

REGIONE SICILIANA

ASSESSORATO DELLE INFRASTRUTTURE E DELLA MOBILITA'
DIPARTIMENTO DELLE INFRASTRUTTURE DELLA MOBILITA' E DEI TRASPORTI

ISOLA DI SALINA (MESSINA)

COMUNE DI MALFA

LAVORI DI RIQUALIFICA E DI ADEGUAMENTO DELLE OPERE FORANEE, DELLE BANCHINE, DELLO SCALO DI ALAGGIO E DEI FONDALI DELL' APPRODO DI SCALO GALERA

Progetto Definitivo: Approvato in linea tecnica in Conferenza Speciale di Servizi Ufficio del Genio Civile di Messina in data 21.07.2004

Progetto Esecutivo 1° stralcio funzionale: Approvato in linea tecnica in Conferenza Speciale di Servizi del Genio Civile di Messina in data 20.12.2006 dell'importo complessivo di € 4.800.000,00

Progetto Esecutivo 1° stralcio di completamento: A seguito di rescissione contrattuale ed approvazione Perizia di riparazione danni di forza maggiore di variante in diminuzione in Conferenza Speciale di Servizi del Genio Civile di Messina in data 07 marzo-26 marzo 2013 dell'importo complessivo di € 1.612.247,45

Progetto Esecutivo stralcio di completamento: Approvato in linea tecnica in Conferenza Speciale di Servizi del Genio Civile di Messina in data 19.07.2017 dell'importo complessivo di € 13.700.00,00



PROGETTO ESECUTIVO DI RIUNIONE ED AGGIORNAMENTO DEI LAVORI DEL 1° STRALCIO E DI QUELLO DI COMPLETAMENTO

REV.	DATA	EMISSIONE	RED.	VER.	APPR.
0	270619	PRIMA EMISSIONE	F.GIORDANO	F.GIORDANO	F.GIORDANO
1					
2					
CODICE PROGETTO 1 9 0 1		ELABORATO: All. 9.2	REV. A	SCALA:	-

Studio idraulico-marittimo

(II Parte)

IL R.U.P.:

Geom. Arturo Ciampi
4° Settore Tecnico Lavori Pubblici



DINAMICA S.r.l.
PROGETTO VERIFICATO



IL SUPPORTO ESTERNO AL R.U.P.:

Ing. Salvatore Perillo

IL PROGETTISTA:

Ing. Francesco Giordano
ingfrancescogiordano@gmail.com

COLLABORAZIONE:

Sigma Ingegneria S.r.l.
sigmaingsrl@gmail.com

IL SINDACO:

Dott.ssa Clara Rametta

REGIONE SICILIANA
UFFICIO DEL GENIO CIVILE - MESSINA

Visto: Si esprime parere favorevole in linea tecnica ai sensi dell'art. 12 del R. C. N. e con riferimento alla nota di pari data e numero di protocollo.

[Signature]
Messina, 15 NOV. 2019
L'INGEGNERE CAPO
Ing. Antonino Platania



UFFICIO DEL GENIO CIVILE
— MESSINA —

il attesta che le previsioni del presente progetto sono conformi alle norme di edilizia sismica. L'autorizzazione allo inizio dei lavori è subordinata alla formale domanda ai sensi dell'Art. 17 della Legge 64/1974

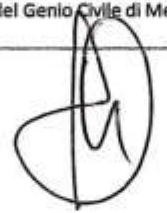
[Signature]
Messina, 15 NOV. 2019

L'INGEGNERE CAPO
Ing. Antonino Platania



Regione Siciliana
Assessorato delle Infrastrutture e della Mobilità
Dipartimento Regionale Tecnico
COMMISSIONE REGIONALE DEI LAVORI PUBBLICI
Legge regionale 12 luglio 2011, n. 12 art.5, comma 12
Copia conforme all'elaborato esaminato nelle sedute del 04 Dicembre 2019 e 17 Dicembre 2019

Parere n° 128
Relatore: Ing. Antonino Platania
(Ufficio del Genio Civile di Messina)



ALLEGATO A

MODELLO NUMERICO STWAVE

Maglia agli elementi finiti

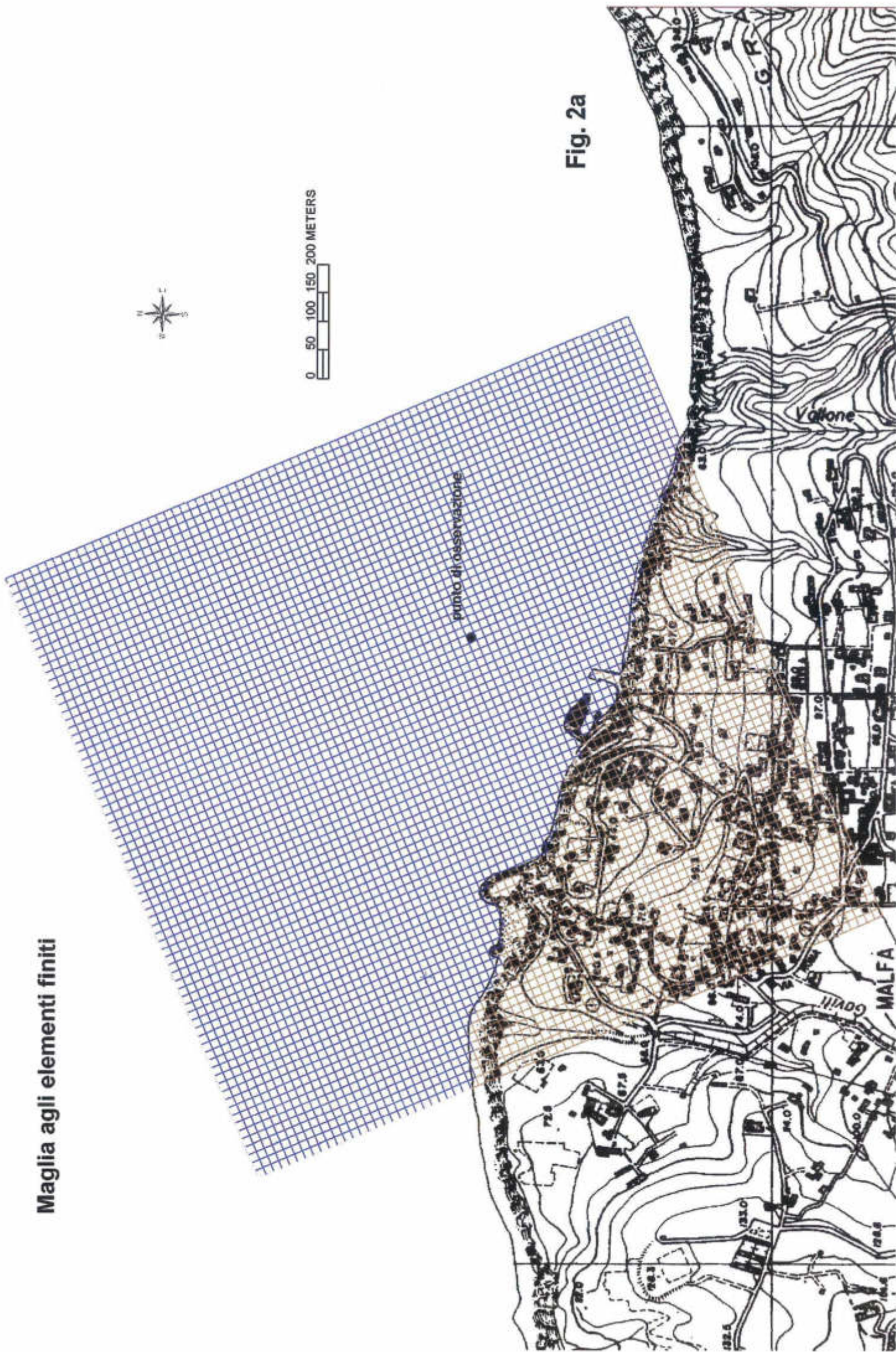


Fig. 2a

Batimetria

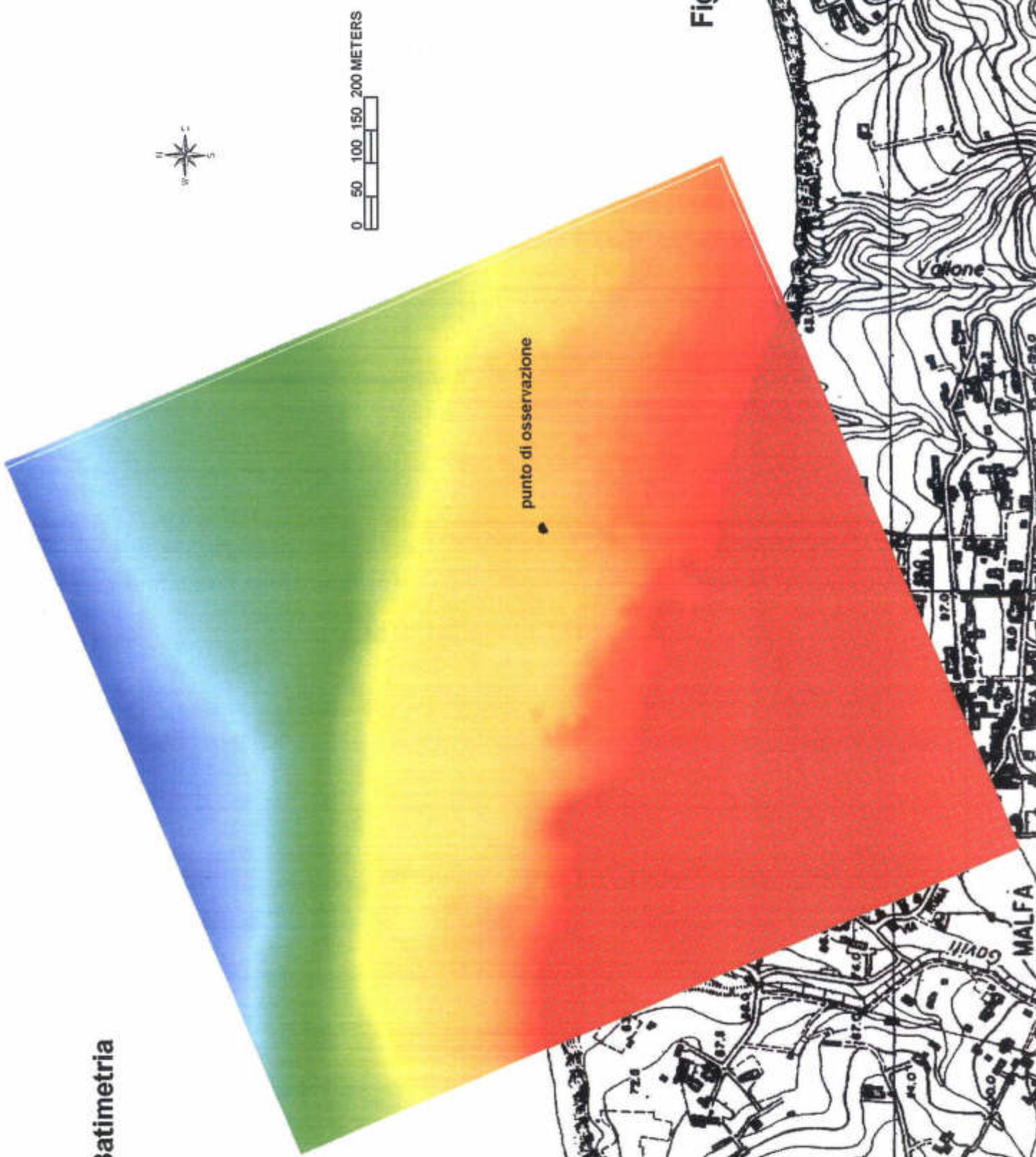
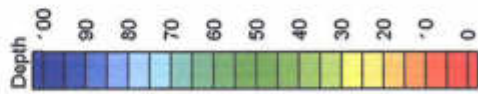
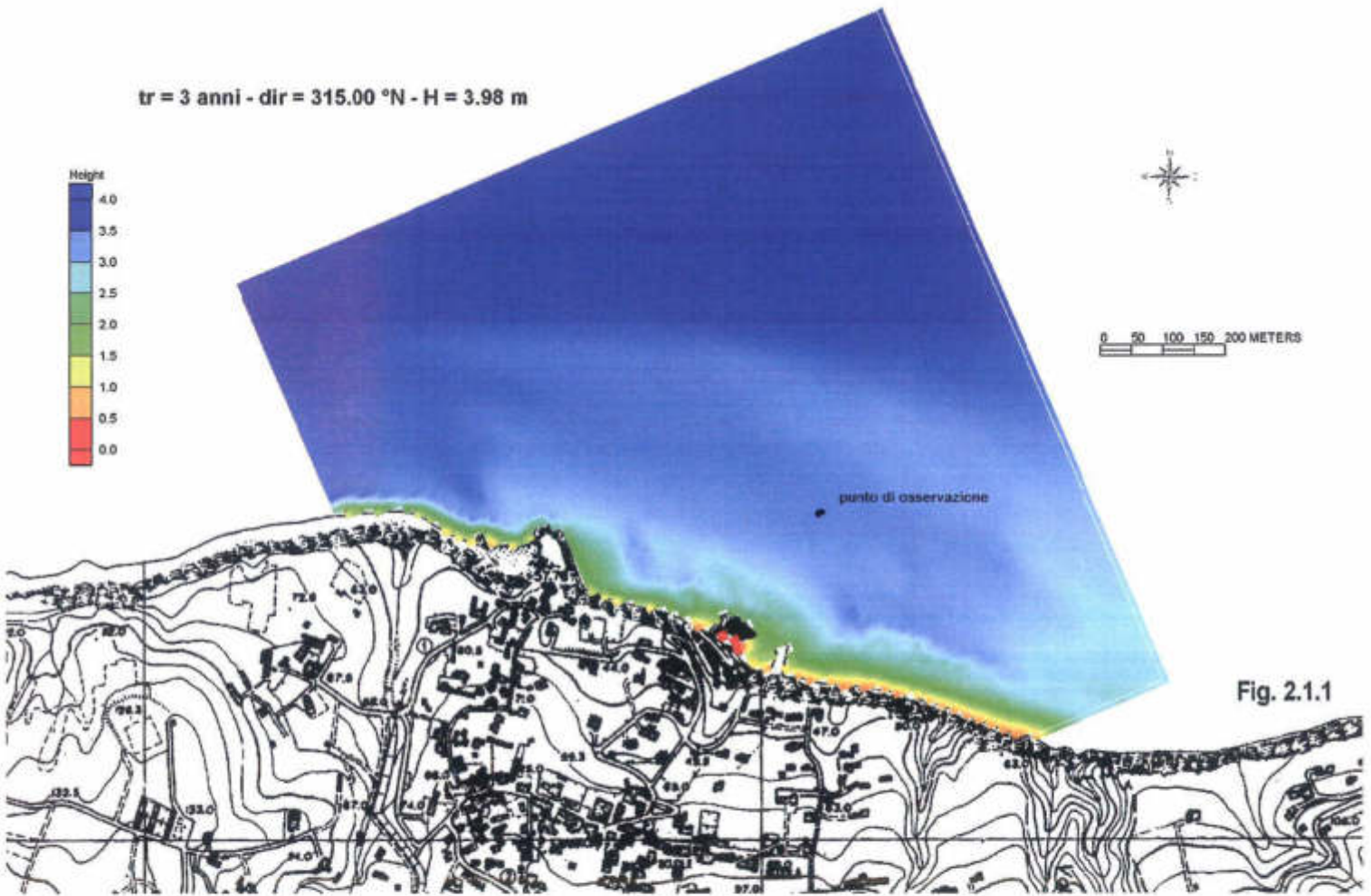
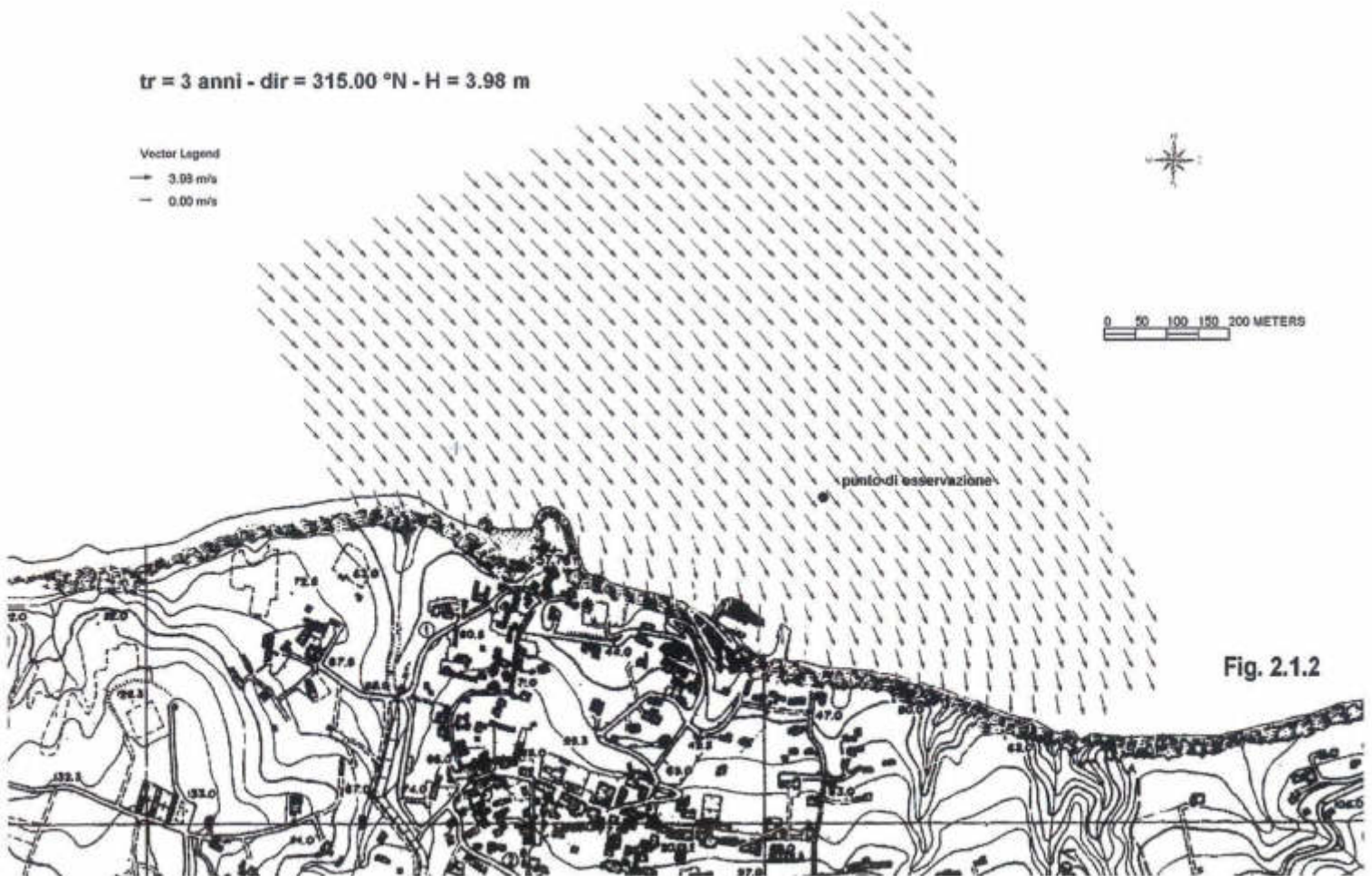


Fig. 2b

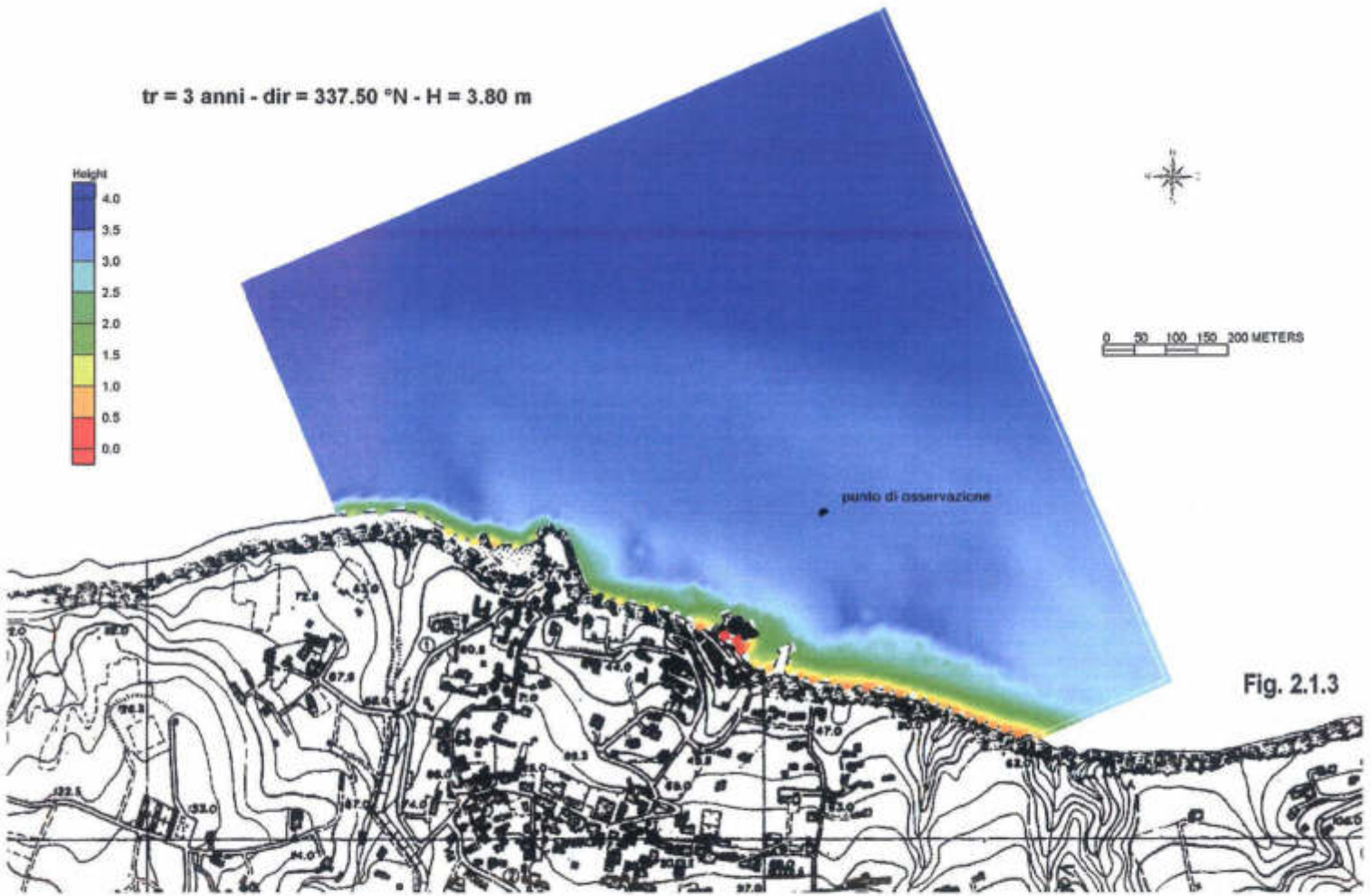
tr = 3 anni - dir = 315.00 °N - H = 3.98 m



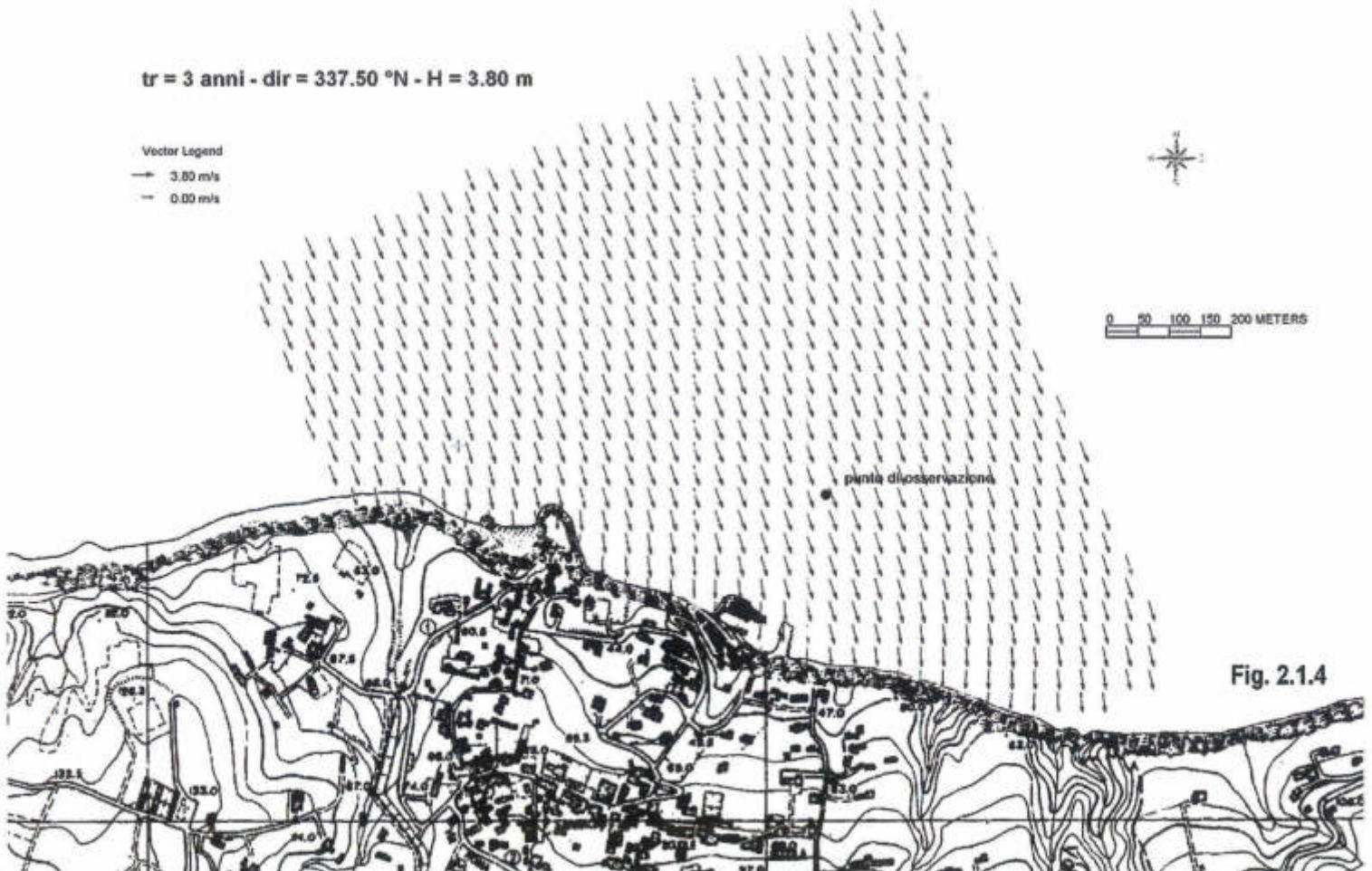
tr = 3 anni - dir = 315.00 °N - H = 3.98 m



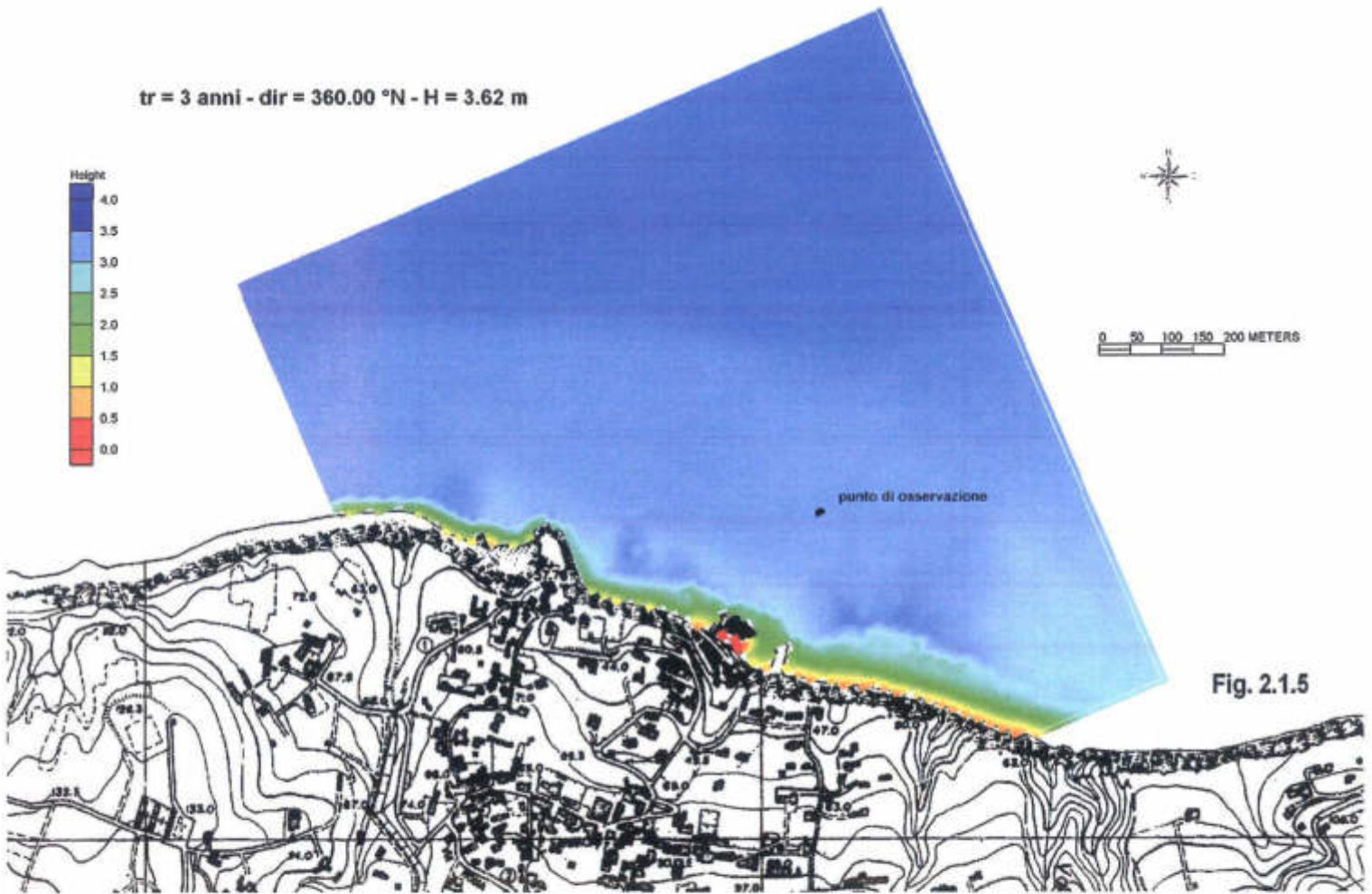
tr = 3 anni - dir = 337.50 °N - H = 3.80 m



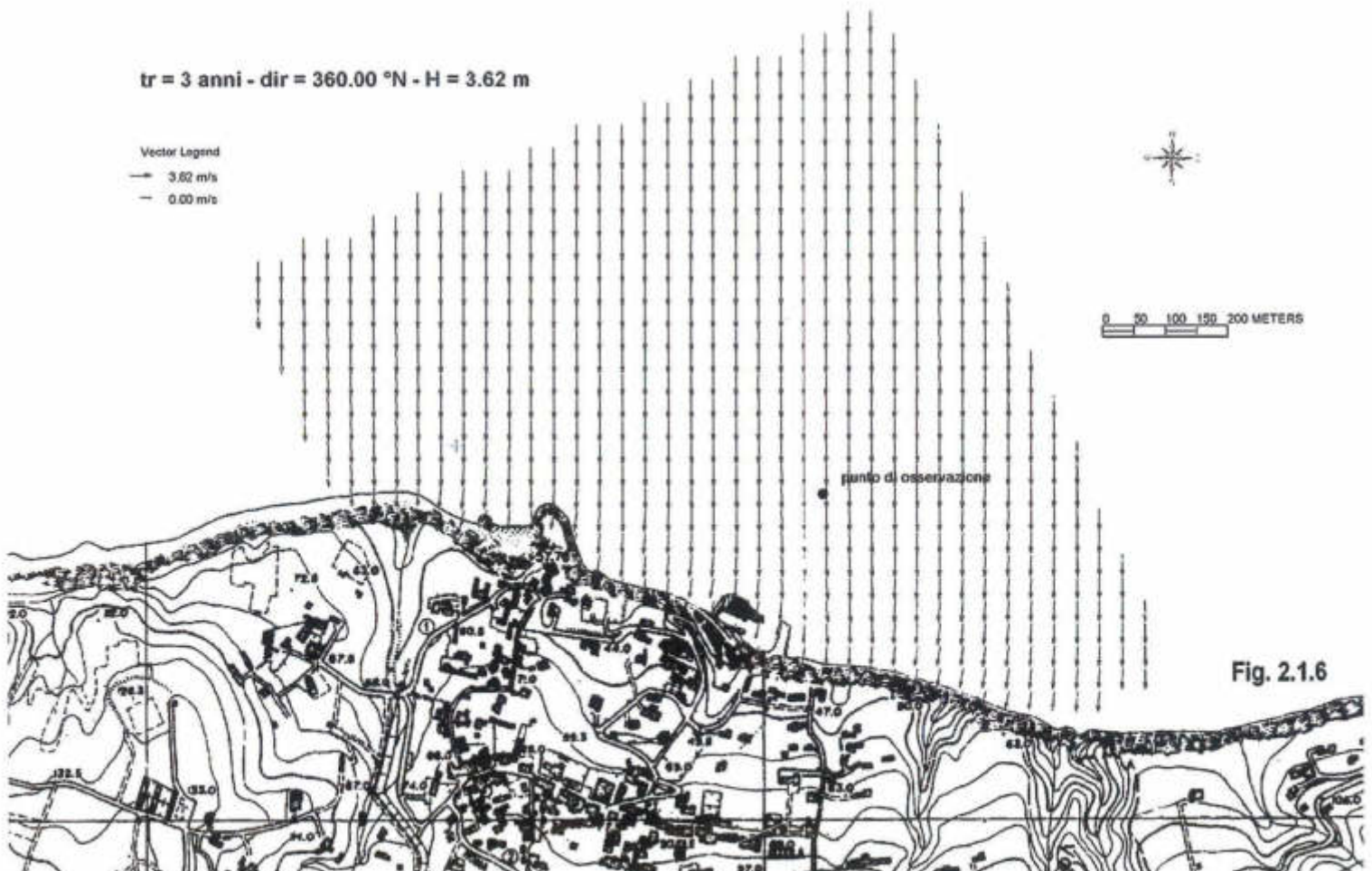
tr = 3 anni - dir = 337.50 °N - H = 3.80 m



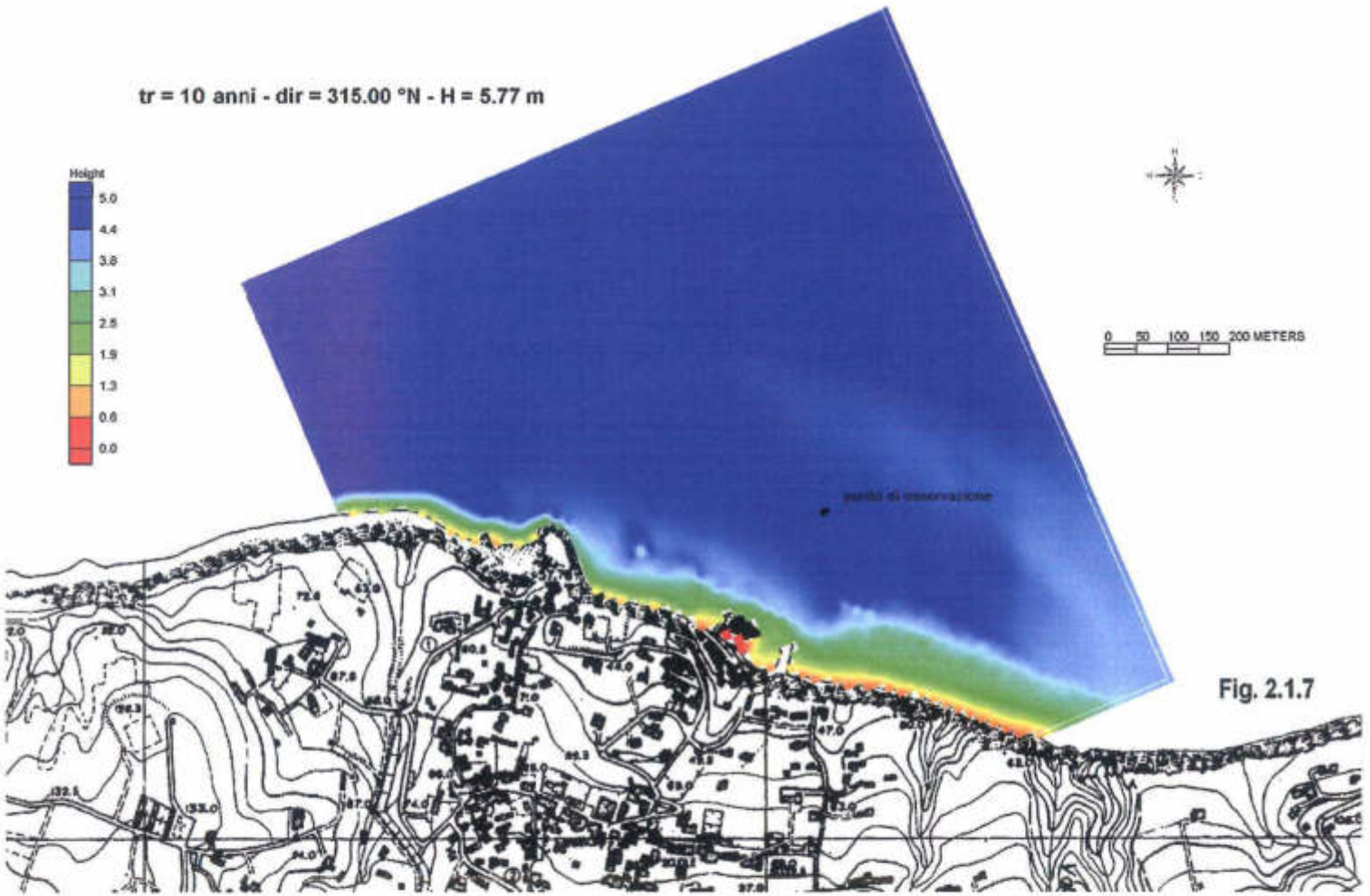
tr = 3 anni - dir = 360.00 °N - H = 3.62 m



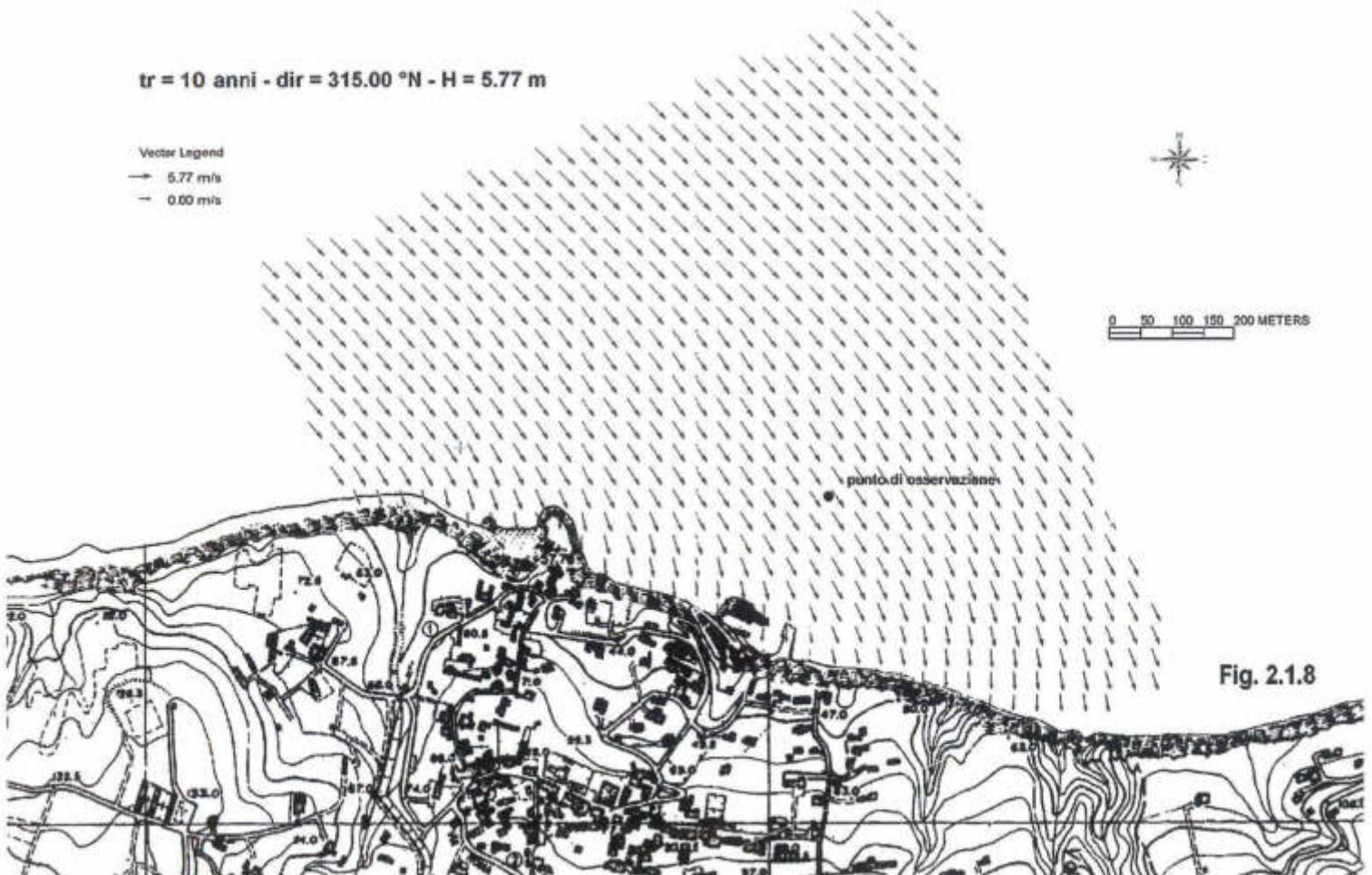
tr = 3 anni - dir = 360.00 °N - H = 3.62 m



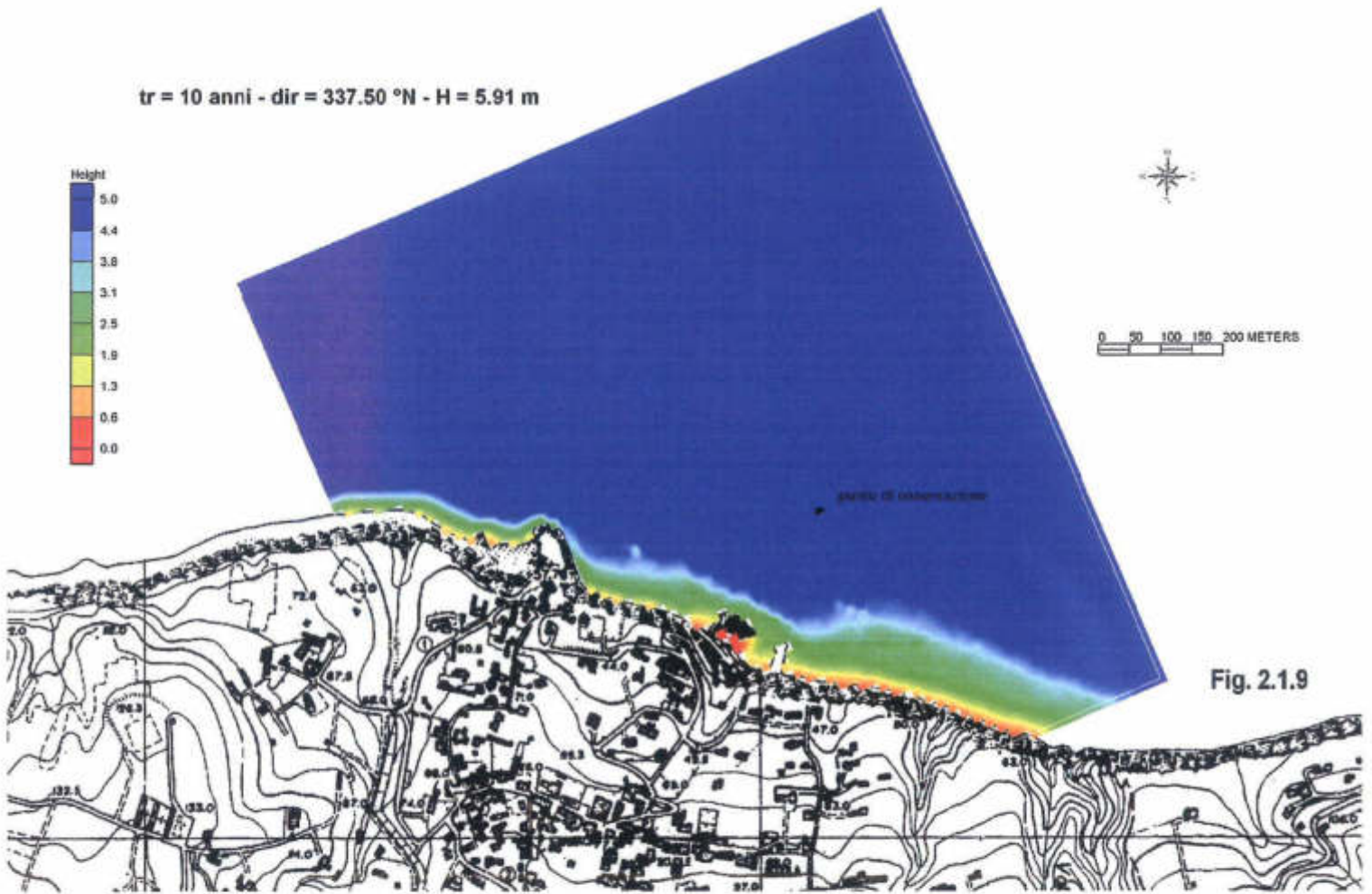
tr = 10 anni - dir = 315.00 °N - H = 5.77 m



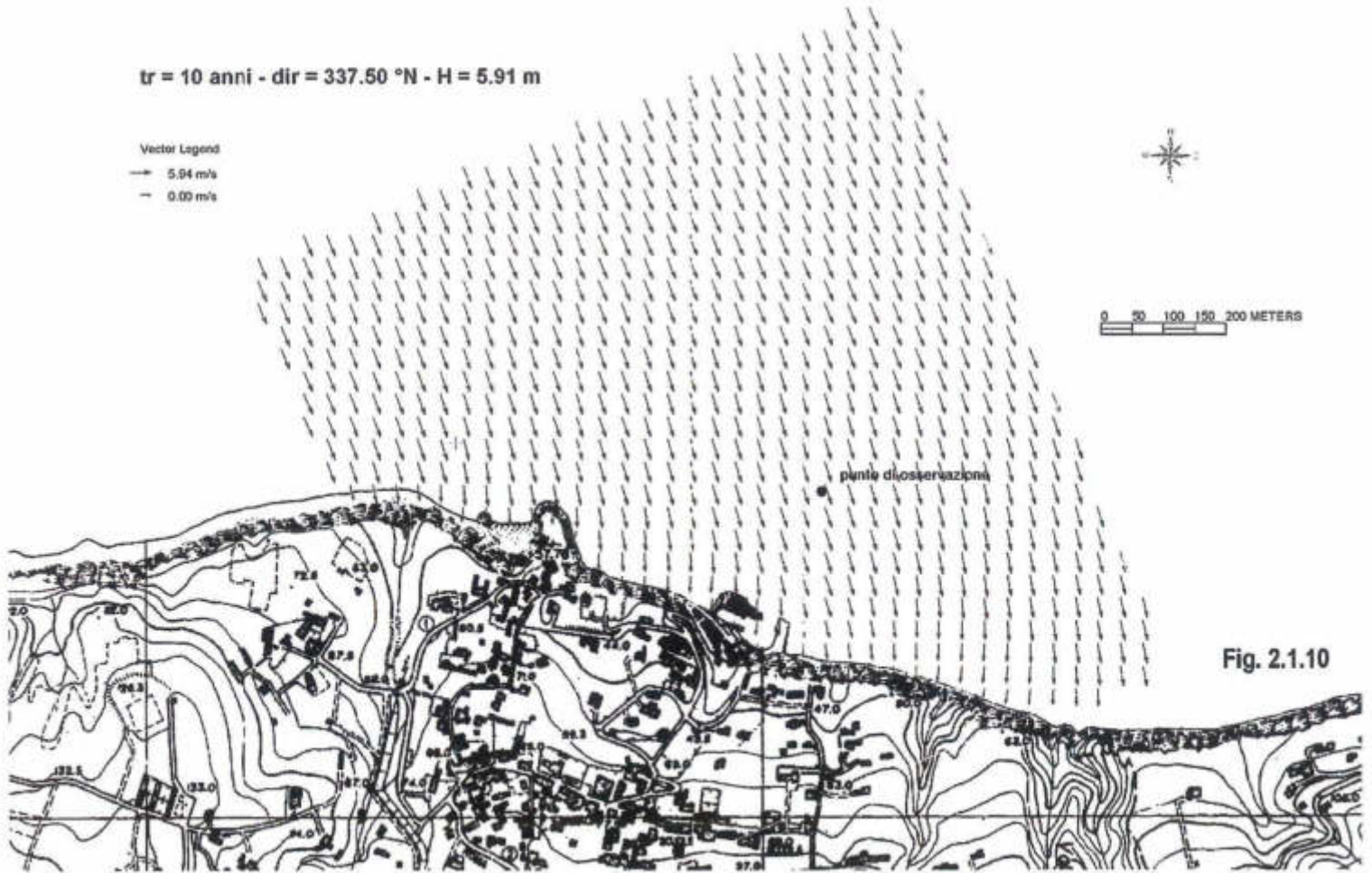
tr = 10 anni - dir = 315.00 °N - H = 5.77 m



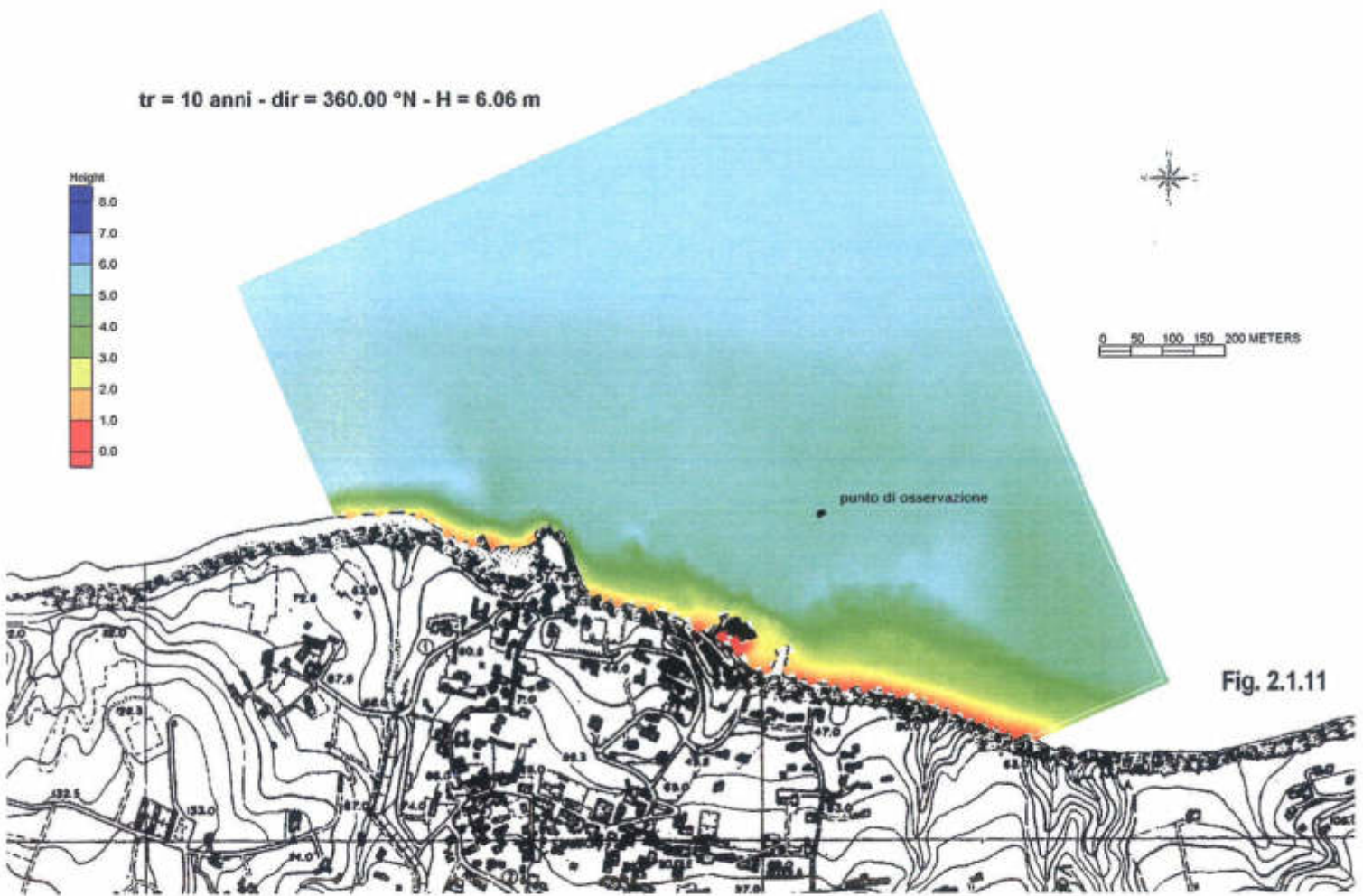
tr = 10 anni - dir = 337.50 °N - H = 5.91 m



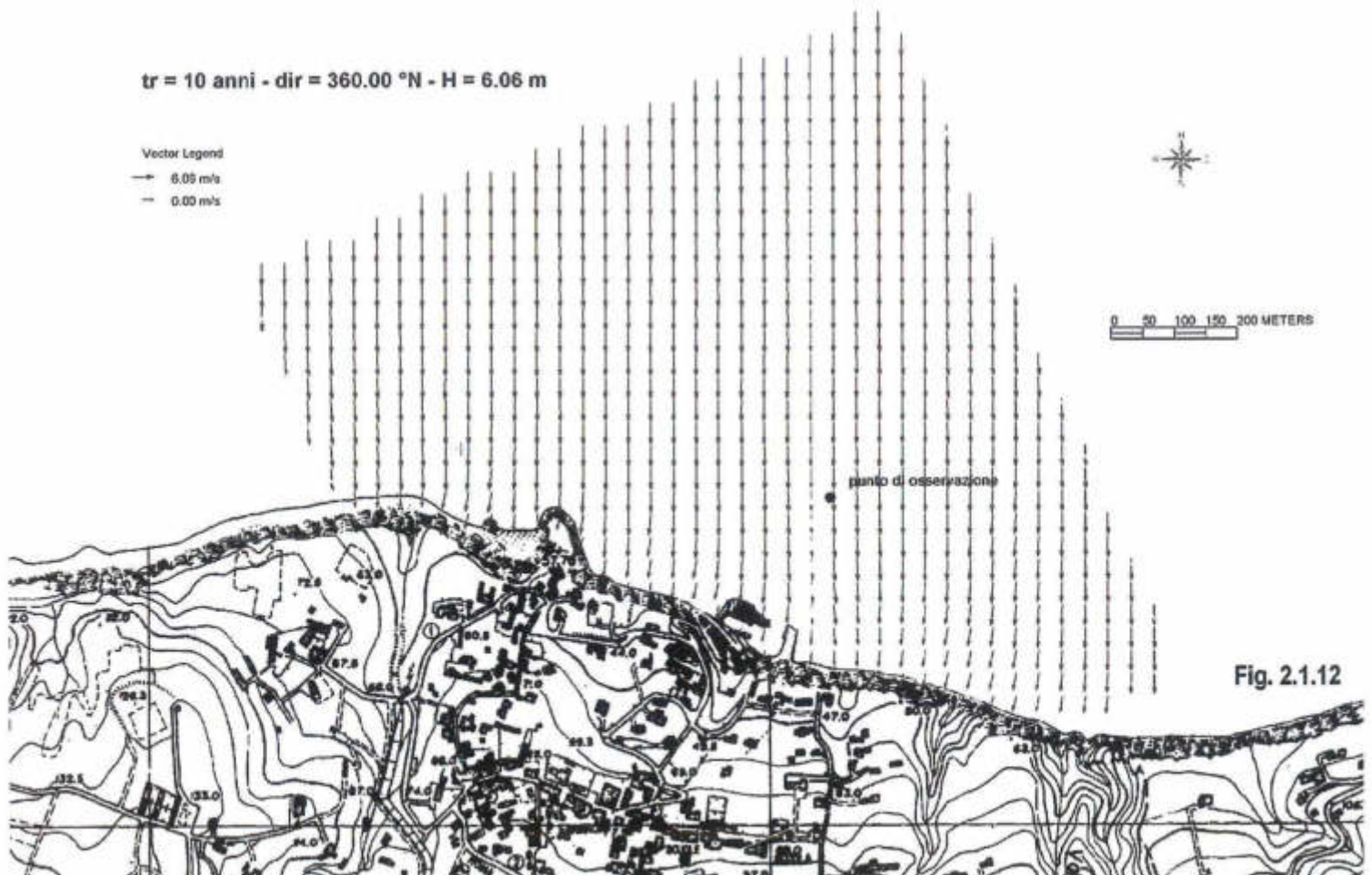
tr = 10 anni - dir = 337.50 °N - H = 5.91 m



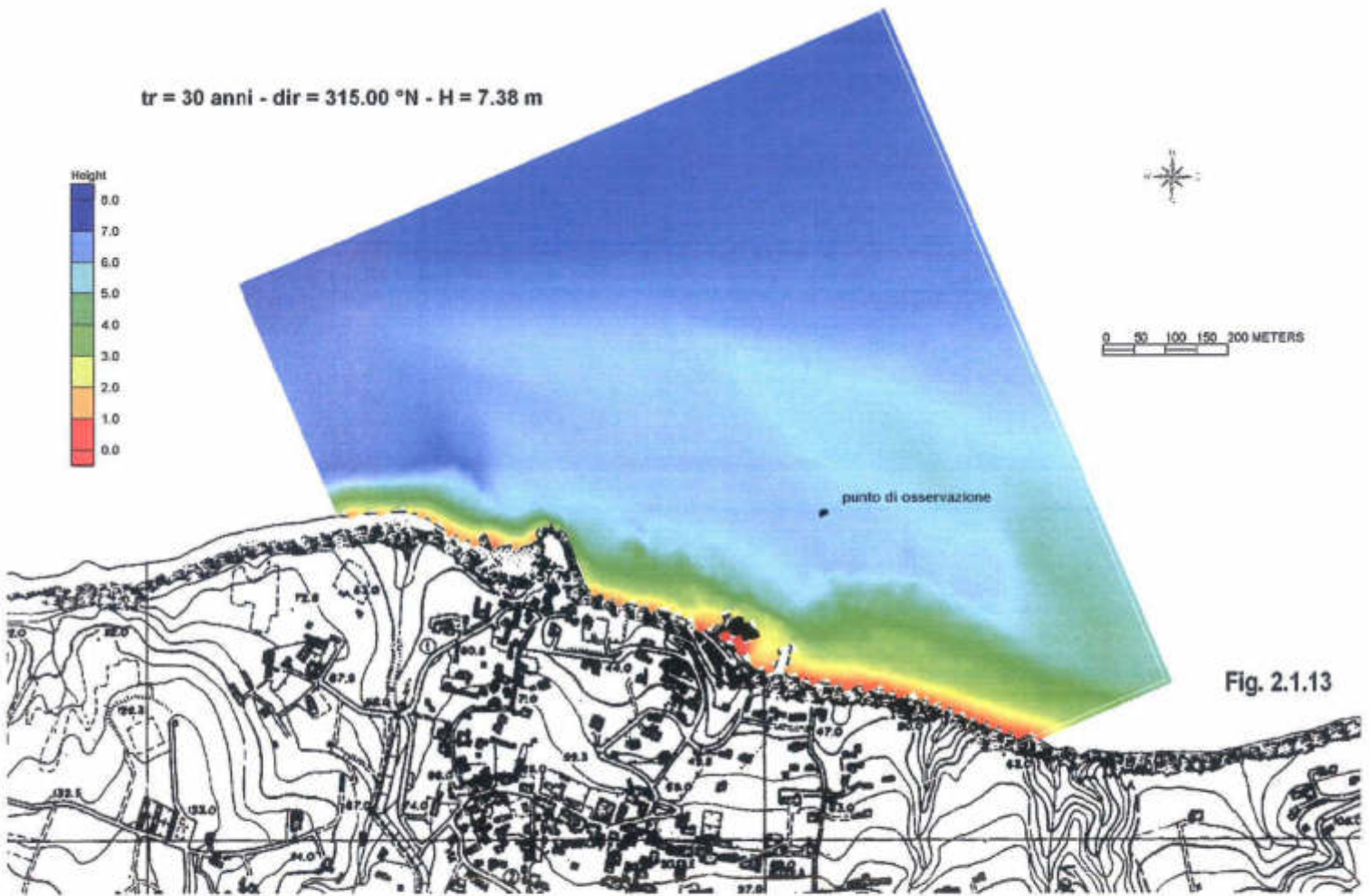
tr = 10 anni - dir = 360.00 °N - H = 6.06 m



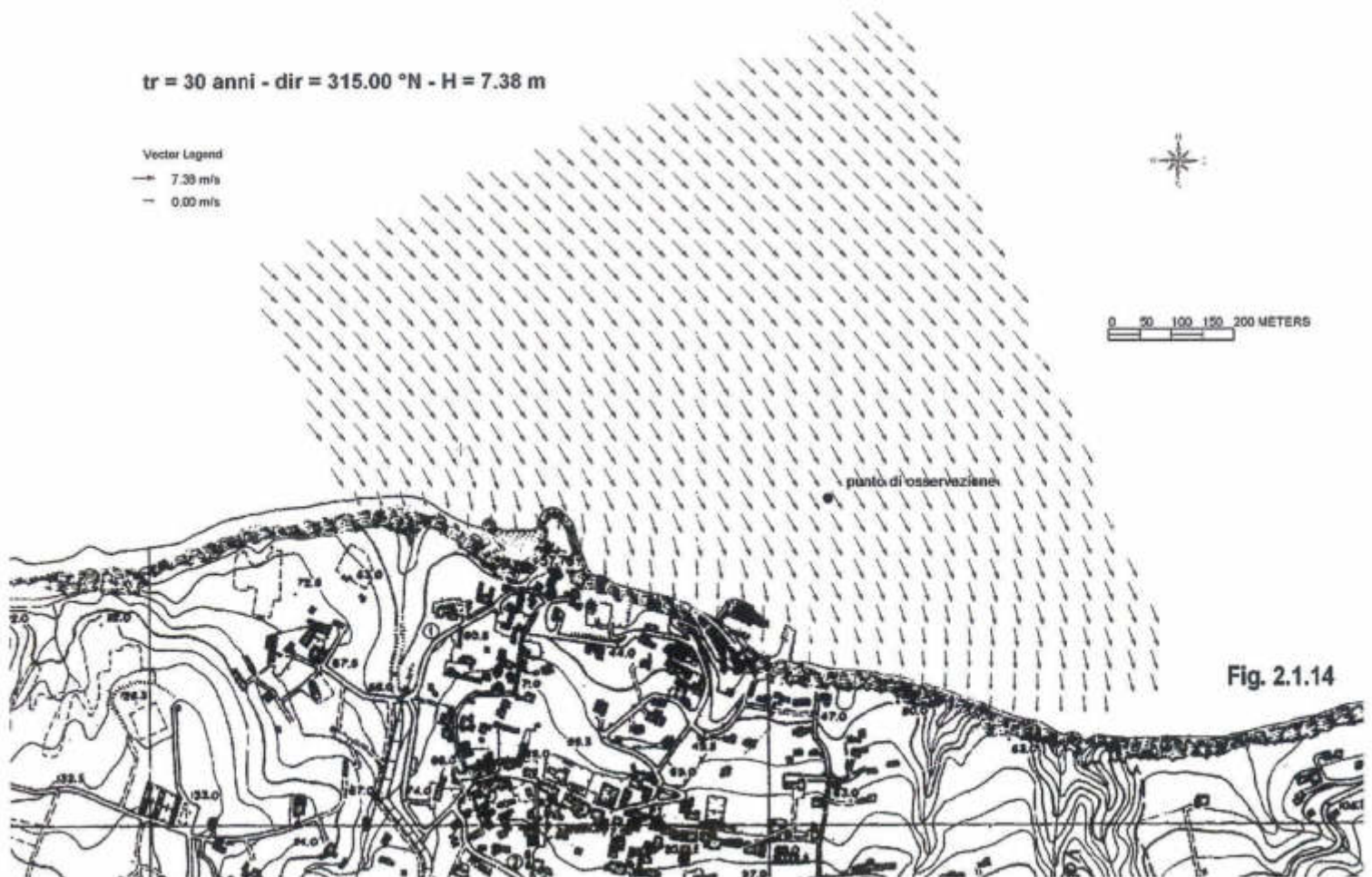
tr = 10 anni - dir = 360.00 °N - H = 6.06 m



$tr = 30$ anni - $dir = 315.00$ °N - $H = 7.38$ m



$tr = 30$ anni - $dir = 315.00$ °N - $H = 7.38$ m



tr = 30 anni - dir = 337.50 °N - H = 7.90 m

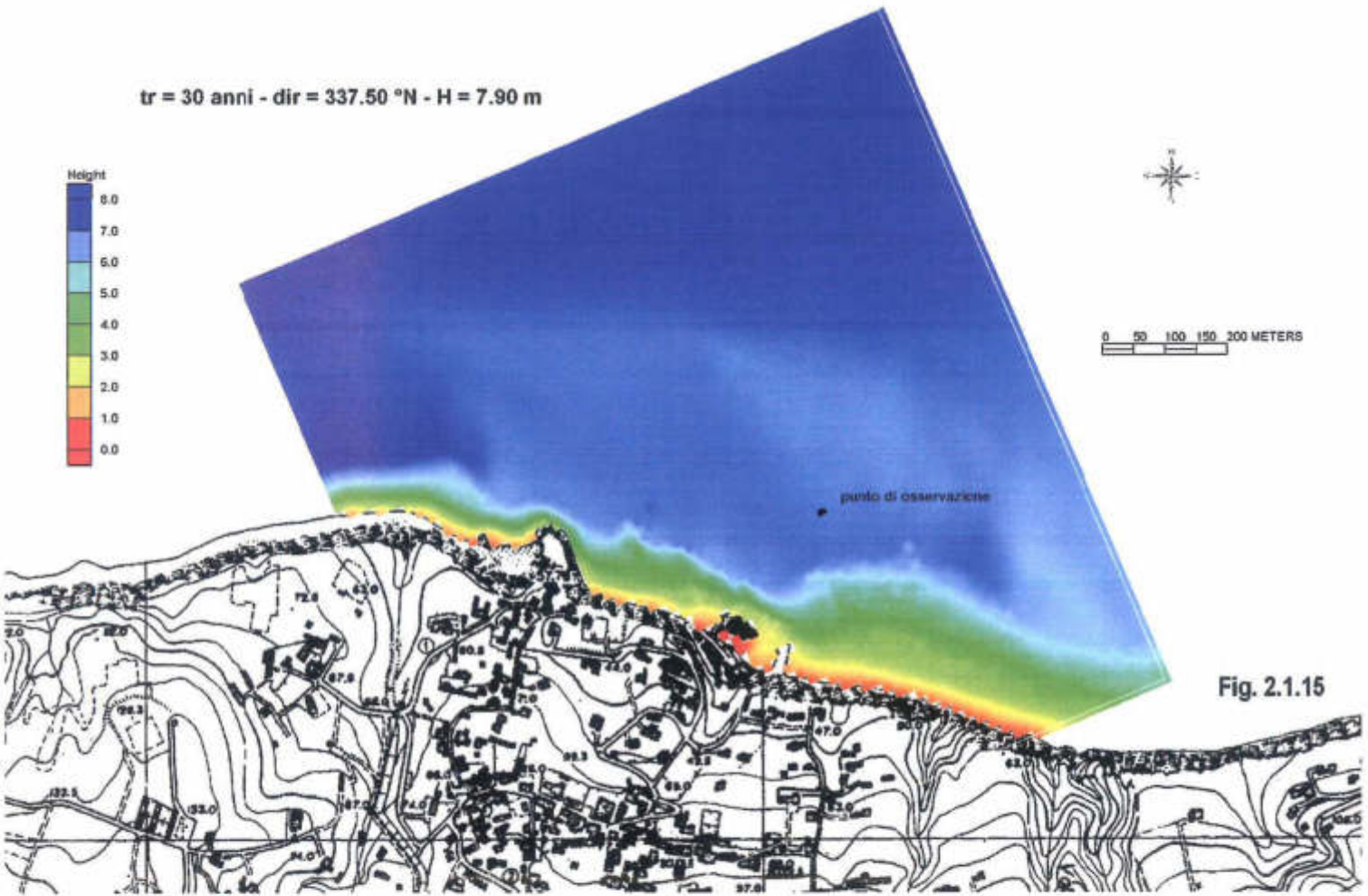


Fig. 2.1.15

tr = 30 anni - dir = 337.50 °N - H = 7.90 m

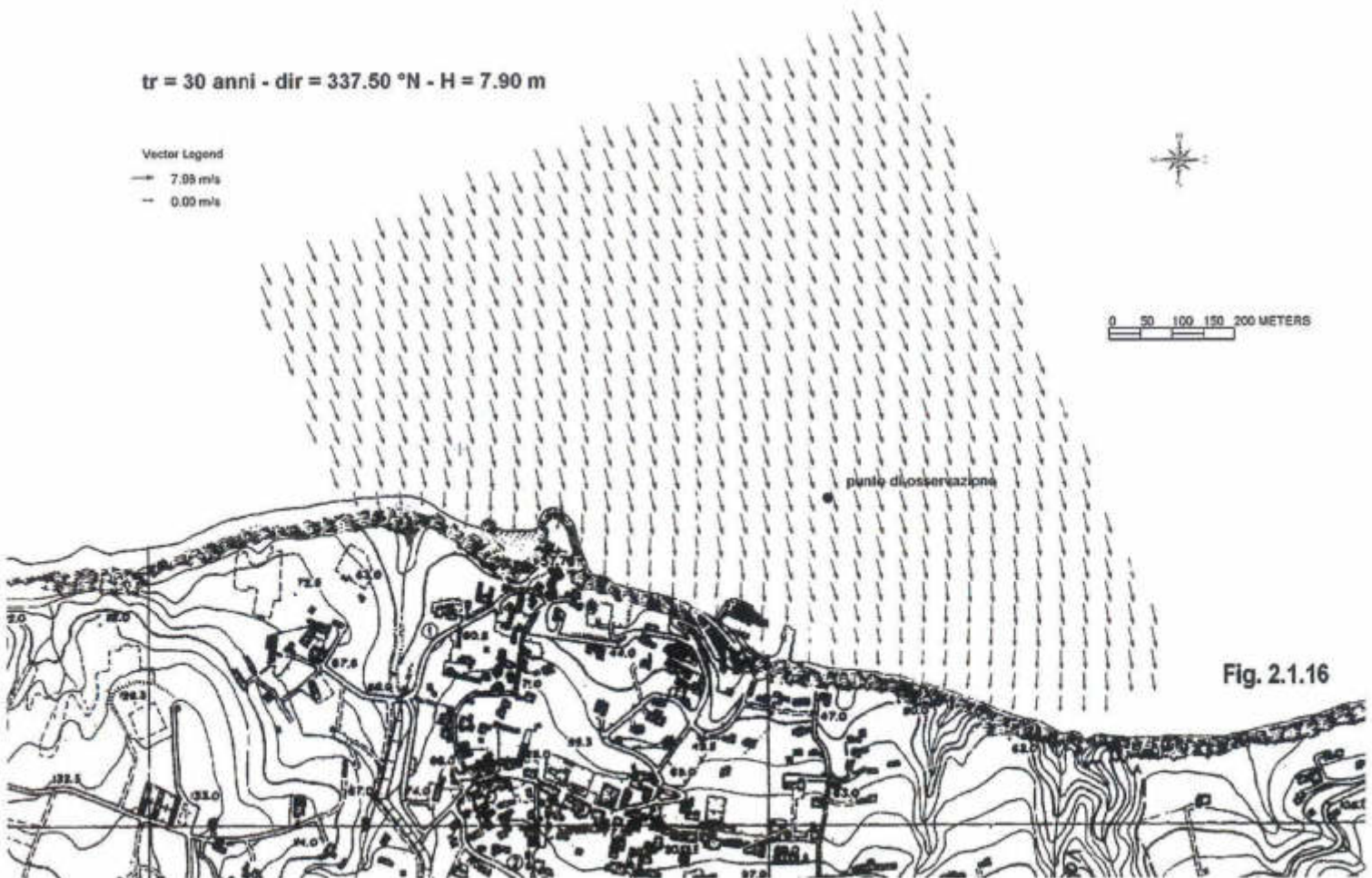
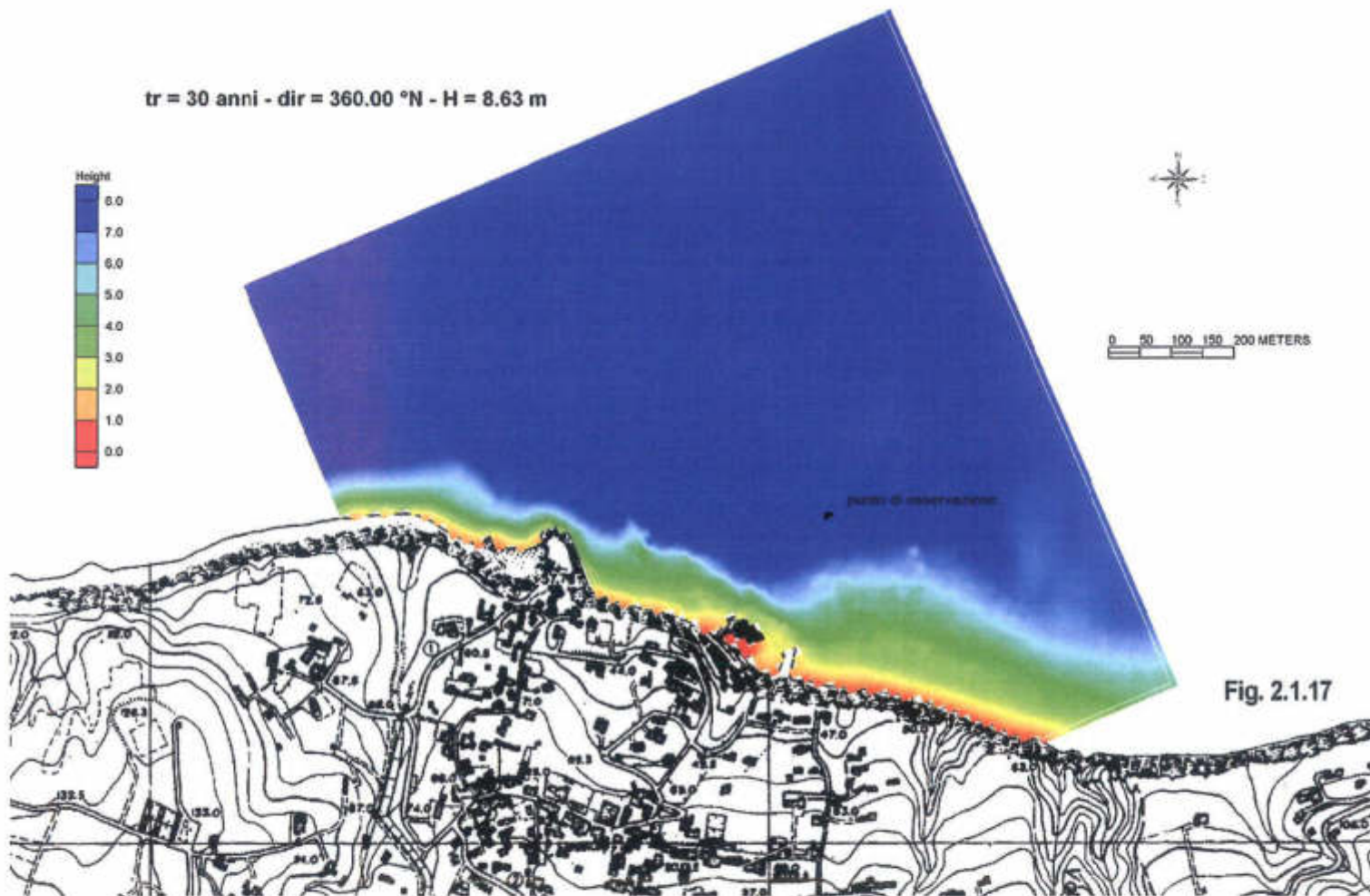
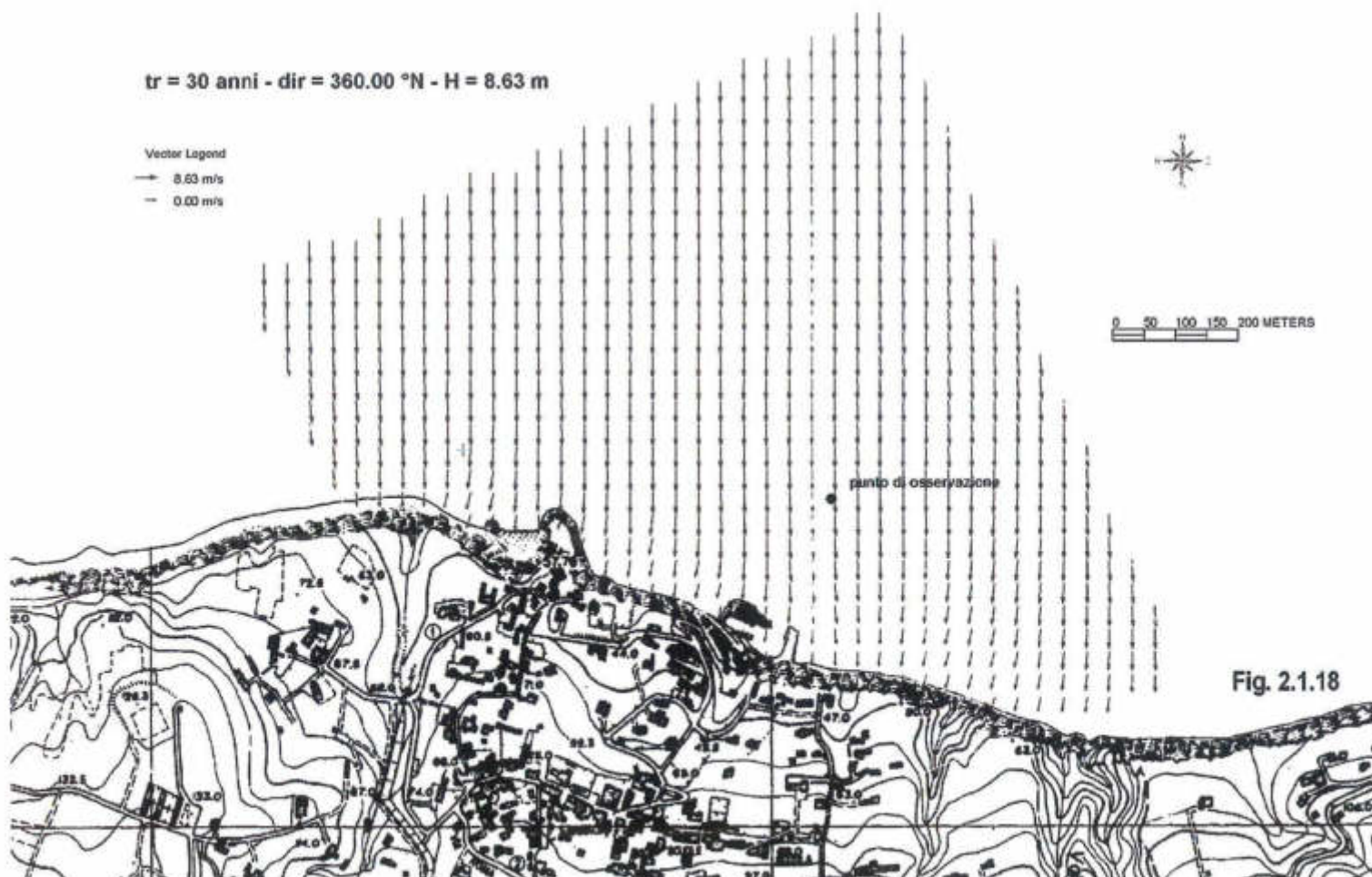


Fig. 2.1.16

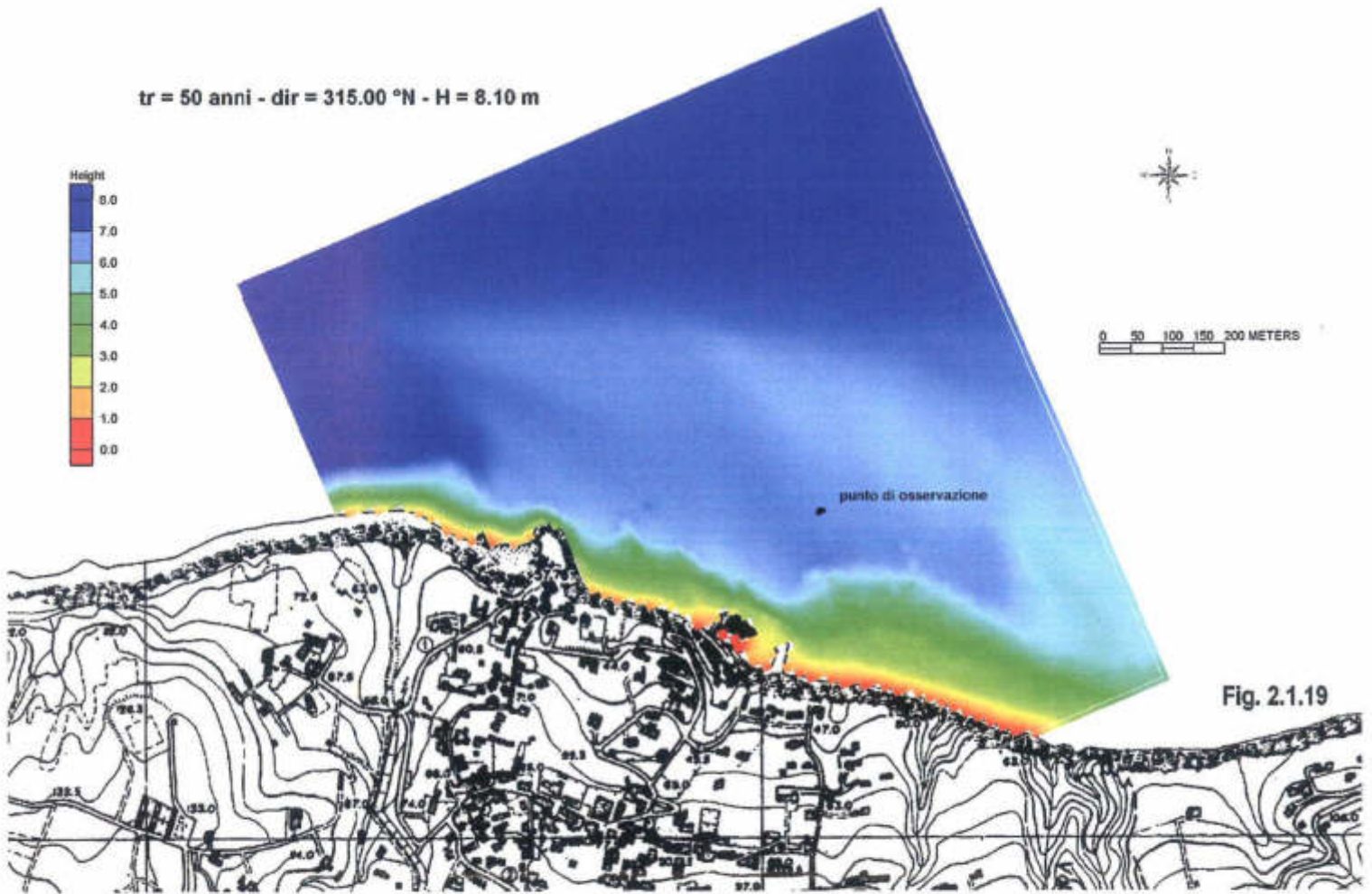
tr = 30 anni - dir = 360.00 °N - H = 8.63 m



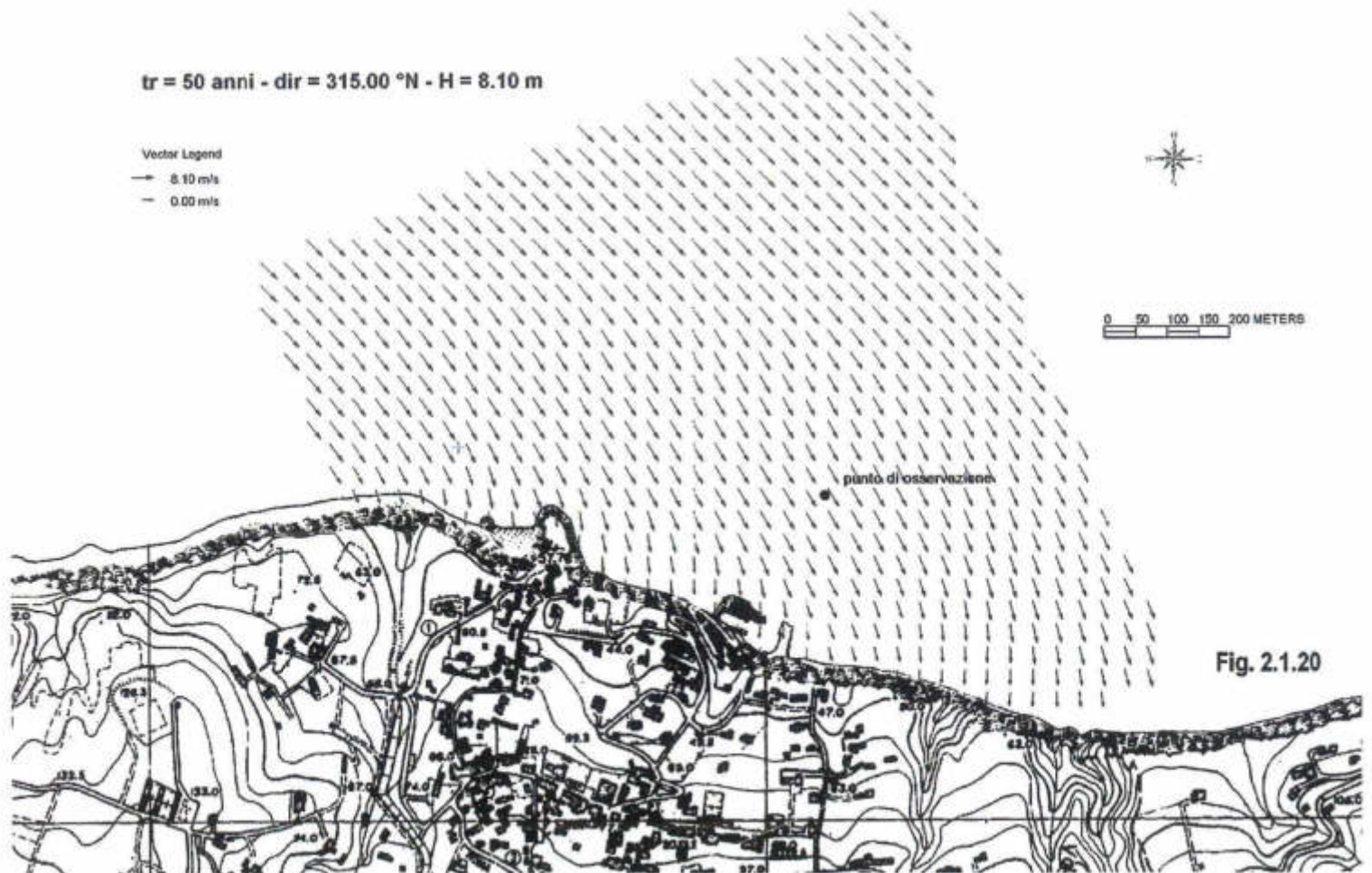
tr = 30 anni - dir = 360.00 °N - H = 8.63 m



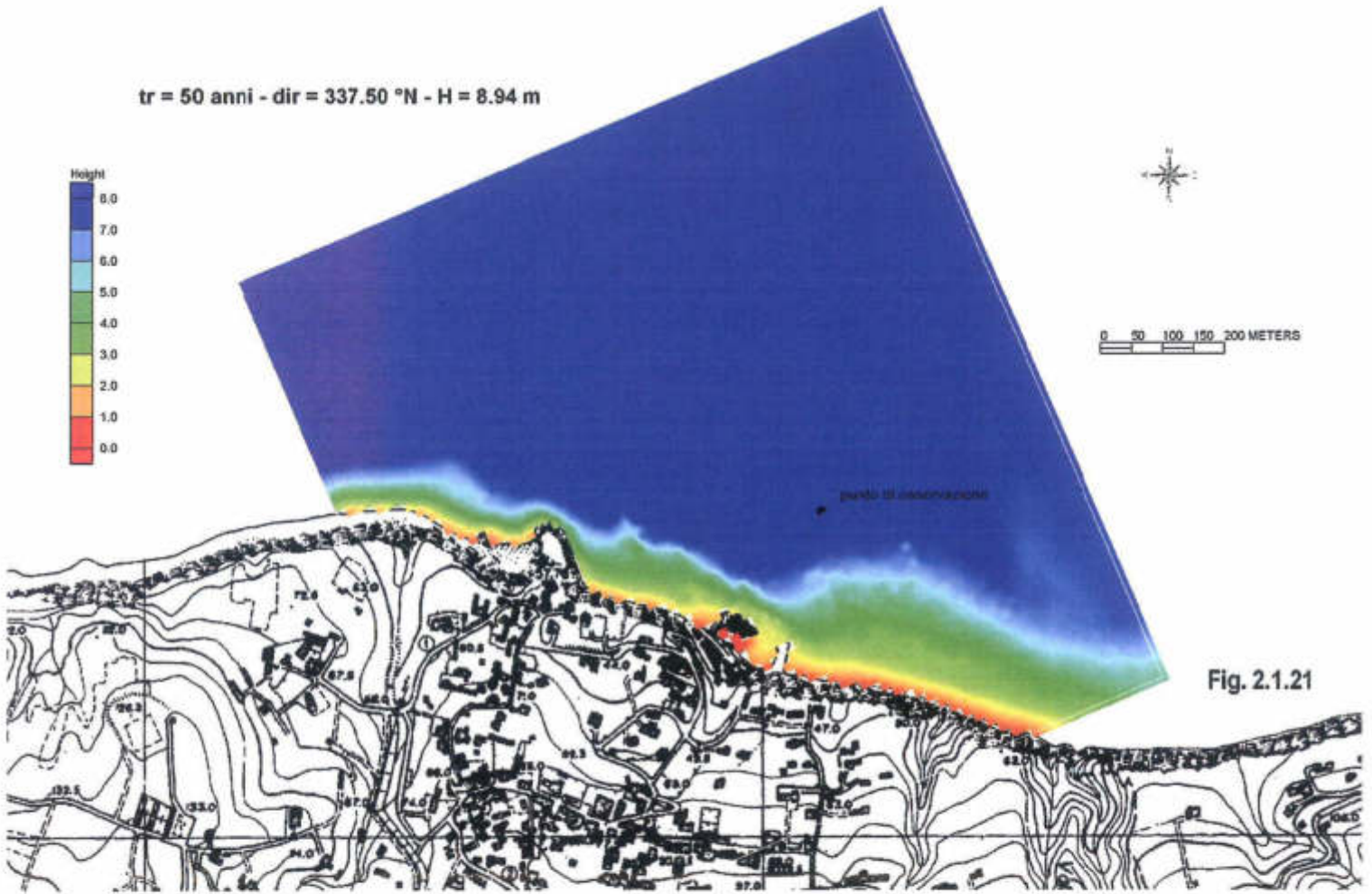
tr = 50 anni - dir = 315.00 °N - H = 8.10 m



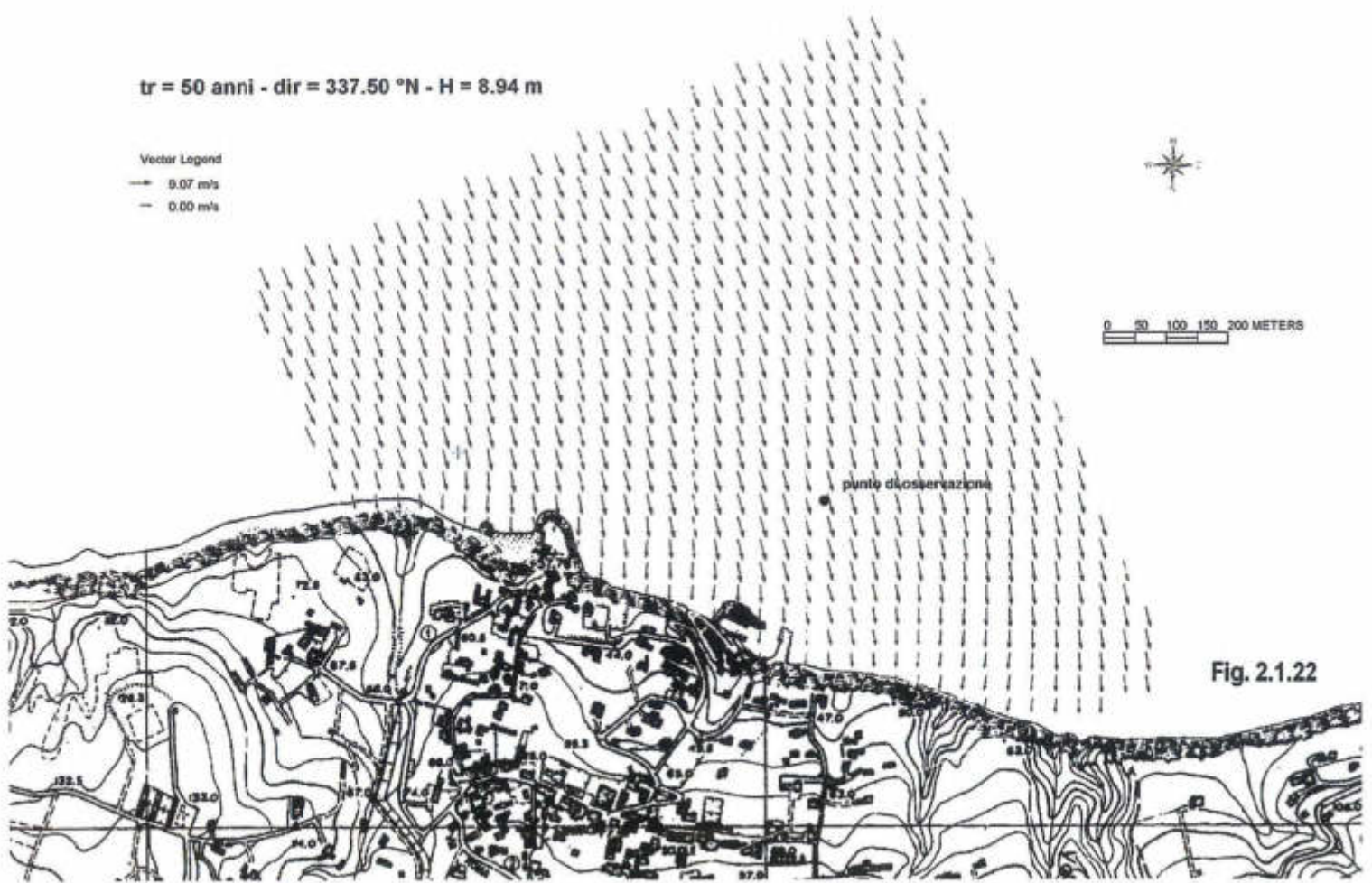
tr = 50 anni - dir = 315.00 °N - H = 8.10 m



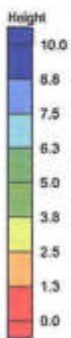
tr = 50 anni - dir = 337.50 °N - H = 8.94 m



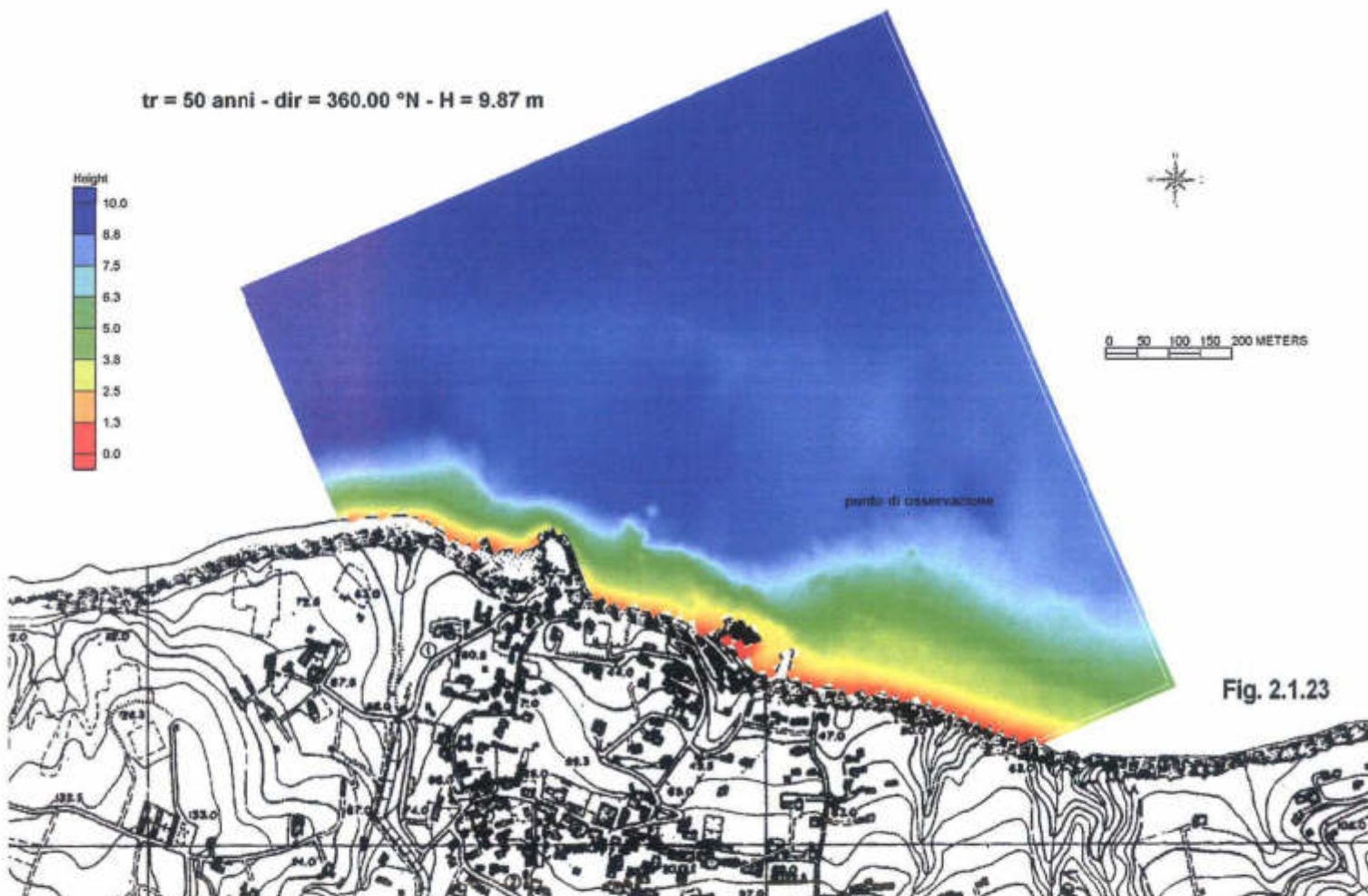
tr = 50 anni - dir = 337.50 °N - H = 8.94 m



tr = 50 anni - dir = 360.00 °N - H = 9.87 m



0 50 100 150 200 METERS



tr = 50 anni - dir = 360.00 °N - H = 9.87 m

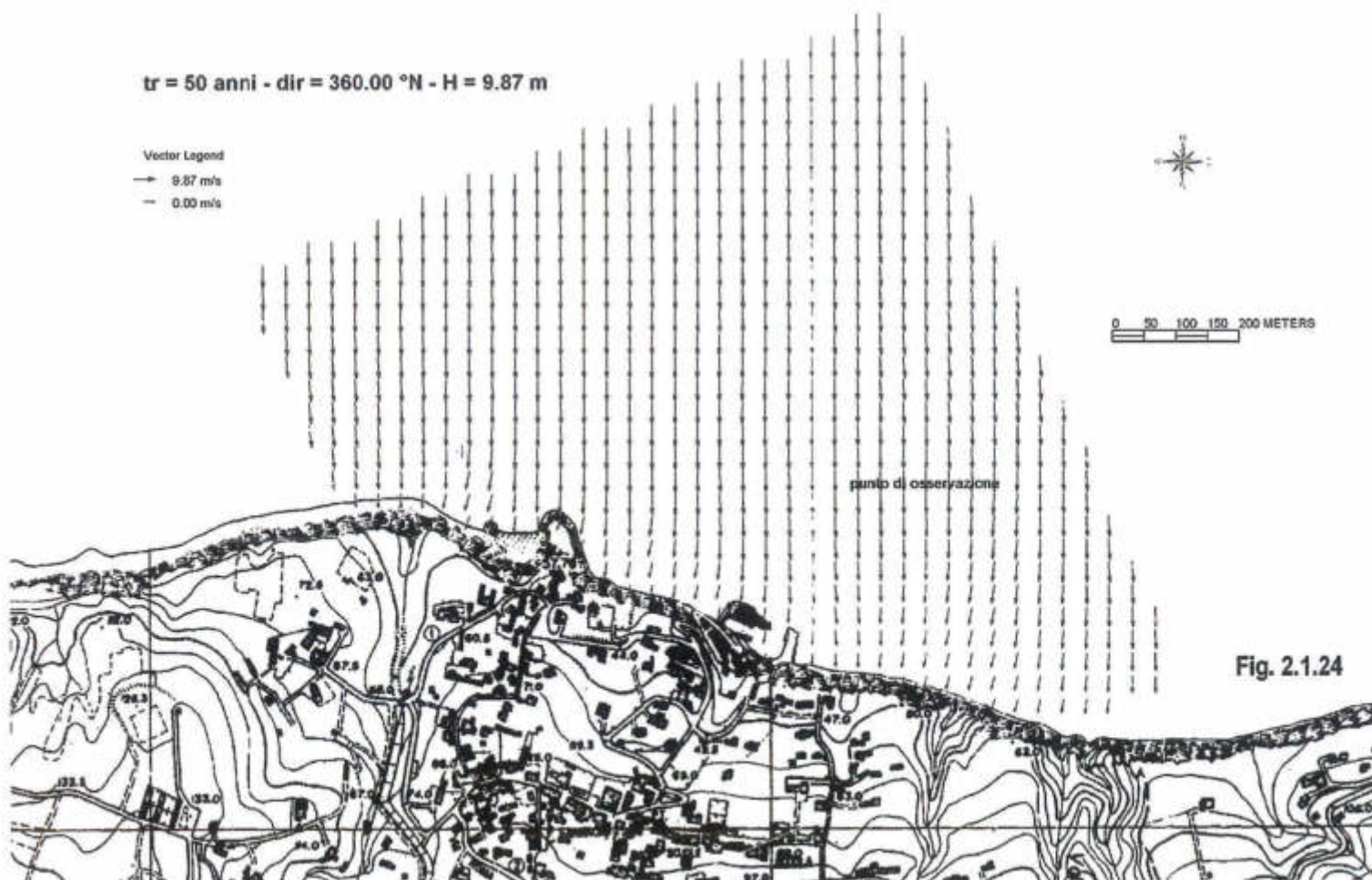
Vector Legend

→ 9.87 m/s

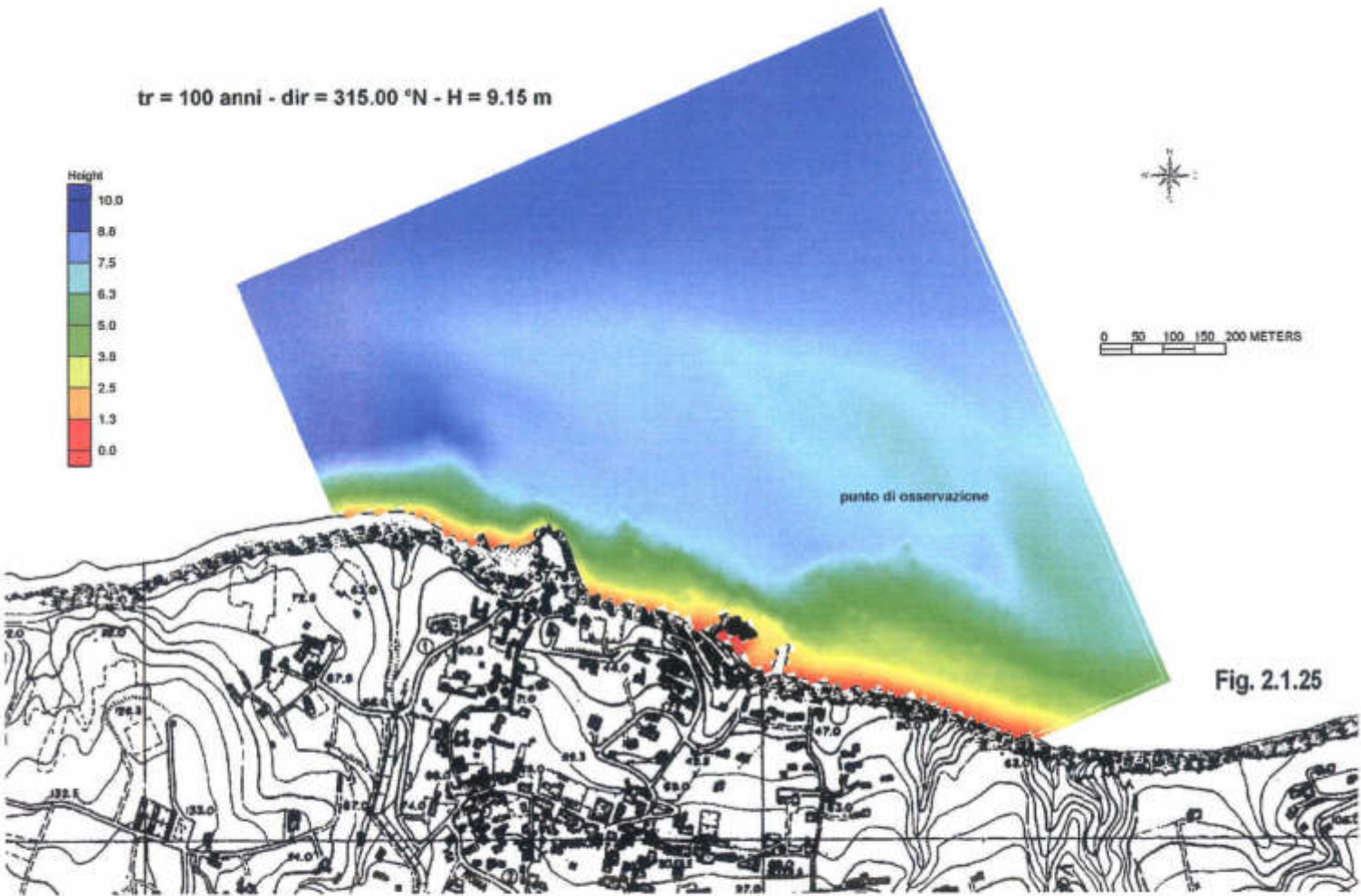
- - 0.00 m/s



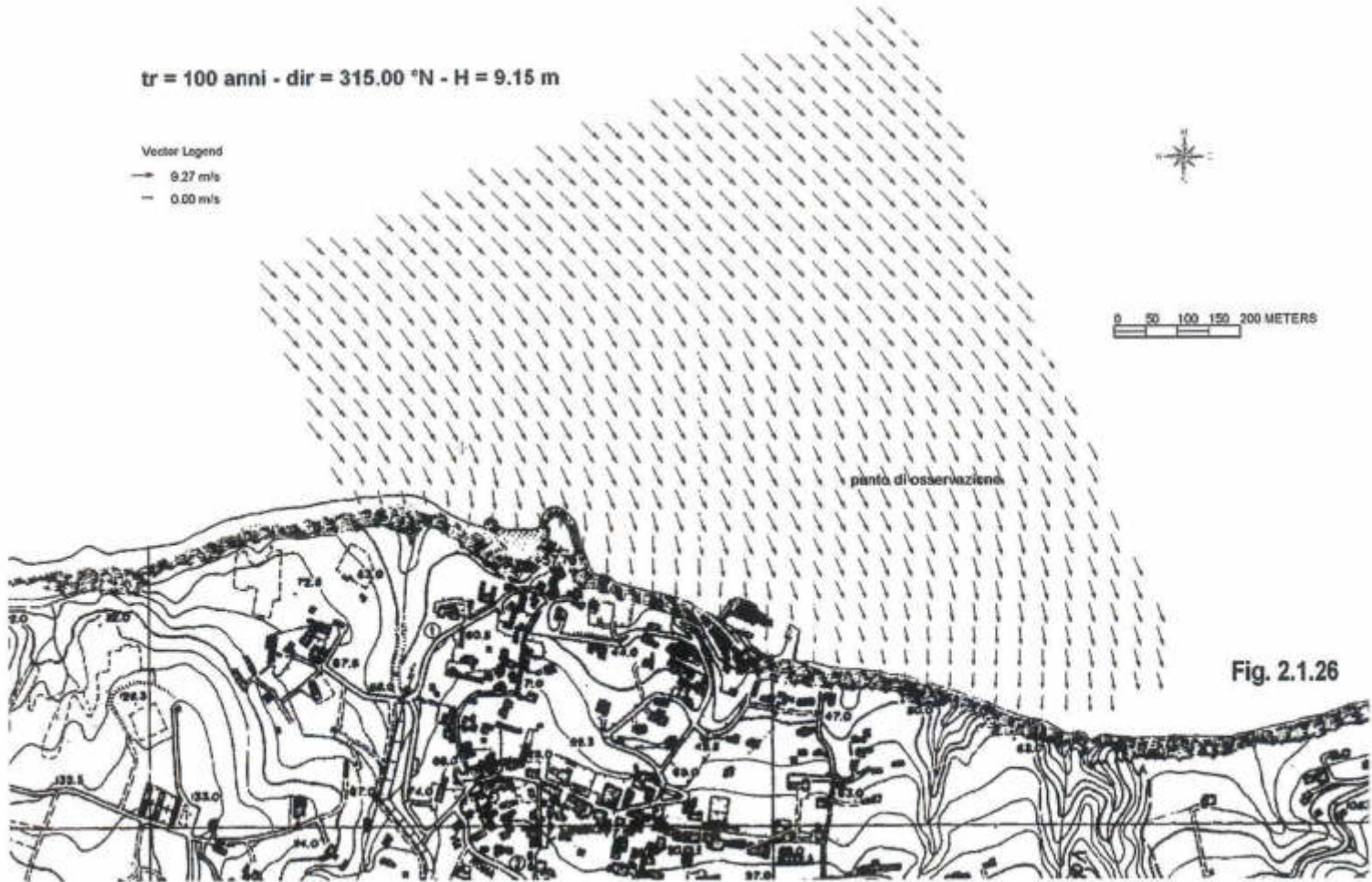
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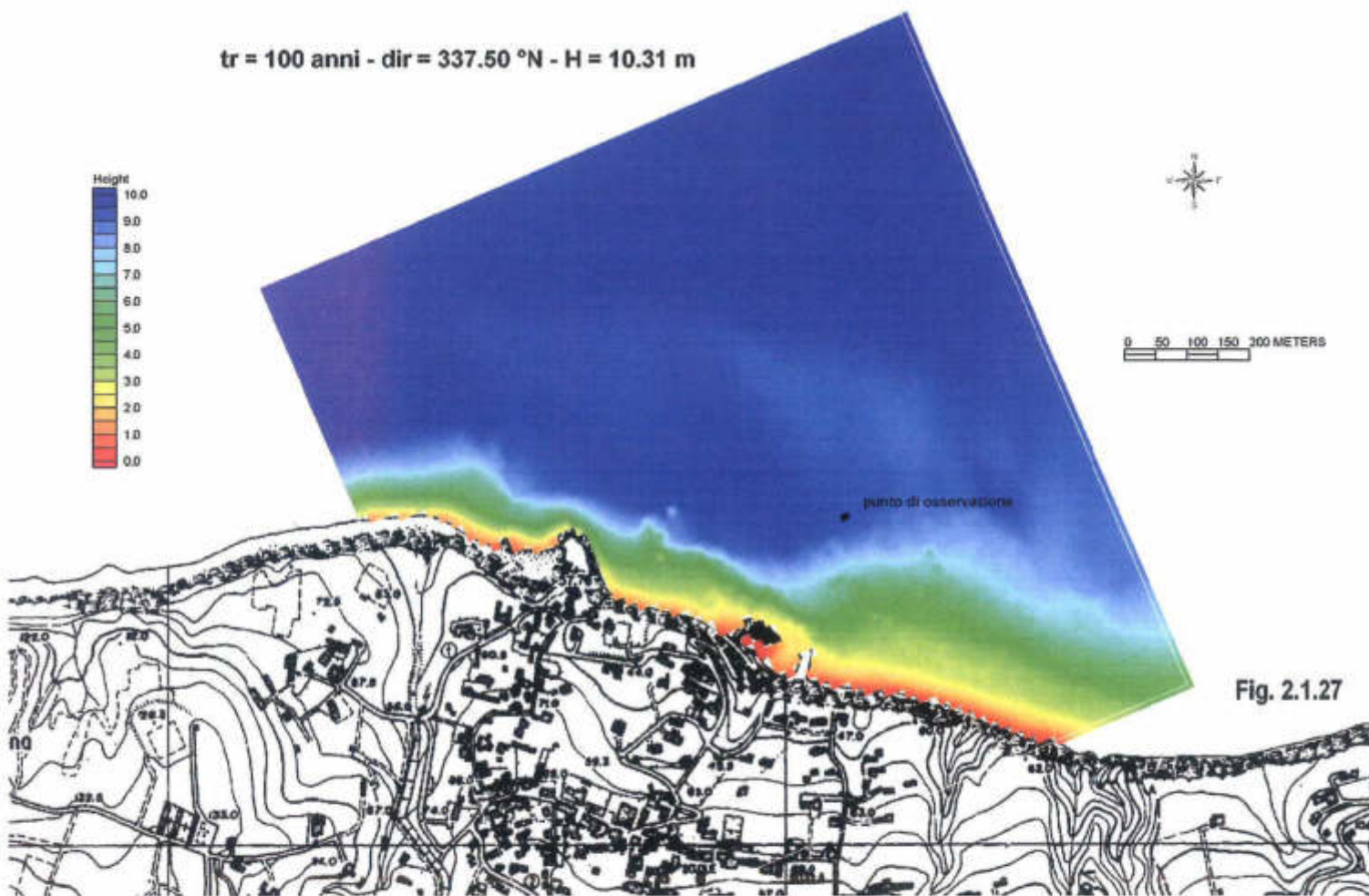
tr = 100 anni - dir = 315.00 °N - H = 9.15 m



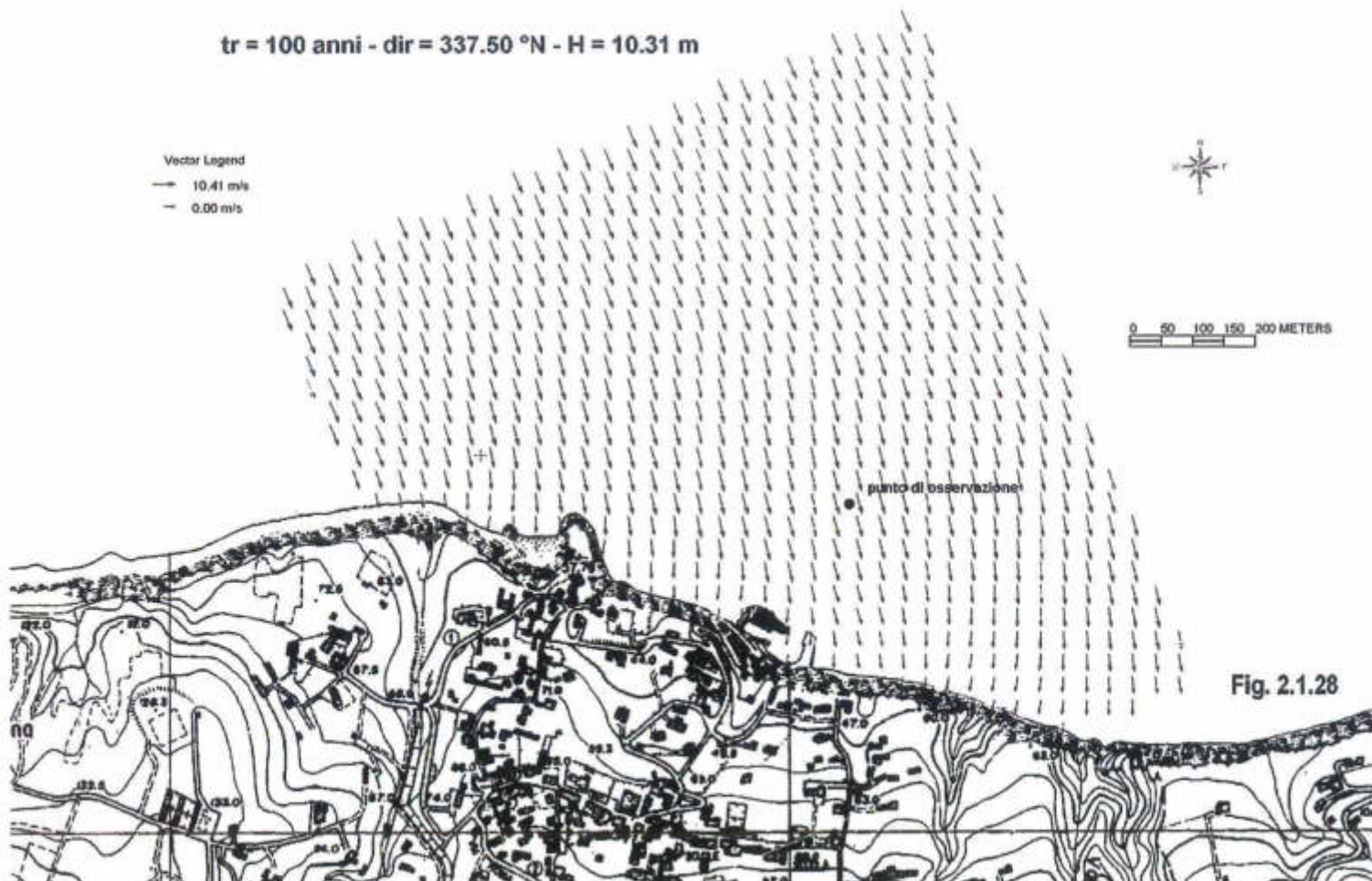
tr = 100 anni - dir = 315.00 °N - H = 9.15 m



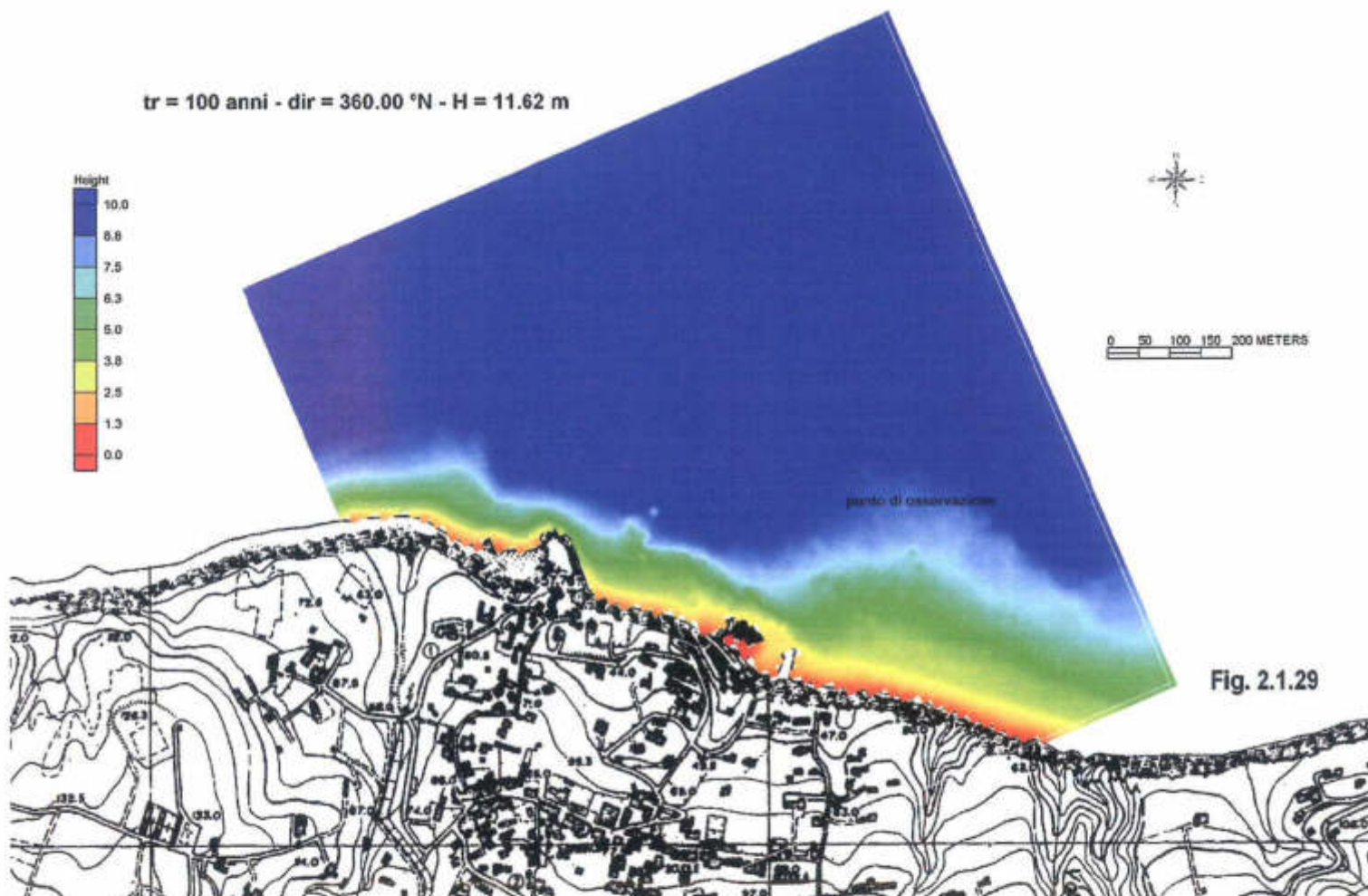
tr = 100 anni - dir = 337.50 °N - H = 10.31 m



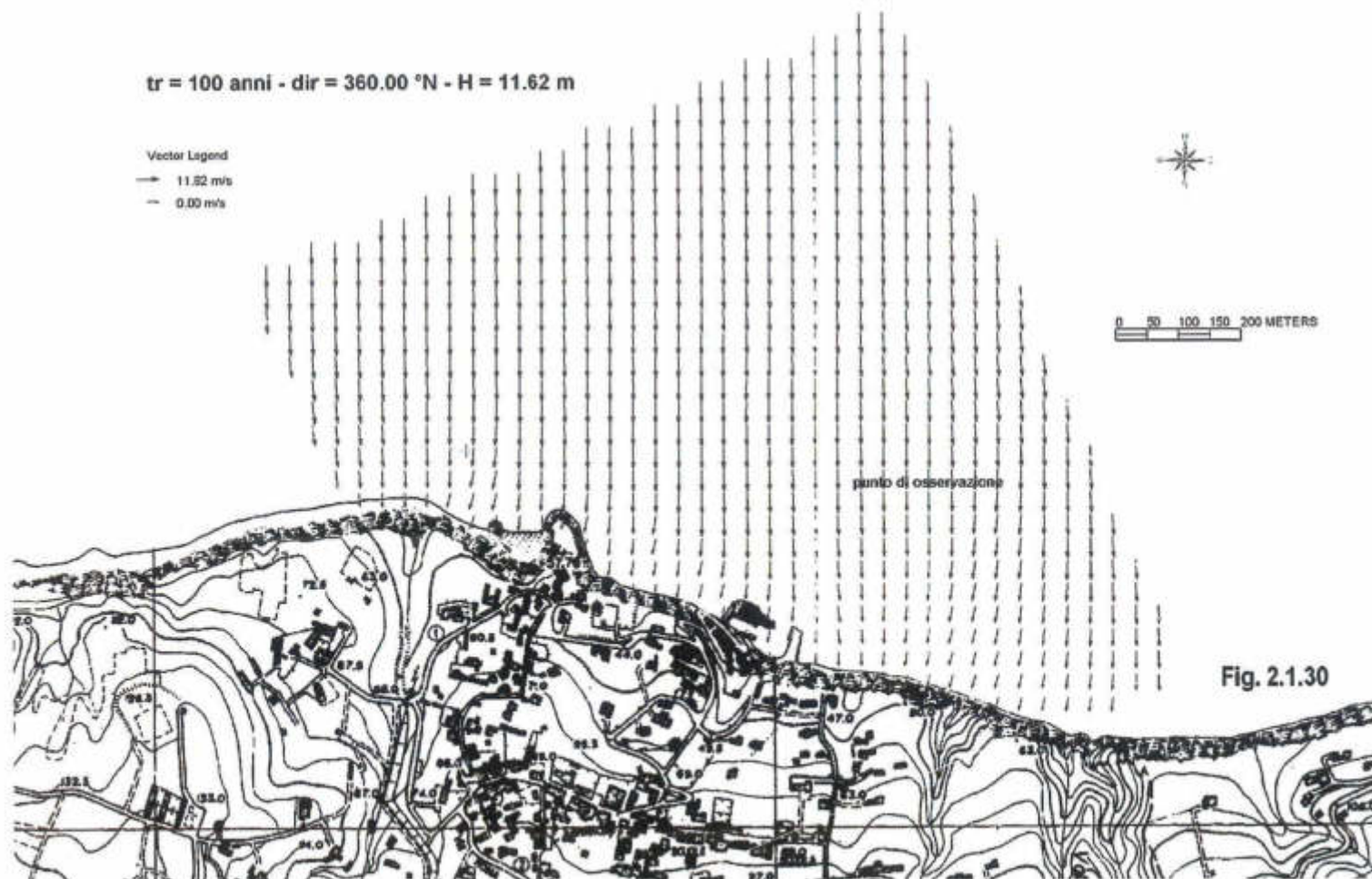
tr = 100 anni - dir = 337.50 °N - H = 10.31 m



tr = 100 anni - dir = 360.00 °N - H = 11.62 m



tr = 100 anni - dir = 360.00 °N - H = 11.62 m



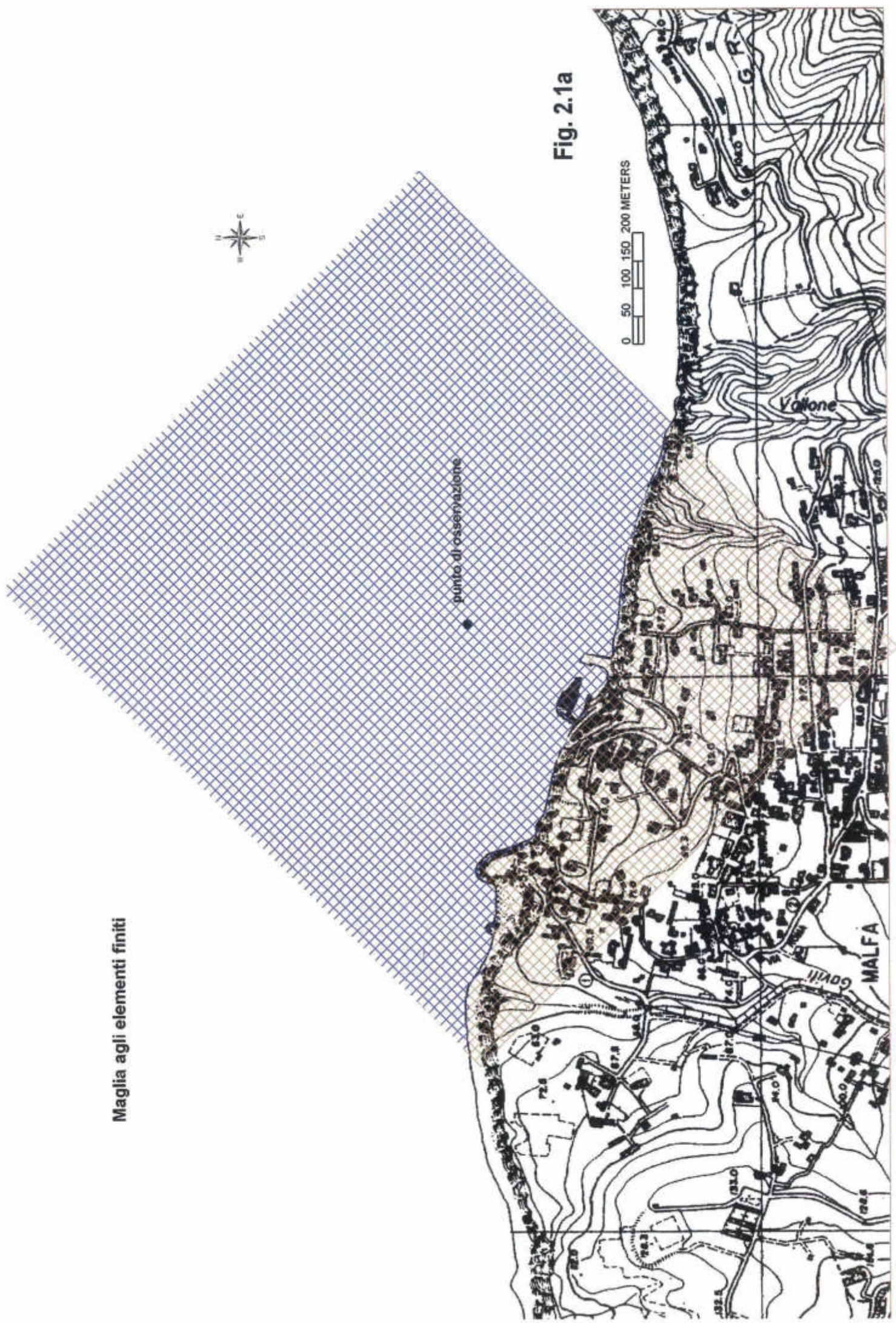
Maglia agli elementi finiti



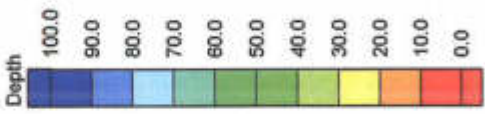
punto di osservazione

Fig. 2.1a

0 50 100 150 200 METERS

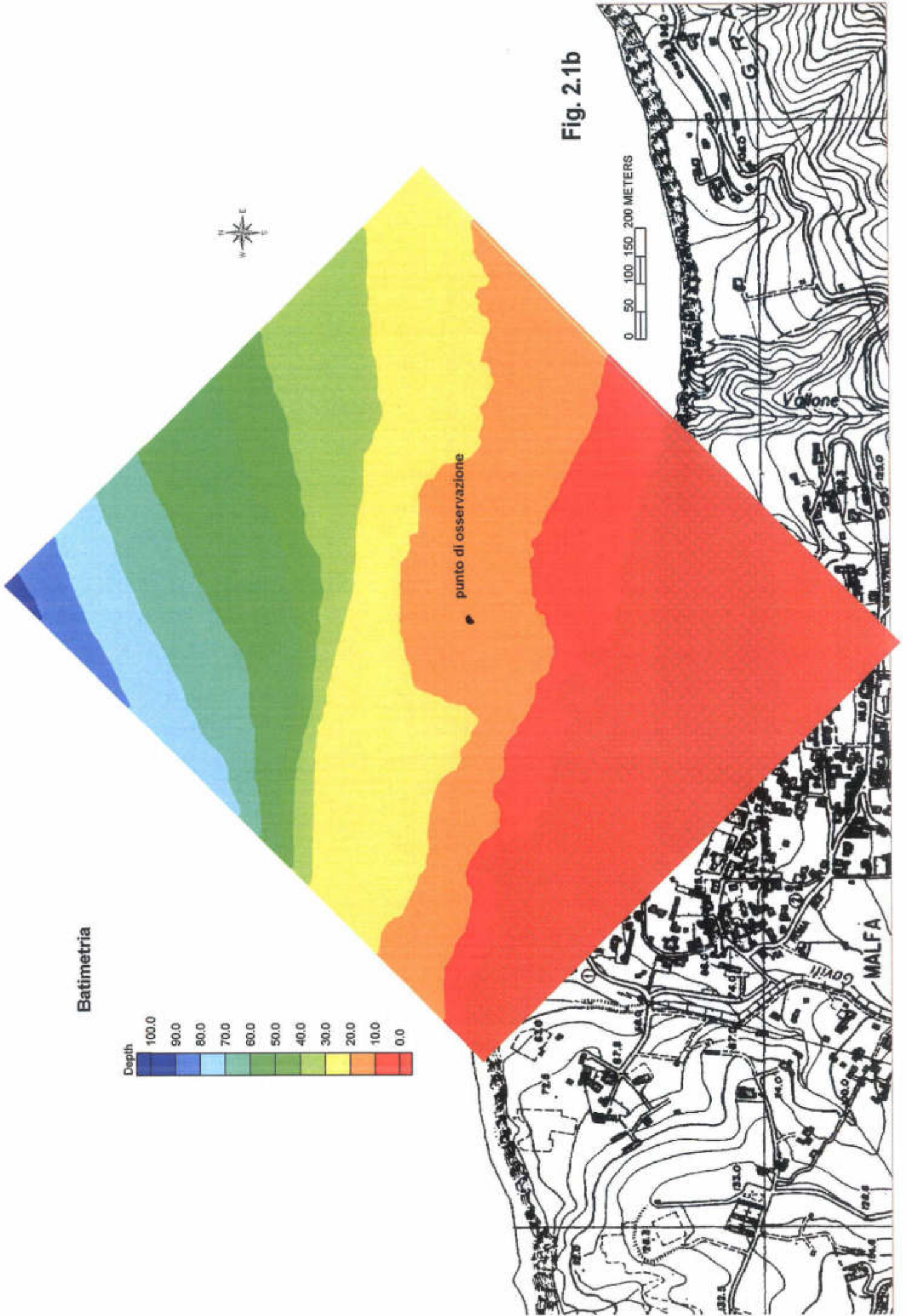


Batimetria



punto di osservazione

Fig. 2.1b



tr = 3 anni - dir = 22.50 °N - H = 2.96 m

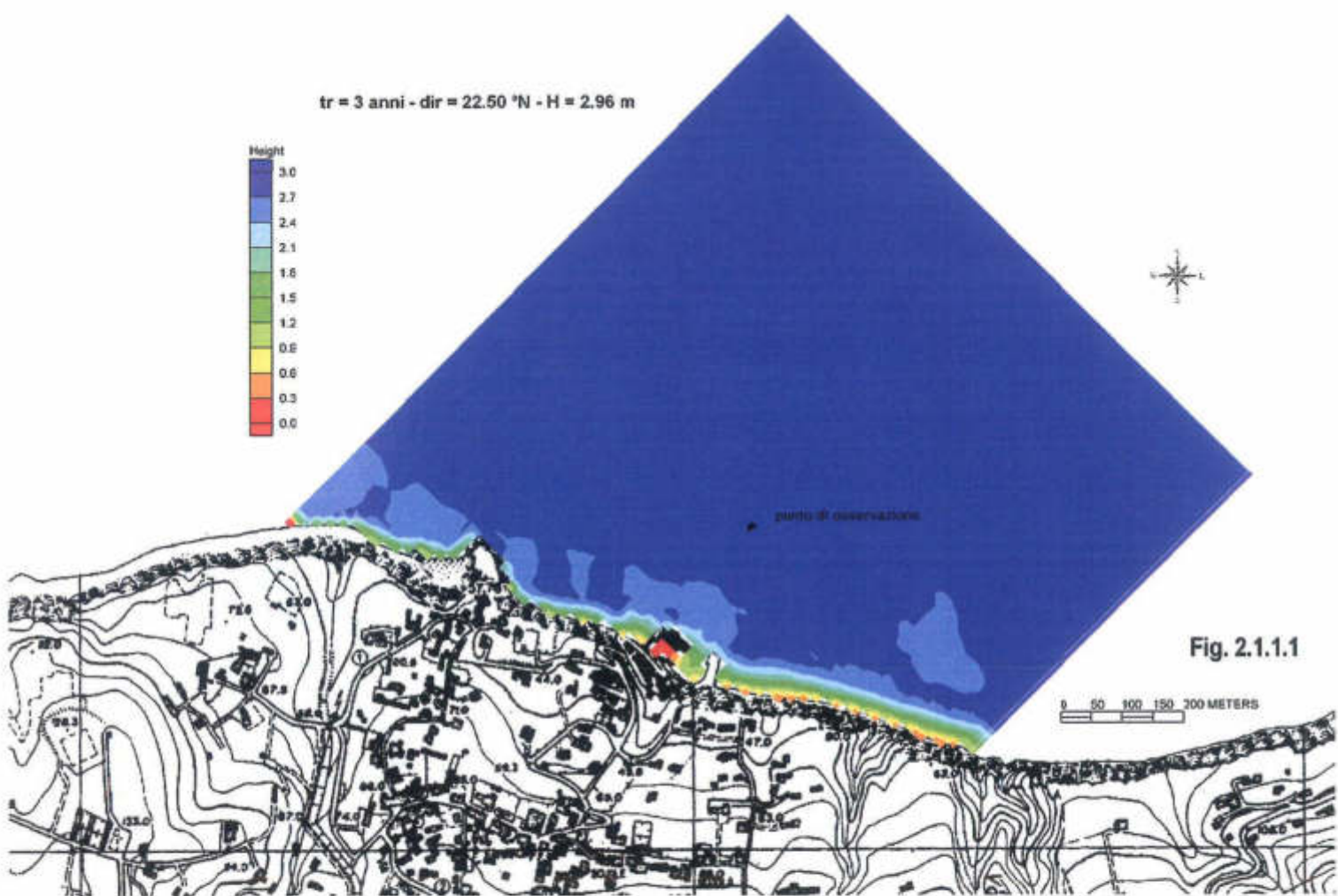
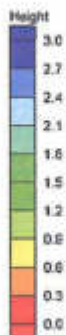


Fig. 2.1.1.1

tr = 3 anni - dir = 22.50 °N - H = 2.96 m

Vector Legend
→ 2.90 m/s
- 0.00 m/s

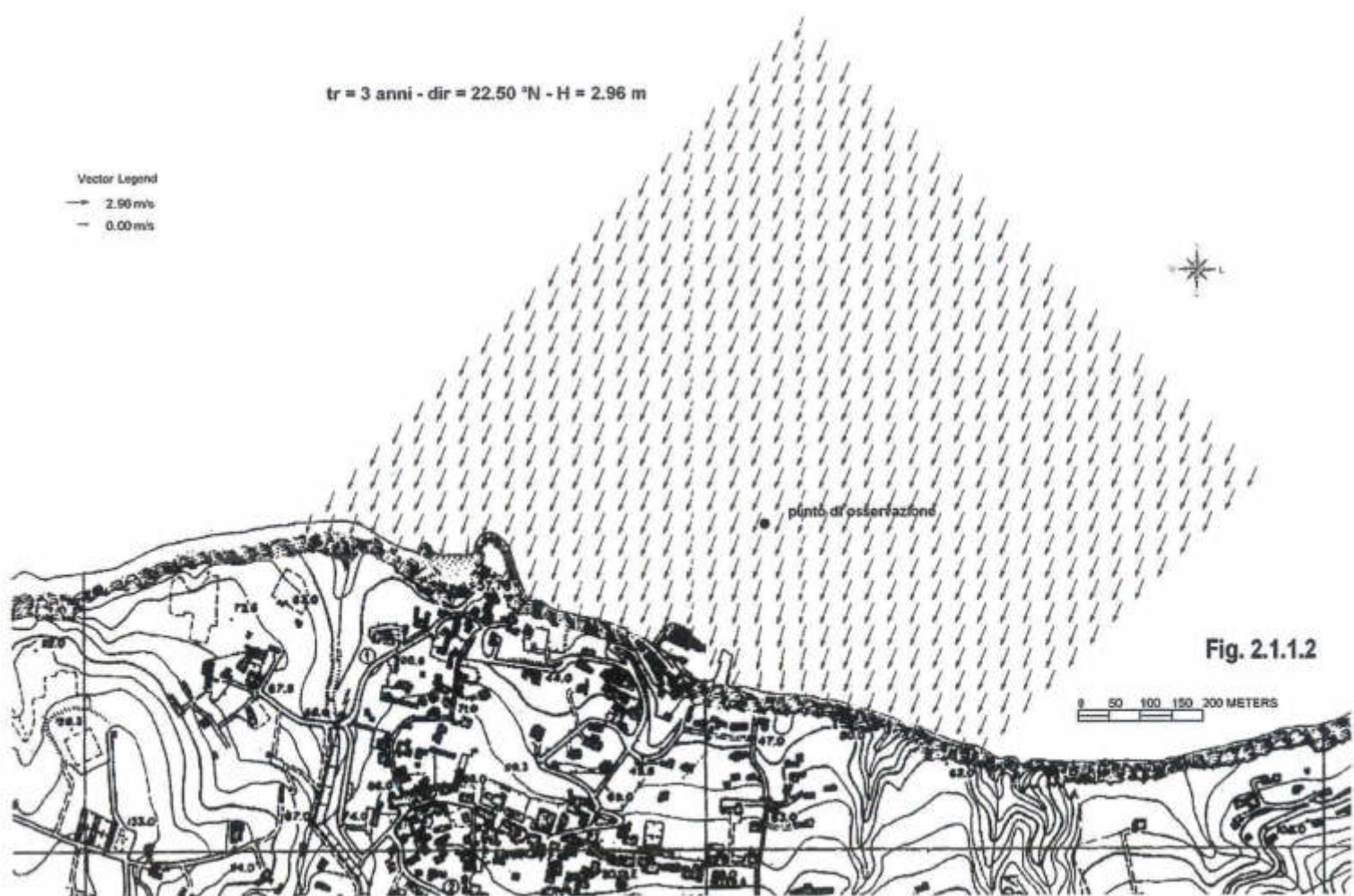
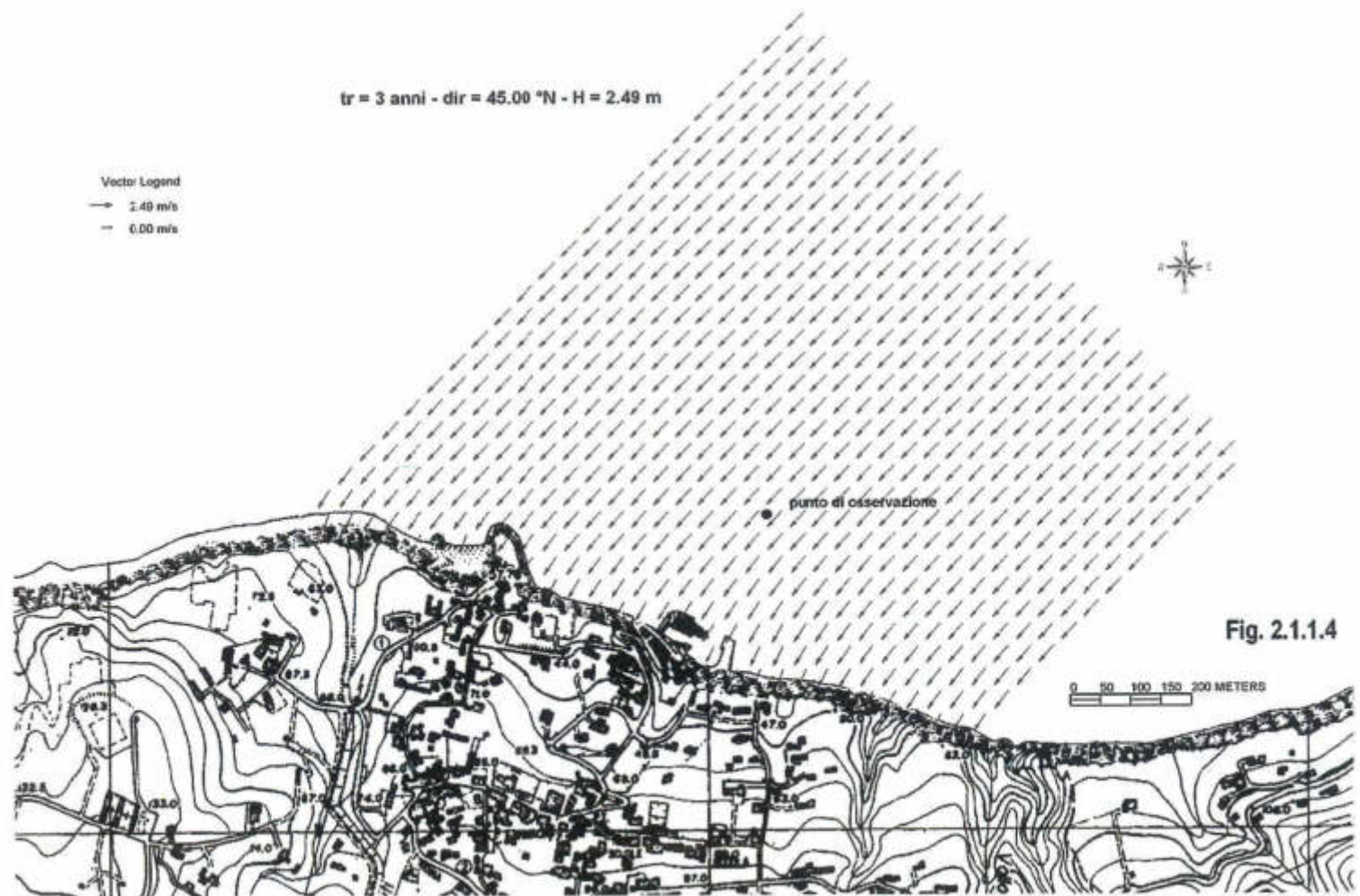
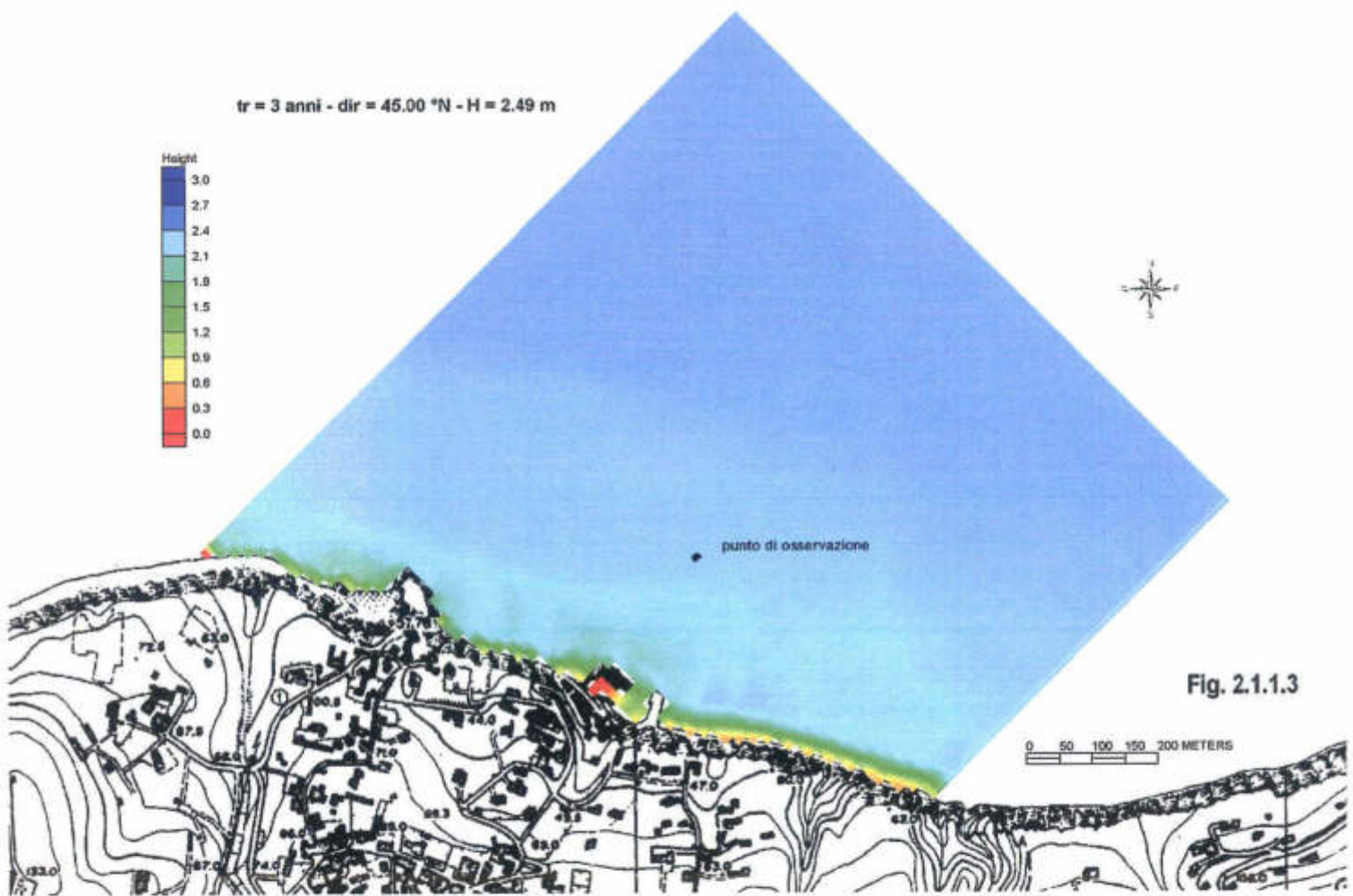
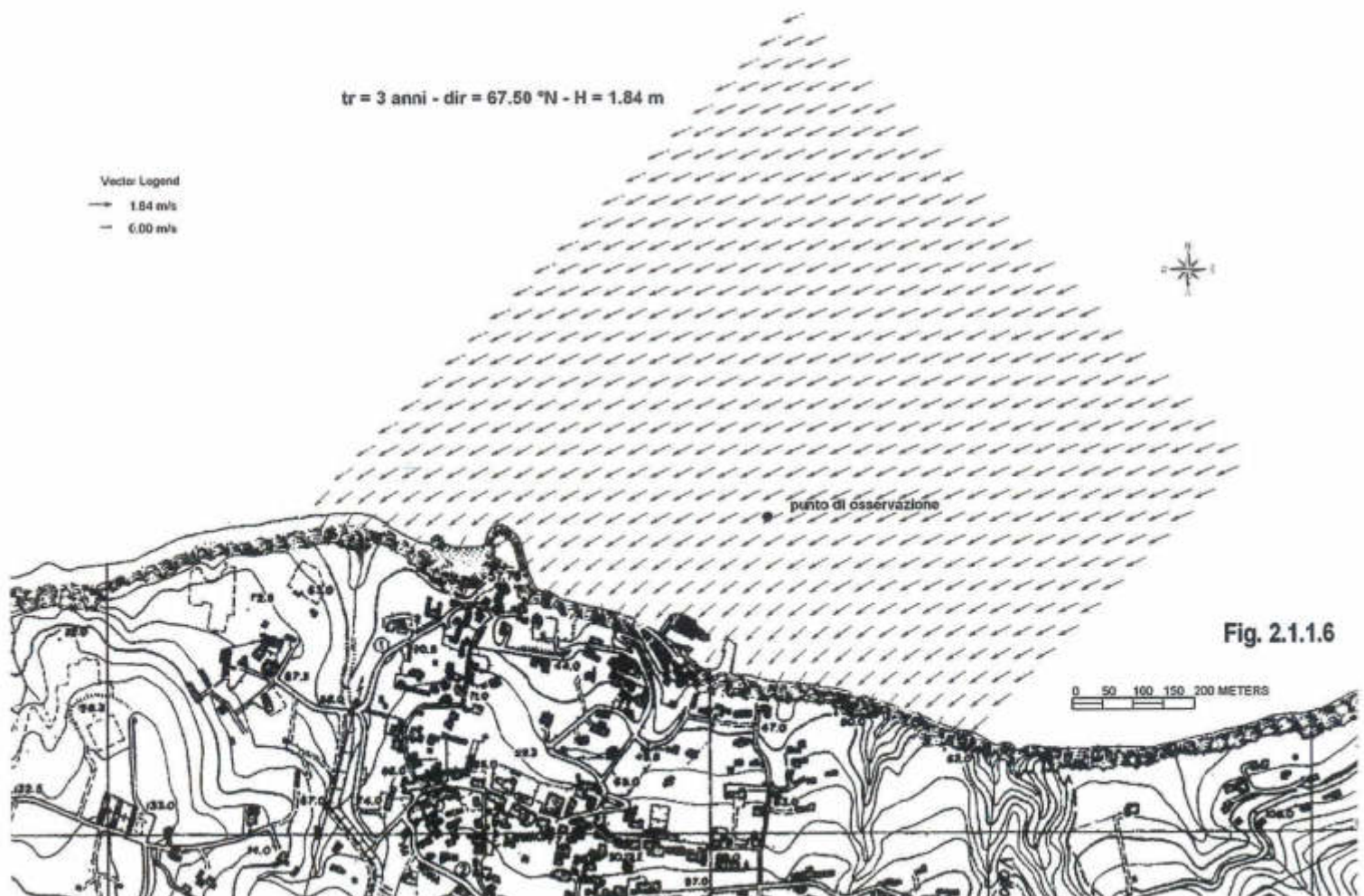
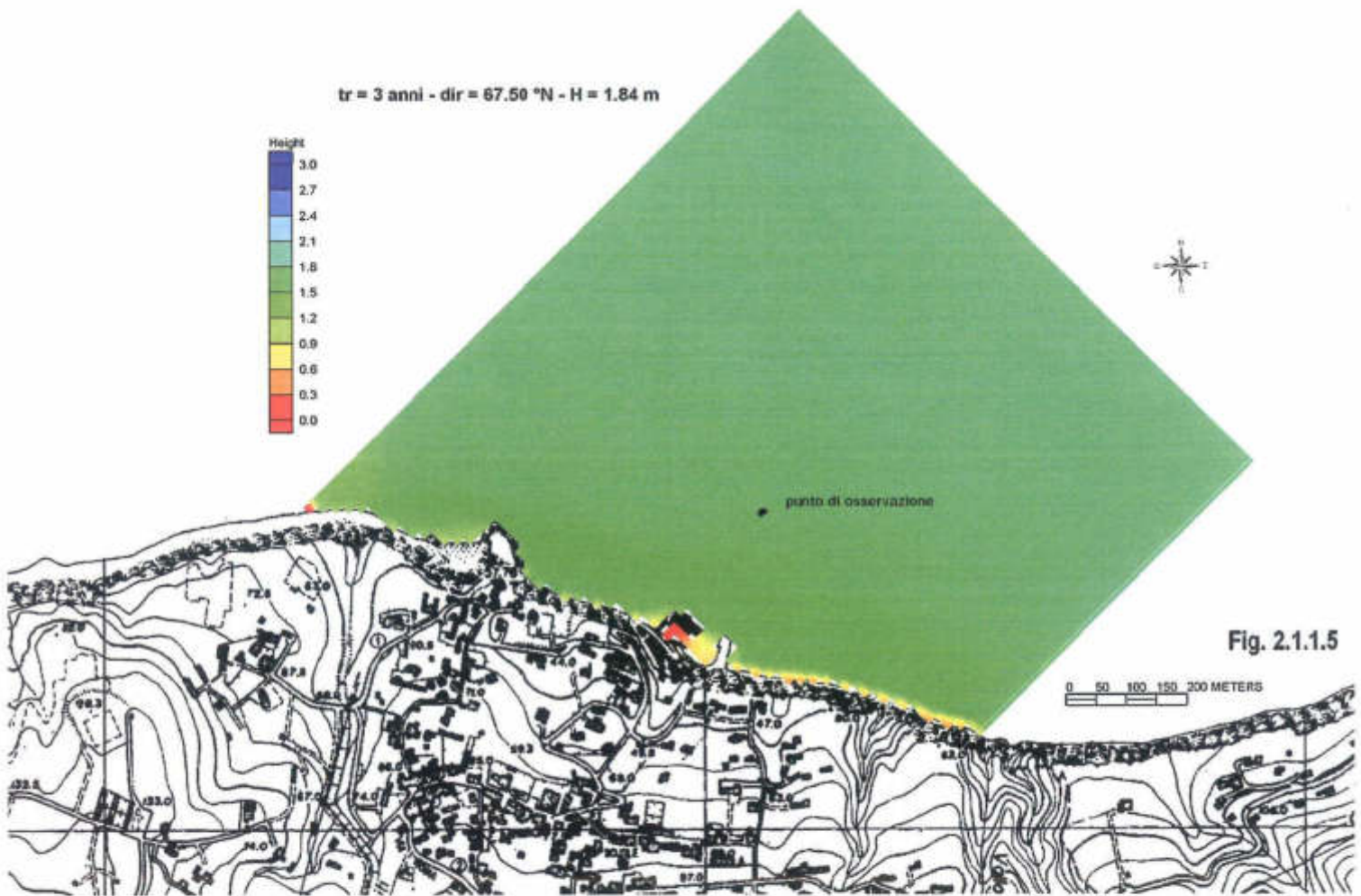
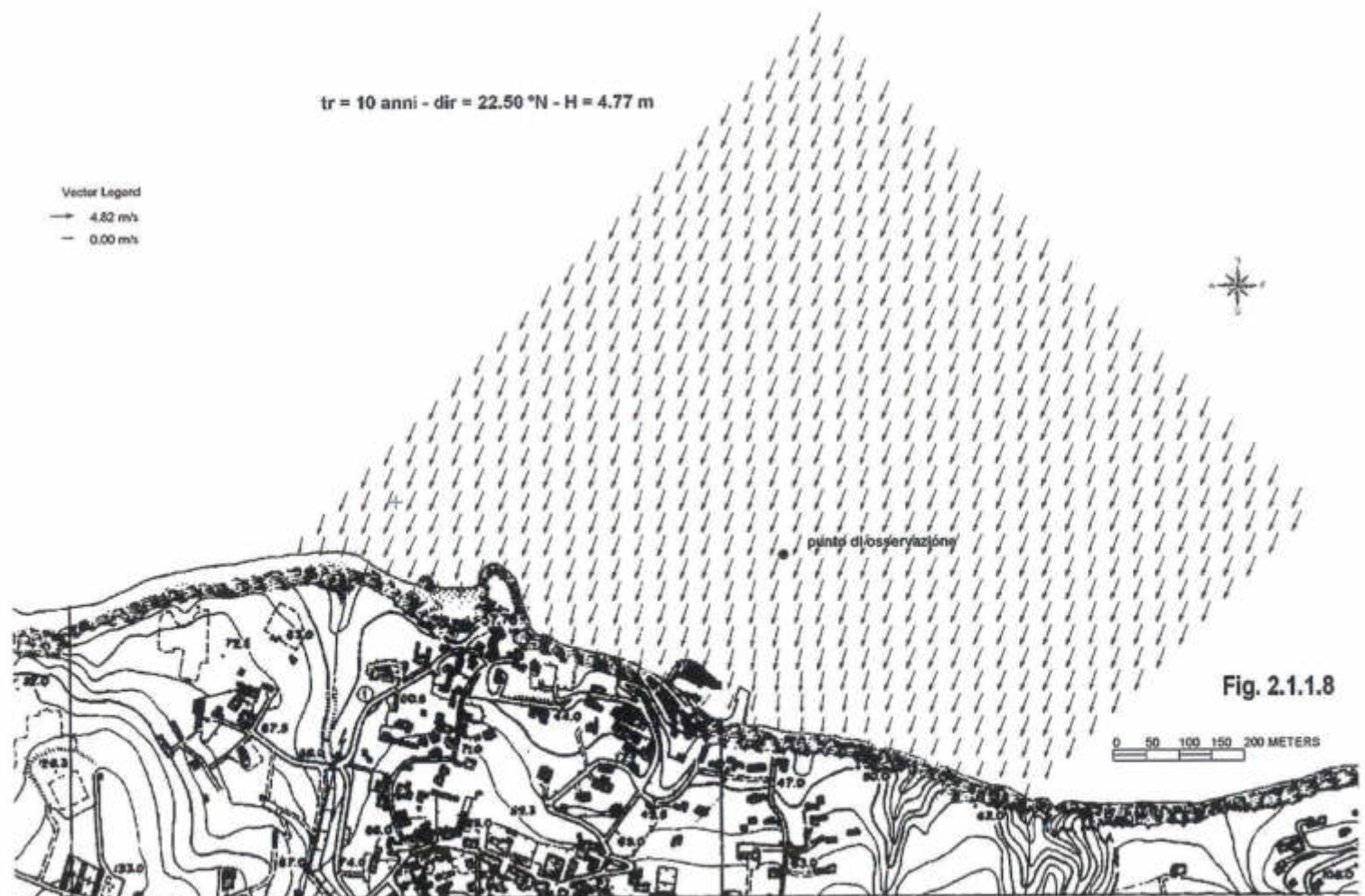
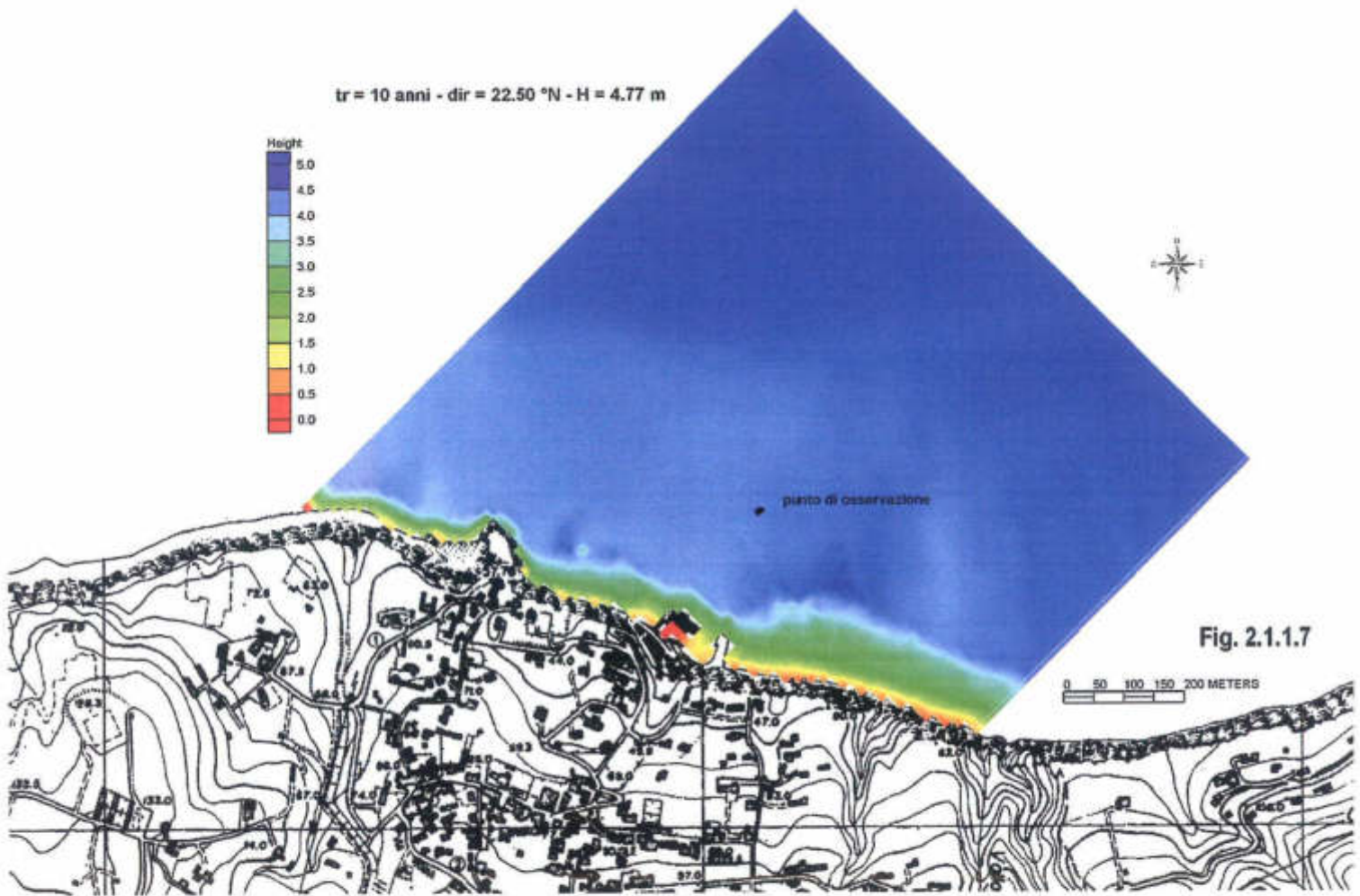


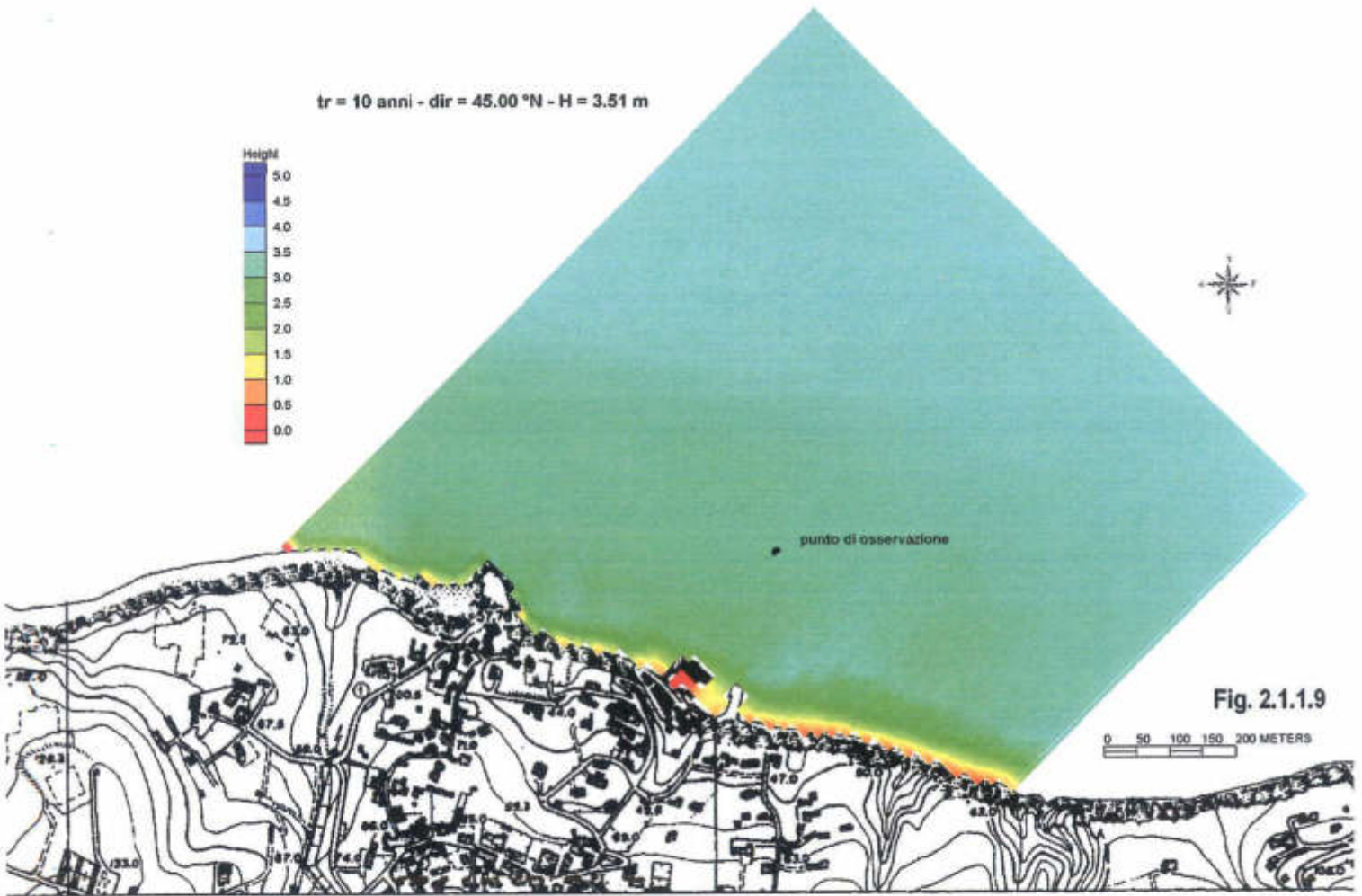
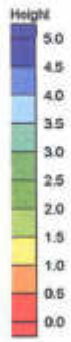
Fig. 2.1.1.2





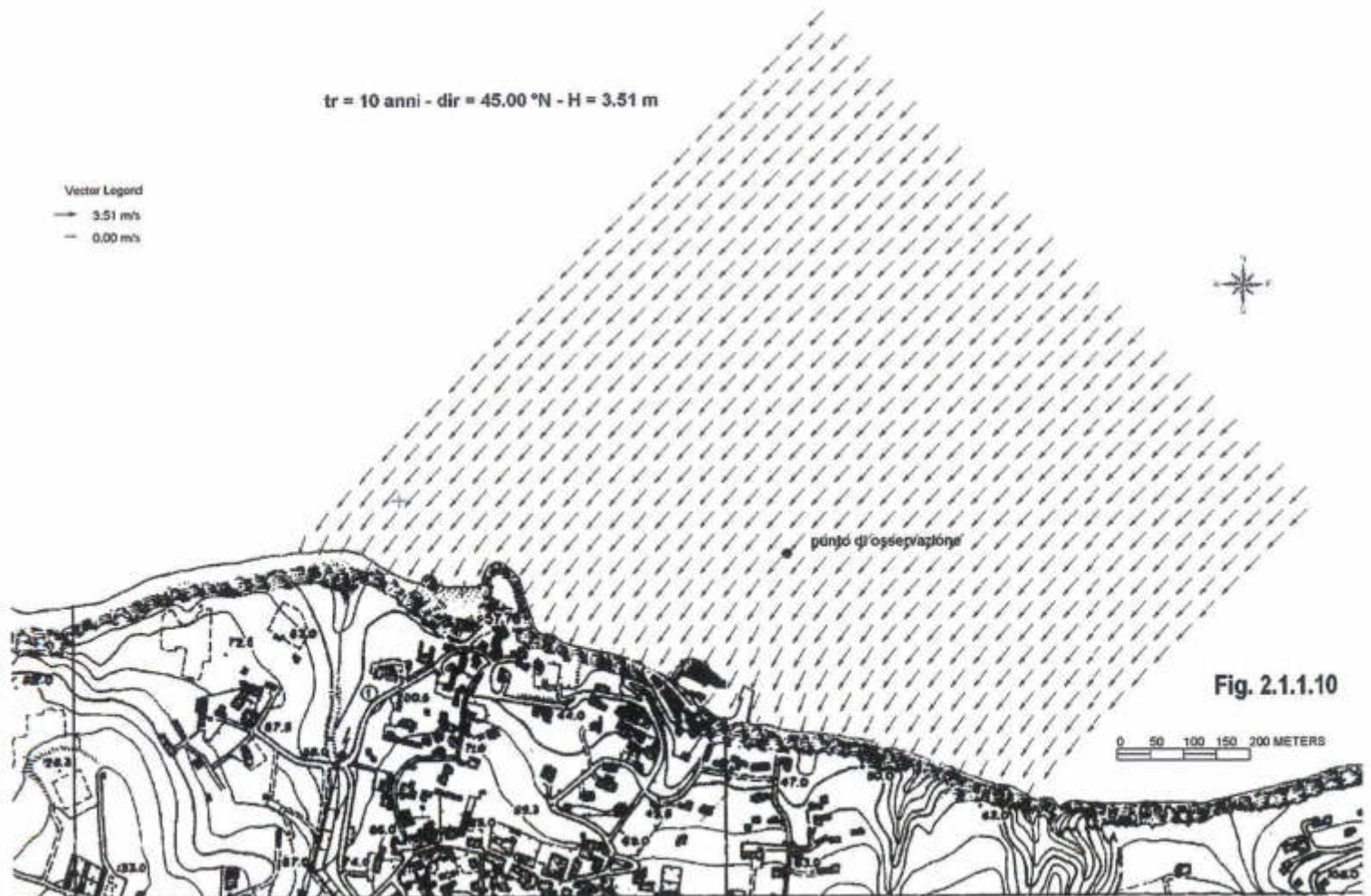
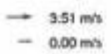


tr = 10 anni - dir = 45.00 °N - H = 3.51 m

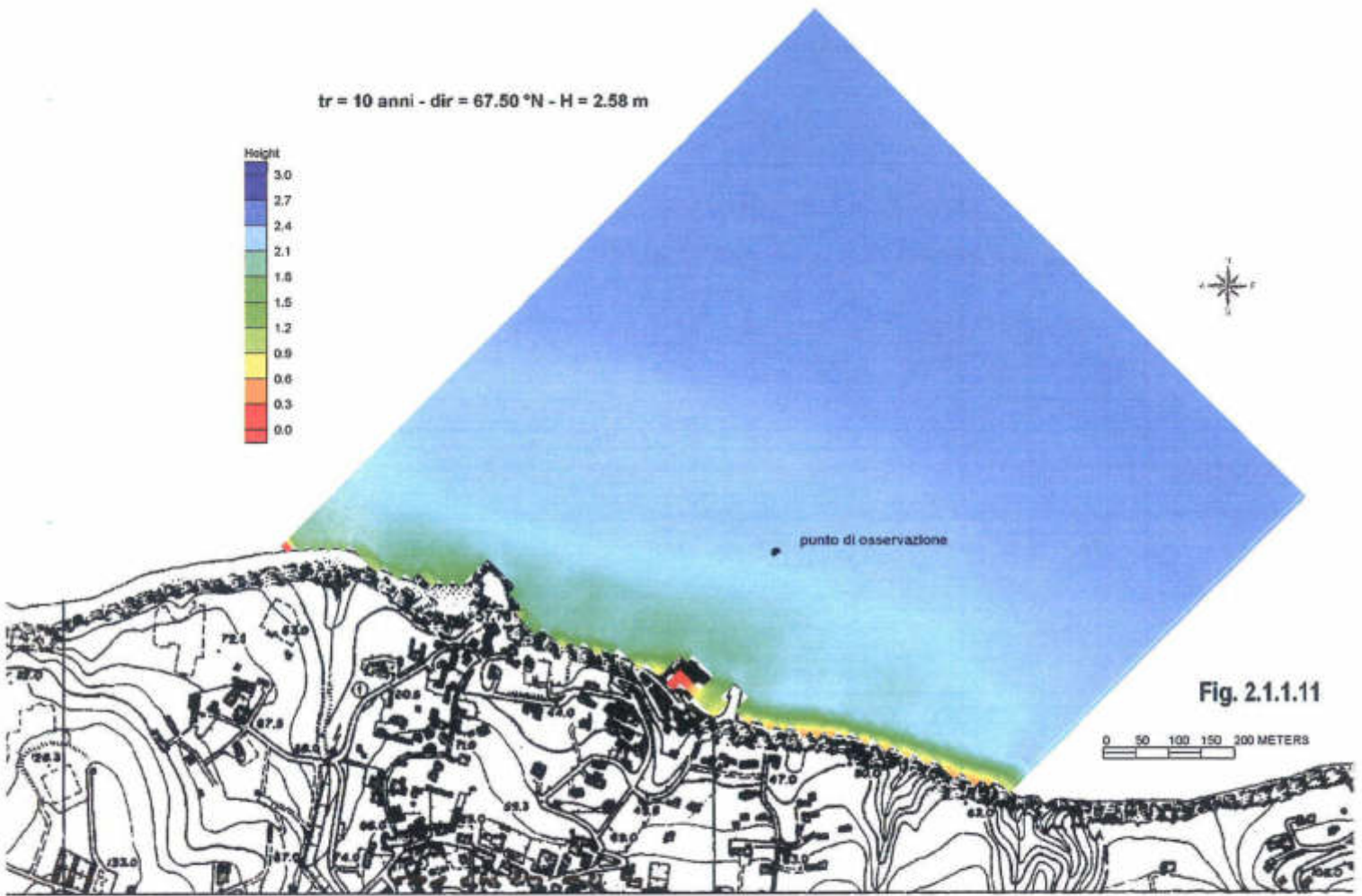
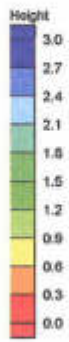


tr = 10 anni - dir = 45.00 °N - H = 3.51 m

Vector Legend



tr = 10 anni - dir = 67.50 °N - H = 2.58 m

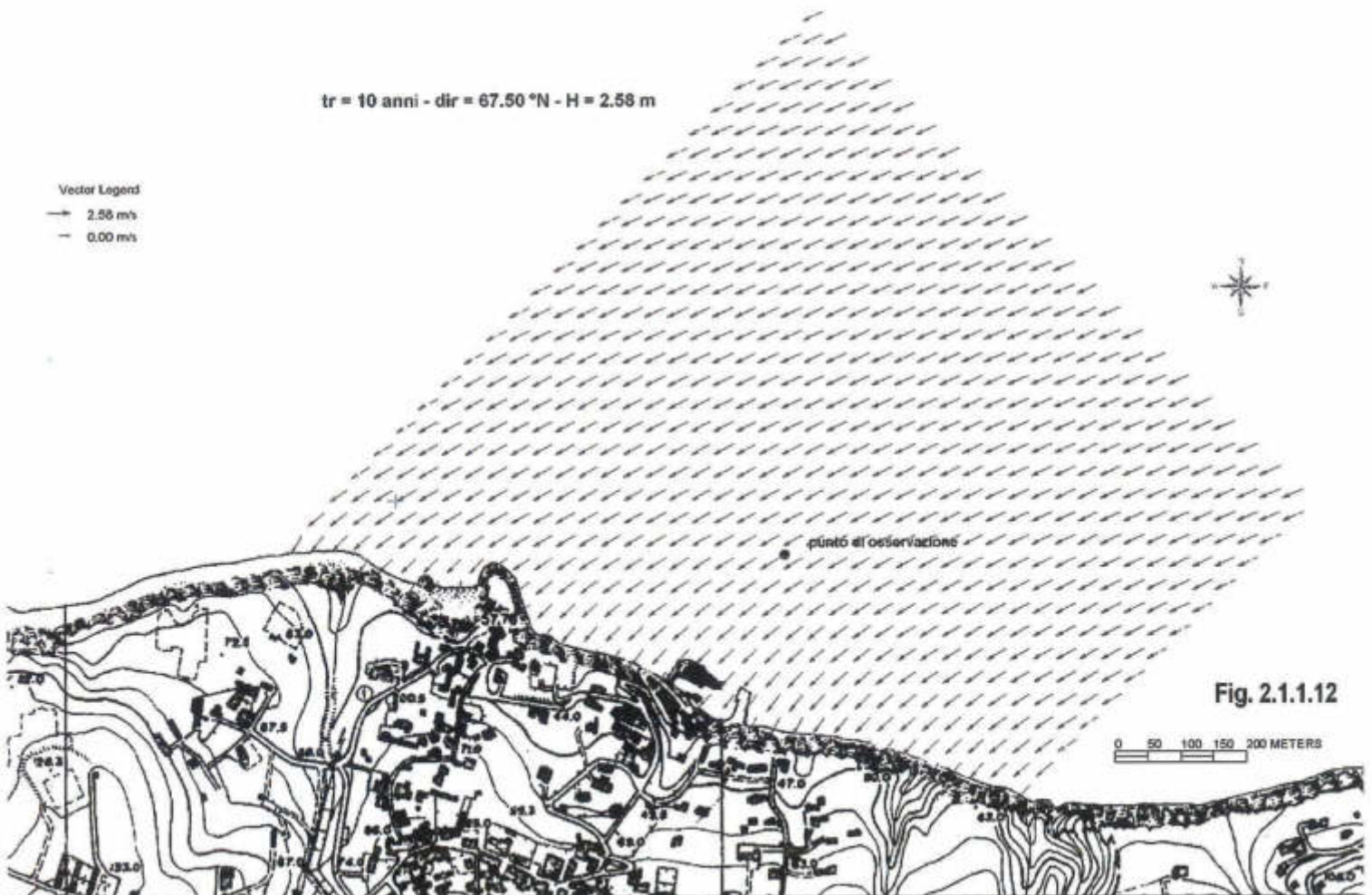


tr = 10 anni - dir = 67.50 °N - H = 2.58 m

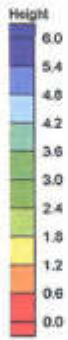
Vector Legend

→ 2.58 m/s

- 0.00 m/s

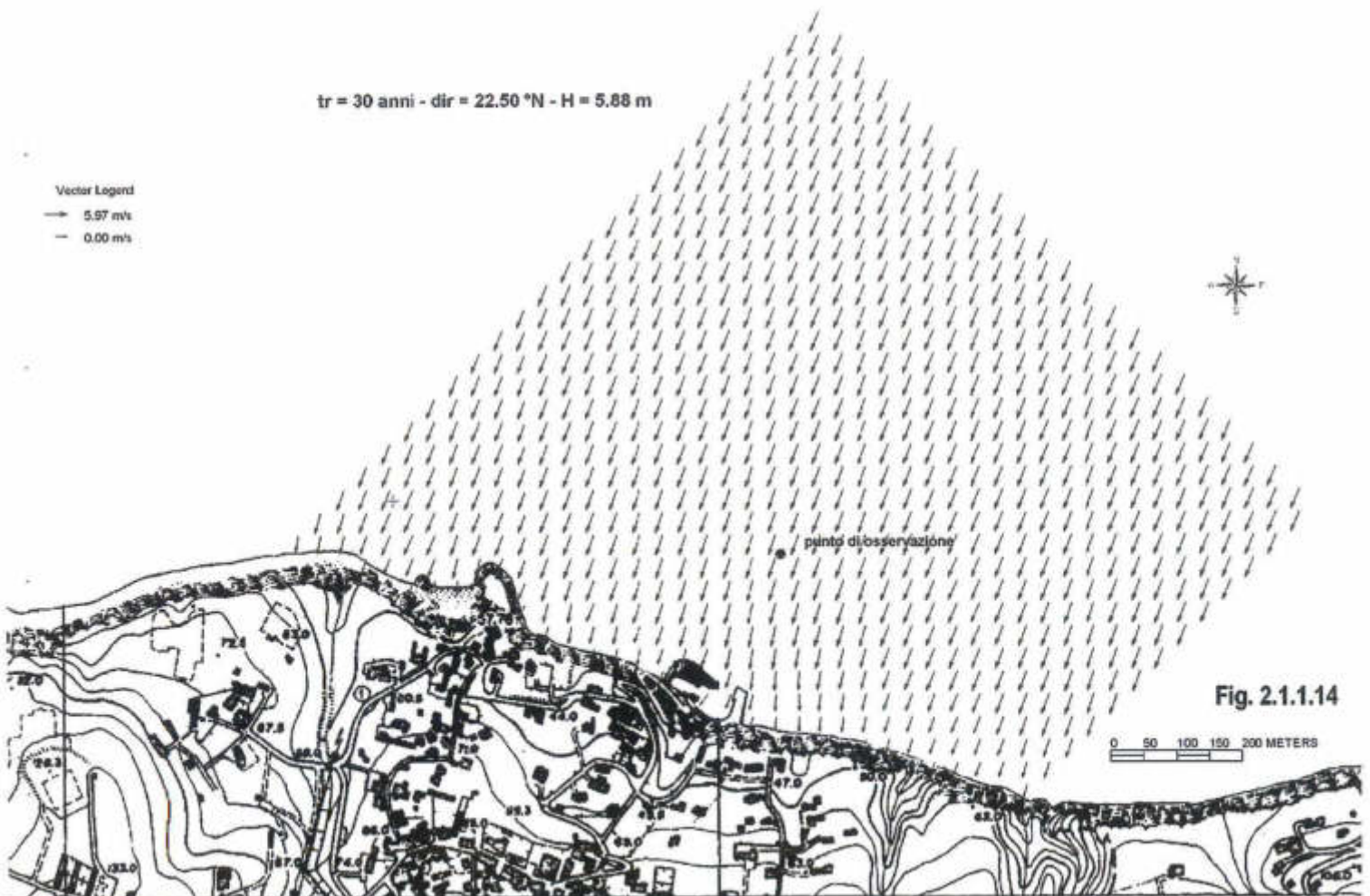
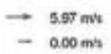


tr = 30 anni - dir = 22.50 °N - H = 5.88 m

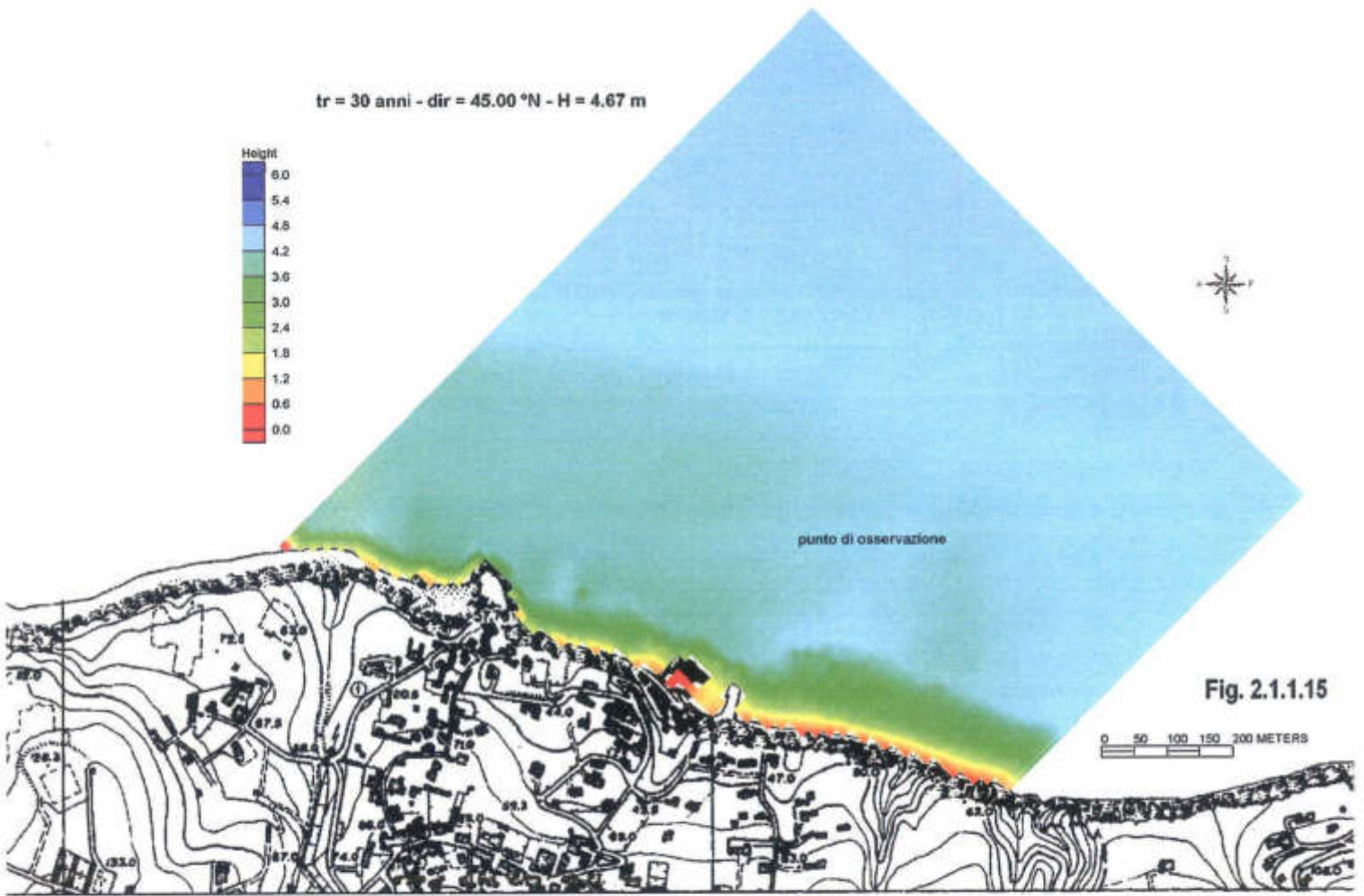
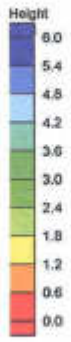


tr = 30 anni - dir = 22.50 °N - H = 5.88 m

Vector Legend



tr = 30 anni - dir = 45.00 °N - H = 4.67 m

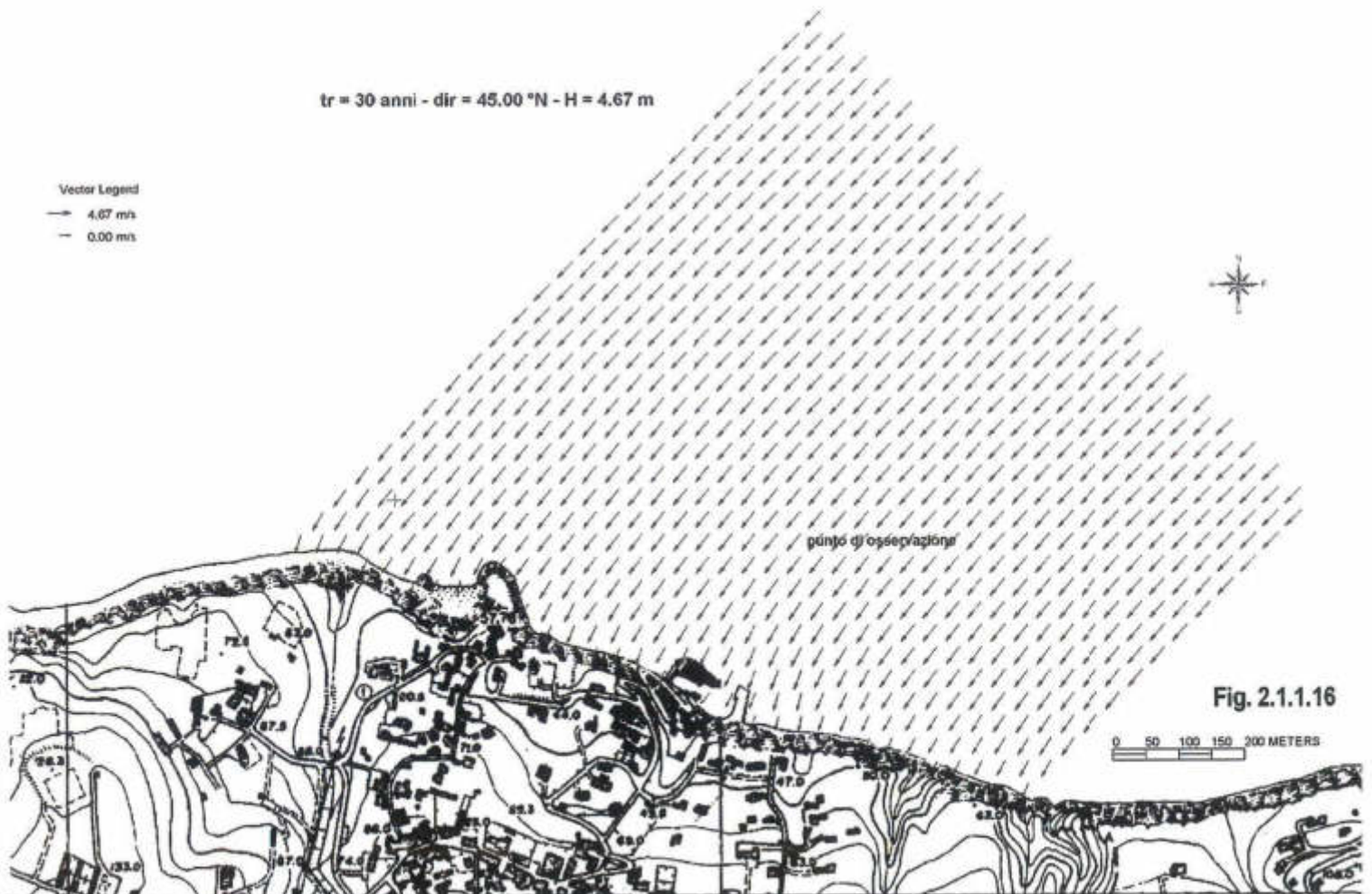


tr = 30 anni - dir = 45.00 °N - H = 4.67 m

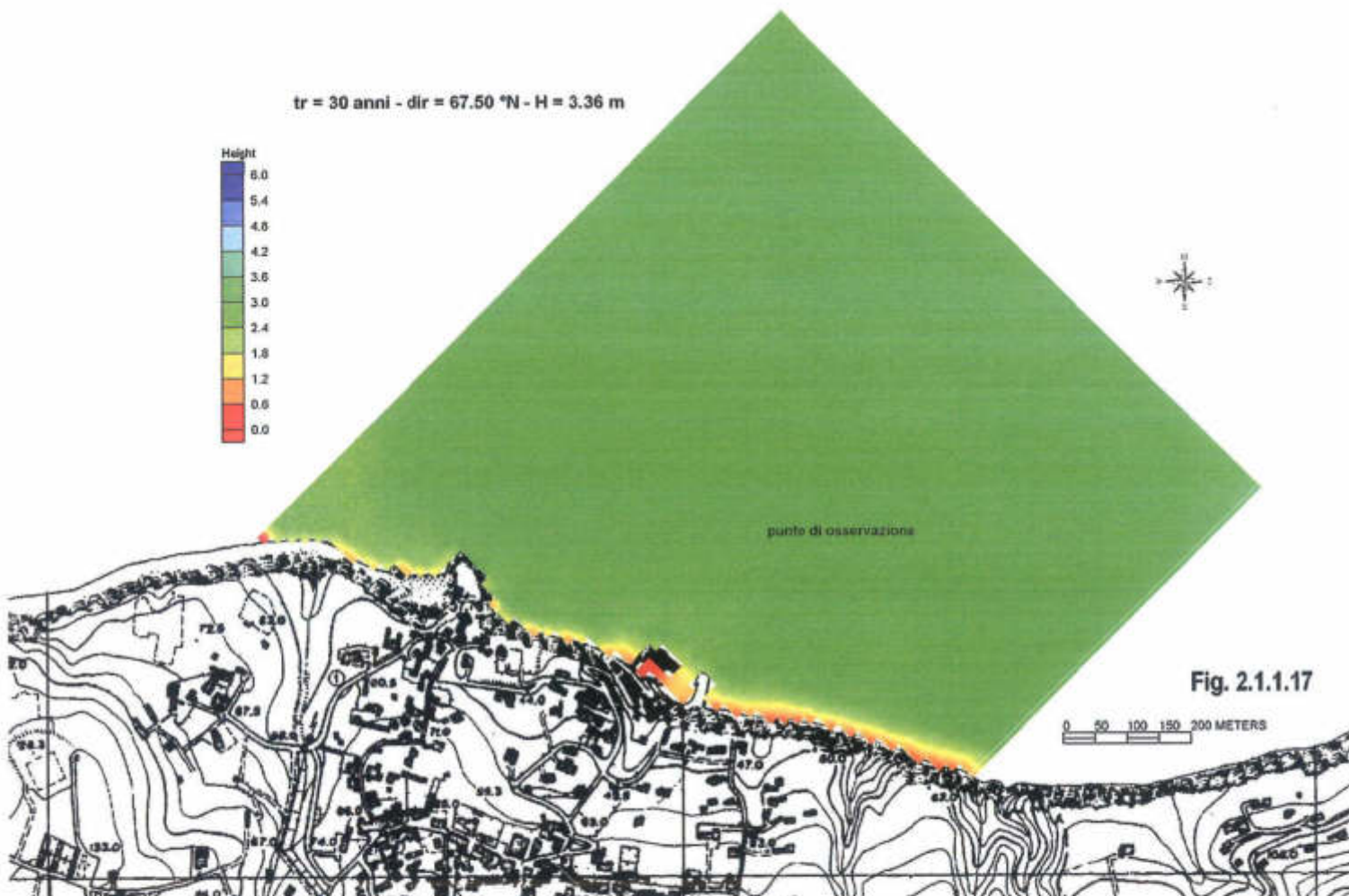
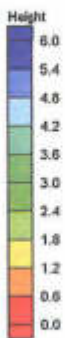
Vector Legend

→ 4.67 m/s

— 0.00 m/s



tr = 30 anni - dir = 67.50 °N - H = 3.36 m

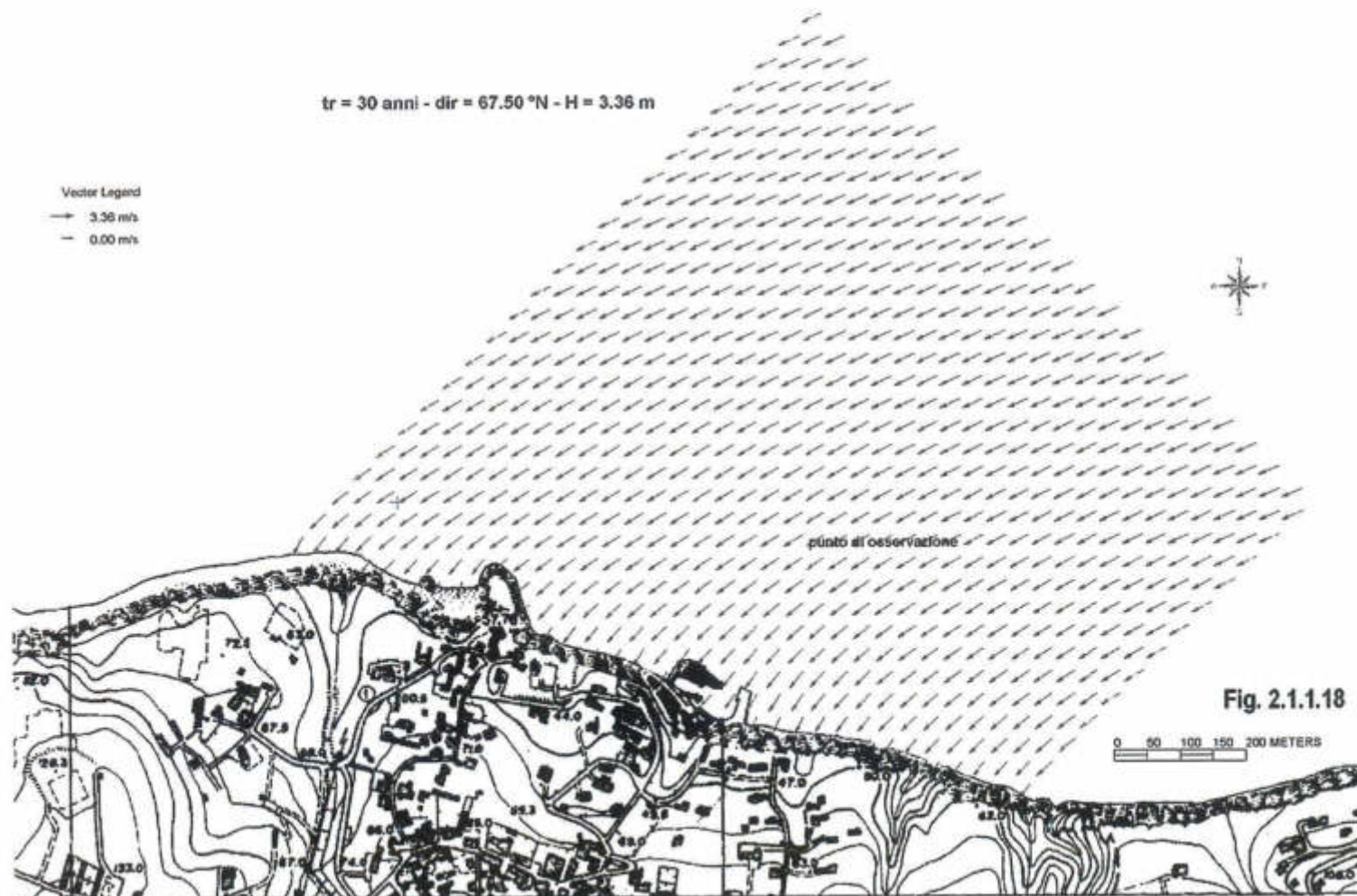


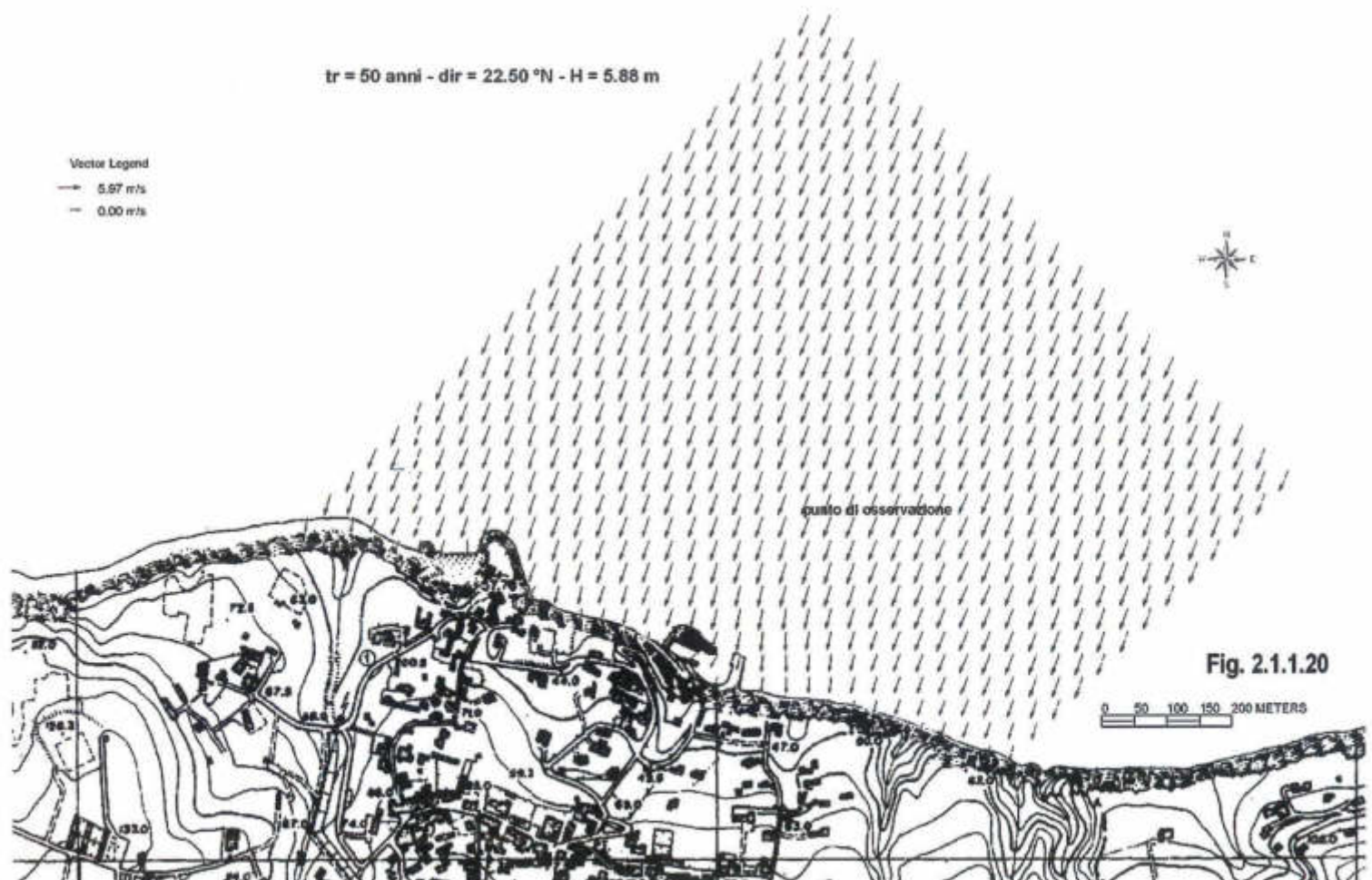
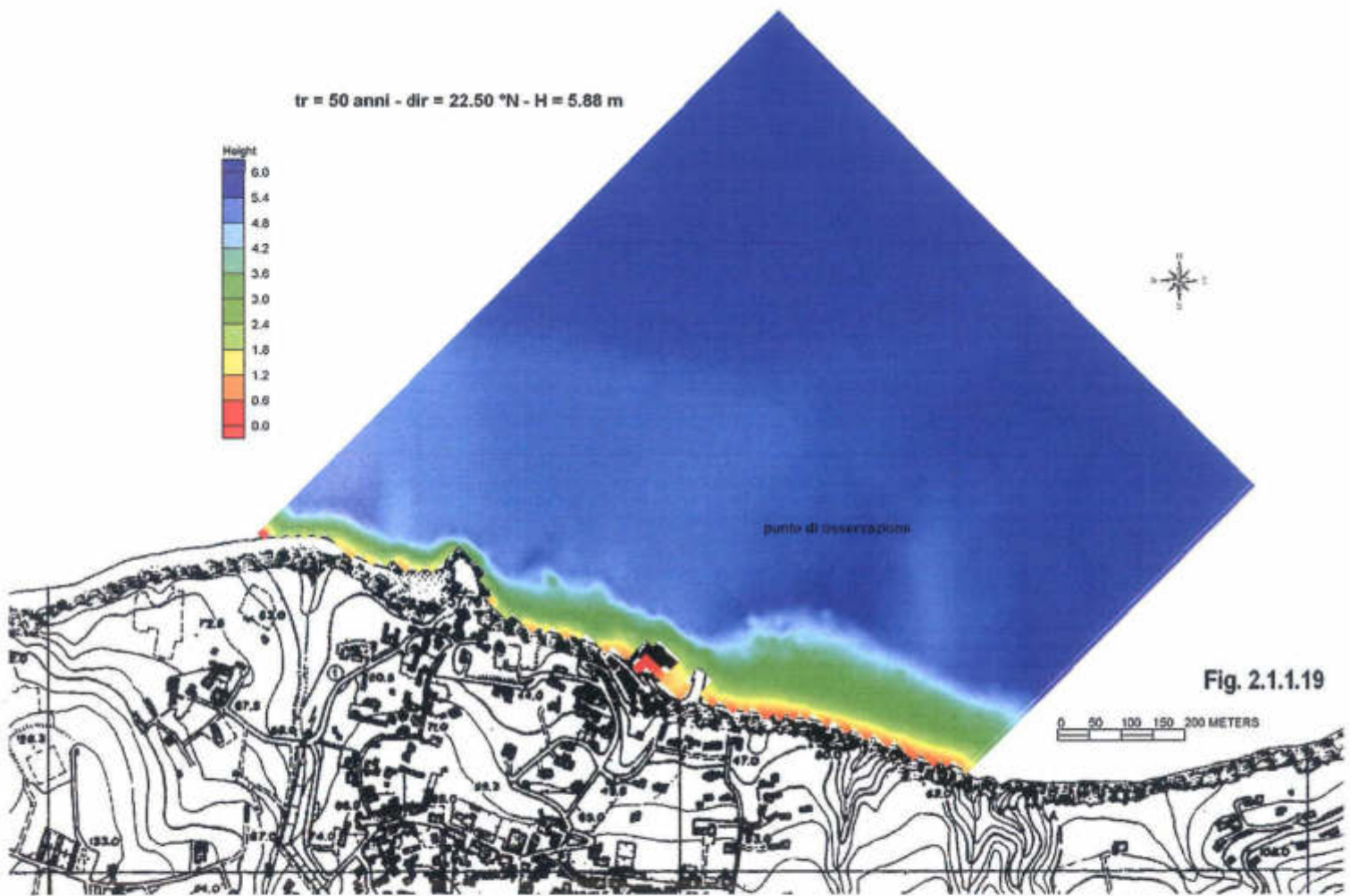
tr = 30 anni - dir = 67.50 °N - H = 3.36 m

Vector Legend

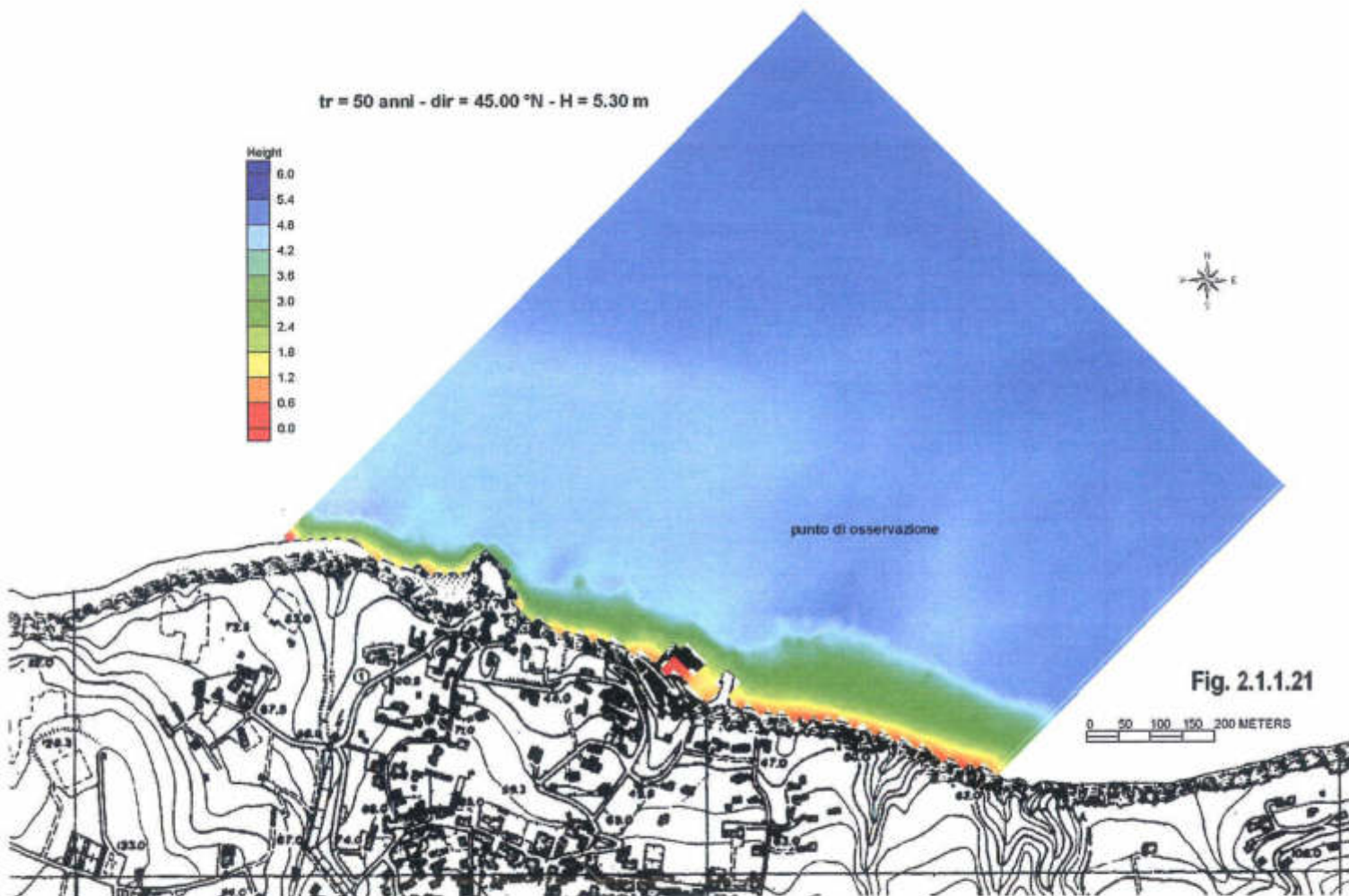
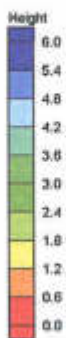
→ 3.36 m/s

→ 0.00 m/s



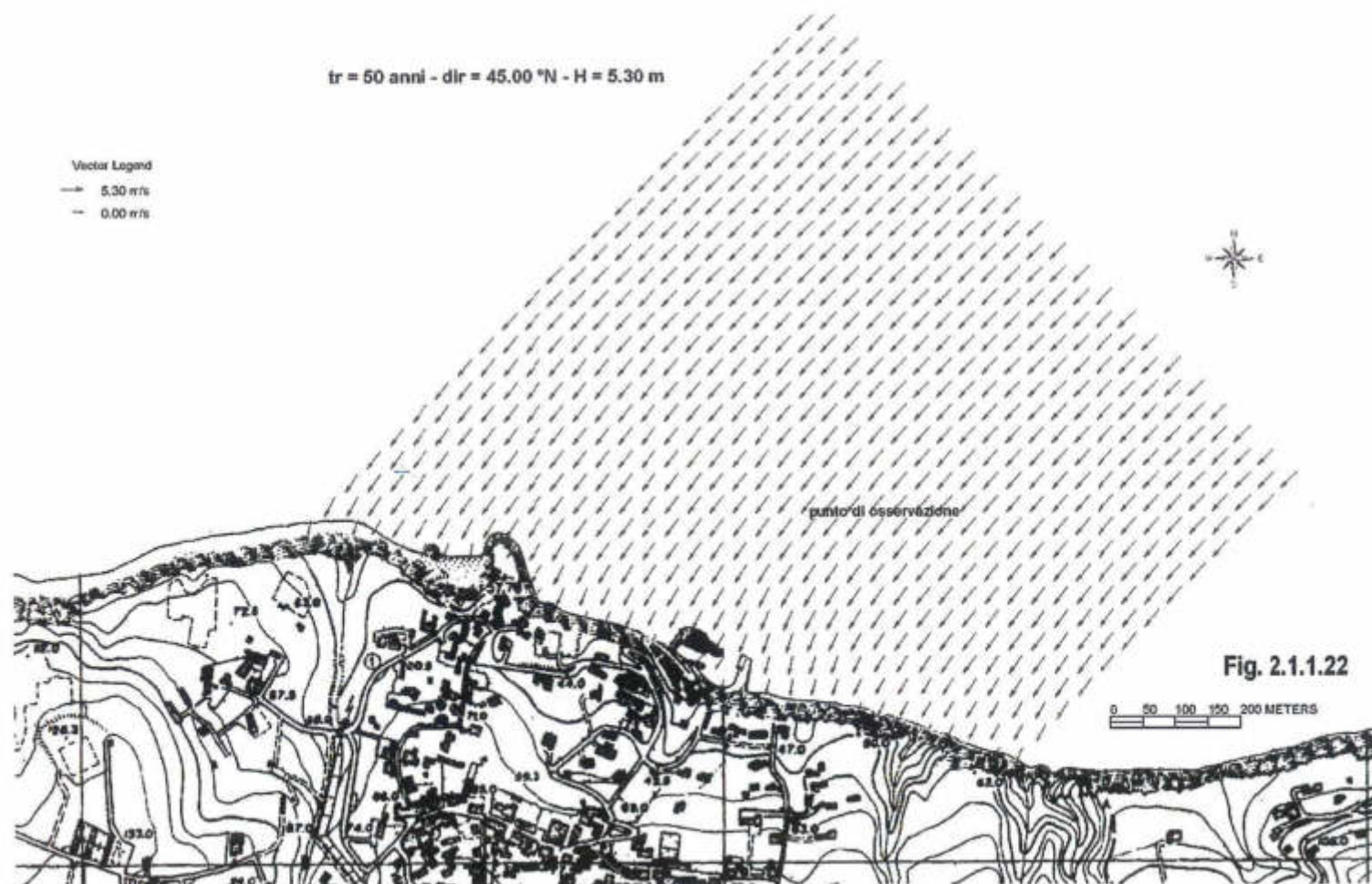
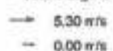


tr = 50 anni - dir = 45.00 °N - H = 5.30 m

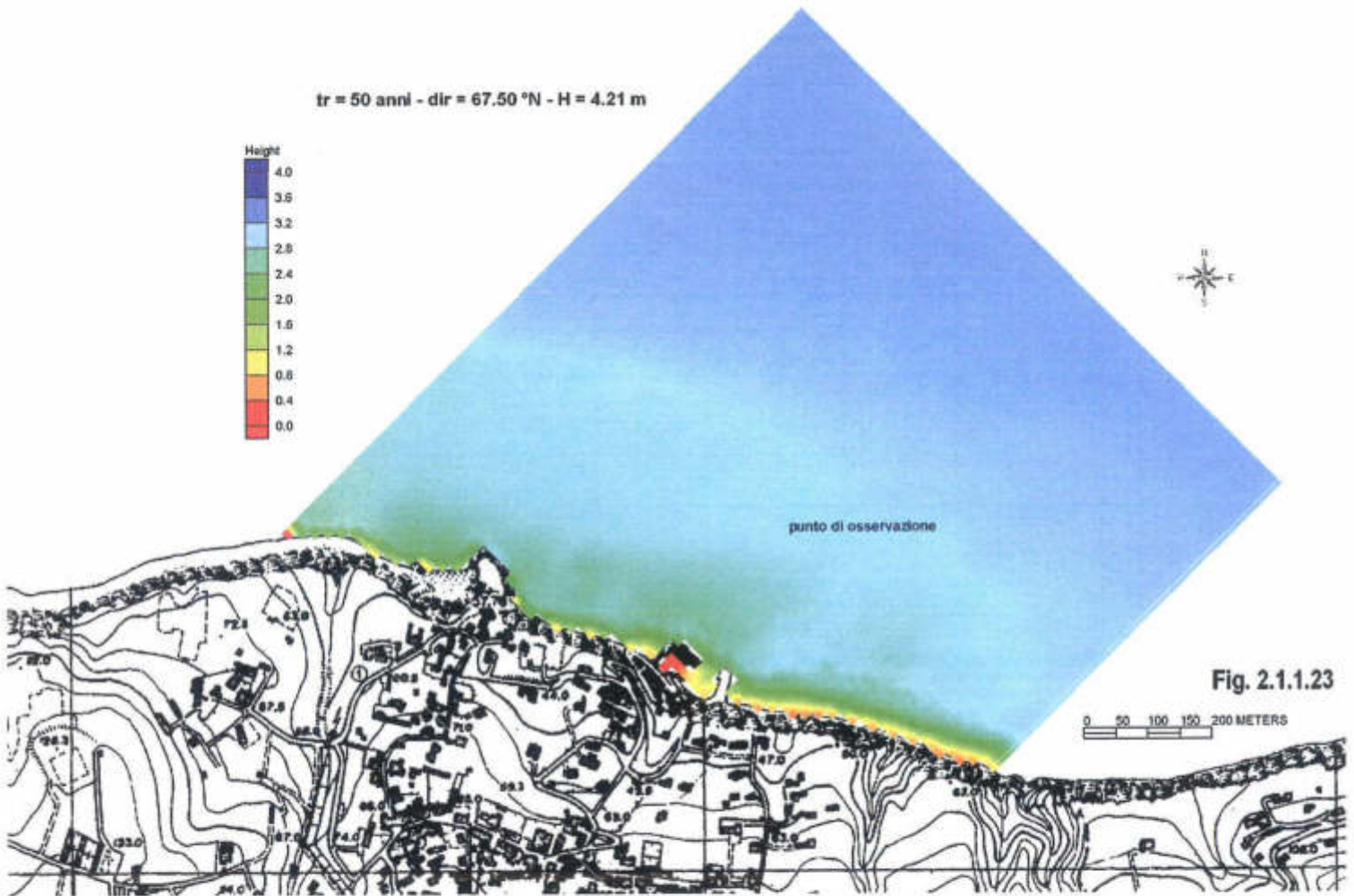
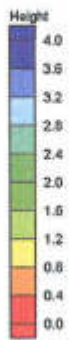


tr = 50 anni - dir = 45.00 °N - H = 5.30 m

Vector Legend



tr = 50 anni - dir = 67.50 °N - H = 4.21 m

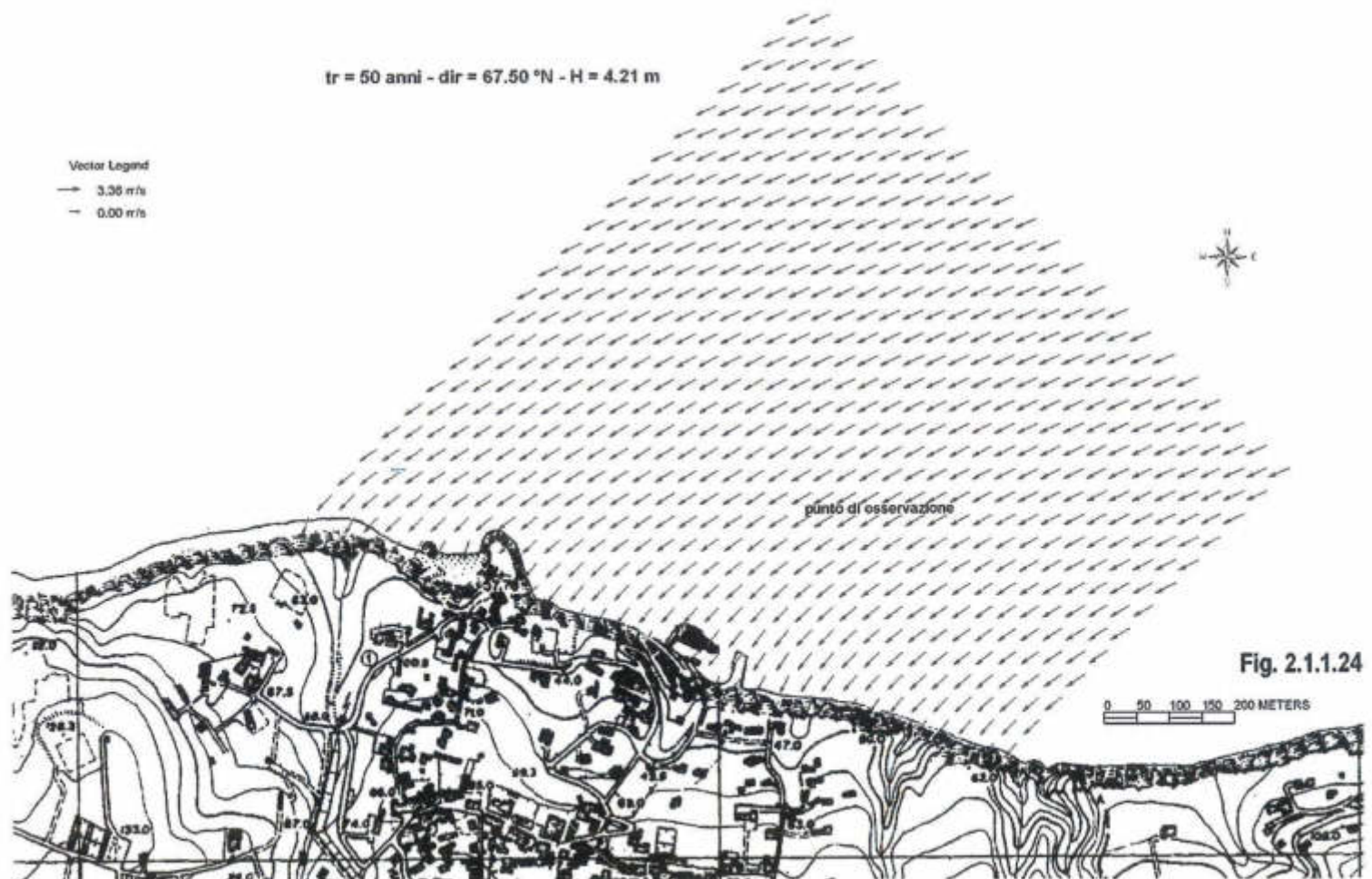


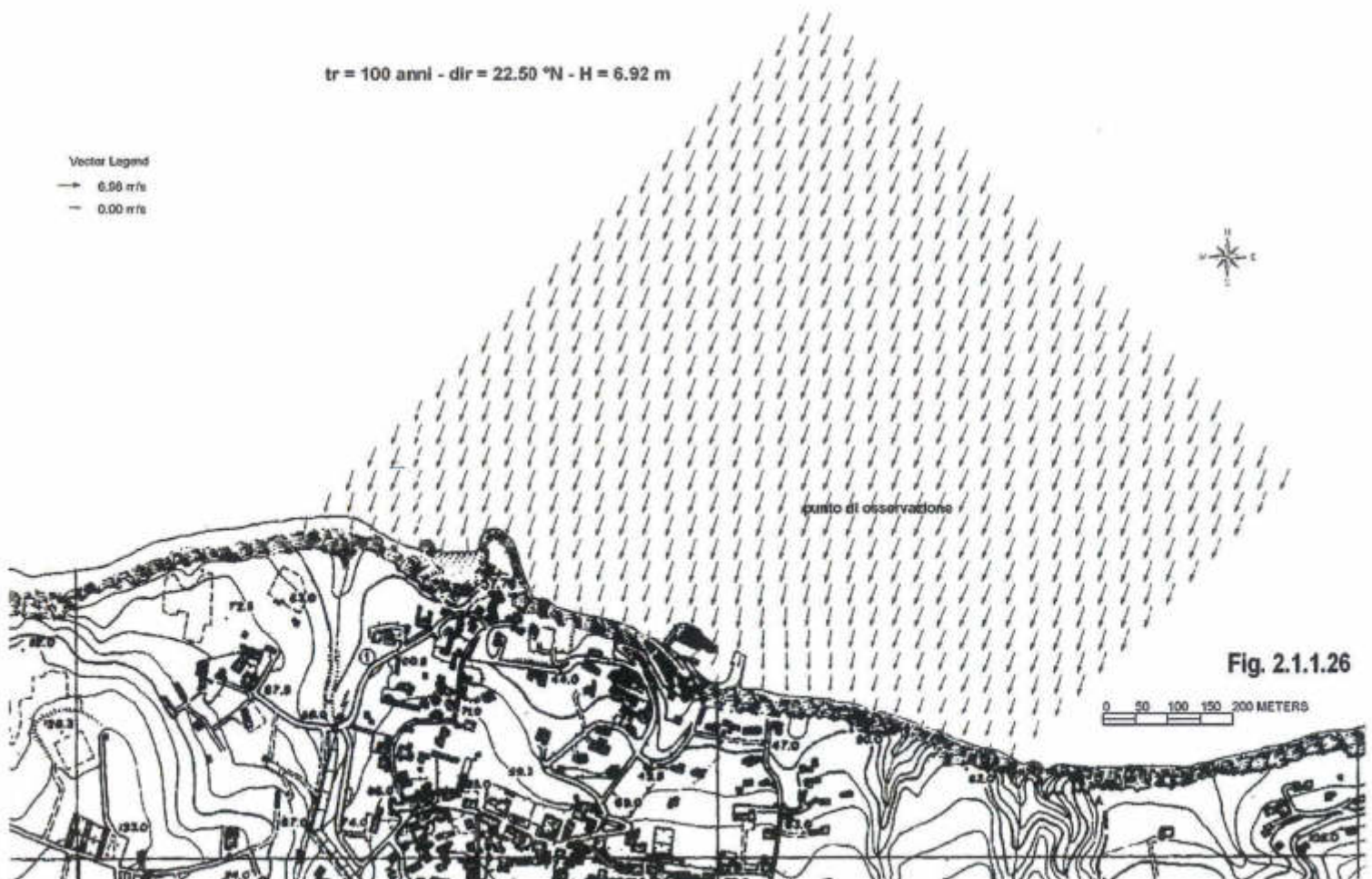
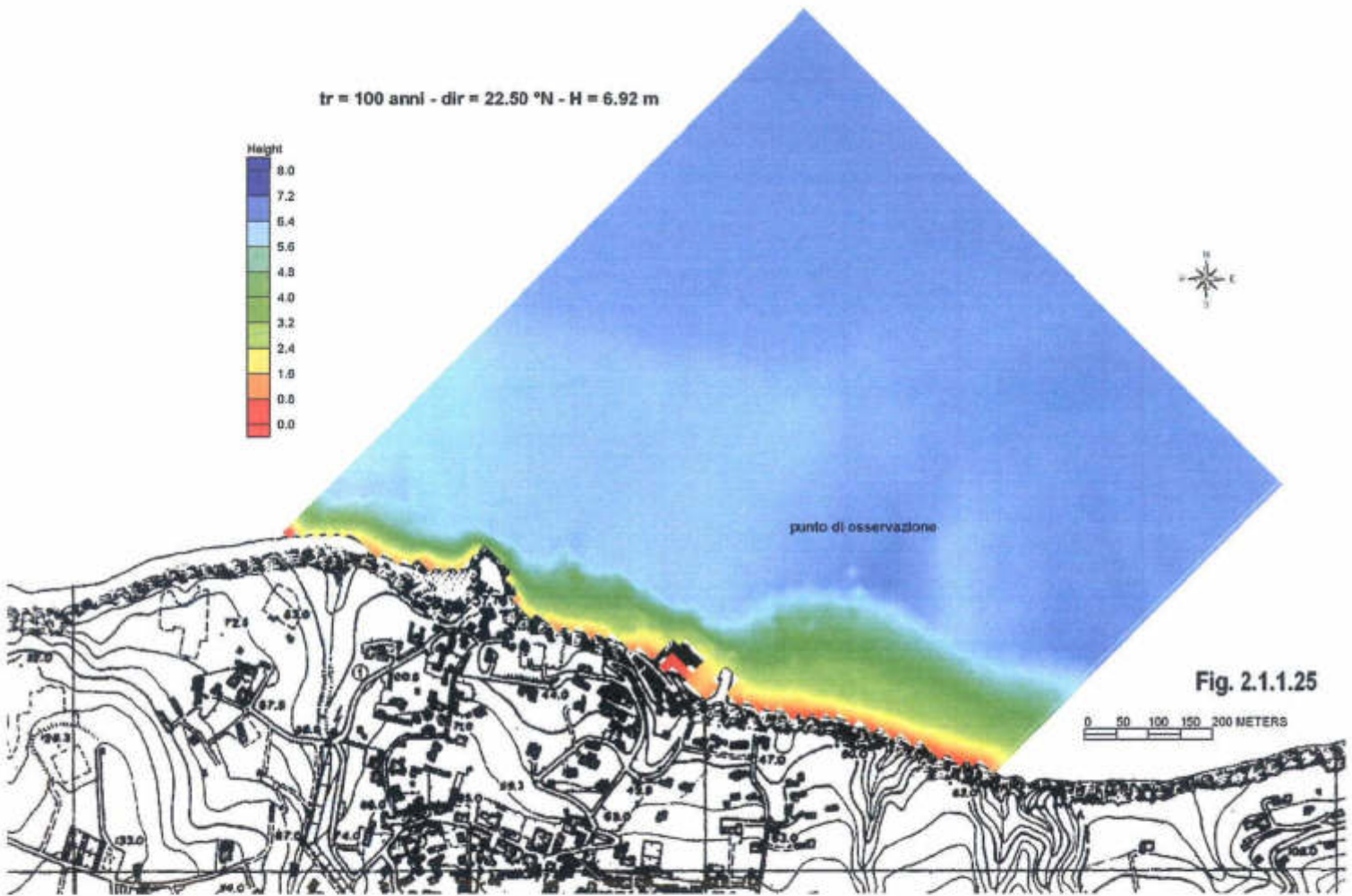
tr = 50 anni - dir = 67.50 °N - H = 4.21 m

Vector Legend

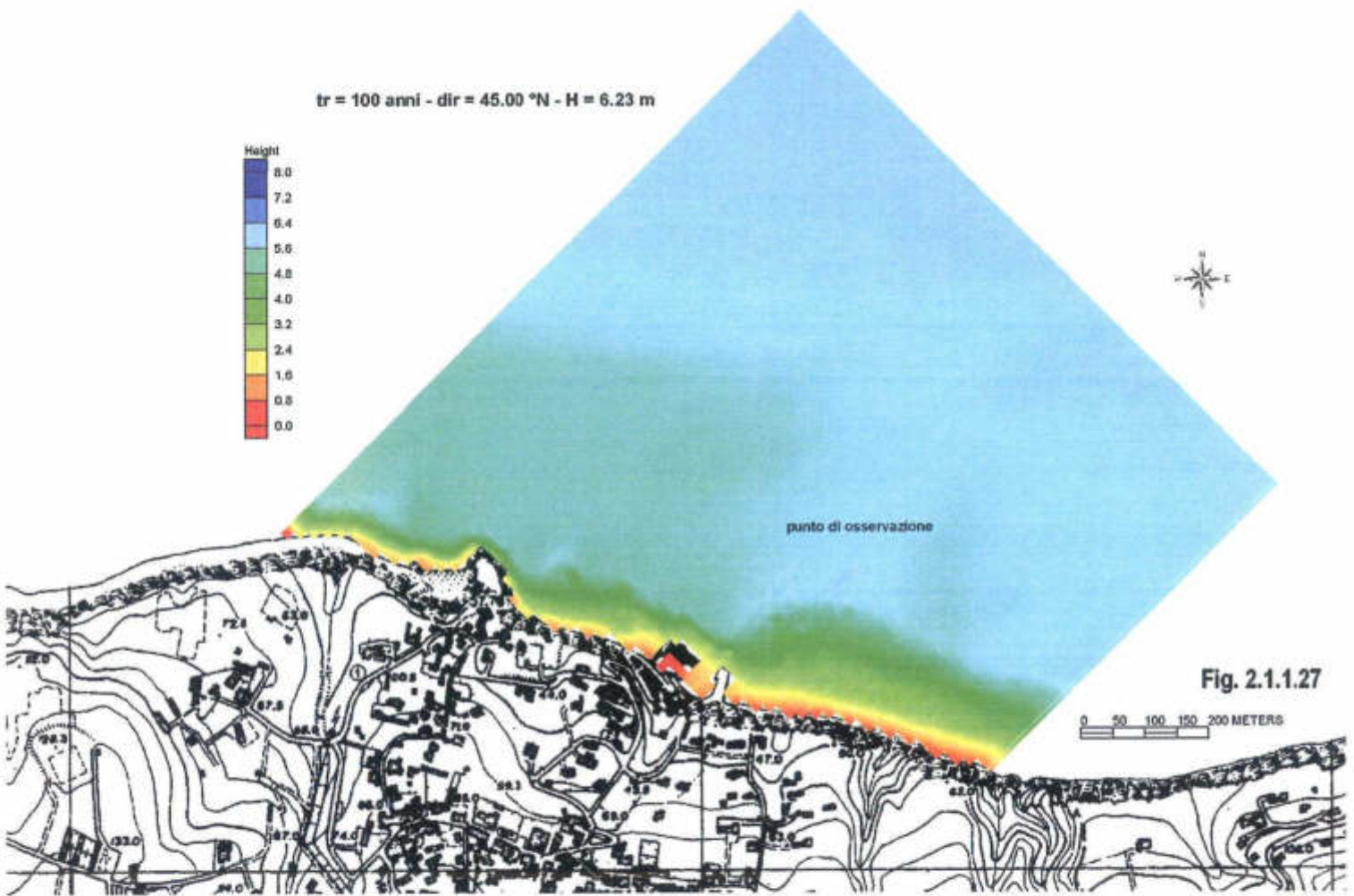
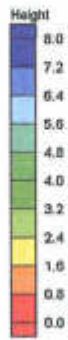
→ 3.36 m/s

— 0.00 m/s





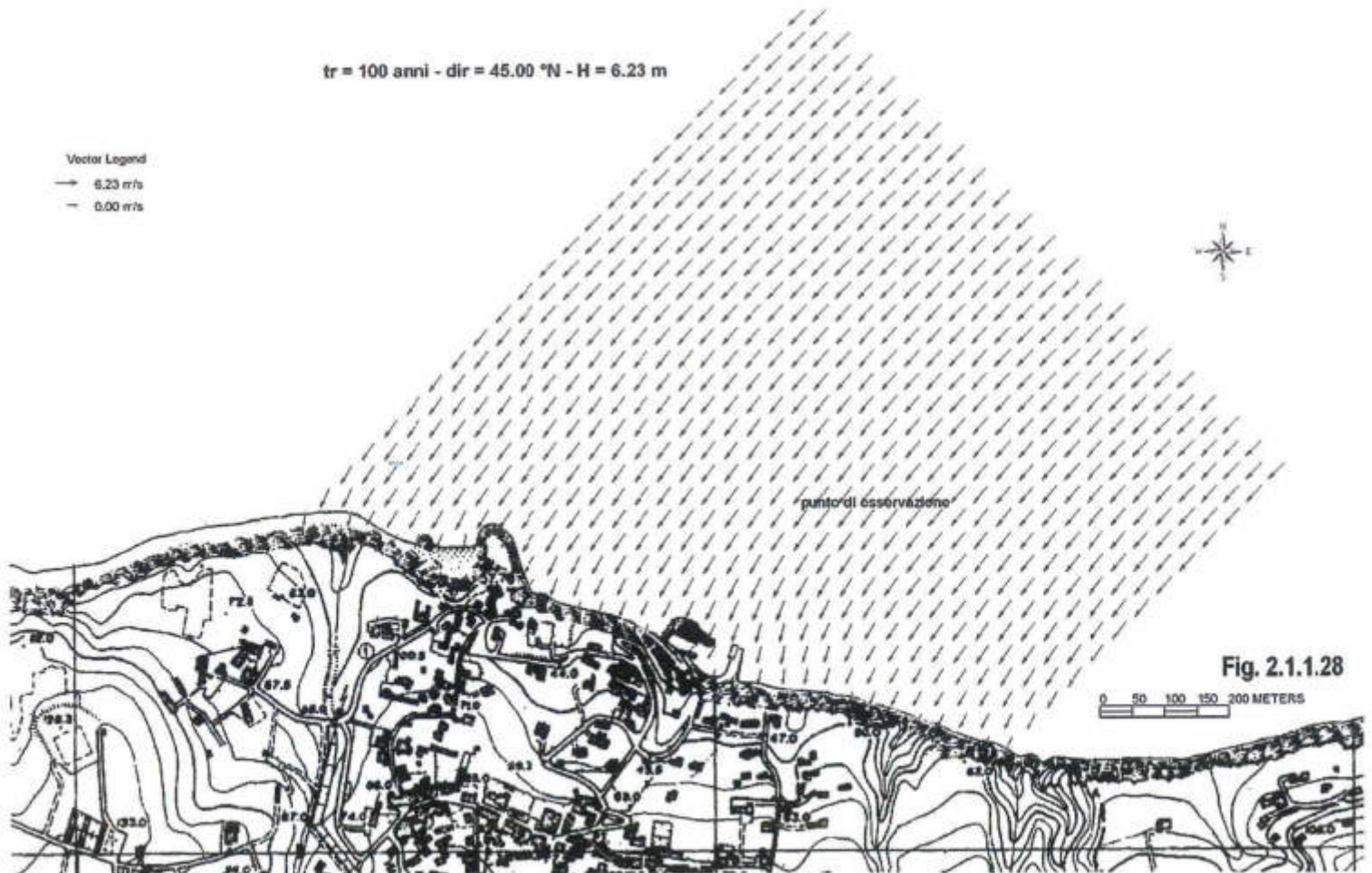
tr = 100 anni - dir = 45.00 °N - H = 6.23 m



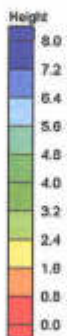
tr = 100 anni - dir = 45.00 °N - H = 6.23 m

Vector Legend

- 6.23 m/s
- 0.00 m/s



tr = 100 anni - dir = 67.50 °N - H = 4.21 m



punto di osservazione

Fig. 2.1.1.29

0 50 100 150 200 METERS

tr = 100 anni - dir = 67.50 °N - H = 4.21 m

Vector Legend

- 4.21 m/s
- - 0.00 m/s



punto di osservazione

Fig. 2.1.1.30

0 50 100 150 200 METERS

$tr = 3 \text{ anni} - dir = 315.00^\circ N - H = 3.98 \text{ m}$



Materials Legend
Breaking
No Breaking



punto di osservazione



Fig. 2.2.1

$tr = 3 \text{ anni} - dir = 337.50^\circ N - H = 3.80 \text{ m}$

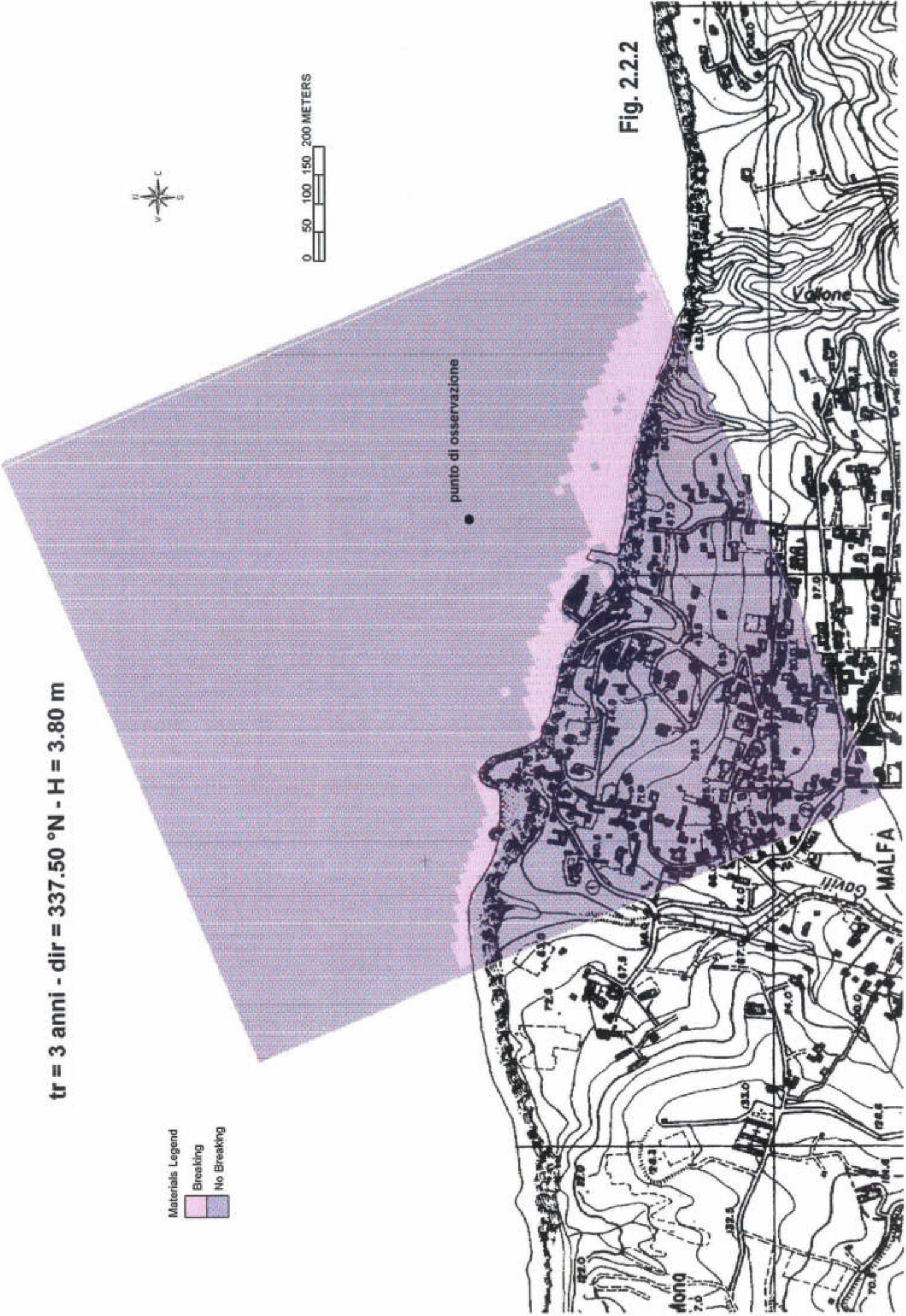
Materials Legend
Breaking
No Breaking



0 50 100 150 200 METERS

punto di osservazione

Fig. 2.2.2



$tr = 3 \text{ anni} - dir = 360.00 \text{ }^\circ N - H = 3.62 \text{ m}$

Materials Legend



0 50 100 150 200 METERS

punto di osservazione



Fig. 2.2.3

$tr = 3 \text{ anni} - dir = 22.50^\circ N - H = 2.96 \text{ m}$

Materials Legend
Breaking
No Breaking



punto di osservazione



Fig. 2.2.4

tr = 3 anni - dir = 45.00 °N - H = 2.49 m

Materials Legend
Breaking
No Breaking



punto di osservazione



Fig. 2.2.5

$tr = 3 \text{ anni} - dir = 67.50^\circ N - H = 1.84 \text{ m}$



Materials Legend
Breaking
No Breaking

punto di osservazione



Fig. 2.2.6

$tr = 10 \text{ anni} - dir = 315.00^\circ N - H = 5.77 \text{ m}$

Materials Legend

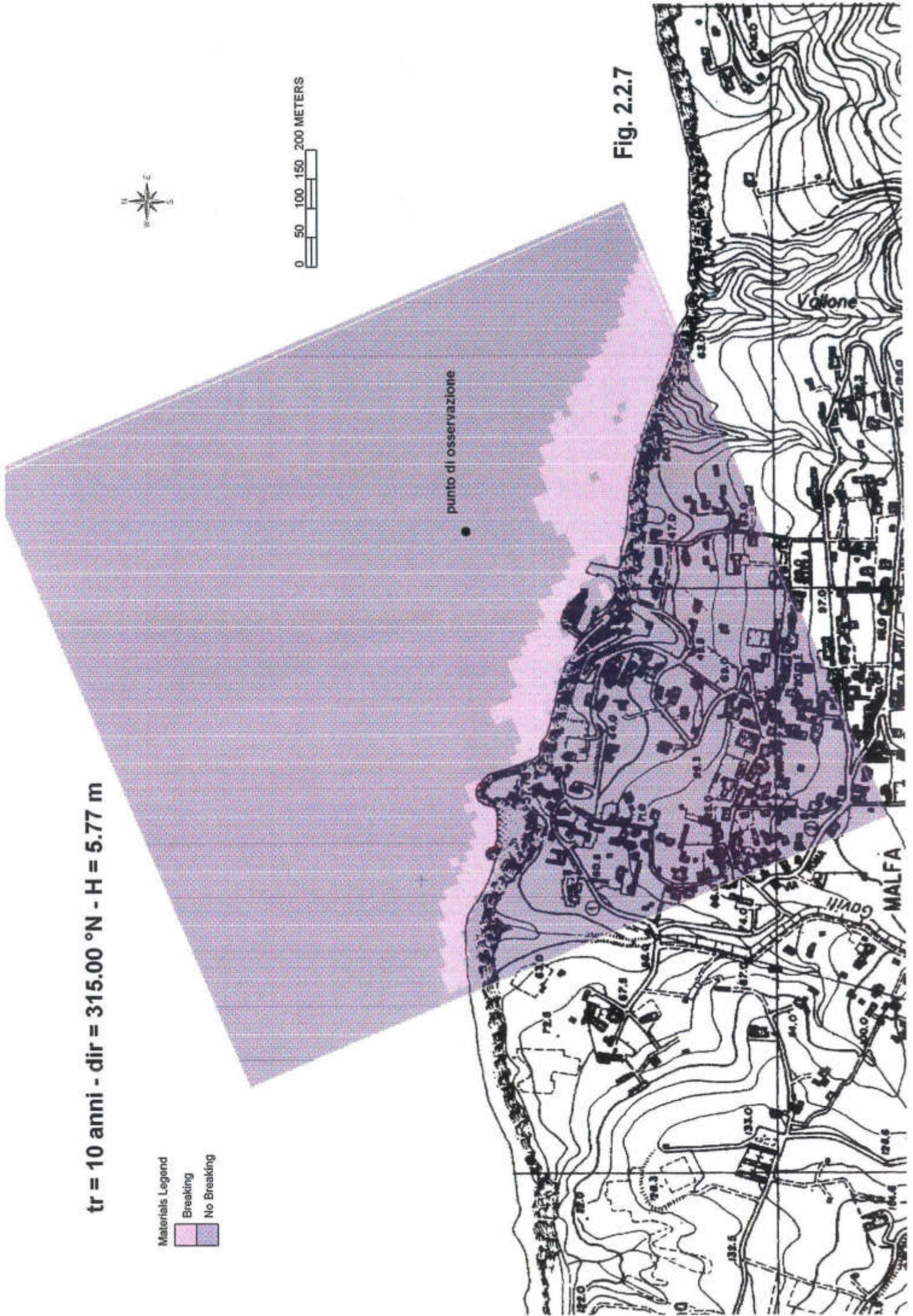
- Breaking
- No Breaking



0 50 100 150 200 METERS

punto di osservazione

Fig. 2.2.7



$t_r = 10 \text{ anni} - d_{ir} = 337.50 \text{ }^\circ\text{N} - H = 5.91 \text{ m}$

Materials Legend

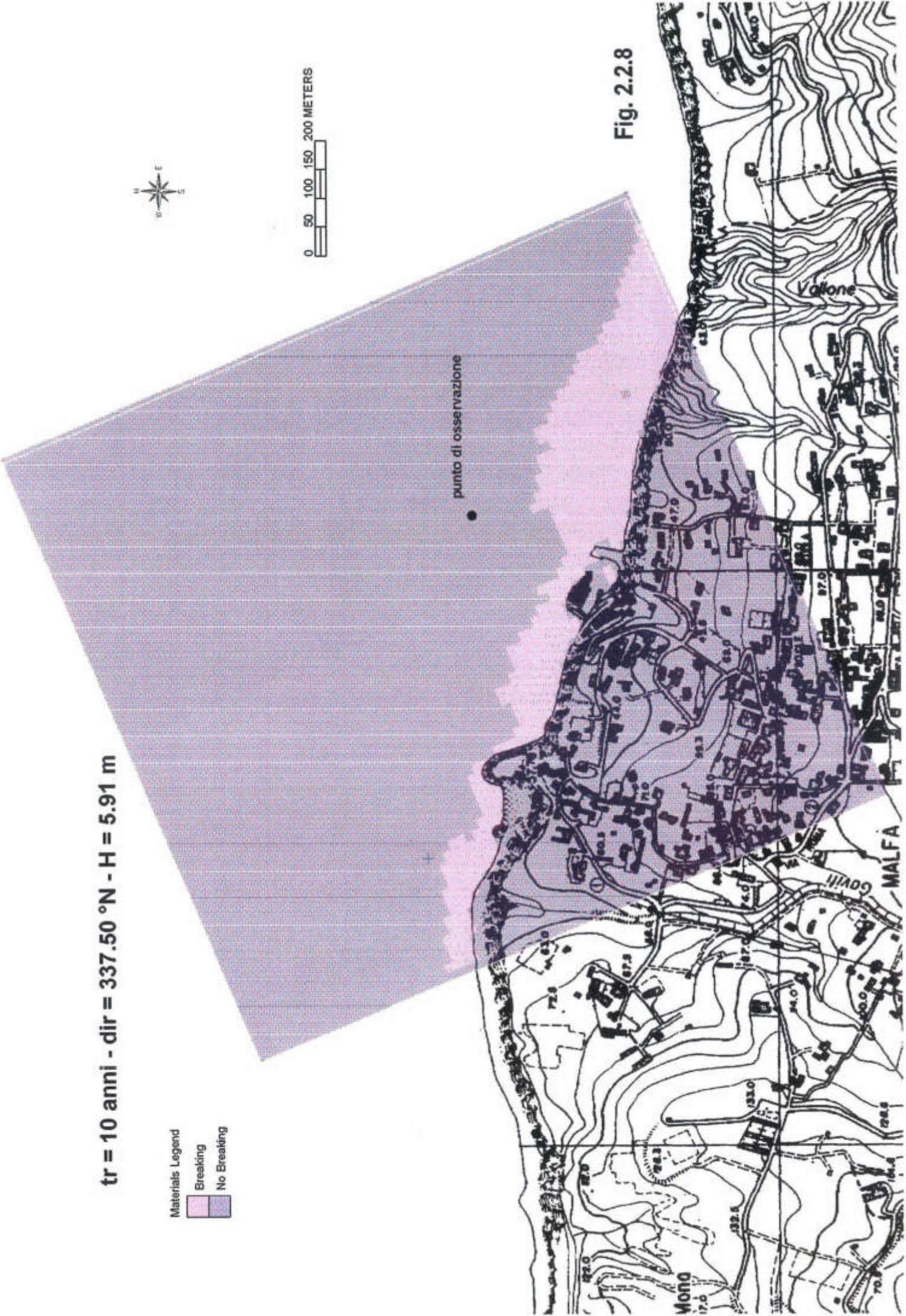
- Breaking
- No Breaking



0 50 100 150 200 METERS

punto di osservazione

Fig. 2.2.8



$tr = 10$ anni - $dir = 360.00$ °N - $H = 6.06$ m

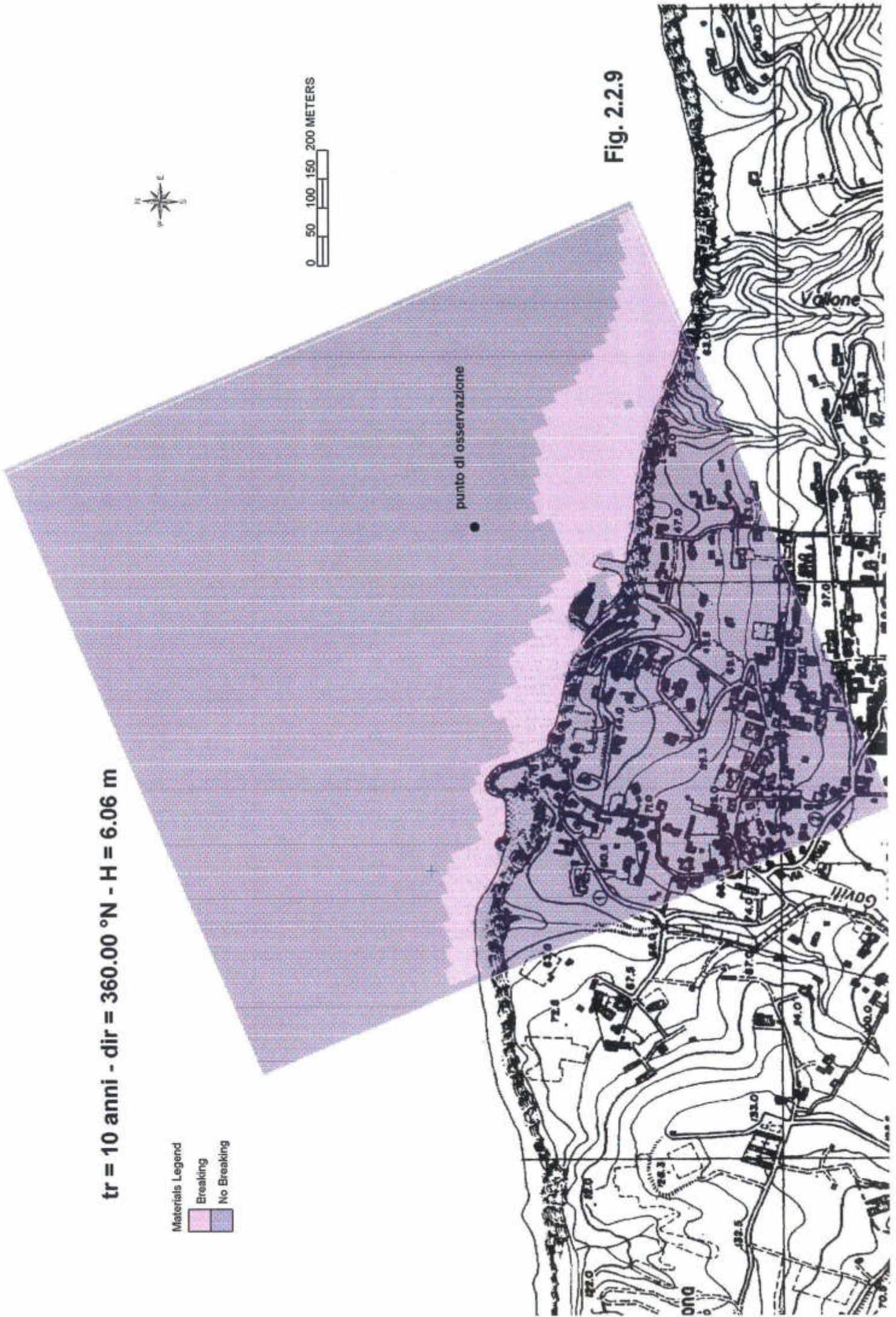
Materials Legend
Breaking
No Breaking



0 50 100 150 200 METERS

punto di osservazione

Fig. 2.2.9



$tr = 10$ anni - $dir = 22.50^\circ N$ - $H = 4.77$ m

Materials Legend
Breaking
No Breaking



punto di osservazione



Fig. 2.2.10

$tr = 10$ anni - $dir = 45.00^\circ N$ - $H = 3.51$ m

Materials Legend

- Breaking
- No Breaking



punto di osservazione

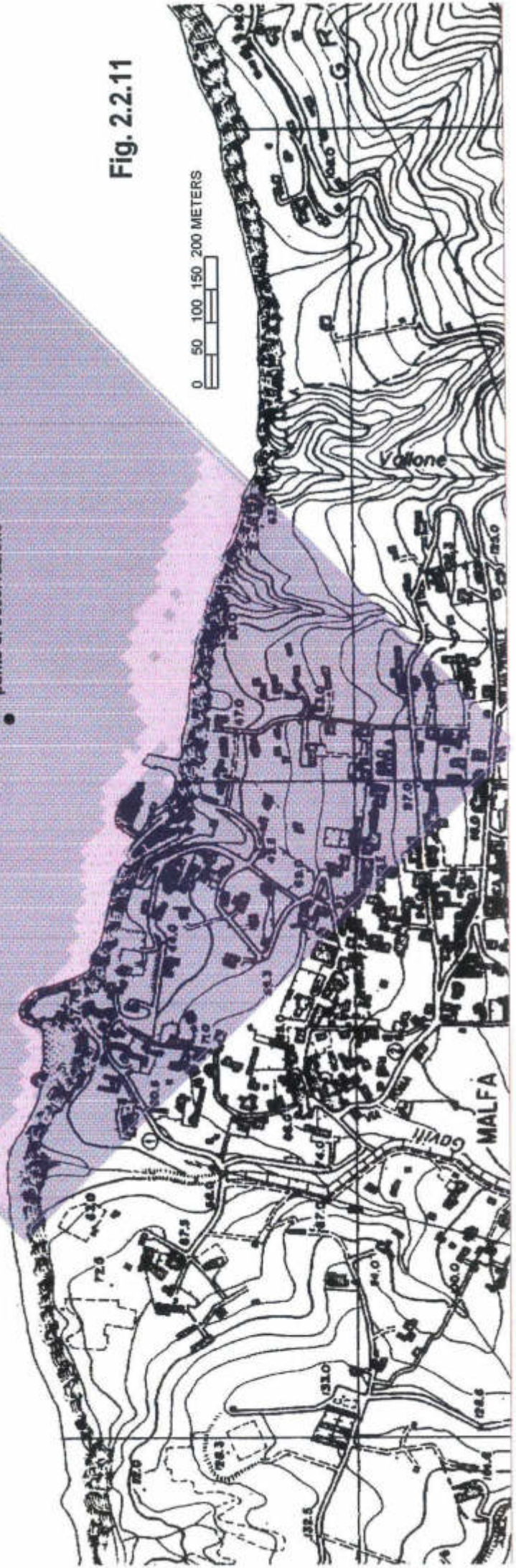


Fig. 2.2.11

$tr = 10$ anni - $dir = 67.50^\circ N$ - $H = 2.58$ m

Materials Legend
Breaking
No Breaking



punto di osservazione

Fig. 2.2.12

0 50 100 150 200 METERS



tr = 30 anni - dir = 315.00 °N - H = 7.38 m

Materials Legend

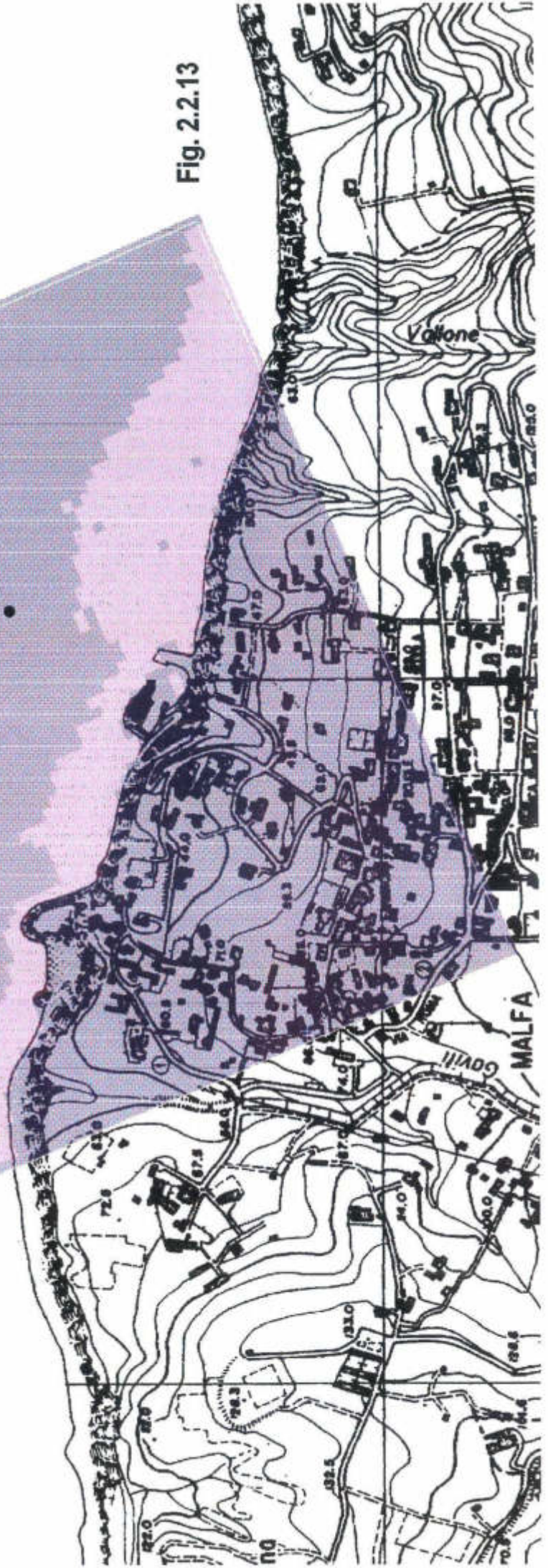
- Breaking
- No Breaking



0 50 100 150 200 METERS

punto di osservazione

Fig. 2.2.13



$tr = 30$ anni - $dir = 337.50$ °N - $H = 7.90$ m

Materials Legend

- Breaking
- No Breaking



0 50 100 150 200 METERS

punto di osservazione

Fig. 2.2.14



$tr = 30 \text{ anni} - dir = 360.00^\circ N - H = 8.63 \text{ m}$

Materials Legend

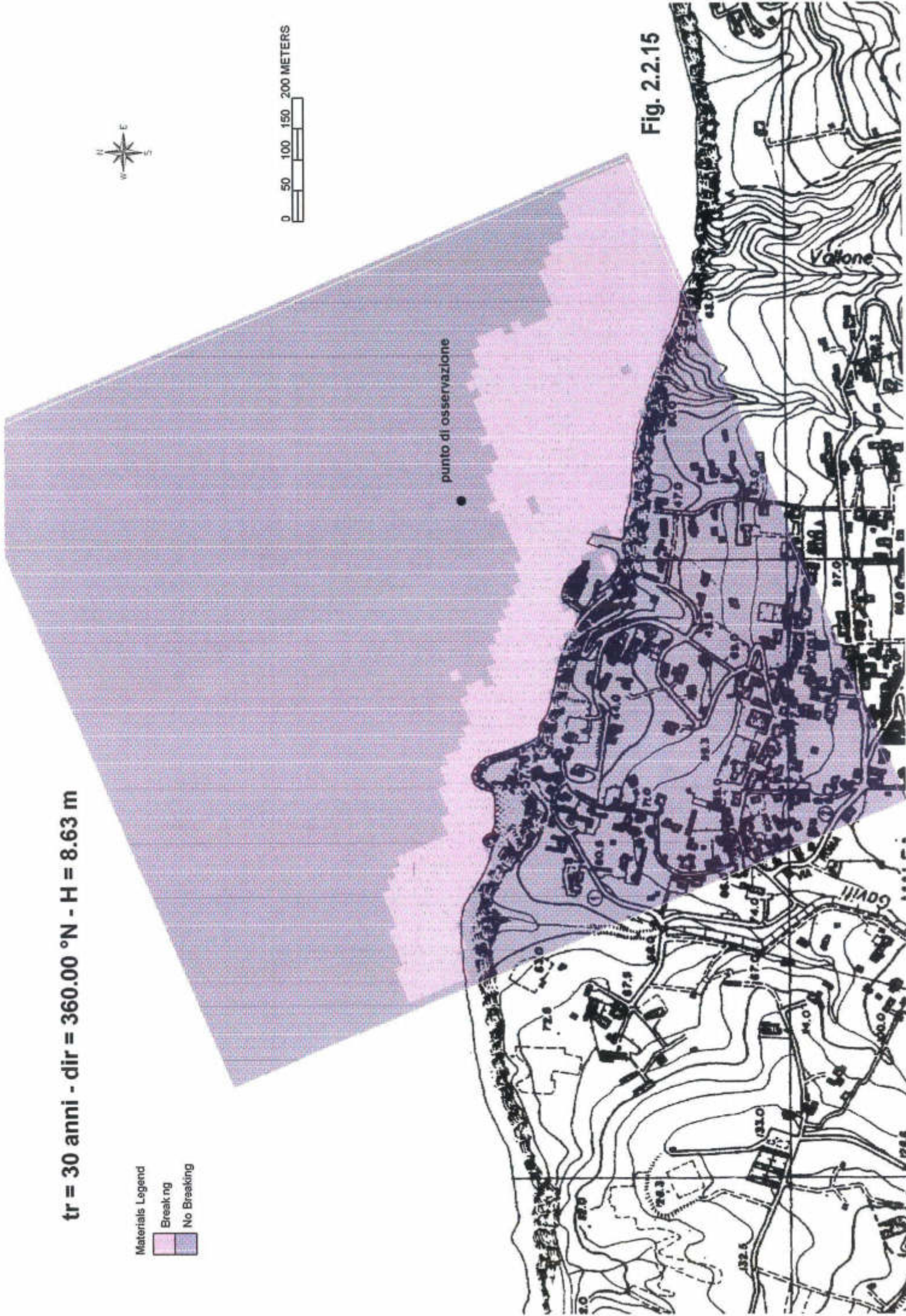
- Breaking
- No Breaking



0 50 100 150 200 METERS

punto di osservazione

Fig. 2.2.15



$tr = 30$ anni - $dir = 22.50^\circ N$ - $H = 5.88$ m

Materials Legend

- Breaking
- No Breaking



punto di osservazione

Fig. 2.2.16



$tr = 30$ anni - $dir = 45.00^\circ N$ - $H = 4.67$ m

Materials Legend

- Breaking
- No Breaking



punto di osservazione



Fig. 2.2.17

tr = 30 anni - dir = 67.50 °N - H = 3.36 m

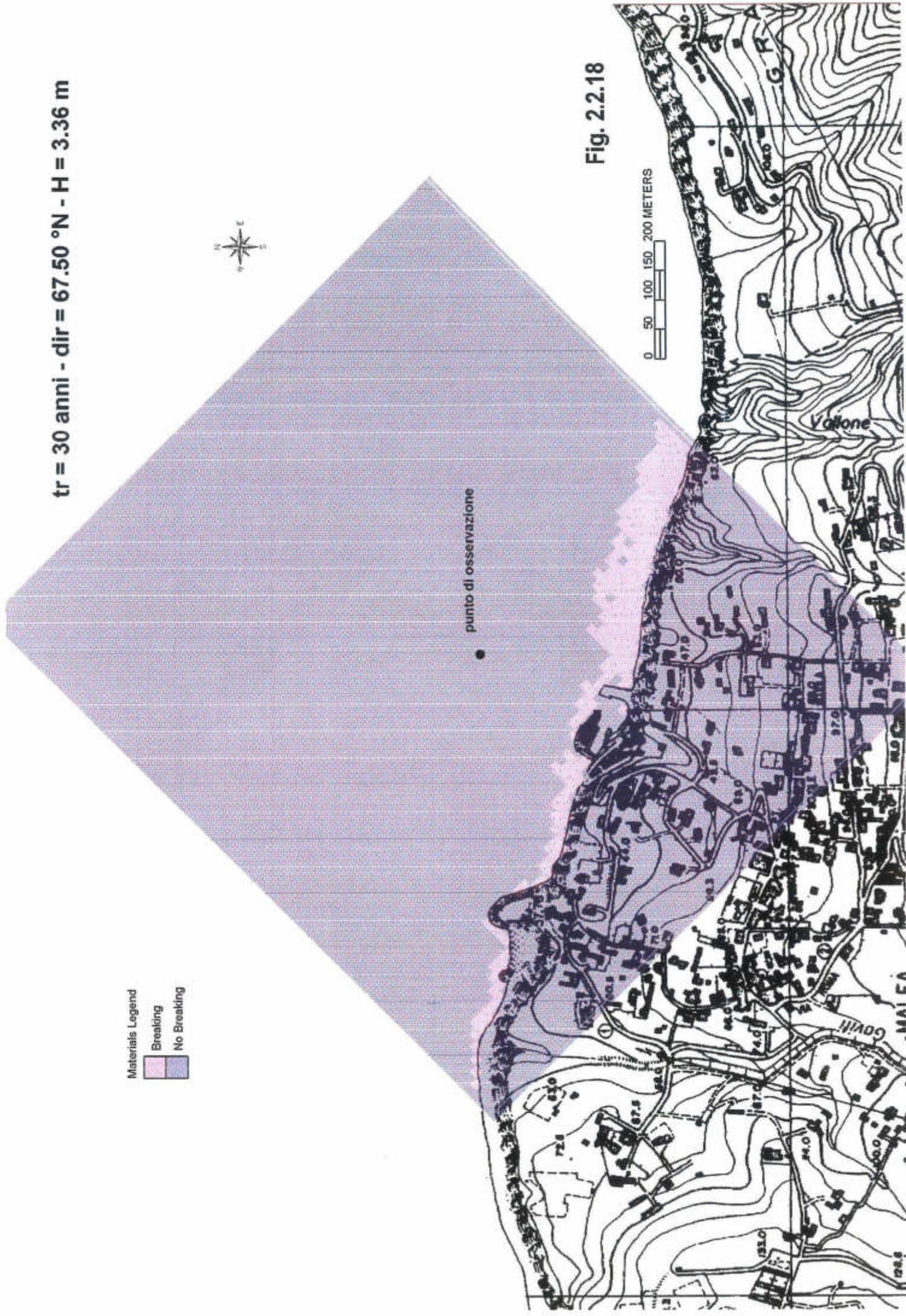
Materials Legend
Breaking
No Breaking



punto di osservazione

Fig. 2.2.18

0 50 100 150 200 METERS



tr = 50 anni - dir = 315.00 °N - H = 8.10 m

Materials Legend

-  Breaking
-  No Breaking



0 50 100 150 200 METERS

punto di osservazione

Fig. 2.2.19



tr = 50 anni - dir = 337.50 °N - H = 8.94 m

Materials Legend
Breaking
No Breaking



0 50 100 150 200 METERS

punto di osservazione

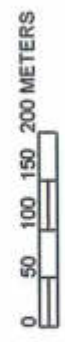


Fig. 2.2.20

$tr = 50$ anni - $dir = 360.00$ °N - $H = 9.87$ m

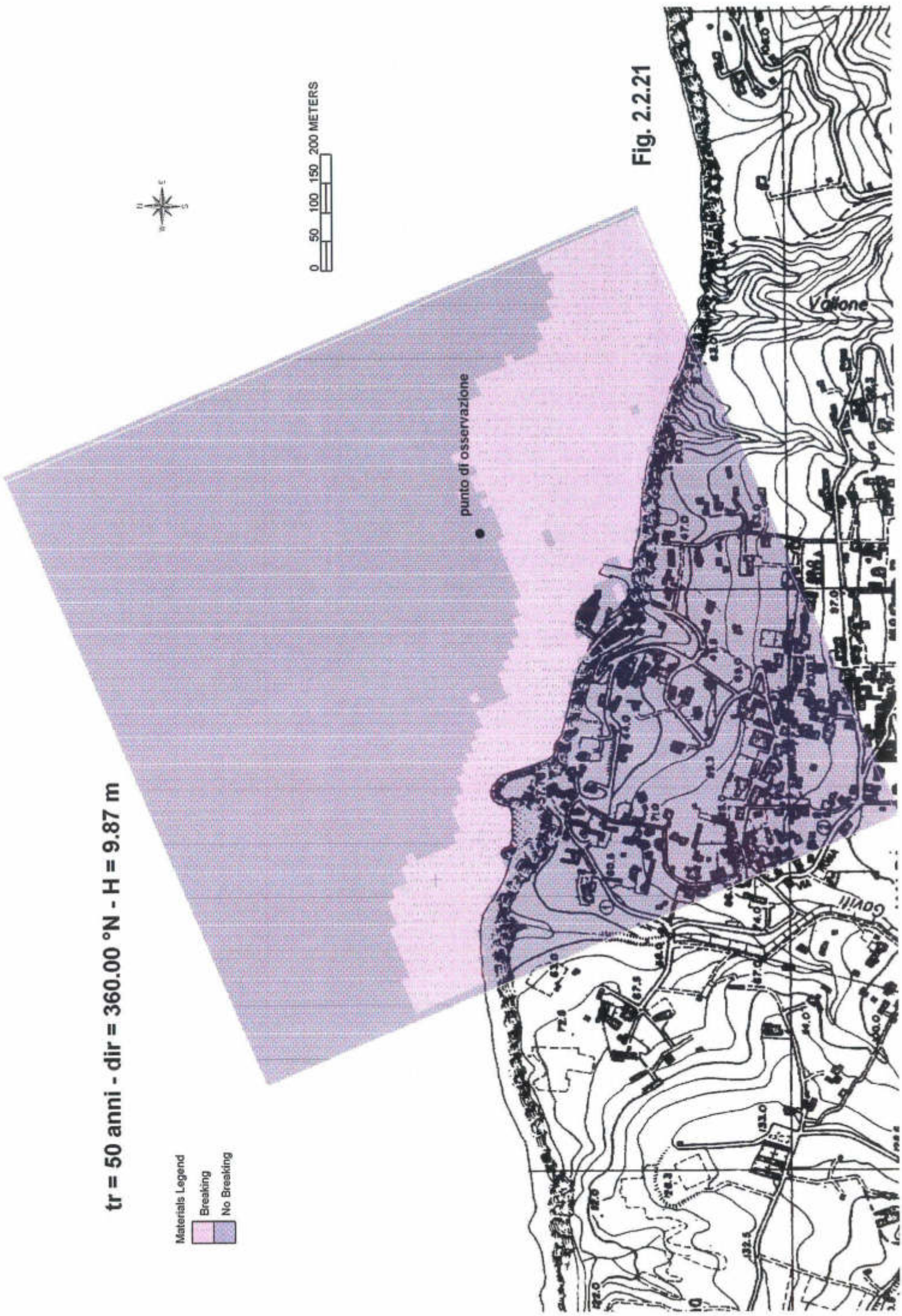
Materials Legend

- Breaking
- No Breaking



punto di osservazione

Fig. 2.2.21



tr = 50 anni - dir = 22.50 °N - H = 5.88 m

Materials Legend

- Breaking
- No Breaking



punto di osservazione



Fig. 2.2.22

tr = 50 anni - dir = 45.00 °N - H = 5.30 m

Materials Legend

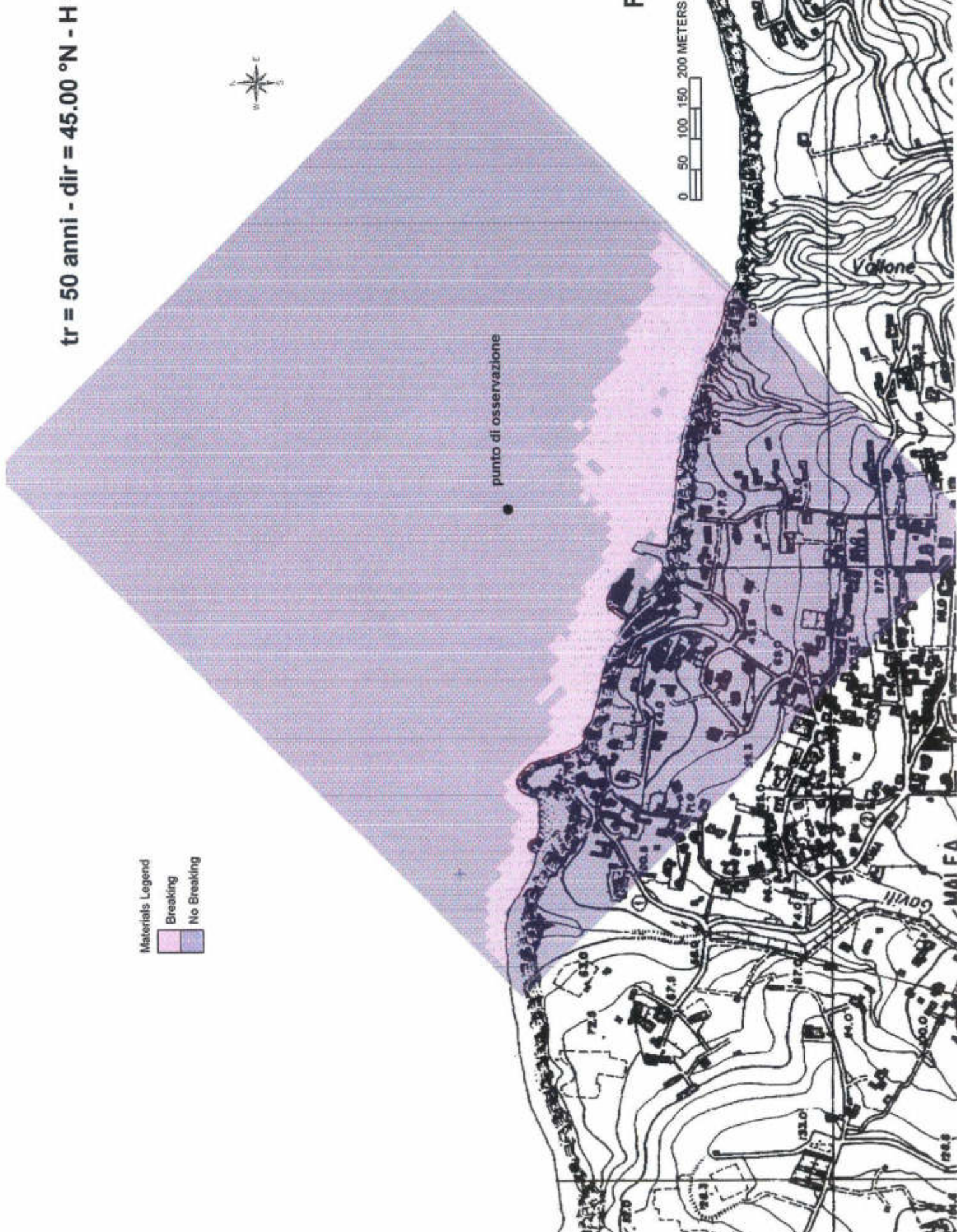
- Breaking
- No Breaking



punto di osservazione

Fig. 2.2.23

0 50 100 150 200 METERS



tr = 50 anni - dir = 67.50 °N - H = 3.36 m

Materials Legend
Breaking
No Breaking



punto di osservazione



Fig. 2.2.24

$tr = 100$ anni - dir = $315.00^\circ N$ - $H = 9.15$ m

Materials Legend

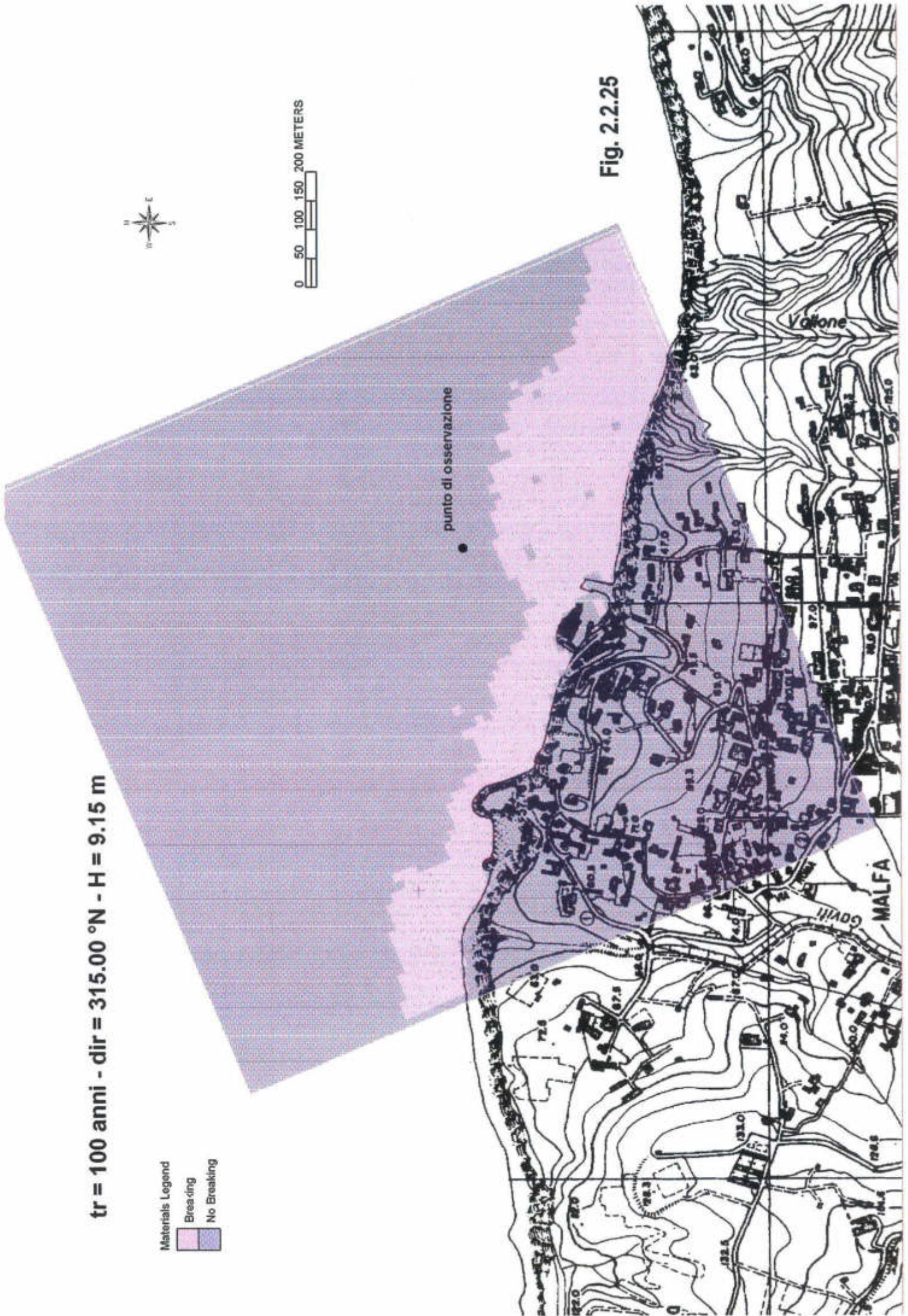
- Breaking
- No Breaking



0 50 100 150 200 METERS

punto di osservazione

Fig. 2.2.25



$tr = 100$ anni - $dir = 337.50^\circ N$ - $H = 10.31$ m

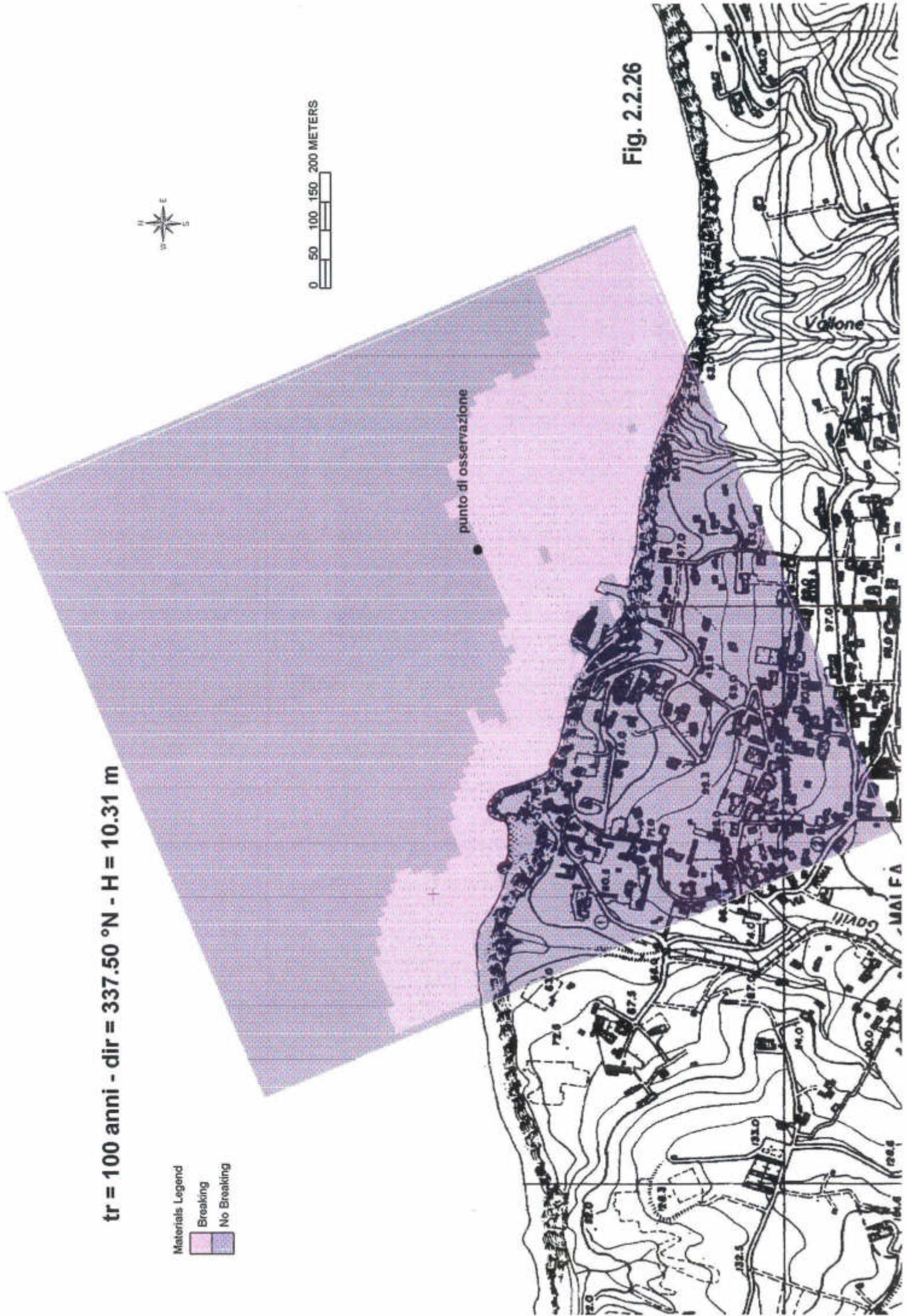
Materials Legend
Breaking
No Breaking



0 50 100 150 200 METERS

punto di osservazione

Fig. 2.2.26



tr = 100 anni - dir = 360.00 °N - H = 11.62 m

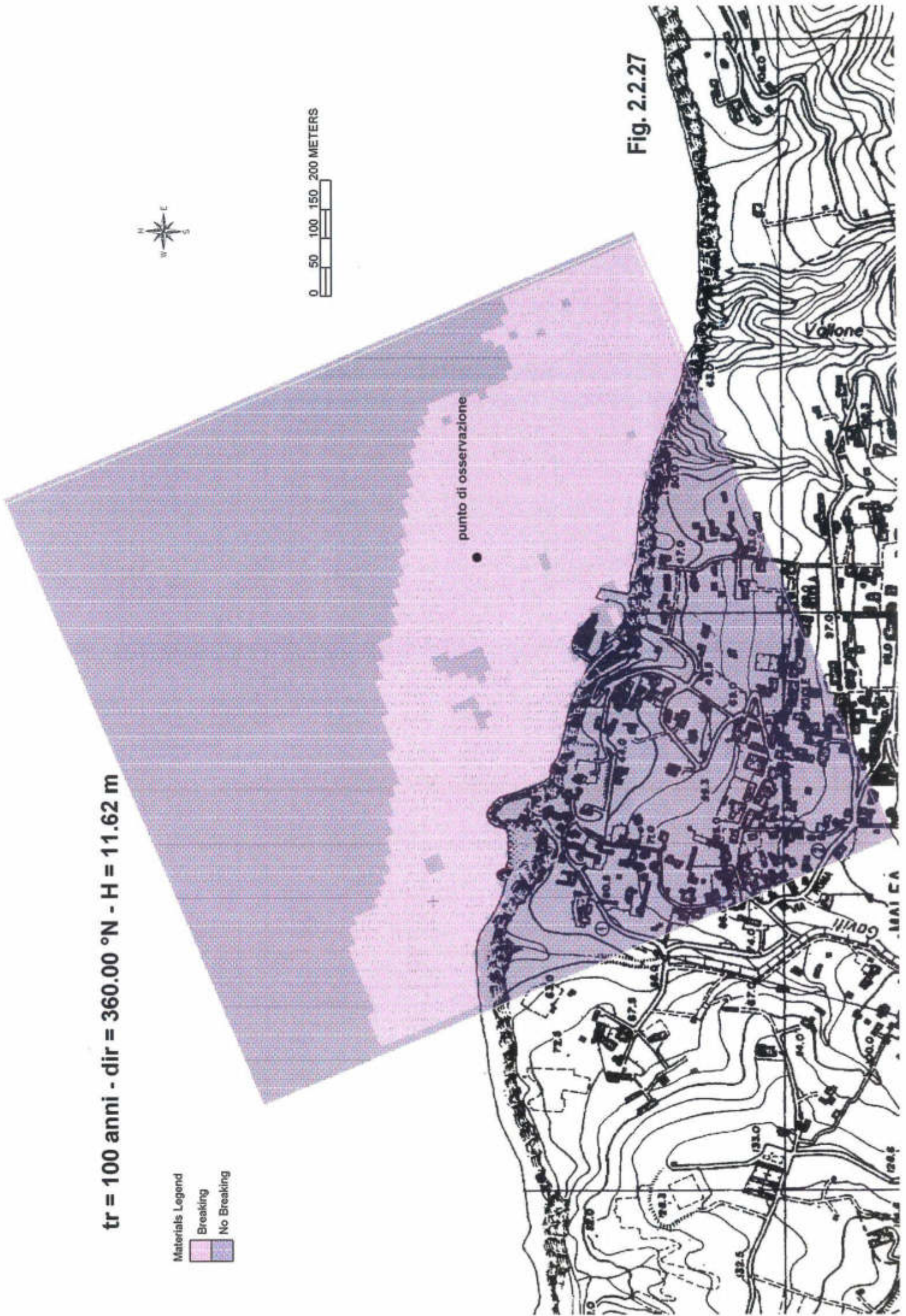
Materials Legend
Breaking
No Breaking



0 50 100 150 200 METERS

punto di osservazione

Fig. 2.2.27



$tr = 100$ anni - $dir = 22.50^\circ N$ - $H = 6.92$ m

Materials Legend

- Breaking
- No Breaking



punto di osservazione



Fig. 2.2.28

$tr = 100$ anni - $dir = 45.00$ °N - $H = 6.23$ m

Materials Legend
Breaking
No Breaking



punto di osservazione



Fig. 2.2.29

$tr = 100$ anni - $dir = 67.50^\circ N$ - $H = 4.21$ m

Materials Legend

- Breaking
- No Breaking



punto di osservazione

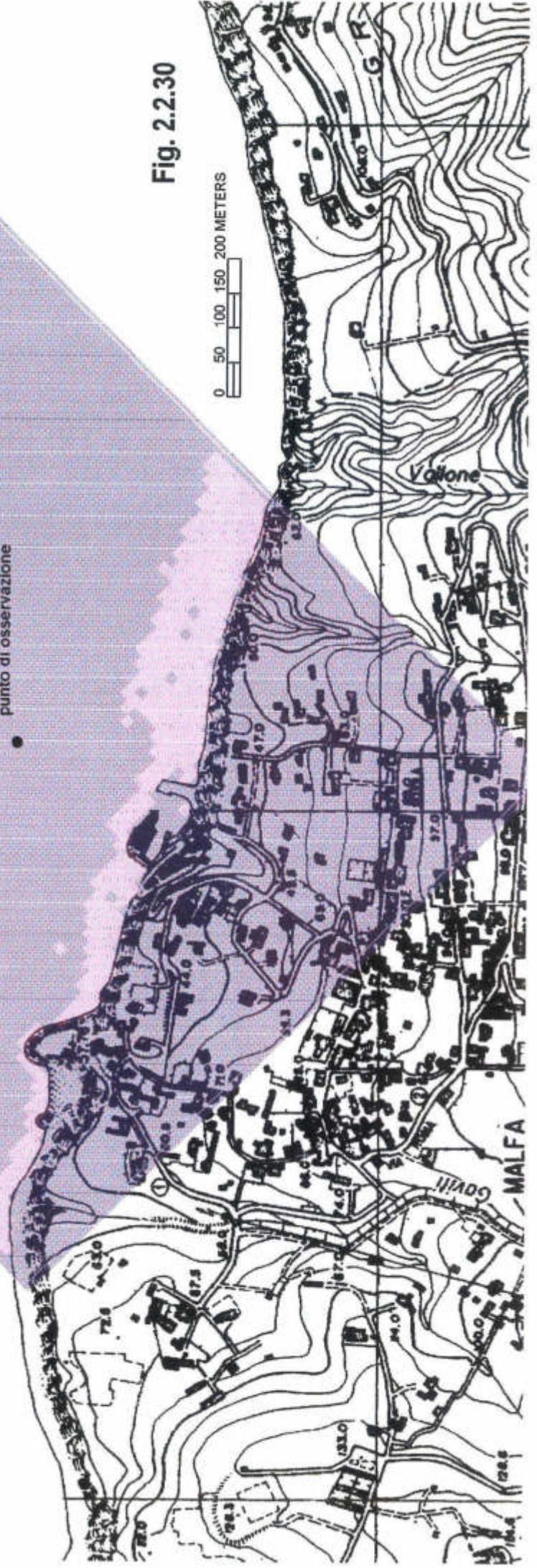


Fig. 2.2.30

ALLEGATO B

MODELLO NUMERICO CGWAVE

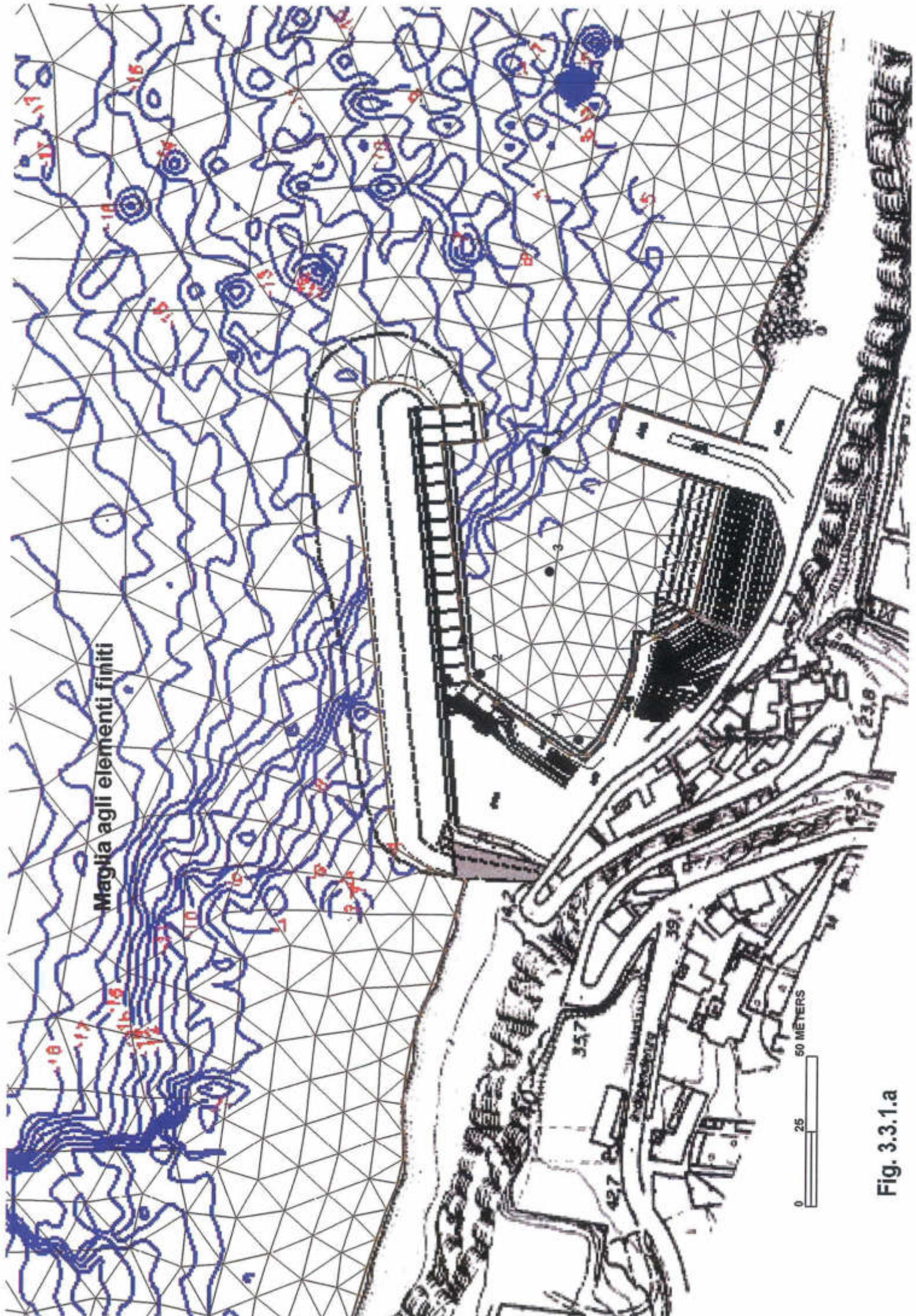


Fig. 3.3.1.a

Profondità (m)

30.0
28.0
26.0
24.0
22.0
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0

Batimetria

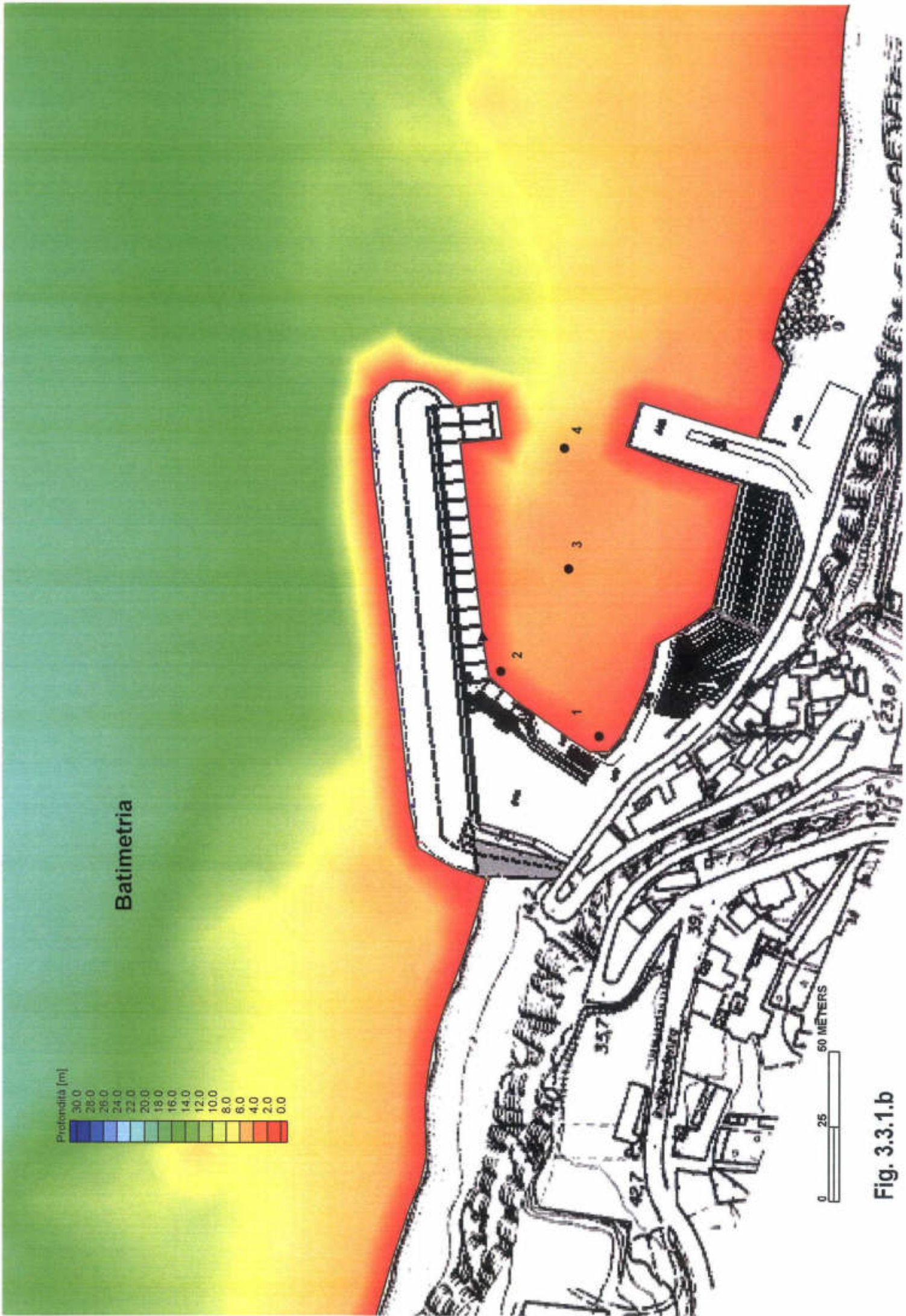
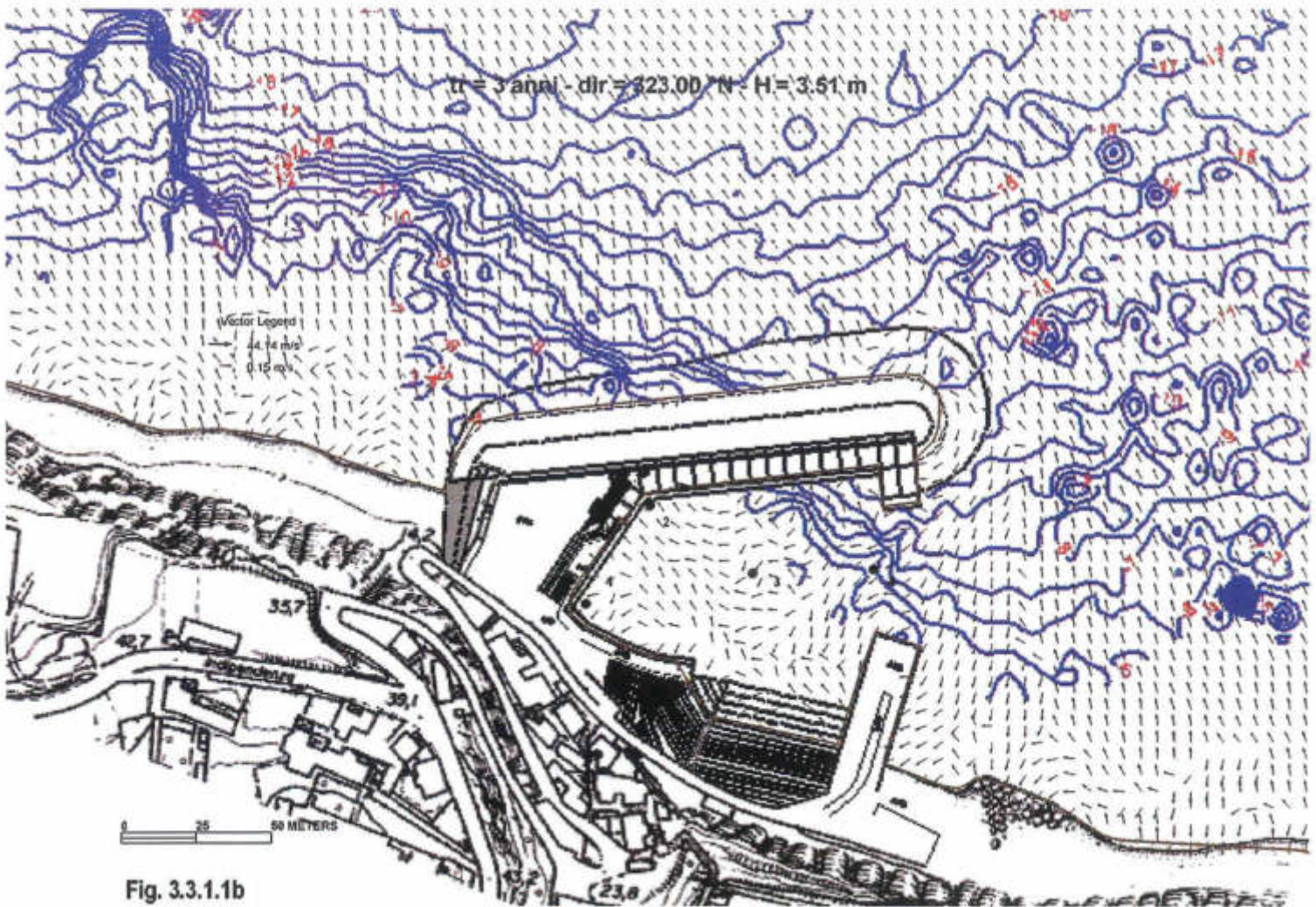
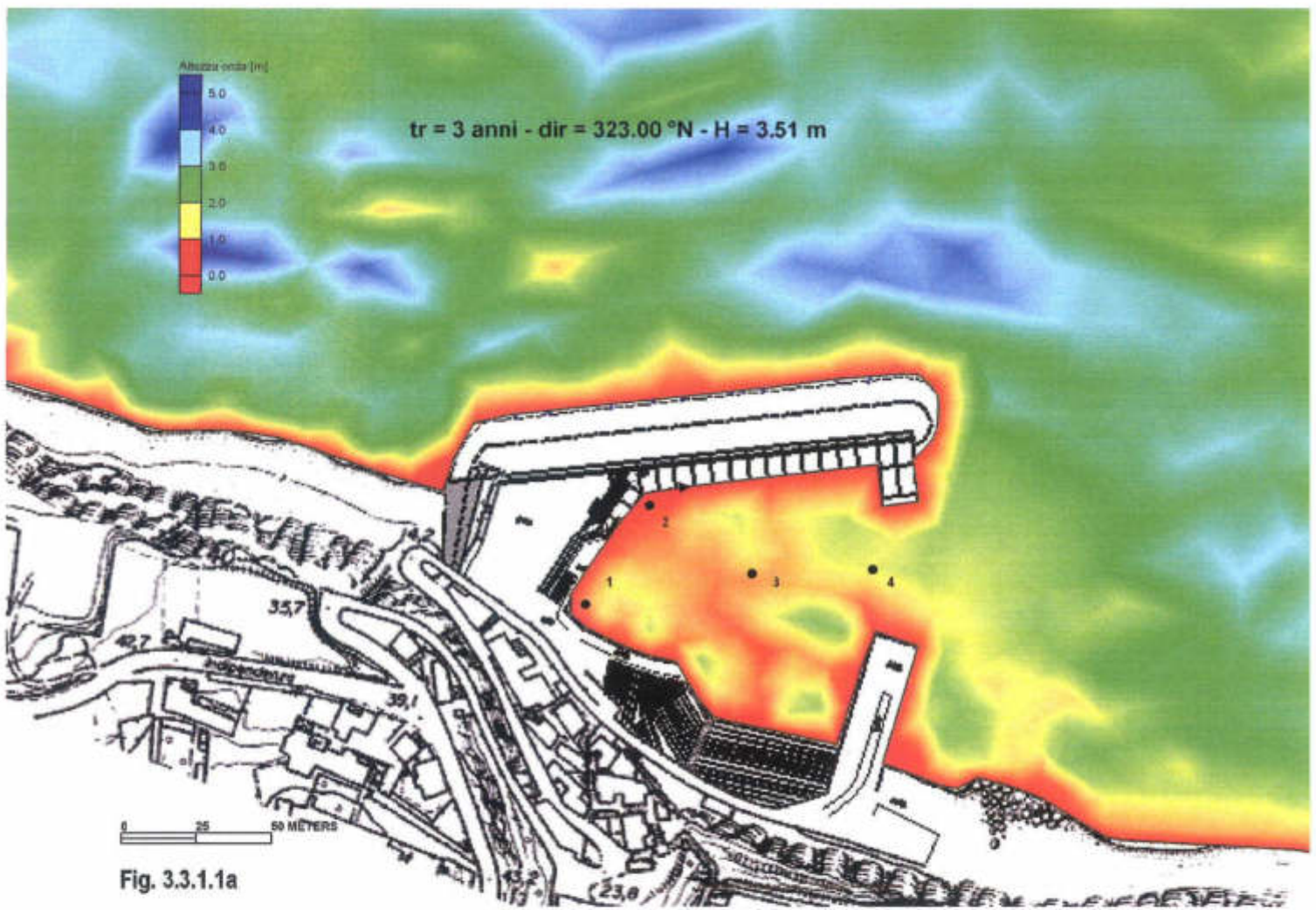
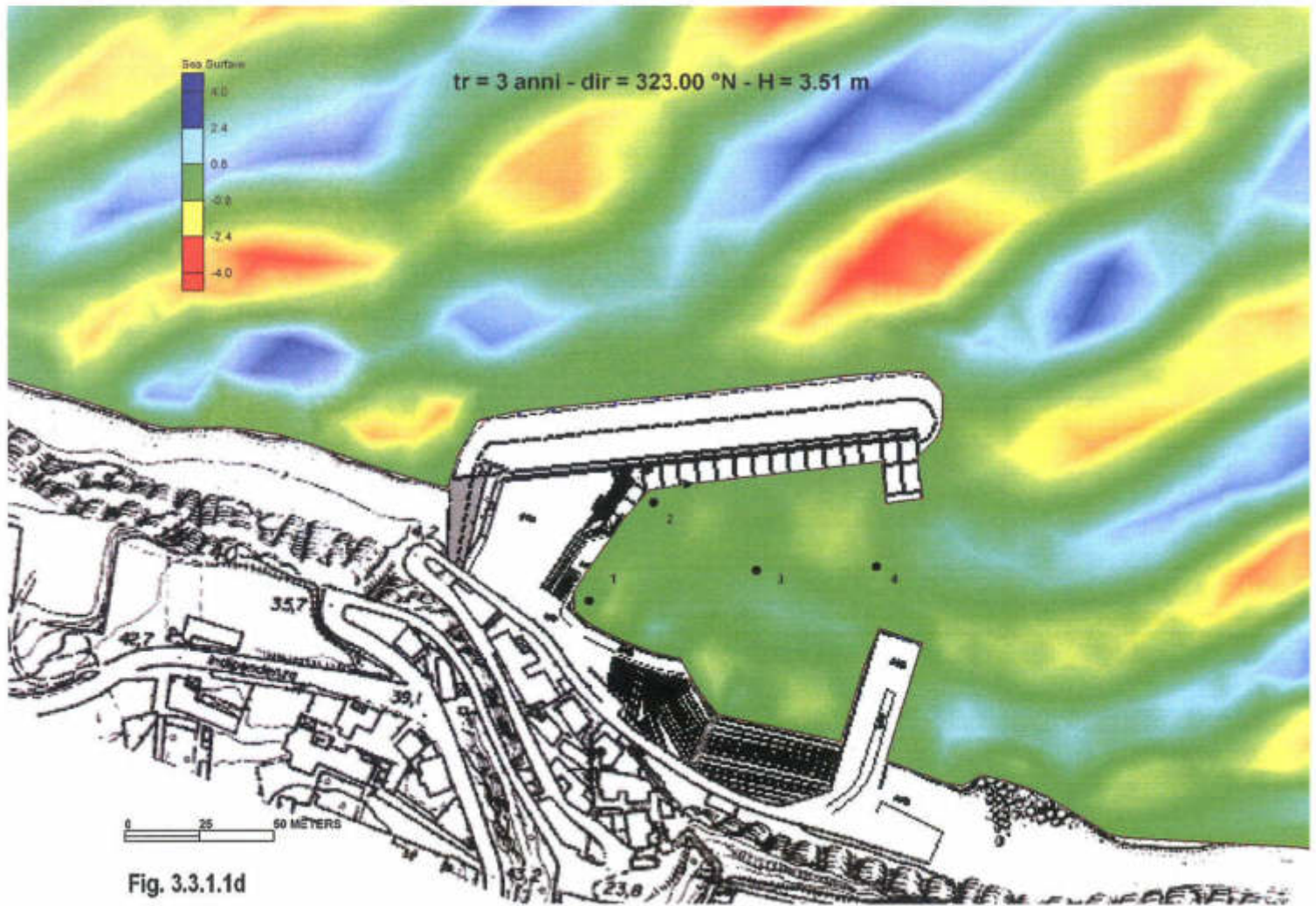
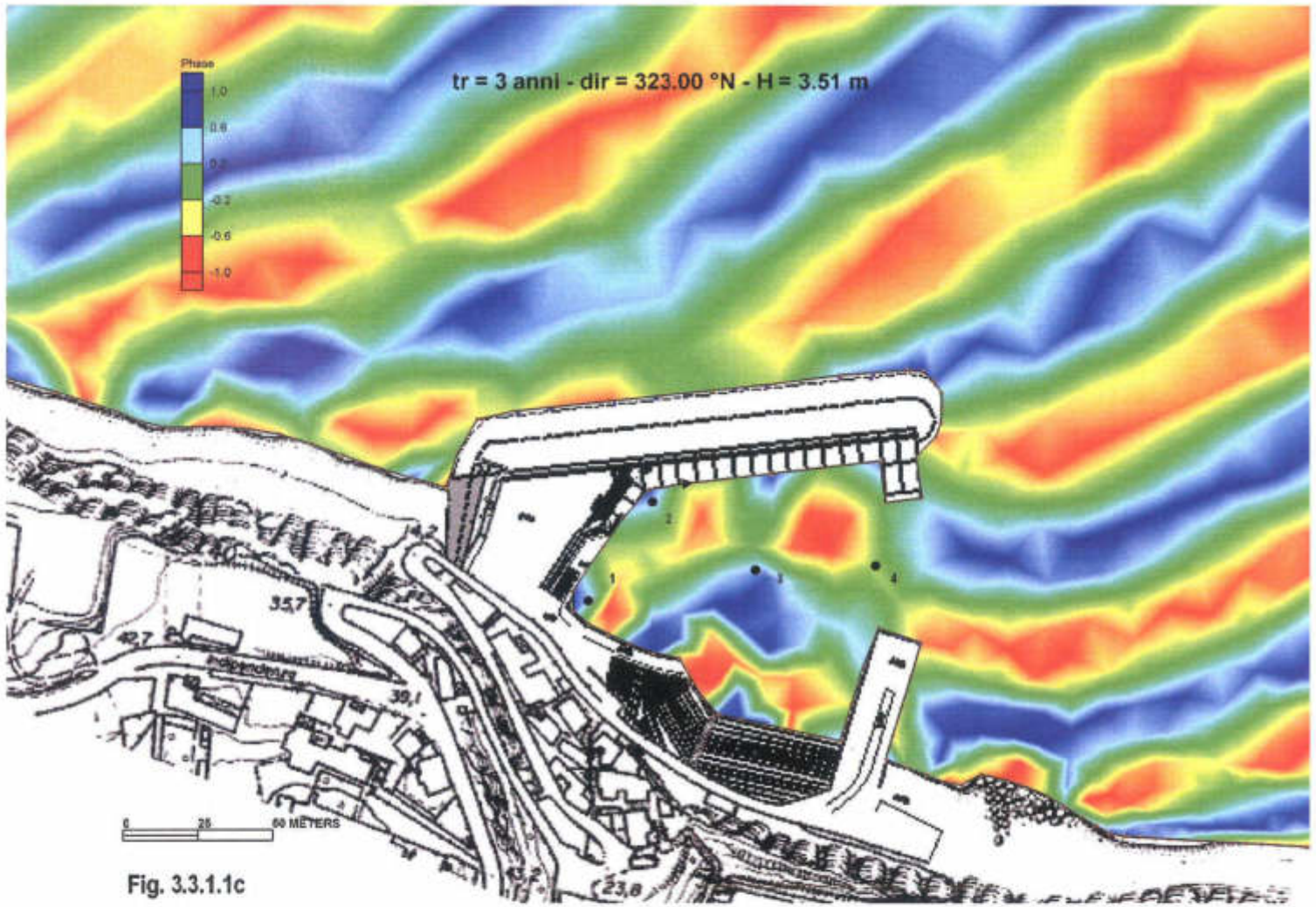


Fig. 3.3.1.b





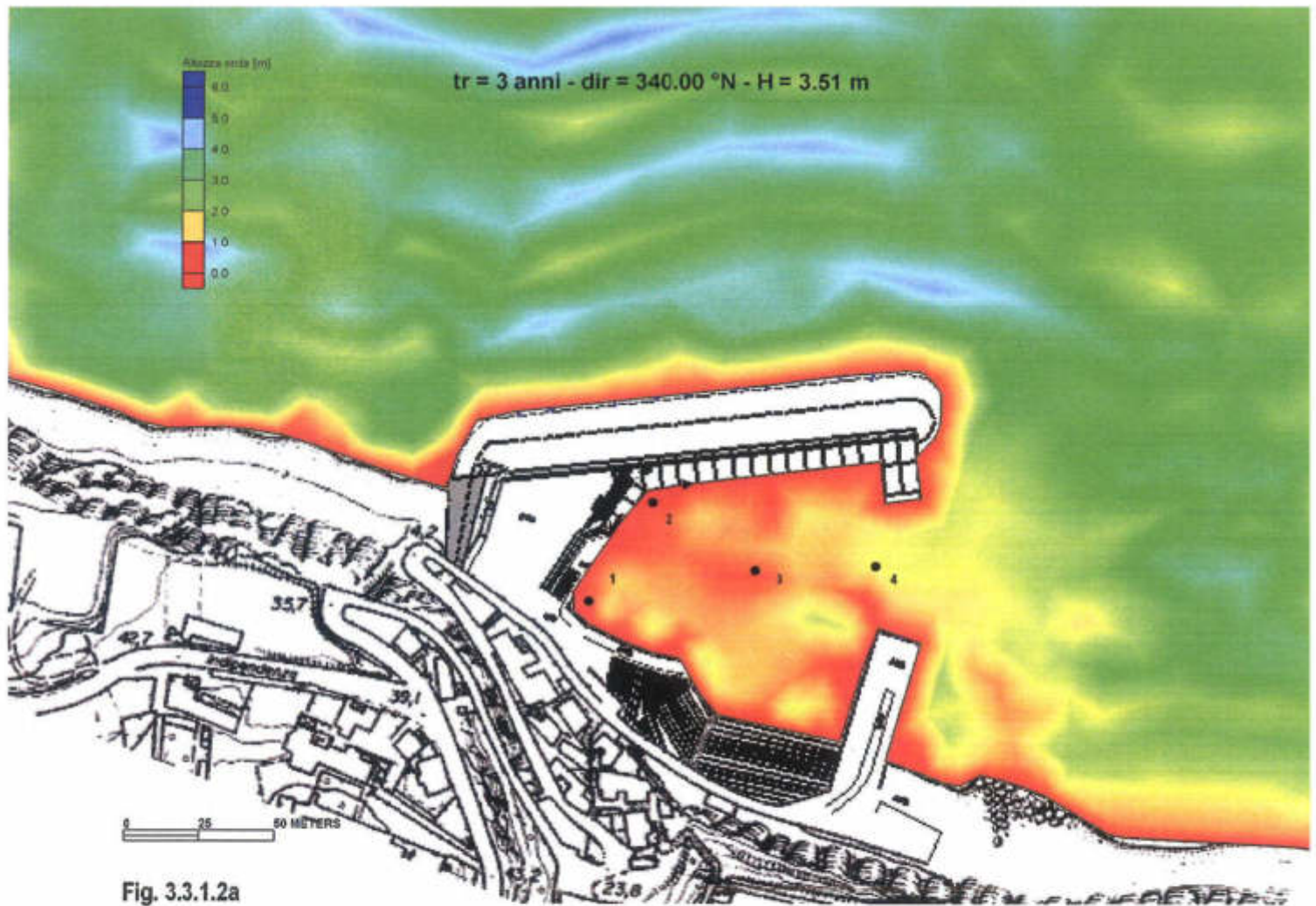


Fig. 3.3.1.2a

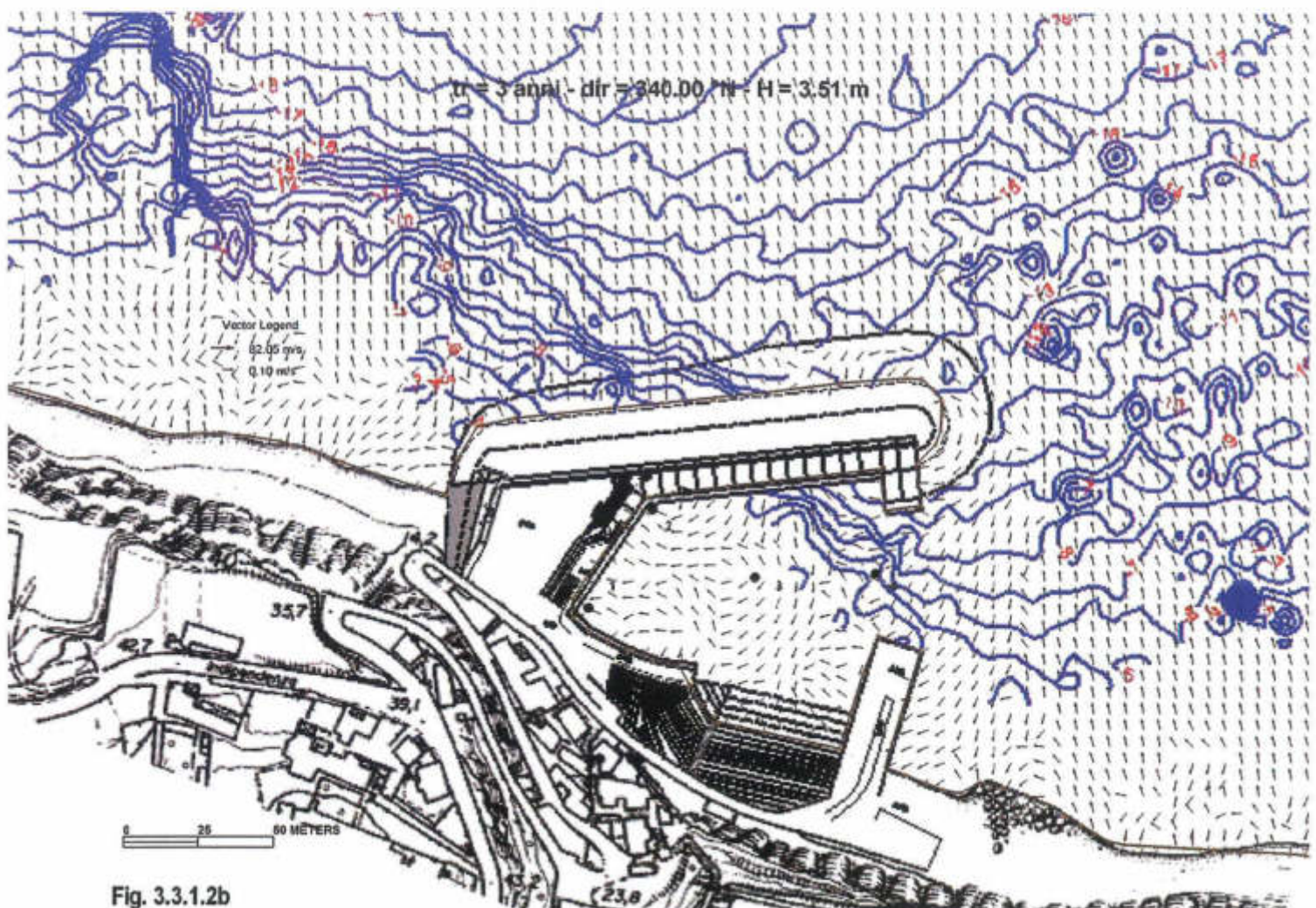
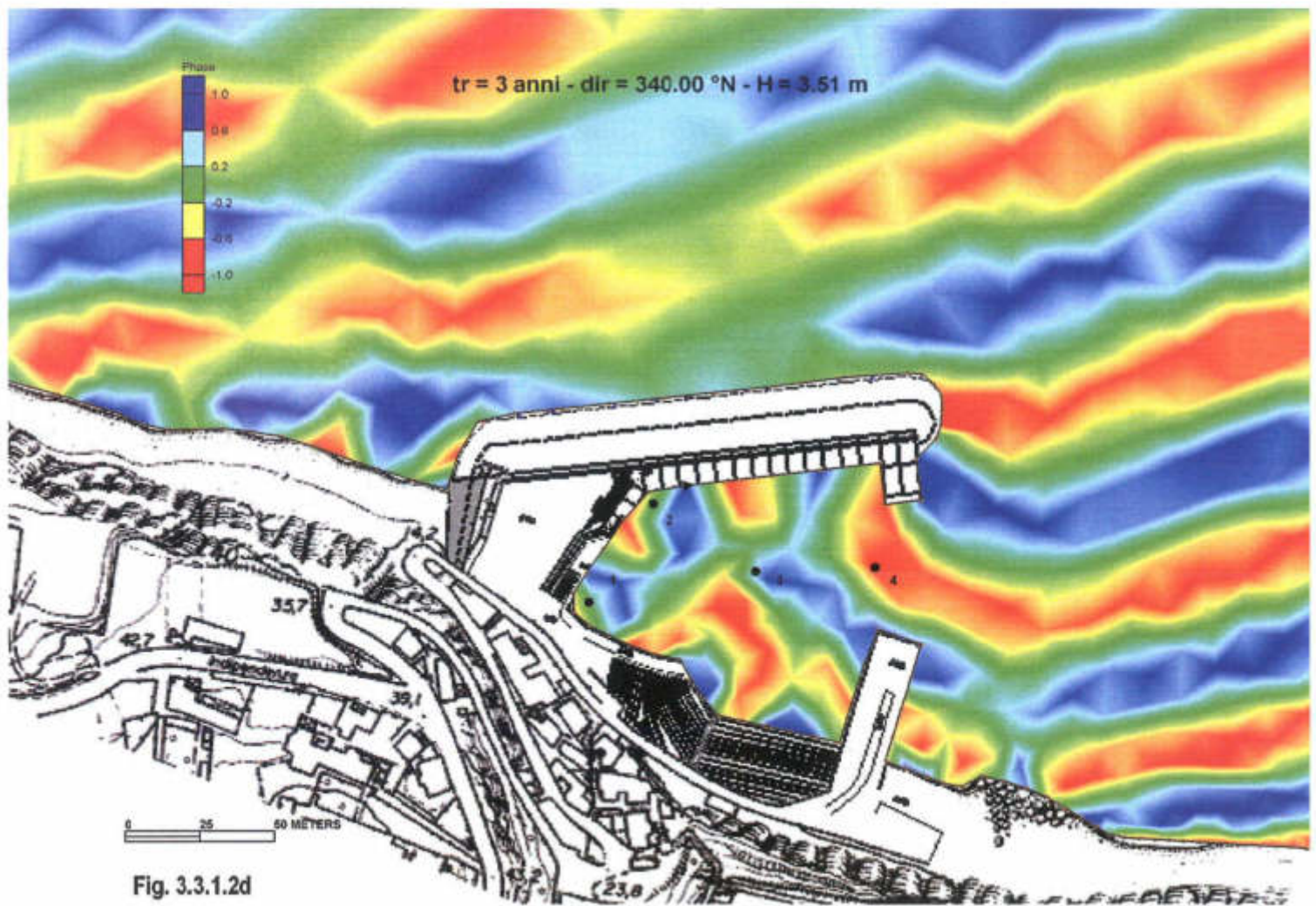
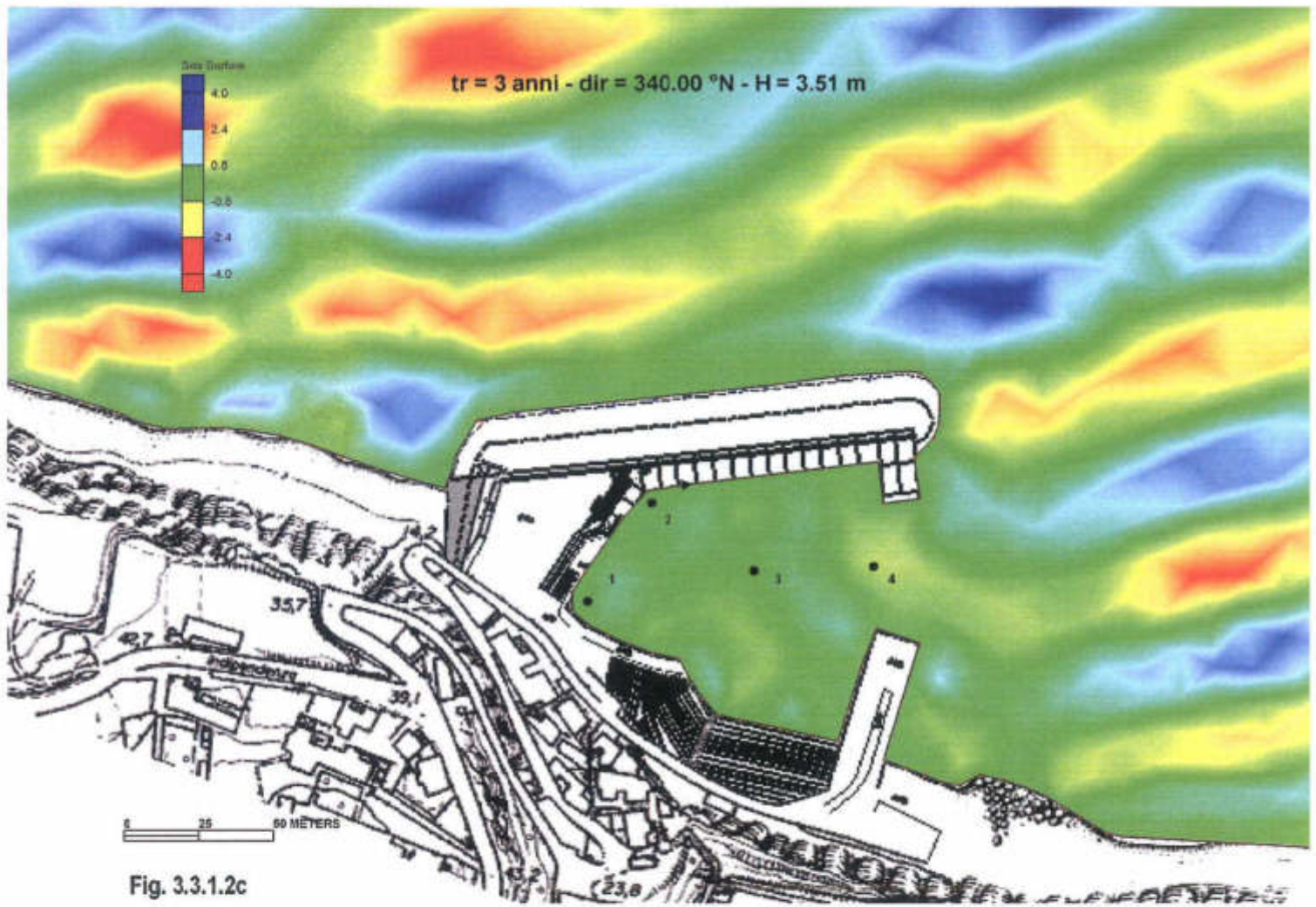
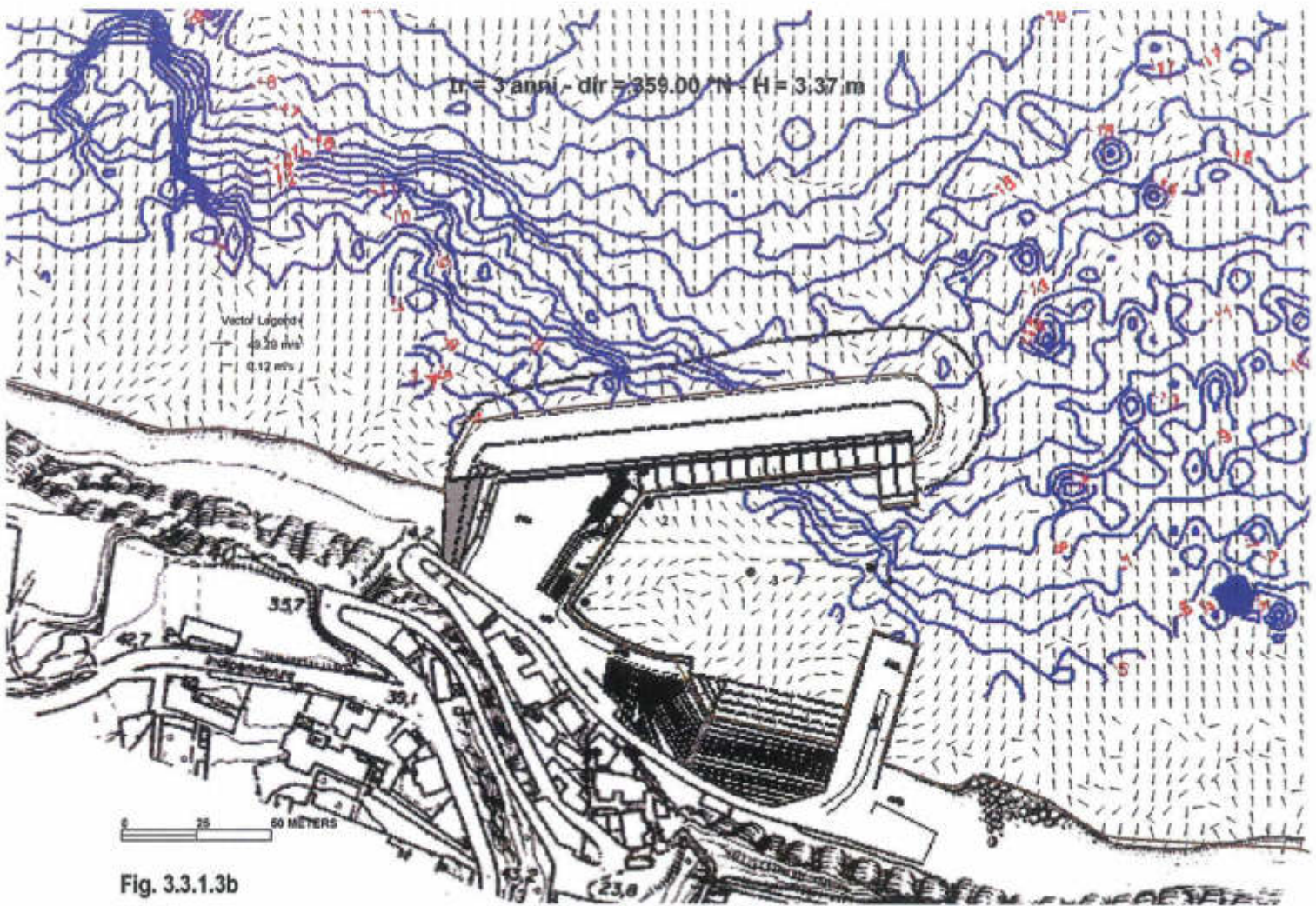
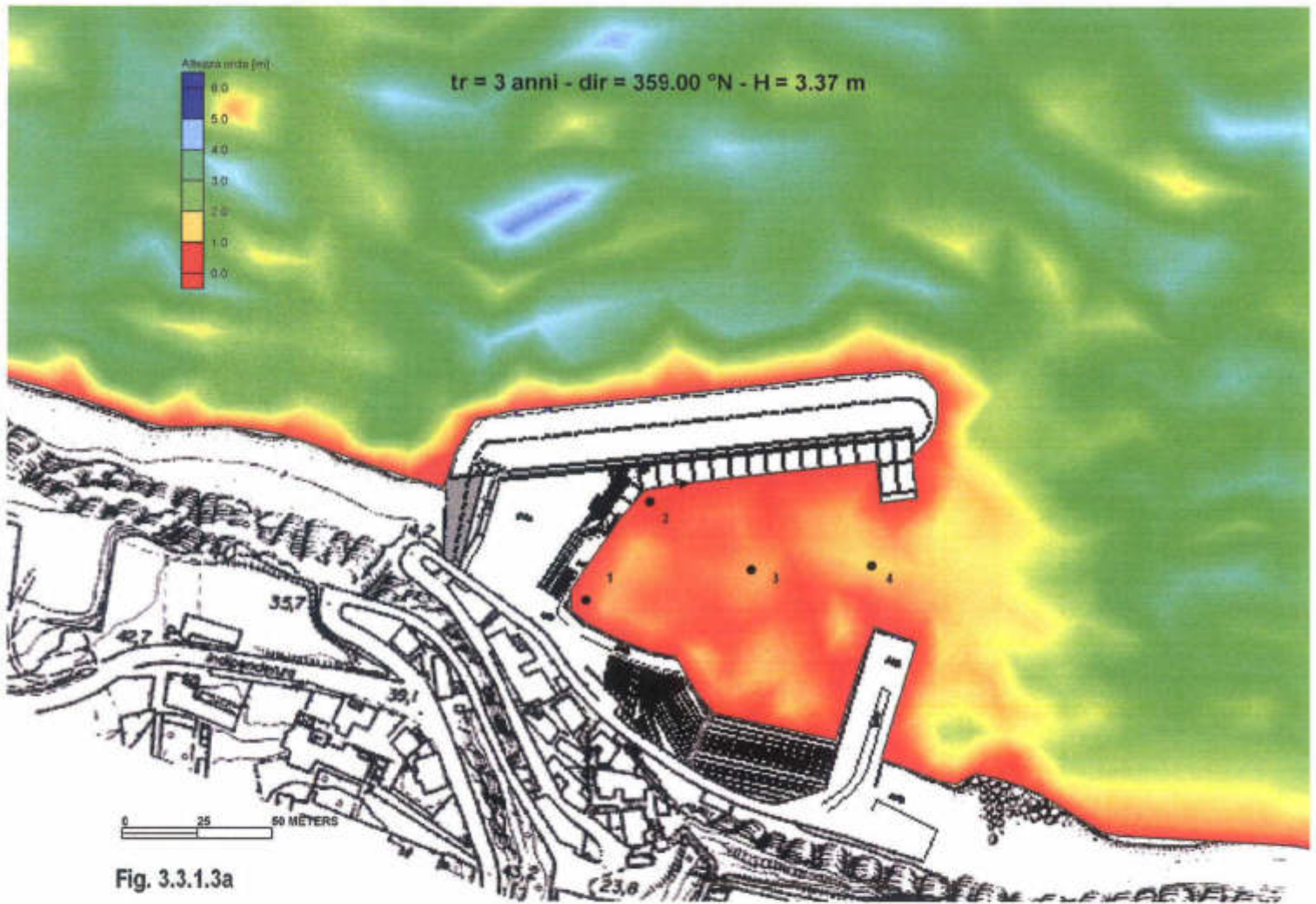
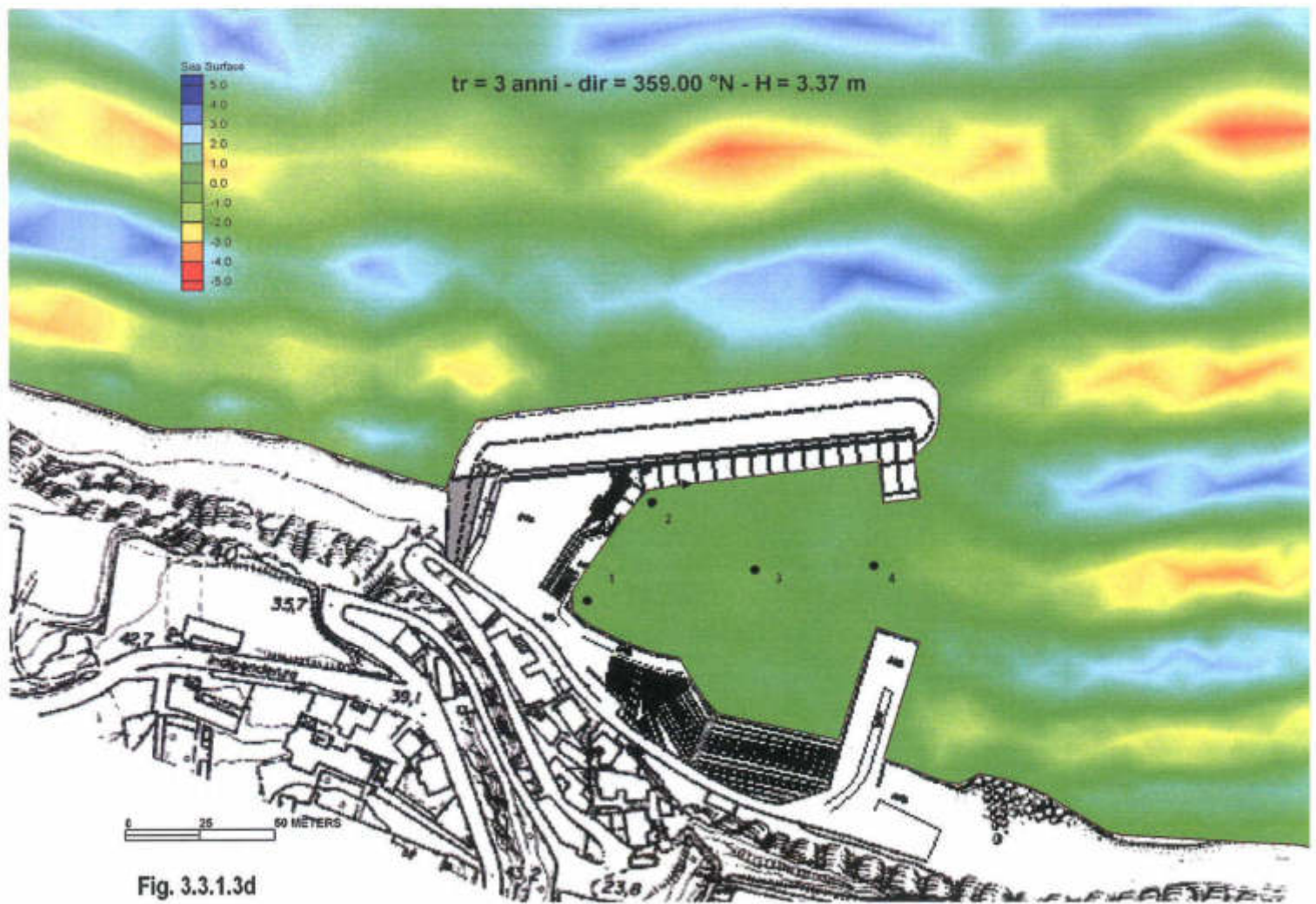
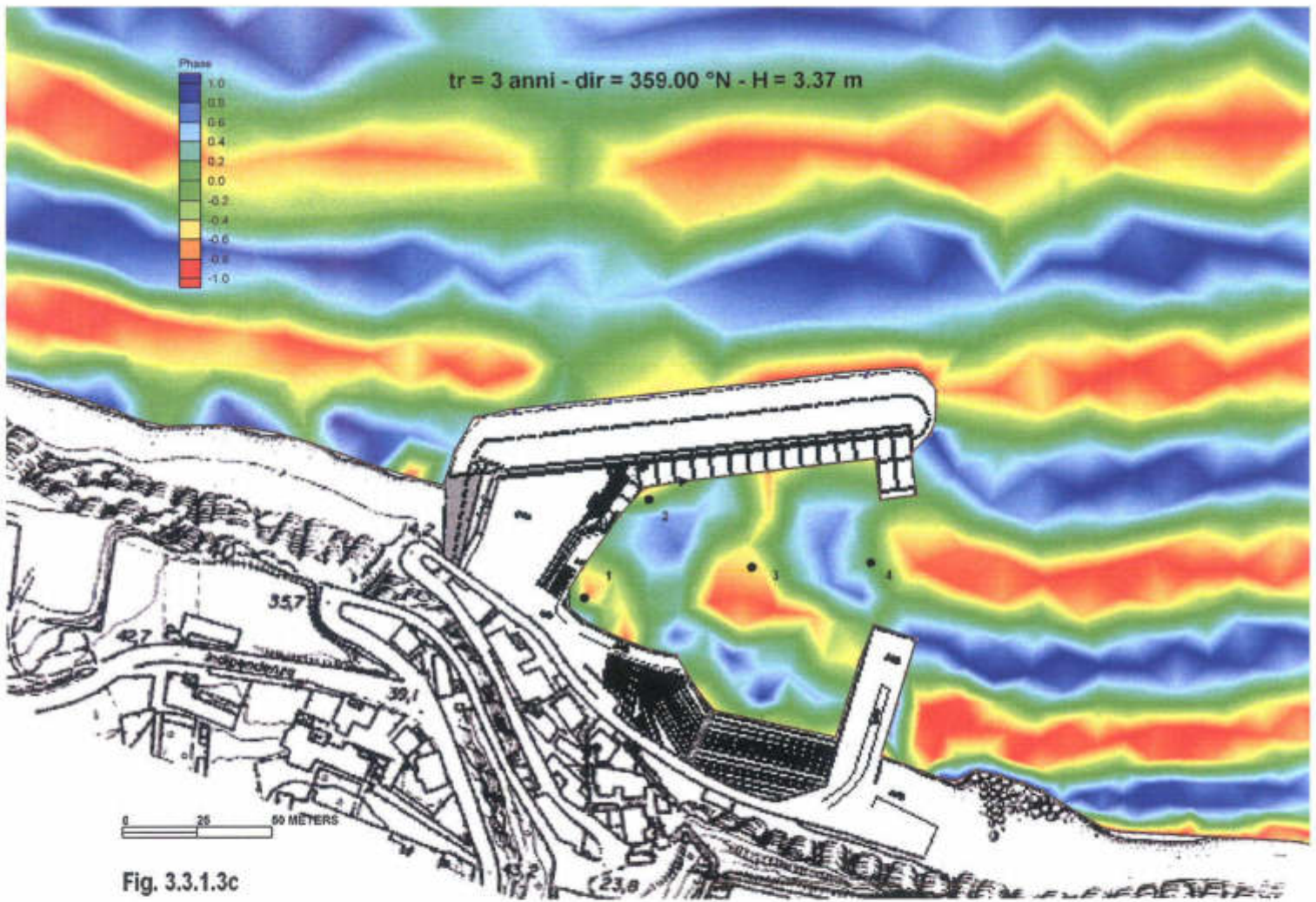


Fig. 3.3.1.2b







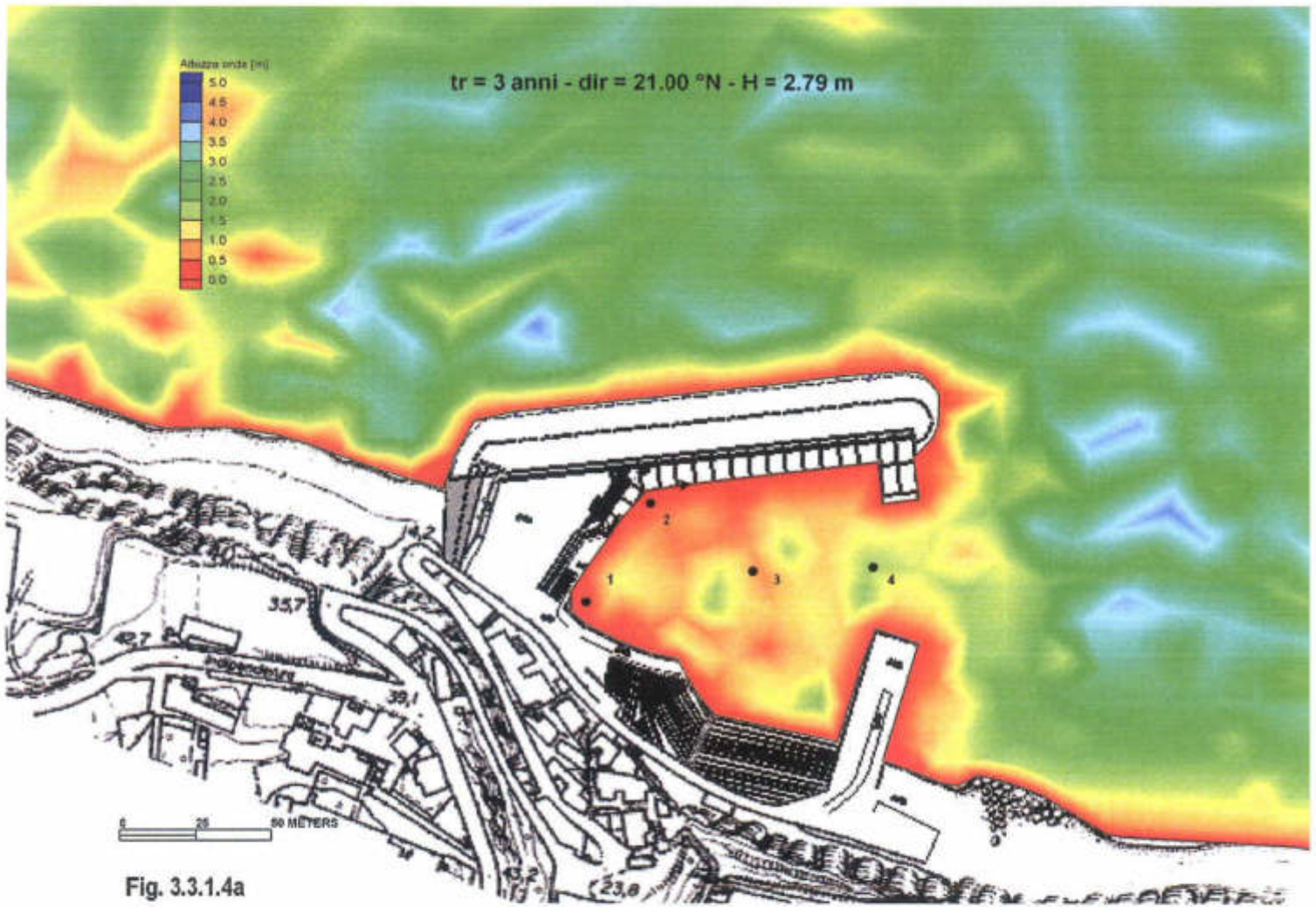


Fig. 3.3.1.4a

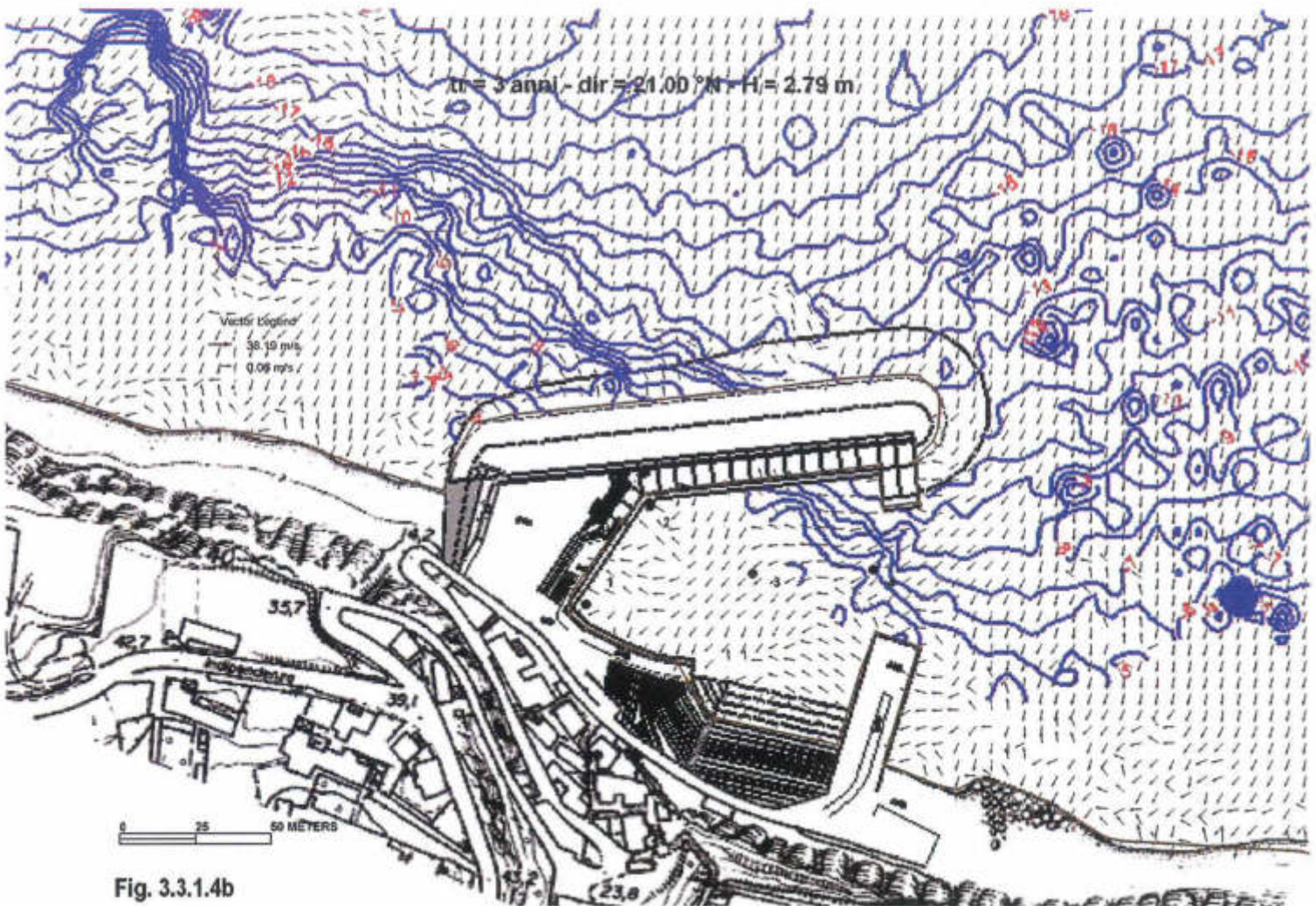
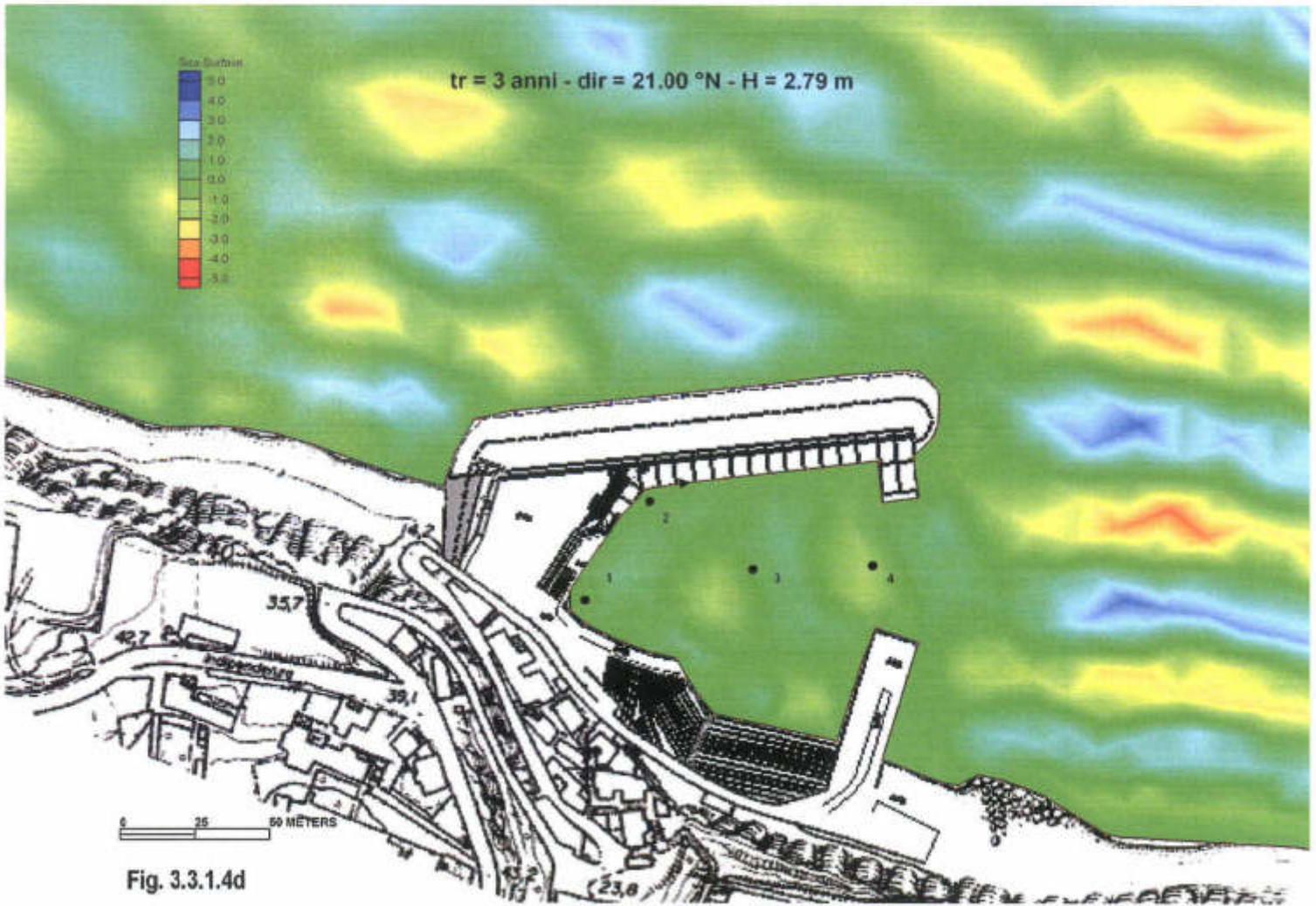
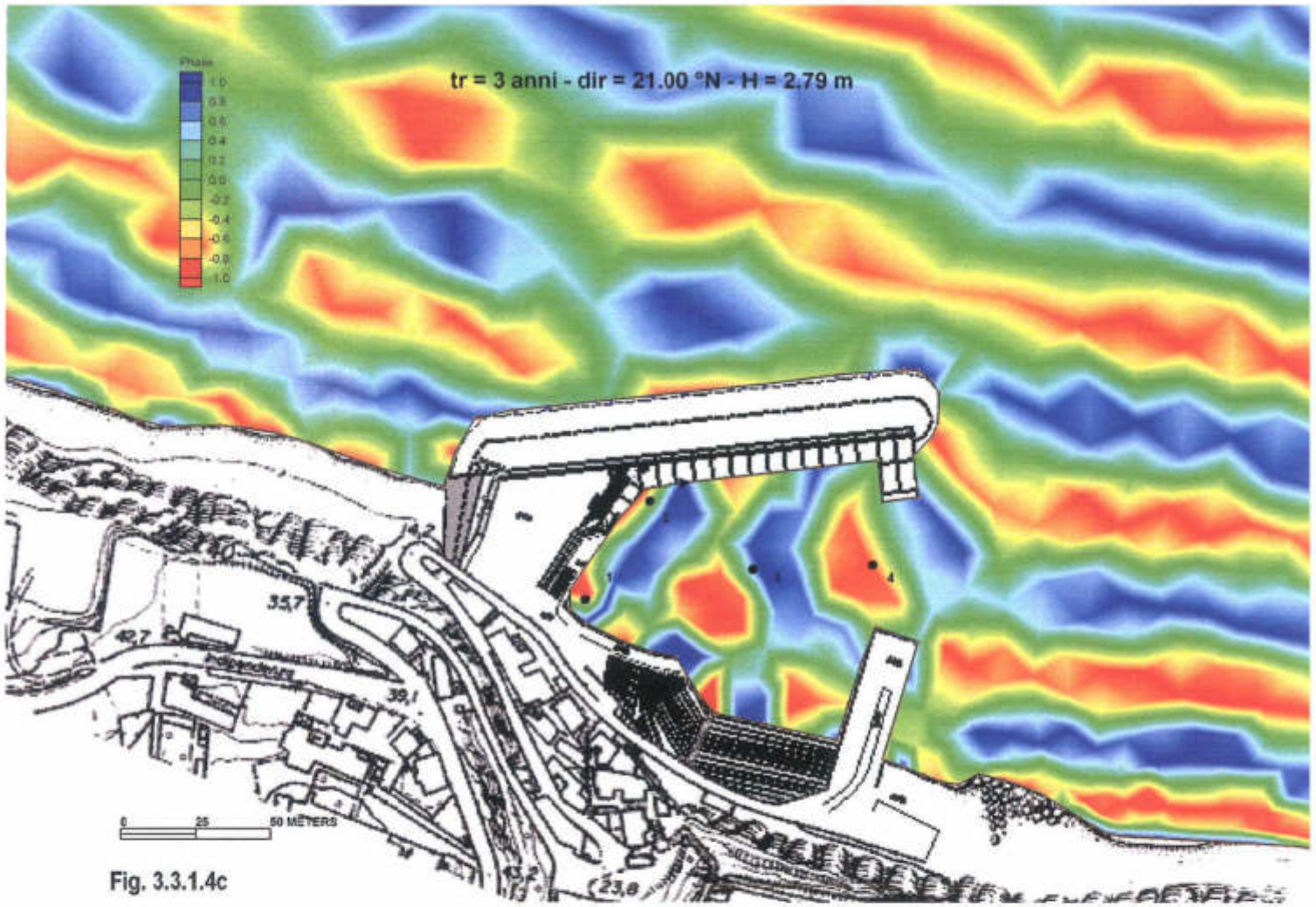
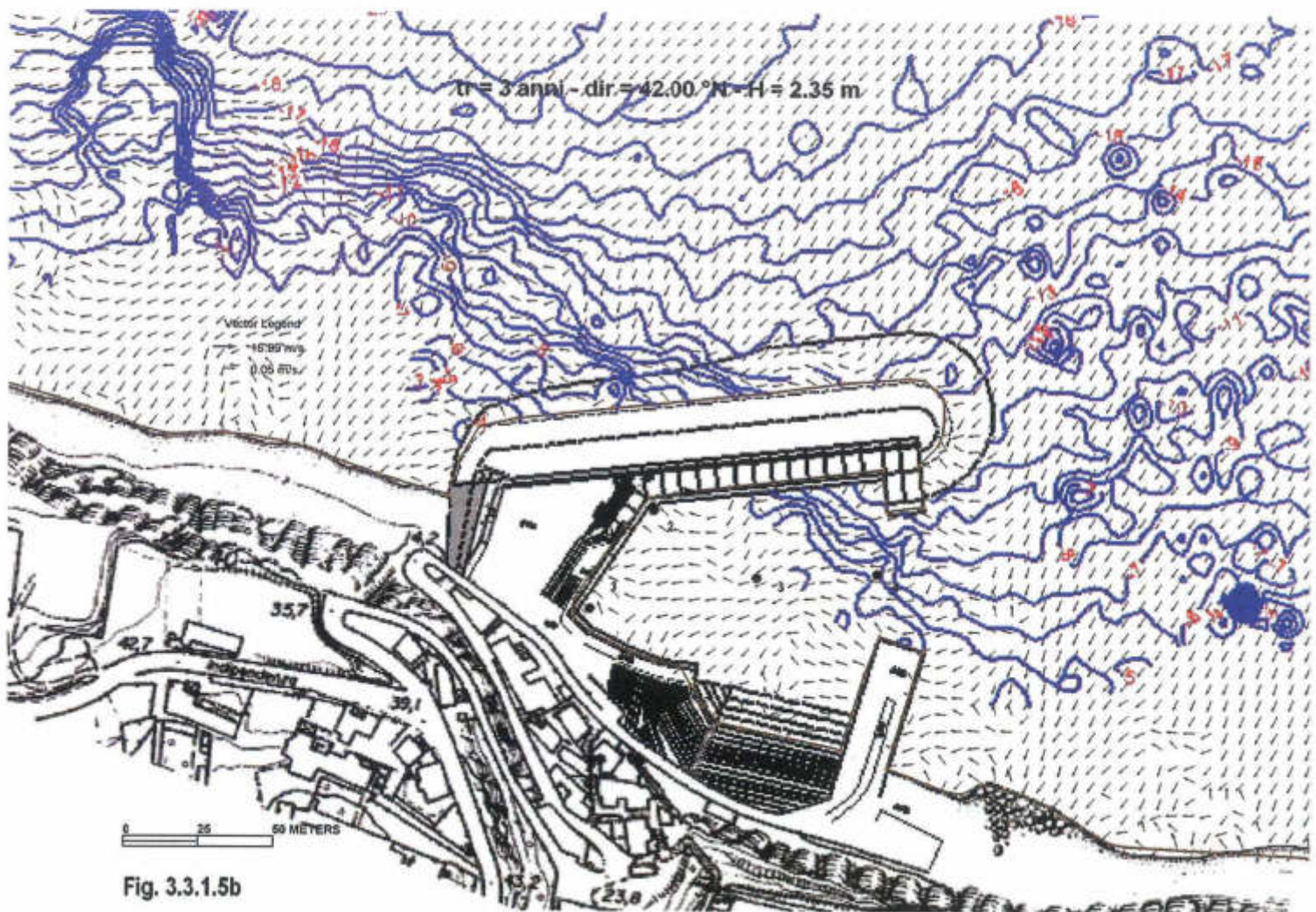
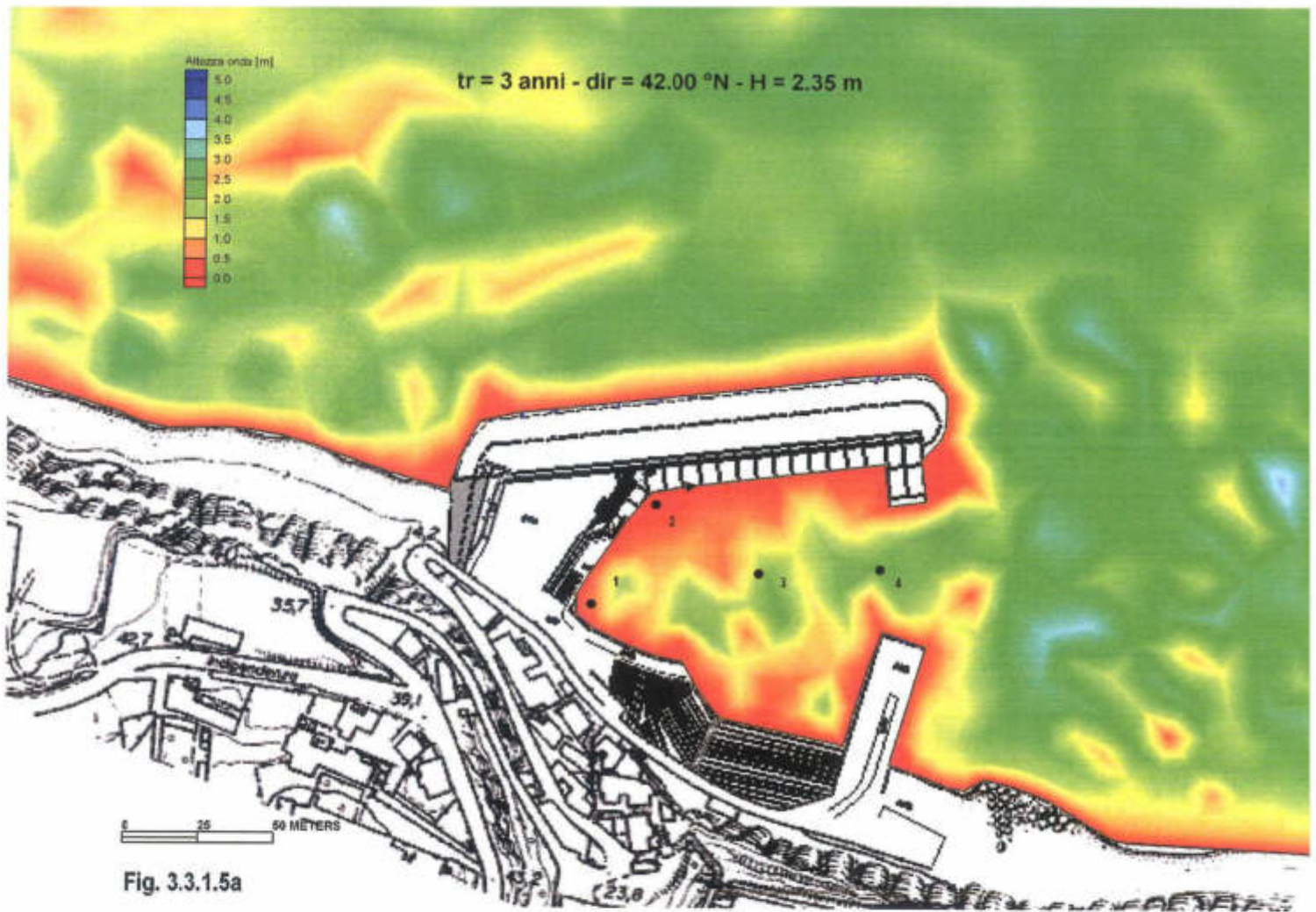
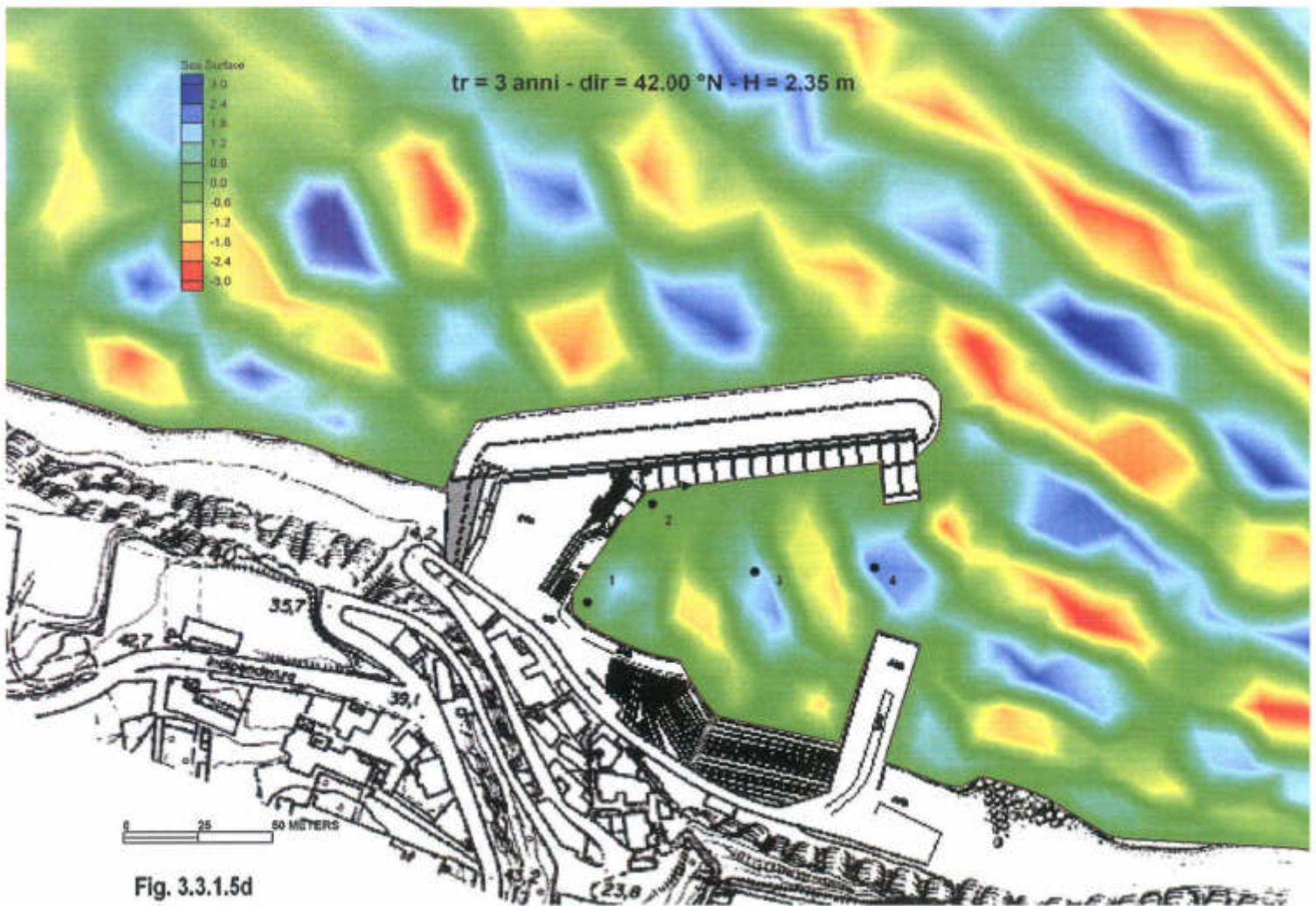
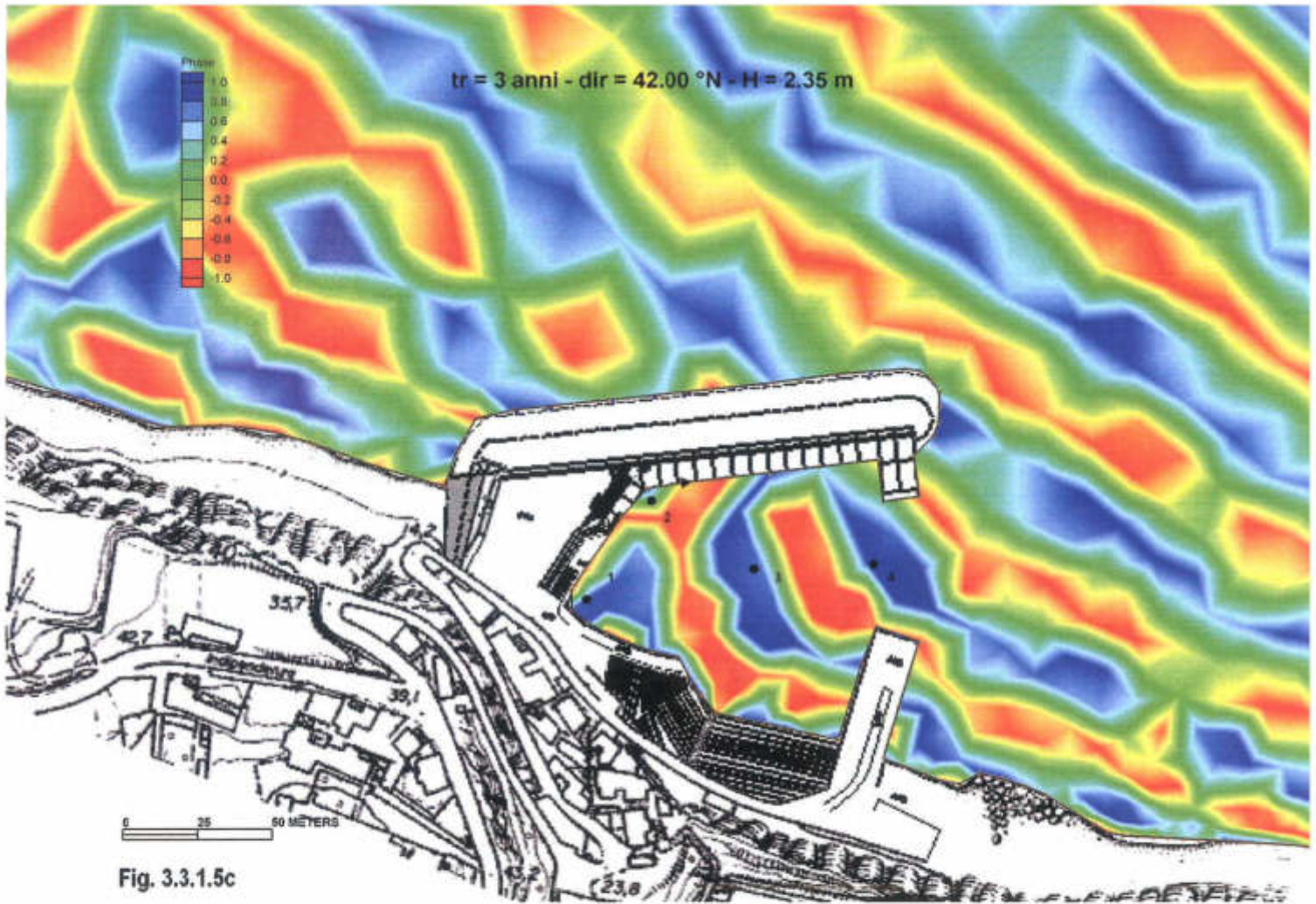
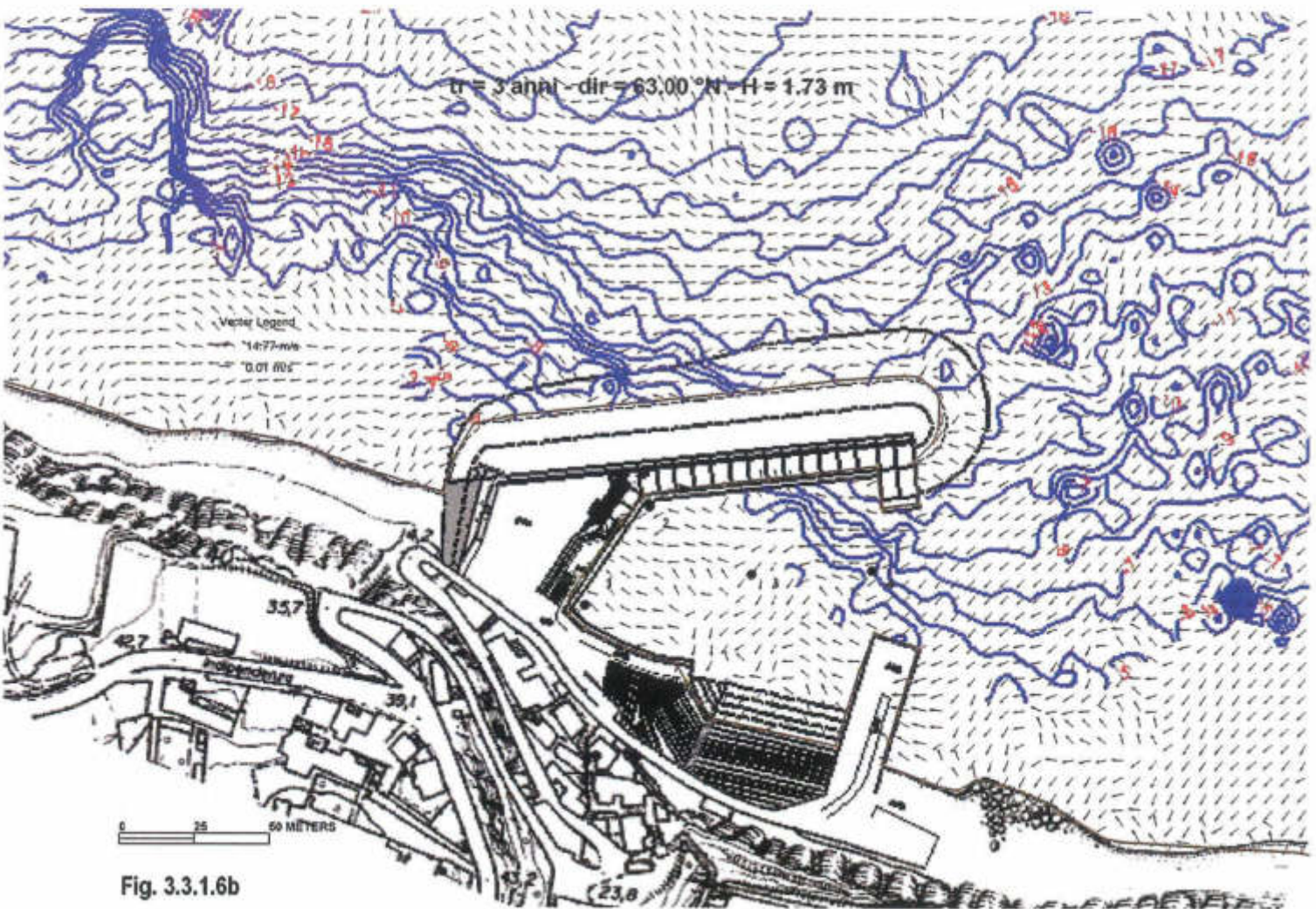
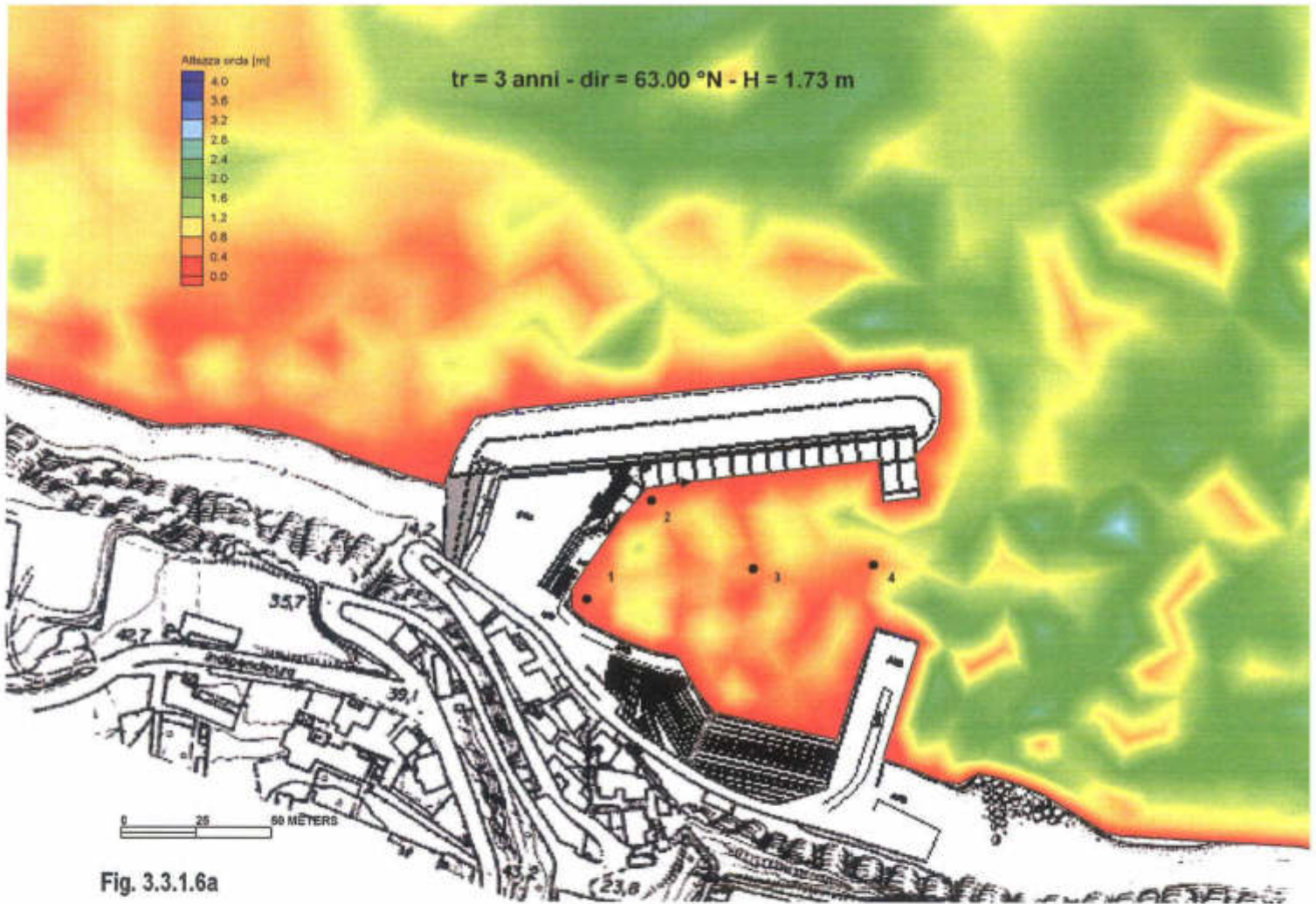


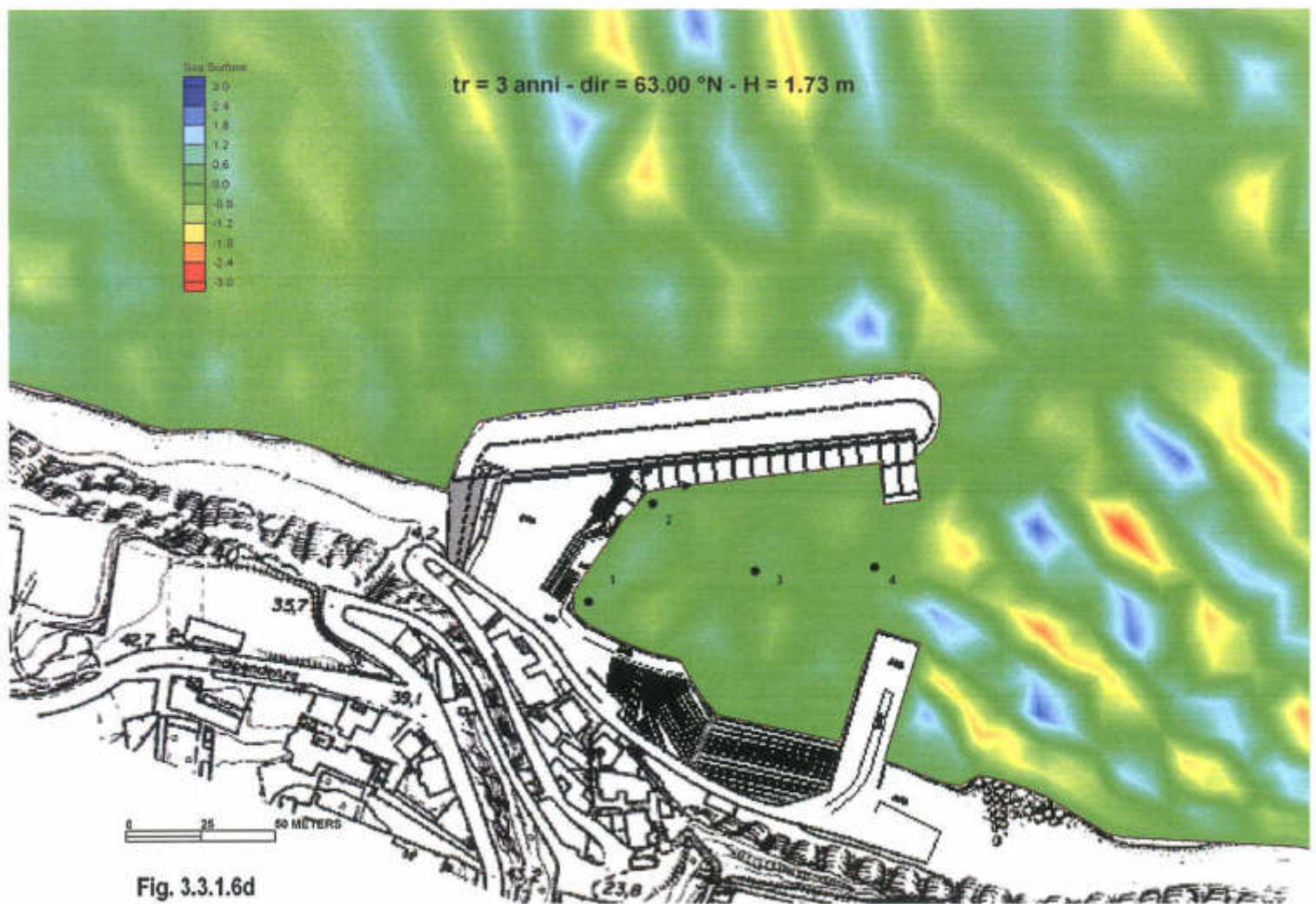
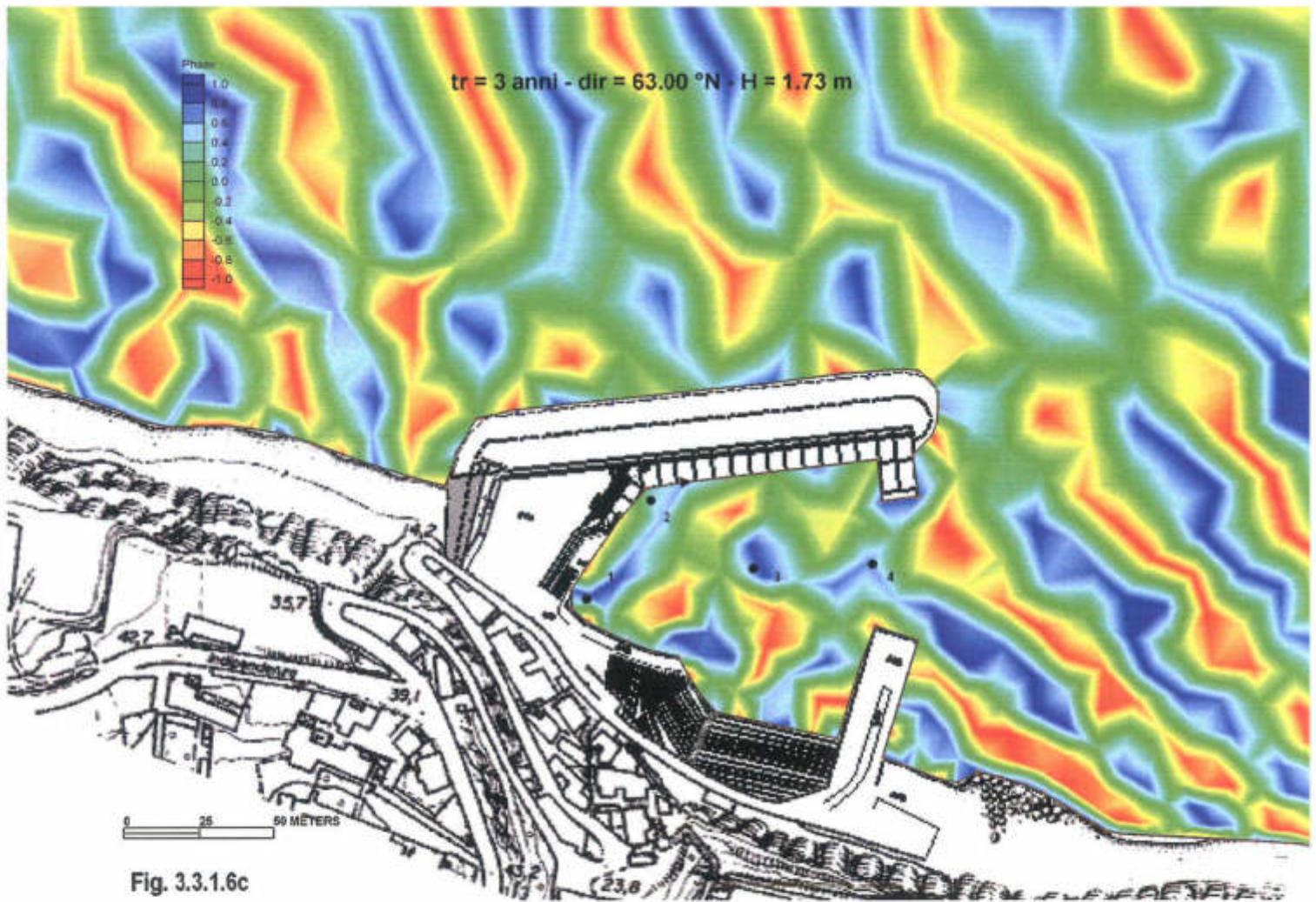
Fig. 3.3.1.4b

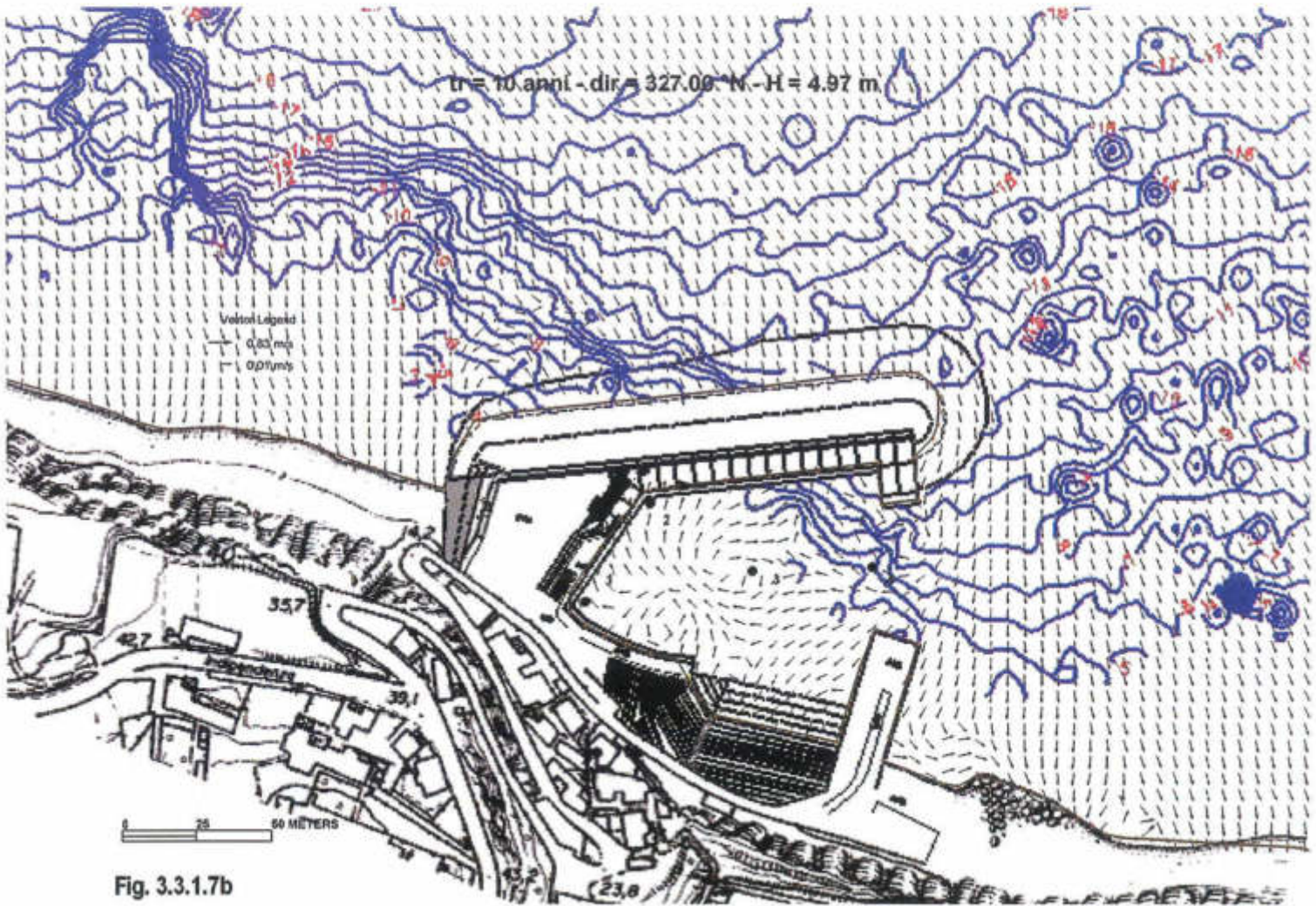
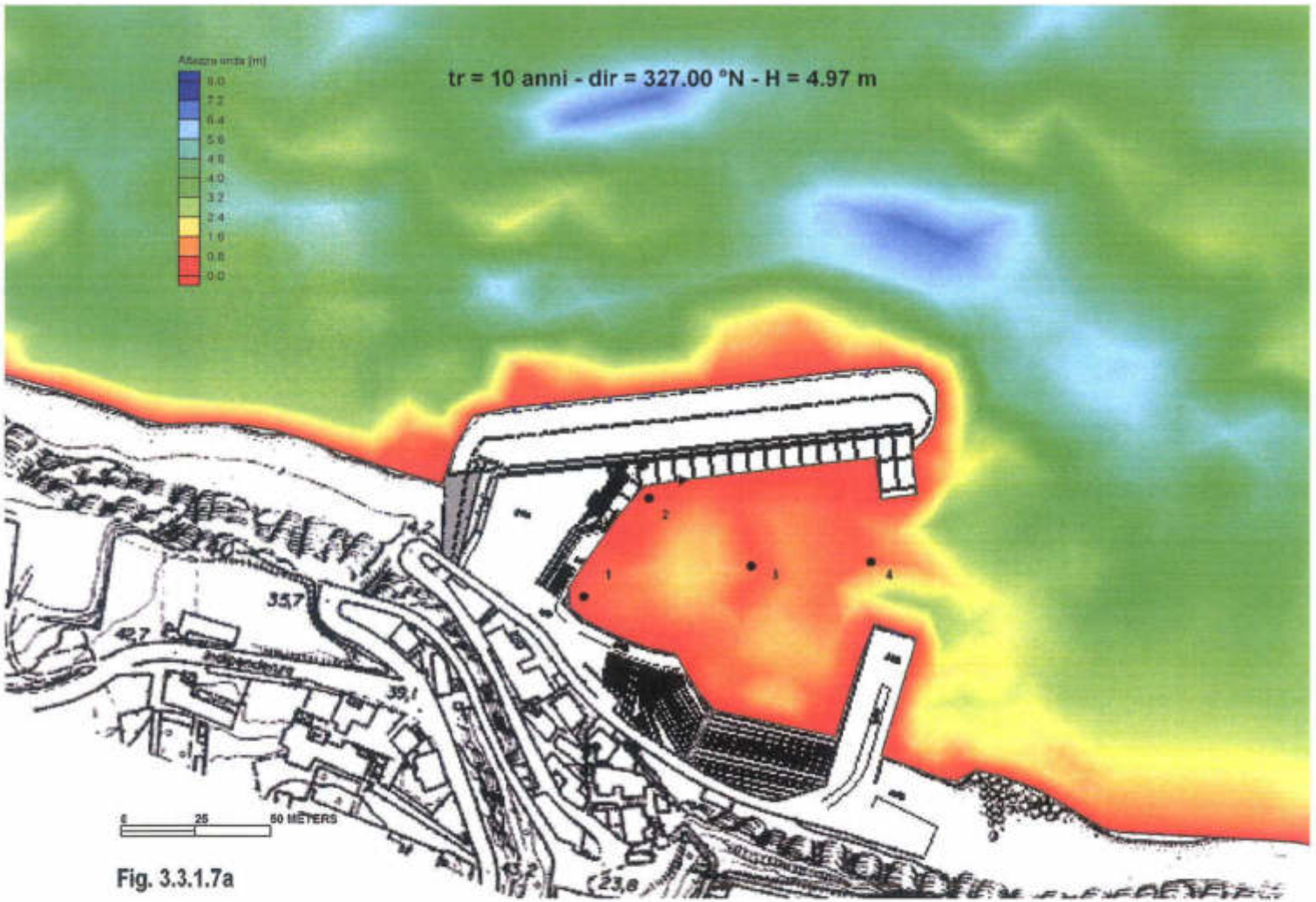


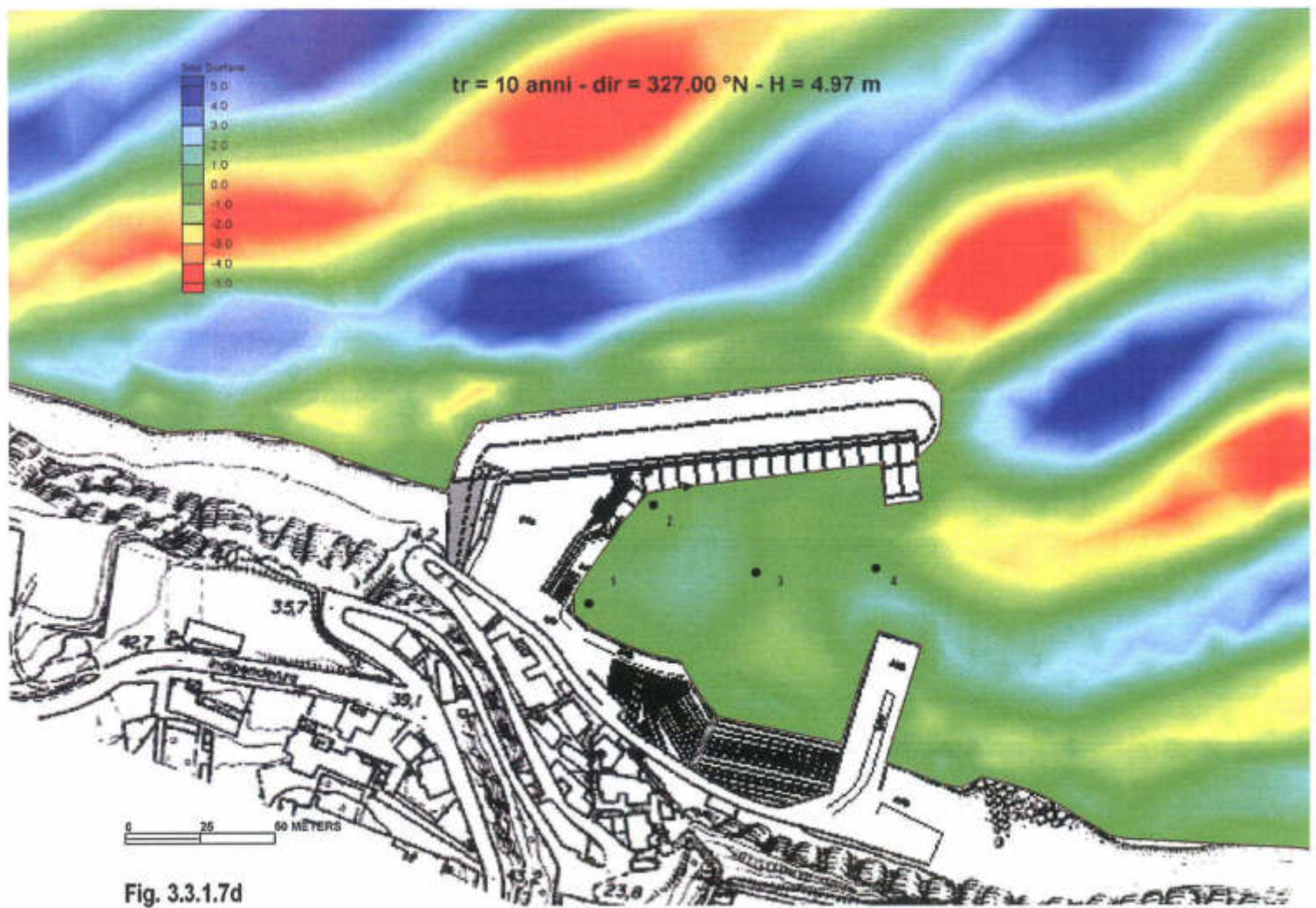
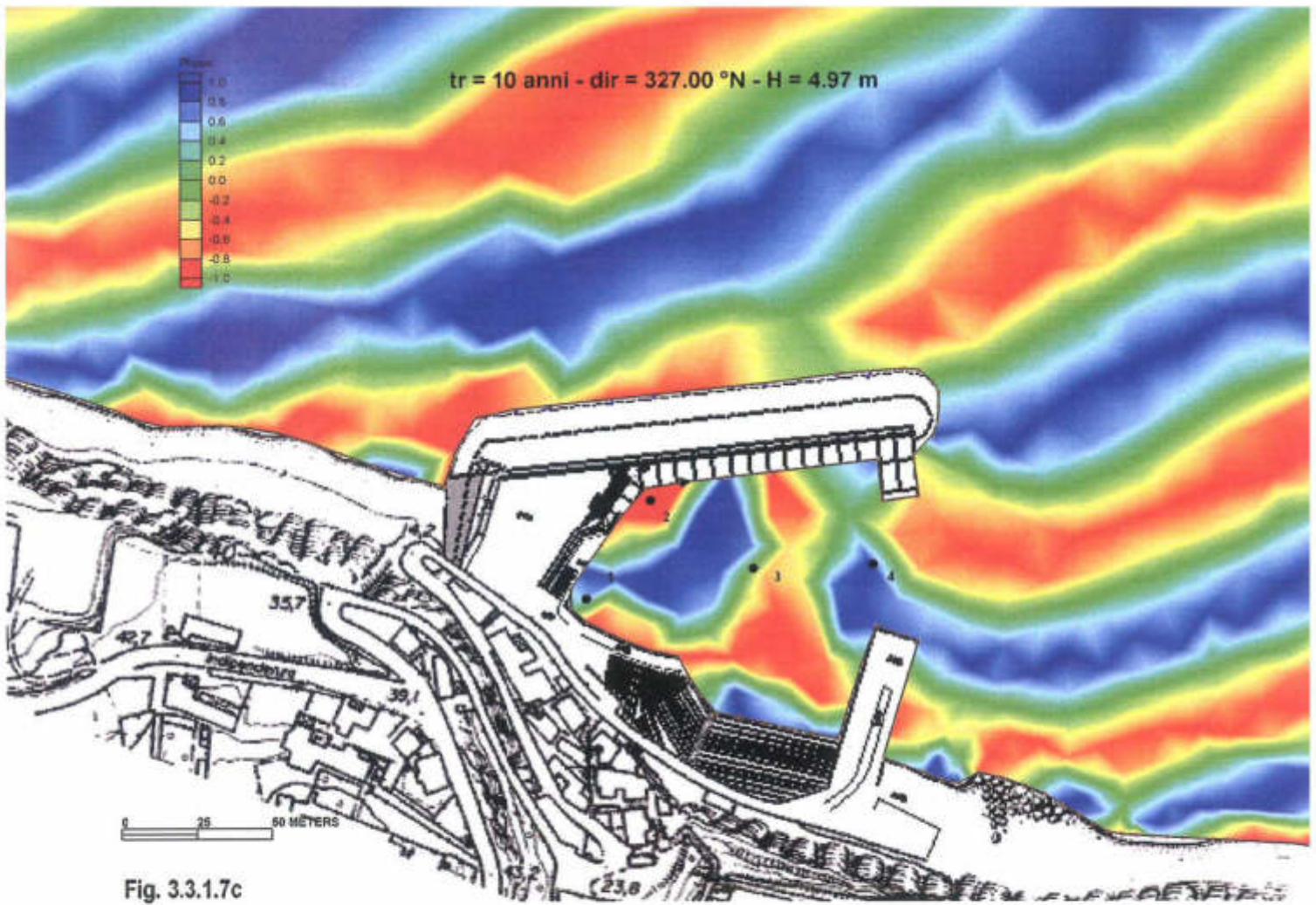


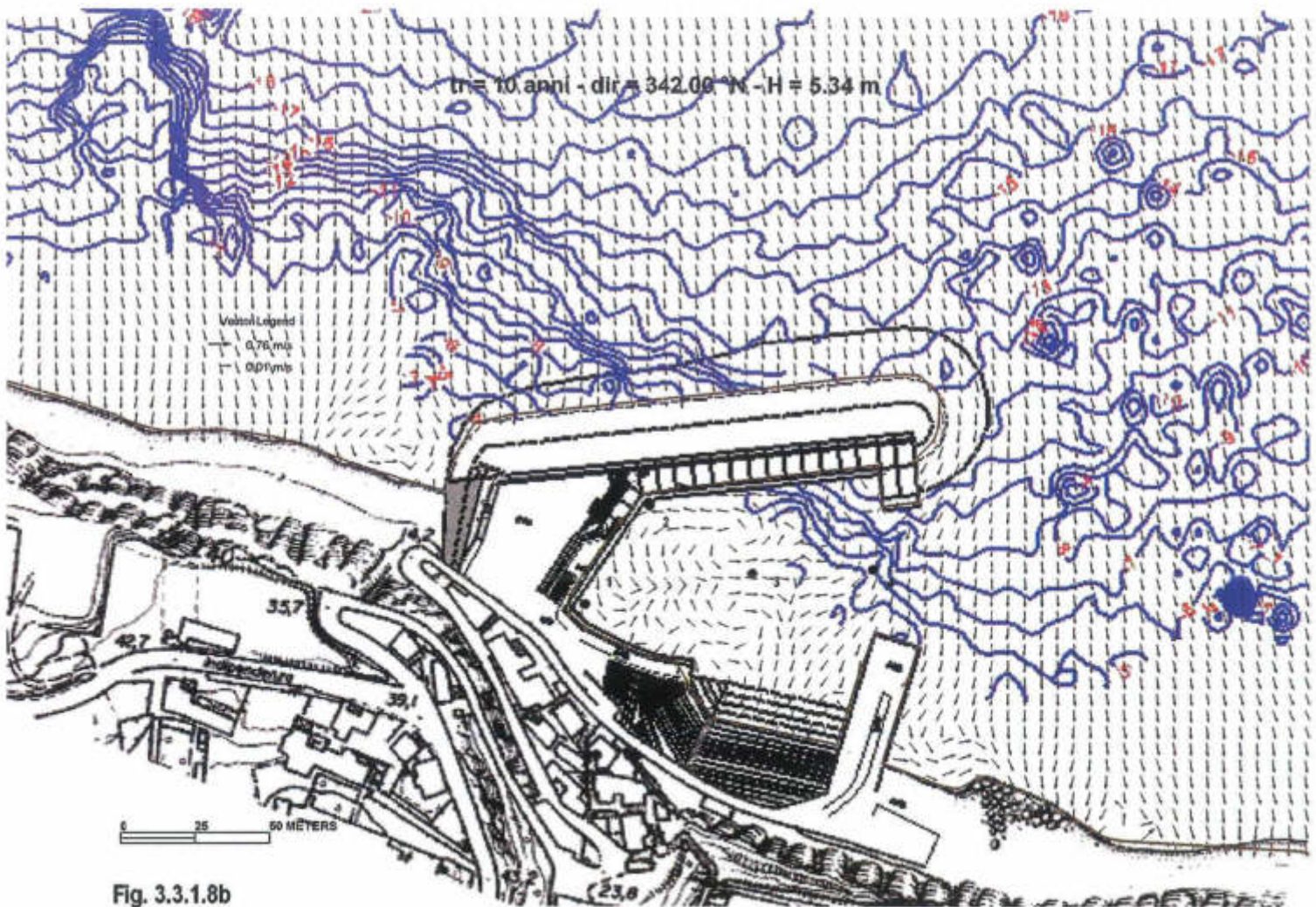
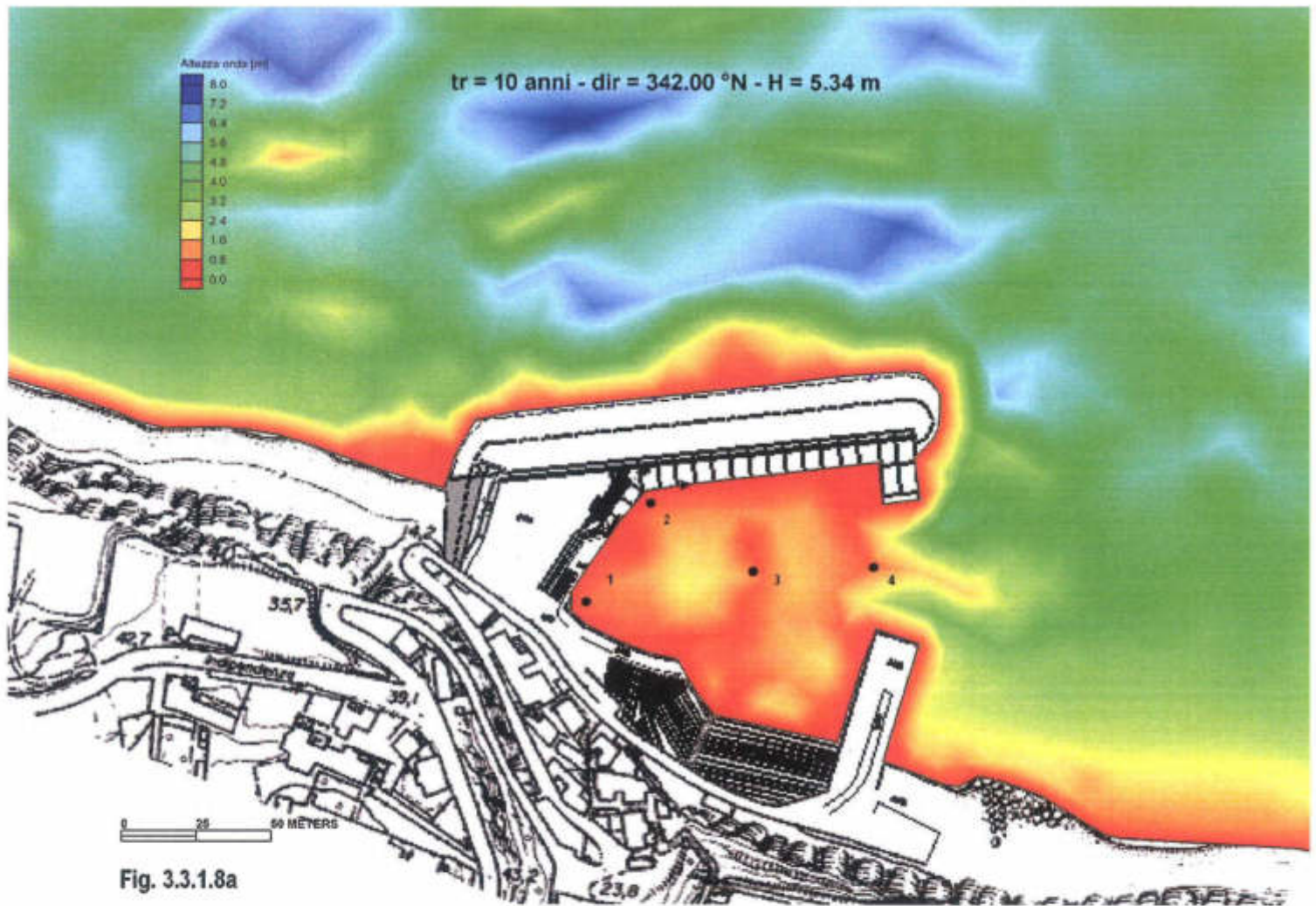


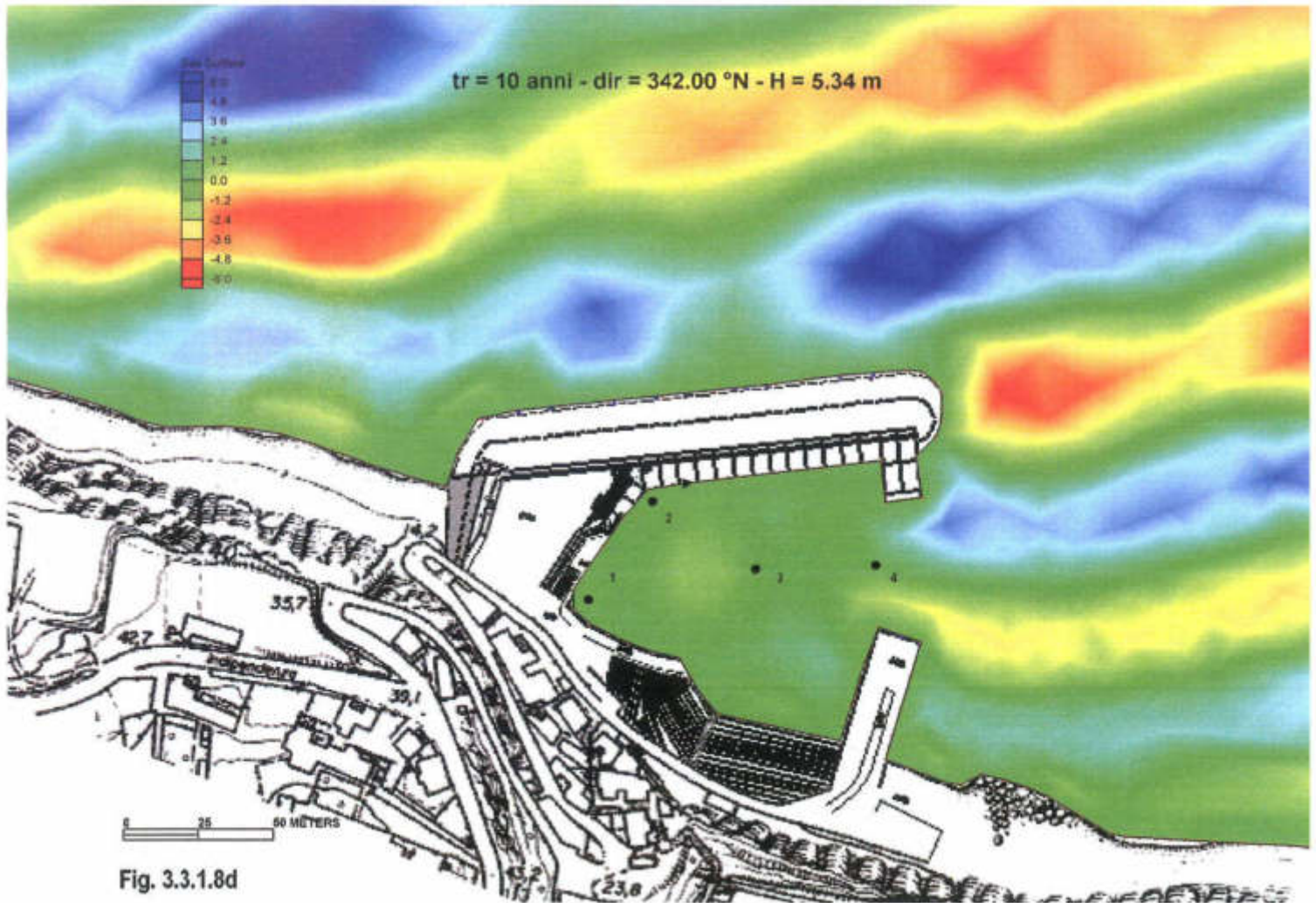
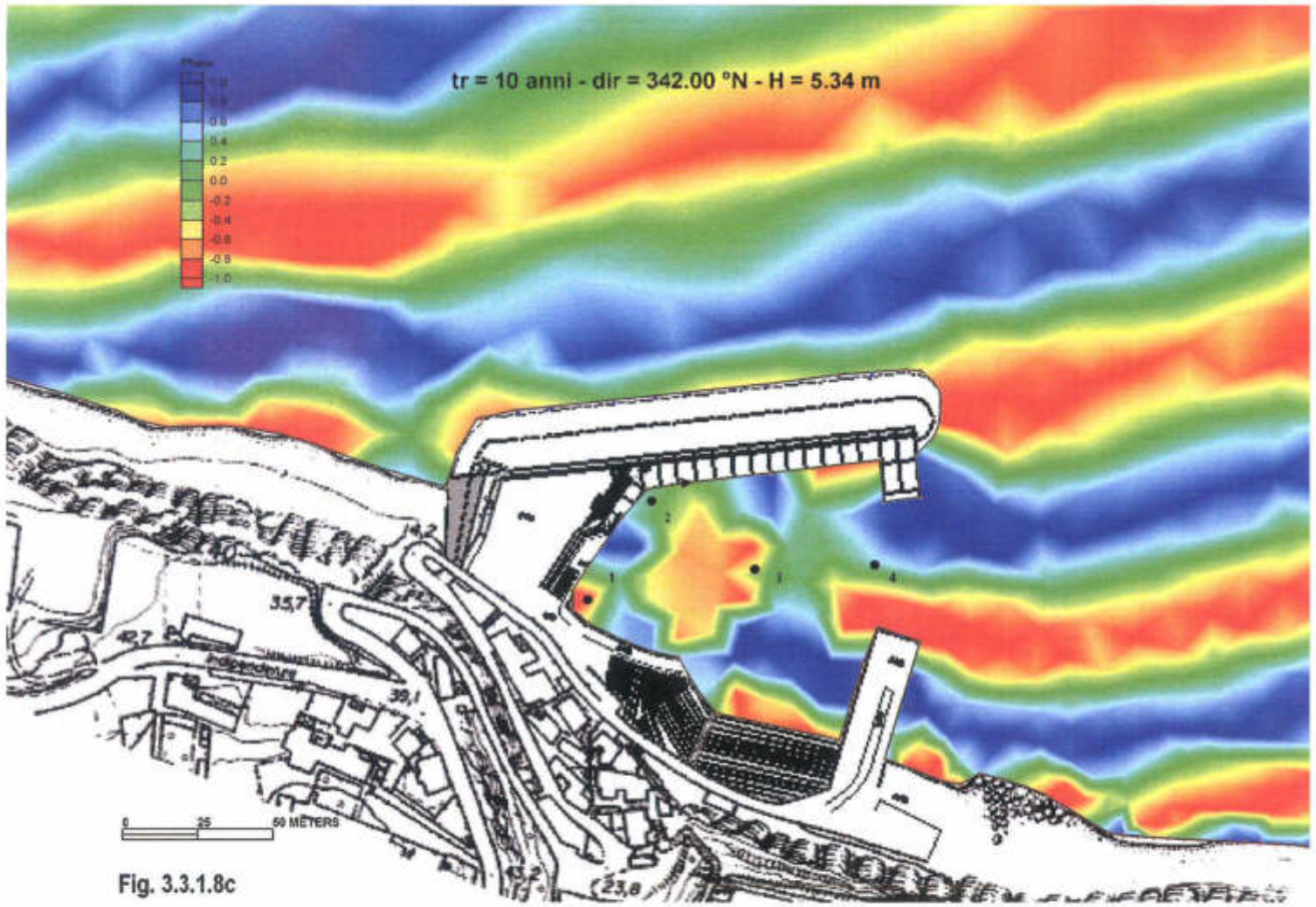












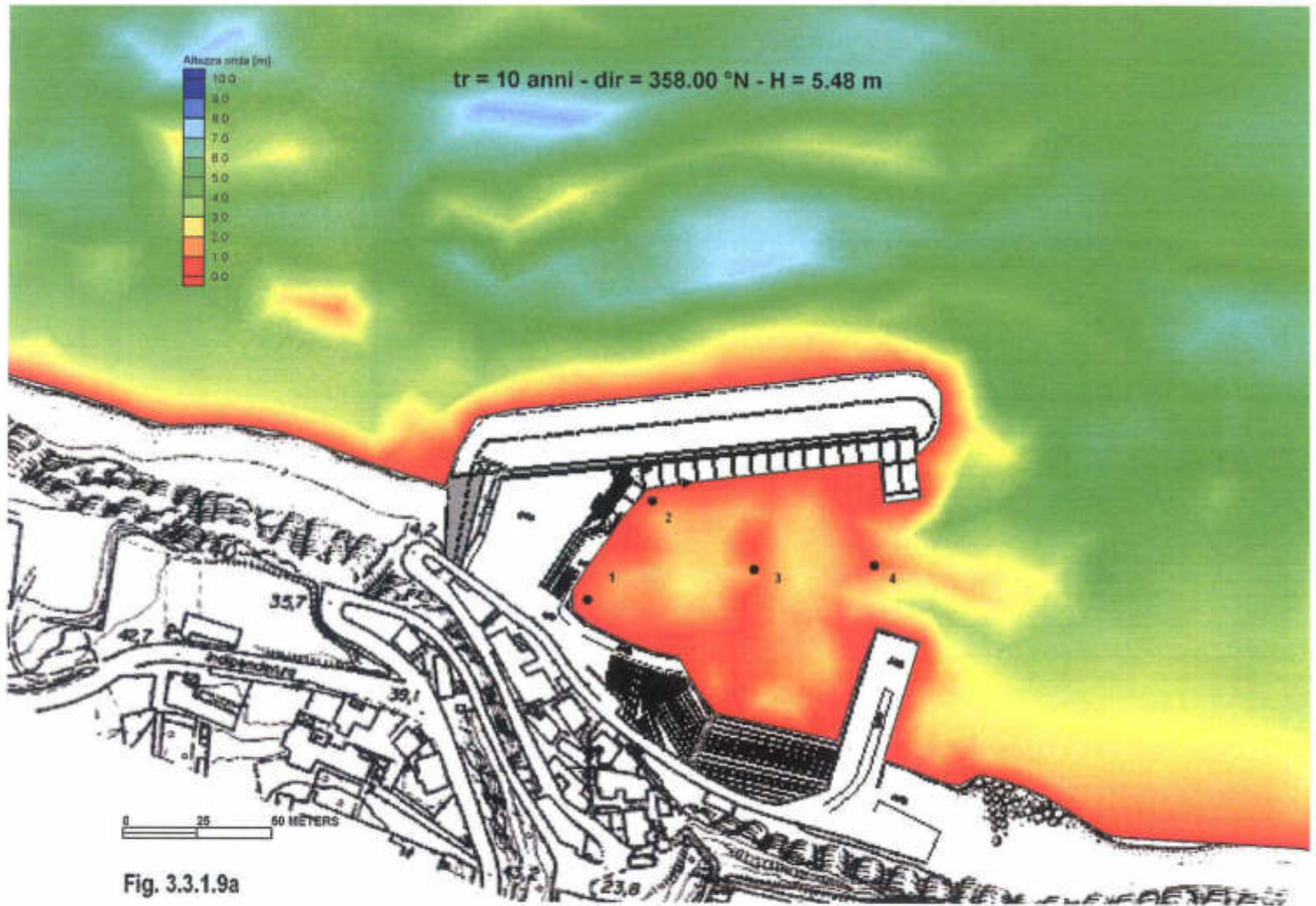


Fig. 3.3.1.9a

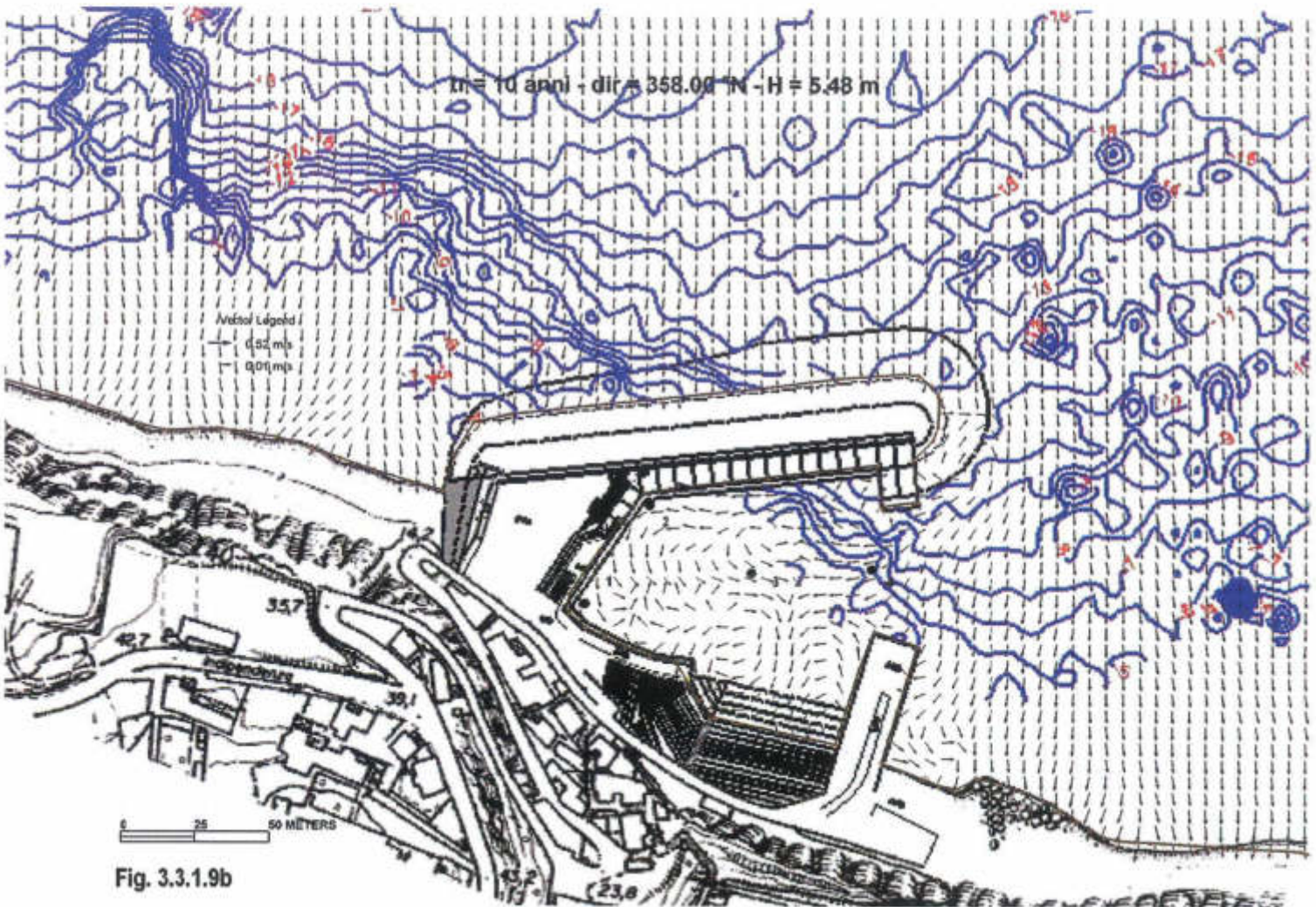
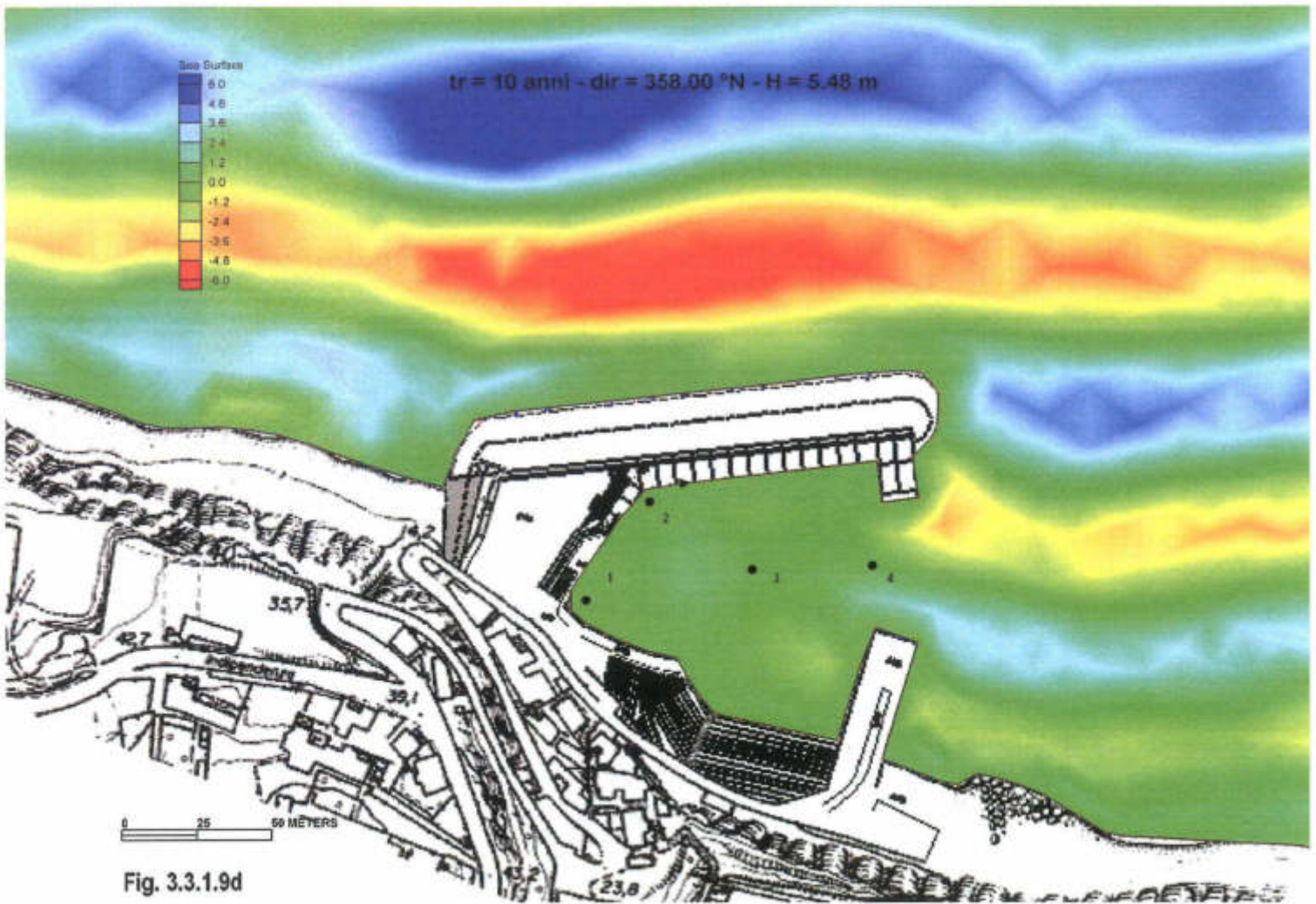
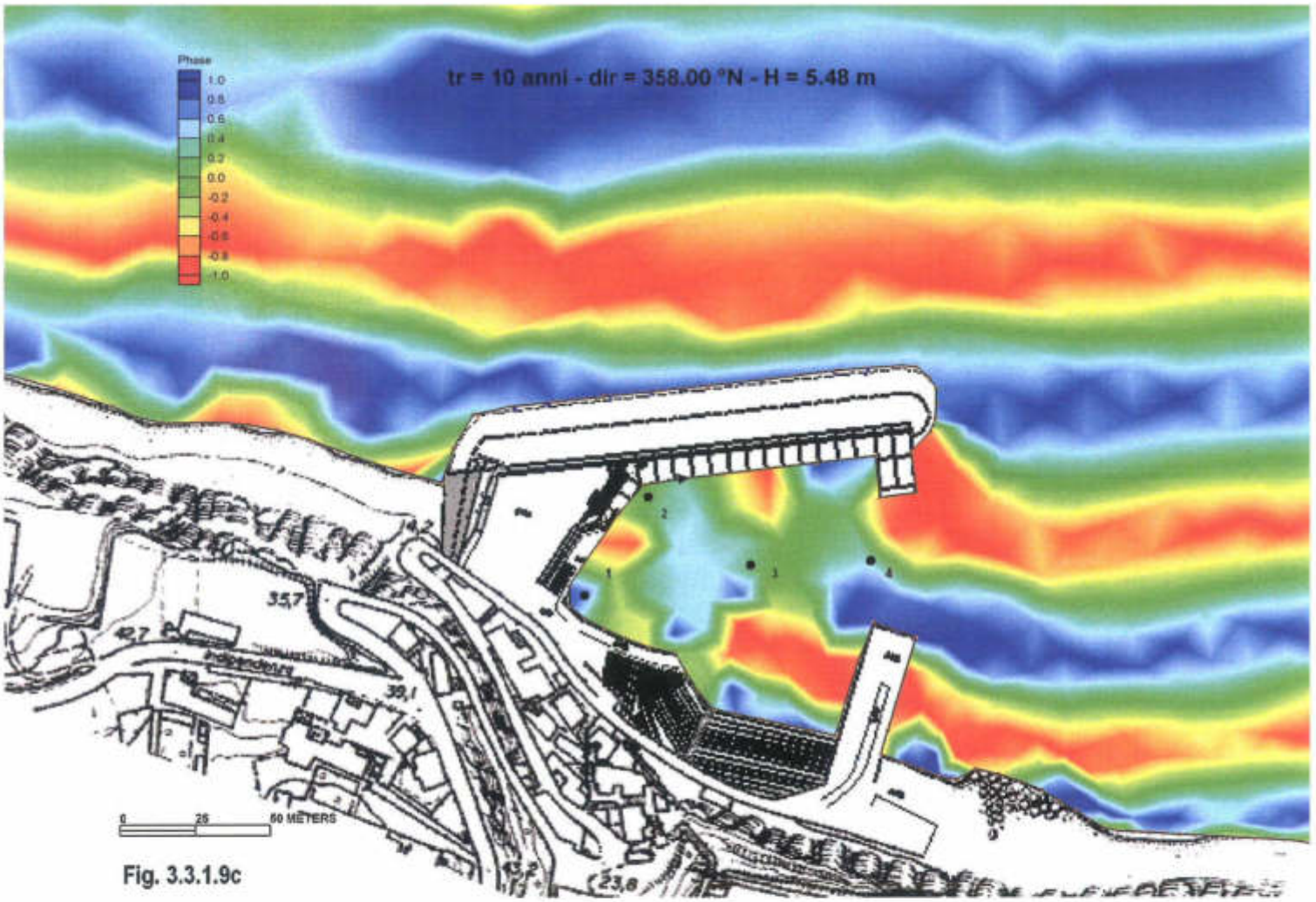
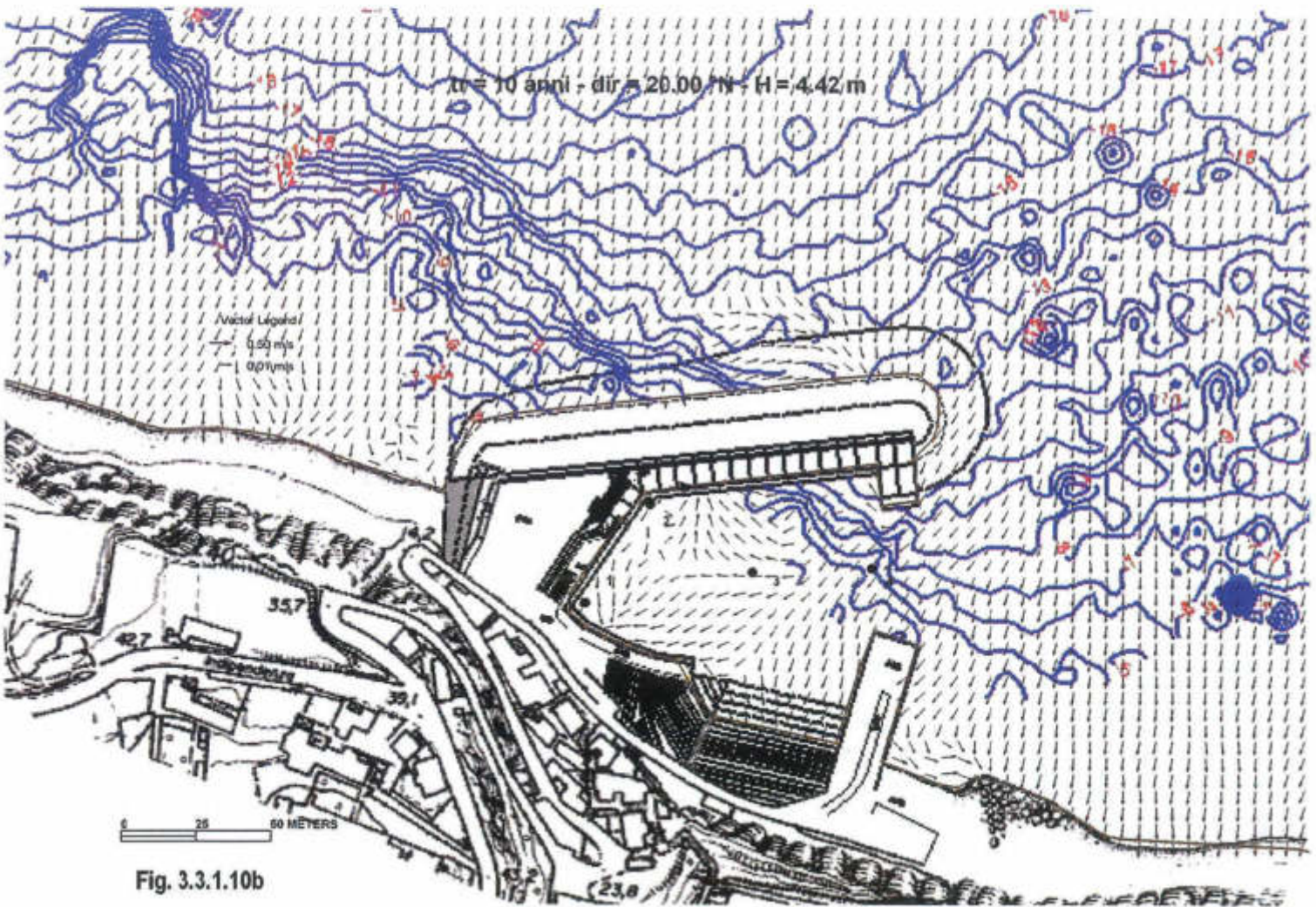
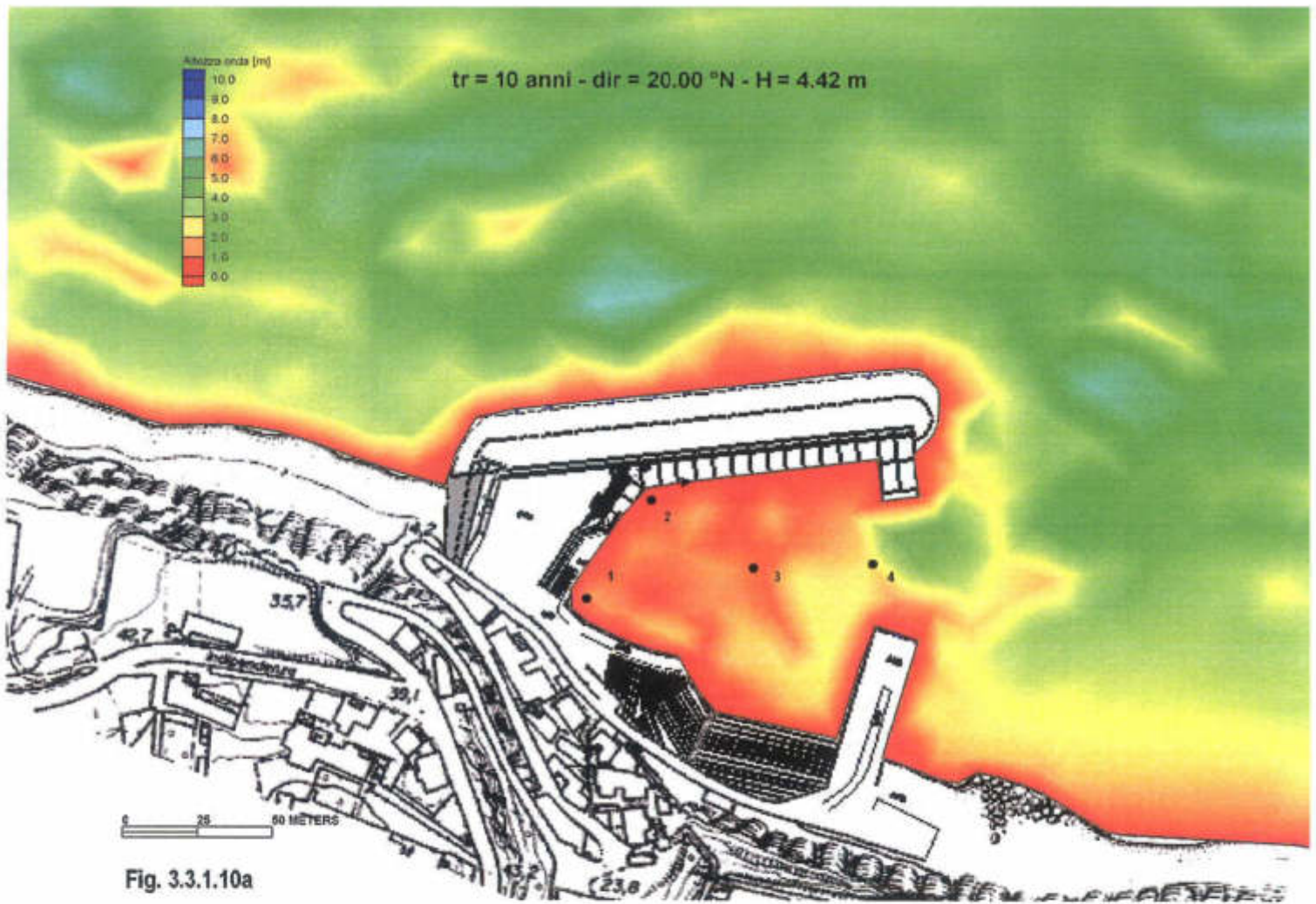
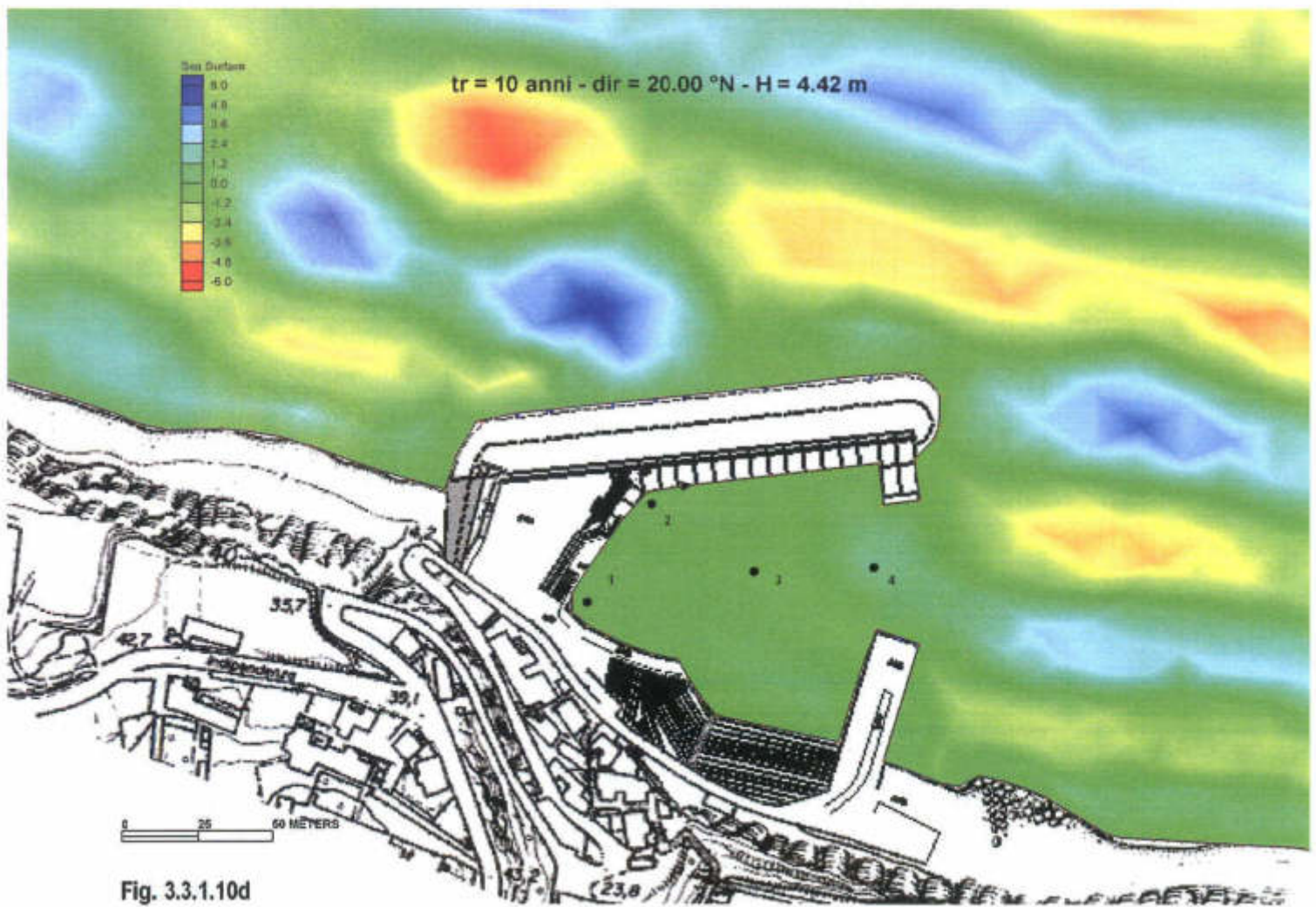
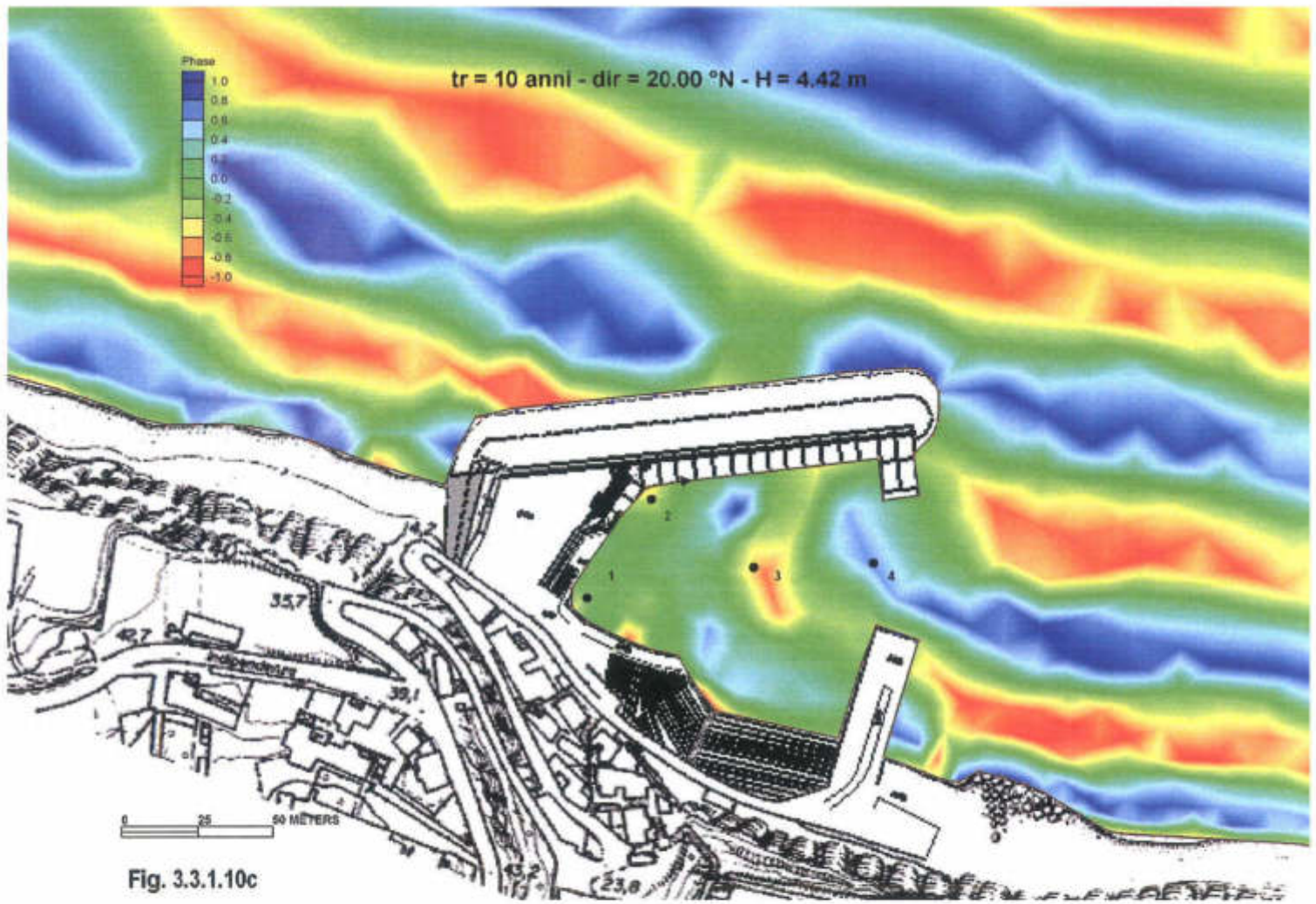
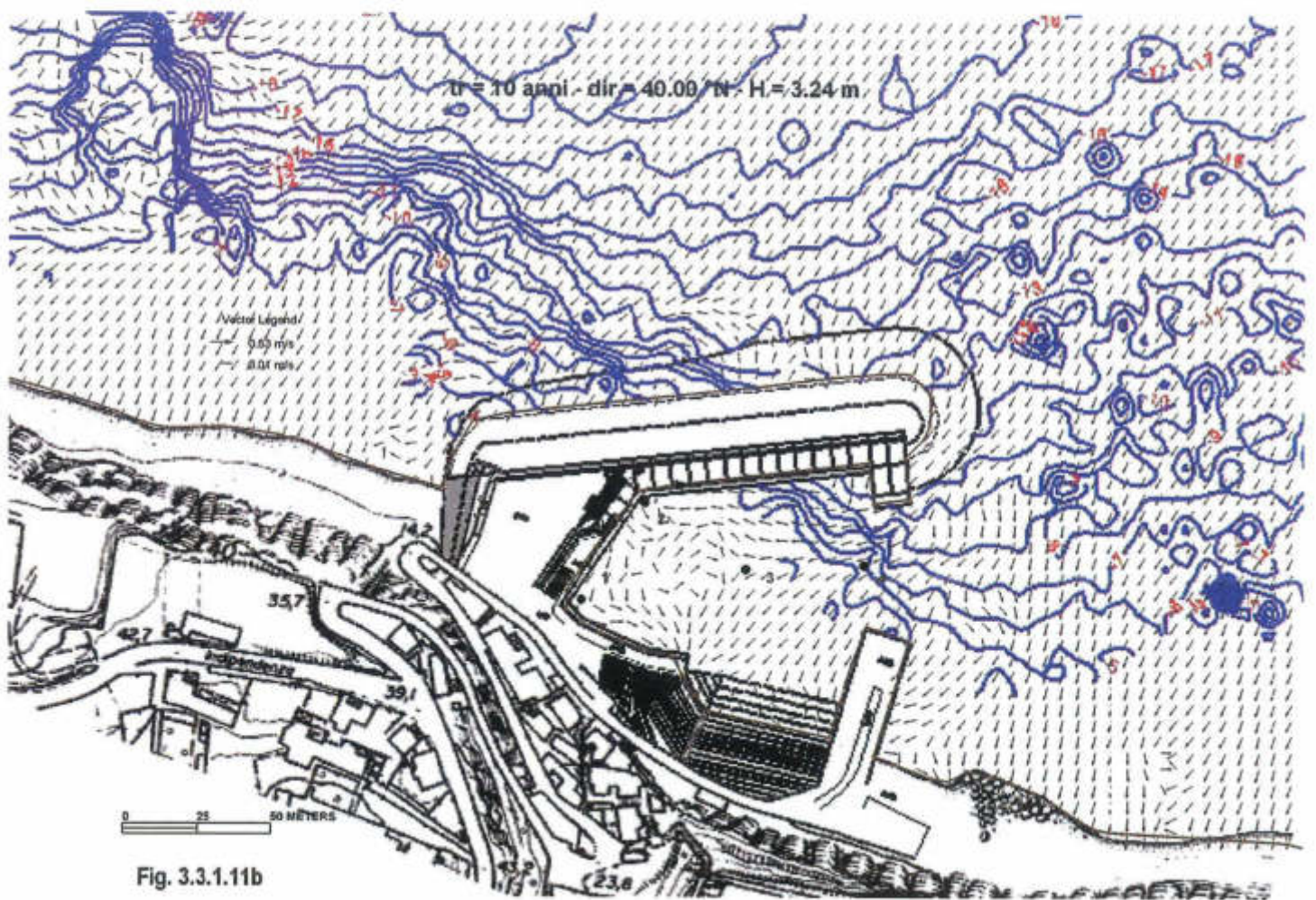
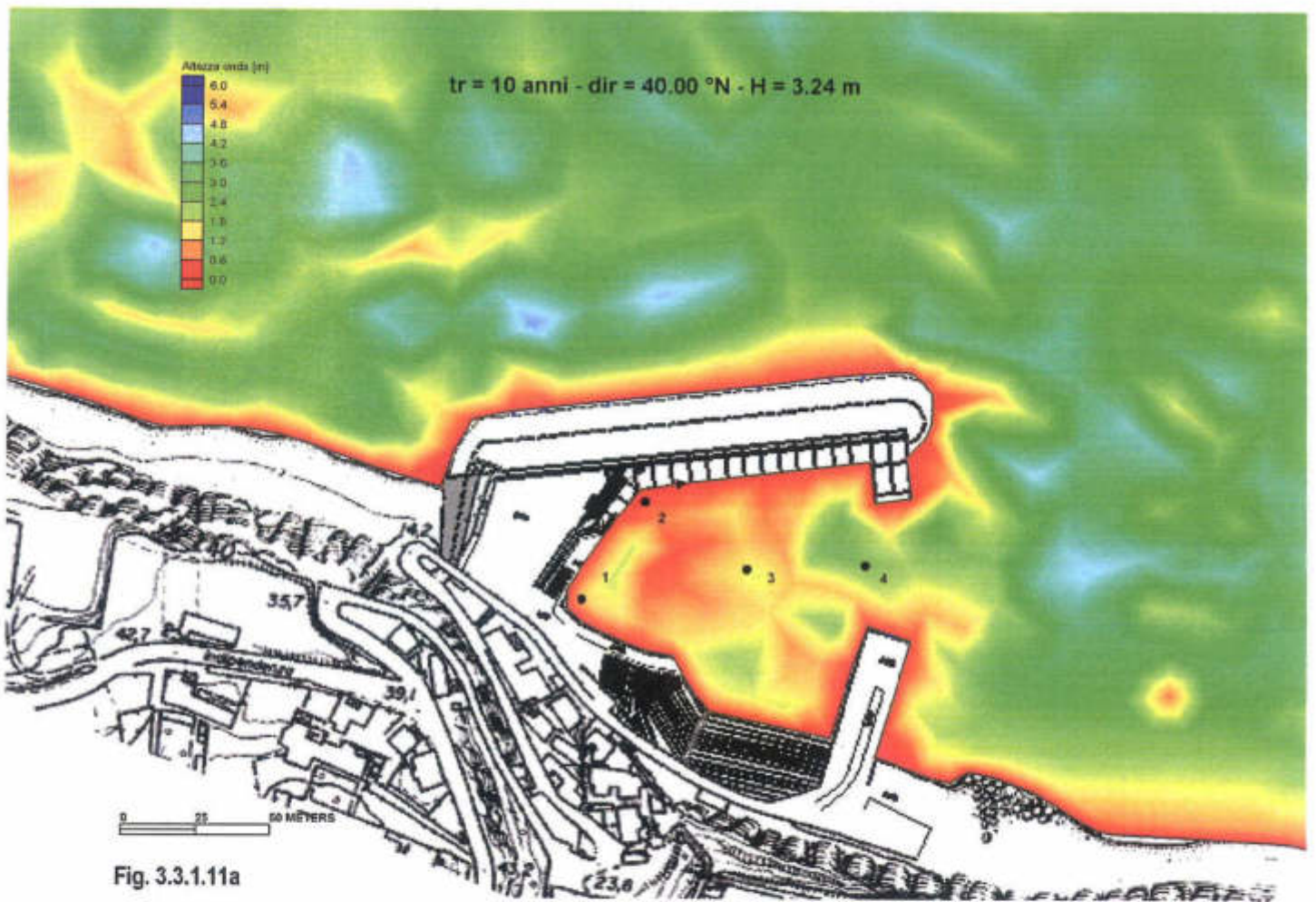


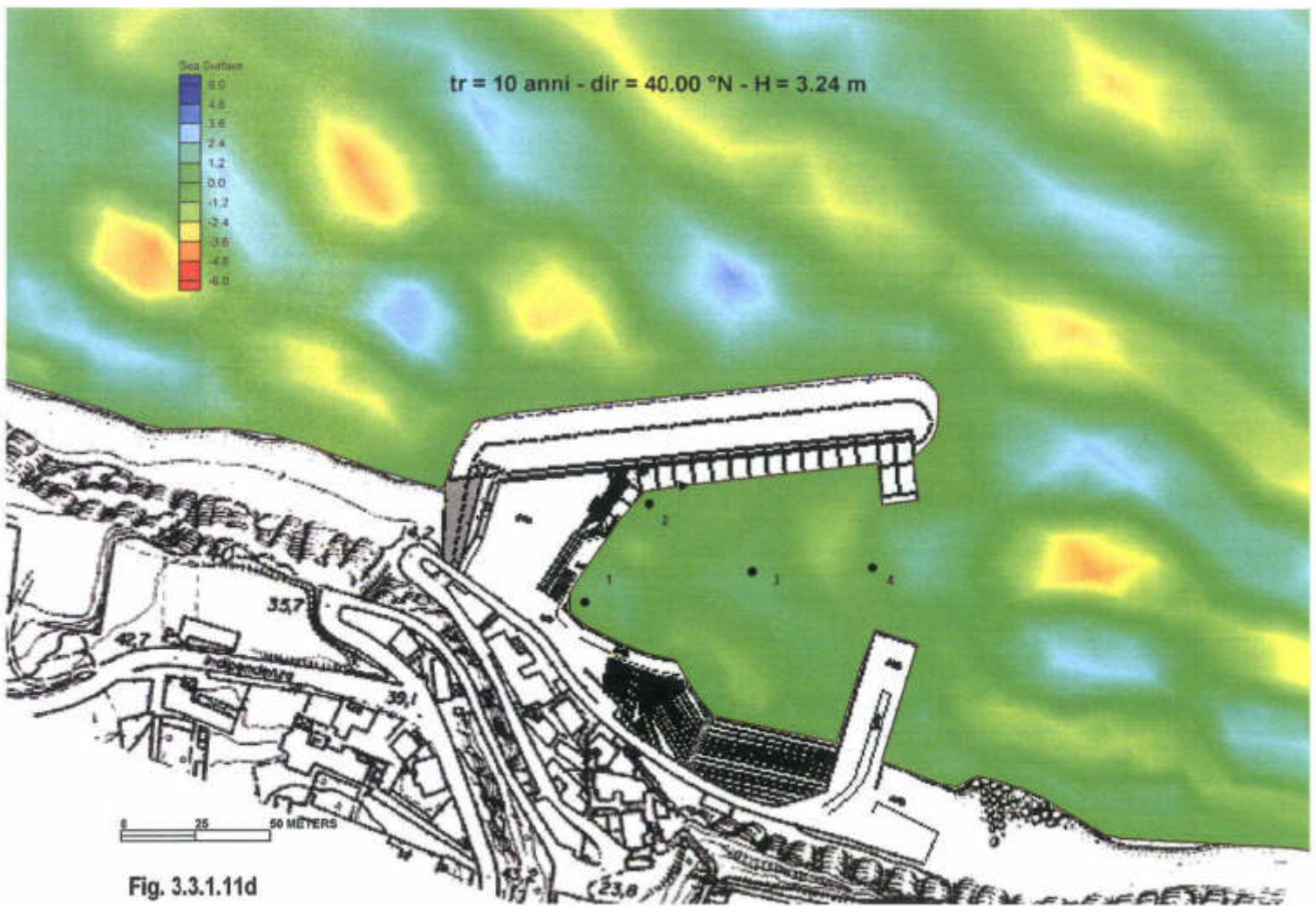
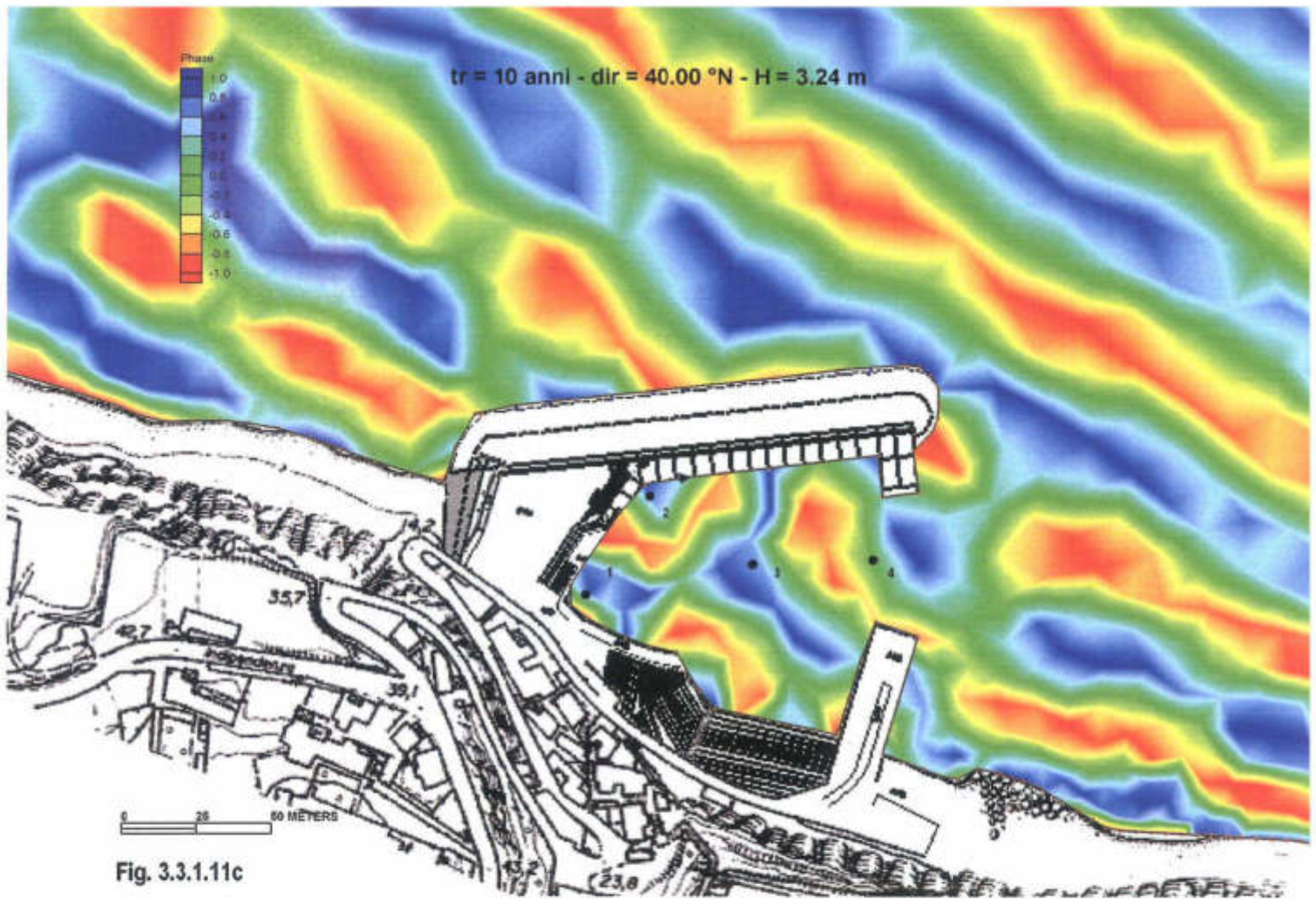
Fig. 3.3.1.9b

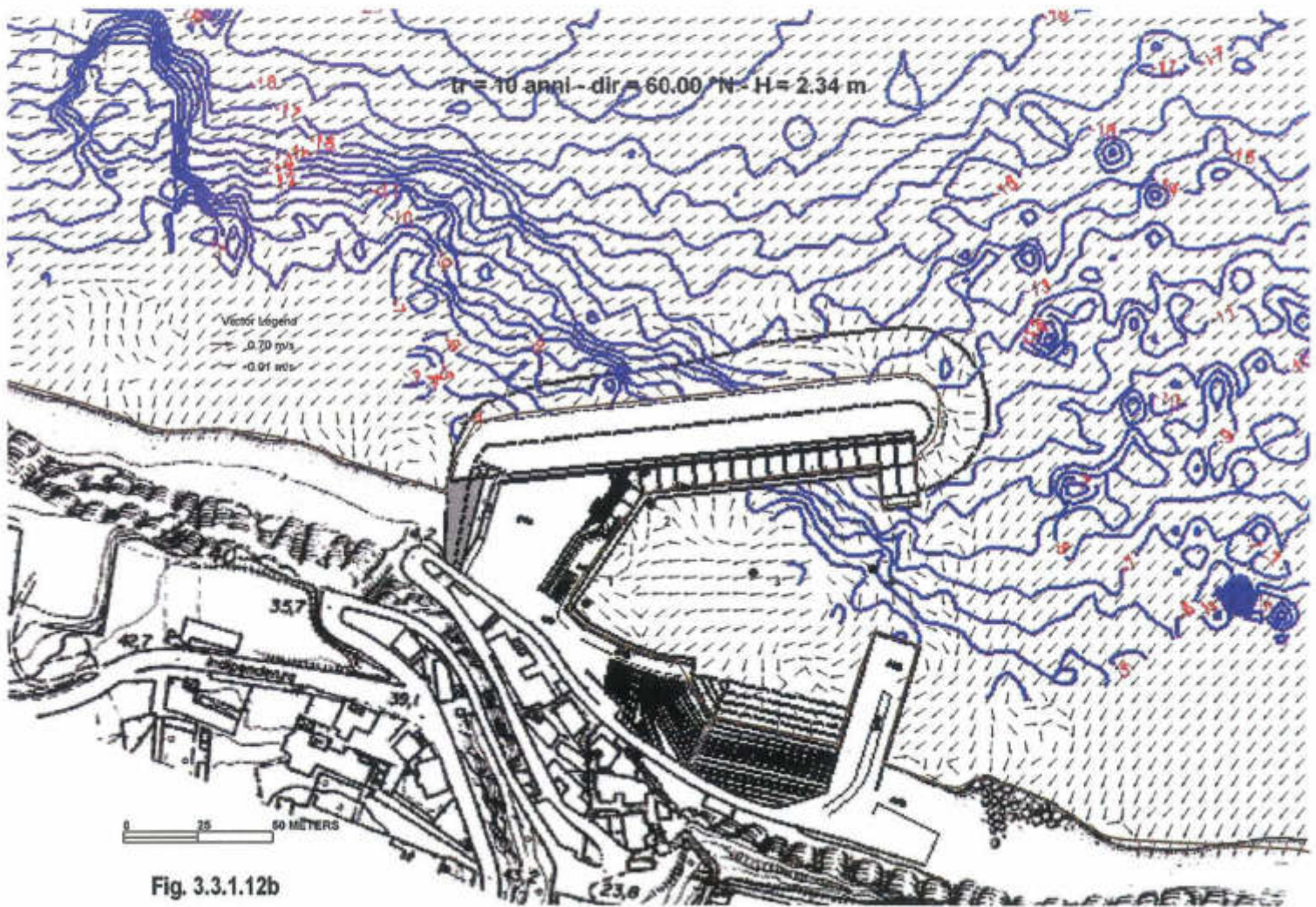
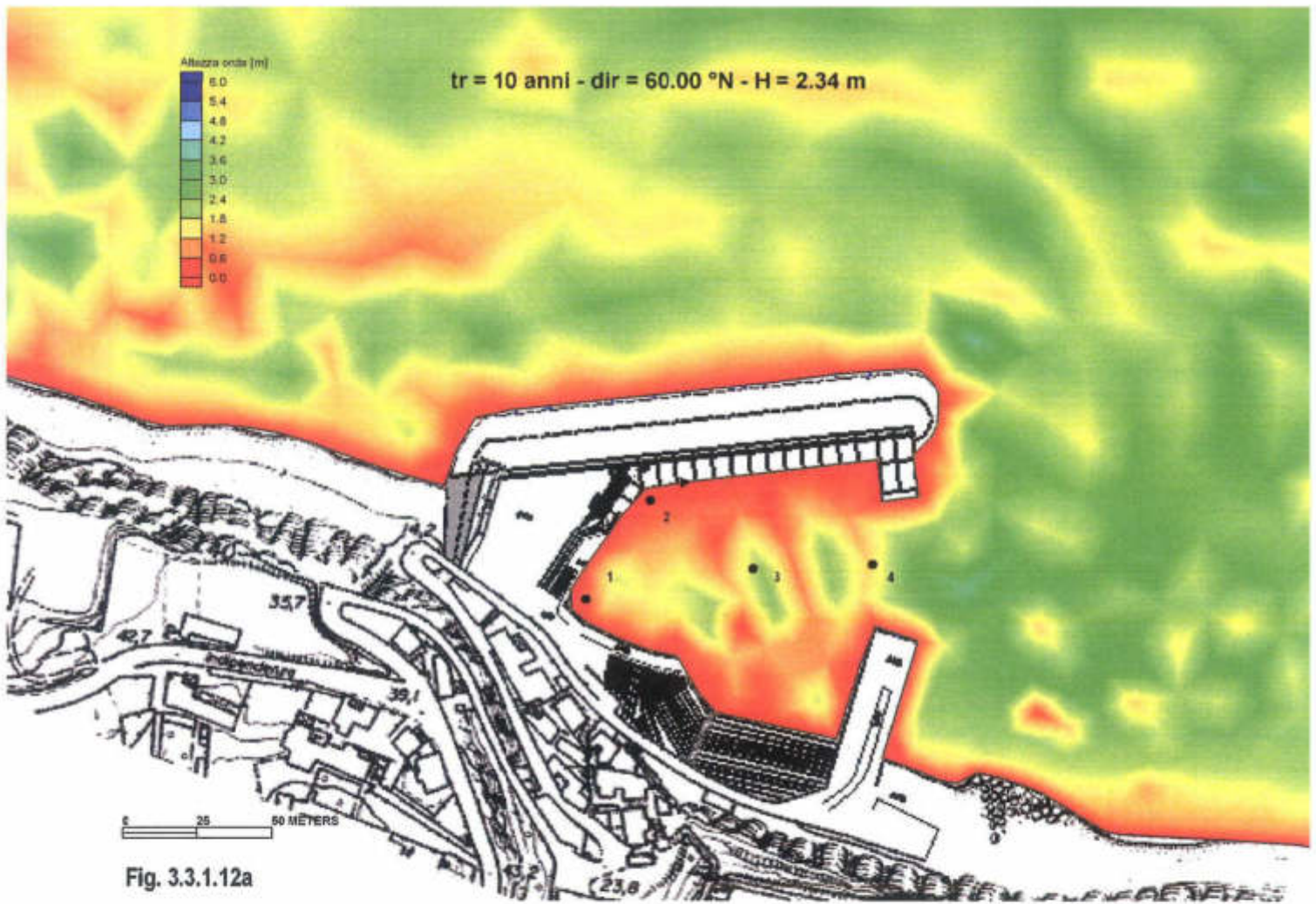


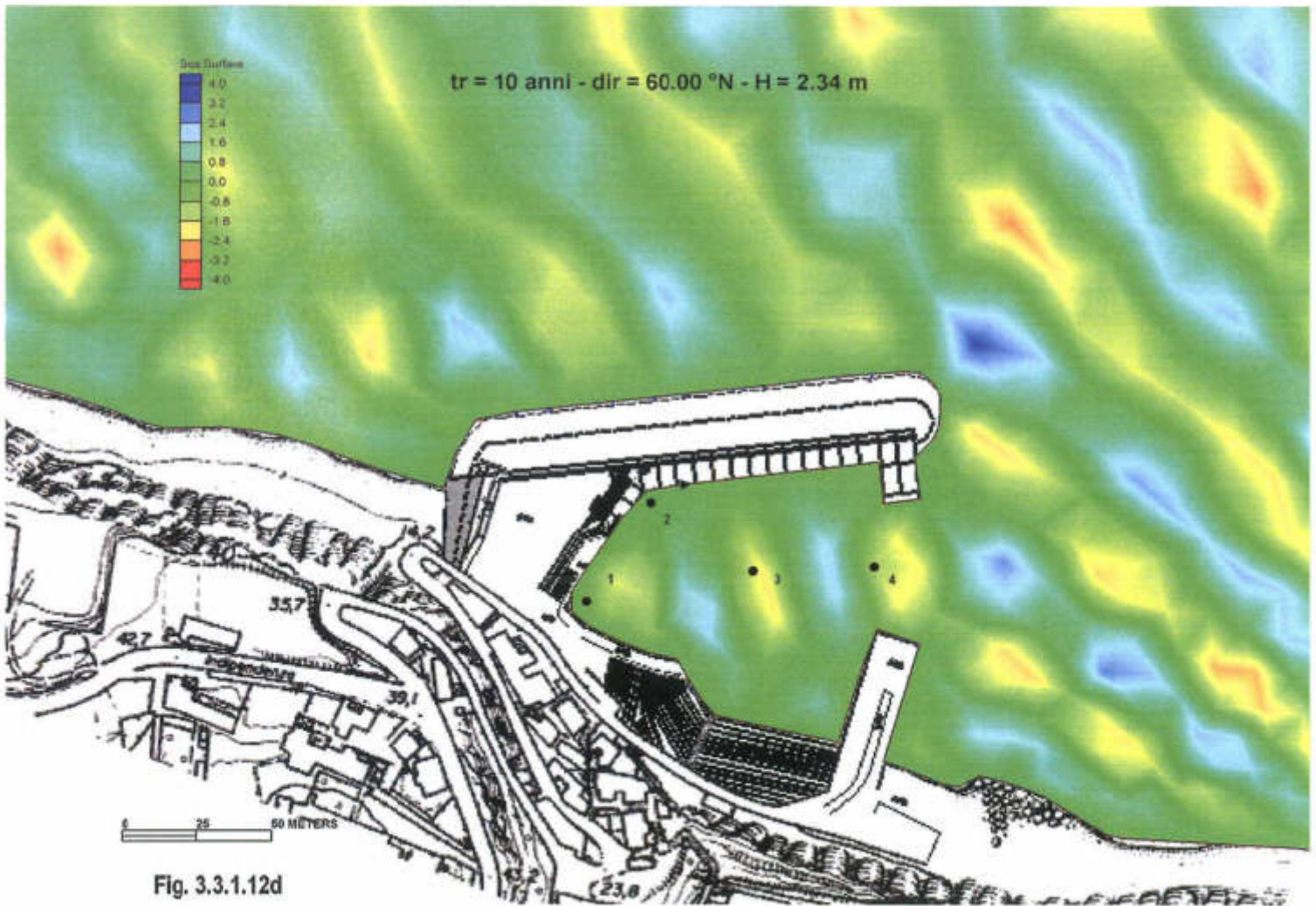
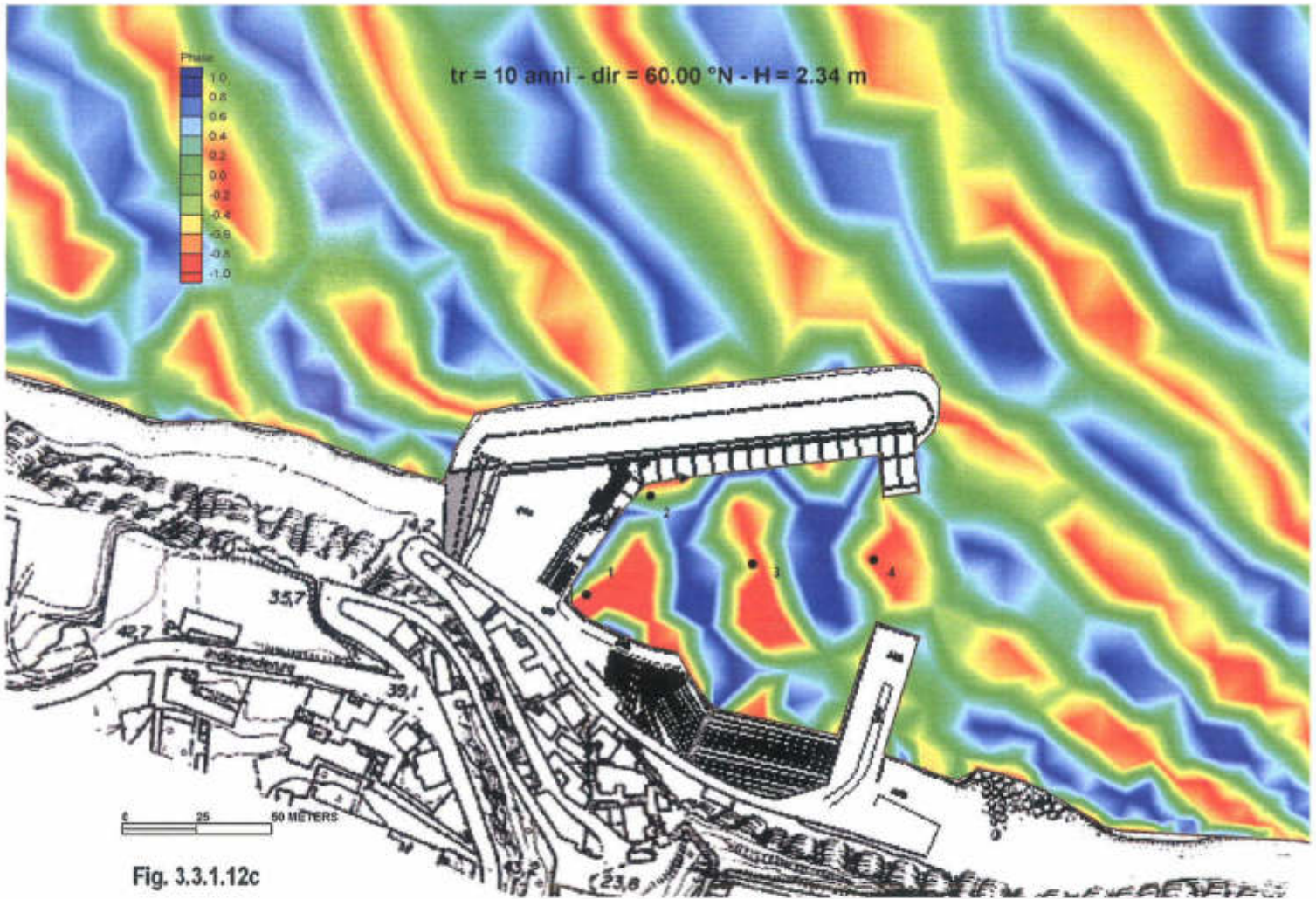


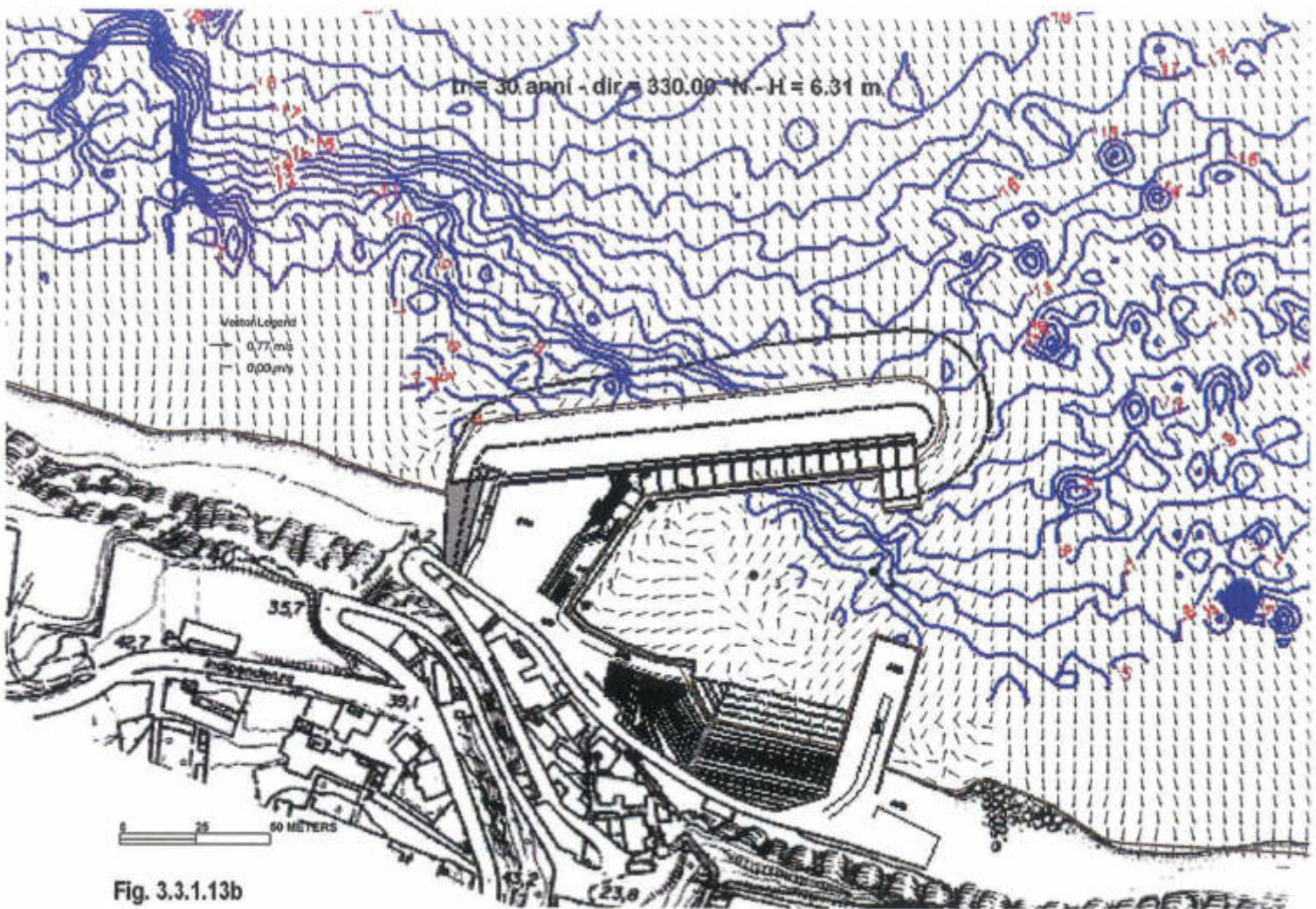
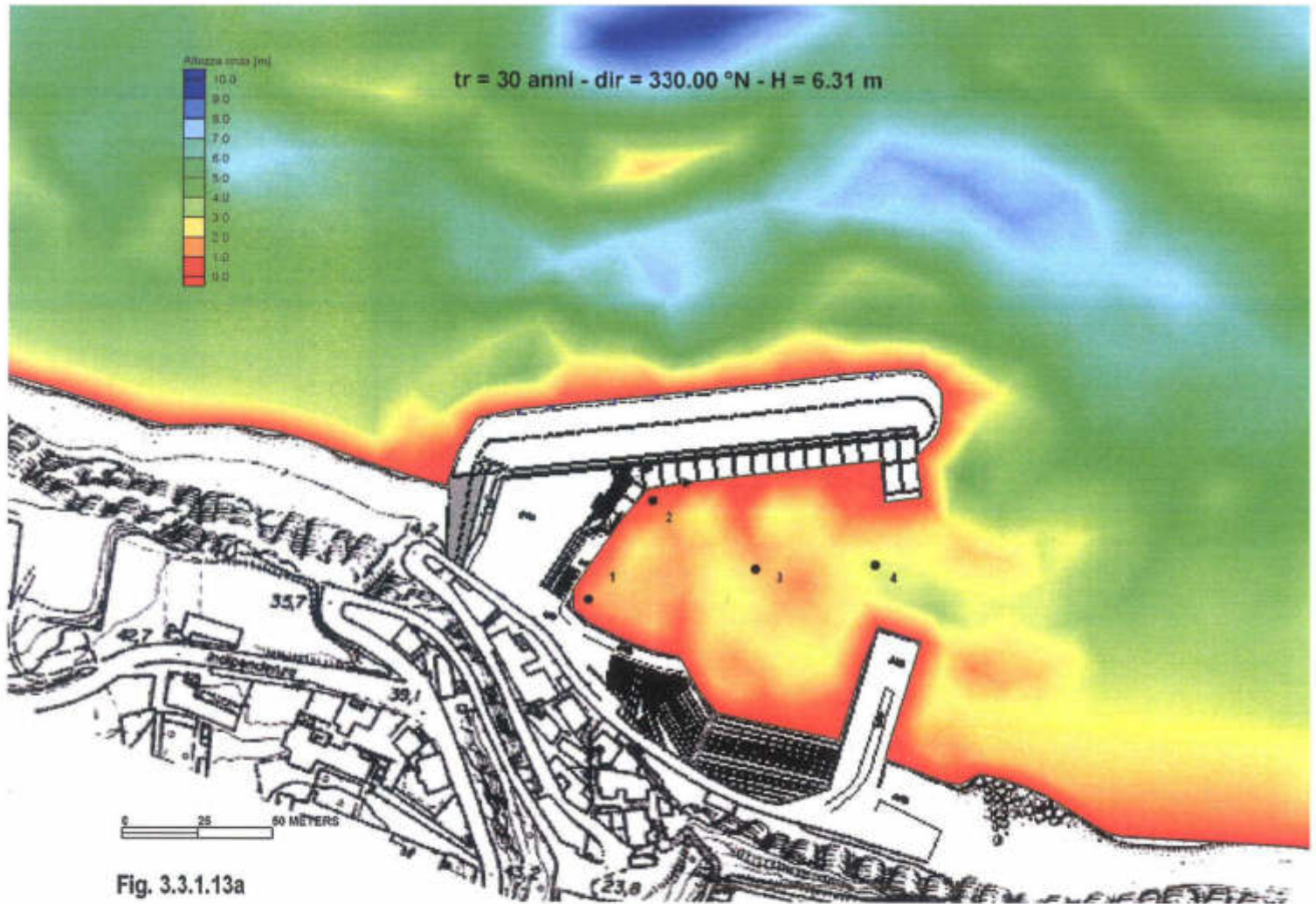


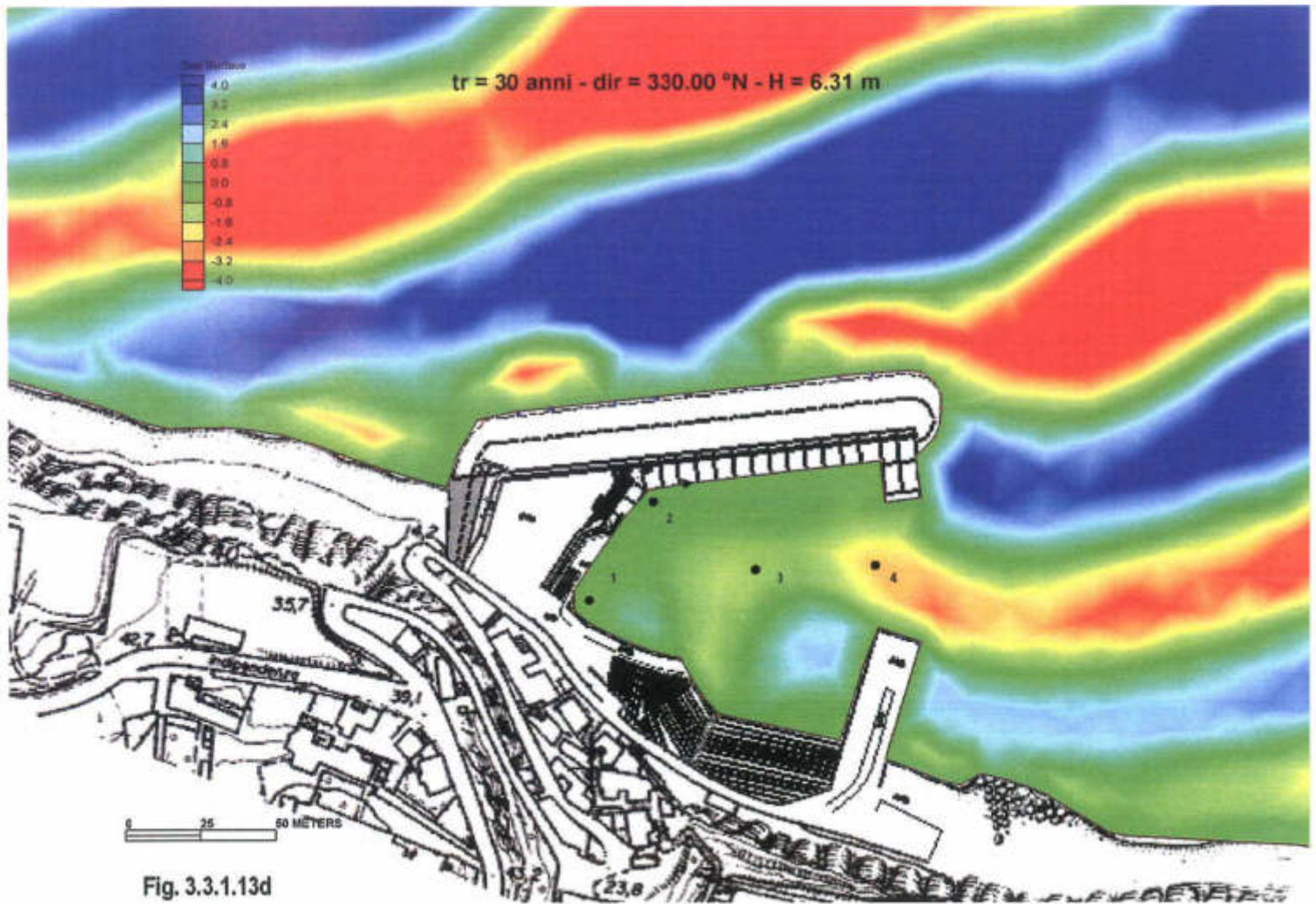
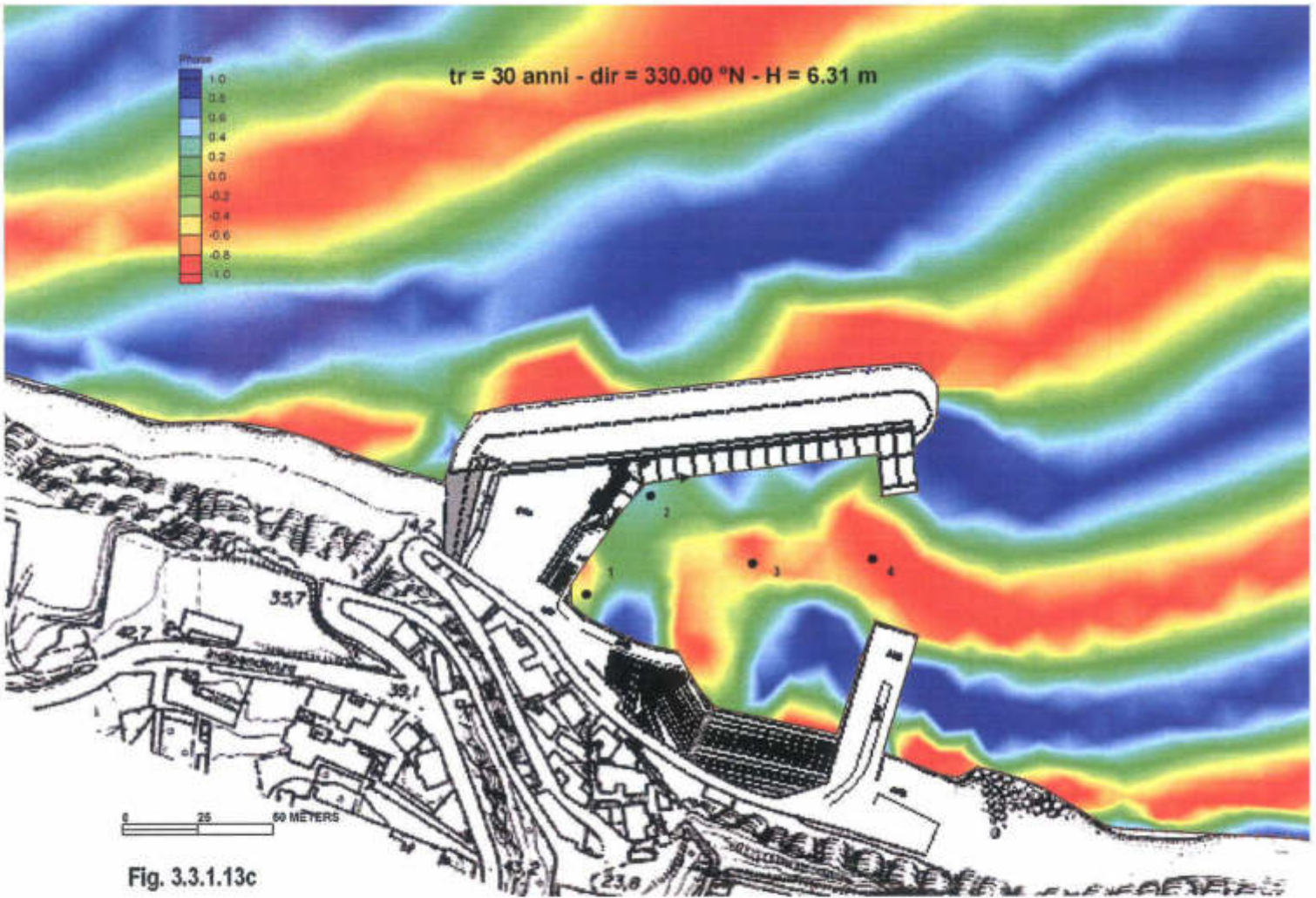












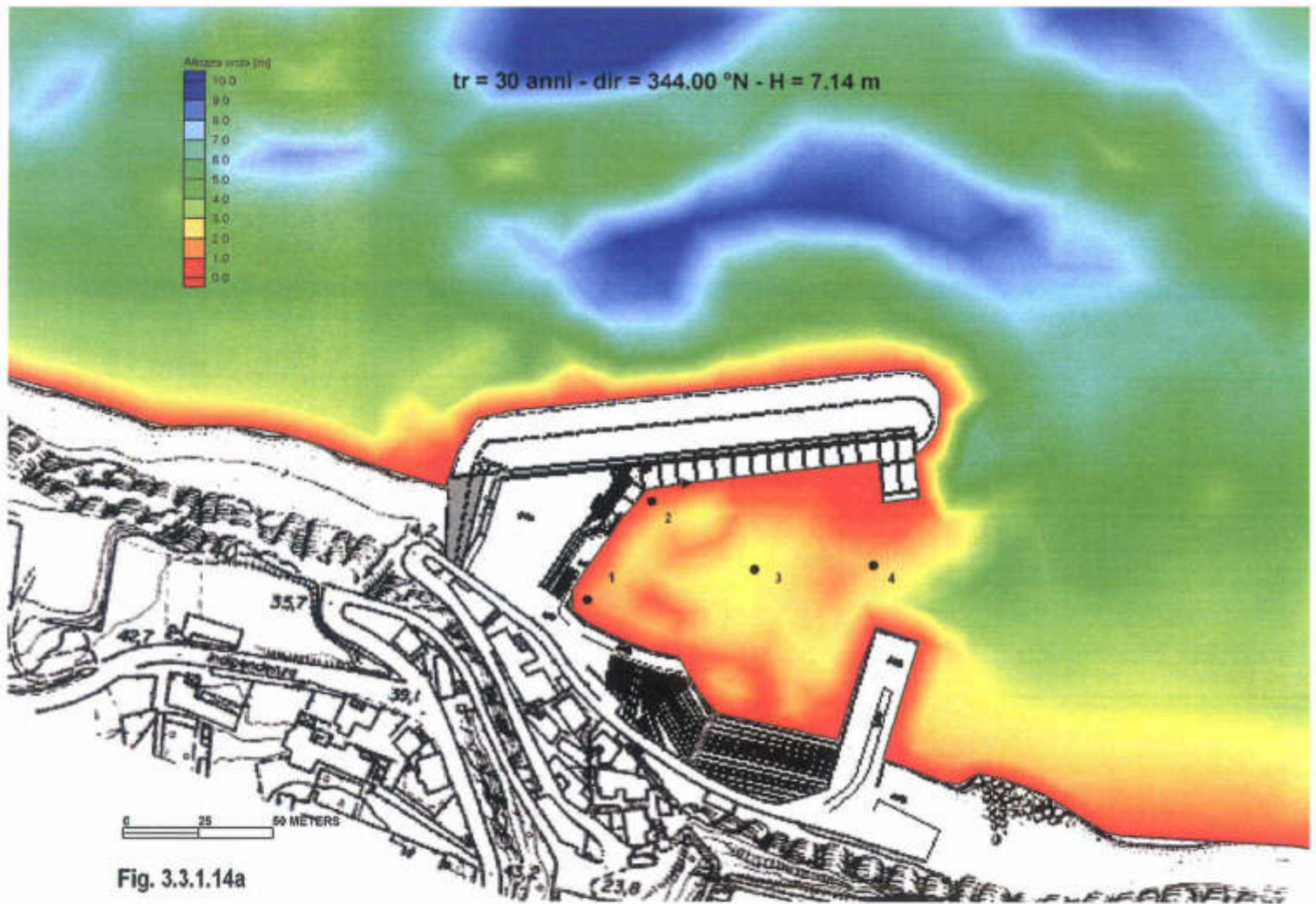


Fig. 3.3.1.14a

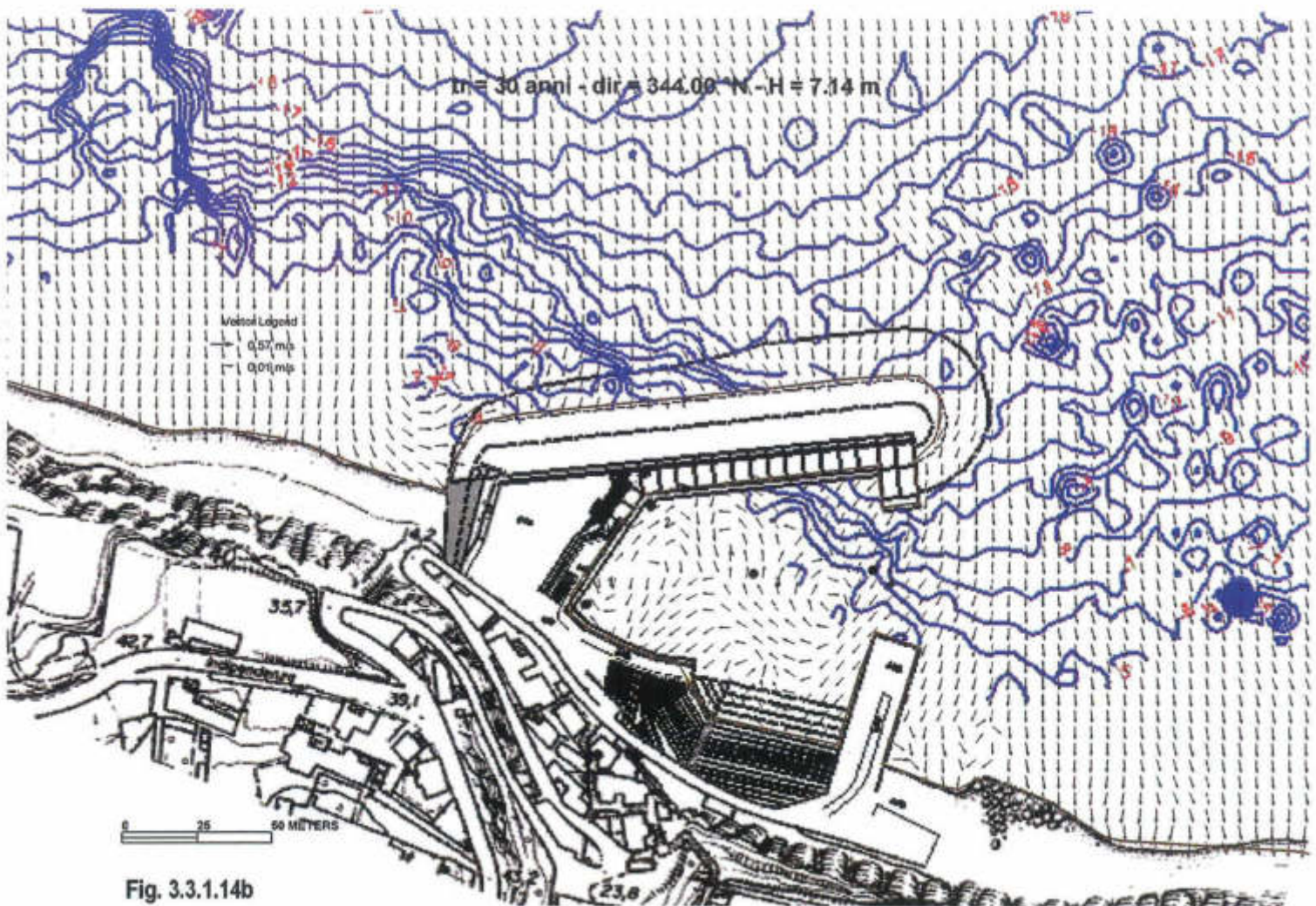
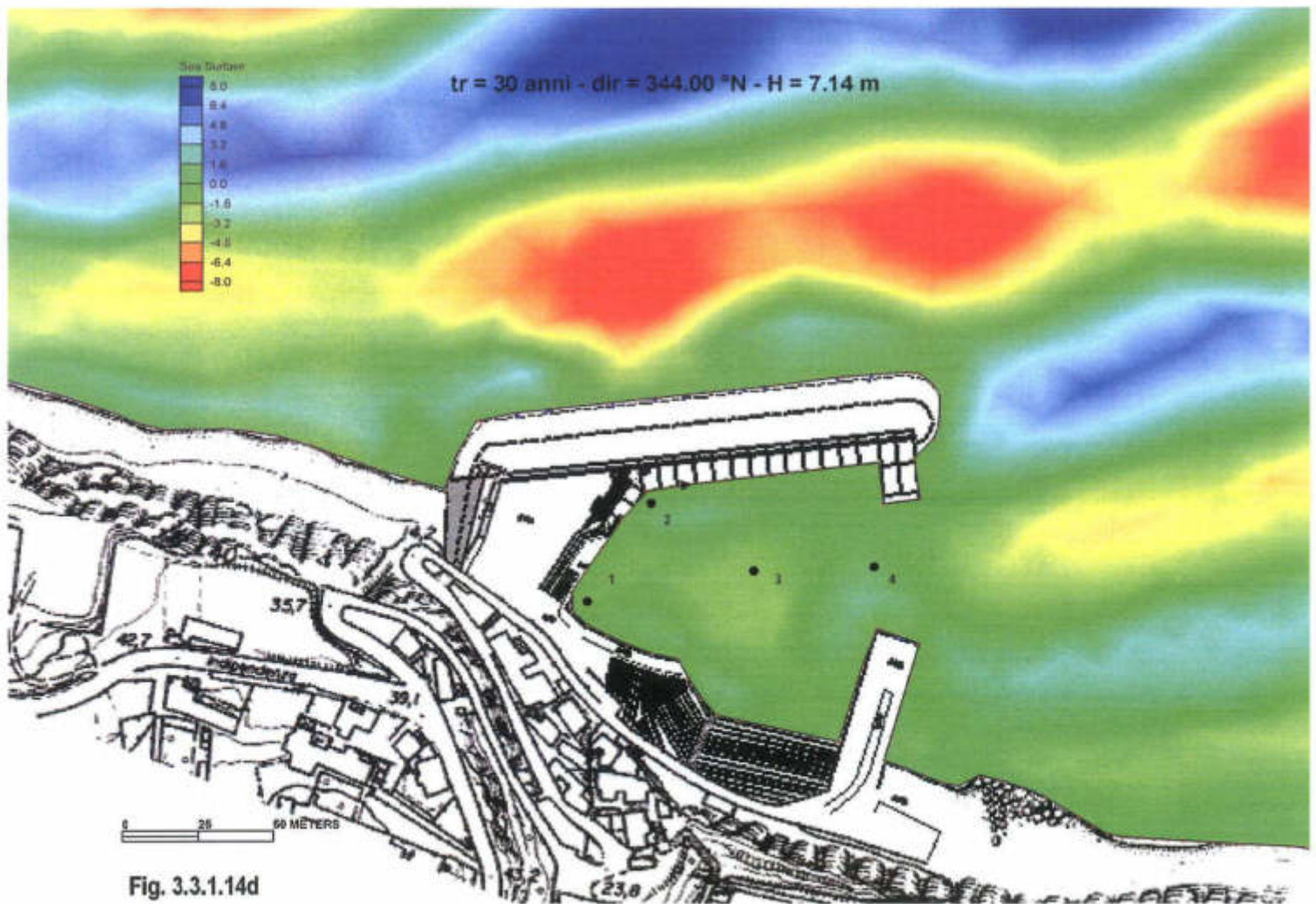
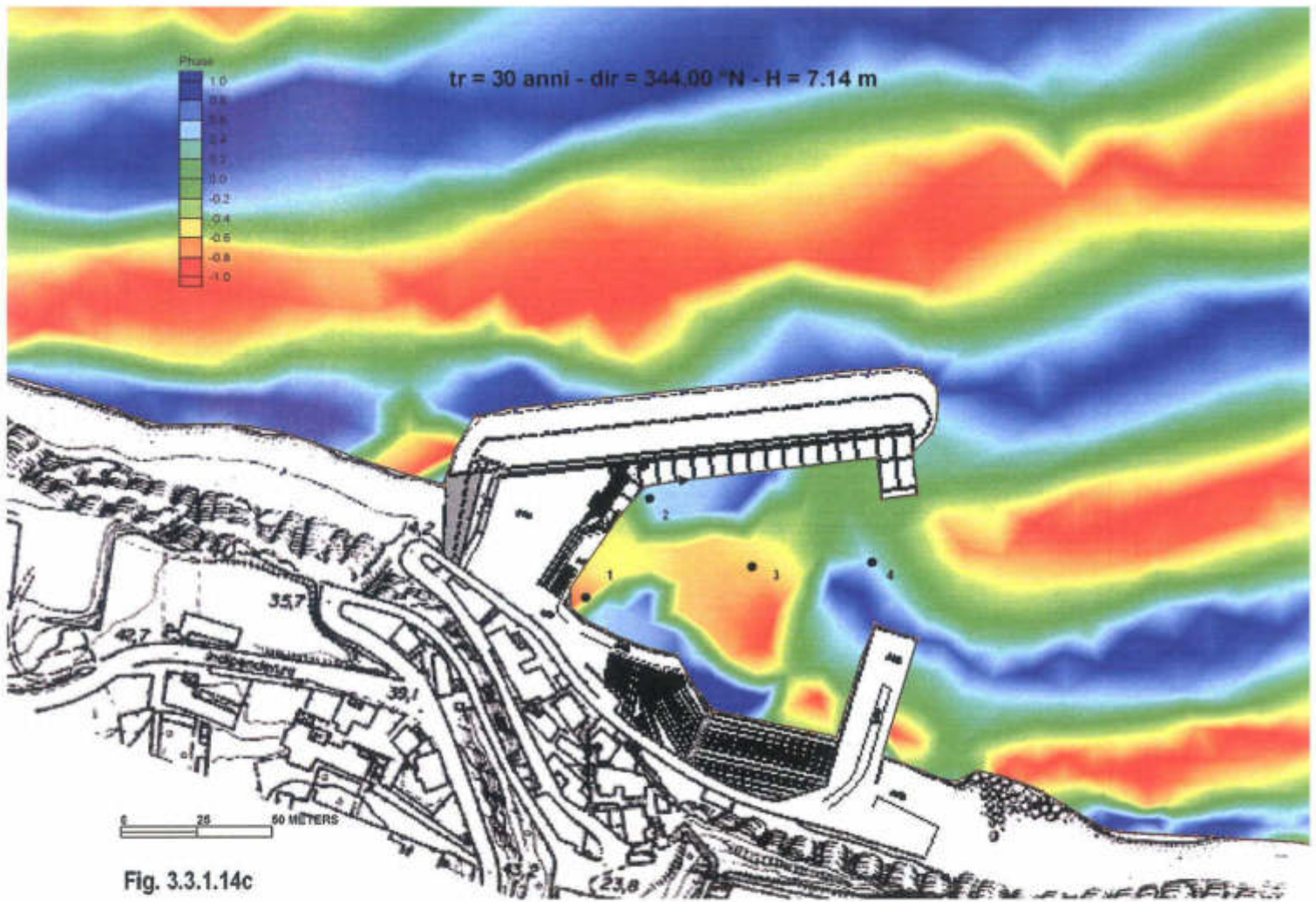
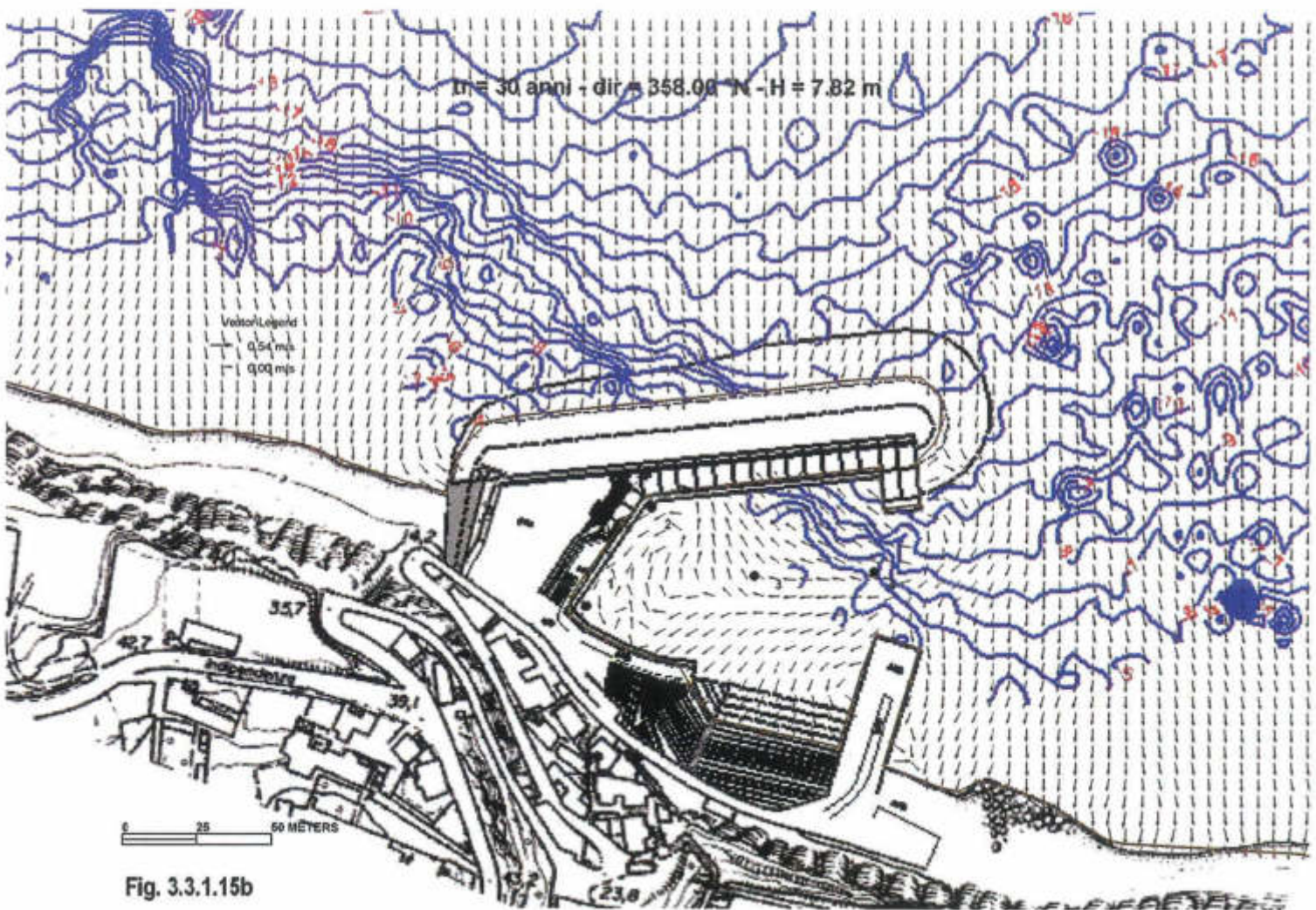
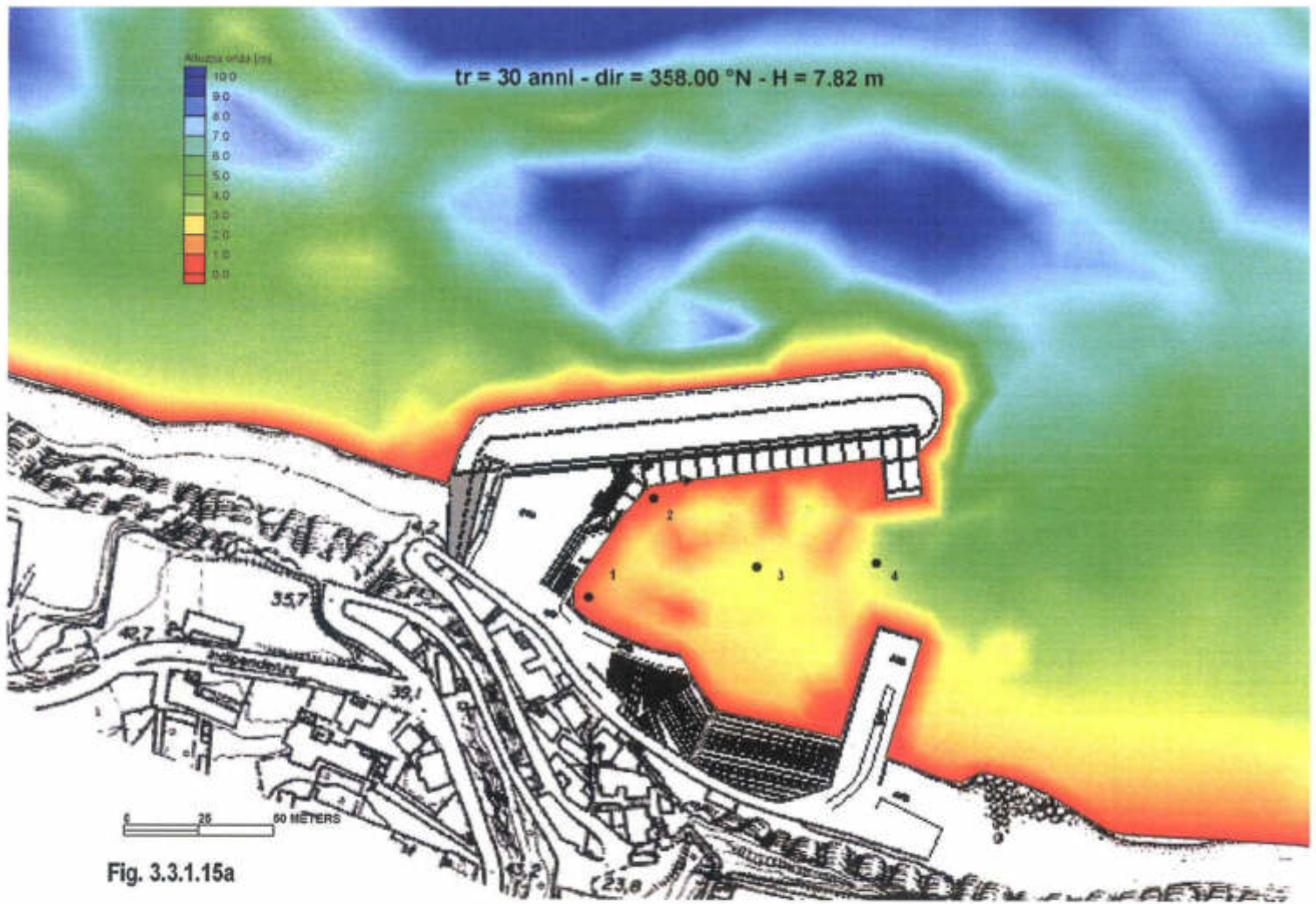
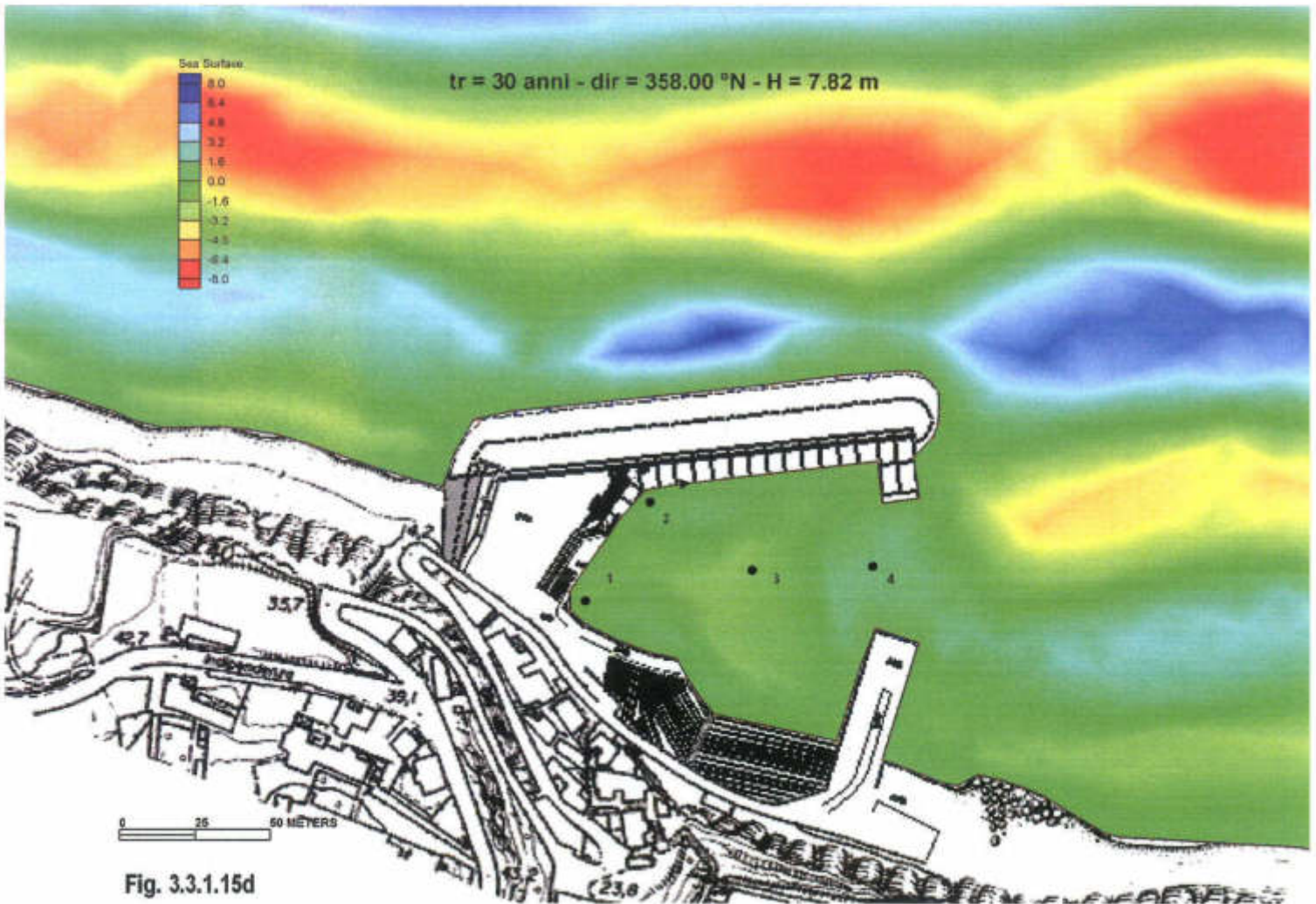
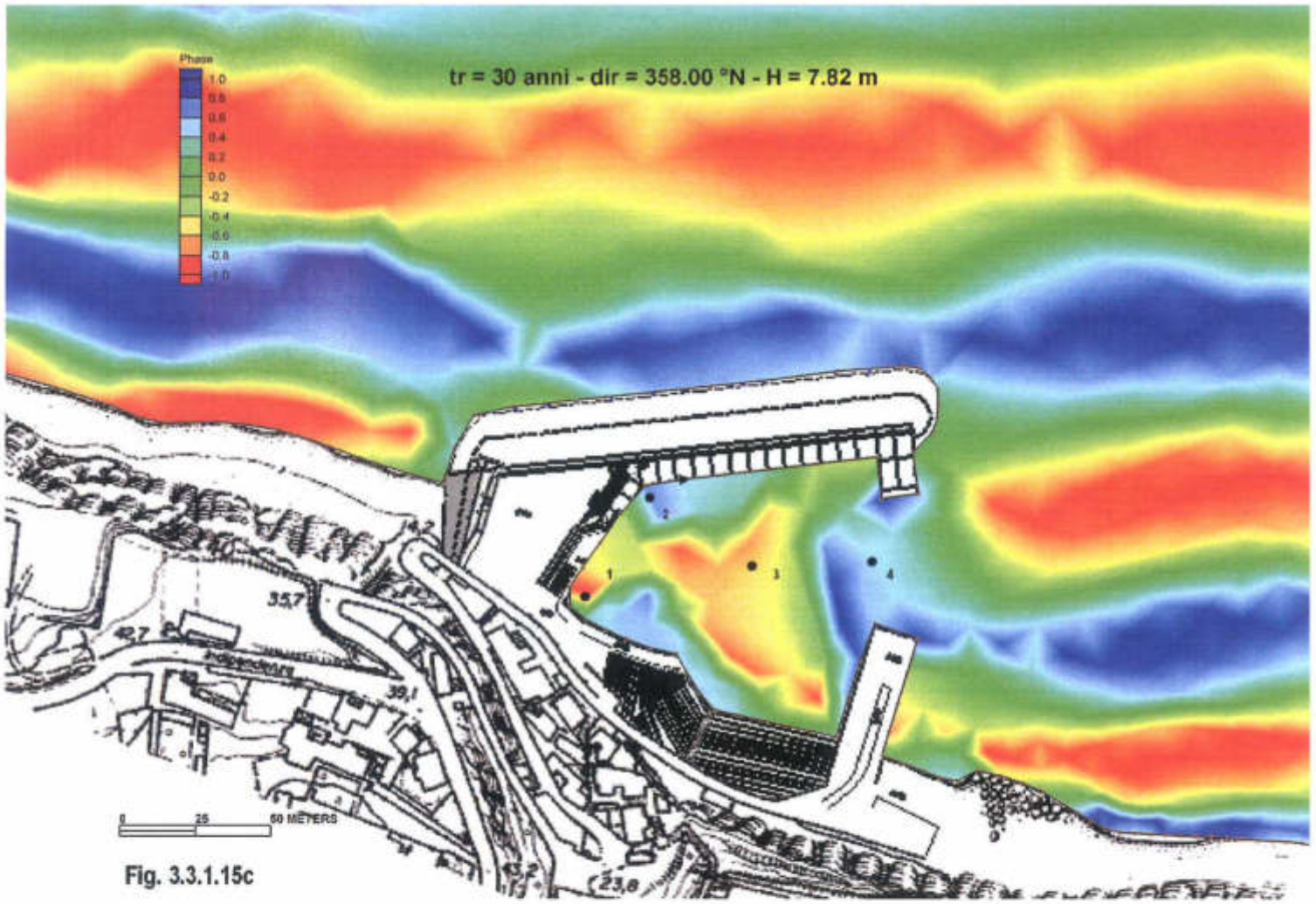
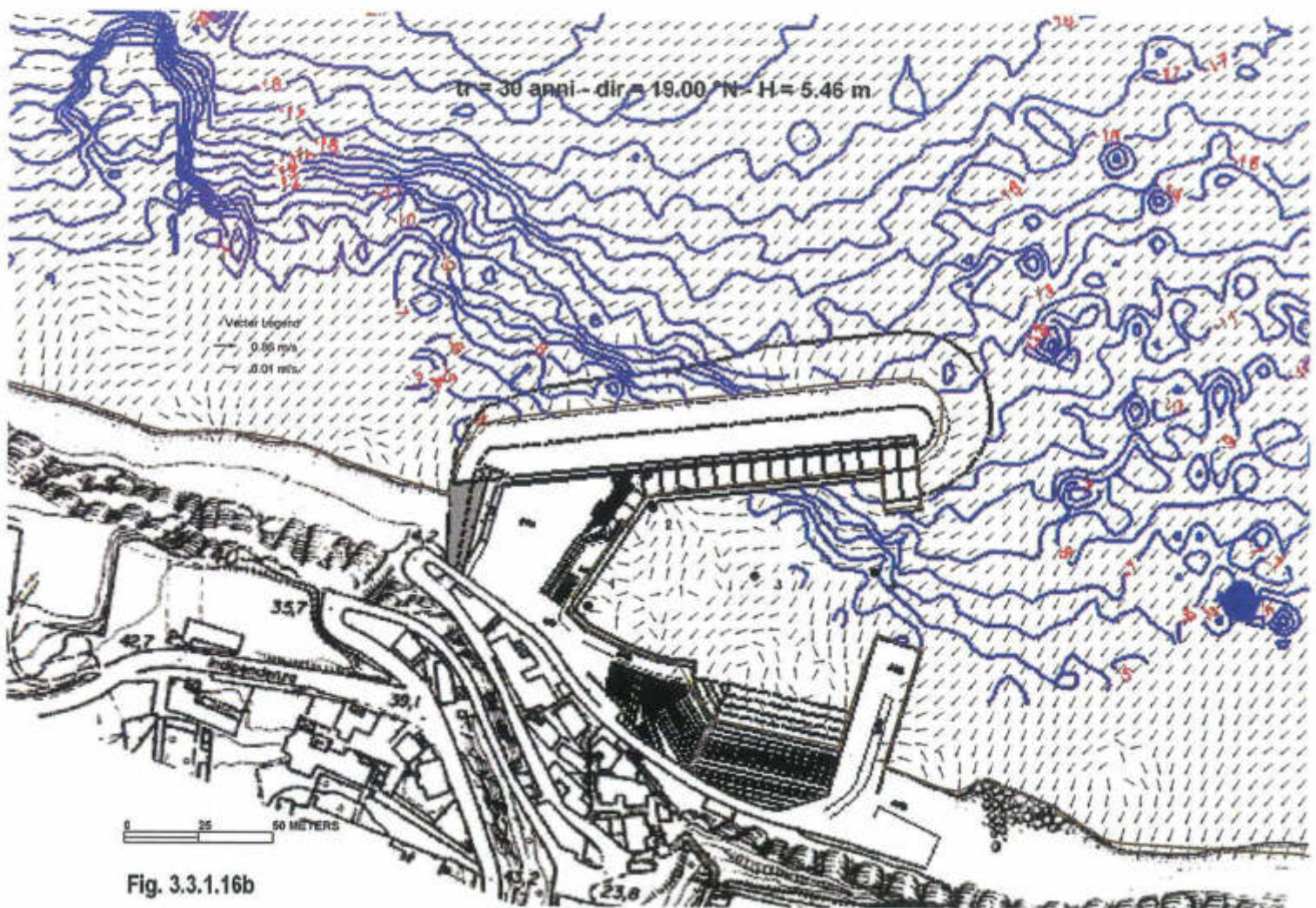
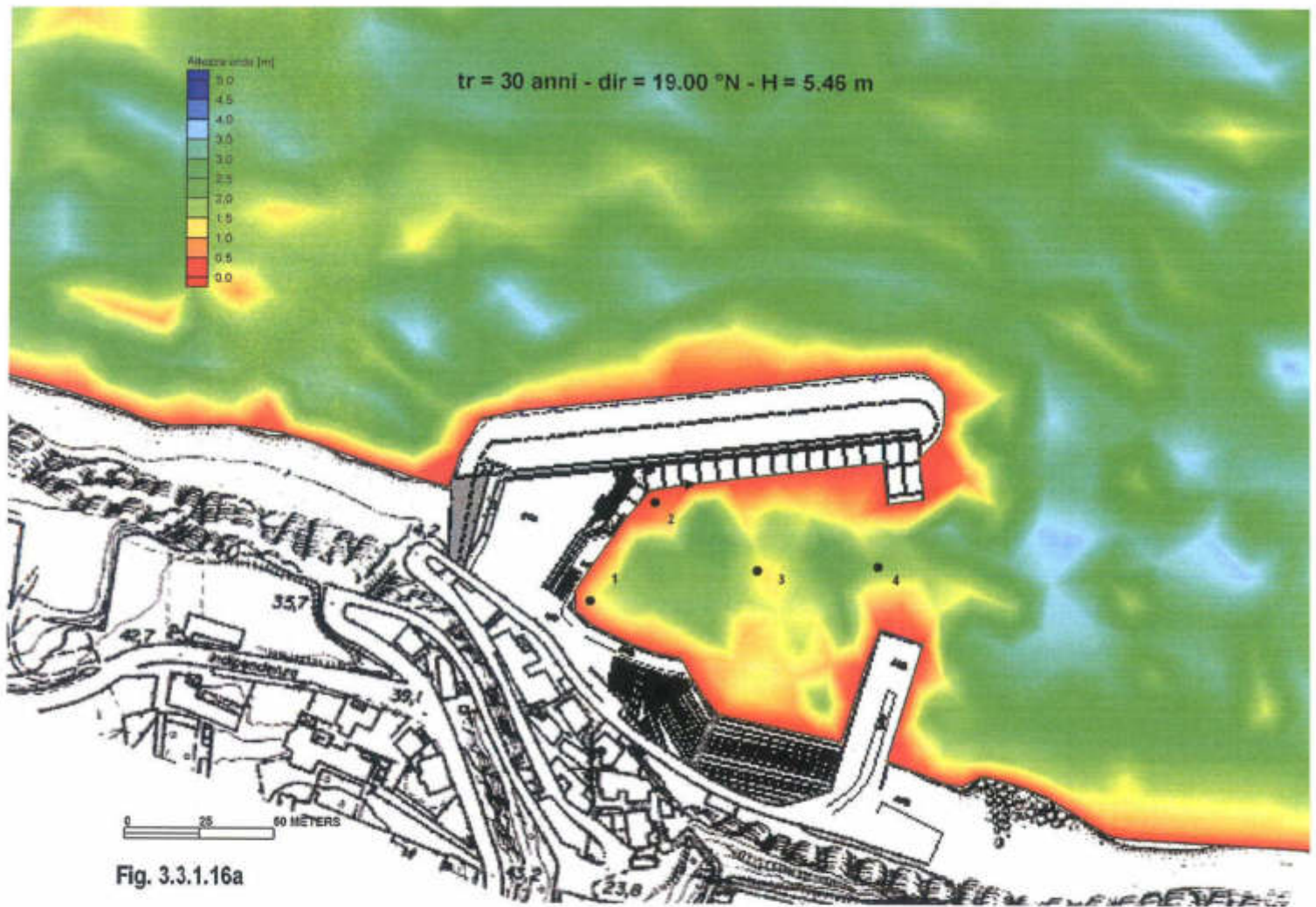


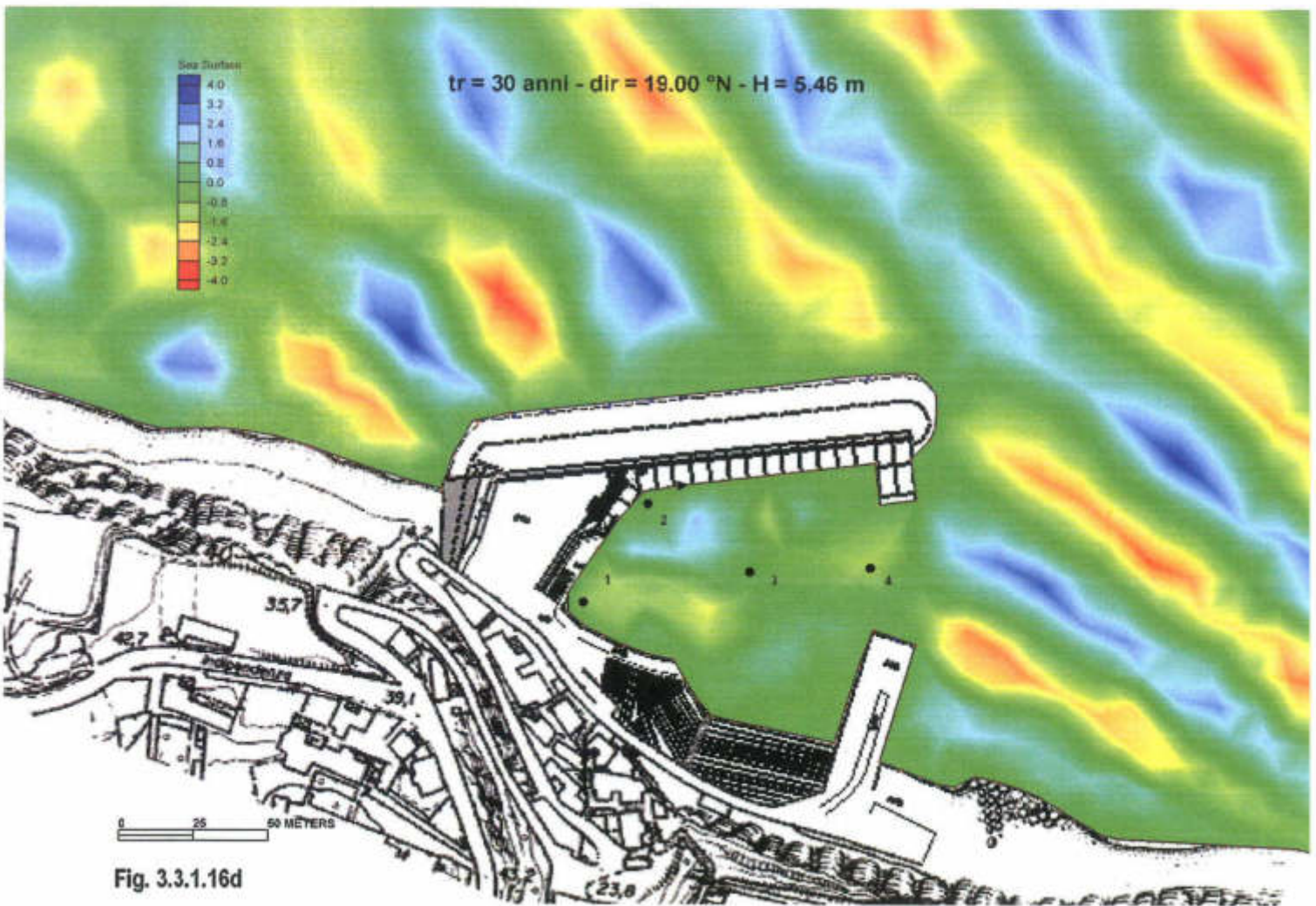
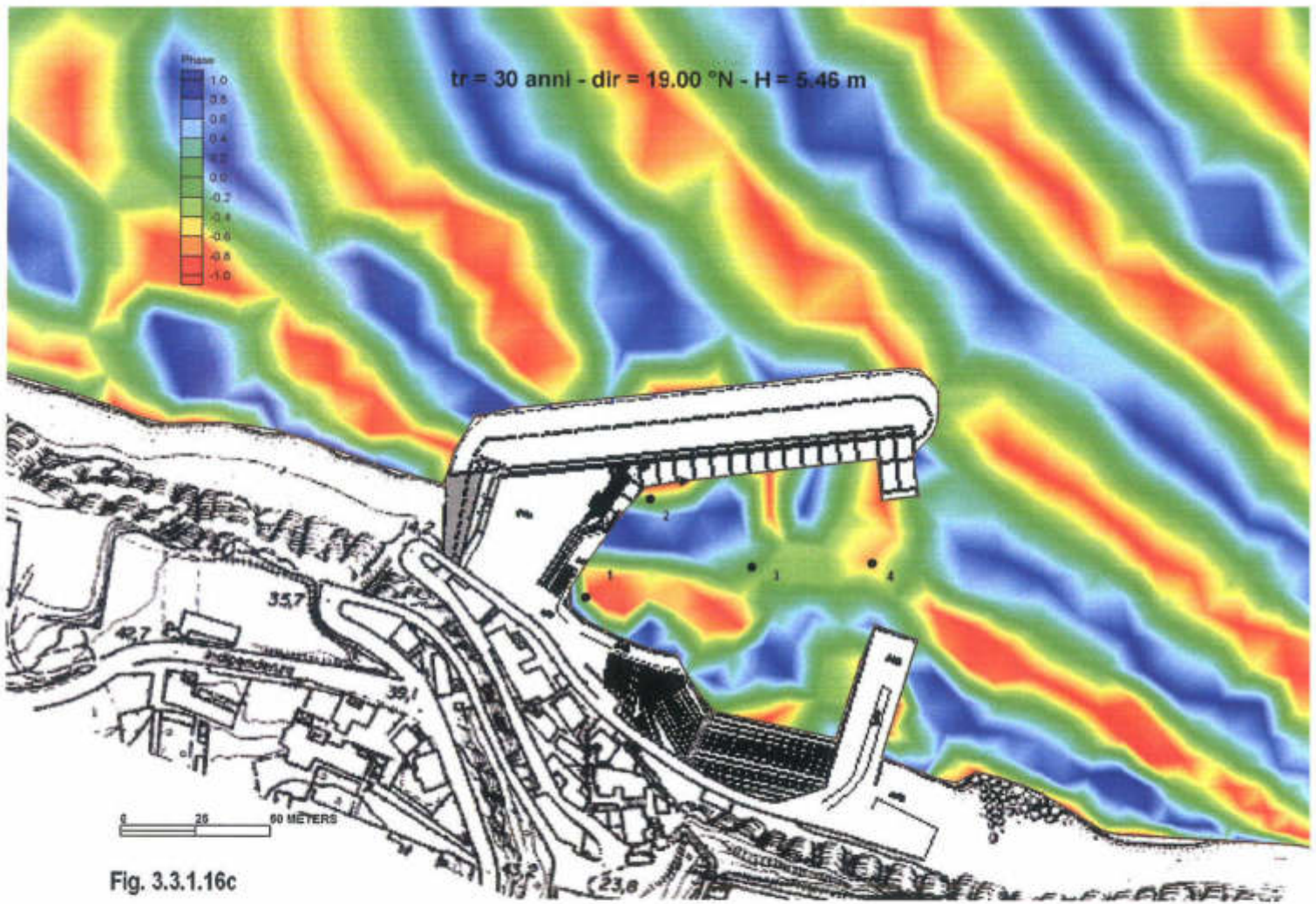
Fig. 3.3.1.14b

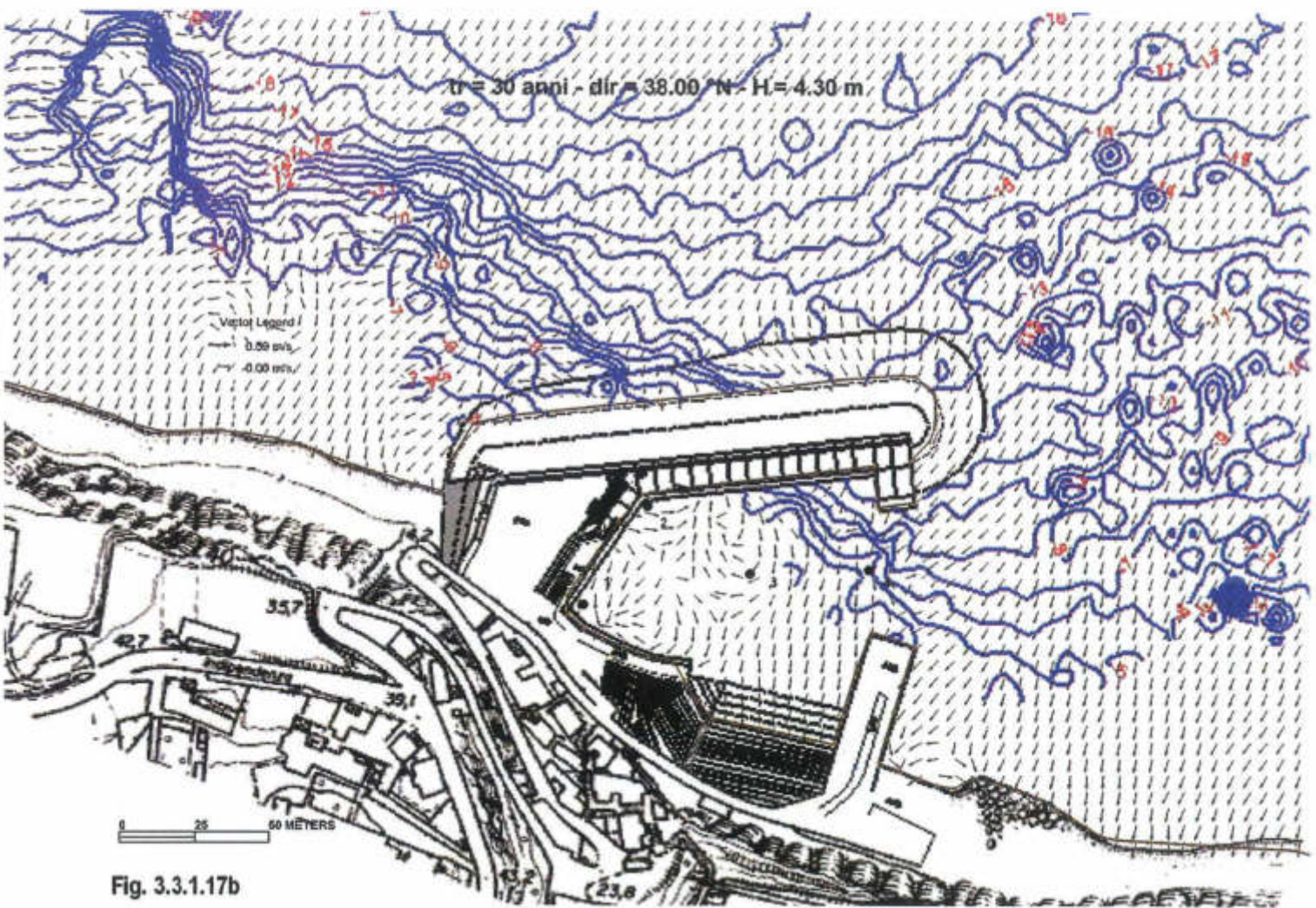
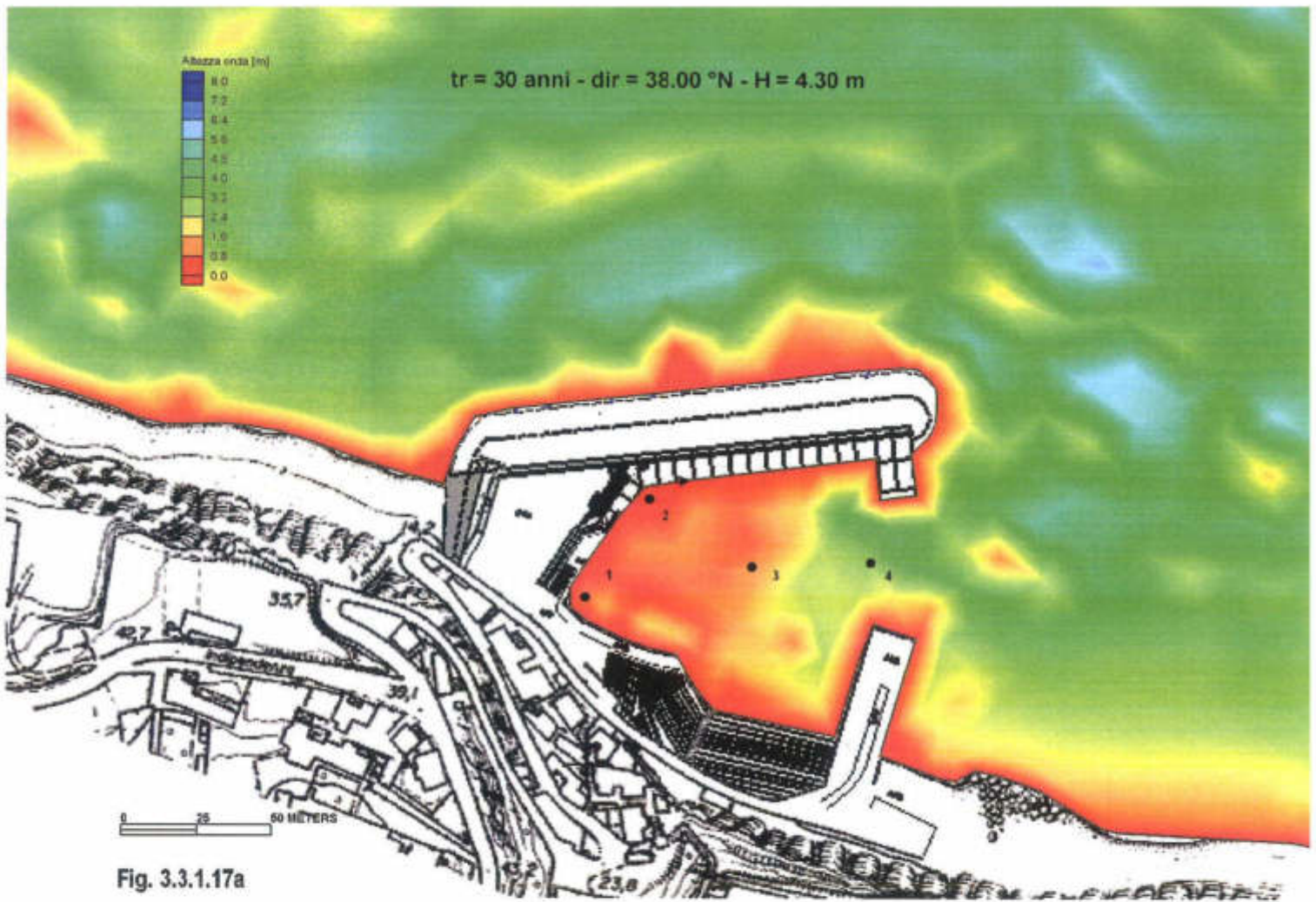


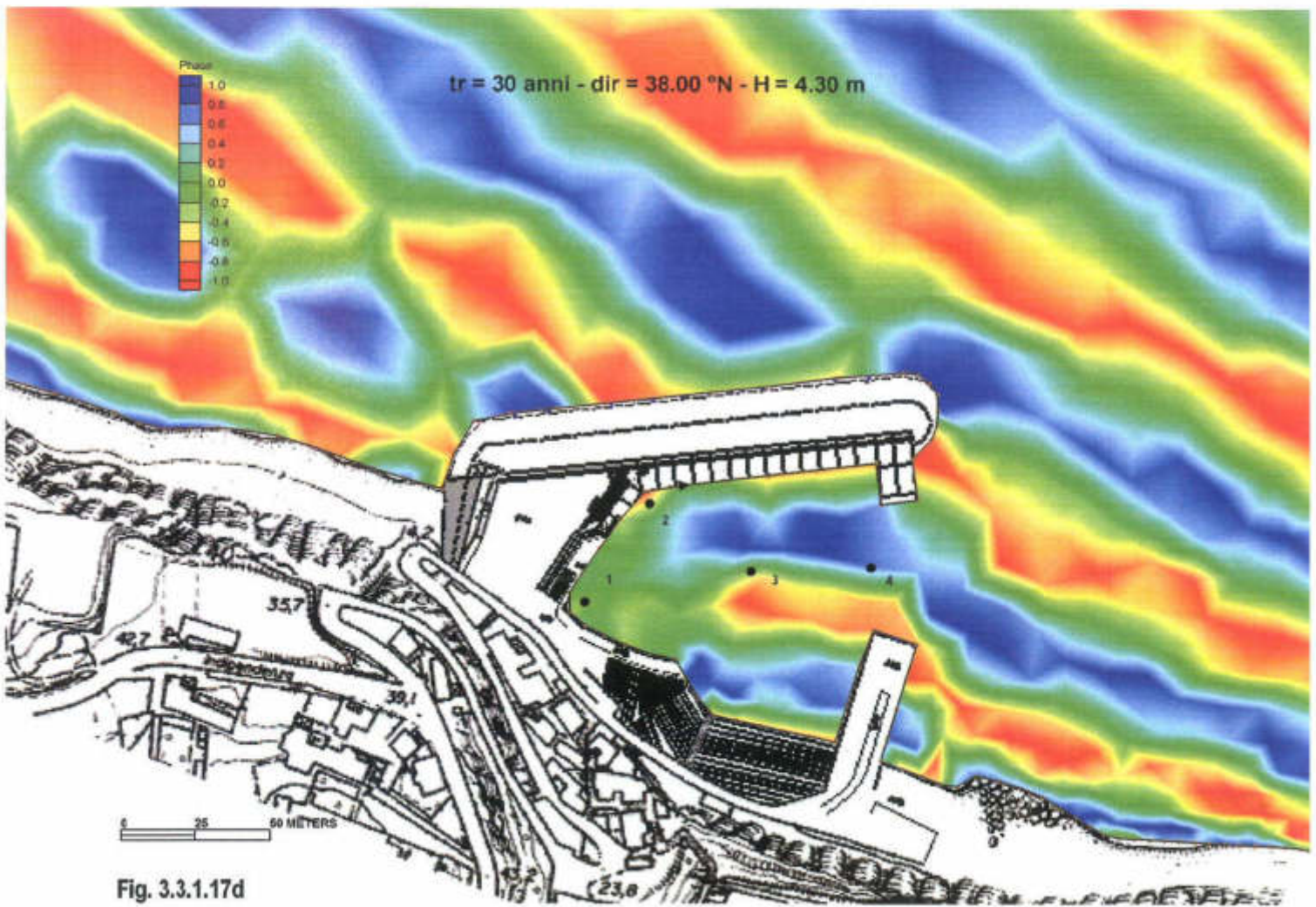
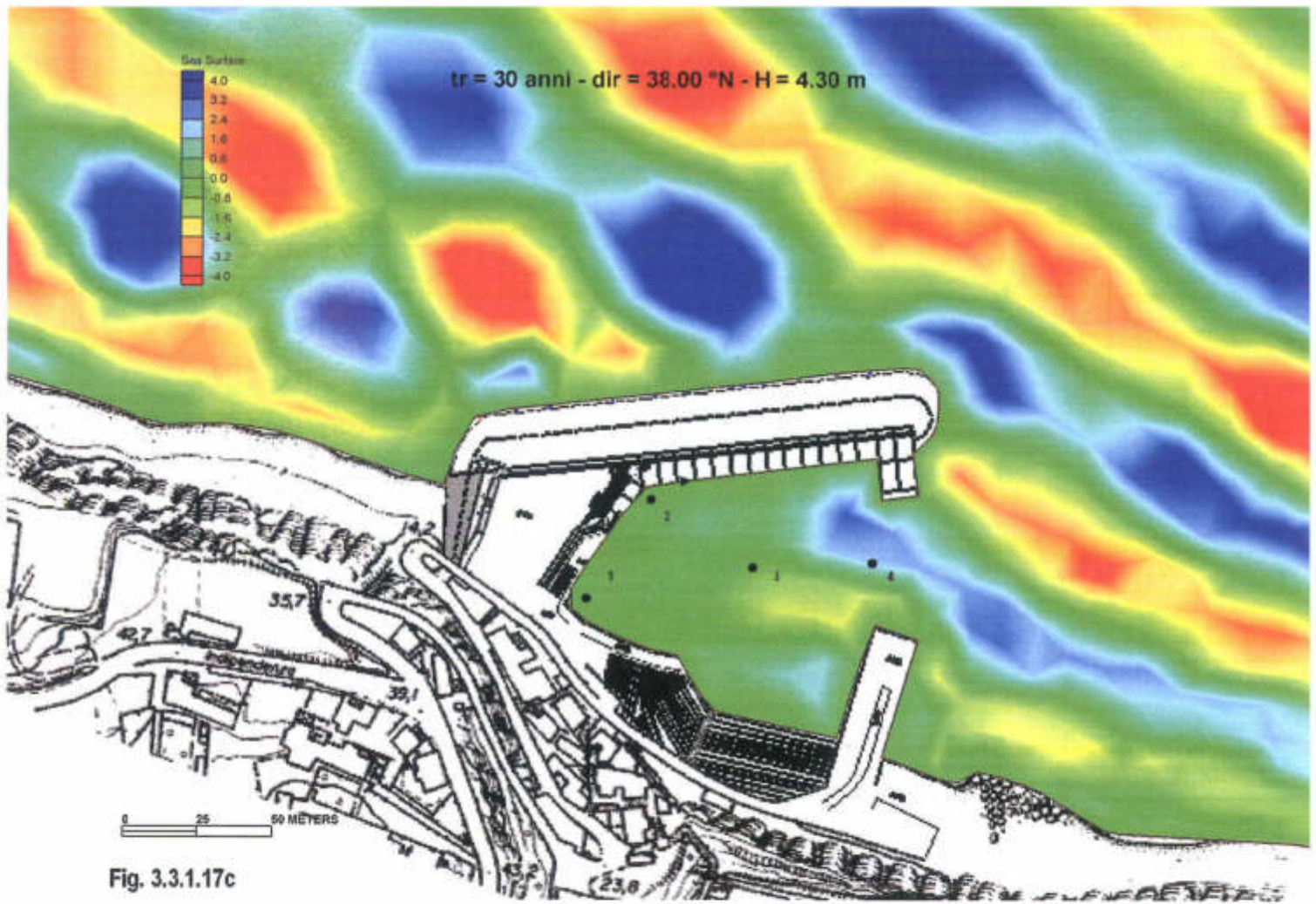


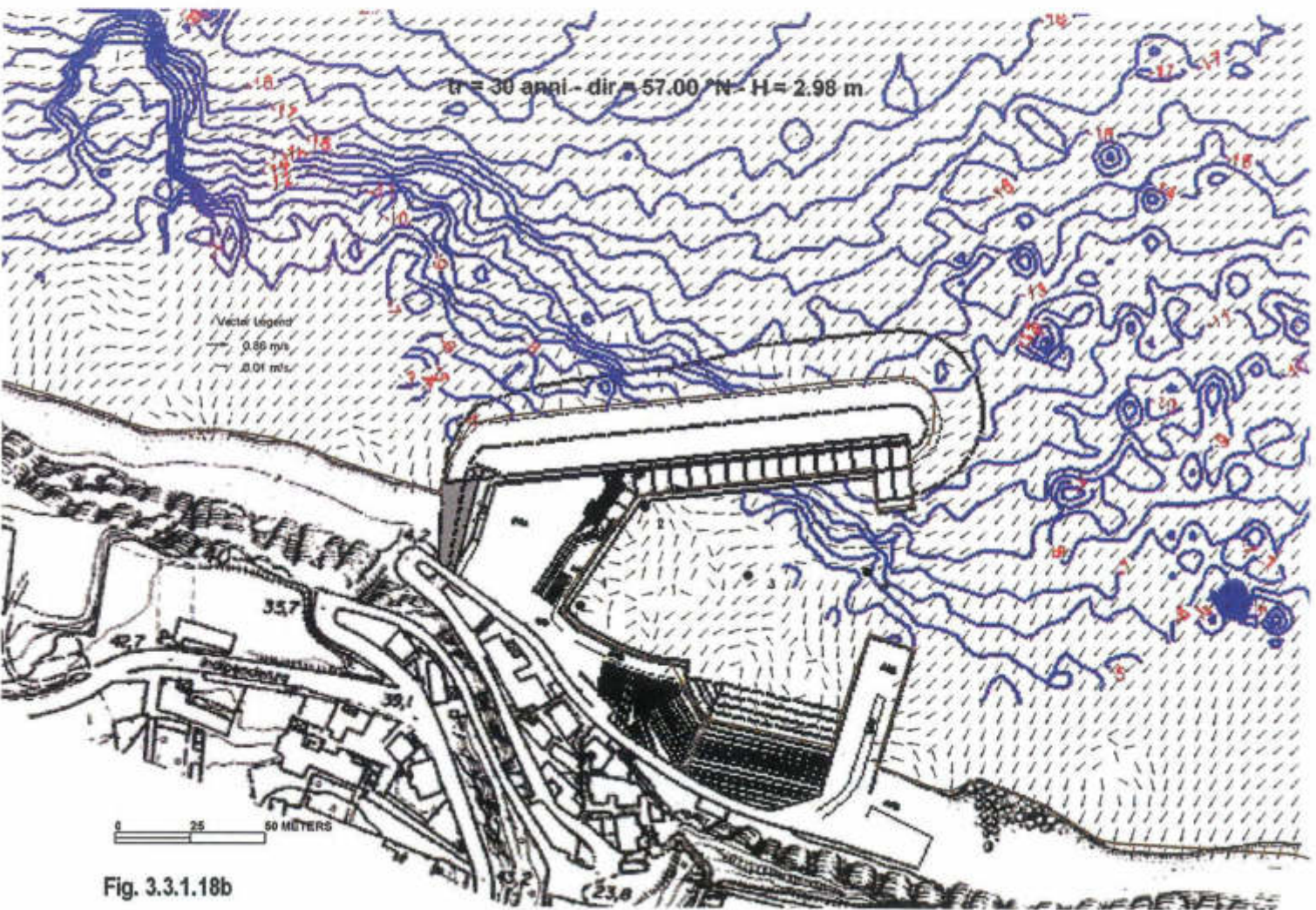
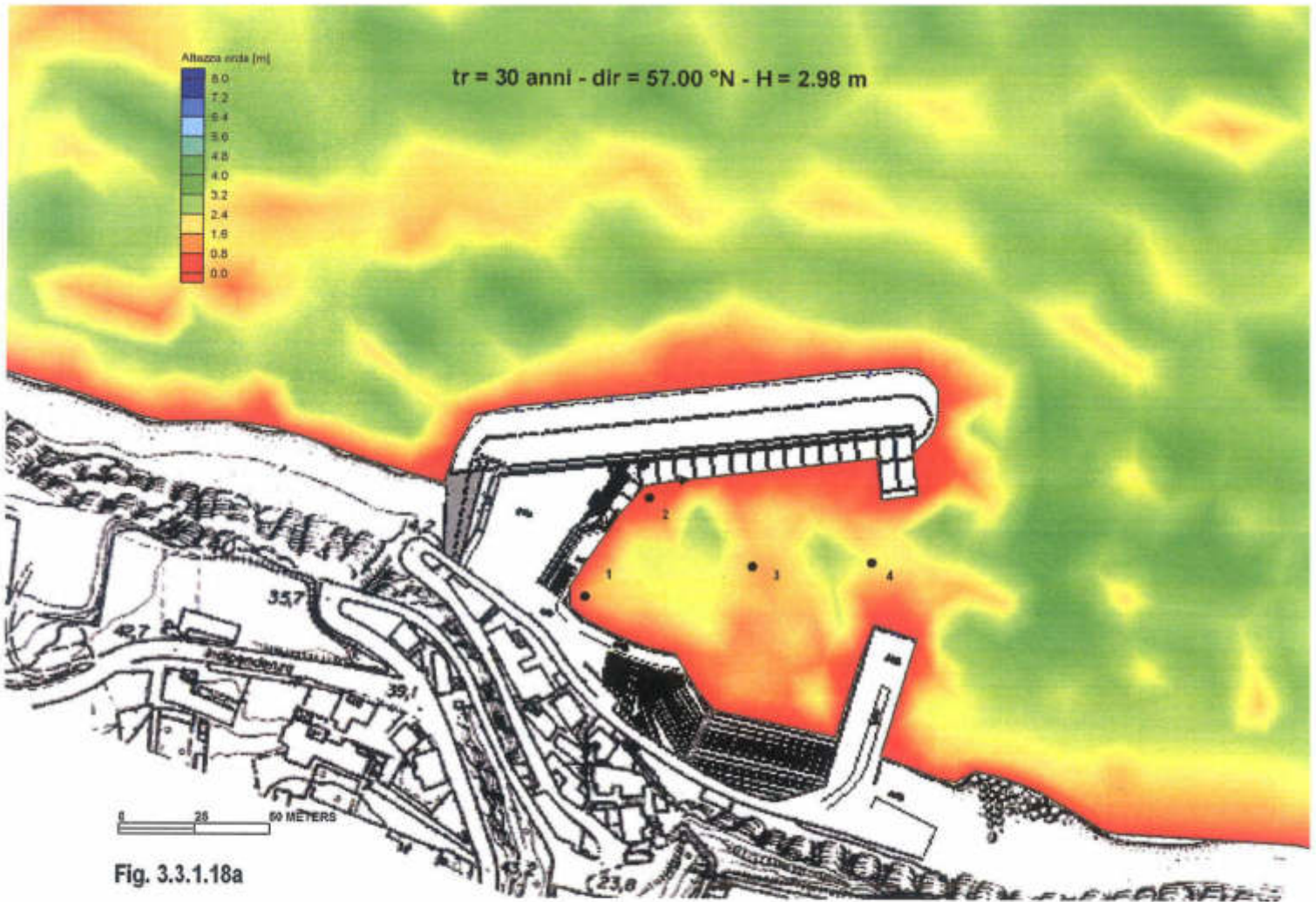


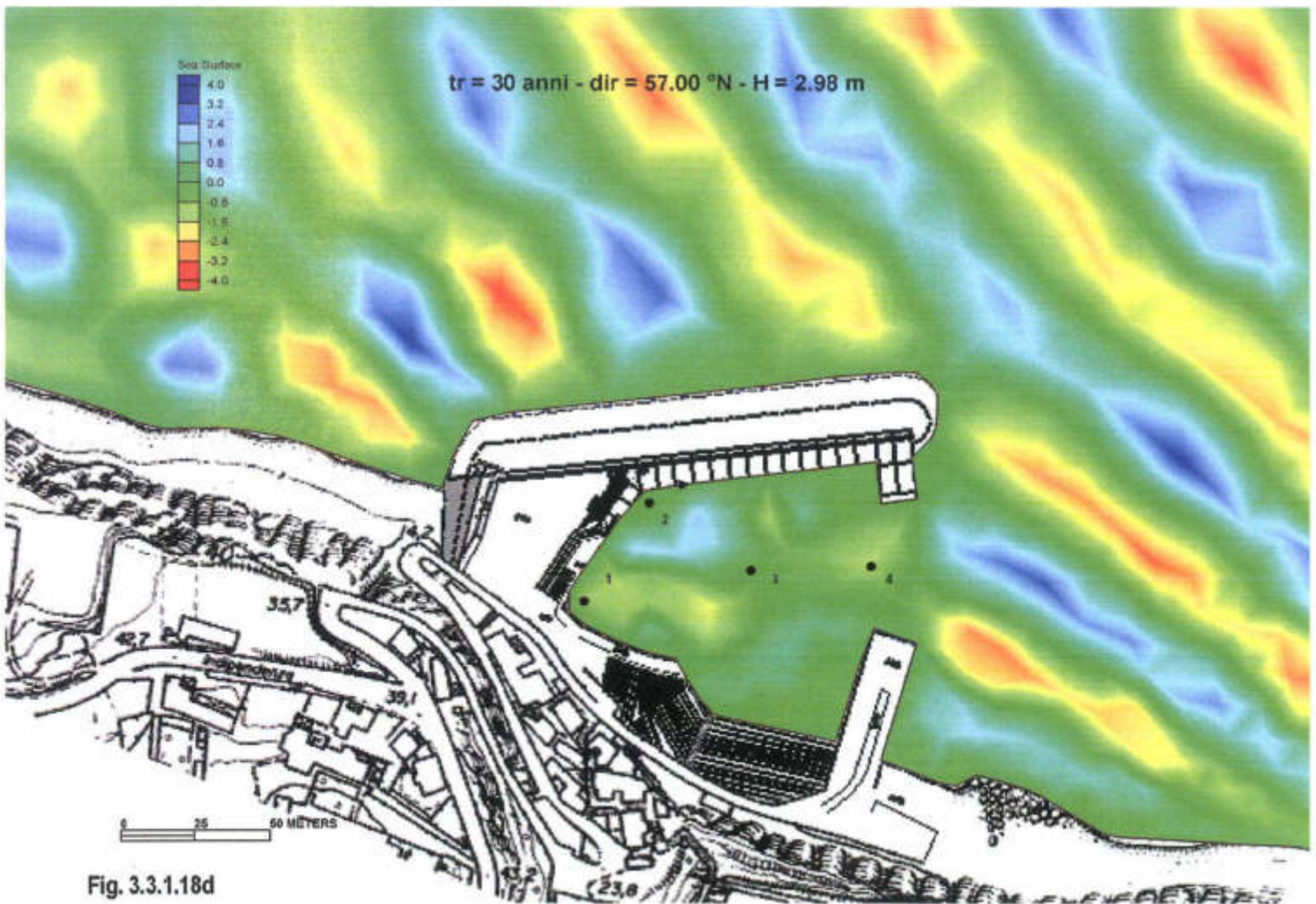
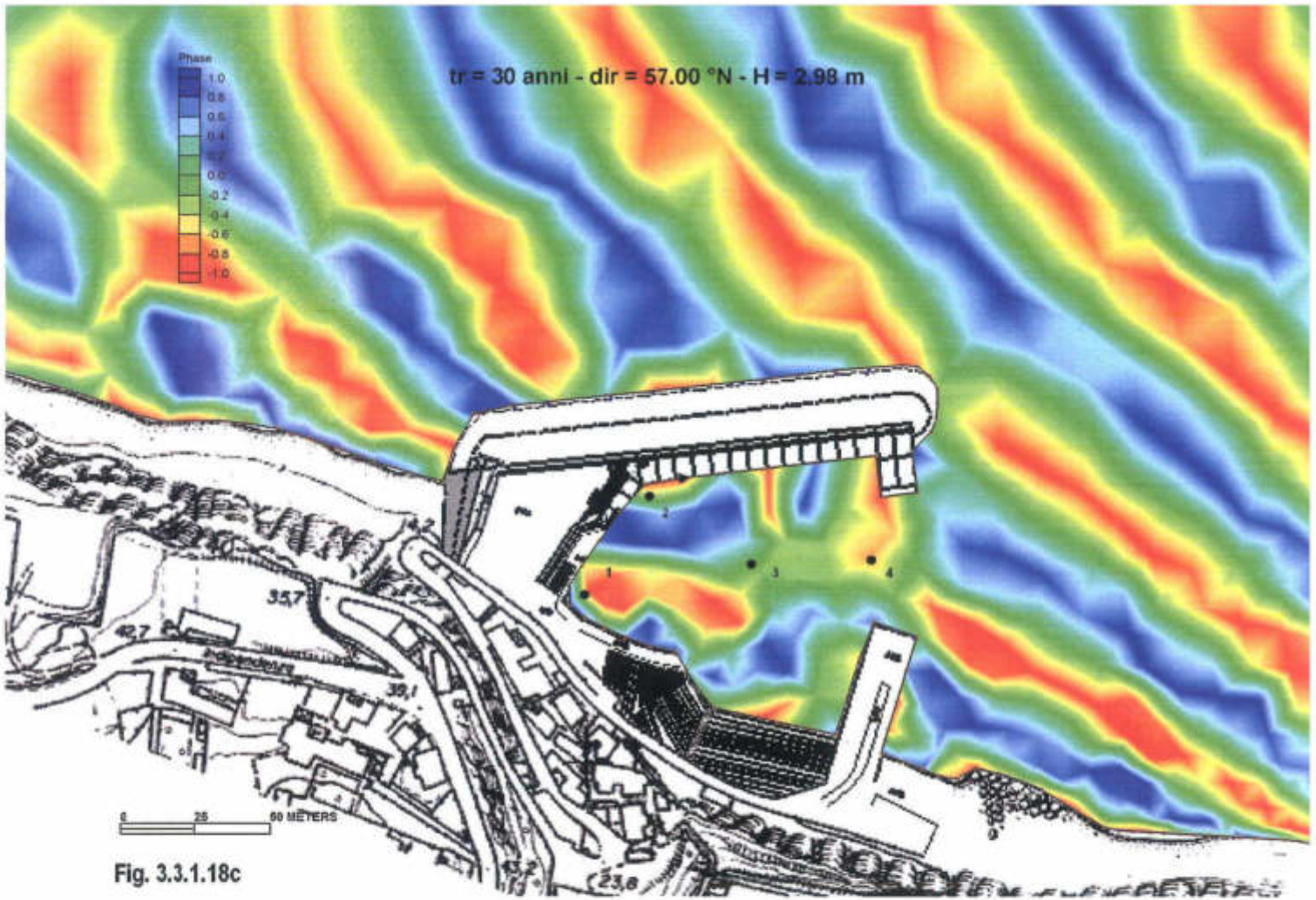


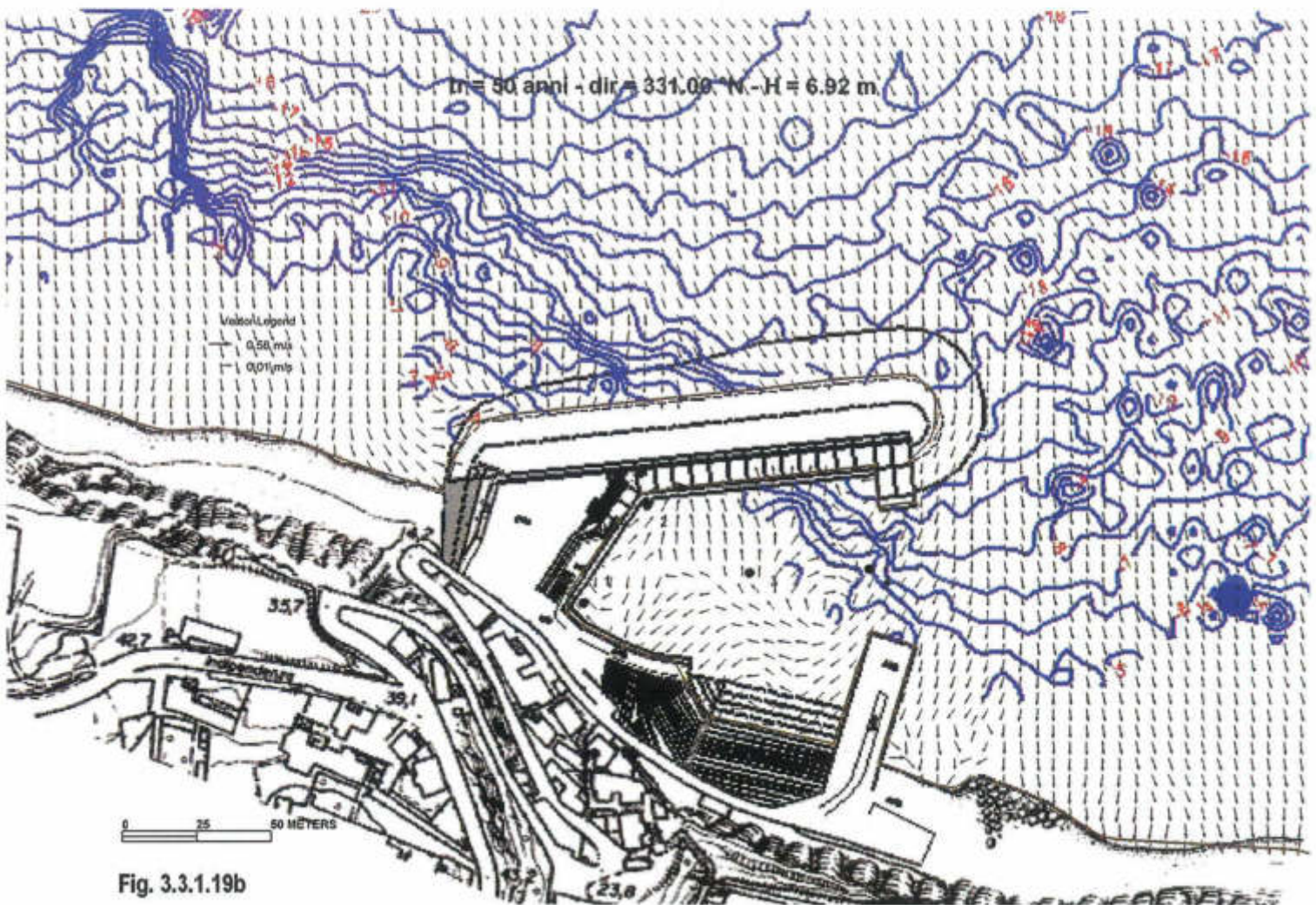
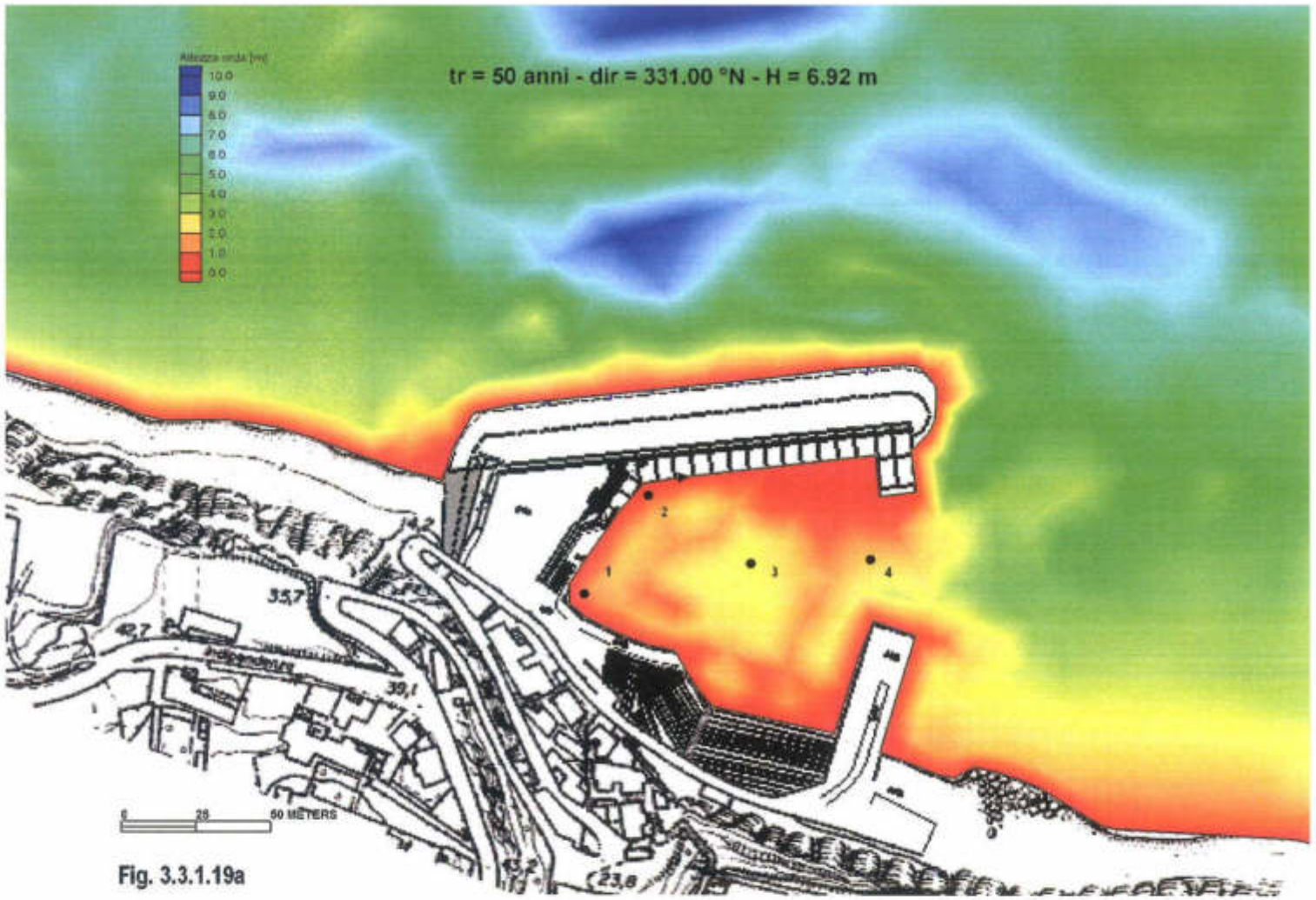


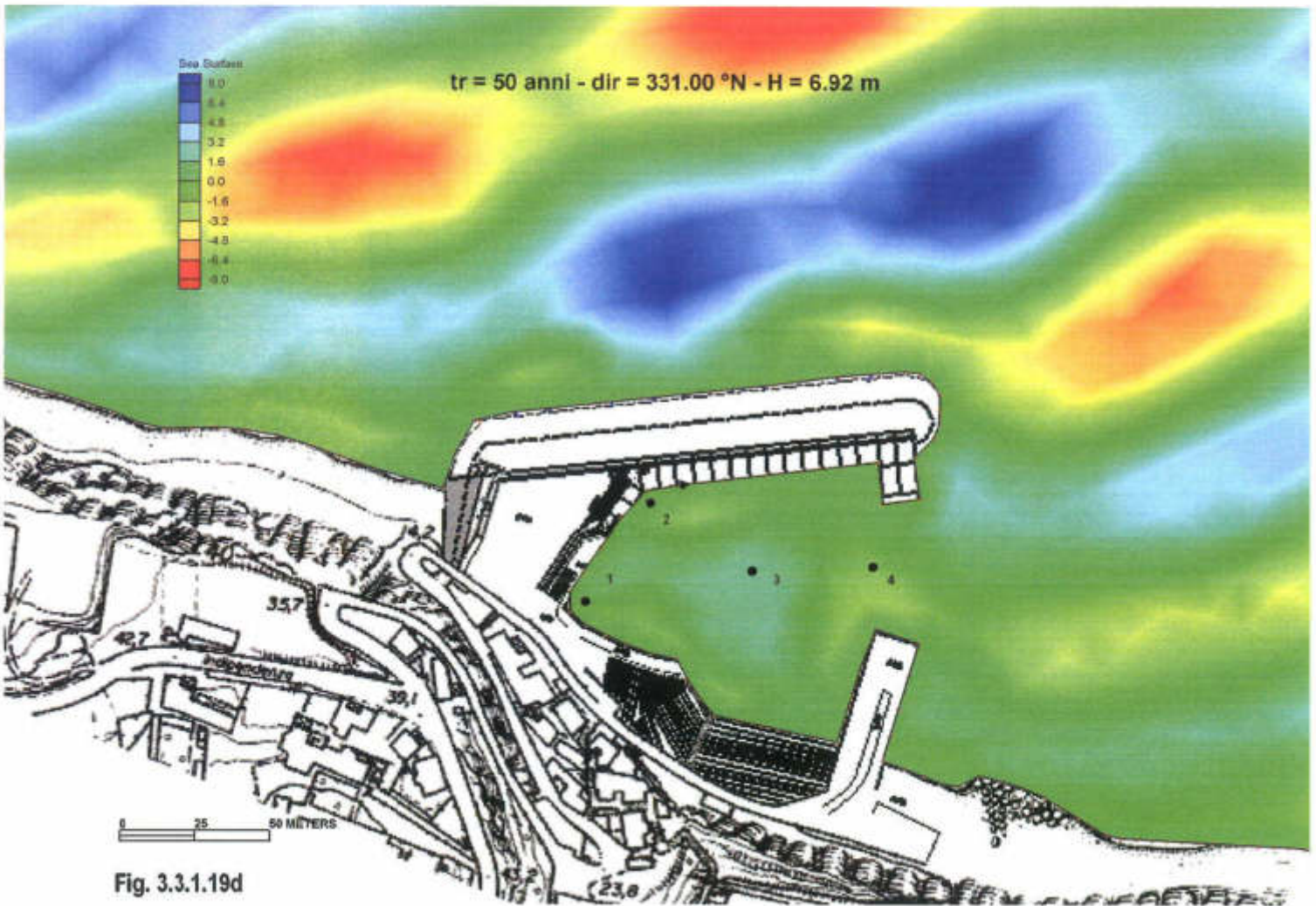
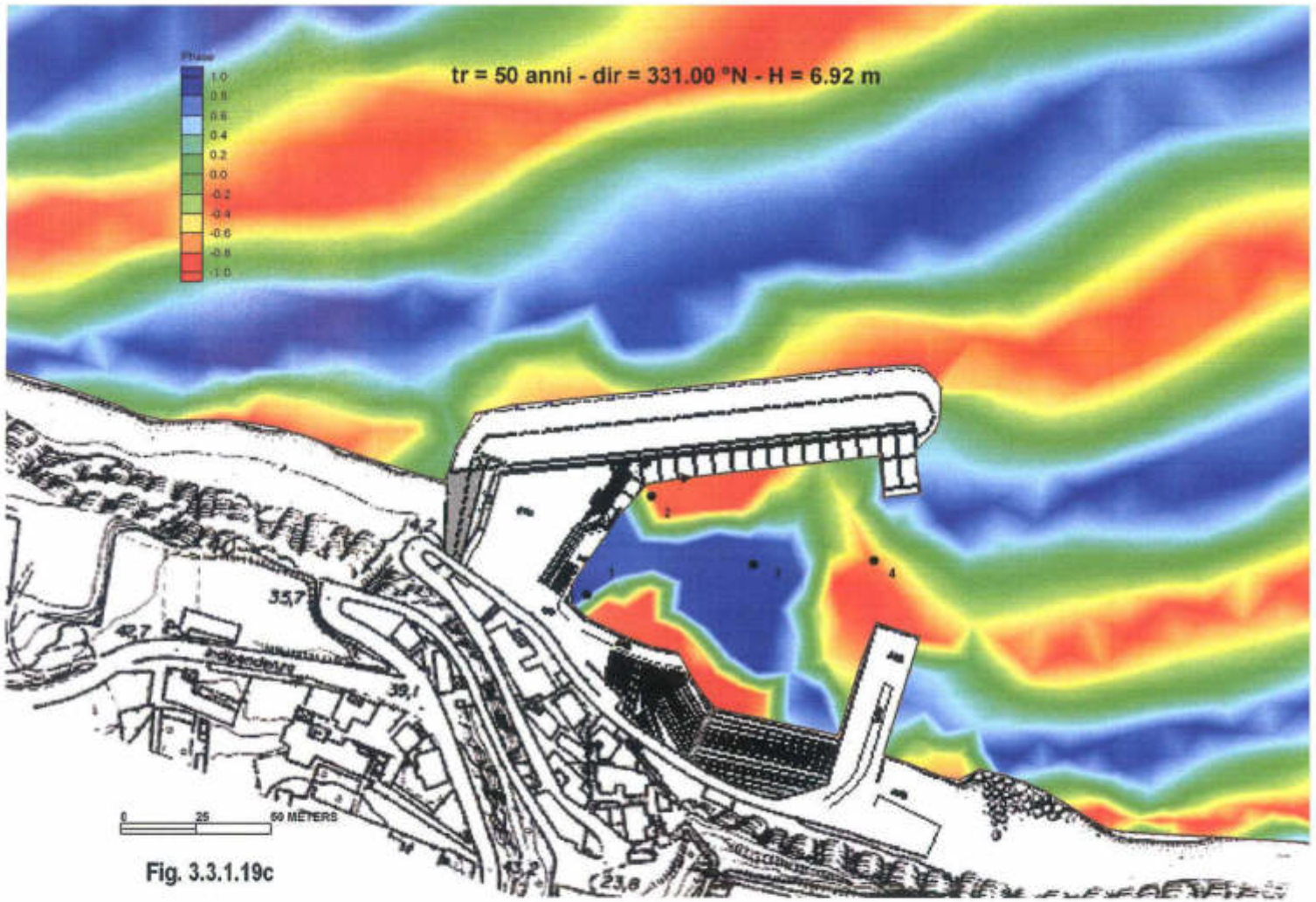


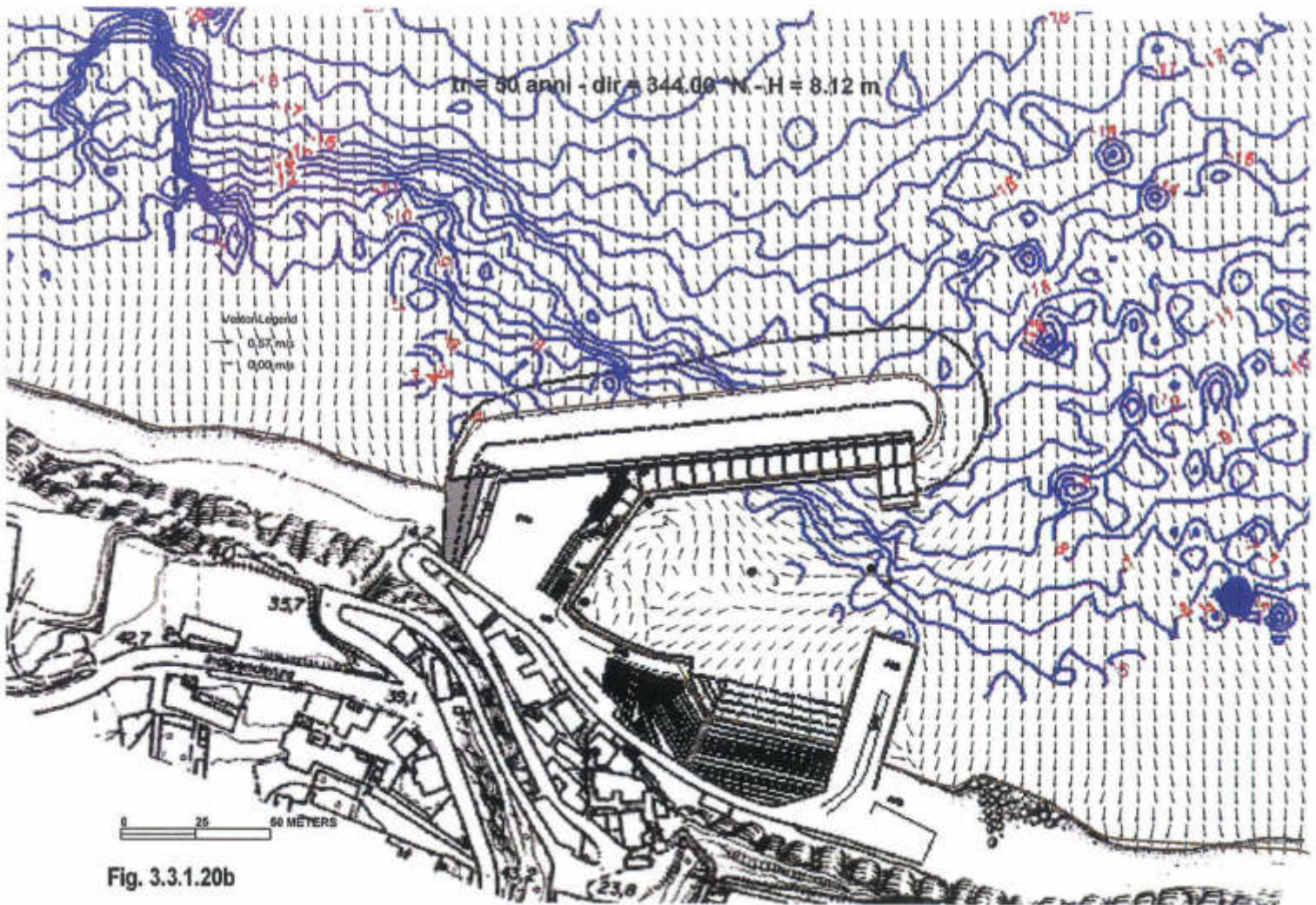
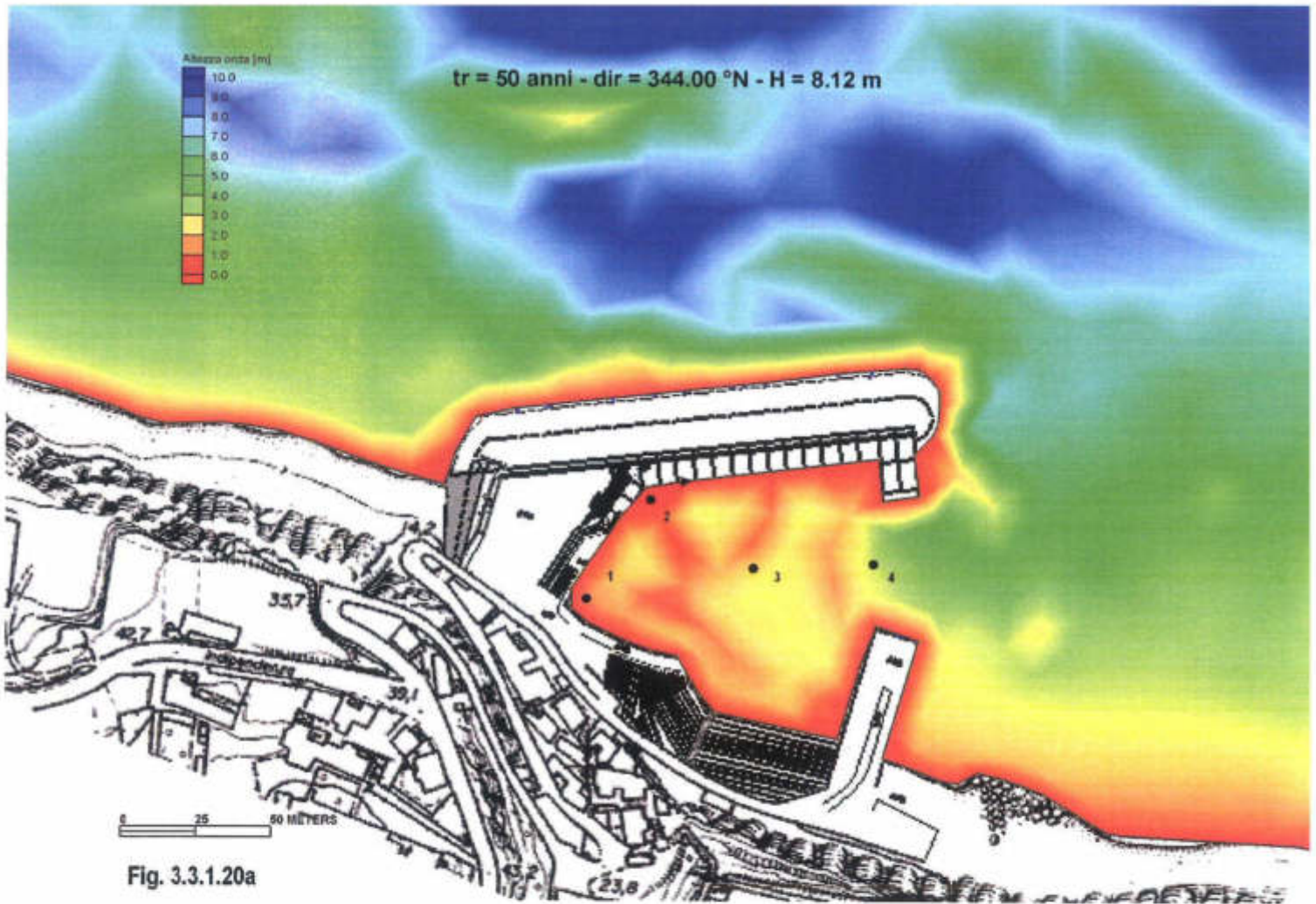


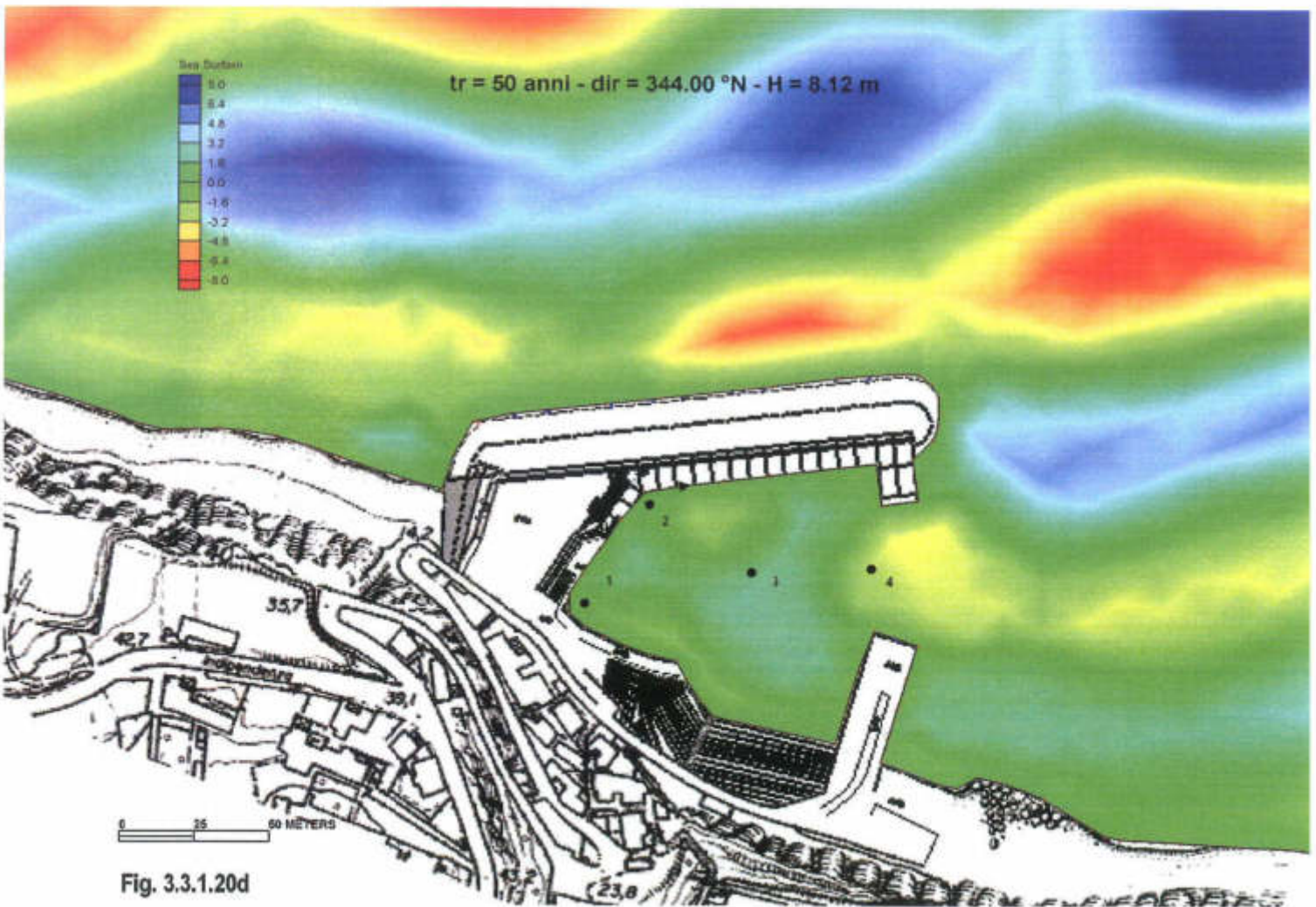
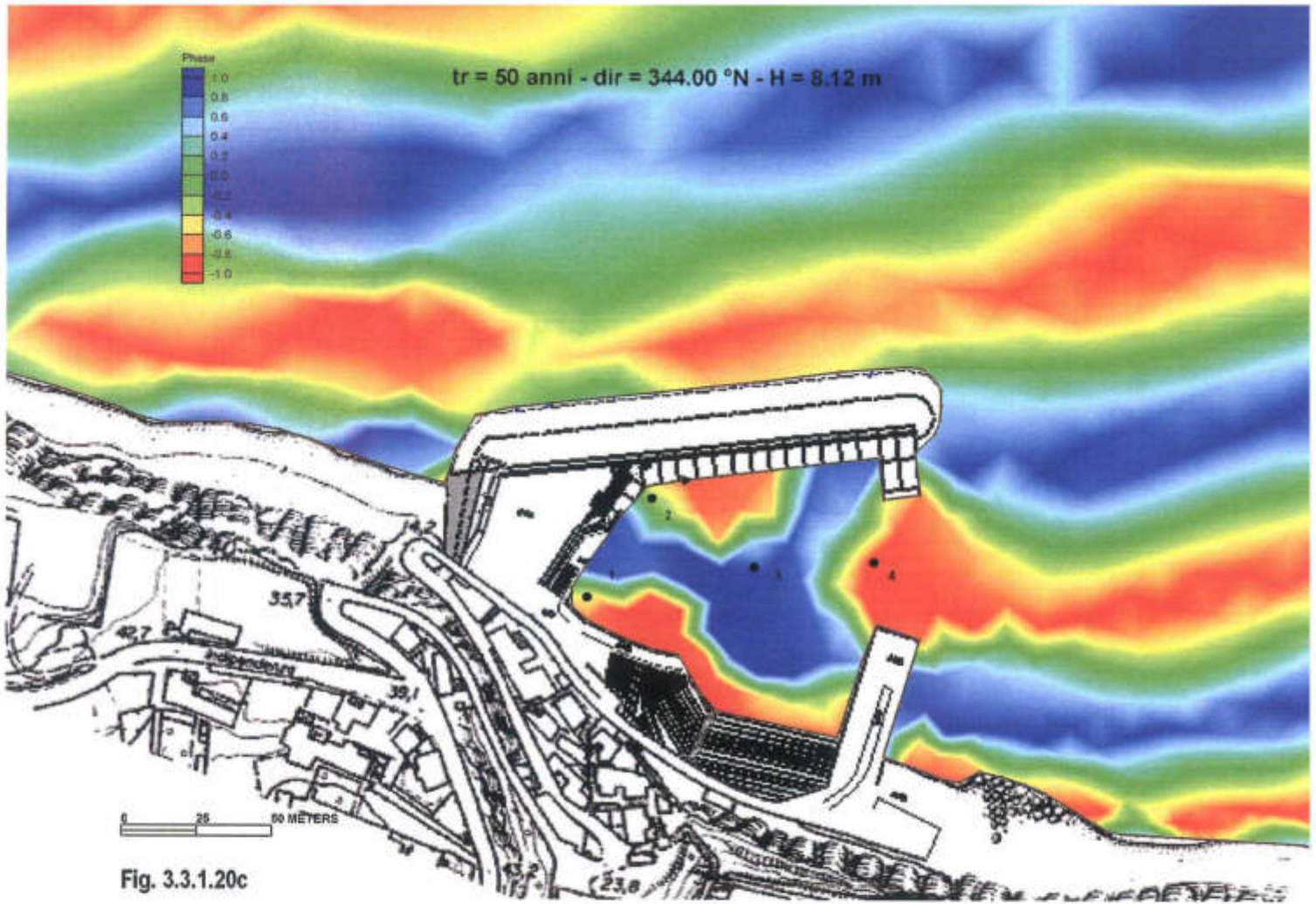


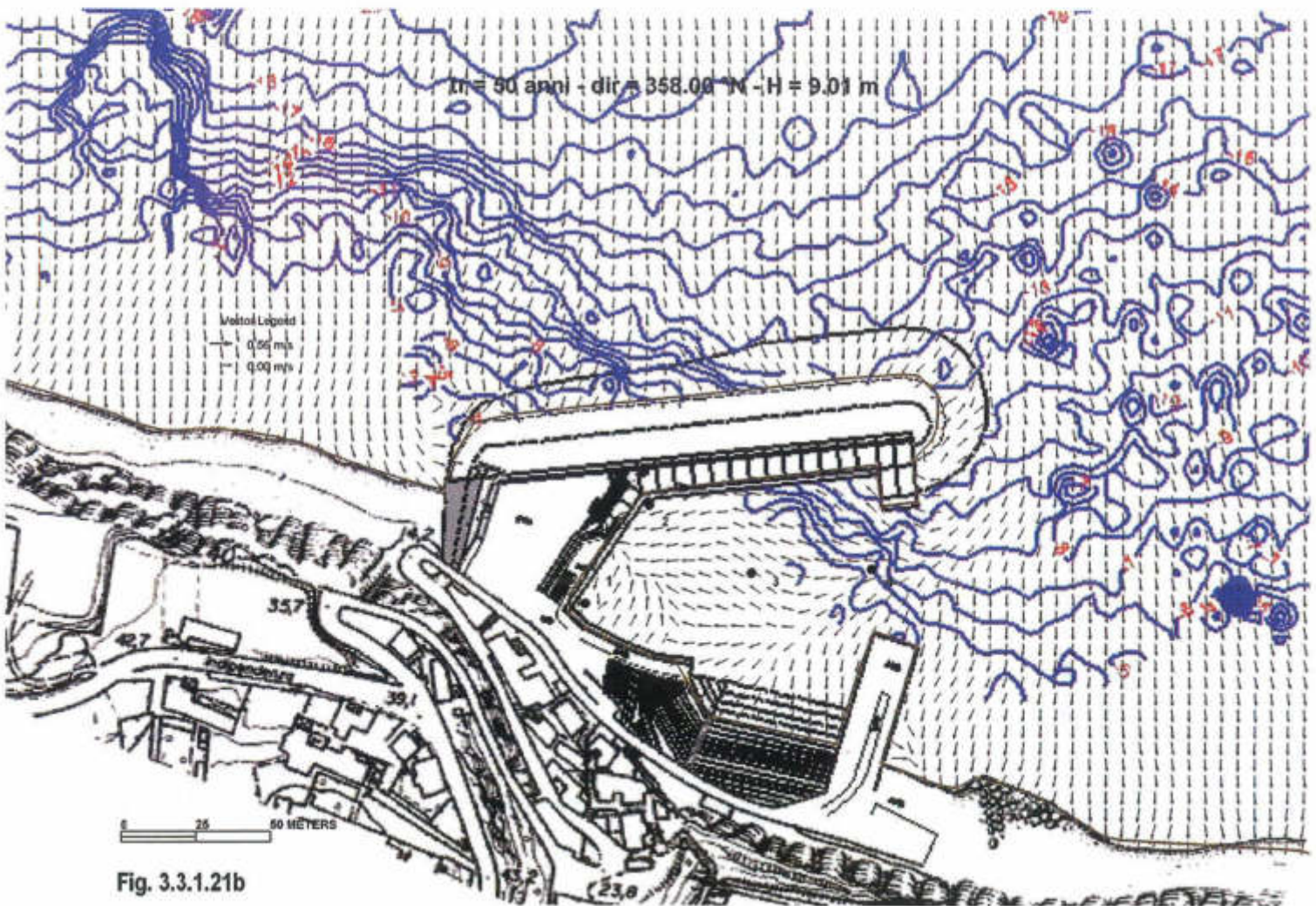
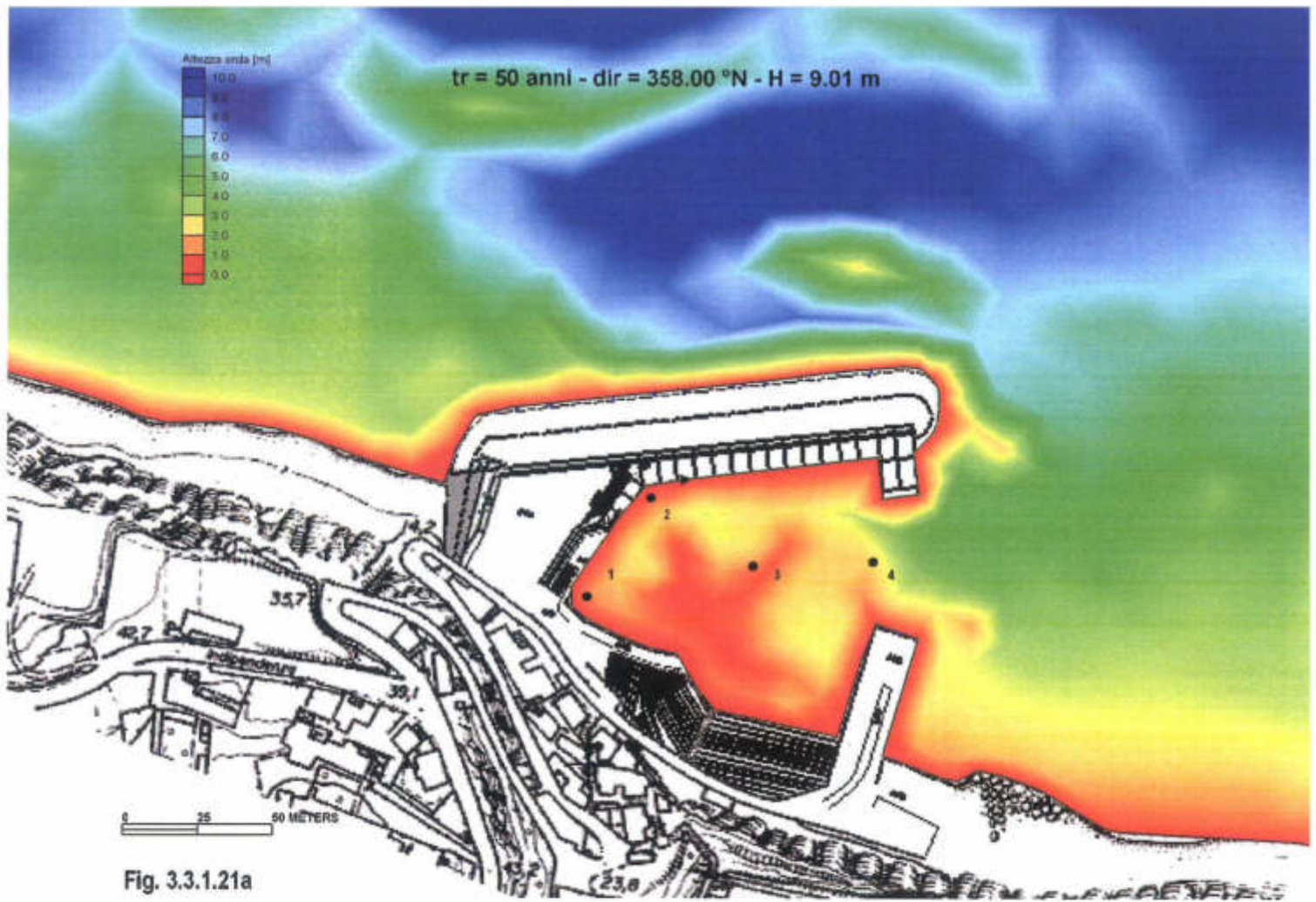


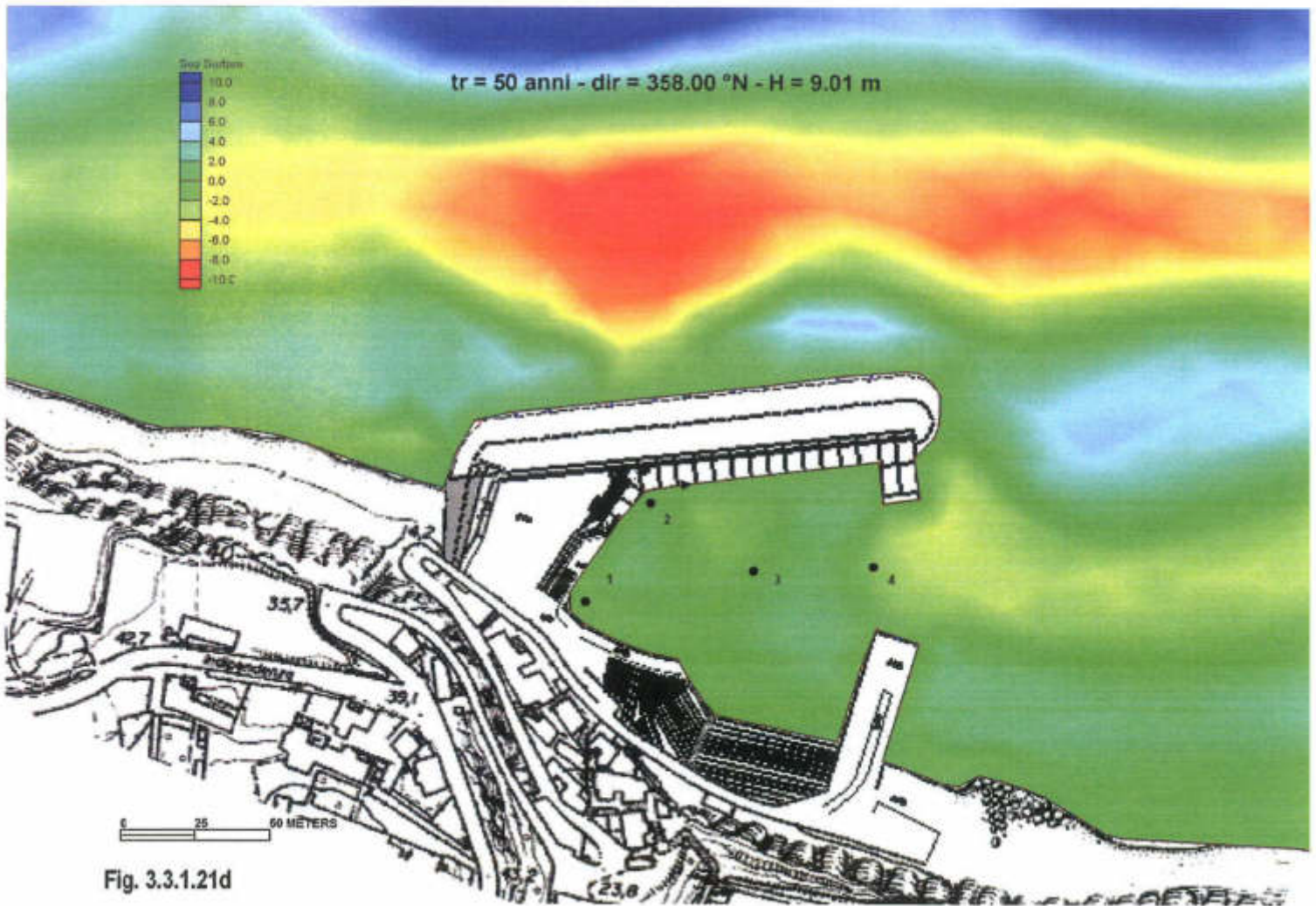
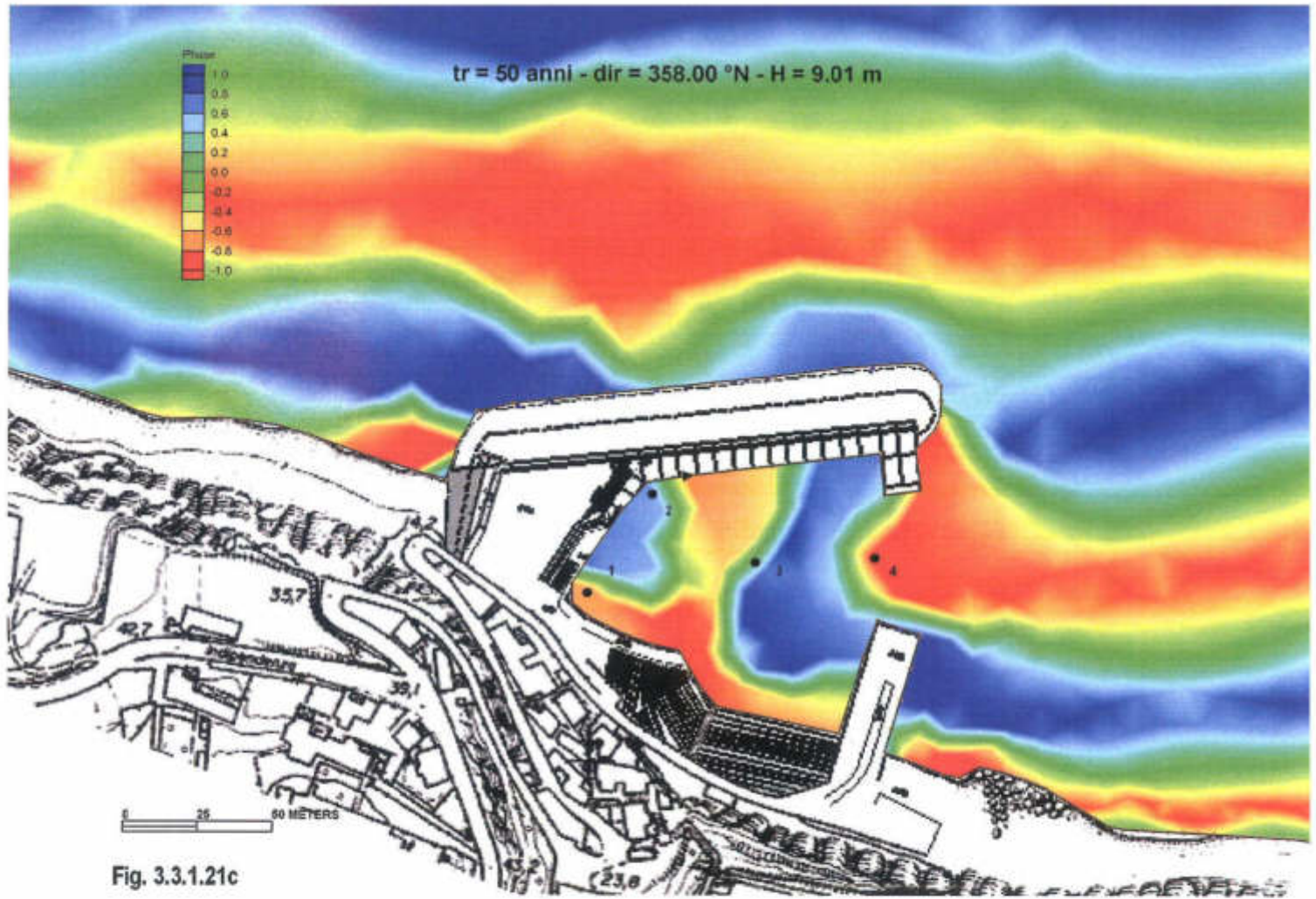












tr = 50 anni - dir = 19.00 °N - H = 5.46 m

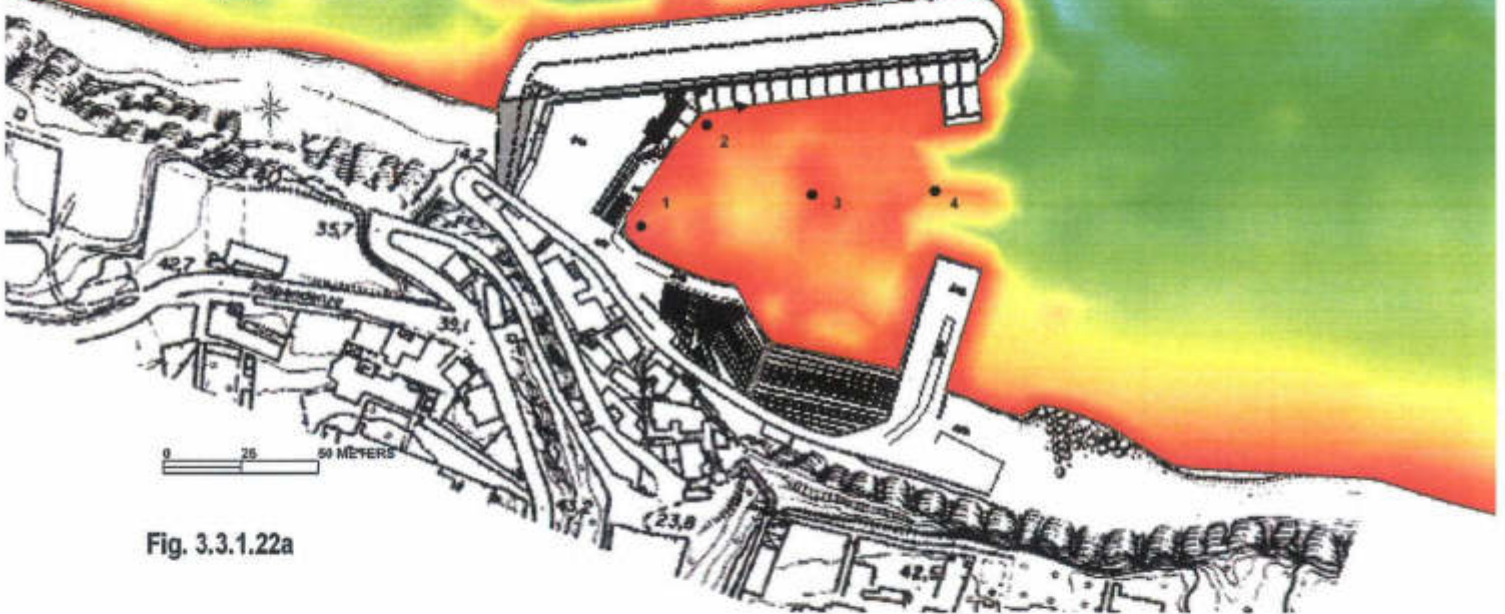


Fig. 3.3.1.22a

tr = 50 anni - dir = 19.00 °N - H = 5.46 m

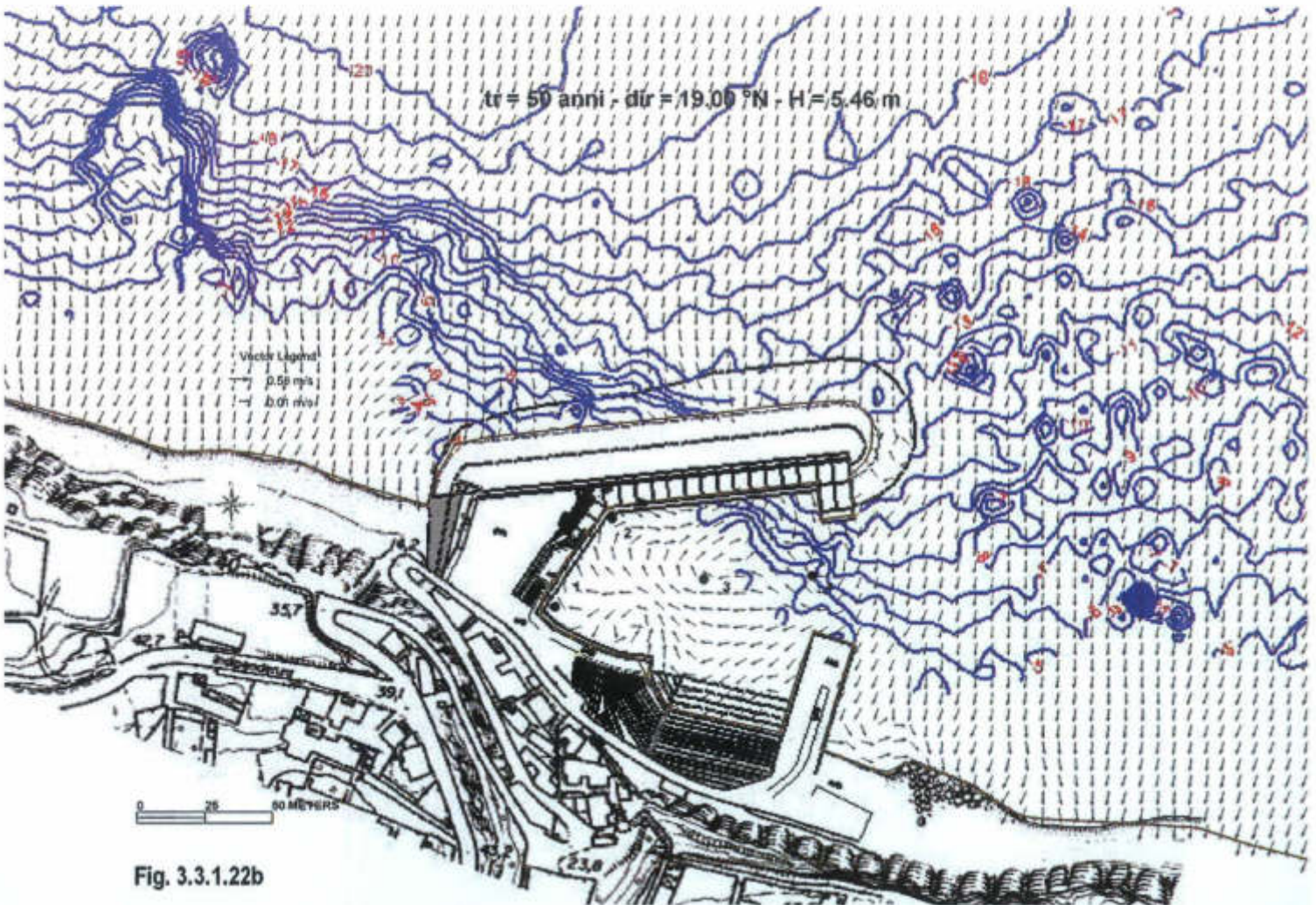


Fig. 3.3.1.22b

tr = 50 anni - dir = 19.00 °N - H = 5.46 m

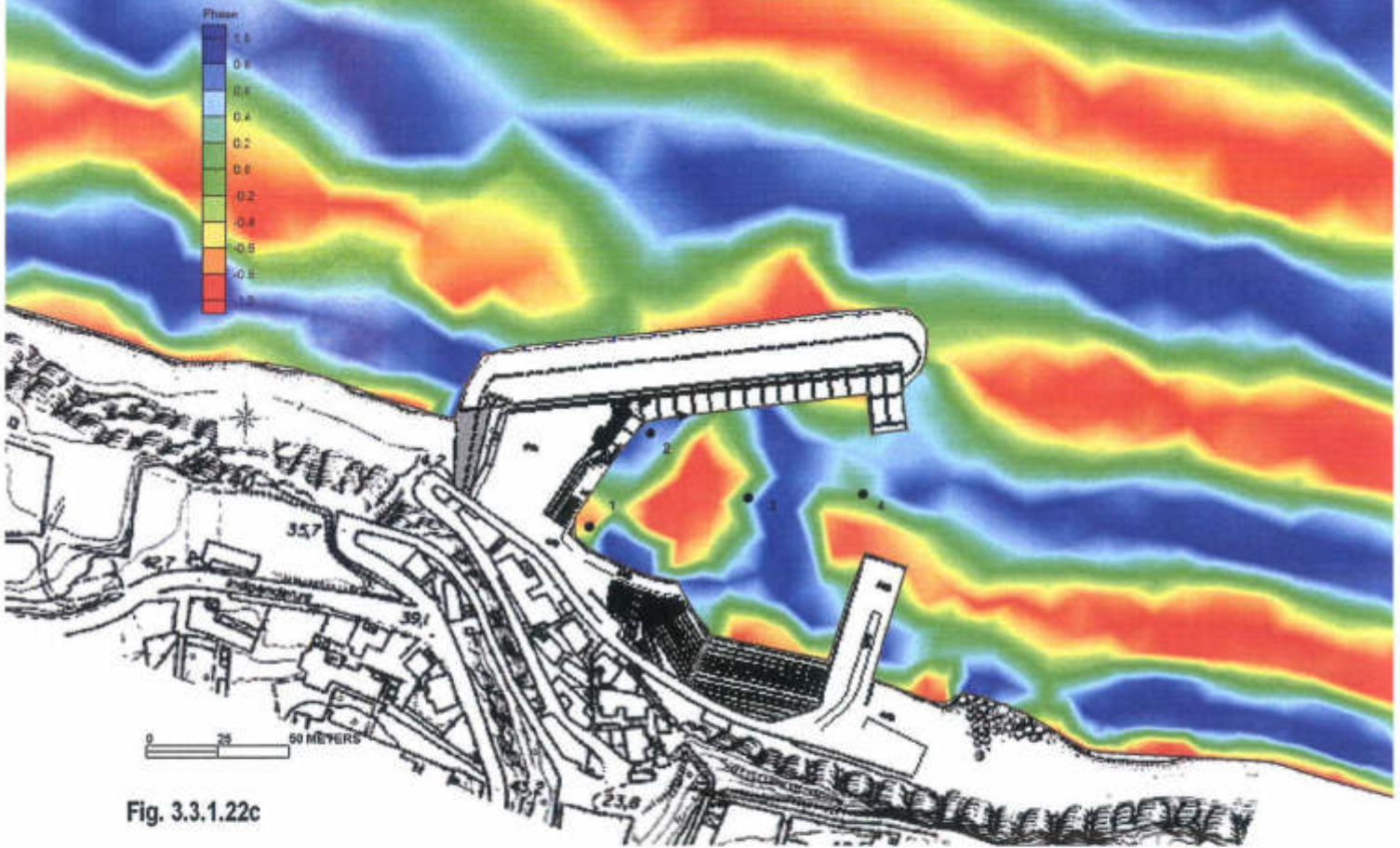


Fig. 3.3.1.22c

tr = 50 anni - dir = 19.00 °N - H = 5.46 m

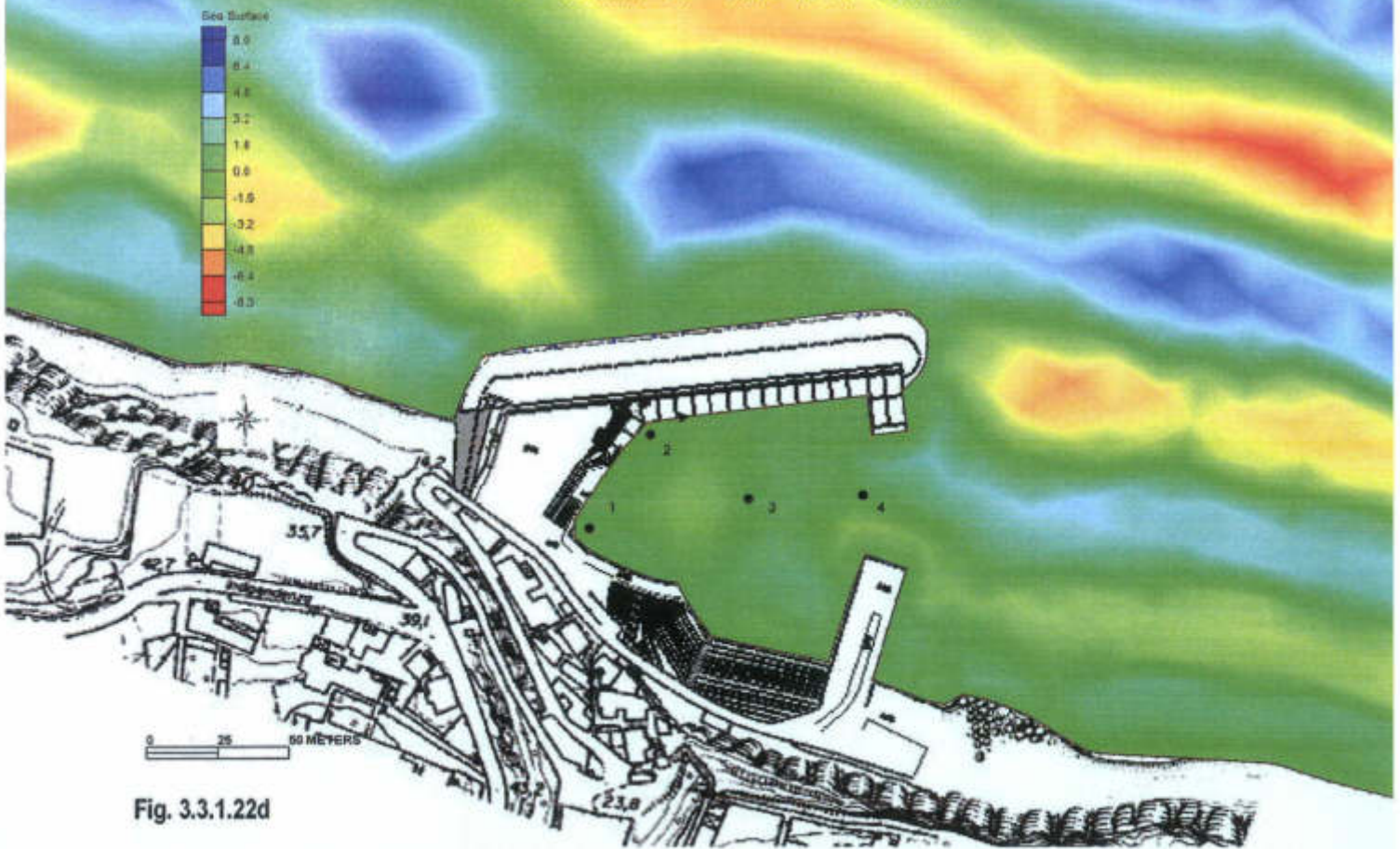
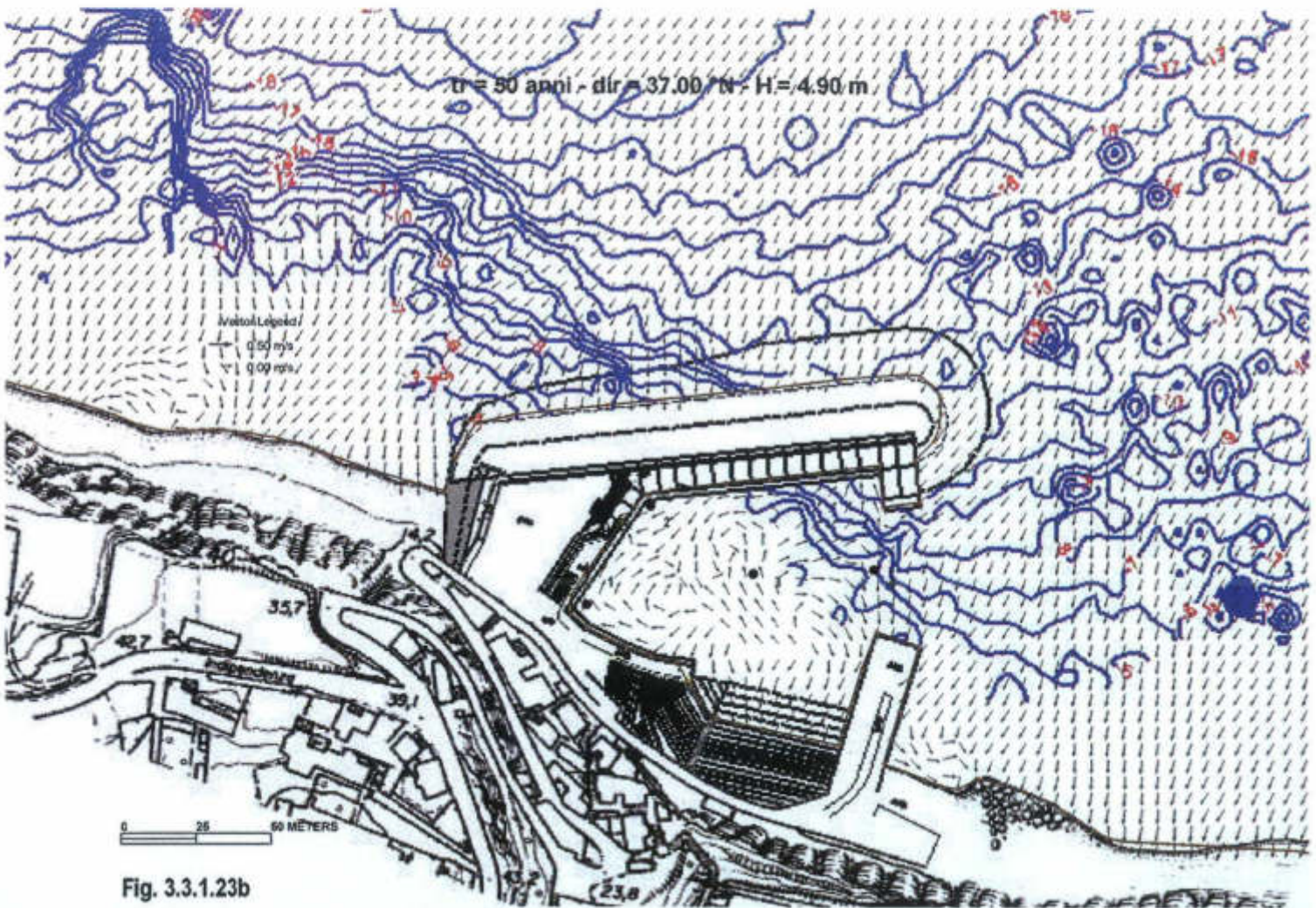
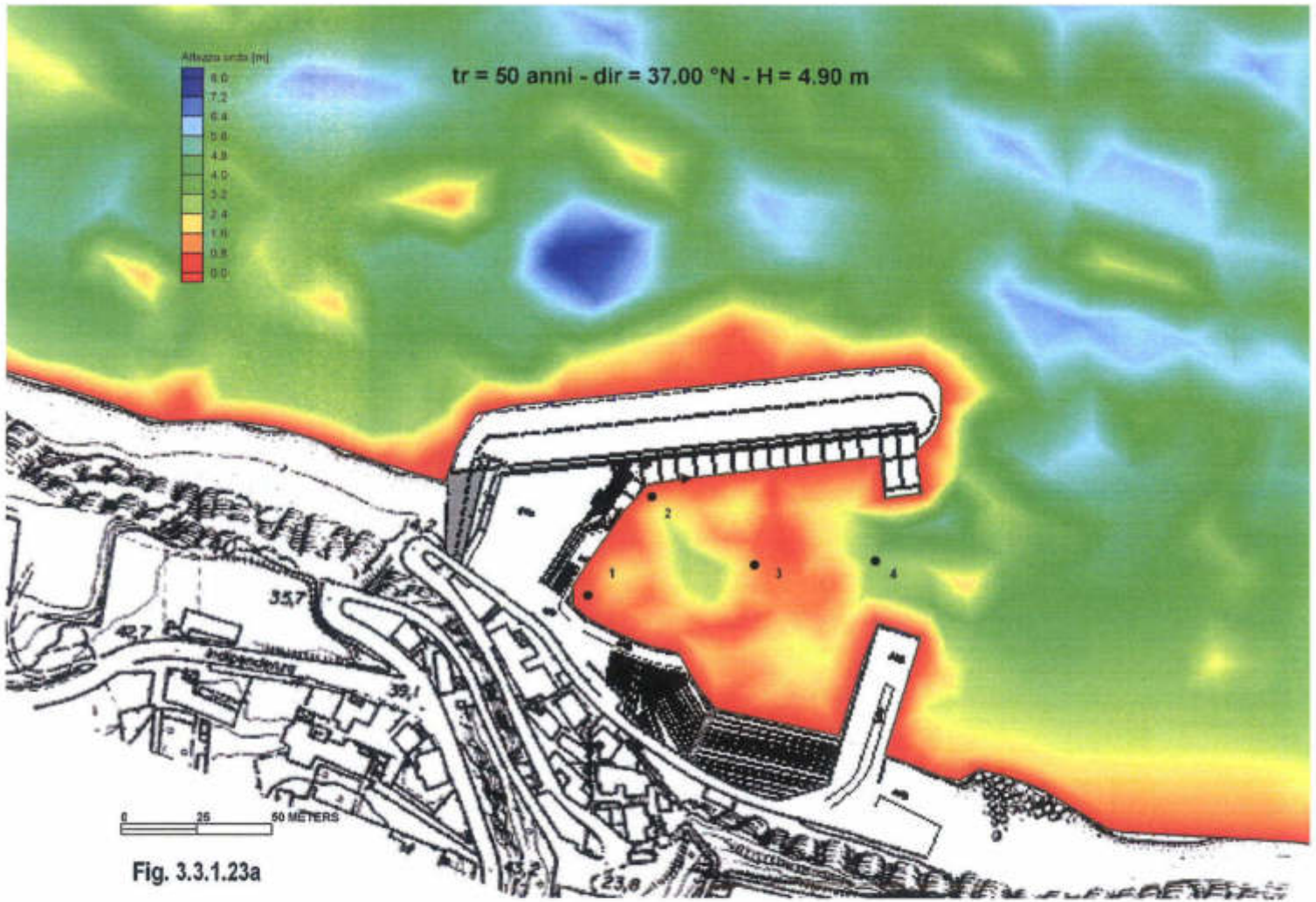
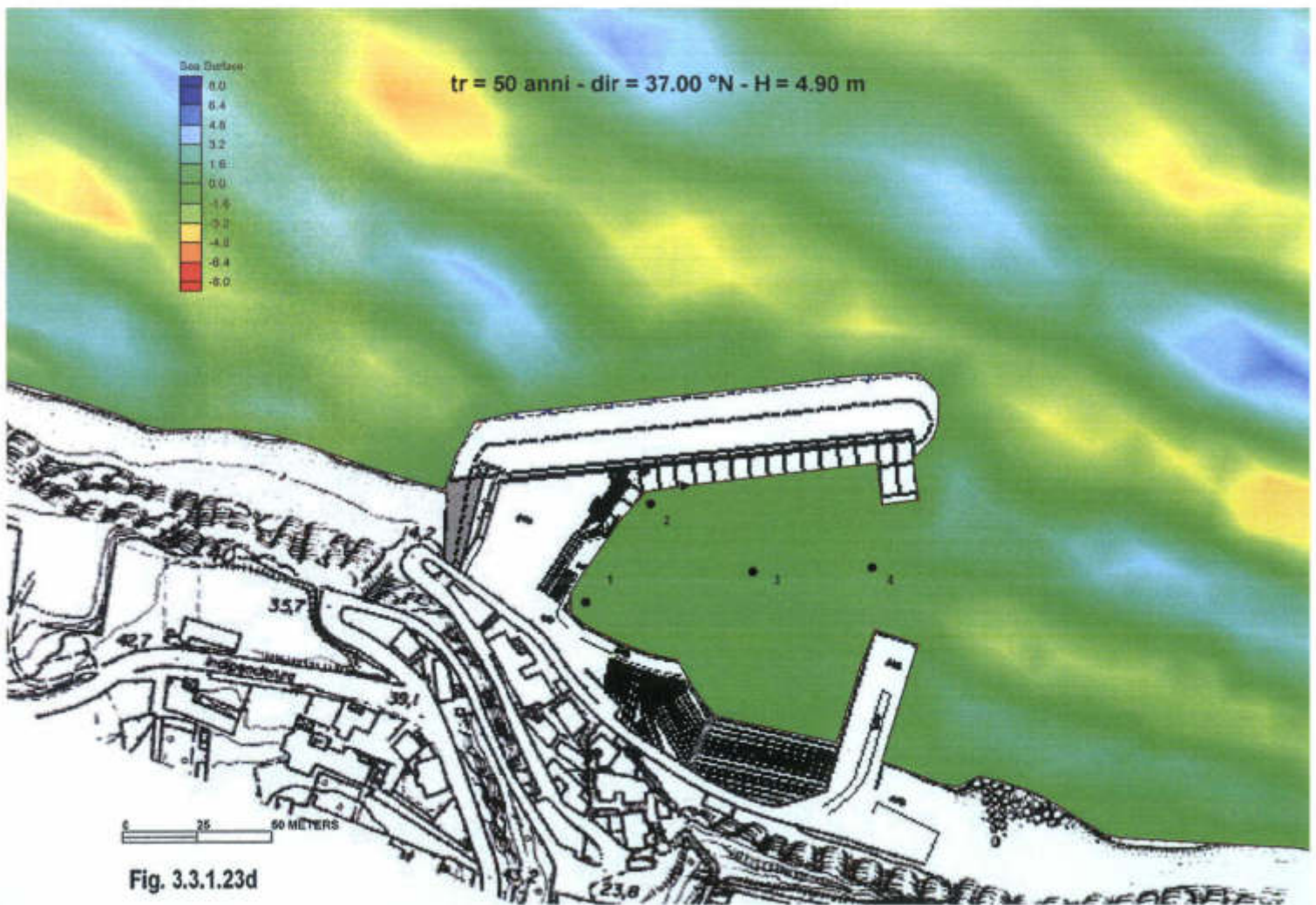
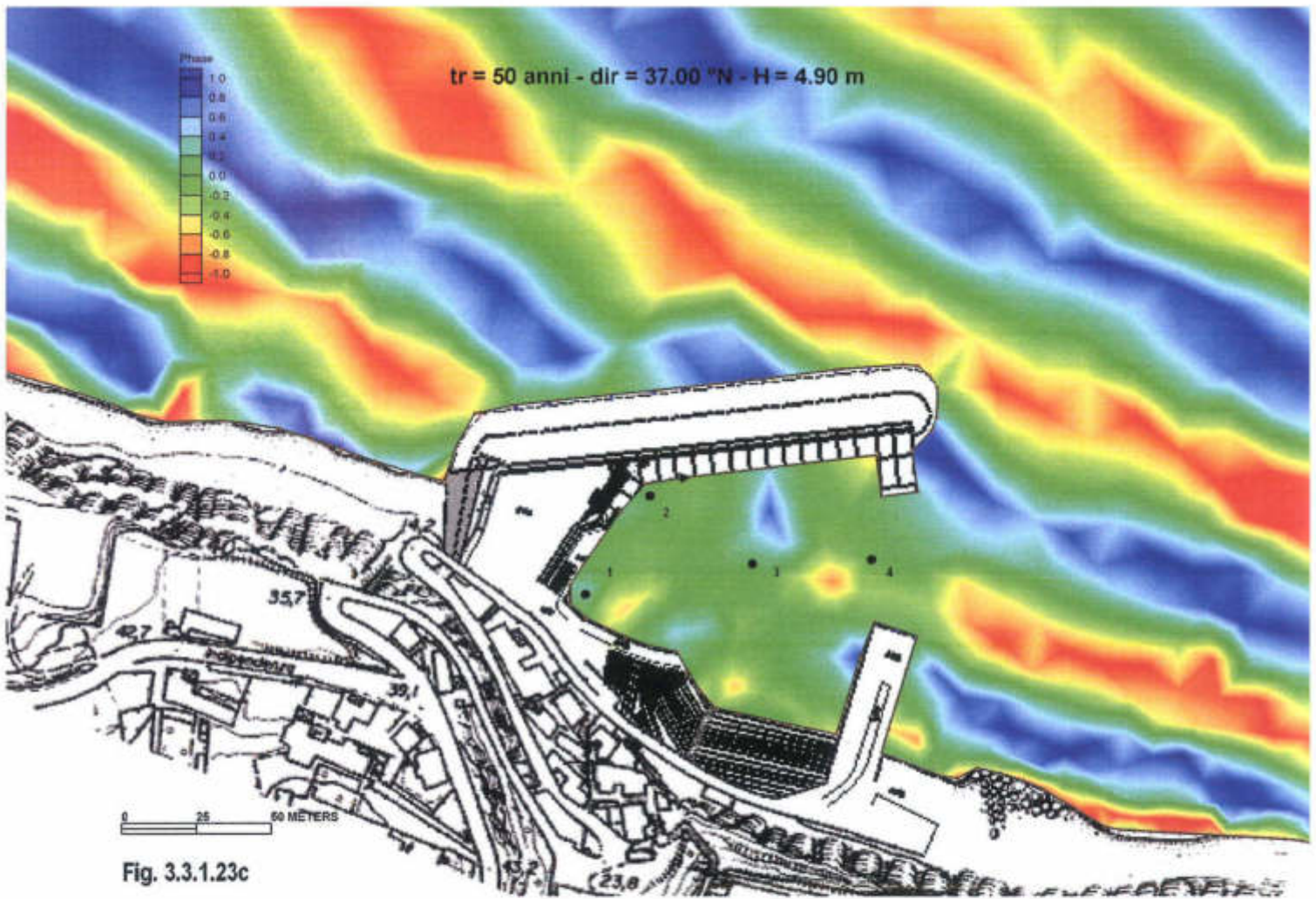
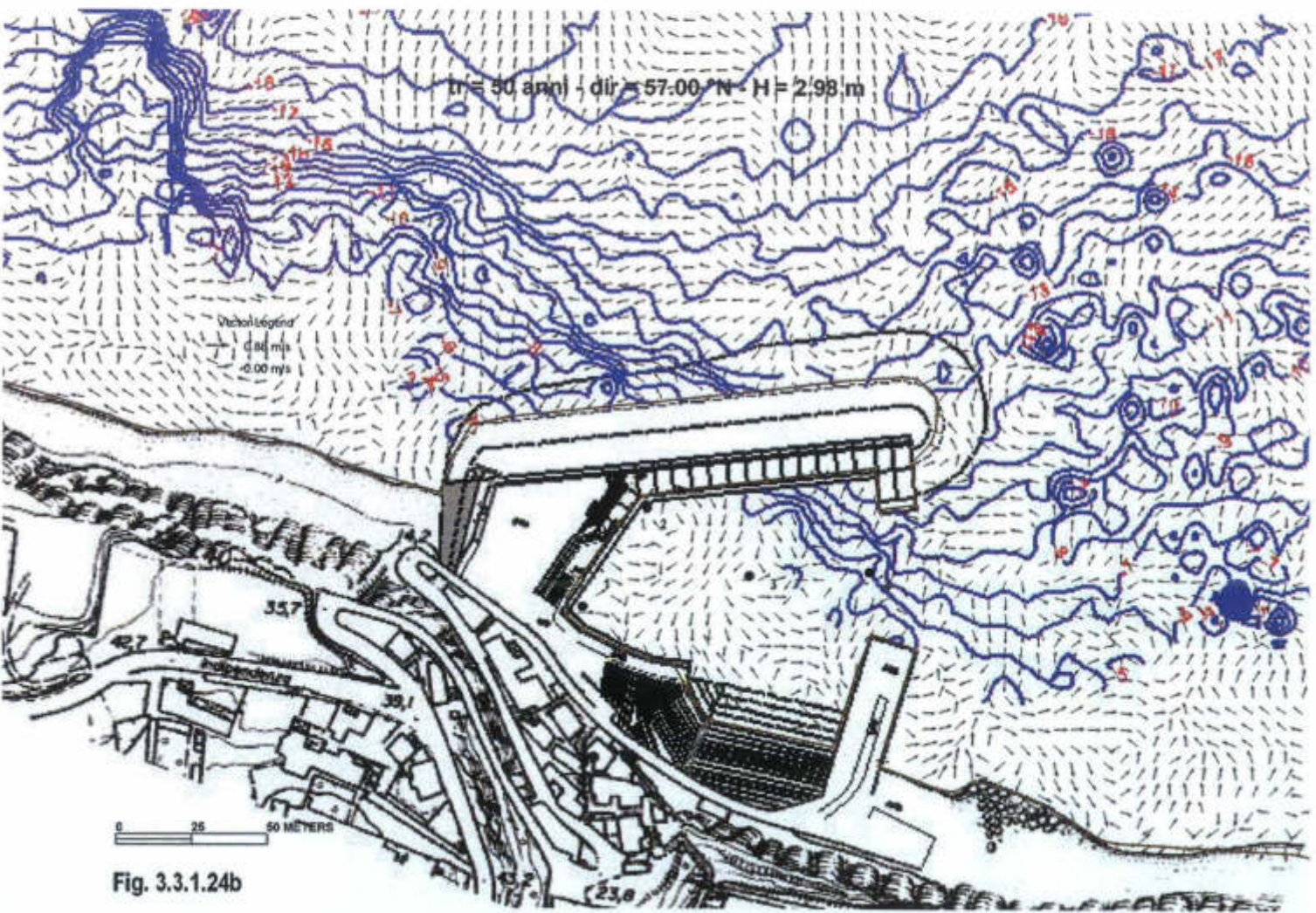
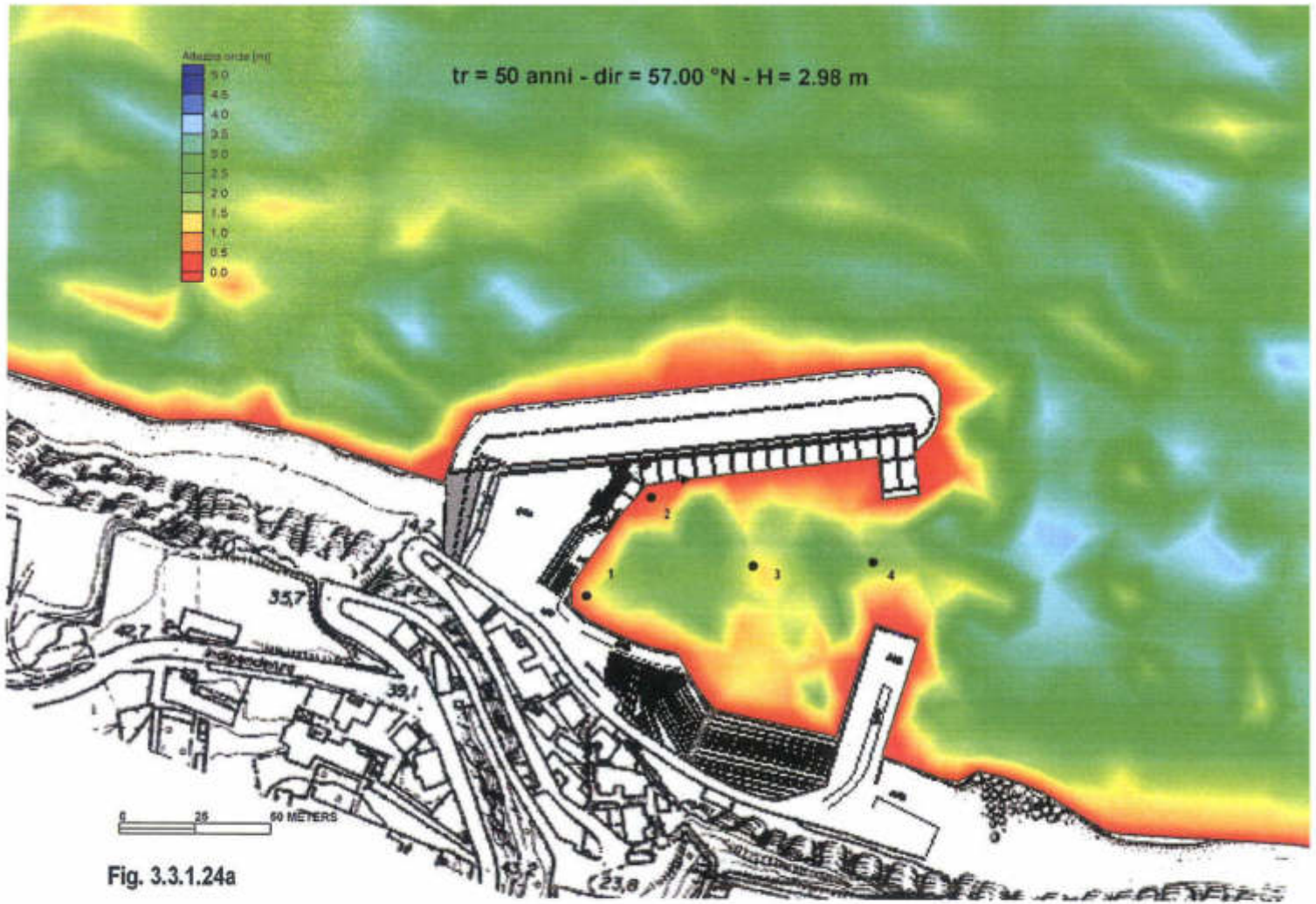
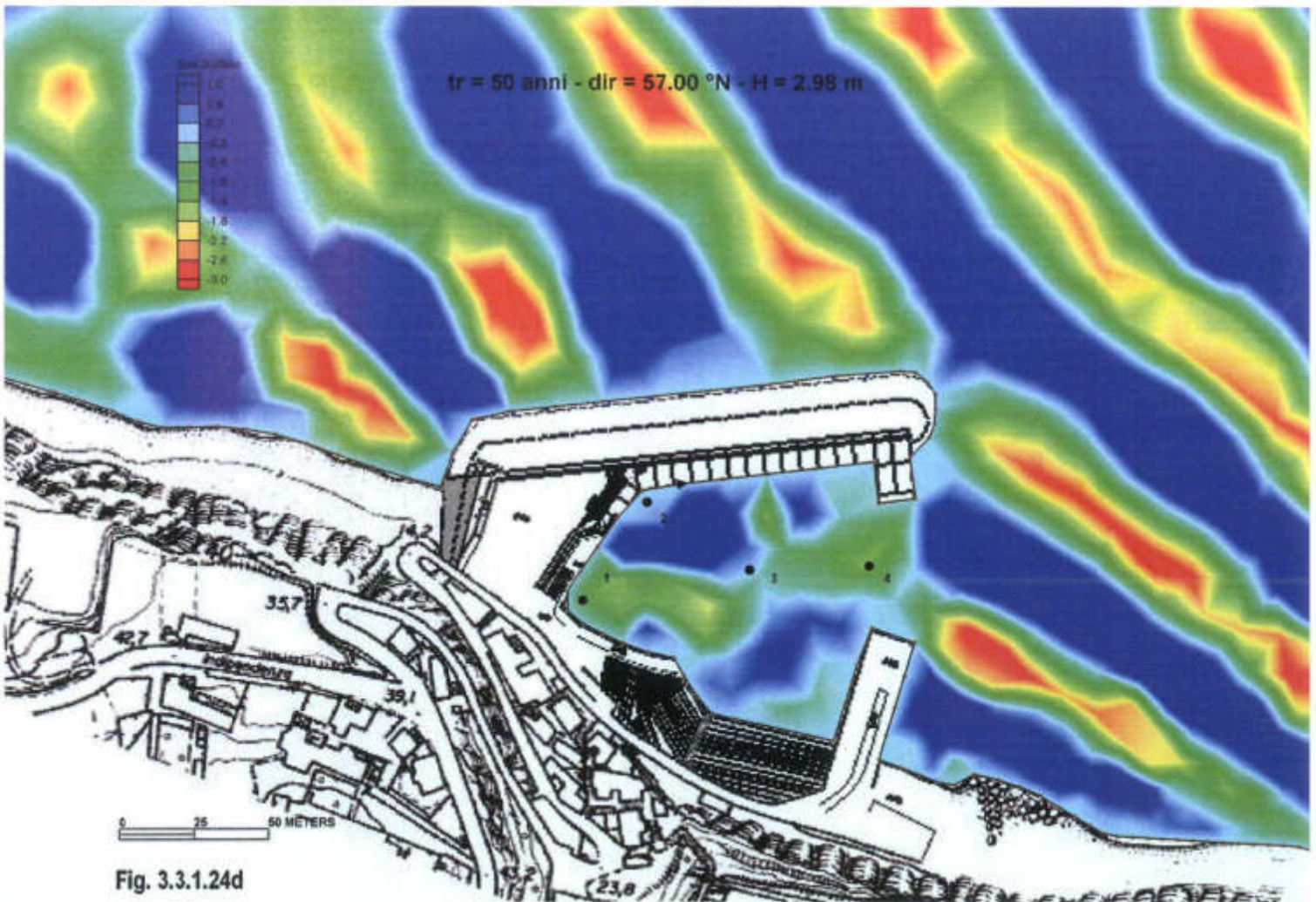
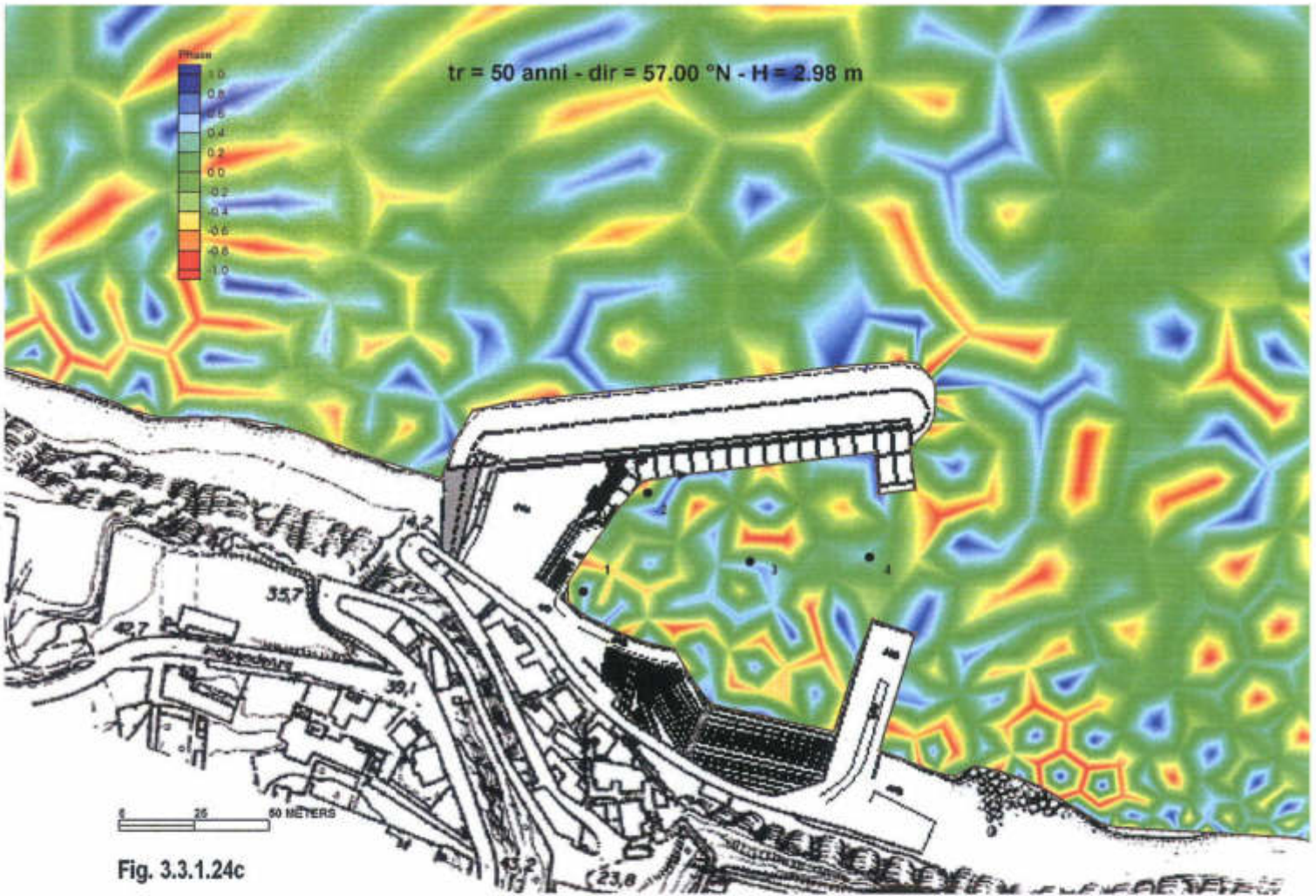


Fig. 3.3.1.22d









SCALO GALERA - PROGETTO - tr = 3 anni				
DD al largo (gradi)	DD sotto costa (gradi)	H sotto costa (m)	H residua (m)	STAZIONE
315,00	323,00	3,51	0,25	1
			0,12	2
			0,43	3
			1,08	4
337,50	340,00	3,51	0,26	1
			0,18	2
			0,55	3
			1,18	4
360,00	359,00	3,37	0,33	1
			0,28	2
			0,59	3
			0,91	4
22,50	21,00	2,79	0,49	1
			0,23	2
			0,63	3
			1,50	4
45,00	42,00	2,35	0,47	1
			0,16	2
			0,96	3
			1,51	4
67,50	63,00	1,73	0,22	1
			0,20	2
			0,50	3
			0,99	4

Tab. 3.3.1

SCALO GALERA - PROGETTO - tr = 10 anni				
DD al largo (gradi)	DD sotto costa (gradi)	H sotto costa (m)	H (m)	STAZIONE
315,00	327,00	4,97	0,32	1
			0,23	2
			0,55	3
			1,14	4
337,50	342,00	5,34	0,44	1
			0,42	2
			0,71	3
			1,32	4
360,00	358,00	5,48	0,54	1
			0,42	2
			0,88	3
			1,30	4
22,50	20,00	4,42	0,77	1
			0,29	2
			0,77	3
			2,27	4
45,00	40,00	3,24	0,55	1
			0,27	2
			1,37	3
			1,98	4
67,50	60,00	2,34	0,46	1
			0,20	2
			1,82	3
			1,51	4

Tab. 3.3.2

SCALO GALERA - PROGETTO - tr = 30 anni				
DD al largo (gradi)	DD sotto costa (gradi)	H sotto costa (m)	H residua (m)	STAZIONE
315,00	330,00	6,31	0,84	1
			0,51	2
			1,62	3
			2,22	4
337,50	344,00	7,14	0,84	1
			0,55	2
			2,27	3
			1,83	4
360,00	358,00	7,82	0,75	1
			0,57	2
			1,87	3
			2,49	4
22,50	19,00	5,46	0,67	1
			0,61	2
			1,41	3
			2,37	4
45,00	38,00	4,30	0,56	1
			0,41	2
			1,61	3
			2,82	4
67,50	57,00	2,98	0,84	1
			0,30	2
			1,32	3
			2,07	4

Tab. 3.3.3

SCALO GALERA - PROGETTO - tr = 50 anni				
DD al largo (gradi)	DD sotto costa (gradi)	H sotto costa (m)	H (m)	STAZIONE
315.00	331.00	6.92	0.84	1
			0.70	2
			2.18	3
			2.30	4
337.50	344.00	8.12	0.84	1
			0.63	2
			2.20	3
			2.66	4
360.00	358.00	9.01	0.84	1
			0.83	2
			1.83	3
			2.47	4
22.50	19.00	5.46	0.67	1
			0.61	2
			1.41	3
			2.37	4
45.00	37.00	4.90	0.47	1
			0.98	2
			1.76	3
			2.87	4
67.50	57.00	2.98	0.84	1
			0.30	2
			1.32	3
			2.07	4

Tab. 3.3.4