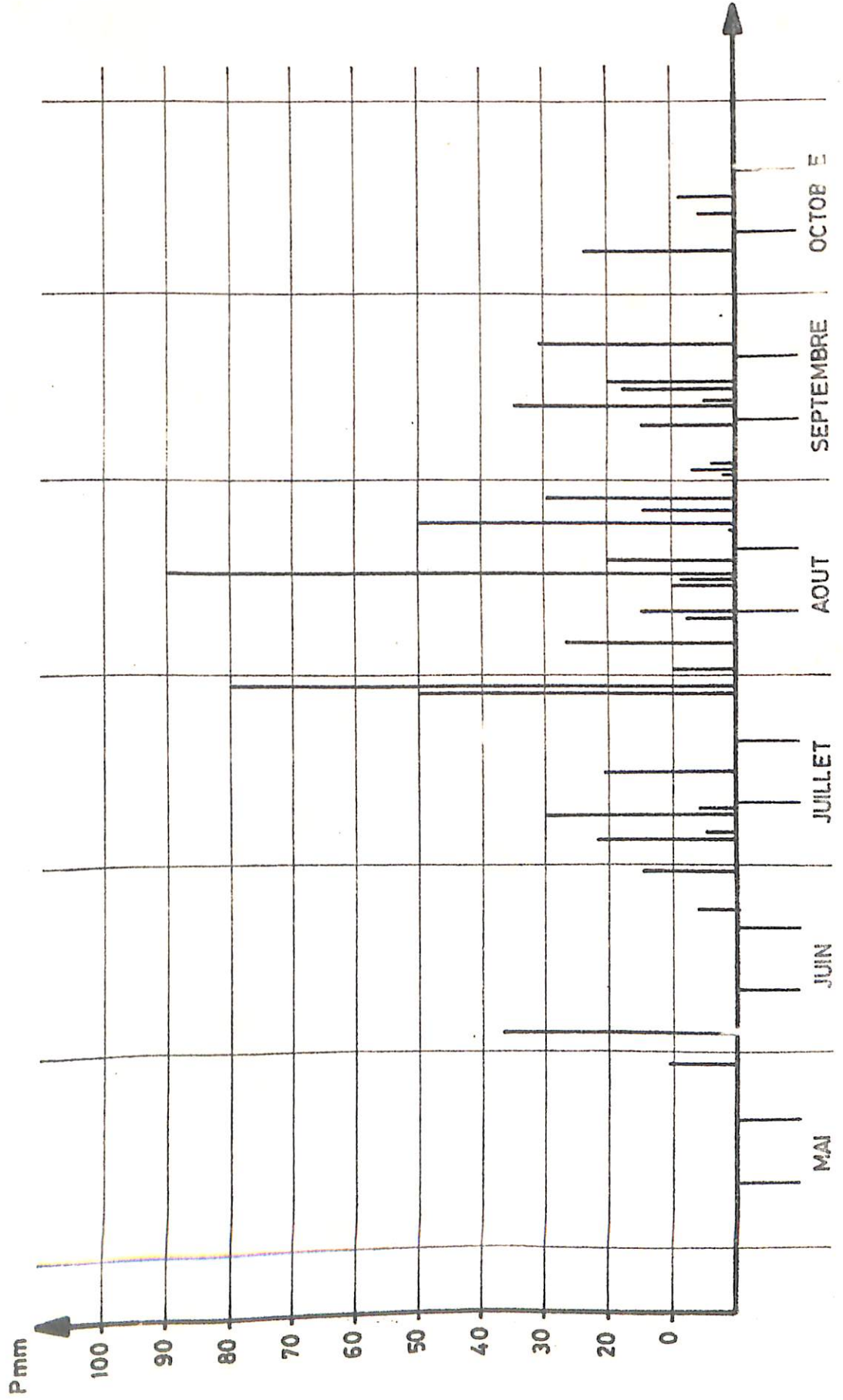
Total des pluies : 709mm





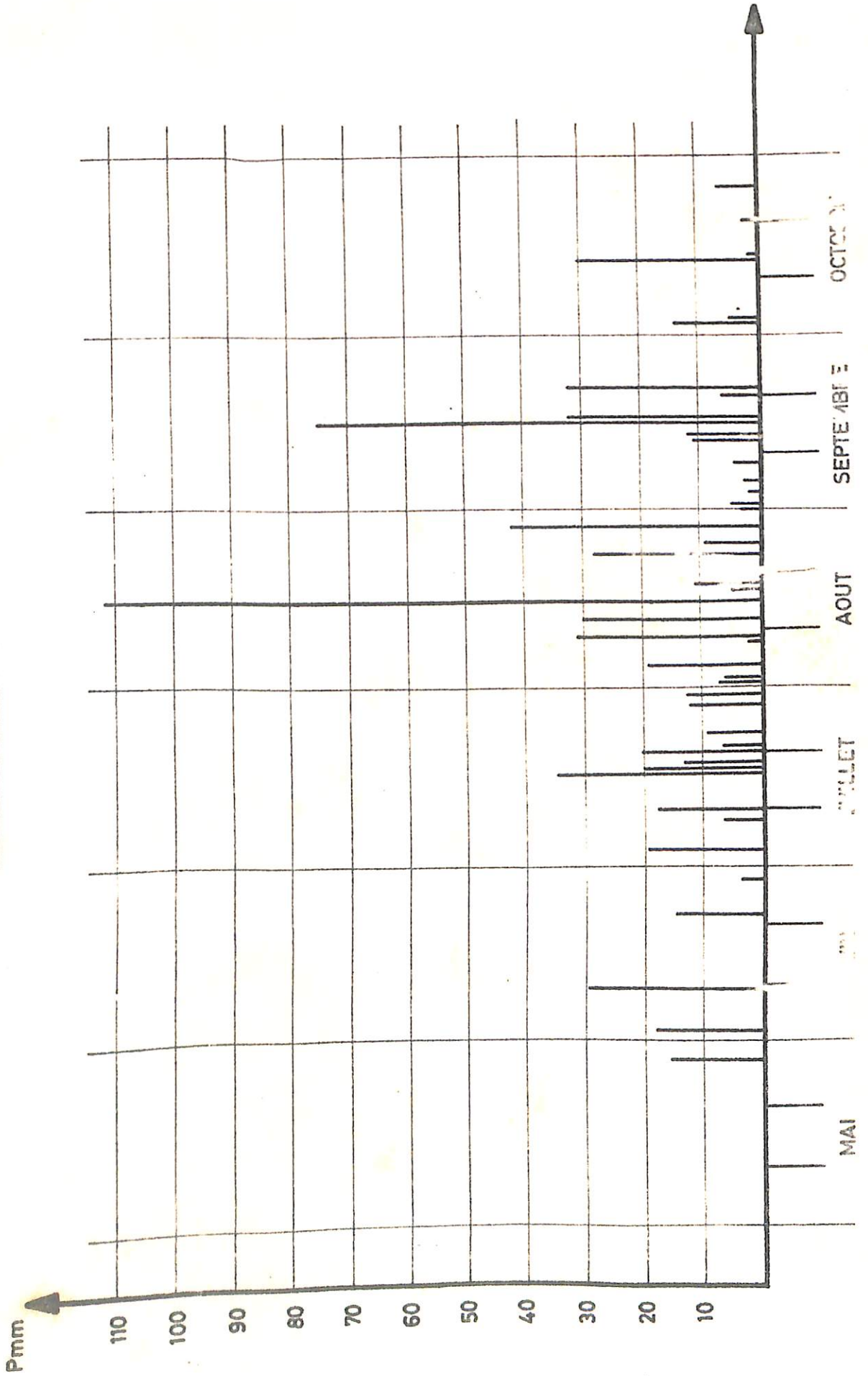
PLUVIOMETRIE JOURNALIERE A KANDIADIOU 1972

Total des pluies: 789 mm



PLUVIOMETRIE JOURNALIERE A DIANA-BA 1972

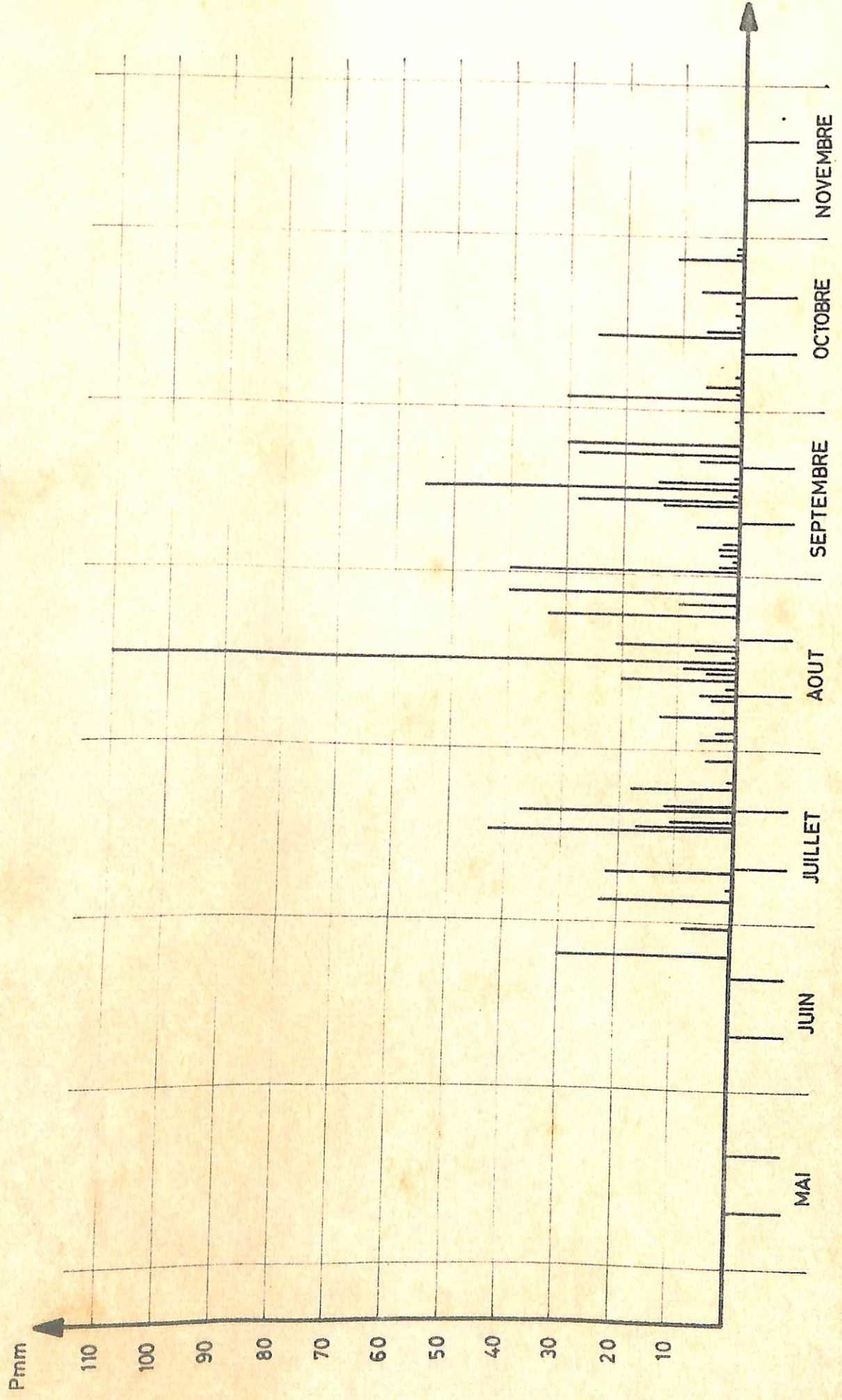
Total des pluies : 822mm





PLUVIOMETRIE JOURNALIERE A KARCIA 1972

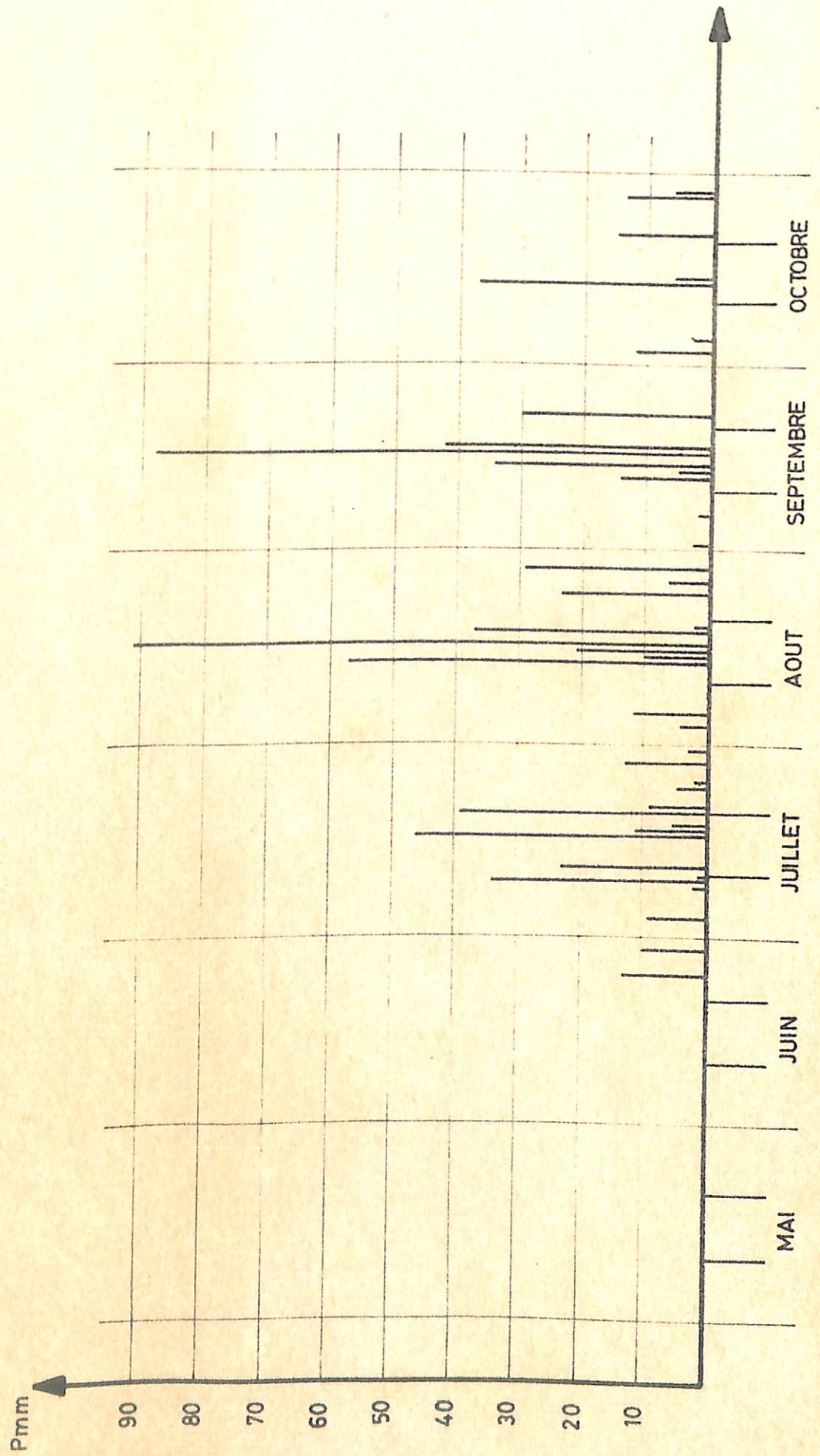
Total des pluies : 863mm





PLUVIOMETRIE JOURNALIERE A SARE BAKARY 1972

Total des pluies 838mm







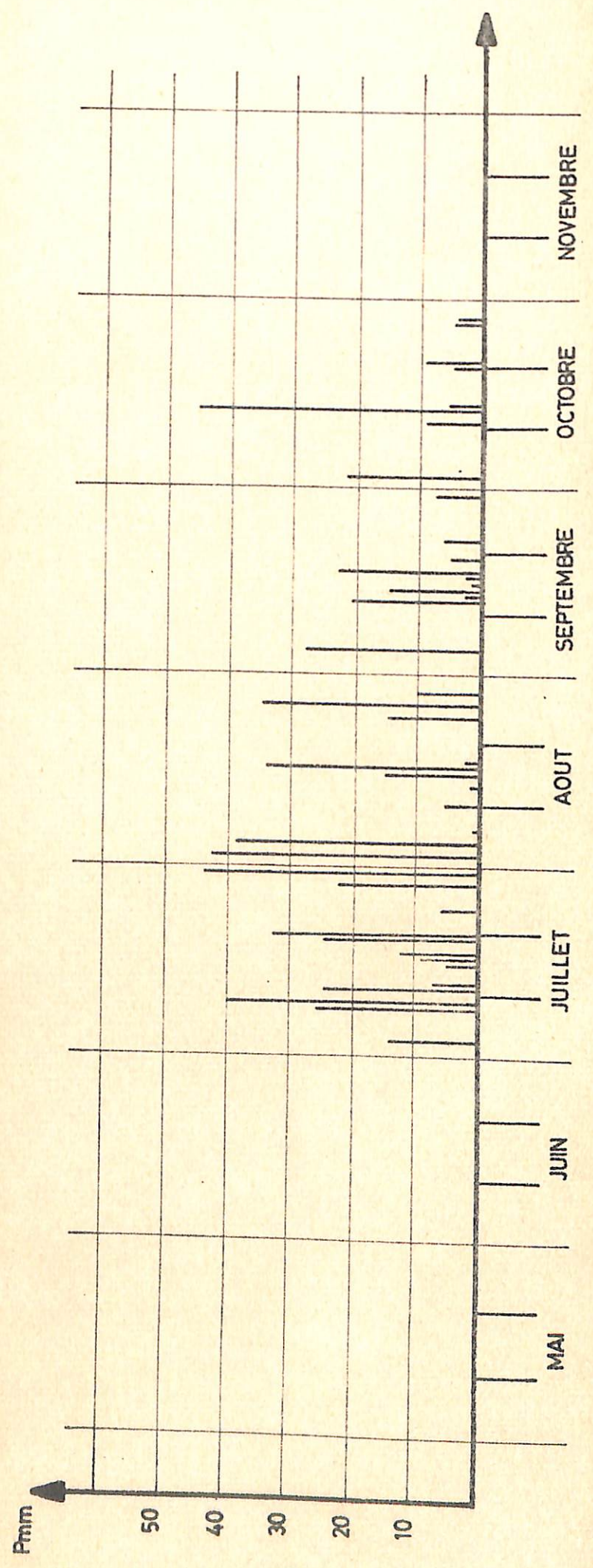






PLUVIOMETRIE JOURNALIERE A DIALLI-KOUNDA 1972

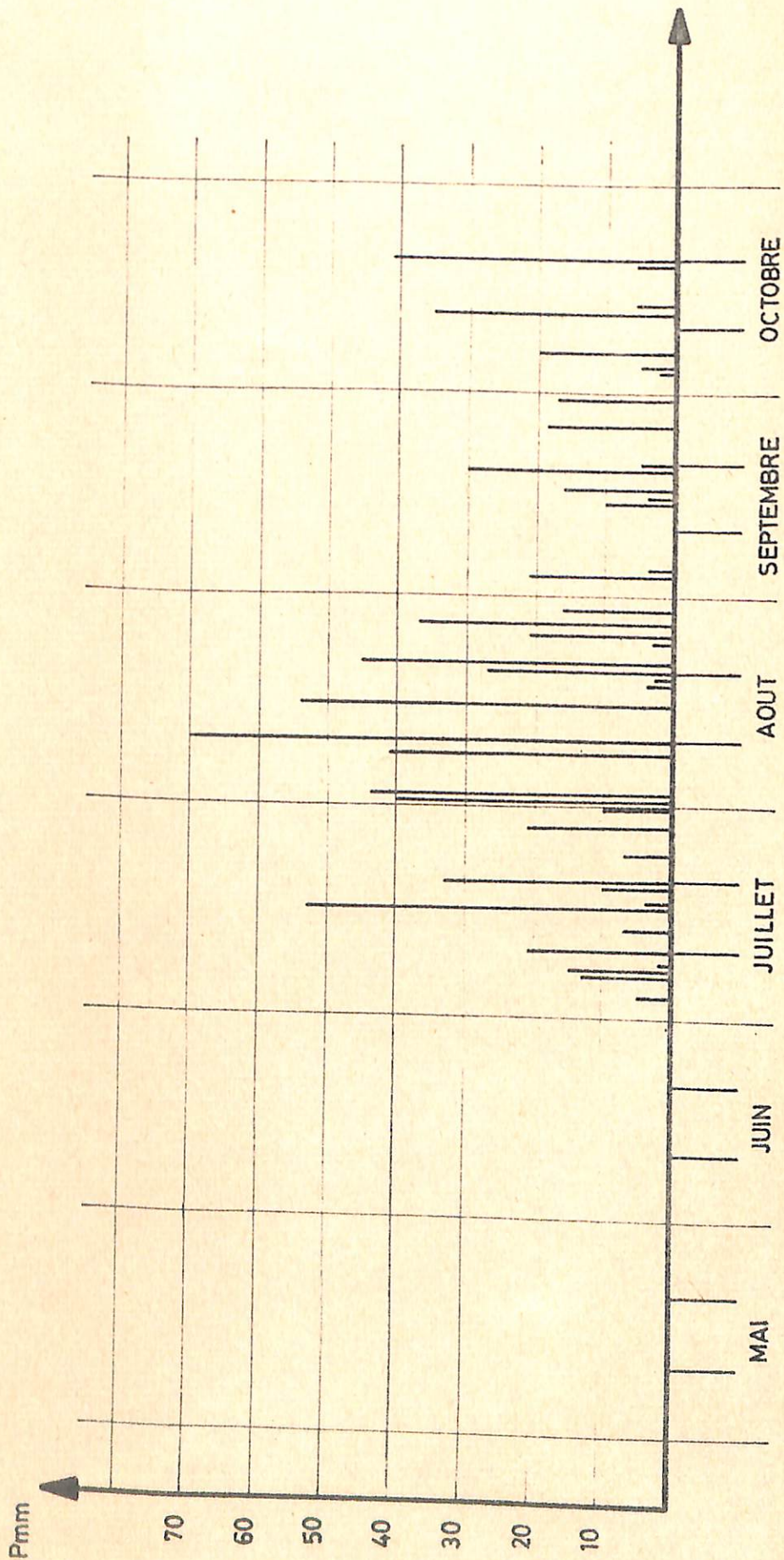
Total des pluies: 694 mm





PLUVIOMETRIE JOURNALIERE A TAKOU DIALLA 1972

Total des pluies : 849 mm







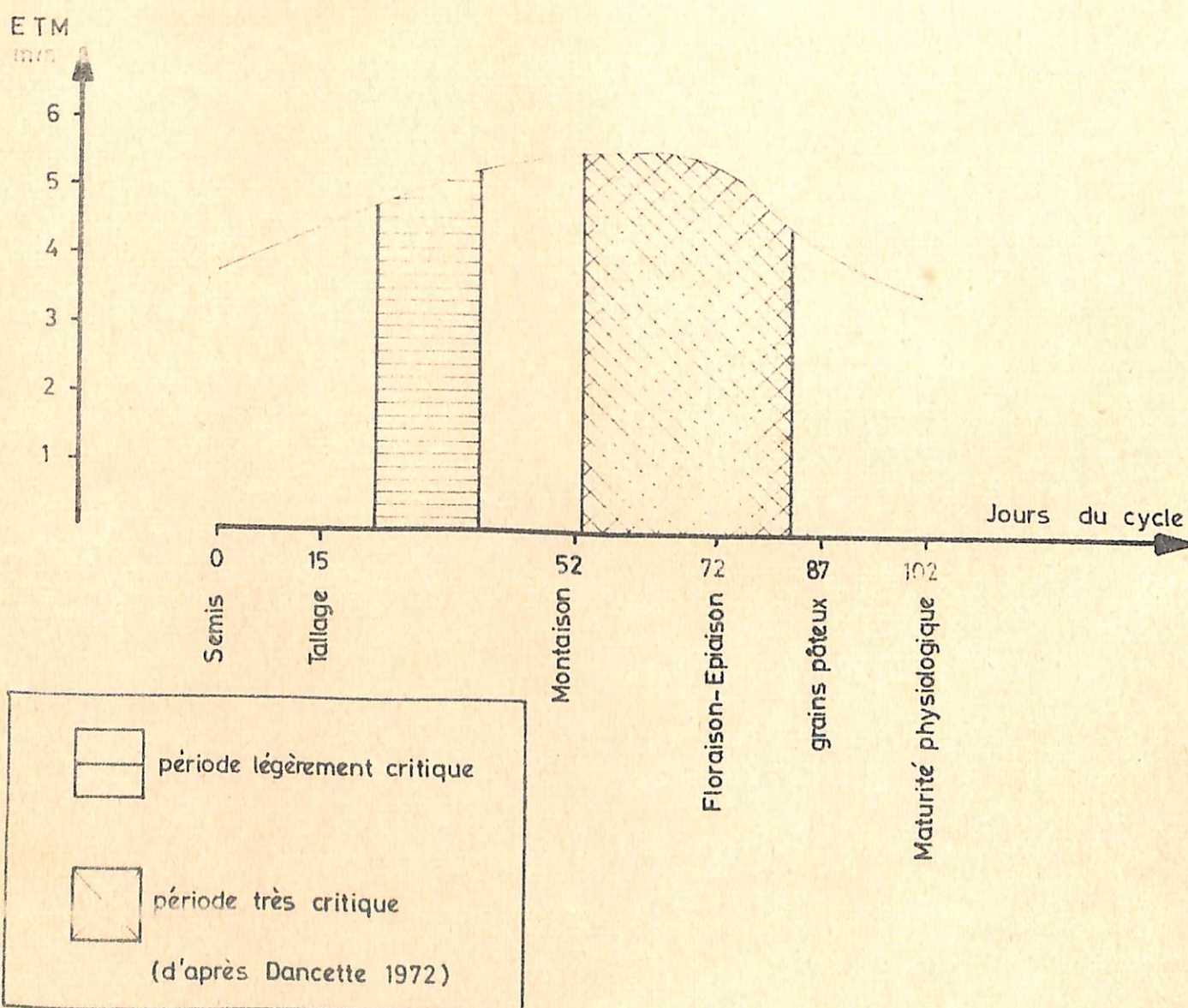


# EVAPOTRANSPIRATION MAXIMALE

## JOURNALIERE A KOLDA EN 1970

### DU RIZ I K P

( D'apres VINH )



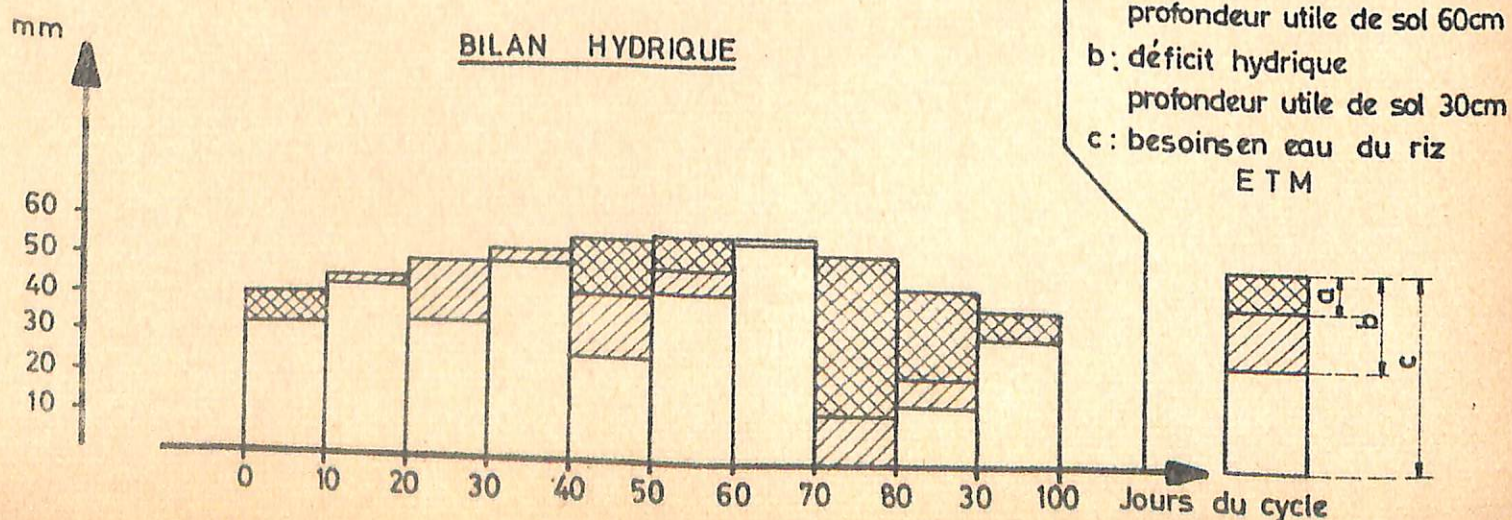
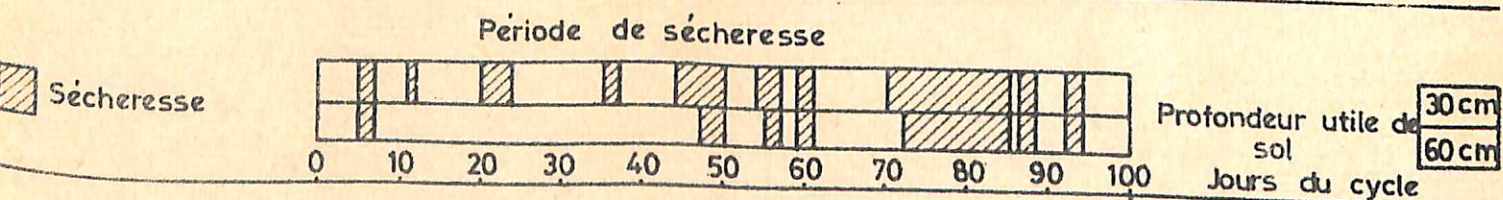
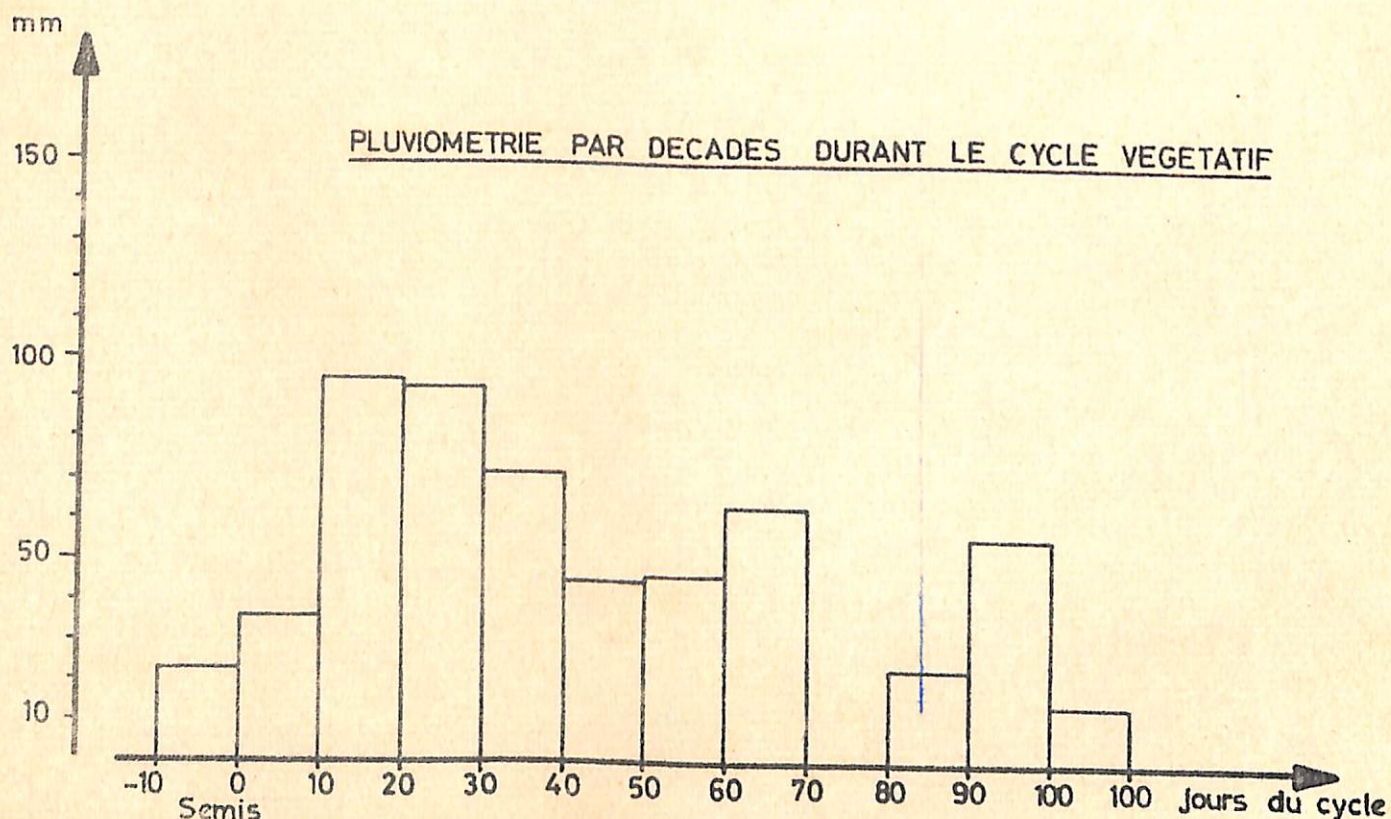


# ETUDE DES CONDITIONS PLUVIALES

FIG. : 16

## SUR L'ALIMENTATION EN EAU DU RIZ

### A BALINGOR-TENDIMANE 1972



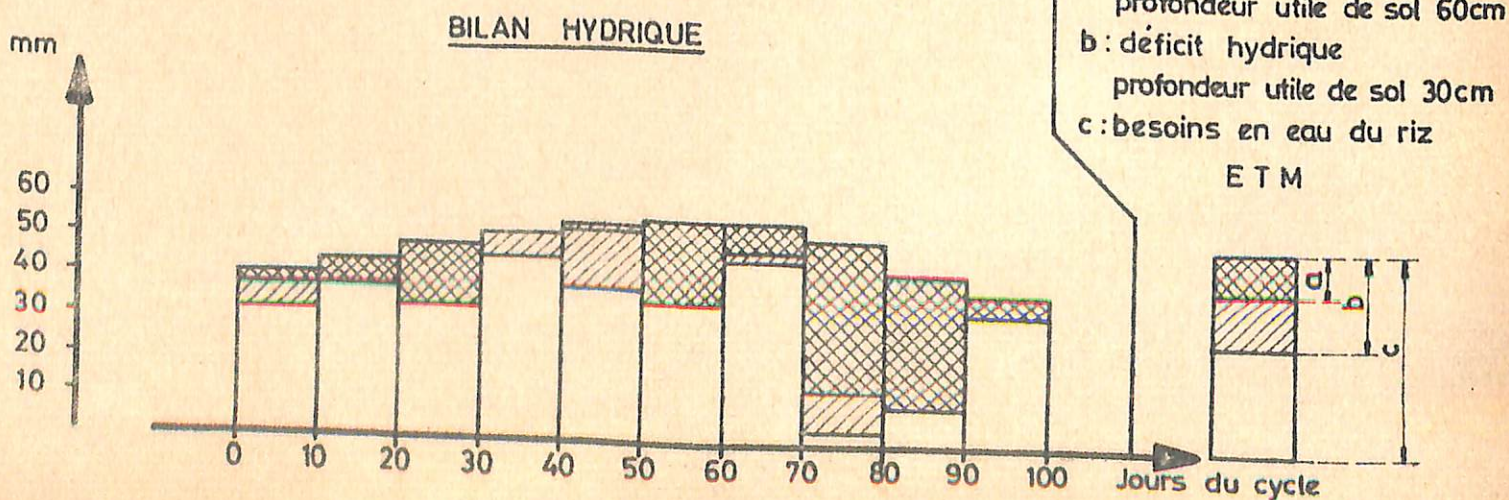
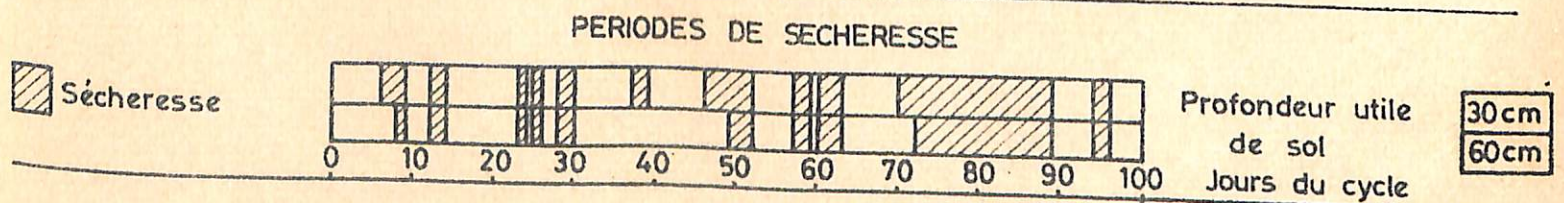
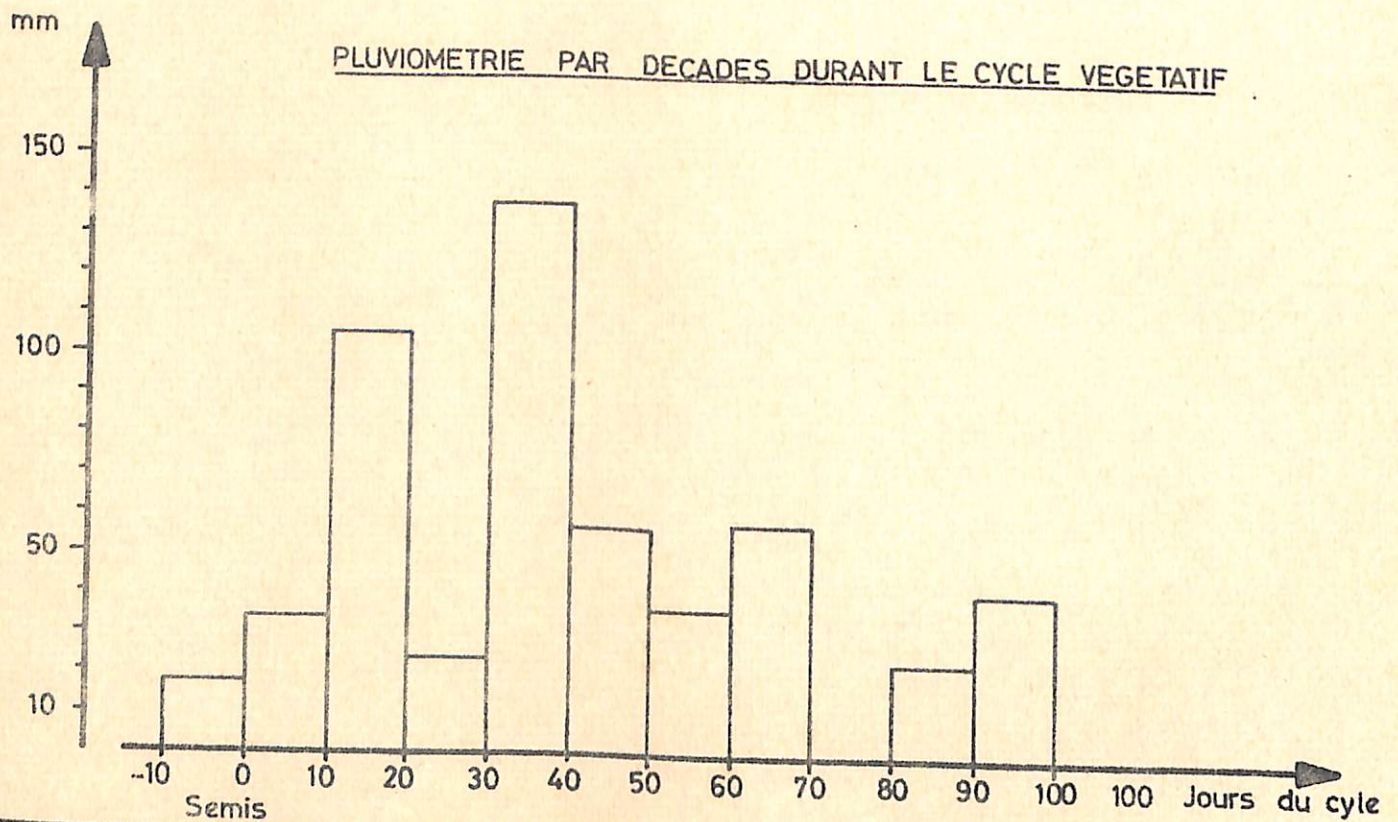


# ETUDE DES CONDITIONS PLUVIALES

FIG. : 17

## SUR L'ALIMENTATION EN EAU DU RIZ

### A DIOUROU 1972



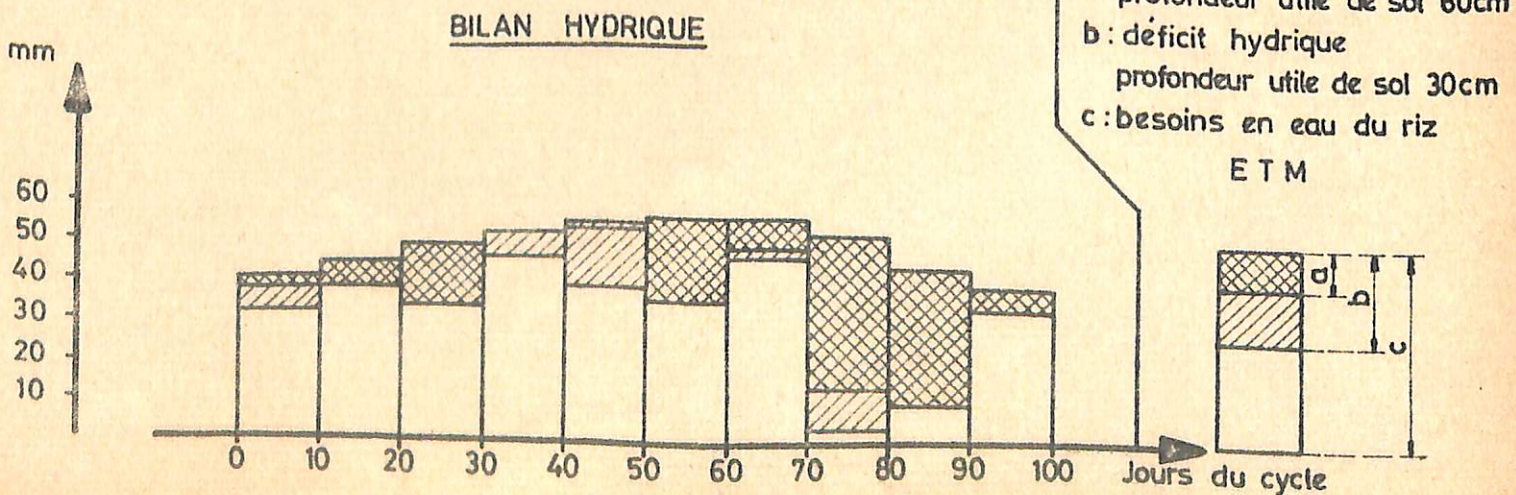
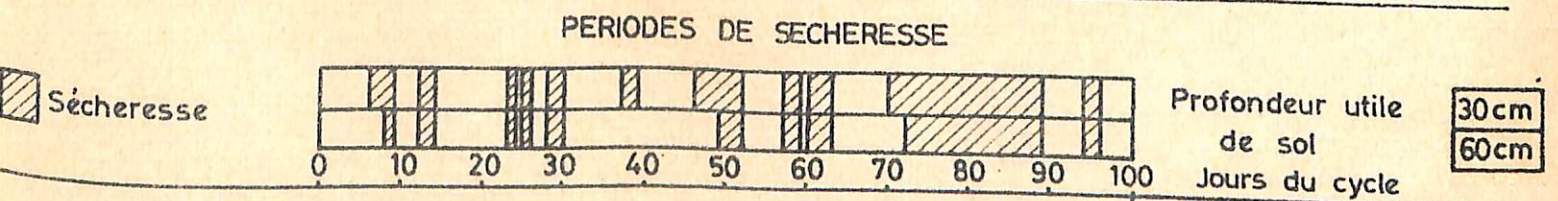
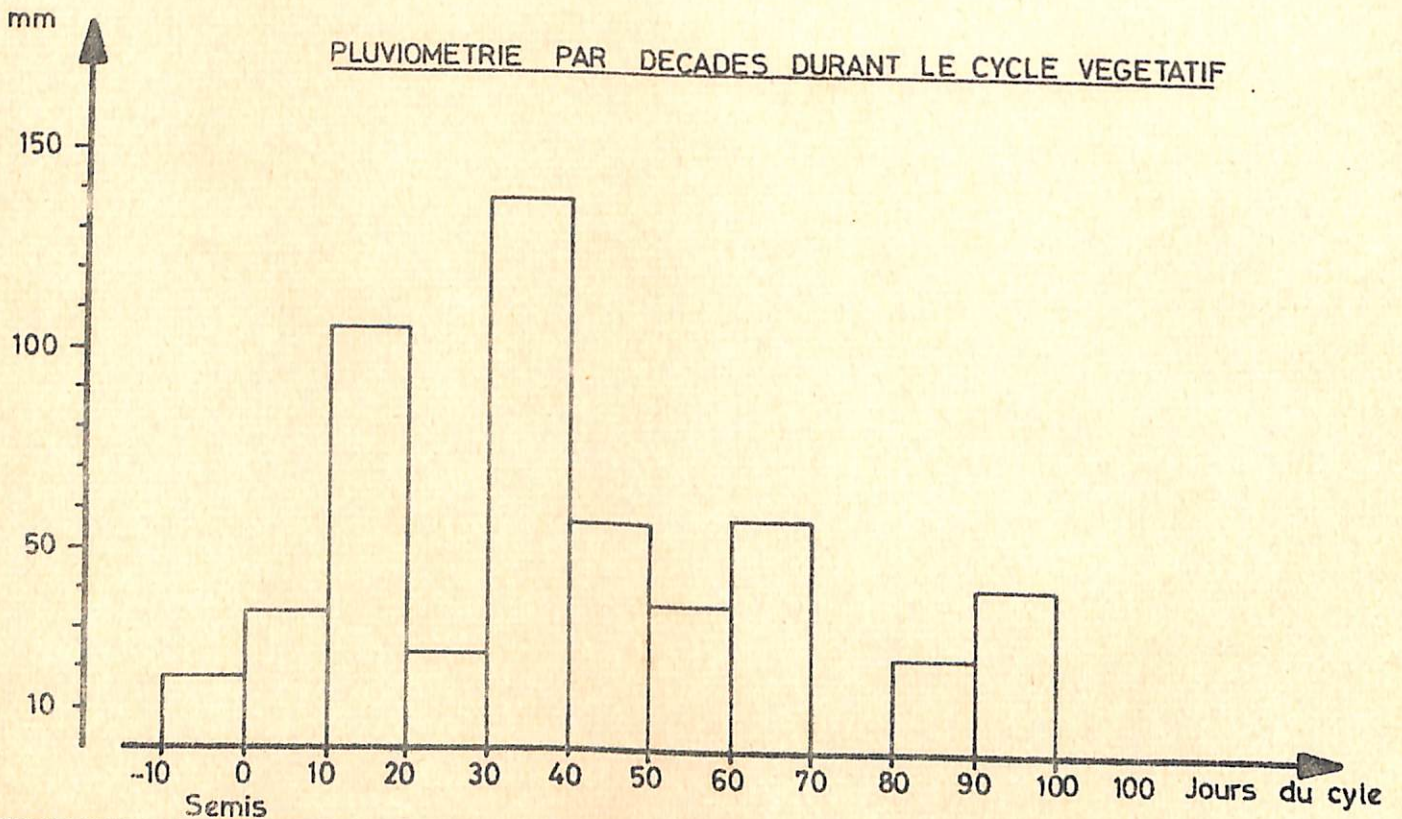


# ETUDE DES CONDITIONS PLUVIALES

FIG. : 17

## SUR L'ALIMENTATION EN EAU DU RIZ

### A DIOUROU 1972



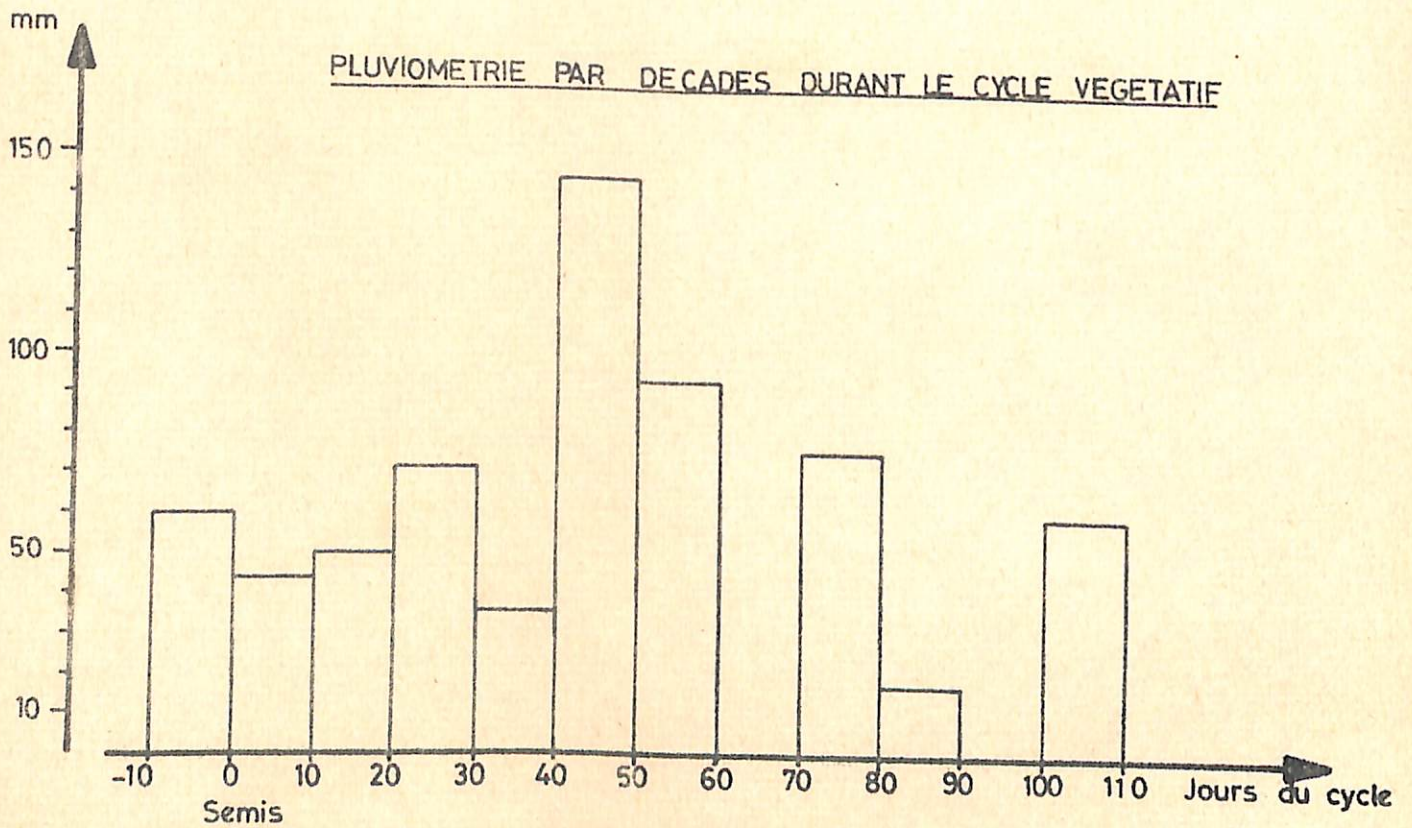


# ETUDE DES CONDITIONS PLUVIALES

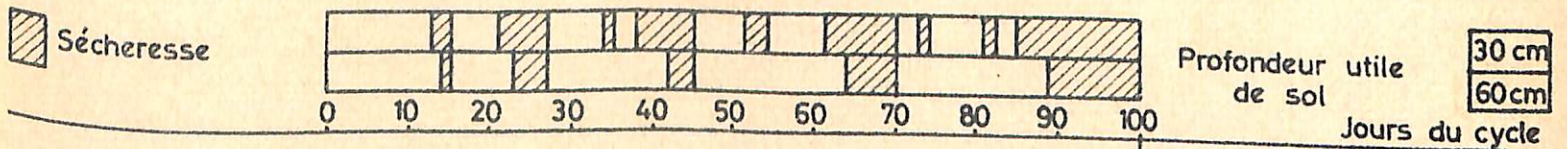
## SUR L'ALIMENTATION EN EAU DU RIZ

### A INOR 1972

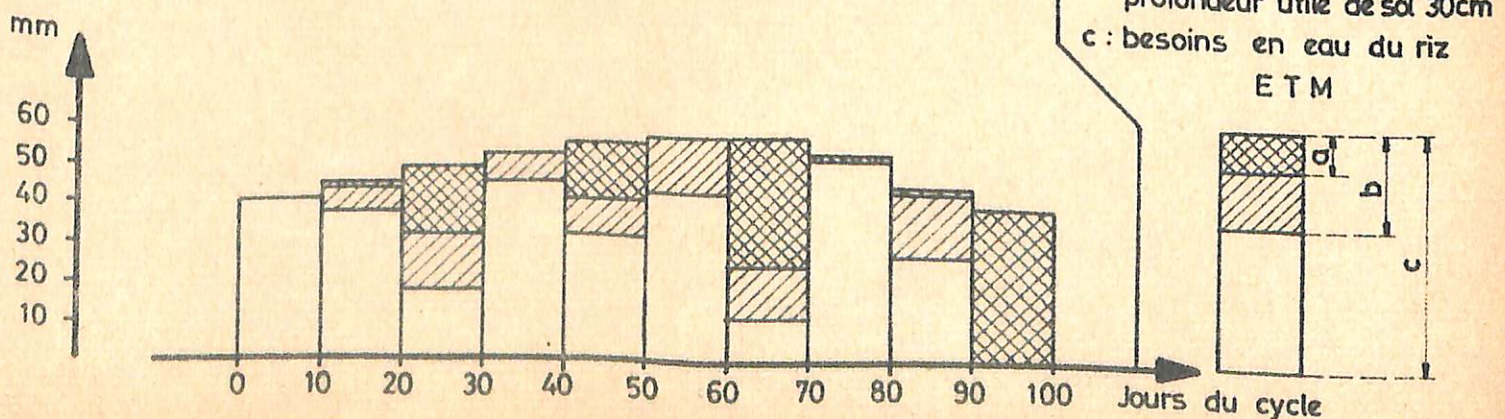
PLUVIOMETRIE PAR DECADES DURANT LE CYCLE VEGETATIF



Périodes de sécheresse



BILAN HYDRIQUE

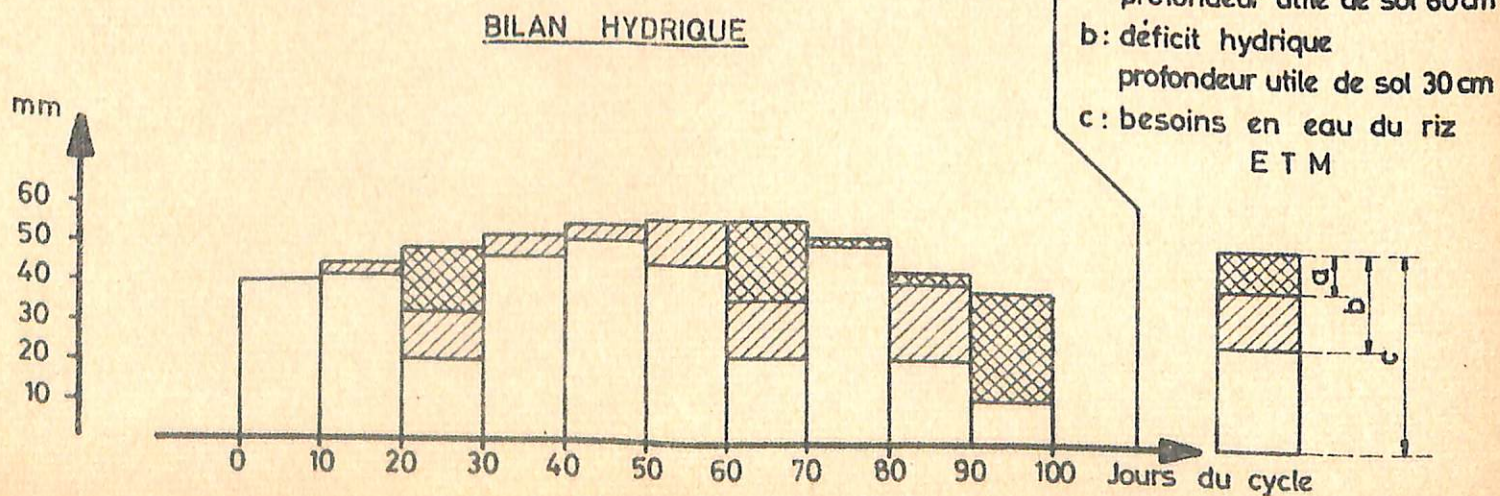
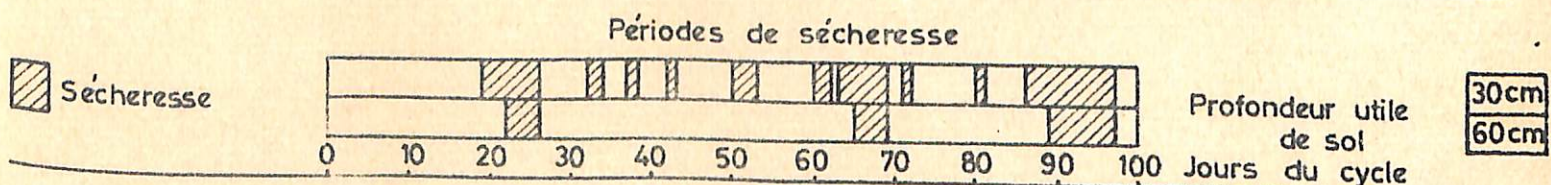
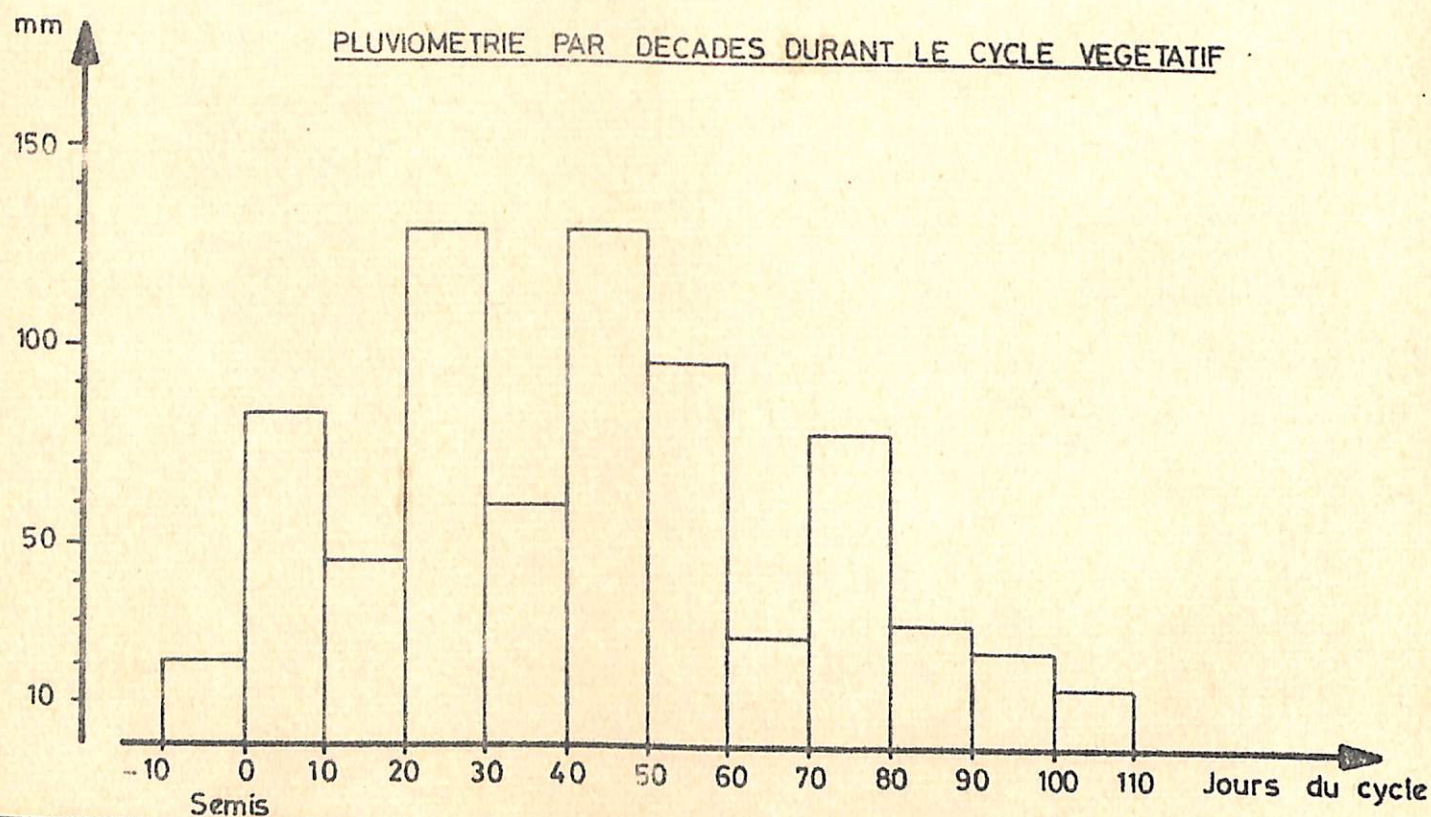




# ETUDE DES CONDITIONS PLUVIALES

## SUR L'ALIMENTATION EN EAU DU RIZ

### A KANDIADIOU 1972

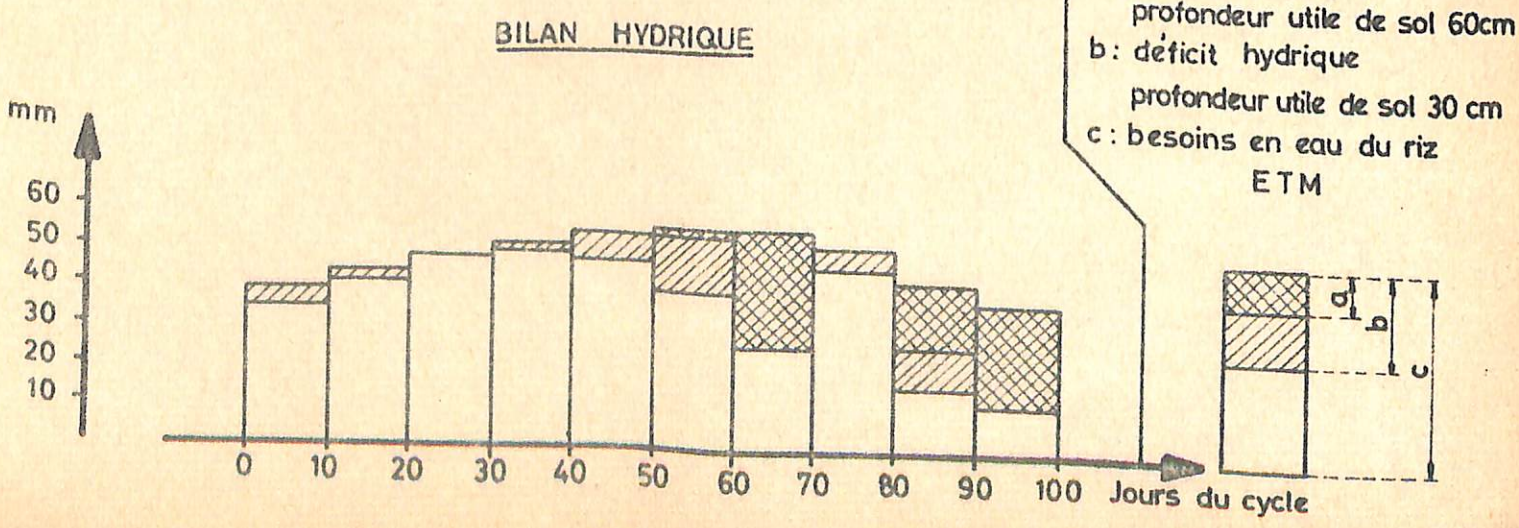
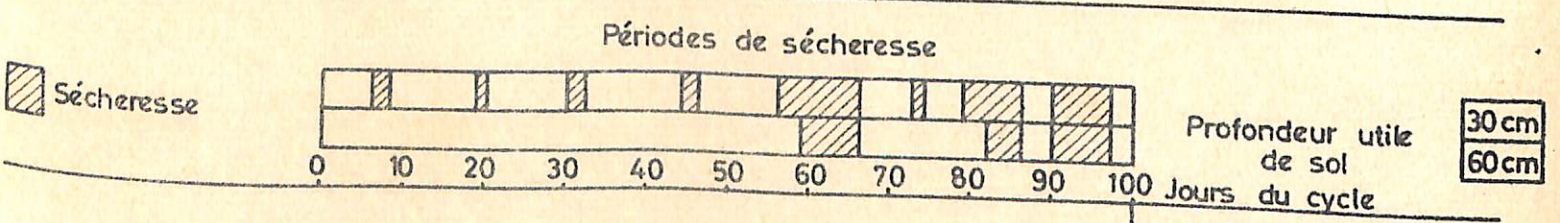
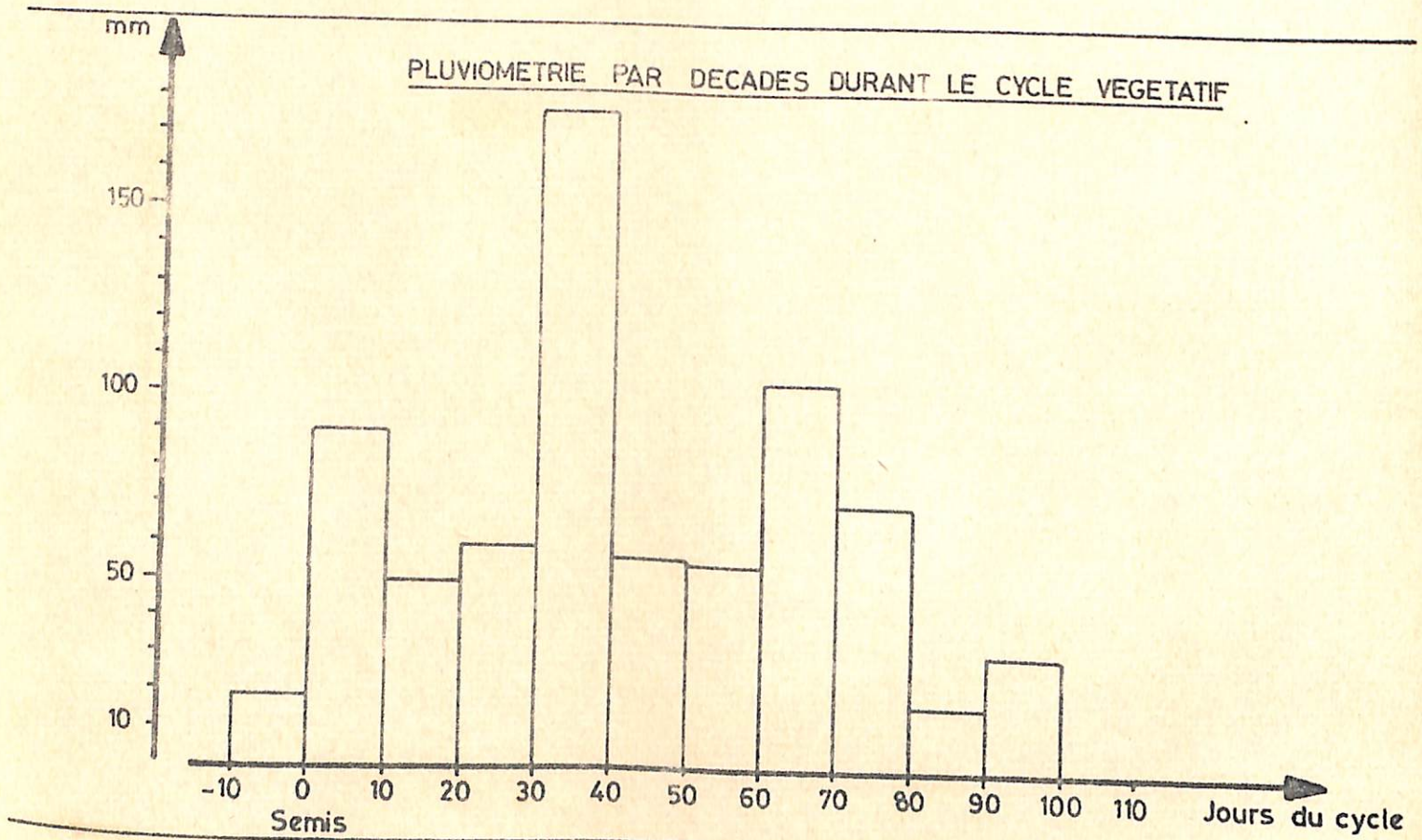




# ETUDE DES CONDITIONS PLUVIALES

## SUR L'ALIMENTATION EN EAU DU RIZ

### A DIANA-BA 1972



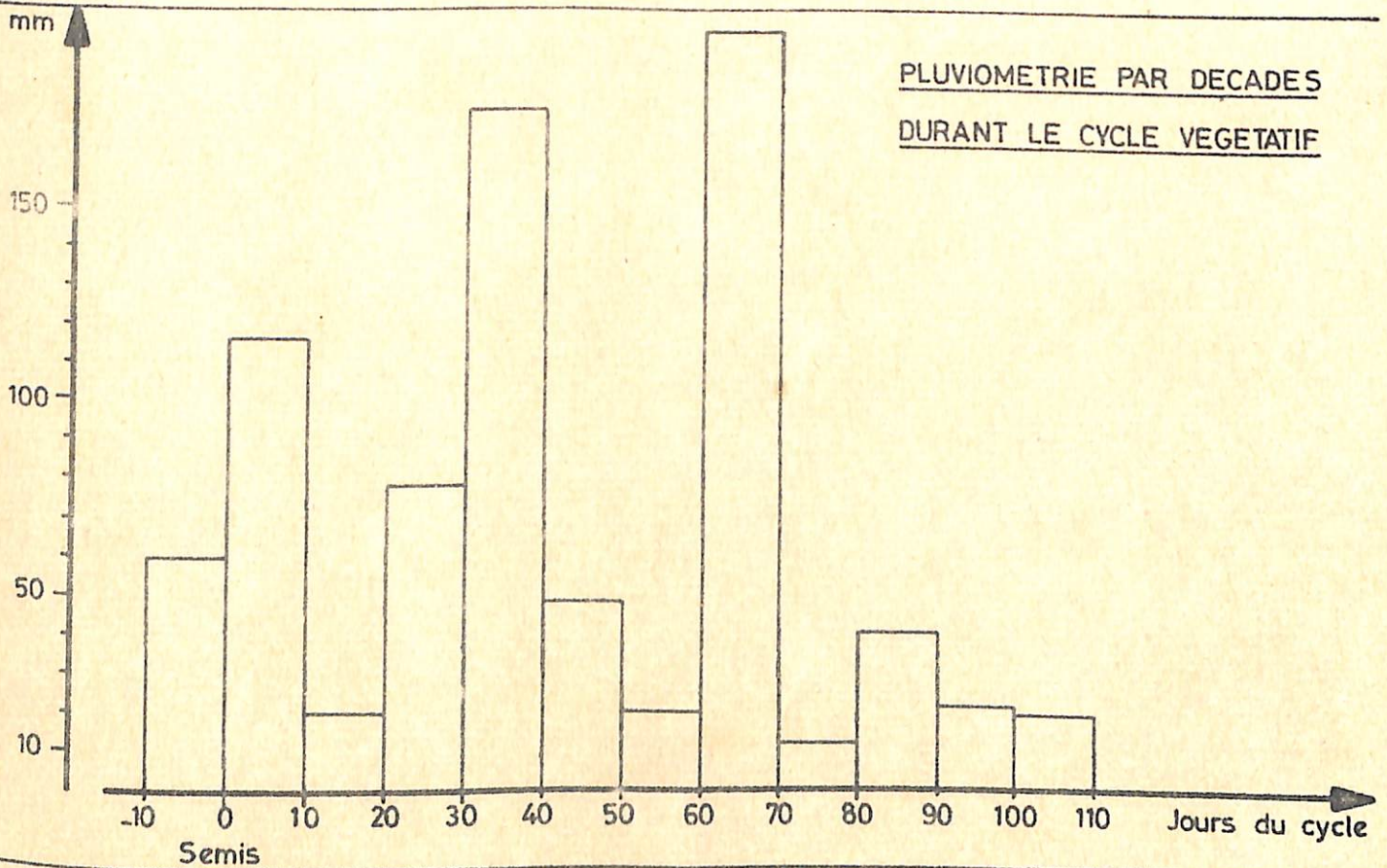


# ETUDE DES CONDITIONS PLUVIALES

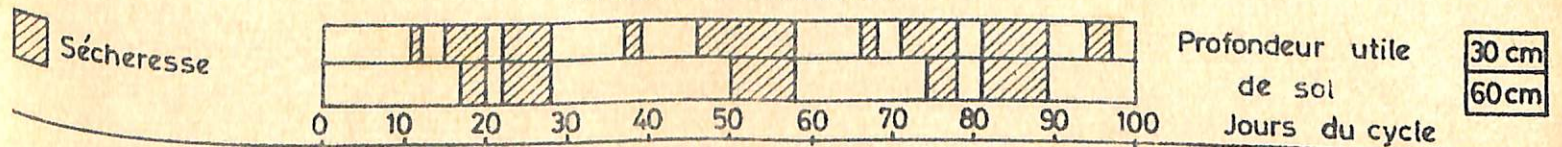
## SUR L'ALIMENTATION EN EAU DU RIZ

### A SARE - BAKARY 1972

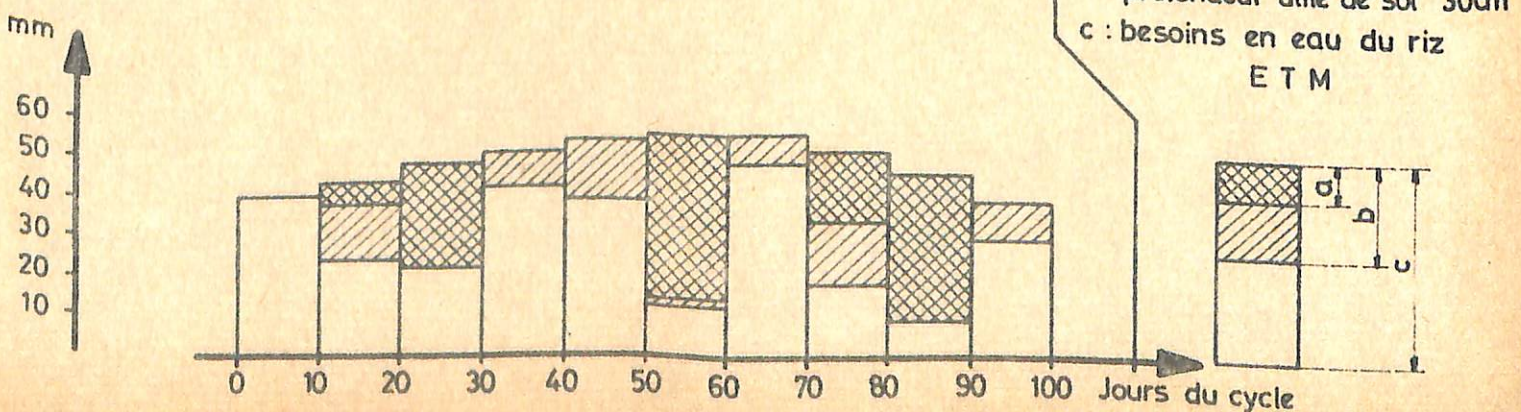
PLUVIOMETRIE PAR DECADES  
DURANT LE CYCLE VEGETATIF



Périodes de sécheresse



BILAN HYDRIQUE

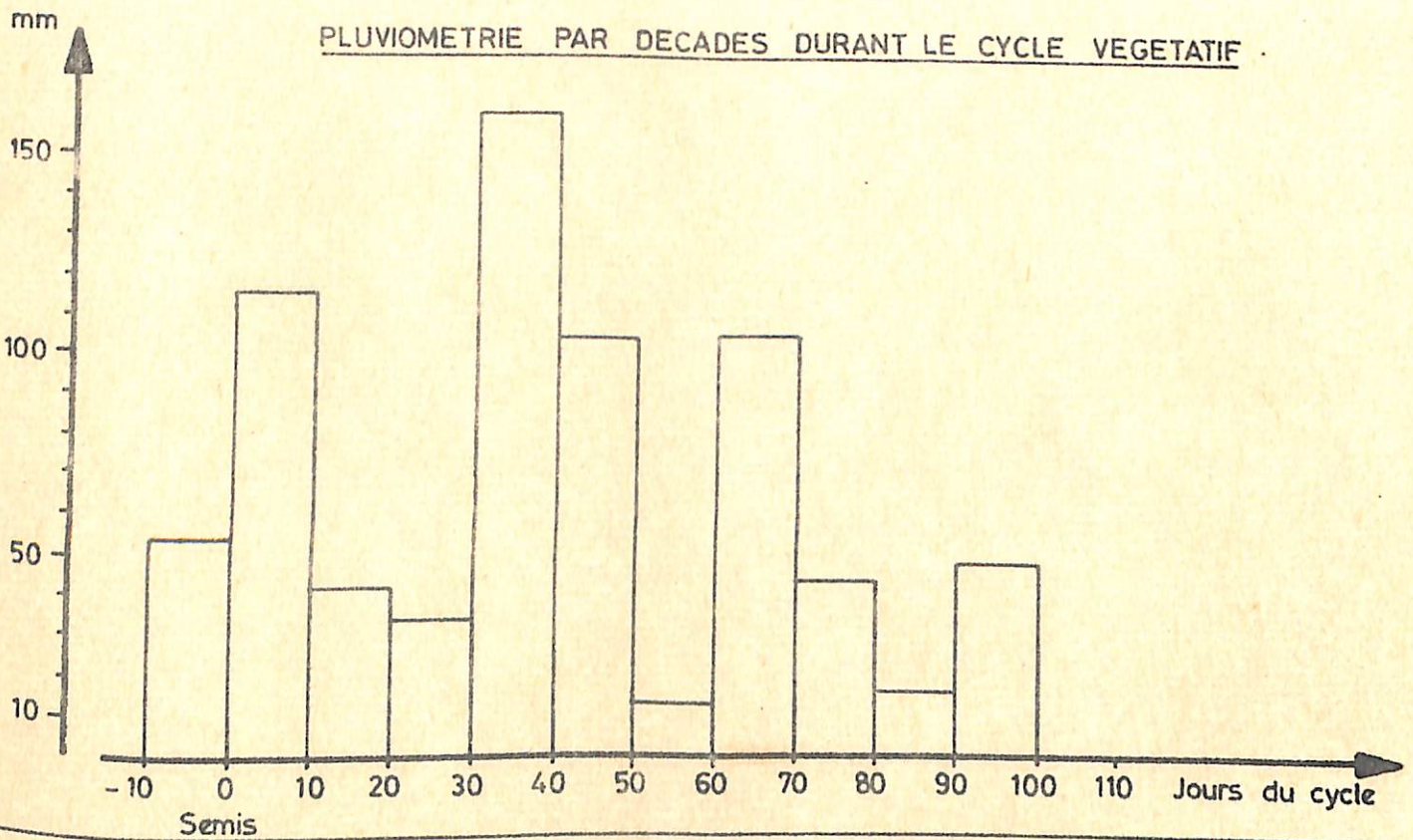




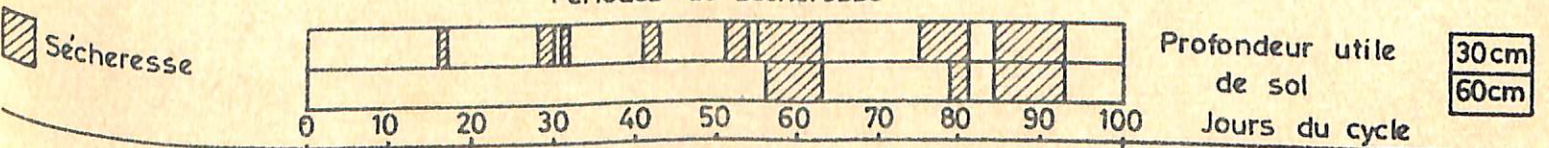
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## SUR L'ALIMENTATION EN EAU DU RIZ

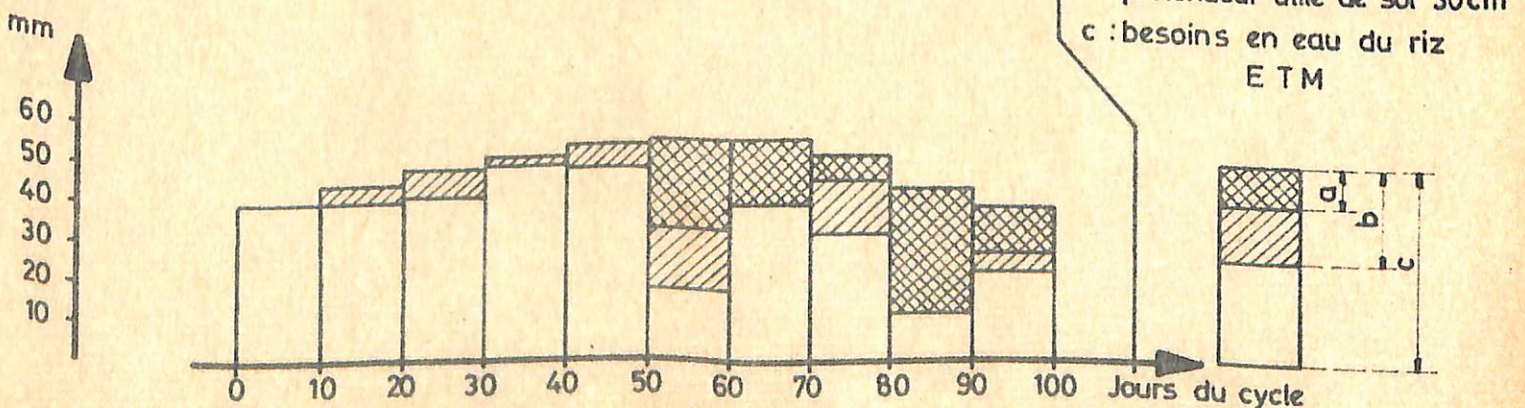
### A SARE-MANSALY 1972



Périodes de sécheresse



BILAN HYDRIQUE

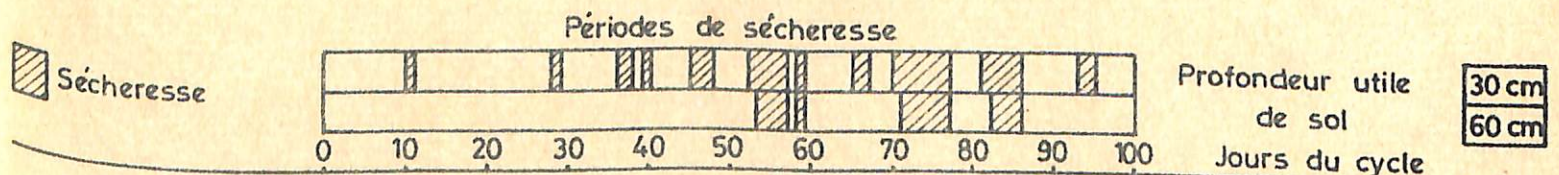
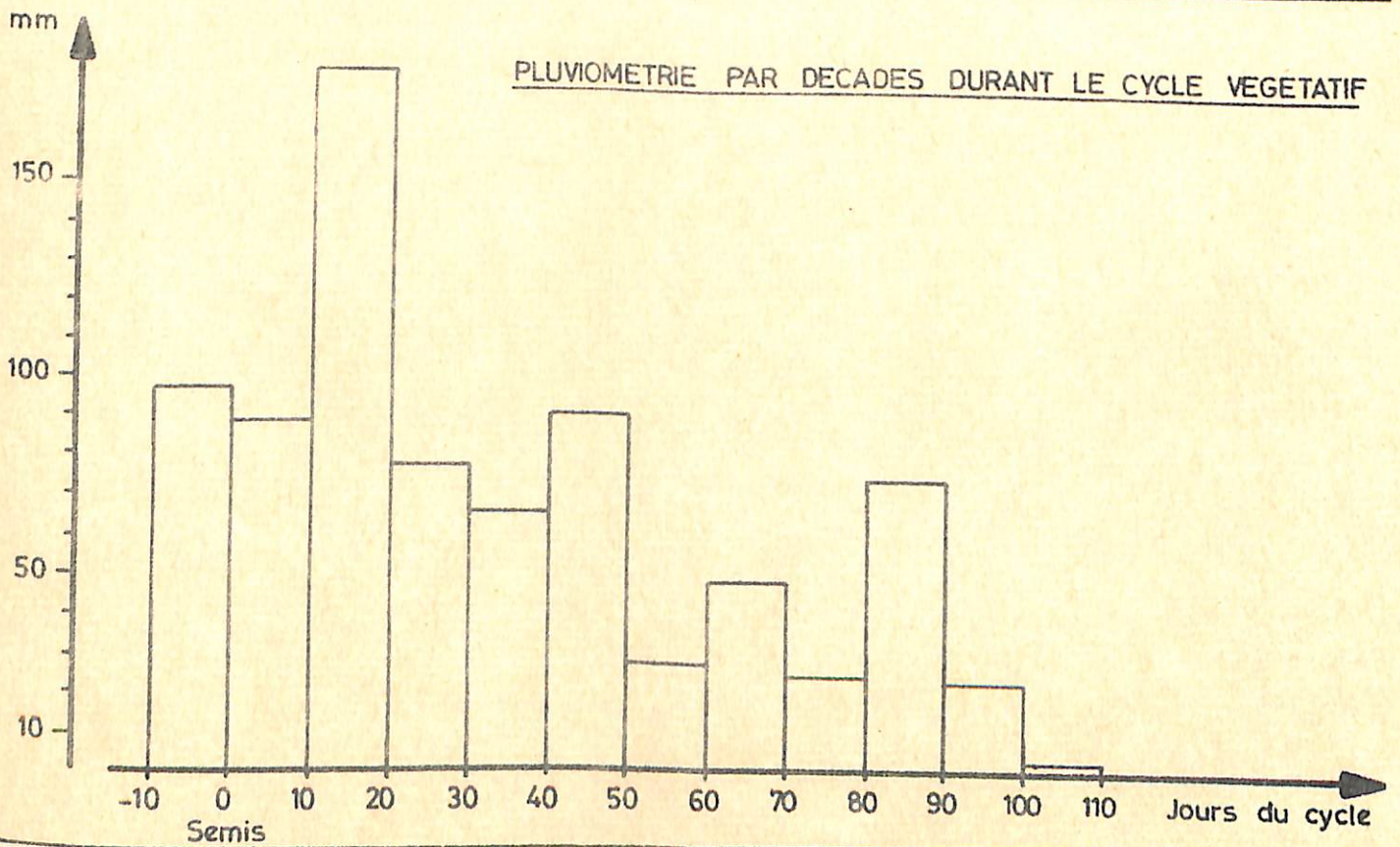




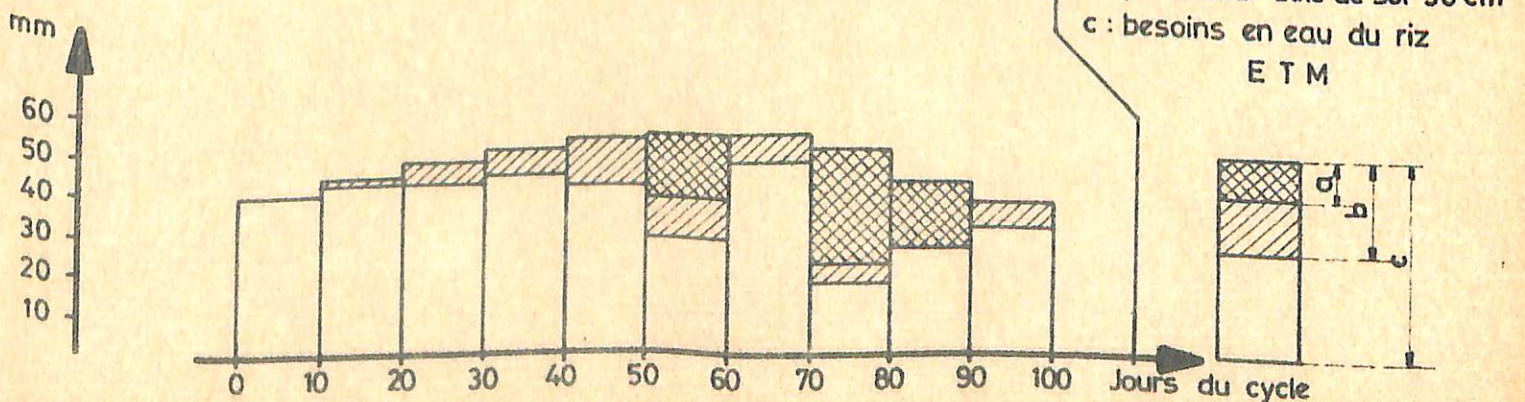
# ETUDE DES CONDITIONS PLUVIALES

## SUR L'ALIMENTATION EN EAU DU RIZ

### A MAMPATIM - MAOUNDE 1972



BILAN HYDRIQUE

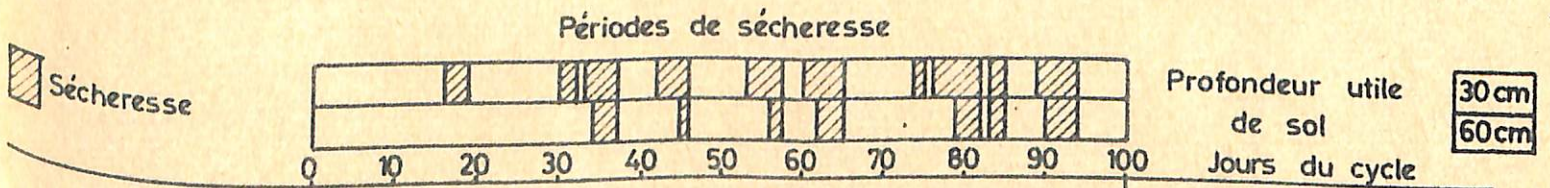
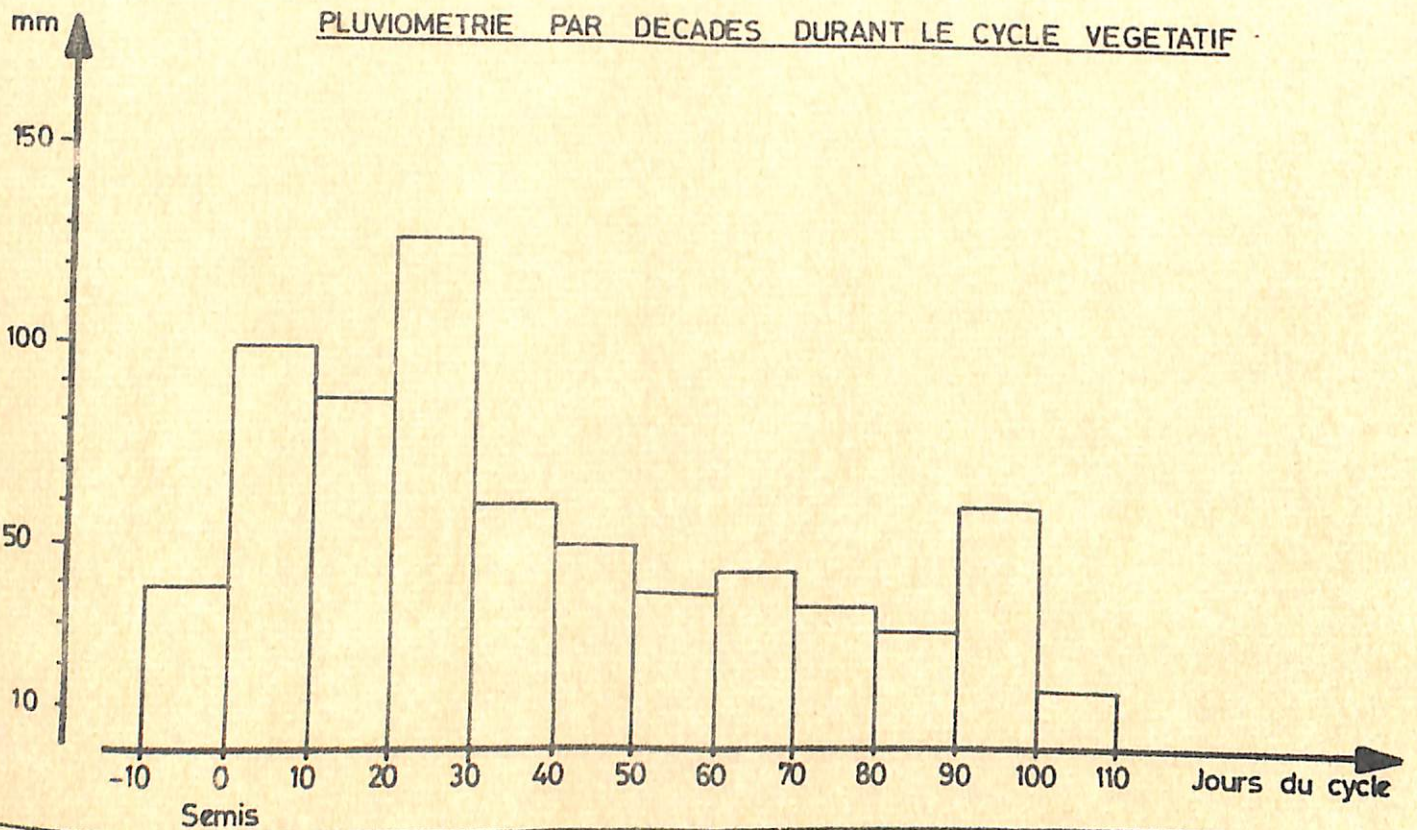




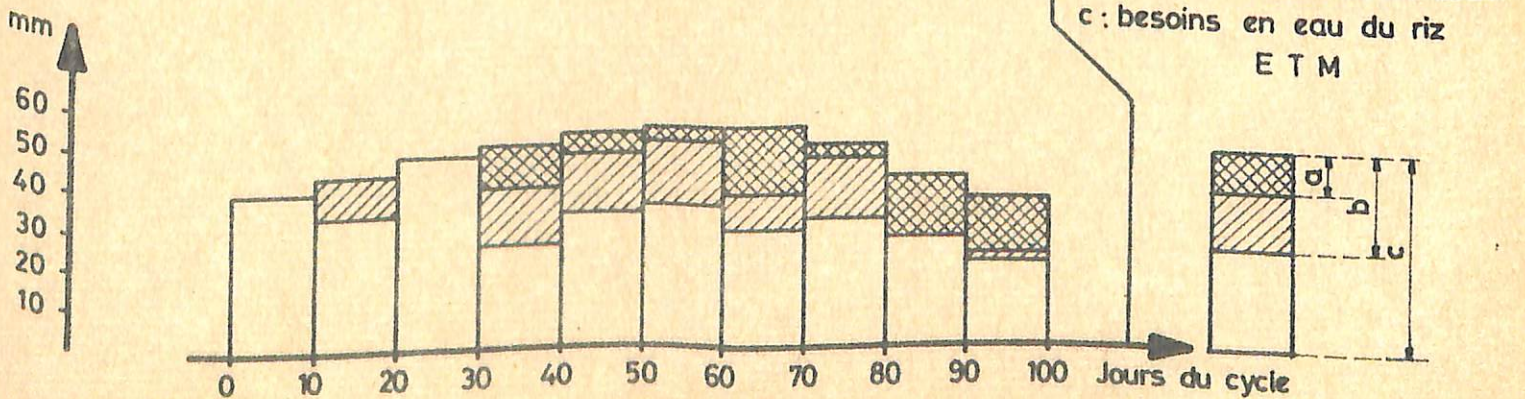
# ETUDE DES CONDITIONS PLUVIALES

## SUR L'ALIMENTATION EN EAU DU RIZ

### A DIALLI-KOUNDA 1972



BILAN HYDRIQUE

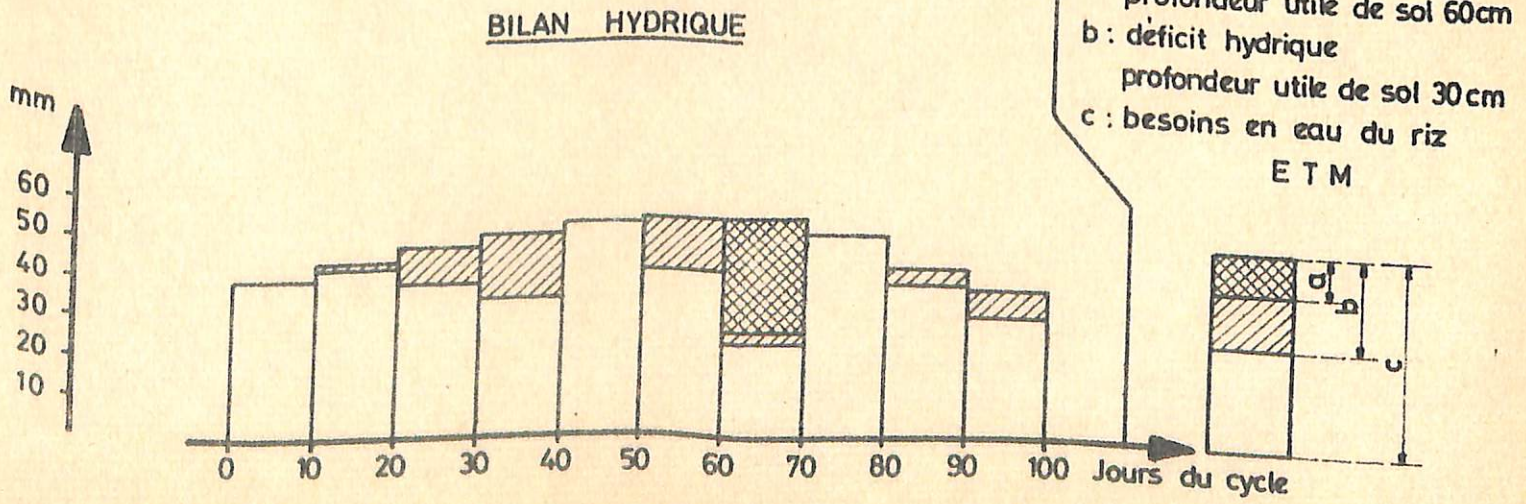
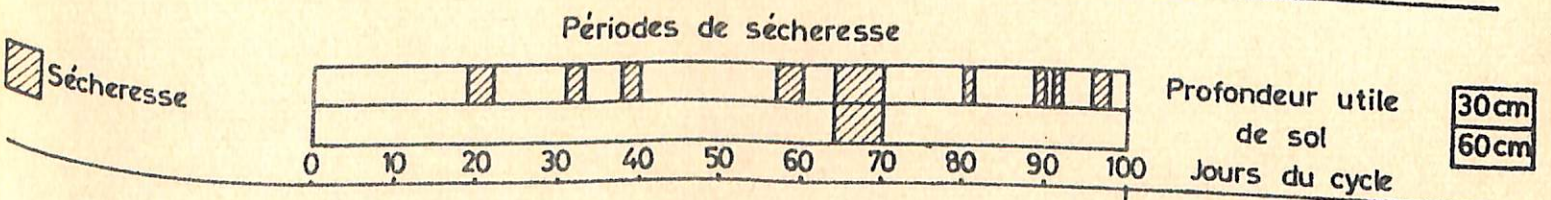
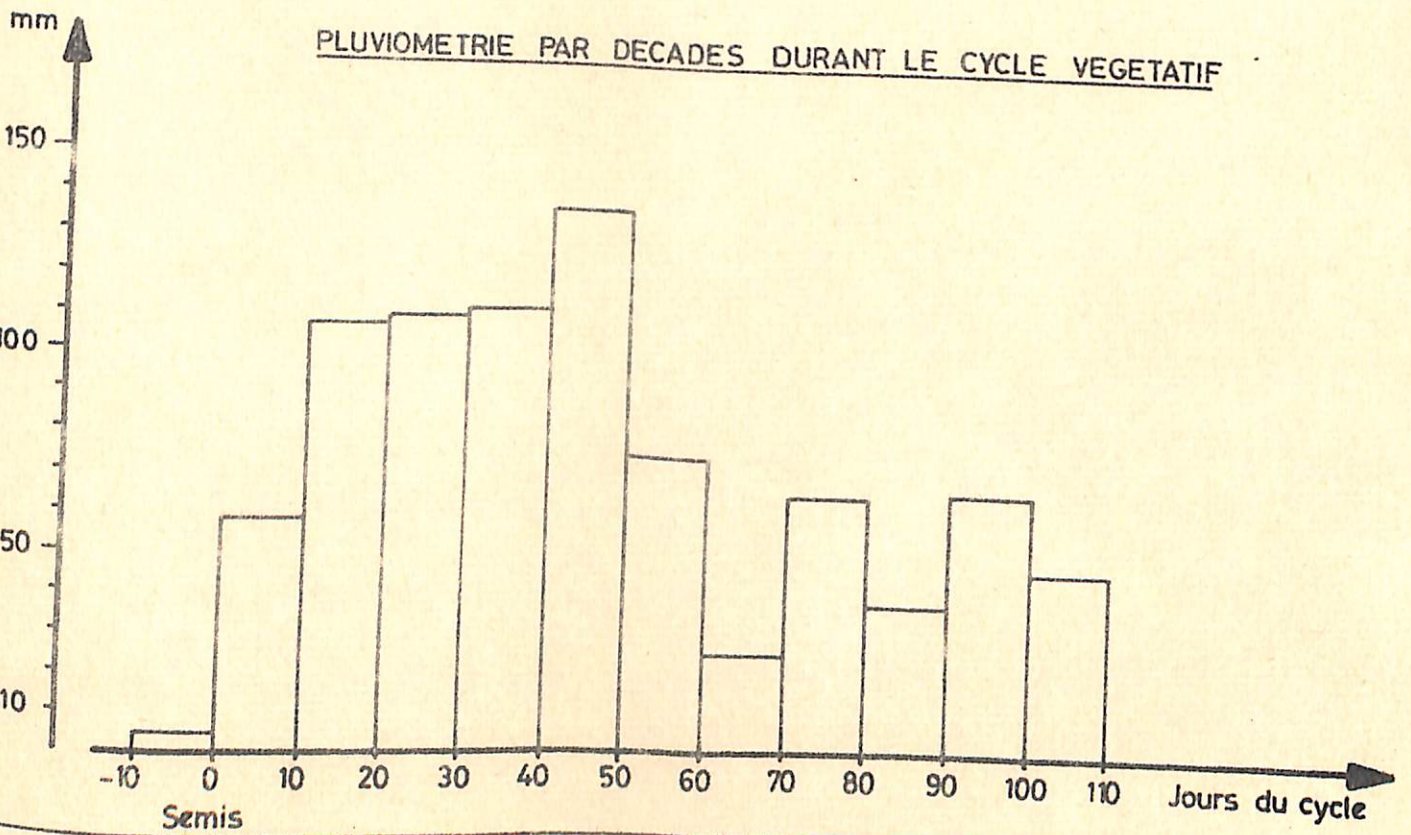




# ETUDE DES CONDITIONS PLUVIALES

## SUR L'ALIMENTATION EN EAU DU RIZ

### A TAKOUDIALLA 1972

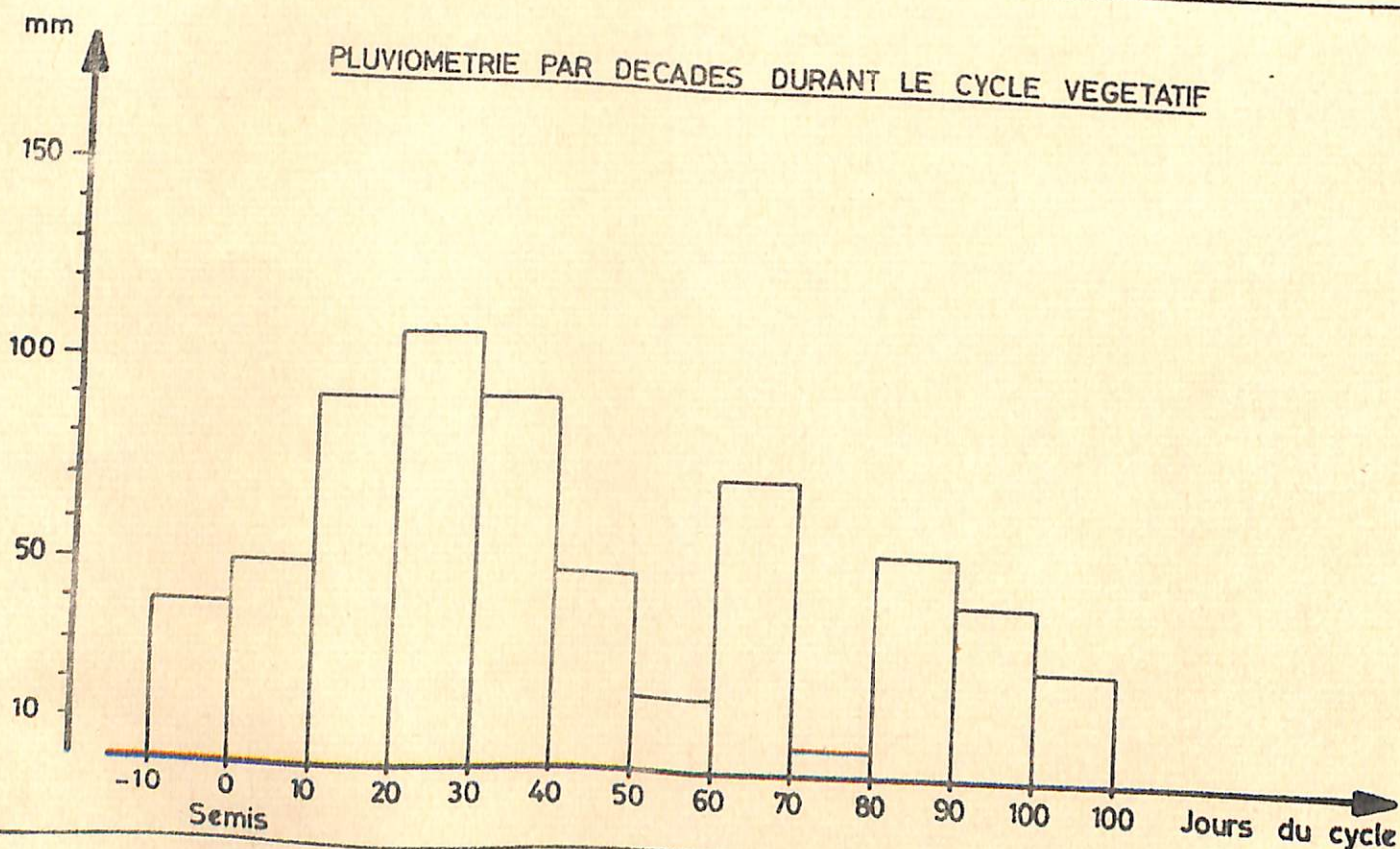




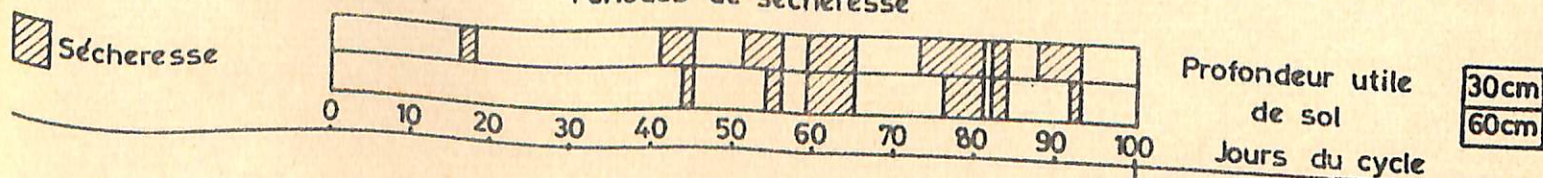
# ETUDE DES CONDITIONS PLUVIALES

## SUR L'ALIMENTATION EN EAU DU RIZ

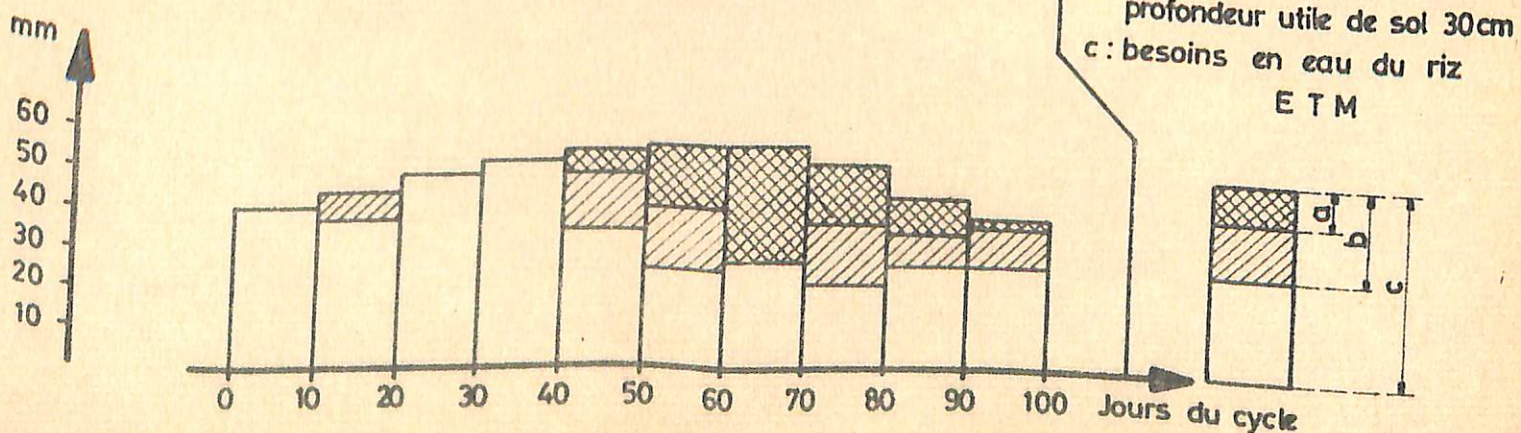
### A KOUNKANE - KABENDOU 1972



Périodes de sécheresse



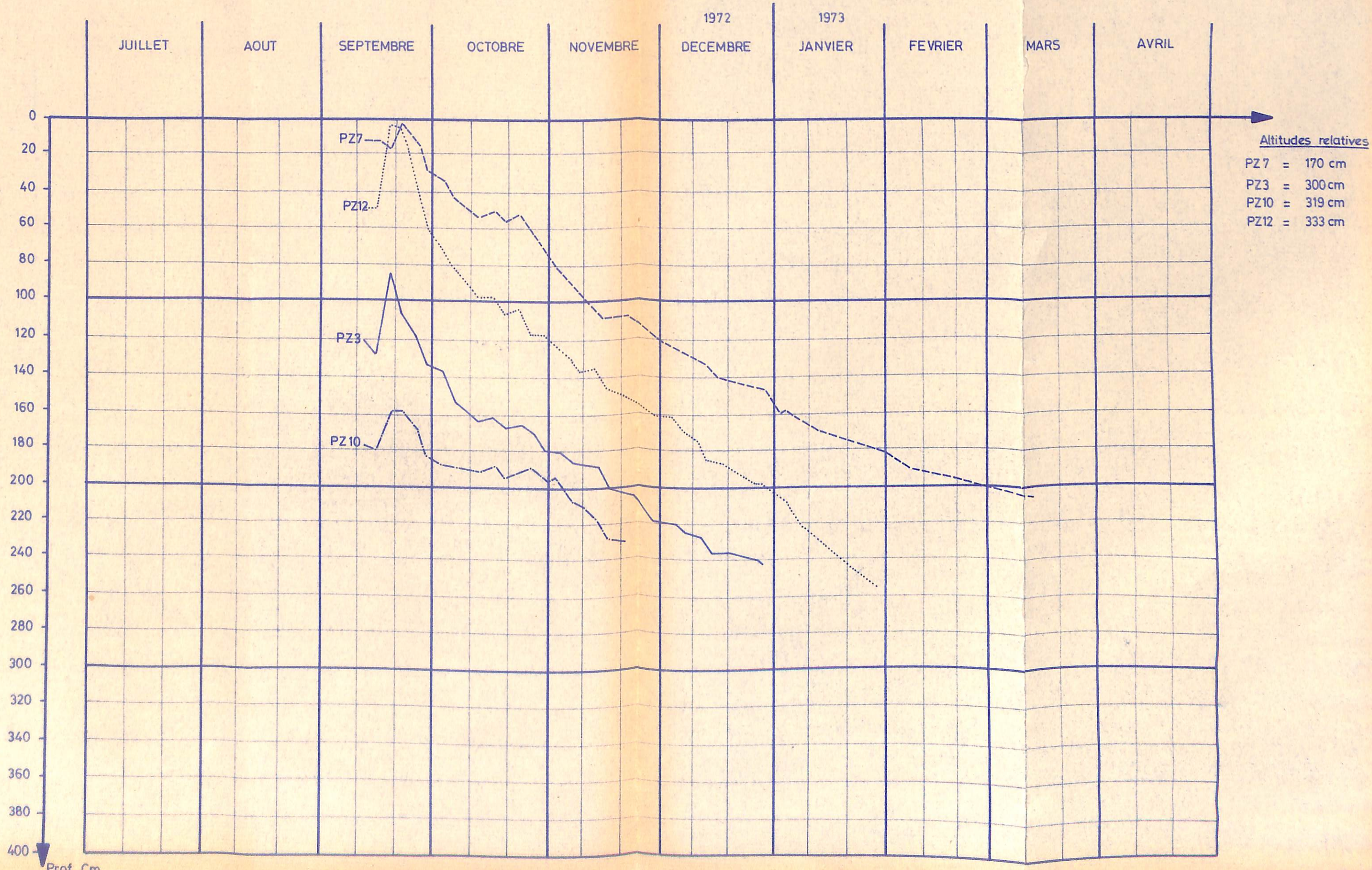
BILAN HYDRIQUE





# Evolution du niveau piézométrique

## Chaîne de Djegoune



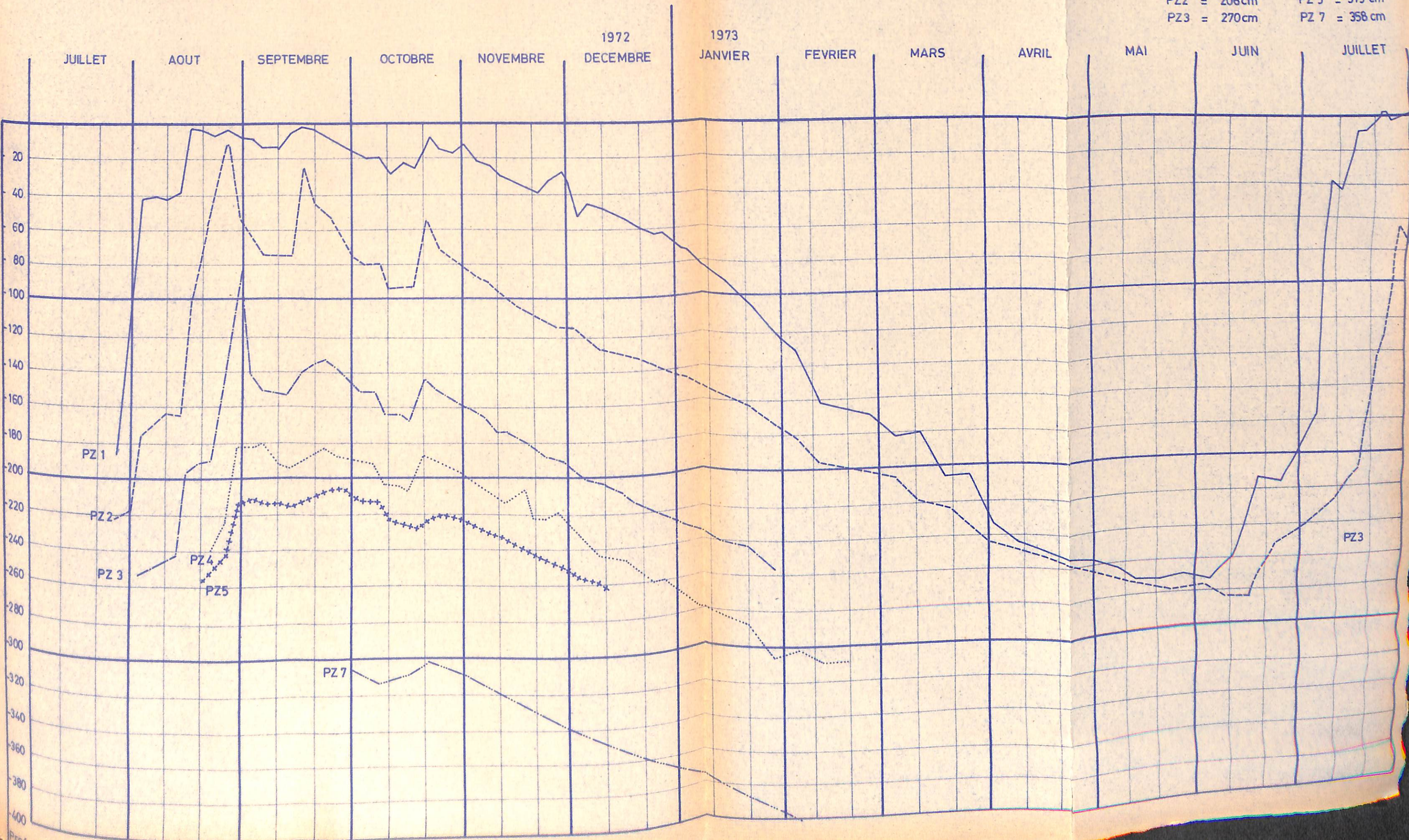


# Evolution du niveau piézométrique

## Chaîne de Balingor-Tendimane

Altitudes relatives

PZ1 = 200 cm	PZ4 = 304 cm
PZ2 = 206 cm	PZ5 = 315 cm
PZ3 = 270 cm	PZ7 = 358 cm

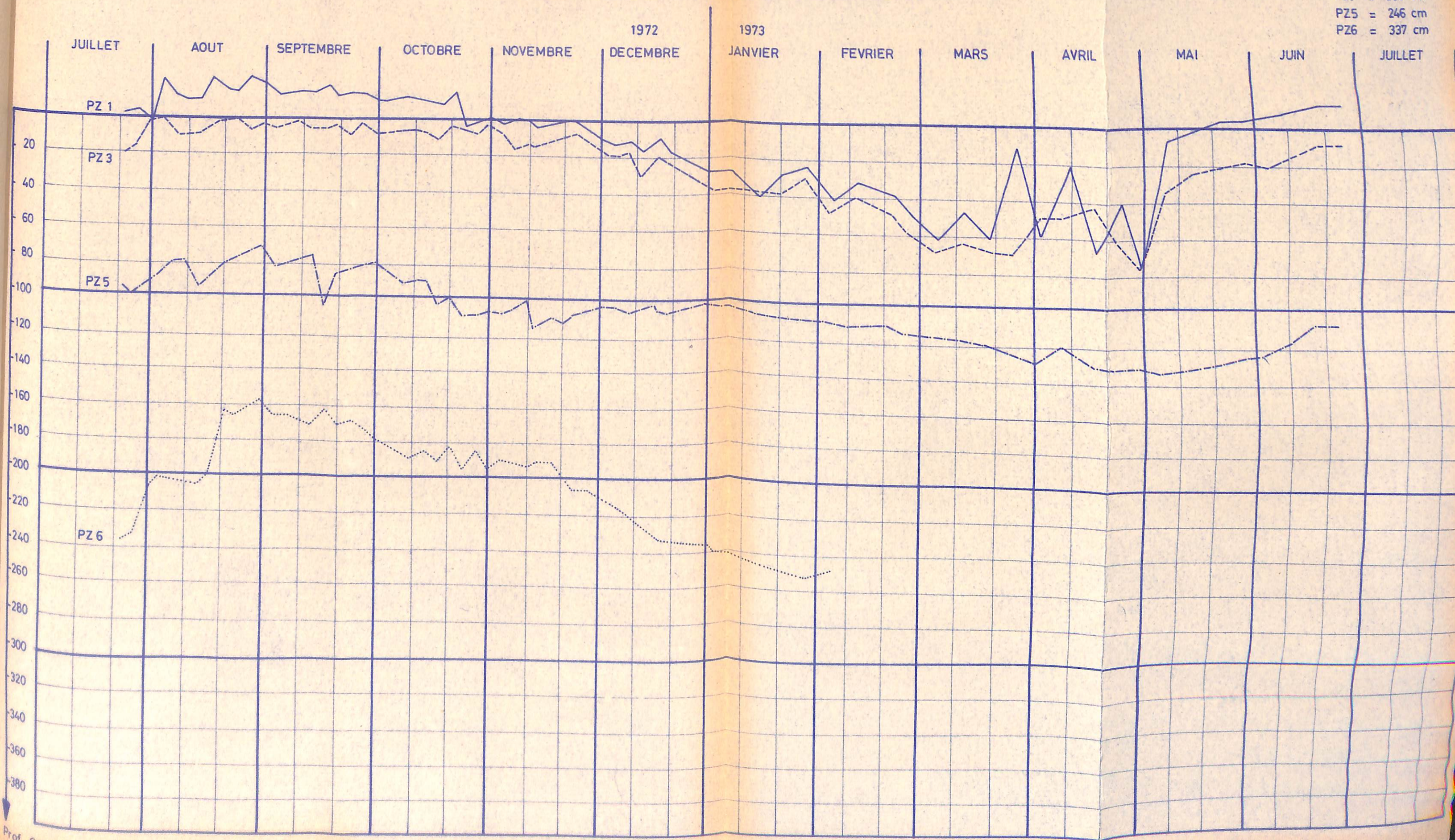




# Evolution du niveau piézométrique

## Chaîne de Diourou

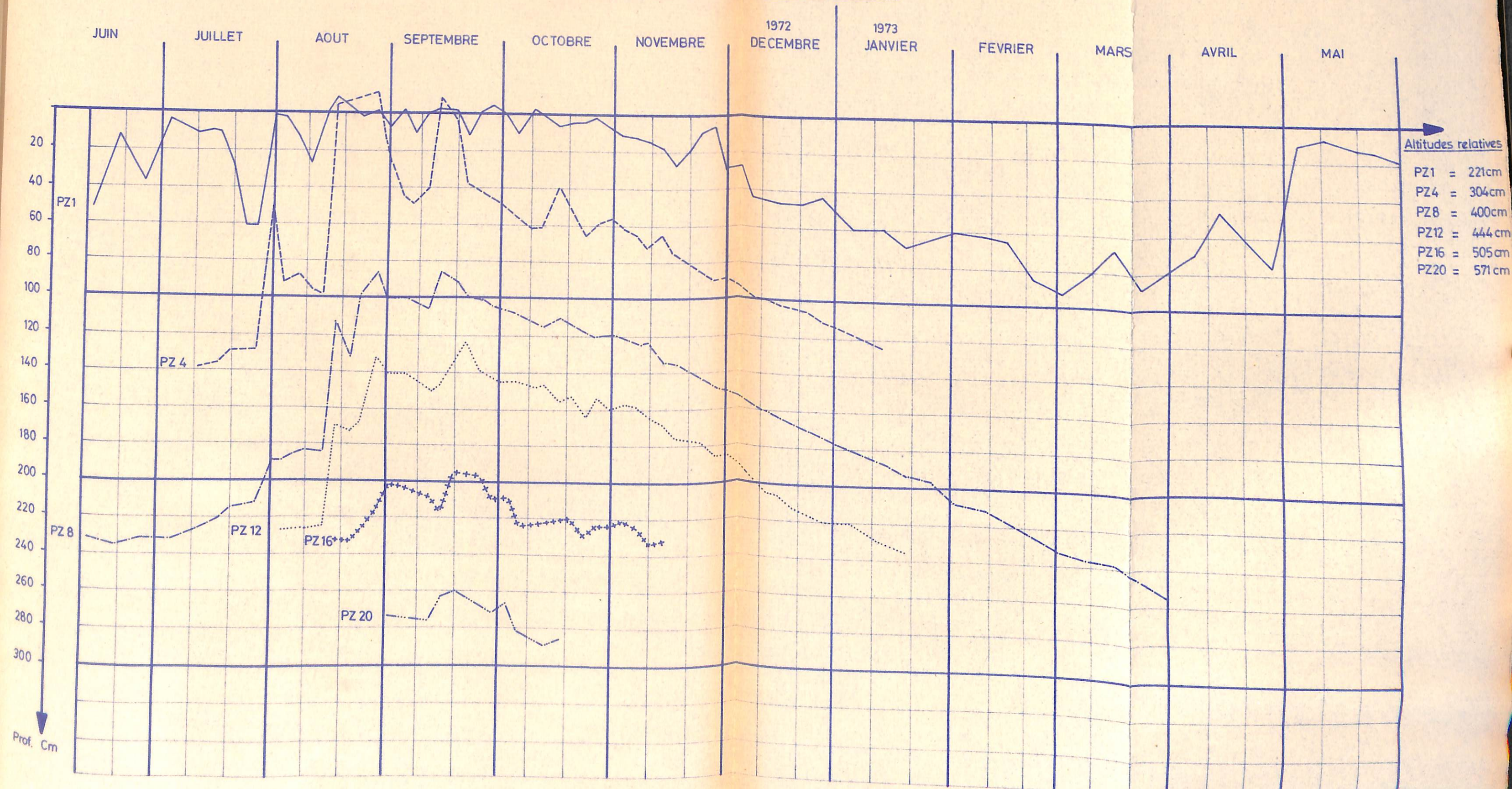
Altitudes relatives  
PZ1 = 200 cm  
PZ3 = 208 cm  
PZ5 = 246 cm  
PZ6 = 337 cm





# Evolution du niveau piézométrique

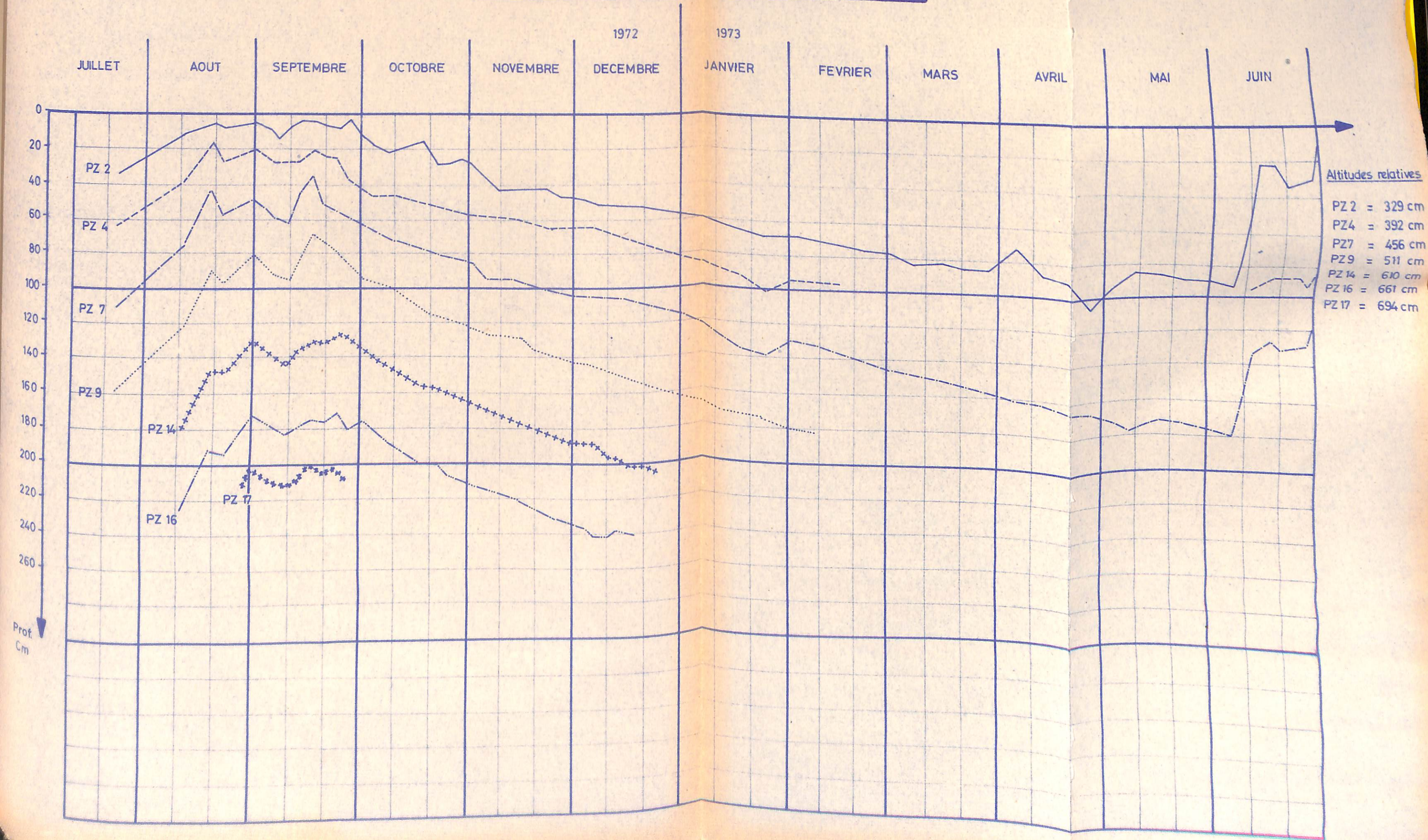
## Chaîne de Inor





# Evolution du niveau piézométrique

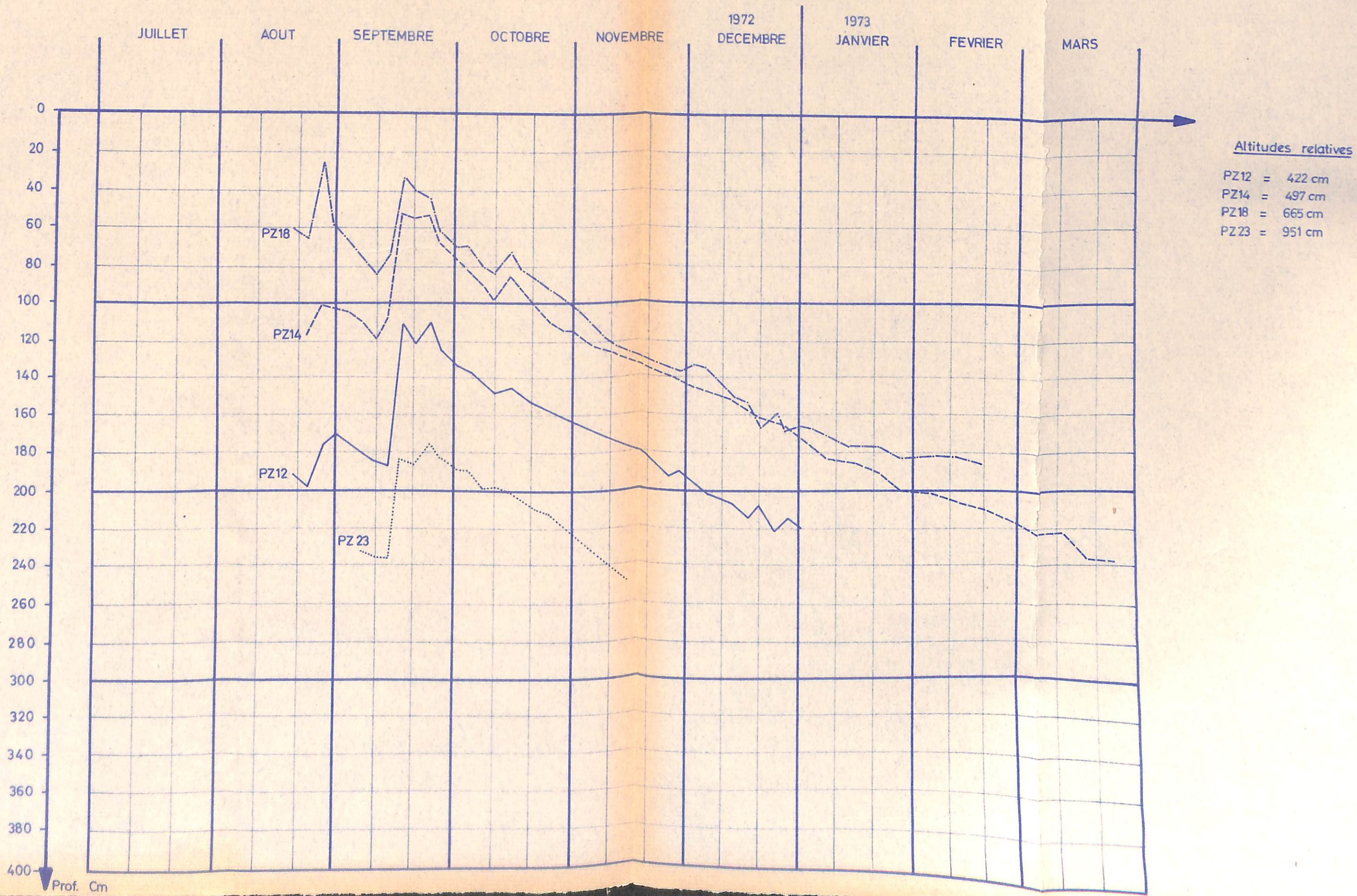
## Chaîne de Kandiadiou





# Evolution du niveau piézométrique

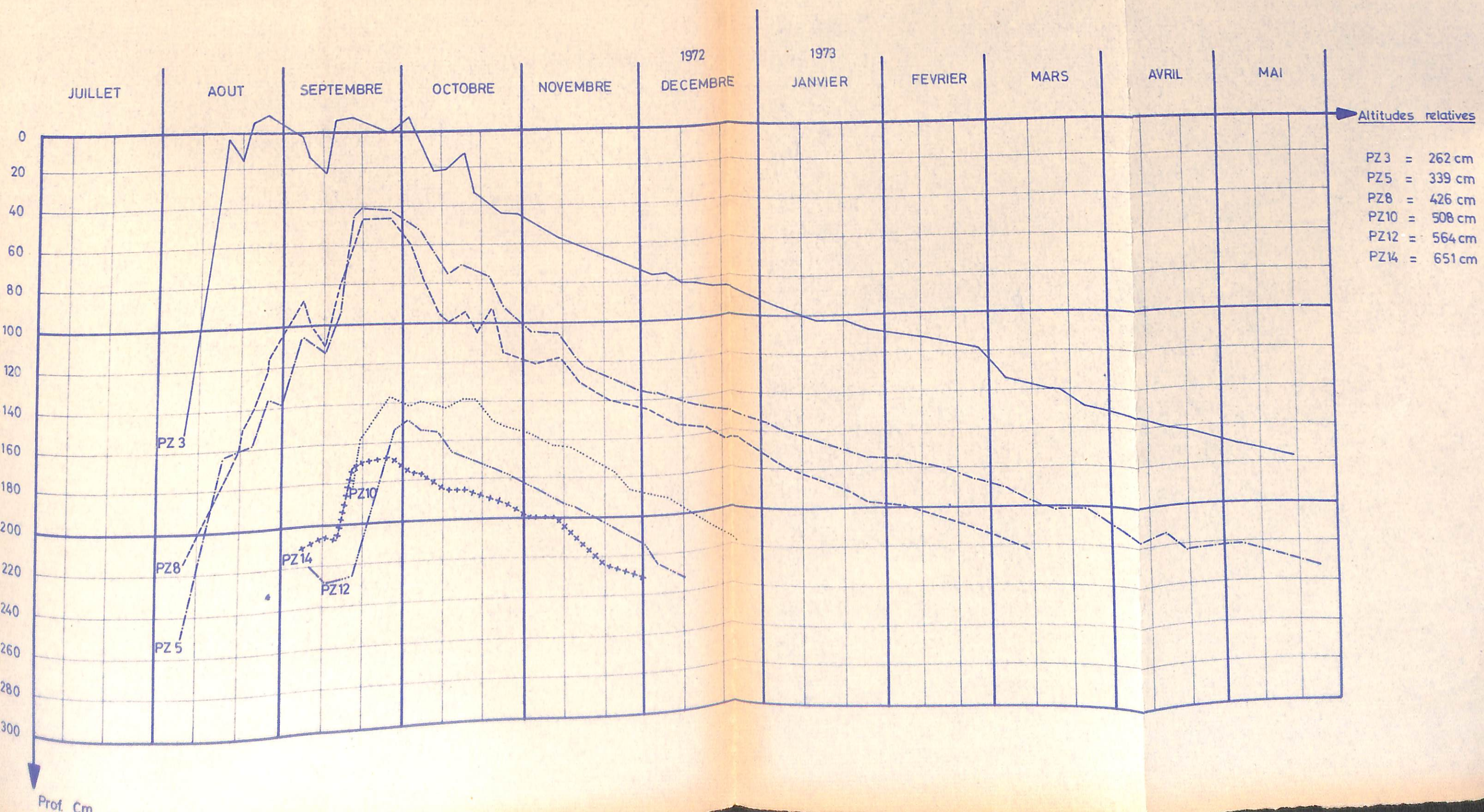
## Chaîne de Diana-Ba





# Evolution du niveau piézométrique

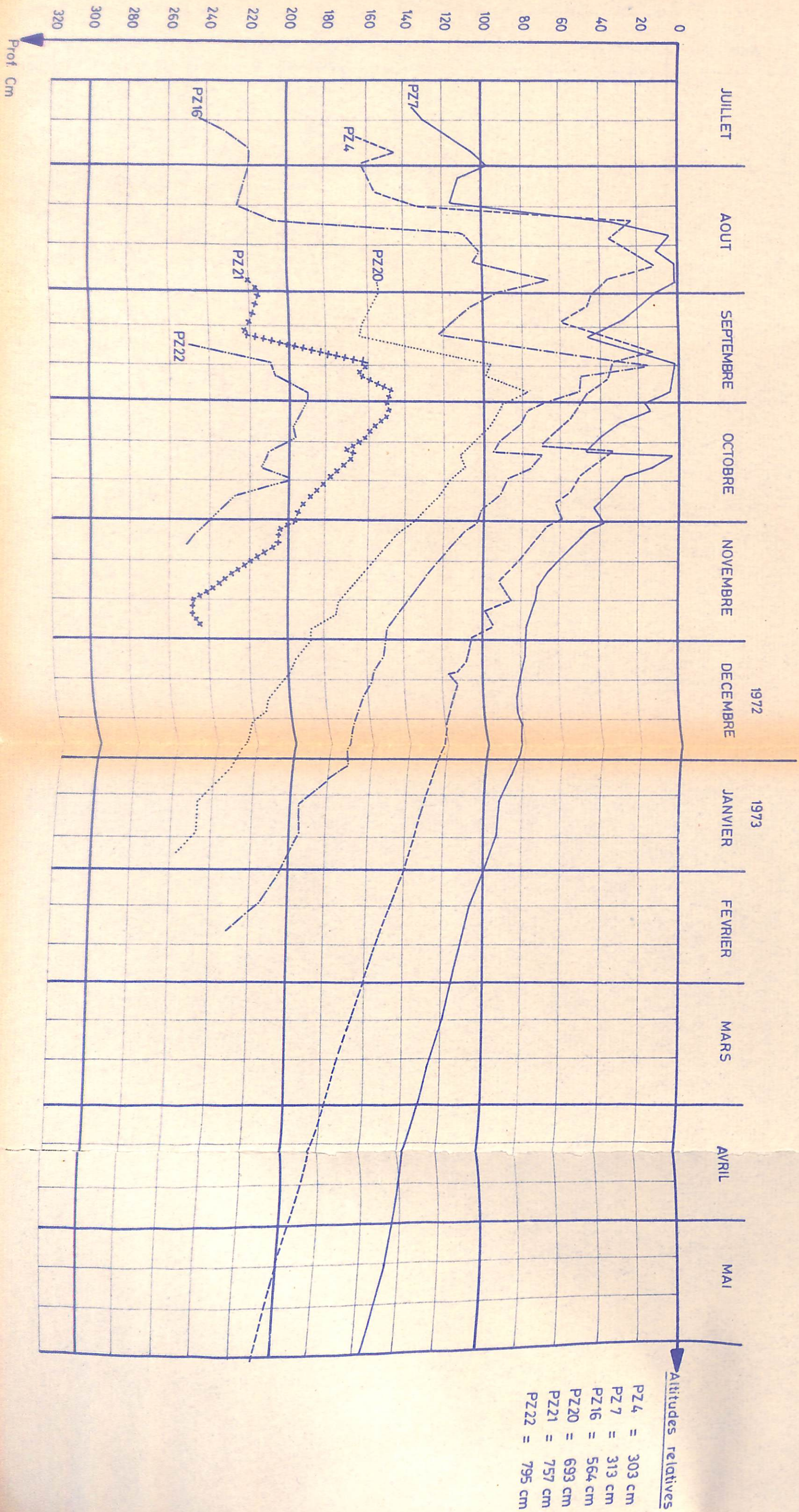
## Chaîne de Karcia





# Evolution du niveau piézométrique

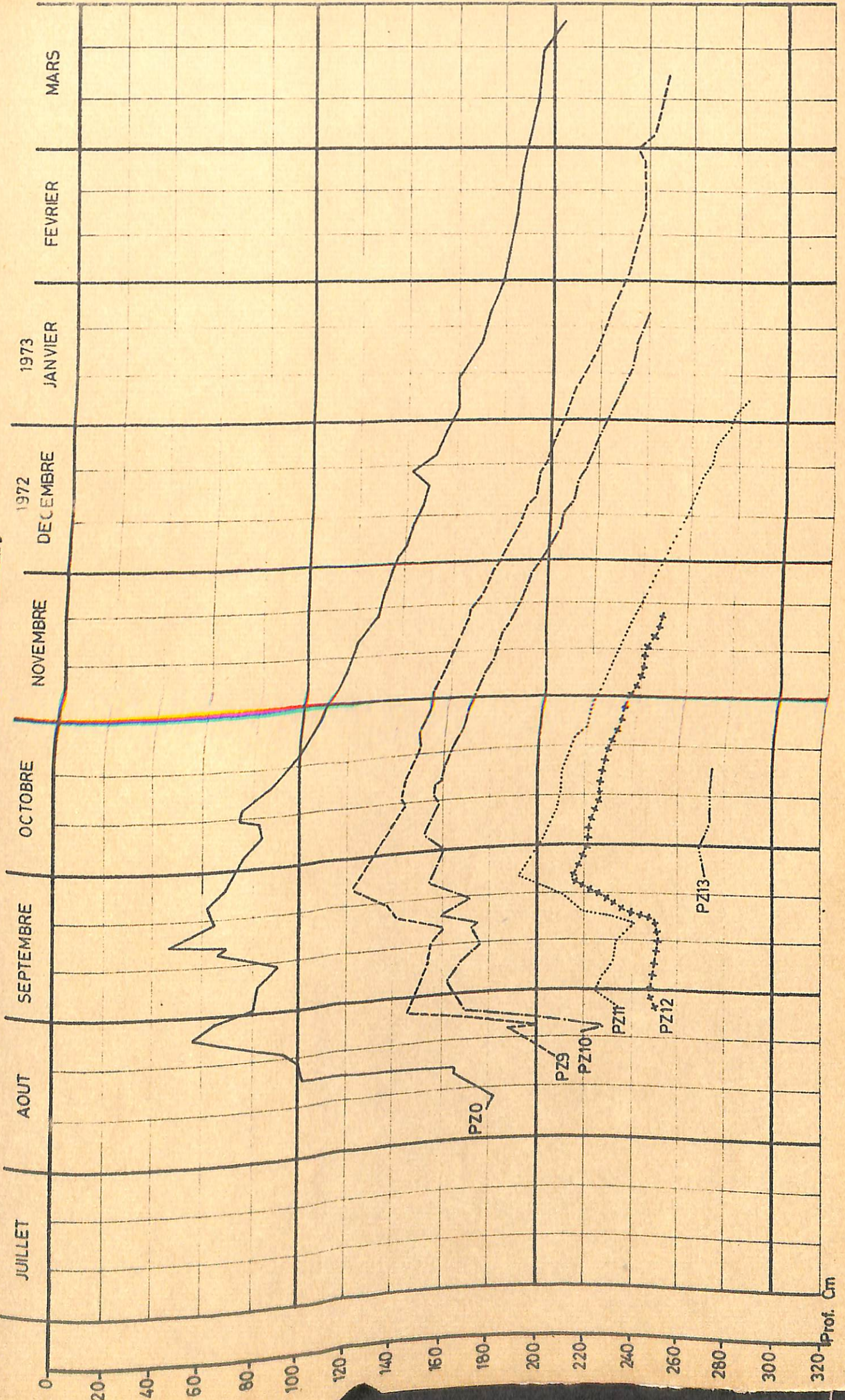
## Chaîne de Saré Bakary





Evolution du niveau piézométrique  
Chaîne de Saré Mansaly

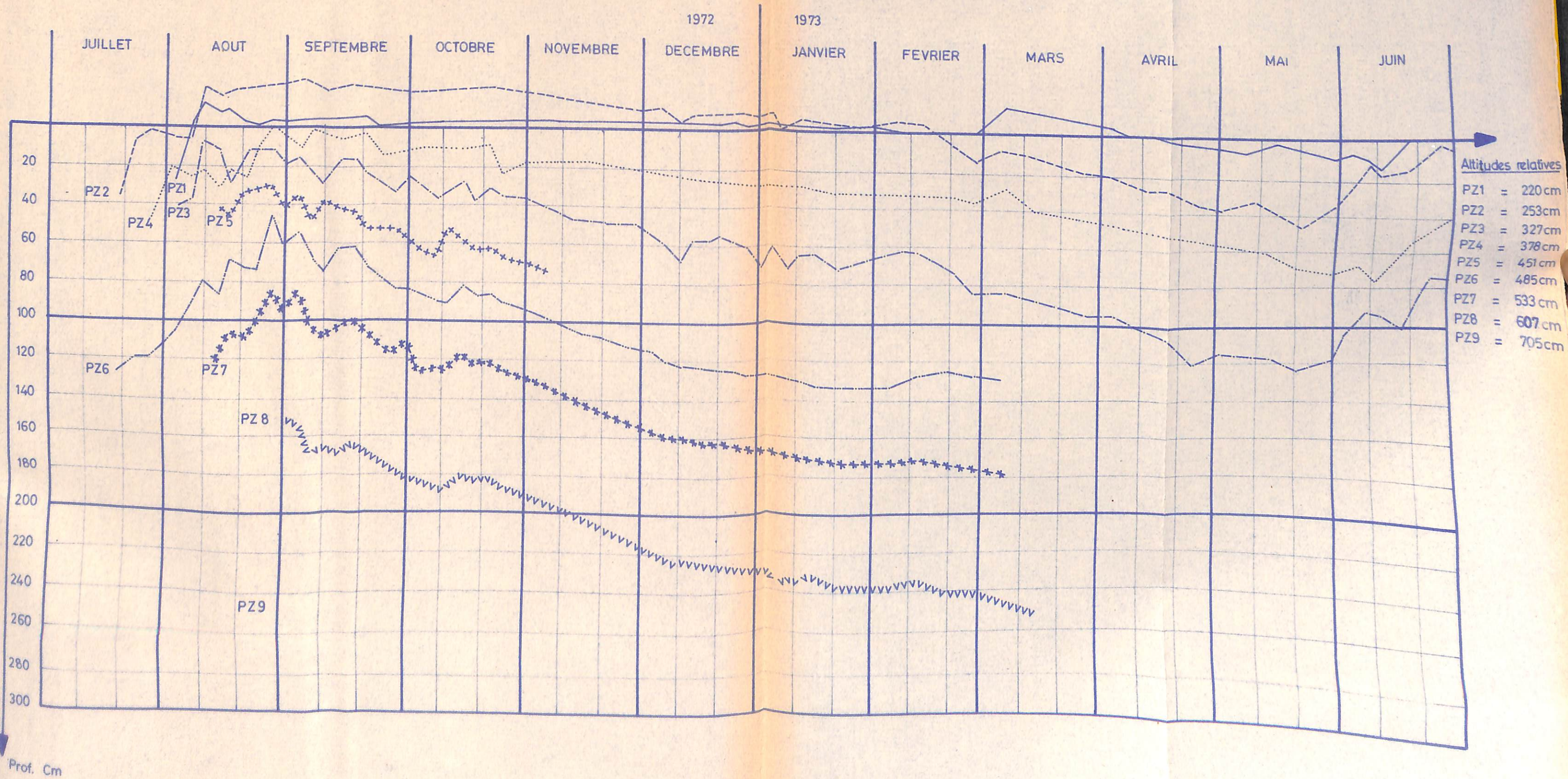
*Altitudes relatives*  
 PZ0 = 220cm    PZ11 = 367cm  
 PZ9 = 334cm    PZ12 = 415cm  
 PZ10 = 334cm    PZ13 = 467cm





# Evolution du niveau piézométrique

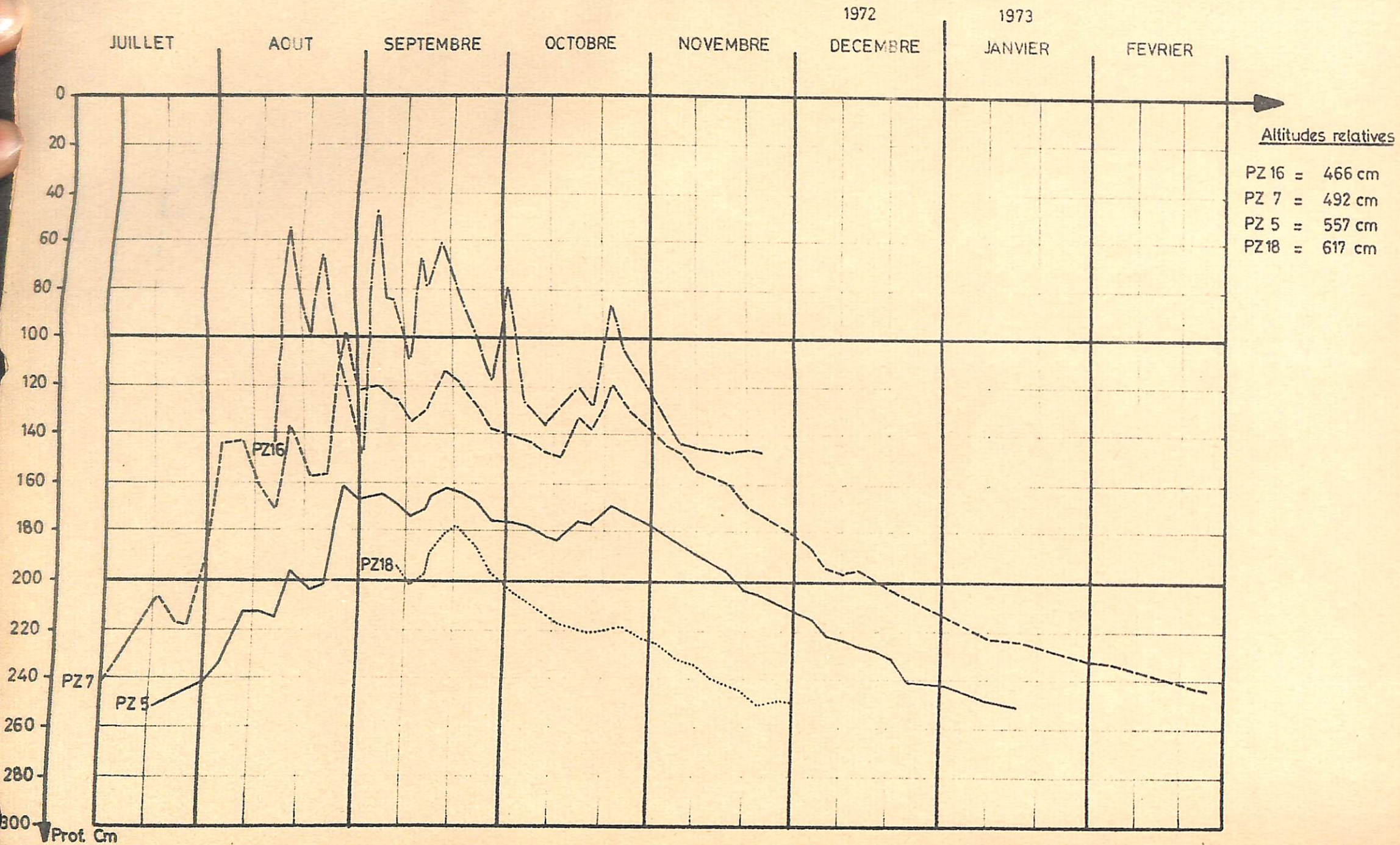
## Chaîne de Mampatim Maoundé





# Evolution du niveau piézométrique

## Chaîne de Dialli-Kounda

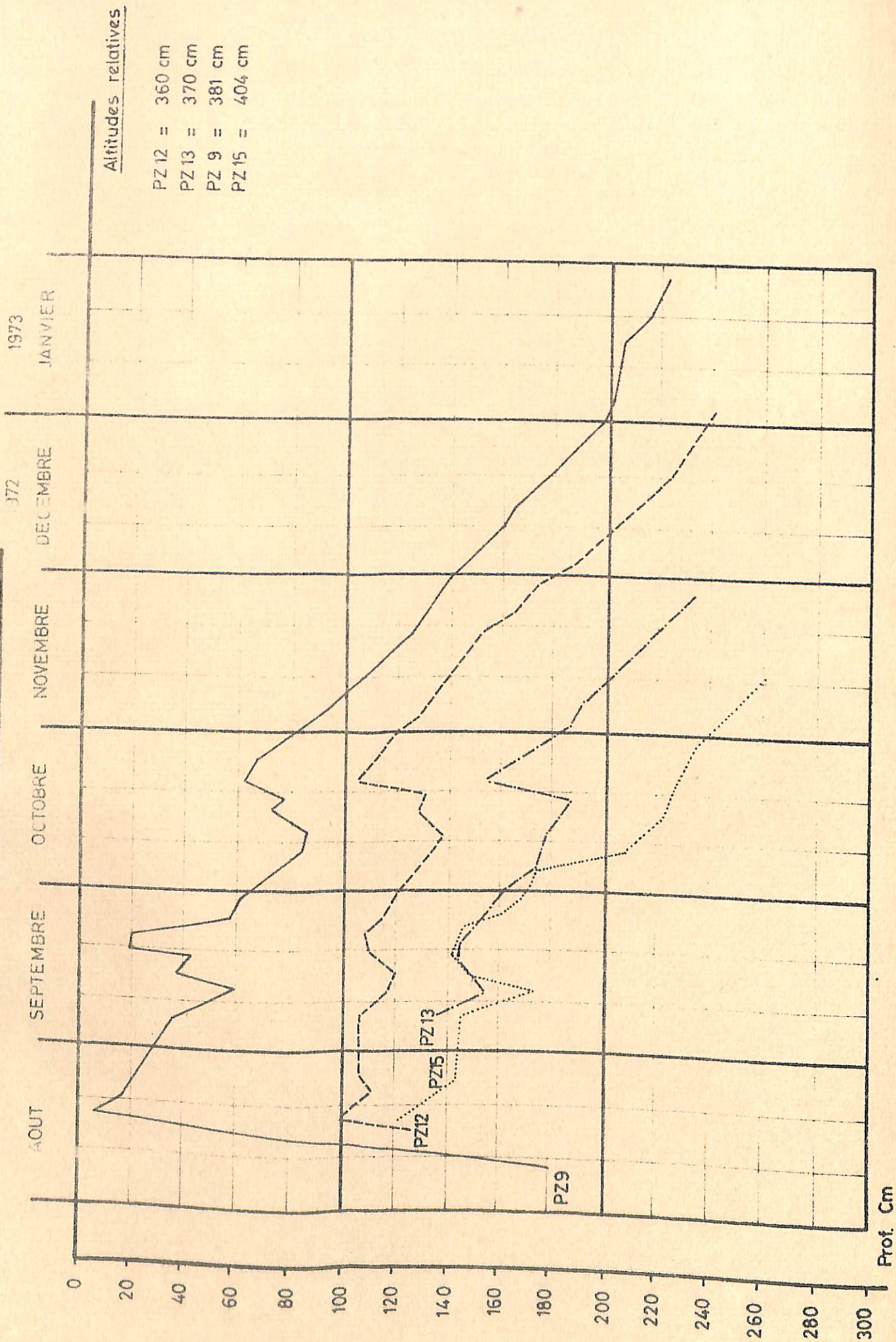




# Evolution du niveau piézométrique

FIG. 39

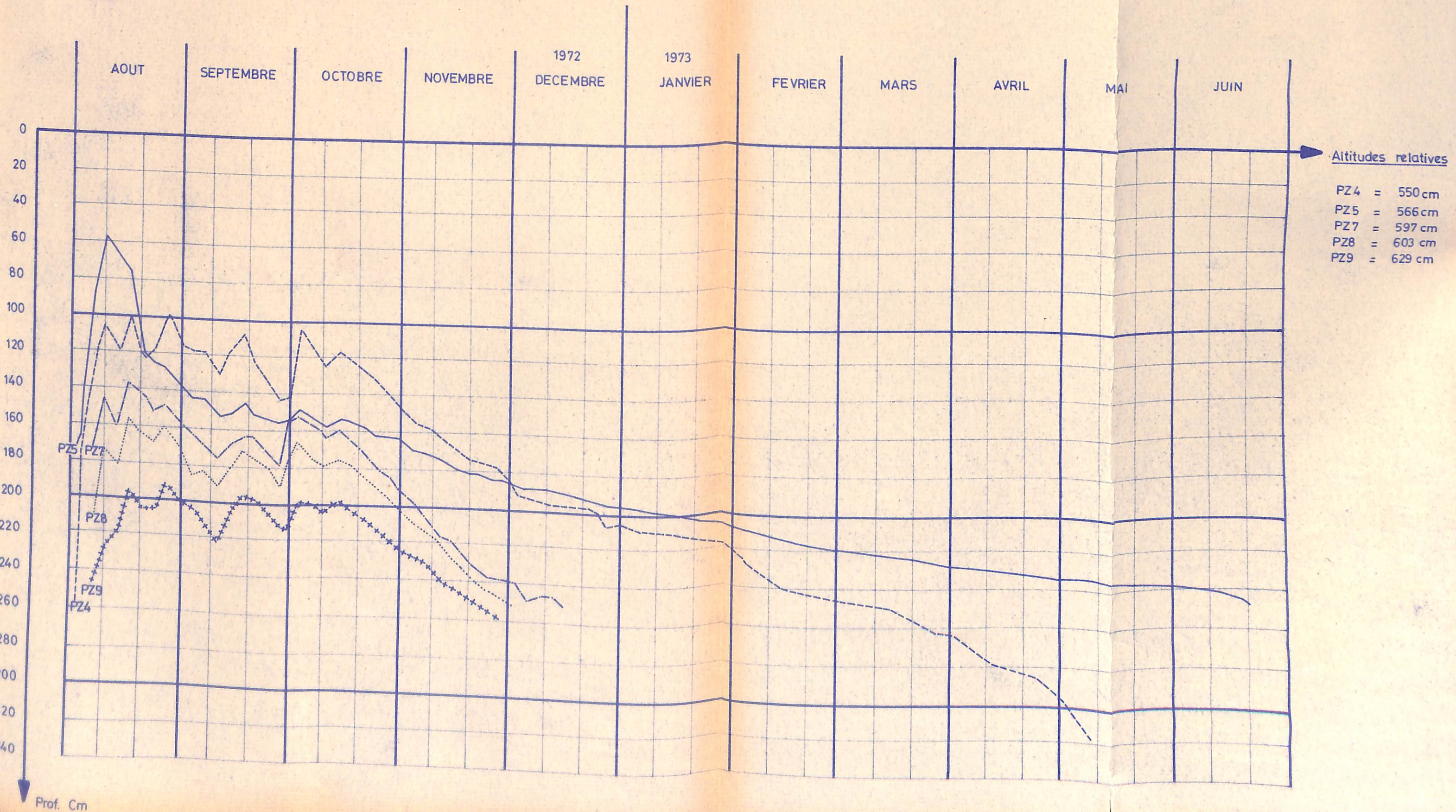
## Chaîne de Takoudialla





# Evolution du niveau piézométrique

## Chaîne de Kounkane-Kabendou





# Evolution du niveau piézométrique

## Djégoune

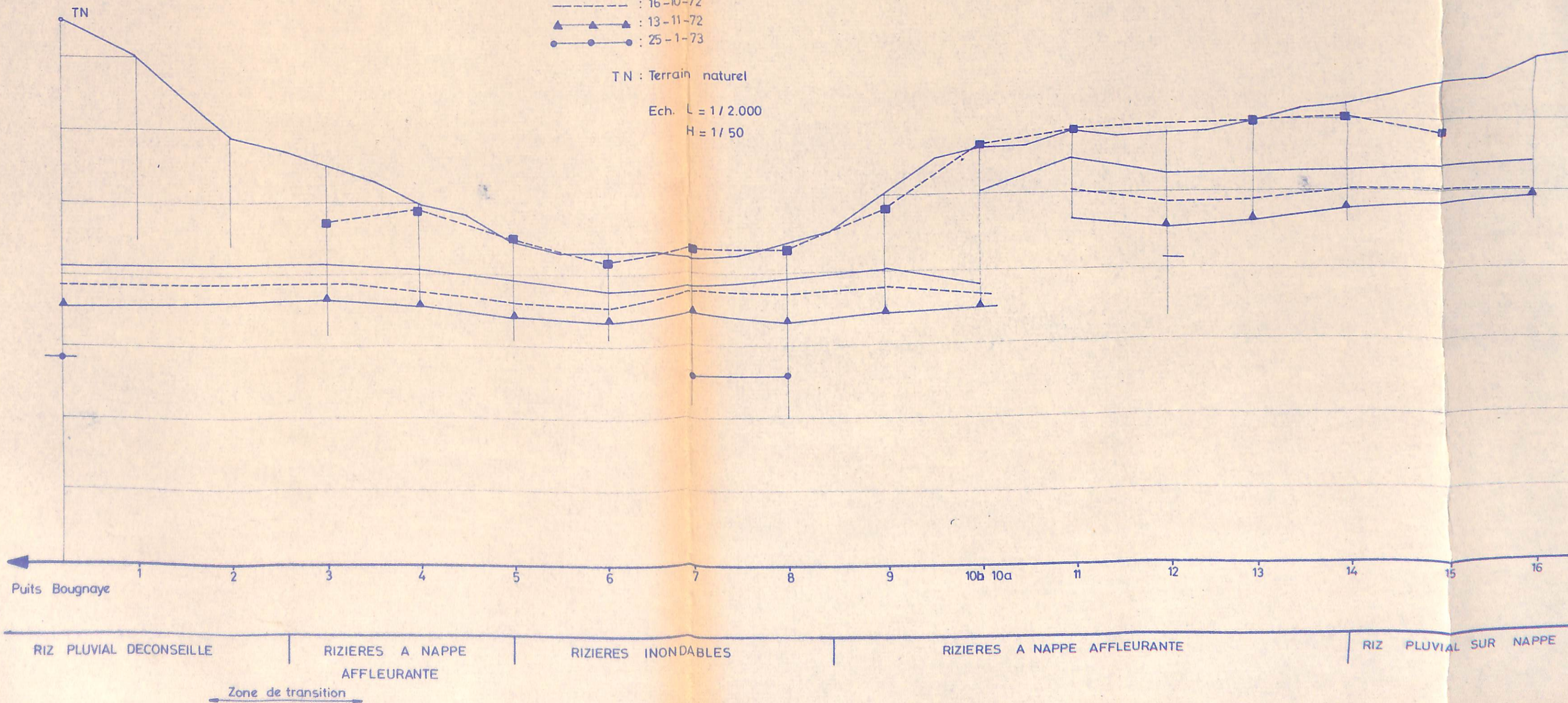
Date d'observation

- : 18-9-72
- : 28-9-72
- - - : 16-10-72
- ▲ : 13-11-72
- : 25-1-73

TN : Terrain naturel

Ech. L = 1 / 2.000

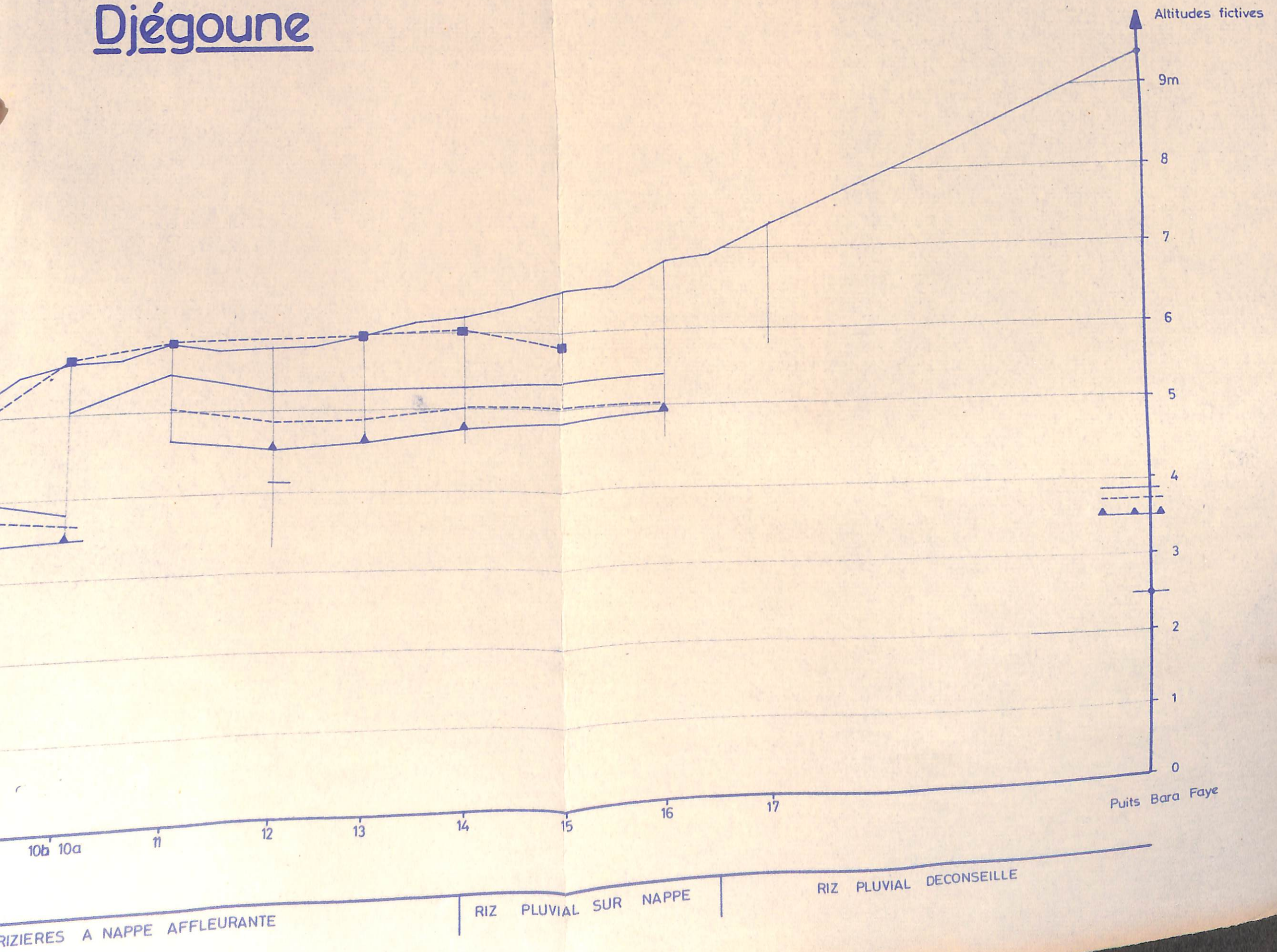
H = 1 / 50





# du niveau piézométrique

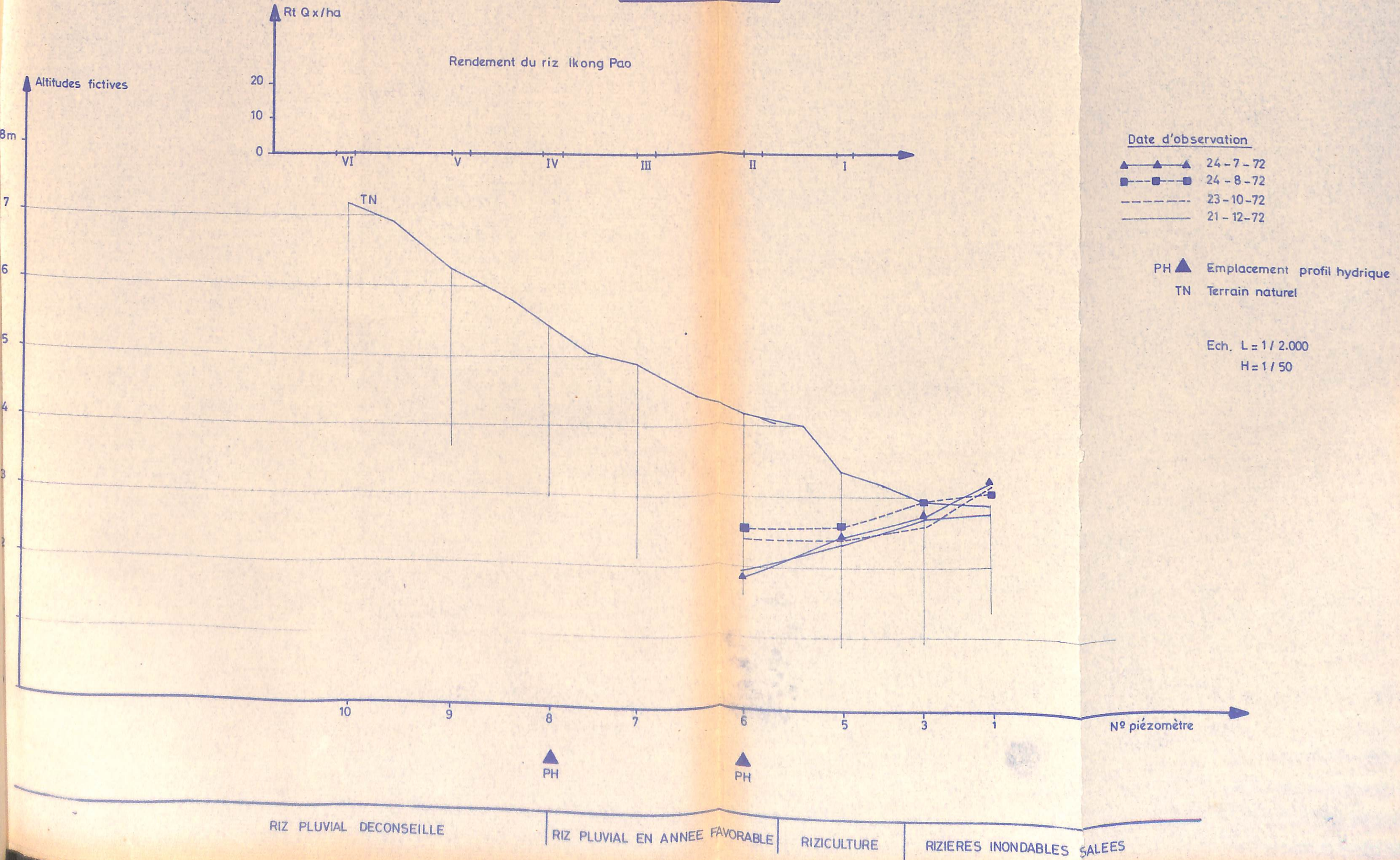
## Djégoune





# Evolution du niveau piézométrique

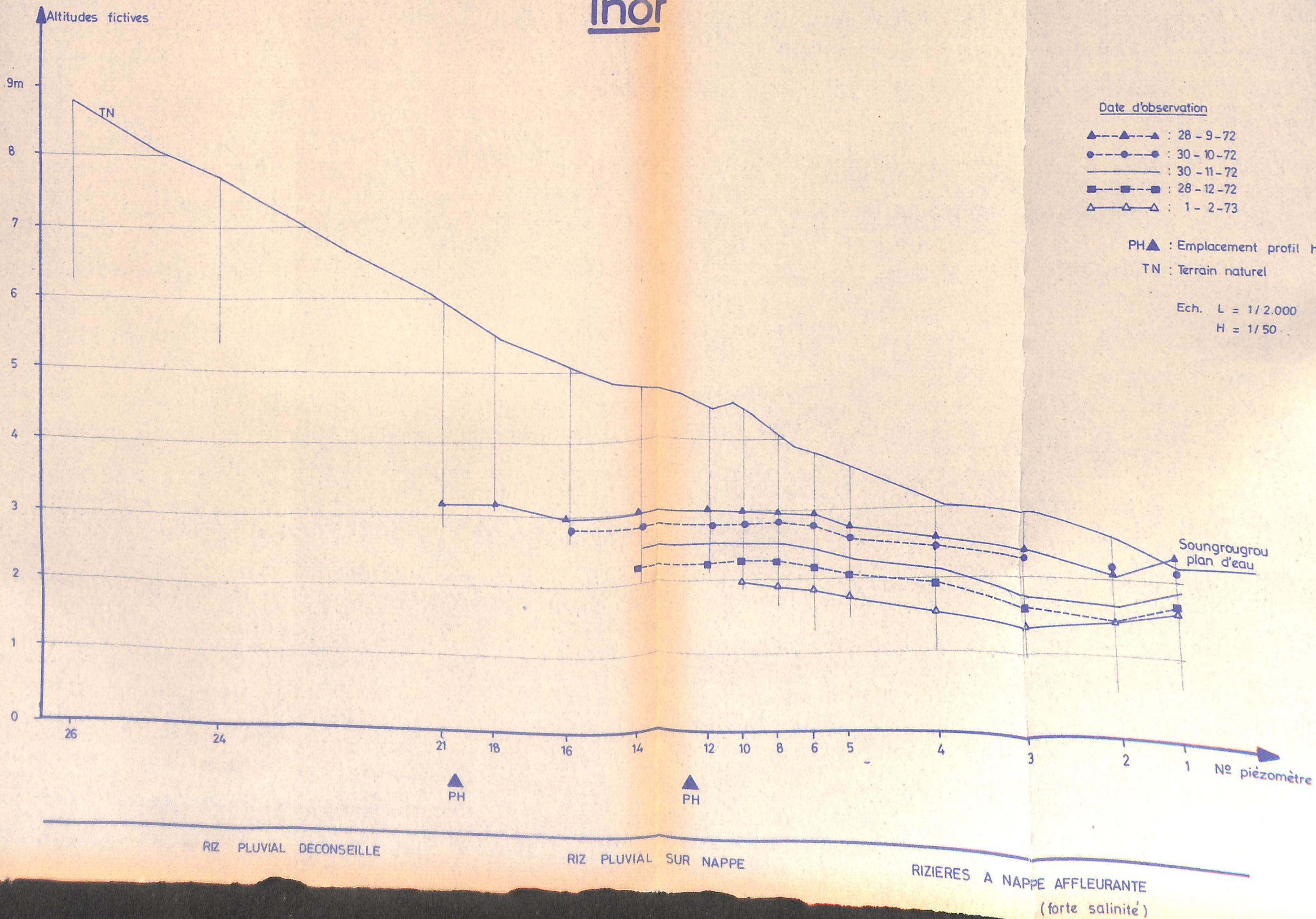
## Diourou





# Evolution du niveau piézométrique

## Inor

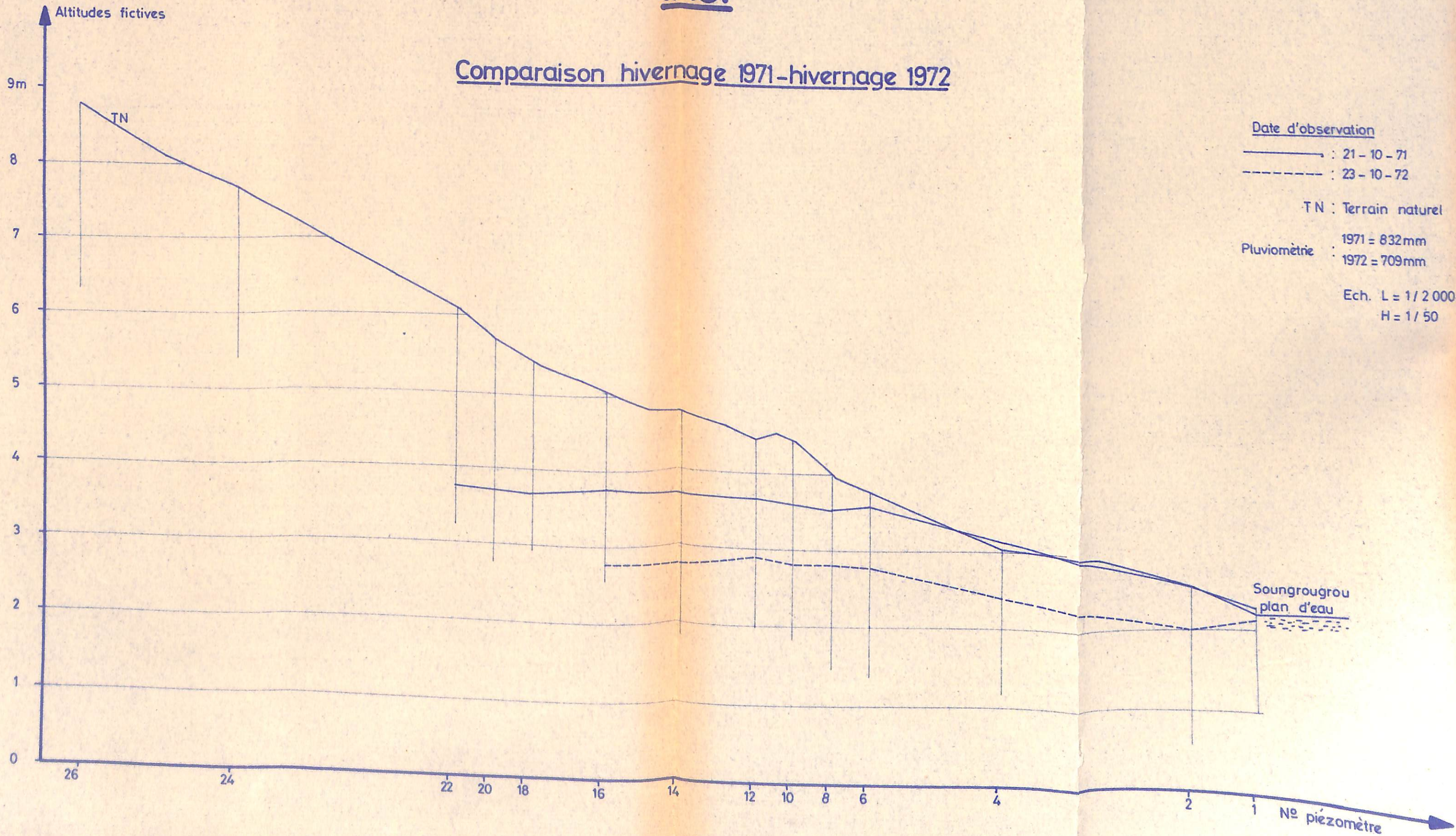




# Evolution du niveau piézométrique

Inor

Comparaison hivernage 1971-hivernage 1972

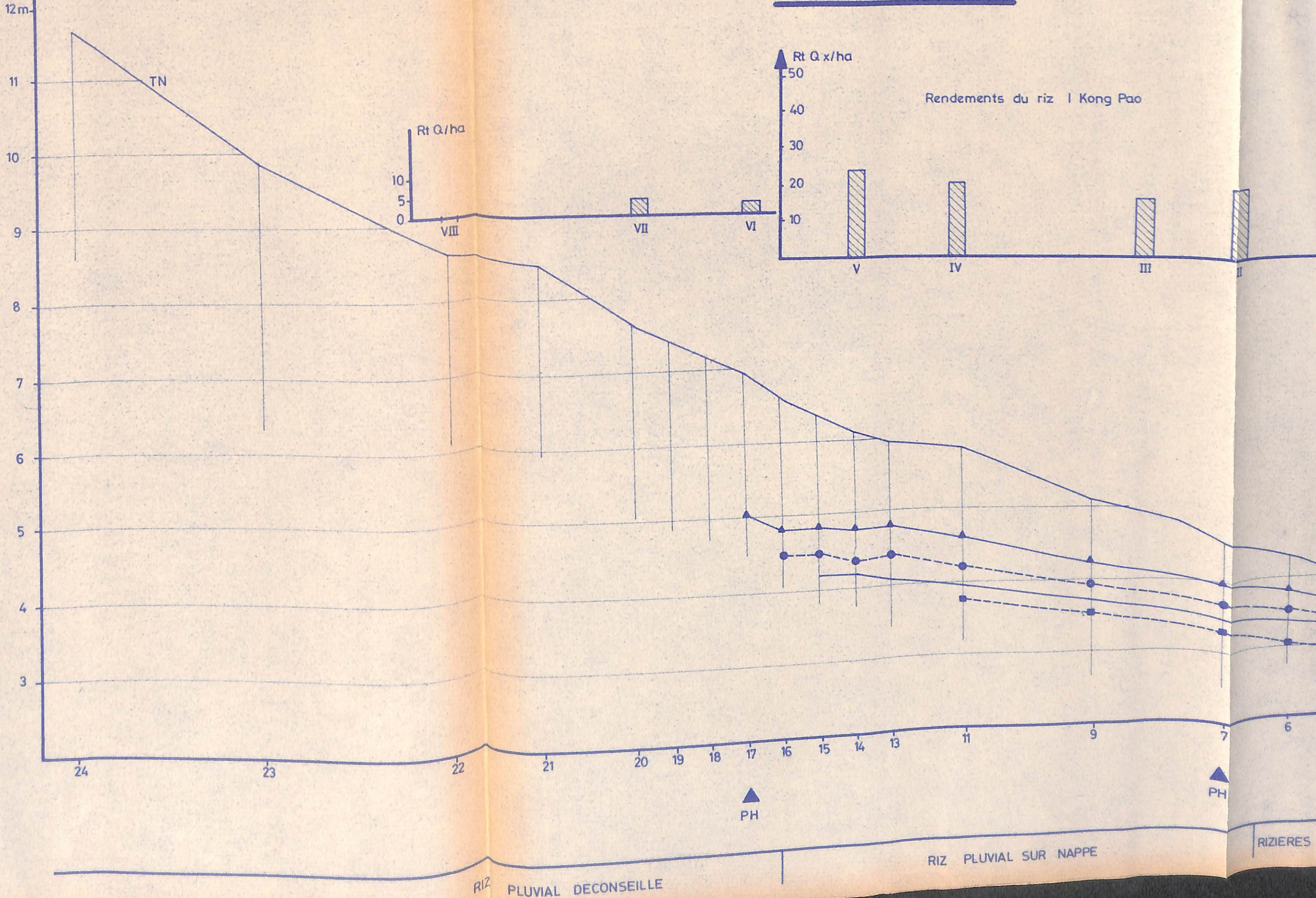




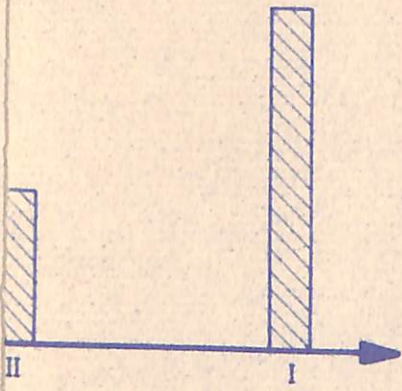
# Evolution du niveau piézométrique

## Kandiadiou

Altitudes fictives





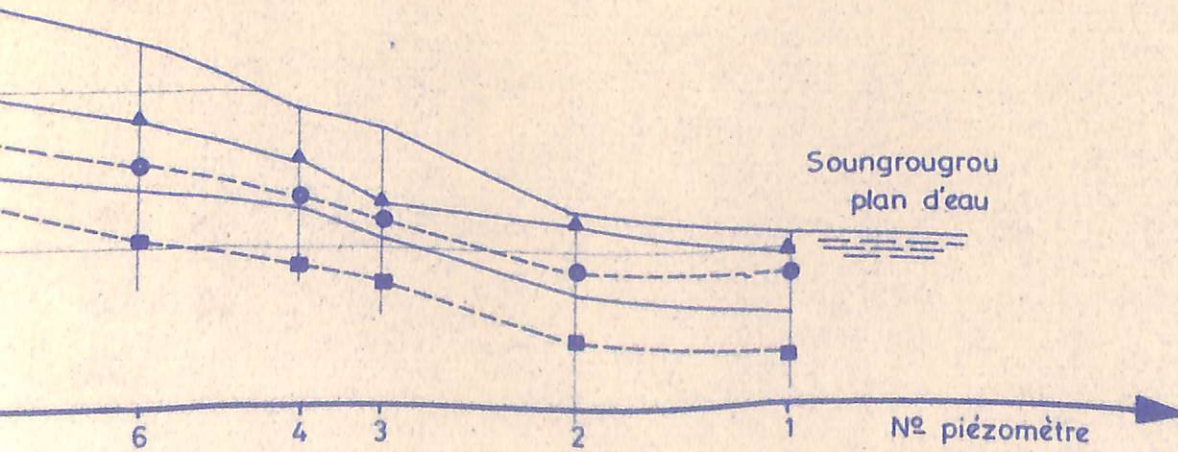


Date d'observation

- ▲ — ▲ — ▲ : 3 - 10 - 72
- — ● — ● : 14 - 11 - 72
- : 27 - 12 - 72
- — ■ — ■ : 5 - 2 - 73

PH ▲ : Emplacement profil hydrique  
 TN : Terrain naturel

Ech. L = 1/2.000  
 H = 1/50



RIZIERES A NAPPE AFFLEURANTE

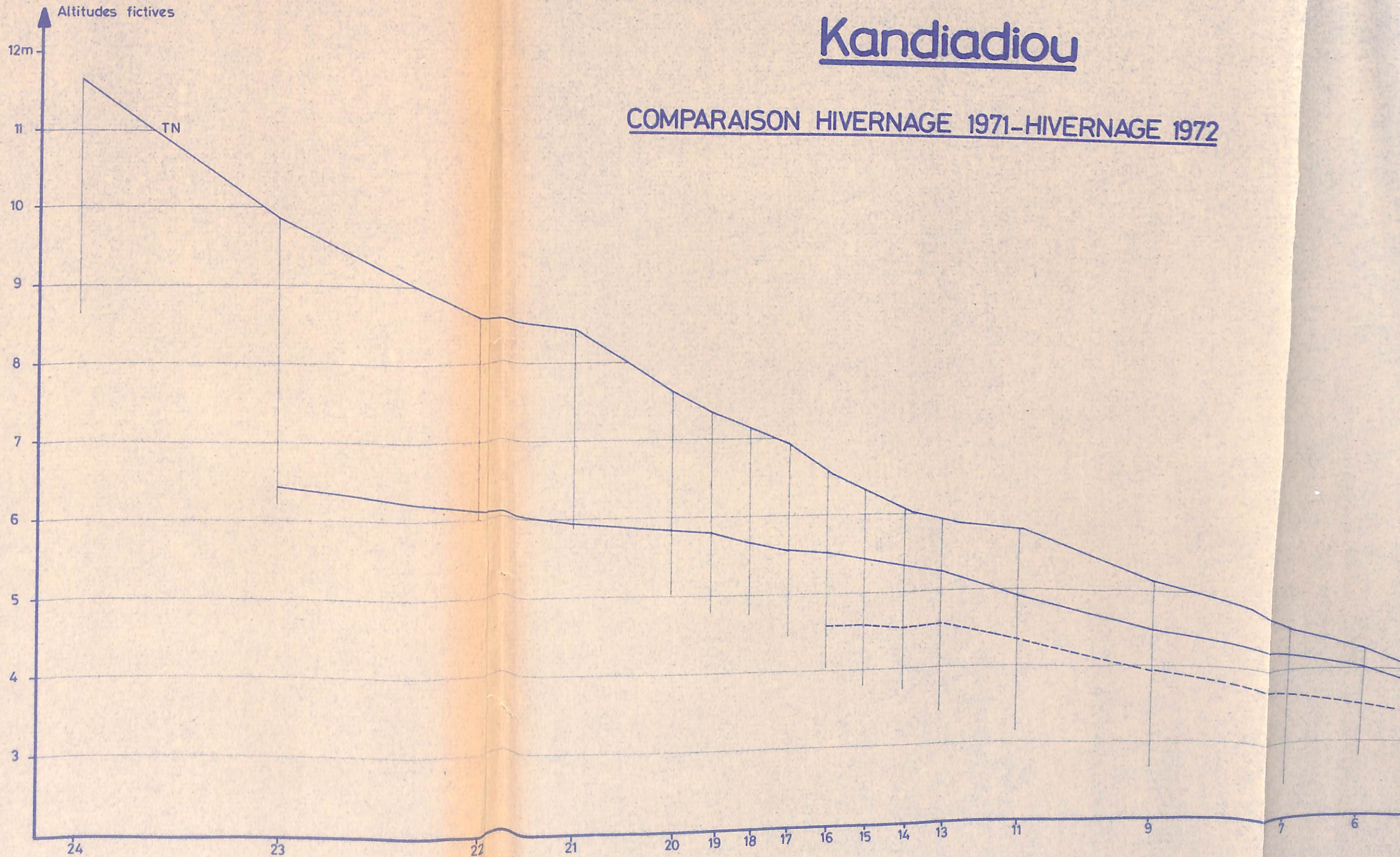
RIZIERES INONDABLES



# Evolution du niveau piézométrique

## Kandiadiou

COMPARAISON HIVERNAGE 1971-HIVERNAGE 1972





2  
1

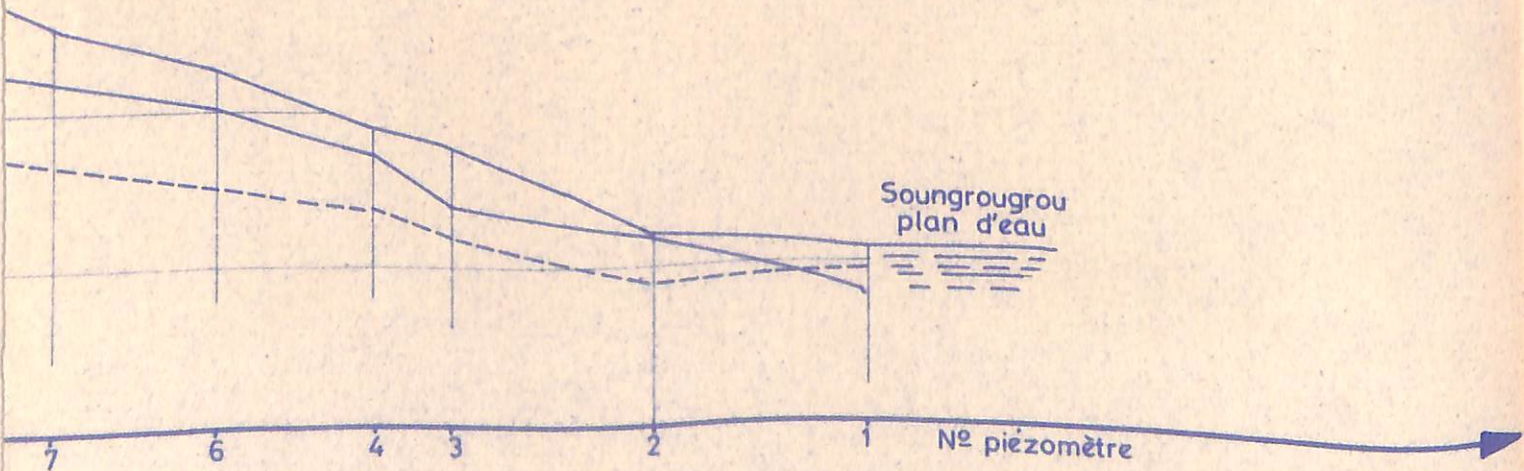
Date d'observation

————— : 21 - 10 - 71  
 - - - - - : 23 - 10 - 72

Pluviométrie : 1971 = ?  
 : 1972 = 789mm

TN : Terrain naturel

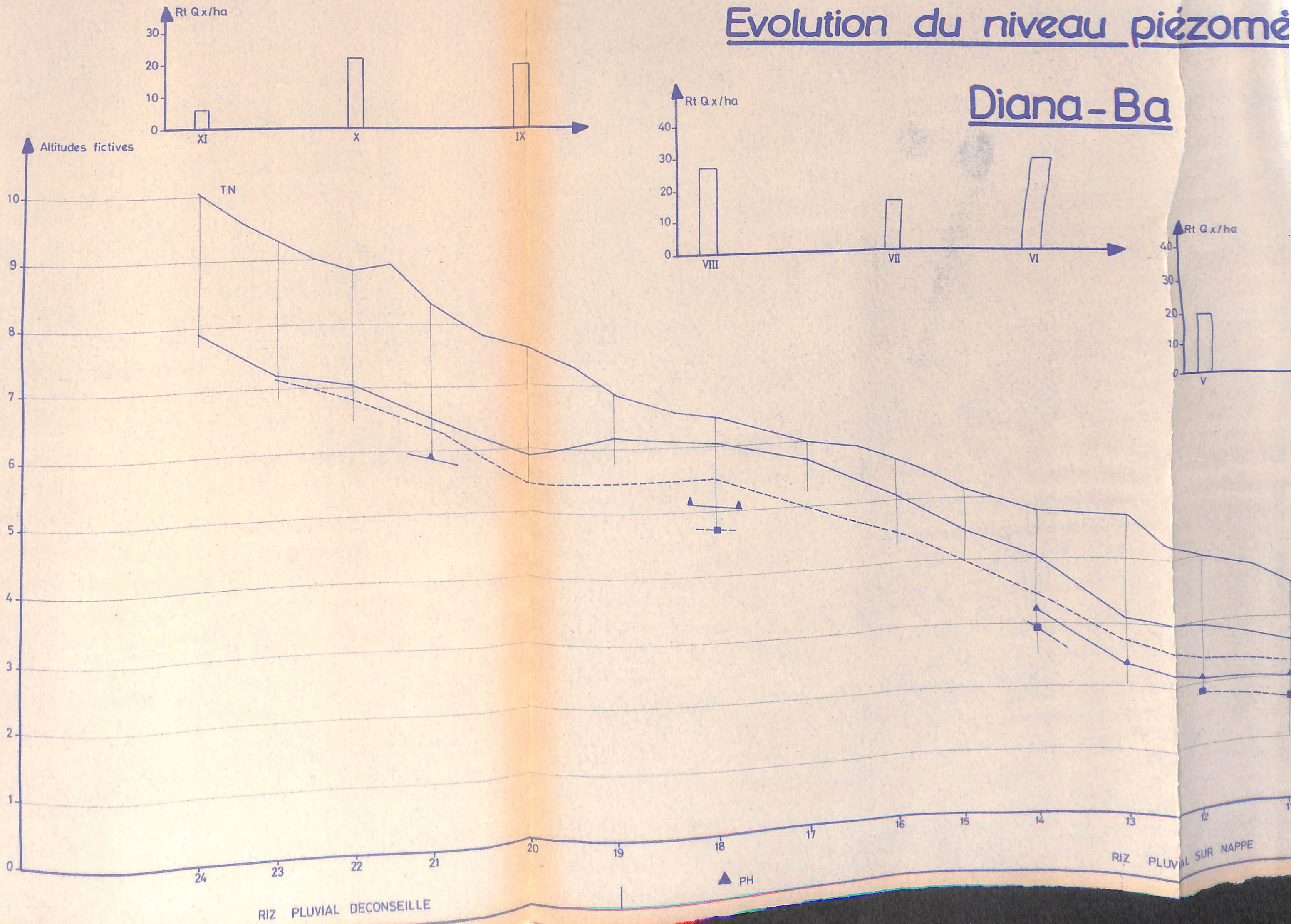
Ech. L = 1/2.000  
 H = 1/50





# Evolution du niveau piézométrique

## Diana-Ba



RIZ PLUVIAL DECONSEILLE

RIZ PLUVIAL SUR NAPPE

▲ PH



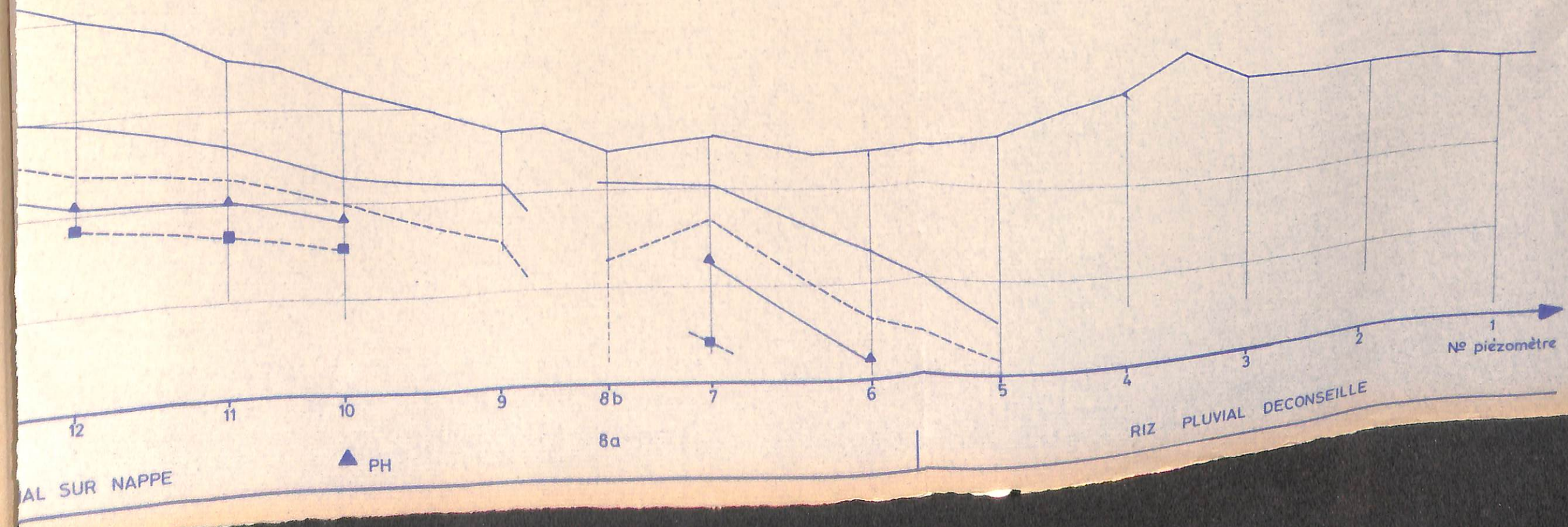
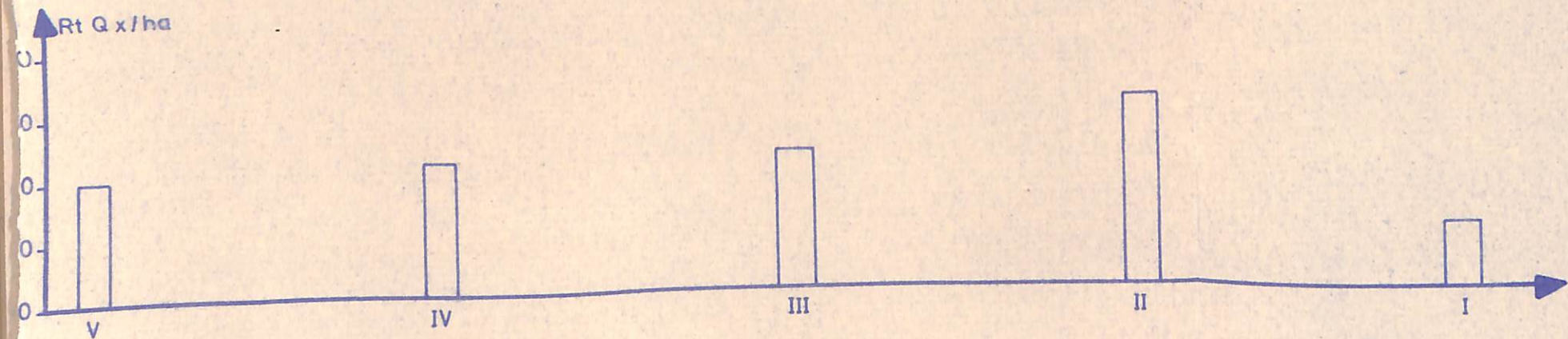
# piézométrique

Date d'observation

- 25-9-72
- - - 26-10-72
- ▲ 27-11-72
- 25-12-72

PH ▲ Emplacement profil hydrique  
 TN Terrain naturel

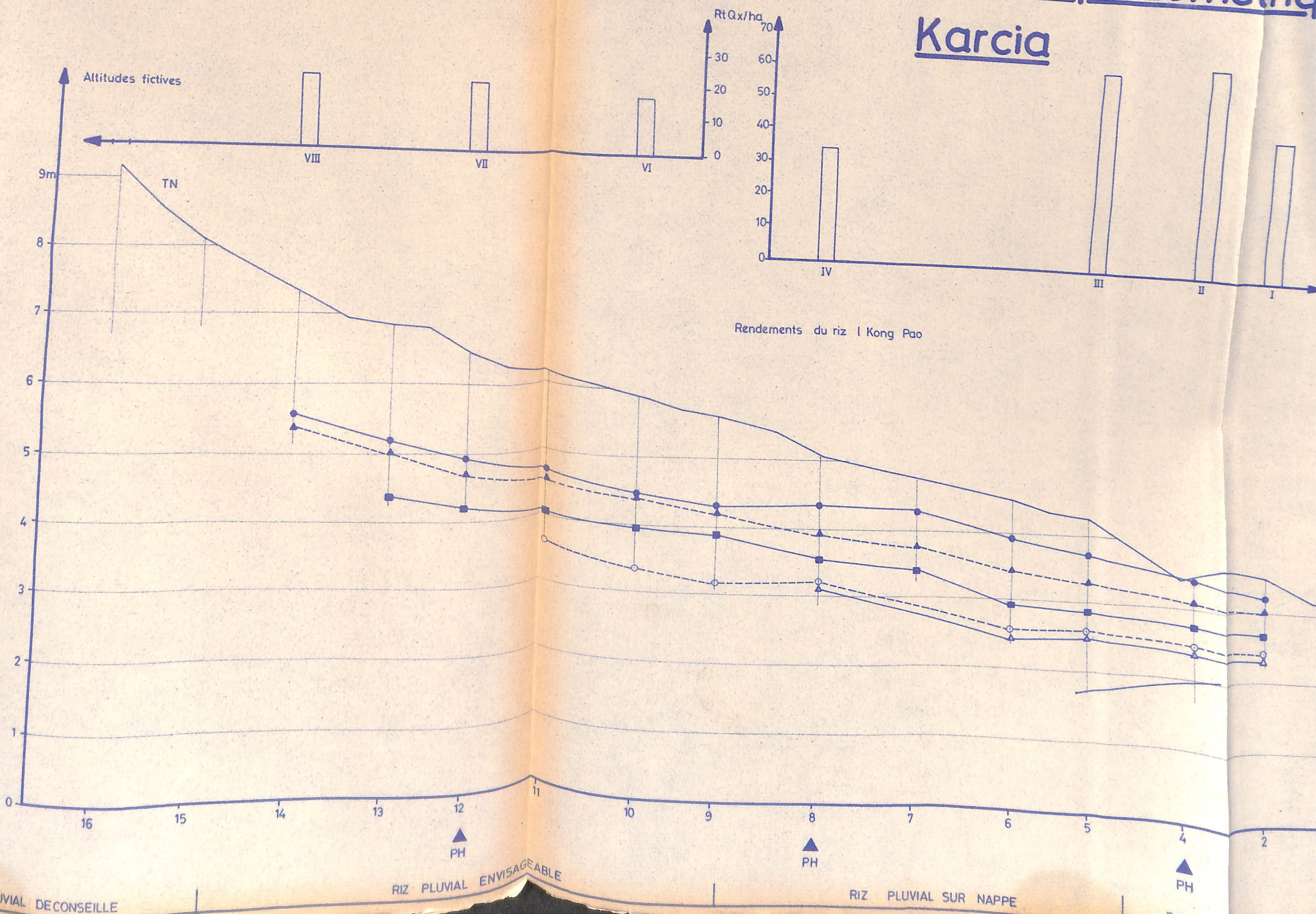
Ech. L = 1 / 2.000  
 H = 1 / 50



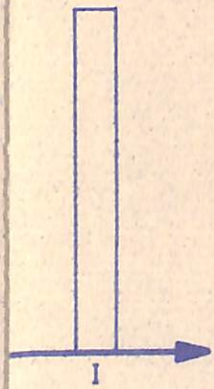


# Evolution du niveau piézométrique

## Karcia







Date d'observation

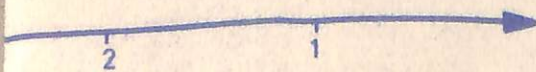
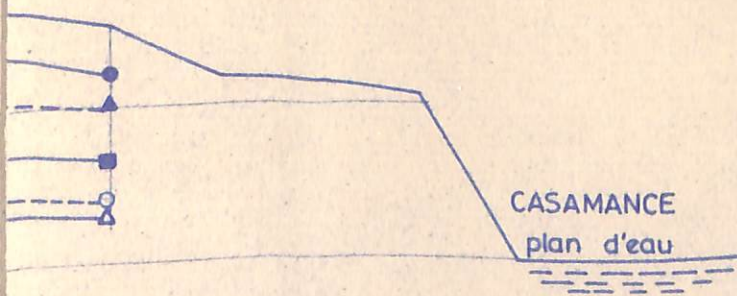
- : 7 - 8 - 72
- : 5 - 10 - 72
- ▲—▲—▲ : 26 - 10 - 72
- : 6 - 12 - 72
- : 8 - 1 - 73
- △—△—△ : 7 - 2 - 73

PH ▲ : Emplacement profil hydrique

TN : Terrain naturel

Ech. L = 1/2.000

H = 1/50



INONDABLES



# Evolution du niveau

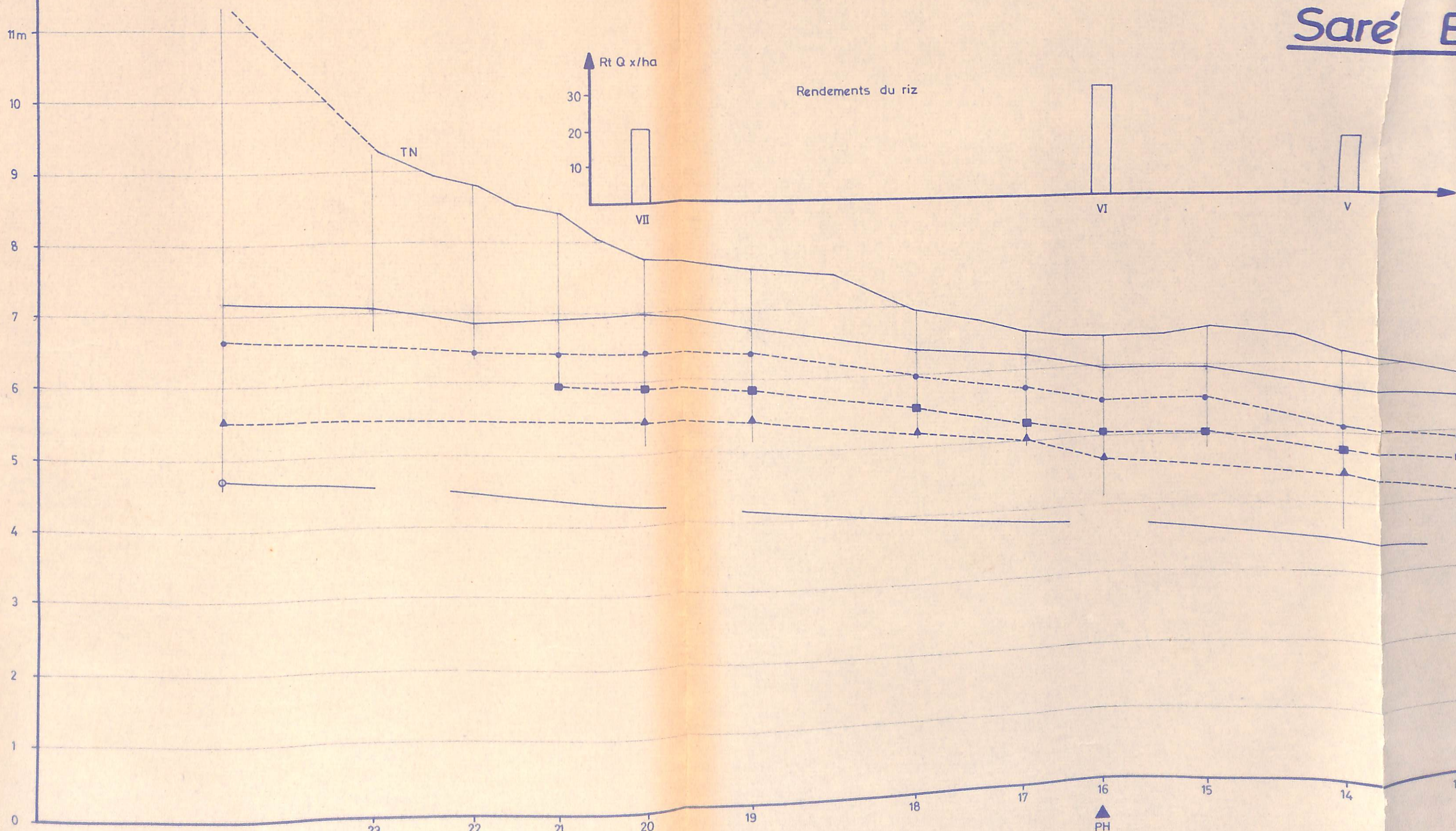
## Saré Bakary

Altitudes fictives

11m  
10  
9  
8  
7  
6  
5  
4  
3  
2  
1  
0

Rt Q x/ha

Rendements du riz



Puits Saré Bakary

PH

PH

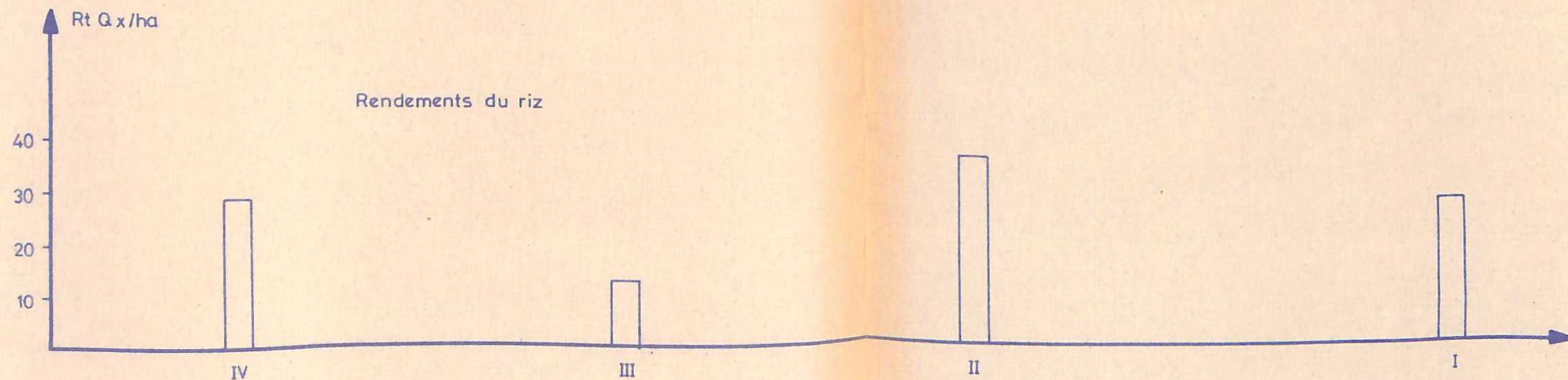
RIZ PLUVIAL DECONSEILLE

RIZ PLUVIAL SUR NAPPE



# niveau piézométrique

## Bakary

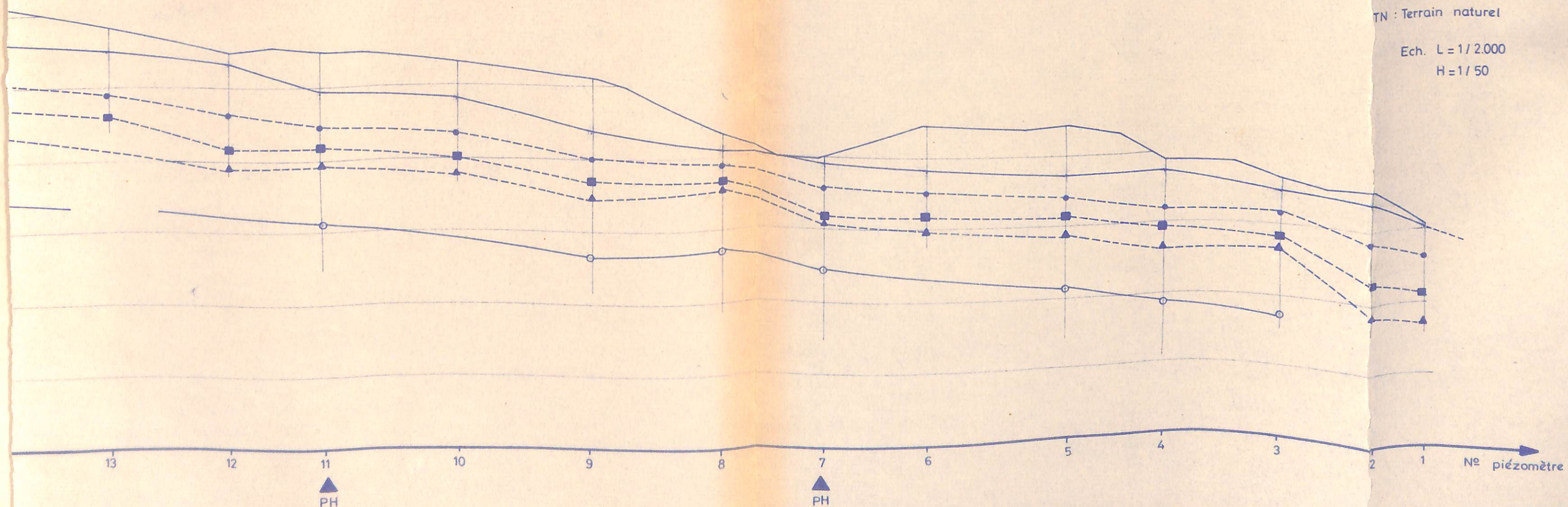


Date d'observation

- : 25-9-72
- : 26-10-72
- : 25-11-72
- ▲- : 25-12-72
- : 31-5-73

PH ▲ : Emplacement profil hydrique  
 TN : Terrain naturel

Ech. L = 1/2.000  
 H = 1/50



RIZIÈRES INONDABLES

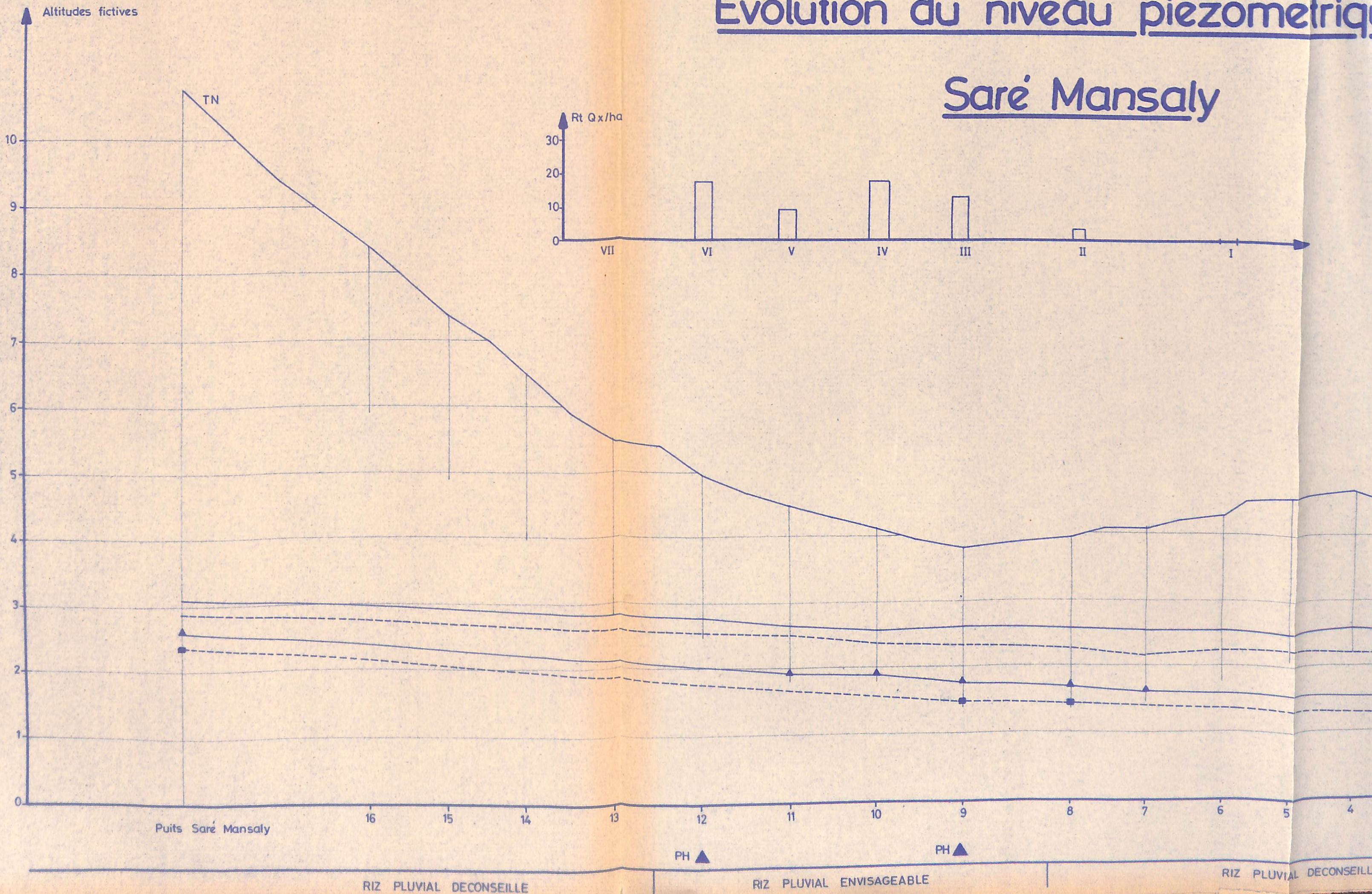
RIZ PLUVIAL SUR NAPPE

ZONE INONDABLE



# Evolution du niveau piézométrique

## Saré Mansaly





trique

Date d'observation

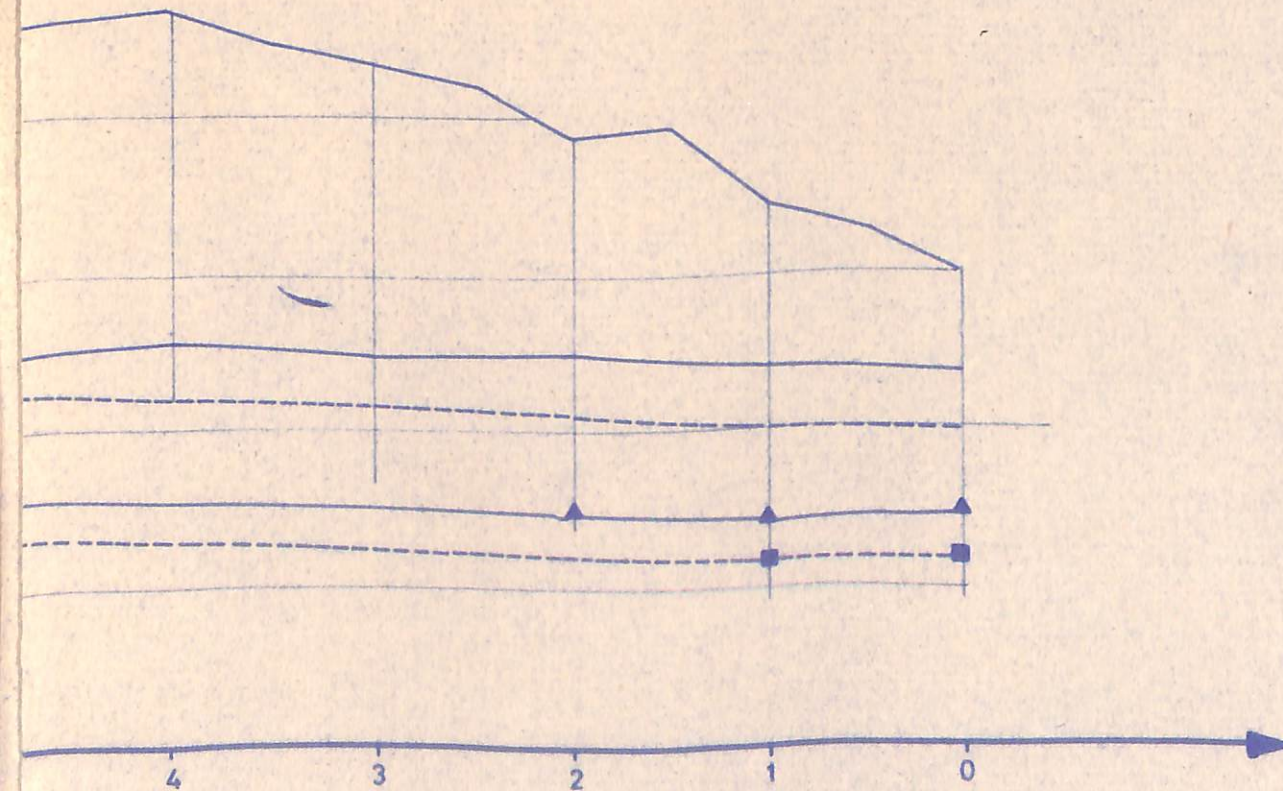
- : 25-9-72
- - - : 26-10-72
- ▲ — ▲ : 25-12-72
- - - ■ : 25-1-73

PH ▲ : Emplacement profil hydrique

TN : Terrain naturel

Ech. L = 1/2.000

H = 1/50

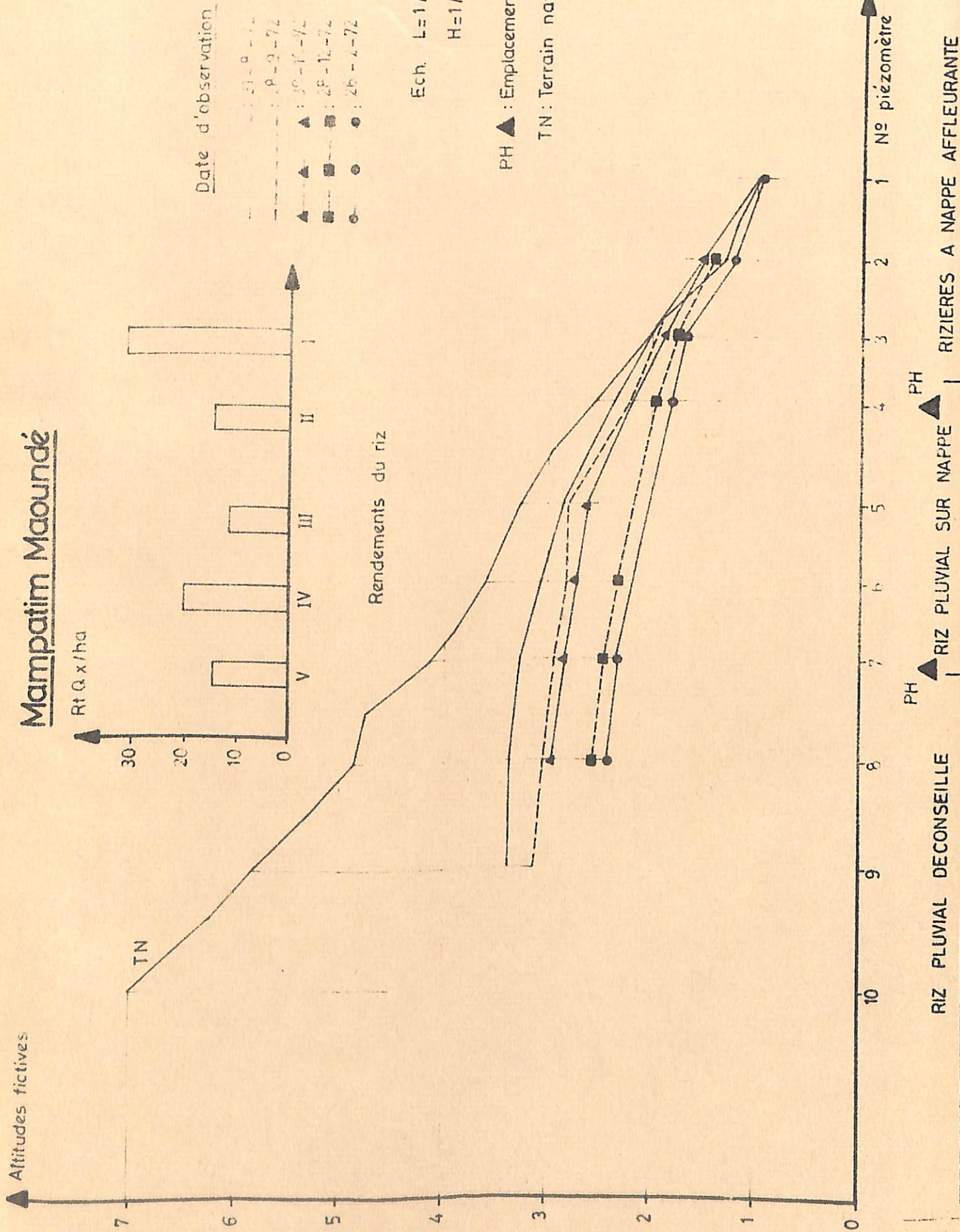


AL DECONSEILLE

RIZ PLUVIAL SUR NAPPE



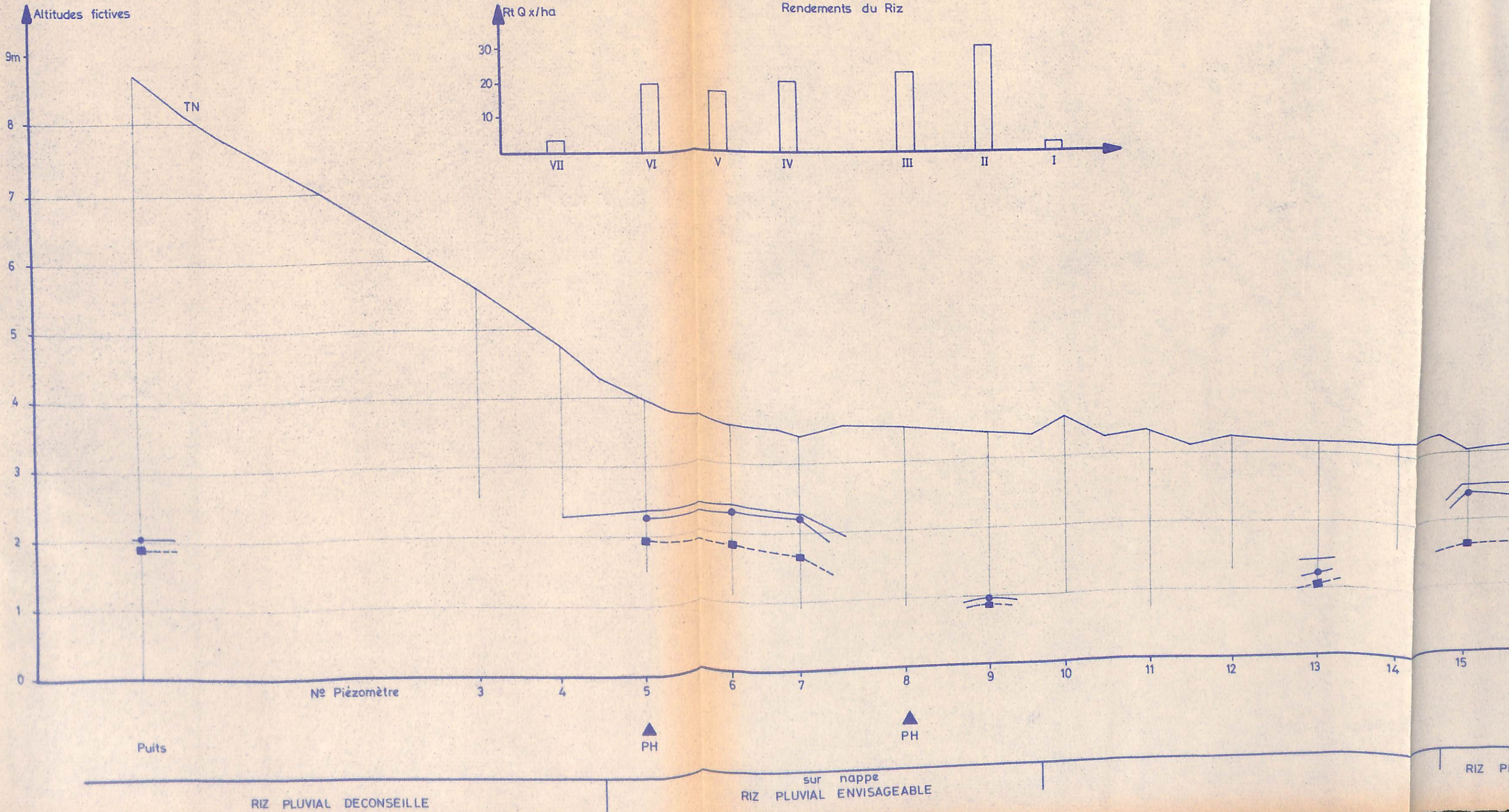
Mampatim Maoundé





# Evolution du niveau piézométrique

## Diallicounda





Date d'observation

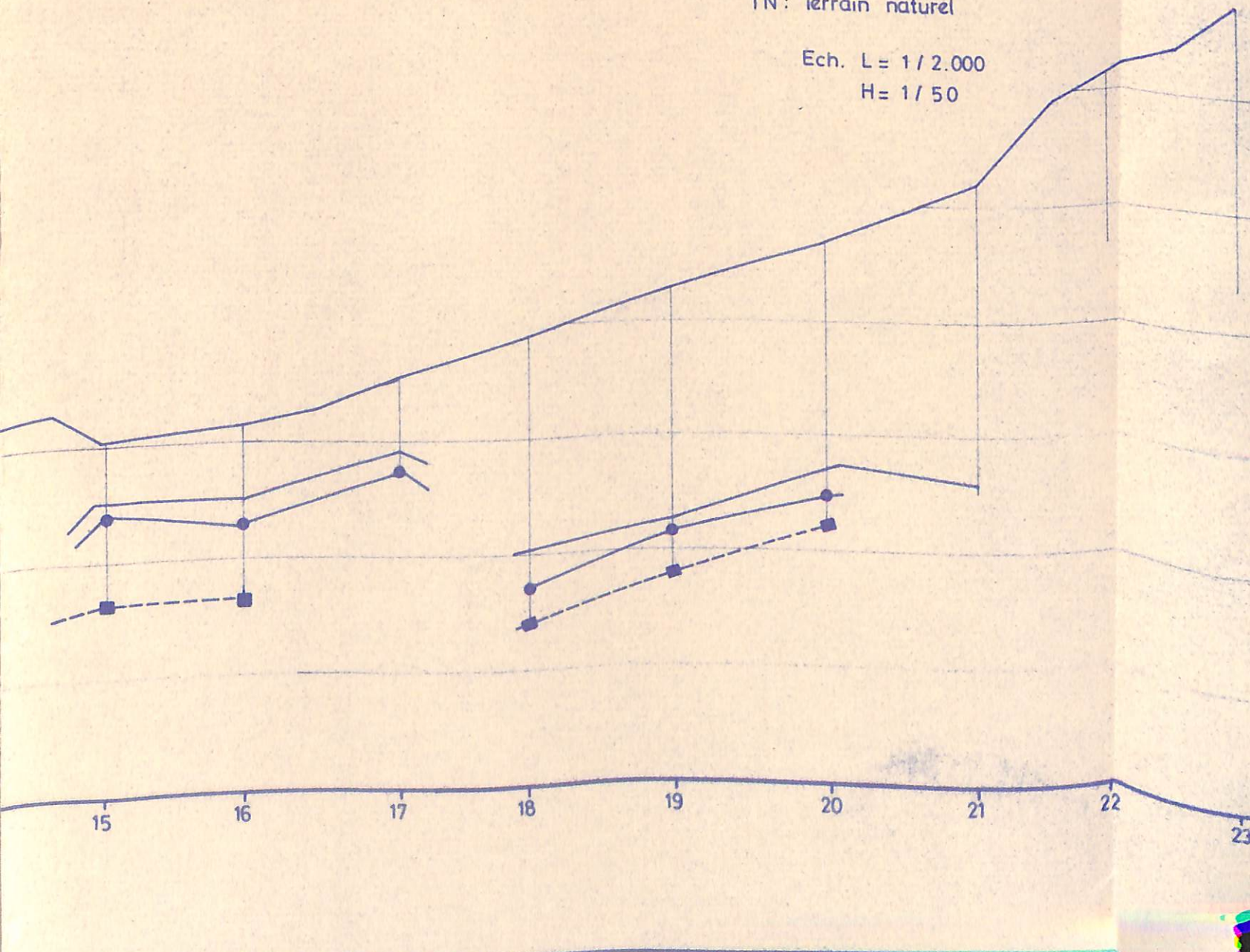
- : 23-10-72
- : 18-9-72
- - -■ : 23-11-73

PH ▲ : Emplacement profil hydrique

TN : Terrain naturel

Ech. L = 1 / 2.000

H = 1 / 50



15

16

17

18

19

20

21

22

23

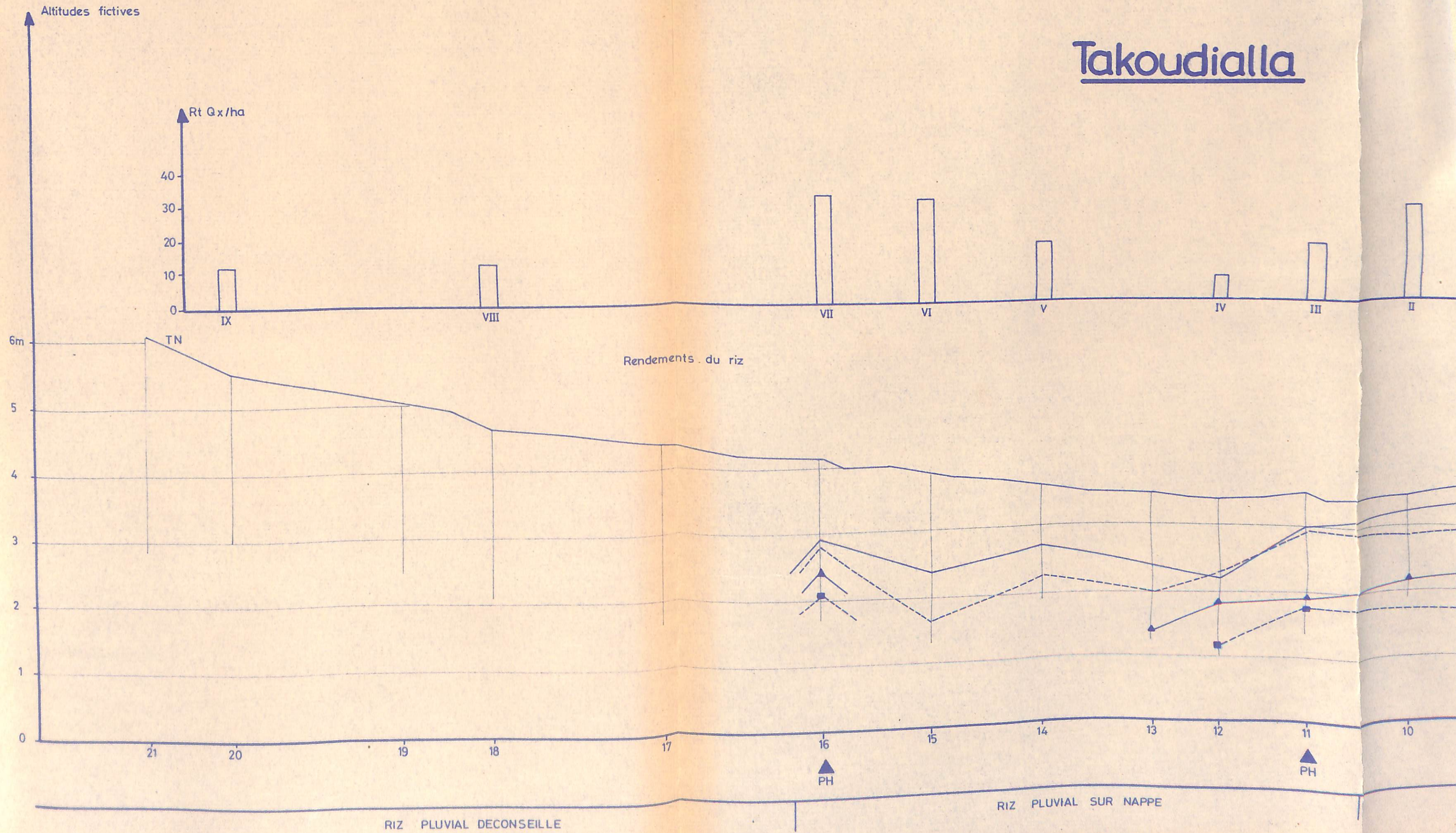
RIZ PLUVIAL SUR NAPPE

RIZ PLUVIAL DECONSEILLE

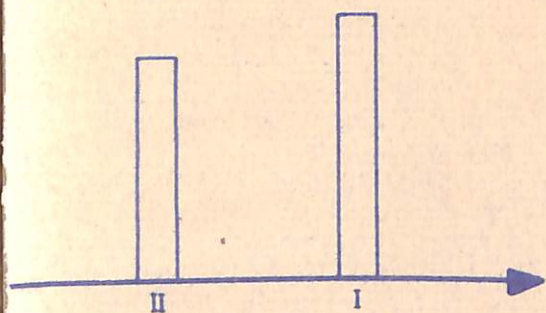


# Evolution du niveau piézométrique

## Takoudialla







### Date d'observation

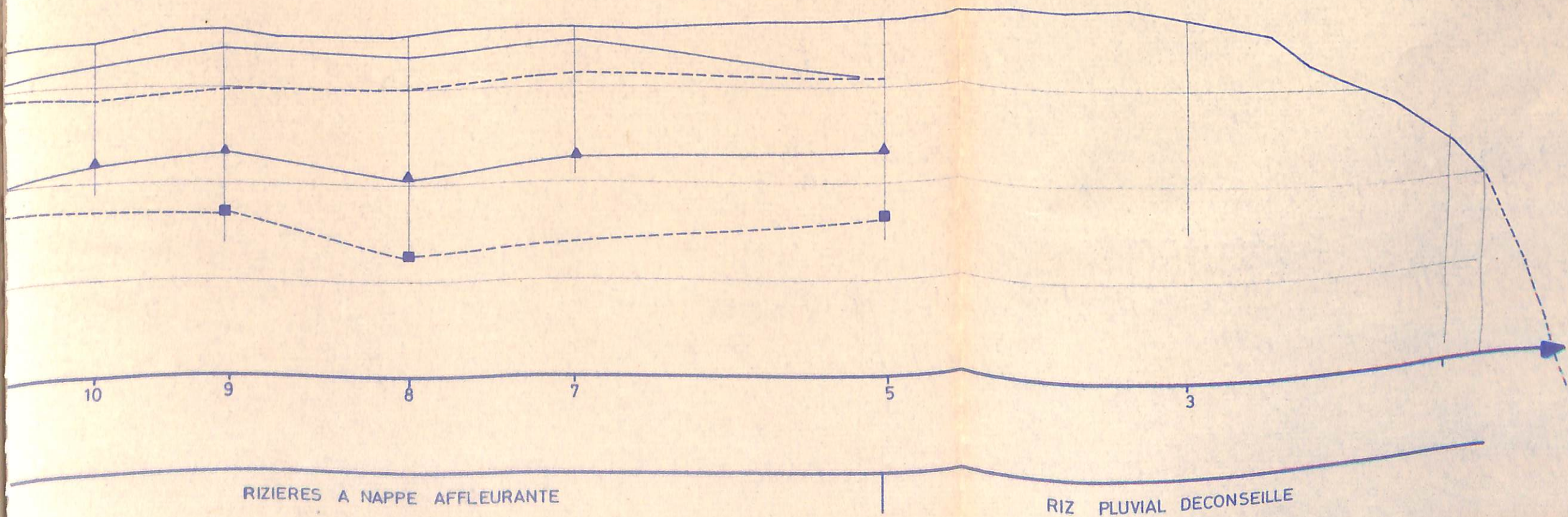
- : 25-8-72
- - - : 25-10-72
- ▲—▲—▲ : 23-11-72
- : 28-12-72

PH ▲ : Emplacement profil hydrique

TN : Terrain naturel

Ech. L = 1 / 2.000

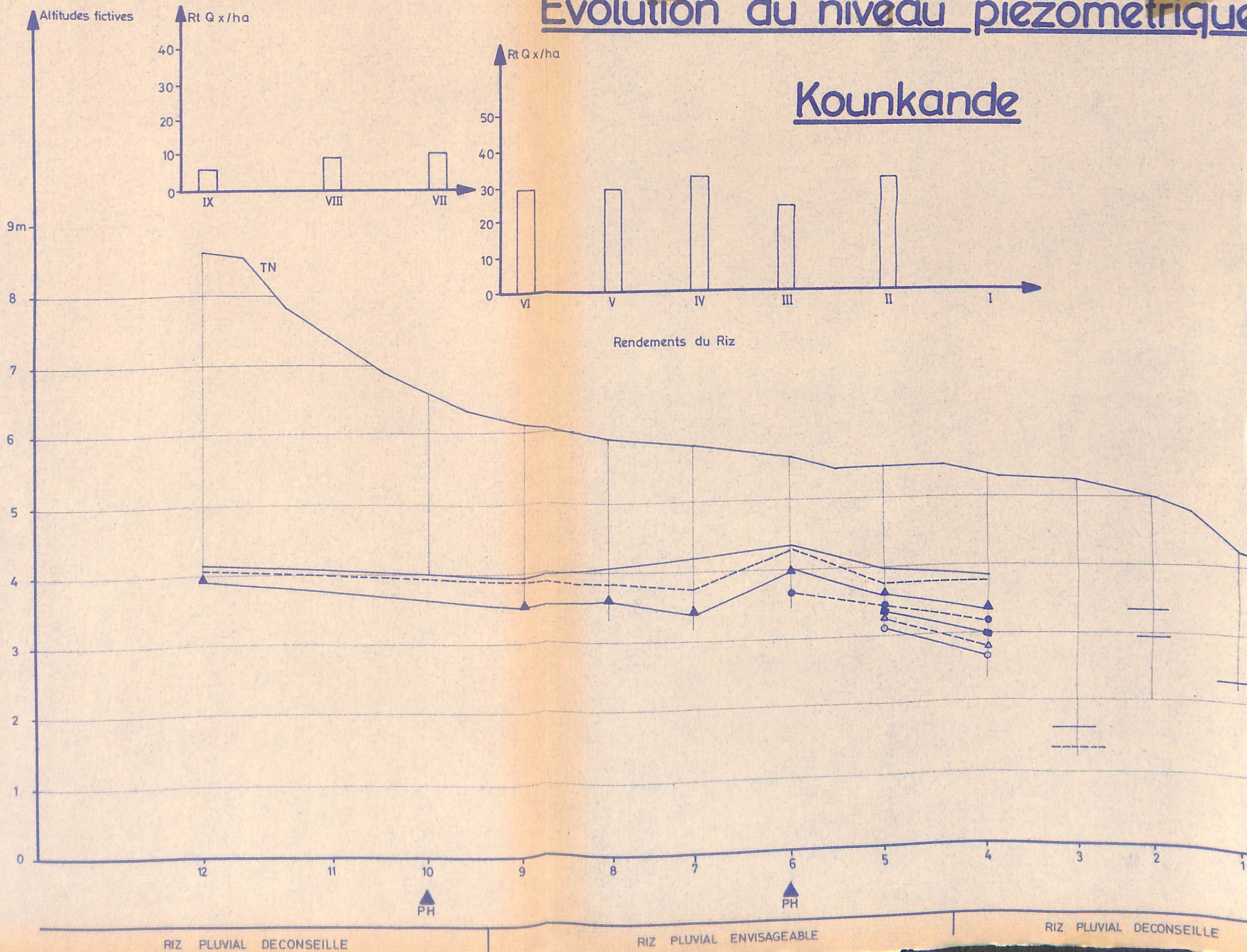
H = 1 / 50





# Evolution du niveau piézométrique

## Kouankande





Date d'observation

————— : 2-10-72

----- : 2-11-72

▲—▲—▲ : 4-12-72

●—●—● : 4-1-73

■—■—■ : 5-2-73

△—△—△ : 5-3-73

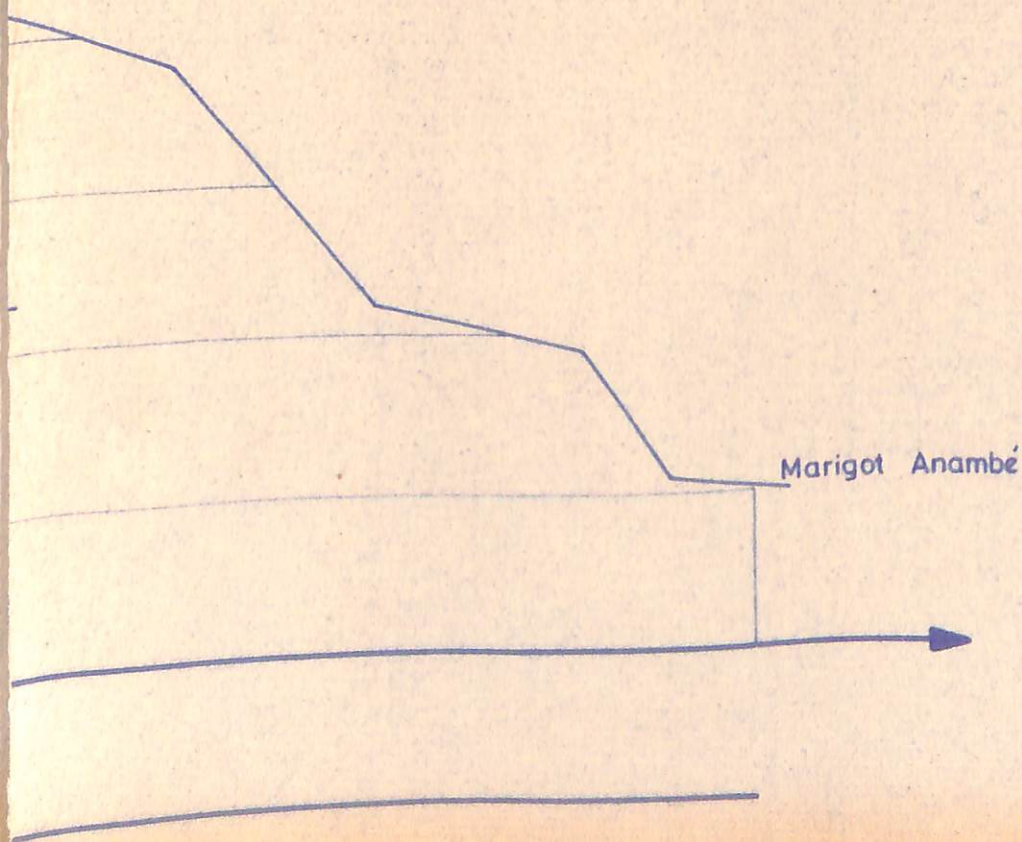
○—○—○ : 2-4-73

PH ▲ : Emplacement profil hydrique

T N : Terrain naturel

Ech. L = 1 / 2.000

H = 1 / 50





# Humectation du profil 1972

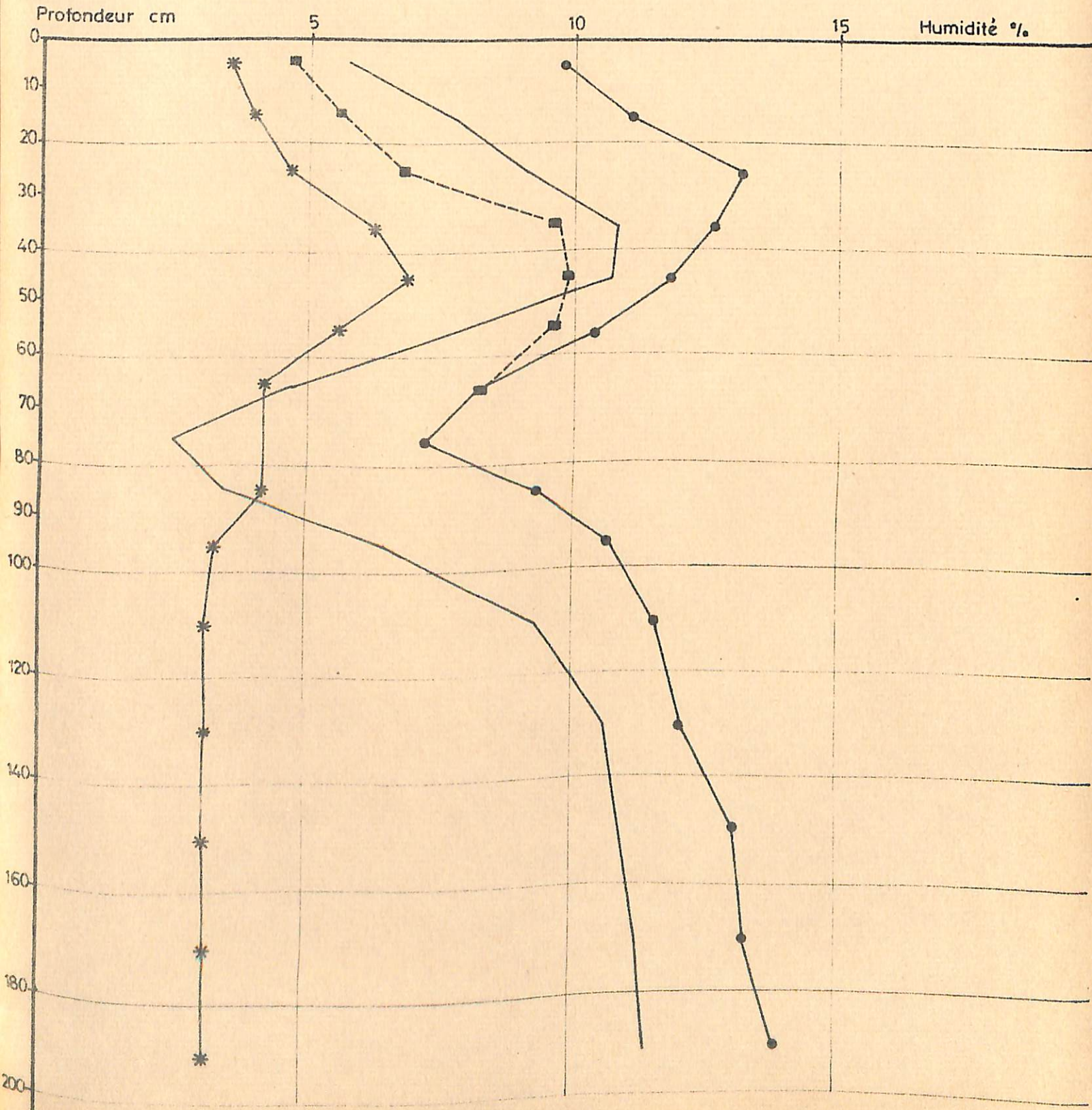
FIG. 56

BALINGOR TENDIMANE  
PH II 5

Date  
10 - 8 - 72  
18 - 8 - 72  
4 - 9 - 72  
PF : 4,2

Profondeur Nappes

—  
●—●—● 260 cm  
■—■—■ 212 cm  
\*—\*—\* 100 cm



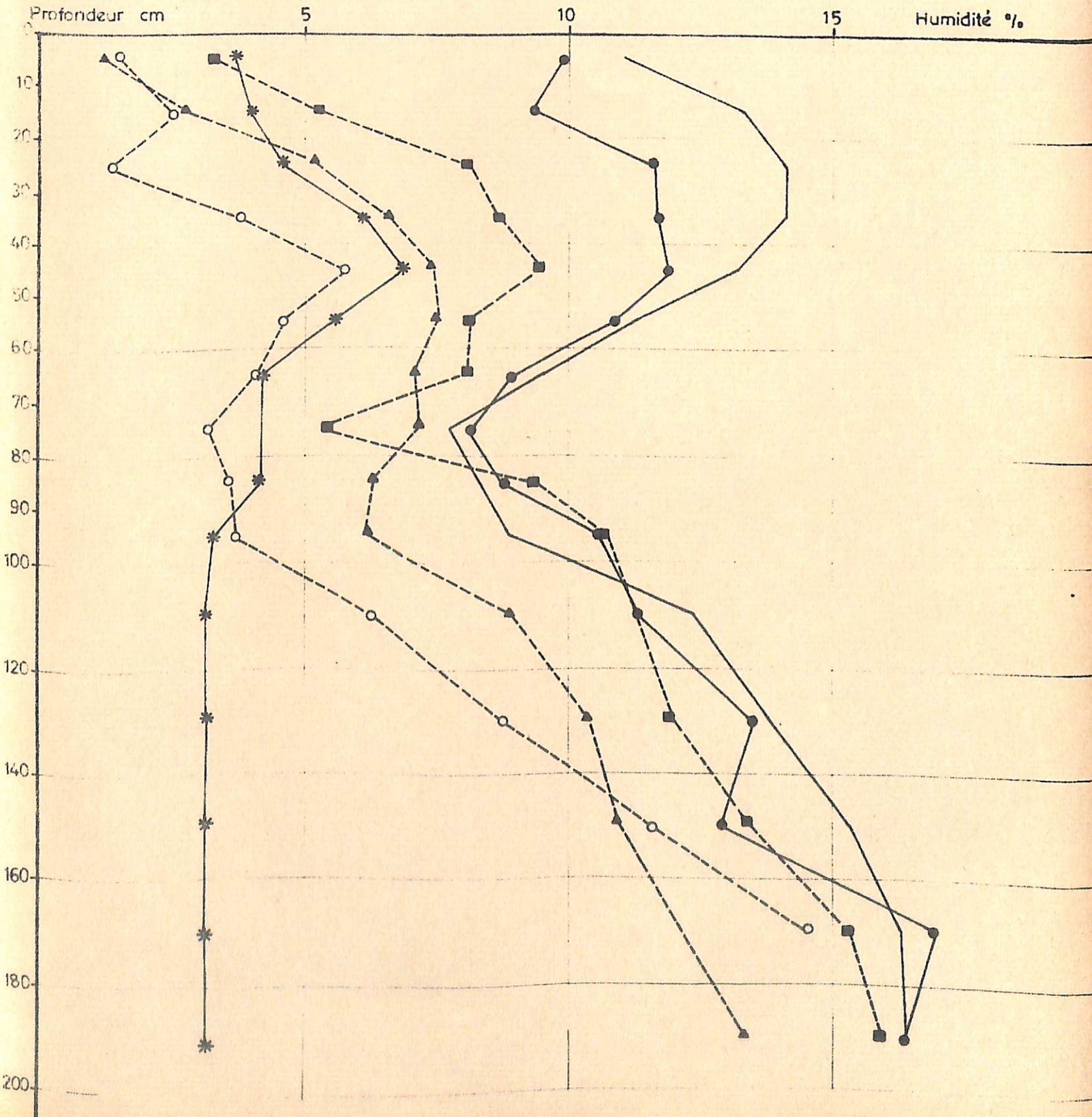


# Assèchement du profil 1972-1973

FIG. 57

BALINGOR TENDIMANE  
PH II 5

Date	Profondeur Nappe
18 9 72	243 cm
25- 9 - 72	207 cm
9 - 10 - 72	217 cm
25 - 1 - 73	217 cm
23 - 5 - 73	217 cm
PF: 4,2	*



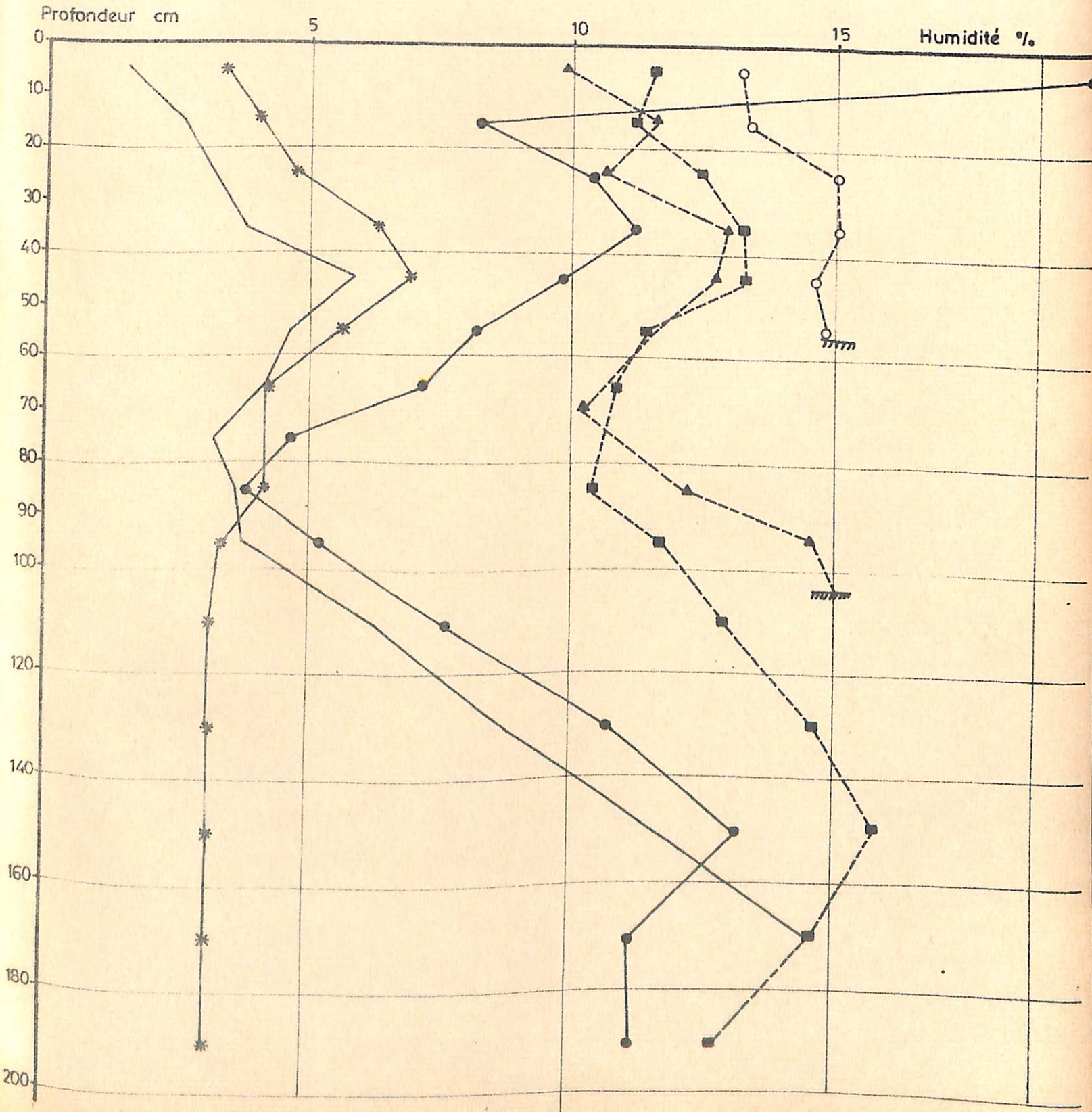


# Humectation du profil 1973

FIG. 58

BALINGOR TENDIMANE  
PH II 5

Date	Profondeur Nappes
23-5-73	—
22-6-73	●—●
18-7-73	■—■
21-8-73	▲—▲ 104cm
5-9-73	○—○ 56cm
PF 4,2	*—*



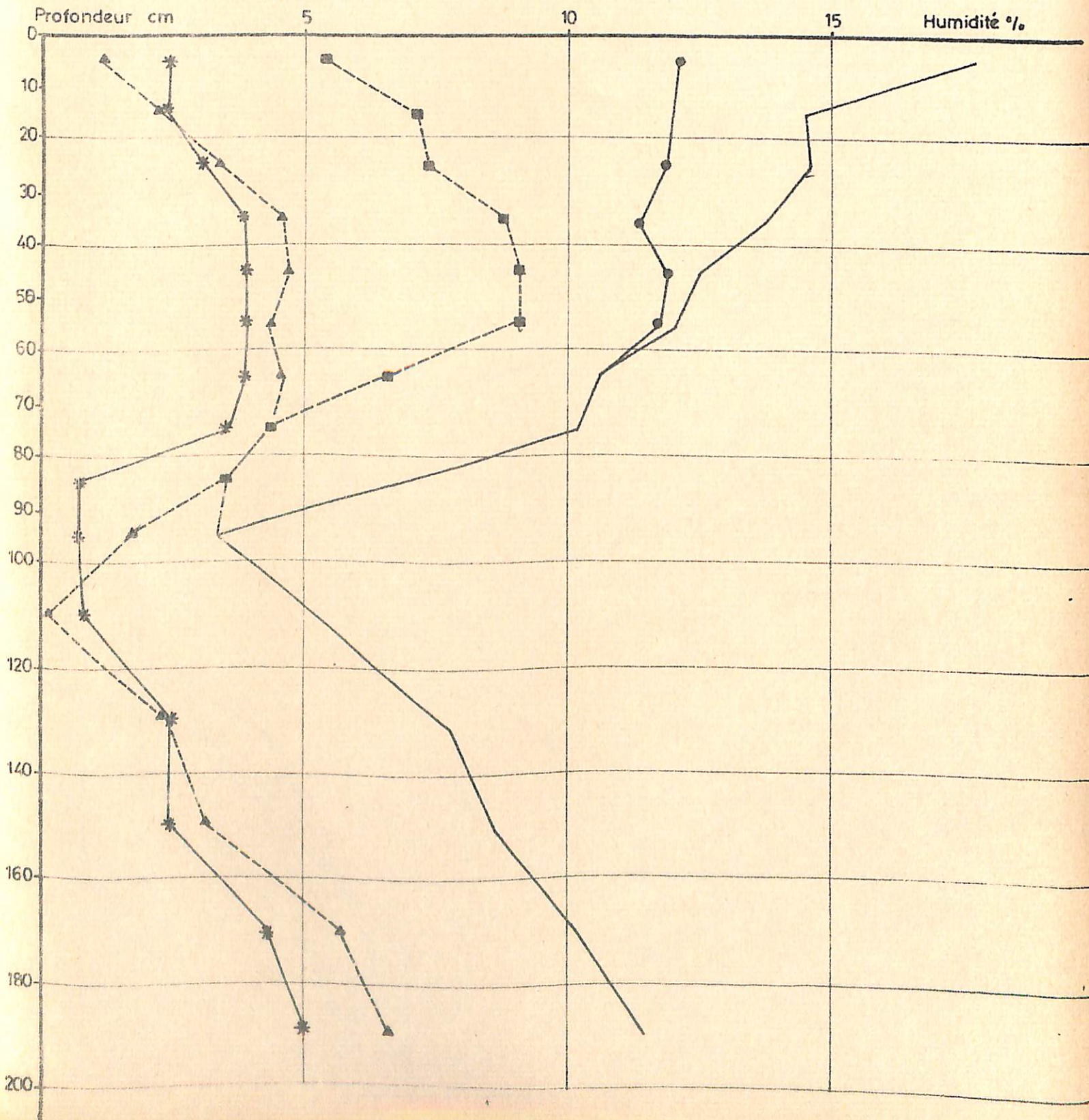


# Assèchement du profil 1972-1973

FIG. 59

BALINGOR TENDIMANE  
PH V10

Date	Profondeur Nappe
18 - 9 - 72	—————
25 - 9 - 72	●—●—●
9 - 10 - 72	■—■—■
25 - 11 - 73	▲—▲—▲
PF 4,2	*—*—*

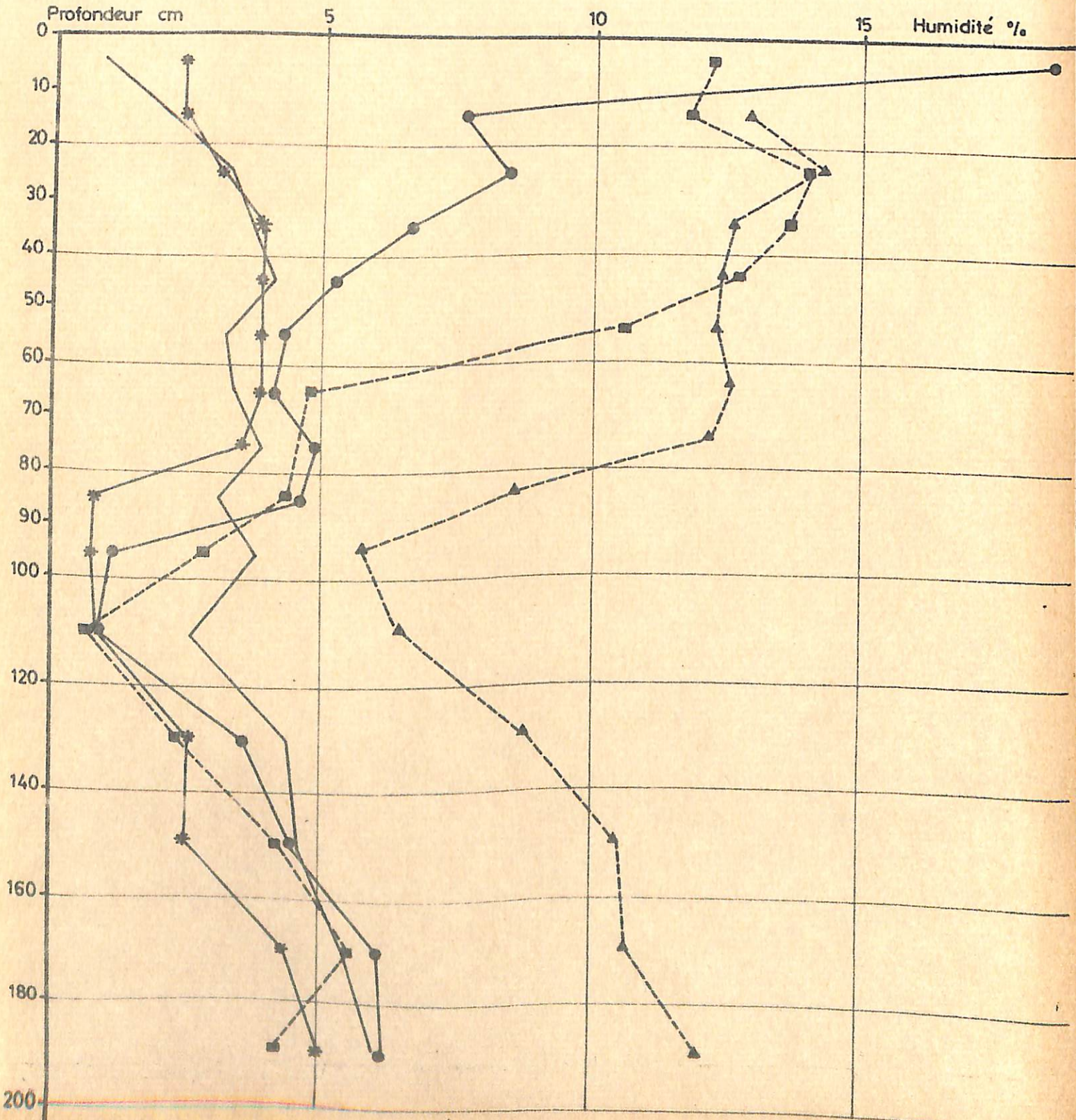




# Humectation du profil 1973

BALINGOR TENDIMANE  
PH V 10

Date	Symbol
23 - 5 - 73	—
22 - 6 - 73	●—●—●
18 - 7 - 73	■—■—■
2 - 8 - 73	▲—▲—▲
PF 4,2	*—*—*

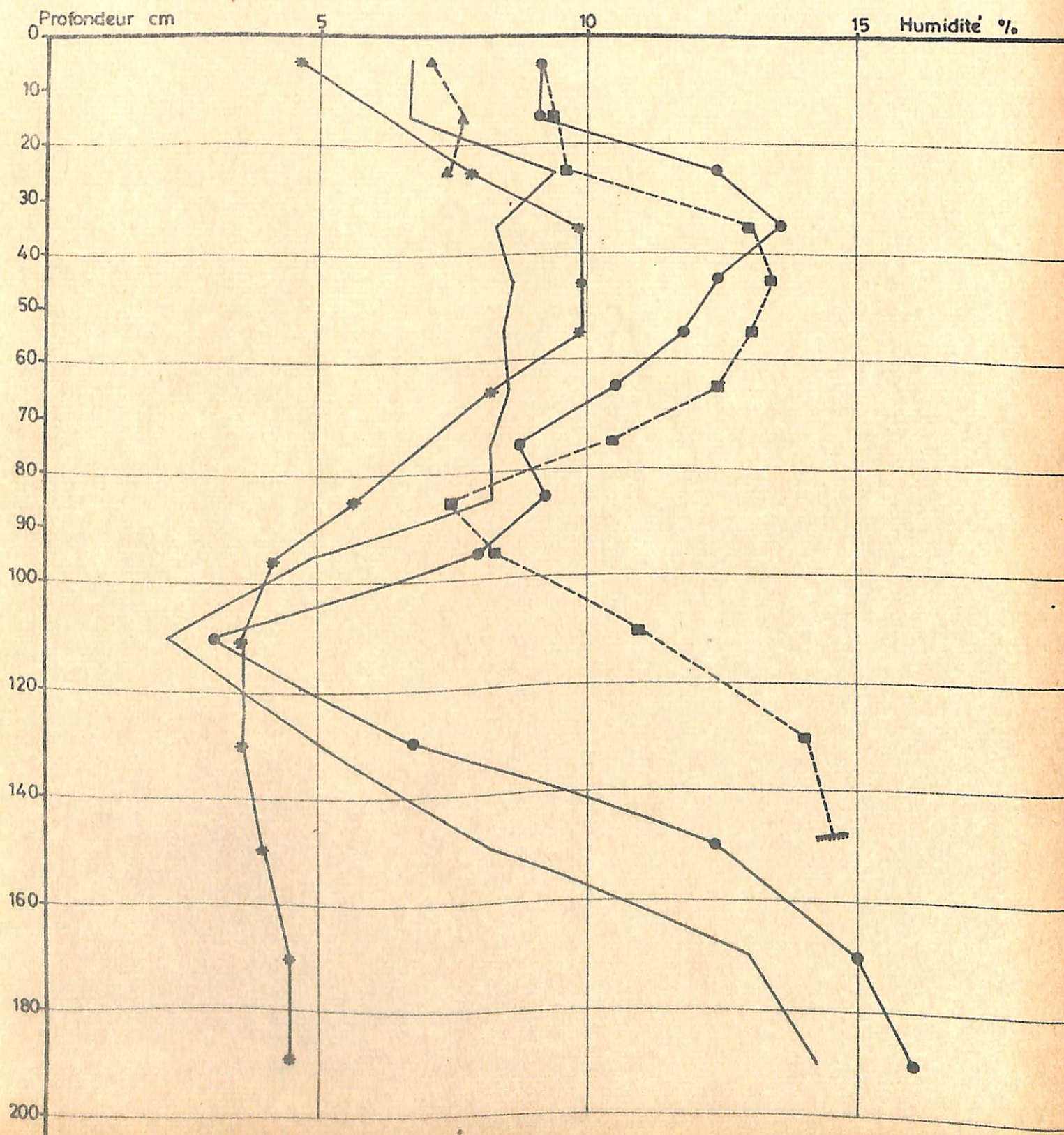




# Humectation du profil 1972

DIJOUROU  
PH II6

Date	Profondeur Nappe
29 - 7 - 72	219 cm
10 - 8 - 72	203 cm
30 - 8 - 72	158 cm
4 - 9 - 72	165 cm
PF 4,2	

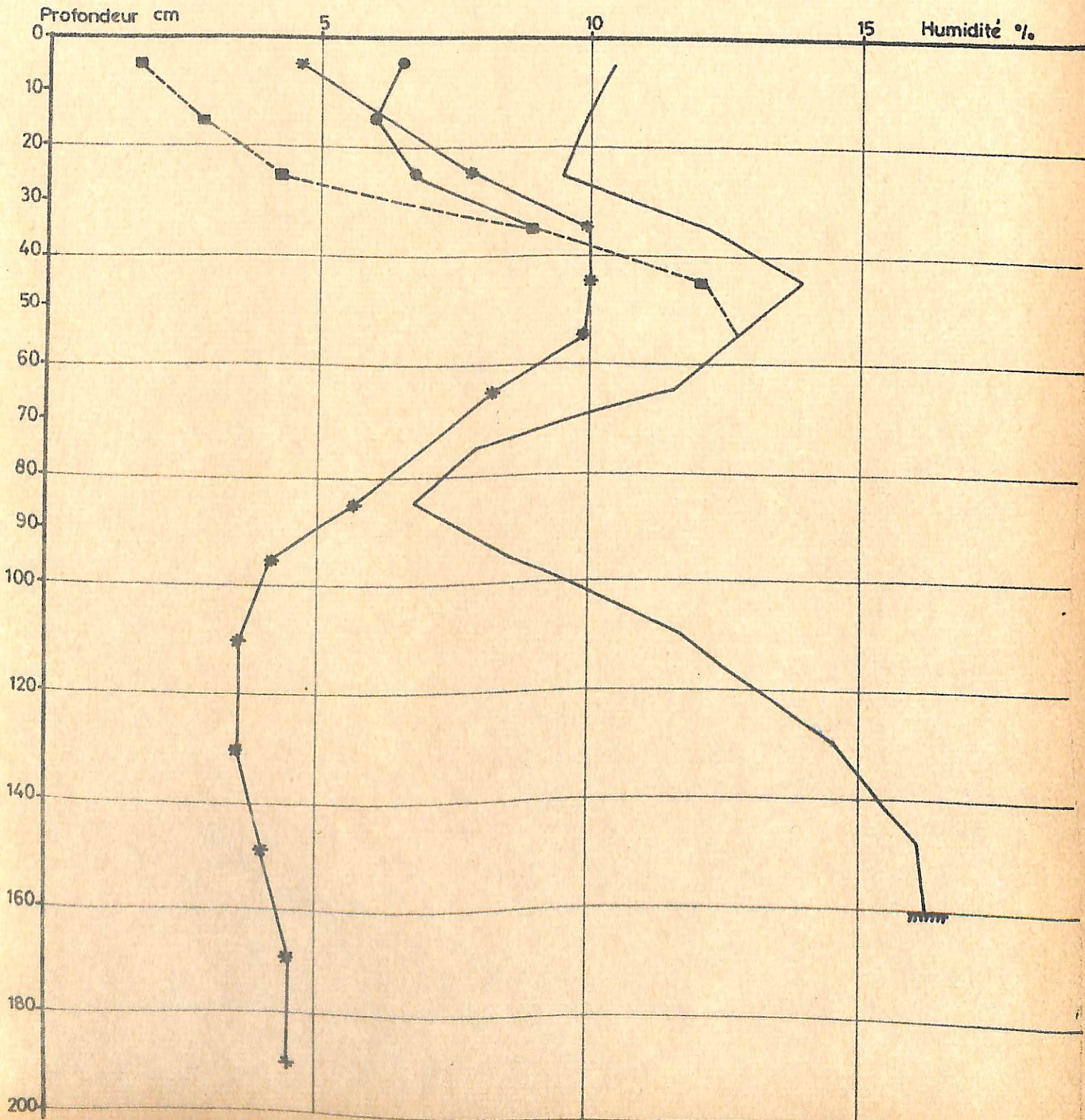




# Assèchement du profil 1972

DIOROU  
PH II 6

Date	Profondeur Nappe
18 - 9 - 72	161cm
25 - 9 - 72	167cm
9 - 10 - 72	185cm
PF 4,2	



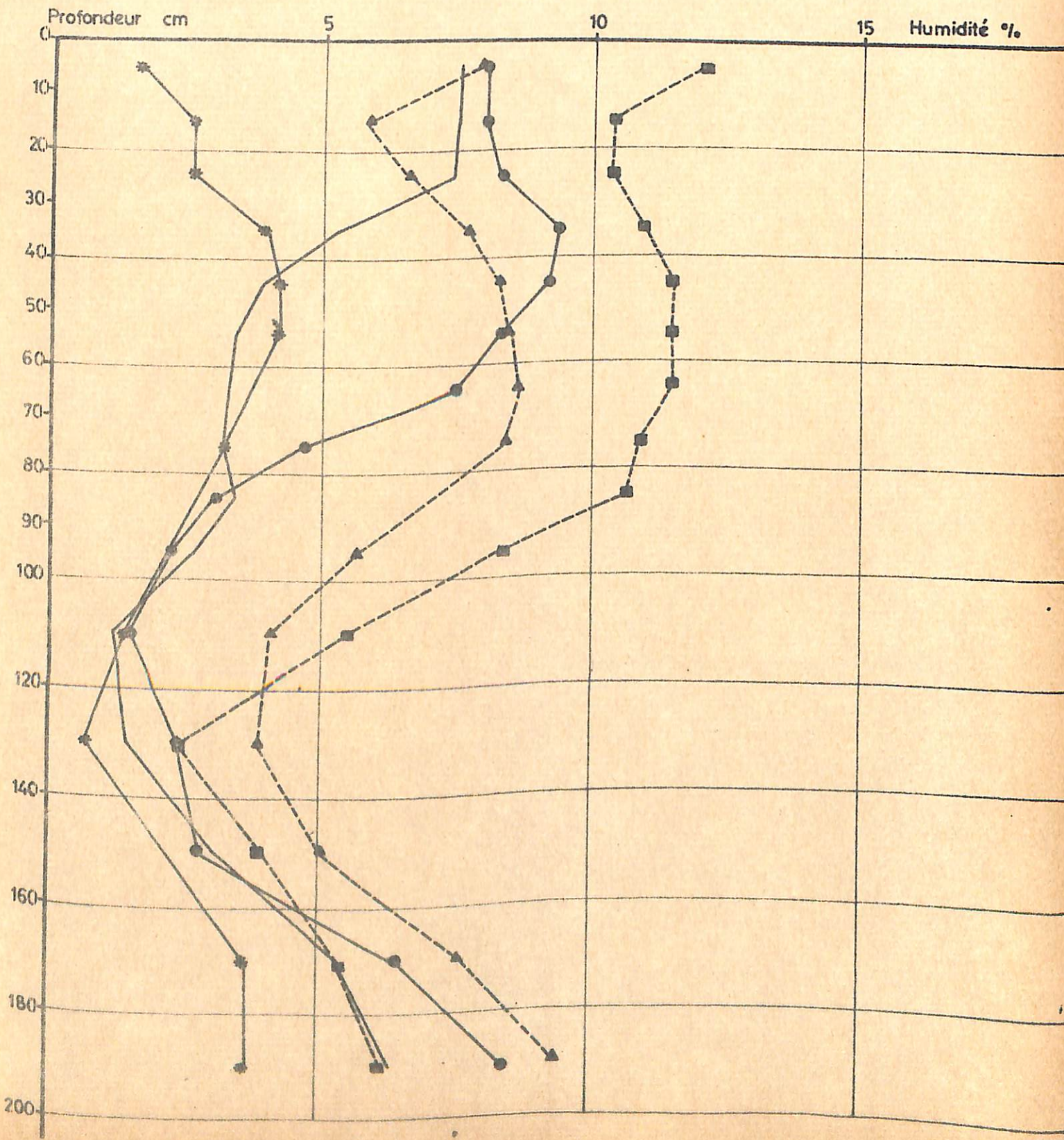


# Humectation du profil 1972

DIOROU  
PH IV 8

Date

- 29 - 7 - 72 —————
- 10 - 8 - 72 ●—●—●
- 18 - 8 - 72 ■—■—■
- 11 - 9 - 72 ▲—▲—▲
- PF 4,2 \*—\*—\*

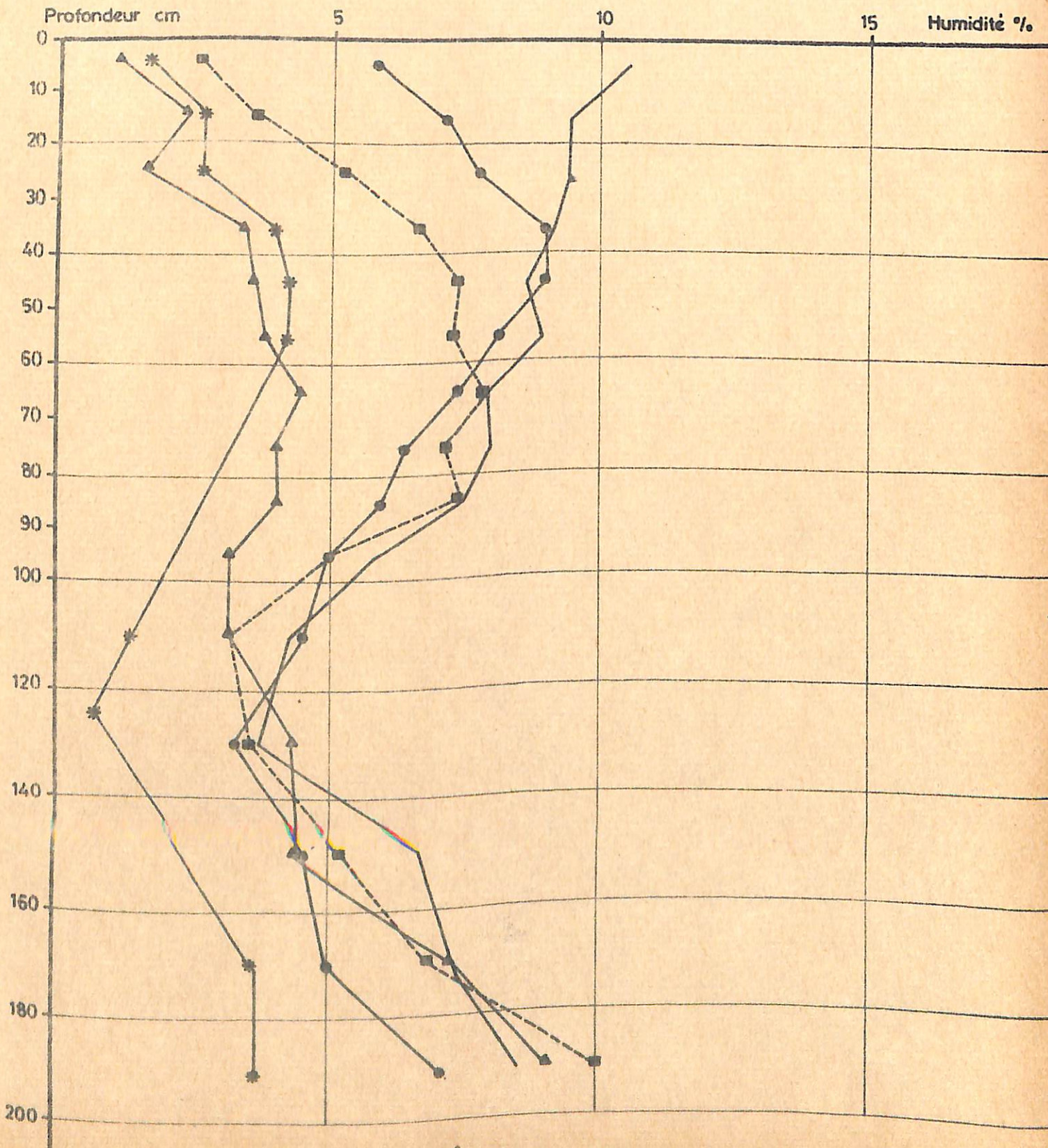




# Assèchement du profil 1972-1973

DIUROU  
PH IV 8

Date  
 18 - 9 - 72 ———  
 25 - 9 - 72 ●—●—●—  
 9 - 10 - 72 ■—■—■—  
 25 - 1 - 73 ▲—▲—▲—  
 PF 4,2 \*—\*—\*—

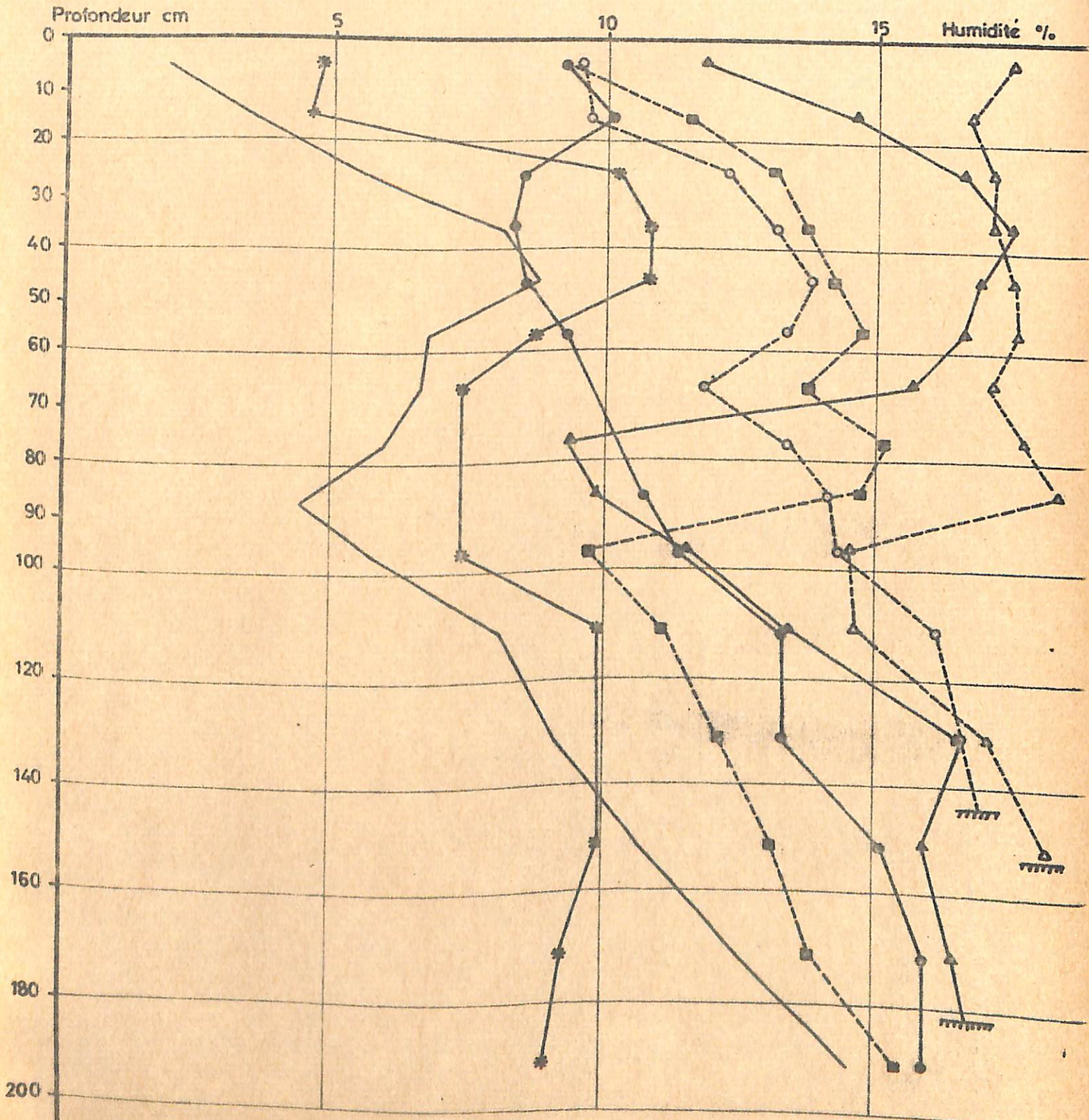




# Humectation du profil 1972

INOR  
PH V 12-13

Date	Profondeur Nappes	
26 - 6 - 72	—	
27 - 7 - 72	●—●—●	
11 - 8 - 72	■—■—■	230 cm
19 - 8 - 72	▲—▲—▲	181cm
4 - 9 - 72	○—○—○	143cm
12 - 9 - 72	△—△—△	152cm
PF 4,2	*—*—*	

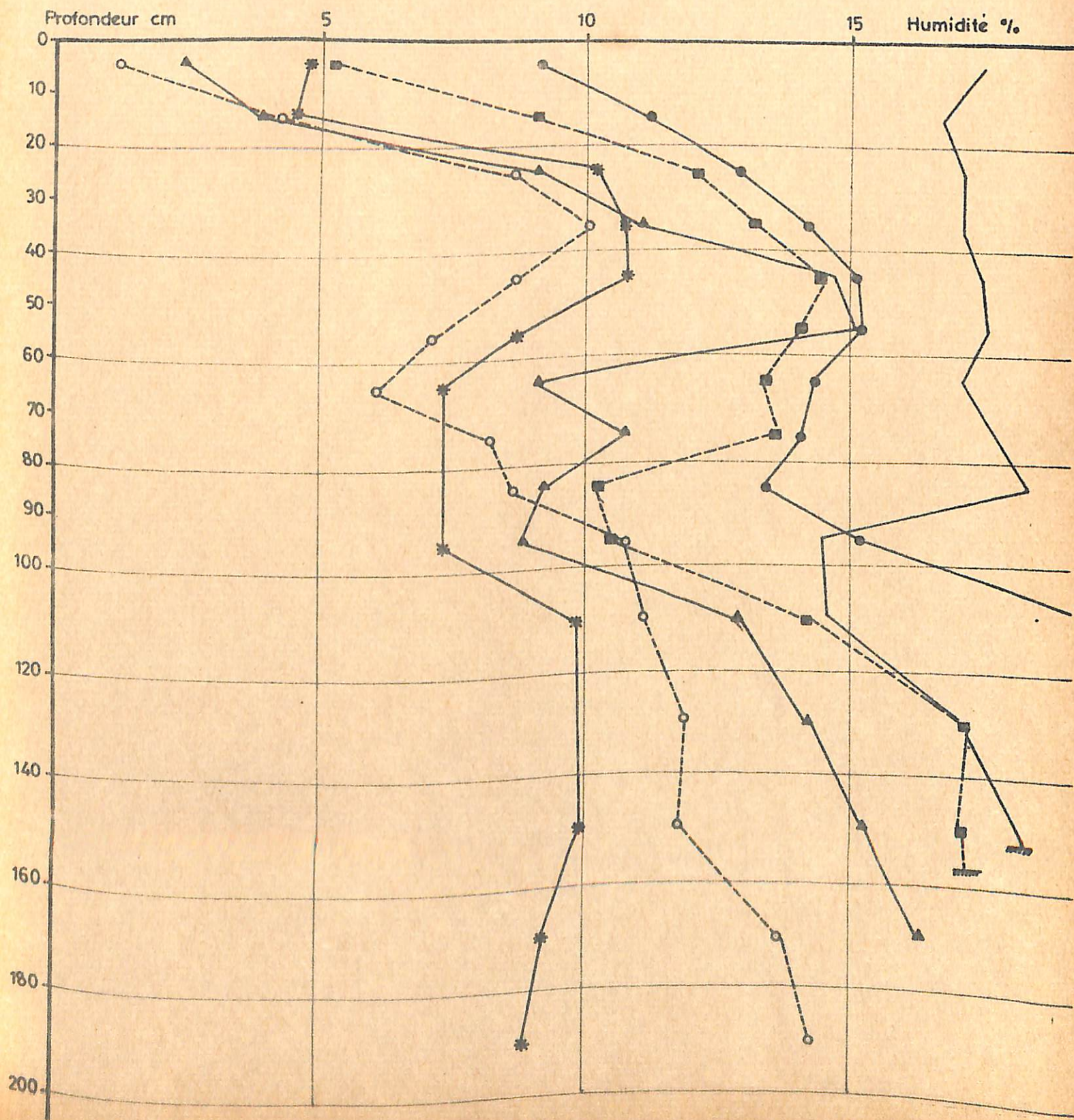




# Assèchement du profil 1972-1973

INOR  
PH V 12-13

Date	Profondeur Nappe
12 - 9 - 72	152 cm
25 - 9 - 72	148 cm
10 - 10 - 72	157 cm
25 - 1 - 73	148 cm
9 - 5 - 73	157 cm
PF 4,2	





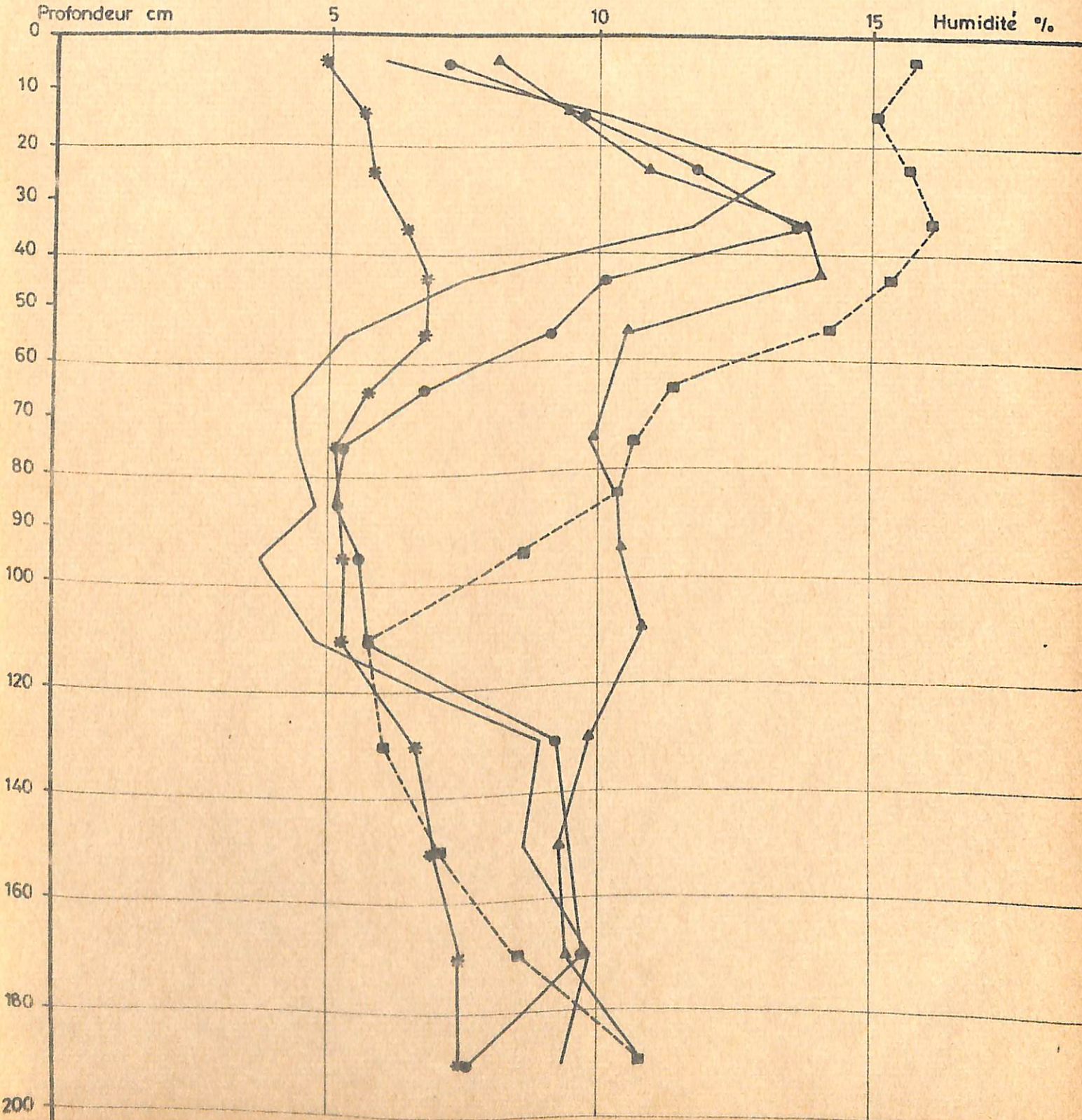
# Humectation du profil 1972

FIG. 67

INOR  
PH XI 20

Date	Profondeur Nappe
27 - 7 - 72	—
11 - 8 - 72	●—●—●
19 - 8 - 72	■—■—■
4 - 9 - 72	▲—▲—▲
PF 4,2	*—*—*

275 cm

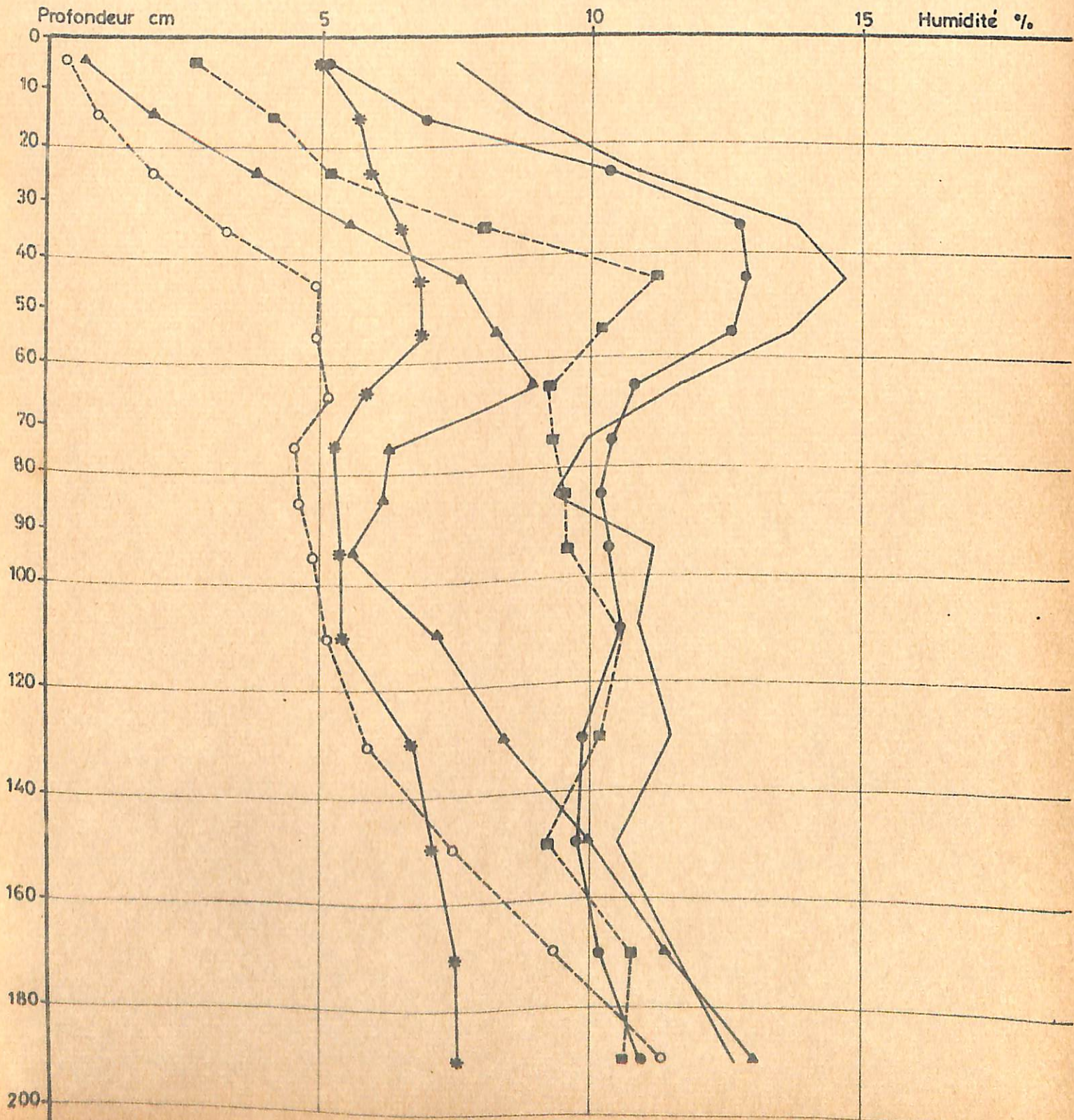




# Assèchement du profil 1972-1973

INOR  
PH XI 20

Date	Profondeur Nappe
25 - 9 - 72	270 cm
3 - 10 - 72	275 cm
10 - 12 - 72	270 cm
25 - 1 - 73	275 cm
9 - 5 - 73	270 cm
PF 4,2	

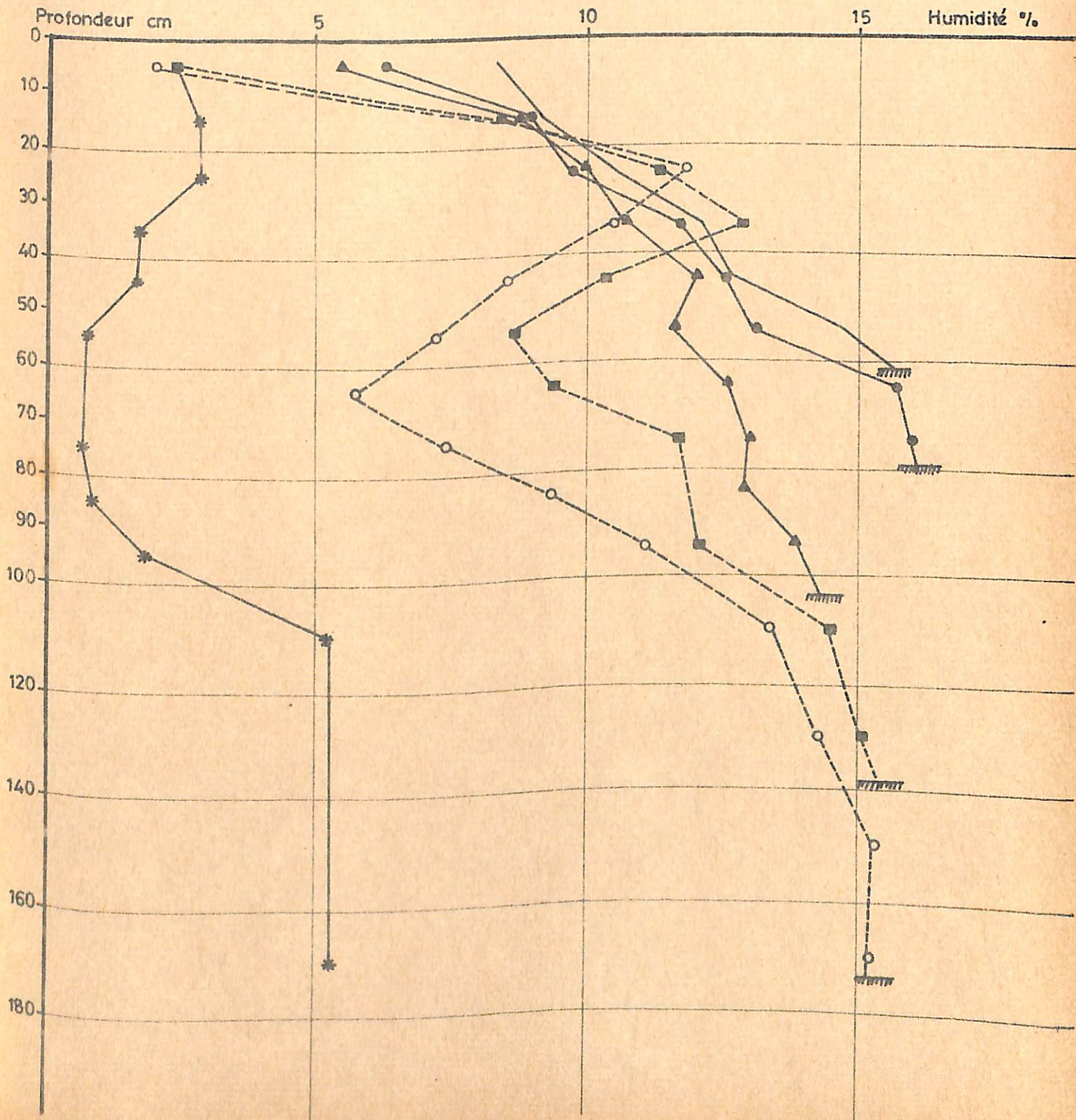




# Assèchement du profil 1972-1973

KANDIADIOU  
PH II 7

Date	Profondeur Nappe
3 - 10 - 72	62 cm
23 - 10 - 72	80 cm
6 - 12 - 72	104 cm
25 - 1 - 73	138 cm
9 - 5 - 73	173 cm
PF 4,2	*

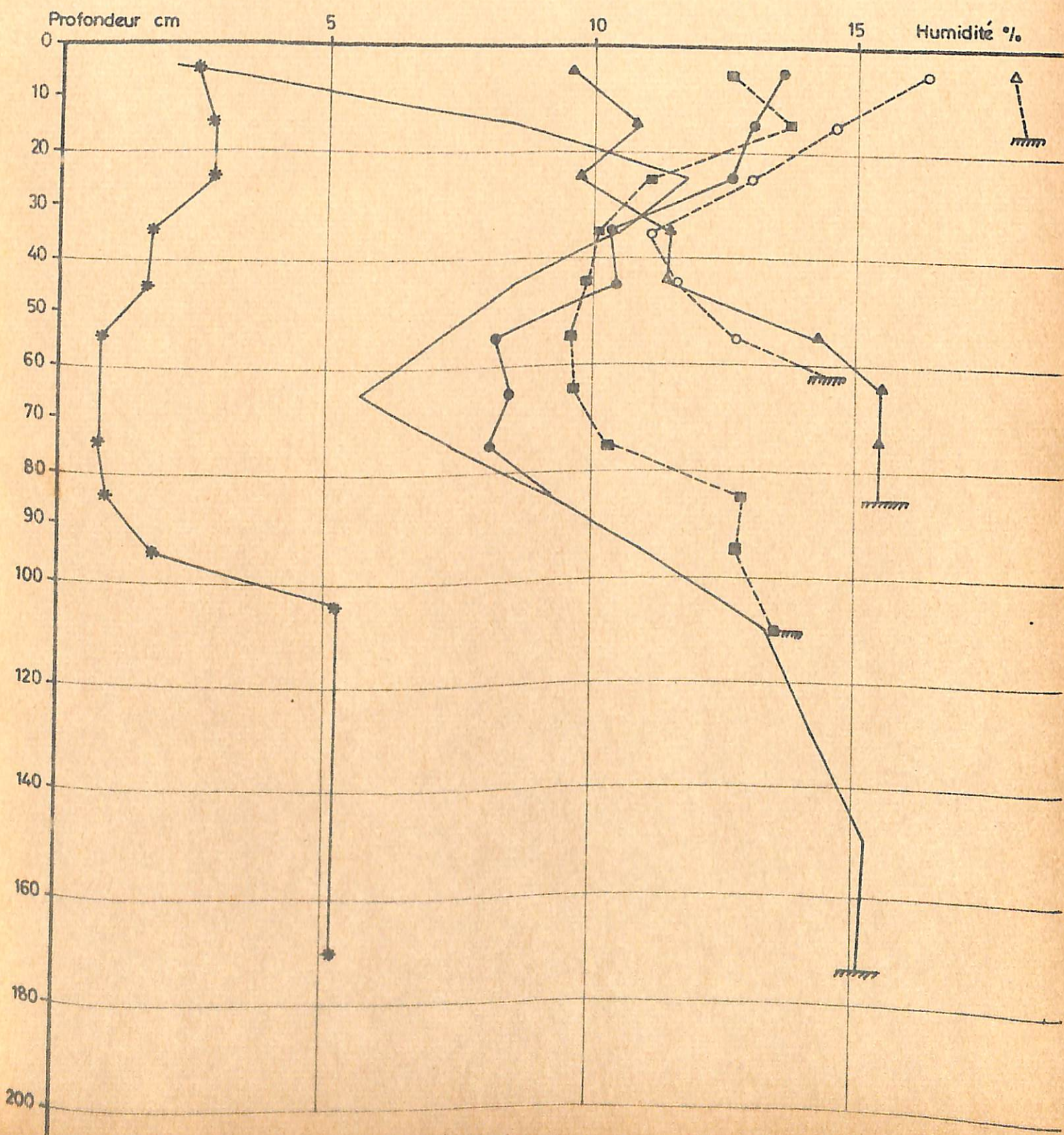




# Humectation du profil 1973

KANDIADIOU  
PH II 7

Date	Profondeur Nappe
9 - 5 - 73	173 cm
14 - 6 - 73	134 cm
5 - 7 - 73	110 cm
25 - 7 - 73	85 cm
7 - 8 - 73	62 cm
23 - 8 - 73	16 cm
PF 4,2	





# Humectation - Assèchement du profil 1972-73

FIG 71

KANDIADICU  
PH VI 17

Date	Profondeur Nappe
12 - 8 - 72	205 cm
19 - 9 - 72	200 cm
25 - 11 - 72	205 cm
9 - 5 - 73	200 cm
PF 4,2	*

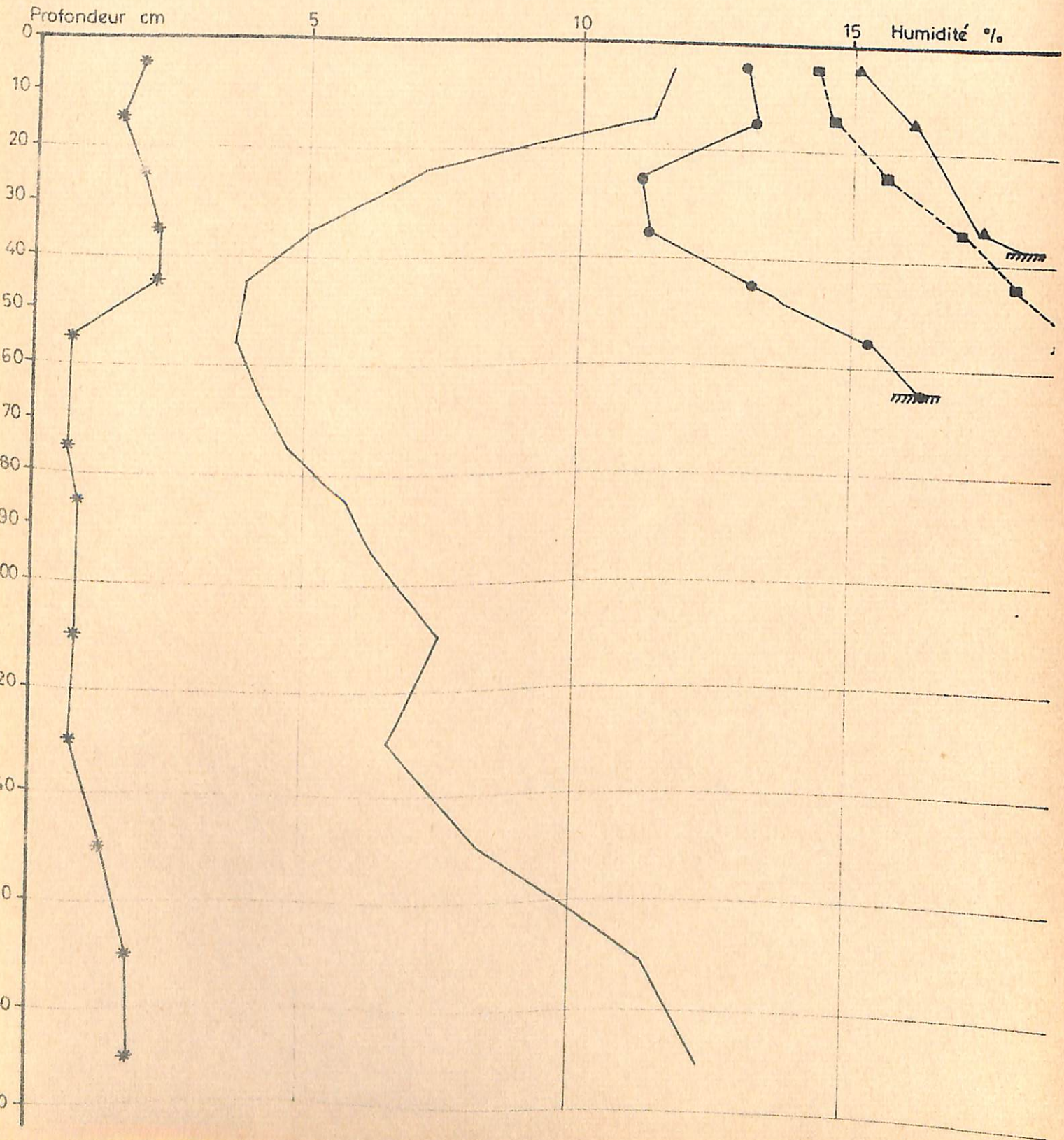




# Humectation du profil 1972

DIANA BA  
PH VIII 18

Date	Profondeur Nappe
5 - 8 - 72	—
20 - 8 - 72	●—●—● 65 cm
29 - 8 - 72	■—■—■ 55 cm
20 - 9 - 72	▲—▲—▲ 38 cm
PF 4,2	*—*—*



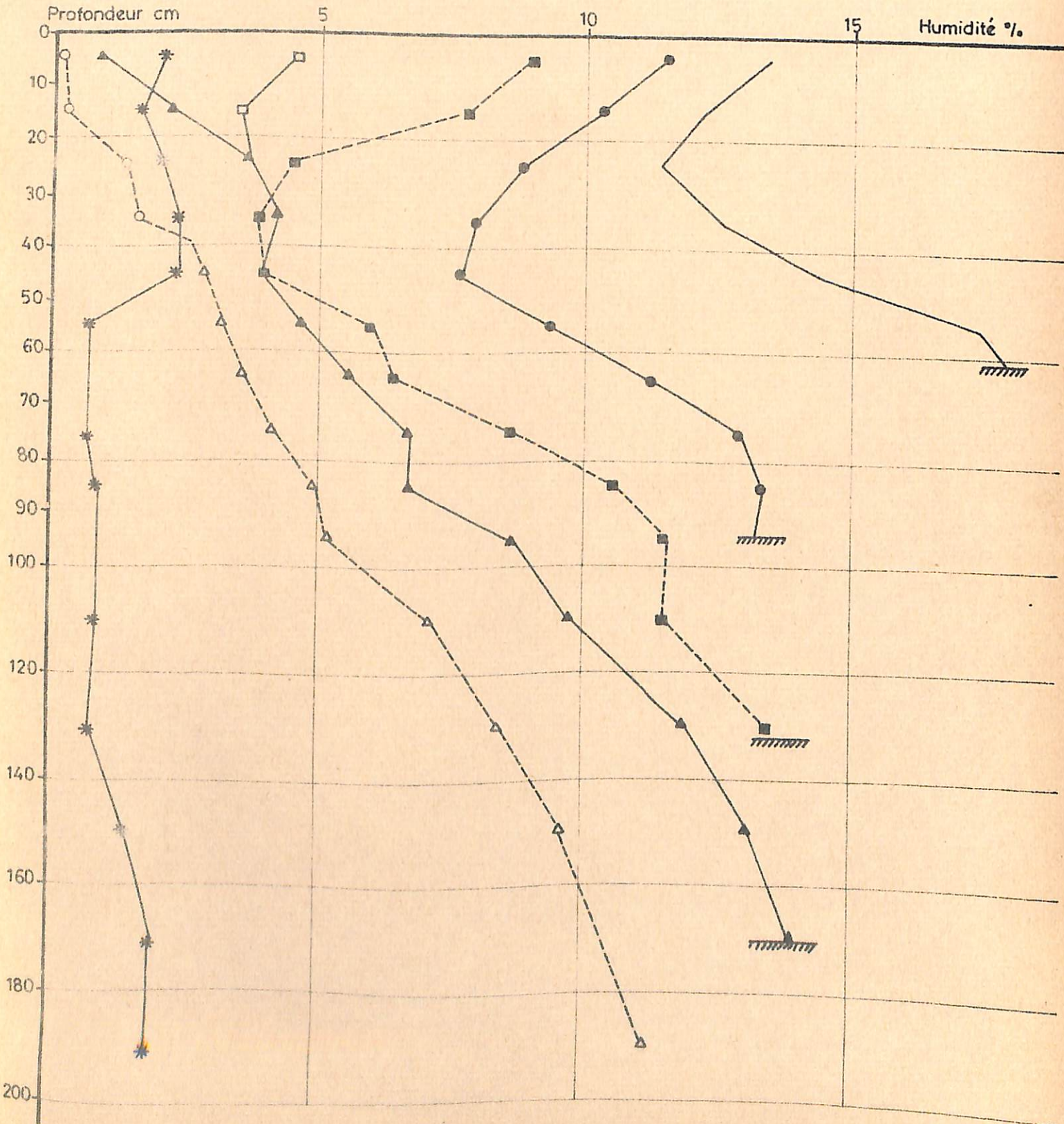


# Assèchement du profil 1972-1973

FIG. 73

DIANA BA  
PH VIII 18

Date	Profondeur Nappe
3 - 10 - 72	62 cm
26 - 10 - 72	94 cm
22 - 11 - 72	132 cm
6 - 12 - 72	136 cm
27 - 12 - 72	170 cm
7 - 2 - 73	
7 - 6 - 73	
PF 4,2	



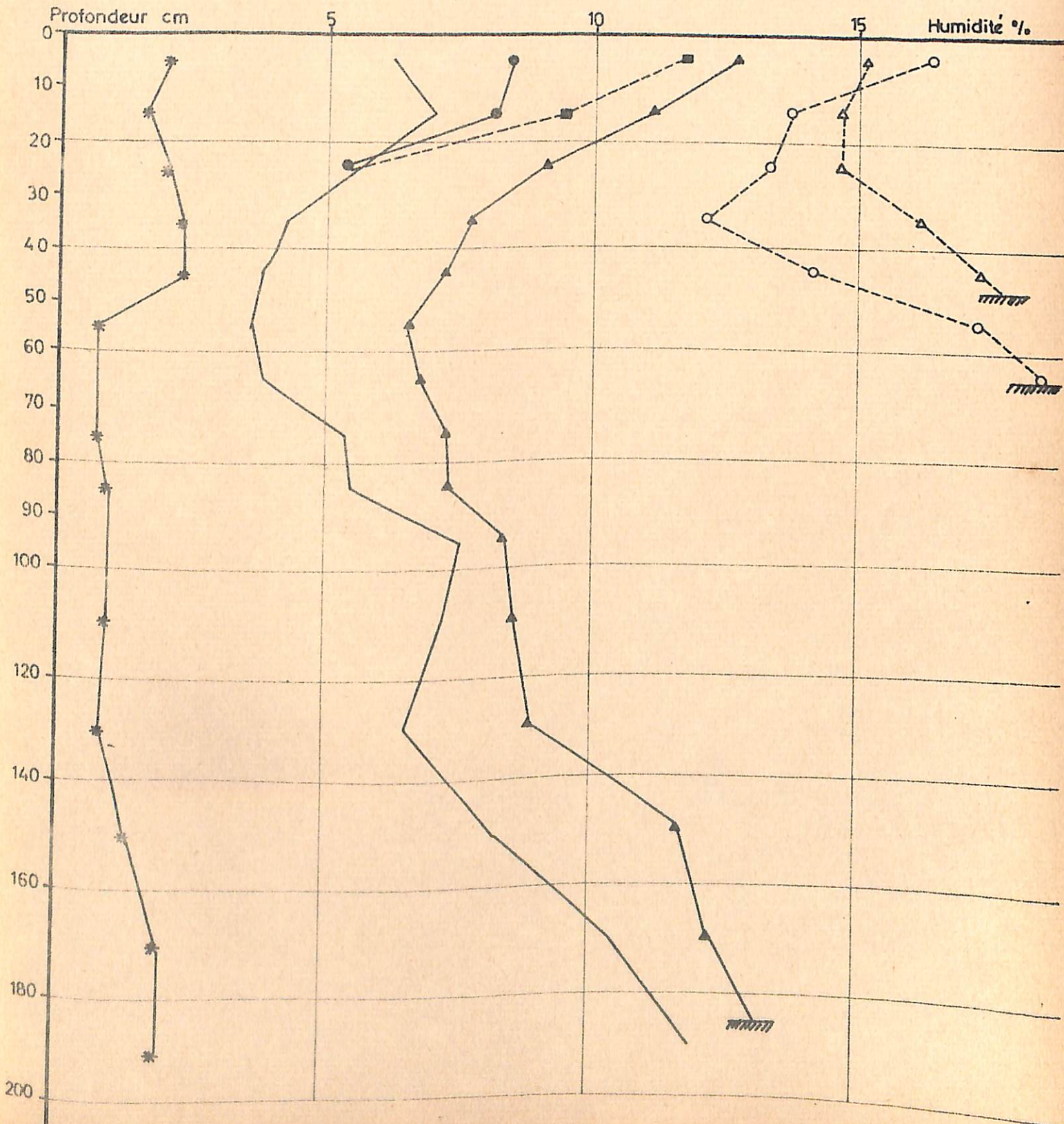


# Humectation du profil 1973

FIG. 74

DIANA BA  
PH VIII 18

Date	Profondeur Nappe
20 - 6 - 73	237 cm
5 - 7 - 73	>250 cm
20 - 7 - 73	247 cm
27 - 7 - 73	185 cm
3 - 8 - 73	65 cm
16 - 8 - 73	49 cm
PF 4,2	

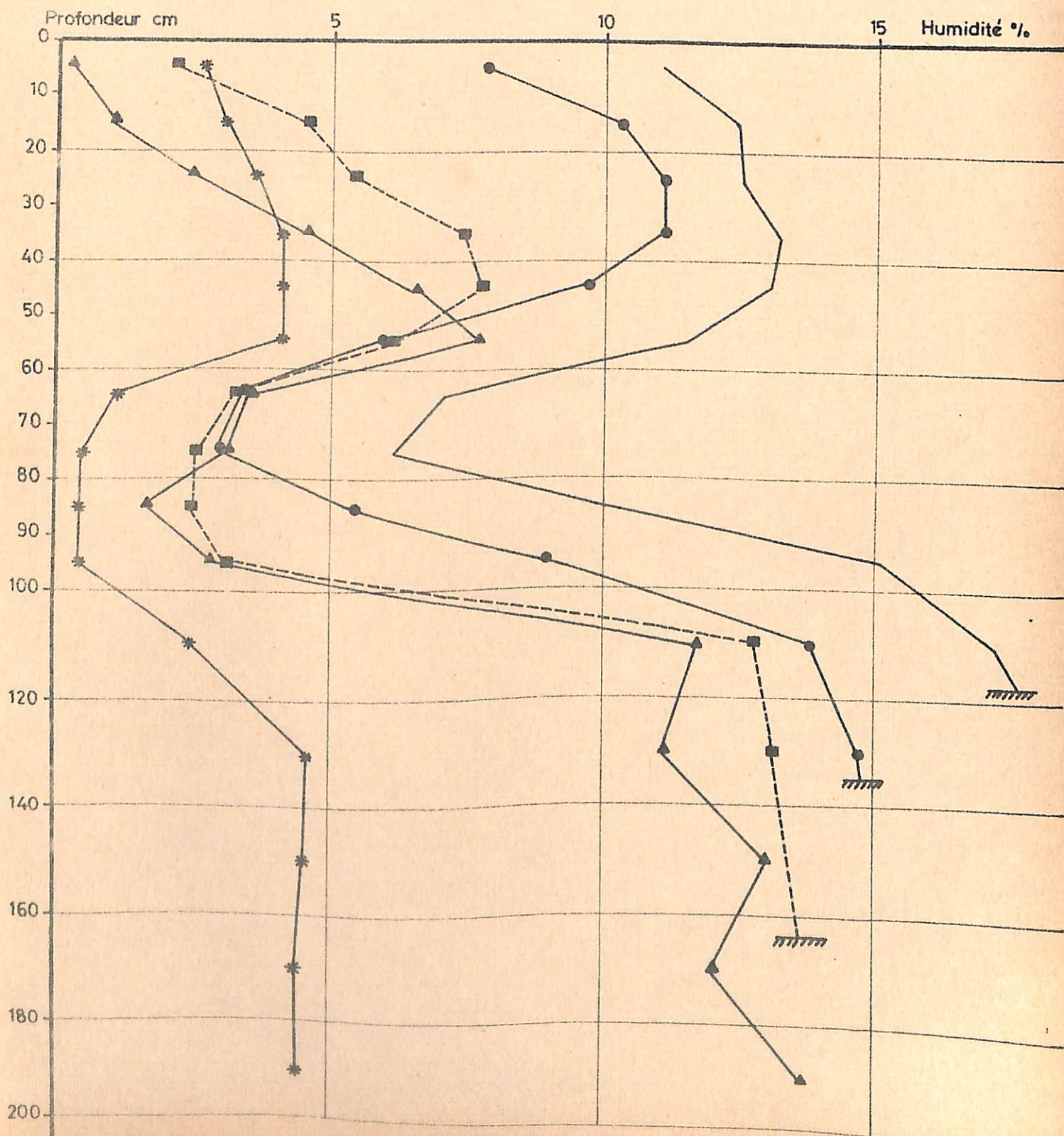




# Assèchement du profil 1972-1973

DIANA BA  
PH IV 10

Date	Profondeur Nappe
26 - 10 - 72	117 cm
22 - 11 - 72	135 cm
27 - 12 - 72	167 cm
7 - 2 - 73	203 cm
PF 4,2	*

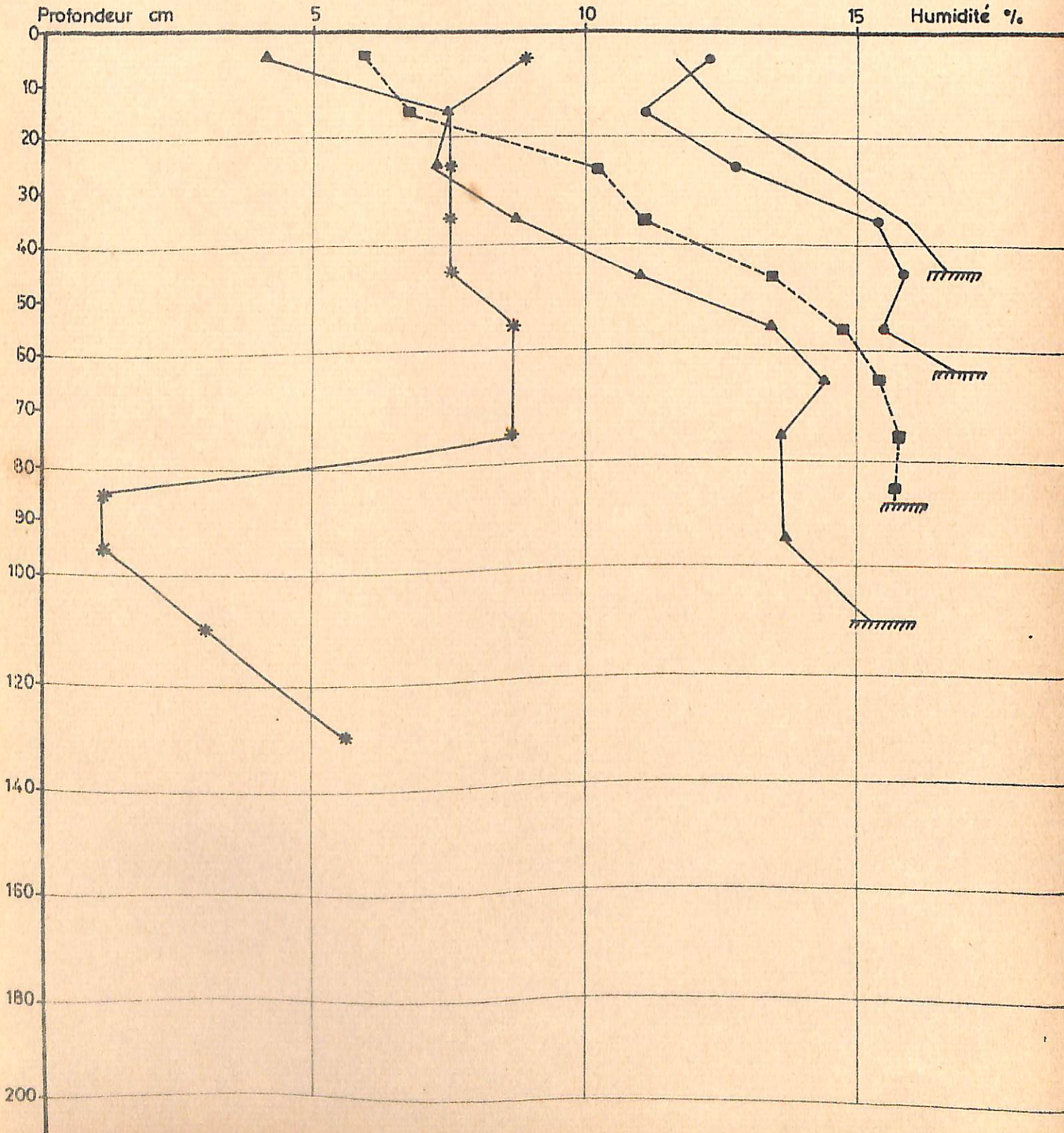




# Assèchement du profil 1972-1973

KARCIA  
PH II 3

Date	Profondeur Nappe
26 - 10 - 72	44cm
22 - 11 - 72	63cm
27 - 12 - 72	88cm
7 - 2 - 73	110cm
PF 4,2	*

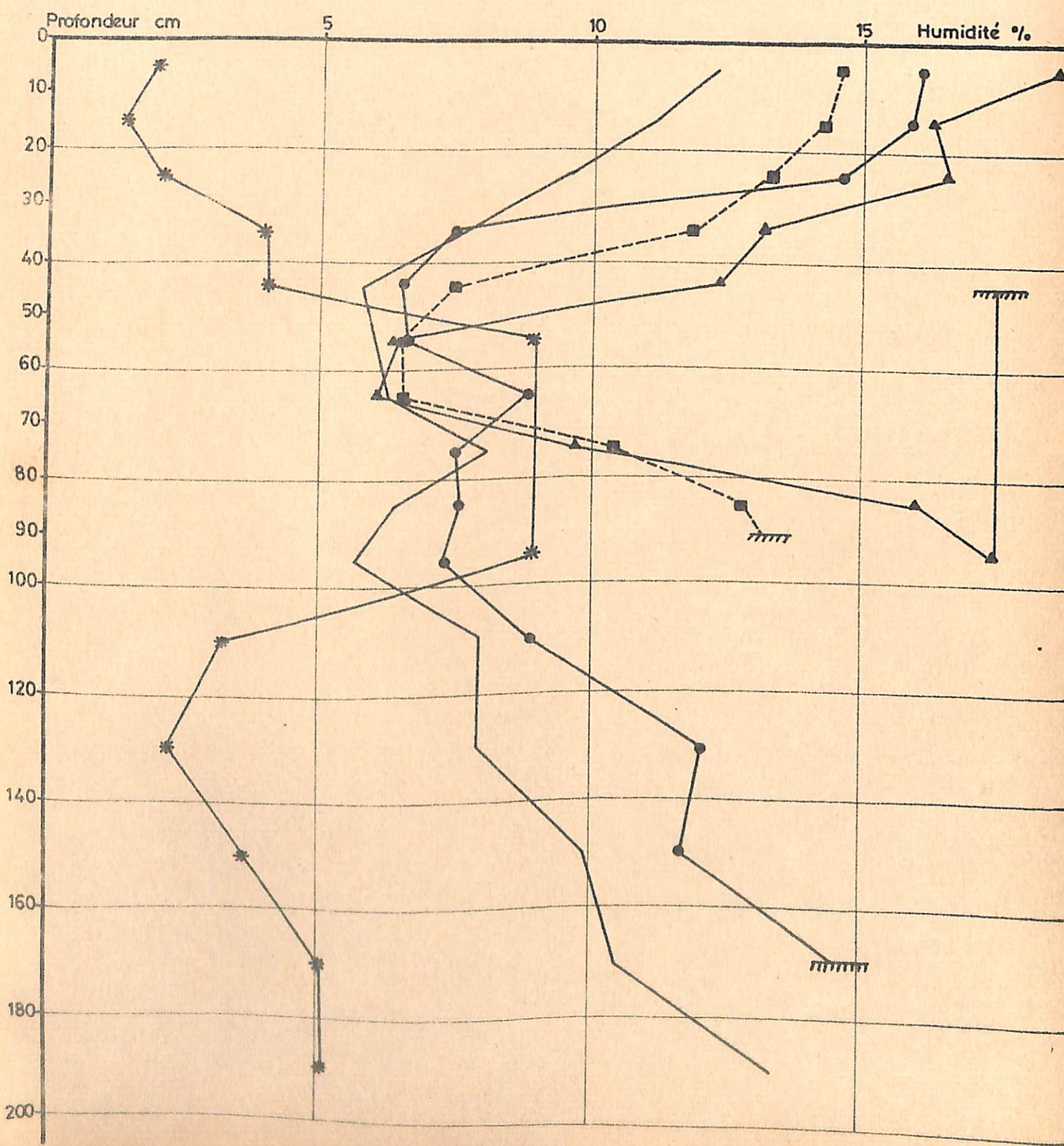




# Humectation du profil 1972

KARCIA  
PH IV 8

Date	Profondeur Nappes
7 - 8 - 72	217 cm
21 - 8 - 72	170 cm
6 - 9 - 72	91 cm
20 - 9 - 72	45 cm
PF 4,2	*

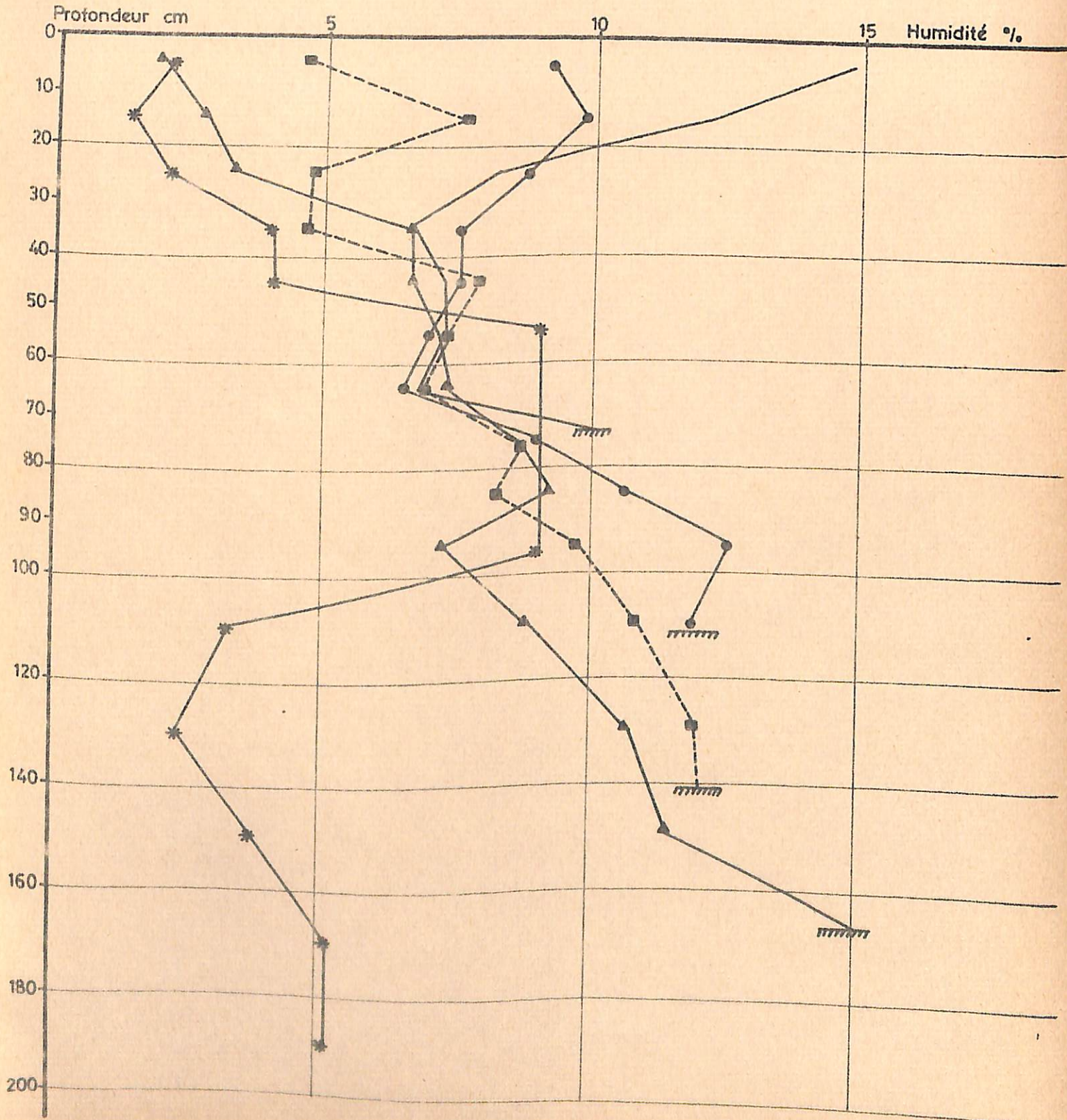




# Assèchement du profil 1972

KARCIA  
PH IV 8

Date	Profondeur Nappes
5 - 10 - 72	73cm
26 - 10 - 72	112cm
22 - 11 - 72	141cm
27 - 12 - 72	166cm
PF 4,2	*





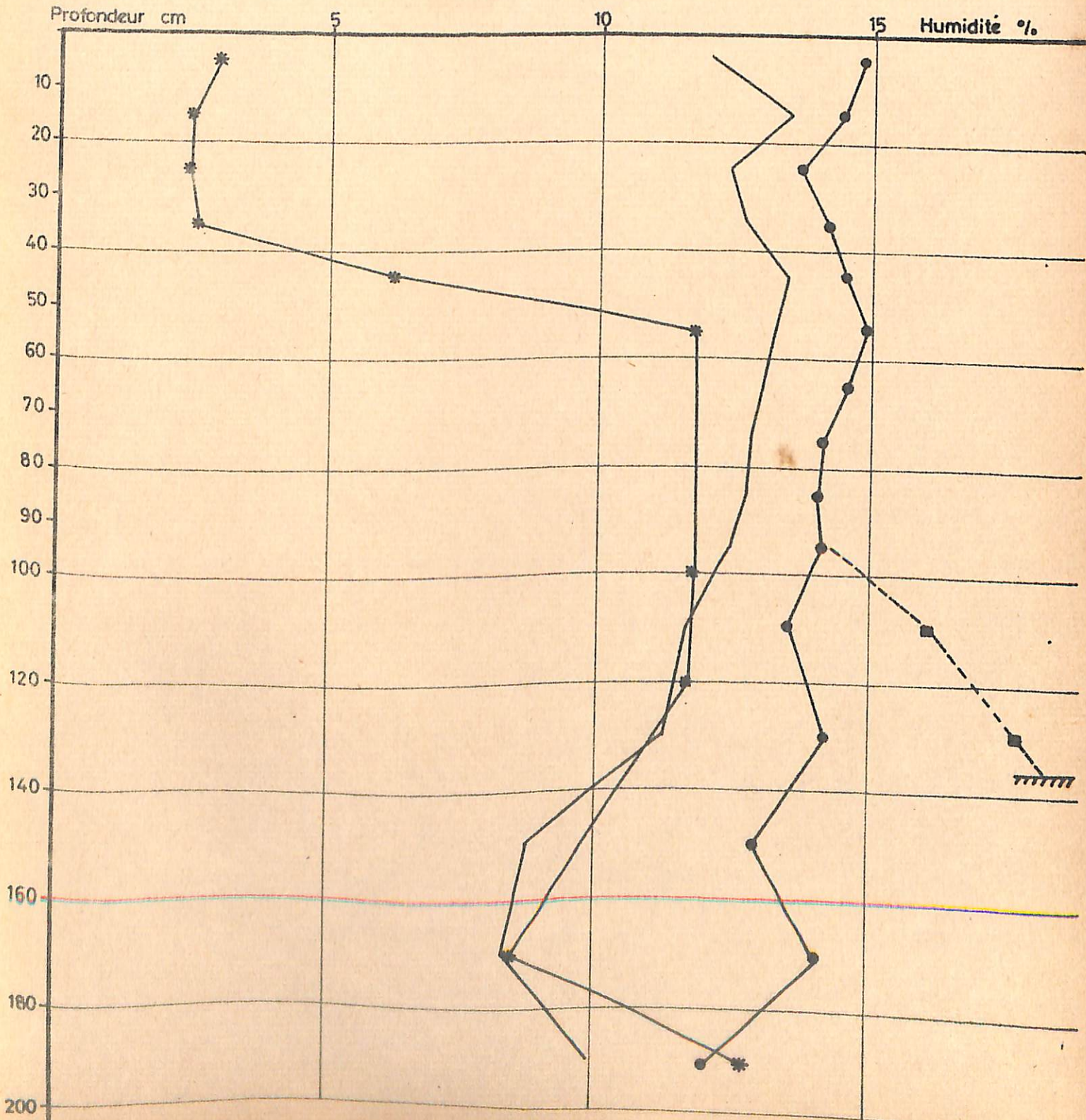




# Humectation du profil 1972

KARCIA  
PH VI 12

Date	Profondeur Nappe
7 - 8 - 72	—
21 - 8 - 72	●—●—●
20 - 9 - 72	■- - -■- - -■ 136 cm
PF 4,2	*—*—*



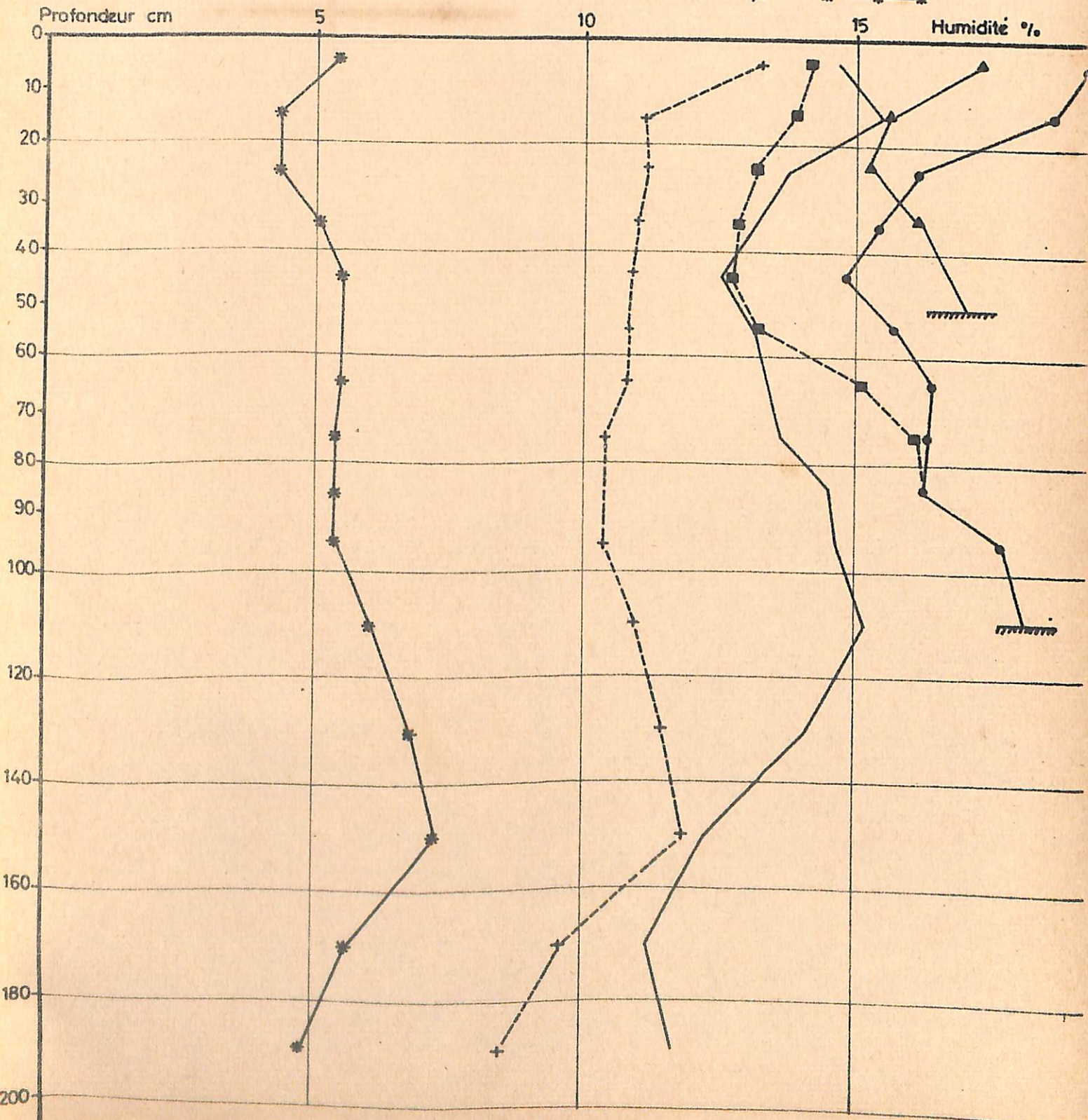


# Humectation du profil 1972

FIG. 81

SARE BAKARY  
PH VI 16

Date	Profondeur Nappe
7 - 8 - 72	220 cm
18 - 8 - 72	110 cm
6 - 9 - 72	109 cm
21 - 9 - 72	51 cm
PF 3,0	+ - - - +
PF 4,2	* - - - *

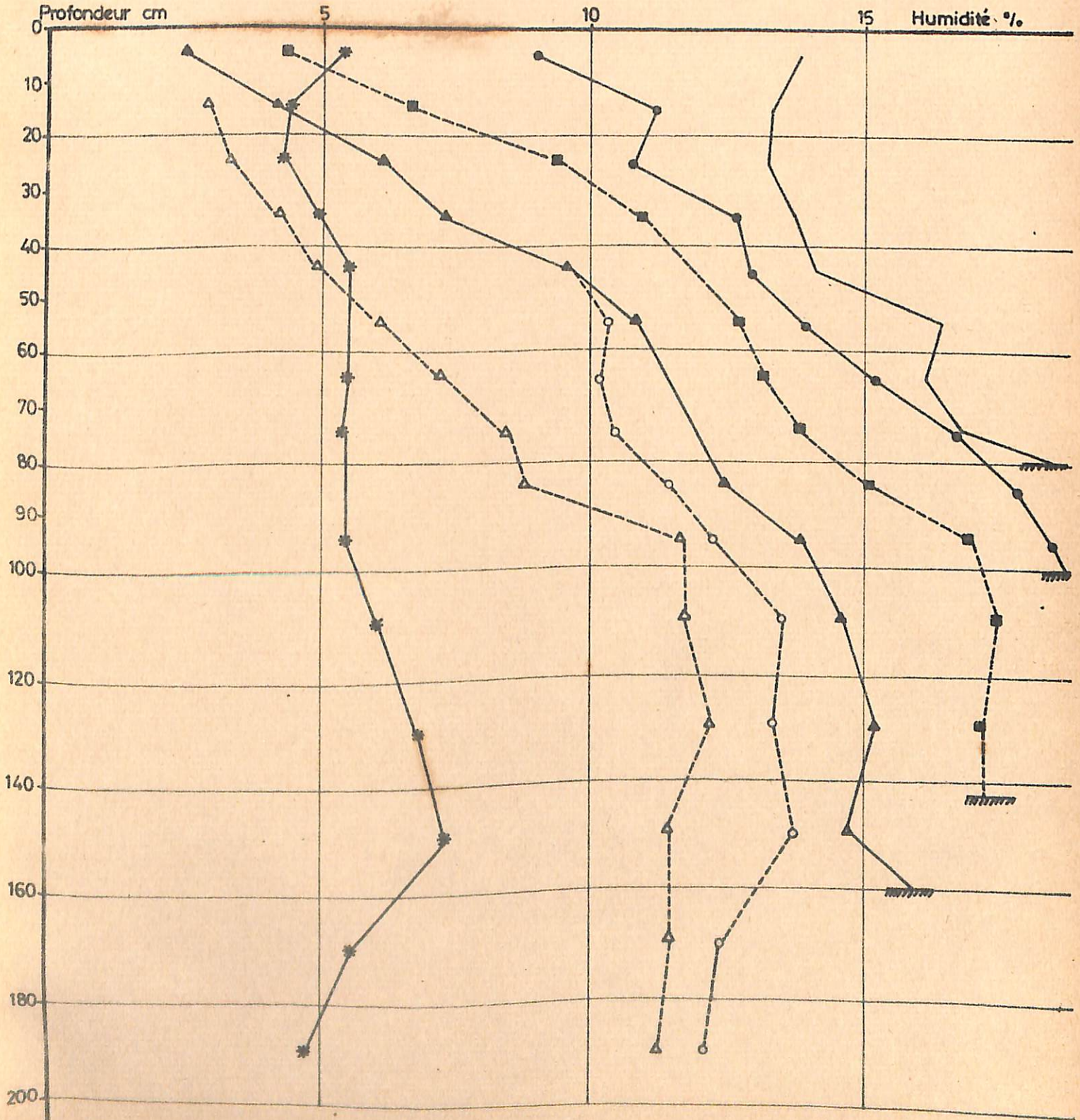




# Assèchement du profil 1972-1973

SARE BAKARY  
PH VI 16

Date	Profondeur Nappe
4 - 10 - 72	80 cm
26 - 10 - 72	101 cm
22 - 11 - 72	143 cm
27 - 12 - 72	162 cm
7 - 2 - 73	215 cm
8 - 6 - 73	
PF 4,2	



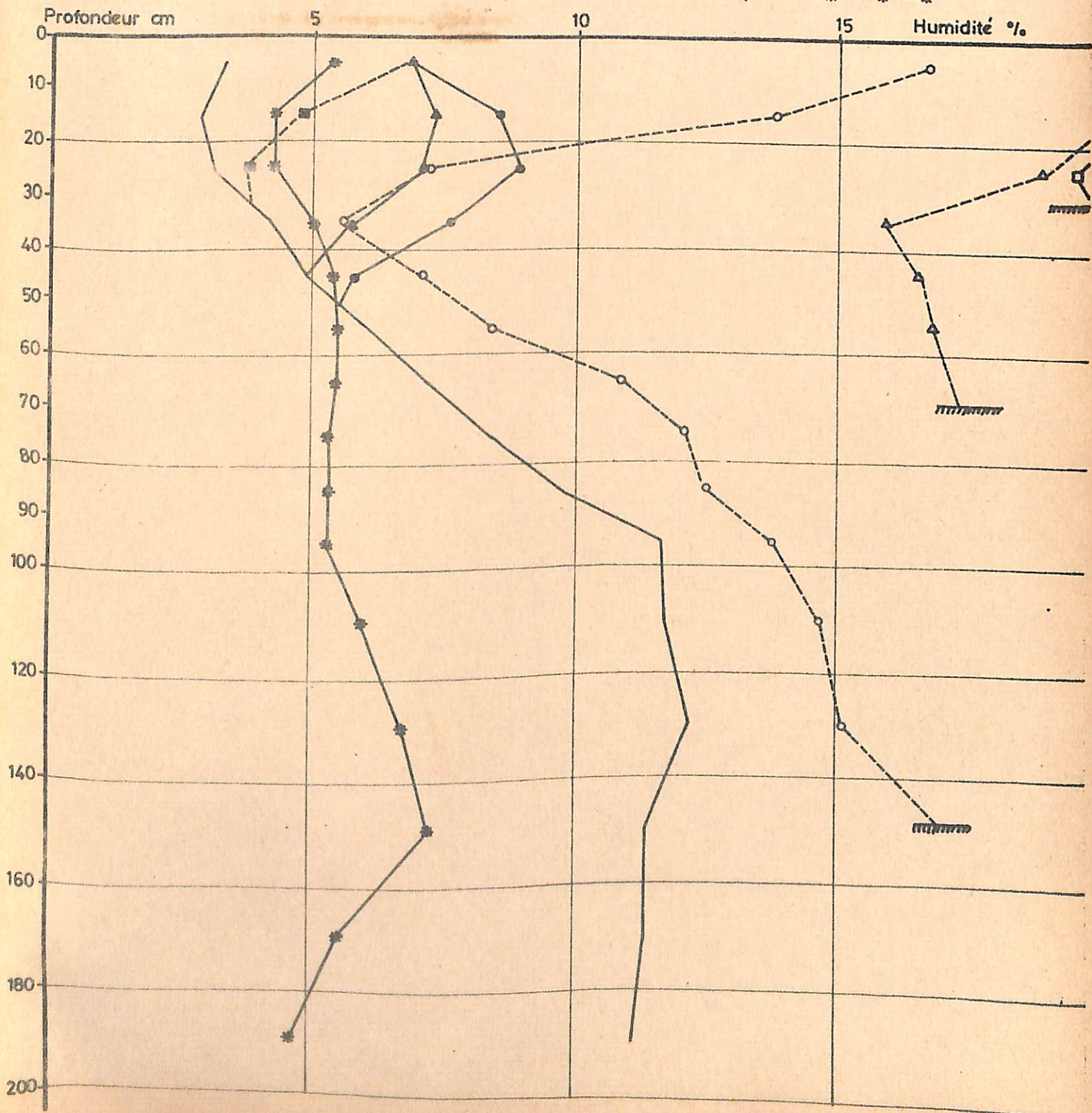


# Humectation du profil 1973

FIG. 83

SARE BAKARY  
PH VI 16

Date	Profondeur Nappe
8 - 6 - 73	—
21 - 6 - 73	●—●—●
5 - 7 - 73	■—■—■
20 - 7 - 73	▲—▲—▲
27 - 7 - 73	○—○—○ 148 cm
3 - 8 - 73	△—△—△ 69 cm
10 - 8 - 73	□—□—□ 30 cm
PF 4,2	*—*—*





# Humectation du profil 1972

FIG. 84

SARE BAKARY  
PH VII 20

Date

Profondeur Nappe

26 - 8 - 72

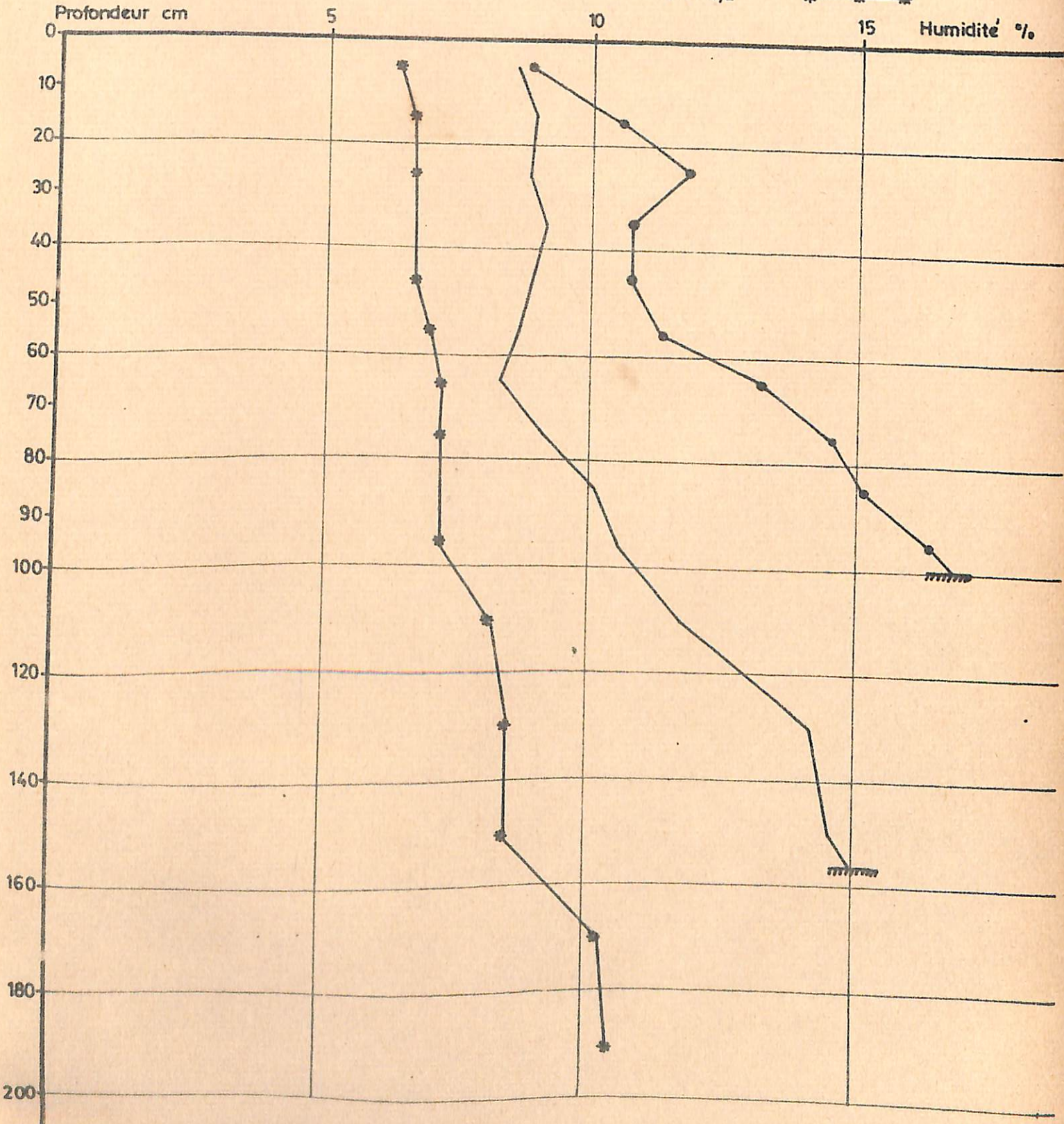
156 cm

21 - 9 - 72

99 cm

PF 4,2

\* \* \*

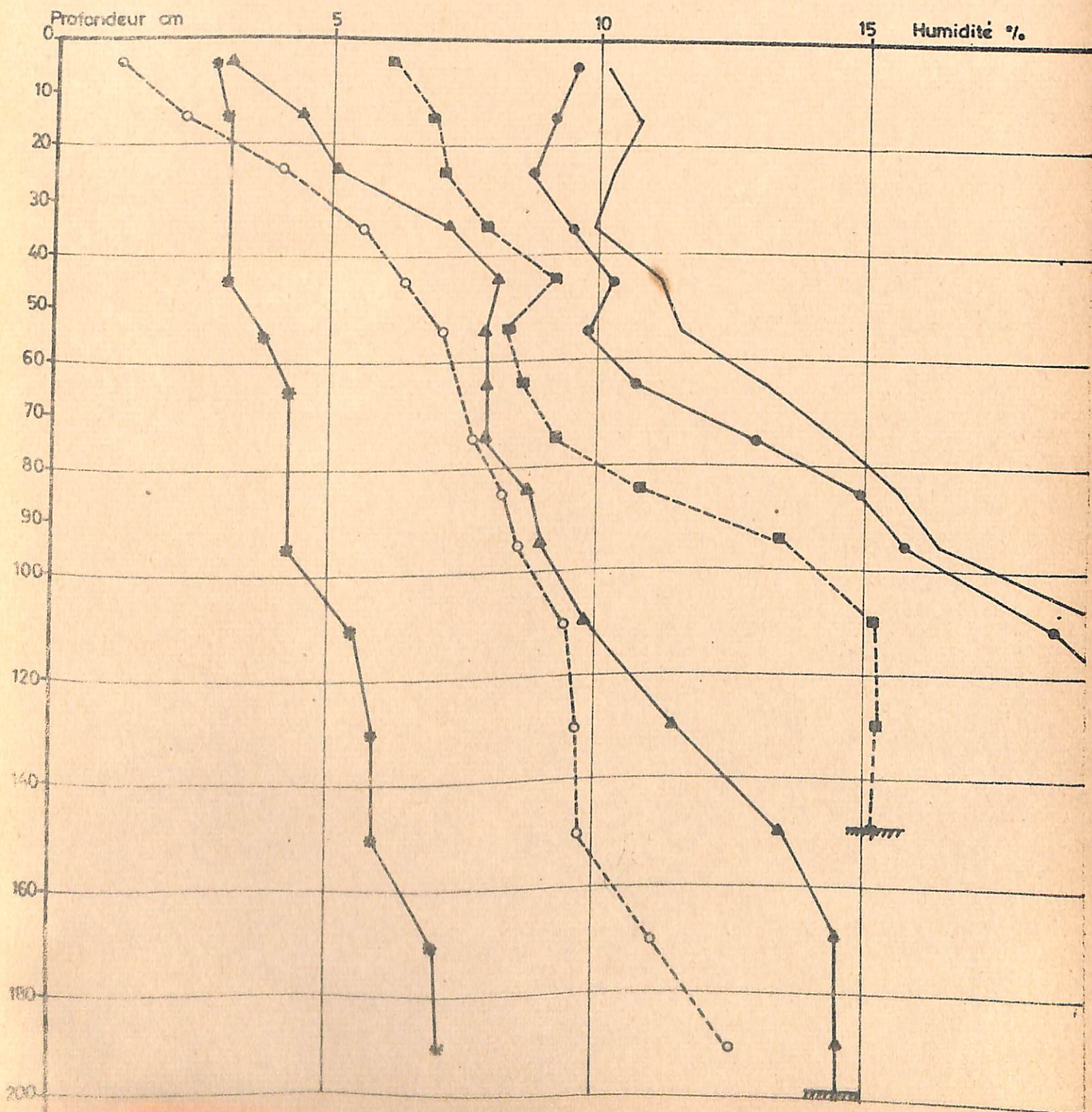




# Assèchement du profil 1972-1973

SARE BAKARY  
PH VII 20

Date	Profondeur Nappe
11 - 10 - 72	108 cm
26 - 10 - 72	129 cm
7 - 11 - 72	149 cm
8 - 12 - 72	198 cm
7 - 2 - 73	
PF 4,2	

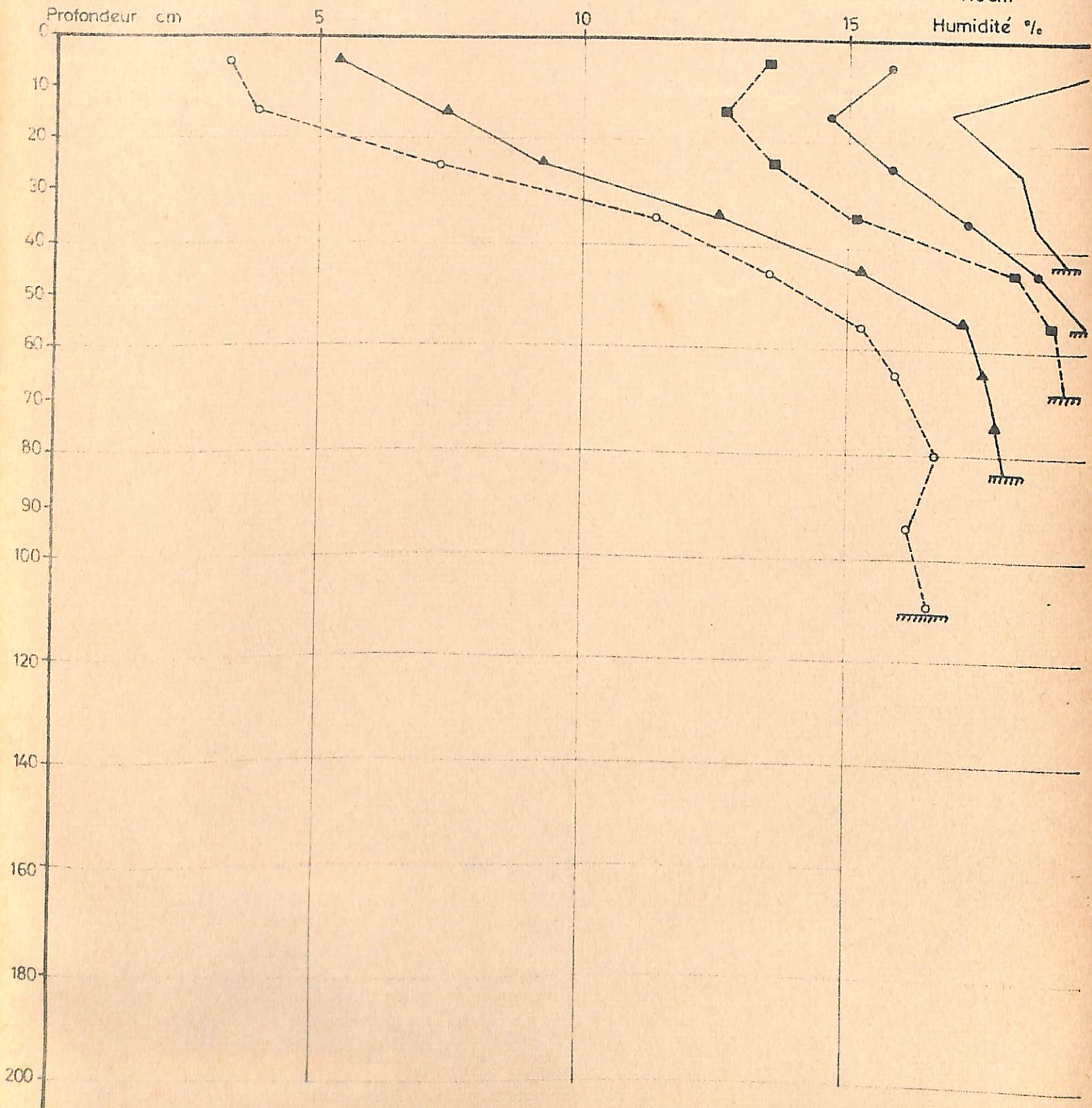




# Assèchement du profil 1972-1973

SARE BAKARY  
PH II 4 -

Date	Profondeur Nappe
26 - 10 - 72	43 cm
7 - 11 - 72	55 cm
22 - 11 - 72	68 cm
27 - 12 - 72	83 cm
7 - 2 - 73	110 cm



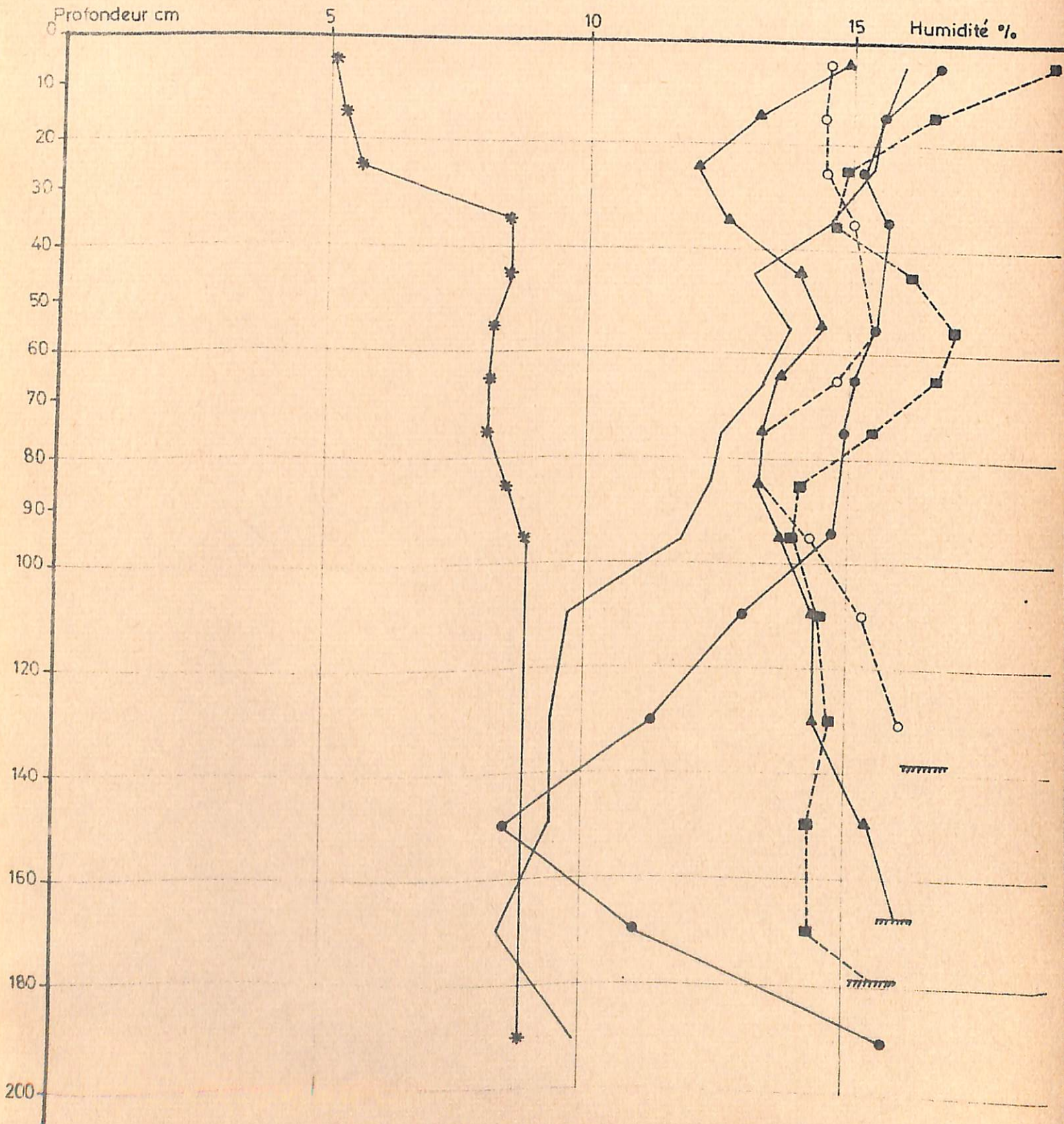


# Humectation du profil 1972

FIG. 87

SARE MANSALY  
PH III 9

Date	Profondeur Nappe
6 - 8 - 72	210 cm
18 - 8 - 72	179 cm
26 - 8 - 72	167 cm
6 - 9 - 72	138 cm
20 - 9 - 72	138 cm
PF 4,2	

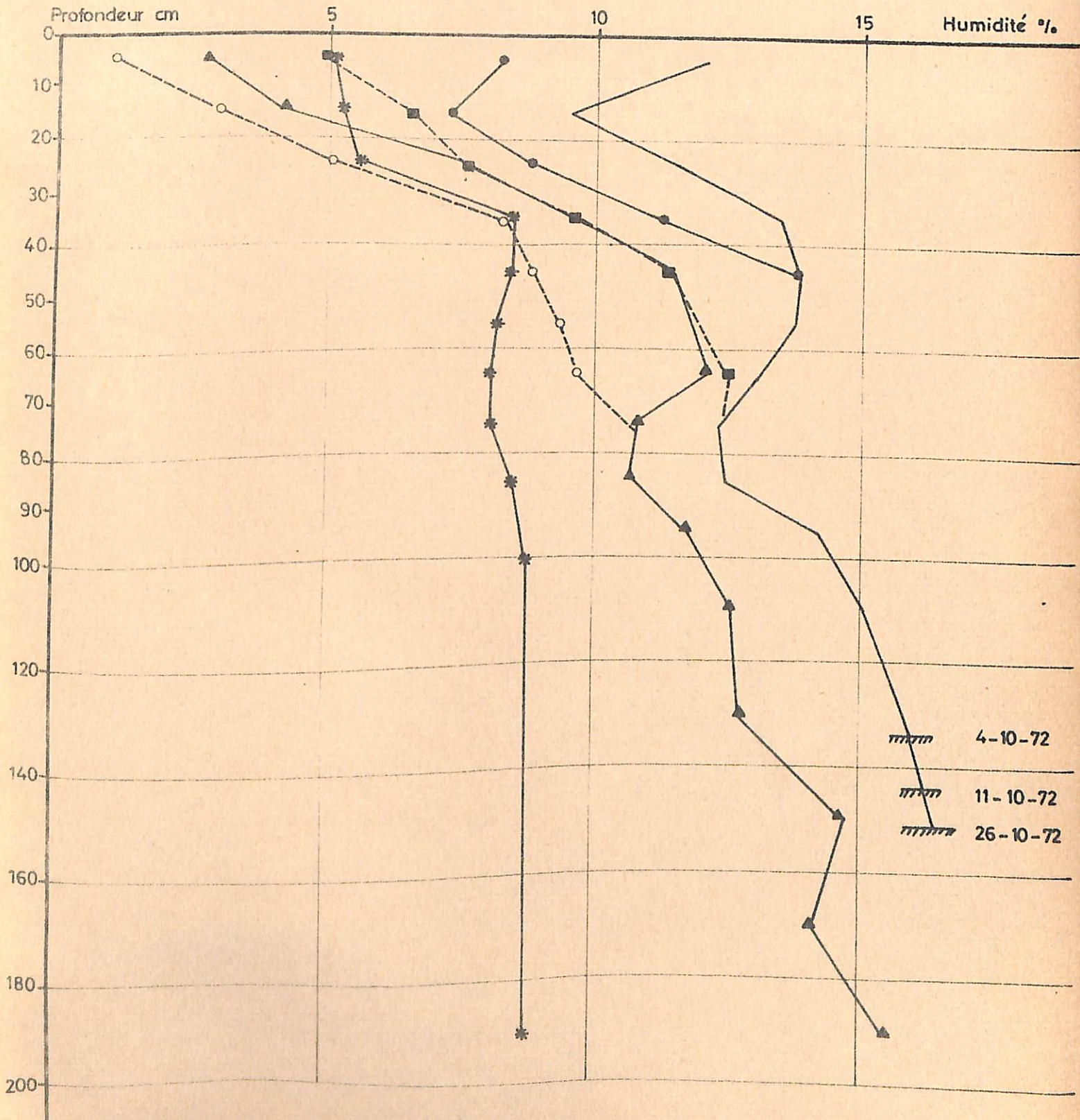




# Assèchement du profil 1972-1973

SARE MANSALY  
PH III 9

Date	Profondeur Nappe
4 - 10 - 72	133 cm
11 - 10 - 72	144 cm
26 - 10 - 72	152 cm
29 - 12 - 72	206 cm
7 - 2 - 73	
PF 4,2	





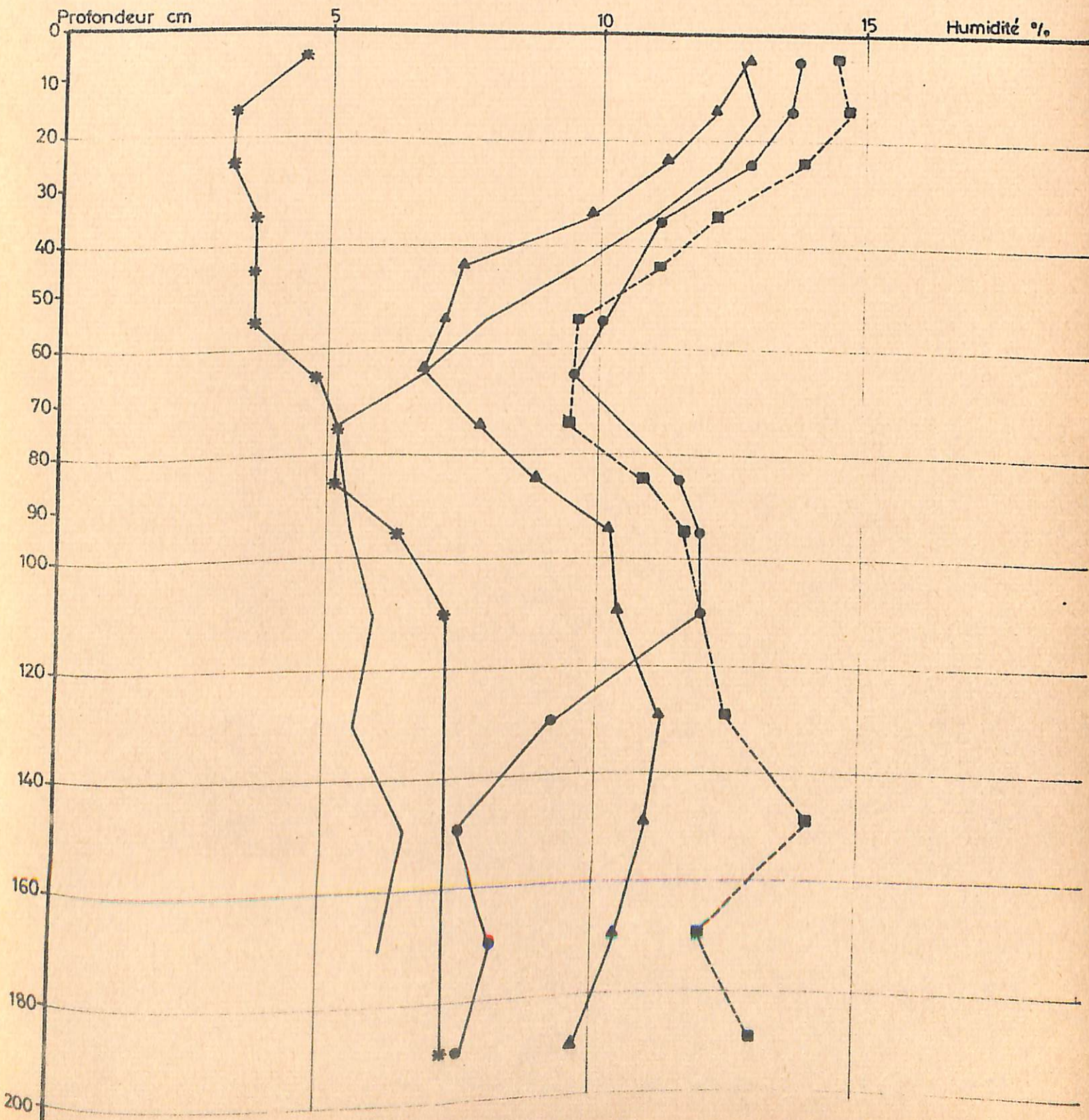
# Humectation du profil 1972

SARE MANSALY  
PH VI 12

Date

Profondeur Nappe

- 6 - 8 - 72 ————
- 26 - 8 - 72 ●—●—●—
- 14 - 9 - 72 ■—■—■— 252 cm
- 20 - 9 - 72 ▲—▲—▲— 233 cm
- PF 4,2 \*—\*—\*



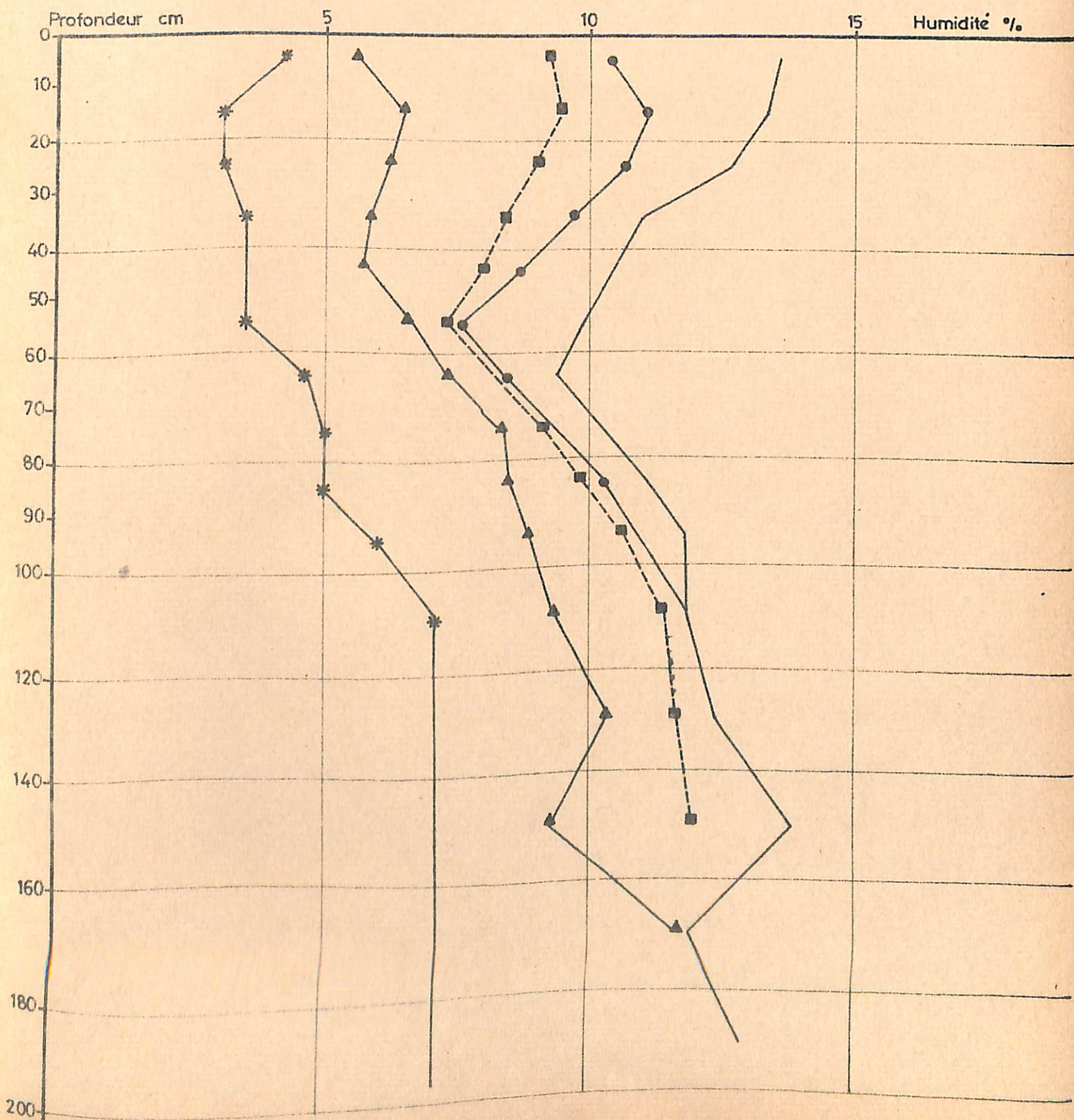


# Asséchement du profil 1972

FIG. 90

SARE MANSALY  
PH VI 12

Date	Profondeur Nappe
20 - 9 - 72	233 cm
27 - 9 - 72	218 cm
4 - 10 - 72	220 cm
11 - 10 - 72	228 cm
PF 4,2	

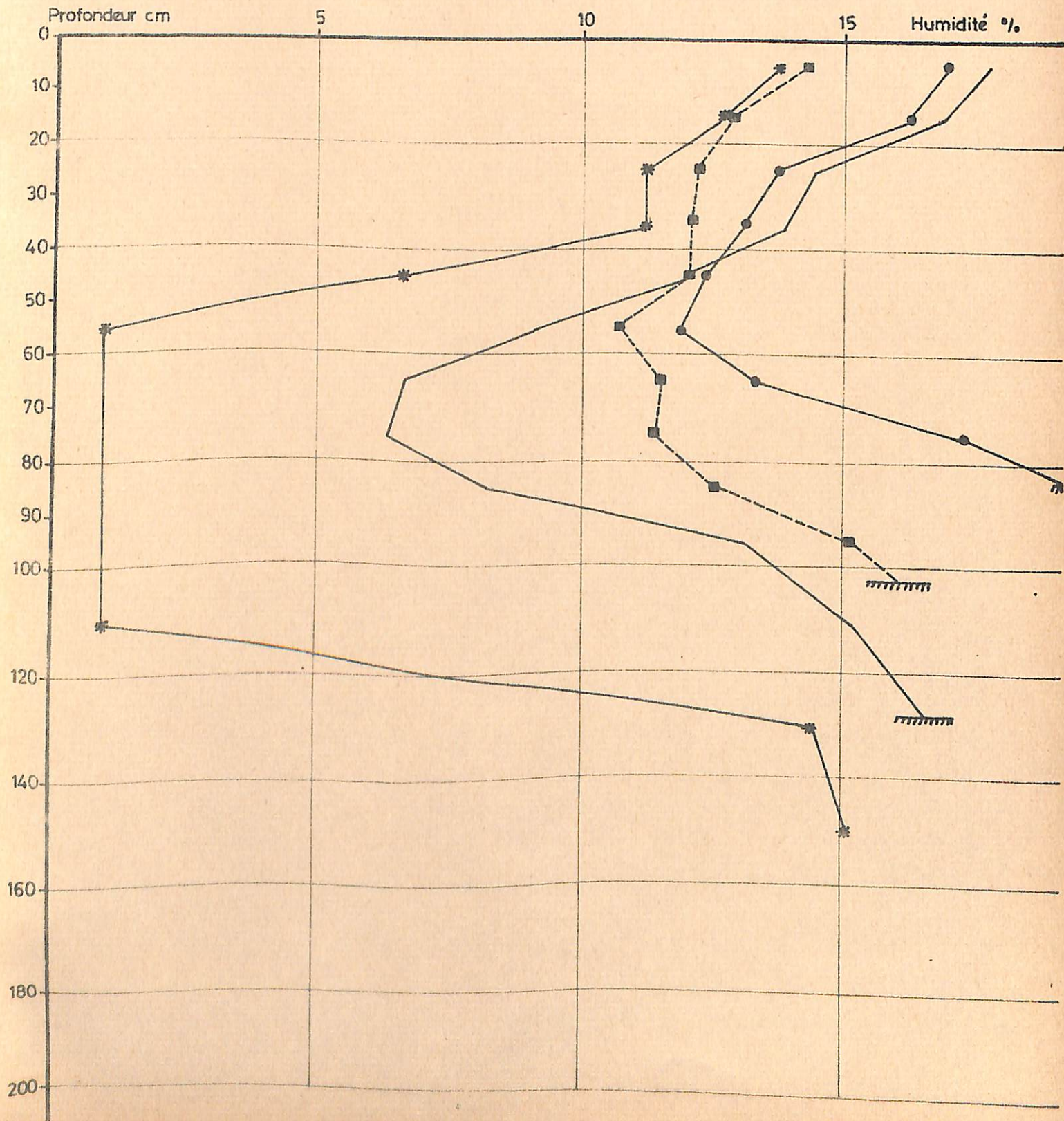




# Humectation du profil 1972

MAMPATIM MAOUNDE  
PH V 7

Date	Profondeur Nappe
16 - 8 - 72	128cm
29 - 8 - 72	84cm
8 - 9 - 72	102cm
PF 2,5	*

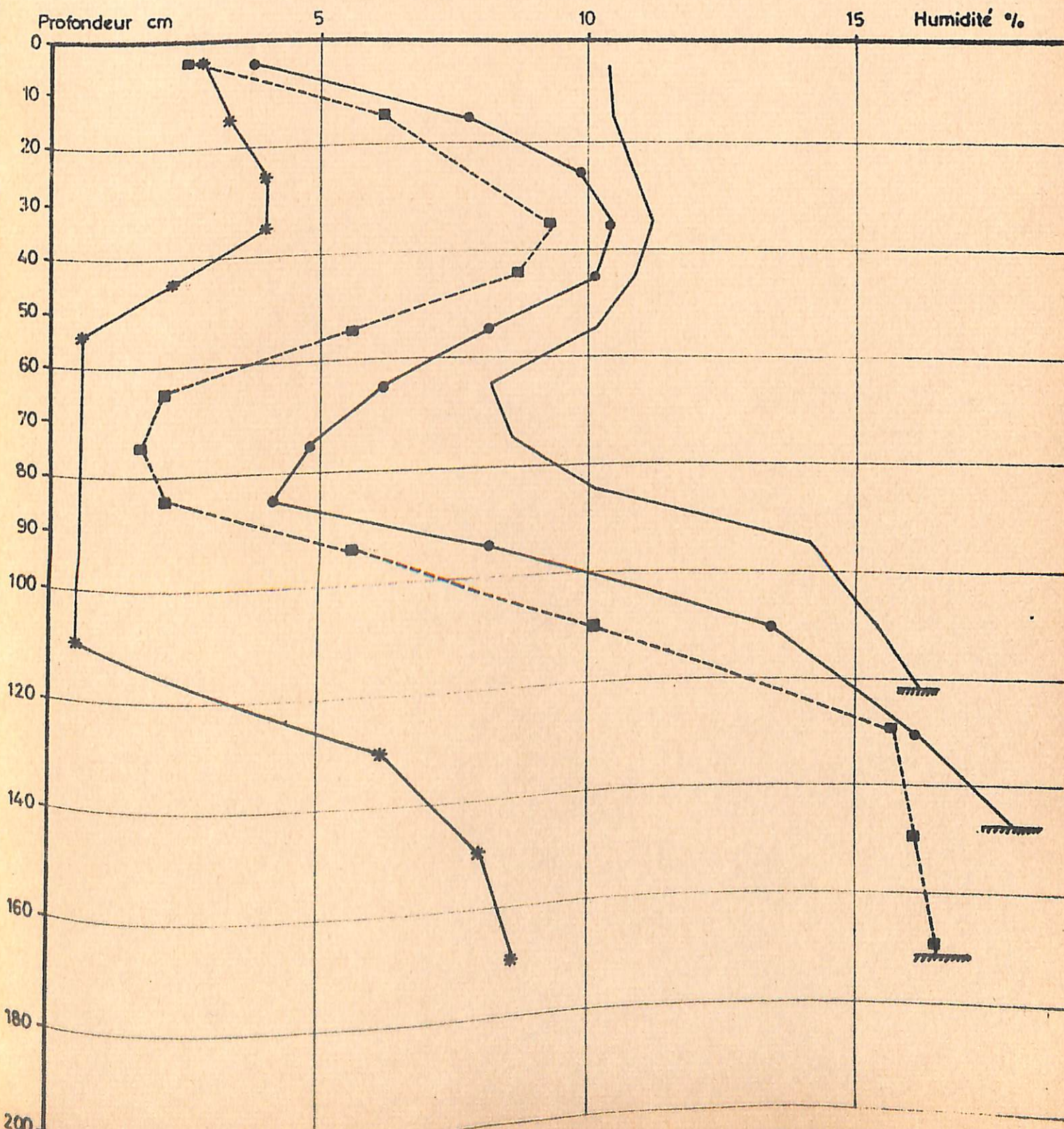




# Assèchement du profil 1972-1973

MAMPATIM MAOUNDE  
PH V 7

Date	Profondeur Nappe
19 - 10 - 72	122 cm
23 - 11 - 72	148 cm
6 - 2 - 73	171 cm
PF 4,2	



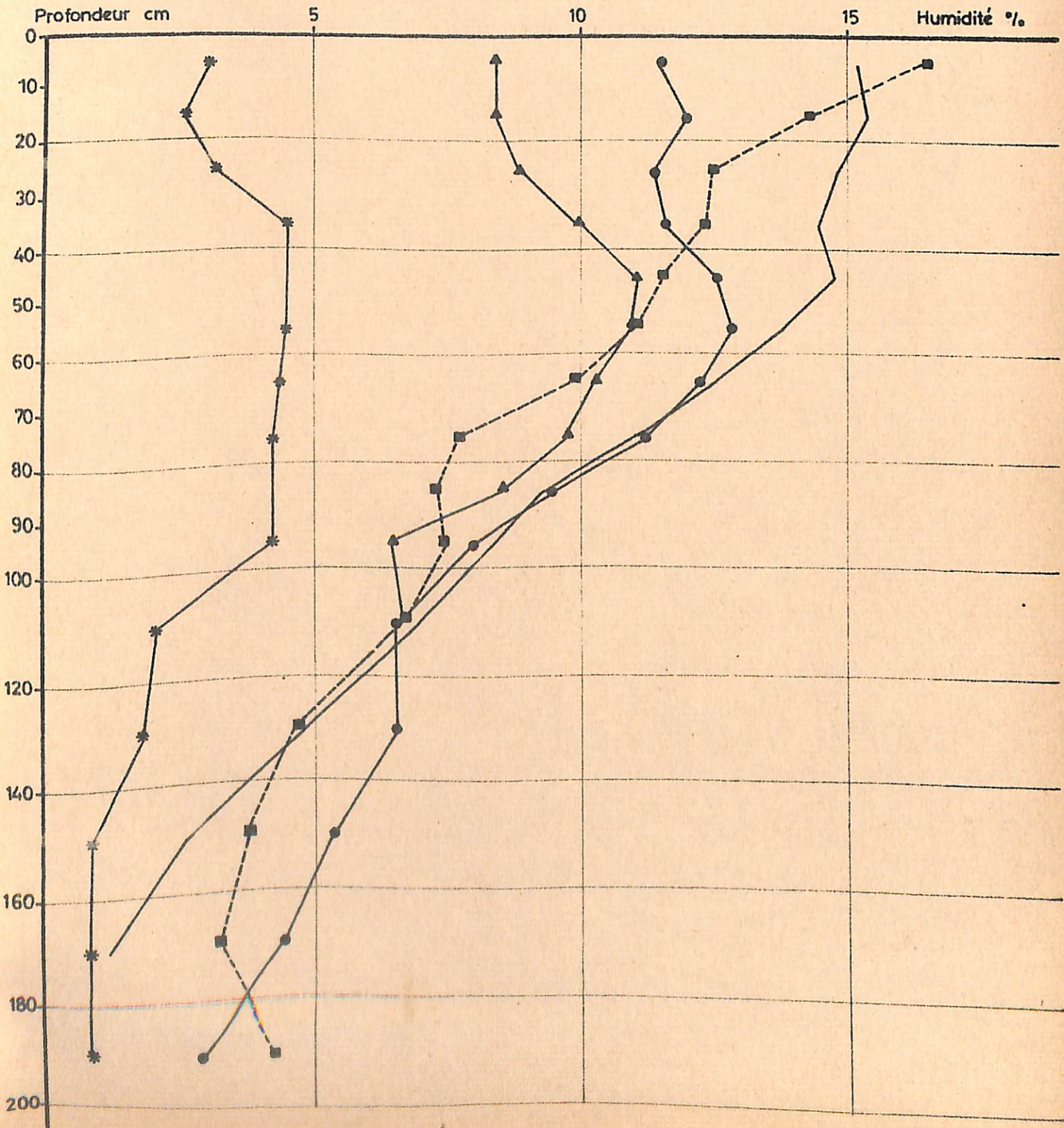


# Humectation du profil 1972

DIALLI-KOUNDA  
PH III 8

Date

16 - 8 - 72	—
25 - 8 - 72	●—●—●
22 - 9 - 72	■—■—■
4 - 10 - 72	▲—▲—▲
PF 4,2	*—*—*

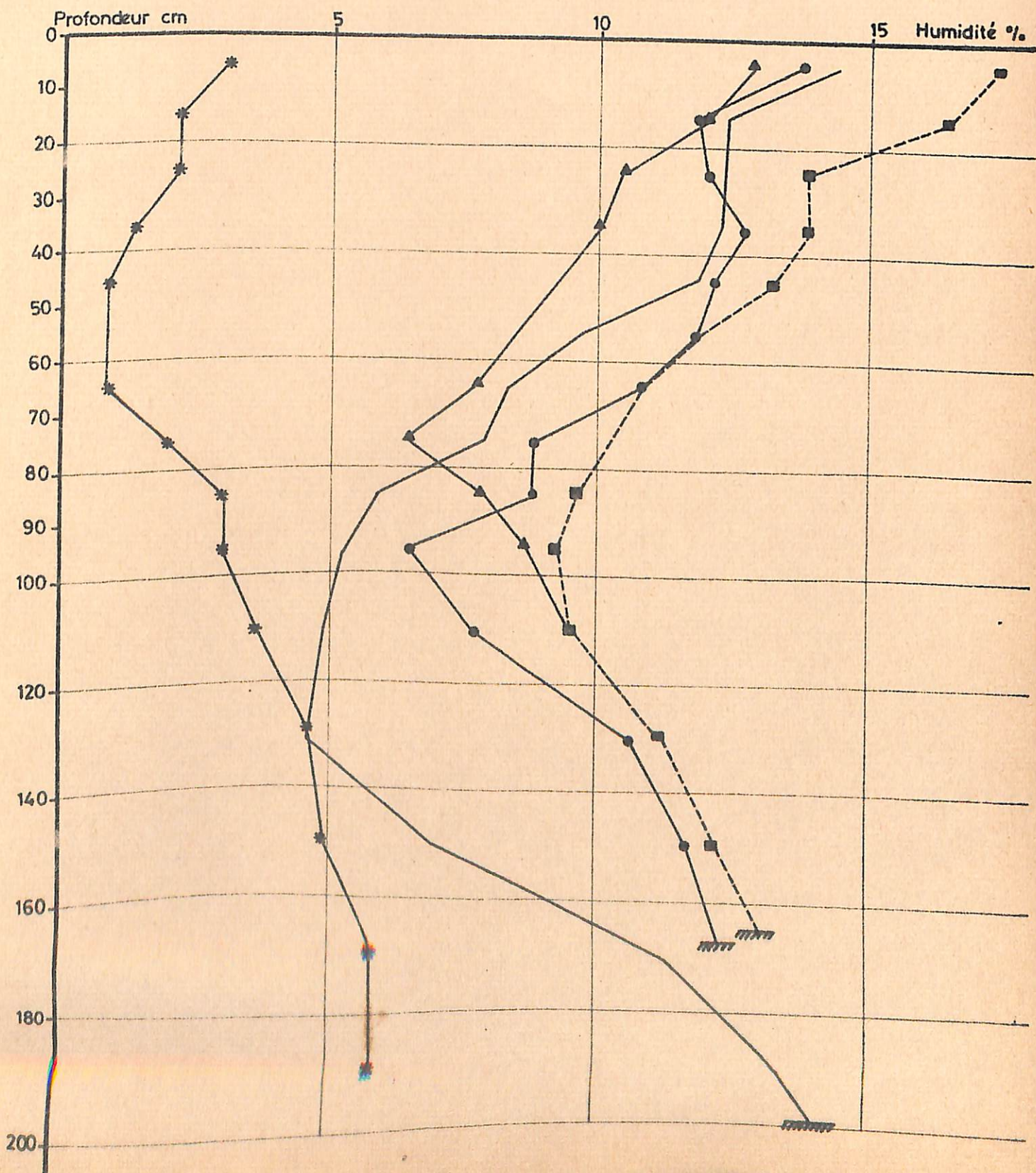




# Humectation du profil 1972

DIALLI - KOUNDA  
PH VI 5

Date	Profondeur Nappe
25 - 8 - 72	199 cm
7 - 9 - 72	167 cm
22 - 9 - 72	165 cm
28 - 9 - 72	175 cm
PF 4,2	*



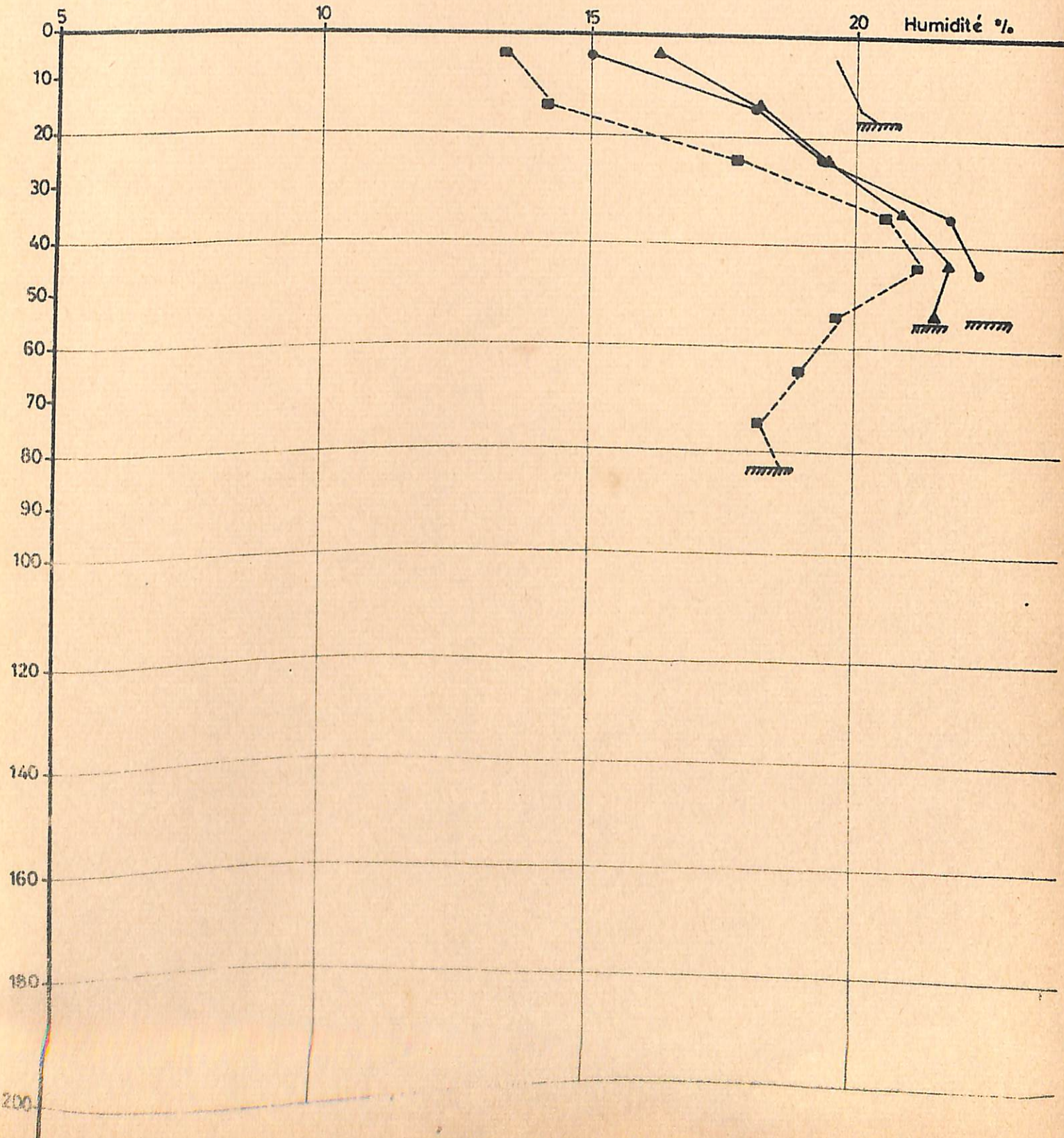


Variation-Humidité 1972

TAKOUDIALLA  
PH III 11

Date	Profondeur Nappe
17 - 8 - 72	17 cm
7 - 9 - 72	54 cm
4 - 10 - 72	82 cm
25 - 10 - 72	55 cm

Profondeur cm

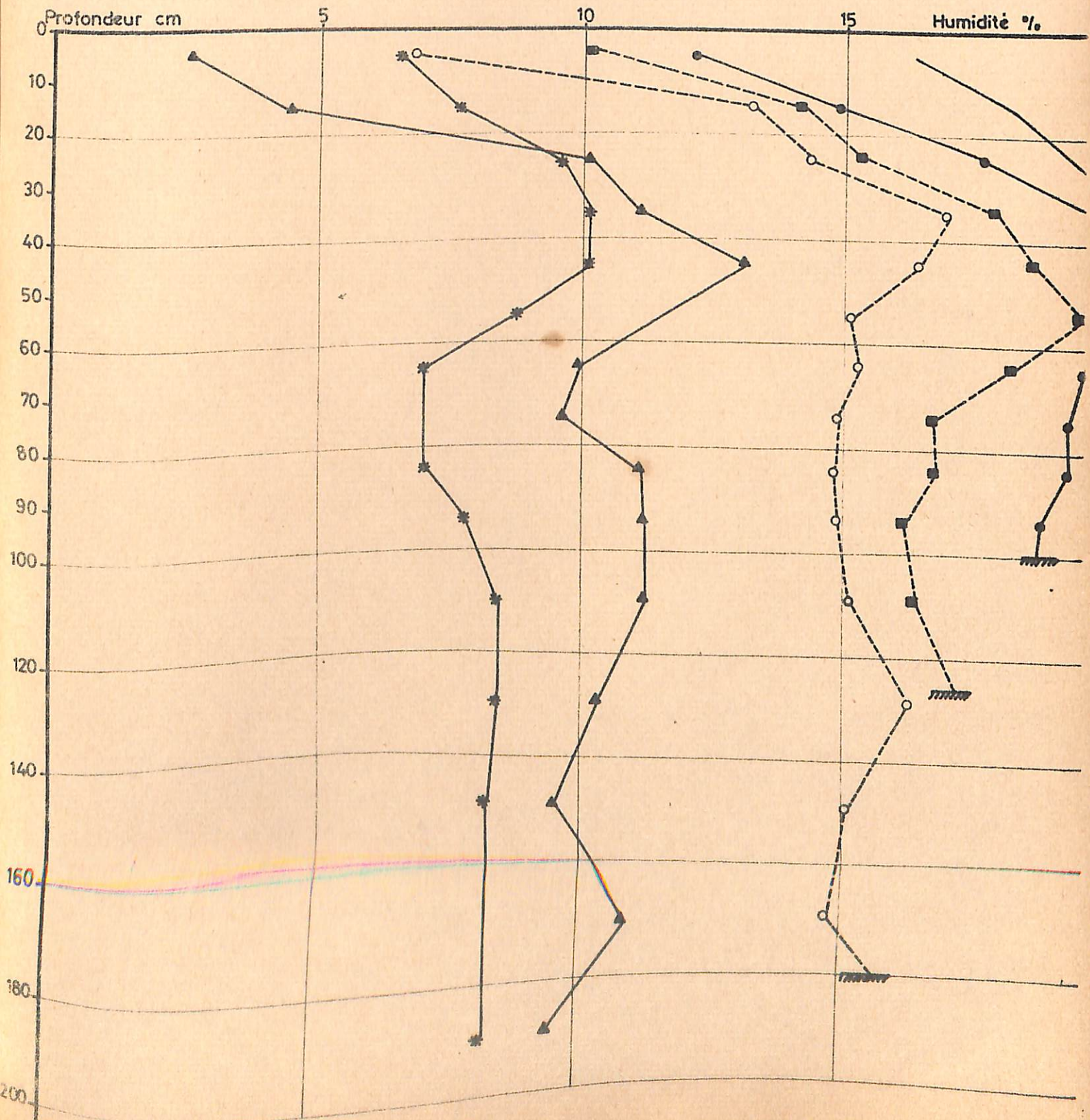




# Asséchement du profil 1972 1973

TAKOUDIALLA  
PH III 11

Date	Profondeur Nappe
25 - 10 - 72	55 cm
9 - 11 - 72	100 cm
23 - 11 - 72	127 cm
28 - 12 - 72	180 cm
6 - 2 - 73	180 cm
PF 4,2	*

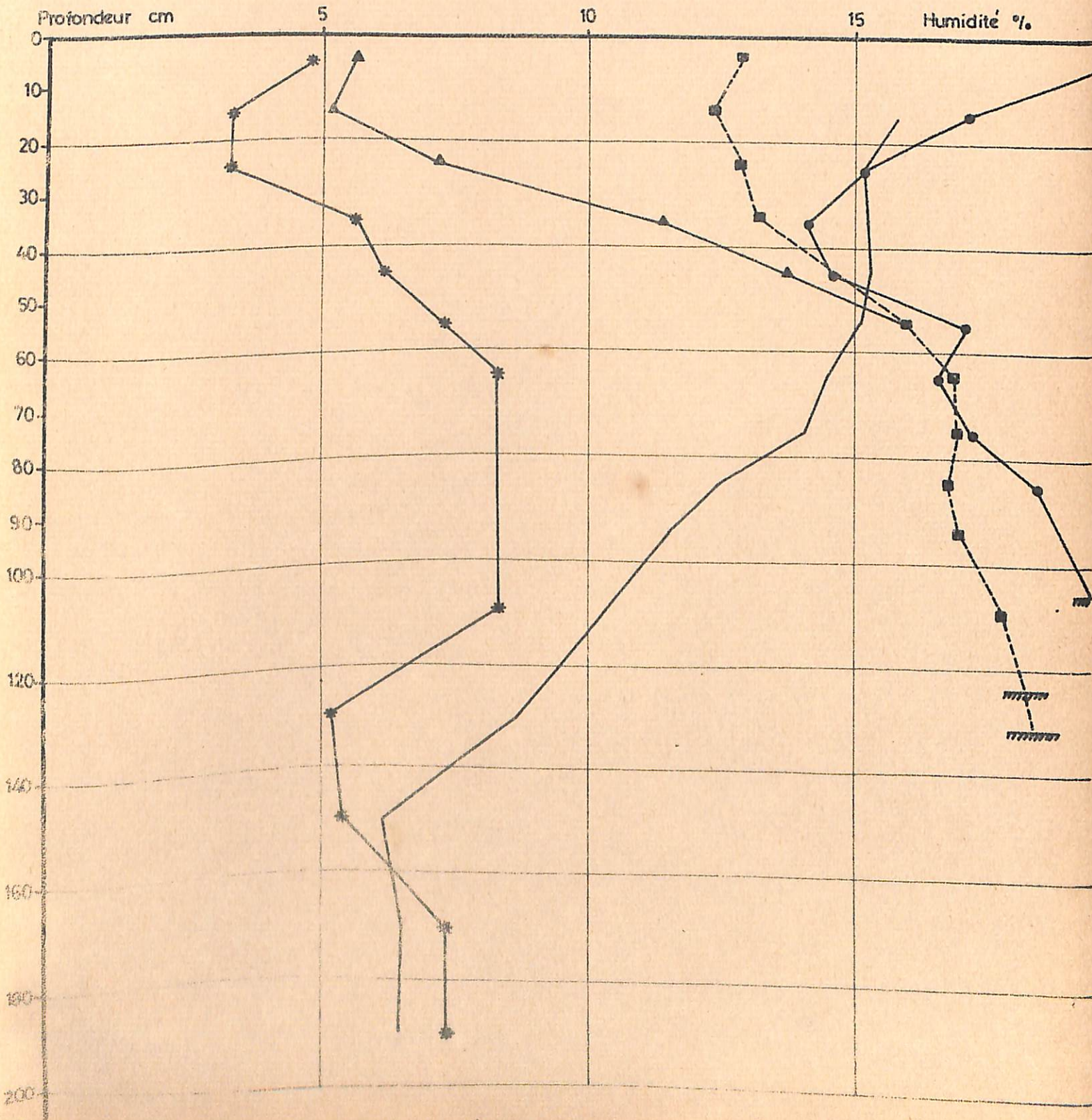




# Humectation du profil 1972

KOUNKANE KABENDOU  
PH III 6

Date	Profondeur Nappe
16 - 8 - 72	— 232 cm
28 - 8 - 72	●—●—● 106 cm
22 - 9 - 72	■—■—■ 125 cm
29 - 9 - 72	▲—▲—▲ 132 cm
PF 4,2	*—*—* 125 cm

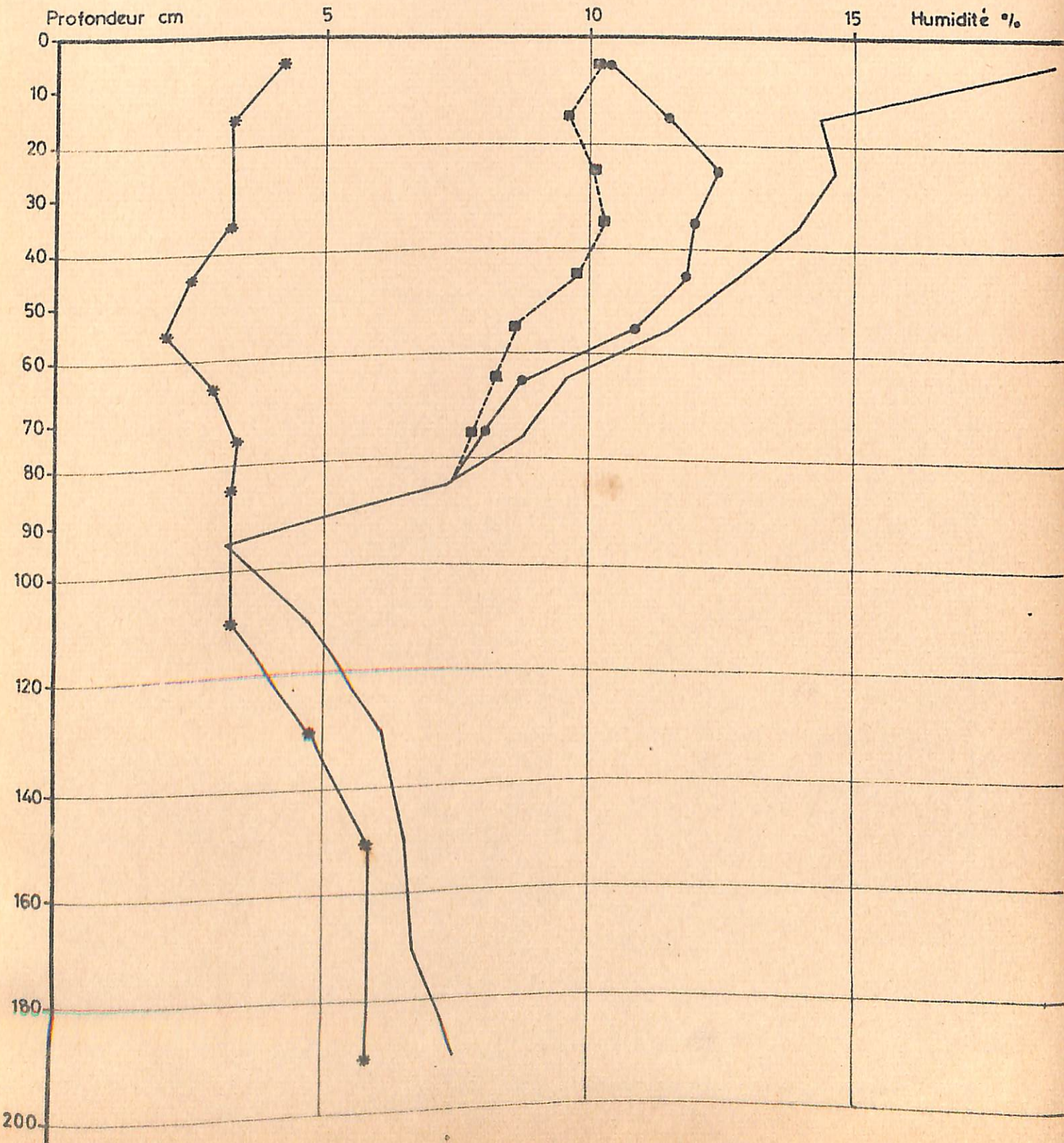




# Variation en hivernage de l'humidité 1972

KOUNKANE KABENDOU  
PH VII 10

Date	Profondeur Nappe
16 - 8 - 72	—
8 - 9 - 72	●—●—●
29 - 9 - 72	■- - -■- - -■
PF 4,2	*—*—*

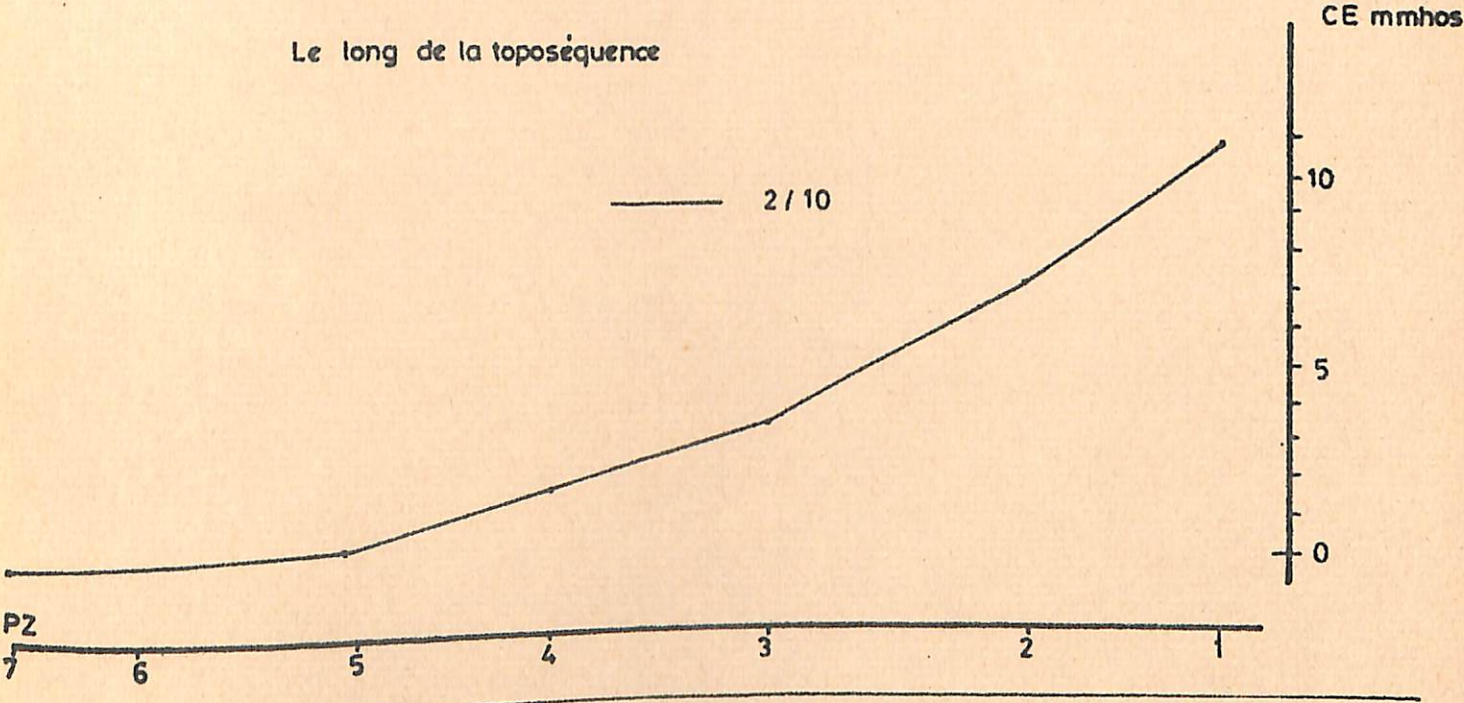




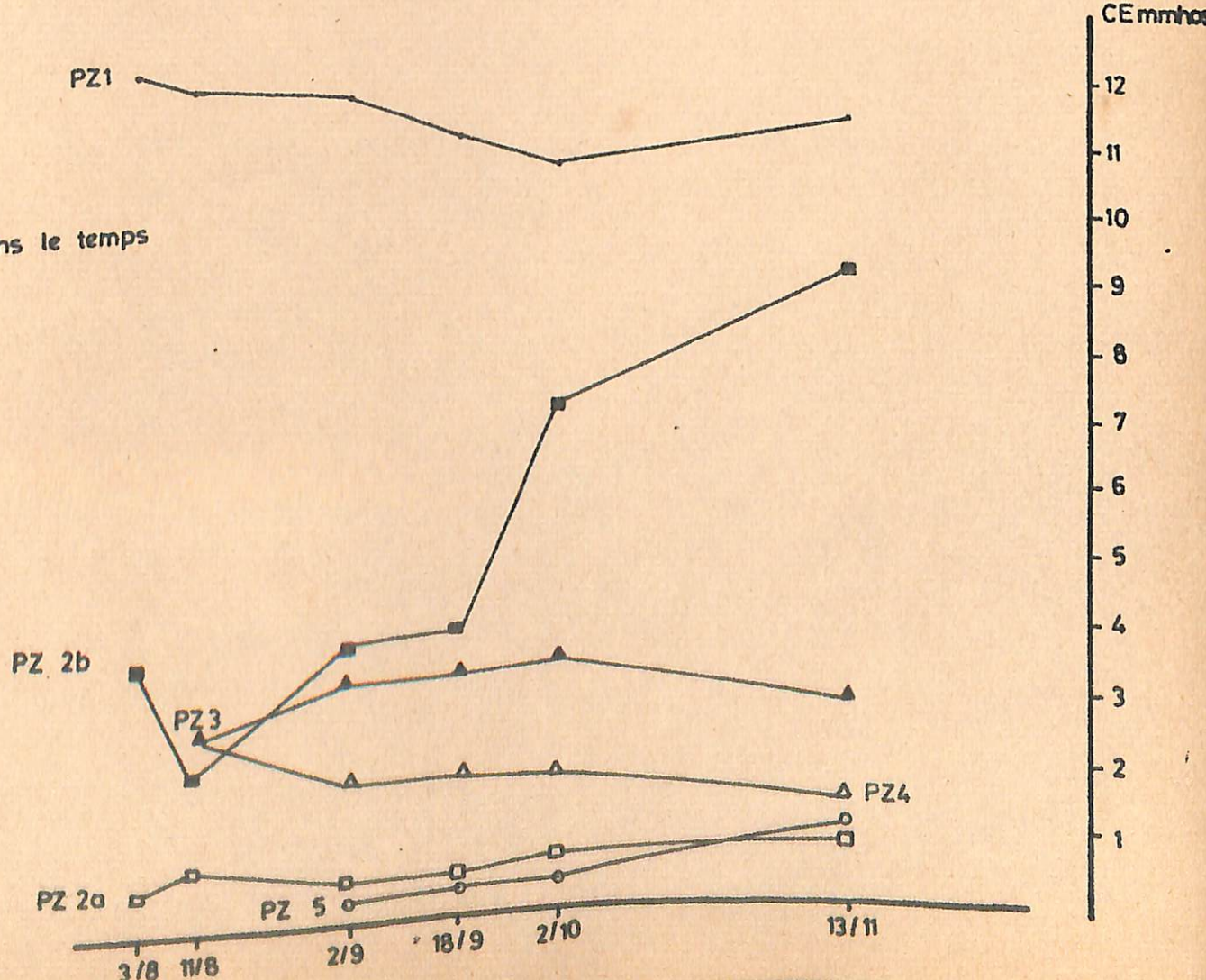
# Conductivité électrique de l'eau des piézomètres

BALINGOR TENDIMANE

Le long de la toposéquence



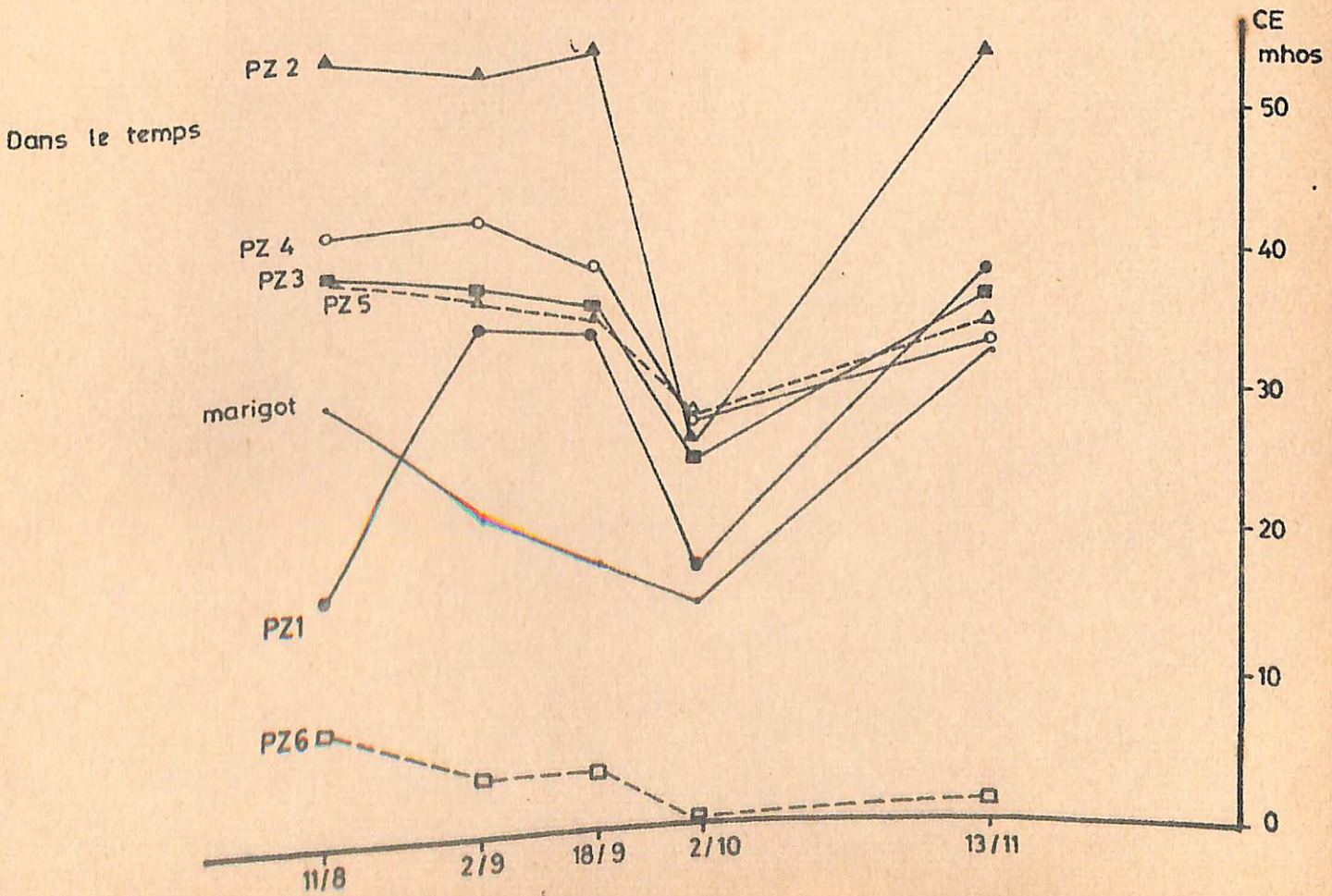
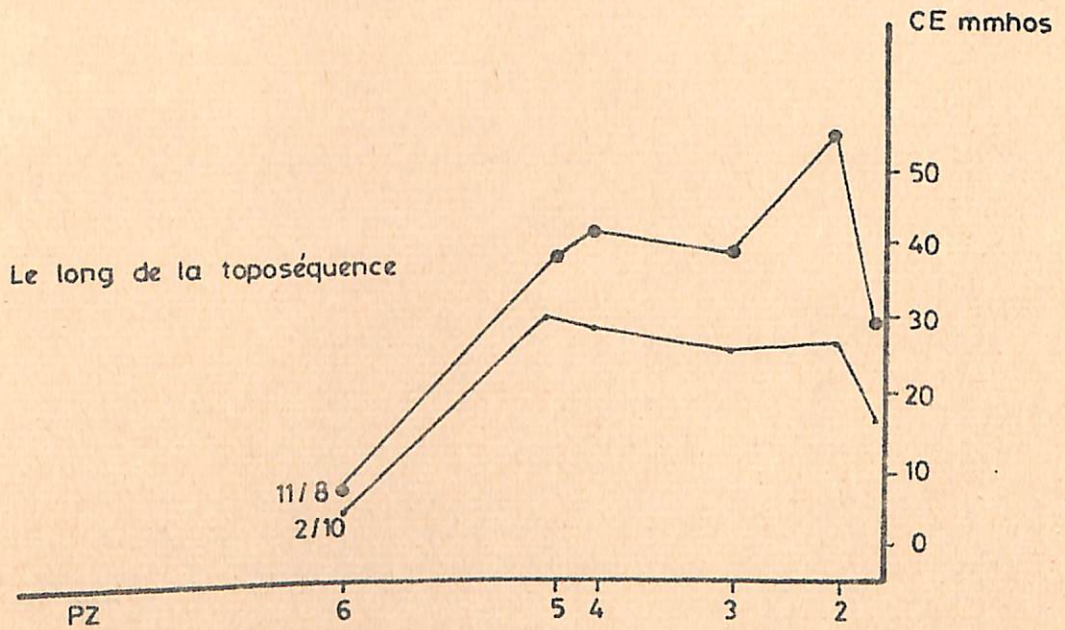
Dans le temps





# Conductivité électrique de l'eau des piézomètres

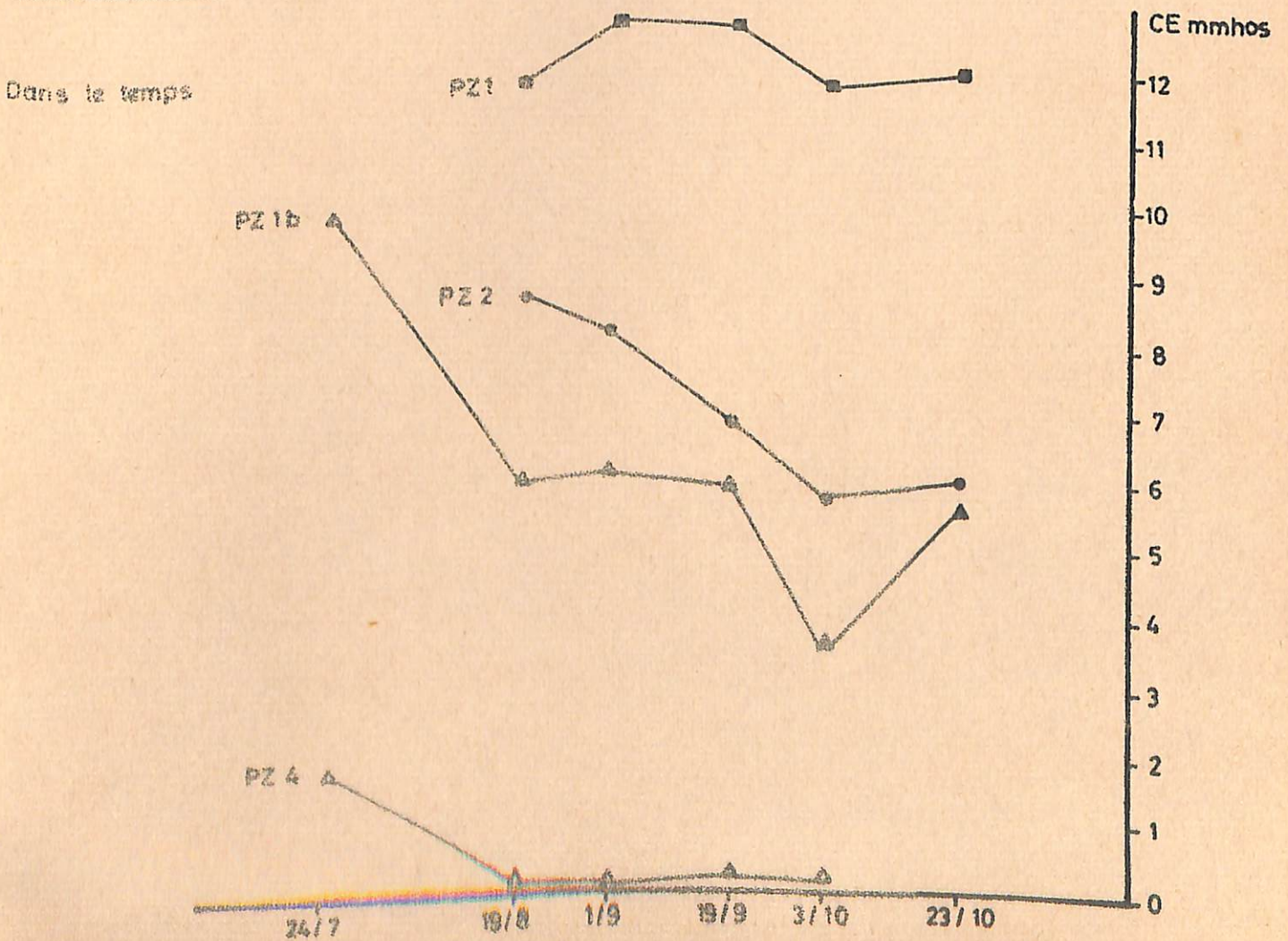
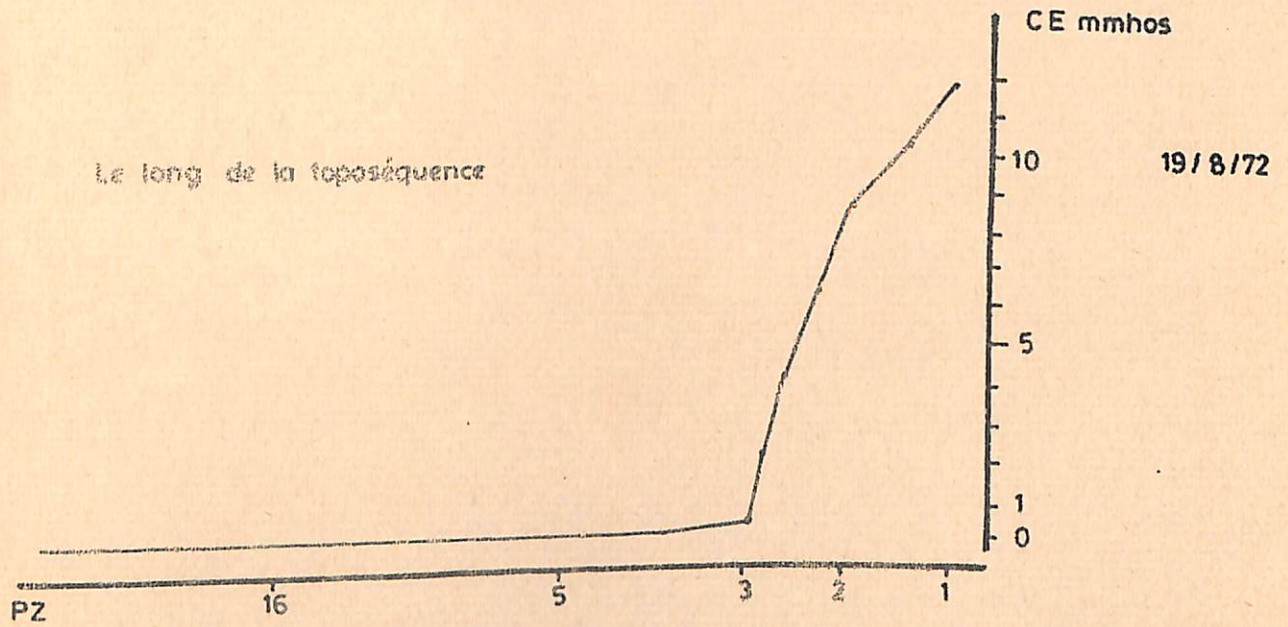
DIOUROU





# Conductivité électrique de l'eau des piézomètres

INOR

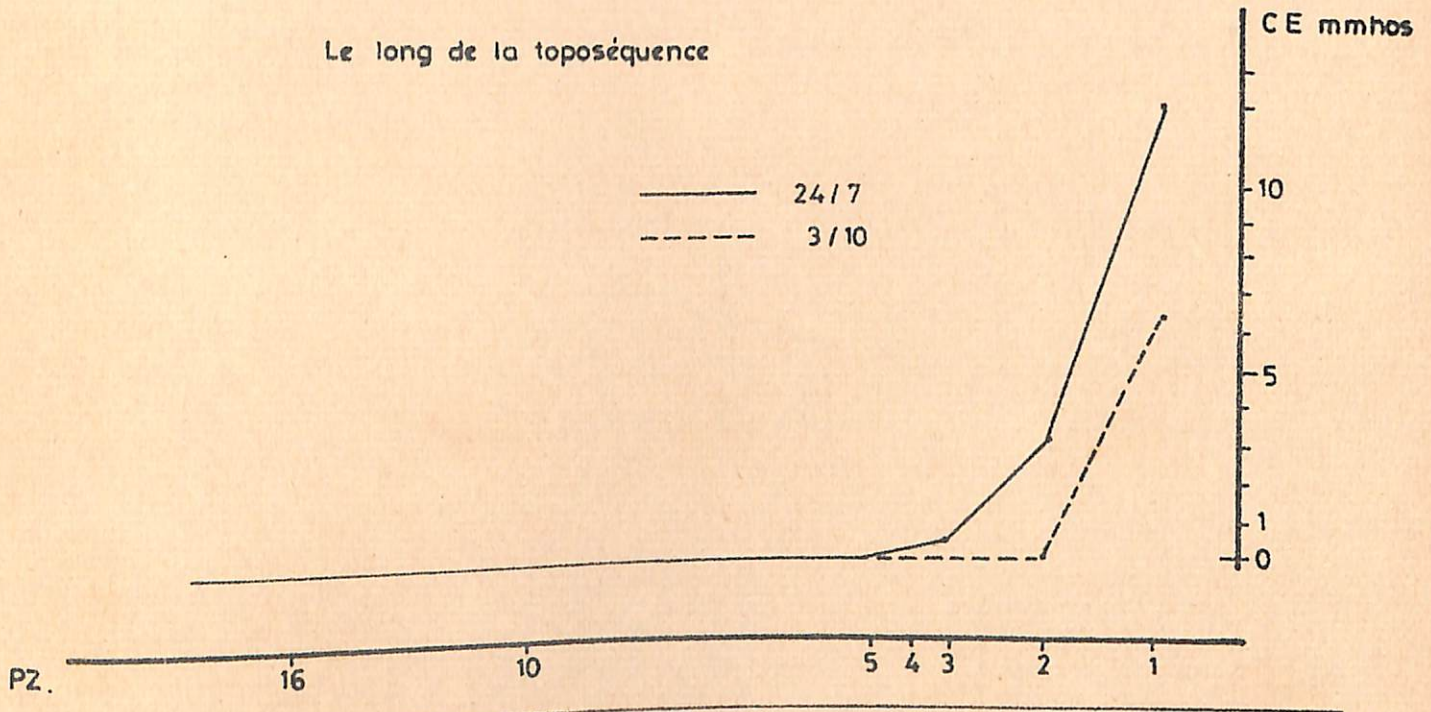




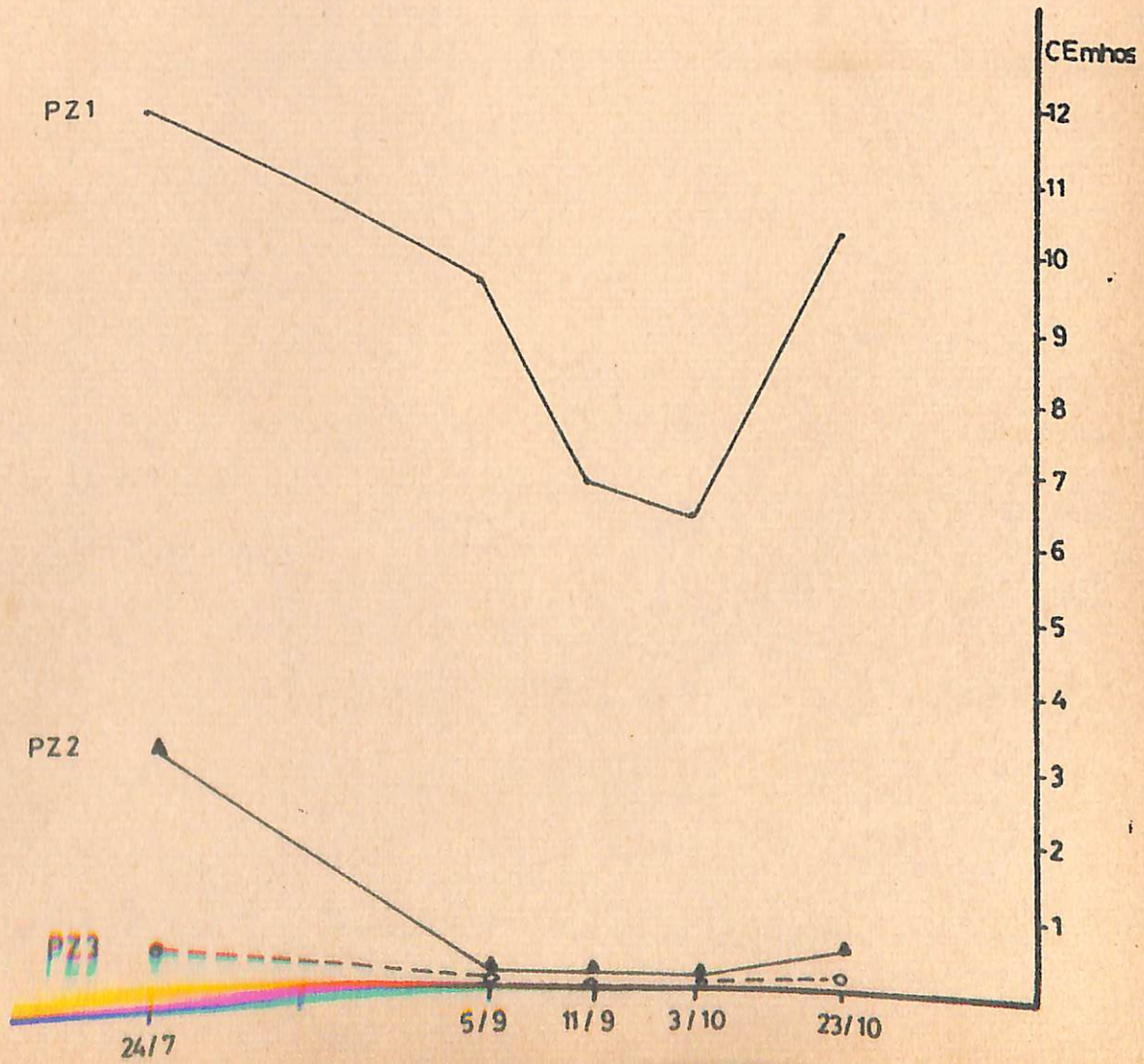
# Conductivité électrique de l'eau des piézomètres

KANDIADIU 1972

Le long de la toposéquence



Dans le temps

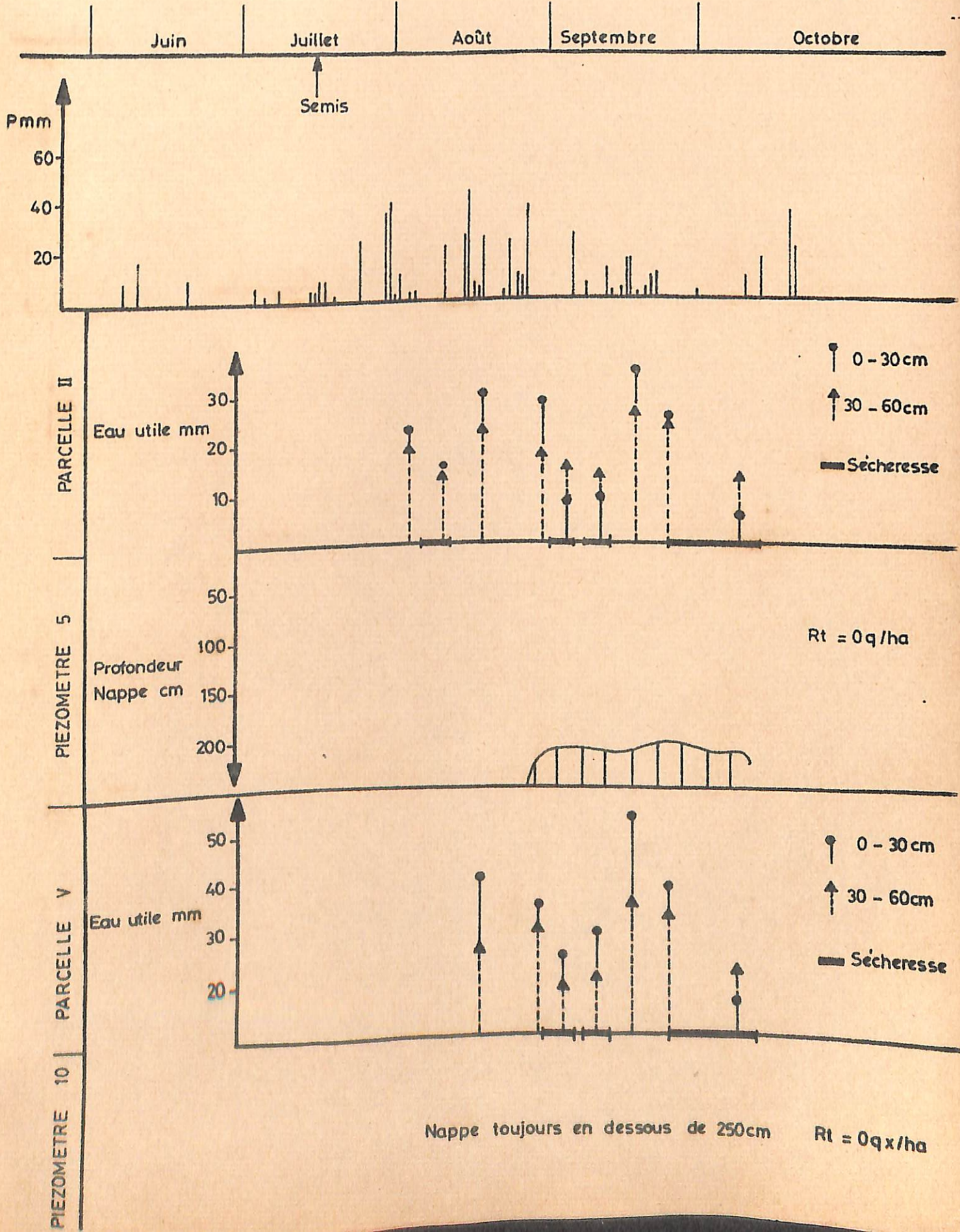




# Influence de la nappe sur les rendements en riz I K P

BALINGOR TENDIMANE

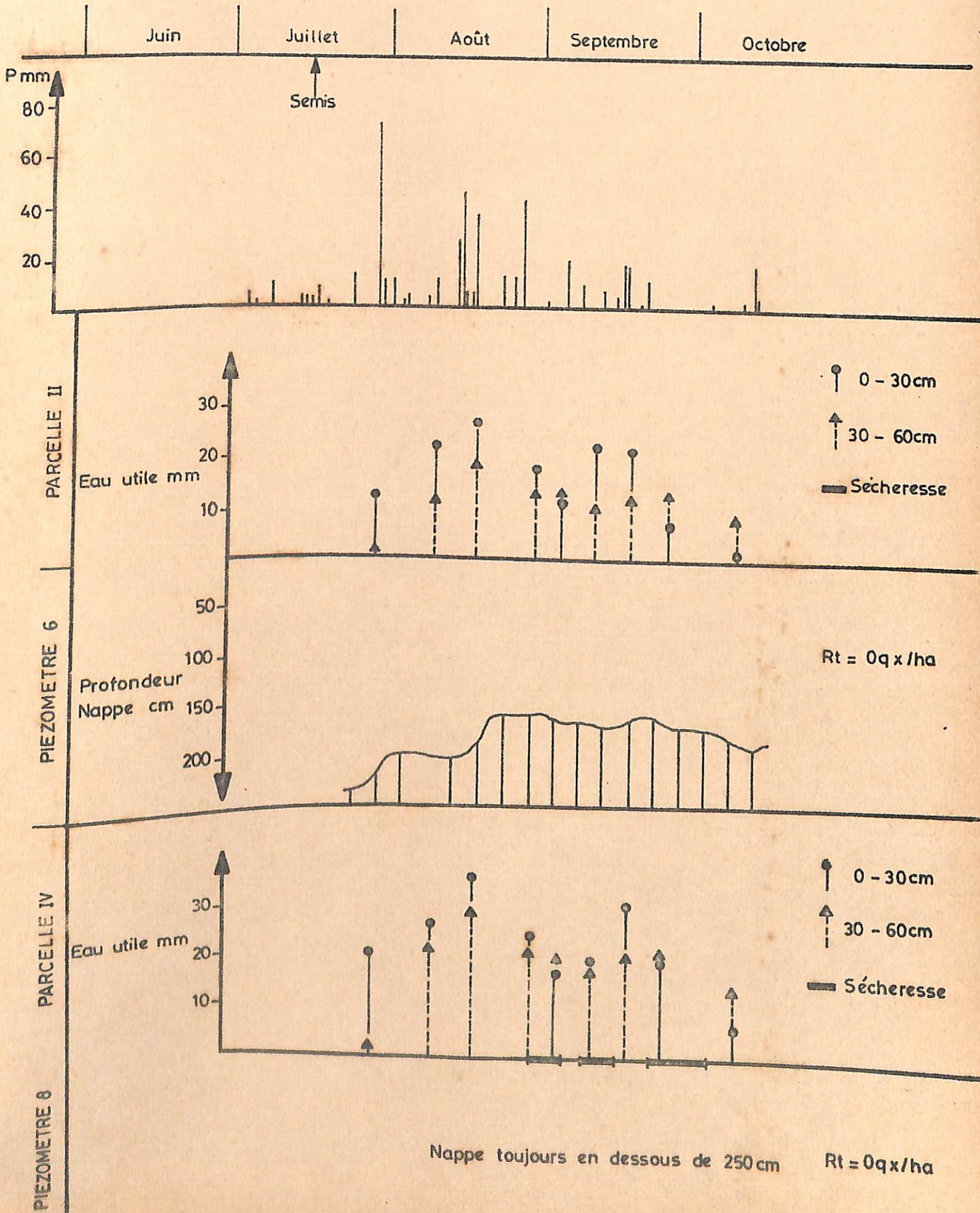
1972





# Influence de la nappe sur les rendements en riz IKP

DIUROU 1972

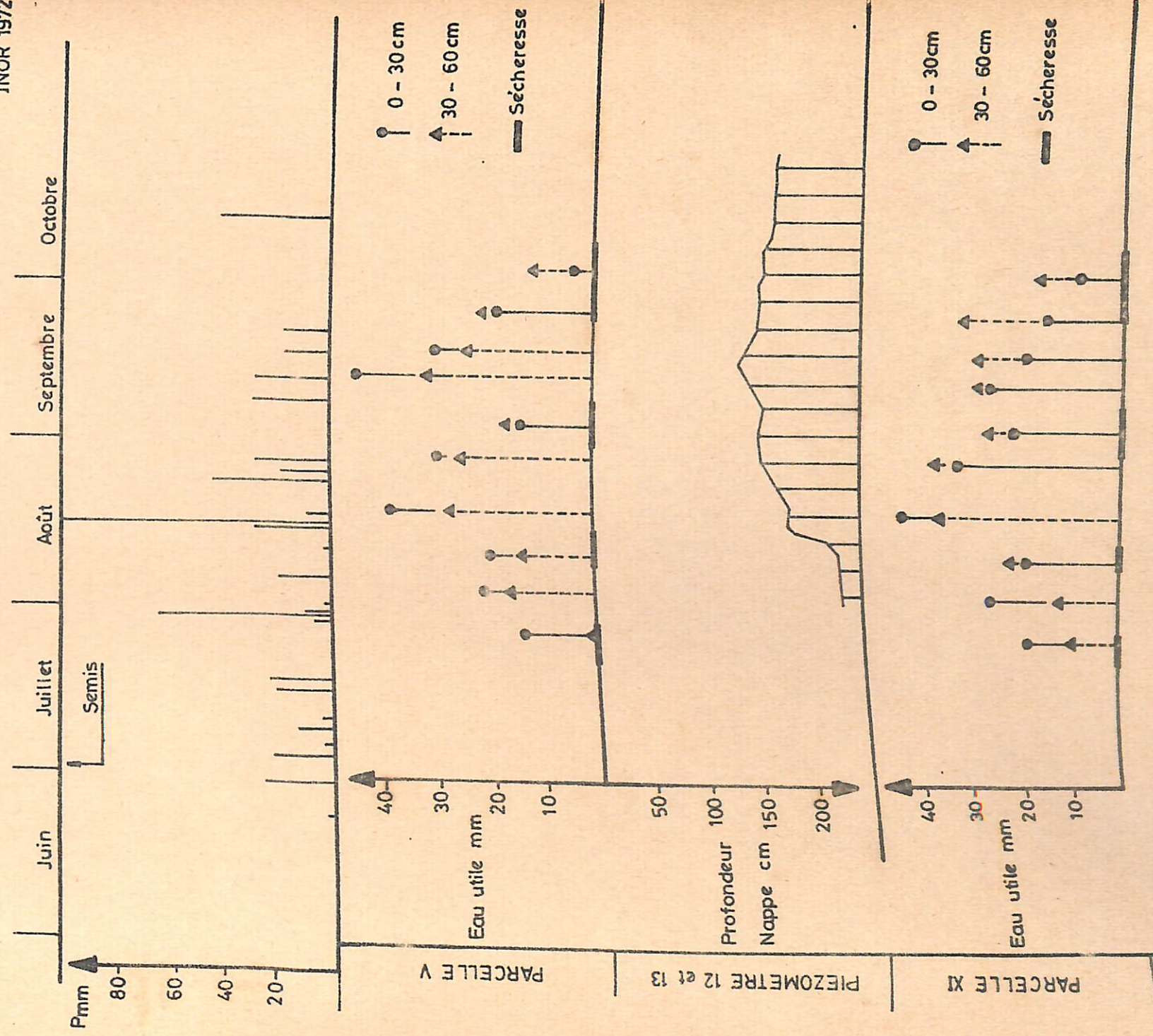




# Influence de la nappe sur les rendements en riz I K P

FIG 105

JNOR 1972

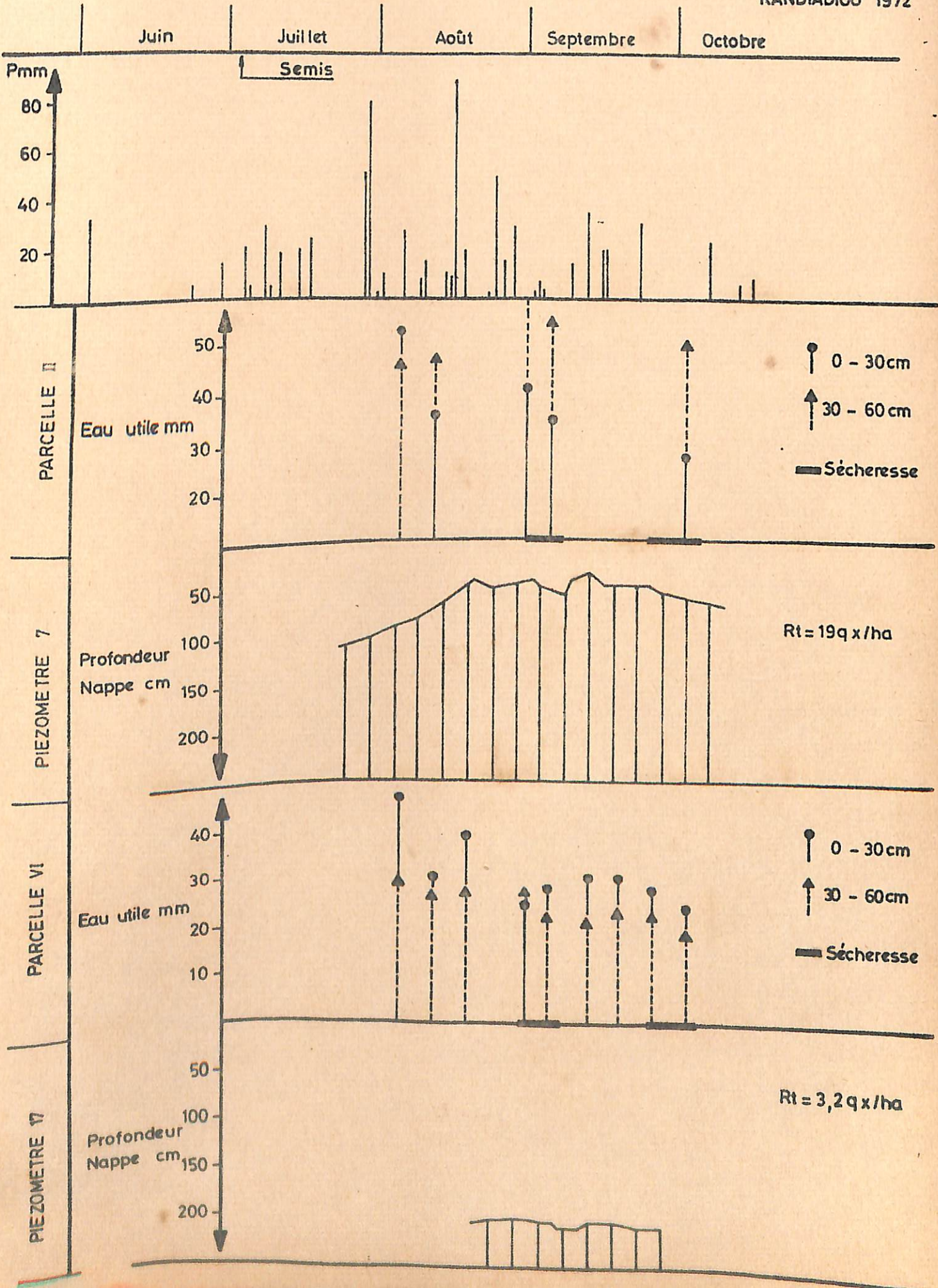


Nappe toujours au dessous de 260 cm



# Influence de la nappe sur les rendements en riz I K P

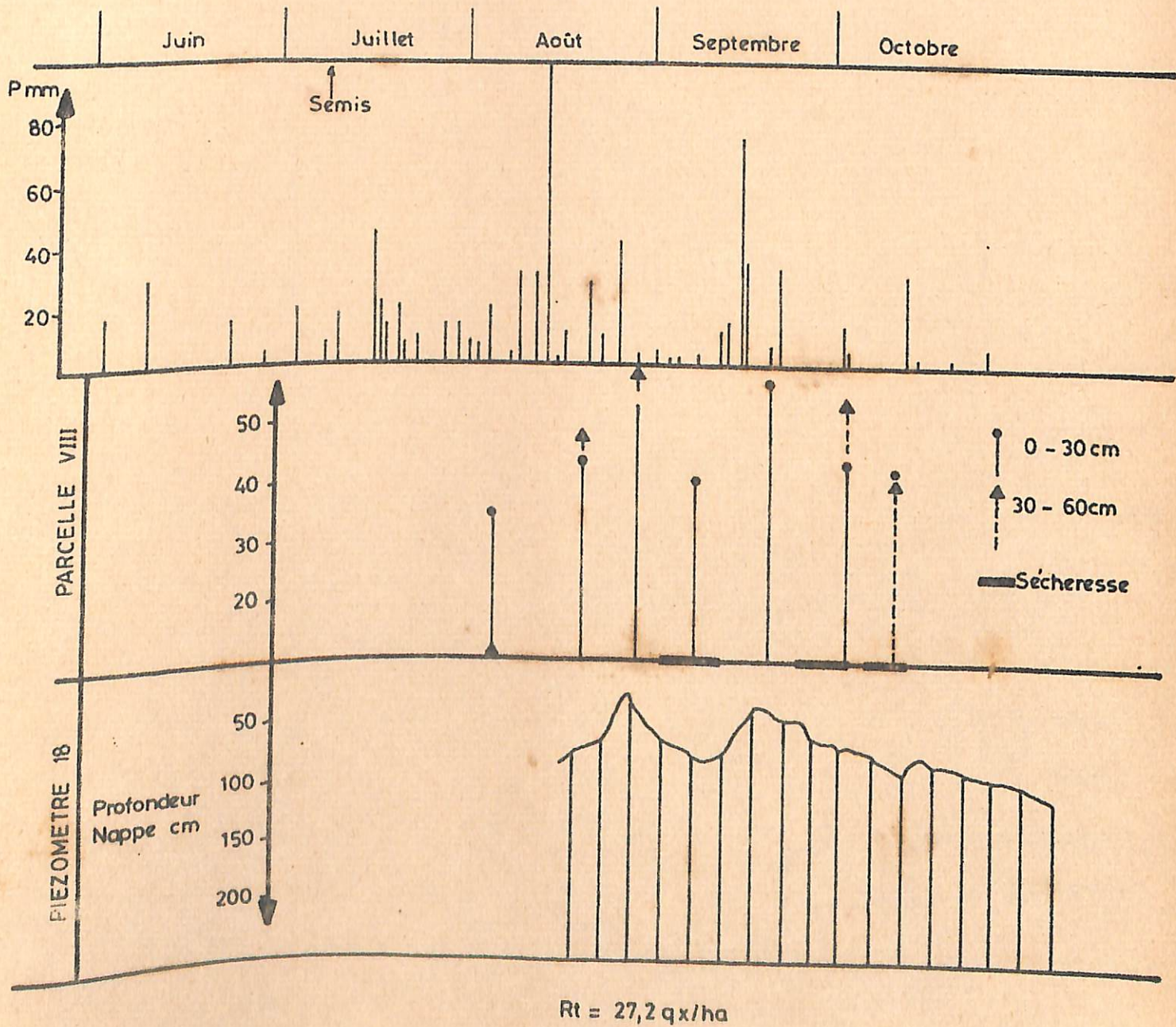
KANDIADIU 1972





# Influence de la nappe sur les rendements en riz IKP

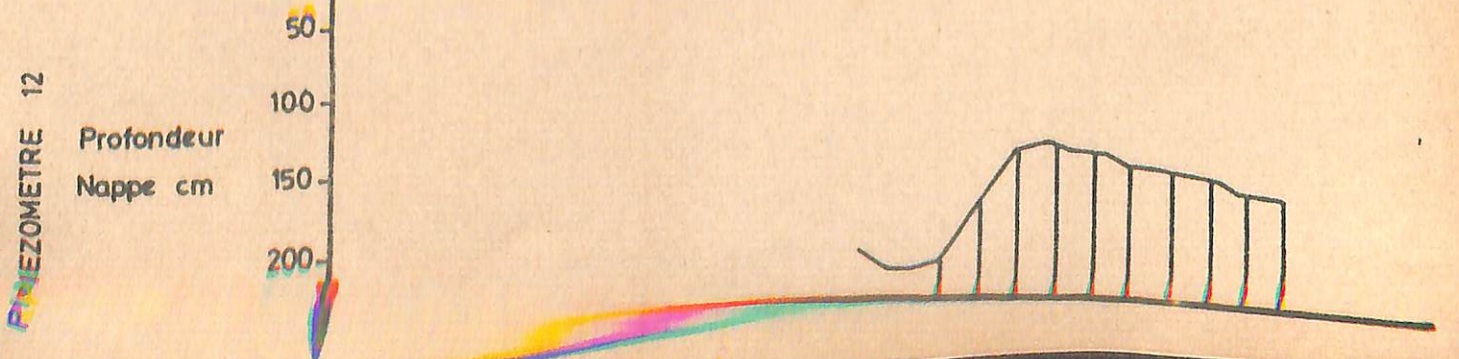
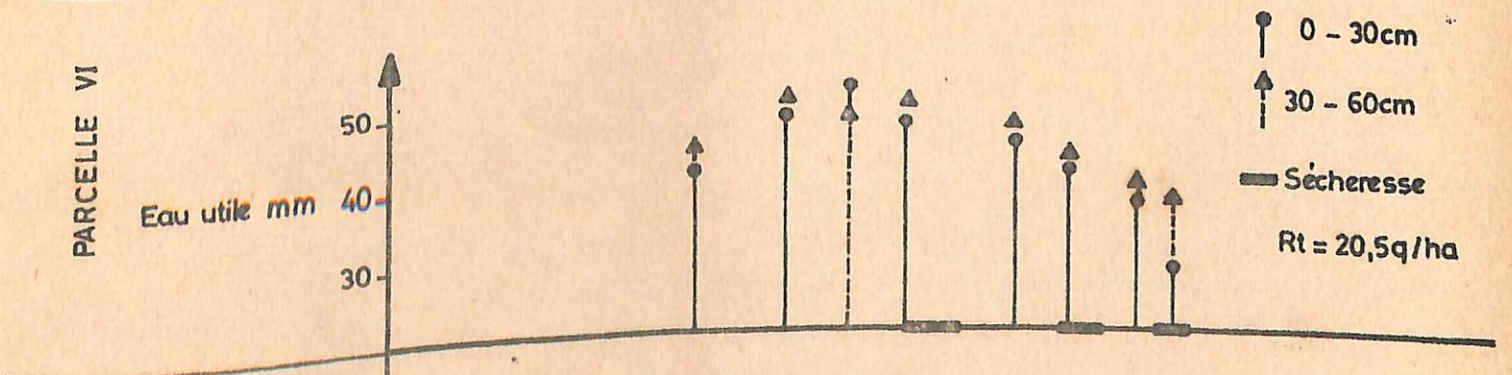
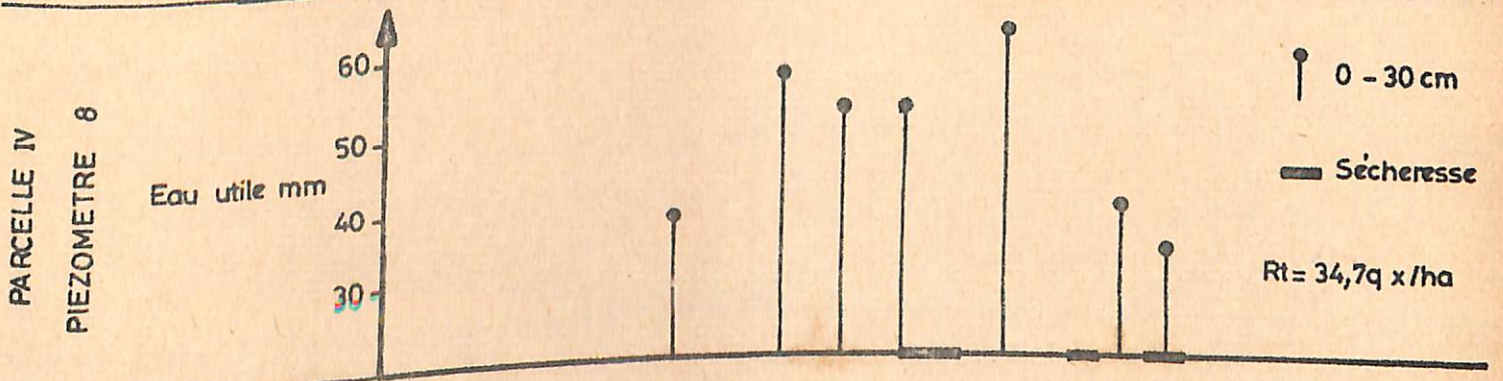
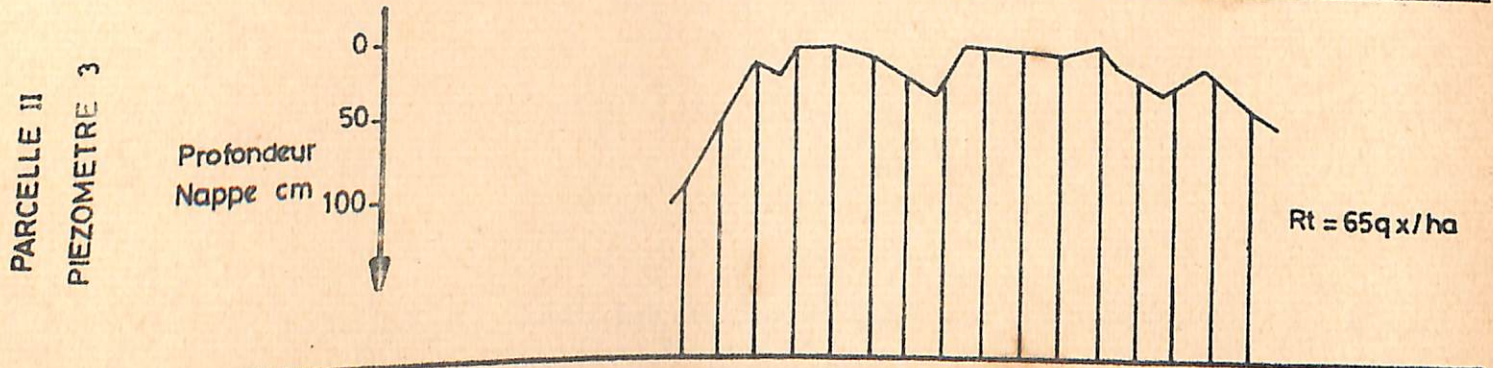
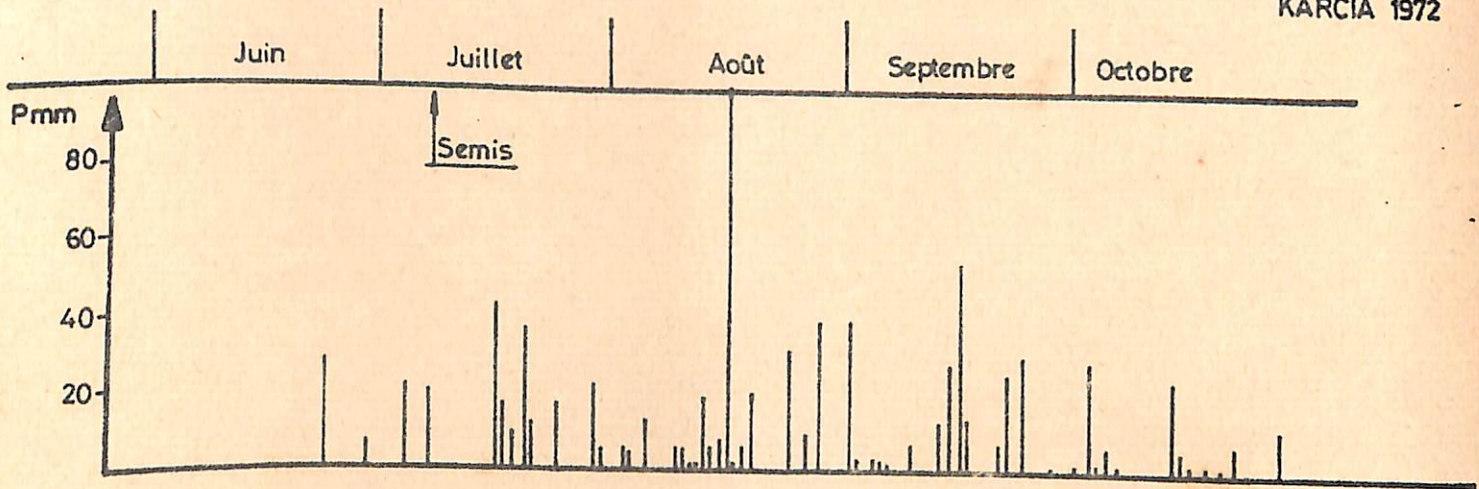
DIANA BA 1972





# Influence de la nappe sur les rendements en riz IKP

KARCIA 1972



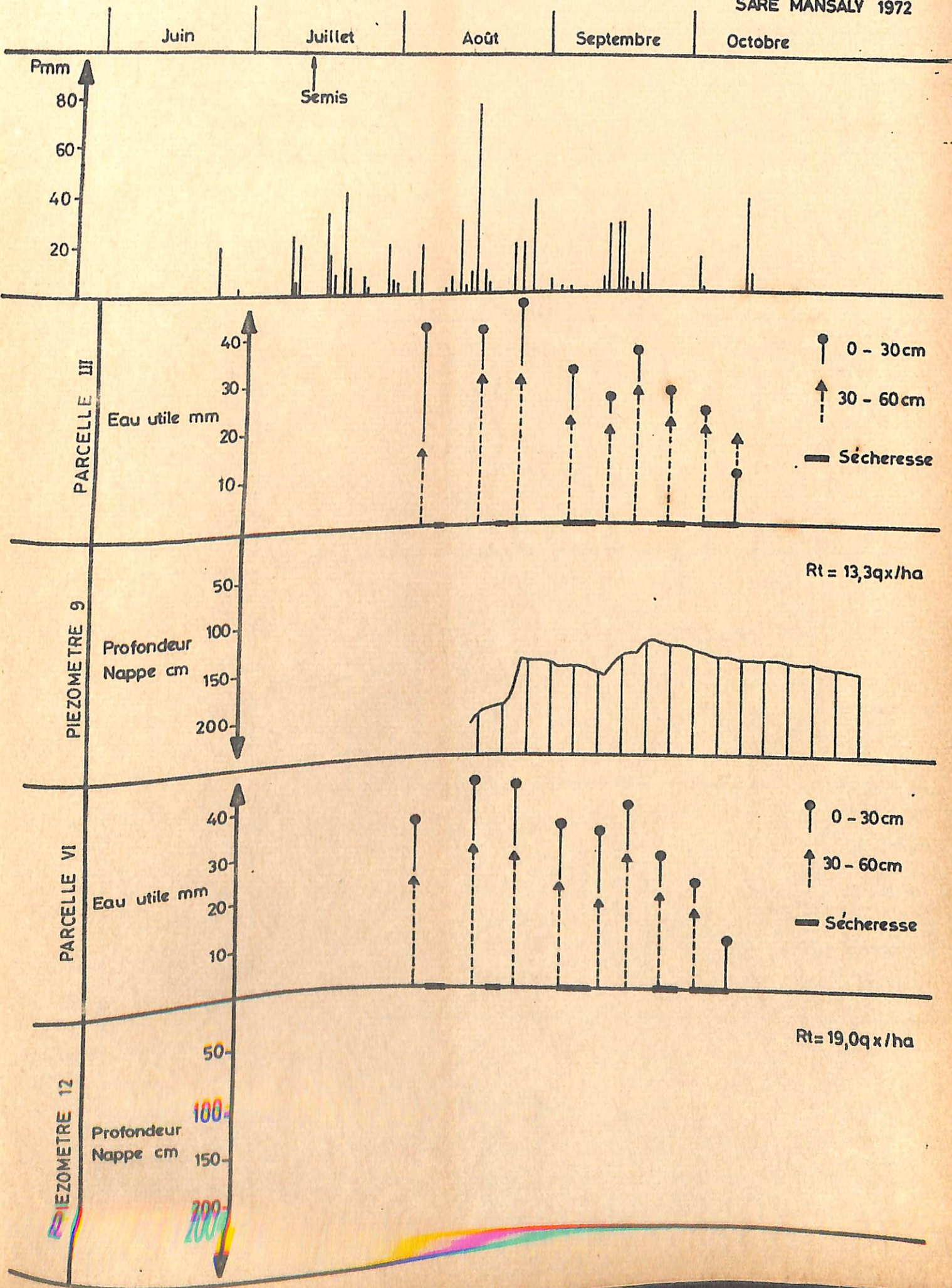






# Influence de la nappe sur les rendements en riz I KP

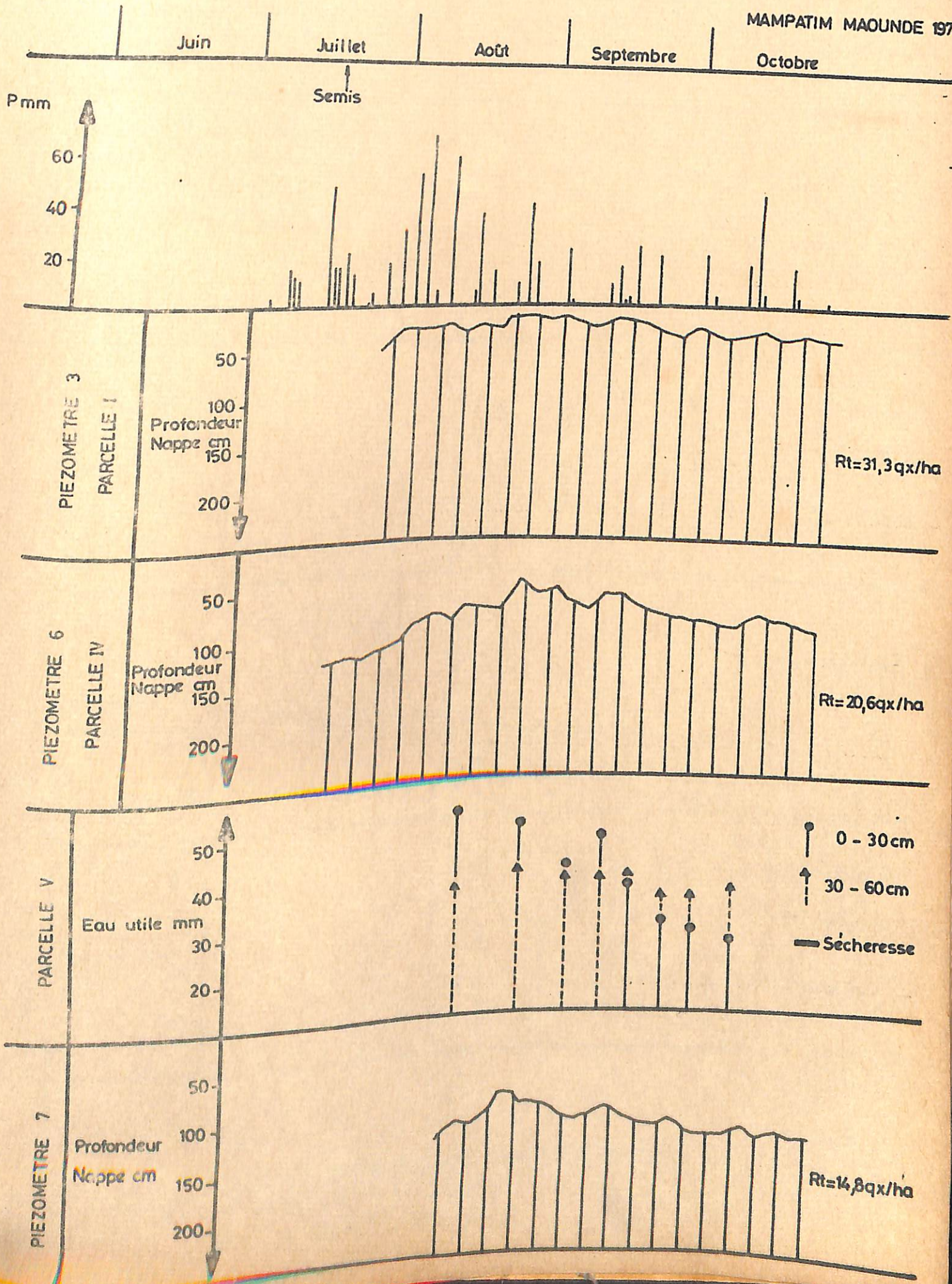
SARE MANSALY 1972





# Influence de la nappe sur les rendements en riz I K P

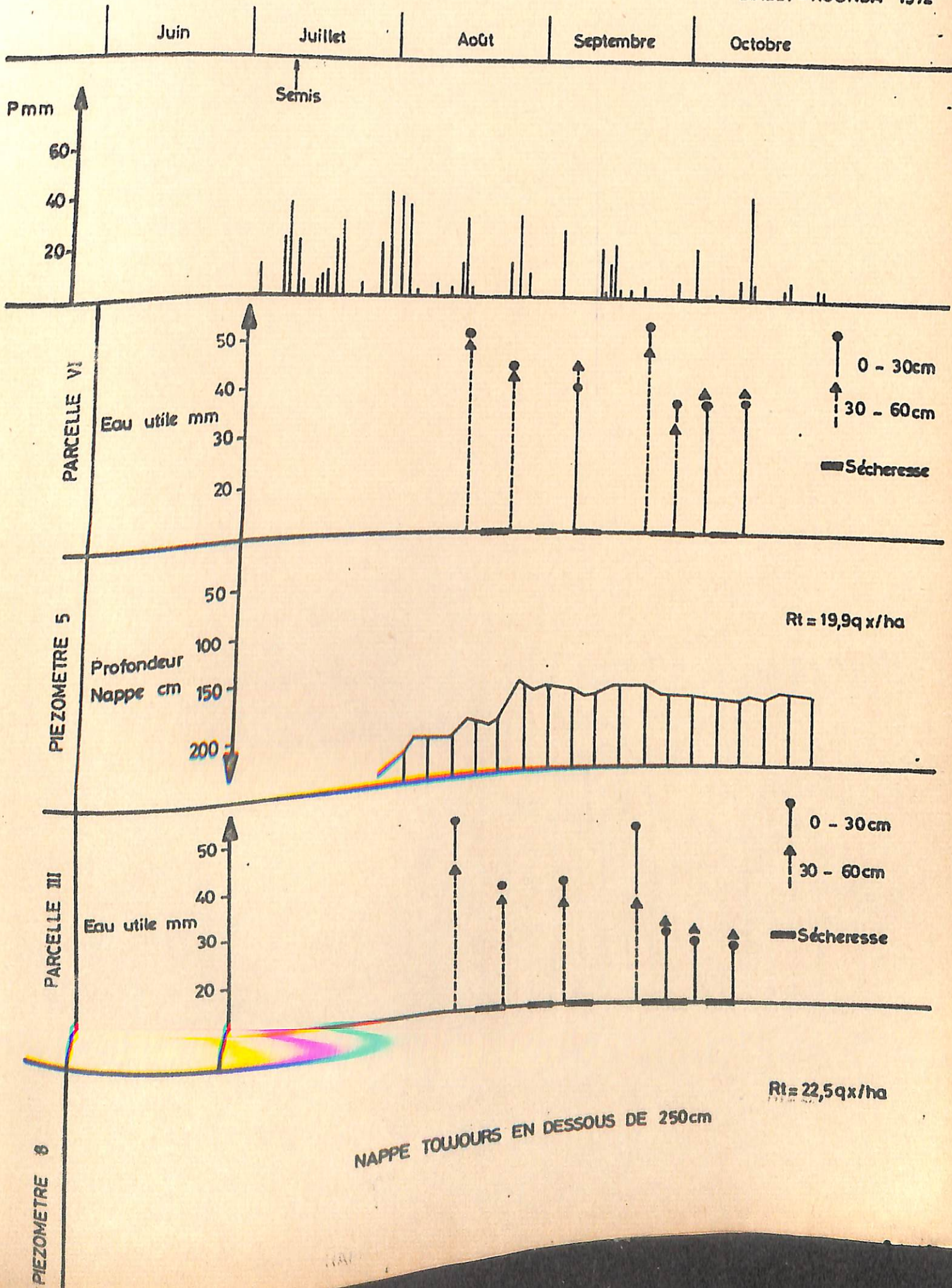
MAMPATIM MAOUNDE 197





# Influence de la nappe sur les rendements en riz I KP

DIALLY - KOUNDA 1972

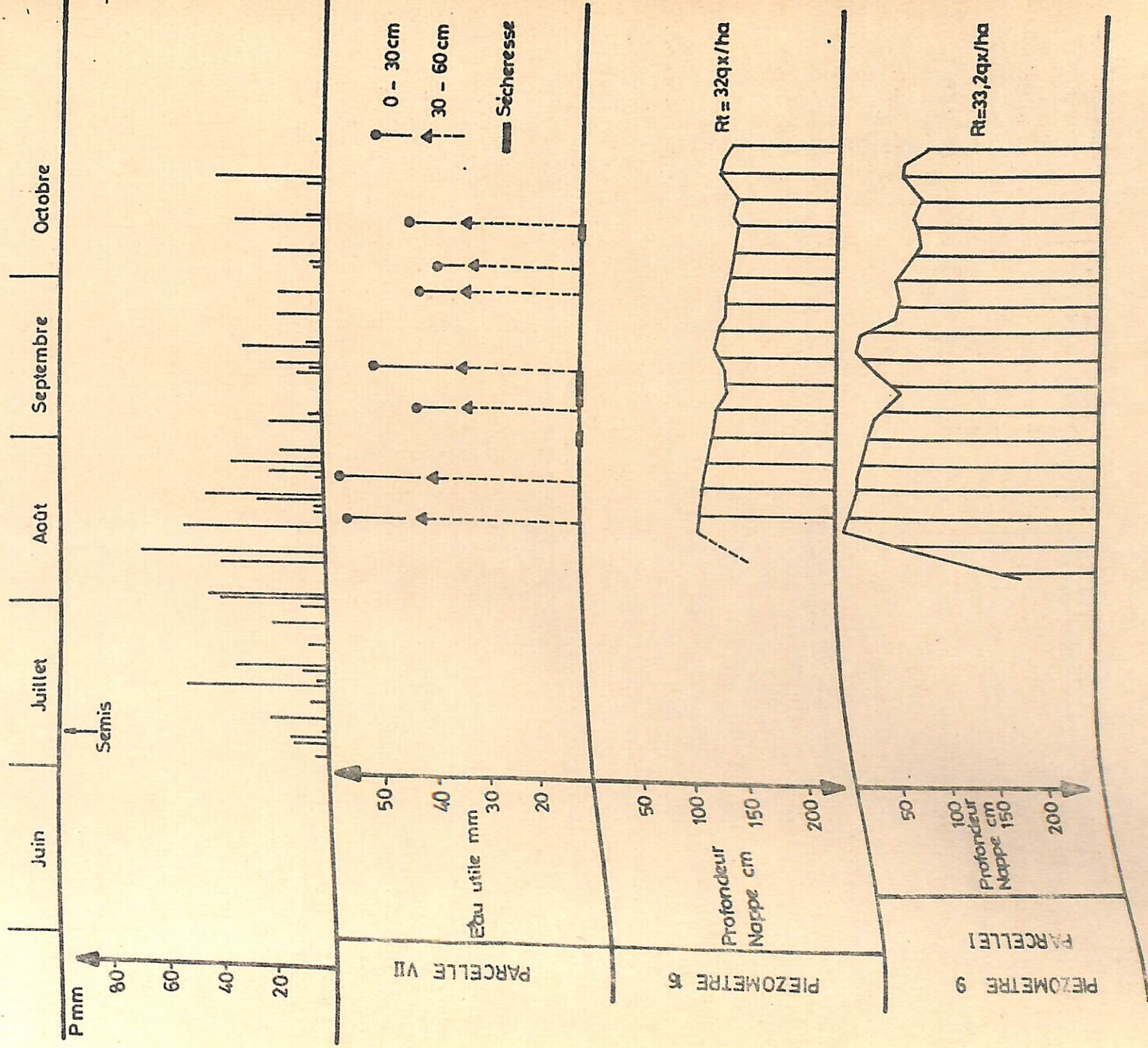




# Influence de la nappe sur les rendements en riz I K P

FIG. 113

TAKOUDIALLA 1972

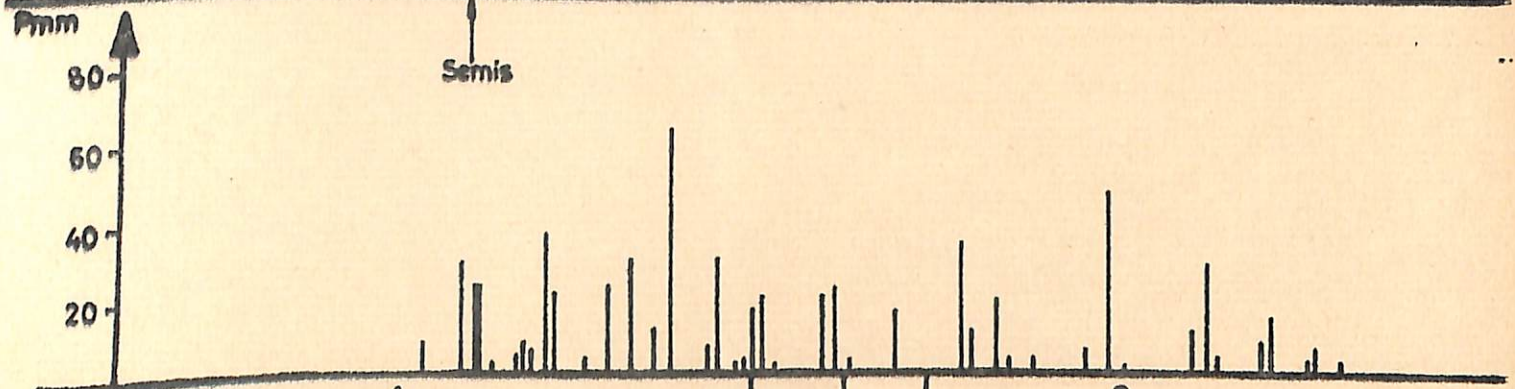




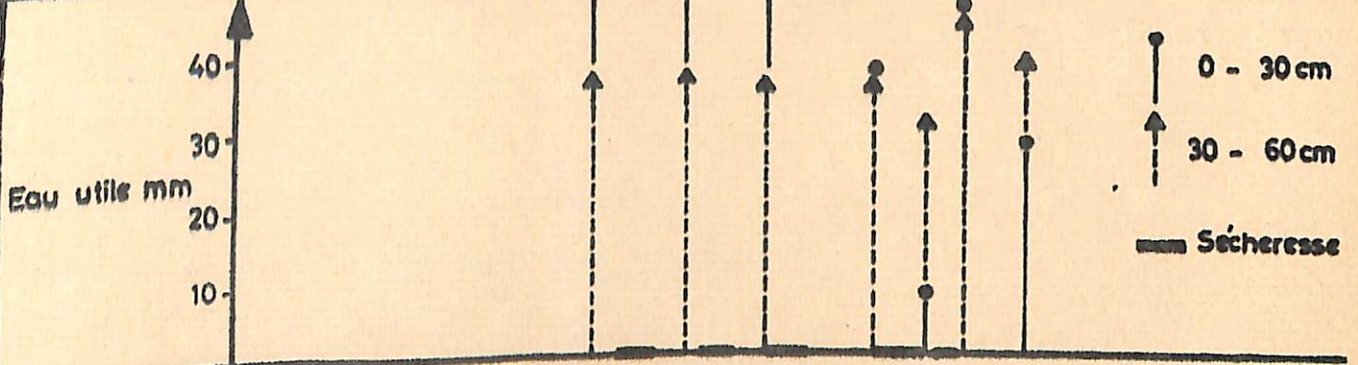
# Influence de la nappe sur les rendements en riz I KP

KABENDOU-KOUNKANE 1972

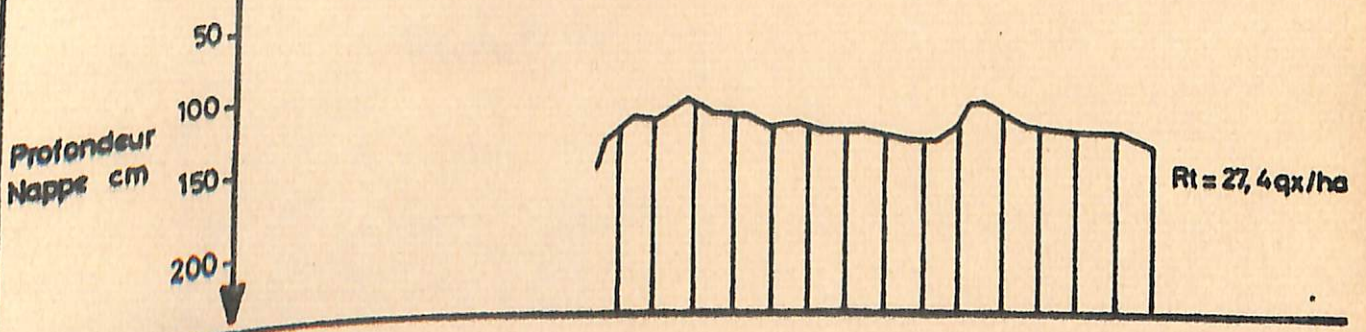
Jun      Juillet      Août      Septembre      Octobre



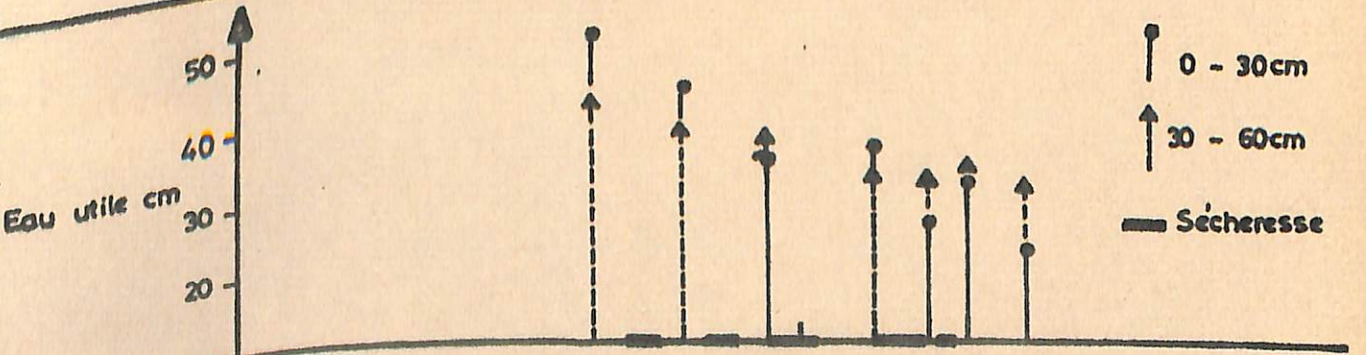
PARCELLE III



PIEZOMETRE 6



PARCELLE VII

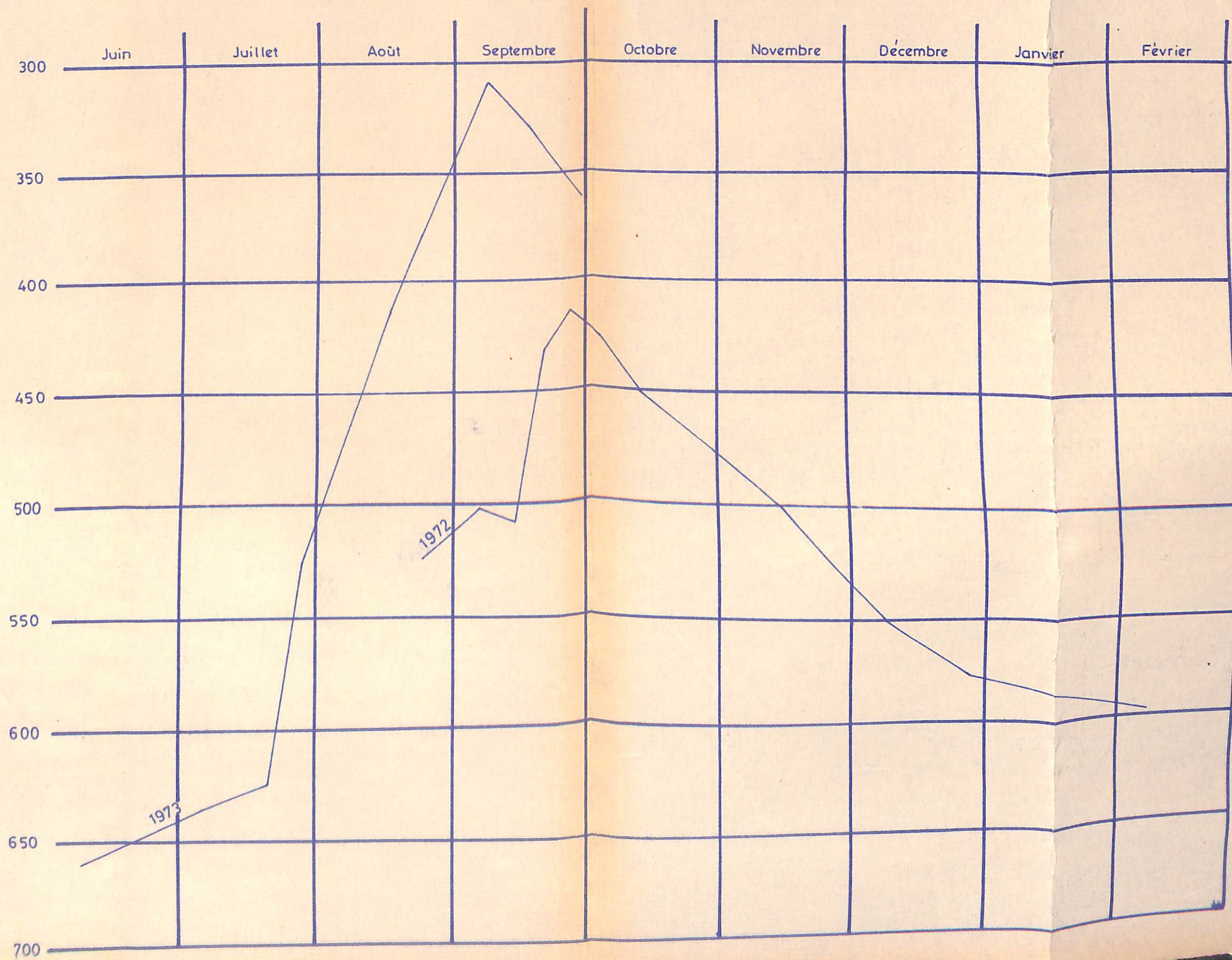


PIEZOMETRE 10





# PUITS DE SARE BAKARY





# ESQUISSE MORPHOPEDOLOGIQUE, REGION DE BALINGOR DIOUROU

FIG. 116

## LEGENDE

ECH. 1/50.000



Mangrove  
Sol de mangrove



Ancien sol de mangrove  
argileux et salé (sol sulfaté acide)



Sol de Tann

Alluvions  
Bas fond



Sol hydromorphe à gley  
argileux, à limoneux non salé



Levéé  
Sol peu évolué hydromorphe (sableux)



Alluvions et colluvions  
Bas de pente  
Tête de Thalweg  
Sol peu évolué hydromorphe d'apport



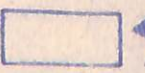
Alluvions et colluvions  
Bas de pente  
Tête de Thalweg  
Sol sulfaté acide, non salé, fossiles



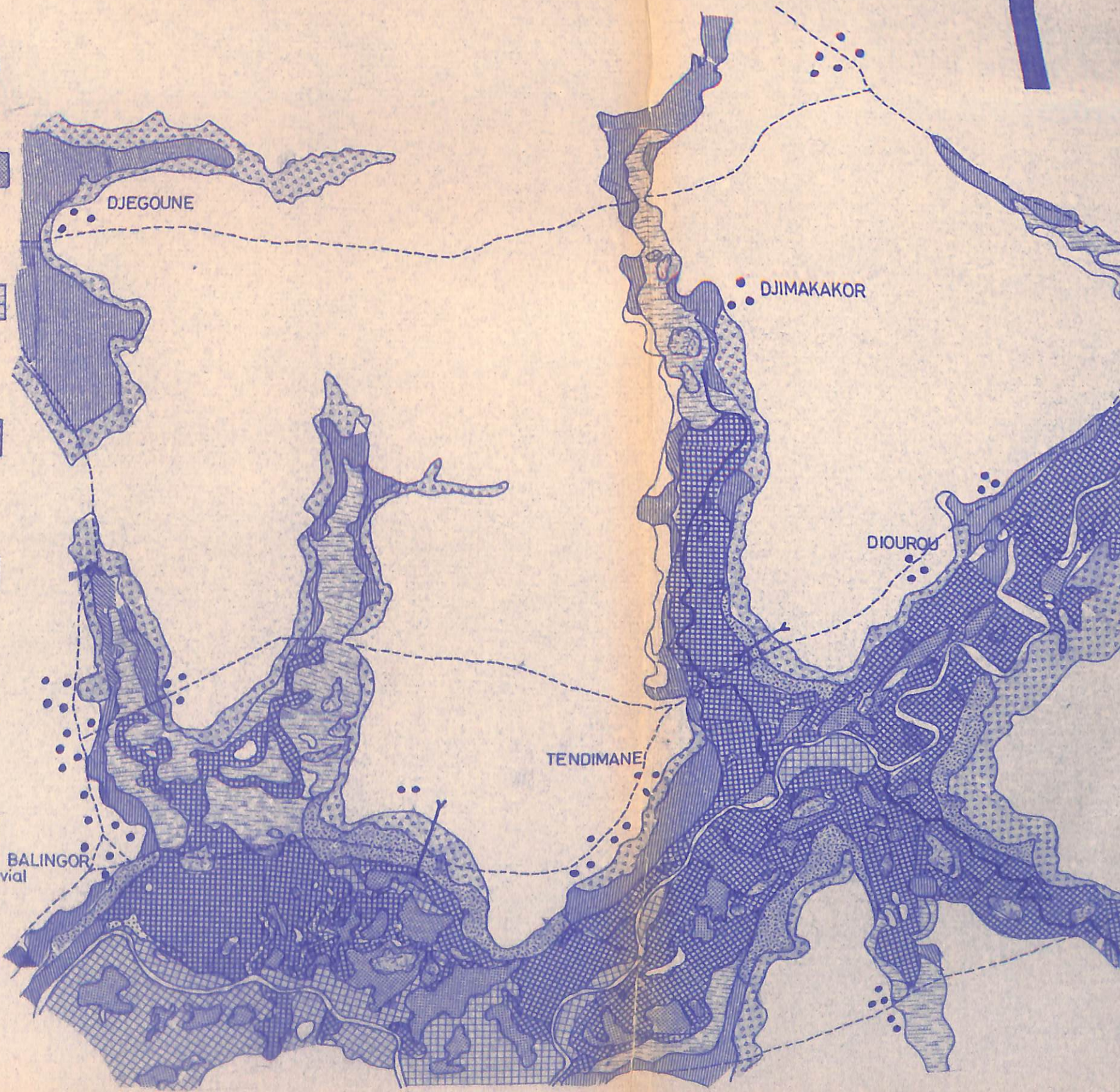
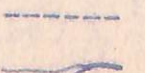
Glacis  
Sol peu évolué hydromorphe d'apport colluvial



Plateau  
Sols rouges et beiges de plateau



Pistes  
Marigot et lit mineur



de piézomètres




# ESQUISSE MORPHOPEDOLOGIQUE, REGION DE SARE YOBA-SARE BAKARY

FIG. 117

ECH. 1/50.000



## LEGENDE

- 
 Plateau  
Sol rouge et Sol beige
- 
 Cuirasse  
Cuirasse subaffleurante
- 
 Versant  
Sol ocre de pente
- 
 Glacis  
Sol peu évolué hydromorphe
- 
 Alluvions QII  
Glacis terrasse  
Sol gris
- 
 Haute levée QI  
Sol peu évolué d'apport alluvial
- 
 Basse levée Q0  
Basse terrasse  
Sol gris
- 
 Alluvions Q0  
Lit majeur  
Sol hydromorphe à gley
- 
 Lit mineur
- 
 Routes
- 
 Cases
- 
 Chaîne de piézomètre




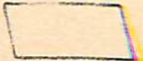








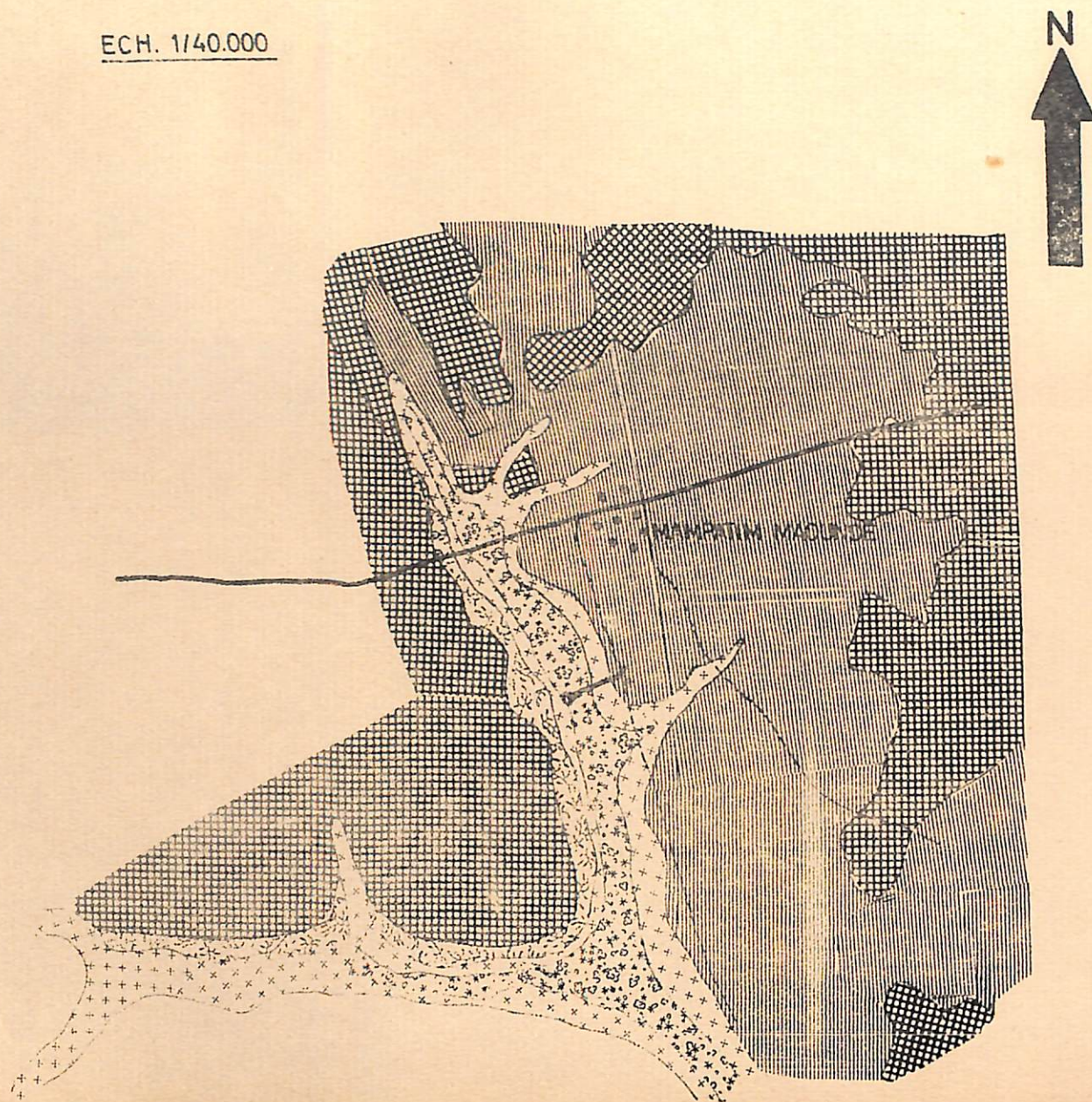
# ESQUISSE MORPHOLOGIQUE, REGION DE MAMPATIM MAOUNDE

FIG. 118

ECH. 1/40.000

## LEGENDE

-   
Cuirasse  
Cuirasse subaffleurante
-   
Versant  
Sol ocre de pente
-   
Glacis  
Sol peu évolué hydromorphe
-   
Alluvions QII  
Colluvions  
Sol gris
-   
Alluvions Q0  
Sol humique à gley
-   
Pistes
-   
Cases
-   
Chaîne de piézomètres





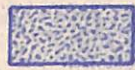
# ESQUISSE MORPHOPÉDOLOGIQUE, RÉGION DE DIALLI-KOUNDA, DIAOBE

ECH. 1/40.000



## LEGENDE

Plateau  
Sol rouge et Sol beige



Cuirasse  
Cuirasse subaffleurante



Versant  
Sol ocre de versant



Alluvions  
Colluvions Q II  
Sol gris



Levée Q I  
Sol peu évolué hydromorphe d'apport



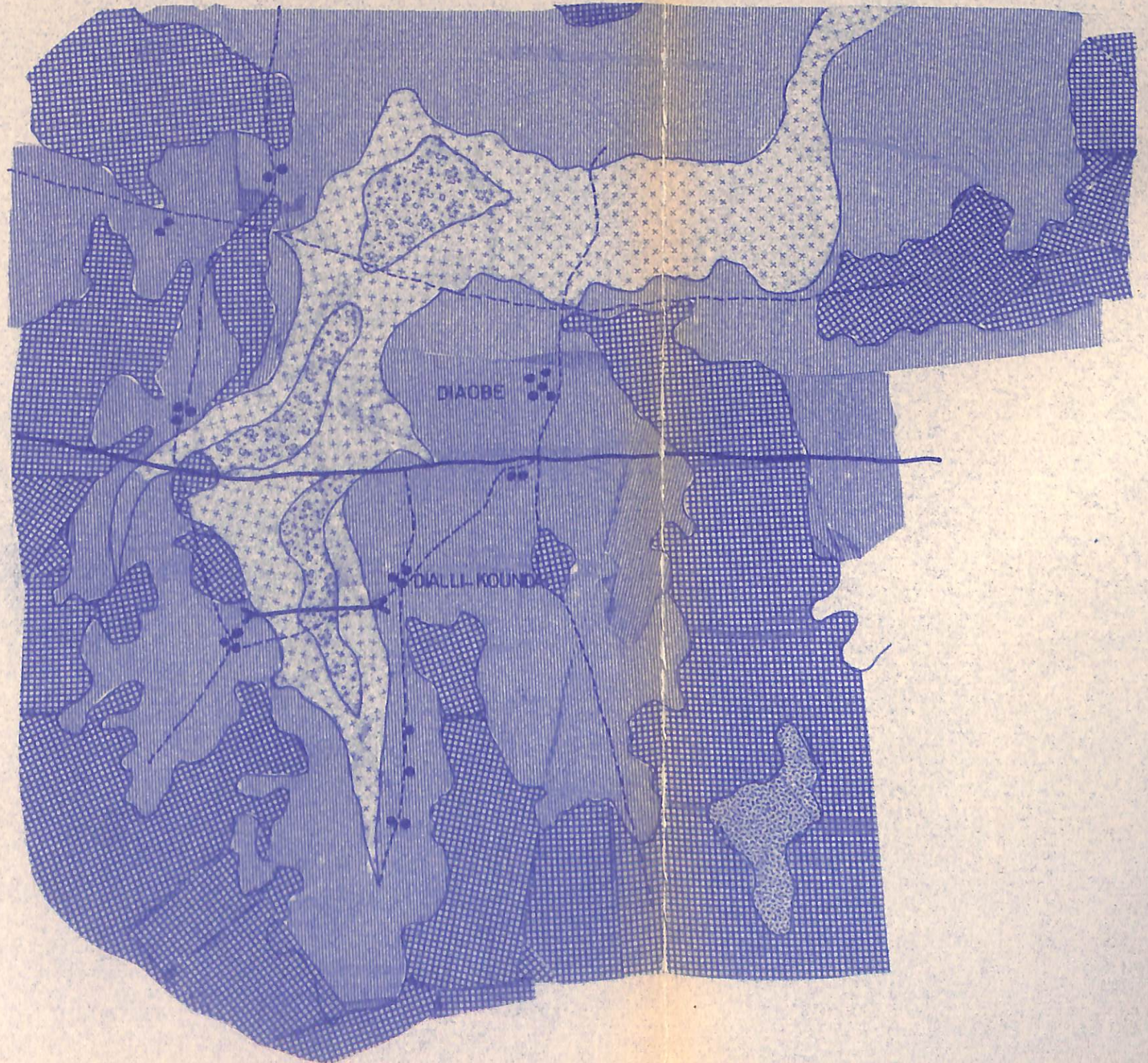
Pistes



Cases



Chaîne de piézomètres










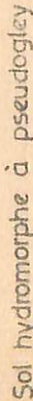

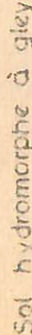
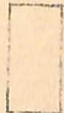
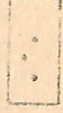

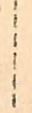




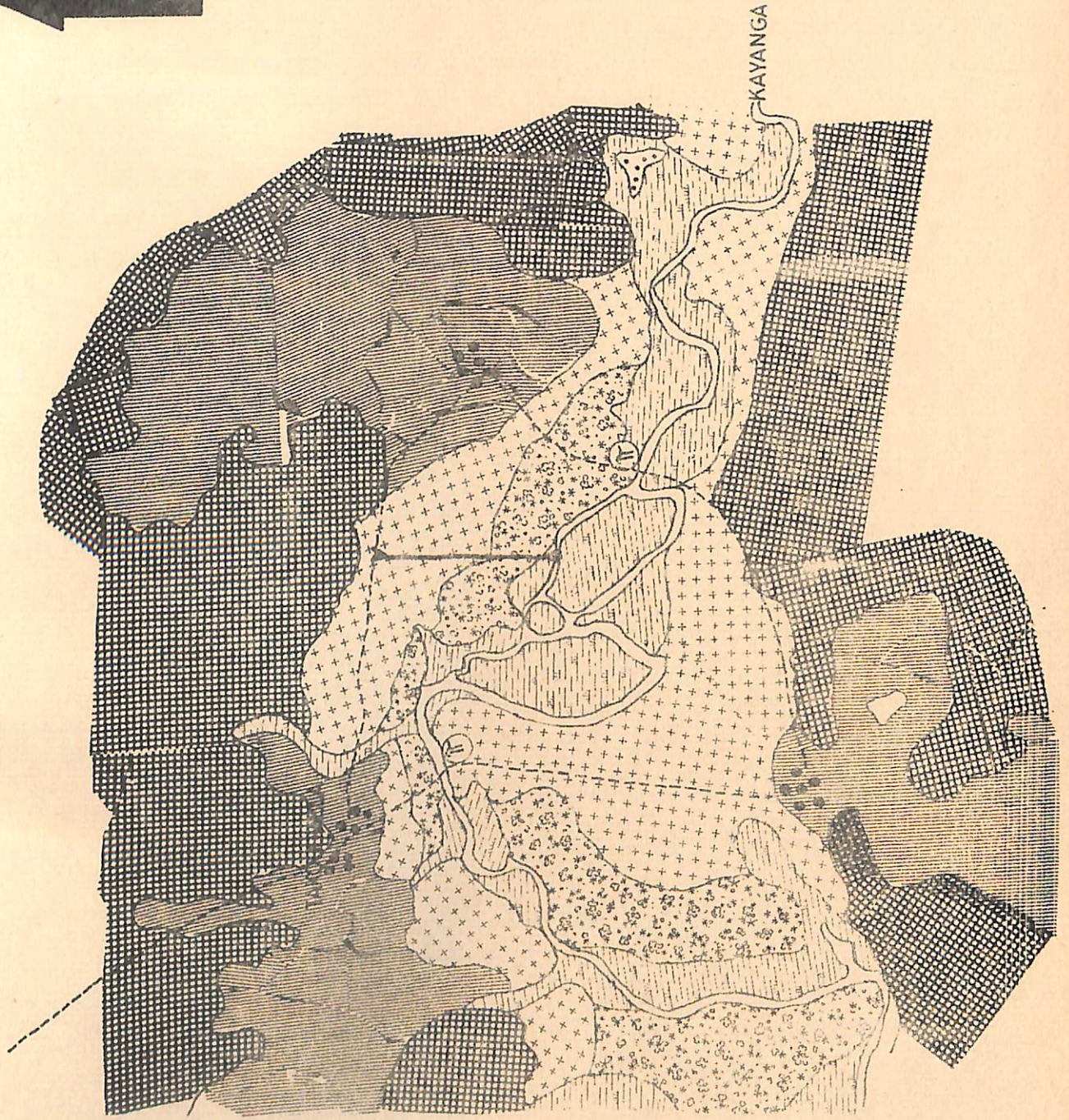
# ESQUISSE MORPHOLOGIQUE REGION DE TAKOUDIALLA (KAYANGA)

FIG. 120

ECH: 1/40.000



- LEGENDE**
-  Couvrasse subaffleurante
  -  Versant
  -  Sol ocre de versant
  -  Glacis
  -  Sol peu évolué hydromorphe d'apport
  -  Berge
  -  Bourrelet
  -  Sol hydromorphe à pseudogley
  -  Alluvions anciennes
  -  Sol hydromorphe à gley
  -  Lit mineur de la Kayanga
  -  Cuvette de décantation
  -  Pirogue
  -  Pistes
  -  Cases
  -  Chaîne de montagnes





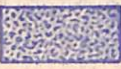








# ESQUISSE MORPHOPÉDOLOGIQUE, RÉGION DE KABENDOU-KOUNKANE

FIG 121

ECH. 1/40.000



## LEGENDE

-  Plateau  
Sol rouge, Sol Beige
-  Cuirasse  
Cuirasse subaffleurante
-  Versant  
Sol ocre de pente
-  Alluvions  
Colluvions Q I-II  
Sol gris
-  Berge Q I  
Sol peu évolué d'apport alluvial
-  Alluvions Q 0  
Sol hydromorphe à gley
-  Pistes
-  Cases
-  Chaîne de piézomètres

