

SURVEY INFORMATION

Date: 2024/01/29

Client: Comune di Monteverdi Marittimo

PLACE INFORMATION

Place ID: Monteverdi H10

Address: piazza

Latitude: -

Longitude: -

Coordinate system: -

Elevation: 0 m

Weather: nuvoloso

Notes: -

STATION INFORMATION

Station code: 10

Model: SARA GEOBOX

Sensor: SARA SS45 (external 4.5 Hz sensors)

Notes: -

SIGNAL AND WINDOWING

Sampling frequency: 300 Hz

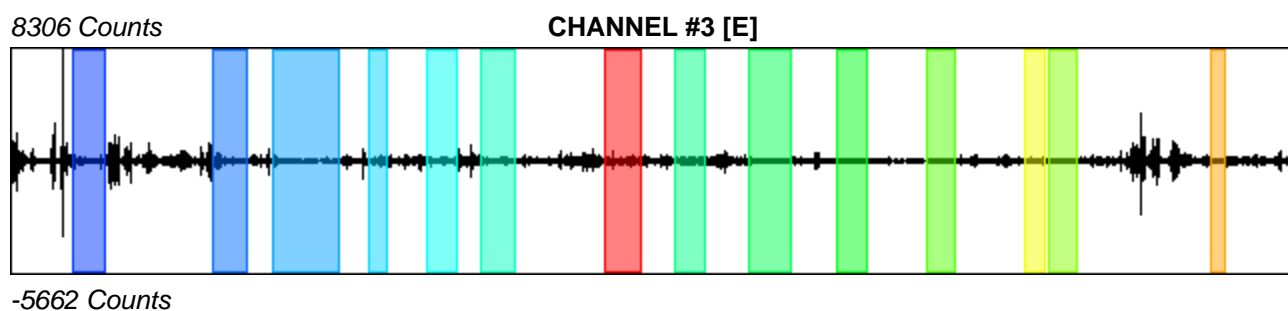
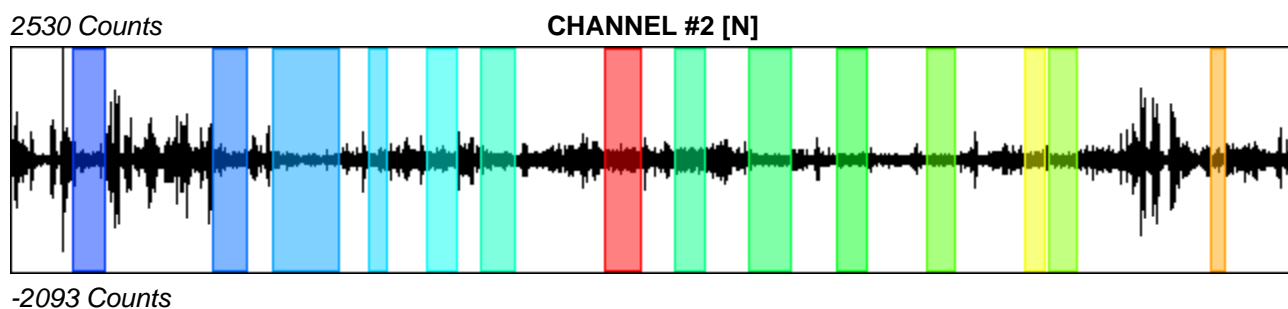
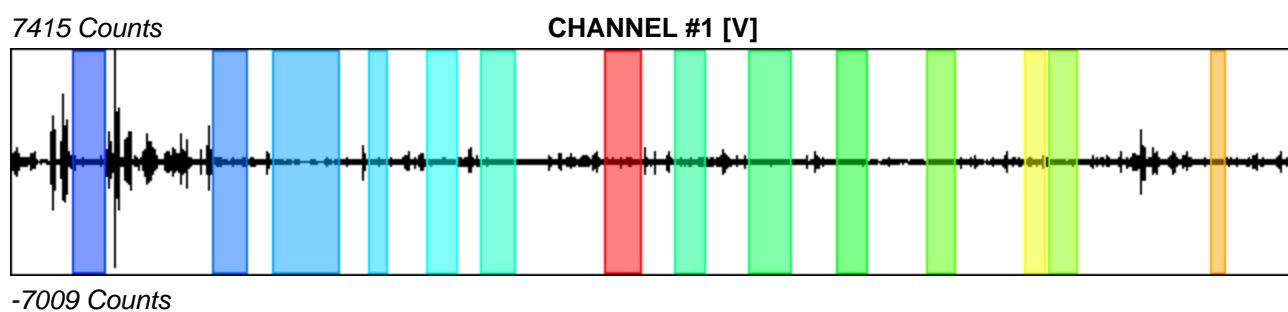
Recording start time: 2024/03/01 09:41:56

Recording length: 33.33 min

Windows count: 14

Average windows length: 49.28

Signal coverage: 34.5%



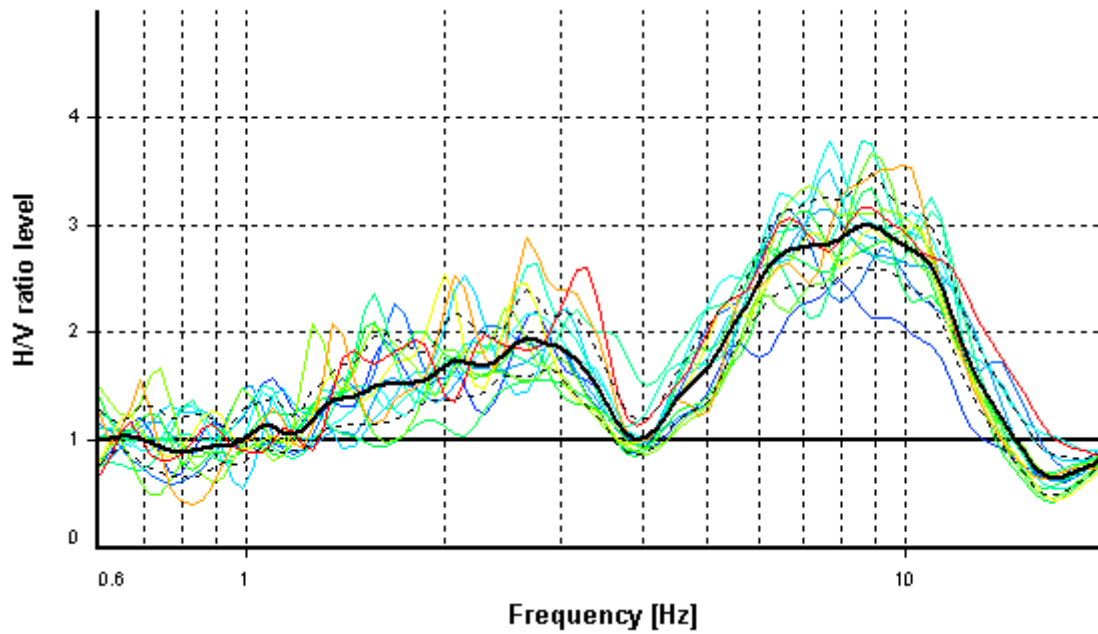
HVSR ANALYSIS

Tapering: Enabled (Bandwidth = 5%)

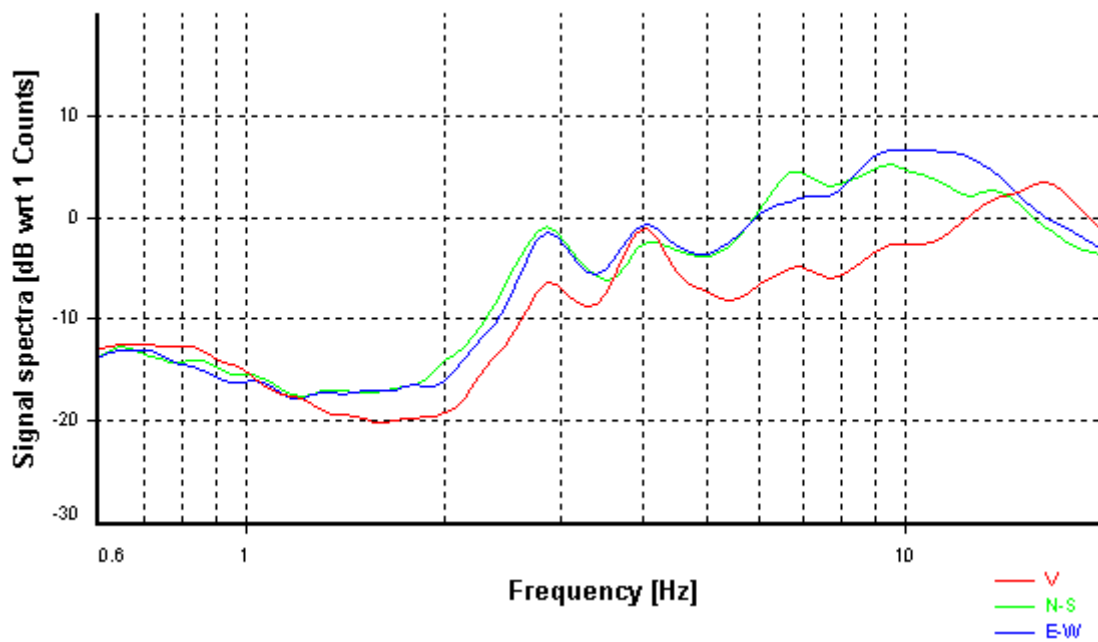
Smoothing: Konno-Ohmachi (Bandwidth coefficient = 40)

Instrumental correction: Disabled

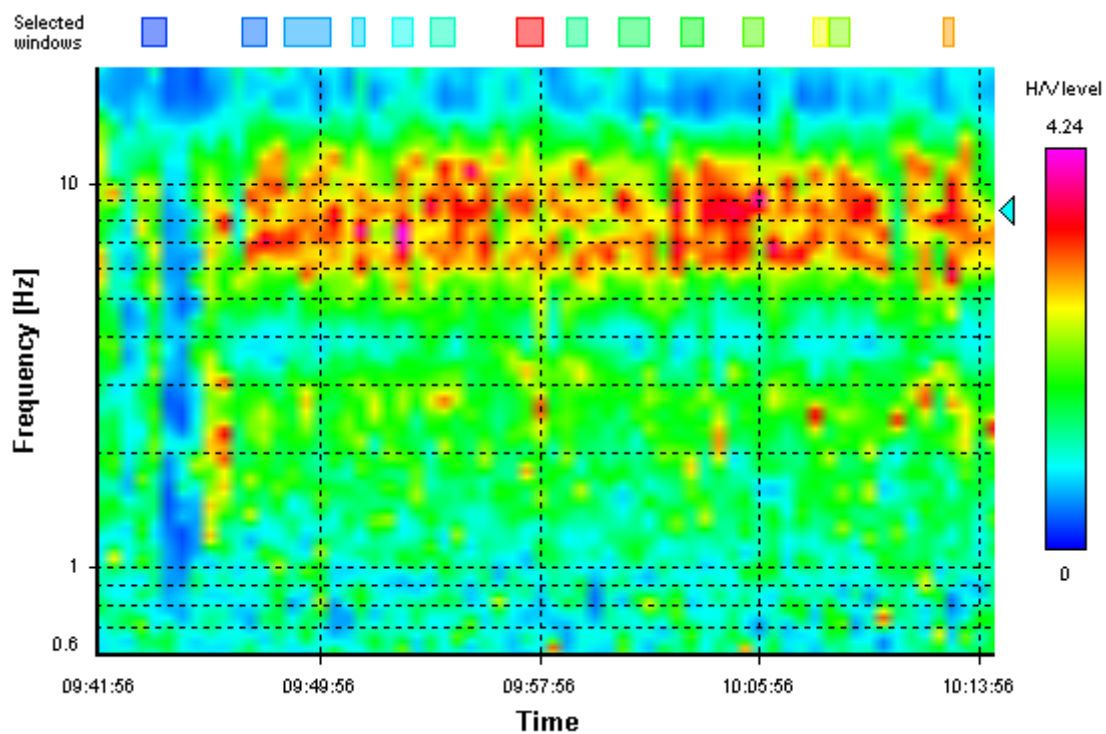
HVSR average



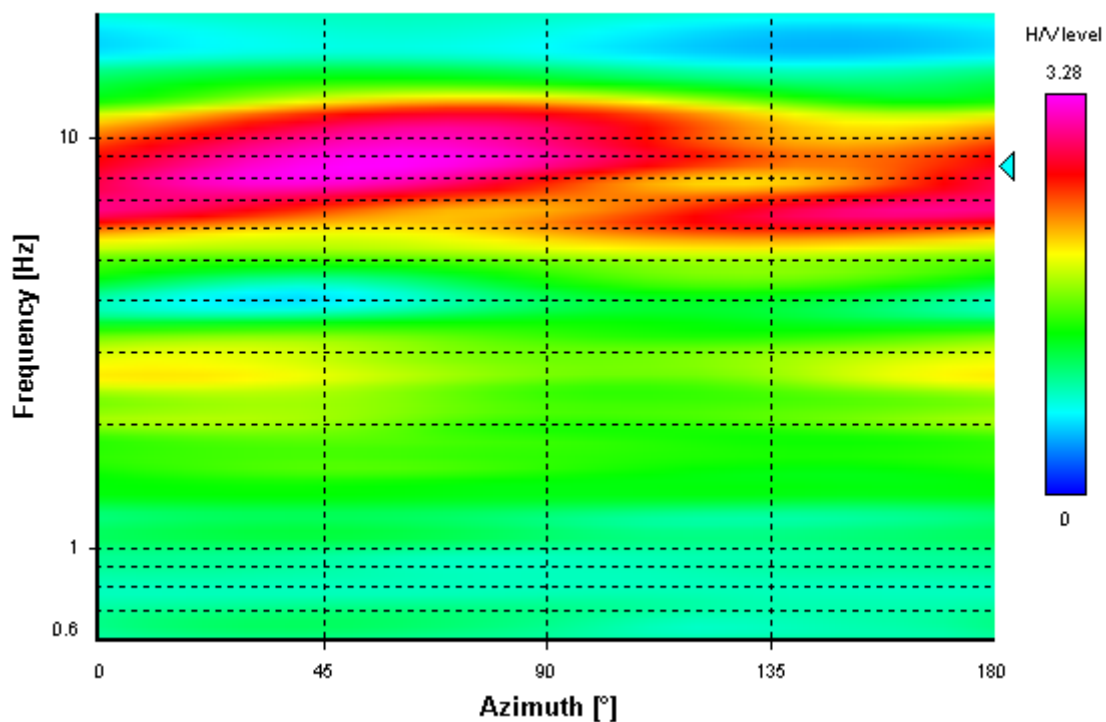
Signal spectra average



HVSR time-frequency analysis (30 seconds windows)



HVSR directional analysis



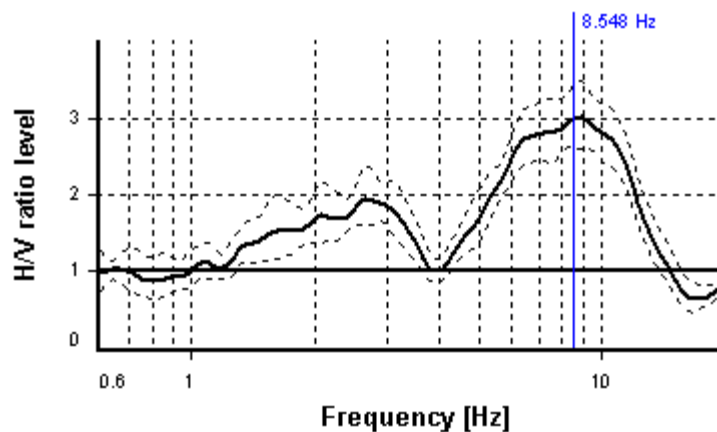
SESAME CRITERIA

Selected f_0 frequency

8.548 Hz

A_0 amplitude = 2.988

Average f_0 = 8.379 ± 1.278



HVSR curve reliability criteria		
$f_0 > 10 / L_w$	14 valid windows (length > 1.17 s) out of 14	OK
$n_c(f_0) > 200$	5896.89 > 200	OK
$\sigma_A(f) < 2$ for $0.5f_0 < f < 2f_0$	Exceeded 0 times in 39	OK
HVSR peak clarity criteria		
$\exists f \text{ in } [f_0/4, f_0] \mid A_{H/V}(f) < A_0/2$	4.51815 Hz	OK
$\exists f^+ \text{ in } [f_0, 4f_0] \mid A_{H/V}(f^+) < A_0/2$	13.54632 Hz	OK
$A_0 > 2$	2.99 > 2	OK
$f_{\text{peak}}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	3.61% <= 5%	OK
$\sigma_f < \varepsilon(f_0)$	1.27822 >= 0.42738	NO
$\sigma_A(f_0) < \theta(f_0)$	1.14887 < 1.58	OK
Overall criteria fulfillment		OK