



REGIONE SICILIANA

Assessorato del Territorio e dell'Ambiente

IL PRESENTE DOCUMENTO COSTITUISCE ALLEGATO

AL D. A. N° 1729/92 DEL 6 NOV. 1992

L'ASSESSORE

ILICUM

SALINA

LIPARI

VULCANO

COMUNE DI S. AGATA MILITELLO (ME)

Il presente elaborato è stato adottato con delibera C.C. n° 50 del 14.3.90.-

IL SEGRETARIO GENERALE

IL SINDACO



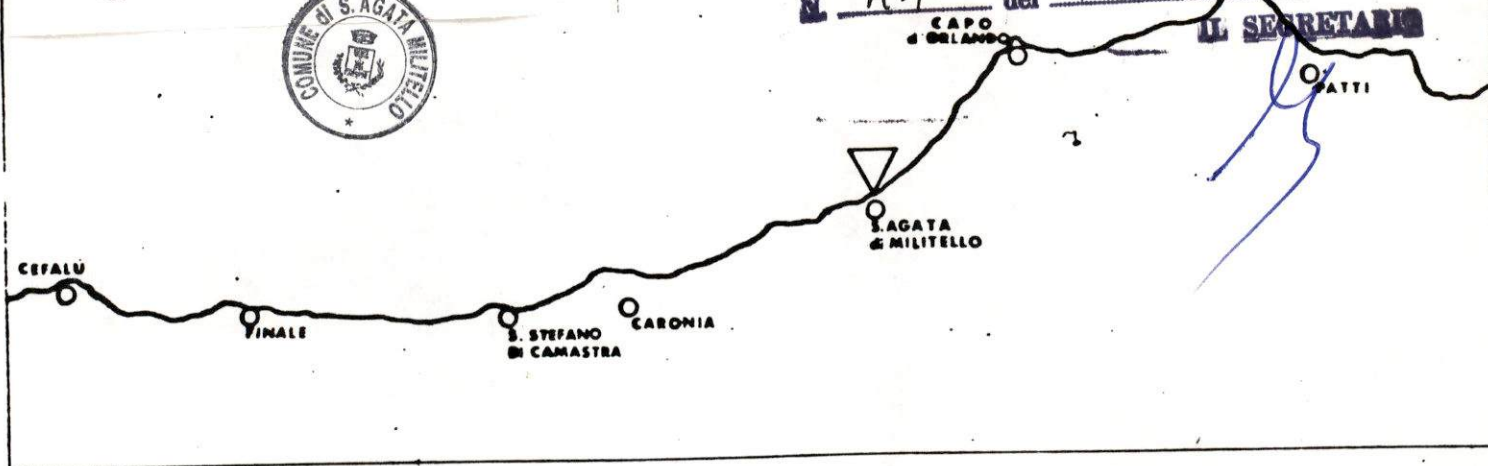
REGIONE SICILIANA

ASSESSORATO DEL TERRITORIO E DELL'AMBIENTE
CONSIGLIO REGIONALE DELL'URBANISTICA

VISTO: CON RIFERIMENTO AL PROPRIO VOTO

N. 417 del 17-4-92

IL SEGRETARIO



ASSESSORATO REGIONALE TERRITORIO E AMBIENTE

COMUNE DI S. AGATA DI MILITELLO

PROVINCIA DI MESSINA

PIANO REGOLATORE GENERALE DEL

PORTO DI 2ª CATEGORIA IVª CLASSE

Allegato:

7

Scala:

IL SINDACO

Disegnato II:

IL PROGETTISTA
Dott. Ing. Francesco Buffa
Francesco Buffa

n. 2150

RELAZIONE

IDRAULICO-MARITTIMA
TABELLE - FIGURE

Fig. 1 - Curva del vento da N per Tr = 3 anni a Ustica

"	2	-	"	"	"	"	"	"	"	"	5	"	"	"
"	3	-	"	"	"	"	"	"	"	"	10	"	"	"
"	4	-	"	"	"	"	"	"	"	"	20	"	"	"
"	5	-	"	"	"	"	"	"	"	"	30	"	"	"
"	6	-	"	"	"	"	"	"	"	"	40	"	"	"
"	7	-	"	"	"	"	"	"	"	"	50	"	"	"
"	8	-	"	"	"	"	"	"	"	"	50	"	"	"
"	9	-	"	"	"	"	"	"	"	"	75	"	"	"
"	10	-	"	"	"	"	"	"	"	"	100	"	"	"
"	11	-	"	"	"	"	NE	"	"	"	3	"	"	"
"	12	-	"	"	"	"	"	"	"	"	5	"	"	"
"	13	-	"	"	"	"	"	"	"	"	10	"	"	"
"	14	-	"	"	"	"	"	"	"	"	15	"	"	"
"	15	-	"	"	"	"	"	"	"	"	20	"	"	"
"	16	-	"	"	"	"	"	"	"	"	30	"	"	"
"	17	-	"	"	"	"	"	"	"	"	40	"	"	"
"	18	-	"	"	"	"	"	"	"	"	50	"	"	"
"	19	-	"	"	"	"	"	"	"	"	75	"	"	"
"	20	-	"	"	"	"	"	"	"	"	100	"	"	"
"	21	-	"	"	"	"	E	"	"	"	3	"	"	"

Fig. 22 - Curva del vento da E per Tr = 5 anni a Ustica

"	23	-	"	"	"	"	"	"	"	10	"	"	"
"	24	-	"	"	"	"	"	"	"	15	"	"	"
"	25	-	"	"	"	"	"	"	"	20	"	"	"
"	26	-	"	"	"	"	"	"	"	30	"	"	"
"	27	-	"	"	"	"	"	"	"	40	"	"	"
"	28	-	"	"	"	"	"	"	"	50	"	"	"
"	29	-	"	"	"	"	"	"	"	75	"	"	"
"	30	-	"	"	"	"	"	"	"	100	"	"	"
"	31	-	"	"	"	"	W	"	"	3	"	"	"
"	32	-	"	"	"	"	"	"	"	5	"	"	"
"	33	-	"	"	"	"	"	"	"	10	"	"	"
"	34	-	"	"	"	"	"	"	"	15	"	"	"
"	35	-	"	"	"	"	"	"	"	20	"	"	"
"	36	-	"	"	"	"	"	"	"	30	"	"	"
"	37	-	"	"	"	"	"	"	"	40	"	"	"
"	38	-	"	"	"	"	"	"	"	50	"	"	"
"	39	-	"	"	"	"	"	"	"	75	"	"	"
"	40	-	"	"	"	"	"	"	"	100	"	"	"
"	41	-	"	"	"	"	NW	"	"	3	"	"	"
"	42	-	"	"	"	"	"	"	"	5	"	"	"
"	43	-	"	"	"	"	"	"	"	10	"	"	"
"	44	-	"	"	"	"	"	"	"	15	"	"	"

Fig.	45	-	Curva del vento da NW per Tr = 20 anni a Ustica
"	46	-	" " " " " " " " 30 " " "
"	47	-	" " " " " " " " 40 " " "
"	48	-	" " " " " " " " 50 " " "
"	49	-	" " " " " " " " 75 " " "
"	50	-	" " " " " " " " 100 " " "
"	50b	-	Paraggio
"	51	-	Diagramma distanze di mare libero
"	52	-	Diagramma dei Fetches effettivi
"	53	-	Diagramma di rifrazione
"	54	-	Diagramma di rotazione
"	55	-	Ortogonalì d'onda da NE per T = 8 sec.
"	56	-	" " " " " " " " 10 "
"	57	-	" " " " " " " " 12 "
"	58	-	" " " W " " " " 8 "
"	59	-	" " " " " " " " 10 "
"	60	-	" " " " " " " " 12 "
"	61	-	" " " NW " " " " 8 "
"	62	-	" " " " " " " " 10 "
"	63	-	" " " " " " " " 12 "
"	64	-	" " " N " " " " 8 "
"	65	-	" " " " " " " " 10 "
"	66	-	" " " " " " " " 12 "
"	67	-	Frangimento da NE per Tr = 10 anni

Fig.	68	-	Frangimento da NE	per Tr = 30	anni
"	69	-	" " "	" " 50	"
"	70	-	" W	" " 10	"
"	71	-	" "	" " 30	"
"	72	-	" "	" " 50	"
"	73	-	" NW	" " 10	"
"	74	-	" "	" " 30	"
"	75	-	" "	" " 50	"
"	76	-	" N	" " 10	"
"	77	-	" "	" " 30	"
"	78	-	" "	" " 50	"
"	79	-	Diffrazione da NNE	T = 6	sec.
"	80	-	" " "	" " 8	"
"	81	-	" " "	" " 10	"
"	82	-	" NE	" " 6	"
"	83	-	" "	" " 8	"
"	84	-	" "	" " 10	"
"	85	-	" NW	" " 6	"
"	86	-	" "	" " 8	"
"	87	-	" "	" " 10	"
"	88	-	" NNW	" " 6	"
"	89	-	" "	" " 8	"
"	90	-	" "	" " 10	"

Fig. 91 - Diffrazione da .N T = 6 sec.

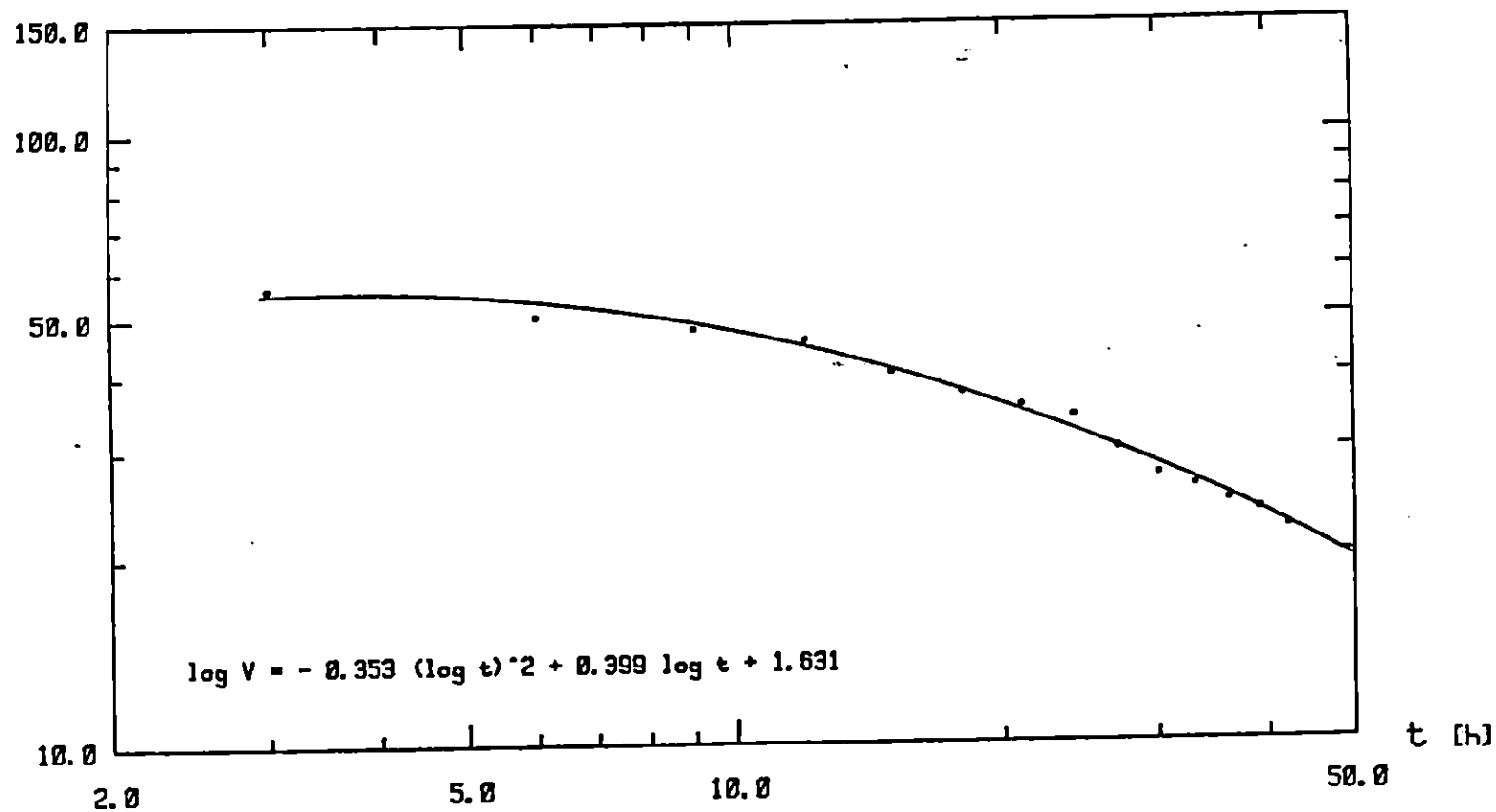
" 92 - " " " " " 8 "

" 93 - " " " " " 10 "

EXTRAPOLATION OF WIND DATA

STATION OF USTICA (3/I)

V [Knots]



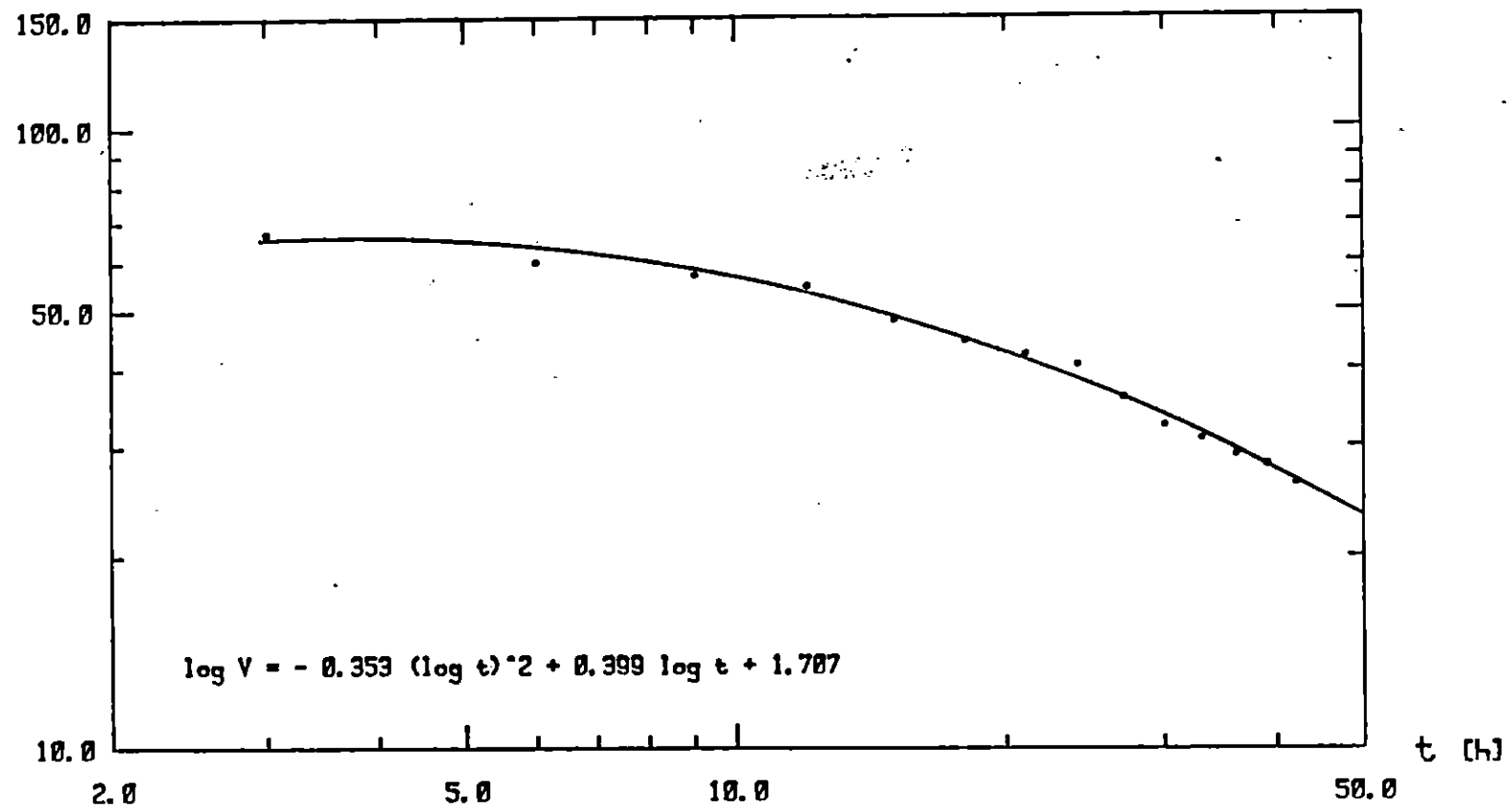
DIRECTION = N - RETURN PERIOD = 3 years

Fig. 1.159

EXTRAPOLATION OF WIND DATA

STATION OF USTICA (3/1)

V [Knots]



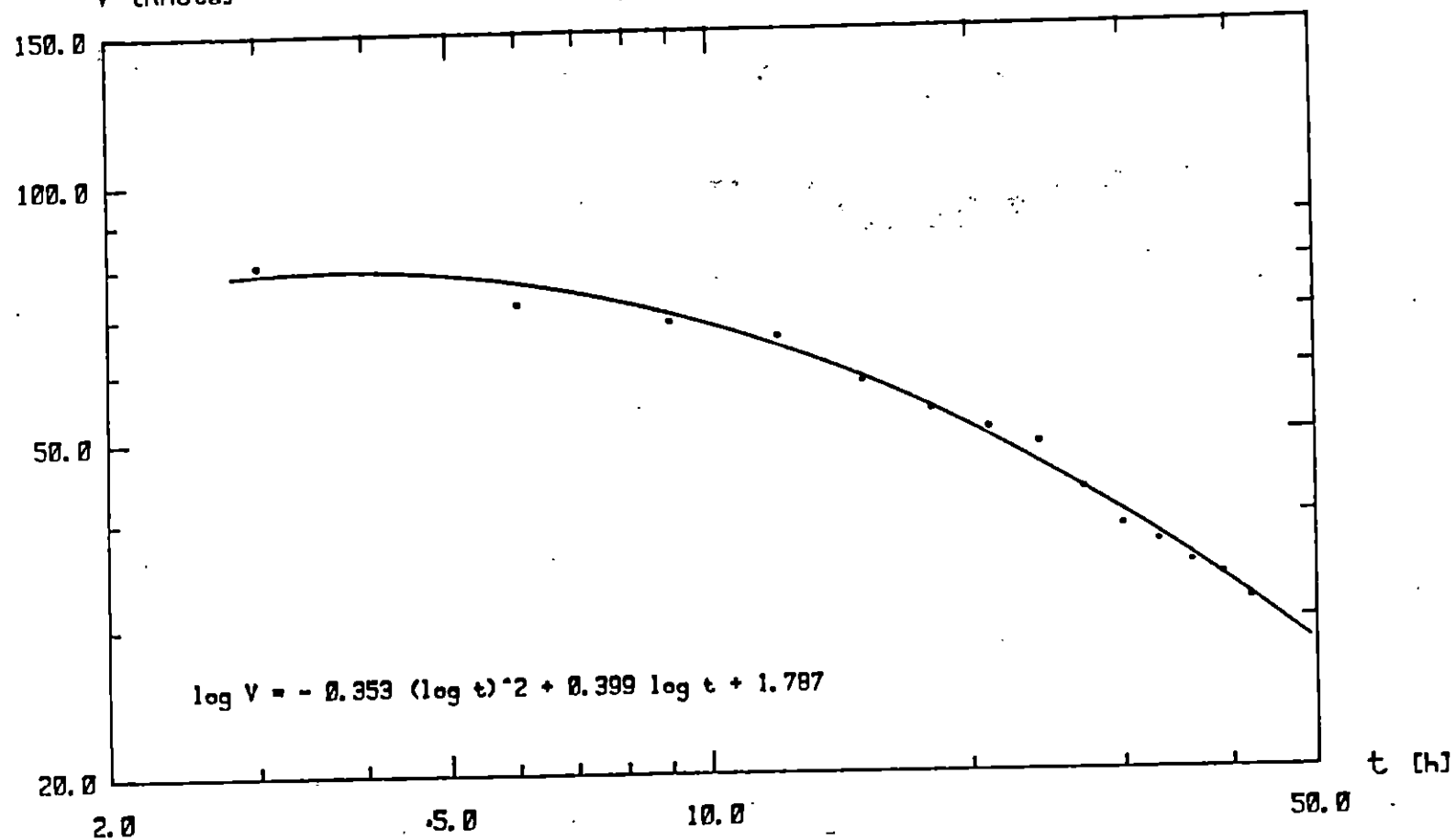
DIRECTION = N - RETURN PERIOD = 5 years

Fig. 2

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

V [Knots]



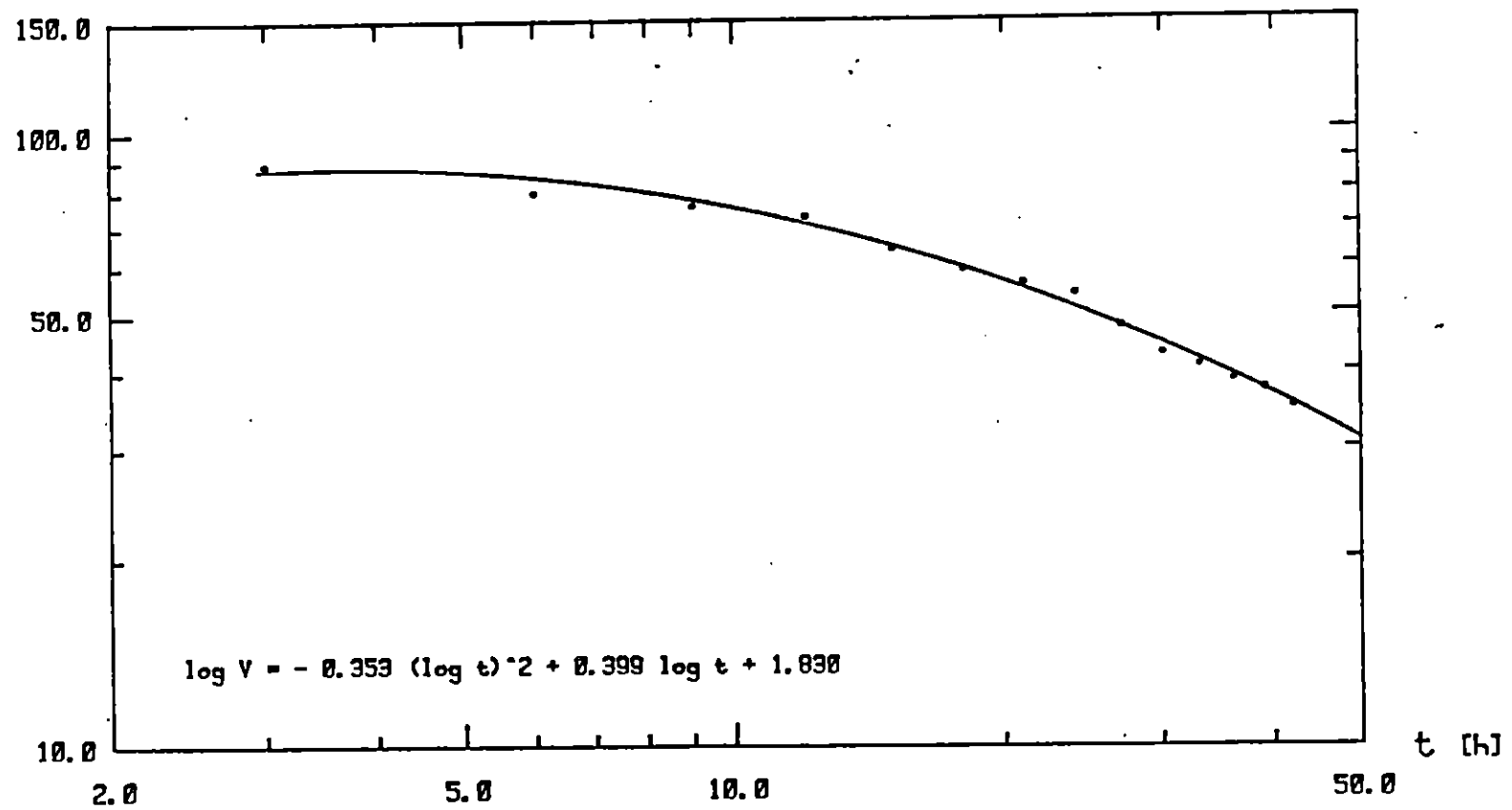
DIRECTION = N - RETURN PERIOD = 10 years

Fig. 3

EXTRAPOLATION OF WIND DATA

STATION OF USTICA (3/1)

V [Knots]



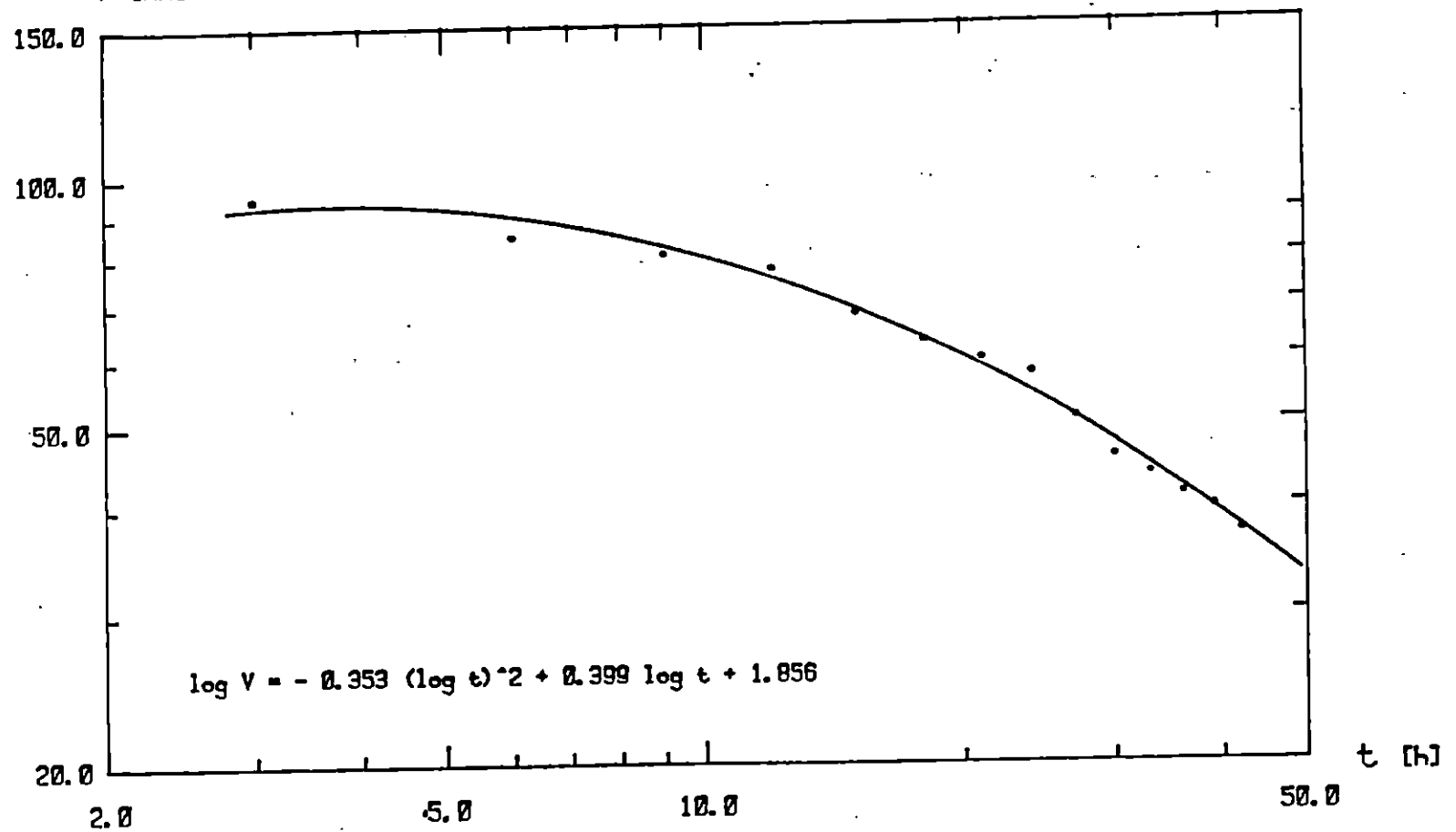
DIRECTION = N - RETURN PERIOD = 15 years

Fig. 4

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

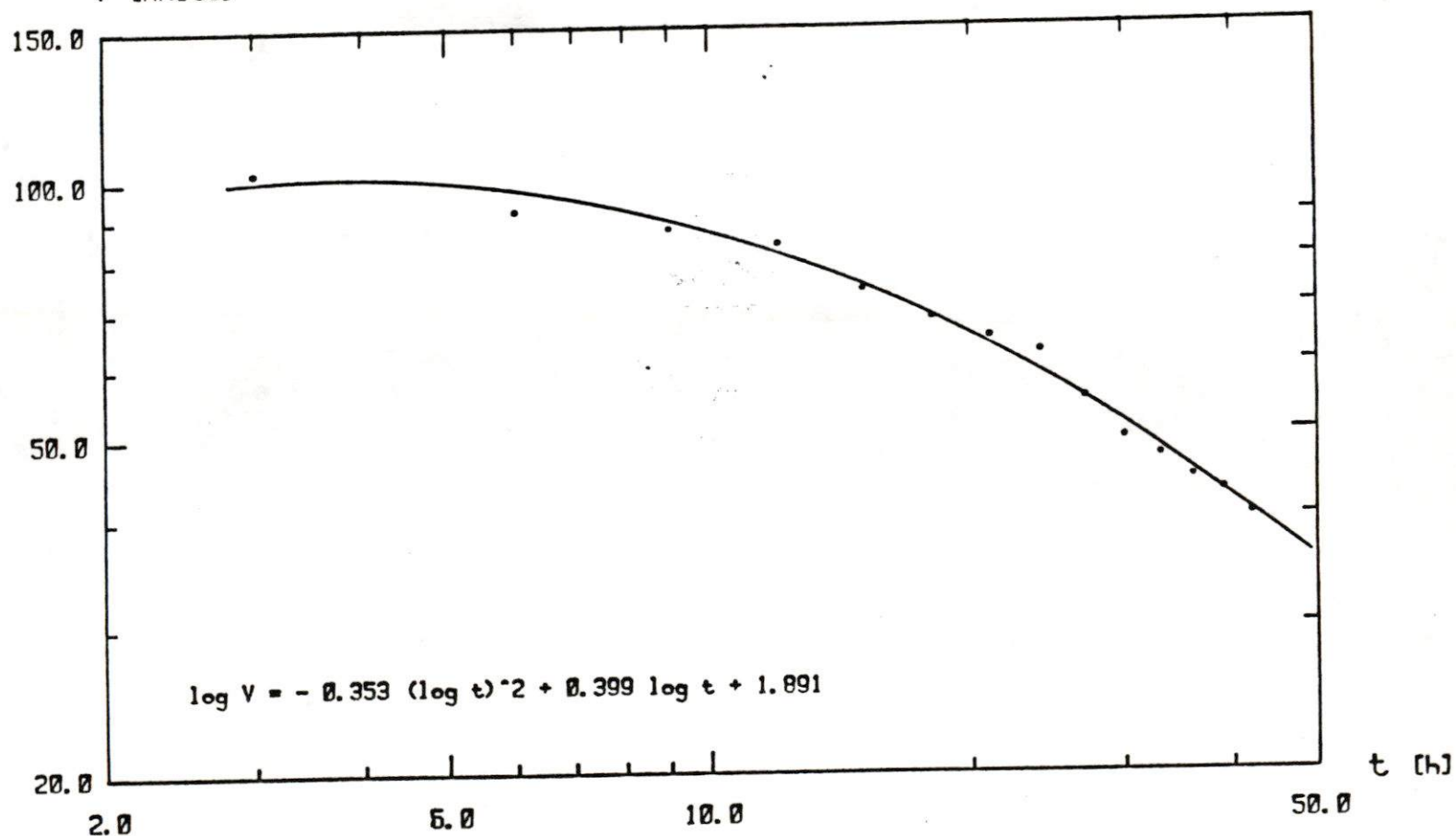
V [Knots]



DIRECTION = N - RETURN PERIOD = 20 years

Fig. 5

EXTRAPOLATION OF WIND DATA
STATION OF USTICA
V [Knots]



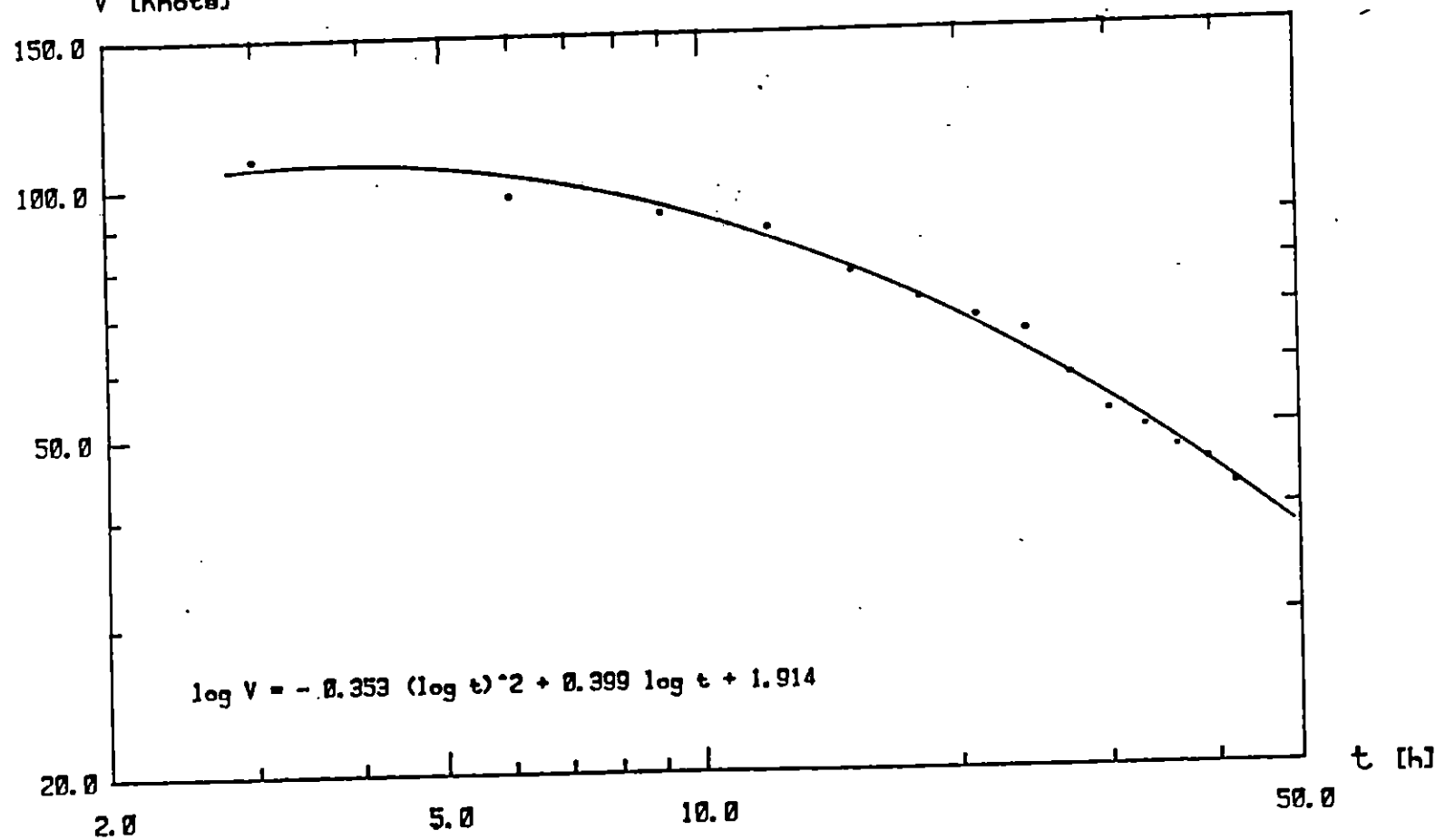
DIRECTION = N - RETURN PERIOD = 30 years

Fig. 6

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

V [Knots]



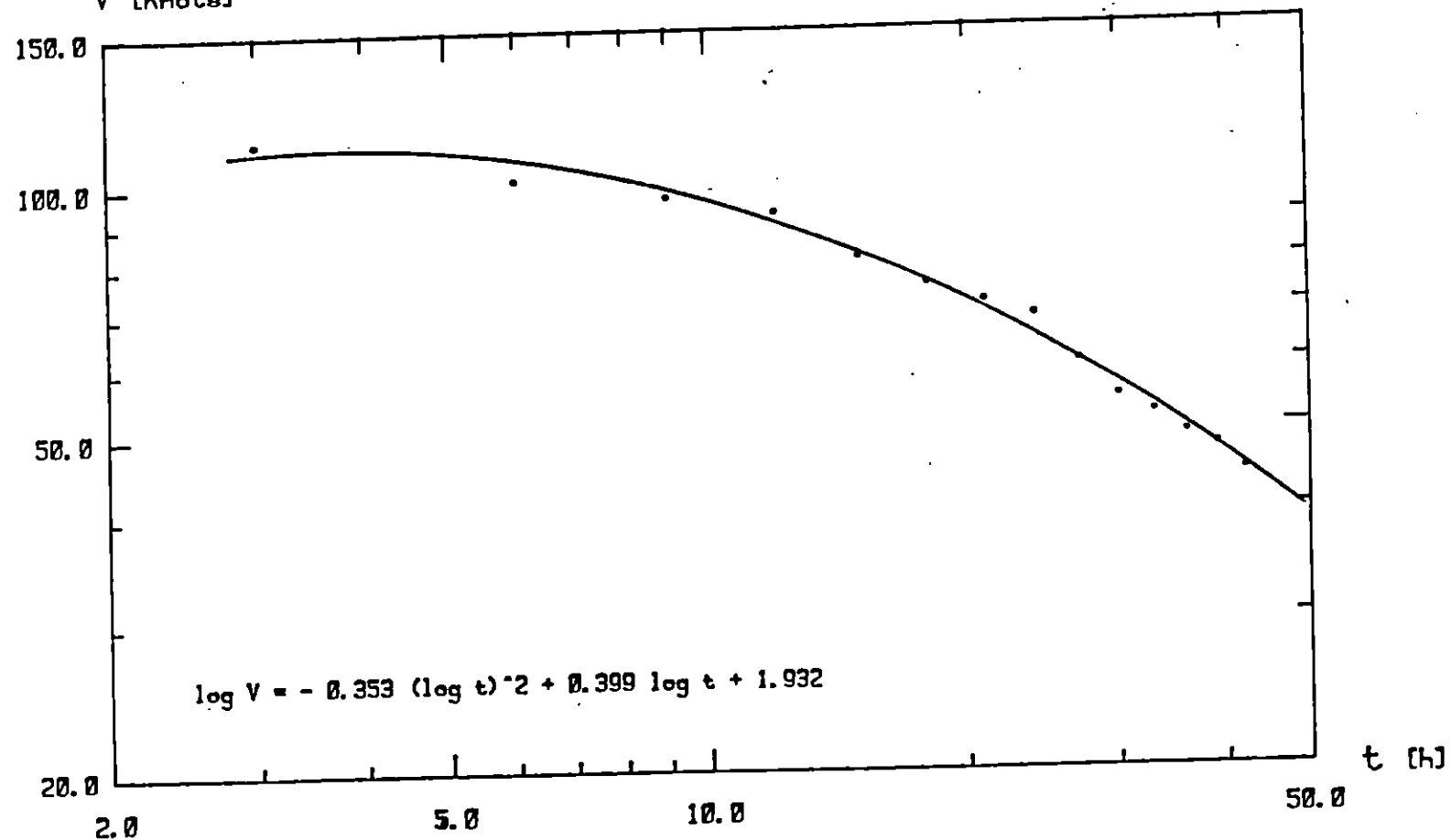
DIRECTION = N - RETURN PERIOD = 40 years

Fig. 7

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

V [Knots]



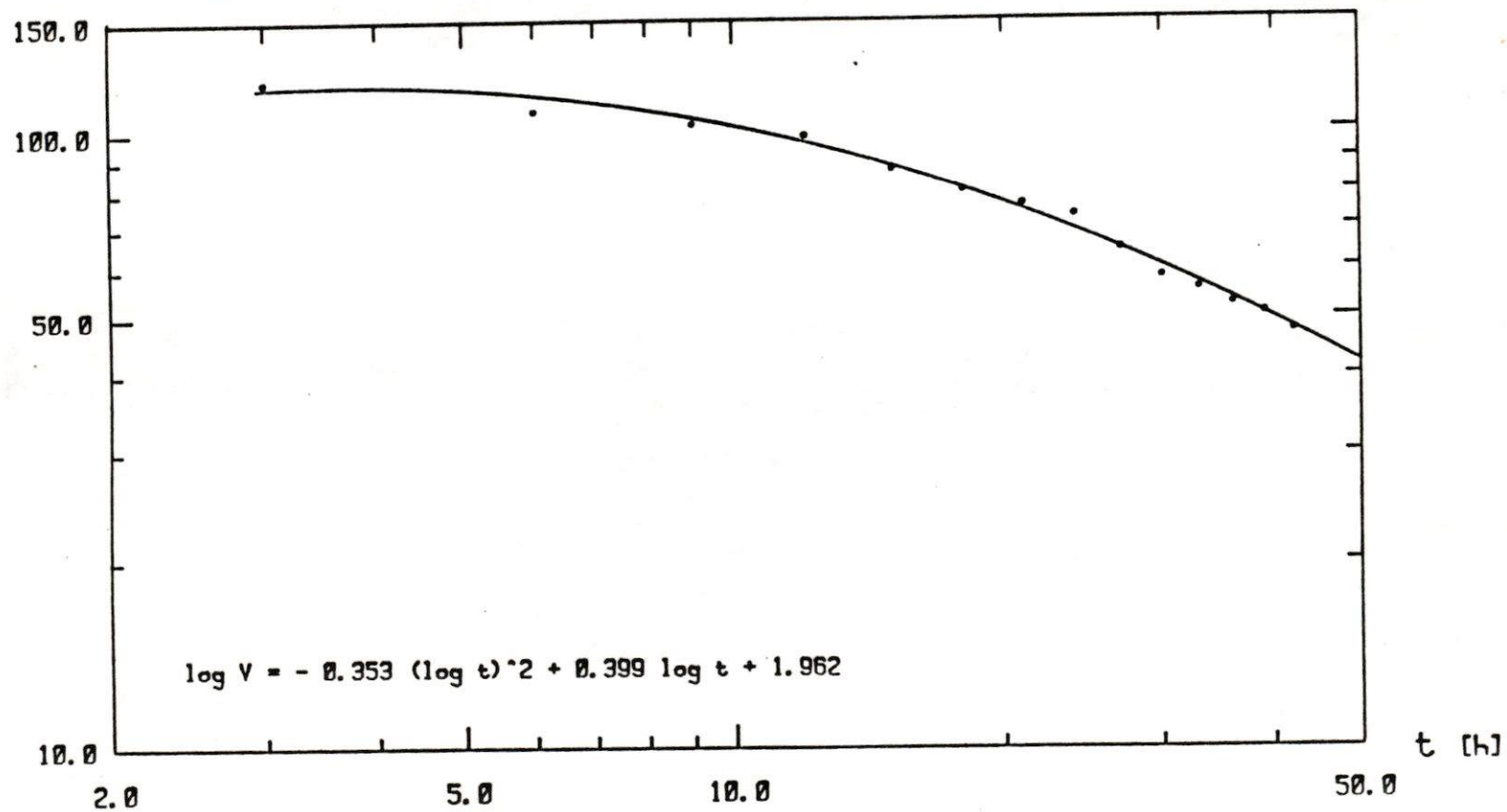
DIRECTION = N - RETURN PERIOD = 50 years

Fig. 8

EXTRAPOLATION OF WIND DATA

STATION OF USTICA (3/I)

V [Knots]



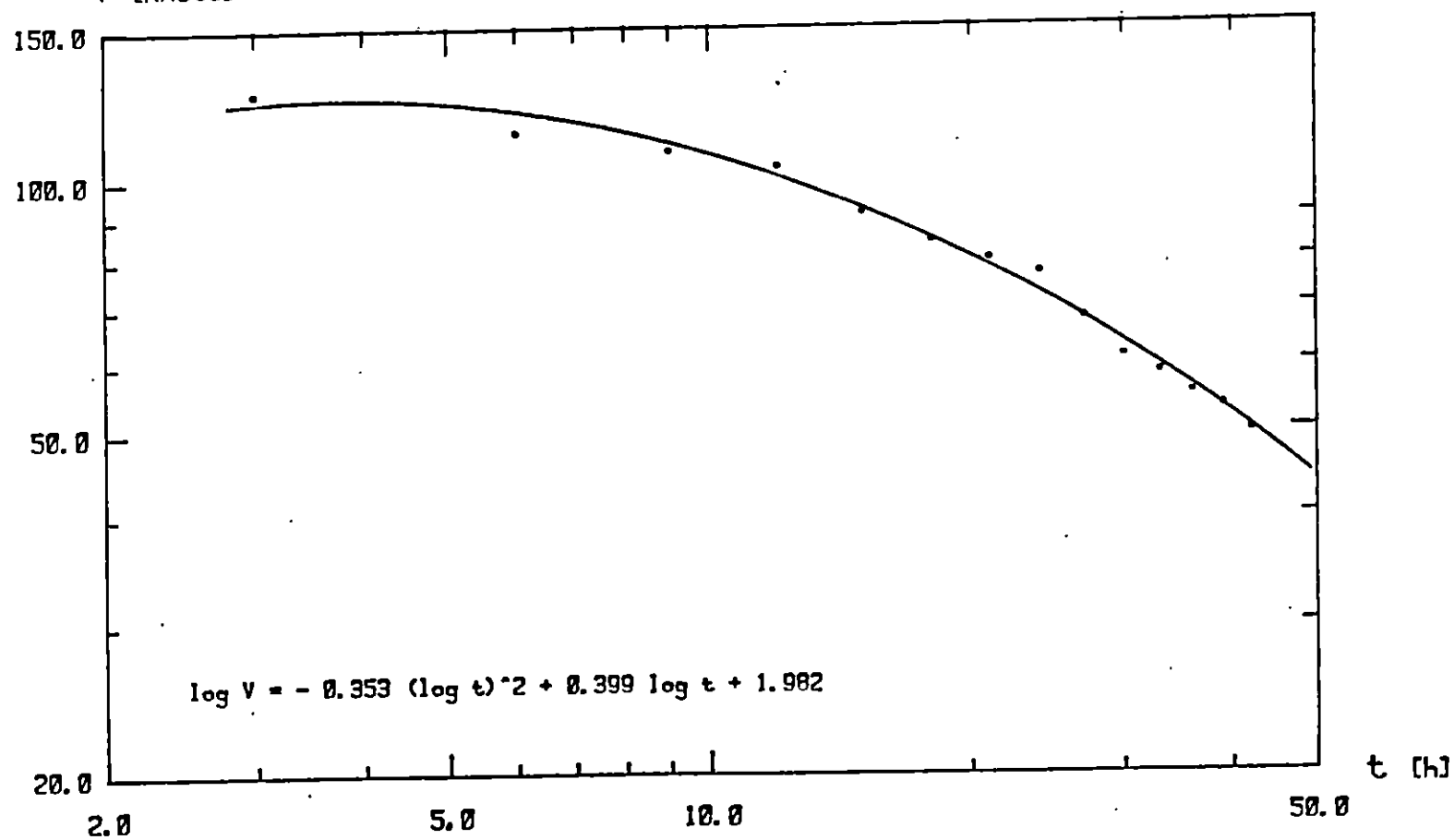
DIRECTION = N - RETURN PERIOD = 75 years

Fig. 9

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

V [Knots]



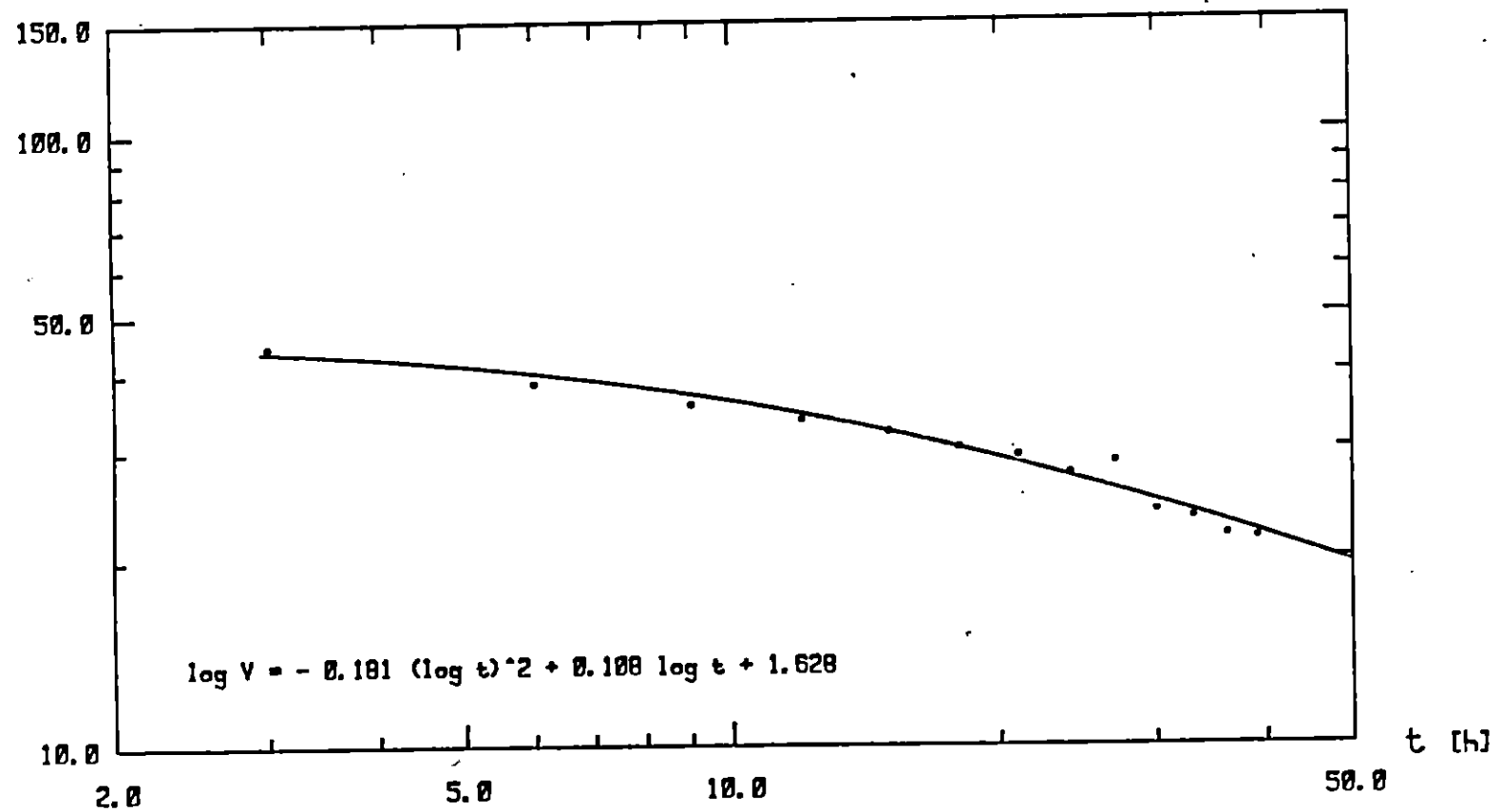
DIRECTION = N - RETURN PERIOD = 100 years

Fig. 10

EXTRAPOLATION OF WIND DATA

STATION OF USTICA (3/I)

V [Knots]



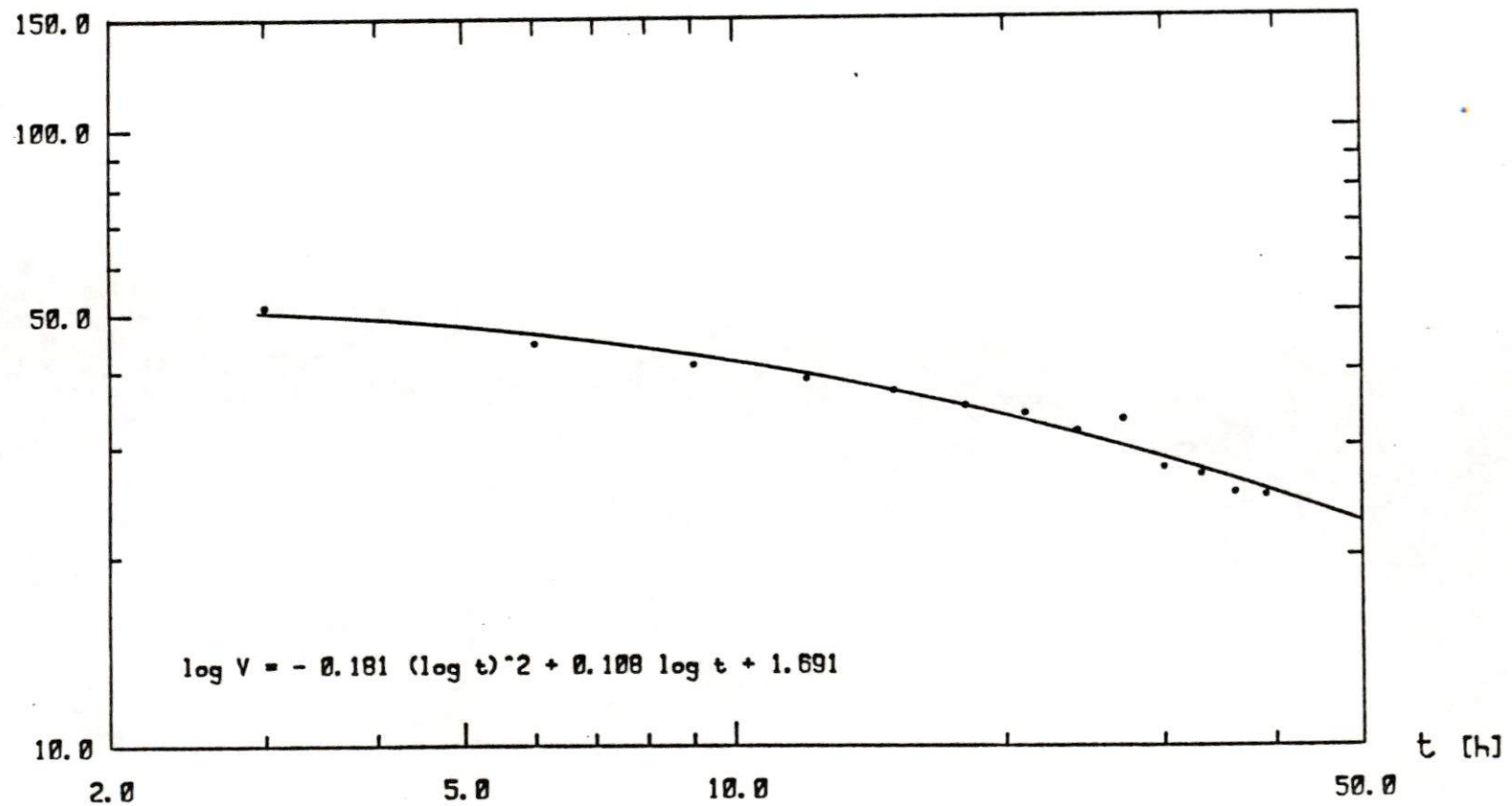
DIRECTION = NE - RETURN PERIOD = 3 years

Fig. 11

EXTRAPOLATION OF WIND DATA

STATION OF USTICA (3/I)

V [Knots]



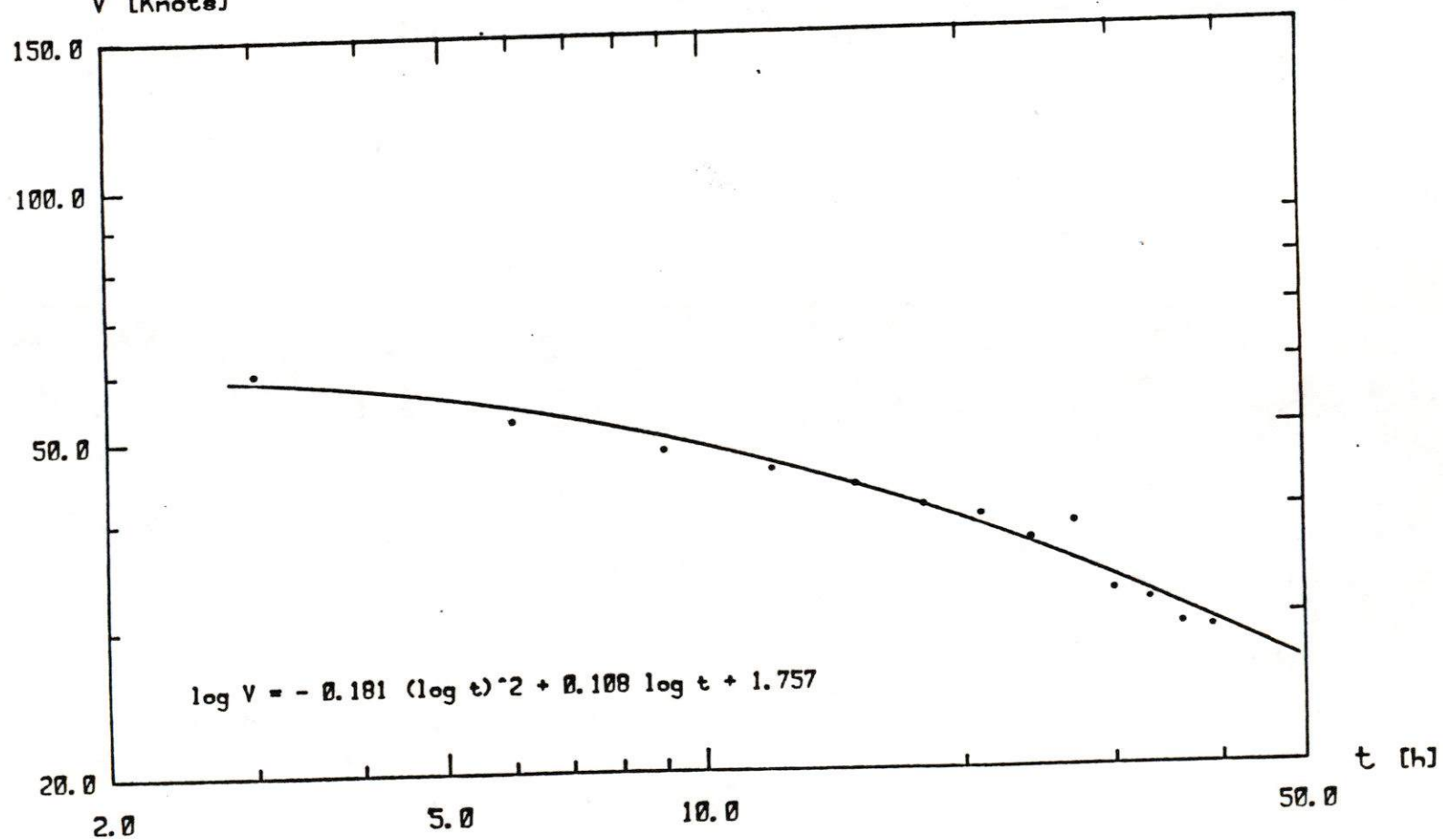
DIRECTION = NE - RETURN PERIOD = 5 years

Fig. 12

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

V [Knots]



DIRECTION = NE - RETURN PERIOD = 10 years

Fig. 13

EXTRAPOLATION OF WIND DATA
STATION OF USTICA (3/I)

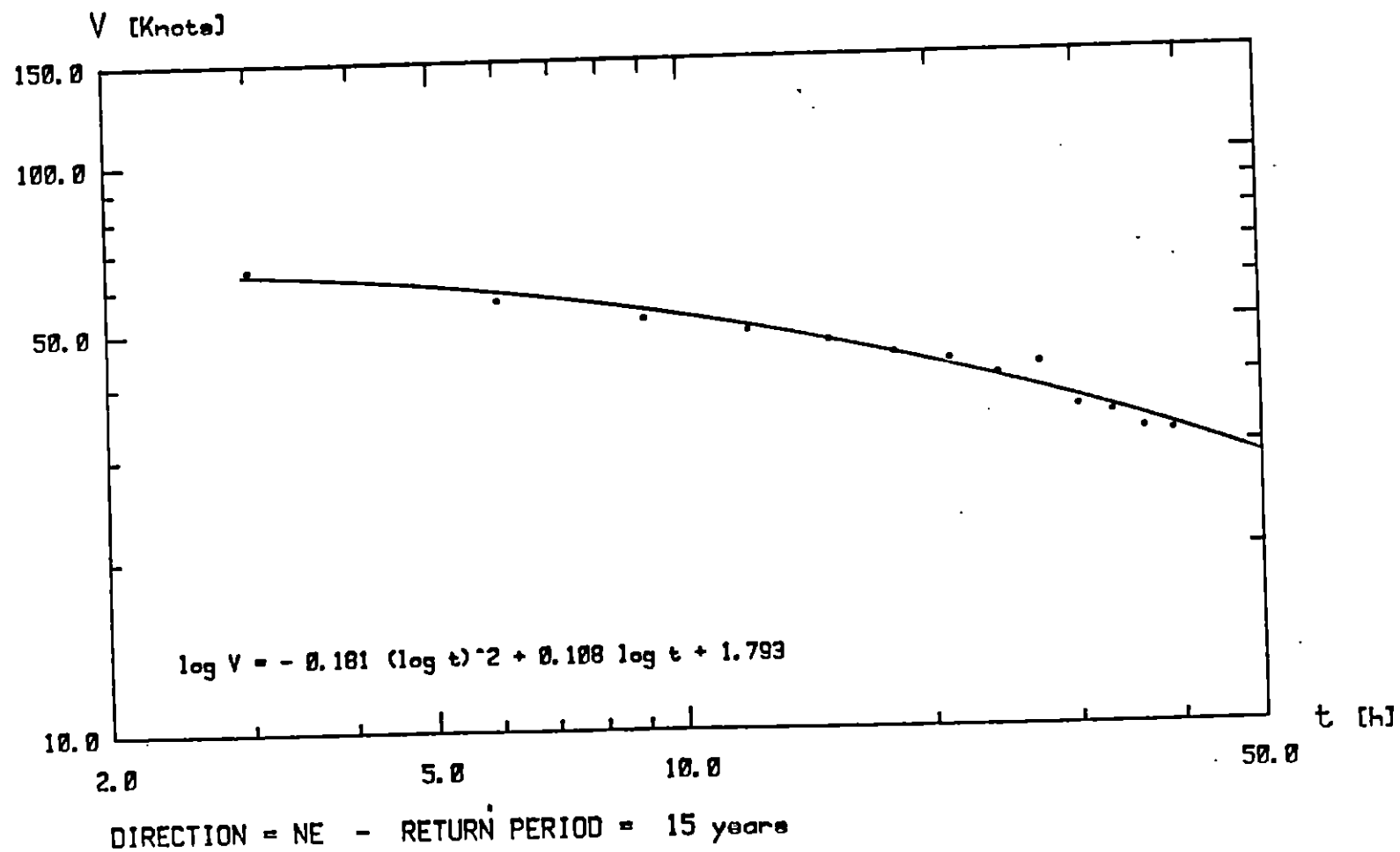
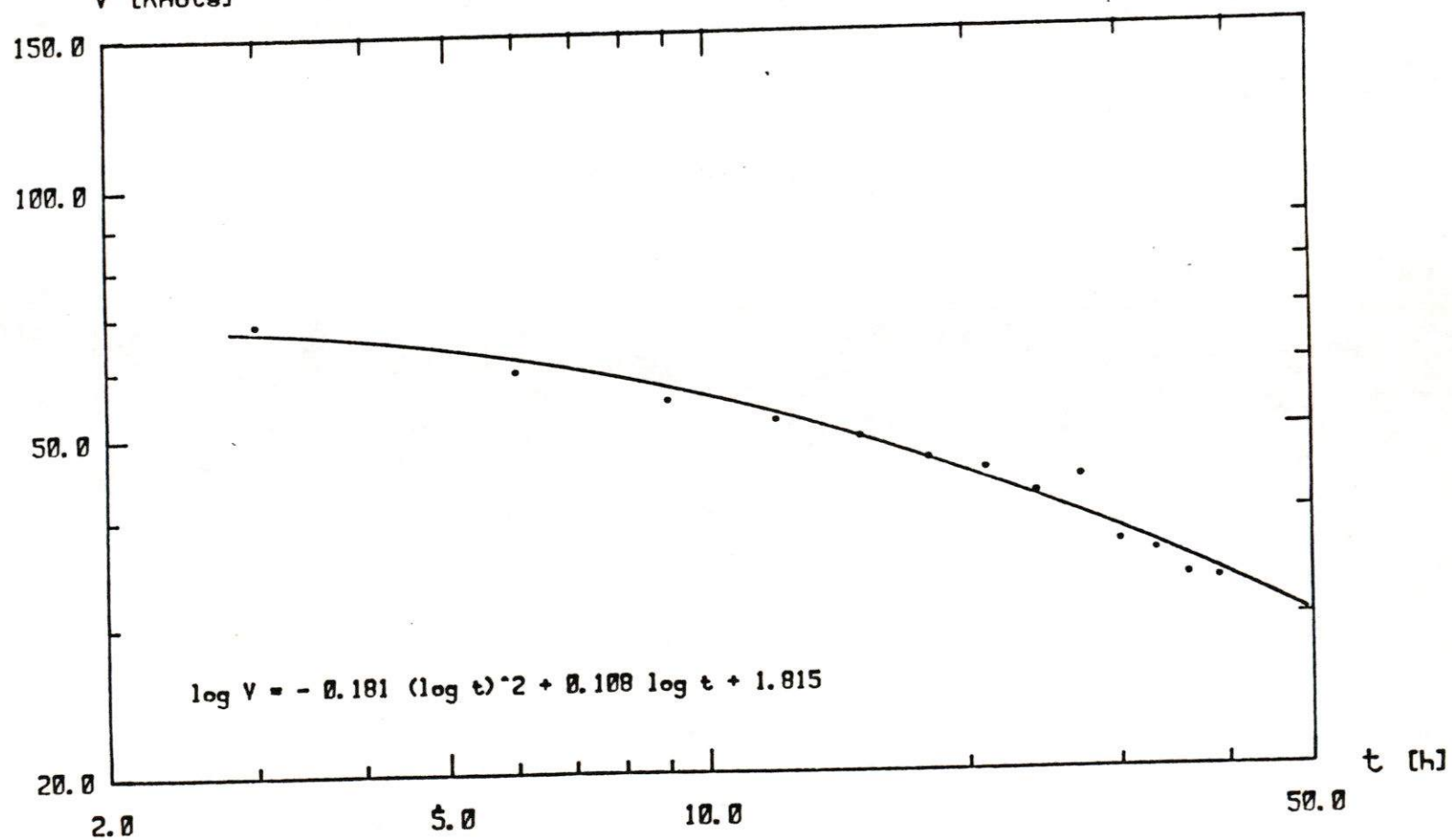


Fig. 14

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

V [Knots]



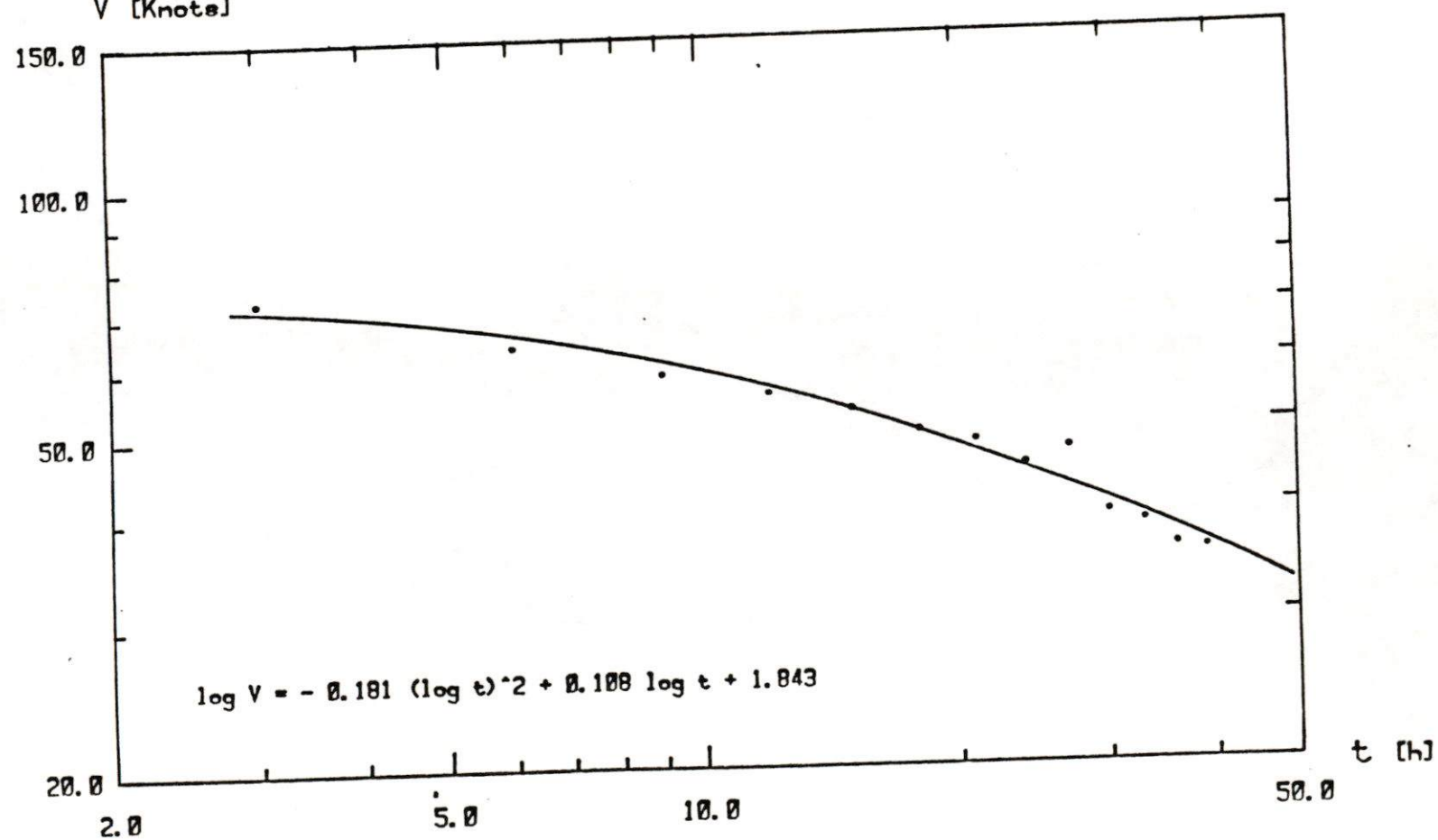
DIRECTION = NE - RETURN PERIOD = 20 years

Fig. 15

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

V [Knots]



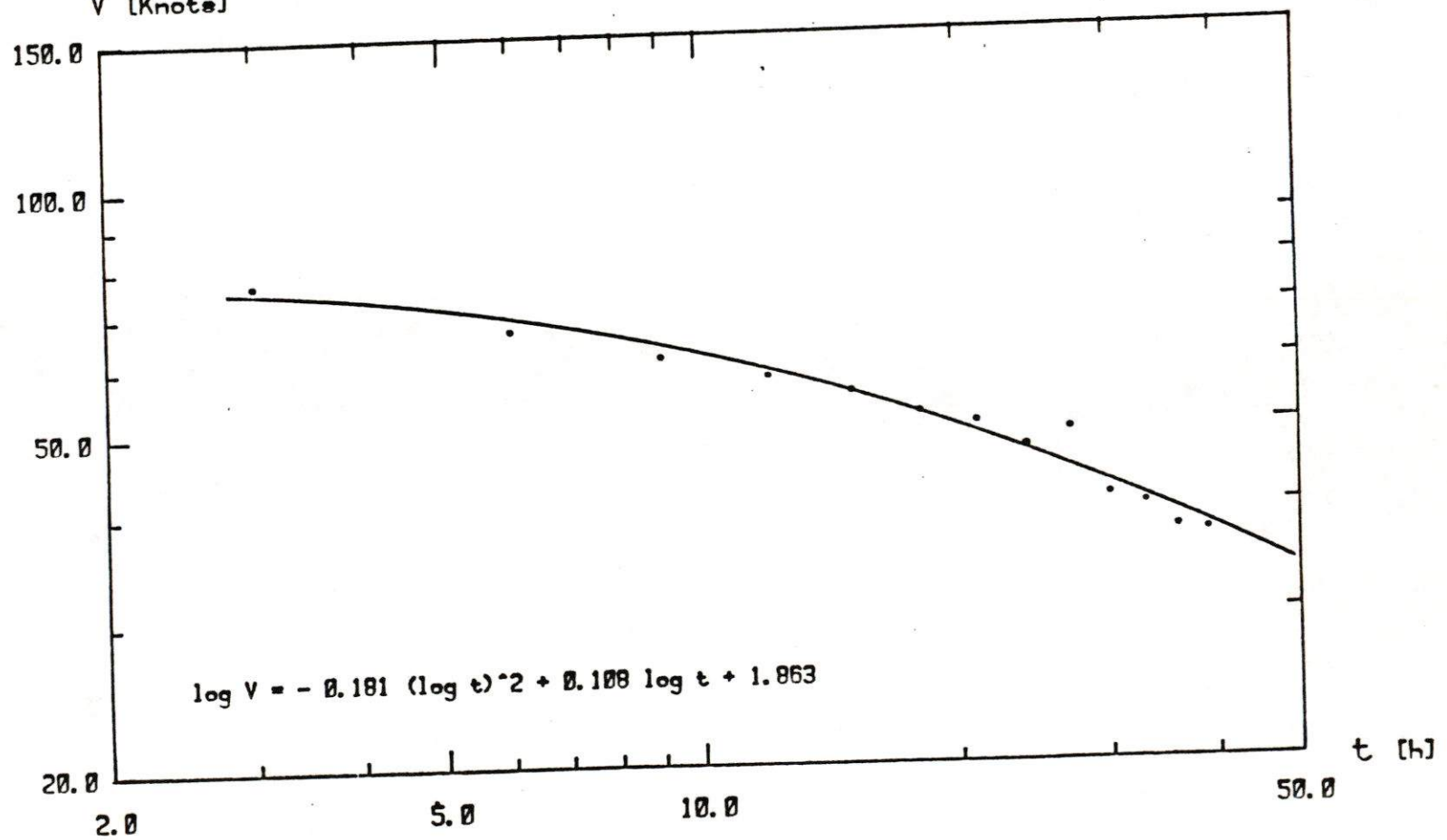
DIRECTION = NE - RETURN PERIOD = 30 years

Fig. 16

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

V [Knots]



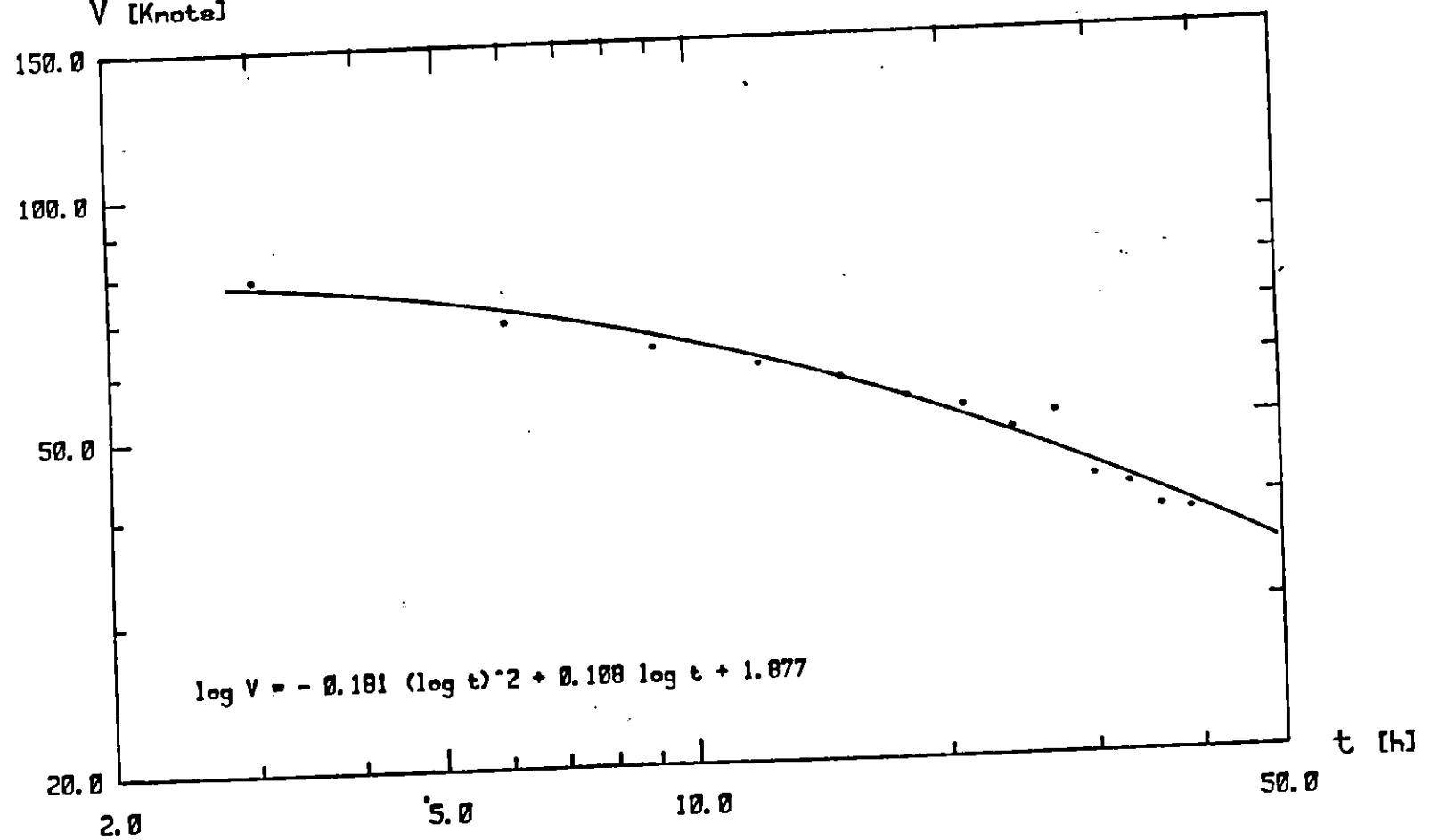
DIRECTION = NE - RETURN PERIOD = 40 years

Fig. 17

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

V [Knots]



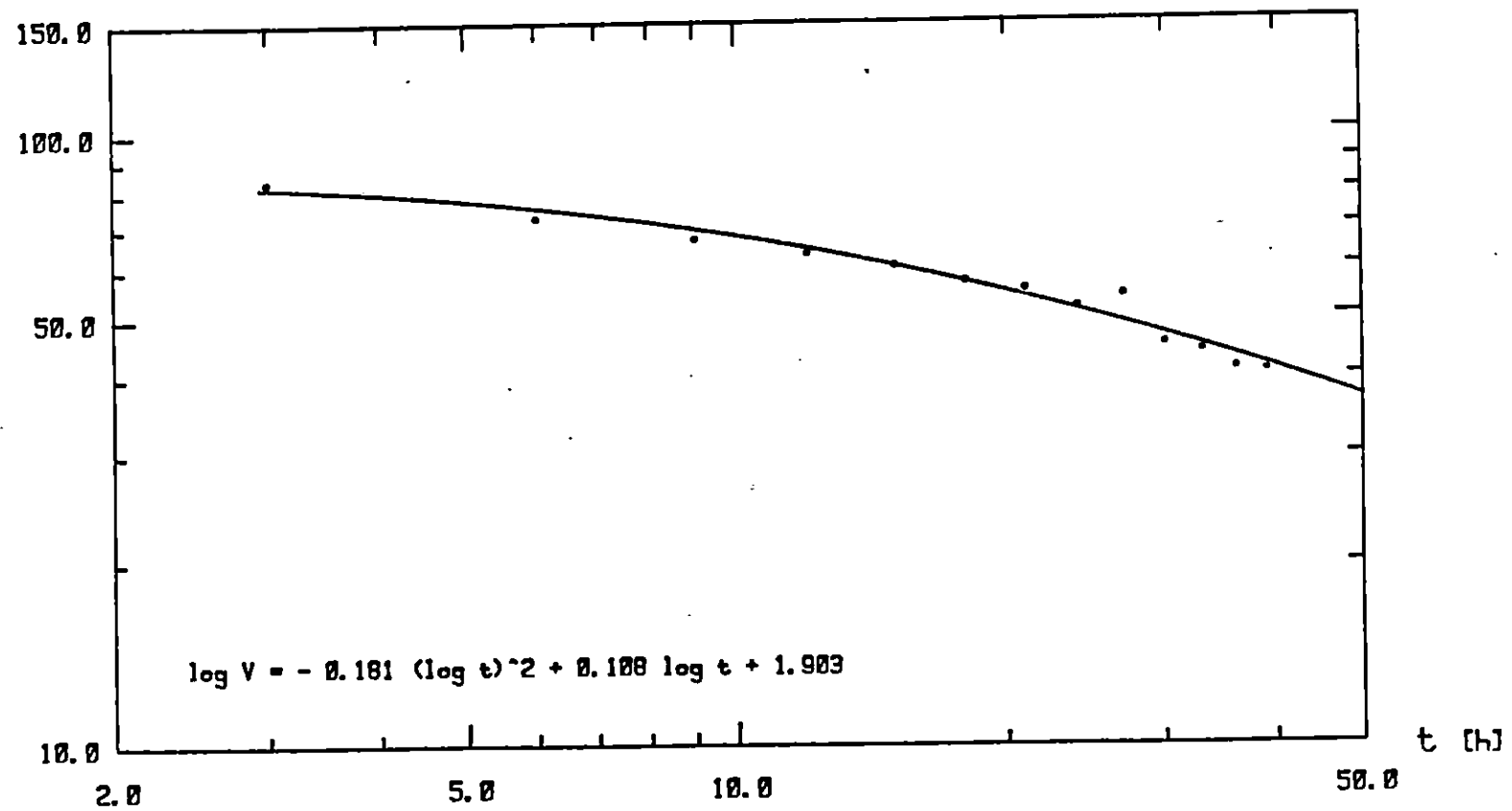
DIRECTION = NE - RETURN PERIOD = 50 years

Fig. 18

EXTRAPOLATION OF WIND DATA

STATION OF USTICA (3/I)

V [Knots]



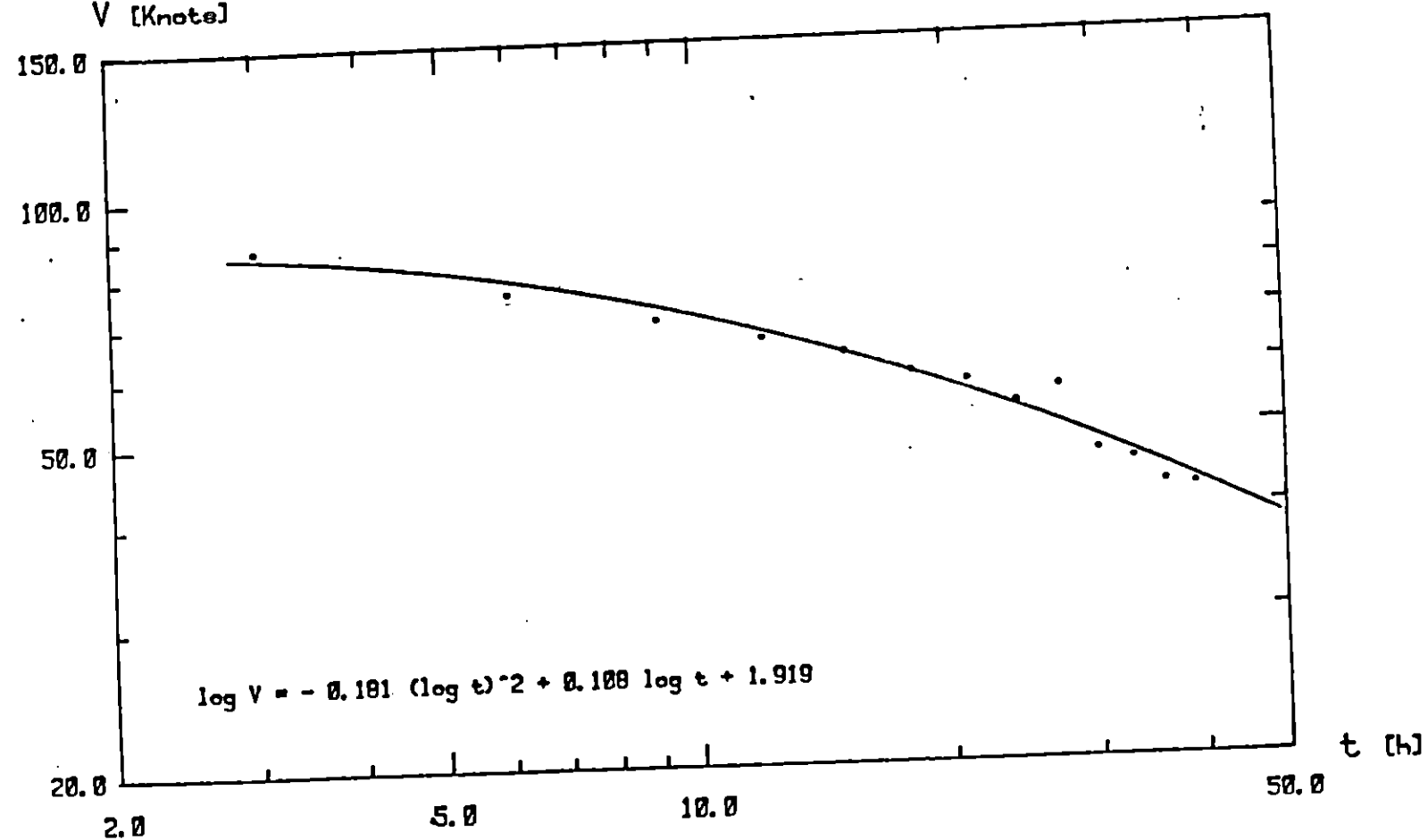
DIRECTION = NE - RETURN PERIOD = 75 years

Fig. 19

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

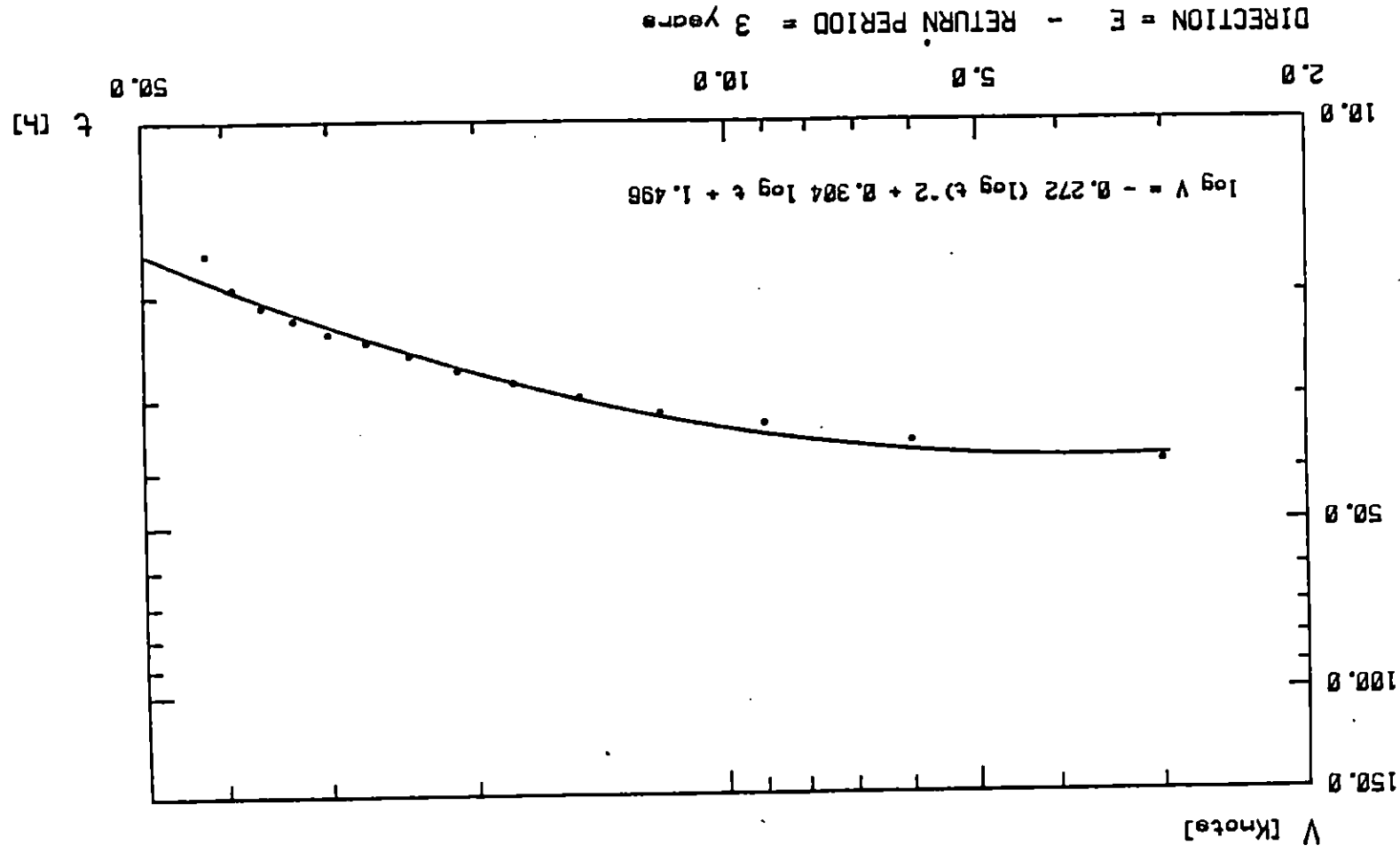
V [Knots]



DIRECTION = NE - RETURN PERIOD = 100 years

Fig. 20

EXTRAPOLATION OF WIND DATA
STATION OF USTICA (3/1)

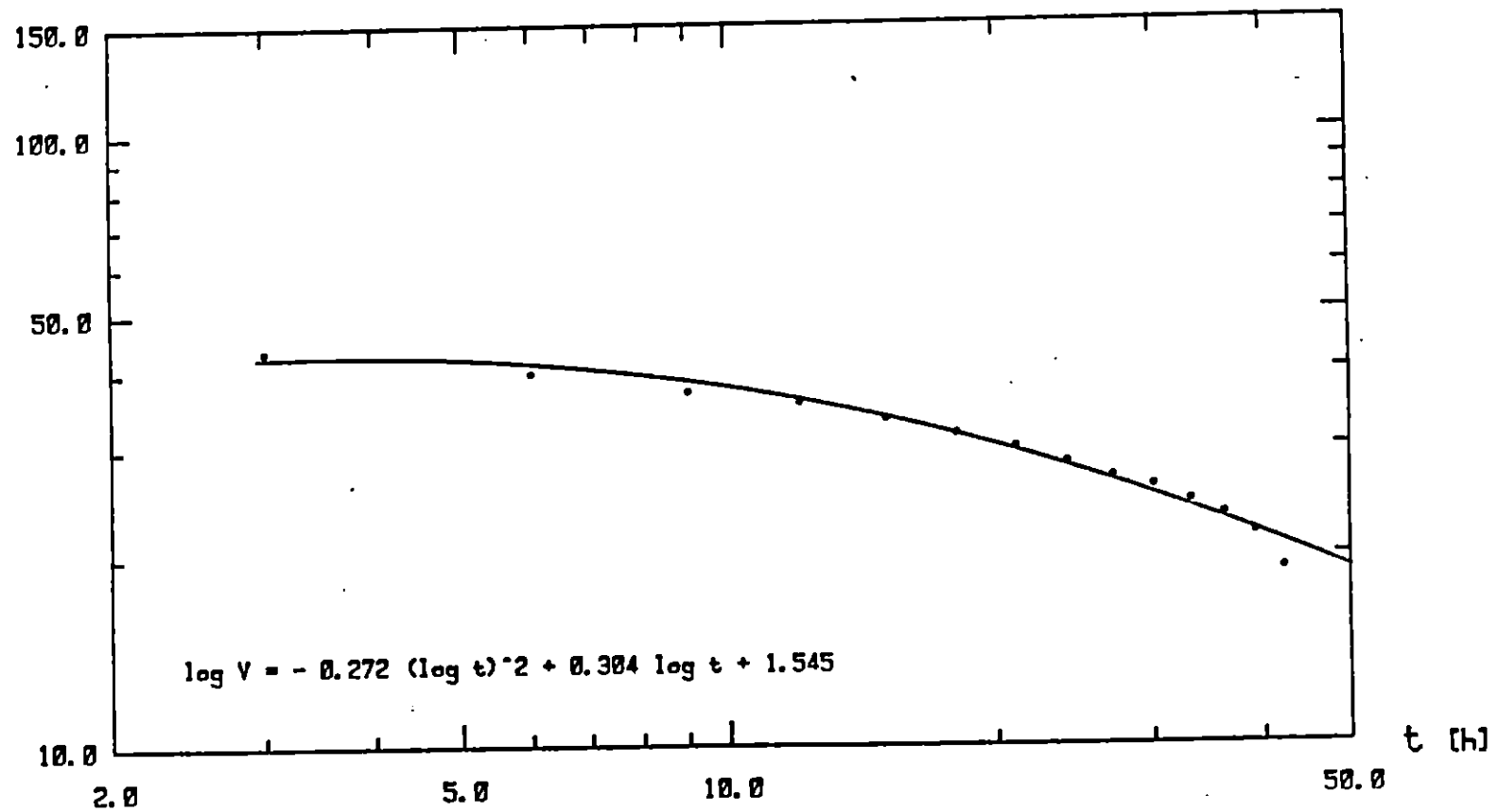


DIRECTION = E - RETURN PERIOD = 3 years

EXTRAPOLATION OF WIND DATA

STATION OF USTICA (3/I)

V [Knots]



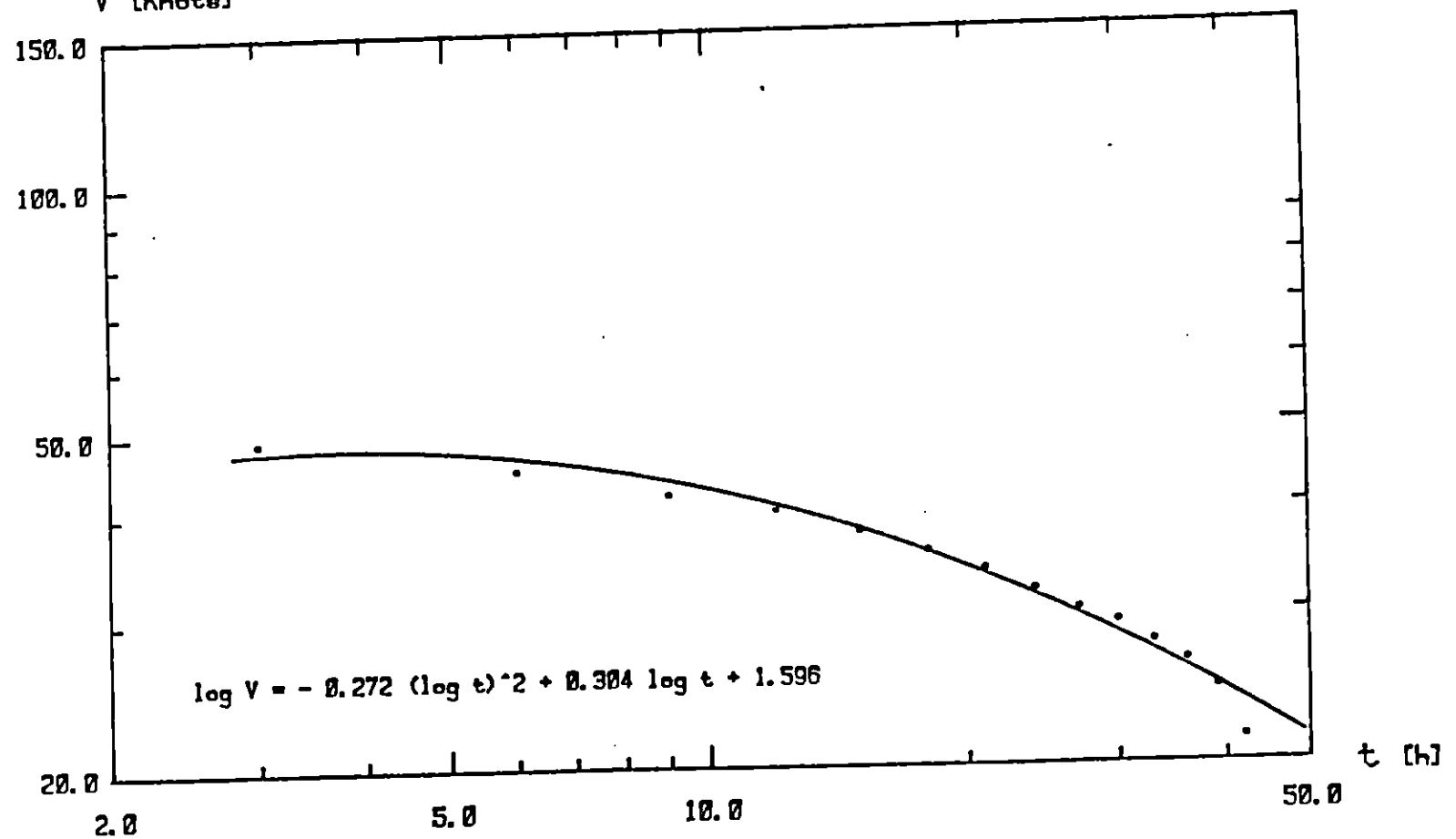
DIRECTION = E - RETURN PERIOD = 5 years

Fig. 22

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

V [Knots]



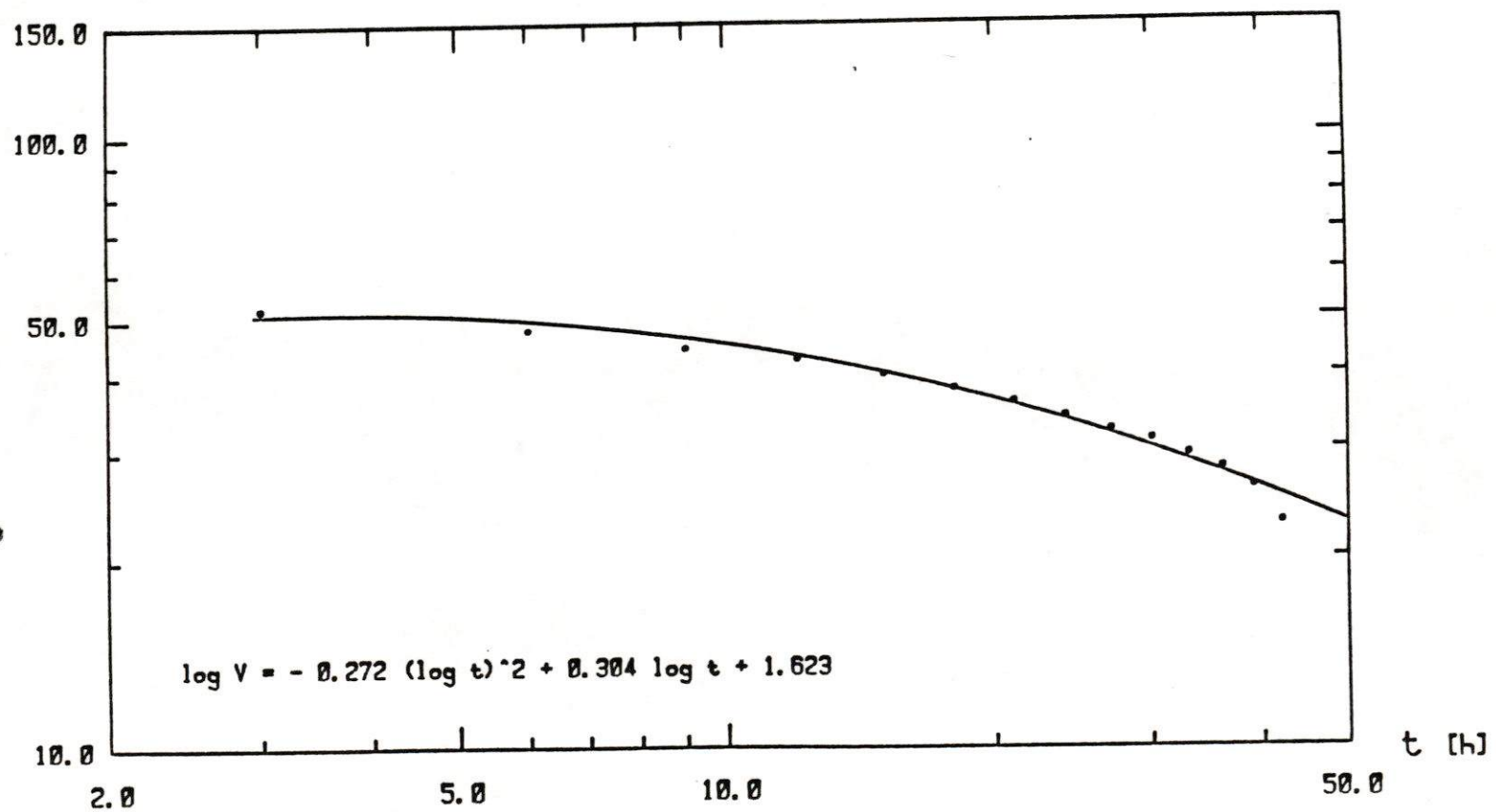
DIRECTION = E - RETURN PERIOD = 10 years

Fig. 23

EXTRAPOLATION OF WIND DATA

STATION OF USTICA (3/1)

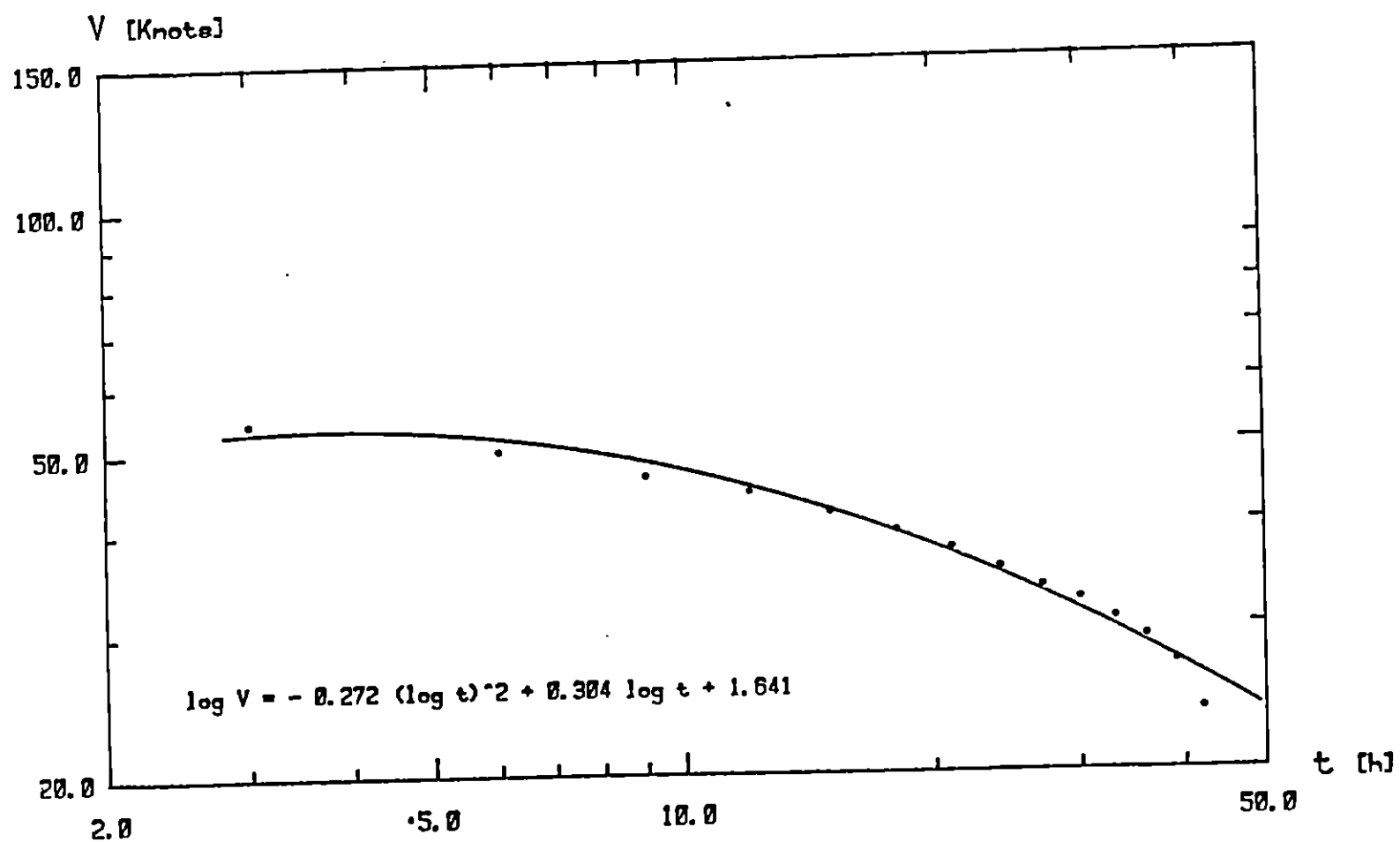
V [Knots]



DIRECTION = E - RETURN PERIOD = 15 years

Fig. 24

EXTRAPOLATION OF WIND DATA
STATION OF USTICA



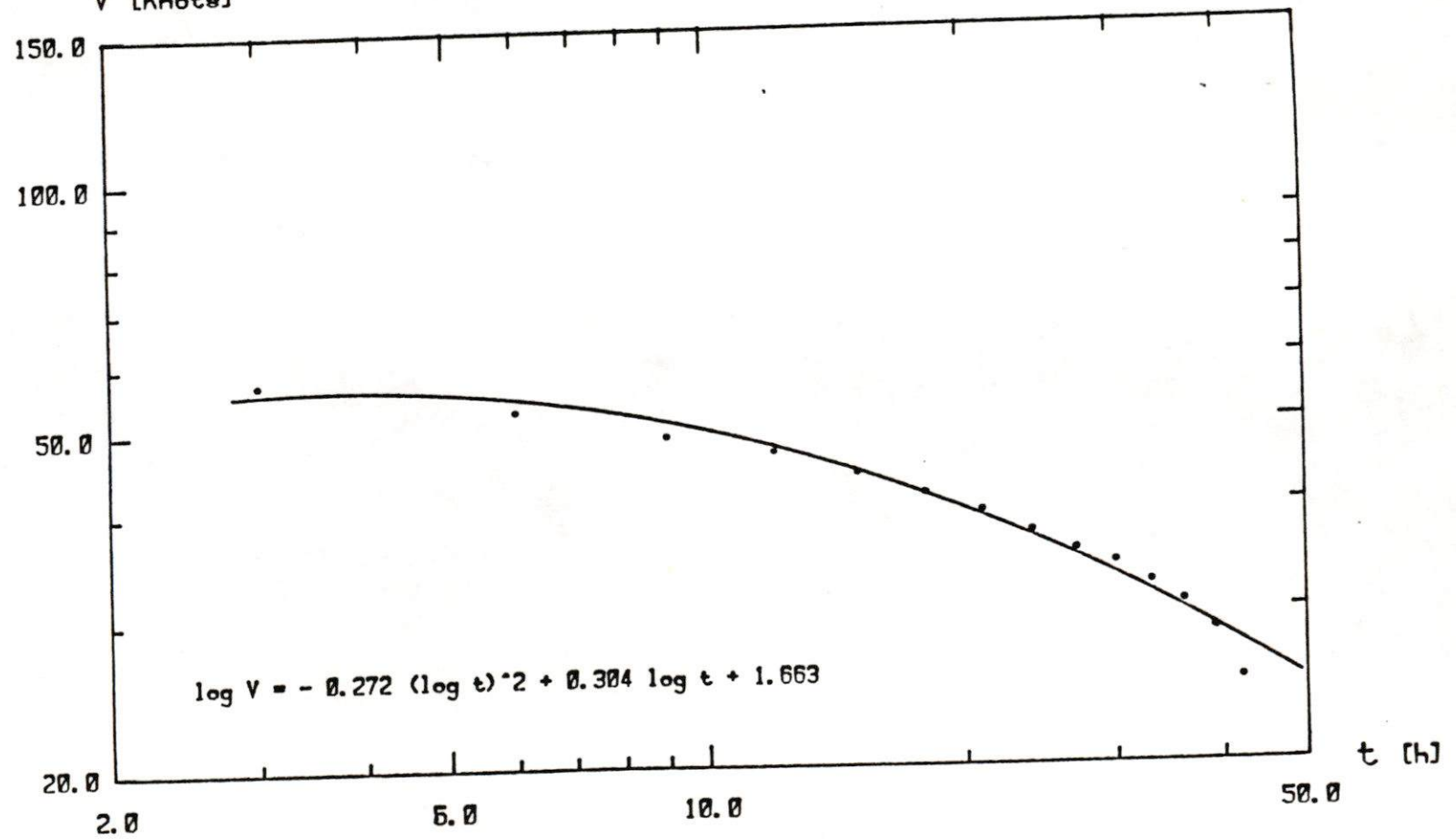
DIRECTION = E - RETURN PERIOD = 20 years

Fig. 25

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

V [Knots]



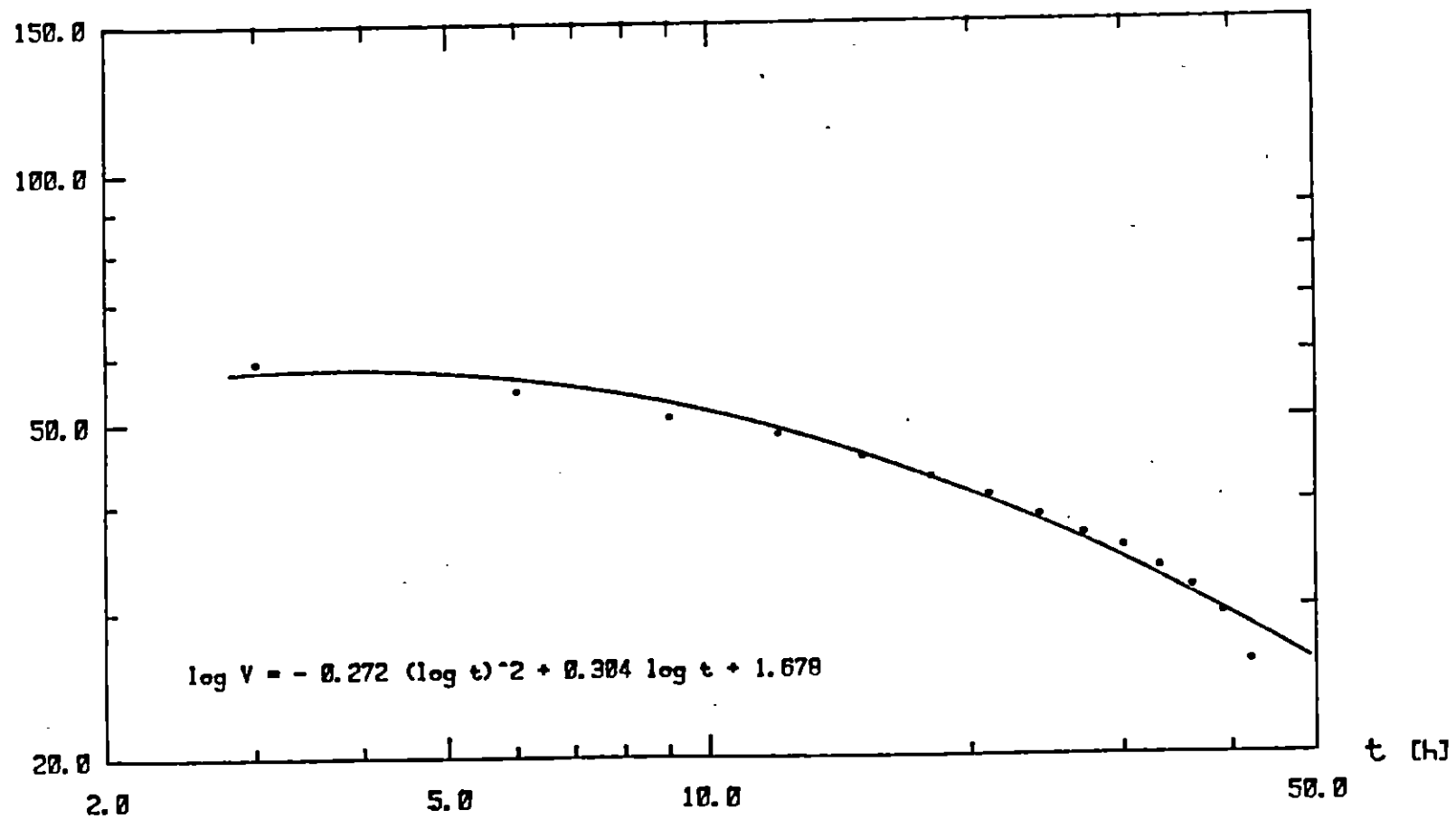
DIRECTION = E - RETURN PERIOD = 30 years

Fig. 26

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

V [Knots]



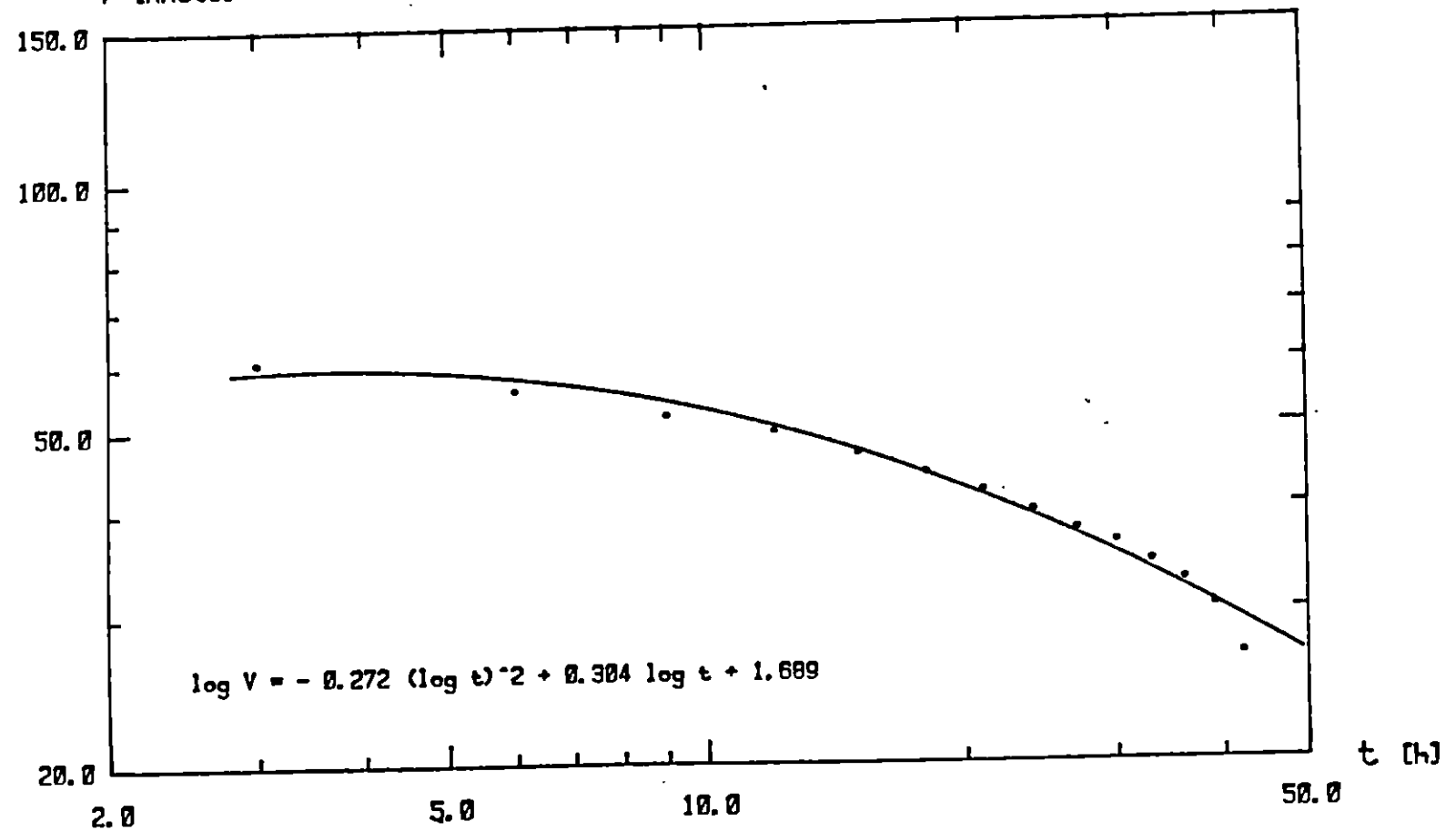
DIRECTION = E - RETURN PERIOD = 40 years

Fig. 27

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

V [Knots]



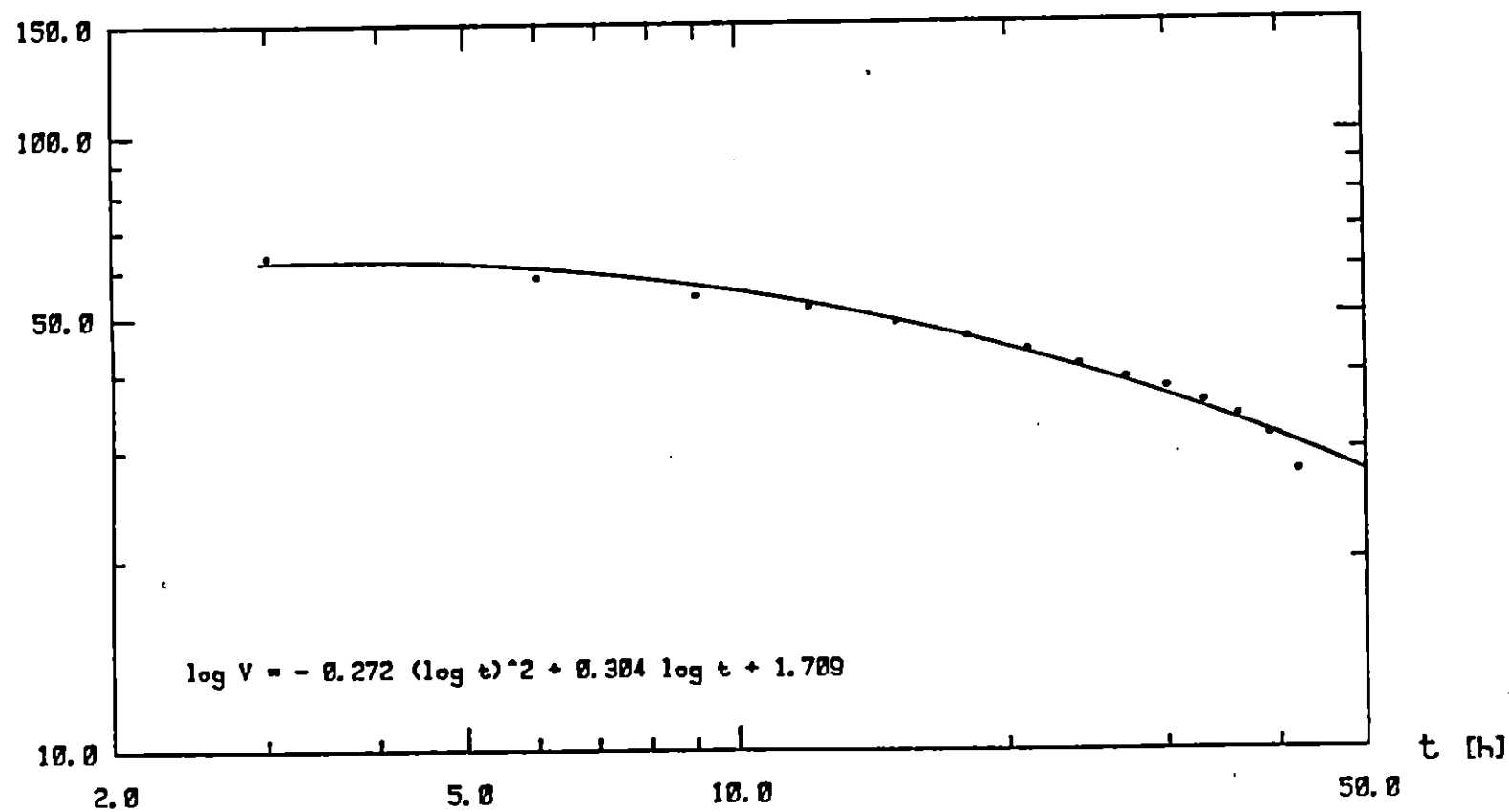
DIRECTION = E - RETURN PERIOD = 50 years

Fig. 28

EXTRAPOLATION OF WIND DATA

STATION OF USTICA (3/I)

V [Knots]



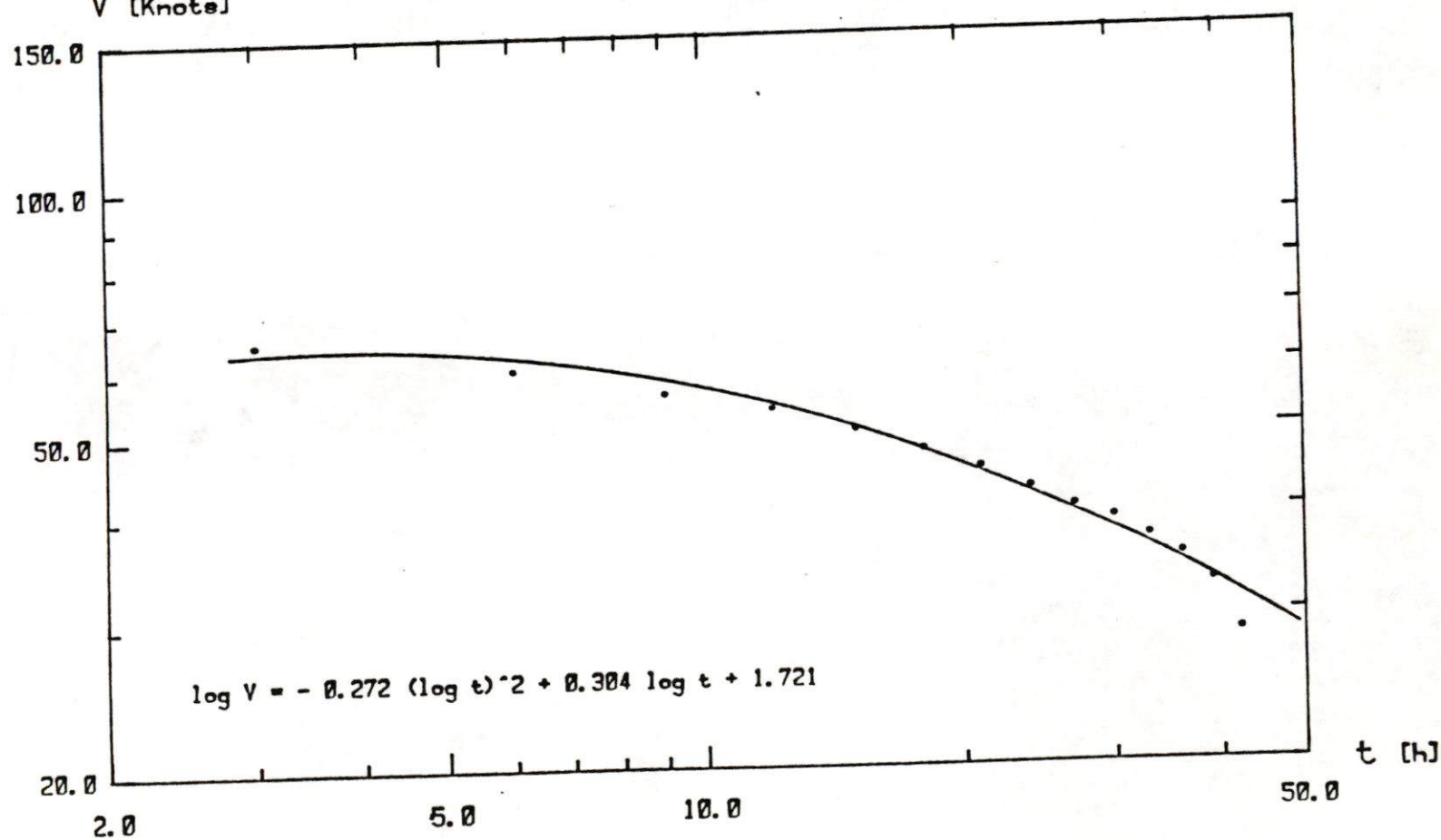
DIRECTION = E - RETURN PERIOD = 75 years

Fig. 29

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

V [Knots]



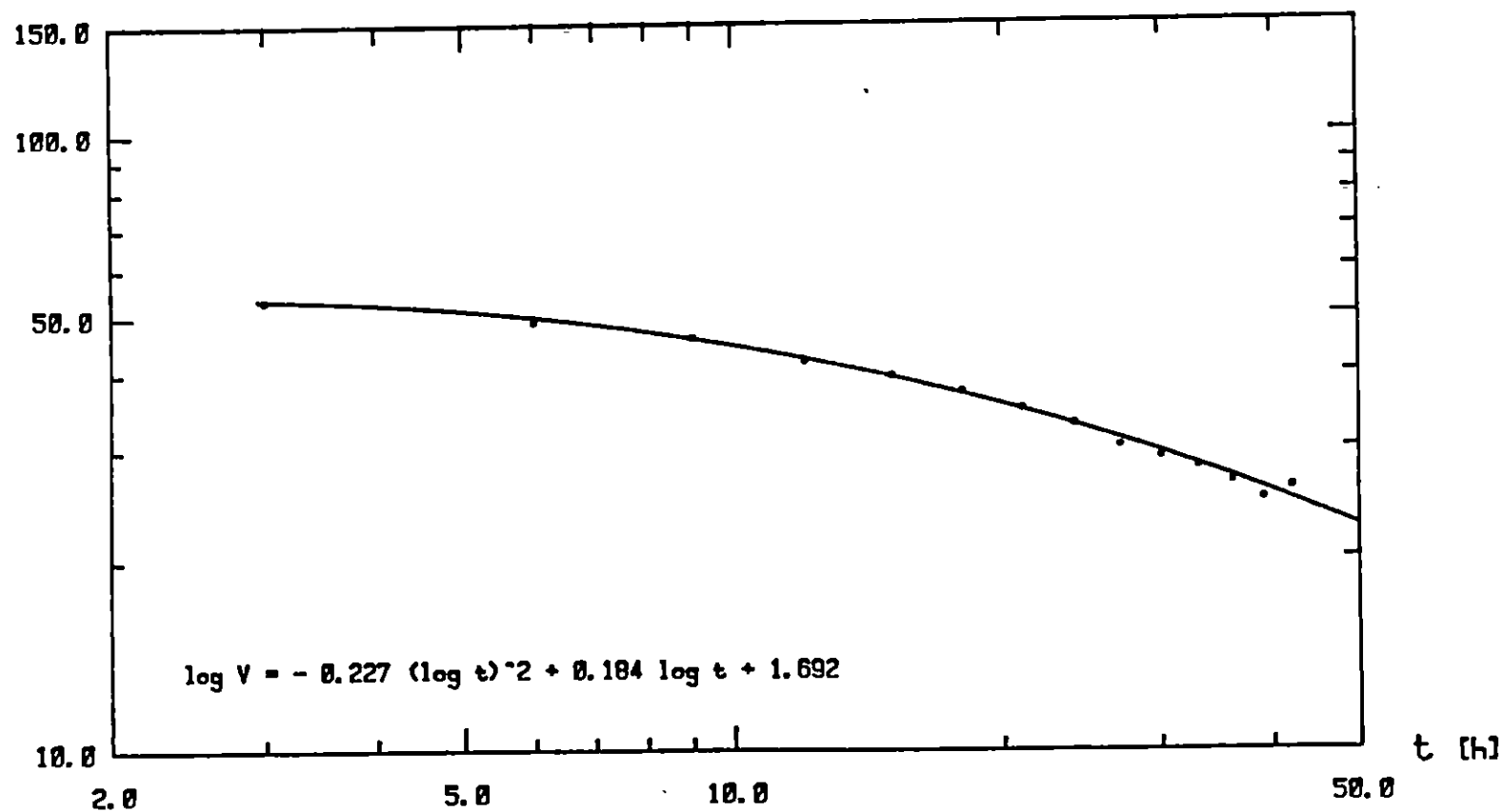
DIRECTION = E - RETURN PERIOD = 100 years

Fig. 30

EXTRAPOLATION OF WIND DATA

STATION OF USTICA (3/I)

V [Knots]



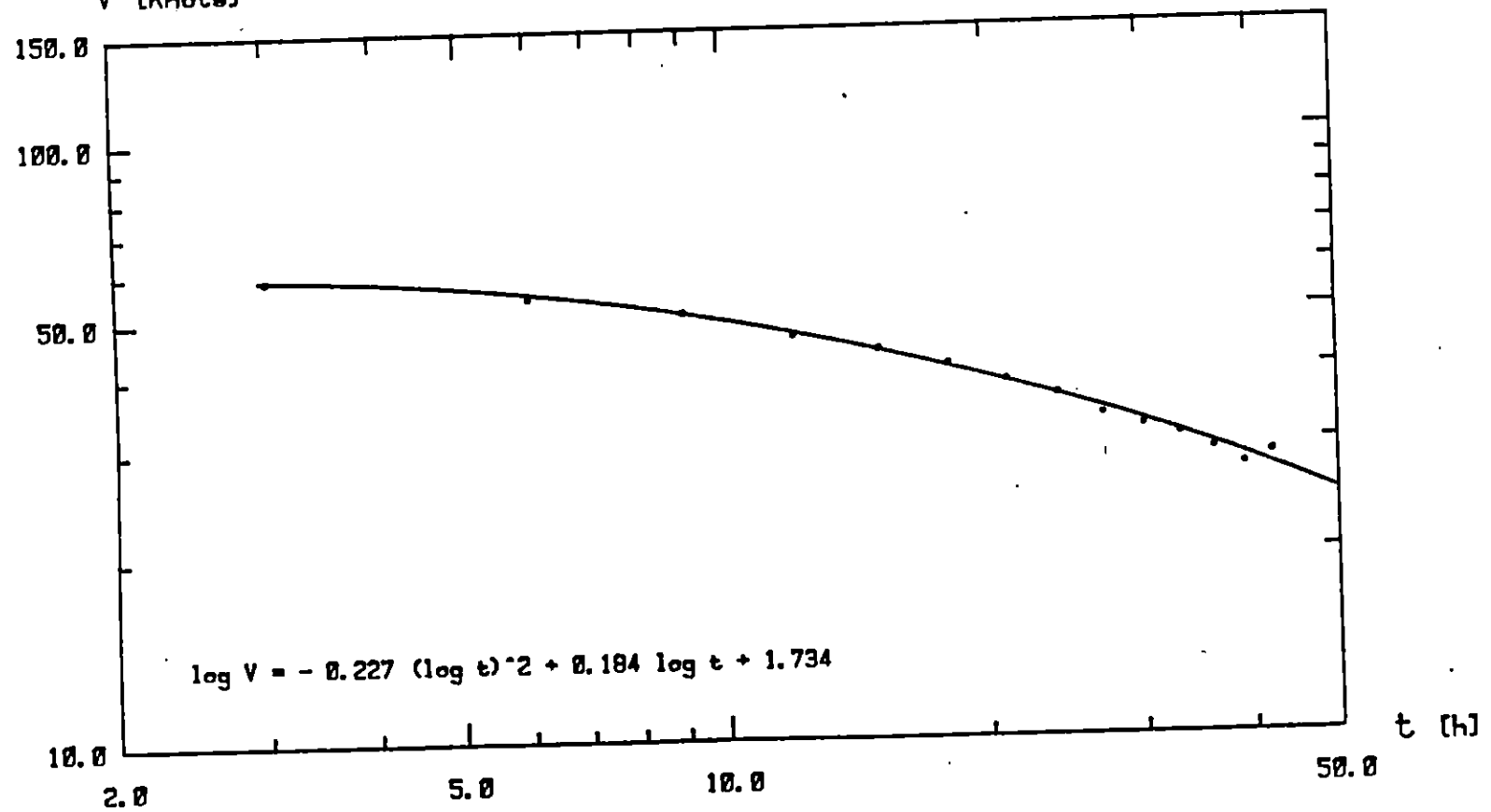
DIRECTION = W - RETURN PERIOD = 3 years

Fig. 31

EXTRAPOLATION OF WIND DATA

STATION OF USTICA (3/I)

V [Knots]



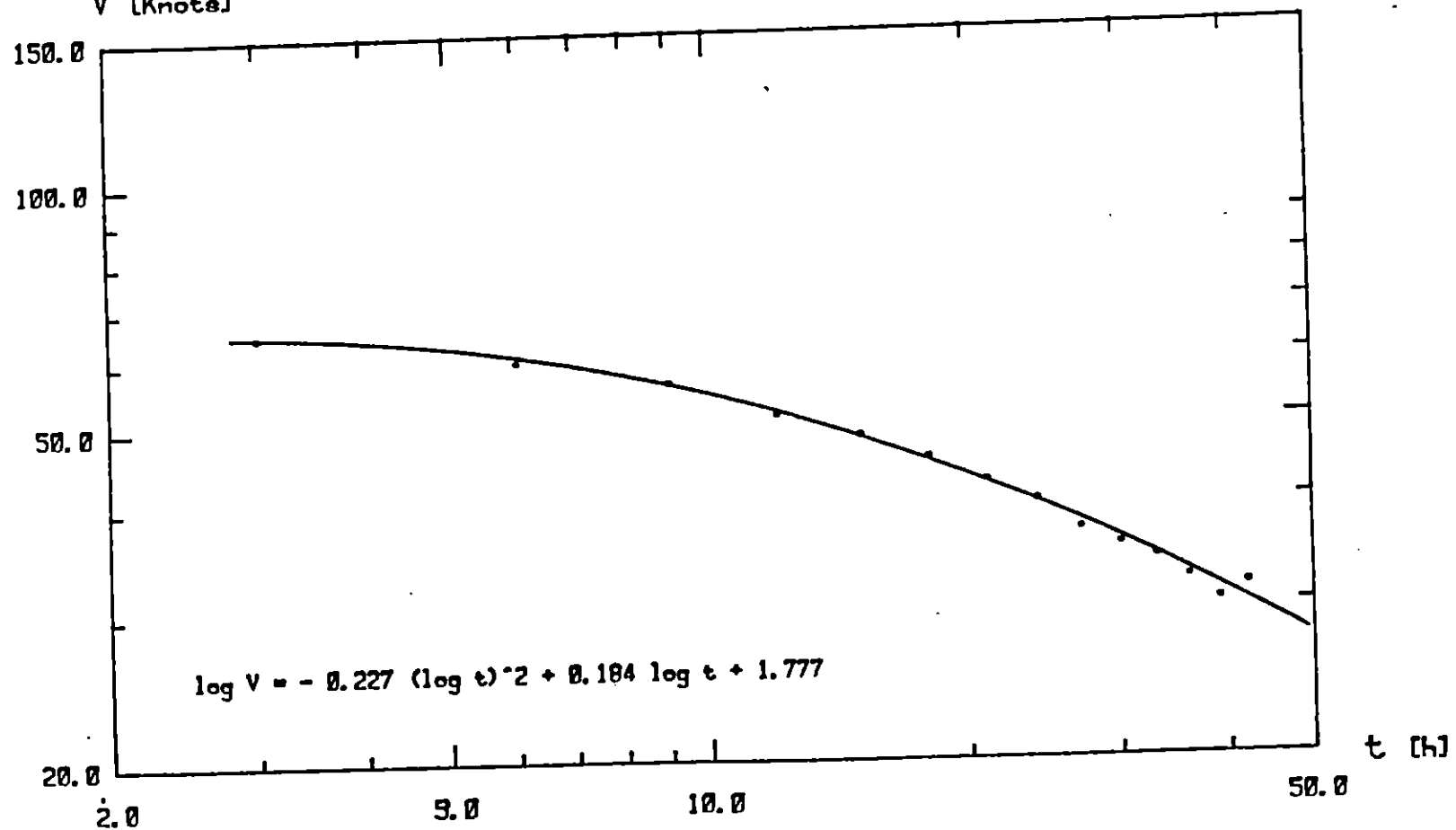
DIRECTION = W - RETURN PERIOD = 5 years

Fig. 32

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

V [Knots]



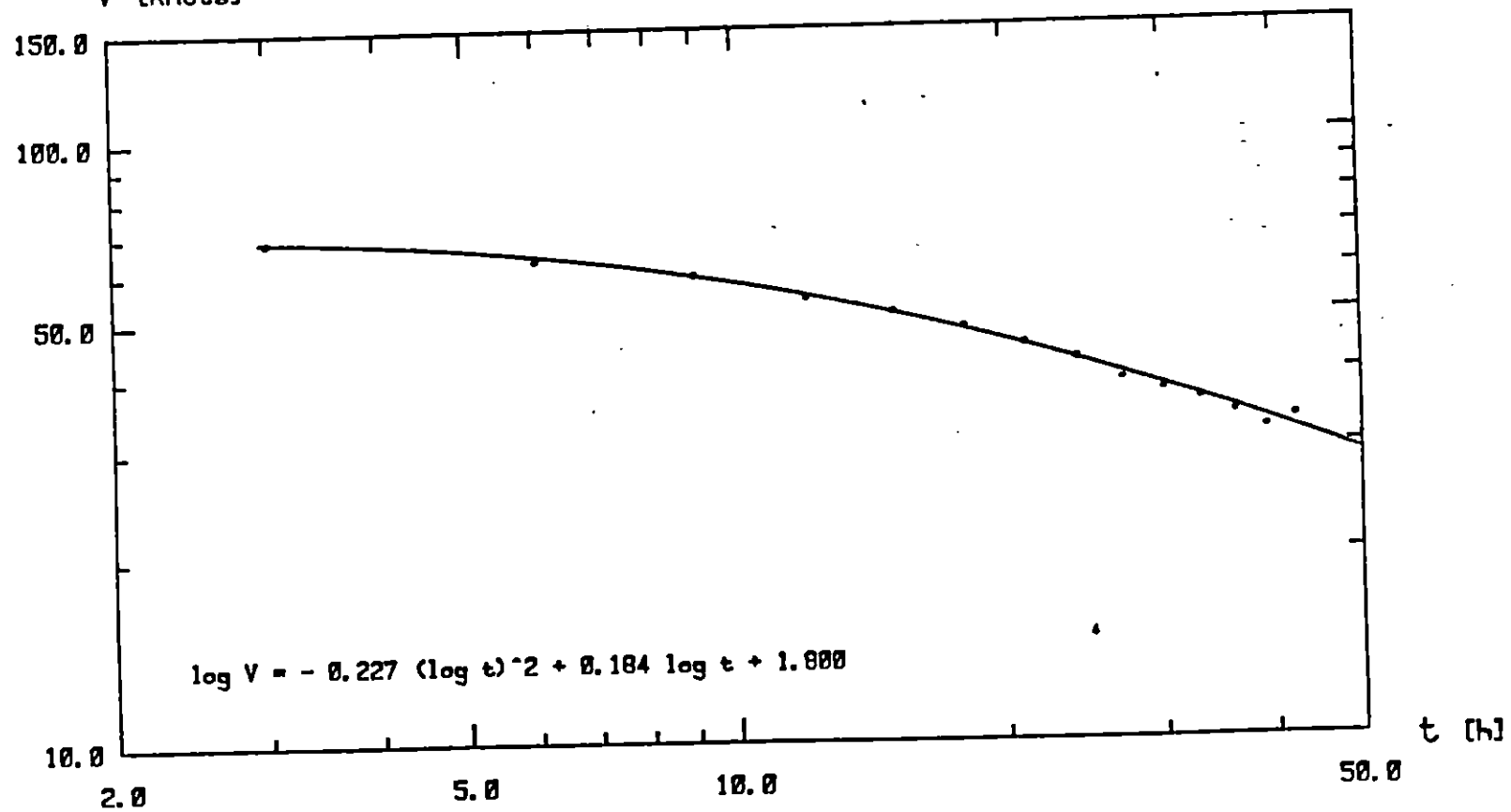
DIRECTION = W - RETURN PERIOD = 10 years

Fig. 33

EXTRAPOLATION OF WIND DATA

STATION OF USTICA (3/I)

V [Knots]



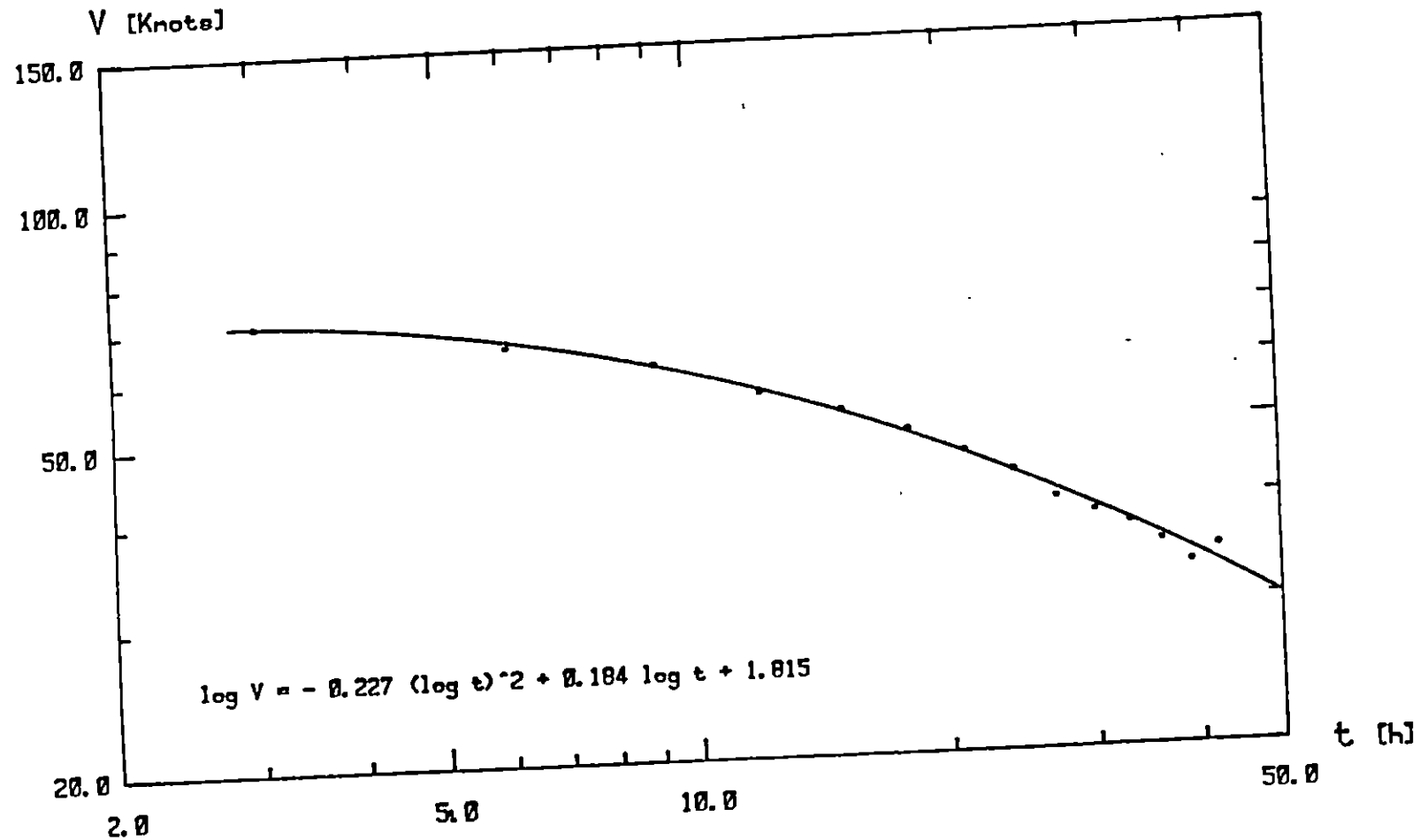
DIRECTION = W - RETURN PERIOD = 15 years

Fig. 34

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

V [Knots]



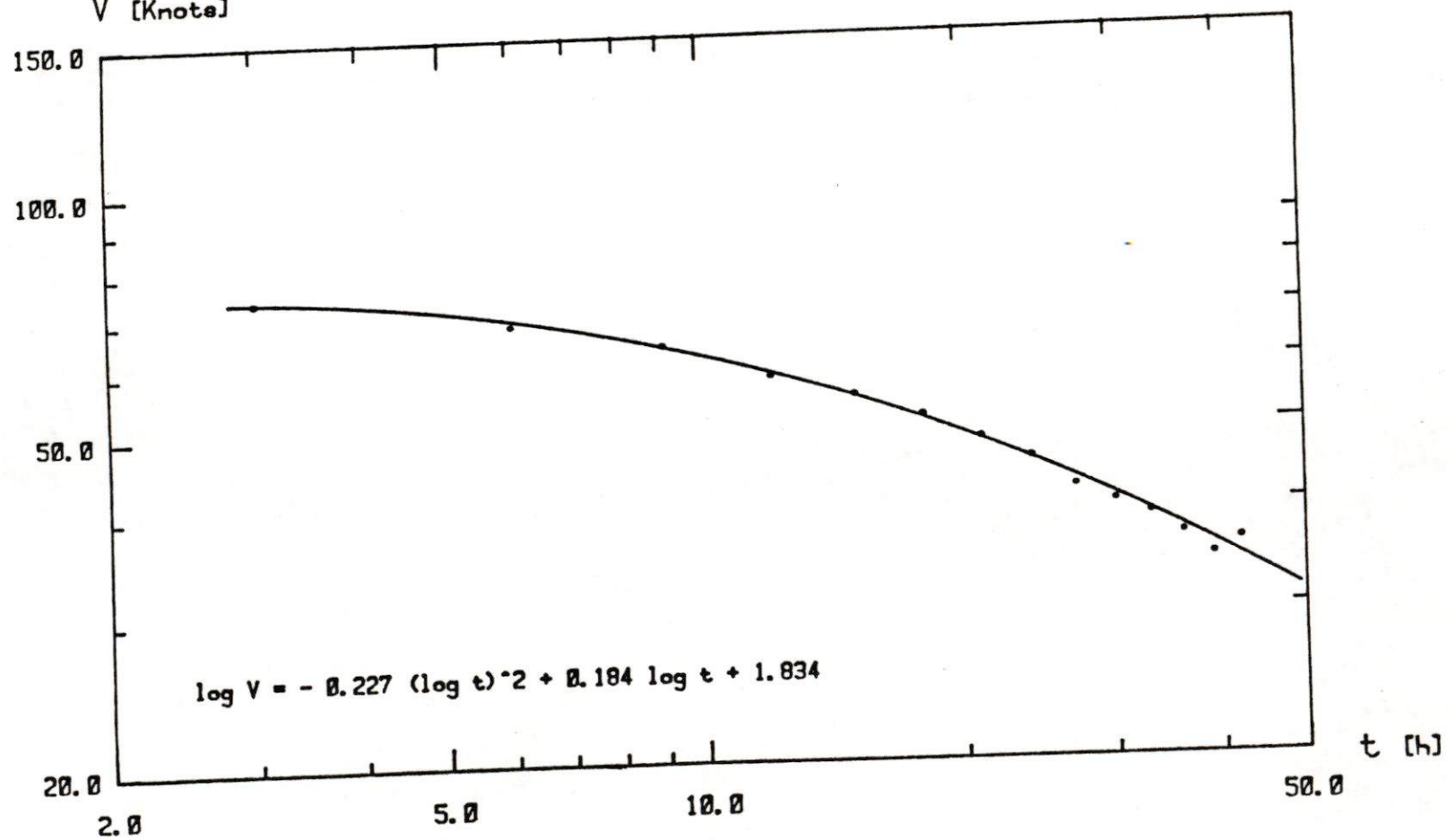
DIRECTION = W - RETURN PERIOD = 20 years

Fig. 35

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

V [Knots]



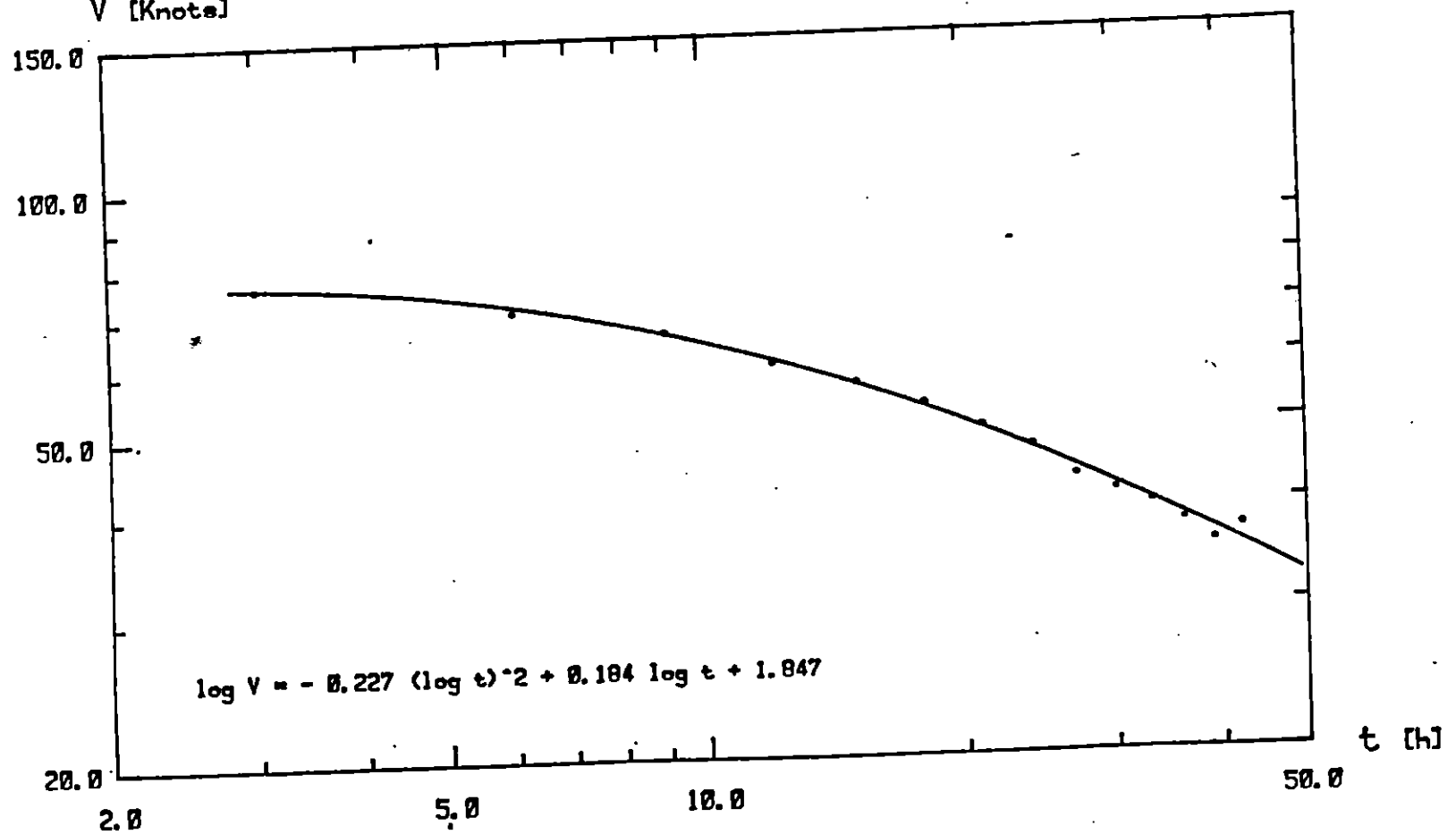
DIRECTION = W - RETURN PERIOD = 30 years

Fig. 36

EXTRAPOLATION OF WIND DATA

STATION OF USTICA.

V [Knots]



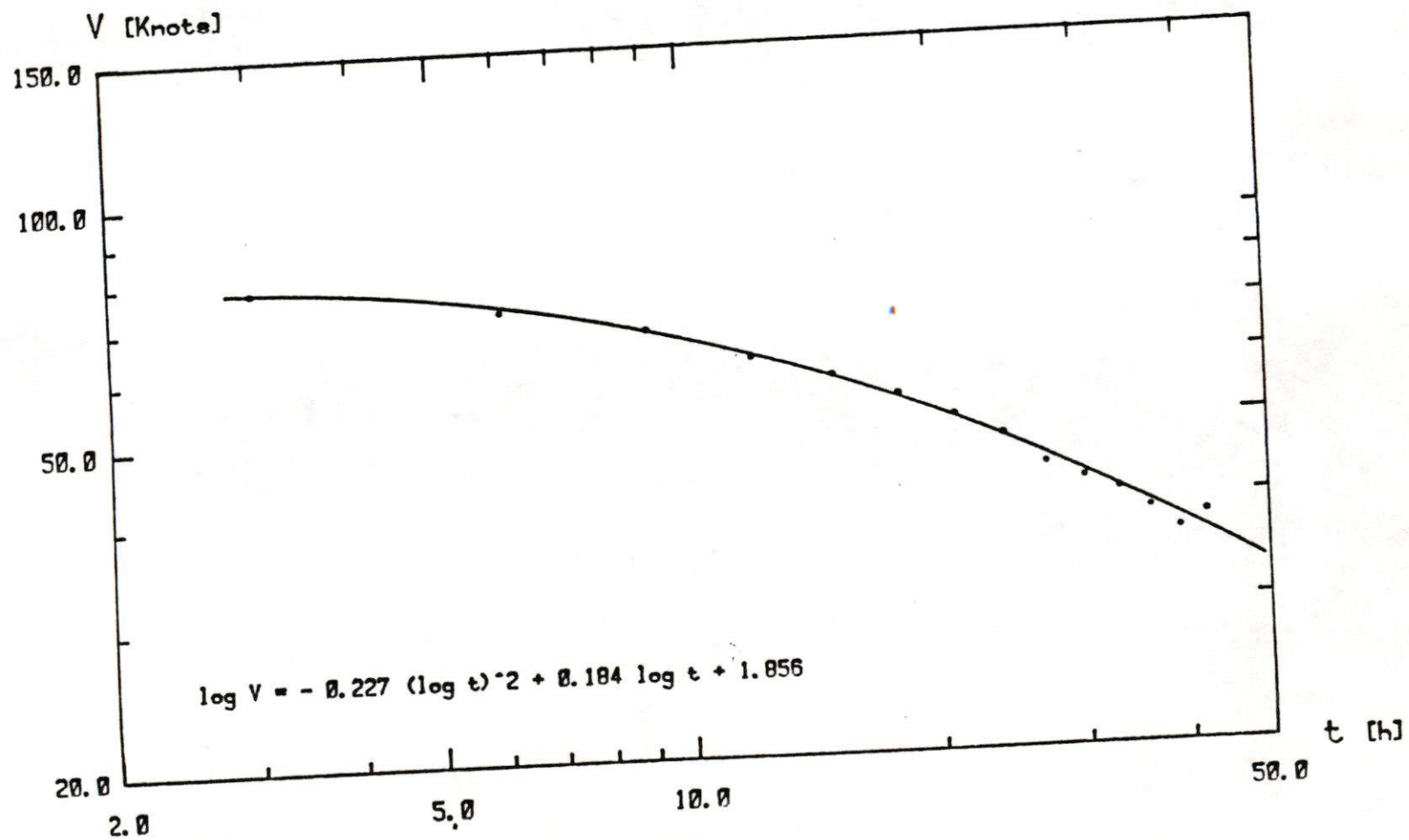
DIRECTION = W - RETURN PERIOD = 40 years

Fig. 37

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

V [Knots]



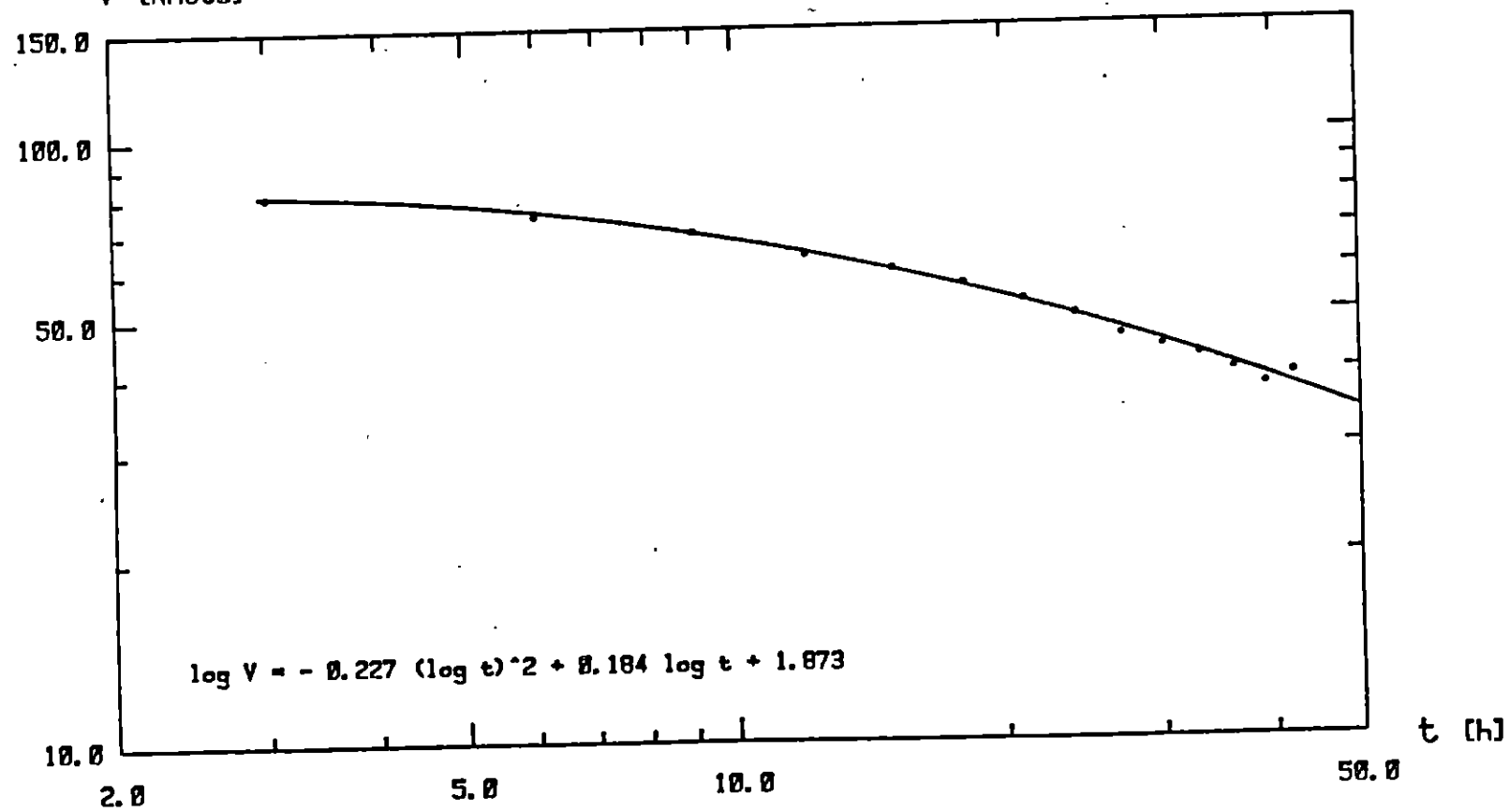
DIRECTION = W - RETURN PERIOD = 50 years

Fig. 38

EXTRAPOLATION OF WIND DATA

STATION OF USTICA (3/I)

V [Knots]



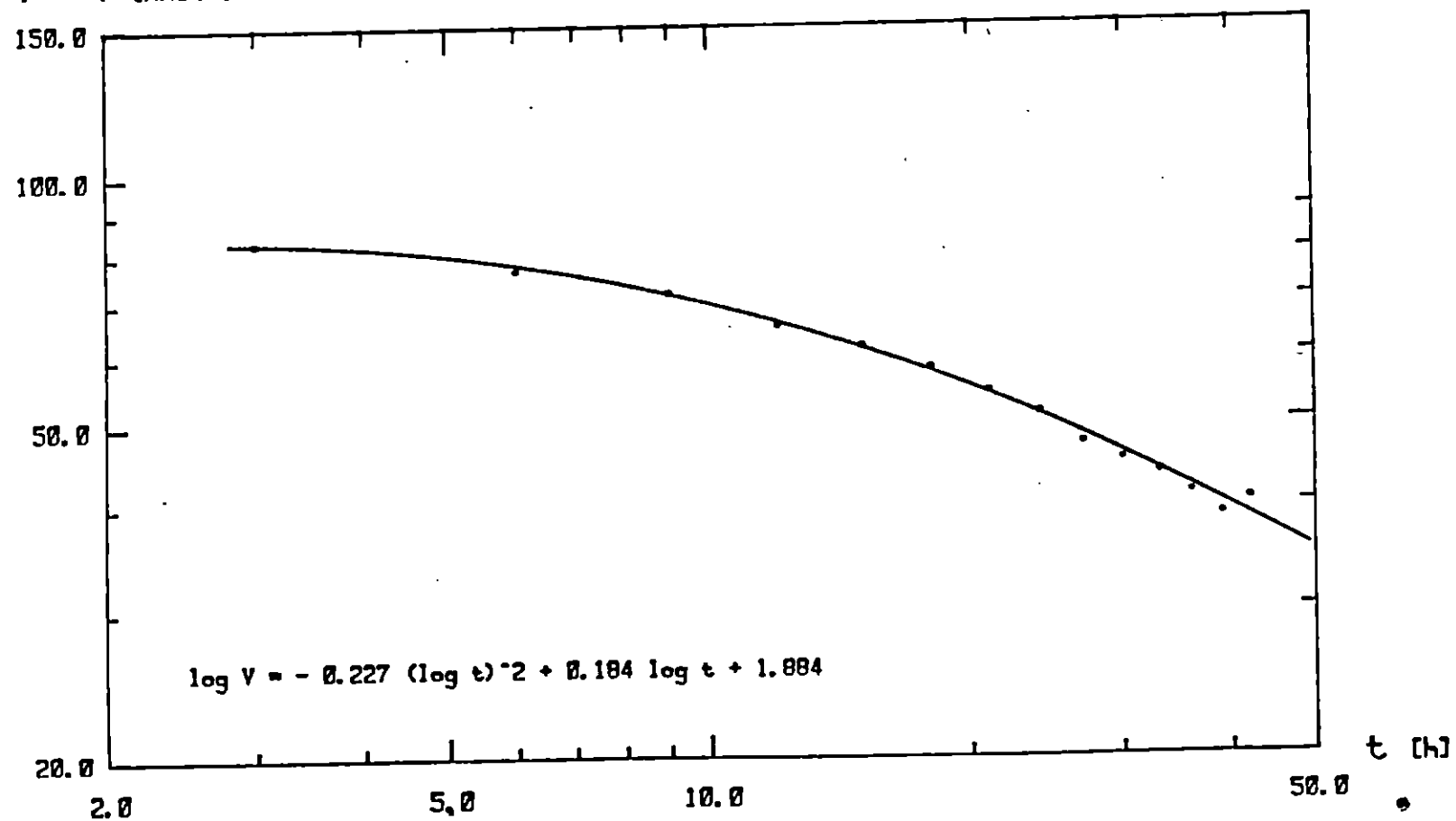
DIRECTION = W - RETURN PERIOD = 75 years

Fig. 39

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

V [Knots]



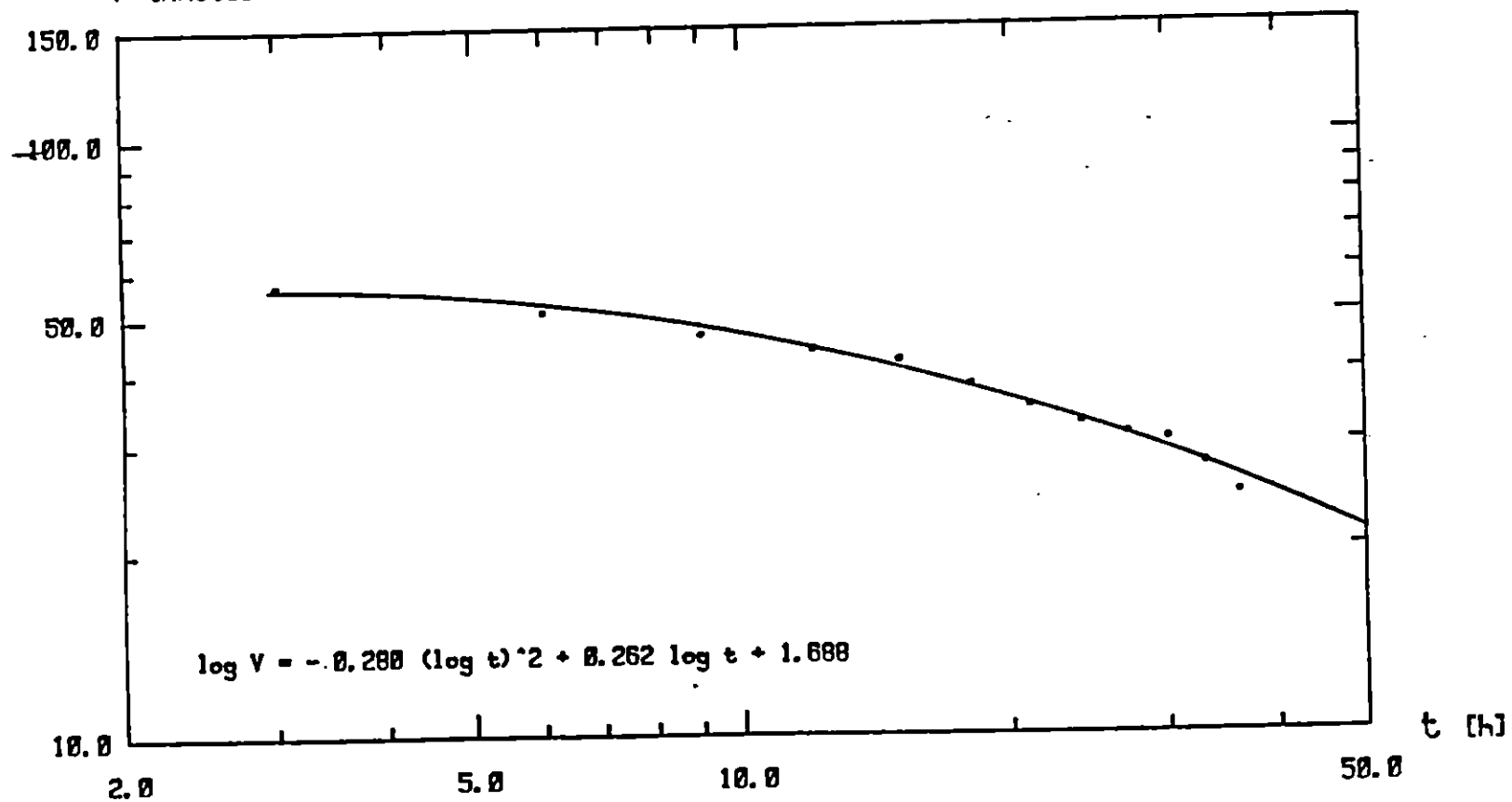
DIRECTION = W - RETURN PERIOD = 100 years

Fig. 40

EXTRAPOLATION OF WIND DATA

STATION OF USTICA (3/I)

V [Knots]

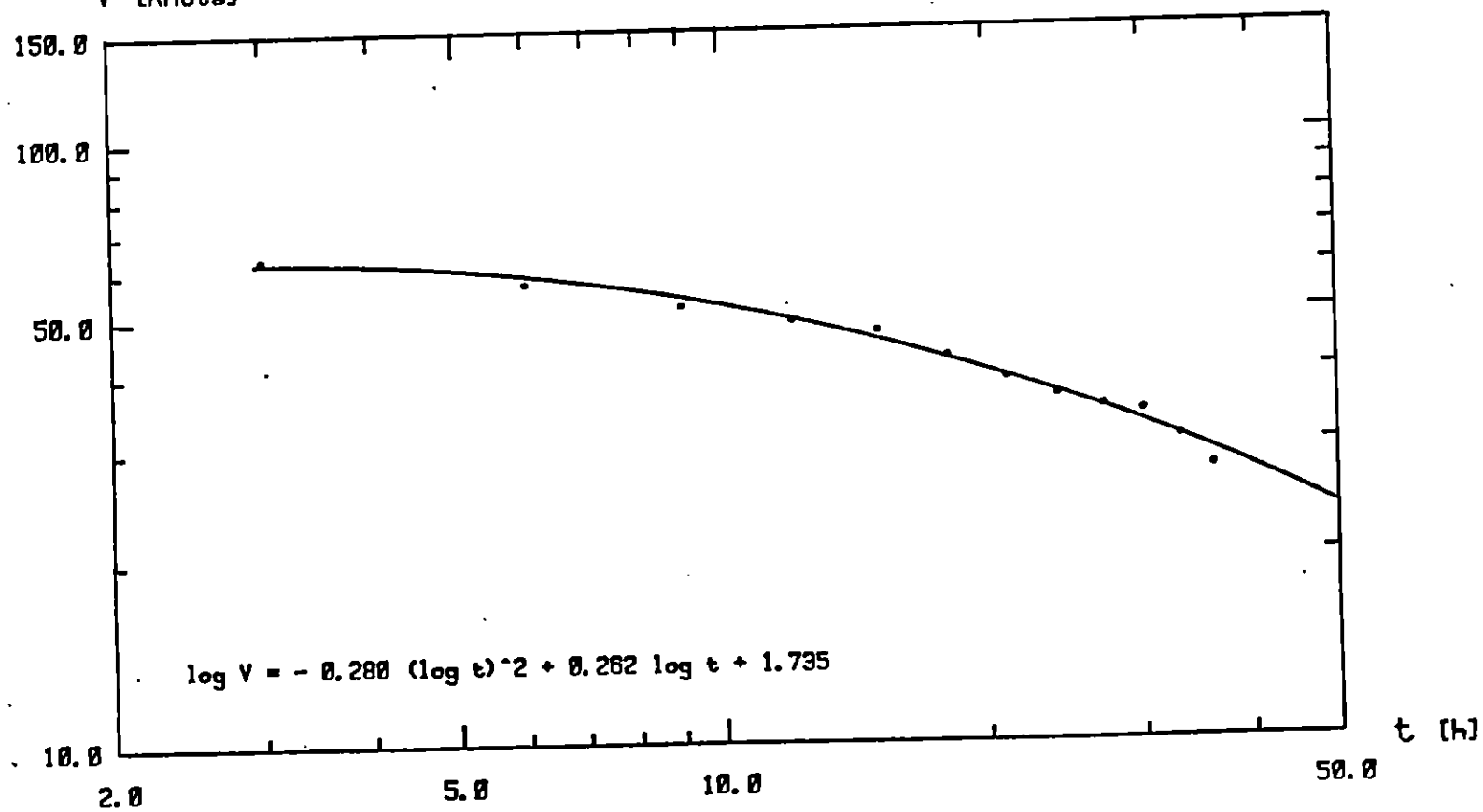


DIRECTION = NW - RETURN PERIOD = 3 years

Fig. 41

EXTRAPOLATION OF WIND DATA
STATION OF USTICA (3/I)

V [Knots]



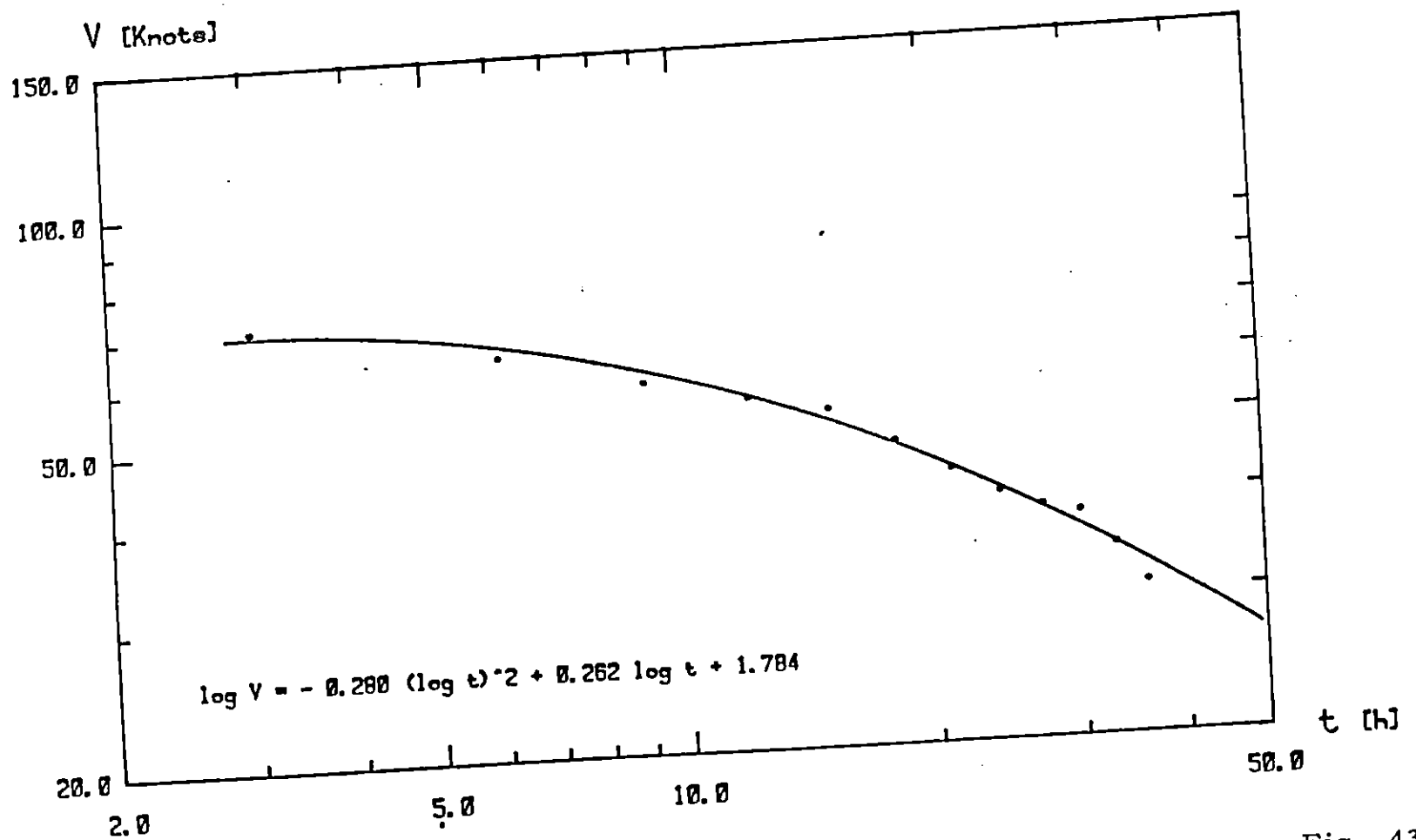
DIRECTION = NW - RETURN PERIOD = 5 years

Fig. 42

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

V [Knots]



DIRECTION = NW - RETURN PERIOD = 10 years

Fig. 43

EXTRAPOLATION OF WIND DATA
STATION OF USTICA (3/I)

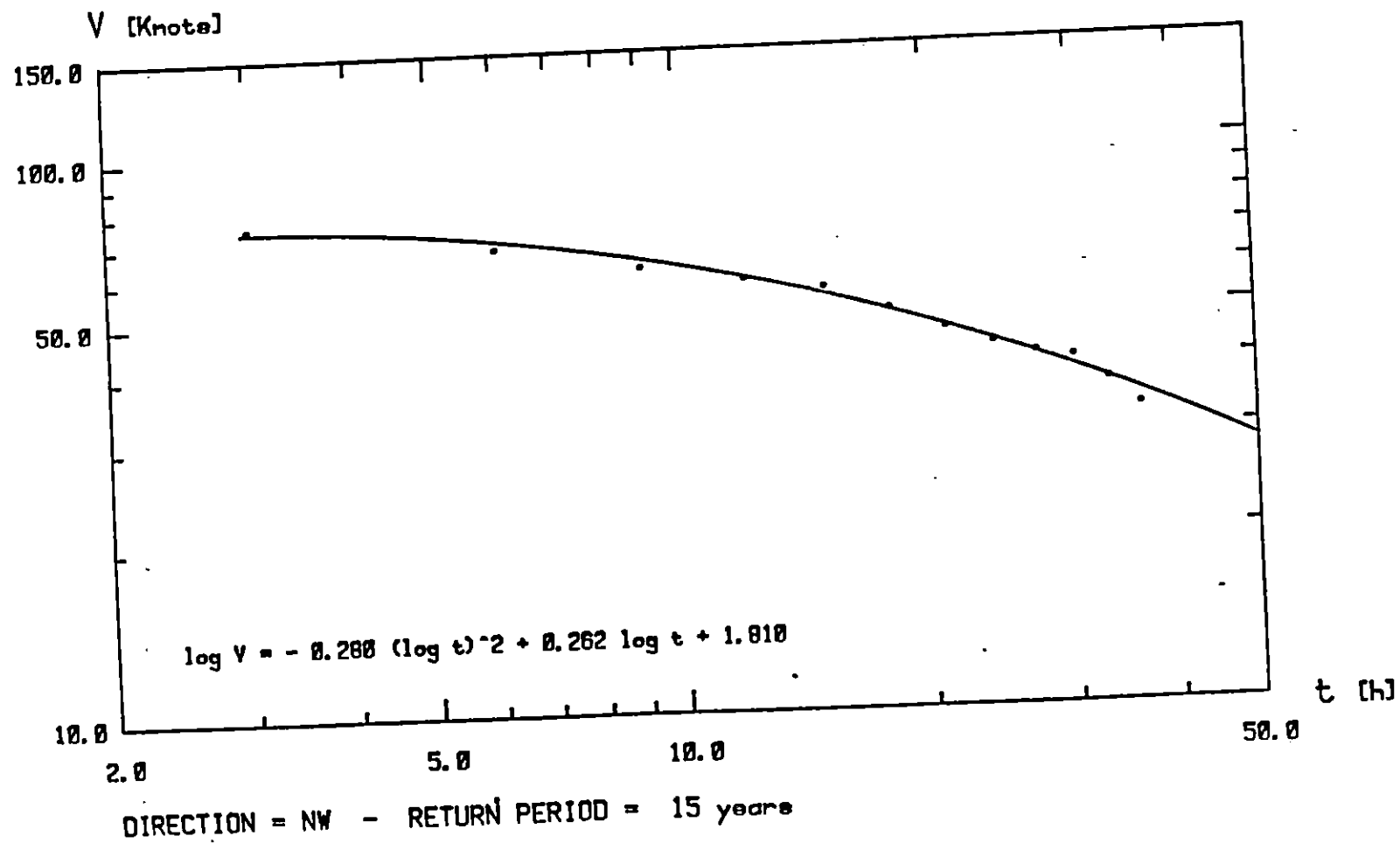
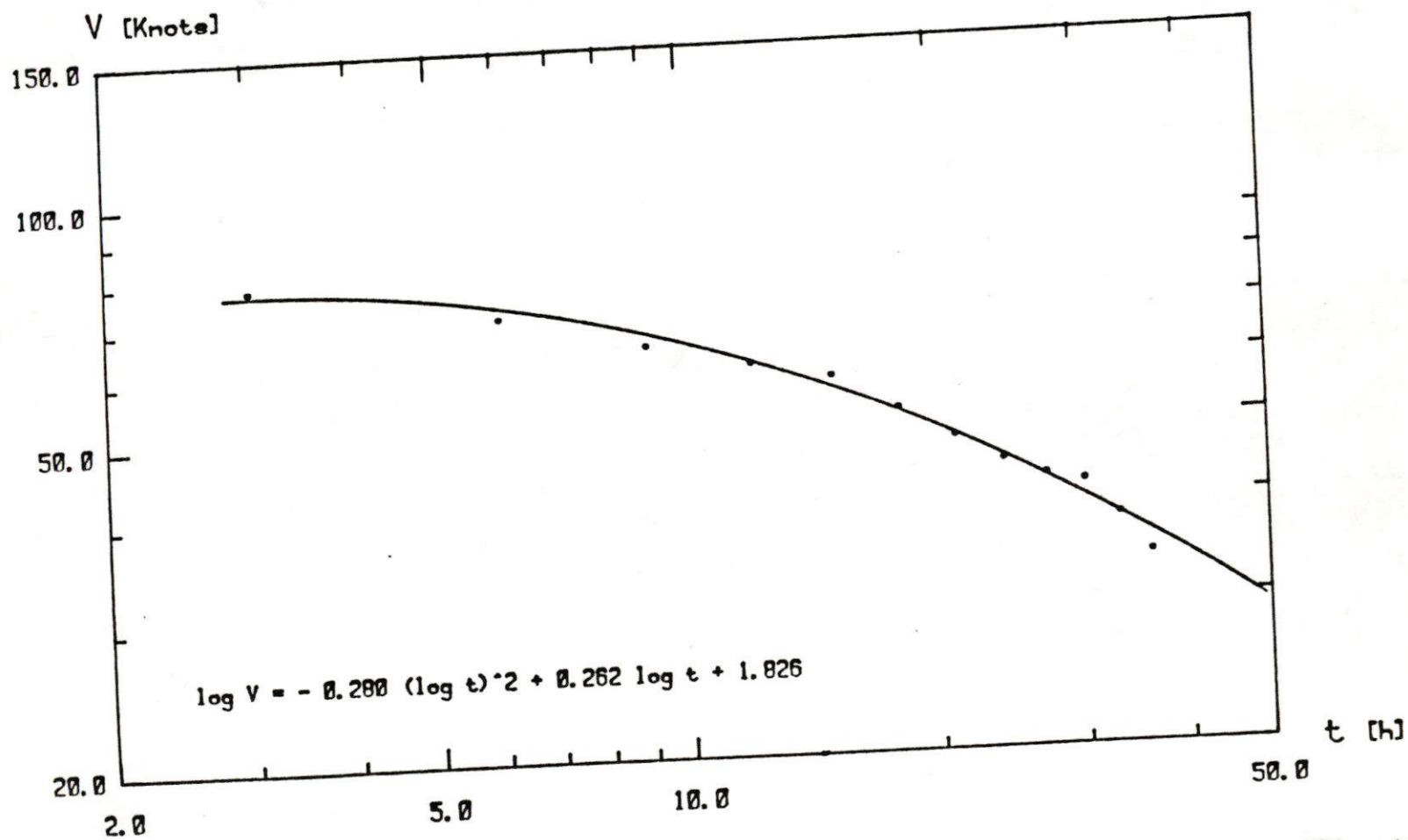


Fig. 44

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

V [Knots]



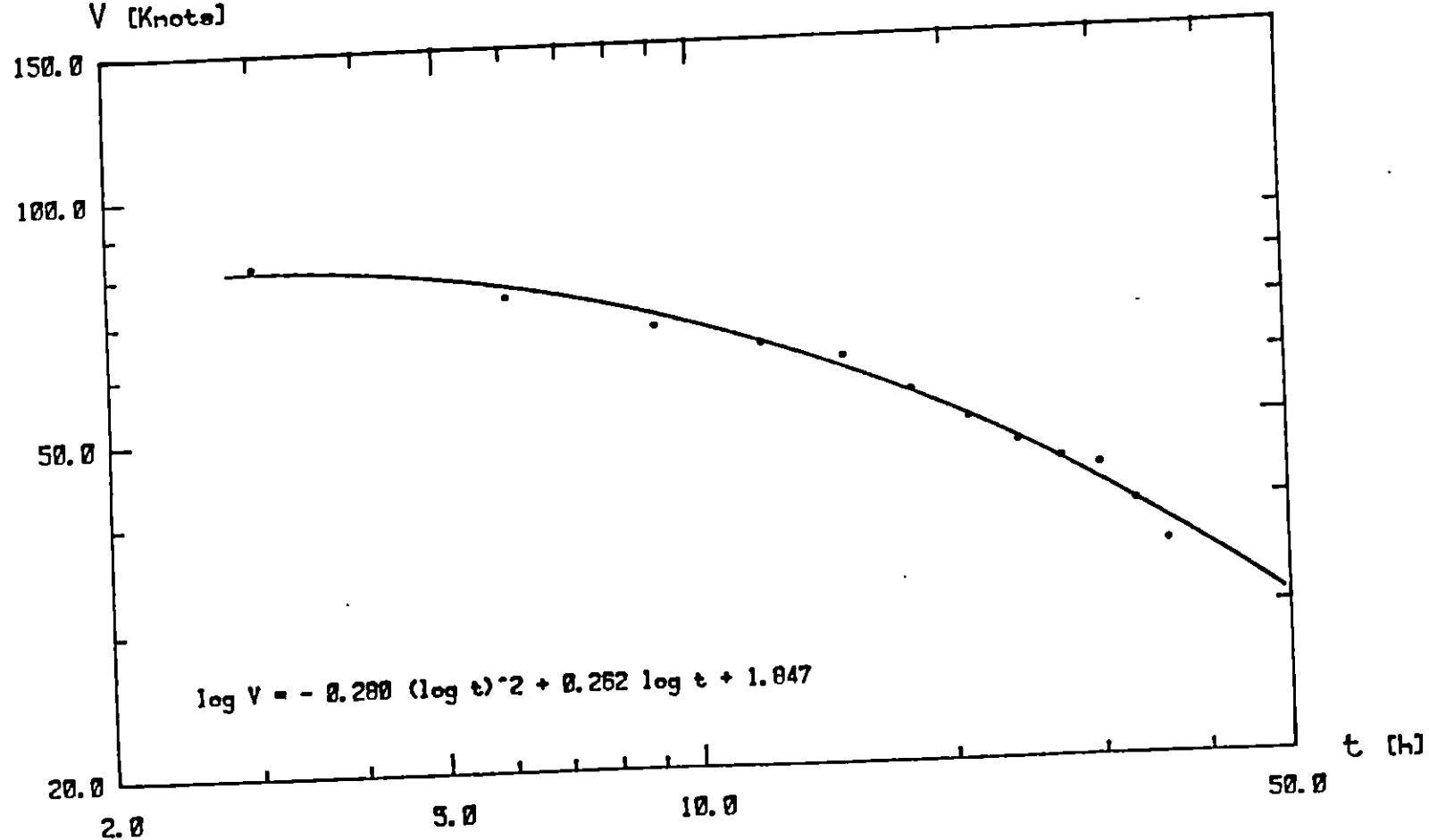
DIRECTION = NW - RETURN PERIOD = 20 years

Fig. 45

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

V [Knots]



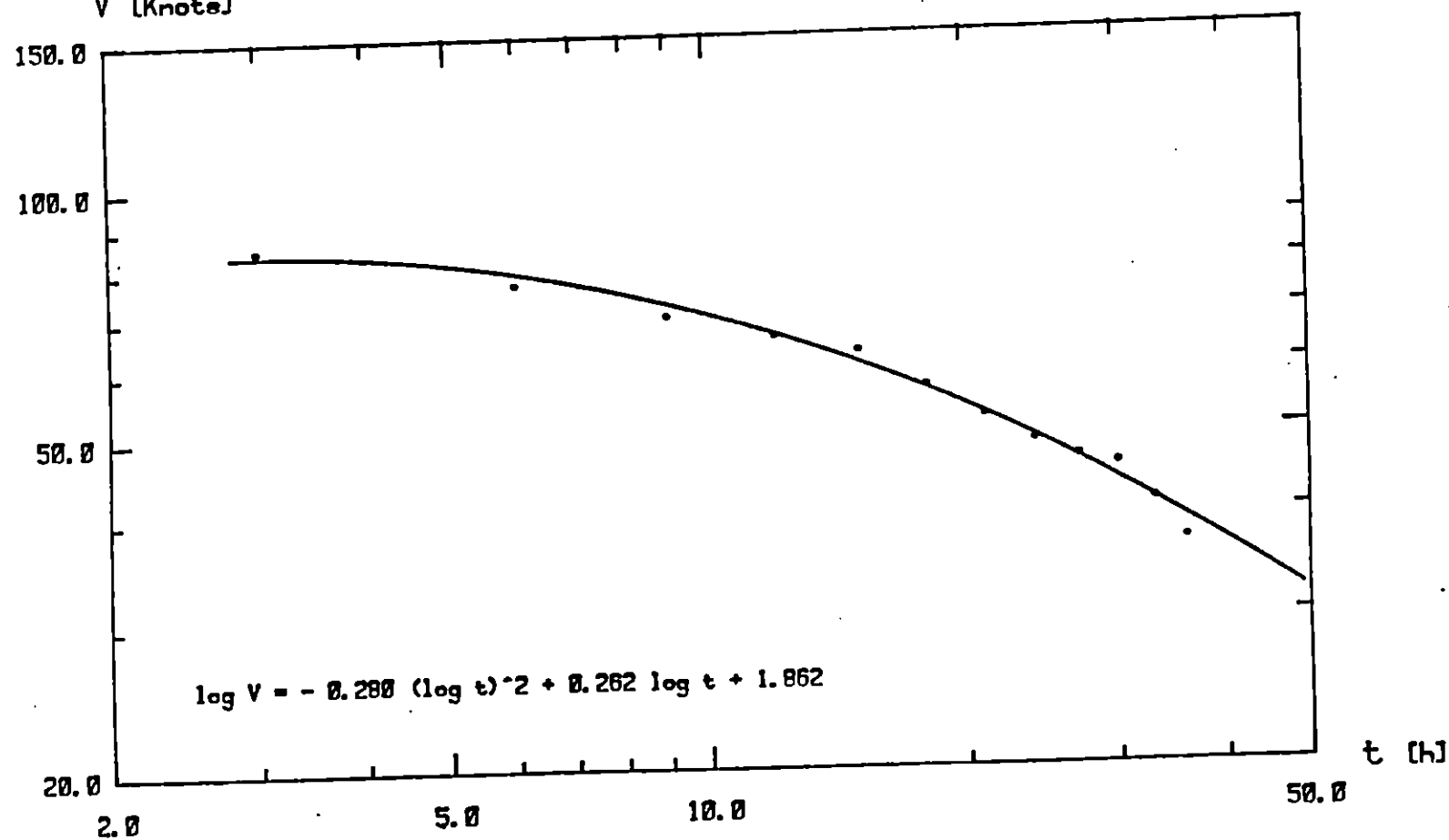
DIRECTION = NW - RETURN PERIOD = 30 years

Fig. 46

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

V [Knots]



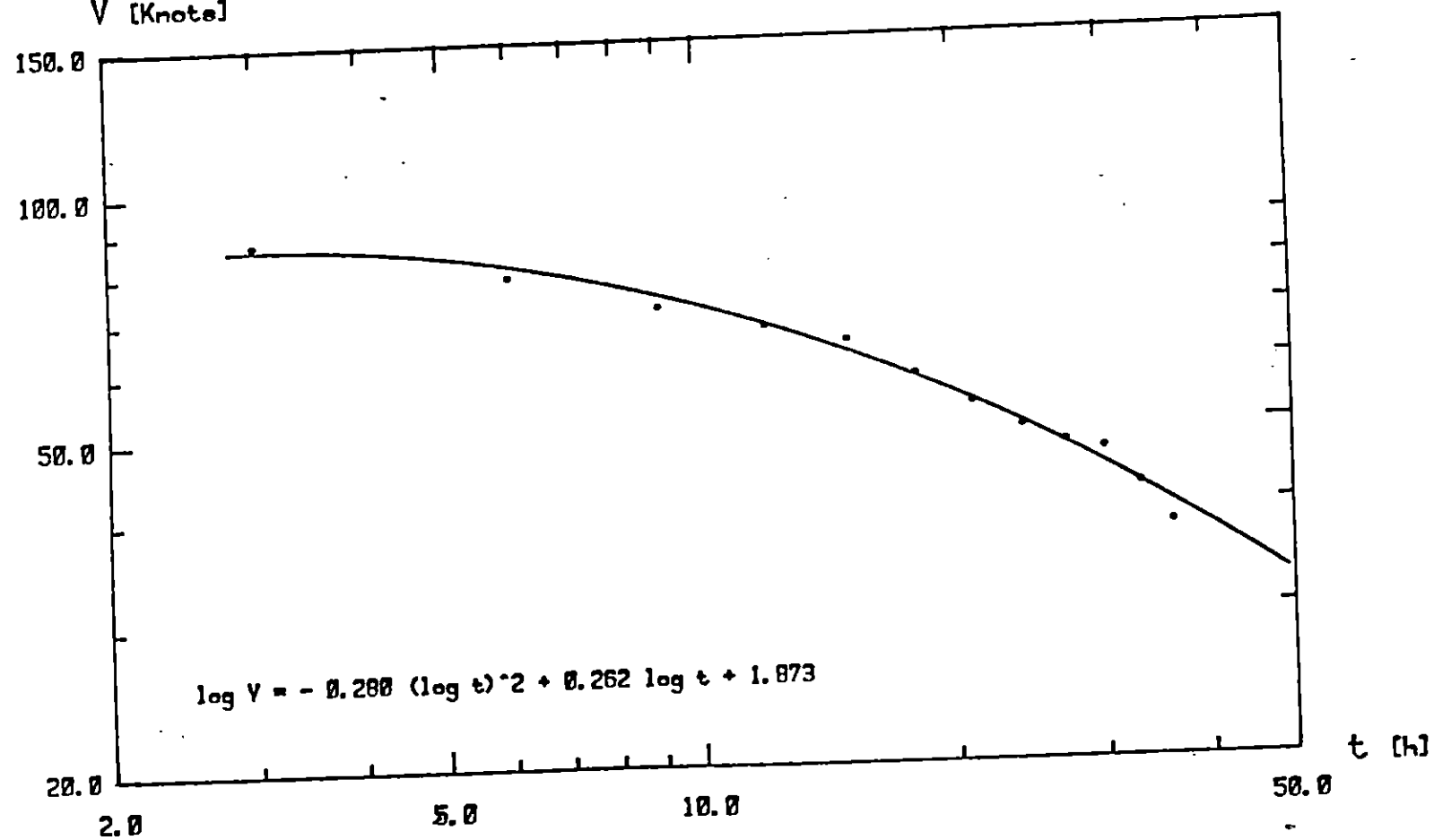
DIRECTION = NW - RETURN PERIOD = 40 years

Fig. 47

EXTRAPOLATION OF WIND DATA

STATION OF USTICA

V [Knots]



DIRECTION = NW - RETURN PERIOD = 50 years

Fig. 48

EXTRAPOLATION OF WIND DATA
STATION OF USTICA (3/I)

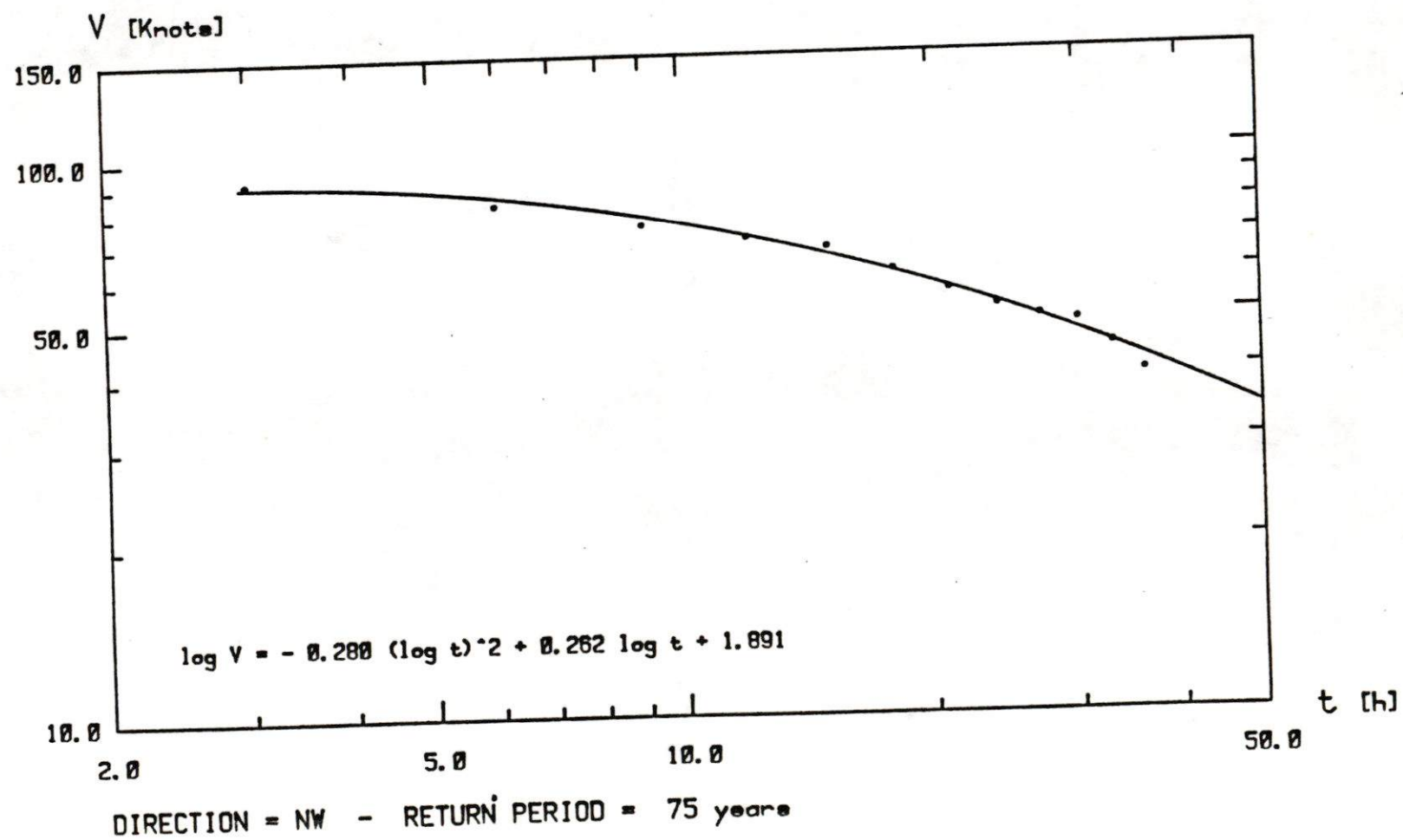


Fig. 49

EXTRAPOLATION OF WIND DATA
STATION OF USTICA

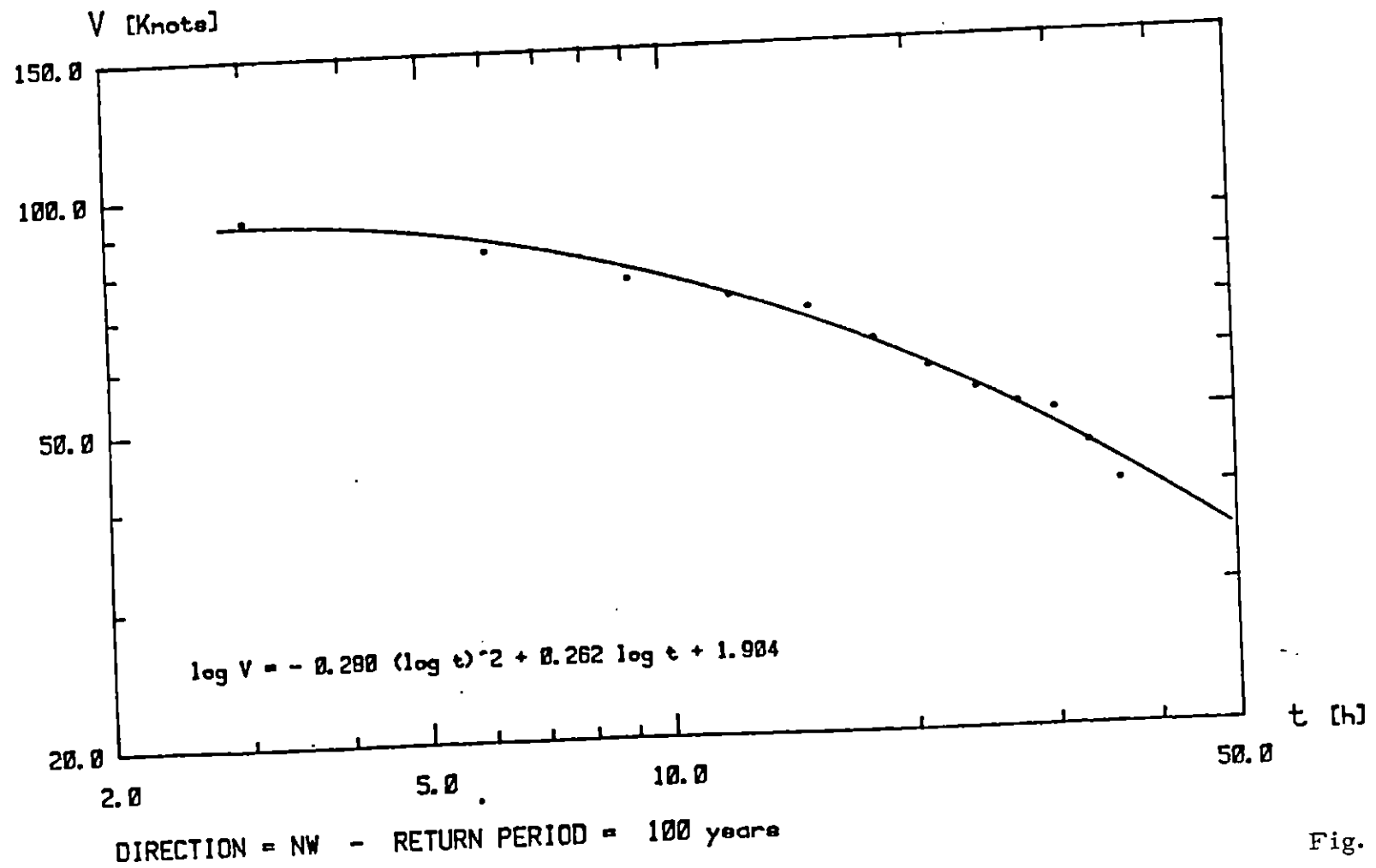
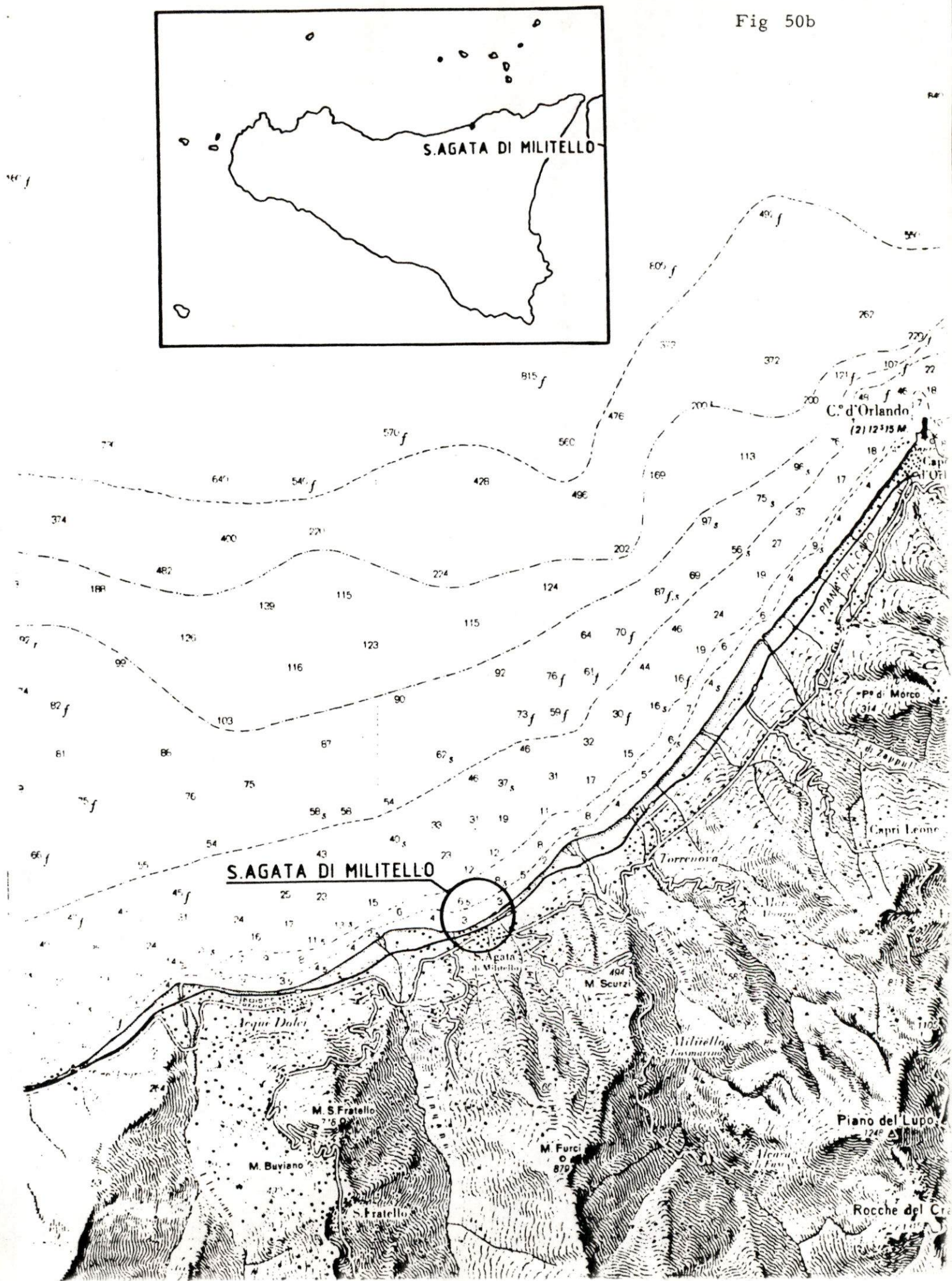
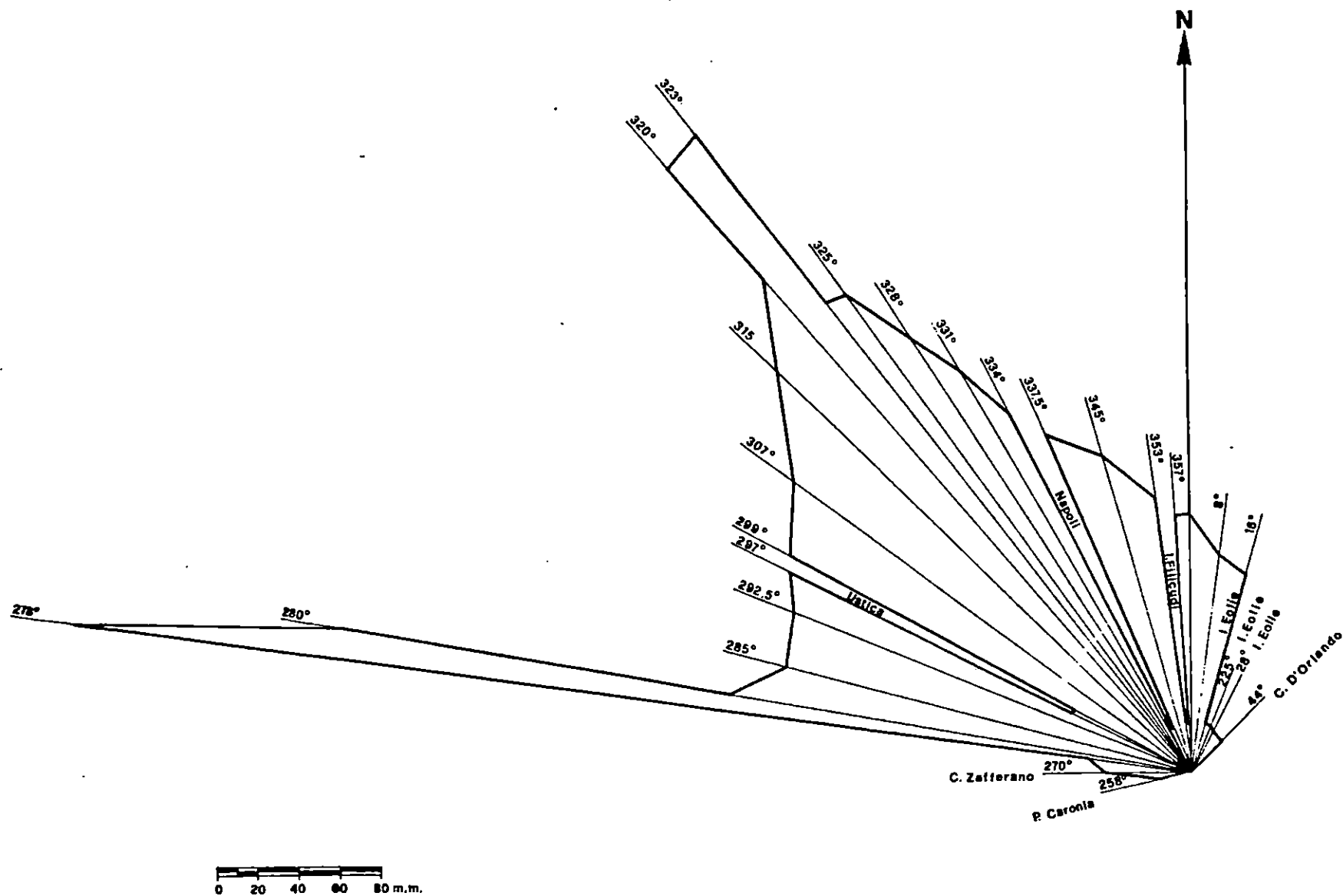


Fig. 50

PL





Distanze di mare libero Sant'Agata di Militello

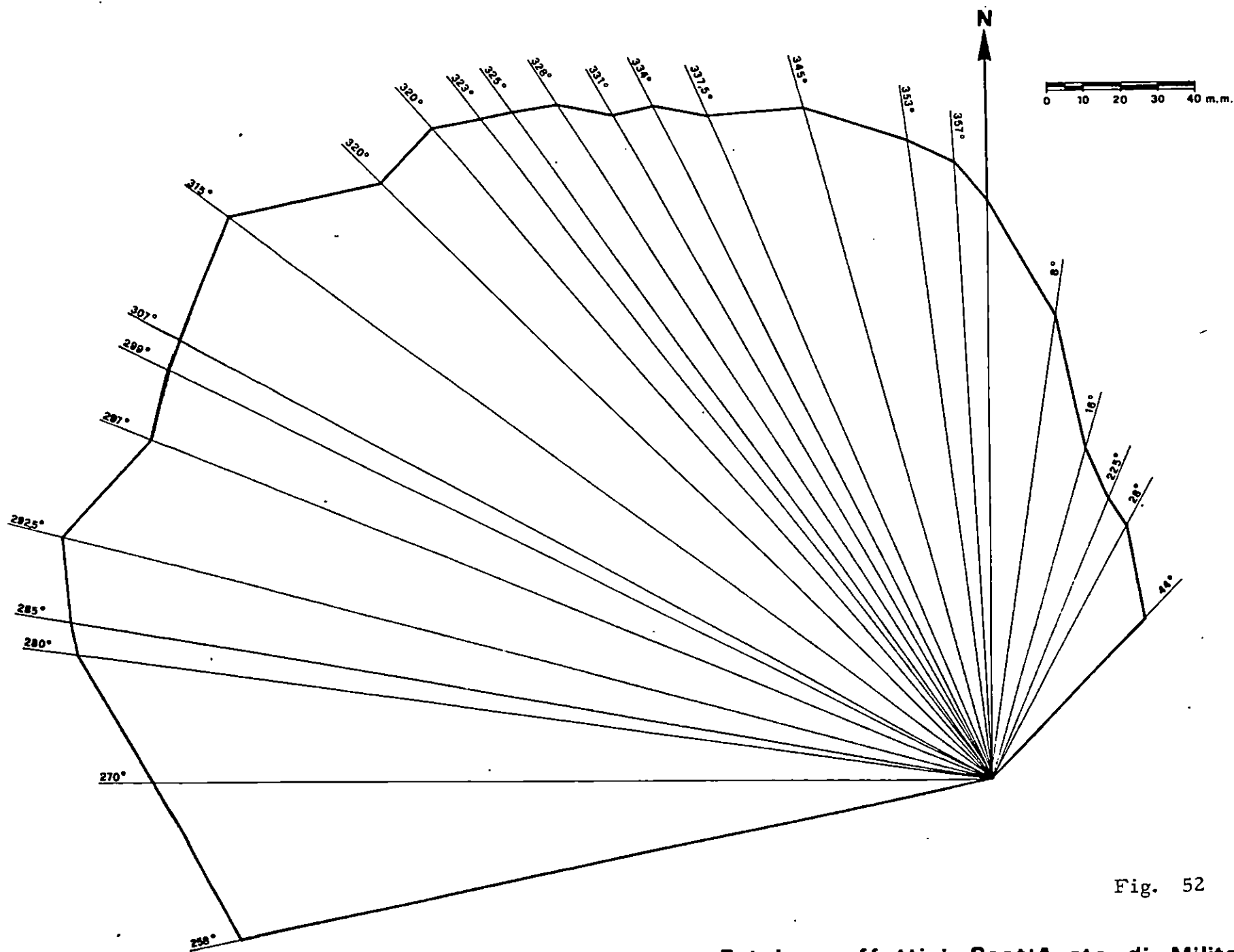


Fig. 52

Fetches effettivi Sant'Agata di Militello

Fig. 53

REFRACTION DIAGRAM OF S. AGATA

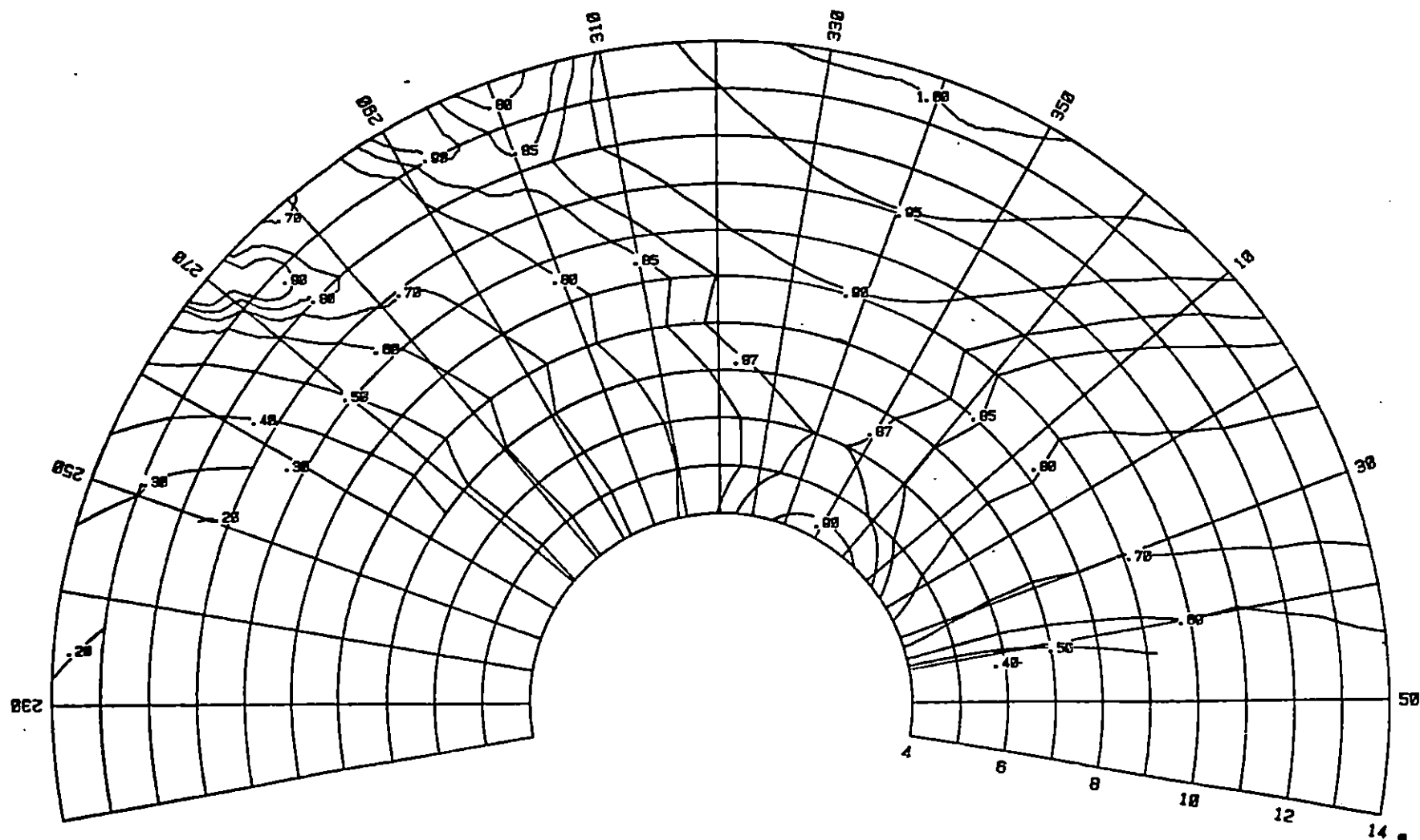


Fig. 54

ROTATIONS DIAGRAM OF S. AGATA

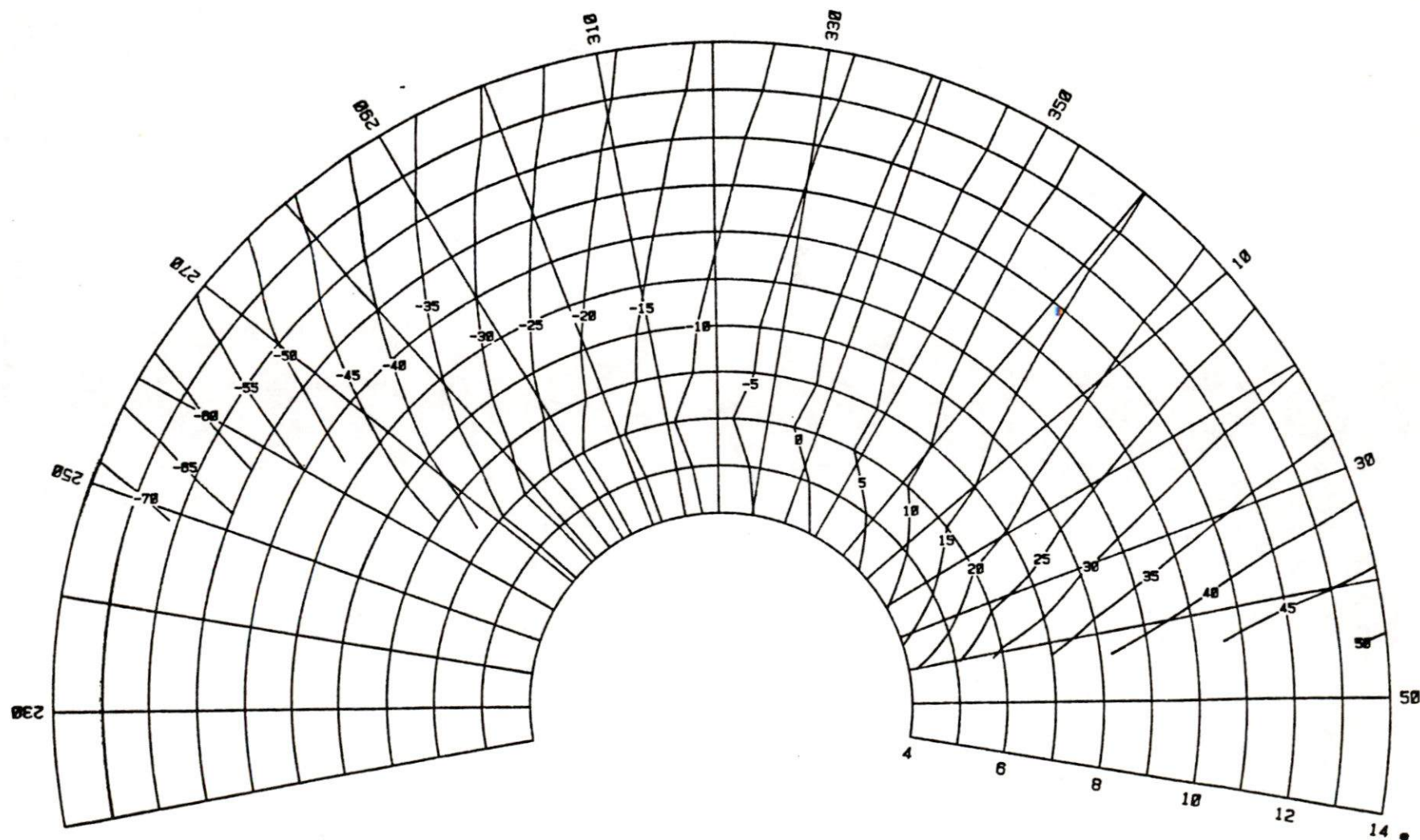
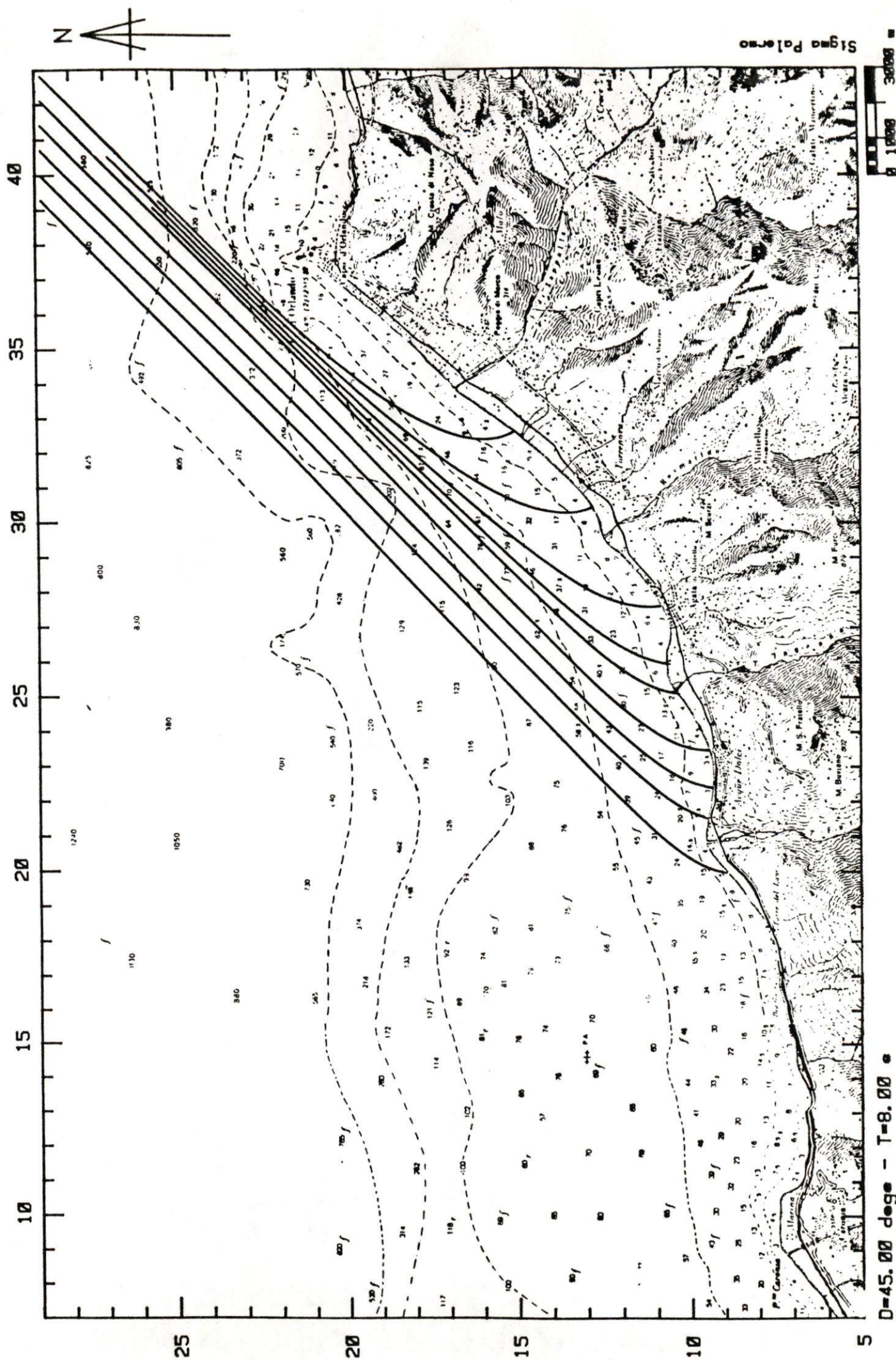
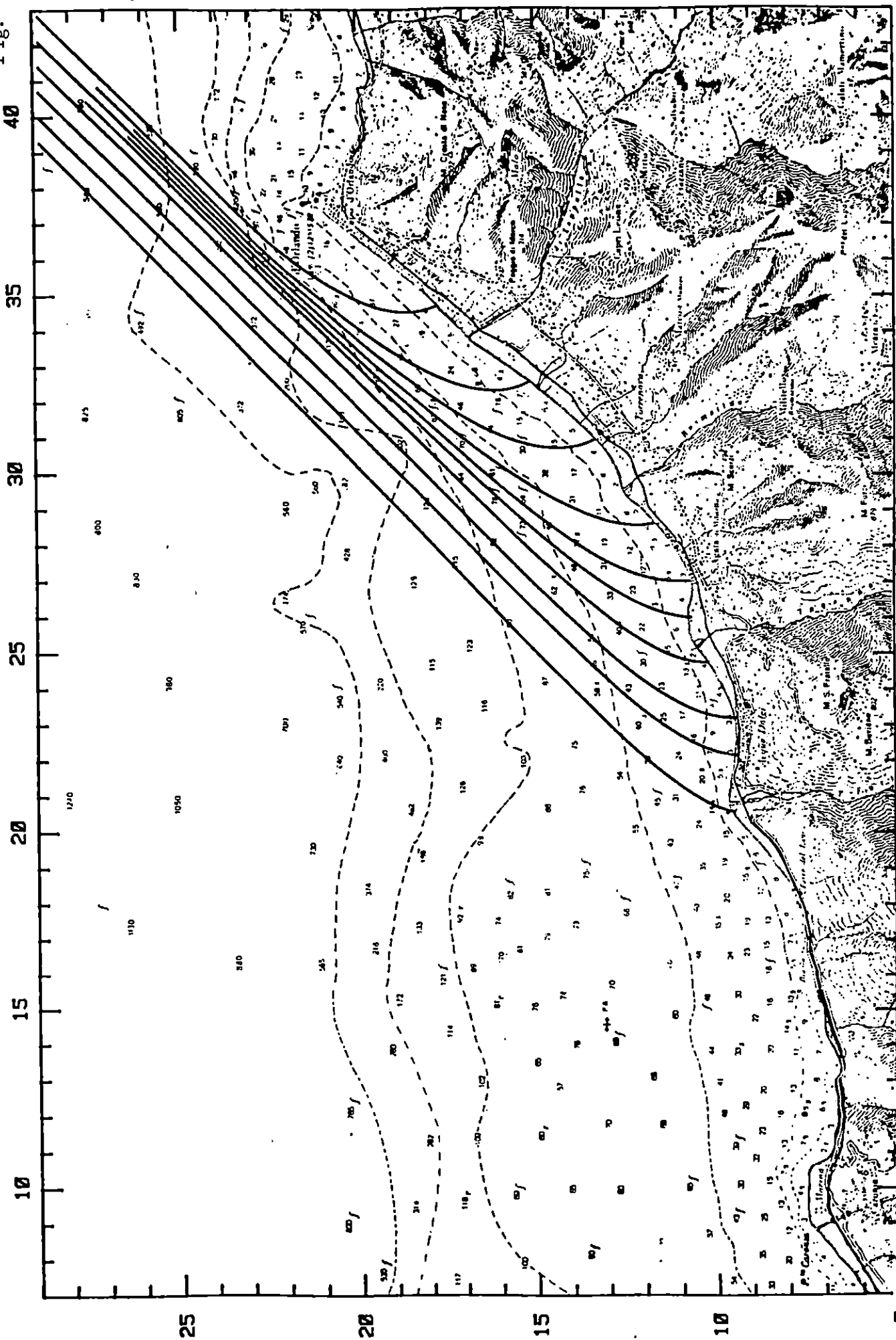


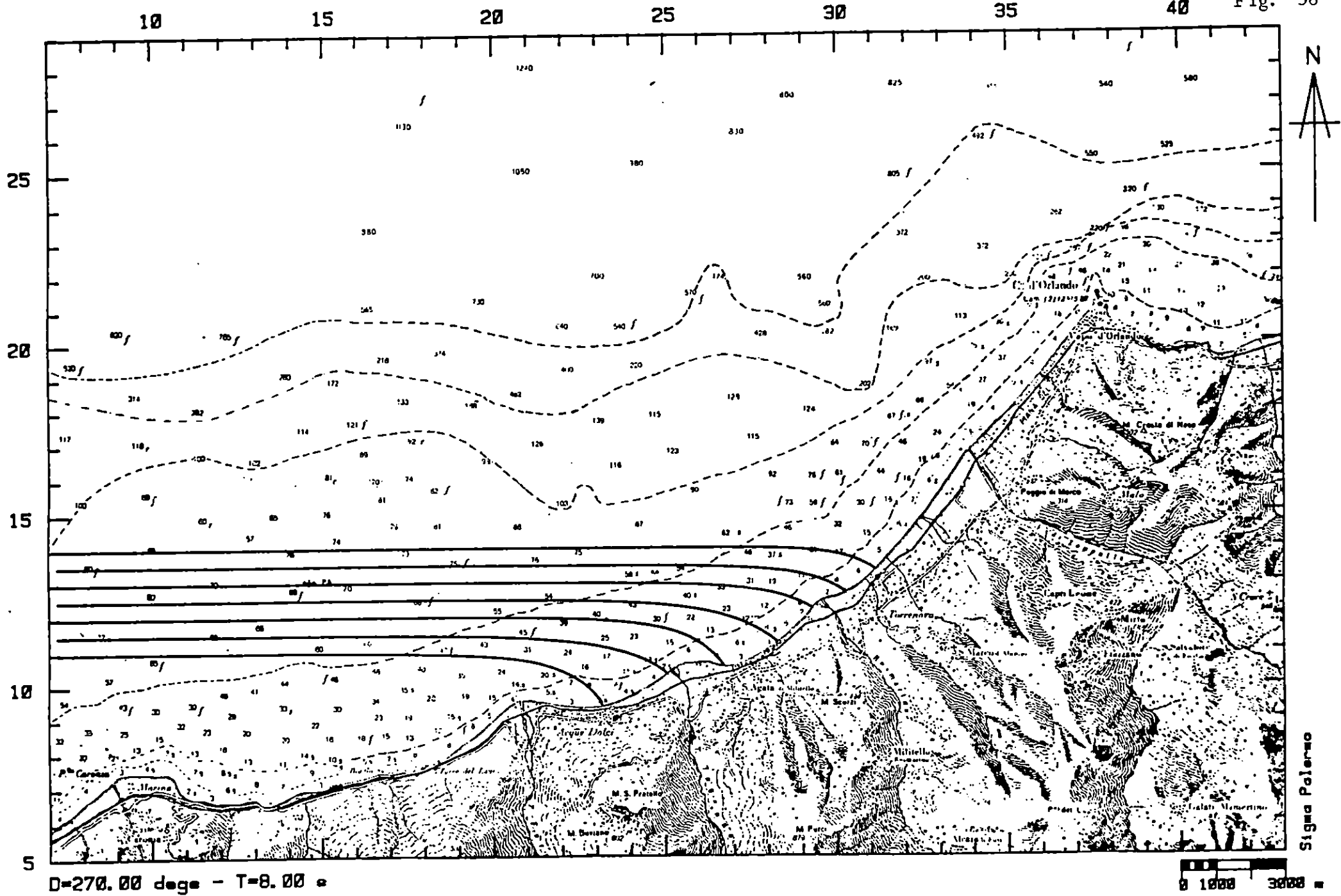
Fig. 55



D=45.00 degs - T=8.00 s



D=45.00 degs - T=10.00 °



D=270.00 degs - T=8.00 °

Sigma Palermo

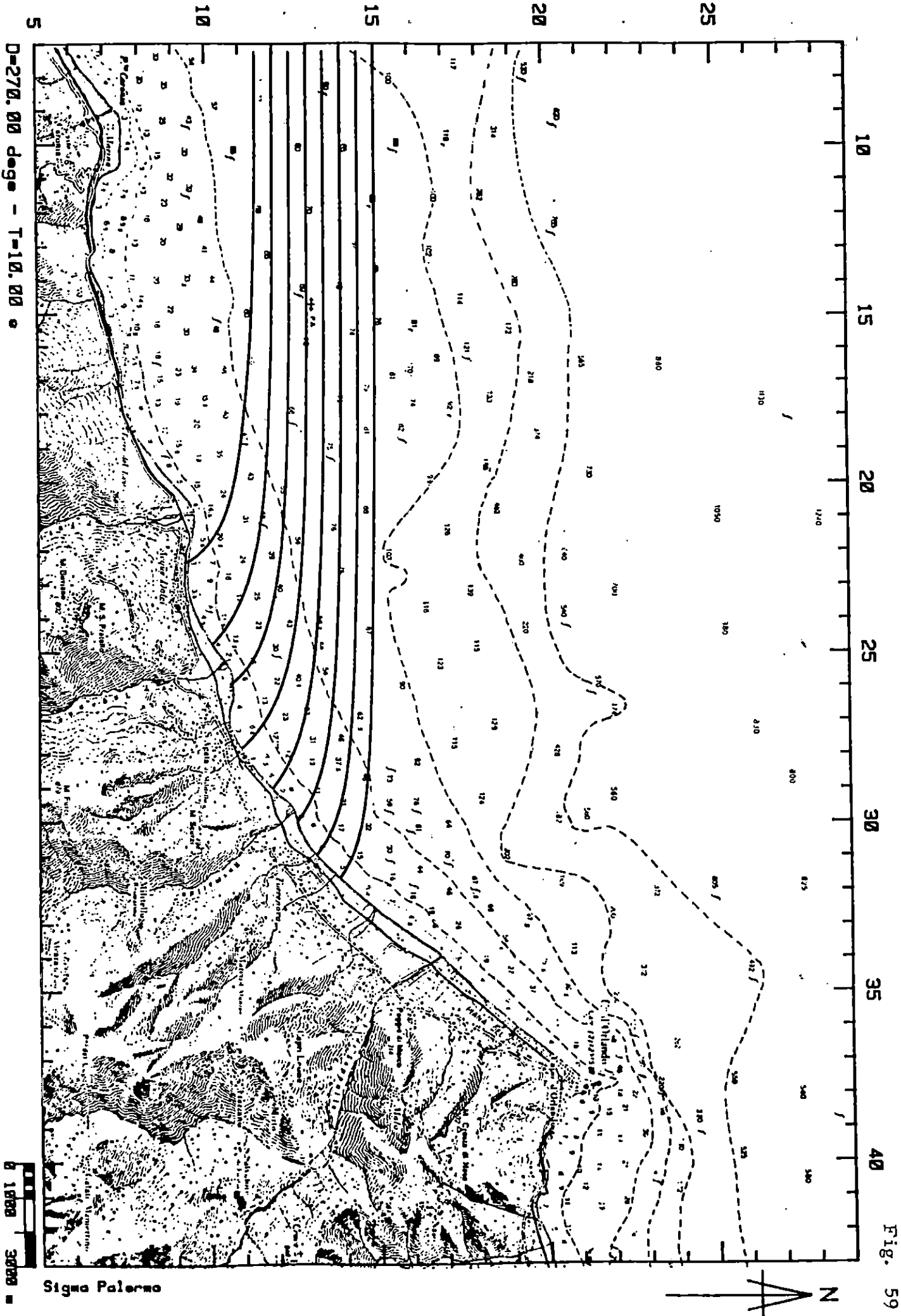


Fig. 59

D-270.00 degs - T-10.00

0 1000 3000

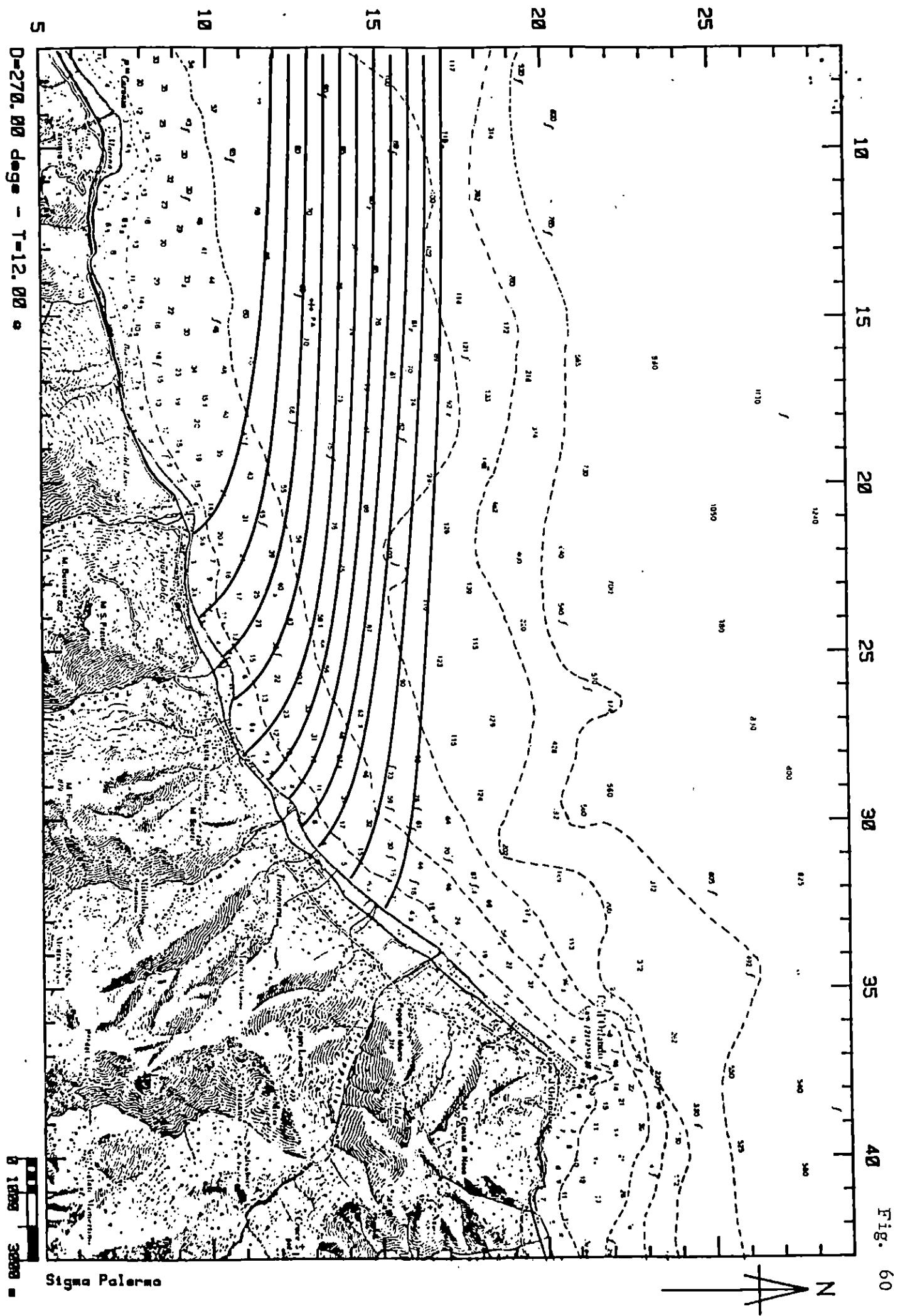


Fig. 60

Fig. 61

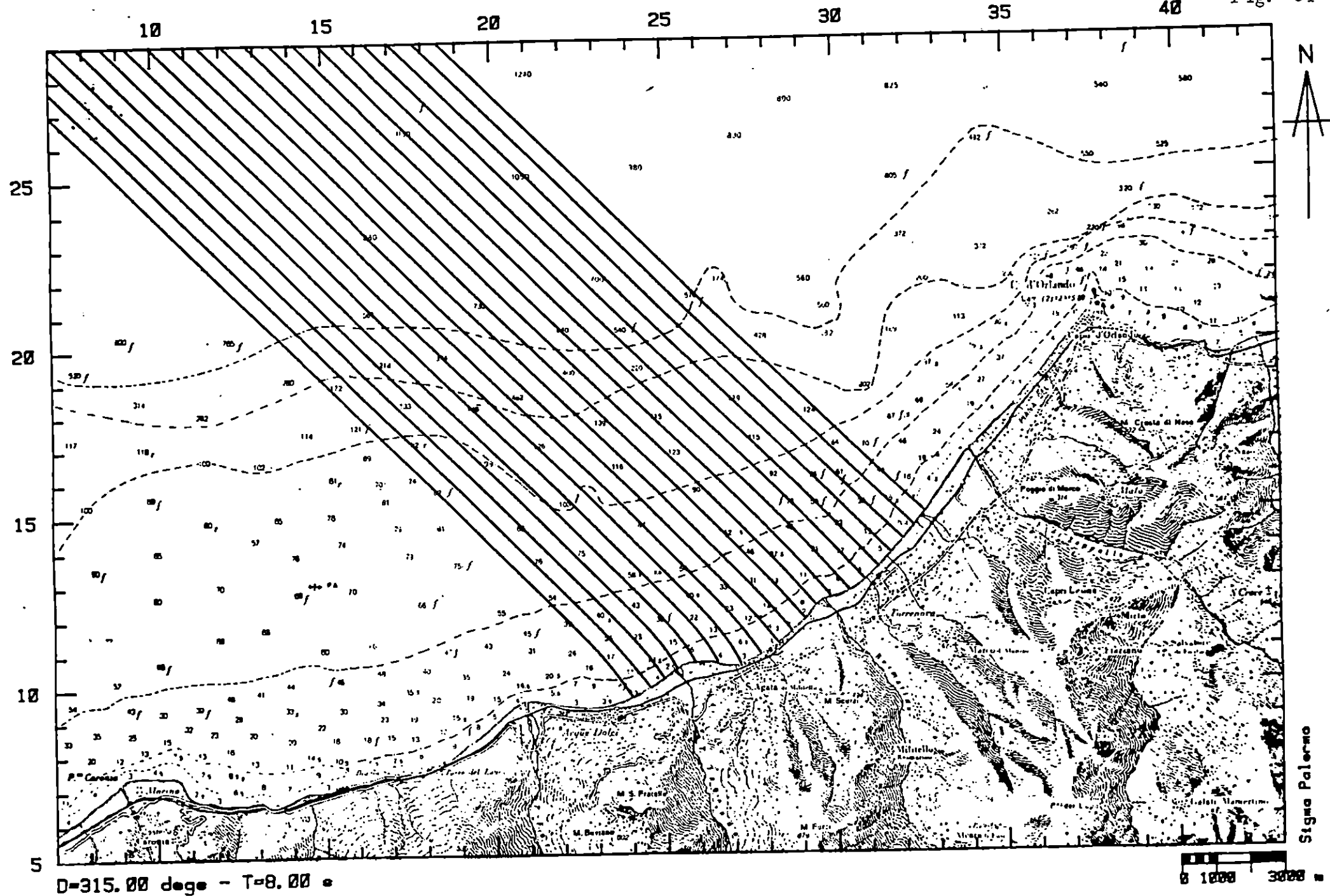


Fig. 62

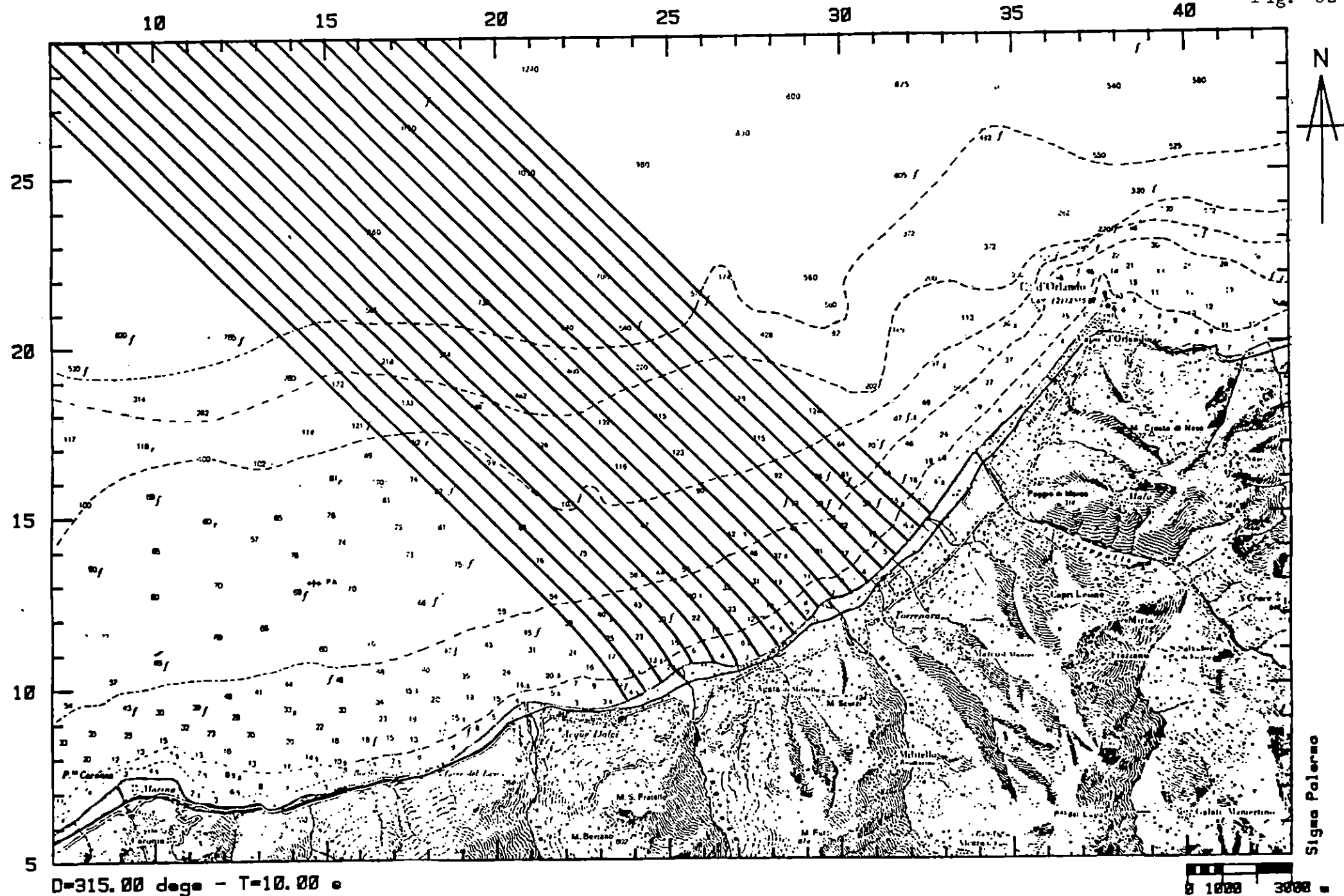
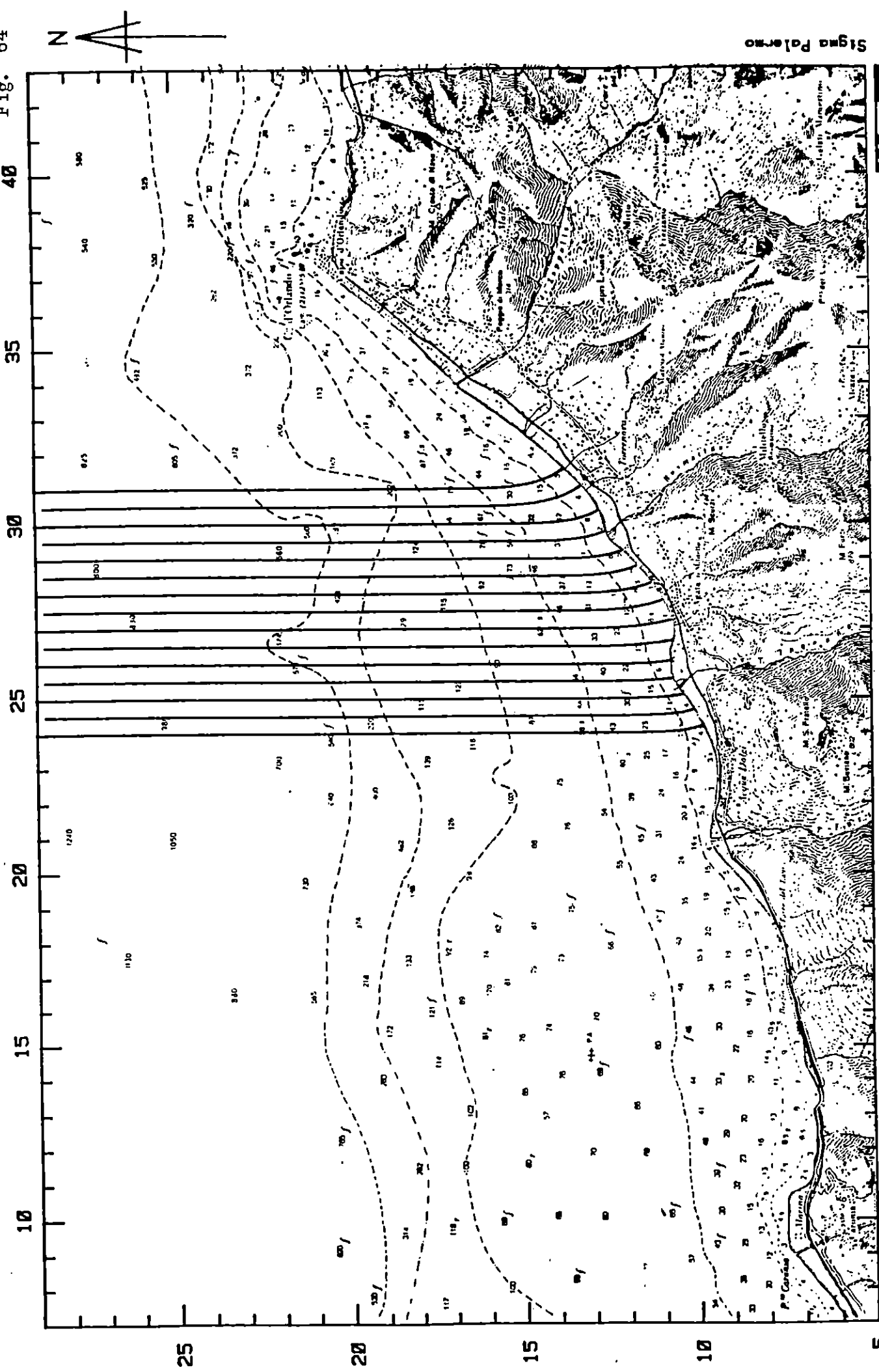


Fig. 64



Sigma Palermo

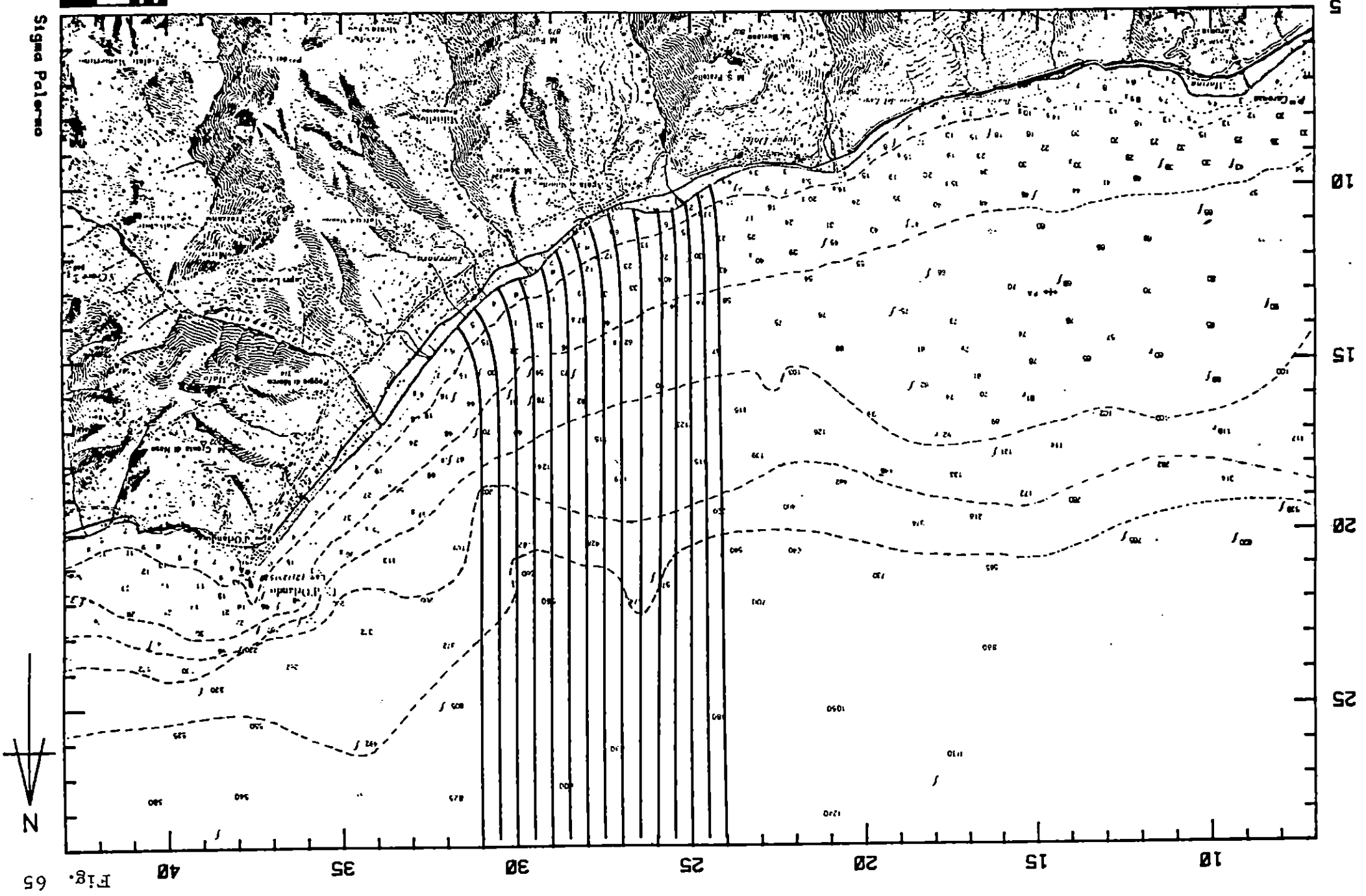
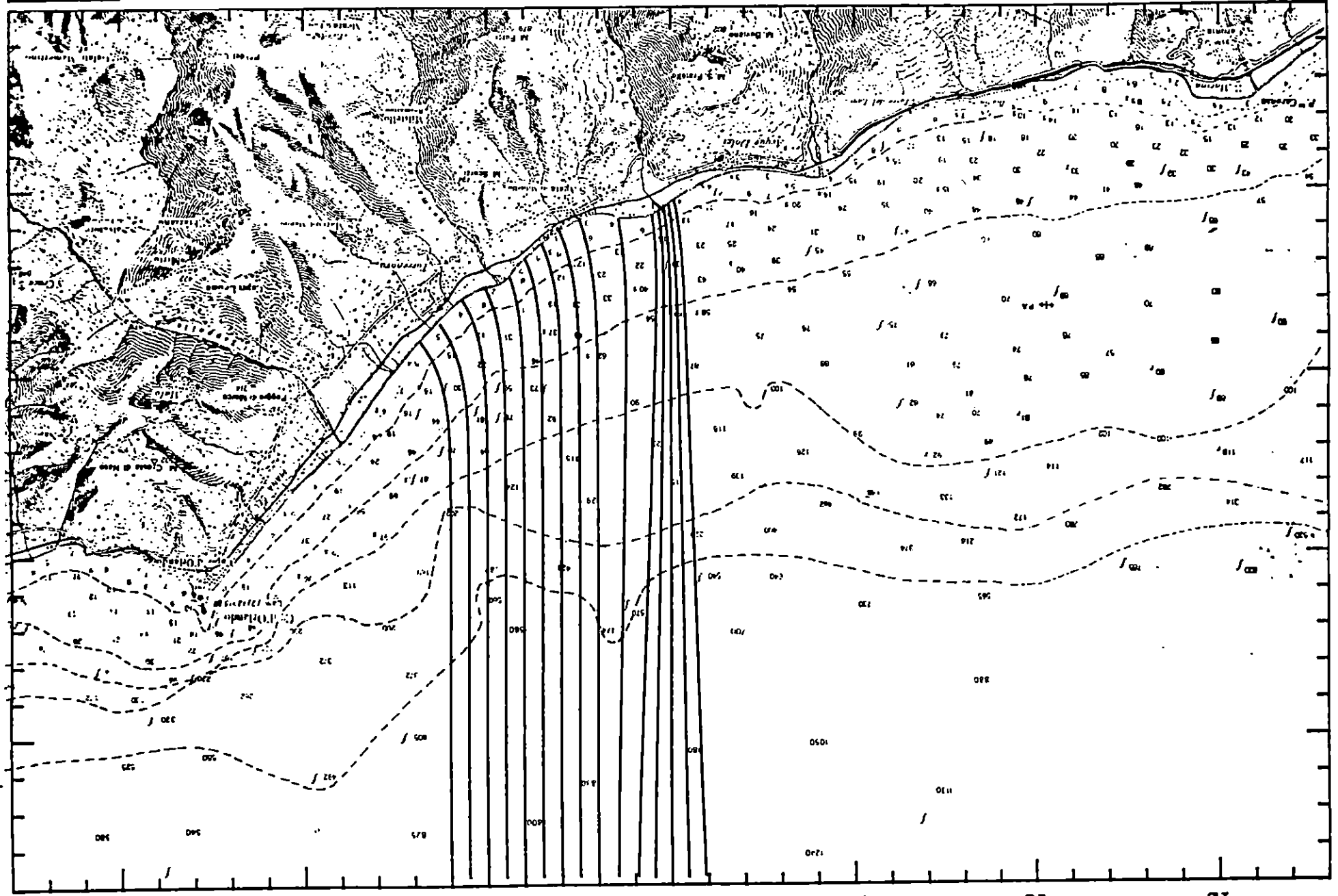


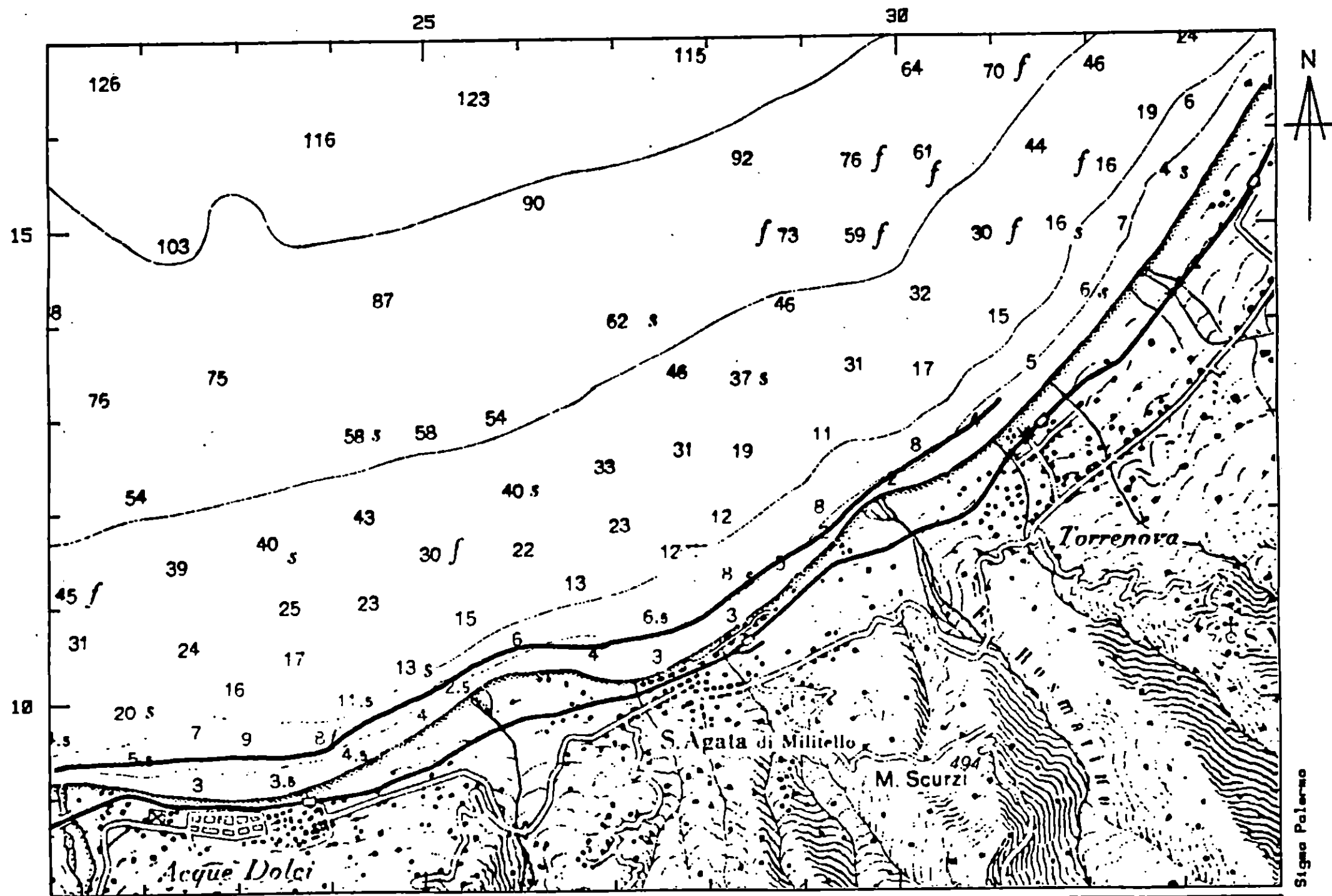
Fig. 65

Sigmo Palermo



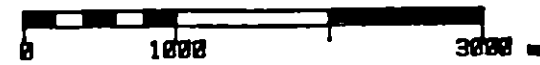
Fig. 66





D=45.00 deg - T=7.30 - H=3.39 m

Fig. 67

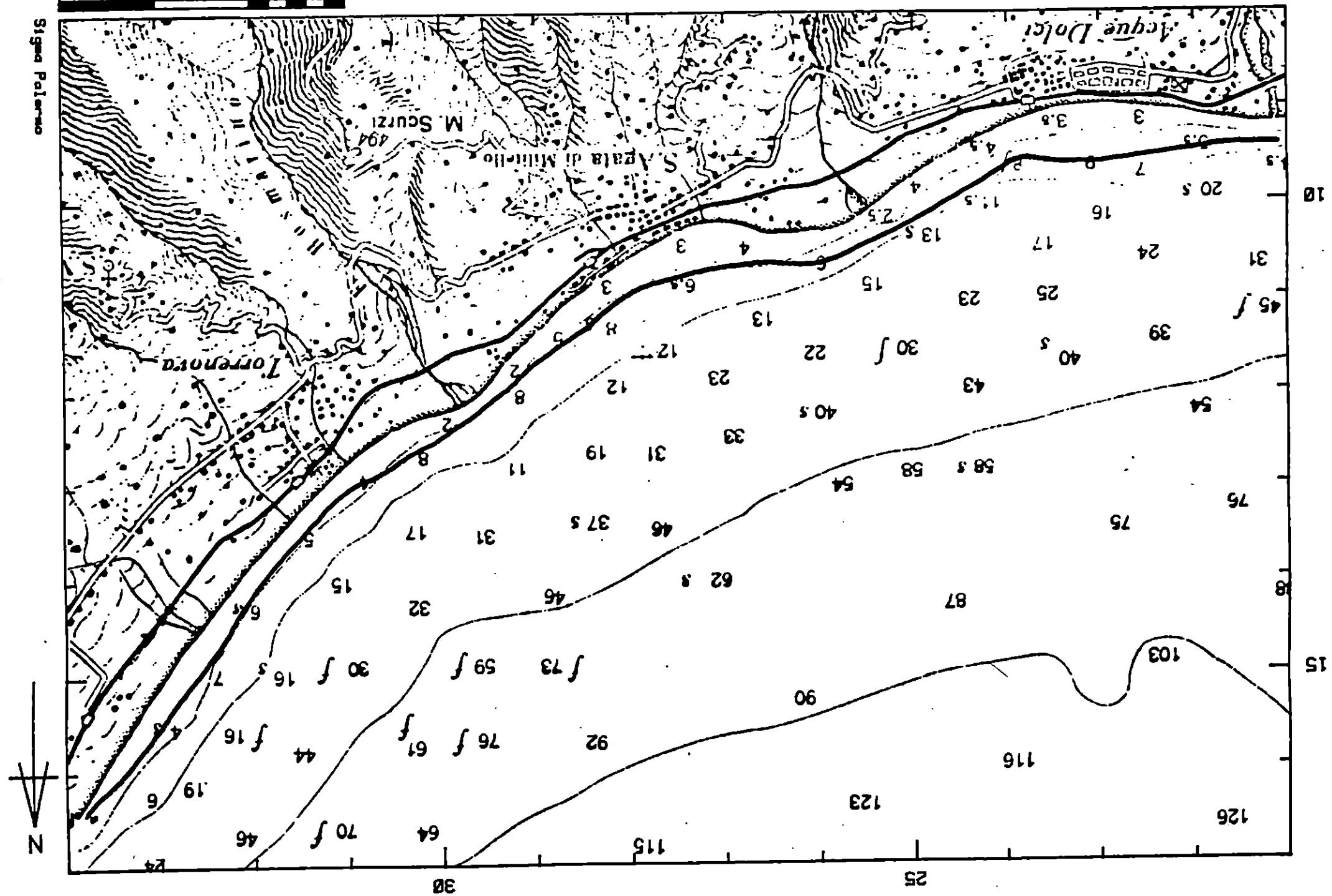


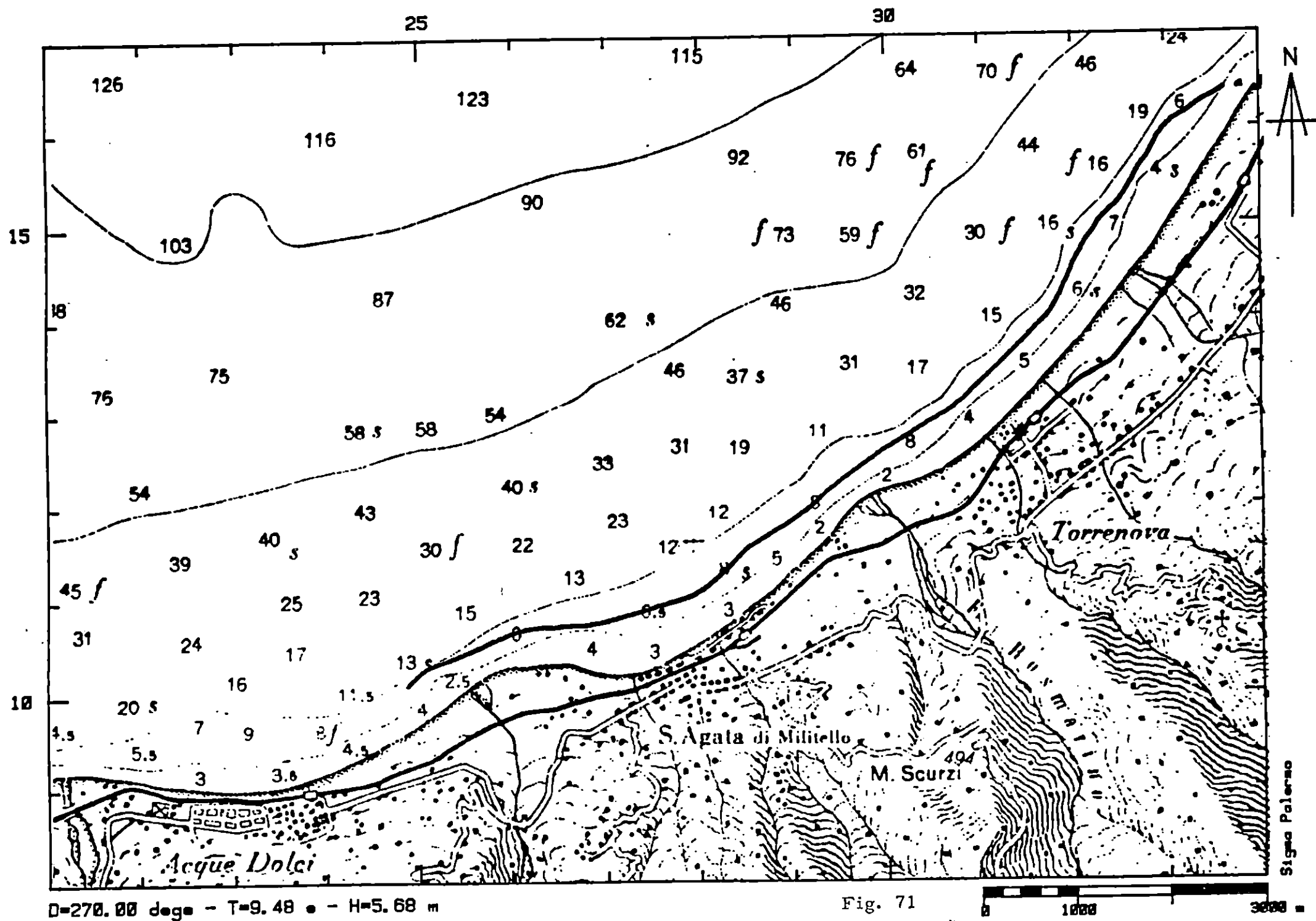
0-45.00 degs - T=8.89 - H=5.10 m

Fig. 69

1000 3000

Sigra Palermo





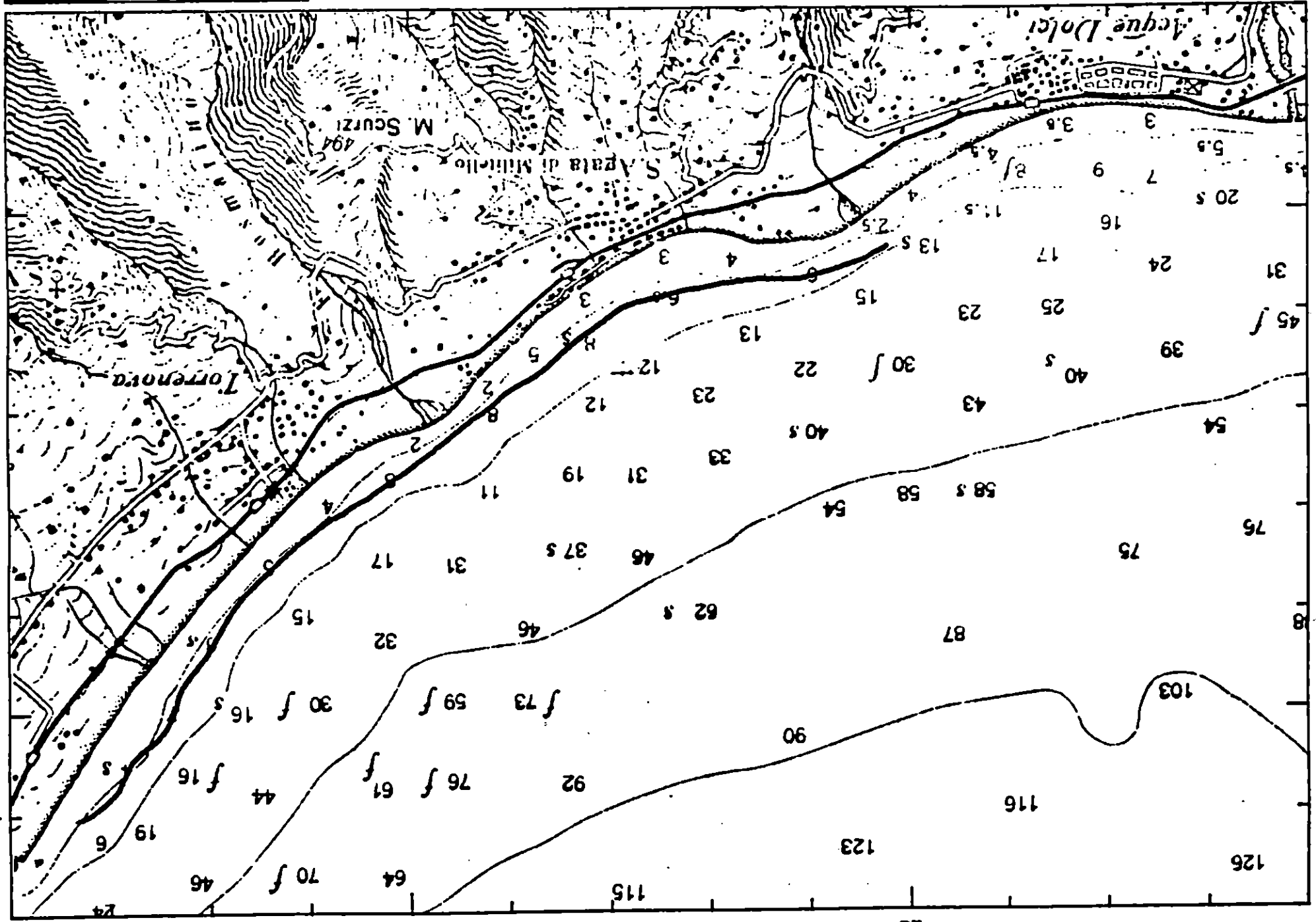
D=270.00 deg - T=9.93 - H=6.20 m

Fig. 72

1000

3000

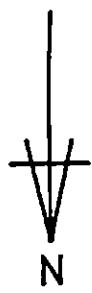
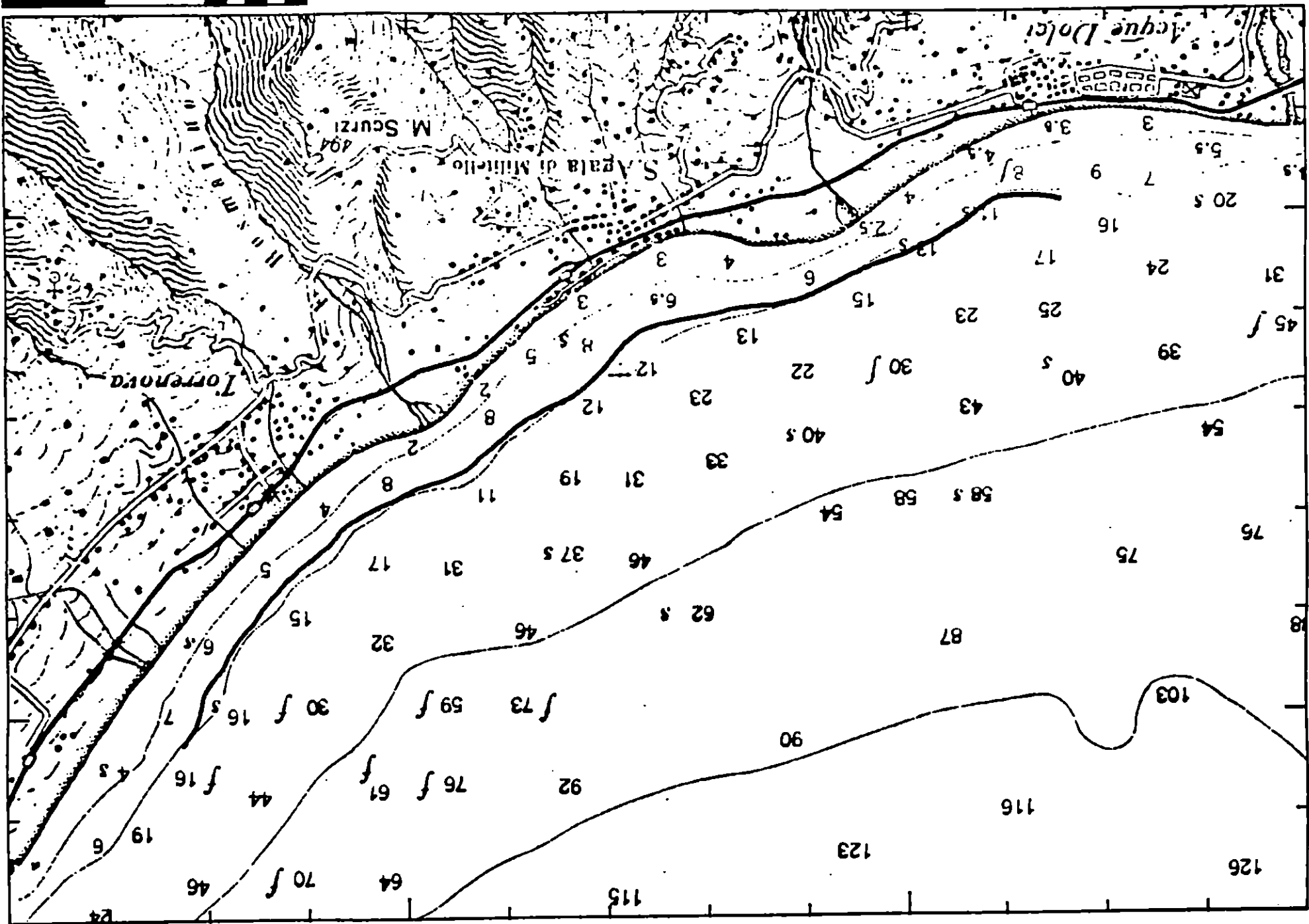
Sigra Palermo



D=315.00 doge - T=10.88 - H=7.38 m

Fig. 74

Sighe Palermo

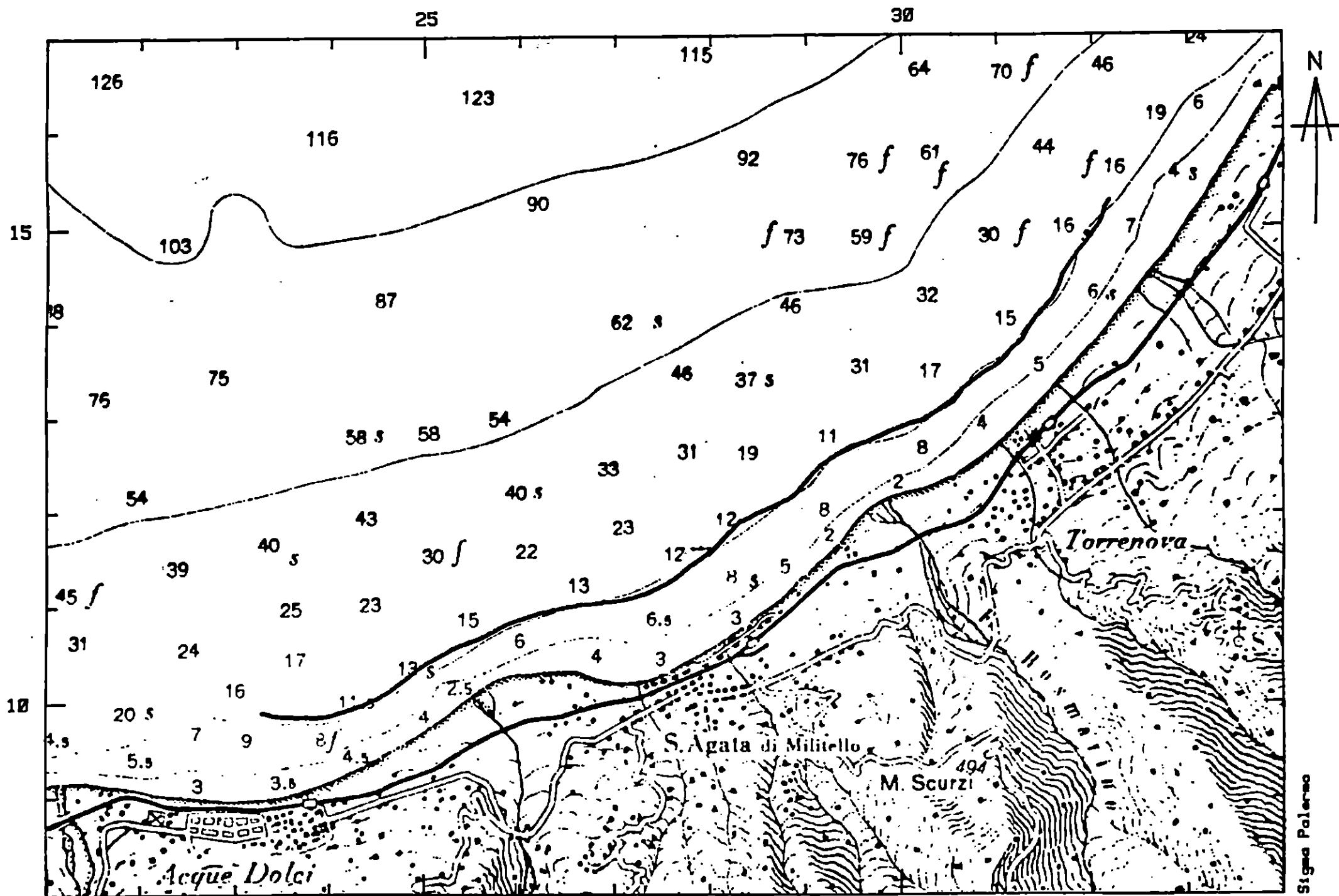


30

25

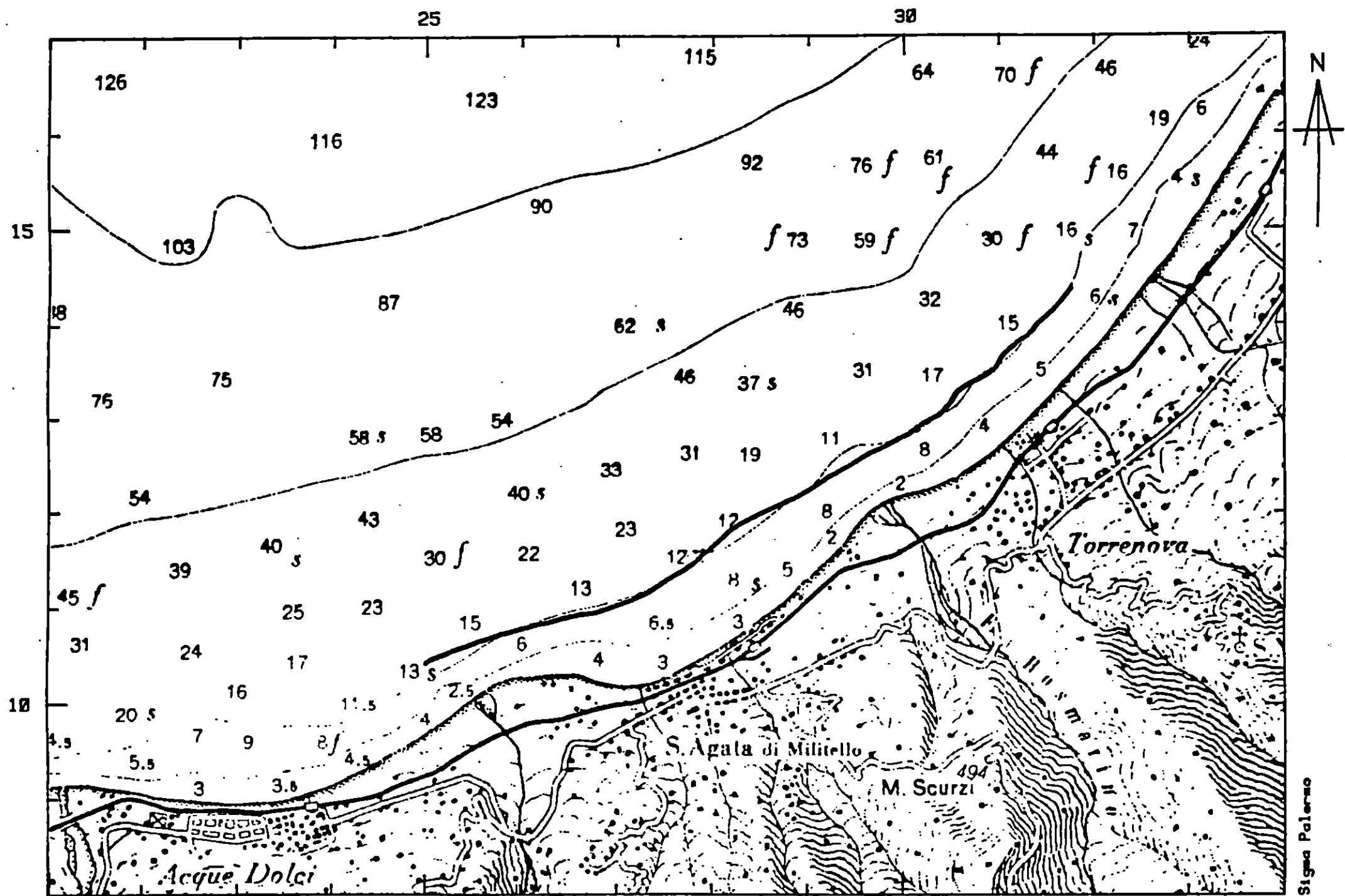
10

15



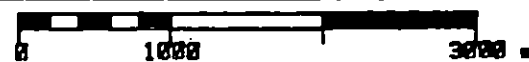
D=315.00 degs - T=11.27 ° - H=8.10 m

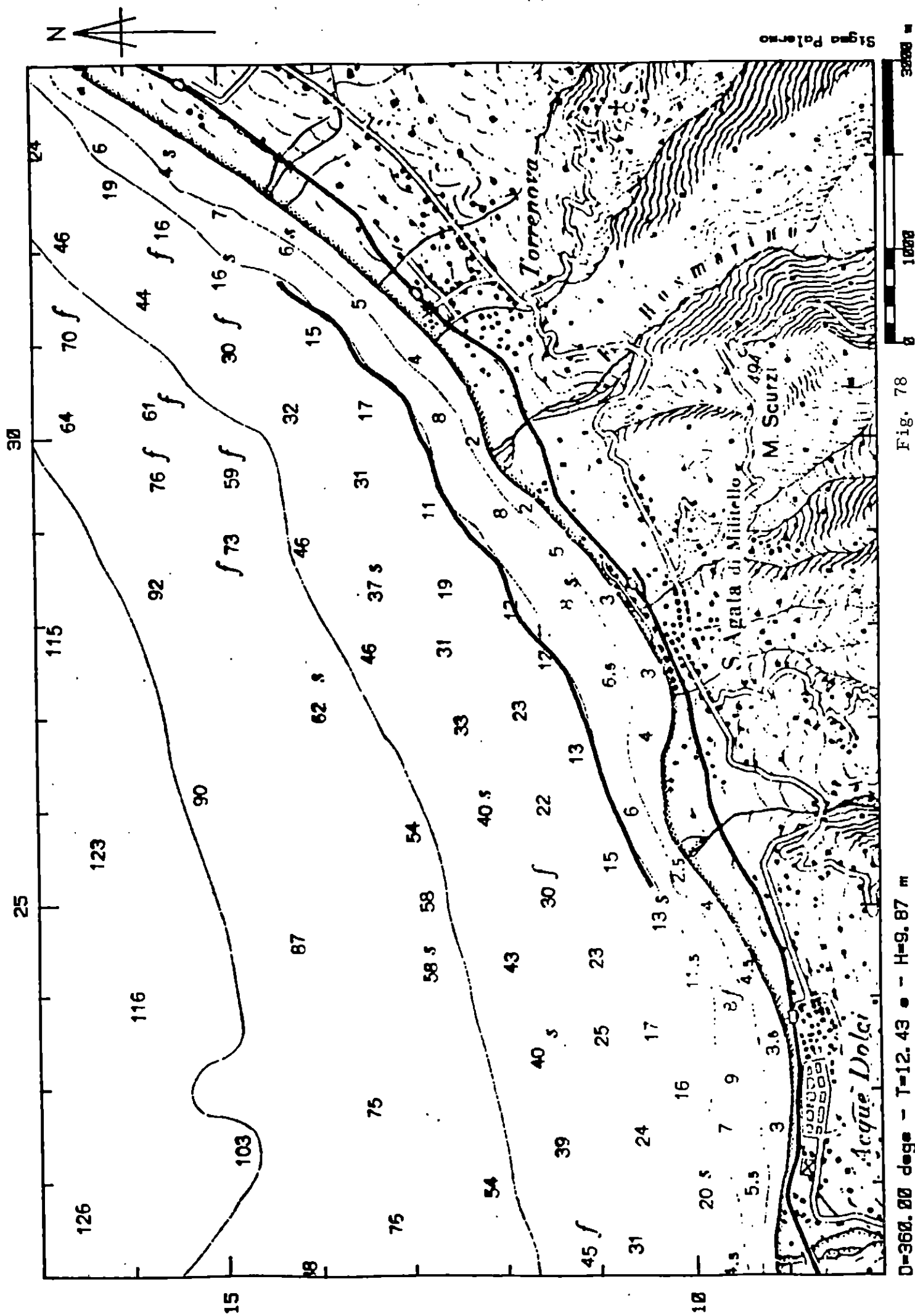
Fig. 75



D=360.00 deg - T=11.65 ° - H=8.63 m

Fig. 77





D=360.00 degs - T=12.43 ° - H=9.87 m

Fig. 78

Fig. 79

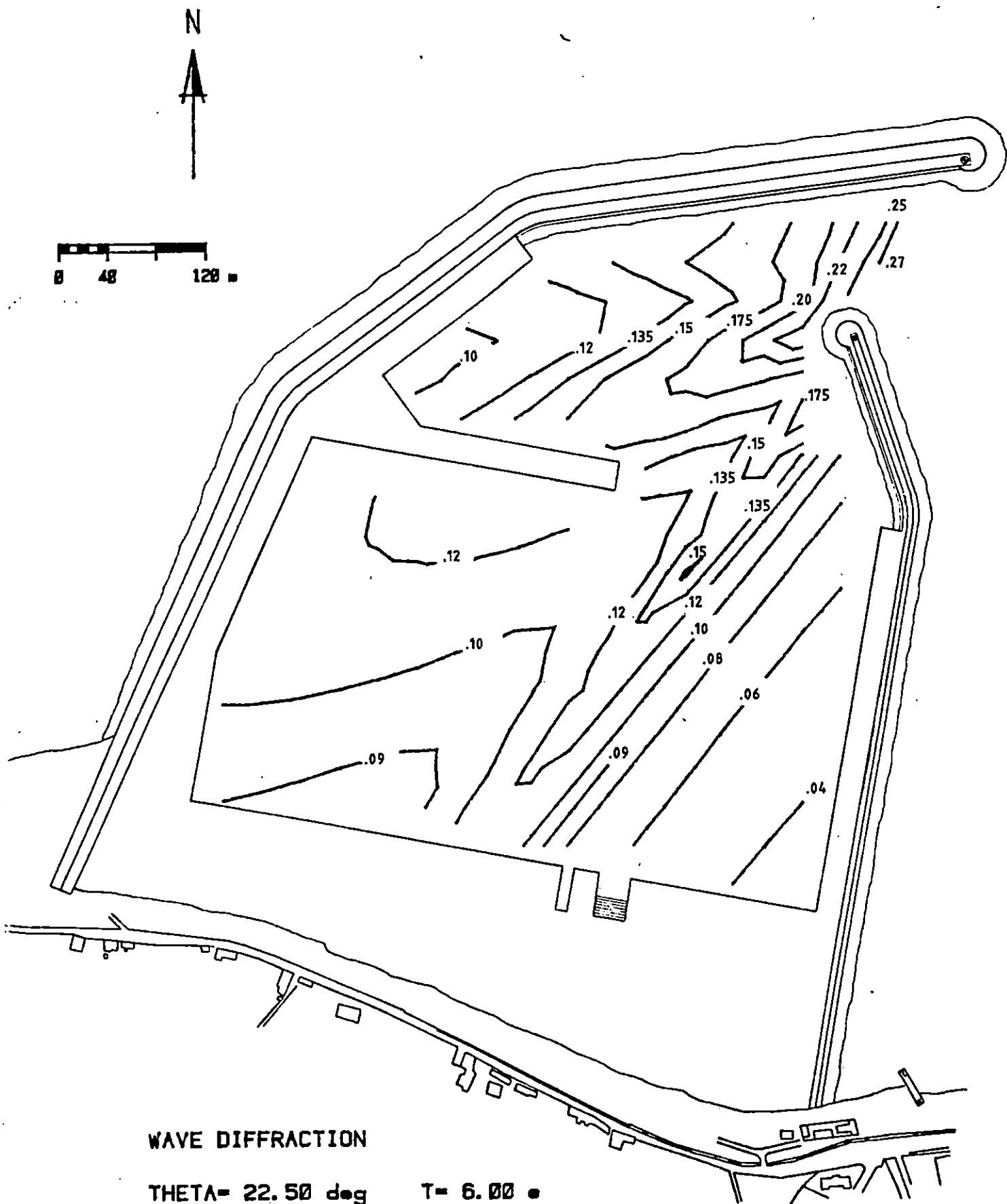


Fig. 80

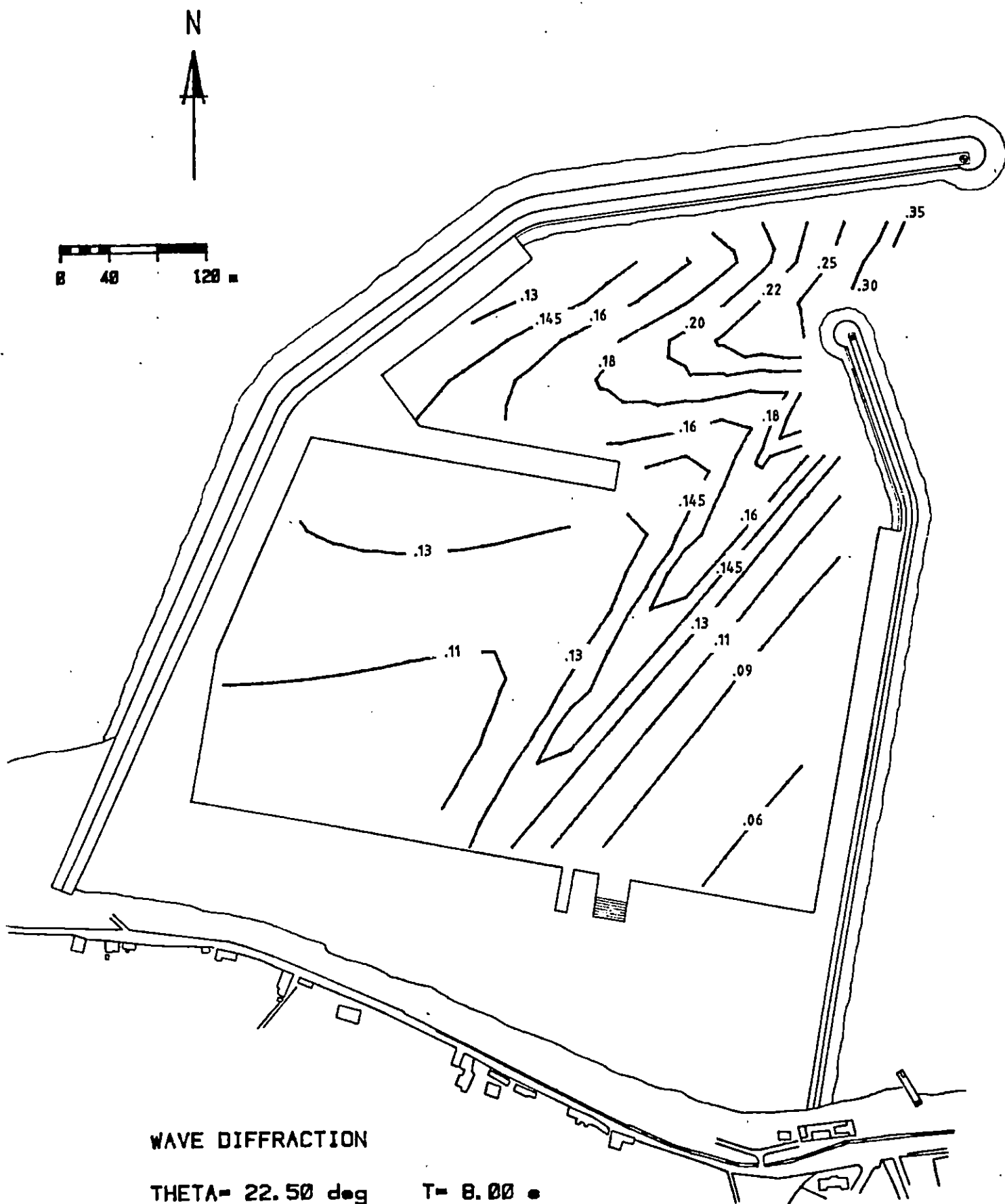


Fig. 81

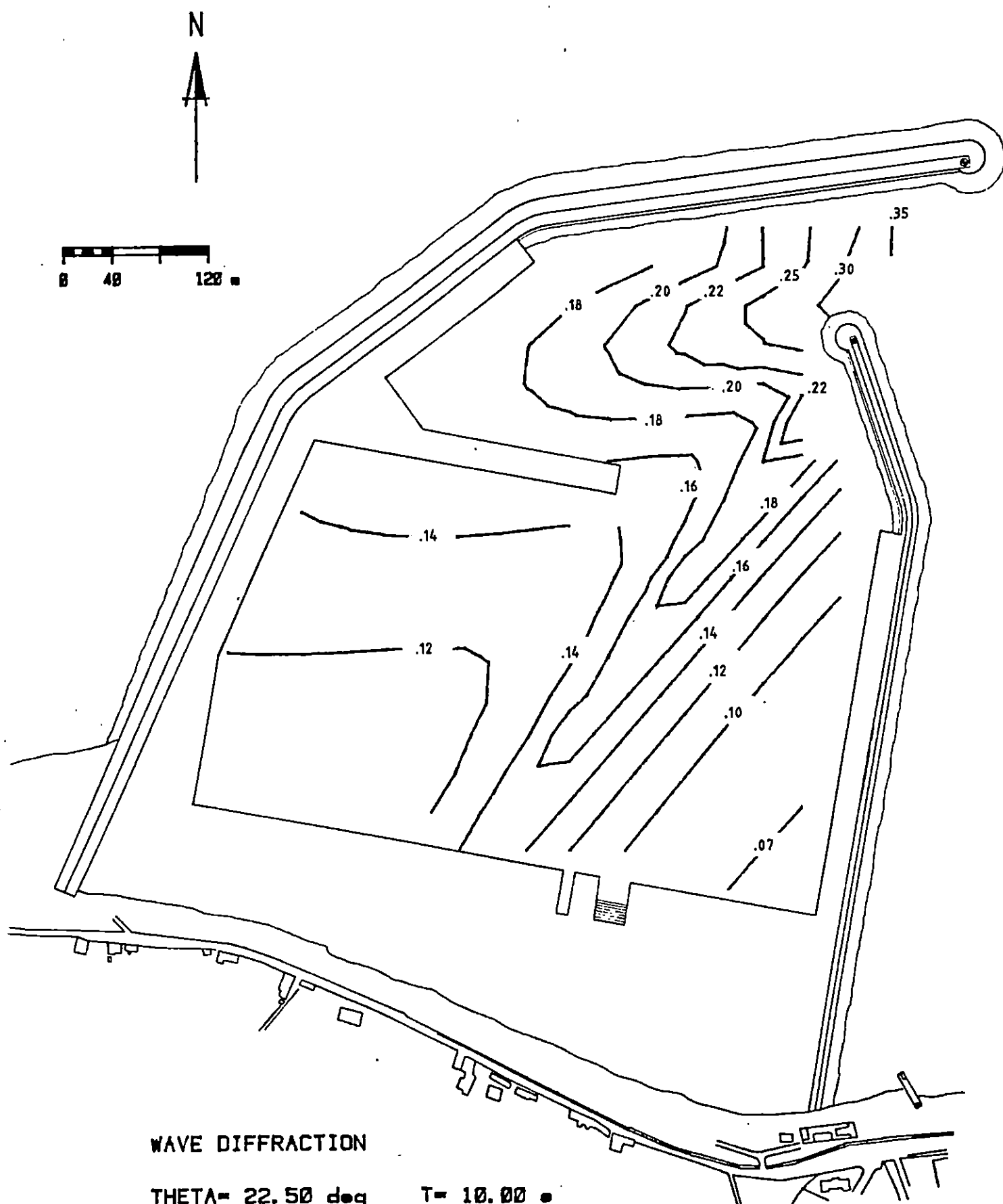


Fig. 82

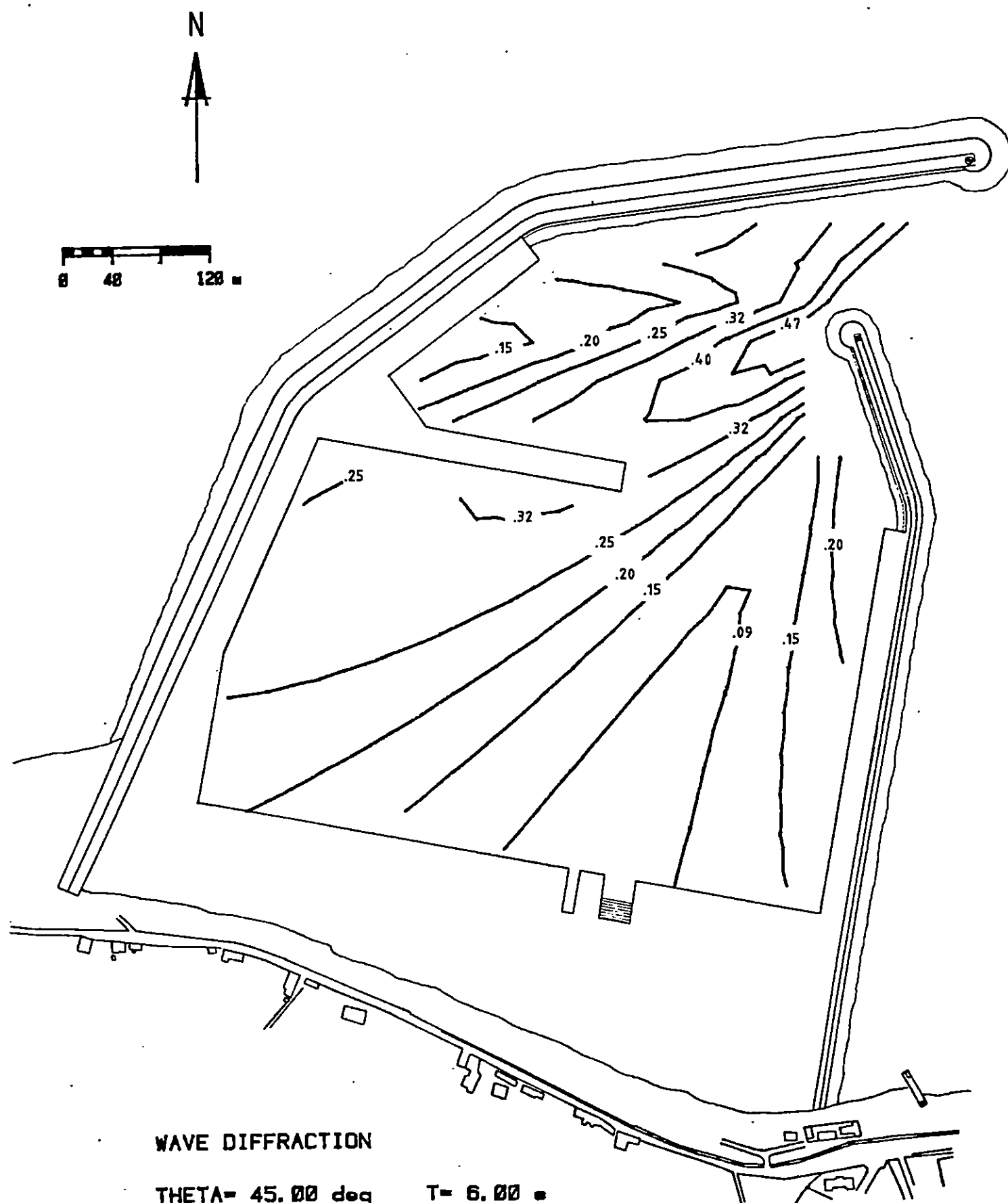


Fig. 83

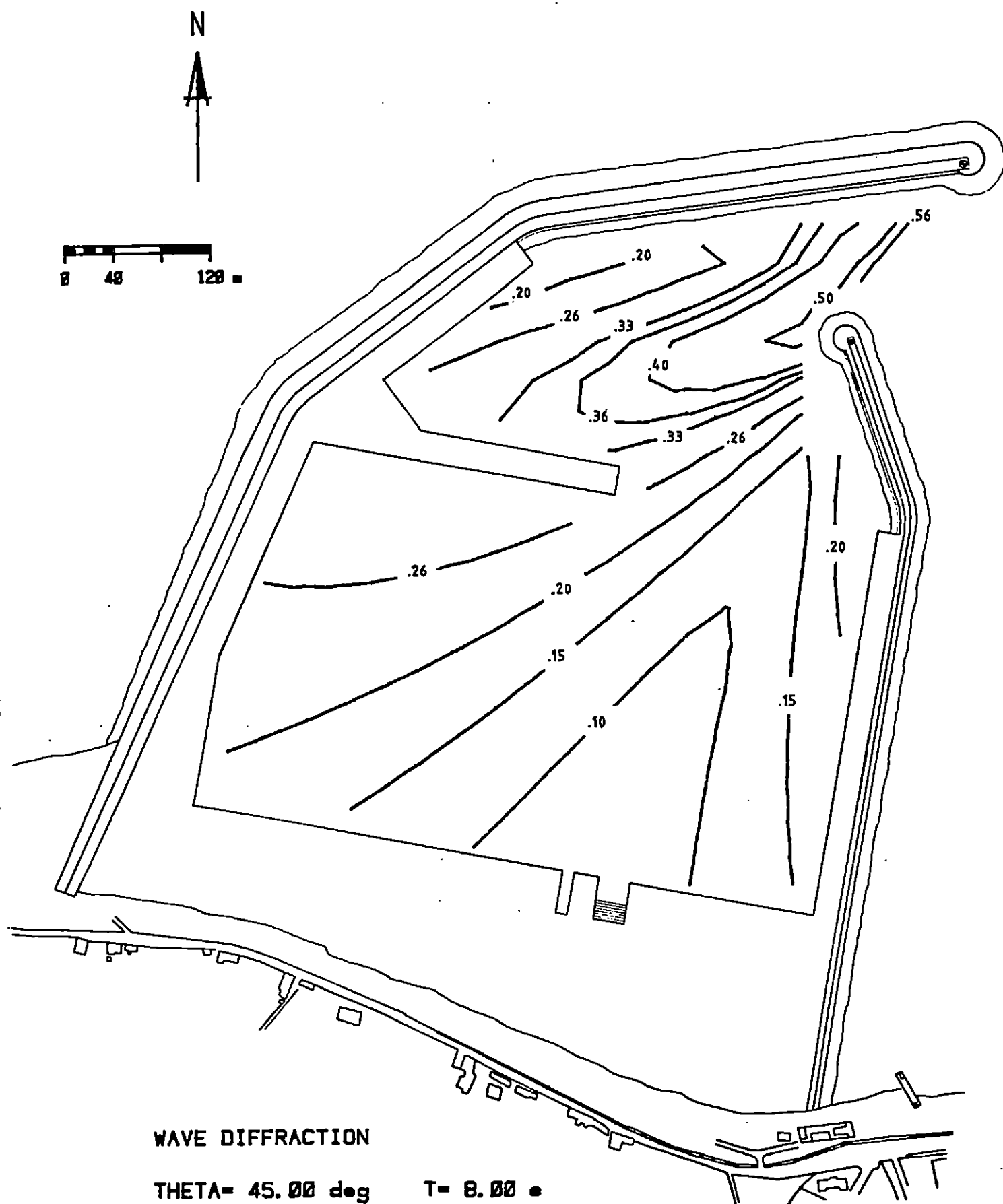


Fig. 84

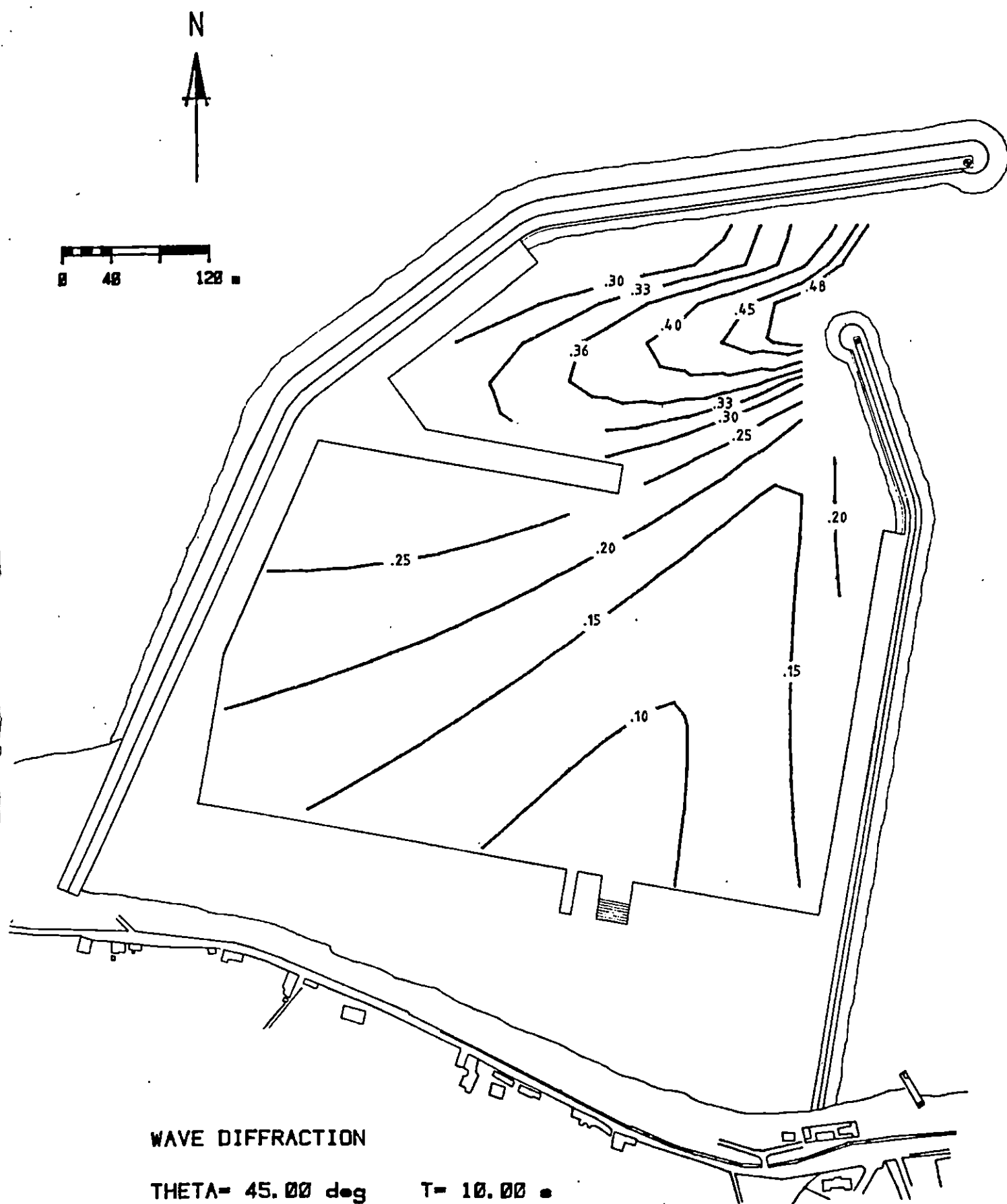


Fig. 85

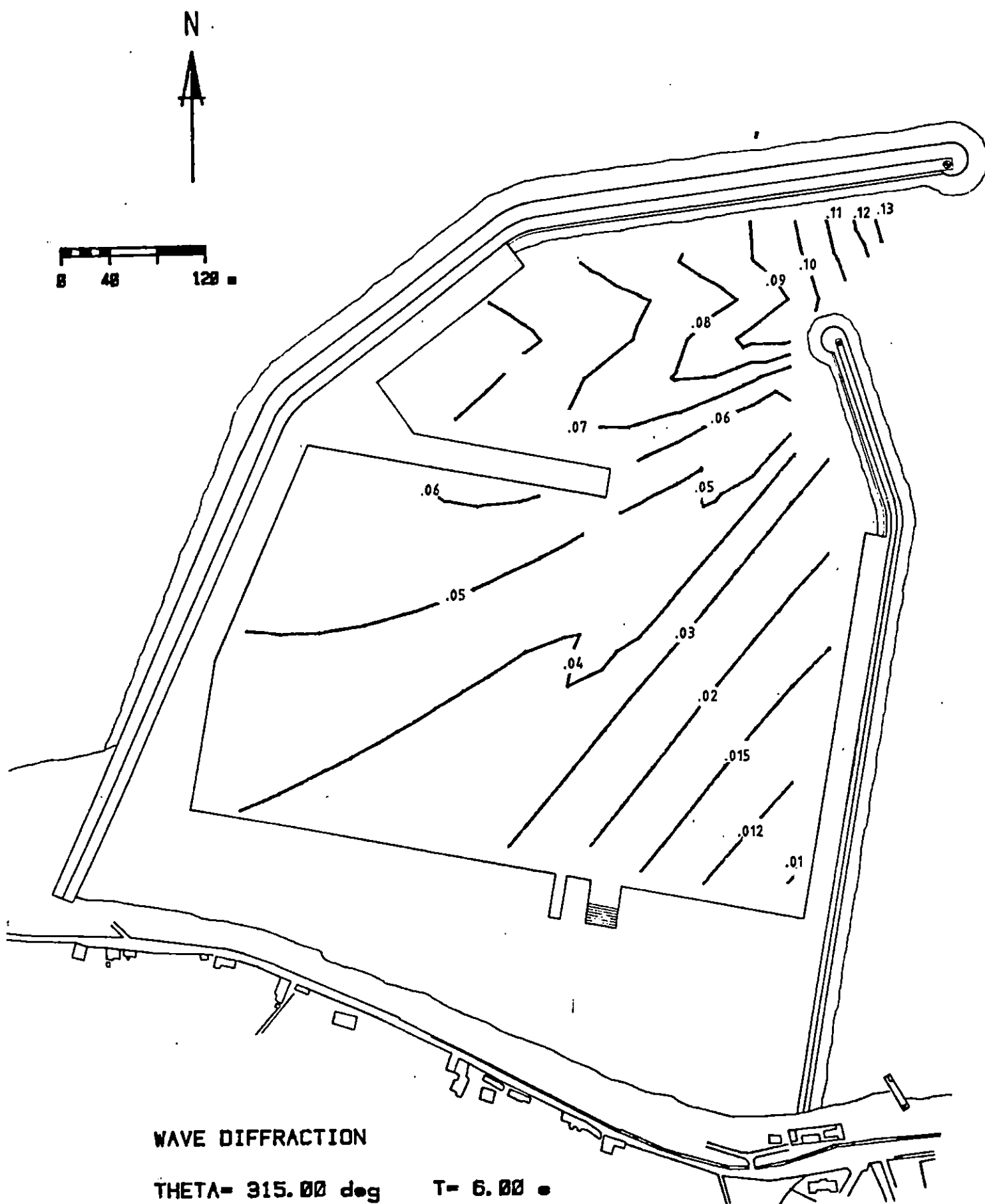


Fig. 86

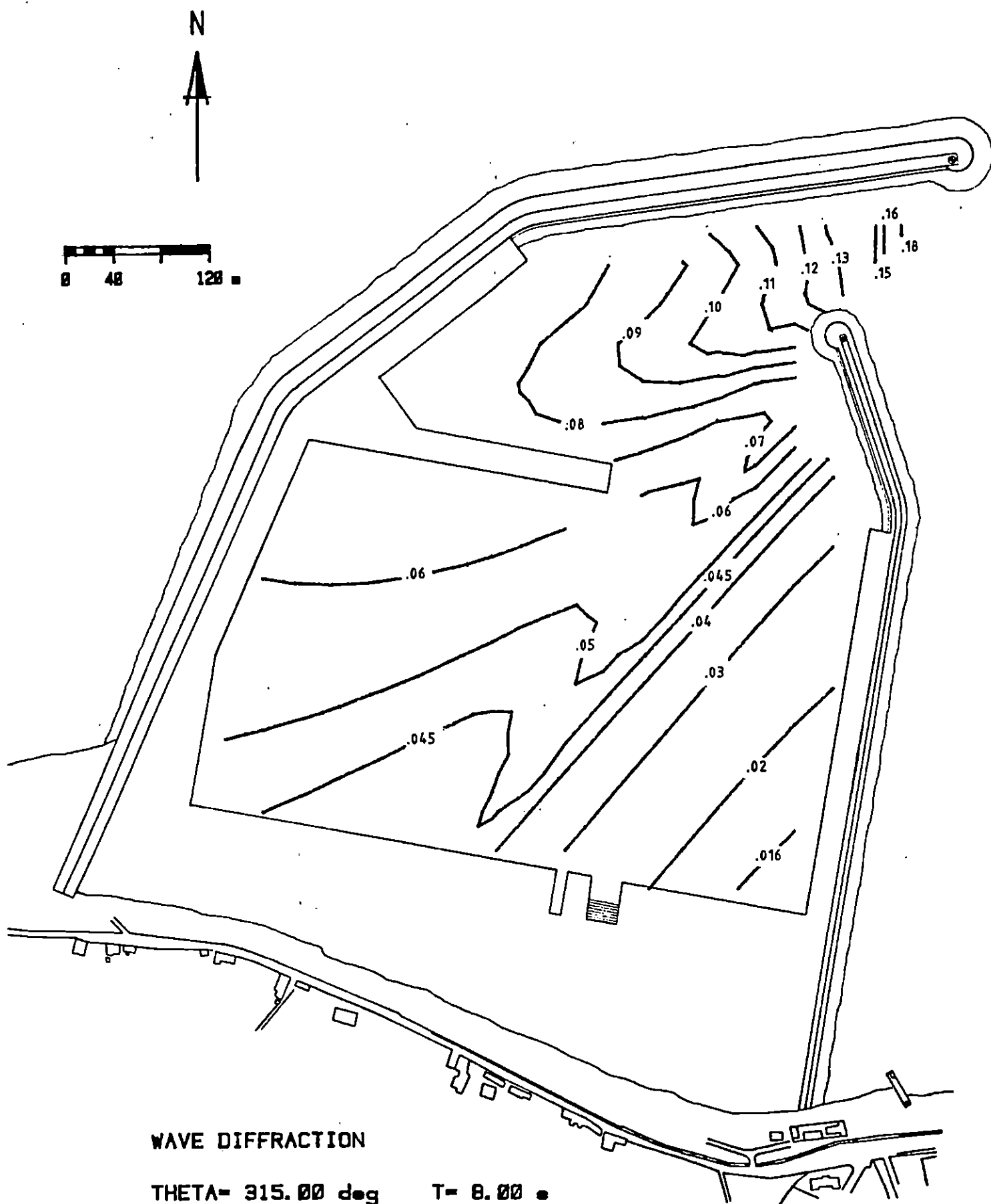
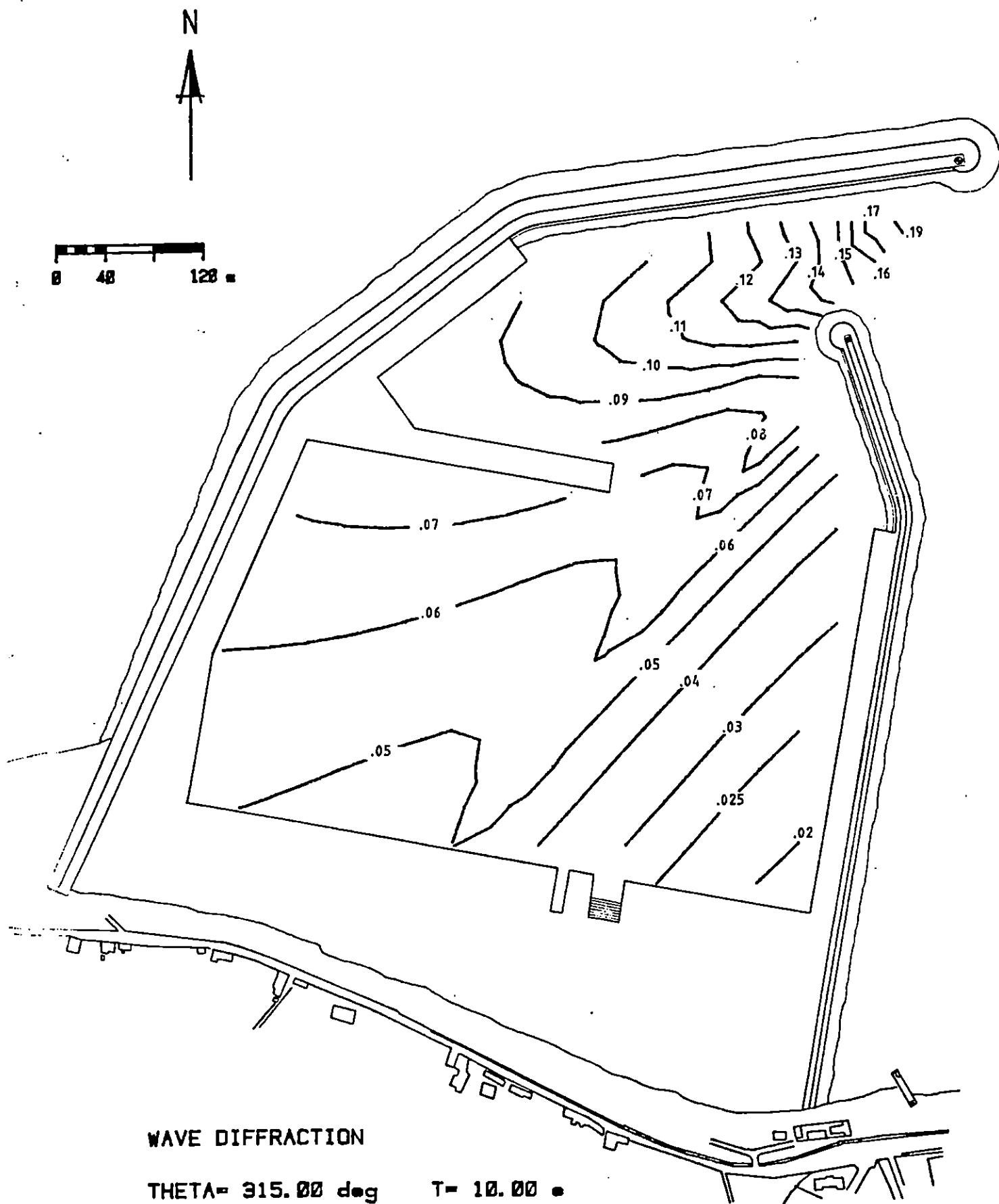


Fig. 87



WAVE DIFFRACTION

THETA= 315.00 deg T= 10.00 •

Fig. 88

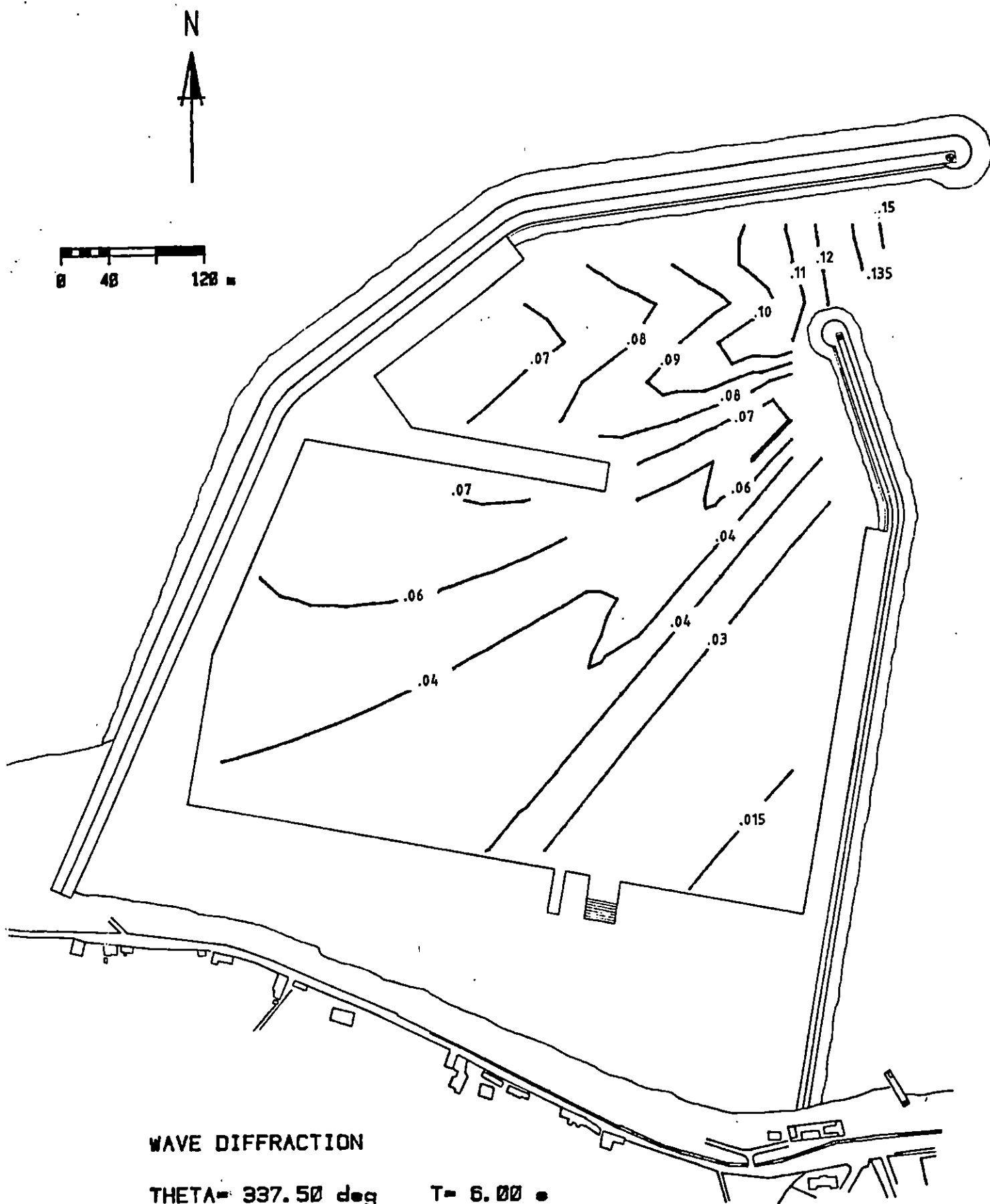


Fig. 89

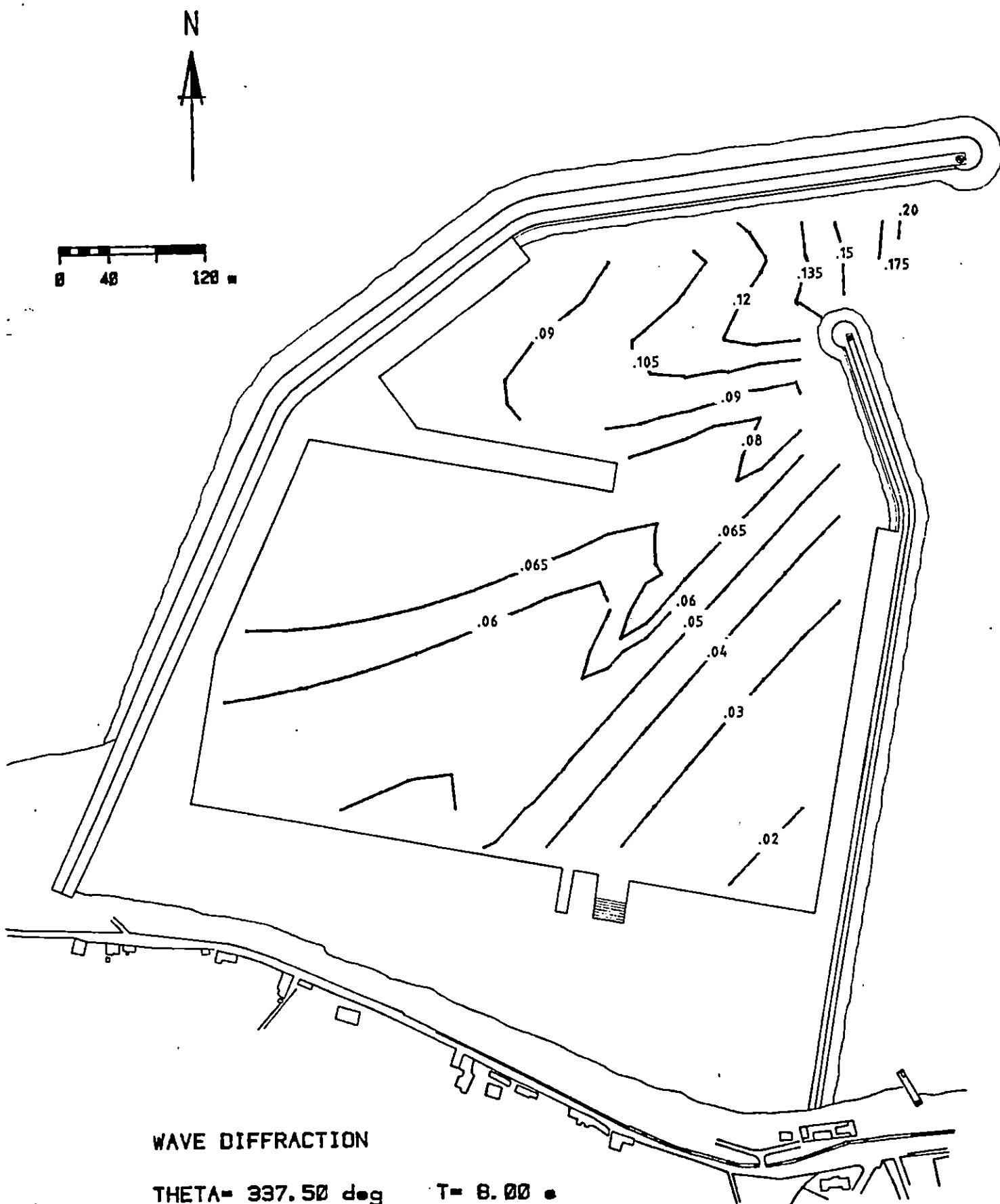
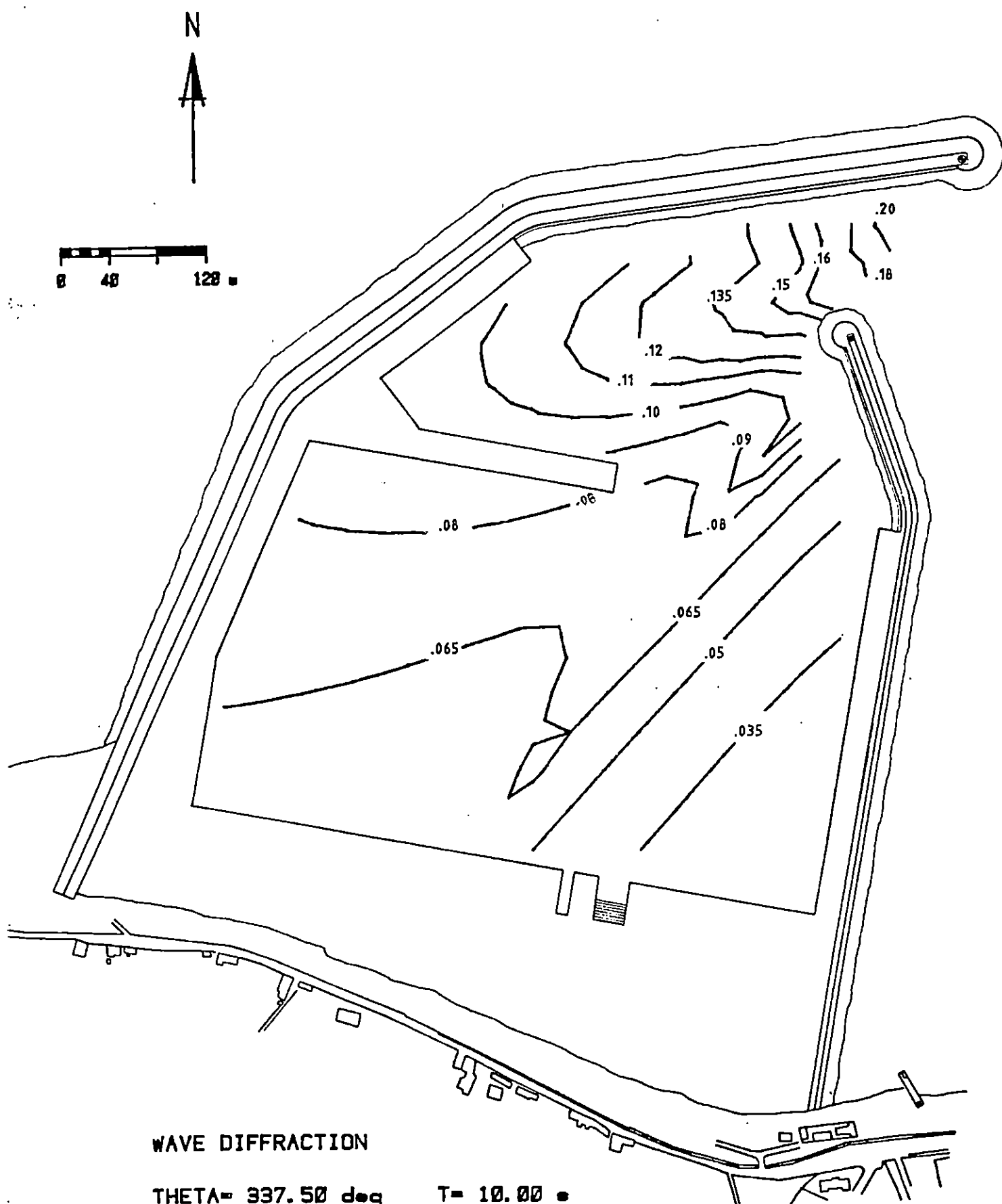


Fig. 90



WAVE DIFFRACTION

THETA= 337.50 deg T= 10.00 •

Fig. 91

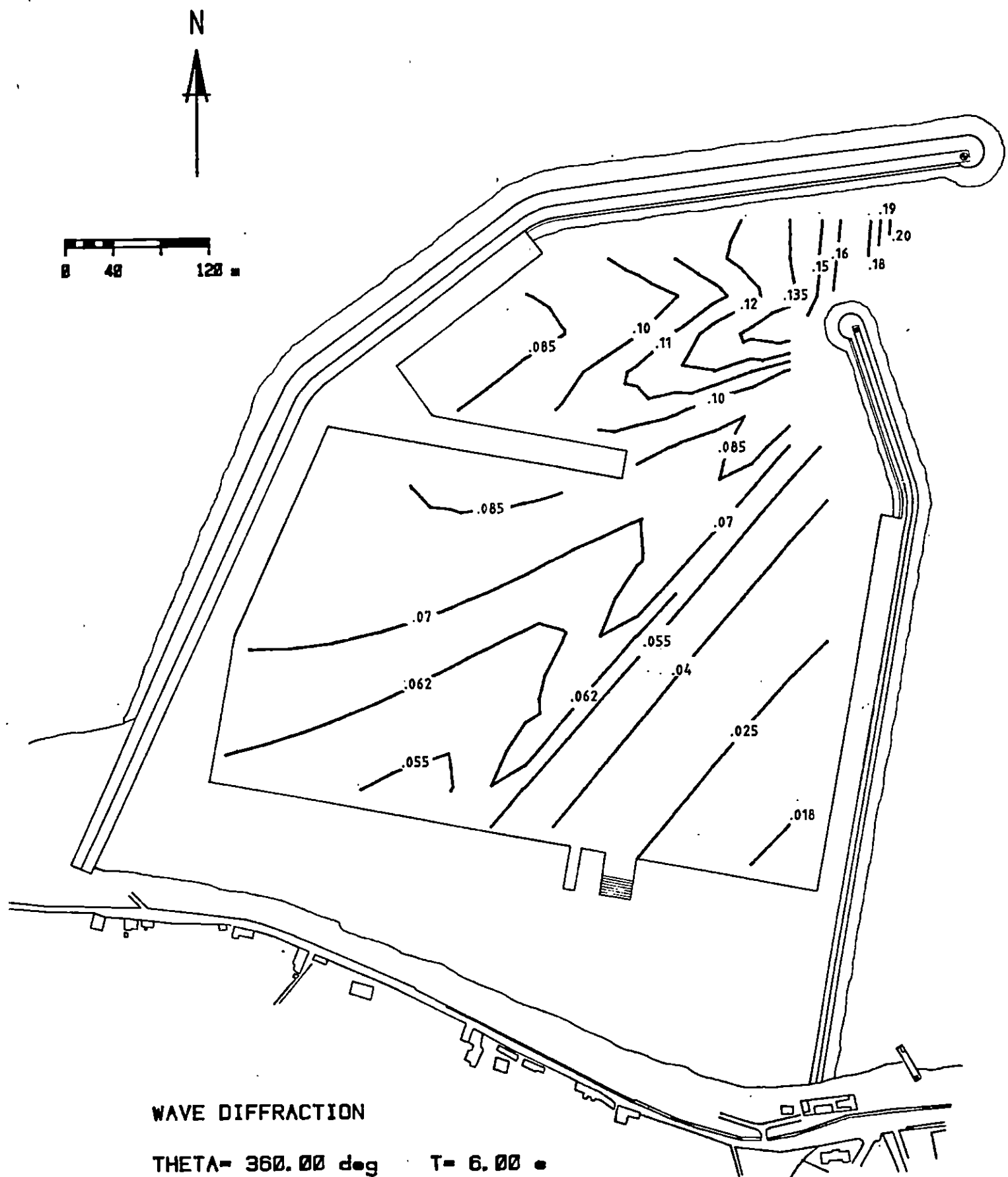
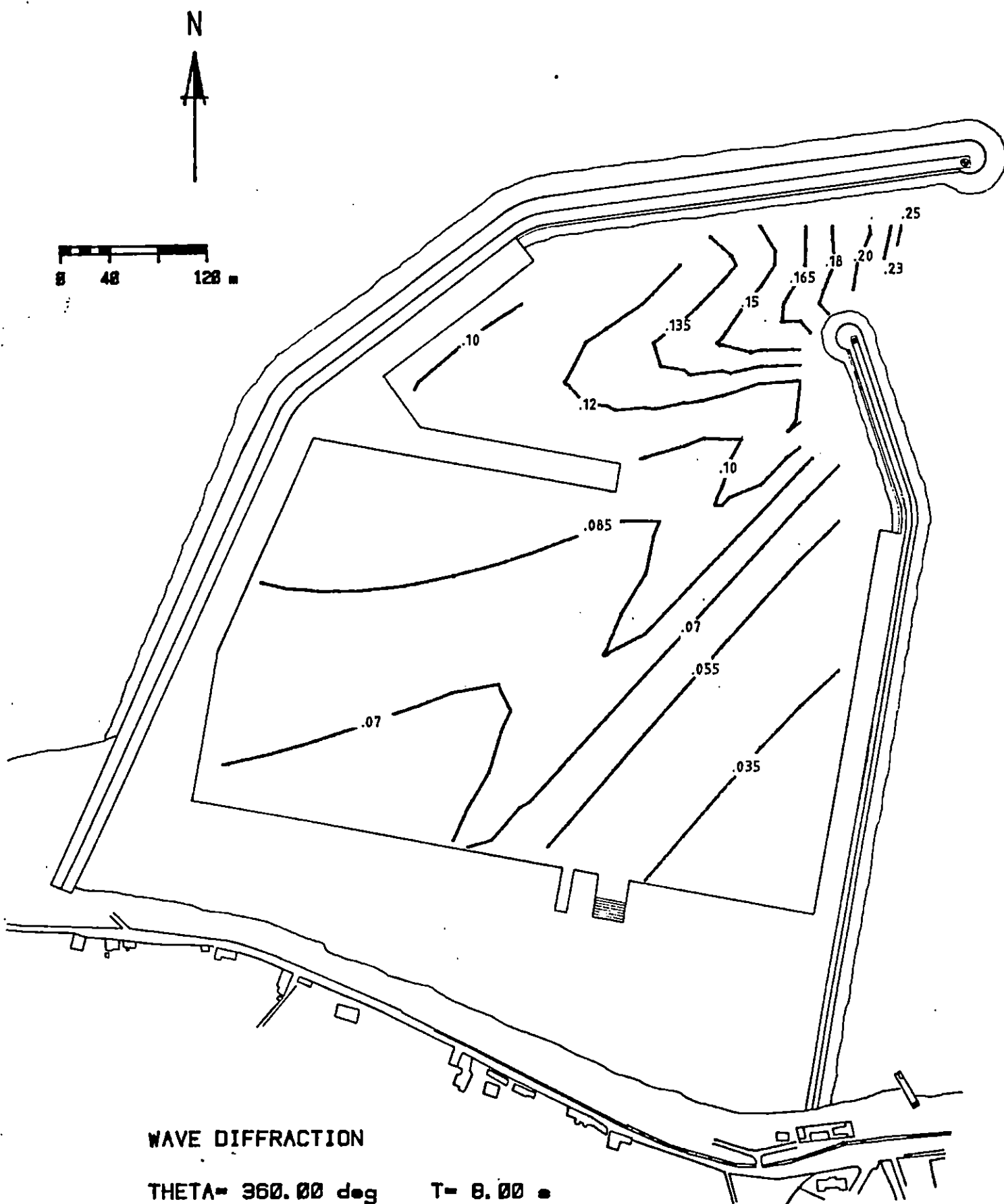


Fig. 92



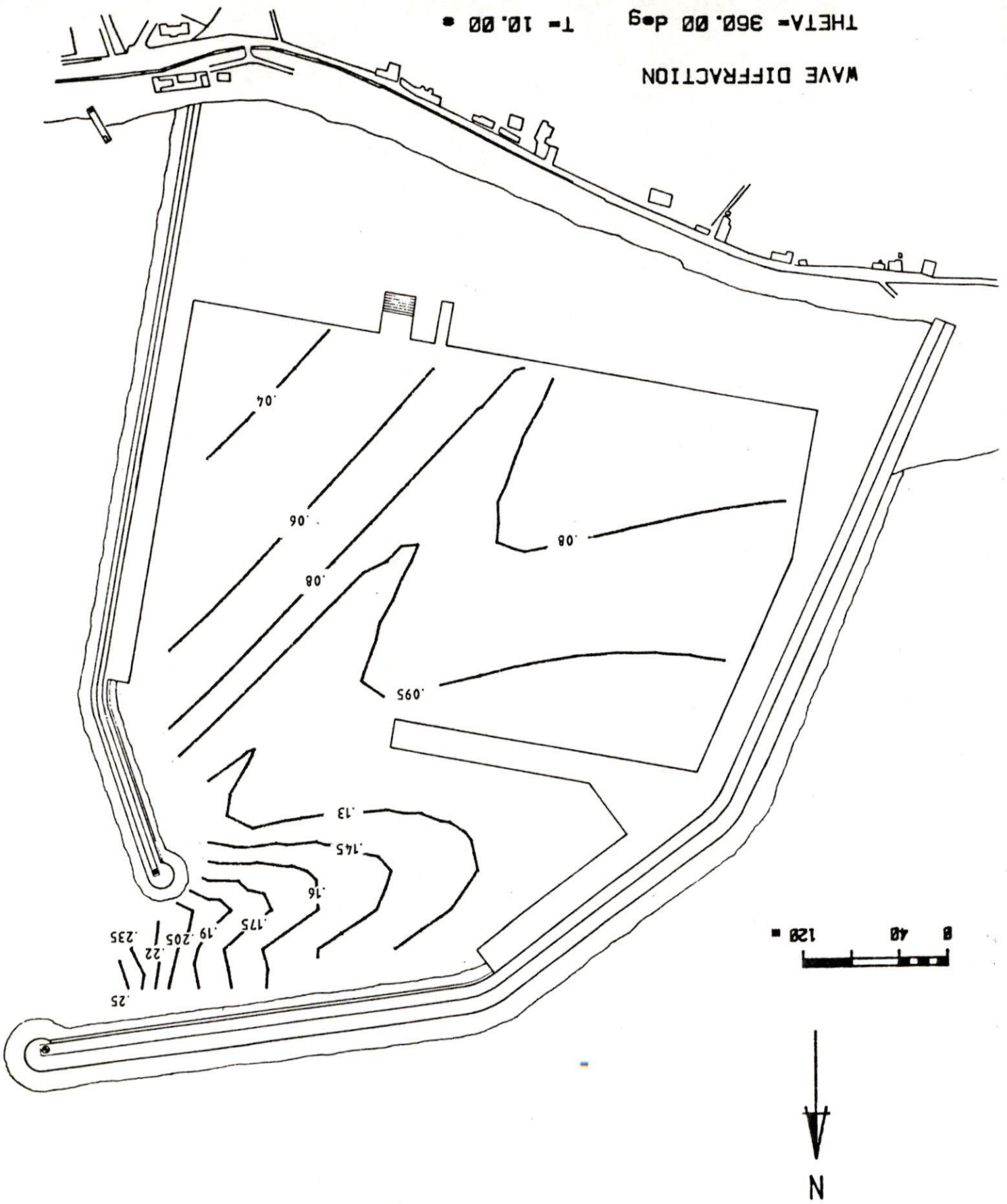


Fig. 93

Tab. 1 - Frequenze del vento nel mese di Gennaio a Ustica

"	2 -	"	"	"	"	"	"	Febbraio	"	"
"	3 -	"	"	"	"	"	"	Marzo	"	"
"	4 -	"	"	"	"	"	"	Aprile	"	"
"	5 -	"	"	"	"	"	"	Maggio	"	"
"	6 -	"	"	"	"	"	"	Giugno	"	"
"	7 -	"	"	"	"	"	"	Luglio	"	"
"	8 -	"	"	"	"	"	"	Agosto	"	"
"	9 -	"	"	"	"	"	"	Settembre	"	"
"	10 -	"	"	"	"	"	"	Ottobre	"	"
"	11 -	"	"	"	"	"	"	Novembre	"	"
"	12 -	"	"	"	"	"	"	Dicembre	"	"
"	13 -	"	"	"	annuale					
"	14 -	Durata del vento da 27° 5				NNE				
"	15 -	"	"	"	"	45°	NE			
"	16 -	"	"	"	"	270°	W			
"	17 -	"	"	"	"	292° 5	WNW			
"	18 -	"	"	"	"	315°	NW			
"	19 -	"	"	"	"	337° 5	NNW			
"	20 -	"	"	"	"	360°	N			
"	21 -	Altezza dell'onda significativa da					22° 5			
"	22 -	"	"	"	"	"	"	45°		
"	23 -	"	"	"	"	"	"	270°		

Tab.	24	-	Altezza	dell'onda	significativa	da	292°5
"	25	-	"	"	"	"	315°
"	26	-	"	"	"	"	337°5
"	27	-	"	"	"	"	360°
"	28	-	Periodo	dell'onda	significativa	da	22°5
"	29	-	"	"	"	"	45°
"	30	-	"	"	"	"	270°
"	31	-	"	"	"	"	292°5
"	32	-	"	"	"	"	315°
"	33	-	"	"	"	"	337°5
"	34	-	"	"	"	"	360°
"	35	-	Altezze	sottocosta	dell'onda	significativa	da 22°5
"	36	-	"	"	"	"	45°
"	37	-	"	"	"	"	270°
"	38	-	"	"	"	"	292°5
"	39	-	"	"	"	"	315°
"	40	-	"	"	"	"	337°5
"	41	-	"	"	"	"	360°
"	42	-	Direzione	sottocosta	dell'onda	significativa	da 22°5
"	43	-	"	"	"	"	45°
"	44	-	"	"	"	"	270°
"	45	-	"	"	"	"	292°5
"	46	-	"	"	"	"	315°

Tab. 47 - Direzione sottocosta dell'onda significativa da 337,5

" 48 - " " " " " 360°

" da 49 a 52 - Frangimento per $T_r = 10$ anni

" " 53 a 56 - " " " = 30 "

" " 57 a 60 - " " " = 50 "

" 61 - Fascia di Frangimento

" 62 - Agitazioni nel dispositivo portuale

Tab. 1 FREQUENZA IN PERCENTO CALCOLATA
SU OTTO OSSERVAZIONI GIORNALIERE
STAZIONE DI USTICA
Mese di GENNAIO

Direzioni	CAMPI DI VELOCITA' (NODI)			
	01-30	31-40	41-50	>50
N	11.5	1.2	0.4	-----
NE	8.9	0.3	0.1	-----
E	7.3	0.1	-----	-----
SE	6.6	0.1	-----	-----
S	9.2	0.6	-----	-----
SW	13.6	1.4	0.1	-----
W	15.5	1.8	0.2	-----
NW	11.6	1.6	0.1	0.1

Tab. 2 FREQUENZA IN PERCENTO CALCOLATA
SU OTTO OSSERVAZIONI GIORNALIERE
STAZIONE DI USTICA
Mese di FEBBRAIO

Direzioni	CAMPI DI VELOCITA' (NODI)			
	01-30	31-40	41-50	>50
N	9.5	1.1	0.3	0.2
NE	5.9	0.3	0.1	---
E	7.2	0.2	---	----
SE	6.6	0.1	---	---
S	8.8	0.4	----	---
SW	14.2	1.5	0.3	0.1
W	19.0	2.4	0.5	0.2
NW	11.5	1.5	0.5	0.2

Tab. 3 FREQUENZA IN PERCENTO CALCOLATA
SU OTTO OSSERVAZIONI GIORNALIERE
STAZIONE DI USTICA
Mese di MARZO

Direzioni	CAMPI DI VELOCITA' (NODI)			
	01-30	31-40	41-50	>50
N	10.3	0.8	0.1	0.1
NE	8.4	0.4	0.1	---
E	10.9	0.4	0.1	---
SE	7.9	0.2	---	---
S	8.0	0.6	0.2	---
SW	12.6	1.3	0.2	---
W	14.8	1.7	0.4	---
NW	10.5	1.1	0.2	0.1

Tab. 4 FREQUENZA IN PERCENTO CALCOLATA
SU OTTO OSSERVAZIONI GIORNALIERE
STAZIONE DI USTICA
Mese di APRILE

Direzioni	CAMPI DI VELOCITA' (NODI)			
	01-30	31-40	41-50	>50
N	8.4	0.6	0.1	0.1
NE	7.0	0.3	0.1	---
E	14.2	0.3	---	---
SE	9.0	0.4	0.1	---
S	6.1	0.3	---	---
SW	11.0	0.7	---	---
W	17.7	0.9	0.1	---
NW	10.8	1.0	0.2	---

Tab. 5 FREQUENZA IN PERCENTO CALCOLATA
SU OTTO OSSERVAZIONI GIORNALIERE
STAZIONE DI USTICA
Mese di MAGGIO

Direzioni	CAMPI DI VELOCITA' (NODI)			
	01-30	31-40	41-50	>50
N	11.8	0.1	---	---
NE	7.4	---	---	---
E	14.4	---	---	---
SE	9.4	---	---	---
S	5.6	0.1	---	---
SW	8.6	0.5	0.1	---
W	15.8	0.4	---	---
NW	12.2	0.1	---	---

Tab.6 FREQUENZA IN PERCENTO CALCOLATA
SU OTTO OSSERVAZIONI GIORNALIERE
STAZIONE DI USTICA
Mese di GIUGNO

Direzioni	CAMPI DI VELOCITA' (NODI)			
	01-30	31-40	41-50	>50
N	12.0	---	---	---
NE	11.5	---	---	---
E	14.0	0.1	---	---
SE	10.0	0.1	---	---
S	4.4	---	---	---
SW	6.9	0.1	---	---
W	13.3	0.1	---	---
NW	12.9	0.1	---	---

Tab. 7 FREQUENZA IN PERCENTO CALCOLATA
SU OTTO OSSERVAZIONI GIORNALIERE
STAZIONE DI USTICA
Mese di LUGLIO

Direzioni	CAMPI DI VELOCITA' (NODI)			
	01-30	31-40	41-50	>50
N	17.6	0.1	---	---
NE	11.4	---	---	---
E	10.6	---	---	---
SE	8.1	---	---	---
S	3.9	---	---	---
SW	5.5	---	---	---
W	11.2	---	---	---
NW	15.5	0.3	0.1	---

Tab.8 FREQUENZA IN PERCENTO CALCOLATA
SU OTTO OSSERVAZIONI GIORNALIERE
STAZIONE DI USTICA
Mese di AGOSTO

Direzioni	CAMPI DI VELOCITA' (NODI)			
	01-30	31-40	41-50	>50
N	14.6	---	---	---
NE	11.8	---	---	---
E	13.1	---	---	---
SE	10.2	---	---	---
S	6.4	0.1	---	---
SW	6.1	0.2	---	---
W	10.1	---	---	---
NW	12.4	0.1	---	---

Tab.9 FREQUENZA IN PERCENTO CALCOLATA
SU OTTO OSSERVAZIONI GIORNALIERE
STAZIONE DI USTICA
Mese di SETTEMBRE

Direzioni	CAMPI DI VELOCITA' (NODI)			
	01-30	31-40	41-50	>50
N	12.9	0.3	---	---
NE	12.5	0.2	---	---
E	13.3	0.1	---	---
SE	10.2	0.1	---	---
S	7.3	0.1	---	---
SW	7.6	0.2	---	---
W	10.4	0.1	---	---
NW	11.0	0.6	---	---

Tab.10 FREQUENZA IN PERCENTO CALCOLATA
SU OTTO OSSERVAZIONI GIORNALIERE
STAZIONE DI USTICA
Mese di OTTOBRE

Direzioni	CAMPI DI VELOCITA' (NODI)			
	01-30	31-40	41-50	>50
N	13.1	0.5	0.1	---
NE	12.0	0.4	0.1	0.1
E	15.6	0.3	0.1	---
SE	10.3	0.1	---	---
S	8.4	0.2	0.1	---
SW	8.5	0.5	0.1	---
W	10.9	0.6	---	---
NW	7.8	0.4	0.1	---

Tab.11 FREQUENZA IN PERCENTO CALCOLATA
SU OTTO OSSERVAZIONI GIORNALIERE
STAZIONE DI USTICA
Mese di NOVEMBRE

Direzioni	CAMPI DI VELOCITA' (NODI)			
	01-30	31-40	41-50	>50
N	8.1	0.8	0.1	0.1
NE	8.4	0.2	---	---
E	9.7	0.1	---	---
SE	10.3	0.4	0.1	---
S	11.5	0.9	0.2	0.1
SW	14.1	1.2	0.1	0.1
W	15.1	1.3	0.2	0.1
NW	10.5	1.3	0.2	0.1

Tab.12 FREQUENZA IN PERCENTO CALCOLATA
SU OTTO OSSERVAZIONI GIORNALIERE
STAZIONE DI USTICA
Mese di DICEMBRE

Direzioni	CAMPI DI VELOCITA' (NODI)			
	01-30	31-40	41-50	>50
N	10.9	1.1	0.3	0.1
NE	7.9	0.4	---	---
E	7.5	0.2	---	---
SE	7.9	0.2	0.1	---
S	9.8	0.9	0.1	---
SW	12.1	2.0	0.3	0.1
W	15.5	1.6	0.2	---
NW	10.7	1.4	0.7	0.2

Tab.13 FREQUENZA IN PERCENTO CALCOLATA
SU OTTO OSSERVAZIONI GIORNALIERE
STAZIONE DI USTICA
ANNUALE

Direzioni	CAMPI DI VELOCITA' (NODI)			
	01-30	31-40	41-50	>50
N	11.8	0.5	0.1	---
NE	9.2	0.2	---	---
E	11.5	0.1	---	---
SE	8.9	0.1	---	---
S	7.4	0.4	0.1	---
SW	10.0	0.8	0.1	---
W	14.1	0.9	0.1	---
NW	11.5	0.8	0.2	0.1

Tab. 14

DURATA (h) DEL VENTO DA 22.50 deg - STAZIONE 400AM

T. DI RITORNO [anni]	VELOCITA' [nodi]							
	30	40	50	60	70	80	90	100
3	23.70	11.20	--	--	--	--	--	--
5	32.59	17.47	8.83	--	--	--	--	--
10	43.76	25.37	14.99	8.83	--	--	--	--
15	50.56	30.21	18.67	11.31	--	--	--	--
20	55.17	33.51	21.17	13.36	--	--	--	--
30	61.60	38.12	24.70	16.18	10.23	--	--	--
40	66.32	41.53	27.31	18.27	12.83	--	--	--
50	69.97	44.18	29.34	19.90	13.48	--	--	--
75	76.62	47.01	33.86	22.97	15.98	10.72	--	--
100	81.25	52.39	35.67	24.76	17.62	12.26	--	--

Tab. 15

DURATA (h) DEL VENTO DA 45.00 deg - STAZIONE 400AM

T. DI RITORNO [anni]	VELOCITA' [m/s]					
	30	40	50	60	70	80
3	20.71	7.23	---	---	---	---
5	30.22	13.36	4.30	---	---	---
10	42.67	21.44	10.30	2.97	---	---
15	50.46	26.56	13.92	6.32	---	---
20	55.00	30.11	16.43	8.27	---	---
30	63.29	35.12	20.01	10.90	4.92	---
40	68.05	38.08	22.70	13.01	6.65	---
50	73.20	41.02	24.82	14.61	7.94	---
75	81.11	47.03	30.74	17.56	10.29	5.09
100	86.68	51.06	31.53	19.68	11.95	6.54

Tab. 16

DURATA (h) DEL VENTO DA 270.00 deg - STAZIONE 400AM

T. DI RITORNO [anni]	VELOCITA' [madi]							
	30	40	50	60	70	80	90	100
3	31.91	14.71	5.43	--	--	--	--	--
5	39.43	19.75	9.24	--	--	--	--	--
10	48.60	25.98	13.67	6.15	--	--	--	--
15	53.98	29.52	16.29	8.25	--	--	--	--
20	57.54	31.74	18.05	9.61	3.40	--	--	--
30	62.42	35.27	20.46	11.46	5.33	--	--	--
40	65.94	37.68	22.22	12.81	6.51	--	--	--
50	68.64	39.54	23.57	13.85	7.37	--	--	--
75	73.47	42.88	26.01	15.72	8.98	3.56	--	--
100	76.79	45.18	27.71	17.01	9.95	4.72	--	--

Tab. 17

DURATA (h) DEL VENTO DA 292.50 deg - STAZIONE 400AM

T. DI RITORNO [anni]	VELOCITA' [m/s]							
	30	40	50	60	70	80	90	100
3	31.26	16.29	7.59	-	--	--	--	--
5	38.24	21.27	11.58	--	--	--	--	--
10	46.52	27.21	16.18	9.02	--	--	--	--
15	51.32	30.68	18.85	11.25	--	--	--	--
20	54.49	32.98	20.62	12.70	6.83	--	--	--
30	58.80	36.11	23.83	14.66	8.73	--	--	--
40	61.71	38.37	24.78	16.07	9.98	--	--	--
50	64.28	40.11	26.12	17.15	10.91	--	--	--
75	68.51	43.28	28.52	19.09	12.56	7.47	--	--
100	71.41	45.33	30.17	20.42	13.68	8.59	--	--

Tab. 18

DURATA (h) DEL VENTO DA 315.00 deg - STAZIONE 400AM

T. DI RITORNO [anni]	VELOCITA' [nodi]							
	30	40	50	60	70	80	90	100
3	30.72	17.87	9.75	--	--	--	--	--
5	37.05	22.79	13.93	7.53	--	--	--	--
10	44.44	28.54	18.67	11.98	6.44	--	--	--
15	48.67	31.84	21.41	14.25	8.83	--	--	--
20	51.44	34.82	23.17	15.70	10.26	5.34	--	--
30	55.19	36.75	25.61	17.85	12.13	7.47	--	--
40	57.87	39.06	27.34	19.33	13.45	8.78	--	--
50	59.93	40.67	28.67	20.46	14.45	9.73	5.36	--
75	63.55	43.53	31.92	22.46	16.21	11.37	7.26	--
100	66.03	45.49	32.63	23.04	17.42	12.47	8.38	--

Tab. 19

DURATA (h) DEL VENTO DA 337.50 deg - STAZIONE 400AM

T. DI RITORNO [anni]	VELOCITA' [nodi]							
	30	40	50	60	70	80	90	100
3	28.73	16.60	0.00	--	--	--	--	--
5	36.80	22.20	13.65	7.52	--	--	--	--
10	44.63	28.92	17.18	12.49	7.29	--	--	--
15	49.67	32.05	22.42	15.28	9.95	--	--	--
20	53.01	35.47	24.56	17.11	11.61	7.00	--	--
30	57.55	39.84	27.50	19.61	13.84	9.26	--	--
40	60.93	41.62	29.63	21.43	15.44	10.76	--	--
50	63.35	43.61	31.27	22.82	16.66	11.89	7.76	--
75	67.94	47.16	34.20	25.32	18.94	13.07	9.79	--
100	70.93	49.60	36.22	27.04	20.35	15.22	11.07	--

Tab. 20

DURATA (h) DEL VENTO DA 360.00 deg - STAZIONE 493AM

T. DI RITORNO [anni]	VELOCITA' [medi]							
	30	40	50	60	70	80	90	100
3	26.04	15.33	9.02	--	--	--	--	--
5	34.95	21.62	13.36	7.50	--	--	--	--
10	44.03	27.30	17.68	13.10	9.15	--	--	--
15	50.67	33.06	23.43	16.31	11.07	6.82	--	--
20	54.57	36.92	25.94	18.44	12.97	9.67	4.62	--
30	59.71	41.12	29.39	21.38	15.55	11.05	7.31	--
40	63.77	44.18	31.72	23.53	17.42	12.74	9.96	5.50
50	66.77	46.54	33.86	25.19	18.87	14.04	10.17	6.02
75	72.12	50.78	37.37	28.17	21.47	16.36	12.31	8.93
100	75.02	53.72	39.81	30.25	23.28	17.77	13.77	10.31

Tab. 21

ALTEZZA (m) DELL'ONDA SIGNIFICATIVA DA 22.50 deg

T. DI RITORNO
[anni]VELOCITA' ALL'ANEMOGRAFO
[nodi]VELOCITA' A QUOTA 10 m s.l.m.
[nodi]

	30	40	50	60	70	80	90	100
	22	28	35	42	49	56	63	70
3	2.06	2.93	---	---	---	---	---	---
5	2.06	2.93	3.79	---	---	---	---	---
10	2.06	2.93	3.84	4.77	---	---	---	---
15	2.06	2.93	3.84	4.81	---	---	---	---
20	2.06	2.93	3.84	4.81	---	---	---	---
30	2.06	2.93	3.84	4.81	5.81	---	---	---
40	2.06	2.93	3.84	4.81	5.81	---	---	---
50	2.06	2.93	3.84	4.81	5.81	---	---	---
75	2.06	2.93	3.84	4.81	5.81	6.84	---	---
100	2.06	2.93	3.84	4.81	5.81	6.84	---	---

Tab. 22

ALTEZZA [m] DELL'ONDA SIGNIFICATIVA DA 45.00 deg

T. DI RITORNO
[anni]VELOCITA' ALL'ANEMOGRAFO
[nodi]VELOCITA' A QUOTA 10 m s.l.m.
[nodi]

	30	40	50	60	70	80	90	100
	22	28	35	42	49	56	63	70
3	1.85	2.47	--	--	--	--	--	--
5	1.85	2.60	2.65	--	--	--	--	--
10	1.85	2.60	3.37	2.85	--	--	--	--
15	1.85	2.60	3.37	4.23	--	--	--	--
20	1.85	2.60	3.37	4.24	--	--	--	--
30	1.85	2.60	3.37	4.24	4.67	--	--	--
40	1.85	2.60	3.37	4.24	5.10	--	--	--
50	1.85	2.60	3.37	4.24	5.10	--	--	--
75	1.85	2.60	3.37	4.24	5.10	5.77	--	--
100	1.85	2.60	3.37	4.24	5.10	5.77	--	--

Tab. 23

ALTEZZA [m] DELL'ONDA SIGNIFICATIVA DA 270.00 deg

T. DI RITORNO [anni]	VELOCITA' ALL'ANEMOGRAFO [nodi]							
	30	40	50	60	70	80	90	100
	VELOCITA' A QUOTA 10 m s.l.m. [nodi]							
	22	28	35	42	49	56	63	70
3	2.76	3.43	2.98	--	--	--	--	--
5	2.76	3.05	3.08	--	--	--	--	--
10	2.76	4.07	4.65	4.17	--	--	--	--
15	2.76	4.07	5.01	4.84	--	--	--	--
20	2.76	4.07	5.23	5.21	3.05	--	--	--
30	2.76	4.07	5.48	5.68	4.87	--	--	--
40	2.76	4.07	5.48	5.78	5.40	--	--	--
50	2.76	4.07	5.48	6.20	5.76	--	--	--
75	2.76	4.07	5.48	6.57	6.34	4.88	--	--
100	2.76	4.07	5.48	6.80	6.78	5.57	--	--

Tab. 24

ALTEZZA (m) DELL'ONDA SIGNIFICATIVA DA 272.50 deg

T. DI RITORNO [anni]	VELOCITA' ALL'ANEMOGRAFO [nodi]							
	30	40	50	60	70	80	90	100
	VELOCITA' A QUOTA 10 m s.l.m. [nodi]							
	22	28	35	42	49	56	63	70
3	2.84	3.50	3.53	---	---	---	---	---
5	2.84	3.76	4.31	---	---	---	---	---
10	2.84	4.23	5.00	5.05	---	---	---	---
15	2.84	4.23	5.33	5.62	---	---	---	---
20	2.84	4.23	5.53	5.75	5.54	---	---	---
30	2.84	4.23	5.72	6.36	6.27	---	---	---
40	2.84	4.23	5.72	6.63	6.71	---	---	---
50	2.84	4.23	5.72	6.83	7.01	---	---	---
75	2.84	4.23	5.72	7.15	7.50	7.90	---	---
100	2.84	4.23	5.72	7.32	7.81	7.60	---	---

ALTEZZA (m) DELL'ONDA SIGNIFICATIVA DA 315.00 deg

T. DI RITORNO
[anni]

VELOCITA' ALL'ANEMOGRAFO
[m/s]

VELOCITA' A QUOTA 10 m s.l.m.
[m/s]

100	30	40	50	60	70	80	90	100
3	2.84	3.71	3.98	--	--	--	--	--
5	2.84	4.06	4.68	4.62	--	--	--	--
10	2.84	4.22	5.31	5.77	5.38	--	--	--
15	2.84	4.22	5.61	6.28	6.31	--	--	--
20	2.84	4.22	5.70	6.58	6.80	5.94	--	--
30	2.84	4.22	5.70	6.75	7.38	7.08	--	--
40	2.84	4.22	5.70	7.17	7.75	7.68	--	--
50	2.84	4.22	5.70	7.30	8.01	8.10	7.09	--
75	2.84	4.22	5.79	7.30	8.46	8.75	8.31	--
100	2.84	4.22	5.70	7.30	8.74	9.15	8.94	--

Tab. 26

ALTEZZA [m] DELL'ONDA SIGNIFICATIVA DA 337.50 deg

T. DI RITORNO [anni]	VELOCITA' ALL'ANEMOGRAFO [nodi]							
	30	40	50	60	70	80	90	100
	VELOCITA' A QUOTA 10 m s.l.m. [nodi]							
	22	28	35	42	49	56	63	70
3	2.66	3.60	3.80	--	--	--	--	--
5	2.66	3.70	4.64	4.62	--	--	--	--
10	2.66	3.70	5.23	5.91	5.73	--	--	--
15	2.66	3.70	5.23	6.48	6.70	--	--	--
20	2.66	3.70	5.23	6.65	7.22	6.84	--	--
30	2.66	3.70	5.23	6.65	7.85	7.90	--	--
40	2.66	3.70	5.23	6.65	8.11	8.51	--	--
50	2.66	3.70	5.23	6.65	8.11	8.74	8.68	--
75	2.66	3.70	5.23	6.65	8.11	9.60	9.68	--
100	2.66	3.70	5.23	6.65	8.11	9.60	10.31	--

Tab. 27

ALTEZZA (m) DELL'ONDA SIGNIFICATIVA DA 360.00 deg

T. DI RITORNO (anni)	VELOCITA' ALL'ANEMOGRAFO (nodi)							
	30	40	50	60	70	80	90	100
	VELOCITA' A QUOTA 10 m s.l.m. (nodi)							
	22	20	35	42	49	56	63	70
3	2.51	3.47	3.62	--	--	--	--	--
5	2.51	3.65	4.60	4.61	--	--	--	--
10	2.51	3.65	4.85	6.04	6.06	--	--	--
15	2.51	3.65	4.85	6.15	7.06	6.75	--	--
20	2.51	3.65	4.85	6.15	7.40	7.64	6.55	--
30	2.51	3.65	4.85	6.15	7.40	8.63	8.34	--
40	2.51	3.65	4.85	6.15	7.40	8.83	9.26	8.37
50	2.51	3.65	4.85	6.15	7.40	8.83	9.97	9.38
75	2.51	3.65	4.85	6.15	7.40	8.83	10.21	10.79
100	2.51	3.65	4.85	6.15	7.40	8.83	10.21	11.59

Tab. 28

PERIODO (s) DELL'ONDA SIGNIFICATIVA DA 22.50 deg

T. DI RITORNO [anni]	VELOCITA' ALL'ANEMOGRAFO [nodi]							
	30	40	50	60	70	80	90	100
	VELOCITA' A QUOTA 10 M s.l.m. [nodi]							
	22	28	35	42	47	56	63	78
3	5.75	6.83	--	--	--	--	--	--
5	5.75	6.83	7.75	--	--	--	--	--
10	5.75	6.83	7.79	8.66	--	--	--	--
15	5.75	6.83	7.79	8.70	--	--	--	--
20	5.75	6.83	7.79	8.70	--	--	--	--
30	5.75	6.83	7.79	8.70	9.53	--	--	--
40	5.75	6.83	7.79	8.70	9.53	--	--	--
50	5.75	6.83	7.79	8.70	9.53	--	--	--
75	5.75	6.83	7.79	8.70	9.53	10.30	--	--
100	5.75	6.83	7.79	8.70	9.53	10.30	--	--

Tab. 29

PERIODO [s] DELL'ONDA SIGNIFICATIVA DA 45.00 deg

T. DI RITORNO [anni]	VELOCITA' ALL'ANCHOGRAFO [nodi]							
	30	40	50	60	70	80	90	100
	VELOCITA' A QUOTA 10 m s.l.m. [nodi]							
	22	20	35	42	49	56	63	70
3	5.43	6.20	--	--	--	--	--	--
5	5.43	6.42	6.41	--	--	--	--	--
10	5.43	6.42	7.30	6.57	--	--	--	--
15	5.43	6.42	7.30	8.13	--	--	--	--
20	5.43	6.42	7.30	8.13	--	--	--	--
30	5.43	6.42	7.30	8.13	8.48	--	--	--
40	5.43	6.42	7.30	8.13	8.89	--	--	--
50	5.43	6.42	7.30	8.13	8.89	--	--	--
75	5.43	6.42	7.30	8.13	8.89	9.42	--	--
100	5.43	6.42	7.30	8.13	8.89	9.59	--	--

Tab. 30

PERIODO [s] DELL'ONDA SIGNIFICATIVA DA 270.00 deg

T. DI RITORNO
[anni]VELOCITA' ALL'ANEMOGRAFO
[nodi]

30 40 50 60 70 80 90 100

VELOCITA' A QUOTA 10 M s.l.m.
[nodi]

22 28 35 42 49 56 63 70

3	6.71	7.41	8.03	--	--	--	--	--
5	6.71	7.88	7.84	--	--	--	--	--
10	6.71	8.11	8.61	8.07	--	--	--	--
15	6.71	8.11	8.95	8.72	--	--	--	--
20	6.71	8.11	9.15	9.07	7.62	--	--	--
30	6.71	8.11	9.37	9.48	8.67	--	--	--
40	6.71	8.11	9.37	9.75	9.17	--	--	--
50	6.71	8.11	9.37	9.93	9.48	--	--	--
75	6.71	8.11	9.37	10.23	9.77	8.50	--	--
100	6.71	8.11	9.37	10.42	10.27	9.22	--	--

Tab. 31

PERIODO [s] DELL'ONDA SIGNIFICATIVA DA 292.50 deg

T. DI RITORNO [anni]	VELOCITA' ALL'ANCHORAGO [nodi]							
	30	40	50	60	70	80	90	100
	VELOCITA' A QUOTA 10 m s.l.m. [nodi]							
	22	28	35	42	47	56	63	70
3	6.83	7.57	7.46	--	--	--	--	--
5	6.83	7.79	8.28	--	--	--	--	--
10	6.83	8.27	8.94	8.73	--	--	--	--
15	6.83	8.27	9.24	9.44	--	--	--	--
20	6.83	8.27	9.42	9.72	9.79	--	--	--
30	6.83	8.27	9.58	10.06	9.72	--	--	--
40	6.83	8.27	9.58	10.28	10.28	--	--	--
50	6.83	8.27	9.58	10.44	10.52	--	--	--
75	6.83	8.27	9.58	10.67	10.70	10.49	--	--
100	6.83	8.27	9.58	10.82	11.13	10.70	--	--

Tab. 32

PERIODO (s) DELL'ONDA SIGNIFICATIVA DA 315.00 deg

T. DI RITORNO [anni]	VELOCITA' ALL'ANEMOGRAFO [nodi]							
	30	40	50	60	70	80	90	100
	VELOCITA' A QUOTA 10 M s.l.m. [nodi]							
	22	20	35	42	49	56	63	70
3	6.82	7.72	7.94	---	---	--	--	--
5	6.82	8.10	8.64	8.52	--	--	--	--
10	6.82	8.26	9.22	9.57	9.14	--	--	--
15	6.82	8.26	9.47	10.00	9.95	--	--	--
20	6.82	8.26	9.57	10.24	10.35	9.55	--	--
30	6.82	8.26	9.57	10.53	10.80	10.49	--	--
40	6.82	8.26	9.57	10.72	11.00	10.76	--	--
50	6.82	8.26	9.57	10.00	11.20	11.27	10.40	--
75	6.82	8.26	9.57	10.80	11.60	11.74	11.34	--
100	6.82	8.26	9.57	10.80	11.79	12.02	11.79	--

Tab. 33

PERIODO (s) DELL'ONDA SIGNIFICATIVA DA 337.50 deg

T. DI RITORNO [anni]	VELOCITA' ALL'ANEMOGRAFO [nodi]							
	30	40	50	60	70	80	90	100
	VELOCITA' A QUOTA 10 m s.l.m. [nodi]							
	22	28	35	42	49	56	63	70
3	6.58	7.60	7.74	--	--	--	--	--
5	6.58	7.93	8.60	8.51	--	--	--	--
10	6.58	7.93	9.15	9.69	9.46	--	--	--
15	6.58	7.93	9.15	10.16	10.27	--	--	--
20	6.58	7.93	9.15	10.30	10.60	10.31	--	--
30	6.58	7.93	9.15	10.30	11.16	11.12	--	--
40	6.58	7.93	9.15	10.30	11.35	11.57	--	--
50	6.58	7.93	9.15	10.30	11.35	11.87	11.55	--
75	6.58	7.93	9.15	10.30	11.35	12.32	12.30	--
100	6.58	7.93	9.15	10.30	11.35	12.32	12.72	--

Tab. 34

PERIODO (s) DELL'ONDA SIGNIFICATIVA DA 360.00 deg

T. DI RITORNO [anni]	VELOCITA' ALL'ANEMOGRAFO [nodi]							
	30	40	50	60	70	80	90	100
	VELOCITA' A QUOTA 10 m s.l.m. [nodi]							
	22	28	35	42	49	56	63	70
3	6.38	7.48	7.56	--	--	--	--	--
5	6.38	7.65	8.56	8.51	--	--	--	--
10	6.38	7.65	8.80	9.80	9.74	--	--	--
15	6.38	7.65	8.80	9.87	10.55	10.23	--	--
20	6.38	7.65	8.80	9.97	10.88	10.72	9.96	--
30	6.38	7.65	8.80	9.89	10.88	11.65	11.36	--
40	6.38	7.65	8.80	9.89	10.88	11.79	12.01	11.27
50	6.38	7.65	8.80	9.89	10.88	11.79	12.43	12.01
75	6.38	7.65	8.80	9.89	10.88	11.79	12.65	12.95
100	6.38	7.65	8.80	9.89	10.88	11.79	12.65	13.45

Tab. 35

ALTEZZA SOTTOCOSTA (m) DELL'ONDA SIGNIFICATIVA DA 22.50 deg

T. DI RITORNO [anni]	VELOCITA' ALL'ANELOGRAFO [nodil]							
	30	40	50	60	70	80	90	100
	VELOCITA' A QUOTA 10 m s.l.m. [nodil]							
	22	28	35	42	49	56	63	70
3	1.56	2.20	--	--	--	--	--	--
5	1.56	2.20	2.87	--	--	--	--	--
10	1.56	2.20	2.98	3.59	--	--	--	--
15	1.56	2.20	2.90	3.62	--	--	--	--
20	1.56	2.20	2.90	3.62	--	--	--	--
30	1.56	2.20	2.90	3.62	4.42	--	--	--
40	1.56	2.20	2.90	3.62	4.42	--	--	--
50	1.56	2.20	2.90	3.62	4.42	--	--	--
75	1.56	2.20	2.90	3.62	4.42	5.29	--	--
100	1.56	2.20	2.90	3.62	4.42	5.29	--	--

Tab. 36

ALTEZZA SOTTOCOSTA (m) DELL'ONDA SIGNIFICATIVA DA 45.00 deg

T. DI RITORNO
[anni]VELOCITA' ALL'ANEMOGRAFO
[nodi]

30

40

50

60

70

80

90

100

VELOCITA' A QUOTA 10 M s.l.m.
[nodi]

22

28

35

42

49

56

63

70

3

5

10

15

20

30

40

50

75

100

Tab. 37

ALTEZZA SOTTOCOSTA (m) DELL'ONDA SIGNIFICATIVA DA 270.00 deg

T. DI RITORNO [anni]	VELOCITA' ALL'ANEMOGRAFO [nod]							
	30	40	50	60	70	80	90	100
	VELOCITA' A QUOTA 10 m s.l.m. [nod]							
	22	28	35	42	49	56	63	70
3	1.33	1.62	1.44	--	--	--	--	--
5	1.33	1.76	1.78	--	--	--	--	--
10	1.33	1.85	2.15	1.70	--	--	--	--
15	1.33	1.85	2.35	2.25	--	--	--	--
20	1.33	1.85	2.47	2.45	1.79	--	--	--
30	1.33	1.85	2.62	2.73	2.26	--	--	--
40	1.33	1.85	2.62	2.72	2.55	--	--	--
50	1.33	1.85	2.62	3.05	2.77	--	--	--
75	1.33	1.85	2.62	3.31	3.13	2.21	--	--
100	1.33	1.85	2.62	3.47	3.38	2.64	--	--

Tab. 38

ALTEZZA SOTTOCOSTA [m] DELL'ONDA SIGNIFICATIVA DA 292.50 deg

T. DI RITORNO
[anni]VELOCITA' ALL'ANEMOGRAFO
[nodi]VELOCITA' A QUOTA 10 m s.l.m.
[nodi]

	30	40	50	60	70	80	90	100
	22	28	35	42	47	56	63	70
3	2.03	2.51	2.48	--	--	--	--	--
5	2.03	2.74	3.02	--	--	--	--	--
10	2.03	2.76	3.61	3.65	--	--	--	--
15	2.03	2.76	3.70	4.16	--	--	--	--
20	2.03	2.76	4.00	4.46	4.07	--	--	--
30	2.03	2.76	4.25	4.83	4.74	--	--	--
40	2.03	2.76	4.25	5.07	5.13	--	--	--
50	2.03	2.76	4.25	5.25	5.40	--	--	--
75	2.03	2.76	4.25	5.54	5.95	5.45	--	--
100	2.03	2.76	4.25	5.70	6.15	5.93	--	--

Tab. 39

ALTEZZA SOTTOCOSTA (m) DELL'ONDA SIGNIFICATIVA DA 315.00 deg

T. DI RITORNO [anni]	VELOCITA' ALL'ANEMOGRAFO [nodi]							
	30	40	50	60	70	80	90	100
	VELOCITA' A QUOTA 10 M S.L.M. [nodi]							
	22	20	35	42	49	56	63	70
3	2.37	3.17	3.42	--	--	--	--	--
5	2.37	3.49	4.01	3.96	--	--	--	--
10	2.37	3.62	4.57	5.02	4.62	--	--	--
15	2.37	3.62	4.07	5.53	5.55	--	--	--
20	2.37	3.62	4.95	5.83	6.04	5.16	--	--
30	2.37	3.62	4.95	6.19	6.61	6.31	--	--
40	2.37	3.62	4.95	6.44	6.97	6.92	--	--
50	2.37	3.62	4.95	6.54	7.26	7.33	6.30	--
75	2.37	3.62	4.95	6.54	7.71	8.00	7.54	--
100	2.37	3.62	4.95	6.54	8.00	8.42	8.19	--

Tab. 40

ALTEZZA COTTOCOSTA (m) DELL'ONDA SIGNIFICATIVA DA 337.50 deg

T. DI RITORNO
[anni]VELOCITA' ALL'ANEMOGRAFO
[nodi]VELOCITA' A QUOTA 10 m s.l.m.
[nodi]

	30	40	50	60	70	80	90	100
	22	28	35	42	49	56	63	70
3	2.33	3.21	3.41	--	--	--	--	--
5	2.33	3.51	4.17	4.15	--	--	--	--
10	2.33	3.51	4.71	5.41	5.21	--	--	--
15	2.33	3.51	4.71	6.01	6.22	--	--	--
20	2.33	3.51	4.71	6.19	6.78	6.37	--	--
30	2.33	3.51	4.71	6.19	7.47	7.50	--	--
40	2.33	3.51	4.71	6.19	7.75	8.18	--	--
50	2.33	3.51	4.71	6.19	7.75	8.65	8.26	--
75	2.33	3.51	4.71	6.19	7.75	9.39	9.47	--
100	2.33	3.51	4.71	6.19	7.75	9.39	10.17	--

Tab. 41

ALTEZZA SOTTOCOSTA (m) DELL'ONDA SIGNIFICATIVA DA 360.00 deg

T. DI RITORNO [anni]	VELOCITA' ALL'ANEMOGRAFO [nodi]							
	30	40	50	60	70	80	90	100
	VELOCITA' A QUOTA 10 m s.l.m. [nodi]							
	22	28	35	42	49	56	63	70
3	2.14	2.99	3.10	--	--	--	--	--
5	2.14	3.13	3.94	3.95	--	--	--	--
10	2.14	3.13	4.14	5.23	5.24	--	--	--
15	2.14	3.13	4.14	5.33	6.22	5.90	--	--
20	2.14	3.13	4.14	5.33	6.64	6.79	5.68	--
30	2.14	3.13	4.14	5.33	6.64	7.81	7.50	--
40	2.14	3.13	4.14	5.33	6.64	9.02	9.46	7.51
50	2.14	3.13	4.14	5.33	6.64	8.02	9.13	8.57
75	2.14	3.13	4.14	5.33	6.64	9.02	9.50	10.13
100	2.14	3.13	4.14	5.33	6.64	8.02	9.50	11.06

Tab. 42

DIREZIONE SOTTOCOSTA [deg] DELL'ONDA SIGNIFICATIVA DA 22.50 deg

T. DI RITORNO [anni]	VELOCITA' ALL'ANEMOGRAFO [nodi]							
	30	40	50	60	70	80	90	100
	VELOCITA' A QUOTA 10 M s.l.m. [nodi]							
	22	28	35	42	49	56	63	70
3	3.71	1.13	--	--	--	--	--	--
5	3.71	1.13	358.78	--	--	--	--	--
10	3.71	1.13	358.66	356.90	--	--	--	--
15	3.71	1.13	358.66	356.83	--	--	--	--
20	3.71	1.13	358.66	356.83	--	--	--	--
30	3.71	1.13	358.66	356.83	355.51	--	--	--
40	3.71	1.13	358.66	356.83	355.51	--	--	--
50	3.71	1.13	358.66	356.83	355.51	--	--	--
75	3.71	1.13	358.66	356.83	355.51	354.42	--	--
100	3.71	1.13	358.66	356.83	355.51	354.42	--	--

Tab. 43

DIREZIONE SOTTOCOSTA [deg] DELL'ONDA SIGNIFICATIVA DA 45.90 deg

T. DI RITORNO [anni]	VELOCITA' ALL'ANEMOGRAFO [nodi]							
	30	40	50	60	70	80	90	100
	VELOCITA' A QUOTA 10 m s.l.m. [nodi]							
	22	28	35	42	49	56	63	70
3	--	--	--	--	--	--	--	--
5	--	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--	--
40	--	--	--	--	--	--	--	--
50	--	--	--	--	--	--	--	--
75	--	--	--	--	--	--	--	--
100	--	--	--	--	--	--	--	--

DIREZIONE SOTTOCOSTA [deg] DELL'ONDA SIGNIFICATIVA DA 270.00 deg

T. DI RITORNO
[anni]VELOCITA' ALL'ANEMOGRAFO
[nodil]VELOCITA' A QUOTA 10 m s.l.m.
[nodil]

	30	40	50	60	70	80	90	100
	22	28	35	42	49	56	63	70
3	308.31	307.73	308.67	--	--	--	--	--
5	308.31	310.75	310.68	--	--	--	--	--
10	308.31	311.23	312.48	311.14	--	--	--	--
15	308.31	311.23	313.34	312.77	--	--	--	--
20	308.31	311.23	313.04	313.64	310.30	--	--	--
30	308.31	311.23	314.38	314.65	312.64	--	--	--
40	308.31	311.23	314.38	315.30	313.07	--	--	--
50	308.31	311.23	314.38	315.75	314.66	--	--	--
75	308.31	311.23	314.38	316.42	315.96	312.21	--	--
100	308.31	311.23	314.38	316.03	316.51	314.00	--	--

Tab. 45

DIREZIONE SOTTOCOSTA [deg] DELL'ONDA SIGNIFICATIVA DA 292.50 deg

T. DI RITORNO [anni]	VELOCITA' ALL'ANEMOGRAFO [nodi]							
	30	40	50	60	70	80	90	100
	VELOCITA' A QUOTA 10 m s.l.m. [nodi]							
	22	28	35	42	49	56	63	70
3	314.66	316.04	315.86	--	--	--	--	--
5	314.66	316.68	317.28	--	--	--	--	--
10	314.66	317.26	318.63	319.61	--	--	--	--
15	314.66	317.26	319.23	319.62	--	--	--	--
20	314.66	317.26	319.57	320.17	319.32	--	--	--
30	314.66	317.26	319.90	320.84	320.56	--	--	--
40	314.66	317.26	319.90	321.29	321.28	--	--	--
50	314.66	317.26	319.90	321.61	321.77	--	--	--
75	314.66	317.26	319.90	322.14	322.56	321.72	--	--
100	314.66	317.26	319.90	322.41	323.02	322.57	--	--

Tab. 46

DIREZIONE SOTTOCOSTA (deg) DELL'ONDA SIGNIFICATIVA DA 315.00 deg

T. DI RITORNO [anni]	VELOCITA' ALL'ANEMOGRAFO [nodi]							
	30	40	50	60	70	80	90	100
	VELOCITA' A QUOTA 10 m s.l.m. [nodi]							
	22	28	35	42	49	56	63	70
3	325.00	325.76	326.12	---	---	---	---	---
5	325.00	326.20	326.75	326.80	---	---	---	---
10	325.00	326.40	327.64	328.03	327.54	---	---	---
15	325.00	326.40	327.94	328.51	328.46	---	---	---
20	325.00	326.40	328.02	328.70	328.71	328.01	---	---
30	325.00	326.40	328.02	329.11	329.41	329.06	---	---
40	325.00	326.40	328.02	329.32	329.71	329.50	---	---
50	325.00	326.40	328.02	329.41	329.70	329.89	328.96	---
75	325.00	326.40	328.02	329.41	330.21	330.35	329.76	---
100	325.00	326.40	328.02	329.41	330.41	330.63	330.41	---

Tab. 47

DIREZIONE SOTTOCOSTA [deg] DELL'ONDA SIGNIFICATIVA DA 337.50 deg

T. DI RITORNO [anni]	VELOCITA' ALL'ANEMOGRAFO [nodi]							
	30	40	50	60	70	80	90	100
	VELOCITA' A QUOTA 10 M s.l.m. [nodi]							
	22	28	35	42	49	56	63	70
3	337.05	337.06	336.99	--	--	--	--	--
5	337.05	336.91	337.01	336.99	--	--	--	--
10	337.05	336.91	337.14	337.28	337.22	--	--	--
15	337.05	336.91	337.14	337.41	337.44	--	--	--
20	337.05	336.91	337.14	337.44	337.55	337.45	--	--
30	337.05	336.91	337.14	337.44	337.67	337.66	--	--
40	337.05	336.91	337.14	337.44	337.72	337.77	--	--
50	337.05	336.91	337.14	337.44	337.72	337.85	337.77	--
75	337.05	336.91	337.14	337.44	337.72	338.06	338.05	--
100	337.05	336.91	337.14	337.44	337.72	338.06	338.28	--

Tab. 48

DIREZIONE SOTTOCOSTA [deg] DELL'ONDA SIGNIFICATIVA DA 360.00 deg

T. DI RITORNO
[anni]VELOCITA' ALL'ANEMOGRAFO
[nodi]

30

40

50

60

70

80

90

100

VELOCITA' A QUOTA 10 m s.l.m.
[nodi]

22

28

35

42

49

56

63

70

3	350.24	349.04	348.90	--	--	--	--	--
5	350.24	348.75	347.67	347.71	--	--	--	--
10	350.24	348.75	347.46	346.68	346.73	--	--	--
15	350.24	348.75	347.46	346.62	346.23	346.41	--	--
20	350.24	348.75	347.46	346.62	346.06	346.04	346.56	--
30	350.24	348.75	347.46	346.62	346.06	345.68	345.82	--
40	350.24	348.75	347.46	346.62	346.06	345.61	345.51	345.06
50	350.24	348.75	347.46	346.62	346.06	345.61	345.49	345.51
75	350.24	348.75	347.46	346.62	346.06	345.61	345.48	345.46
100	350.24	348.75	347.46	346.62	346.06	345.61	345.48	345.29

*** DEEP WATER WAVE PARAMETERS

WAVE HEIGHT 3.39 m
 WAVE PERIOD 7.30 s
 WAVE DIRECTION 45.00 degs

***** OUTPUT DATA *****

ORTH. NUMBER	INITIAL COORDINATES		COORDINATES		DEPTH [m]	BREAKING CONDITIONS			REFRAC. COEF.	SHOALING COEF.	WAVE HEIGHT [m]
	X	Y	X	Y		WAVE LENGTH [m]	WAVE DIRECTION [deg]				
1	43.00	29.00	31.08	13.12	.70	19.0	325.36	.144	1.033	.50	
2	42.99	29.01	30.71	12.84	.82	20.5	333.53	.156	1.270	.67	
3	42.98	29.02	30.32	12.59	.95	22.0	336.12	.142	1.478	.71	
4	42.97	29.03	29.90	12.33	.98	22.4	340.16	.145	1.449	.71	
5	42.96	29.04	29.53	12.06	1.01	22.7	341.91	.152	1.487	.77	
6	42.94	29.06	29.19	11.67	.97	22.3	341.64	.151	1.533	.78	
7	42.93	29.07	28.81	11.46	.97	22.2	344.04	.141	1.568	.75	
8	42.92	29.08	28.46	11.21	1.08	23.4	345.93	.158	1.488	.80	
9	42.91	29.09	28.14	10.94	1.12	23.8	346.34	.171	1.502	.87	
10	42.90	29.10	27.84	10.80	1.20	24.7	349.17	.182	1.498	.93	
11	42.89	29.11	27.55	10.72	1.21	24.8	353.15	.181	1.499	.92	
12	42.88	29.12	27.26	10.65	1.22	24.8	357.39	.194	1.493	.98	
13	42.87	29.13	27.00	10.59	1.29	25.5	1.07	.201	1.450	.99	
14	42.86	29.14	26.76	10.59	1.43	26.9	3.42	.229	1.402	1.09	
15	42.85	29.15	26.53	10.58	1.42	26.7	5.24	.238	1.422	1.14	
16	42.83	29.17	26.34	10.58	1.49	27.4	6.57	.253	1.405	1.21	
17	42.82	29.18	26.19	10.58	1.55	27.9	7.44	.253	1.391	1.19	
18	42.81	29.19	26.04	10.59	1.74	29.5	10.62	.292	1.338	1.33	
19	42.80	29.20	25.89	10.53	1.63	28.5	8.60	.291	1.335	1.32	
20	42.79	29.21	25.75	10.47	1.66	28.8	7.28	.306	1.269	1.32	
21	42.78	29.22	25.62	10.41	1.66	28.8	6.64	.319	1.208	1.31	
22	42.77	29.23	25.50	10.35	1.60	28.3	3.71	.326	1.157	1.28	
23	42.76	29.24	25.40	10.30	1.60	28.3	.92	.330	1.096	1.23	
24	42.75	29.25	25.30	10.25	1.57	28.1	357.78	.347	1.044	1.23	
25	42.73	29.27	25.22	10.20	1.54	27.8	354.32	.356	.993	1.20	
26	42.72	29.28	25.14	10.16	1.55	27.9	351.45	.375	.946	1.20	
27	42.71	29.29	25.08	10.13	1.52	27.6	346.19	.387	.919	1.20	
28	42.70	29.30	25.02	10.10	1.56	28.0	344.09	.401	.915	1.25	
29	42.69	29.31	24.95	10.07	1.63	28.6	344.13	.406	.915	1.26	
30	42.68	29.32	24.89	10.03	1.58	28.2	344.30	.409	.914	1.27	
31	42.67	29.33	24.82	9.99	1.67	28.9	342.84	.411	.925	1.29	
32	42.66	29.34	24.76	9.96	1.67	28.9	344.20	.410	.969	1.35	
33	42.65	29.35	24.70	9.93	1.78	29.8	345.64	.414	1.003	1.41	
34	42.64	29.36	24.64	9.90	1.86	30.4	346.23	.415	1.037	1.46	
35	42.62	29.38	24.58	9.87	1.98	31.4	354.52	.425	1.053	1.52	
36	42.61	29.39	24.53	9.84	1.98	31.4	355.33	.428	1.084	1.57	
37	42.60	29.40	24.47	9.81	2.01	31.6	356.16	.430	1.107	1.61	
38	42.59	29.41	24.42	9.78	2.08	32.1	356.94	.432	1.117	1.64	
39	42.58	29.42	24.37	9.75	2.07	32.1	350.11	.415	1.135	1.60	
40	42.57	29.43	24.32	9.72	2.09	32.2	350.89	.415	1.146	1.61	
41	42.56	29.44	24.28	9.69	2.03	31.7	351.27	.394	1.169	1.56	

42	42.55	29.45	24.23	9.66	1.98	31.4	351.70	.392	1.186	1.58
43	42.54	29.46	24.19	9.62	1.96	31.2	352.14	.371	1.196	1.50
44	42.52	29.48	24.14	9.59	1.96	31.2	352.44	.368	1.198	1.50
45	42.51	29.49	24.09	9.56	1.98	31.4	353.38	.388	1.193	1.57
46	42.50	29.50	24.05	9.52	1.83	30.2	353.29	.345	1.221	1.43
47	42.49	29.51	24.00	9.50	1.96	31.2	353.81	.386	1.186	1.55
48	42.47	29.53	23.90	9.49	2.05	31.9	355.74	.400	1.163	1.58
49	42.45	29.55	23.81	9.48	2.04	31.8	357.12	.396	1.155	1.55
50	42.43	29.57	23.72	9.48	2.05	31.9	358.52	.418	1.144	1.62
51	42.40	29.60	23.62	9.47	2.09	32.2	359.82	.419	1.130	1.61
52	42.38	29.62	23.53	9.47	2.22	33.1	1.18	.460	1.104	1.72
53	42.36	29.64	23.44	9.46	2.32	33.8	2.88	.487	1.084	1.79
54	42.34	29.66	23.35	9.46	2.41	34.4	4.27	.514	1.066	1.86
55	42.32	29.68	23.26	9.46	2.50	35.0	6.06	.541	1.050	1.93
56	42.29	29.71	23.18	9.45	2.58	35.5	6.90	.570	1.036	2.00
57	42.27	29.73	23.10	9.45	2.63	35.9	8.35	.594	1.026	2.06
58	42.25	29.75	23.03	9.44	2.65	36.0	8.82	.599	1.018	2.07
59	42.23	29.77	22.96	9.43	2.65	36.0	9.58	.607	1.014	2.09
60	42.20	29.80	22.89	9.44	2.96	37.9	13.81	.676	.996	2.28
61	42.18	29.82	22.83	9.43	2.87	37.3	10.42	.666	1.000	2.26
62	42.16	29.84	22.77	9.43	2.90	37.5	10.62	.678	.997	2.29
63	42.14	29.86	22.71	9.42	2.92	37.6	11.01	.688	.996	2.32
64	42.12	29.88	22.65	9.43	3.10	38.7	11.79	.710	.986	2.37
65	42.09	29.91	22.60	9.41	2.91	37.6	10.99	.687	.996	2.32
66	42.07	29.93	22.54	9.41	2.92	37.7	11.12	.689	.996	2.33
67	42.05	29.95	22.48	9.41	2.93	37.7	11.45	.689	.996	2.33
68	42.03	29.97	22.43	9.41	3.14	38.9	13.23	.724	.984	2.42
69	42.01	29.99	22.38	9.40	3.02	38.2	11.39	.691	.992	2.32
70	41.98	30.02	22.32	9.40	3.10	38.7	11.91	.709	.988	2.37
71	41.96	30.04	22.27	9.39	2.95	37.8	11.53	.673	.997	2.28
72	41.94	30.06	22.22	9.40	3.02	38.3	12.52	.708	.993	2.38
73	41.92	30.08	22.16	9.39	2.97	37.9	11.88	.686	.997	2.32
74	41.90	30.10	22.11	9.39	2.92	37.6	12.19	.684	1.002	2.32
75	41.87	30.13	22.05	9.38	2.85	37.2	12.03	.662	1.007	2.26
76	41.85	30.15	22.00	9.38	2.78	36.8	12.08	.638	1.014	2.19
77	41.81	30.19	21.90	9.39	3.03	38.3	12.01	.693	.997	2.34
78	41.78	30.22	21.85	9.38	2.94	37.7	11.73	.665	1.004	2.26
79	41.76	30.24	21.80	9.38	2.85	37.2	11.44	.661	1.011	2.27
80	41.74	30.26	21.75	9.38	2.78	36.8	11.17	.632	1.016	2.18
81	41.72	30.28	21.69	9.38	2.86	37.2	10.89	.648	1.011	2.22
82	41.70	30.30	21.64	9.38	2.72	36.4	10.73	.619	1.023	2.15
83	41.67	30.33	21.59	9.38	2.75	36.6	10.63	.613	1.021	2.12
84	41.65	30.35	21.53	9.38	2.78	36.8	11.68	.627	1.019	2.17
85	41.63	30.37	21.48	9.38	2.68	36.1	9.99	.602	1.028	2.10
86	41.61	30.39	21.42	9.38	2.70	36.3	9.89	.595	1.026	2.07
87	41.59	30.41	21.37	9.37	2.57	35.5	9.77	.569	1.039	2.01
88	41.56	30.44	21.31	9.38	2.58	35.5	9.65	.580	1.039	2.04
89	41.54	30.46	21.26	9.38	2.59	35.6	10.01	.571	1.039	2.01
90	41.52	30.48	21.20	9.37	2.44	34.7	8.93	.528	1.054	1.89
91	41.48	30.52	21.10	9.37	2.43	34.6	8.06	.531	1.057	1.90
92	41.45	30.55	21.05	9.37	2.42	34.5	8.12	.531	1.059	1.91

*** DEEP WATER WAVE PARAMETERS

WAVE HEIGHT 4.65 m
 WAVE PERIOD 8.61 s
 WAVE DIRECTION 270.00 degs

***** OUTPUT DATA *****

ORTH. NUMBER	INITIAL COORDINATES		COORDINATES		DEPTH [m]	BREAKING CONDITIONS		REFRAC. COEF.	SHOALING COEF.	WAVE HEIGHT [m]
	X	Y	X	Y		WAVE LENGTH [m]	WAVE DIRECTION [deg]			
1	3.00	17.00	33.79	16.58	4.01	52.0	297.45	.645	1.032	3.09
2	3.00	16.94	33.72	16.51	4.28	53.6	295.61	.700	1.012	3.29
3	3.00	16.88	33.67	16.44	4.04	52.2	297.28	.674	1.019	3.19
4	3.00	16.81	33.61	16.37	4.15	52.8	297.88	.683	1.013	3.22
5	3.00	16.75	33.54	16.31	4.16	52.9	298.00	.692	1.015	3.26
6	3.00	16.69	33.46	16.26	4.28	53.6	298.11	.701	1.014	3.30
7	3.00	16.63	33.39	16.20	4.33	53.9	297.98	.708	1.019	3.35
8	3.00	16.56	33.31	16.15	4.53	55.0	297.52	.744	1.020	3.53
9	3.00	16.50	33.24	16.10	4.35	54.1	297.44	.707	1.040	3.42
10	3.00	16.47	33.19	16.08	4.64	55.7	296.46	.762	1.033	3.66
11	3.00	16.41	33.10	16.04	4.69	55.9	296.02	.744	1.046	3.62
12	3.00	16.38	33.05	16.02	4.96	57.4	295.17	.799	1.042	3.87
13	3.00	16.31	32.98	15.97	5.14	58.3	293.95	.830	1.037	4.00
14	3.00	16.25	32.96	15.90	4.79	56.5	294.94	.777	1.040	3.76
15	3.00	16.19	32.92	15.84	4.93	57.2	294.55	.804	1.023	3.82
16	3.00	16.13	32.87	15.78	5.05	57.9	294.16	.831	1.008	3.90
17	3.00	16.06	32.84	15.72	4.94	57.2	294.18	.825	1.004	3.85
18	3.00	16.00	32.79	15.65	5.03	57.7	289.06	.840	.993	3.88
19	3.00	15.94	32.75	15.57	4.86	56.8	289.73	.823	.991	3.79
20	3.00	15.88	32.71	15.49	4.60	55.5	292.96	.772	.994	3.57
21	3.00	15.81	32.68	15.41	4.35	54.0	294.68	.722	.998	3.35
22	3.00	15.75	32.64	15.33	4.07	52.4	295.75	.674	1.007	3.15
23	3.00	15.69	32.59	15.26	4.07	52.4	295.85	.686	1.008	3.21
24	3.00	15.63	32.53	15.19	4.03	52.2	296.00	.669	1.013	3.15
25	3.00	15.56	32.48	15.12	3.95	51.6	296.17	.656	1.023	3.12
26	3.00	15.50	32.41	15.07	4.17	53.0	295.86	.678	1.023	3.23
27	3.00	15.44	32.34	15.01	4.38	54.2	295.51	.709	1.027	3.39
28	3.00	15.38	32.34	14.92	3.62	49.6	297.11	.564	1.061	2.78
29	3.00	15.31	32.29	14.86	3.69	50.1	297.02	.579	1.057	2.84
30	3.00	15.25	32.25	14.79	3.51	48.9	297.30	.550	1.062	2.72
31	3.00	15.19	32.17	14.75	4.05	52.3	296.21	.664	1.029	3.18
32	3.00	15.13	32.13	14.69	4.01	52.0	296.34	.670	1.020	3.18
33	3.00	15.06	32.08	14.61	4.03	52.2	296.63	.666	1.003	3.11
34	3.00	15.03	32.06	14.56	3.77	50.6	297.39	.628	1.001	2.92
35	3.00	15.00	32.02	14.51	3.80	50.7	297.22	.645	.984	2.95
36	3.00	14.97	31.99	14.46	3.88	51.3	296.62	.665	.966	2.99
37	3.00	14.94	31.98	14.39	3.50	48.9	299.20	.613	.961	2.74
38	3.00	14.91	31.94	14.34	3.60	49.5	299.19	.634	.947	2.79
39	3.00	14.88	31.94	14.27	2.99	45.4	301.05	.531	.946	2.34
40	3.00	14.84	31.90	14.22	3.24	47.1	300.80	.572	.936	2.49
41	3.00	14.81	31.86	14.17	3.23	47.0	300.58	.592	.931	2.56

42	3.00	14.78	31.83	14.12	3.18	46.7	301.08	.579	.929	2.50
43	3.00	14.75	31.80	14.07	3.10	46.1	301.59	.565	.928	2.44
44	3.00	14.72	31.79	14.01	2.64	42.8	303.53	.467	.929	2.02
45	3.00	14.69	31.76	13.97	2.60	42.4	303.74	.456	.942	2.00
46	3.00	14.66	31.69	13.95	3.25	47.2	300.45	.569	.944	2.50
47	3.00	14.63	31.68	13.89	2.71	43.3	303.62	.459	.973	2.08
48	3.00	14.59	31.64	13.86	2.83	44.2	303.47	.476	.982	2.17
49	3.00	14.56	31.60	13.82	2.77	43.8	303.54	.467	.997	2.17
50	3.00	14.53	31.56	13.78	2.98	45.2	303.00	.492	.997	2.28
51	3.00	14.50	31.53	13.74	2.75	43.7	303.61	.455	1.017	2.15
52	3.00	14.47	31.48	13.71	3.07	45.9	302.96	.520	1.006	2.43
53	3.00	14.41	31.42	13.64	2.99	45.4	303.59	.485	1.017	2.29
54	3.00	14.34	31.36	13.57	2.80	44.0	304.08	.463	1.028	2.21
55	3.00	14.28	31.28	13.51	2.99	45.4	303.87	.502	1.009	2.36
56	3.00	14.25	31.24	13.47	2.98	45.4	304.09	.507	1.003	2.37
57	3.00	14.22	31.21	13.44	3.00	45.5	304.34	.512	.994	2.37
58	3.00	14.19	31.17	13.40	3.02	45.6	304.61	.516	.983	2.36
59	3.00	14.16	31.13	13.37	3.06	45.9	304.92	.519	.970	2.34
60	3.00	14.13	31.08	13.33	3.11	46.2	304.50	.551	.956	2.45
61	3.00	14.09	31.04	13.30	3.14	46.4	304.81	.553	.942	2.42
62	3.00	14.06	31.00	13.26	3.12	46.3	305.15	.554	.929	2.40
63	3.00	14.03	30.95	13.21	3.09	46.1	305.61	.552	.926	2.38
64	3.00	14.00	30.89	13.15	2.97	45.2	306.19	.547	.925	2.35
65	3.00	13.97	30.84	13.08	2.73	43.5	307.79	.491	.929	2.12
66	3.00	13.94	30.75	13.05	3.15	46.5	306.07	.558	.934	2.42
67	3.00	13.91	30.69	13.00	3.13	46.4	306.77	.548	.946	2.41
68	3.00	13.88	30.63	12.95	3.06	45.8	306.04	.537	.975	2.43
69	3.00	13.84	30.57	12.91	3.01	45.5	306.99	.497	1.004	2.32
70	3.00	13.81	30.51	12.86	3.00	45.5	306.78	.487	1.029	2.33
71	3.00	13.78	30.44	12.84	3.37	48.0	306.11	.541	1.029	2.59
72	3.00	13.75	30.39	12.79	3.14	46.4	305.92	.505	1.059	2.49
73	3.00	13.72	30.32	12.76	3.37	48.0	305.49	.535	1.058	2.63
74	3.00	13.69	30.26	12.72	3.37	48.0	305.80	.536	1.069	2.67
75	3.00	13.66	30.23	12.67	3.03	45.6	306.30	.461	1.104	2.36
76	3.00	13.63	30.15	12.65	3.44	48.4	305.50	.540	1.079	2.71
77	3.00	13.59	30.09	12.62	3.52	49.0	305.28	.543	1.078	2.72
78	3.00	13.56	30.04	12.58	3.41	48.3	305.53	.519	1.087	2.63
79	3.00	13.53	29.97	12.56	3.65	49.8	303.36	.581	1.069	2.89
80	3.00	13.50	29.94	12.52	3.39	48.1	305.09	.529	1.083	2.67
81	3.00	13.47	29.88	12.49	3.50	48.9	304.82	.551	1.072	2.74
82	3.00	13.44	29.82	12.46	3.62	49.6	304.10	.572	1.062	2.83
83	3.00	13.41	29.79	12.42	3.35	47.8	305.08	.520	1.079	2.61
84	3.00	13.38	29.73	12.39	3.45	48.5	304.90	.536	1.071	2.67
85	3.00	13.34	29.68	12.36	3.54	49.1	304.00	.555	1.066	2.75
86	3.00	13.31	29.64	12.31	3.26	47.2	305.03	.504	1.086	2.54
87	3.00	13.28	29.59	12.28	3.35	47.8	304.90	.520	1.082	2.62
88	3.00	13.25	29.54	12.25	3.43	48.4	304.57	.539	1.079	2.70
89	3.00	13.22	29.50	12.21	3.32	47.6	304.97	.509	1.091	2.58
90	3.00	13.19	29.45	12.17	3.32	47.6	305.02	.507	1.097	2.59
91	3.00	13.16	29.40	12.12	3.19	46.8	305.28	.480	1.115	2.49
92	3.00	13.13	29.33	12.08	3.44	48.4	305.15	.518	1.104	2.66
93	3.00	13.09	29.28	12.03	3.28	47.4	305.52	.489	1.128	2.56
94	3.00	13.06	29.22	11.98	3.41	48.3	305.72	.505	1.124	2.64
95	3.00	13.03	29.16	11.90	3.25	47.2	306.38	.475	1.137	2.51
96	3.00	13.02	29.11	11.87	3.45	48.5	305.70	.519	1.124	2.71
97	3.00	13.00	29.08	11.83	3.27	47.4	306.53	.488	1.140	2.59
98	3.00	12.98	29.02	11.80	3.41	48.3	306.51	.508	1.134	2.68
99	3.00	12.97	28.96	11.77	3.53	49.1	306.02	.534	1.124	2.79
100	3.00	12.95	28.93	11.73	3.30	47.6	306.99	.479	1.140	2.54
101	3.00	12.94	28.87	11.71	3.40	48.2	306.95	.500	1.128	2.62

102	3.00	12.92	28.82	11.69	3.49	48.8	305.49	.527	1.117	2.74
103	3.00	12.91	28.80	11.64	3.14	46.4	307.45	.461	1.146	2.45
104	3.00	12.89	28.74	11.62	3.26	47.2	307.39	.476	1.132	2.51
105	3.00	12.88	28.70	11.59	3.23	47.0	307.53	.473	1.133	2.49
106	3.00	12.84	28.63	11.52	3.05	45.7	307.96	.447	1.147	2.38
107	3.00	12.83	28.57	11.51	3.34	47.8	307.54	.500	1.118	2.60
108	3.00	12.80	28.50	11.45	3.17	46.7	308.20	.466	1.131	2.45
109	3.00	12.77	28.44	11.38	3.04	45.7	308.53	.454	1.143	2.41
110	3.00	12.73	28.37	11.32	2.92	44.9	309.24	.423	1.155	2.27
111	3.00	12.70	28.29	11.27	2.98	45.3	309.70	.430	1.149	2.30
112	3.00	12.67	28.22	11.21	3.06	45.8	310.19	.441	1.142	2.34
113	3.00	12.64	28.16	11.14	2.88	44.6	311.11	.410	1.164	2.22
114	3.00	12.61	28.08	11.10	3.21	46.9	309.35	.477	1.133	2.51
115	3.00	12.58	28.02	11.03	3.08	46.1	311.99	.444	1.150	2.37
116	3.00	12.55	27.93	10.97	2.96	45.1	313.98	.415	1.169	2.26
117	3.00	12.53	27.89	10.95	2.82	44.1	314.71	.393	1.189	2.17
118	3.00	12.52	27.83	10.94	2.96	45.2	314.89	.432	1.174	2.36
119	3.00	12.50	27.78	10.93	2.97	45.2	314.98	.431	1.175	2.35
120	3.00	12.48	27.73	10.91	2.98	45.3	315.86	.428	1.176	2.34
121	3.00	12.47	27.67	10.90	2.99	45.4	316.36	.425	1.177	2.33
122	3.00	12.45	27.60	10.90	3.32	47.6	313.23	.479	1.145	2.55
123	3.00	12.42	27.52	10.85	3.02	45.6	317.82	.425	1.178	2.33
124	3.00	12.41	27.47	10.83	2.88	44.6	318.76	.403	1.195	2.24
125	3.00	12.39	27.41	10.82	3.06	45.9	318.80	.443	1.175	2.42
126	3.00	12.38	27.35	10.81	3.09	46.1	318.72	.441	1.173	2.40
127	3.00	12.36	27.30	10.80	3.11	46.2	319.67	.438	1.172	2.38
128	3.00	12.34	27.24	10.78	3.09	46.1	320.22	.434	1.173	2.37
129	3.00	12.33	27.18	10.77	3.12	46.3	320.62	.457	1.170	2.48
130	3.00	12.31	27.12	10.75	3.14	46.4	319.18	.458	1.168	2.49
131	3.00	12.30	27.08	10.72	2.85	44.3	322.11	.395	1.202	2.20
132	3.00	12.28	27.01	10.72	3.05	45.8	322.08	.428	1.177	2.34
133	3.00	12.27	26.95	10.72	3.15	46.5	321.65	.448	1.167	2.43
134	3.00	12.25	26.89	10.71	3.09	46.1	321.13	.445	1.175	2.43
135	3.00	12.23	26.84	10.69	2.89	44.6	322.42	.402	1.199	2.24
136	3.00	12.22	26.78	10.70	3.01	45.5	322.16	.420	1.186	2.32
137	3.00	12.20	26.71	10.71	3.28	47.4	319.30	.469	1.158	2.52
138	3.00	12.19	26.67	10.68	2.87	44.5	322.33	.405	1.205	2.27
139	3.00	12.17	26.61	10.68	2.99	45.4	322.47	.421	1.193	2.33
140	3.00	12.16	26.55	10.69	3.11	46.2	321.78	.439	1.180	2.41
141	3.00	12.14	26.49	10.68	3.07	45.9	321.41	.439	1.186	2.42
142	3.00	12.13	26.42	10.69	3.40	48.2	320.01	.489	1.153	2.62
143	3.00	12.11	26.37	10.69	3.35	47.8	320.69	.487	1.159	2.63
144	3.00	12.09	26.32	10.68	3.24	47.1	320.04	.463	1.172	2.53
145	3.00	12.08	26.26	10.67	3.15	46.5	321.10	.440	1.183	2.42
146	3.00	12.06	26.20	10.67	3.24	47.1	320.78	.460	1.175	2.51
147	3.00	12.05	26.13	10.68	3.36	47.9	319.23	.485	1.164	2.62
148	3.00	12.03	26.08	10.67	3.23	47.0	320.29	.459	1.180	2.52
149	3.00	12.02	26.00	10.67	3.51	48.9	319.18	.512	1.153	2.75
150	3.00	12.00	25.96	10.63	3.00	45.5	320.68	.416	1.199	2.32

*** DEEP WATER WAVE PARAMETERS

WAVE HEIGHT 5.77 m
 WAVE PERIOD 9.57 s
 WAVE DIRECTION 315.00 degs

***** OUTPUT DATA *****

ORTH. NUMBER	INITIAL COORDINATES		COORDINATES		DEPTH [m]	BREAKING CONDITIONS		REFRAC. COEF.	SHOALING COEF.	WAVE HEIGHT [m]
	X	Y	X	Y		WAVE LENGTH [m]	WAVE DIRECTION [deg]			
1	4.00	30.00	23.71	9.76	6.40	72.2	329.12	.846	1.018	4.97
2	4.02	30.02	23.76	9.75	6.20	71.3	328.86	.812	1.024	4.80
3	4.04	30.04	23.81	9.74	6.01	70.2	328.50	.781	1.029	4.64
4	4.09	30.09	23.88	9.77	6.41	72.3	327.36	.856	1.021	5.04
5	4.11	30.11	23.93	9.76	6.22	71.4	327.17	.820	1.026	4.86
6	4.15	30.15	24.02	9.77	6.04	70.3	326.29	.788	1.032	4.69
7	4.20	30.20	24.10	9.79	5.64	68.3	325.49	.736	1.038	4.40
8	4.24	30.24	24.15	9.85	5.98	70.1	324.82	.798	1.021	4.70
9	4.29	30.29	24.21	9.88	5.92	69.8	324.41	.785	1.013	4.59
10	4.33	30.33	24.27	9.93	6.17	71.1	324.10	.829	.996	4.77
11	4.38	30.38	24.32	9.97	6.26	71.6	324.08	.860	.982	4.88
12	4.42	30.42	24.38	10.01	6.36	72.0	324.21	.881	.969	4.93
13	4.46	30.46	24.43	10.06	6.56	73.1	324.44	.918	.958	5.08
14	4.51	30.51	24.48	10.11	6.75	74.0	324.72	.955	.950	5.23
15	4.55	30.55	24.52	10.15	6.94	75.0	325.13	.989	.943	5.38
16	4.60	30.60	24.58	10.19	7.02	75.3	325.31	1.003	.937	5.43
17	4.64	30.64	24.63	10.22	7.00	75.2	326.02	1.021	.933	5.50
18	4.69	30.69	24.68	10.26	7.11	75.7	326.57	1.042	.930	5.59
19	4.73	30.73	24.74	10.28	7.11	75.7	327.13	1.031	.927	5.51
20	4.77	30.77	24.79	10.31	7.07	75.5	327.77	1.030	.924	5.49
21	4.82	30.82	24.86	10.32	6.87	74.6	328.38	1.014	.922	5.39
22	4.86	30.86	24.91	10.35	6.83	74.5	328.97	.996	.920	5.29
23	4.91	30.91	24.98	10.36	6.63	73.4	329.41	.976	.919	5.18
24	4.95	30.95	25.04	10.38	6.54	73.0	330.30	.964	.921	5.12
25	4.99	30.99	25.09	10.41	6.46	72.6	330.60	.945	.928	5.06
26	5.04	31.04	25.15	10.43	6.25	71.5	331.61	.909	.936	4.91
27	5.08	31.08	25.21	10.45	6.24	71.5	332.14	.892	.944	4.86
28	5.13	31.13	25.27	10.48	6.31	71.8	332.44	.890	.952	4.89
29	5.17	31.17	25.33	10.51	6.23	71.4	332.71	.884	.962	4.91
30	5.22	31.22	25.39	10.54	6.19	71.2	332.93	.867	.973	4.87
31	5.26	31.26	25.45	10.58	6.42	72.3	332.67	.881	.978	4.97
32	5.30	31.30	25.52	10.61	6.42	72.3	332.86	.881	.987	5.02
33	5.35	31.35	25.58	10.64	6.43	72.4	332.85	.867	.996	4.98
34	5.39	31.39	25.65	10.68	6.61	73.3	332.60	.888	1.000	5.12
35	5.44	31.44	25.72	10.71	6.58	73.2	332.38	.879	1.009	5.12
36	5.48	31.48	25.78	10.75	6.80	74.3	331.92	.904	1.010	5.27
37	5.52	31.52	25.85	10.77	6.70	73.7	331.75	.897	1.019	5.27
38	5.57	31.57	25.91	10.81	6.92	74.9	331.17	.919	1.019	5.40
39	5.61	31.61	25.98	10.83	6.80	74.2	331.29	.900	1.028	5.34
40	5.66	31.66	26.05	10.85	6.95	75.0	330.81	.918	1.025	5.43
41	5.70	31.70	26.13	10.86	6.90	74.8	331.16	.910	1.026	5.39

42	5.75	31.75	26.20	10.87	6.87	74.6	331.19	.904	1.027	5.36
43	5.79	31.79	26.28	10.86	6.96	75.0	331.13	.917	1.024	5.42
44	5.83	31.83	26.35	10.88	6.88	74.7	331.22	.906	1.026	5.36
45	5.88	31.88	26.42	10.90	7.04	75.4	331.06	.930	1.022	5.48
46	5.92	31.92	26.49	10.91	6.93	74.9	331.11	.912	1.025	5.39
47	5.97	31.97	26.57	10.92	6.93	74.9	331.15	.908	1.025	5.37
48	6.01	32.01	26.65	10.92	6.80	74.2	331.16	.889	1.028	5.27
49	6.06	32.06	26.72	10.93	6.81	74.4	330.39	.899	1.028	5.33
50	6.10	32.10	26.80	10.94	6.72	73.8	330.82	.875	1.031	5.20
51	6.14	32.14	26.88	10.95	6.60	73.3	330.54	.870	1.035	5.19
52	6.19	32.19	26.96	10.96	6.51	72.8	330.58	.846	1.038	5.07
53	6.23	32.23	27.04	10.97	6.37	72.1	330.41	.823	1.042	4.95
54	6.28	32.28	27.11	11.01	6.65	73.5	328.70	.873	1.033	5.20
55	6.32	32.32	27.19	11.02	6.54	73.0	329.06	.864	1.032	5.12
56	6.36	32.36	27.28	11.02	6.20	71.3	328.68	.808	1.040	4.85
57	6.41	32.41	27.36	11.05	6.28	71.7	327.82	.828	1.033	4.94
58	6.45	32.45	27.44	11.07	6.15	71.0	327.15	.803	1.034	4.79
59	6.50	32.50	27.50	11.12	6.42	72.3	325.86	.854	1.022	5.04
60	6.54	32.54	27.58	11.14	6.28	71.7	325.77	.831	1.024	4.91
61	6.59	32.59	27.66	11.16	6.12	70.8	325.18	.812	1.027	4.81
62	6.63	32.63	27.73	11.19	6.12	70.8	324.59	.798	1.026	4.73
63	6.67	32.67	27.79	11.25	6.43	72.4	323.84	.852	1.016	4.99
64	6.72	32.72	27.85	11.29	6.53	72.9	323.31	.865	1.013	5.06
65	6.76	32.76	27.91	11.33	6.59	73.3	322.84	.878	1.013	5.13
66	6.81	32.81	27.97	11.38	6.63	73.4	322.45	.892	1.013	5.21
67	6.85	32.85	28.02	11.42	6.63	73.4	322.17	.890	1.014	5.21
68	6.89	32.89	28.07	11.48	6.80	74.2	321.92	.905	1.010	5.28
69	6.94	32.94	28.11	11.54	6.99	75.1	321.68	.931	1.006	5.41
70	6.98	32.98	28.17	11.58	7.01	75.2	321.53	.945	1.006	5.49
71	7.03	33.03	28.20	11.65	7.41	77.1	321.12	.963	.998	5.55
72	7.07	33.07	28.25	11.69	7.45	77.3	320.99	.972	.998	5.60
73	7.12	33.12	28.31	11.73	7.50	77.5	320.83	.976	.998	5.62
74	7.16	33.16	28.38	11.75	7.17	76.0	320.97	.973	1.005	5.64
75	7.20	33.20	28.43	11.79	7.24	76.4	320.80	.975	1.005	5.66
76	7.25	33.25	28.48	11.83	7.31	76.7	320.66	.975	1.005	5.65
77	7.29	33.29	28.54	11.85	7.18	76.1	320.58	.969	1.009	5.64
78	7.34	33.34	28.59	11.91	7.48	77.4	320.42	.972	1.005	5.63
79	7.38	33.38	28.66	11.92	7.18	76.1	320.34	.962	1.013	5.62
80	7.43	33.43	28.71	11.96	7.29	76.6	320.22	.967	1.012	5.65
81	7.47	33.47	28.76	12.00	7.42	77.1	320.16	.965	1.012	5.64
82	7.51	33.51	28.83	12.01	7.17	76.0	320.16	.958	1.017	5.62
83	7.56	33.56	28.89	12.04	7.15	75.9	320.14	.952	1.017	5.59
84	7.60	33.60	28.95	12.07	7.10	75.7	320.13	.952	1.017	5.59
85	7.65	33.65	29.00	12.11	7.28	76.6	319.94	.982	1.011	5.73
86	7.69	33.69	29.04	12.16	7.46	77.3	320.16	.980	1.002	5.67
87	7.73	33.73	29.08	12.20	7.57	77.9	320.21	.993	.996	5.71
88	7.78	33.78	29.13	12.25	7.70	78.5	320.26	1.009	.990	5.76
89	7.82	33.82	29.17	12.29	7.74	78.7	320.34	1.021	.986	5.81
90	7.87	33.87	29.22	12.33	7.82	79.0	320.41	1.031	.982	5.84
91	7.91	33.91	29.27	12.37	7.82	79.0	320.50	1.048	.980	5.92
92	7.96	33.96	29.31	12.41	7.89	79.3	320.57	1.060	.977	5.97
93	8.00	34.00	29.36	12.45	7.97	79.6	320.64	1.071	.974	6.02
94	8.04	34.04	29.41	12.49	8.00	79.8	320.66	1.073	.973	6.02
95	8.09	34.09	29.47	12.51	7.68	78.4	320.38	1.033	.977	5.82
96	8.13	34.13	29.52	12.55	7.72	78.6	320.37	1.028	.977	5.79
97	8.18	34.18	29.58	12.58	7.66	78.3	320.59	1.022	.978	5.76
98	8.22	34.22	29.64	12.60	7.35	76.9	320.53	1.011	.984	5.73
99	8.26	34.26	29.69	12.64	7.40	77.1	320.45	.990	.984	5.62
100	8.31	34.31	29.75	12.68	7.45	77.3	320.32	.980	.985	5.57
101	8.35	34.35	29.82	12.69	6.98	75.2	320.20	.947	.995	5.44

102	8.40	34.40	29.87	12.73	7.00	75.2	320.05	.946	.998	5.45
103	8.44	34.44	29.94	12.75	6.79	74.2	319.91	.910	1.005	5.28
104	8.49	34.49	30.00	12.78	6.60	73.3	319.76	.874	1.013	5.11
105	8.53	34.53	30.06	12.81	6.67	73.6	319.61	.888	1.008	5.17
106	8.57	34.57	30.14	12.82	6.08	70.6	319.44	.811	1.013	4.74
107	8.62	34.62	30.18	12.88	6.47	72.6	319.26	.876	1.000	5.05
108	8.66	34.66	30.23	12.92	6.62	73.4	319.08	.901	.989	5.14
109	8.71	34.71	30.30	12.95	6.37	72.1	318.91	.870	.984	4.94
110	8.75	34.75	30.36	12.98	6.21	71.3	318.74	.853	.976	4.80
111	8.80	34.80	30.43	13.01	5.88	69.6	318.56	.820	.968	4.58
112	8.84	34.84	30.48	13.05	6.00	70.2	318.38	.852	.956	4.70
113	8.88	34.88	30.53	13.10	6.39	72.2	318.15	.921	.944	5.02
114	8.93	34.93	30.59	13.14	6.25	71.5	317.93	.904	.939	4.89
115	8.97	34.97	30.66	13.17	5.91	69.7	317.68	.852	.936	4.60
116	9.02	35.02	30.71	13.22	6.04	70.3	317.42	.873	.933	4.70
117	9.06	35.06	30.75	13.27	6.27	71.6	317.15	.911	.931	4.89
118	9.10	35.10	30.81	13.32	6.24	71.5	316.88	.907	.931	4.87
119	9.15	35.15	30.87	13.35	5.98	70.1	316.61	.857	.934	4.62
120	9.19	35.19	30.91	13.41	6.02	70.3	316.35	.868	.937	4.69
121	9.24	35.24	30.97	13.45	5.85	69.4	316.08	.829	.944	4.52
122	9.28	35.28	30.99	13.52	6.36	72.0	315.89	.902	.948	4.93
123	9.33	35.33	31.05	13.56	6.16	71.0	315.61	.866	.956	4.78
124	9.37	35.37	31.12	13.59	5.66	68.4	315.33	.798	.967	4.45
125	9.41	35.41	31.19	13.61	5.21	65.8	315.08	.714	.978	4.03
126	9.46	35.46	31.21	13.69	5.87	69.5	314.88	.815	.971	4.57
127	9.50	35.50	31.26	13.74	5.86	69.4	314.64	.816	.972	4.58
128	9.55	35.55	31.31	13.79	5.89	69.6	314.42	.819	.971	4.59
129	9.59	35.59	31.35	13.84	5.93	69.8	314.19	.823	.968	4.60
130	9.63	35.63	31.42	13.87	5.52	67.5	313.91	.761	.969	4.25
131	9.68	35.68	31.44	13.95	6.20	71.3	313.77	.881	.956	4.86
132	9.72	35.72	31.47	14.01	6.41	72.3	313.64	.920	.949	5.03
133	9.77	35.77	31.53	14.04	6.04	70.4	313.22	.857	.944	4.67
134	9.81	35.81	31.57	14.10	6.31	71.8	313.03	.901	.939	4.88
135	9.86	35.86	31.60	14.16	6.54	73.0	312.86	.936	.935	5.05
136	9.90	35.90	31.64	14.21	6.57	73.2	312.70	.947	.934	5.10
137	9.94	35.94	31.68	14.27	6.73	73.9	312.78	.971	.933	5.23
138	9.99	35.99	31.72	14.32	6.56	73.1	312.49	.953	.935	5.14
139	10.03	36.03	31.76	14.37	6.60	73.3	312.36	.944	.937	5.11
140	10.08	36.08	31.80	14.43	6.58	73.2	312.29	.954	.941	5.18
141	10.12	36.12	31.82	14.49	6.70	73.7	312.27	.961	.945	5.24
142	10.17	36.17	31.86	14.54	6.61	73.3	312.20	.941	.952	5.17
143	10.21	36.21	31.89	14.61	6.73	73.9	312.22	.946	.958	5.23
144	10.25	36.25	31.92	14.66	6.58	73.2	312.24	.923	.970	5.16
145	10.30	36.30	31.95	14.72	6.64	73.5	312.26	.913	.980	5.16
146	10.34	36.34	31.98	14.78	6.69	73.7	312.29	.907	.992	5.19
147	10.39	36.39	32.00	14.85	6.80	74.2	312.31	.907	1.004	5.25
148	10.43	36.43	32.03	14.91	6.98	75.2	312.36	.939	1.008	5.47
149	10.47	36.47	32.06	14.97	7.10	75.7	312.35	.942	1.012	5.50
150	10.52	36.52	32.10	15.02	7.11	75.7	312.34	.950	1.011	5.54
151	10.56	36.56	32.14	15.06	7.13	75.8	312.32	.953	1.003	5.52
152	10.61	36.61	32.18	15.10	7.13	75.8	312.32	.973	.996	5.59
153	10.65	36.65	32.22	15.16	7.32	76.7	312.53	1.002	.988	5.71
154	10.67	36.67	32.24	15.18	7.37	77.0	312.54	1.008	.984	5.73
155	10.72	36.72	32.28	15.23	7.39	77.0	312.44	1.027	.980	5.81

*** DEEP WATER WAVE PARAMETERS

WAVE HEIGHT 6.06 m
 WAVE PERIOD 9.74 s
 WAVE DIRECTION 360.00 degs

***** OUTPUT DATA *****

ORTH. NUMBER	INITIAL COORDINATES		COORDINATES		DEPTH [m]	BREAKING CONDITIONS			REFRAC. COEF.	SHOALING COEF.	WAVE HEIGHT [m]
	X	Y	X	Y		WAVE LENGTH [m]	WAVE DIRECTION [deg]				
1	24.00	37.00	24.38	10.00	6.24	72.8	346.97	.817	.975	4.83	
2	24.06	37.00	24.43	10.03	6.08	71.9	342.62	.807	.969	4.74	
3	24.13	37.00	24.47	10.08	6.31	73.2	343.36	.848	.959	4.93	
4	24.19	37.00	24.52	10.12	6.54	74.4	344.91	.894	.951	5.15	
5	24.25	37.00	24.56	10.16	6.77	75.6	345.02	.925	.944	5.29	
6	24.31	37.00	24.60	10.20	6.99	76.6	347.26	.962	.938	5.47	
7	24.38	37.00	24.65	10.24	7.22	77.8	346.28	.994	.934	5.63	
8	24.44	37.00	24.70	10.28	7.45	78.9	347.37	1.034	.930	5.83	
9	24.50	37.00	24.74	10.34	8.08	81.8	351.29	1.076	.927	6.04	
10	24.56	37.00	24.78	10.38	8.27	82.5	348.54	1.110	.925	6.22	
11	24.63	37.00	24.83	10.42	8.63	84.2	348.81	1.158	.923	6.47	
12	24.69	37.00	24.87	10.46	9.14	86.3	349.51	1.222	.922	6.83	
13	24.75	37.00	24.93	10.48	9.10	86.1	349.53	1.202	.921	6.71	
14	24.81	37.00	24.98	10.49	8.96	85.6	350.40	1.201	.920	6.70	
15	24.88	37.00	25.02	10.54	9.50	87.7	350.34	1.278	.921	7.13	
16	24.94	37.00	25.07	10.55	9.29	86.8	351.33	1.240	.925	6.94	
17	25.00	37.00	25.12	10.57	9.18	86.4	350.93	1.226	.928	6.90	
18	25.06	37.00	25.17	10.61	9.40	87.3	351.48	1.237	.931	6.98	
19	25.13	37.00	25.22	10.62	9.23	86.6	352.07	1.223	.936	6.94	
20	25.19	37.00	25.27	10.65	9.39	87.2	352.13	1.227	.939	6.99	
21	25.25	37.00	25.32	10.69	9.57	87.9	352.46	1.252	.942	7.15	
22	25.31	37.00	25.38	10.69	9.24	86.7	352.49	1.201	.948	6.90	
23	25.38	37.00	25.43	10.70	8.92	85.3	352.51	1.165	.954	6.73	
24	25.44	37.00	25.48	10.71	8.60	84.0	352.52	1.115	.961	6.49	
25	25.50	37.00	25.53	10.72	8.43	83.3	352.98	1.074	.967	6.29	
26	25.56	37.00	25.59	10.73	8.11	81.9	352.95	1.035	.975	6.11	
27	25.63	37.00	25.64	10.74	7.80	80.4	352.56	.992	.984	5.92	
28	25.69	37.00	25.70	10.74	7.49	79.1	352.89	.968	.994	5.83	
29	25.75	37.00	25.75	10.76	7.33	78.3	352.56	.936	1.002	5.68	
30	25.81	37.00	25.80	10.77	7.18	77.6	352.61	.912	1.010	5.58	
31	25.88	37.00	25.85	10.79	7.03	76.8	352.56	.889	1.018	5.48	
32	25.94	37.00	25.91	10.80	6.89	76.1	352.68	.868	1.026	5.39	
33	26.00	37.00	25.96	10.82	6.75	75.5	352.53	.847	1.034	5.31	
34	26.06	37.00	26.03	10.85	6.86	76.0	352.48	.855	1.034	5.36	
35	26.13	37.00	26.11	10.85	6.86	76.0	352.32	.859	1.034	5.38	
36	26.19	37.00	26.19	10.86	6.86	76.0	351.99	.853	1.033	5.34	
37	26.25	37.00	26.27	10.87	6.86	76.0	351.65	.848	1.033	5.31	
38	26.31	37.00	26.36	10.88	6.70	75.3	351.27	.837	1.037	5.26	
39	26.38	37.00	26.44	10.89	6.70	75.2	350.95	.831	1.037	5.22	
40	26.44	37.00	26.53	10.90	6.68	75.1	350.66	.836	1.037	5.26	
41	26.50	37.00	26.61	10.91	6.65	74.9	350.29	.820	1.038	5.16	

42	26.56	37.00	26.69	10.93	6.74	75.4	349.99	.830	1.036	5.21
43	26.63	37.00	26.77	10.94	6.81	75.8	350.36	.844	1.035	5.29
44	26.69	37.00	26.85	10.95	6.75	75.5	350.00	.844	1.037	5.30
45	26.75	37.00	26.94	10.96	6.66	75.0	349.27	.824	1.040	5.20
46	26.81	37.00	27.02	10.97	6.55	74.4	348.75	.804	1.044	5.08
47	26.88	37.00	27.11	10.97	6.21	72.7	347.92	.766	1.052	4.88
48	26.94	37.00	27.19	11.01	6.37	73.6	347.24	.786	1.045	4.98
49	27.00	37.00	27.27	11.05	6.61	74.7	346.60	.818	1.032	5.11
50	27.06	37.00	27.34	11.07	6.60	74.7	345.94	.825	1.029	5.14
51	27.13	37.00	27.41	11.11	6.79	75.7	345.59	.851	1.020	5.26
52	27.19	37.00	27.48	11.13	6.74	75.4	344.98	.858	1.017	5.30
53	27.25	37.00	27.54	11.17	6.85	76.0	344.40	.865	1.014	5.31
54	27.31	37.00	27.61	11.20	6.94	76.4	344.51	.890	1.010	5.45
55	27.38	37.00	27.68	11.22	6.80	75.8	343.46	.863	1.013	5.30
56	27.44	37.00	27.74	11.27	7.00	76.7	343.30	.887	1.007	5.41
57	27.50	37.00	27.80	11.32	7.16	77.5	346.13	.925	1.004	5.63
58	27.56	37.00	27.87	11.36	7.09	77.2	342.95	.899	1.006	5.48
59	27.63	37.00	27.93	11.41	7.17	77.6	342.92	.917	1.006	5.59
60	27.69	37.00	27.98	11.46	7.21	77.8	342.94	.925	1.007	5.65
61	27.75	37.00	28.04	11.52	7.39	78.6	344.73	.948	1.004	5.77
62	27.81	37.00	28.10	11.57	7.42	78.7	343.57	.948	1.003	5.76
63	27.88	37.00	28.15	11.62	7.47	79.0	344.03	.954	1.003	5.79
64	27.94	37.00	28.22	11.65	7.35	78.3	343.11	.942	1.005	5.74
65	28.00	37.00	28.28	11.70	7.42	78.7	343.03	.944	1.005	5.74
66	28.06	37.00	28.34	11.74	7.31	78.2	344.30	.939	1.008	5.74
67	28.13	37.00	28.41	11.76	7.04	77.0	342.16	.901	1.014	5.54
68	28.19	37.00	28.47	11.81	7.16	77.5	342.35	.916	1.013	5.63
69	28.25	37.00	28.53	11.85	7.29	78.1	342.85	.924	1.012	5.67
70	28.31	37.00	28.60	11.87	7.05	77.0	341.63	.892	1.019	5.51
71	28.38	37.00	28.65	11.92	7.21	77.8	341.97	.916	1.018	5.65
72	28.44	37.00	28.71	11.97	7.39	78.6	343.81	.930	1.016	5.73
73	28.50	37.00	28.78	11.99	7.17	77.6	341.72	.897	1.023	5.56
74	28.56	37.00	28.85	12.00	6.98	76.6	341.06	.880	1.029	5.49
75	28.63	37.00	28.90	12.05	7.23	77.8	341.60	.908	1.020	5.61
76	28.69	37.00	28.96	12.08	7.23	77.9	341.27	.906	1.019	5.59
77	28.75	37.00	29.02	12.12	7.13	77.4	341.59	.905	1.019	5.59
78	28.81	37.00	29.08	12.17	7.18	77.6	342.02	.921	1.012	5.64
79	28.88	37.00	29.13	12.22	7.28	78.0	346.57	.940	1.004	5.72
80	28.94	37.00	29.19	12.25	7.02	76.8	341.90	.895	1.006	5.45
81	29.00	37.00	29.26	12.30	6.98	76.6	342.12	.901	1.002	5.47
82	29.06	37.00	29.34	12.35	6.77	75.6	341.16	.871	1.003	5.30
83	29.13	37.00	29.42	12.39	6.56	74.5	340.71	.844	1.005	5.14
84	29.19	37.00	29.50	12.45	6.57	74.5	340.23	.840	1.003	5.10
85	29.25	37.00	29.57	12.50	6.58	74.6	341.31	.844	1.002	5.12
86	29.31	37.00	29.66	12.51	5.93	71.2	338.28	.748	1.018	4.62
87	29.38	37.00	29.73	12.58	6.17	72.5	338.29	.777	1.014	4.77
88	29.44	37.00	29.80	12.62	6.19	72.6	338.35	.791	1.015	4.87
89	29.50	37.00	29.88	12.63	5.55	69.0	336.39	.685	1.036	4.30
90	29.56	37.00	29.94	12.71	6.21	72.7	338.62	.775	1.023	4.91
91	29.63	37.00	30.02	12.72	5.54	69.0	335.48	.680	1.043	4.30
92	29.69	37.00	30.09	12.75	5.43	68.4	335.02	.666	1.042	4.20
93	29.75	37.00	30.15	12.81	5.67	69.7	335.31	.710	1.028	4.42
94	29.81	37.00	30.23	12.82	5.14	66.7	334.21	.634	1.034	3.97
95	29.88	37.00	30.29	12.89	5.53	68.9	334.65	.712	1.012	4.36
96	29.94	37.00	30.35	12.93	5.55	69.0	334.28	.716	.998	4.33
97	30.00	37.00	30.45	12.95	4.91	65.2	332.56	.634	.994	3.82
98	30.03	37.00	30.49	13.00	5.12	66.5	332.36	.667	.975	3.96
99	30.06	37.00	30.54	13.03	5.04	66.1	331.70	.666	.966	3.90
100	30.09	37.00	30.58	13.08	5.43	68.4	333.19	.731	.952	4.22
101	30.13	37.00	30.63	13.12	5.49	68.6	334.58	.754	.946	4.32

102	30.16	37.00	30.67	13.15	5.44	68.4	333.96	.747	.942	4.26
103	30.19	37.00	30.72	13.18	5.36	68.0	333.34	.740	.939	4.21
104	30.22	37.00	30.77	13.21	5.19	66.9	330.91	.704	.938	4.00
105	30.25	37.00	30.81	13.24	5.04	66.1	330.32	.696	.938	3.96
106	30.28	37.00	30.86	13.26	4.86	64.9	328.96	.663	.939	3.77
107	30.31	37.00	30.90	13.29	4.65	63.6	328.02	.632	.942	3.60
108	30.34	37.00	30.93	13.34	4.94	65.4	328.56	.672	.944	3.84
109	30.38	37.00	30.97	13.38	4.94	65.4	327.98	.664	.948	3.81
110	30.44	37.00	31.05	13.43	4.67	63.8	327.31	.620	.965	3.62
111	30.47	37.00	31.09	13.45	4.41	62.1	326.86	.587	.977	3.47
112	30.50	37.00	31.10	13.53	5.31	67.6	331.19	.702	.971	4.13
113	30.56	37.00	31.18	13.57	4.79	64.5	327.44	.622	.987	3.72
114	30.63	37.00	31.25	13.63	4.73	64.1	326.84	.615	.995	3.70
115	30.69	37.00	31.31	13.69	4.75	64.2	326.68	.613	.996	3.70
116	30.75	37.00	31.36	13.78	5.20	67.0	328.45	.685	.985	4.09
117	30.81	37.00	31.43	13.82	4.78	64.5	326.38	.636	.988	3.77
118	30.88	37.00	31.48	13.89	5.01	65.9	326.88	.666	.974	3.93
119	30.94	37.00	31.55	13.94	4.69	63.9	325.65	.626	.967	3.67
120	31.00	37.00	31.61	14.02	4.93	65.3	325.69	.660	.951	3.80

*** DEEP WATER WAVE PARAMETERS

WAVE HEIGHT 4.67 m
WAVE PERIOD 8.46 s
WAVE DIRECTION 45.00 degs

***** OUTPUT DATA *****

-----BREAKING CONDITIONS-----

ORTH. NUMBER	INITIAL COORDINATES		DEPTH [m]	WAVE		WAVE DIRECTION [deg]	REFRACT. COEF.	SHOALING COEF.	WAVE HEIGHT [m]
	X	Y		LENGTH	PERIOD				
1	43.00	29.00	15.86	34.3	33.6	335.69	.222	1.324	1.37
2	42.99	29.01	15.63	33.9	33.2	334.07	.221	1.295	1.33
3	42.98	29.02	15.42	33.4	33.2	332.32	.217	1.251	1.27
4	42.97	29.03	15.19	33.4	33.2	332.92	.222	1.214	1.26
5	42.96	29.04	14.98	33.6	33.6	335.23	.222	1.249	1.30
6	42.94	29.06	14.74	32.9	32.9	331.73	.208	1.303	1.26
7	42.93	29.07	14.50	30.6	30.6	327.70	.184	1.292	1.11
8	42.92	29.08	14.23	28.2	28.2	323.08	.181	1.094	.93
9	42.91	29.09	13.92	27.1	27.1	322.32	.180	1.035	.87
10	42.90	29.10	13.66	29.8	29.8	326.93	.174	1.223	1.00
11	42.89	29.11	13.39	27.7	27.7	327.46	.145	1.279	.87
12	42.88	29.12	13.12	25.7	25.7	326.63	.157	1.004	.74
13	42.87	29.13	12.87	28.1	28.1	329.36	.158	1.190	.88
14	42.86	29.14	12.64	29.9	29.9	334.97	.158	1.405	1.04
15	42.85	29.15	12.39	29.0	29.0	338.47	.144	1.459	.98
16	42.83	29.17	12.12	30.1	30.1	340.68	.149	1.439	1.00
17	42.82	29.18	11.73	30.4	30.4	340.01	.157	1.466	1.07
18	42.81	29.19	11.50	31.0	31.0	343.03	.162	1.472	1.12
19	42.80	29.20	11.26	32.7	32.7	345.08	.181	1.481	1.18
20	42.79	29.21	10.97	33.0	33.0	344.23	.184	1.411	1.21
21	42.78	29.22	10.81	33.2	33.2	348.33	.190	1.442	1.28
22	42.77	29.23	10.74	35.1	35.1	353.12	.212	1.389	1.38
23	42.76	29.24	10.67	34.9	34.9	356.82	.216	1.394	1.40
24	42.75	29.25	10.62	34.5	34.5	359.68	.212	1.404	1.39
25	42.73	29.27	10.63	37.0	37.0	2.61	.244	1.341	1.53
26	42.72	29.28	10.62	36.8	36.8	2.59	.249	1.355	1.58
27	42.71	29.29	10.61	37.0	37.0	3.79	.255	1.356	1.62
28	42.70	29.30	10.61	37.9	37.9	4.58	.261	1.341	1.63
29	42.69	29.31	10.61	38.7	38.7	5.63	.274	1.327	1.70
30	42.68	29.32	10.60	39.0	39.0	6.11	.290	1.312	1.78
31	42.67	29.33	10.54	39.2	39.2	5.55	.295	1.267	1.75
32	42.66	29.34	10.48	38.8	38.8	4.62	.304	1.232	1.75
33	42.65	29.35	10.43	39.2	39.2	3.42	.317	1.179	1.74
34	42.64	29.36	10.38	39.0	39.0	1.85	.326	1.134	1.72
35	42.62	29.38	10.34	38.6	38.6	.35	.326	1.100	1.67
36	42.61	29.39	10.30	38.2	38.2	358.38	.346	1.065	1.72
37	42.60	29.40	10.26	37.9	37.9	356.26	.358	1.030	1.68
38	42.59	29.41	10.23	38.3	38.3	354.00	.368	.990	1.70
39	42.58	29.42	10.19	38.0	38.0	353.68	.377	.959	1.69
40	42.57	29.43	10.16	37.9	37.9	348.41	.383	.933	1.67
41	42.56	29.44	10.14	38.1	38.1	345.96	.400	.917	1.72

42	42.55	29.45	24.99	10.11	2.16	38.3	344.41	.406	.913	1.73
43	42.54	29.46	24.93	10.08	2.18	38.4	344.52	.408	.916	1.75
44	42.52	29.48	24.87	10.05	2.21	38.7	344.67	.410	.923	1.77
45	42.51	29.49	24.82	10.02	2.24	38.9	344.83	.411	.933	1.79
46	42.50	29.50	24.76	10.00	2.37	40.0	345.02	.411	.944	1.81
47	42.49	29.51	24.71	9.97	2.46	40.7	348.69	.417	.974	1.90
48	42.48	29.52	24.65	9.94	2.42	40.4	346.72	.406	1.013	1.92
49	42.47	29.53	24.60	9.91	2.54	41.3	347.35	.405	1.036	1.96
50	42.46	29.54	24.54	9.88	2.55	41.4	347.99	.404	1.055	2.01
51	42.45	29.55	24.49	9.85	2.59	41.7	348.66	.403	1.088	2.05
52	42.44	29.56	24.43	9.82	2.66	42.3	349.35	.401	1.104	2.07
53	42.43	29.57	24.38	9.78	2.58	41.6	349.71	.386	1.136	2.05
54	42.41	29.59	24.32	9.76	2.71	42.6	350.80	.396	1.136	2.10
55	42.40	29.60	24.27	9.73	2.89	43.9	353.89	.432	1.128	2.28
56	42.39	29.61	24.22	9.69	2.69	42.5	351.28	.393	1.162	2.13
57	42.38	29.62	24.16	9.65	2.71	42.6	351.74	.392	1.165	2.13
58	42.37	29.63	24.11	9.62	2.76	43.0	352.52	.391	1.163	2.12
59	42.36	29.64	24.06	9.58	2.63	42.0	352.46	.370	1.179	2.04
60	42.35	29.65	24.01	9.54	2.57	41.5	353.03	.378	1.182	2.04
61	42.34	29.66	23.95	9.54	2.77	43.1	354.66	.397	1.154	2.14
62	42.33	29.67	23.89	9.55	3.01	44.8	.00	.454	1.125	2.39
63	42.32	29.68	23.84	9.53	2.67	42.4	355.55	.387	1.136	2.09
64	42.30	29.70	23.79	9.54	2.88	43.8	356.61	.421	1.131	2.22
65	42.29	29.71	23.74	9.53	2.91	44.1	357.66	.434	1.124	2.28
66	42.28	29.72	23.69	9.54	3.11	45.5	359.22	.473	1.102	2.44
67	42.26	29.74	23.59	9.53	3.00	44.7	359.65	.453	1.105	2.34
68	42.24	29.76	23.50	9.53	3.21	46.2	1.81	.499	1.083	2.52
69	42.22	29.78	23.41	9.54	3.39	47.4	2.42	.524	1.065	2.60
70	42.19	29.81	23.33	9.53	3.40	47.4	3.47	.528	1.059	2.61
71	42.17	29.83	23.25	9.53	3.56	48.4	5.33	.571	1.045	2.79
72	42.15	29.85	23.17	9.52	3.55	48.4	5.72	.576	1.040	2.80
73	42.13	29.87	23.11	9.52	3.66	49.1	6.41	.584	1.031	2.81
74	42.11	29.89	23.04	9.53	3.78	49.9	7.88	.619	1.022	2.95
75	42.08	29.92	22.97	9.53	4.00	51.1	8.29	.660	1.010	3.11
76	42.06	29.94	22.90	9.52	4.01	51.2	8.63	.667	1.007	3.14
77	42.04	29.96	22.84	9.52	4.13	51.9	9.58	.687	1.001	3.21
78	42.02	29.98	22.78	9.50	4.05	51.4	9.00	.678	1.002	3.17
79	41.99	30.01	22.72	9.49	4.11	51.8	9.18	.683	.999	3.19
80	41.97	30.03	22.66	9.49	4.15	52.0	10.82	.706	.997	3.29
81	41.95	30.05	22.60	9.48	4.17	52.1	9.39	.697	.996	3.24
82	41.93	30.07	22.55	9.48	4.17	52.1	9.68	.697	.996	3.24
83	41.91	30.09	22.49	9.46	4.06	51.5	9.36	.672	.999	3.14
84	41.88	30.12	22.43	9.46	4.15	52.0	10.25	.696	.996	3.24
85	41.86	30.14	22.37	9.45	4.01	51.2	9.49	.685	1.002	3.11
86	41.84	30.16	22.32	9.45	4.09	51.7	9.98	.673	.999	3.14
87	41.82	30.18	22.26	9.43	3.80	50.0	9.65	.638	1.012	3.01
88	41.80	30.20	22.20	9.44	4.13	51.9	13.62	.700	.999	3.26
89	41.77	30.23	22.15	9.44	4.08	51.6	10.18	.675	1.002	3.16
90	41.75	30.25	22.09	9.43	4.01	51.2	10.38	.666	1.005	3.12
91	41.73	30.27	22.03	9.42	3.80	50.0	10.82	.614	1.016	2.92
92	41.71	30.29	21.97	9.42	3.84	50.2	10.89	.643	1.015	3.05
93	41.69	30.31	21.91	9.41	3.65	49.0	9.90	.590	1.026	2.83
94	41.66	30.34	21.86	9.41	3.62	48.8	9.76	.581	1.028	2.79
95	41.64	30.36	21.80	9.40	3.45	47.7	9.63	.554	1.040	2.69
96	41.62	30.38	21.74	9.42	3.75	49.6	11.89	.605	1.022	2.89
97	41.60	30.40	21.68	9.40	3.47	47.8	9.43	.558	1.040	2.71
98	41.57	30.43	21.63	9.41	3.47	47.8	9.34	.550	1.040	2.67
99	41.55	30.45	21.57	9.41	3.46	47.8	10.25	.560	1.041	2.72
100	41.53	30.47	21.51	9.40	3.31	46.9	8.81	.520	1.052	2.55
101	41.51	30.49	21.46	9.40	3.17	45.9	8.54	.495	1.064	2.46

102	41.49	30.51	21.40	9.40	3.16	45.8	8.98	.496	1.065	2.47
103	41.46	30.54	21.34	9.40	3.32	46.9	8.39	.520	1.054	2.56
104	41.44	30.56	21.28	9.40	3.18	46.0	7.85	.494	1.065	2.46
105	41.42	30.58	21.22	9.39	3.06	45.1	8.16	.482	1.076	2.42
106	41.40	30.60	21.13	9.39	3.01	44.8	7.24	.455	1.082	2.30
107	41.38	30.62	21.04	9.39	2.84	43.6	6.95	.432	1.100	2.22

*** DEEP WATER WAVE PARAMETERS

WAVE HEIGHT 5.68 m
 WAVE PERIOD 9.48 s
 WAVE DIRECTION 270.00 degs

***** OUTPUT DATA *****

ORTH. NUMBER	INITIAL COORDINATES		COORDINATES		DEPTH [m]	BREAKING CONDITIONS			WAVE HEIGHT [m]
	X	Y	X	Y		WAVE LENGTH [m]	WAVE DIRECTION [deg]	REFRACTION COEFF.	SHOALING COEFF.
1	3.00	17.00	33.69	16.48	4.46	60.6	298.77	.584	1.039
2	3.00	16.97	33.63	16.46	4.99	63.8	296.63	.682	1.016
3	3.00	16.91	33.59	16.37	4.42	60.4	299.20	.582	1.038
4	3.00	16.88	33.54	16.34	4.63	61.6	299.06	.618	1.030
5	3.00	16.84	33.50	16.32	4.82	62.8	298.92	.641	1.024
6	3.00	16.81	33.44	16.29	5.20	65.1	298.28	.705	1.013
7	3.00	16.75	33.38	16.22	4.79	62.6	298.95	.633	1.035
8	3.00	16.72	33.31	16.21	5.57	67.2	297.13	.749	1.012
9	3.00	16.69	33.28	16.18	5.18	65.0	298.33	.691	1.029
10	3.00	16.66	33.22	16.16	5.67	67.7	295.44	.761	1.018
11	3.00	16.63	33.20	16.12	5.22	65.2	297.98	.687	1.039
12	3.00	16.59	33.13	16.11	5.75	68.1	296.05	.766	1.027
13	3.00	16.53	33.06	16.05	5.51	66.9	296.57	.723	1.050
14	3.00	16.50	33.00	16.04	5.77	68.3	295.71	.749	1.048
15	3.00	16.44	32.94	15.98	5.75	68.1	295.35	.753	1.046
16	3.00	16.38	32.89	15.91	5.89	68.9	295.15	.778	1.029
17	3.00	16.31	32.85	15.85	6.00	69.4	294.51	.803	1.016
18	3.00	16.25	32.81	15.78	5.85	68.7	294.52	.801	1.012
19	3.00	16.19	32.78	15.71	5.69	67.8	294.87	.770	1.009
20	3.00	16.13	32.73	15.64	5.73	68.0	294.76	.777	1.002
21	3.00	16.06	32.68	15.56	5.72	67.9	290.52	.787	.997
22	3.00	16.00	32.64	15.47	5.40	66.2	293.56	.737	1.002
23	3.00	15.94	32.60	15.38	5.08	64.4	295.20	.690	1.009
24	3.00	15.88	32.56	15.30	4.74	62.3	296.26	.644	1.020
25	3.00	15.84	32.52	15.26	4.89	63.3	296.11	.663	1.017
26	3.00	15.78	32.47	15.19	4.80	62.7	296.30	.648	1.025
27	3.00	15.72	32.39	15.13	5.02	64.0	295.55	.669	1.026
28	3.00	15.66	32.32	15.07	5.22	65.2	295.25	.696	1.031
29	3.00	15.59	32.24	15.00	5.35	66.0	293.88	.701	1.039
30	3.00	15.53	32.22	14.92	5.00	63.9	295.74	.658	1.047
31	3.00	15.47	32.18	14.85	4.78	62.6	296.62	.621	1.049
32	3.00	15.41	32.14	14.78	4.65	61.8	296.80	.620	1.044
33	3.00	15.34	32.07	14.72	4.91	63.4	296.42	.654	1.025
34	3.00	15.28	32.03	14.65	4.88	63.2	296.58	.656	1.011
35	3.00	15.22	32.01	14.55	4.30	59.5	297.82	.594	1.006
36	3.00	15.19	31.98	14.51	4.38	60.1	298.04	.614	.991
37	3.00	15.16	31.95	14.47	4.51	60.9	298.31	.635	.976
38	3.00	15.13	31.92	14.42	4.66	61.8	298.60	.655	.963
39	3.00	15.09	31.90	14.36	4.43	60.5	299.03	.643	.987
40	3.00	15.06	31.89	14.29	3.95	57.3	300.56	.567	.954
41	3.00	15.03	31.85	14.23	3.96	57.4	300.75	.582	.947

42	3.00	15.00	31.81	14.17	3.91	57.0	301.31	.566	.943	3.03
43	3.00	14.97	31.78	14.12	3.81	56.3	301.88	.550	.942	2.94
44	3.00	14.94	31.74	14.06	3.66	55.3	302.46	.535	.943	2.87
45	3.00	14.91	31.69	14.02	3.87	56.8	302.48	.553	.946	2.97
46	3.00	14.88	31.64	13.97	4.02	57.7	300.47	.579	.955	3.14
47	3.00	14.84	31.64	13.90	3.23	52.0	303.94	.445	.987	2.49
48	3.00	14.81	31.59	13.86	3.34	53.0	303.90	.456	.998	2.58
49	3.00	14.78	31.56	13.81	3.28	52.5	304.06	.446	1.013	2.56
50	3.00	14.75	31.52	13.77	3.25	52.2	304.19	.438	1.025	2.55
51	3.00	14.72	31.48	13.73	3.26	52.3	304.30	.431	1.032	2.53
52	3.00	14.69	31.40	13.71	3.86	56.7	303.48	.520	1.011	2.99
53	3.00	14.66	31.39	13.65	3.44	53.7	304.39	.454	1.030	2.66
54	3.00	14.63	31.31	13.64	4.16	58.6	301.19	.562	1.002	3.20
55	3.00	14.59	31.27	13.60	4.08	58.2	301.42	.563	1.003	3.20
56	3.00	14.56	31.27	13.54	3.46	53.8	304.94	.469	1.022	2.72
57	3.00	14.53	31.22	13.51	3.70	55.5	304.89	.499	1.006	2.85
58	3.00	14.50	31.18	13.47	3.69	55.5	305.15	.503	.999	2.85
59	3.00	14.47	31.14	13.43	3.78	55.5	305.43	.505	.989	2.84
60	3.00	14.44	31.08	13.40	3.97	57.4	302.76	.567	.971	3.13
61	3.00	14.41	31.04	13.37	3.95	57.3	303.06	.566	.960	3.09
62	3.00	14.38	31.00	13.33	3.93	57.1	303.39	.565	.948	3.04
63	3.00	14.34	30.97	13.28	3.73	55.8	306.52	.534	.943	2.86
64	3.00	14.31	30.93	13.24	3.78	55.5	306.84	.534	.940	2.85
65	3.00	14.28	30.88	13.21	3.83	56.4	304.51	.561	.938	2.99
66	3.00	14.25	30.85	13.16	3.65	55.2	306.37	.530	.939	2.83
67	3.00	14.22	30.81	13.12	3.48	52.9	307.44	.504	.942	2.69
68	3.00	14.19	30.75	13.09	3.65	55.2	307.29	.525	.946	2.82
69	3.00	14.16	30.70	13.05	3.79	56.1	306.47	.548	.953	2.97
70	3.00	14.13	30.63	13.01	3.86	56.7	307.08	.541	.964	2.96
71	3.00	14.09	30.57	12.97	3.85	56.6	306.36	.534	.986	2.99
72	3.00	14.06	30.51	12.92	3.88	56.8	307.01	.526	1.009	3.02
73	3.00	14.03	30.44	12.88	3.93	57.1	306.84	.519	1.030	3.04
74	3.00	14.00	30.38	12.82	3.72	55.6	307.37	.486	1.061	2.93
75	3.00	13.97	30.29	12.79	4.18	58.8	305.62	.549	1.056	3.29
76	3.00	13.94	30.22	12.74	4.06	58.0	306.95	.517	1.074	3.15
77	3.00	13.91	30.15	12.70	4.04	57.8	306.91	.519	1.084	3.20
78	3.00	13.88	30.09	12.65	4.02	57.7	307.06	.501	1.091	3.10
79	3.00	13.84	30.03	12.61	3.89	56.9	307.10	.486	1.101	3.04
80	3.00	13.81	29.94	12.58	4.35	59.9	306.47	.553	1.072	3.37
81	3.00	13.78	29.89	12.53	4.05	57.9	306.70	.511	1.084	3.15
82	3.00	13.75	29.81	12.50	4.31	59.6	306.32	.550	1.068	3.33
83	3.00	13.72	29.75	12.46	4.31	59.6	305.60	.548	1.066	3.32
84	3.00	13.69	29.71	12.41	3.99	57.6	306.52	.503	1.081	3.09
85	3.00	13.66	29.65	12.37	4.03	57.8	306.43	.512	1.079	3.14
86	3.00	13.63	29.59	12.34	4.08	58.1	306.14	.523	1.078	3.20
87	3.00	13.59	29.55	12.29	3.95	57.3	306.48	.494	1.088	3.05
88	3.00	13.56	29.48	12.26	4.19	58.9	305.59	.528	1.078	3.23
89	3.00	13.53	29.44	12.21	3.89	56.9	306.56	.480	1.110	3.00
90	3.00	13.50	29.38	12.17	4.15	58.6	306.33	.515	1.090	3.19
91	3.00	13.47	29.33	12.13	4.03	57.8	306.31	.509	1.113	3.19
92	3.00	13.44	29.28	12.08	3.92	57.0	306.71	.480	1.118	3.05
93	3.00	13.41	29.22	12.05	4.15	58.6	306.00	.505	1.113	3.19
94	3.00	13.38	29.18	11.99	3.87	56.8	307.06	.460	1.139	2.97
95	3.00	13.34	29.12	11.95	4.11	58.4	306.92	.496	1.125	3.17
96	3.00	13.31	29.08	11.89	3.94	57.2	307.56	.471	1.138	3.04
97	3.00	13.28	29.01	11.85	4.10	58.3	307.45	.490	1.132	3.15
98	3.00	13.25	28.95	11.80	3.94	57.2	307.91	.468	1.140	3.03
99	3.00	13.22	28.87	11.76	3.94	57.2	308.08	.470	1.135	3.03
100	3.00	13.19	28.79	11.72	4.10	58.3	307.78	.509	1.120	3.24
101	3.00	13.16	28.71	11.67	4.09	58.2	307.98	.506	1.117	3.21

102	3.00	13.14	28.66	11.66	4.25	59.3	307.91	.526	1.106	3.30
103	3.00	13.11	28.58	11.60	4.21	59.0	307.13	.521	1.105	3.27
104	3.00	13.08	28.52	11.53	3.88	56.8	308.88	.473	1.123	3.02
105	3.00	13.06	28.48	11.50	3.88	56.8	309.21	.467	1.122	2.98
106	3.00	13.05	28.44	11.47	3.87	56.7	309.24	.480	1.122	3.06
107	3.00	13.03	28.39	11.44	4.01	57.7	308.96	.494	1.112	3.12
108	3.00	13.02	28.35	11.40	3.86	56.7	309.68	.467	1.121	2.97
109	3.00	13.00	28.33	11.35	3.57	54.6	310.39	.426	1.143	2.76
110	3.00	12.98	28.26	11.33	3.88	56.8	310.24	.473	1.120	3.01
111	3.00	12.97	28.24	11.28	3.61	54.8	311.01	.428	1.140	2.77
112	3.00	12.95	28.17	11.26	3.94	57.2	310.04	.484	1.117	3.07
113	3.00	12.94	28.16	11.20	3.40	53.3	312.02	.400	1.159	2.63
114	3.00	12.92	28.10	11.18	3.76	56.0	311.79	.449	1.132	2.89
115	3.00	12.91	28.07	11.14	3.68	55.4	312.37	.444	1.139	2.87
116	3.00	12.89	28.03	11.10	3.63	55.0	313.03	.440	1.144	2.86
117	3.00	12.88	28.01	11.04	3.32	52.8	314.32	.382	1.173	2.55
118	3.00	12.86	27.93	11.03	3.60	54.8	314.56	.432	1.150	2.82
119	3.00	12.84	27.87	11.01	3.62	55.0	315.10	.429	1.151	2.81
120	3.00	12.83	27.80	11.01	3.88	56.8	313.07	.477	1.133	3.07
121	3.00	12.81	27.76	10.97	3.57	54.6	315.98	.429	1.162	2.83
122	3.00	12.80	27.71	10.94	3.39	53.3	317.17	.391	1.181	2.62
123	3.00	12.78	27.65	10.93	3.51	54.2	317.61	.405	1.172	2.70
124	3.00	12.77	27.59	10.91	3.50	54.0	318.15	.404	1.176	2.70
125	3.00	12.75	27.54	10.90	3.50	54.0	318.68	.402	1.177	2.69
126	3.00	12.73	27.48	10.88	3.50	54.0	319.20	.400	1.179	2.68
127	3.00	12.72	27.41	10.88	3.80	56.2	319.17	.459	1.155	3.01
128	3.00	12.70	27.35	10.86	3.76	56.0	319.32	.439	1.158	2.89
129	3.00	12.69	27.31	10.84	3.63	55.0	320.63	.418	1.171	2.78
130	3.00	12.67	27.24	10.84	3.83	56.4	320.01	.456	1.155	2.99
131	3.00	12.66	27.19	10.81	3.71	55.6	321.33	.433	1.165	2.86
132	3.00	12.64	27.14	10.79	3.56	54.6	321.95	.412	1.178	2.76
133	3.00	12.63	27.09	10.77	3.42	53.5	322.55	.394	1.192	2.66
134	3.00	12.61	27.01	10.79	3.95	57.2	321.16	.468	1.147	3.05
135	3.00	12.59	26.96	10.78	3.94	57.2	321.81	.465	1.148	3.03
136	3.00	12.58	26.90	10.76	3.86	56.7	320.21	.465	1.155	3.05
137	3.00	12.56	26.84	10.75	3.78	56.1	322.15	.439	1.162	2.90
138	3.00	12.55	26.78	10.74	3.70	55.5	322.29	.436	1.170	2.89
139	3.00	12.53	26.71	10.75	3.95	57.3	319.98	.477	1.150	3.12
140	3.00	12.52	26.66	10.73	3.70	55.5	322.53	.429	1.171	2.85
141	3.00	12.50	26.60	10.73	3.81	56.3	322.00	.447	1.163	2.95
142	3.00	12.48	26.53	10.74	4.12	58.4	316.75	.495	1.141	3.21
143	3.00	12.47	26.49	10.71	3.65	55.2	322.15	.427	1.180	2.86
144	3.00	12.45	26.42	10.73	3.96	57.3	320.95	.465	1.155	3.05
145	3.00	12.42	26.33	10.70	3.63	55.1	322.20	.420	1.185	2.83
146	3.00	12.41	26.27	10.70	3.61	54.8	322.13	.419	1.189	2.83
147	3.00	12.39	26.22	10.70	3.77	56.1	321.75	.437	1.175	2.92
148	3.00	12.36	26.12	10.69	3.65	55.2	321.66	.421	1.190	2.85
149	3.00	12.34	26.06	10.70	4.02	57.7	319.90	.481	1.159	3.17
150	3.00	12.31	25.96	10.69	4.22	59.1	318.13	.507	1.138	3.28
151	3.00	12.28	25.90	10.65	3.81	56.3	321.06	.457	1.159	3.01
152	3.00	12.25	25.82	10.62	3.95	57.3	321.17	.482	1.131	3.10
153	3.00	12.22	25.74	10.59	4.09	58.2	320.64	.511	1.106	3.21
154	3.00	12.19	25.68	10.55	3.90	56.9	321.55	.492	1.104	3.08
155	3.00	12.16	25.61	10.52	3.98	57.5	321.72	.501	1.081	3.07
156	3.00	12.13	25.53	10.49	4.07	58.1	321.27	.532	1.056	3.19
157	3.00	12.09	25.46	10.45	4.00	57.6	321.45	.521	1.041	3.08
158	3.00	12.06	25.38	10.42	4.06	58.0	320.79	.555	1.016	3.20
159	3.00	12.03	25.30	10.38	4.16	58.6	320.26	.569	.989	3.20
160	3.00	12.00	25.21	10.33	3.98	57.5	319.81	.571	.969	3.14

*** DEEP WATER WAVE PARAMETERS

WAVE HEIGHT 7.38 m

WAVE PERIOD 10.80 s

WAVE DIRECTION 315.08 degs

***** OUTPUT DATA *****

ORTH. NUMBER	INITIAL COORDINATES		COORDINATES		DEPTH	BREAKING CONDITIONS			REFRAC. COEF.	SHOALING COEF.	WAVE	
	X	Y	X	Y		WAVE LENGTH	WAVE DIRECTION	HEIGHT				
1	4.00	30.00	23.43	9.94	9.09	96.6	330.49	.944	1.016	7.08		
2	4.04	30.04	23.52	9.91	8.70	94.8	330.41	.899	1.021	6.78		
3	4.09	30.09	23.60	9.92	8.79	95.2	329.83	.914	1.020	6.88		
4	4.13	30.13	23.68	9.92	8.80	95.3	329.18	.906	1.020	6.82		
5	4.15	30.15	23.74	9.89	8.40	93.3	329.00	.860	1.026	6.52		
6	4.20	30.20	23.81	9.91	8.63	94.4	328.26	.895	1.023	6.76		
7	4.22	30.22	23.86	9.90	8.45	93.5	328.03	.867	1.026	6.57		
8	4.24	30.24	23.91	9.89	8.27	92.7	327.69	.844	1.029	6.41		
9	4.29	30.29	24.00	9.88	8.08	91.6	326.95	.824	1.033	6.28		
10	4.33	30.33	24.06	9.93	8.26	92.6	326.41	.853	1.024	6.44		
11	4.38	30.38	24.12	9.97	8.32	92.9	326.06	.864	1.015	6.47		
12	4.42	30.42	24.19	9.99	8.02	91.3	325.86	.842	1.009	6.27		
13	4.46	30.46	24.23	10.05	8.31	92.9	325.89	.876	.995	6.45		
14	4.51	30.51	24.29	10.10	8.38	93.2	325.92	.900	.986	6.55		
15	4.55	30.55	24.33	10.16	8.73	94.9	326.18	.940	.975	6.77		
16	4.60	30.60	24.38	10.20	8.87	95.6	326.44	.967	.968	6.90		
17	4.64	30.64	24.43	10.25	9.01	96.2	326.73	.993	.961	7.05		
18	4.69	30.69	24.48	10.29	9.15	97.0	327.12	1.014	.956	7.16		
19	4.73	30.73	24.54	10.32	9.23	97.3	327.61	1.030	.952	7.23		
20	4.77	30.77	24.60	10.34	8.99	96.1	327.99	1.005	.949	7.04		
21	4.82	30.82	24.66	10.37	8.98	96.1	328.47	1.009	.946	7.04		
22	4.86	30.86	24.72	10.39	8.88	95.7	328.98	1.000	.943	6.96		
23	4.91	30.91	24.79	10.40	8.71	94.9	329.45	.980	.940	6.80		
24	4.95	30.95	24.85	10.42	8.64	94.5	330.12	.967	.938	6.70		
25	4.99	30.99	24.92	10.44	8.37	93.2	330.73	.948	.936	6.55		
26	5.04	31.04	24.98	10.45	8.30	92.8	330.99	.936	.934	6.45		
27	5.08	31.08	25.04	10.47	8.17	92.1	331.88	.915	.939	6.34		
28	5.13	31.13	25.10	10.50	8.17	92.1	331.80	.911	.947	6.37		
29	5.17	31.17	25.16	10.53	8.06	91.5	332.46	.892	.935	6.29		
30	5.22	31.22	25.23	10.55	7.96	91.1	332.89	.870	.965	6.20		
31	5.26	31.26	25.29	10.58	7.87	90.6	333.21	.849	.974	6.10		
32	5.30	31.30	25.36	10.61	7.81	90.2	333.36	.841	.984	6.11		
33	5.35	31.35	25.42	10.65	8.05	91.5	333.25	.855	.989	6.24		
34	5.39	31.39	25.49	10.68	8.08	91.6	333.14	.858	.997	6.31		
35	5.44	31.44	25.55	10.72	8.23	92.5	332.85	.865	1.002	6.40		
36	5.48	31.48	25.62	10.75	8.26	92.6	332.72	.859	1.009	6.39		
37	5.52	31.52	25.69	10.78	8.29	92.8	332.42	.868	1.015	6.50		
38	5.57	31.57	25.75	10.82	8.48	93.7	332.10	.878	1.017	6.59		
39	5.61	31.61	25.82	10.86	8.68	94.7	331.60	.898	1.018	6.75		
40	5.66	31.66	25.88	10.90	8.90	95.7	330.12	.927	1.019	6.97		
41	5.70	31.70	25.95	10.92	8.84	95.5	331.31	.913	1.024	6.90		

42	5.75	31.75	26.02	18.95	8.88	95.7	331.05	.919	1.025	6.95
43	5.79	31.79	26.10	10.96	8.85	95.5	331.11	.914	1.026	6.92
44	5.83	31.83	26.17	10.96	8.79	95.2	331.29	.906	1.027	6.87
45	5.88	31.88	26.25	10.98	8.86	95.6	331.34	.906	1.026	6.86
46	5.92	31.92	26.32	10.99	8.93	95.9	331.21	.926	1.025	7.00
47	5.97	31.97	26.39	11.00	8.81	95.3	331.33	.902	1.027	6.84
48	6.01	32.01	26.46	11.02	8.95	95.9	330.63	.921	1.022	6.95
49	6.06	32.06	26.54	11.03	8.81	95.3	330.95	.905	1.024	6.84
50	6.10	32.10	26.62	11.03	8.67	94.7	330.93	.887	1.026	6.72
51	6.14	32.14	26.70	11.04	8.57	94.1	330.97	.879	1.028	6.66
52	6.19	32.19	26.78	11.05	8.47	93.6	330.68	.872	1.029	6.62
53	6.23	32.23	26.86	11.06	8.37	93.2	330.52	.865	1.030	6.58
54	6.28	32.28	26.95	11.07	8.26	92.6	330.33	.842	1.032	6.41
55	6.32	32.32	27.02	11.09	8.39	93.3	330.08	.862	1.027	6.54
56	6.36	32.36	27.11	11.11	8.18	92.1	329.66	.834	1.029	6.34
57	6.41	32.41	27.18	11.13	8.21	92.3	328.70	.852	1.025	6.45
58	6.45	32.45	27.27	11.15	8.02	91.3	328.34	.825	1.027	6.25
59	6.50	32.50	27.35	11.17	7.86	90.6	327.78	.802	1.028	6.09
60	6.54	32.54	27.44	11.17	7.49	88.6	327.34	.762	1.035	5.82
61	6.59	32.59	27.51	11.21	7.52	88.7	326.66	.763	1.033	5.82
62	6.63	32.63	27.58	11.25	7.70	89.6	325.96	.788	1.027	5.97
63	6.67	32.67	27.64	11.30	7.84	90.5	325.24	.816	1.023	6.16
64	6.72	32.72	27.71	11.34	7.94	91.0	324.63	.825	1.021	6.21
65	6.76	32.76	27.77	11.39	8.03	91.4	324.12	.838	1.019	6.30
66	6.81	32.81	27.83	11.43	8.10	91.7	323.72	.835	1.019	6.28
67	6.85	32.85	27.87	11.50	8.50	93.8	323.24	.881	1.013	6.58
68	6.89	32.89	27.92	11.55	8.50	93.7	322.94	.880	1.015	6.59
69	6.94	32.94	27.96	11.61	8.83	95.4	322.33	.919	1.011	6.86
70	6.99	32.98	28.02	11.66	8.78	95.2	322.24	.921	1.014	6.89
71	7.03	33.03	28.07	11.70	8.80	95.3	322.14	.918	1.014	6.87
72	7.07	33.07	28.12	11.76	9.02	96.3	321.93	.937	1.012	6.99
73	7.12	33.12	28.17	11.80	9.07	96.5	321.77	.946	1.012	7.07
74	7.16	33.16	28.23	11.84	9.13	96.8	321.63	.954	1.012	7.12
75	7.20	33.20	28.28	11.86	9.19	97.2	321.48	.958	1.012	7.15
76	7.25	33.25	28.32	11.94	9.45	98.3	321.27	.962	1.009	7.17
77	7.29	33.29	28.37	11.98	9.54	98.7	321.14	.963	1.009	7.18
78	7.34	33.34	28.45	11.99	9.26	97.5	320.90	.968	1.015	7.25
79	7.38	33.38	28.50	12.03	9.50	98.5	320.81	.969	1.008	7.21
80	7.43	33.43	28.57	12.05	9.25	97.4	320.95	.963	1.011	7.19
81	7.47	33.47	28.62	12.09	9.49	98.5	320.89	.963	1.005	7.15
82	7.51	33.51	28.69	12.10	9.23	97.4	320.85	.965	1.009	7.19
83	7.56	33.56	28.74	12.14	9.43	98.2	320.86	.963	1.004	7.14
84	7.60	33.60	28.82	12.16	9.14	96.8	320.89	.963	1.009	7.17
85	7.65	33.65	28.87	12.20	9.29	97.6	320.89	.975	1.006	7.24
86	7.69	33.69	28.92	12.23	9.31	97.7	320.93	.983	1.005	7.29
87	7.73	33.73	28.95	12.28	9.75	99.7	320.96	.997	.998	7.34
88	7.78	33.78	29.00	12.32	9.83	100.1	321.02	1.008	.996	7.41
89	7.82	33.82	29.05	12.37	9.95	100.6	321.09	1.018	.992	7.45
90	7.87	33.87	29.10	12.41	9.97	100.7	321.17	1.028	.989	7.50
91	7.91	33.91	29.14	12.45	10.00	100.8	321.25	1.038	.987	7.56
92	7.96	33.96	29.19	12.49	10.11	101.3	321.34	1.047	.984	7.61
93	8.00	34.00	29.24	12.53	10.16	101.5	321.42	1.056	.983	7.65
94	8.04	34.04	29.28	12.57	10.20	101.6	321.50	1.063	.981	7.70
95	8.09	34.09	29.33	12.61	10.24	101.8	321.55	1.065	.980	7.71
96	8.13	34.13	29.39	12.64	10.21	101.7	321.55	1.067	.981	7.72
97	8.18	34.18	29.44	12.67	10.10	101.2	321.52	1.053	.982	7.63
98	8.22	34.22	29.50	12.70	9.96	100.7	321.47	1.032	.984	7.50
99	8.26	34.26	29.56	12.73	9.88	100.3	321.44	1.022	.986	7.44
100	8.31	34.31	29.61	12.76	9.80	99.9	321.38	1.006	.989	7.34
101	8.35	34.35	29.67	12.79	9.64	99.1	321.04	.990	.992	7.25

102	8.40	34.40	29.75	12.80	9.19	97.1	321.12	.966	1.000	7.13
103	8.44	34.44	29.82	12.81	8.62	94.3	320.99	.896	1.011	6.68
104	8.49	34.49	29.87	12.85	8.81	95.3	320.85	.924	1.011	6.90
105	8.53	34.53	29.93	12.89	8.89	95.7	320.68	.934	1.014	6.99
106	8.57	34.57	29.98	12.92	8.98	96.1	320.52	.926	1.017	6.95
107	8.62	34.62	30.06	12.94	8.48	93.7	320.29	.876	1.018	6.58
108	8.66	34.66	30.12	12.97	8.38	93.2	320.10	.869	1.013	6.50
109	8.71	34.71	30.19	13.00	8.04	91.4	319.90	.844	1.008	6.28
110	8.75	34.75	30.25	13.03	8.08	91.6	319.71	.858	.994	6.29
111	8.80	34.80	30.33	13.05	7.65	89.4	319.50	.819	.987	5.97
112	8.84	34.84	30.37	13.11	8.23	92.5	319.30	.890	.970	6.37
113	8.88	34.88	30.44	13.13	7.82	98.3	319.05	.853	.966	6.08
114	8.93	34.93	30.50	13.17	7.84	90.5	318.79	.859	.959	6.08
115	8.97	34.97	30.56	13.22	7.81	90.2	318.50	.864	.953	6.08
116	9.02	35.02	30.60	13.28	8.24	92.5	318.25	.921	.948	6.44
117	9.06	35.06	30.66	13.32	8.10	91.7	317.89	.898	.947	6.27
118	9.10	35.10	30.72	13.35	7.70	89.6	317.56	.853	.948	5.97
119	9.15	35.15	30.77	13.40	7.84	90.5	317.25	.866	.949	6.07
120	9.19	35.19	30.81	13.46	8.17	92.1	317.05	.909	.950	6.38
121	9.24	35.24	30.87	13.51	7.94	91.0	316.69	.882	.956	6.22
122	9.28	35.28	30.92	13.55	7.73	89.8	316.35	.849	.964	6.04
123	9.33	35.33	30.98	13.60	7.46	88.4	316.01	.814	.974	5.85
124	9.37	35.37	31.02	13.66	7.65	89.4	315.73	.828	.982	6.00
125	9.41	35.41	31.06	13.72	7.97	91.2	315.48	.855	.984	6.21
126	9.46	35.46	31.13	13.75	7.50	86.7	315.17	.798	.990	5.83
127	9.50	35.50	31.18	13.79	7.49	88.6	314.91	.798	.992	5.84
128	9.55	35.55	31.22	13.84	7.49	88.6	314.67	.802	.991	5.86
129	9.59	35.59	31.27	13.89	7.54	88.9	314.43	.809	.989	5.90
130	9.63	35.63	31.31	13.95	7.62	89.3	314.18	.818	.985	5.95
131	9.68	35.68	31.34	14.02	8.18	92.1	313.99	.881	.976	6.34
132	9.72	35.72	31.40	14.06	7.95	91.1	313.71	.872	.969	6.23
133	9.77	35.77	31.44	14.11	8.11	91.8	313.49	.889	.962	6.31
134	9.81	35.81	31.48	14.16	8.21	92.3	313.28	.907	.957	6.40
135	9.86	35.86	31.52	14.22	8.26	92.6	313.10	.919	.953	6.47
136	9.90	35.90	31.57	14.27	8.27	92.7	312.90	.917	.951	6.44
137	9.94	35.94	31.60	14.33	8.45	93.5	312.75	.941	.950	6.59
138	9.99	35.99	31.63	14.39	8.59	94.2	312.66	.959	.950	6.72
139	10.03	36.03	31.68	14.44	8.45	93.5	312.49	.940	.952	6.61
140	10.08	36.08	31.71	14.50	8.69	94.8	312.42	.961	.954	6.77
141	10.12	36.12	31.74	14.56	8.69	94.7	312.33	.957	.958	6.77
142	10.17	36.17	31.78	14.61	8.63	94.4	312.32	.953	.964	6.78
143	10.21	36.21	31.81	14.67	8.56	94.0	312.24	.934	.971	6.69
144	10.25	36.25	31.84	14.73	8.72	94.9	312.24	.940	.977	6.78
145	10.30	36.30	31.87	14.79	8.59	94.2	312.24	.918	.987	6.69
146	10.34	36.34	31.90	14.85	8.77	95.1	312.25	.934	.995	6.86
147	10.39	36.39	31.92	14.92	8.83	95.4	312.27	.930	1.005	6.90
148	10.43	36.43	31.94	14.98	9.04	96.3	312.28	.943	1.014	7.06
149	10.47	36.47	31.96	15.05	9.48	98.4	312.30	.958	1.008	7.12
150	10.52	36.52	32.00	15.10	9.21	97.2	312.30	.964	1.016	7.23
151	10.56	36.56	32.04	15.15	9.33	97.8	312.36	.983	1.008	7.31
152	10.61	36.61	32.07	15.21	9.71	99.5	312.35	.992	.997	7.30
153	10.65	36.65	32.10	15.25	9.79	99.9	312.38	1.008	.992	7.38
154	10.67	36.67	32.12	15.28	9.83	100.1	312.39	1.017	.989	7.43
155	10.72	36.72	32.16	15.33	10.83	100.9	312.44	1.037	.983	7.52

*** DEEP WATER WAVE PARAMETERS

WAVE HEIGHT 8.63 m
WAVE PERIOD 11.65 s
WAVE DIRECTION 360.00 degs

***** OUTPUT DATA *****

ORTH. NUMBER	INITIAL		COORDINATES		DEPTH	BREAKING CONDITIONS			SHOALING COEF.	WAVE HEIGHT
	COORDINATES		WAVE LENGTH	WAVE DIRECTION		REFRAC. COEF.				
	X	Y								
							X	Y		
					[m]	[m]	[deg]			[m]
1	24.00	37.00	24.80	10.30	6.93	92.8	346.01	.646	.961	5.36
2	24.13	37.00	24.85	10.36	7.56	96.5	346.61	.713	.956	5.88
3	24.25	37.00	24.89	10.44	8.66	102.7	348.05	.824	.952	6.77
4	24.31	37.00	24.98	10.51	9.77	108.6	349.35	.925	.951	7.59
5	24.38	37.00	24.92	10.58	10.96	114.2	350.80	1.040	.949	8.52
6	24.41	37.00	24.92	10.65	12.13	119.5	351.13	1.109	.949	9.08
7	24.47	37.00	24.93	10.73	13.46	124.9	351.77	1.255	.948	10.27
8	24.59	37.00	24.99	10.74	13.35	124.4	352.04	1.234	.948	10.09
9	24.72	37.00	25.04	10.77	13.47	124.9	352.08	1.225	.951	10.05
10	24.78	37.00	25.06	10.75	13.02	123.2	352.23	1.189	.953	9.78
11	24.84	37.00	25.10	10.67	11.25	115.5	352.28	1.026	.958	8.48
12	24.88	37.00	25.12	10.61	9.93	109.3	350.73	.931	.963	7.74
13	24.94	37.00	25.16	10.57	8.89	104.0	350.26	.830	.970	6.95
14	25.06	37.00	25.20	10.59	8.84	103.8	350.57	.820	.977	6.91
15	25.13	37.00	25.22	10.67	10.13	110.3	351.40	.935	.973	7.85
16	25.19	37.00	25.23	10.75	11.58	117.1	352.16	1.038	.969	8.68
17	25.22	37.00	25.23	10.82	12.85	122.5	352.85	1.153	.966	9.61
18	25.28	37.00	25.25	10.87	13.65	125.6	353.47	1.226	.965	10.21
19	25.41	37.00	25.30	10.91	13.91	126.7	353.27	1.296	.967	10.82
20	25.53	37.00	25.36	10.93	13.77	126.2	353.39	1.233	.970	10.32
21	25.59	37.00	25.39	10.88	12.61	121.4	353.09	1.125	.977	9.48
22	25.66	37.00	25.43	10.80	10.72	113.2	352.44	.976	.990	8.34
23	25.78	37.00	25.50	10.73	8.81	103.6	351.93	.787	1.015	6.89
24	25.91	37.00	25.56	10.71	7.93	98.7	351.92	.698	1.035	6.24
25	26.03	37.00	25.65	10.72	7.43	95.8	351.82	.641	1.056	5.84
26	26.06	37.00	25.70	10.76	7.69	97.4	352.55	.655	1.056	5.97
27	26.09	37.00	25.75	10.78	7.69	97.4	351.95	.655	1.061	6.00
28	26.13	37.00	25.80	10.81	7.85	98.2	351.96	.663	1.062	6.08
29	26.16	37.00	25.85	10.84	7.95	98.8	351.96	.674	1.064	6.19
30	26.19	37.00	25.90	10.86	8.06	99.5	352.03	.682	1.066	6.27
31	26.22	37.00	25.95	10.88	8.11	99.8	352.11	.691	1.068	6.37
32	26.25	37.00	26.00	10.91	8.24	100.4	351.97	.698	1.068	6.43
33	26.28	37.00	26.05	10.92	8.32	101.0	351.92	.707	1.066	6.50
34	26.31	37.00	26.10	10.93	8.38	101.3	351.81	.712	1.064	6.54
35	26.34	37.00	26.16	10.94	8.44	101.6	353.10	.717	1.063	6.58
36	26.38	37.00	26.22	10.95	8.43	101.6	352.81	.720	1.063	6.60
37	26.41	37.00	26.27	10.96	8.37	101.2	351.73	.715	1.064	6.57
38	26.44	37.00	26.33	10.96	8.34	101.1	351.08	.710	1.065	6.53
39	26.47	37.00	26.39	10.97	8.32	100.9	350.64	.704	1.065	6.47
40	26.50	37.00	26.45	10.98	8.30	100.7	350.38	.705	1.066	6.48
41	26.53	37.00	26.51	10.99	8.27	100.6	350.12	.706	1.067	6.50

42	26.56	37.00	26.56	11.00	8.24	100.4	349.78	.698	1.068	6.43
43	26.59	37.00	26.62	11.00	8.21	100.2	349.51	.699	1.068	6.44
44	26.63	37.00	26.68	11.02	8.29	100.7	349.24	.708	1.064	6.43
45	26.66	37.00	26.74	11.04	8.38	101.3	349.04	.713	1.061	6.53
46	26.69	37.00	26.80	11.03	8.09	99.7	348.66	.681	1.068	6.28
47	26.72	37.00	26.85	11.07	8.54	102.1	348.62	.733	1.054	6.67
48	26.75	37.00	26.90	11.07	8.49	101.9	348.27	.723	1.055	6.58
49	26.78	37.00	26.96	11.08	8.44	101.6	347.98	.727	1.055	6.62
50	26.81	37.00	27.01	11.12	8.85	103.8	348.02	.765	1.043	6.89
51	26.84	37.00	27.07	11.13	8.73	103.2	347.48	.753	1.044	6.79
52	26.88	37.00	27.13	11.14	8.63	102.5	346.93	.743	1.044	6.69
53	26.91	37.00	27.18	11.18	9.00	104.5	346.70	.790	1.034	7.05
54	26.94	37.00	27.23	11.23	9.37	106.5	347.03	.825	1.024	7.29
55	26.97	37.00	27.28	11.24	9.29	106.1	346.21	.822	1.024	7.26
56	27.03	37.00	27.37	11.29	9.38	106.5	345.32	.828	1.021	7.30
57	27.09	37.00	27.43	11.34	9.67	108.1	345.06	.856	1.015	7.49
58	27.16	37.00	27.50	11.38	9.71	108.3	344.84	.865	1.014	7.57
59	27.22	37.00	27.56	11.43	9.93	109.3	344.68	.891	1.010	7.77
60	27.28	37.00	27.62	11.48	10.09	110.1	345.43	.902	1.008	7.85
61	27.34	37.00	27.69	11.50	9.83	108.8	344.03	.876	1.013	7.66
62	27.41	37.00	27.74	11.56	10.12	110.3	344.13	.907	1.010	7.91
63	27.47	37.00	27.80	11.63	10.37	111.4	344.42	.926	1.008	8.05
64	27.53	37.00	27.86	11.68	10.37	111.4	344.76	.933	1.010	8.14
65	27.59	37.00	27.91	11.74	10.53	112.2	344.47	.940	1.011	8.20
66	27.63	37.00	27.94	11.77	10.50	112.0	344.49	.938	1.013	8.20
67	27.69	37.00	27.99	11.85	10.77	113.4	347.49	.960	1.013	8.40
68	27.75	37.00	28.04	11.93	11.14	115.0	345.87	.958	1.011	8.35
69	27.81	37.08	28.11	11.93	10.70	113.1	344.82	.957	1.016	8.40
70	27.88	37.00	28.16	12.00	11.09	114.8	344.99	.958	1.013	8.37
71	27.94	37.00	28.23	12.01	10.83	113.7	344.83	.963	1.015	8.44
72	28.00	37.00	28.29	12.05	11.12	114.9	344.52	.961	1.008	8.36
73	28.06	37.00	28.35	12.08	11.11	114.9	345.82	.963	1.006	8.36
74	28.13	37.00	28.42	12.08	10.69	113.0	343.87	.951	1.012	8.31
75	28.19	37.00	28.49	12.11	10.65	112.8	343.57	.947	1.011	8.26
76	28.25	37.00	28.55	12.13	10.59	112.5	345.03	.952	1.011	8.30
77	28.31	37.00	28.62	12.15	10.39	111.5	343.46	.932	1.013	8.15
78	28.38	37.00	28.68	12.18	10.42	111.6	343.21	.929	1.012	8.11
79	28.44	37.00	28.74	12.22	10.42	111.6	343.43	.934	1.011	8.16
80	28.50	37.00	28.81	12.25	10.39	111.5	343.20	.932	1.011	8.13
81	28.56	37.00	28.87	12.28	10.35	111.4	343.46	.930	1.012	8.12
82	28.63	37.00	28.92	12.33	10.50	112.0	343.74	.937	1.010	8.17
83	28.69	37.00	28.98	12.36	10.52	112.1	343.57	.935	1.010	8.15
84	28.75	37.00	29.04	12.40	10.33	111.3	343.68	.918	1.011	8.01
85	28.81	37.00	29.10	12.44	10.27	111.0	343.99	.924	1.009	8.05
86	28.88	37.00	29.16	12.49	10.33	111.3	344.83	.933	1.006	8.10
87	28.94	37.00	29.22	12.52	10.15	110.5	343.77	.910	1.007	7.91
88	29.00	37.00	29.30	12.56	9.95	109.4	343.13	.887	1.008	7.71
89	29.06	37.00	29.38	12.62	9.93	109.3	344.13	.890	1.008	7.74
90	29.13	37.00	29.47	12.64	9.47	107.0	342.16	.849	1.014	7.43
91	29.19	37.00	29.56	12.64	8.59	102.4	340.03	.751	1.028	6.67
92	29.25	37.00	29.65	12.67	8.16	100.0	339.05	.708	1.037	6.34
93	29.31	37.00	29.73	12.69	7.75	97.7	338.10	.668	1.047	6.04
94	29.38	37.00	29.81	12.73	7.56	96.5	337.39	.646	1.055	5.88
95	29.44	37.00	29.87	12.79	7.98	99.0	337.28	.682	1.051	6.19
96	29.47	37.00	29.92	12.80	7.77	97.8	336.82	.662	1.058	6.04
97	29.53	37.00	29.99	12.85	7.84	98.1	336.42	.664	1.062	6.08
98	29.59	37.80	30.06	12.88	7.66	97.2	335.90	.649	1.060	5.94
99	29.66	37.00	30.11	12.96	8.34	101.1	336.61	.727	1.041	6.53
100	29.69	37.00	30.18	12.91	6.90	92.6	334.74	.586	1.059	5.36
101	29.72	37.00	30.22	12.93	6.85	92.3	334.56	.584	1.054	5.31

102	29.75	37.00	30.22	13.02	8.14	99.9	336.01	.718	1.024	6.35
103	29.81	37.00	30.31	13.02	7.19	94.4	334.48	.633	1.025	5.60
104	29.88	37.00	30.37	13.08	7.70	97.4	334.65	.693	1.000	5.98
105	29.94	37.00	30.47	13.08	6.70	91.4	332.81	.604	1.010	5.21
106	29.97	37.00	30.49	13.14	7.28	94.9	333.23	.670	.986	5.70
107	30.00	37.00	30.53	13.18	7.64	97.0	333.56	.712	.977	6.00
108	30.03	37.00	30.58	13.22	7.57	96.6	332.95	.706	.973	5.92
109	30.06	37.00	30.63	13.25	7.45	96.0	332.34	.699	.970	5.85
110	30.09	37.00	30.68	13.26	6.96	92.9	330.97	.649	.971	5.44
111	30.13	37.00	30.72	13.31	7.13	94.0	330.71	.662	.969	5.54
112	30.16	37.00	30.76	13.35	7.25	94.7	330.45	.677	.969	5.66
113	30.19	37.00	30.81	13.38	7.00	93.2	329.81	.646	.972	5.42
114	30.22	37.00	30.83	13.45	7.76	97.8	331.53	.717	.971	6.01
115	30.25	37.00	30.89	13.46	7.07	93.6	329.28	.653	.979	5.52
116	30.28	37.00	30.92	13.50	7.07	93.6	329.03	.646	.985	5.49
117	30.31	37.00	30.96	13.54	7.06	93.5	328.81	.639	.992	5.47
118	30.34	37.00	30.99	13.60	7.35	95.3	328.95	.667	.999	5.75
119	30.41	37.00	31.08	13.64	6.81	92.0	327.86	.607	1.014	5.31
120	30.47	37.00	31.15	13.70	6.72	91.4	327.45	.597	1.021	5.26
121	30.53	37.00	31.22	13.77	6.69	91.3	327.17	.592	1.024	5.24
122	30.56	37.00	31.23	13.83	7.24	94.6	327.69	.641	1.018	5.63
123	30.63	37.00	31.31	13.88	6.98	93.0	327.15	.616	1.017	5.41
124	30.66	37.00	31.33	13.93	7.23	94.6	327.35	.643	1.012	5.62
125	30.69	37.00	31.34	13.99	7.84	98.2	328.48	.702	1.003	6.08
126	30.75	37.00	31.40	14.05	7.72	97.6	328.12	.703	.993	6.02
127	30.81	37.00	31.49	14.07	6.89	92.5	326.50	.631	.990	5.39
128	30.88	37.00	31.54	14.15	7.37	95.5	326.94	.678	.979	5.73
129	30.94	37.00	31.59	14.22	7.41	95.7	326.89	.683	.974	5.74
130	31.00	37.00	31.65	14.30	7.40	95.6	327.23	.689	.974	5.79

*** DEEP WATER WAVE PARAMETERS

WAVE HEIGHT 5.10 m
 WAVE PERIOD 8.89 s
 WAVE DIRECTION 45.00 degs

***** INPUT DATA *****
 ***** OUTPUT DATA *****

ORTH. NUMBER	INITIAL COORDINATES		COORDINATES		DEPTH	BREAKING CONDITIONS			REFRAC. COEF.	SHOALING COEF.		WAVE HEIGHT
	X	Y	X	Y		WAVE LENGTH	WAVE DIRECTION	[deg]				
					[m]	[m]						[m]
1	43.00	29.00	33.79	16.41	1.97	38.4	333.26		.239	1.249		1.52
2	42.99	29.01	33.62	16.23	2.01	38.8	334.34		.241	1.239		1.52
3	42.98	29.02	33.43	16.09	2.12	39.8	338.10		.251	1.256		1.61
4	42.97	29.03	33.27	15.90	1.86	37.3	335.26		.216	1.335		1.47
5	42.96	29.04	33.12	15.71	1.93	38.1	333.70		.223	1.282		1.46
6	42.94	29.06	32.95	15.53	1.86	37.4	332.82		.220	1.259		1.41
7	42.93	29.07	32.81	15.29	1.69	35.7	330.74		.211	1.236		1.33
8	42.92	29.08	32.63	15.08	1.78	36.6	334.61		.228	1.224		1.42
9	42.91	29.09	32.47	14.87	1.71	35.9	329.57		.201	1.295		1.33
10	42.90	29.10	32.30	14.64	1.66	35.3	330.26		.200	1.293		1.32
11	42.89	29.11	32.14	14.39	1.48	33.4	326.23		.194	1.207		1.19
12	42.88	29.12	31.97	14.10	1.19	30.1	321.21		.185	.960		.91
13	42.87	29.13	31.76	13.85	1.33	31.8	323.66		.182	1.106		1.03
14	42.86	29.14	31.50	13.58	1.37	32.2	328.08		.174	1.253		1.11
15	42.85	29.15	31.23	13.31	1.22	30.4	326.81		.151	1.209		.93
16	42.83	29.17	30.95	13.04	.95	27.0	326.87		.161	.940		.77
17	42.82	29.18	30.59	12.80	1.37	32.2	333.00		.167	1.272		1.09
18	42.81	29.19	30.19	12.54	1.42	32.8	337.27		.158	1.430		1.15
19	42.80	29.20	29.78	12.29	1.51	32.7	339.75		.165	1.381		1.16
20	42.79	29.21	29.40	12.01	1.66	35.3	346.75		.181	1.401		1.30
21	42.78	29.22	29.03	11.65	1.68	35.5	341.49		.173	1.425		1.26
22	42.77	29.23	28.64	11.41	1.72	36.0	343.93		.186	1.391		1.32
23	42.76	29.24	28.29	11.14	1.75	36.3	344.85		.198	1.380		1.39
24	42.75	29.25	27.98	10.89	1.81	36.9	344.63		.191	1.399		1.37
25	42.73	29.27	27.70	10.82	1.87	37.5	349.06		.211	1.396		1.50
26	42.72	29.28	27.46	10.75	1.95	38.2	352.25		.212	1.382		1.49
27	42.71	29.29	27.22	10.69	1.89	37.6	355.52		.208	1.399		1.48
28	42.70	29.30	27.01	10.65	2.04	39.1	358.51		.229	1.358		1.59
29	42.69	29.31	26.82	10.64	2.09	39.5	359.89		.232	1.353		1.60
30	42.68	29.32	26.66	10.64	2.21	40.6	1.67		.250	1.334		1.70
31	42.67	29.33	26.49	10.63	2.18	40.3	2.36		.255	1.348		1.75
32	42.66	29.34	26.34	10.62	2.23	40.8	3.09		.254	1.344		1.74
33	42.65	29.35	26.20	10.63	2.47	42.8	4.24		.288	1.299		1.91
34	42.64	29.36	26.06	10.63	2.52	43.3	5.41		.301	1.280		2.00
35	42.62	29.38	25.94	10.60	2.57	43.6	5.45		.307	1.280		2.00
36	42.61	29.39	25.83	10.55	2.59	43.9	5.20		.318	1.241		2.01
37	42.60	29.40	25.72	10.50	2.47	42.8	4.04		.388	1.225		1.92
38	42.59	29.41	25.62	10.46	2.60	44.0	4.18		.337	1.169		2.81
39	42.58	29.42	25.54	10.41	2.53	43.3	2.25		.338	1.144		1.97
40	42.57	29.43	25.45	10.37	2.52	43.2	1.28		.339	1.110		1.92
41	42.56	29.44	25.38	10.33	2.41	42.3	359.28		.346	1.086		1.92

42	42.55	29.45	25.31	10.30	2.41	42.3	357.66	.360	1.051	1.93
43	42.54	29.46	25.25	10.27	2.43	42.6	356.24	.362	1.016	1.88
44	42.52	29.48	25.19	10.23	2.42	42.5	354.71	.380	.985	1.91
45	42.51	29.49	25.13	10.20	2.40	42.3	351.74	.386	.958	1.89
46	42.50	29.50	25.08	10.18	2.47	42.8	354.27	.399	.933	1.90
47	42.49	29.51	25.03	10.15	2.40	42.2	348.24	.409	.918	1.91
48	42.48	29.52	24.97	10.12	2.44	42.6	345.56	.414	.915	1.93
49	42.47	29.53	24.91	10.09	2.49	43.0	345.74	.415	.921	1.95
50	42.46	29.54	24.84	10.06	2.55	43.5	345.96	.416	.930	1.98
51	42.45	29.55	24.79	10.03	2.62	44.1	346.18	.418	.941	2.00
52	42.44	29.56	24.73	9.99	2.60	43.9	345.68	.415	.961	2.03
53	42.43	29.57	24.67	9.97	2.72	44.9	346.84	.421	.990	2.12
54	42.41	29.59	24.61	9.94	2.86	46.0	347.36	.421	1.015	2.18
55	42.40	29.60	24.55	9.91	2.88	46.1	348.02	.421	1.045	2.25
56	42.39	29.61	24.49	9.87	2.92	46.4	348.75	.421	1.070	2.30
57	42.38	29.62	24.43	9.84	3.02	47.2	349.51	.422	1.086	2.34
58	42.37	29.63	24.38	9.81	2.97	46.8	349.90	.408	1.112	2.32
59	42.36	29.64	24.32	9.78	3.14	48.0	351.02	.423	1.112	2.40
60	42.35	29.65	24.27	9.74	2.94	46.5	350.77	.392	1.148	2.29
61	42.34	29.66	24.21	9.71	3.15	48.0	352.56	.425	1.136	2.46
62	42.33	29.67	24.16	9.67	2.97	46.8	351.71	.388	1.161	2.30
63	42.32	29.68	24.11	9.62	2.83	45.7	351.93	.370	1.181	2.23
64	42.30	29.70	24.05	9.59	2.90	46.3	352.45	.384	1.172	2.30
65	42.29	29.71	24.00	9.57	3.13	47.9	353.56	.417	1.146	2.44
66	42.28	29.72	23.94	9.55	2.91	46.3	353.86	.379	1.164	2.25
67	42.27	29.73	23.89	9.56	3.08	47.6	355.16	.410	1.143	2.39
68	42.26	29.74	23.83	9.57	3.28	49.0	356.74	.448	1.122	2.56
69	42.25	29.75	23.78	9.54	2.95	46.7	356.29	.395	1.148	2.31
70	42.24	29.76	23.73	9.55	3.15	48.1	357.31	.426	1.126	2.45
71	42.22	29.78	23.63	9.55	3.36	49.6	359.65	.472	1.113	2.66
72	42.19	29.81	23.54	9.57	3.72	52.0	2.36	.520	1.075	2.85
73	42.17	29.83	23.45	9.55	3.55	50.9	1.38	.500	1.079	2.75
74	42.15	29.85	23.37	9.55	3.71	51.9	2.86	.524	1.065	2.85
75	42.13	29.87	23.29	9.55	3.70	51.8	3.53	.531	1.060	2.87
76	42.11	29.89	23.21	9.55	3.83	52.7	4.53	.554	1.049	2.97
77	42.08	29.92	23.14	9.55	3.97	53.6	6.12	.590	1.039	3.13
78	42.06	29.94	23.08	9.57	4.29	55.6	10.21	.642	1.024	3.35
79	42.04	29.96	23.01	9.56	4.26	55.4	7.68	.647	1.021	3.37
80	42.02	29.98	22.94	9.55	4.31	55.7	8.16	.656	1.016	3.40
81	41.99	30.01	22.87	9.54	4.46	56.6	8.39	.671	1.009	3.45
82	41.97	30.03	22.81	9.53	4.39	56.1	8.41	.672	1.009	3.46
83	41.95	30.05	22.75	9.52	4.46	56.6	9.18	.684	1.006	3.51
84	41.93	30.07	22.69	9.51	4.52	56.9	8.72	.690	1.002	3.53
85	41.91	30.09	22.63	9.51	4.55	57.1	9.01	.691	1.001	3.53
86	41.88	30.12	22.57	9.49	4.36	56.0	8.71	.671	1.006	3.44
87	41.86	30.14	22.51	9.49	4.47	56.6	8.79	.678	1.002	3.46
88	41.84	30.16	22.45	9.47	4.34	55.9	8.86	.661	1.006	3.39
89	41.82	30.18	22.39	9.47	4.31	55.7	8.93	.654	1.008	3.36
90	41.80	30.20	22.33	9.46	4.28	55.6	9.18	.648	1.009	3.34
91	41.77	30.23	22.28	9.46	4.35	56.0	9.08	.657	1.007	3.37
92	41.75	30.25	22.22	9.45	4.31	55.7	9.25	.647	1.009	3.33
93	41.73	30.27	22.16	9.44	4.25	55.3	9.32	.635	1.012	3.28
94	41.71	30.29	22.10	9.44	4.23	55.2	10.06	.641	1.014	3.32
95	41.69	30.31	22.04	9.42	3.94	53.4	9.39	.593	1.029	3.11
96	41.66	30.34	21.98	9.42	3.89	53.1	9.48	.580	1.033	3.05
97	41.64	30.36	21.92	9.42	3.81	52.6	9.62	.567	1.038	3.00
98	41.62	30.38	21.86	9.42	3.92	53.3	9.26	.576	1.032	3.03
99	41.60	30.40	21.81	9.41	3.74	52.2	9.14	.548	1.043	2.92
100	41.57	30.43	21.75	9.41	3.73	52.1	9.04	.540	1.045	2.88
101	41.55	30.45	21.69	9.41	3.72	52.0	9.82	.550	1.046	2.93

102	41.53	30.47	21.63	9.41	3.56	51.9	8.57	.511	1.056	2.75
103	41.51	30.49	21.57	9.40	3.41	50.0	8.31	.486	1.068	2.65
104	41.49	30.51	21.51	9.40	3.40	49.9	8.70	.487	1.070	2.66
105	41.46	30.54	21.46	9.41	3.54	50.8	8.21	.509	1.060	2.75
106	41.44	30.56	21.39	9.40	3.41	49.9	7.73	.484	1.070	2.64
107	41.42	30.58	21.33	9.40	3.29	49.1	7.99	.473	1.080	2.60
108	41.40	30.60	21.24	9.39	3.10	47.8	6.96	.437	1.098	2.45
109	41.38	30.62	21.14	9.39	3.07	47.5	6.89	.425	1.102	2.39
110	41.36	30.64	21.09	9.40	3.09	47.7	6.54	.433	1.101	2.43
111	41.35	30.65	21.04	9.40	3.10	47.8	7.12	.436	1.111	2.45

*** DEEP WATER WAVE PARAMETERS

WAVE HEIGHT 6.20 m

WAVE PERIOD 9.93 s

WAVE DIRECTION 270.00 degs

***** OUTPUT DATA *****

ORTH. NUMBER	INITIAL COORDINATES		COORDINATES		DEPTH	BREAKING CONDITIONS			REFRAC. COEF.	SHOALING COEF.	WAVE HEIGHT
	X	Y	X	Y		WAVE LENGTH	WAVE DIRECTION	WAVE HEIGHT			
1	3.00	17.00	33.58	16.41	5.02	67.3	299.20	.605	1.032	3.87	
2	3.08	16.97	33.54	16.37	5.02	67.3	299.09	.611	1.033	3.91	
3	3.00	16.94	33.49	16.34	5.21	68.5	298.97	.644	1.027	4.10	
4	3.00	16.91	33.45	16.30	5.15	68.1	299.32	.623	1.032	3.98	
5	3.00	16.88	33.40	16.28	5.50	70.2	298.73	.683	1.023	4.33	
6	3.00	16.84	33.35	16.25	5.60	70.8	298.05	.688	1.023	4.36	
7	3.00	16.81	33.30	16.22	5.68	71.2	298.42	.692	1.025	4.40	
8	3.00	16.78	33.26	16.19	5.74	71.6	298.22	.696	1.028	4.44	
9	3.00	16.75	33.21	16.16	5.79	71.9	298.27	.700	1.032	4.48	
10	3.00	16.72	33.18	16.13	5.51	70.2	298.42	.666	1.048	4.33	
11	3.00	16.69	33.12	16.10	5.76	71.7	297.82	.692	1.046	4.49	
12	3.00	16.66	33.06	16.08	6.00	73.0	297.13	.719	1.045	4.66	
13	3.00	16.63	33.00	16.06	6.22	74.2	295.29	.747	1.046	4.84	
14	3.00	16.56	32.95	15.99	5.65	71.1	296.60	.656	1.072	4.36	
15	3.00	16.50	32.89	15.93	6.04	73.3	295.93	.732	1.043	4.74	
16	3.00	16.44	32.84	15.86	6.15	73.9	295.36	.755	1.029	4.82	
17	3.00	16.38	32.80	15.78	6.01	73.1	295.65	.736	1.024	4.67	
18	3.08	16.31	32.76	15.71	6.05	73.4	295.38	.747	1.016	4.70	
19	3.00	16.25	32.71	15.64	6.06	73.4	294.99	.752	1.019	4.71	
20	3.00	16.19	32.67	15.56	5.84	72.2	295.29	.735	1.010	4.60	
21	3.00	16.16	32.67	15.50	5.34	69.2	296.23	.654	1.021	4.14	
22	3.00	16.13	32.60	15.48	5.94	72.7	291.56	.744	1.005	4.64	
23	3.00	16.09	32.61	15.41	5.19	68.4	296.53	.631	1.022	4.00	
24	3.00	16.06	32.56	15.38	5.54	70.4	294.48	.695	1.013	4.36	
25	3.00	16.03	32.54	15.33	5.33	69.2	295.79	.656	1.019	4.14	
26	3.00	16.00	32.54	15.27	4.79	65.8	297.19	.575	1.036	3.70	
27	3.00	15.97	32.48	15.25	5.26	68.7	296.43	.638	1.025	4.06	
28	3.00	15.91	32.42	15.17	5.14	68.0	296.66	.624	1.035	4.01	
29	3.00	15.88	32.36	15.15	5.60	70.8	294.61	.686	1.027	4.37	
30	3.00	15.81	32.33	15.06	5.05	67.5	296.81	.608	1.053	3.97	
31	3.00	15.78	32.29	15.03	5.13	67.9	296.69	.604	1.057	3.96	
32	3.00	15.75	32.23	15.01	5.58	70.7	296.06	.670	1.051	4.37	
33	3.00	15.69	32.20	14.92	5.18	68.3	296.81	.616	1.060	4.05	
34	3.00	15.63	32.14	14.86	5.31	69.1	296.14	.641	1.050	4.18	
35	3.00	15.56	32.12	14.77	4.86	66.3	297.33	.586	1.053	3.82	
36	3.00	15.50	32.05	14.71	5.11	67.8	296.97	.616	1.032	3.94	
37	3.00	15.44	32.02	14.62	4.78	65.8	297.58	.594	1.023	3.77	
38	3.00	15.38	31.95	14.56	5.30	69.0	296.11	.672	.988	4.12	
39	3.00	15.34	31.92	14.52	5.45	69.9	294.43	.701	.977	4.25	
40	3.00	15.31	31.92	14.46	4.84	66.2	298.72	.625	.978	3.79	
41	3.00	15.28	31.91	14.40	4.61	64.7	299.40	.590	.973	3.56	

42	3.00	15.25	31.86	14.36	4.95	66.8	299.06	.643	.960	3.83
43	3.00	15.22	31.86	14.30	4.42	63.4	300.52	.572	.959	3.40
44	3.00	15.19	31.82	14.24	4.40	63.3	300.67	.589	.954	3.48
45	3.00	15.16	31.79	14.19	4.34	62.9	301.20	.577	.951	3.40
46	3.00	15.13	31.76	14.13	4.24	62.2	301.77	.564	.950	3.32
47	3.00	15.09	31.74	14.06	3.67	58.1	303.16	.476	.953	2.82
48	3.00	15.06	31.67	14.03	4.29	62.5	302.45	.571	.955	3.38
49	3.00	15.03	31.65	13.95	3.73	58.5	303.72	.474	.974	2.86
50	3.00	15.00	31.58	13.92	4.07	61.0	303.25	.512	.984	3.12
51	3.00	14.97	31.53	13.87	4.23	62.2	303.22	.530	.992	3.26
52	3.00	14.94	31.48	13.83	4.46	63.7	302.47	.557	.996	3.44
53	3.00	14.91	31.46	13.77	3.92	59.9	304.13	.478	1.019	3.02
54	3.00	14.88	31.43	13.72	3.70	58.3	304.52	.446	1.033	2.86
55	3.00	14.84	31.35	13.70	4.37	63.1	303.69	.538	1.012	3.37
56	3.00	14.81	31.34	13.63	3.69	58.3	304.87	.447	1.037	2.87
57	3.00	14.78	31.29	13.60	3.88	59.6	304.88	.473	1.027	3.01
58	3.00	14.75	31.24	13.56	4.09	61.2	304.87	.504	1.015	3.17
59	3.00	14.72	31.17	13.54	4.59	64.5	301.97	.576	.995	3.56
60	3.00	14.69	31.13	13.50	4.56	64.3	302.26	.577	.989	3.54
61	3.00	14.66	31.09	13.46	4.54	64.2	302.56	.577	.981	3.51
62	3.00	14.63	31.05	13.42	4.51	64.0	302.86	.575	.971	3.47
63	3.00	14.59	31.03	13.36	4.02	60.7	306.28	.515	.968	3.09
64	3.00	14.56	31.00	13.32	3.79	59.0	306.89	.491	.958	2.92
65	3.00	14.53	30.97	13.27	3.58	57.4	307.47	.471	.953	2.79
66	3.00	14.50	30.92	13.23	3.73	58.5	307.53	.490	.948	2.88
67	3.00	14.47	30.86	13.20	4.06	60.9	307.33	.534	.946	3.13
68	3.00	14.44	30.83	13.16	3.87	59.6	307.76	.506	.947	2.97
69	3.00	14.41	30.79	13.12	3.68	58.2	308.17	.481	.951	2.84
70	3.00	14.38	30.75	13.08	3.66	58.0	308.31	.478	.957	2.84
71	3.00	14.34	30.68	13.06	4.03	60.7	307.90	.519	.963	3.10
72	3.00	14.31	30.64	13.01	3.68	58.2	308.38	.470	.978	2.85
73	3.00	14.28	30.57	12.98	4.04	60.8	307.93	.511	.990	3.14
74	3.00	14.25	30.53	12.94	3.89	59.7	308.18	.485	1.017	3.06
75	3.00	14.22	30.45	12.92	4.31	62.6	307.30	.532	1.023	3.37
76	3.00	14.19	30.40	12.87	4.17	61.7	307.74	.500	1.046	3.24
77	3.00	14.16	30.33	12.84	4.36	63.0	307.52	.521	1.055	3.41
78	3.00	14.13	30.26	12.80	4.63	64.8	307.20	.550	1.058	3.61
79	3.00	14.09	30.20	12.76	4.52	64.1	306.98	.529	1.073	3.52
80	3.00	14.06	30.13	12.71	4.51	64.0	307.36	.529	1.082	3.55
81	3.00	14.03	30.06	12.67	4.55	64.3	307.27	.532	1.087	3.59
82	3.00	14.00	29.97	12.65	4.98	67.1	305.38	.586	1.069	3.88
83	3.00	13.97	29.91	12.59	4.65	65.0	306.94	.539	1.078	3.60
84	3.00	13.94	29.85	12.54	4.51	64.0	307.20	.522	1.080	3.50
85	3.00	13.91	29.77	12.51	4.74	65.5	306.67	.558	1.067	3.69
86	3.00	13.88	29.71	12.46	4.58	64.5	306.97	.531	1.072	3.53
87	3.00	13.84	29.64	12.42	4.76	65.6	305.34	.564	1.064	3.72
88	3.00	13.81	29.60	12.36	4.41	63.3	306.91	.514	1.081	3.45
89	3.00	13.78	29.53	12.32	4.44	63.5	306.88	.523	1.082	3.51
90	3.00	13.75	29.47	12.27	4.48	63.8	306.85	.513	1.083	3.45
91	3.00	13.72	29.41	12.23	4.51	64.1	306.83	.526	1.086	3.54
92	3.00	13.69	29.37	12.18	4.37	63.1	307.18	.497	1.098	3.39
93	3.00	13.66	29.33	12.13	4.05	60.8	307.54	.454	1.124	3.16
94	3.00	13.63	29.25	12.10	4.50	64.0	307.19	.505	1.106	3.46
95	3.00	13.59	29.20	12.05	4.41	63.3	307.21	.500	1.120	3.47
96	3.00	13.56	29.16	11.99	4.18	61.7	307.79	.455	1.143	3.22
97	3.00	13.53	29.07	11.97	4.81	66.0	304.47	.545	1.112	3.75
98	3.00	13.50	29.04	11.90	4.35	63.0	308.14	.476	1.137	3.36
99	3.00	13.47	28.98	11.85	4.29	62.5	308.20	.474	1.142	3.36
100	3.00	13.44	28.89	11.82	4.61	64.6	307.60	.513	1.119	3.56
101	3.00	13.41	28.84	11.77	4.29	62.5	308.59	.471	1.134	3.31

102	3.00	13.38	28.78	11.72	4.16	61.6	308.85	.455	1.138	3.21
103	3.00	13.34	28.70	11.69	4.33	62.8	308.66	.488	1.124	3.40
104	3.00	13.31	28.60	11.66	4.67	65.1	308.15	.526	1.102	3.60
105	3.00	13.28	28.55	11.60	4.40	63.3	308.99	.501	1.114	3.46
106	3.00	13.25	28.46	11.57	4.73	65.4	306.42	.539	1.095	3.66
107	3.00	13.22	28.40	11.50	4.45	63.6	308.54	.509	1.108	3.50
108	3.00	13.19	28.36	11.42	4.04	60.8	310.43	.445	1.132	3.12
109	3.00	13.16	28.28	11.36	4.09	61.2	310.86	.450	1.128	3.15
110	3.00	13.13	28.21	11.29	3.88	59.7	311.66	.422	1.142	2.99
111	3.00	13.11	28.15	11.27	4.22	62.1	311.29	.472	1.121	3.28
112	3.00	13.09	28.12	11.24	4.13	61.4	311.76	.467	1.127	3.26
113	3.00	13.08	28.10	11.18	3.78	58.9	312.92	.408	1.152	2.92
114	3.00	13.06	28.05	11.16	4.02	60.7	313.16	.438	1.136	3.09
115	3.00	13.05	28.01	11.12	3.99	60.5	313.81	.435	1.139	3.07
116	3.00	13.03	27.95	11.10	4.09	61.1	314.30	.451	1.134	3.17
117	3.00	13.02	27.91	11.06	3.89	59.8	315.02	.428	1.149	3.05
118	3.00	13.00	27.85	11.03	3.91	59.9	315.62	.425	1.150	3.03
119	3.00	12.98	27.78	11.02	4.15	61.6	315.71	.464	1.136	3.27
120	3.00	12.97	27.70	11.02	4.41	63.4	313.85	.488	1.122	3.39
121	3.00	12.95	27.66	10.98	4.08	61.0	316.97	.441	1.147	3.14
122	3.00	12.94	27.60	10.96	4.03	60.7	317.88	.438	1.153	3.13
123	3.00	12.92	27.54	10.93	3.99	60.5	318.51	.436	1.159	3.13
124	3.00	12.91	27.48	10.91	3.95	60.2	319.10	.434	1.163	3.13
125	3.00	12.89	27.42	10.90	3.95	60.1	319.65	.432	1.166	3.12
126	3.00	12.88	27.35	10.90	4.27	62.4	319.27	.473	1.144	3.36
127	3.00	12.86	27.29	10.88	4.27	62.4	320.18	.470	1.145	3.34
128	3.00	12.84	27.25	10.84	3.91	59.9	321.43	.416	1.172	3.02
129	3.00	12.83	27.19	10.82	3.76	58.8	322.09	.399	1.185	2.93
130	3.00	12.81	27.11	10.84	4.29	62.5	320.92	.466	1.147	3.31
131	3.00	12.80	27.07	10.80	4.80	60.6	322.42	.425	1.167	3.08
132	3.00	12.78	27.00	10.81	4.36	63.1	320.12	.482	1.143	3.42
133	3.00	12.77	26.96	10.77	3.81	59.1	323.12	.404	1.182	2.96
134	3.00	12.75	26.88	10.78	4.20	61.9	322.22	.451	1.154	3.23
135	3.00	12.73	26.80	10.79	4.48	63.8	317.43	.497	1.137	3.50
136	3.00	12.72	26.76	10.76	4.05	60.8	322.46	.432	1.166	3.12
137	3.00	12.70	26.69	10.77	4.29	62.5	321.49	.466	1.150	3.32
138	3.00	12.69	26.64	10.75	4.01	60.6	322.80	.423	1.171	3.08
139	3.00	12.67	26.57	10.75	4.06	60.9	322.39	.437	1.168	3.17
140	3.00	12.66	26.50	10.76	4.35	63.0	321.29	.477	1.149	3.39
141	3.00	12.64	26.46	10.73	3.90	59.8	322.82	.414	1.184	3.04
142	3.00	12.63	26.39	10.74	4.16	61.6	321.46	.452	1.164	3.26
143	3.00	12.61	26.33	10.73	4.07	61.0	322.43	.430	1.173	3.13
144	3.00	12.59	26.27	10.73	4.17	61.6	322.19	.445	1.166	3.22
145	3.00	12.58	26.22	10.73	4.26	62.4	320.98	.463	1.160	3.33
146	3.00	12.56	26.17	10.71	4.00	60.5	322.18	.423	1.182	3.10
147	3.00	12.55	26.11	10.71	4.15	61.6	321.80	.439	1.171	3.19
148	3.00	12.52	26.02	10.70	4.00	60.5	321.68	.424	1.186	3.12
149	3.00	12.48	25.92	10.69	4.42	63.4	320.50	.482	1.141	3.41
150	3.00	12.45	25.86	10.64	4.03	60.7	322.16	.440	1.158	3.16
151	3.00	12.42	25.79	10.60	3.85	59.4	322.72	.412	1.158	2.96
152	3.00	12.39	25.71	10.58	4.16	61.6	322.35	.466	1.117	3.23
153	3.00	12.36	25.64	10.55	4.13	61.5	322.22	.470	1.103	3.21
154	3.00	12.33	25.58	10.51	4.04	60.8	322.53	.463	1.092	3.14
155	3.00	12.30	25.51	10.49	4.19	61.8	322.24	.493	1.066	3.26
156	3.00	12.27	25.44	10.46	4.35	62.9	321.66	.523	1.040	3.37
157	3.00	12.23	25.37	10.43	4.34	62.8	321.45	.535	1.022	3.39
158	3.00	12.20	25.31	10.40	4.43	63.5	320.96	.552	1.001	3.43
159	3.00	12.17	25.24	10.37	4.36	63.0	320.76	.557	.984	3.40
160	3.00	12.14	25.18	10.33	4.31	62.6	320.27	.563	.966	3.37
161	3.00	12.11	25.10	10.30	4.43	63.5	318.23	.597	.944	3.49

162	3.00	12.08	25.03	10.26	4.44	63.5	317.52	.595	.927	3.42
163	3.00	12.05	24.95	10.21	4.13	61.4	317.78	.566	.925	3.25
164	3.00	12.03	24.91	10.18	4.12	61.4	317.20	.560	.929	3.23
165	3.00	12.02	24.86	10.16	4.08	61.1	316.39	.554	.934	3.21
166	3.00	12.00	24.81	10.13	4.01	60.6	316.14	.536	.941	3.13

*** DEEP WATER WAVE PARAMETERS

WAVE HEIGHT 8.10 m
 WAVE PERIOD 11.27 s
 WAVE DIRECTION 315.00 degs

***** OUTPUT DATA *****

ORTH. NUMBER	INITIAL COORDINATES		COORDINATES		DEPTH	BREAKING CONDITIONS			REFRAC. COEF.	SHOALING COEF.	WAVE HEIGHT
	X	Y	X	Y		WAVE LENGTH	WAVE DIRECTION	HEIGHT			
1	4.00	30.00	23.30	10.03	10.43	107.6	331.02	.955	1.013	7.83	
2	4.04	30.84	23.38	10.02	10.34	107.2	330.74	.949	1.015	7.80	
3	4.09	30.09	23.45	10.03	10.36	107.3	330.20	.949	1.014	7.79	
4	4.13	30.13	23.55	10.00	10.02	105.9	328.99	.947	1.021	7.83	
5	4.18	30.18	23.64	9.98	9.64	104.0	329.64	.905	1.025	7.52	
6	4.22	30.22	23.74	9.95	9.27	102.1	329.17	.864	1.030	7.21	
7	4.27	30.27	23.80	9.98	9.75	104.5	328.60	.911	1.024	7.56	
8	4.29	30.29	23.86	9.96	9.34	102.5	328.32	.868	1.029	7.24	
9	4.31	30.31	23.91	9.95	9.16	101.7	328.00	.850	1.032	7.11	
10	4.35	30.35	24.00	9.94	9.01	101.0	327.35	.836	1.034	7.00	
11	4.40	30.40	24.06	9.97	8.96	100.7	326.90	.845	1.028	7.03	
12	4.44	30.44	24.11	10.03	9.21	101.9	326.71	.872	1.016	7.17	
13	4.49	30.49	24.15	10.08	9.41	102.8	326.69	.903	1.004	7.34	
14	4.53	30.53	24.21	10.13	9.44	103.1	326.70	.919	.995	7.41	
15	4.57	30.57	24.26	10.17	9.50	103.4	326.73	.930	.987	7.43	
16	4.62	30.62	24.31	10.23	9.82	104.8	326.94	.962	.978	7.62	
17	4.66	30.66	24.36	10.27	9.94	105.4	327.22	.987	.972	7.77	
18	4.71	30.71	24.39	10.34	10.49	107.9	327.51	1.011	.964	7.90	
19	4.75	30.75	24.46	10.36	10.41	107.6	327.78	1.009	.961	7.85	
20	4.80	30.80	24.52	10.38	10.13	106.3	328.28	1.015	.958	7.87	
21	4.84	30.84	24.59	10.39	9.86	105.0	328.71	.999	.955	7.73	
22	4.88	30.88	24.65	10.42	9.84	104.9	329.17	.993	.952	7.66	
23	4.93	30.93	24.72	10.44	9.72	104.3	329.70	.988	.950	7.60	
24	4.97	30.97	24.78	10.45	9.49	103.3	330.14	.968	.948	7.43	
25	5.02	31.02	24.85	10.47	9.40	102.8	330.82	.951	.946	7.28	
26	5.06	31.06	24.92	10.48	9.11	101.4	331.41	.928	.944	7.09	
27	5.10	31.10	24.98	10.49	8.97	100.8	331.91	.916	.942	6.98	
28	5.15	31.15	25.05	10.52	8.87	100.1	332.34	.902	.947	6.92	
29	5.19	31.19	25.10	10.55	8.99	100.8	332.15	.901	.955	6.97	
30	5.24	31.24	25.17	10.58	8.88	100.2	332.43	.892	.963	6.96	
31	5.28	31.28	25.24	10.60	8.79	99.7	333.01	.870	.972	6.85	
32	5.33	31.33	25.31	10.61	8.33	97.3	333.64	.808	.986	6.45	
33	5.37	31.37	25.37	10.66	8.67	99.2	333.41	.843	.990	6.76	
34	5.41	31.41	25.44	10.70	8.76	99.6	333.19	.848	.997	6.85	
35	5.46	31.46	25.51	10.73	8.90	100.3	332.92	.853	1.003	6.93	
36	5.50	31.50	25.57	10.77	8.92	100.4	332.95	.847	1.010	6.93	
37	5.55	31.55	25.64	10.81	9.25	102.0	332.03	.861	1.011	7.21	
38	5.59	31.59	25.70	10.85	9.44	103.1	330.97	.901	1.013	7.39	
39	5.64	31.64	25.77	10.88	9.48	103.3	332.04	.896	1.018	7.39	
40	5.68	31.68	25.84	10.91	9.58	103.8	331.65	.905	1.021	7.48	
41	5.72	31.72	25.91	10.94	9.52	103.5	331.52	.895	1.025	7.43	

42	5.77	31.77	25.98	10.98	9.80	104.7	330.91	.918	1.024	7.61
43	5.81	31.81	26.05	10.99	9.68	104.2	331.00	.912	1.027	7.58
44	5.86	31.86	26.13	11.00	9.63	104.0	331.25	.906	1.027	7.54
45	5.90	31.90	26.21	11.01	9.54	103.6	331.42	.893	1.028	7.44
46	5.94	31.94	26.28	11.03	9.73	104.4	331.25	.920	1.022	7.62
47	5.99	31.99	26.36	11.04	9.61	103.9	331.30	.909	1.024	7.54
48	6.03	32.03	26.43	11.06	9.74	104.5	330.70	.916	1.019	7.57
49	6.08	32.08	26.51	11.07	9.61	103.9	330.99	.902	1.021	7.46
50	6.12	32.12	26.59	11.07	9.48	103.3	330.66	.897	1.023	7.43
51	6.17	32.17	26.67	11.08	9.38	102.7	331.01	.877	1.024	7.27
52	6.21	32.21	26.75	11.09	9.27	102.2	330.71	.870	1.025	7.22
53	6.25	32.25	26.83	11.10	9.16	101.7	330.53	.863	1.027	7.18
54	6.30	32.30	26.92	11.10	8.81	99.8	330.60	.826	1.034	6.92
55	6.34	32.34	26.99	11.13	9.19	101.8	330.09	.860	1.024	7.13
56	6.39	32.39	27.08	11.13	8.73	99.5	329.83	.814	1.032	6.80
57	6.43	32.43	27.17	11.15	8.51	98.3	329.33	.788	1.034	6.60
58	6.47	32.47	27.23	11.19	8.78	99.7	328.49	.824	1.025	6.85
59	6.52	32.52	27.32	11.21	8.59	98.8	327.93	.802	1.027	6.67
60	6.56	32.56	27.39	11.24	8.59	98.8	327.35	.801	1.025	6.65
61	6.61	32.61	27.45	11.29	8.98	100.8	326.04	.847	1.016	6.97
62	6.65	32.65	27.53	11.31	8.74	99.5	325.96	.828	1.020	6.84
63	6.70	32.70	27.60	11.36	8.87	100.1	325.32	.835	1.017	6.88
64	6.74	32.74	27.67	11.39	8.77	99.6	324.84	.824	1.019	6.80
65	6.78	32.78	27.72	11.45	9.05	101.1	324.26	.854	1.015	7.02
66	6.83	32.83	27.78	11.50	9.11	101.4	323.85	.866	1.015	7.12
67	6.87	32.87	27.84	11.54	9.13	101.5	323.52	.863	1.016	7.10
68	6.92	32.92	27.88	11.61	9.50	103.4	322.83	.905	1.012	7.42
69	6.96	32.96	27.94	11.66	9.44	103.1	322.78	.893	1.015	7.35
70	7.01	33.01	27.98	11.71	9.56	103.6	322.53	.907	1.017	7.47
71	7.05	33.05	28.03	11.77	9.73	104.4	322.25	.927	1.016	7.63
72	7.09	33.09	28.08	11.81	9.77	104.6	322.10	.930	1.016	7.66
73	7.14	33.14	28.13	11.86	9.91	105.2	321.95	.939	1.015	7.71
74	7.19	33.18	28.19	11.90	9.97	105.6	321.80	.946	1.015	7.77
75	7.23	33.23	28.22	11.97	10.32	107.2	321.55	.955	1.011	7.82
76	7.27	33.27	28.28	12.01	10.45	107.7	321.33	.960	1.010	7.86
77	7.31	33.31	28.36	12.02	10.11	106.2	321.40	.954	1.014	7.84
78	7.36	33.36	28.42	12.04	10.01	105.8	321.29	.955	1.014	7.85
79	7.40	33.40	28.48	12.08	10.27	106.9	321.23	.952	1.008	7.77
80	7.45	33.45	28.55	12.09	10.82	105.8	321.18	.960	1.011	7.86
81	7.49	33.49	28.61	12.12	10.01	105.8	321.17	.957	1.009	7.82
82	7.54	33.54	28.67	12.15	9.99	105.7	321.15	.955	1.009	7.80
83	7.58	33.58	28.73	12.18	10.05	106.0	321.15	.964	1.007	7.86
84	7.62	33.62	28.77	12.23	10.45	107.8	321.14	.967	1.008	7.83
85	7.67	33.67	28.82	12.26	10.47	107.8	321.14	.979	.999	7.92
86	7.71	33.71	28.87	12.30	10.59	108.5	321.15	.990	.997	8.00
87	7.76	33.76	28.92	12.34	10.69	108.9	321.20	1.000	.996	8.07
88	7.80	33.80	28.97	12.38	10.78	109.3	321.27	1.008	.995	8.13
89	7.84	33.84	29.02	12.42	10.83	109.5	321.34	1.017	.994	8.19
90	7.89	33.89	29.06	12.47	11.02	110.3	321.48	1.039	.990	8.33
91	7.93	33.93	29.11	12.51	11.10	110.6	321.56	1.042	.987	8.33
92	7.98	33.98	29.15	12.55	11.14	110.8	321.65	1.051	.986	8.39
93	8.02	34.02	29.20	12.59	11.18	111.0	321.74	1.058	.984	8.44
94	8.07	34.07	29.25	12.63	11.22	111.3	321.82	1.061	.983	8.45
95	8.11	34.11	29.30	12.66	11.27	111.4	321.87	1.060	.983	8.44
96	8.15	34.15	29.36	12.69	11.06	110.5	321.83	1.041	.985	8.31
97	8.20	34.20	29.41	12.72	10.99	110.2	321.87	1.041	.986	8.31
98	8.24	34.24	29.47	12.75	10.91	109.8	321.82	1.029	.987	8.23
99	8.29	34.29	29.53	12.78	10.83	109.5	321.78	1.018	.989	8.16
100	8.33	34.33	29.58	12.81	10.74	109.1	321.71	1.002	.992	8.05
101	8.38	34.38	29.65	12.84	10.54	108.1	321.62	.982	.996	7.93

102	8.42	34.42	29.71	12.86	10.34	107.2	321.48	.964	1.000	7.81
103	8.46	34.46	29.76	12.90	10.48	107.9	321.18	.968	1.001	7.85
104	8.51	34.51	29.85	12.90	9.78	104.6	321.17	.926	1.013	7.60
105	8.55	34.55	29.92	12.91	9.34	102.5	320.99	.883	1.023	7.31
106	8.60	34.60	29.97	12.96	9.68	104.2	320.82	.908	1.023	7.52
107	8.64	34.64	30.02	13.00	9.78	104.6	320.61	.922	1.021	7.62
108	8.68	34.68	30.10	13.02	9.46	103.2	320.40	.895	1.012	7.33
109	8.73	34.73	30.18	13.03	8.87	100.1	320.18	.849	1.007	6.92
110	8.77	34.77	30.23	13.08	9.17	101.7	319.97	.885	.991	7.11
111	8.82	34.82	30.31	13.10	8.65	99.1	319.75	.842	.986	6.73
112	8.86	34.86	30.35	13.15	8.98	100.8	319.53	.890	.974	7.02
113	8.91	34.91	30.42	13.18	8.75	99.5	319.26	.873	.968	6.85
114	8.95	34.95	30.49	13.20	8.28	97.2	318.96	.826	.965	6.45
115	8.99	34.99	30.54	13.26	8.65	99.1	318.68	.864	.958	6.70
116	9.04	35.04	30.59	13.31	8.77	99.6	318.37	.883	.955	6.83
117	9.08	35.08	30.65	13.35	8.60	98.8	318.02	.863	.954	6.67
118	9.13	35.13	30.70	13.40	8.81	99.8	317.75	.896	.953	6.92
119	9.17	35.17	30.77	13.43	8.32	97.4	317.36	.832	.957	6.45
120	9.21	35.22	30.81	13.50	8.63	99.0	317.08	.863	.959	6.71
121	9.26	35.26	30.88	13.52	8.03	95.7	316.70	.795	.968	6.23
122	9.30	35.30	30.93	13.57	7.80	94.5	316.37	.763	.977	6.04
123	9.35	35.35	30.98	13.62	7.72	94.0	316.05	.748	.988	5.99
124	9.39	35.39	31.00	13.71	8.58	98.7	315.81	.832	.991	6.68
125	9.41	35.41	31.02	13.73	8.53	98.4	315.65	.831	.994	6.69
126	9.46	35.46	31.06	13.80	8.90	100.3	315.39	.858	.996	6.92
127	9.50	35.50	31.11	13.84	8.85	100.0	315.12	.858	.997	6.93
128	9.55	35.55	31.16	13.89	8.85	100.0	314.88	.860	.997	6.95
129	9.59	35.59	31.20	13.94	8.91	100.4	314.63	.866	.995	6.99
130	9.63	35.63	31.25	14.00	8.99	100.8	314.38	.874	.992	7.02
131	9.68	35.68	31.31	14.03	8.71	99.4	314.10	.856	.985	6.83
132	9.72	35.72	31.37	14.07	8.46	98.0	313.82	.828	.978	6.56
133	9.77	35.77	31.41	14.12	8.62	99.0	313.60	.850	.970	6.68
134	9.81	35.81	31.44	14.19	9.17	101.7	313.45	.922	.963	7.19
135	9.86	35.86	31.48	14.25	9.22	101.9	313.27	.932	.959	7.24
136	9.90	35.90	31.52	14.30	9.23	101.9	313.05	.927	.957	7.19
137	9.94	35.94	31.57	14.35	9.19	101.8	312.85	.925	.956	7.17
138	9.99	35.99	31.60	14.41	9.34	102.5	312.71	.944	.956	7.31
139	10.03	36.03	31.64	14.47	9.44	103.1	312.59	.948	.957	7.35
140	10.08	36.08	31.67	14.53	9.60	103.9	312.48	.959	.959	7.44
141	10.12	36.12	31.71	14.58	9.49	103.3	312.42	.945	.963	7.37
142	10.17	36.17	31.74	14.64	9.46	103.2	312.34	.939	.968	7.37
143	10.21	36.21	31.78	14.69	9.39	102.8	312.30	.934	.974	7.37
144	10.25	36.25	31.80	14.76	9.58	103.8	312.31	.941	.980	7.47
145	10.30	36.30	31.83	14.82	9.78	104.6	312.31	.953	.986	7.61
146	10.34	36.34	31.85	14.89	10.01	105.8	312.62	.969	.992	7.79
147	10.39	36.39	31.88	14.94	9.82	104.8	312.30	.943	1.004	7.67
148	10.43	36.43	31.91	15.01	9.93	105.3	312.30	.946	1.012	7.75
149	10.47	36.47	31.93	15.07	10.26	106.9	312.32	.958	1.006	7.74
150	10.52	36.52	31.96	15.13	10.39	107.5	312.34	.966	1.005	7.86
151	10.56	36.56	31.99	15.19	10.51	108.0	312.38	.979	1.004	7.96
152	10.61	36.61	32.02	15.25	10.78	109.3	312.43	.997	.999	8.07
153	10.65	36.65	32.06	15.29	10.86	109.7	312.46	1.011	.993	8.13
154	10.67	36.67	32.08	15.32	10.89	109.7	312.48	1.018	.991	8.17
155	10.72	36.72	32.11	15.36	10.94	110.0	312.53	1.033	.987	8.26

*** DEEP WATER WAVE PARAMETERS

WAVE HEIGHT 9.87 m
 WAVE PERIOD 12.43 s
 WAVE DIRECTION 360.00 degs

***** OUTPUT DATA *****

ORTH. NUMBER	INITIAL COORDINATES		COORDINATES		DEPTH [m]	BREAKING CONDITIONS		REFRAC. COEF.	SHOALING COEF.	WAVE HEIGHT [m]
	X	Y	X	Y		WAVE LENGTH [m]	WAVE DIRECTION [deg]			
1	24.00	37.00	25.04	10.42	7.14	100.8	346.52	.576	.972	5.53
2	24.13	37.00	25.06	10.47	7.92	105.8	347.70	.646	.975	6.22
3	24.19	37.00	25.07	10.52	8.78	111.0	348.68	.714	.974	6.86
4	24.25	37.00	25.07	10.58	9.74	116.3	349.33	.789	.973	7.58
5	24.31	37.00	25.07	10.65	10.98	122.9	350.28	.889	.972	8.53
6	24.34	37.00	25.07	10.70	11.96	127.6	350.81	.972	.970	9.31
7	24.36	37.00	25.07	10.74	12.75	131.2	351.17	1.009	.969	9.65
8	24.39	37.00	25.06	10.83	14.48	138.8	351.83	1.139	.967	10.88
9	24.45	37.00	25.06	10.89	15.53	143.0	352.55	1.216	.967	11.60
10	24.58	37.00	25.09	10.93	15.98	144.8	352.63	1.266	.968	12.09
11	24.64	37.00	25.10	10.94	16.17	145.6	353.04	1.259	.968	12.03
12	24.66	37.00	25.11	10.87	14.83	140.3	352.76	1.158	.970	11.09
13	24.67	37.00	25.12	10.79	13.17	133.2	351.78	1.027	.974	9.87
14	24.70	37.00	25.14	10.71	11.51	125.5	351.16	.926	.978	8.94
15	24.77	37.00	25.16	10.66	10.49	120.4	351.13	.842	.983	8.17
16	24.89	37.00	25.19	10.58	8.70	110.4	350.30	.687	.995	6.75
17	25.14	37.00	25.22	10.60	8.93	111.8	350.44	.707	.998	6.97
18	25.20	37.00	25.22	10.67	10.25	119.0	352.86	.819	.991	8.01
19	25.27	37.00	25.22	10.72	11.11	123.5	351.76	.887	.988	8.65
20	25.30	37.00	25.21	10.81	12.72	131.1	352.53	.992	.982	9.61
21	25.33	37.00	25.21	10.89	14.37	138.3	353.77	1.116	.977	10.77
22	25.39	37.00	25.21	10.98	15.92	144.6	353.65	1.239	.975	11.92
23	25.52	37.00	25.23	10.98	15.85	144.3	353.68	1.237	.976	11.92
24	25.58	37.00	25.24	11.03	16.56	147.0	354.64	1.283	.971	12.30
25	25.59	37.00	25.25	10.98	15.64	143.5	353.73	1.213	.977	11.70
26	25.63	37.00	25.27	10.90	13.99	136.8	354.67	1.088	.982	10.55
27	25.66	37.00	25.28	10.84	12.69	131.0	353.15	.984	.988	9.59
28	25.69	37.00	25.30	10.78	11.48	125.4	353.17	.910	.994	8.92
29	25.75	37.00	25.32	10.71	10.03	118.0	351.95	.787	1.005	7.80
30	25.88	37.00	25.37	10.64	8.40	108.8	351.36	.652	1.025	6.59
31	26.00	37.00	25.41	10.61	7.48	103.0	351.24	.569	1.044	5.86
32	26.03	37.00	25.45	10.64	7.67	104.2	351.66	.573	1.049	5.93
33	26.06	37.00	25.51	10.68	7.80	105.1	351.63	.581	1.055	6.05
34	26.09	37.00	25.57	10.71	7.96	106.0	353.03	.593	1.060	6.20
35	26.13	37.00	25.62	10.74	7.96	106.0	351.69	.589	1.068	6.20
36	26.16	37.00	25.68	10.77	8.16	107.3	351.77	.601	1.070	6.34
37	26.19	37.00	25.74	10.80	8.25	107.8	351.83	.609	1.074	6.46
38	26.22	37.00	25.80	10.83	8.36	108.4	351.79	.618	1.077	6.57
39	26.25	37.00	25.85	10.86	8.48	109.2	351.83	.623	1.080	6.64
40	26.28	37.00	25.91	10.90	8.69	110.4	351.78	.635	1.079	6.76
41	26.31	37.00	25.97	10.93	8.77	111.0	351.76	.645	1.081	6.87

42	26.34	37.00	26.03	10.95	8.92	111.7	352.05	.658	1.079	7.81
43	26.39	37.00	26.09	10.96	9.05	112.5	351.65	.661	1.076	7.02
44	26.41	37.00	26.15	10.97	9.03	112.3	351.45	.665	1.076	7.06
45	26.44	37.00	26.22	10.98	9.02	112.3	351.15	.665	1.076	7.06
46	26.47	37.00	26.28	11.06	9.14	113.1	350.93	.671	1.074	7.11
47	26.50	37.00	26.35	11.01	9.11	112.9	350.63	.673	1.073	7.13
48	26.53	37.00	26.41	11.03	9.20	113.4	350.31	.676	1.069	7.13
49	26.56	37.00	26.48	11.04	9.29	113.8	350.15	.682	1.066	7.24
50	26.59	37.00	26.55	11.05	9.25	113.7	349.75	.682	1.065	7.17
51	26.63	37.00	26.61	11.06	9.21	113.5	349.42	.686	1.065	7.21
52	26.66	37.00	26.68	11.09	9.41	114.5	349.15	.703	1.059	7.35
53	26.69	37.00	26.74	11.11	9.60	115.6	350.08	.724	1.054	7.53
54	26.72	37.00	26.81	11.12	9.53	115.3	349.00	.718	1.054	7.47
55	26.75	37.00	26.87	11.13	9.48	114.9	348.36	.711	1.055	7.40
56	26.78	37.08	26.94	11.14	9.42	114.5	347.87	.703	1.056	7.33
57	26.81	37.00	27.00	11.15	9.35	114.1	347.45	.696	1.056	7.26
58	26.84	37.00	27.07	11.16	9.20	113.4	346.99	.689	1.057	7.19
59	26.88	37.00	27.12	11.23	9.98	117.7	346.97	.764	1.038	7.83
60	26.91	37.00	27.19	11.23	9.63	115.8	346.12	.727	1.043	7.48
61	26.94	37.00	27.24	11.32	10.63	121.0	346.75	.819	1.024	8.27
62	26.97	37.00	27.30	11.32	10.29	119.2	345.51	.787	1.028	7.99
63	27.00	37.00	27.36	11.37	10.61	121.0	345.28	.816	1.022	8.23
64	27.06	37.00	27.41	11.44	11.09	123.4	345.29	.860	1.015	8.61
65	27.13	37.00	27.48	11.49	11.31	124.4	345.13	.886	1.012	8.85
66	27.19	37.00	27.54	11.54	11.48	125.4	345.80	.897	1.010	8.94
67	27.25	37.00	27.60	11.56	11.21	123.9	344.52	.869	1.014	8.70
68	27.31	37.00	27.66	11.63	11.52	125.6	344.59	.901	1.012	9.00
69	27.38	37.00	27.71	11.69	11.78	126.8	344.84	.920	1.010	9.17
70	27.44	37.00	27.77	11.75	11.79	126.8	344.84	.918	1.012	9.17
71	27.50	37.00	27.83	11.81	11.96	127.6	344.86	.934	1.013	9.34
72	27.56	37.00	27.88	11.87	12.07	128.1	345.22	.940	1.015	9.41
73	27.63	37.00	27.94	11.94	12.15	128.6	345.28	.939	1.017	9.43
74	27.69	37.00	27.99	12.01	12.23	128.9	345.68	.950	1.020	9.57
75	27.75	37.00	28.05	12.06	12.65	130.8	345.58	.956	1.011	9.54
76	27.81	37.00	28.11	12.08	12.64	130.8	345.27	.960	1.009	9.56
77	27.88	37.00	28.18	12.09	12.35	129.5	345.14	.965	1.012	9.64
78	27.94	37.00	28.24	12.14	12.75	131.2	346.30	.971	1.004	9.62
79	28.00	37.00	28.30	12.15	12.58	130.5	344.97	.968	1.005	9.52
80	28.06	37.00	28.37	12.16	12.27	129.1	344.33	.959	1.008	9.55
81	28.13	37.00	28.44	12.19	12.21	128.8	345.62	.961	1.008	9.56
82	28.19	37.00	28.49	12.24	12.51	130.1	344.62	.952	1.003	9.42
83	28.25	37.00	28.56	12.24	12.03	127.9	344.00	.941	1.009	9.37
84	28.31	37.00	28.62	12.30	12.52	130.2	345.02	.951	1.002	9.41
85	28.38	37.00	28.69	12.31	12.01	127.8	344.01	.942	1.008	9.37
86	28.44	37.00	28.75	12.34	11.96	127.6	344.24	.939	1.009	9.35
87	28.50	37.00	28.81	12.37	11.90	127.3	343.97	.930	1.010	9.26
88	28.56	37.00	28.87	12.42	12.03	127.9	344.34	.941	1.008	9.37
89	28.63	37.00	28.93	12.45	11.91	127.3	345.08	.936	1.011	9.34
90	28.69	37.00	28.99	12.49	11.99	127.7	344.95	.934	1.011	9.31
91	28.75	37.00	29.05	12.53	11.92	127.4	344.81	.931	1.010	9.28
92	28.81	37.00	29.11	12.57	11.86	127.1	345.02	.928	1.009	9.24
93	28.88	37.00	29.17	12.61	11.69	126.4	344.77	.917	1.010	9.14
94	28.94	37.00	29.23	12.65	11.73	126.6	346.02	.921	1.009	9.17
95	29.00	37.00	29.31	12.68	11.29	124.4	343.84	.878	1.013	8.78
96	29.06	37.00	29.41	12.69	10.61	121.0	342.37	.821	1.021	8.27
97	29.13	37.00	29.48	12.75	10.85	122.1	342.21	.843	1.020	8.49
98	29.19	37.00	29.56	12.81	10.88	122.3	342.11	.845	1.022	8.52
99	29.25	37.00	29.64	12.83	10.46	120.2	340.71	.804	1.029	8.17
100	29.28	37.00	29.67	12.87	10.73	121.5	340.71	.820	1.028	8.32
101	29.30	37.00	29.70	12.87	10.62	121.1	340.48	.816	1.030	8.30

102	29.33	37.00	29.73	12.91	10.91	122.5	343.86	.839	1.029	8.51
103	29.36	37.08	29.77	12.92	10.66	121.1	341.45	.811	1.034	8.27
104	29.42	37.00	29.85	12.94	10.25	119.1	339.60	.774	1.043	7.97
105	29.48	37.80	29.93	12.96	9.88	117.0	338.28	.738	1.053	7.67
106	29.55	37.00	30.00	13.00	10.03	118.0	338.01	.749	1.056	7.80
107	29.61	37.00	30.08	13.03	9.73	116.3	337.35	.737	1.044	7.60
108	29.67	37.00	30.17	13.04	9.02	112.3	336.17	.682	1.040	7.00
109	29.73	37.00	30.25	13.04	8.22	107.6	335.12	.625	1.036	6.40
110	29.80	37.00	30.31	13.12	8.94	111.8	335.51	.699	1.011	6.98
111	29.86	37.00	30.38	13.16	8.88	111.5	334.92	.697	1.000	6.88
112	29.92	37.00	30.48	13.16	7.76	104.7	333.05	.608	1.001	6.00
113	29.95	37.00	30.49	13.23	8.71	110.6	333.79	.693	.987	6.76
114	29.98	37.00	30.54	13.25	8.62	110.0	333.31	.691	.984	6.72
115	30.02	37.00	30.58	13.28	8.50	109.3	332.72	.686	.982	6.65
116	30.05	37.00	30.63	13.33	8.71	110.6	332.44	.701	.979	6.78
117	30.08	37.00	30.67	13.38	8.89	111.5	332.55	.719	.977	6.94
118	30.11	37.00	30.73	13.39	8.27	107.9	331.13	.663	.981	6.42
119	30.14	37.00	30.74	13.47	9.15	113.1	332.83	.734	.979	7.09
120	30.17	37.00	30.81	13.46	8.08	106.8	330.21	.649	.987	6.32
121	30.20	37.00	30.86	13.49	7.76	104.8	329.58	.621	.993	6.08
122	30.23	37.00	30.87	13.58	8.94	111.8	330.89	.714	.992	7.00
123	30.27	37.00	30.89	13.64	9.39	114.4	333.96	.743	.996	7.31
124	30.30	37.00	30.96	13.63	8.08	106.8	329.19	.633	1.013	6.33
125	30.31	37.00	30.96	13.67	8.69	110.4	330.14	.678	1.012	6.77
126	30.34	37.00	31.00	13.72	8.66	110.2	329.55	.672	1.022	6.78
127	30.38	37.00	31.04	13.74	8.38	108.6	328.98	.642	1.028	6.51
128	30.44	37.00	31.11	13.80	8.29	108.0	328.54	.635	1.032	6.47
129	30.50	37.00	31.20	13.85	7.89	105.7	327.78	.605	1.035	6.18
130	30.56	37.00	31.27	13.90	7.62	103.9	327.23	.586	1.035	5.98
131	30.59	37.00	31.30	13.95	7.85	105.4	327.38	.605	1.030	6.15
132	30.63	37.00	31.32	13.99	8.11	107.0	327.62	.628	1.024	6.35
133	30.69	37.00	31.37	14.07	8.36	108.4	327.66	.654	1.009	6.51
134	30.75	37.00	31.43	14.14	8.57	109.7	327.70	.679	.997	6.69
135	30.81	37.00	31.50	14.19	8.29	108.0	327.25	.660	.992	6.46
136	30.88	37.00	31.57	14.24	7.99	106.2	326.82	.639	.990	6.25
137	30.94	37.00	31.61	14.33	8.31	108.1	327.16	.661	.987	6.44
138	30.97	37.00	31.62	14.39	8.81	111.2	328.16	.709	.985	6.89
139	31.00	37.00	31.66	14.42	8.56	109.6	327.45	.687	.987	6.70

Profondità di frangimento

Caso	Minima	Media	Massima
1	2.60	3.43	5.14
2	5.21	6.69	8.08
3	4.41	6.74	9.57
4	.70	2.12	3.14
5	3.23	4.15	6.00
6	7.46	8.66	10.24
7	6.69	9.89	13.91
8	.96	2.68	4.17
9	3.58	4.51	6.22
10	7.72	9.56	11.27
11	7.14	10.40	16.56
12	.95	2.87	4.55

AGITAZIONI NEL DISPOSITIVO PORTUALE

D gradi	T sec.	Ho m.	K _r	H m.	Altezza d'onda (m)				Tr anni
					imboc.	Specchio acqueo			
						media	min.	max.	
22, 50	6	2, 93	0, 75	2, 20	0, 60	0, 20	0, 09	0, 30	3
22, 50	8	3, 84	0, 75	2, 88	1, 00	0, 30	0, 17	0, 43	5
22, 50	10	5, 81	0, 75	4, 35	1, 52	0, 50	0, 30	0, 70	15
45°	6	2, 49	0, 40	1, 00	0, 47	0, 20	0, 09	0, 32	3
45°	8	4, 24	0, 50	2, 12	1, 19	0, 38	0, 21	0, 55	20
315°	6	2, 84	0, 82	2, 32	0, 30	0, 08	0, 02	0, 14	3
315°	8	4, 68	0, 86	4, 02	0, 72	0, 15	0, 06	0, 24	5
315°	10	6, 31	0, 86	5, 42	1, 03	0, 24	0, 10	0, 38	15
337, 50	6	3, 80	0, 86	3, 27	0, 49	0, 14	0, 05	0, 23	3
337, 50	8	4, 62	0, 89	4, 11	0, 82	0, 17	0, 08	0, 26	5
337, 50	10	6, 70	0, 92	6, 16	1, 23	0, 36	0, 22	0, 49	15
360°	6	3, 62	0, 85	3, 08	0, 62	0, 16	0, 06	0, 26	3
360°	8	4, 60	0, 86	3, 96	1, 00	0, 24	0, 14	0, 34	5
360°	10	7, 06	0, 87	6, 15	1, 54	0, 43	0, 25	0, 60	15