

File: <b>Rel_Tec_Bellavia</b>	Codifica: Rel. Tec.	Sistema Gestione Qualità - Rev. 2 del 11/03/16	Pag. 9 di 27
<b>Sez. 7.5: "Produzione ed Erogazione Servizi"</b> PROVE IN SITO - INDAGINI GEOFISICHE			

**L59**

## Allegato 1: Indagine sismica

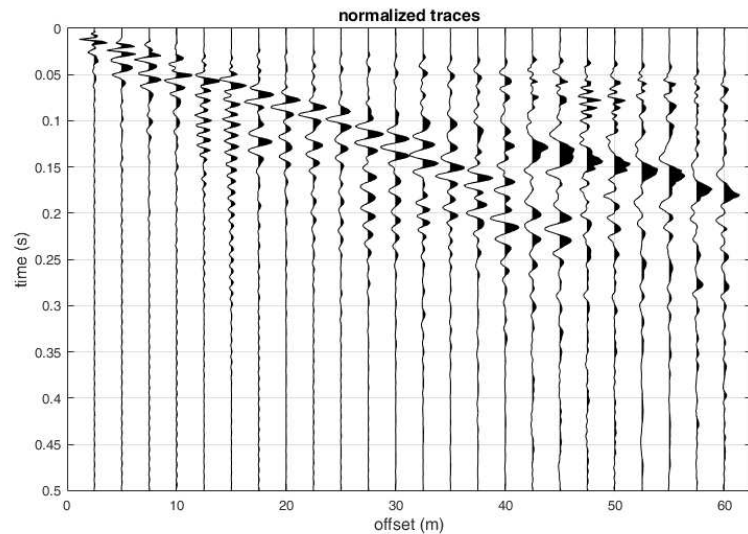
## Sez. 7.5: "Produzione ed Erogazione Servizi"

PROVE IN SITO - INDAGINI GEOFISICHE

## #1: data uploading &amp; processing

dataset: ZVF-PHASE-spectrum-m025-24ch.mat  
sampling: 2ms [500Hz] - 500 samples  
minimum offset: 2.5 m  
geophone spacing: 2.5 m

next shot

☐ keep parameters

resampling: 0.25

data selection:   60

filtering & spectra:

refr. & refl.:  0.2

other tools & setting: 5 time to visualize (s)

## #2: velocity spectrum, modelling &amp; picking (MASW, MFA, ESAC &amp; ReMi analyses)

MASW: compute velocity spectrum

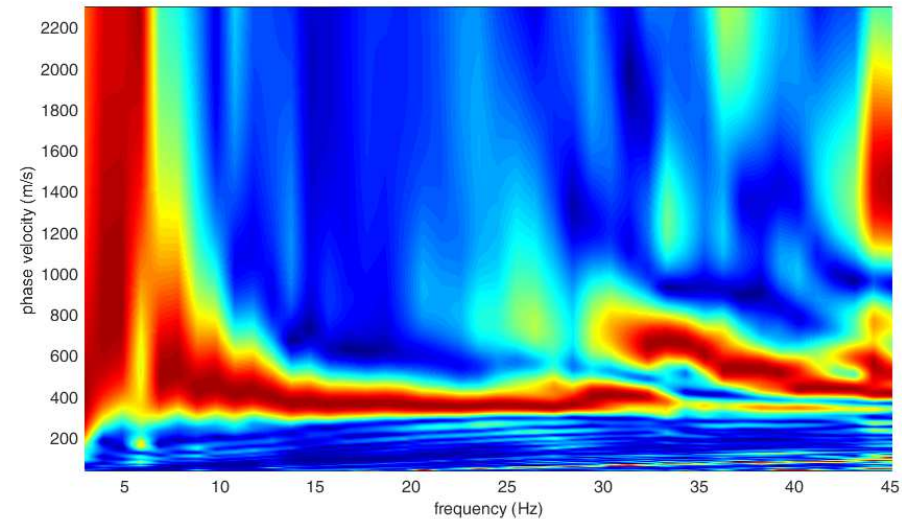
phase velocity ☐ f-k

group velocity

250

linear-linear

handling the spectra



## modelling

?

about Poisson

general setting

Rayleigh

5

phase vel

0

Reference depth

☒ Refraction☐ HV (body waves)☐ HV (surface waves)

Vs	Qs	Poisson	thickness
230	10	0.4	0.5
440	25	0.35	0.7
470	30	0.35	0.8
415	25	0.35	1.8
460	30	0.35	1.5
490	30	0.35	2.4
302	25	0.49	5.1
480	35	0.35	7.0
580	50	0.4	12
660	60	0.3	15
940	70	0.3	60
1300	100	0.25	

synthetics (FVS)

ZVF

☐ shows DC☐ show model☒ just overlap

reporting

40 max depth

visualize curves

?

Site Response

picking

?

dispersion curves

select mode

to select the last  
point of the  
considered mode  
click the right button

?

inversion

www.winmasw.com

## Sez. 7.5: "Produzione ed Erogazione Servizi"

PROVE IN SITO - INDAGINI GEOFISICHE

## #1: data uploading &amp; processing

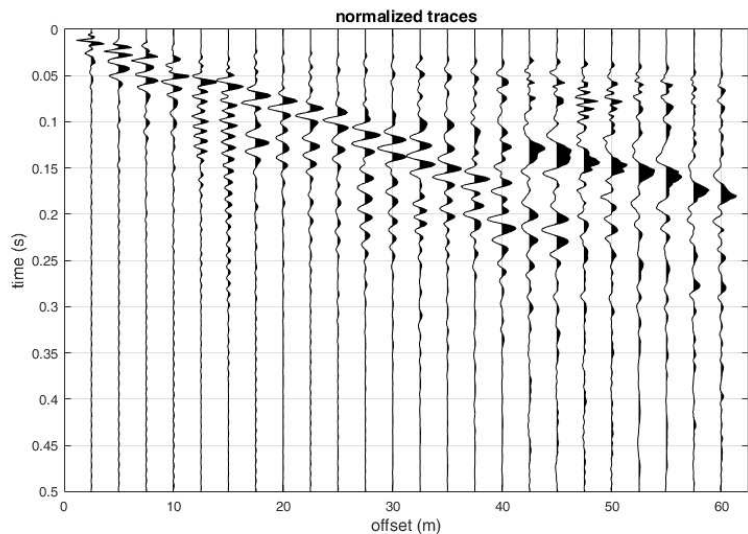
dataset: ZVF-PHASE-spectrum-m025-24ch.mat

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geophone spacing: 2.5 m

next shot

☐ keep parameters

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## #2: velocity spectrum, modelling &amp; picking (MASW, MFA, ESAC &amp; ReMi analyses)

MASW: compute velocity spectrum

phase velocity ☐ f-k

group velocity

250

draw velocity

linear-linear

handling the spectra

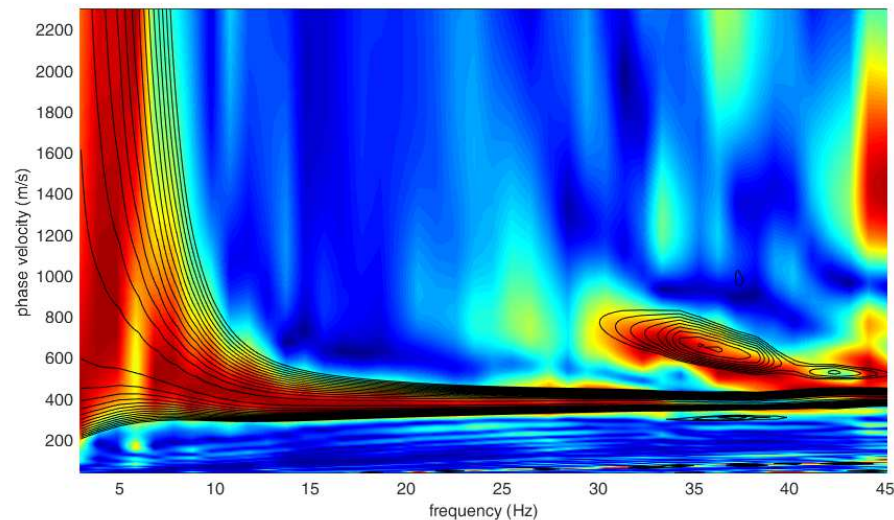
save

upload

merge

explore spectrum

mode separation



## modelling

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about Poisson

general setting

Rayleigh

5

phase vel

0

Reference depth

☒ Refraction☐ HV (body waves)☐ HV (surface waves)

Vs	Qs	Poisson	thickness
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480	35	0.35	7.0
580	50	0.4	12
660	60	0.3	15
940	70	0.3	60
1300	100	0.25	

upload mod.

save model

show M &amp; R

refresh

compute

effective (passive)

synthetics (FVS)

ZVF

☐ shows DC☐ show model☒ just overlap

synthetics

reporting

40 max depth

report DC

report SS

visualize curves

input curve

?

Site Response

picking

show f-k

auto picking

dispersion curves

select mode

to select the last point of the considered mode click the right button

save picking

?

cancel picking

inversion

inversion

joint D+HV inv.

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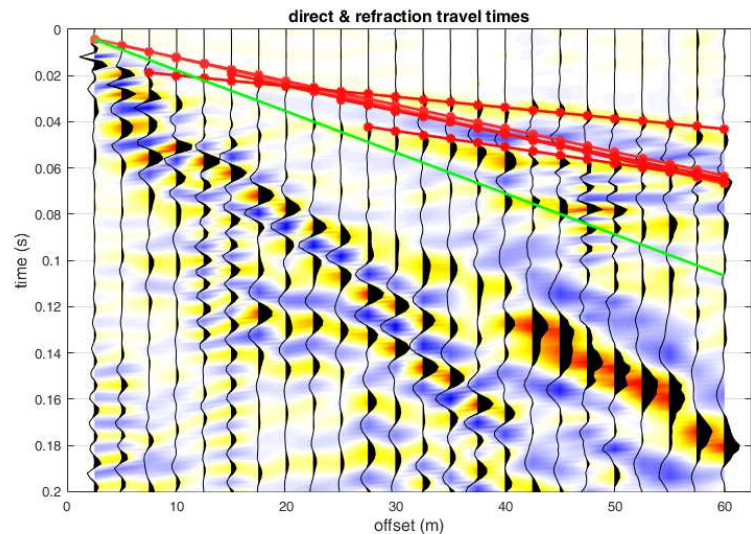
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PROVE IN SITO - INDAGINI GEOFISICHE

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next shot

☐ keep parameters

resampling: 0.25

data selection:   60

filtering & spectra:

refr. & refl.: 0.2

other tools & setting: 2 time to visualize (s)

## #2: velocity spectrum, modelling &amp; picking (MASW, MFA, ESAC &amp; ReMi analyses)

MASW: compute velocity spectrum

phase velocity

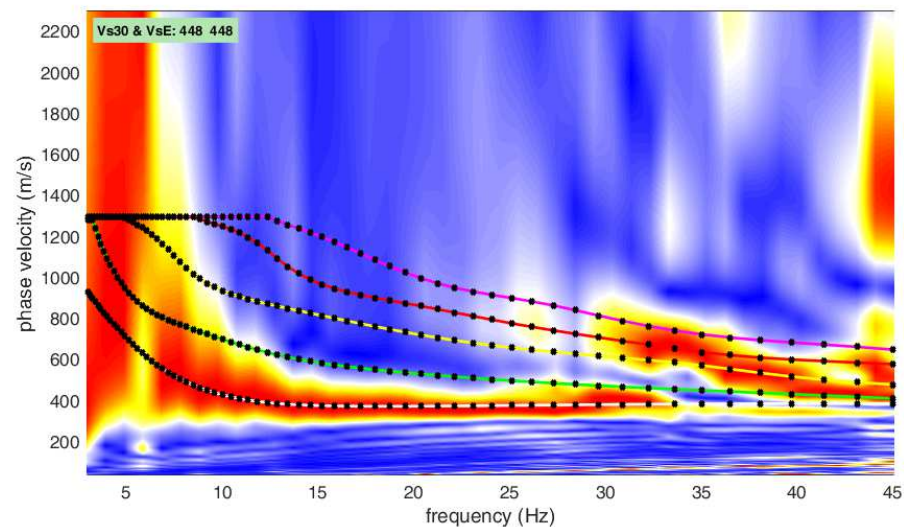
☐ f-k

group velocity

250

linear-linear

handling the spectra



## modelling

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about Poisson

general setting

Rayleigh

5

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Reference depth

☒ Refraction☐ HV (body waves)☐ HV (surface waves)

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580	50	0.4	12
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940	70	0.3	60
1300	100	0.25	

☐ effective (passive)

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