

STATION INFORMATION

Station code: 3

Model: SARA GEOBOX

Sensor: SARA SS45 (external 4.5 Hz sensors)

Notes: traffico occasionale.

PLACE INFORMATION

Place ID: Canneto H3

Address: SP329 Passo di Bocca di Valle

Latitude: 43.198070

Longitude: 10.739290

Coordinate system: WGS84

Elevation: 298 m s.l.m.

Weather: nuvoloso

Notes: -

PHOTOGRAPHIC REFERENCES



SIGNAL AND WINDOWING

Sampling frequency: 200 Hz

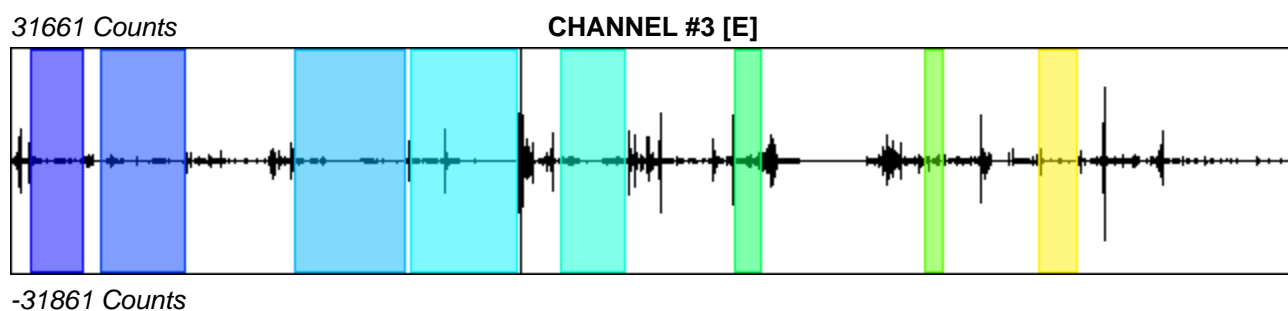
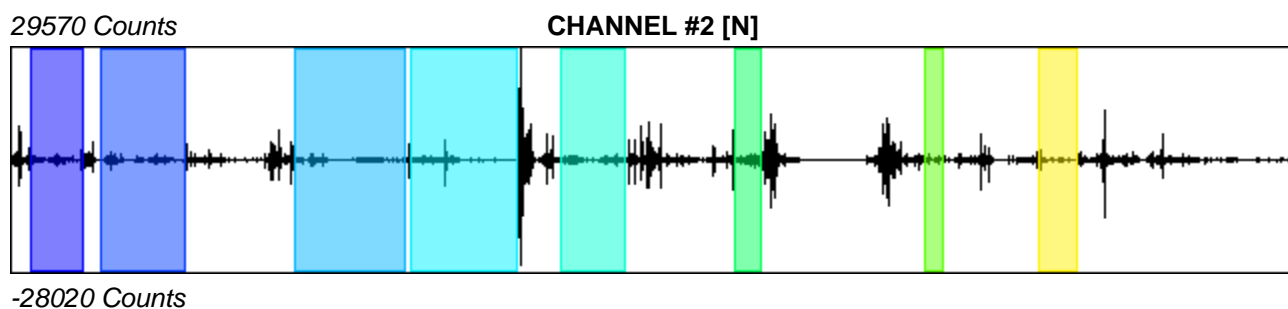
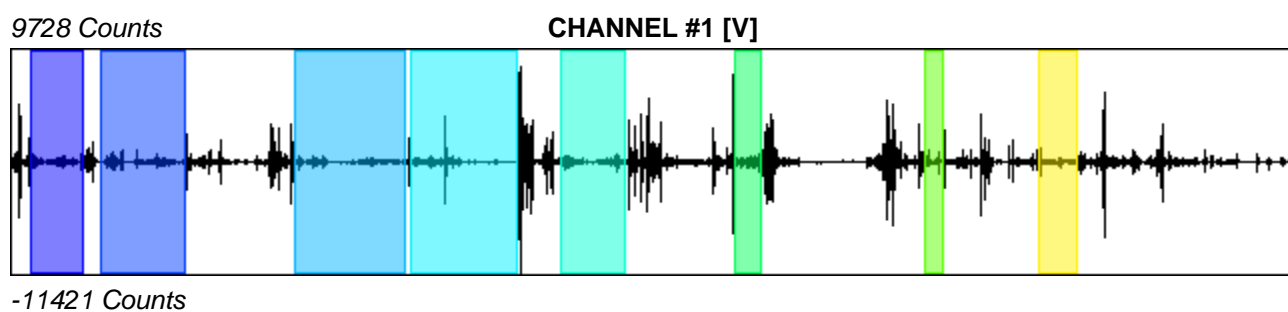
Recording start time: 2023/12/28 15:30:59

Recording length: 30 min

Windows count: 8

Average windows length: 86.93

Signal coverage: 38.64%



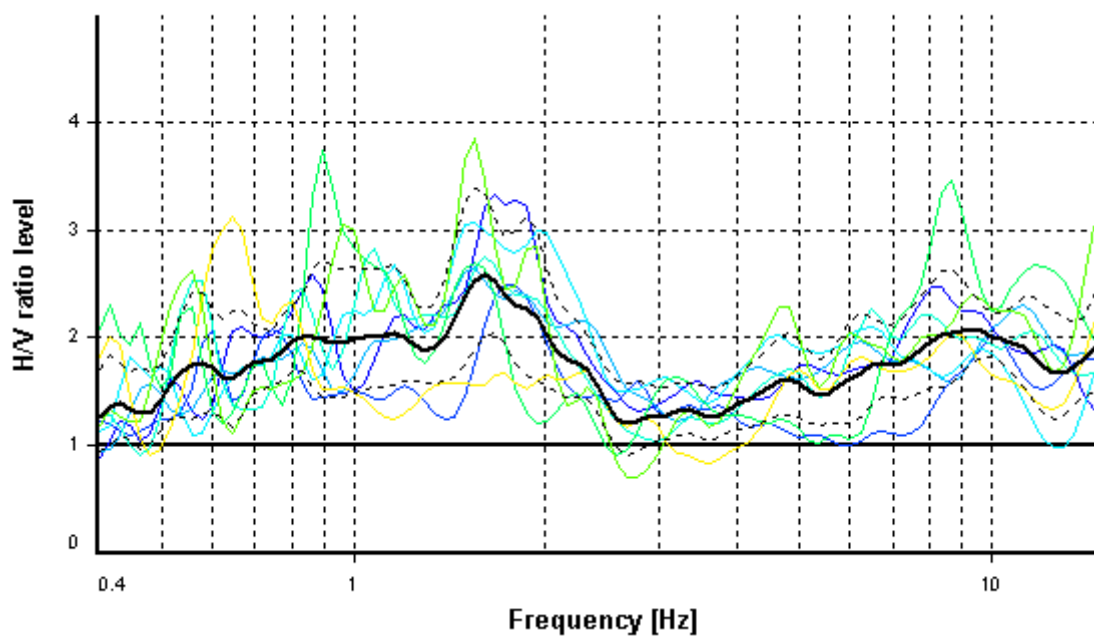
HVSR ANALYSIS

Tapering: Enabled (Bandwidth = 5%)

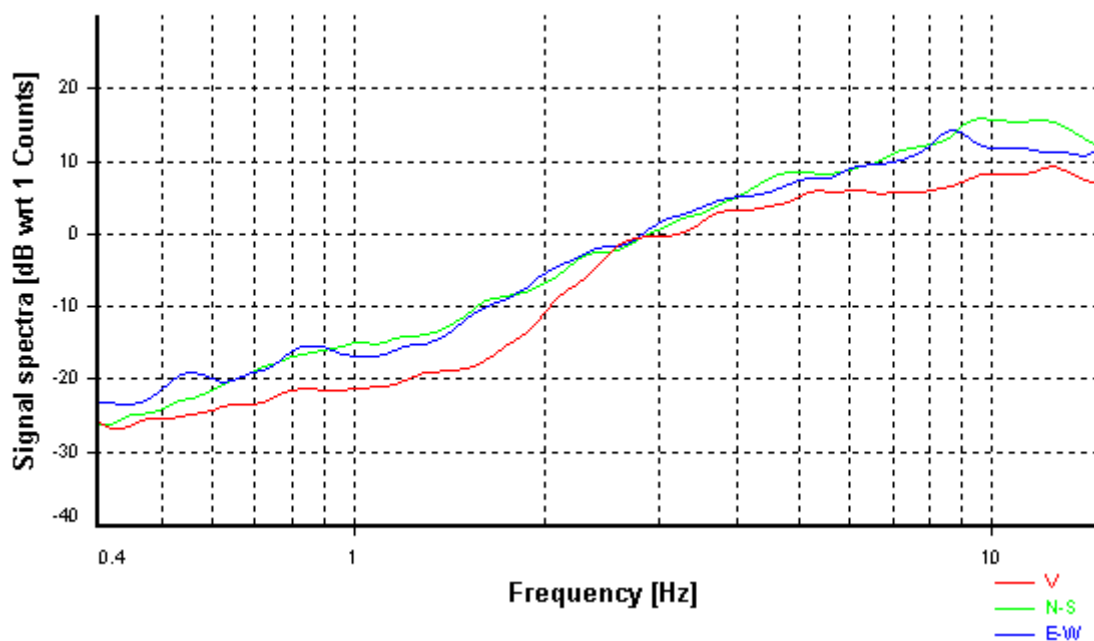
Smoothing: Konno-Ohmachi (Bandwidth coefficient = 40)

Instrumental correction: Disabled

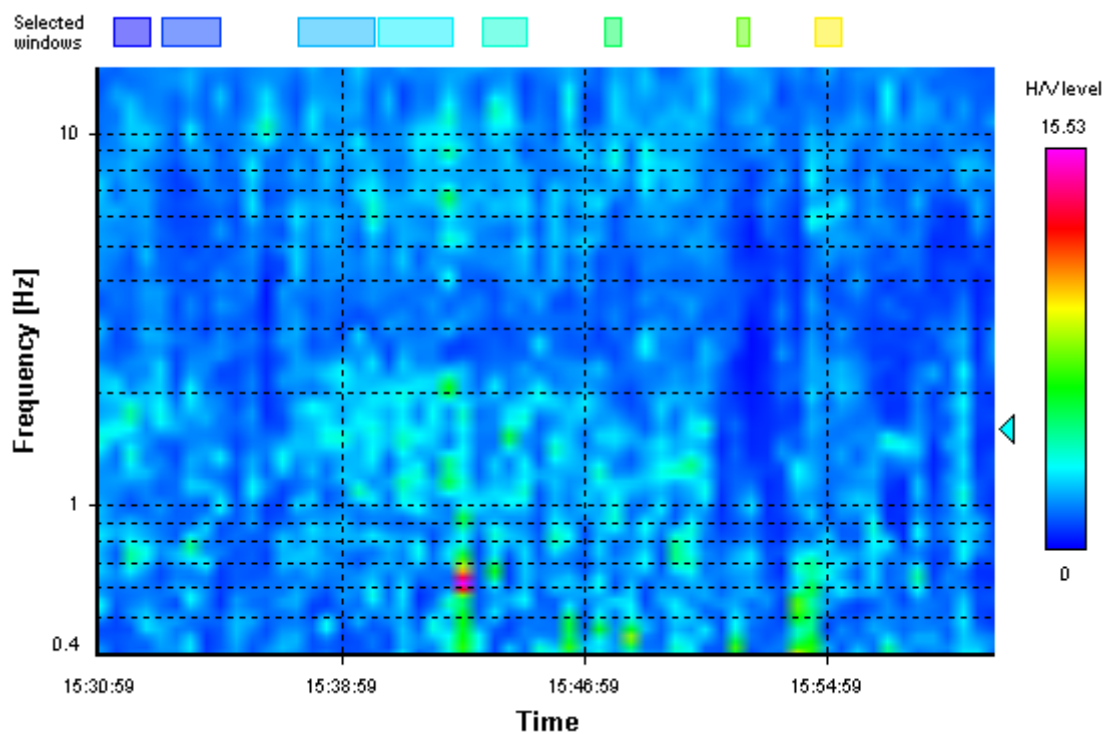
HVSR average



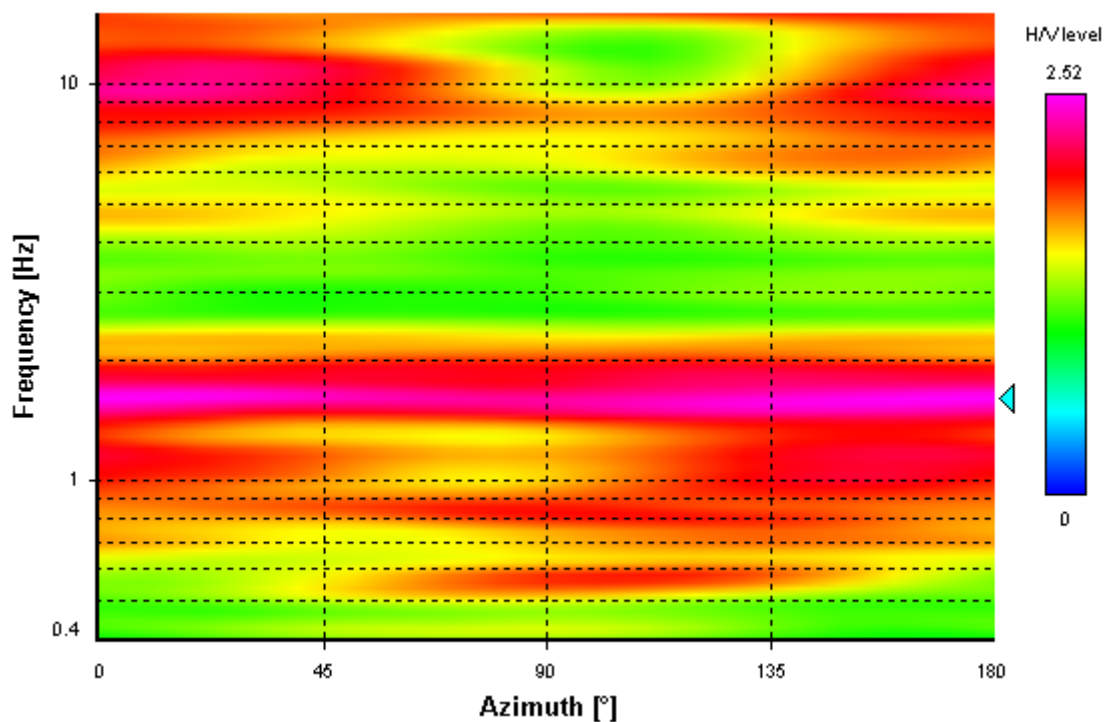
Signal spectra average



HVSR time-frequency analysis (30 seconds windows)



HVSR directional analysis



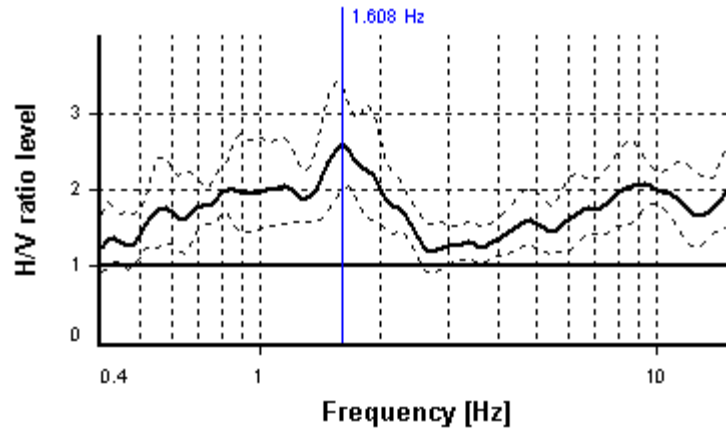
SESAME CRITERIA

Selected f_0 frequency

1.608 Hz

A_0 amplitude = 2.589

Average $f_0 = 1.691 \pm 0.263$



HVSR curve reliability criteria		
$f_0 > 10 / L_w$	8 valid windows (length > 6.22 s) out of 8	OK
$n_c(f_0) > 200$	1118.12 > 200	OK
$\sigma_A(f) < 2$ for $0.5f_0 < f < 2f_0$	Exceeded 0 times in 37	OK
HVSR peak clarity criteria		
$\exists f \text{ in } [f_0/4, f_0] \mid A_{H/V}(f) < A_0/2$	0.46308 Hz	OK
$\exists f^+ \text{ in } [f_0, 4f_0] \mid A_{H/V}(f^+) < A_0/2$	2.58776 Hz	OK
$A_0 > 2$	2.59 > 2	OK
$f_{\text{peak}}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	3.73% <= 5%	OK
$\sigma_f < \varepsilon(f_0)$	0.26251 >= 0.16078	NO
$\sigma_A(f_0) < \theta(f_0)$	1.29128 < 1.78	OK
Overall criteria fulfillment		OK

SESAME CRITERIA

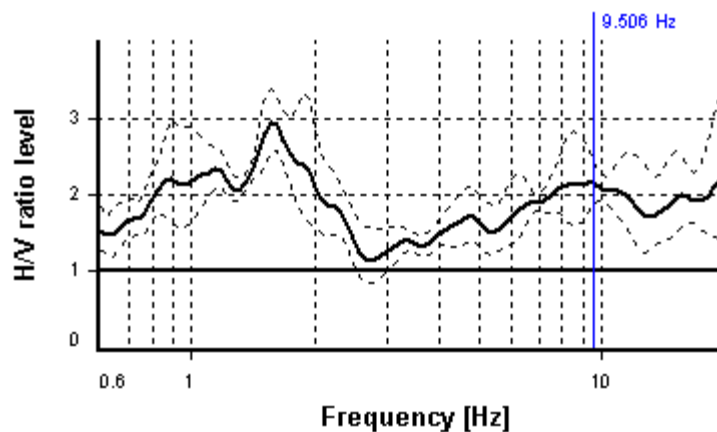
f0 primo contatto con bedrock

Selected f_0 frequency

9.506 Hz

A_0 amplitude = 2.149

Average f_0 = 8.754 ± 1.524



HVSR curve reliability criteria		
$f_0 > 10 / L_w$	6 valid windows (length > 1.05 s) out of 6	OK
$n_c(f_0) > 200$	4996.61 > 200	OK
$\sigma_A(f) < 2$ for $0.5f_0 < f < 2f_0$	Exceeded 0 times in 39	OK
HVSR peak clarity criteria		
$\exists f \text{ in } [f_0/4, f_0] \mid A_{H/V}(f) < A_0/2$	0 Hz	NO
$\exists f^+ \text{ in } [f_0, 4f_0] \mid A_{H/V}(f^+) < A_0/2$	0 Hz	NO
$A_0 > 2$	2.15 > 2	OK
$f_{\text{peak}}[A_{H/V}(f) \pm \sigma_A(f)] = f_0 \pm 5\%$	10.08% > 5%	NO
$\sigma_f < \varepsilon(f_0)$	1.52386 >= 0.4753	NO
$\sigma_A(f_0) < \theta(f_0)$	1.13881 < 1.58	OK
Overall criteria fulfillment		NO