

Riferimento misura: **052006P8**

Durata delle registrazione: **30 Minuti** (Analisi non eseguita sull'intera traccia)

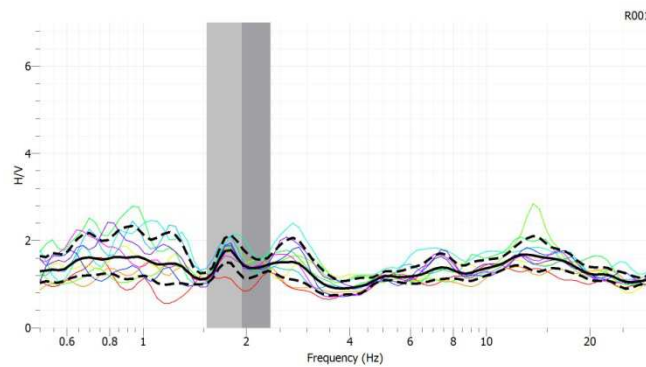
Frequenza di campionamento: **100 Hz**

Lunghezza delle finestre: **90 s**

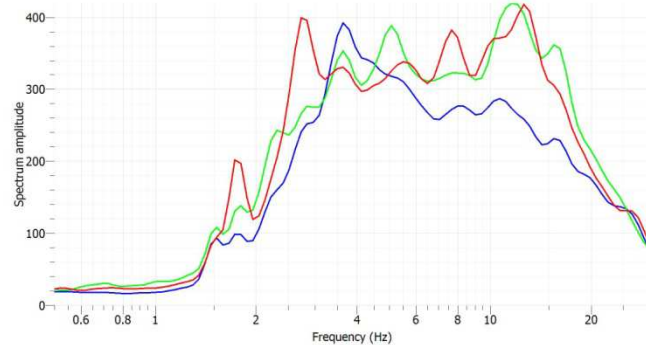
Tipo di lisciamento: **coseno**

Lisciamento: **5%**

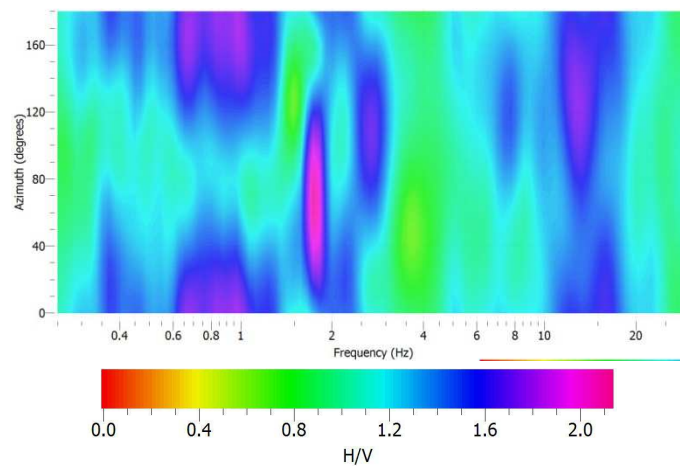
Curva HVSR



Spettri delle singole componenti



Direzionalità



Serie temporale

$(Nc \cdot Lw / Tr) \cdot 100 > 30\%$

50% > 30%

OK

Picco H/V a 1.78 ± 0.42 Hz (nell'intervallo 0.2 -20 Hz)

Criteri per una curva H/V affidabile

(Tutti e tre i criteri devono essere soddisfatti)

$f_0 > 10 / L_w$	$1.78 > 0.11$	OK
$nc(f_0) > 200$	$1762 > 200$	OK
$\sigma_A(f) < 2$ for $0.5f_0 < f < 2f_0$ if $f_0 > 0.5\text{Hz}$ $\sigma_A(f) < 3$ for $0.5f_0 < f < 2f_0$ if $f_0 < 0.5\text{Hz}$	Superato 0 volte su 100 Superato 0 volte su 100	OK

Criteri per un picco H/V chiaro

(Almeno cinque criteri su sei devono essere soddisfatti)

Exists f - in $[f_0/4, f_0] \mid A_{H/V}(f^-) < A_0 / 2$	$1.11 < 0.90$	NO
Exists f + in $[f_0, 4f_0] \mid A_{H/V}(f^+) < A_0 / 2$	$0.90 < 0.90$	OK
$A_0 > 2$	$1.80 > 2$	NO
$f_{\text{peak}}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	$ 0.09 < 0.05$	NO
$\sigma_f < \varepsilon(f_0)$	$0.42 < 0.18$	NO
$\sigma_A(f_0) < \theta(f_0)$	$1.19 < 1.78$	OK

Legenda

L_w	window length
n_w	number of windows used in the analysis
$n_c = L_w n_w f_0$	number of significant cycles
f	current frequency
f_0	H/V peak frequency
σ_f	standard deviation of H/V peak frequency
$\varepsilon(f_0)$	threshold value for the stability condition $\sigma_f < \varepsilon(f_0)$
A_0	H/V peak amplitude at frequency f_0
$A_{H/V}(f)$	H/V curve amplitude at frequency f
f^-	frequency between $f_0/4$ and f_0 for which $A_{H/V}(f^-) < A_0/2$
f^+	frequency between f_0 and $4f_0$ for which $A_{H/V}(f^+) < A_0/2$
$\sigma_A(f)$	standard deviation of $A_{H/V}(f)$, $\sigma_A(f)$ is the factor by which the mean $A_{H/V}(f)$ curve should be multiplied or divided
$\sigma_{\log H/V}(f)$	standard deviation of $\log A_{H/V}(f)$ curve
$\theta(f_0)$	threshold value for the stability condition $\sigma_A(f) < \theta(f_0)$

Threshold values for σ_f and $\sigma_A(f_0)$

Freq.range [Hz]	< 0.2	0.2 – 0.5	0.5 – 1.0	1.0 – 2.0	> 2.0
$\varepsilon(f_0)$ [Hz]	$0.25 f_0$	$0.2 f_0$	$0.15 f_0$	$0.10 f_0$	$0.05 f_0$
$\theta(f_0)$ for $\sigma_A(f_0)$	3.0	2.5	2.0	1.78	1.58
Log $\theta(f_0)$ for $\sigma_{\log H/V}(f_0)$	0.48	0.40	0.30	0.25	0.20