REPORT PROVA H/V

Stazione	**2**
WGS84 N	1702007,1
WGS84 E	4864170,5
Strumentazione	Sara SR04S3 4,5 Hz
Frequenza campionamento	100 Hz
Durata registrazione	30 min
Terreno di misura	Terreno naturale
Orientamento	0° N
Condizioni meteo	Sereno, non ventoso

Lunghezza finestre	20 sec
Tipo di lisciamento	Triangolare cost.
Ampiezza lisciamento	10 %
Intervallo di frequenza (Hz)	0,5 – 20,0
Picco H/V (Hz)	**7,5**
CLASSE DI QUALITA'	**B**

Horizontal-to-Vertical Spectral Ratio

Dataset: 2_77MT_20120725_093338.SAF

Sampling frequency (Hz): 100

Window length (sec): 20

Length of analysed temporal sequence (min): 13.6

Tapering (%): 10

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In the following the results considering the data in the 0.5-20.0Hz frequency range

Peak frequency (Hz): 7.5 (±4.2)

Peak HVSR value: 3.0 (±0.5)

=== Criteria for a reliable H/V curve ==========

#1. [f0 > 10/Lw]: 7.5 > 0.5 (OK)

#2. [nc > 200]: 11965 > 200 (OK)

#3. [f0>0.5Hz; sigmaA(f) < 2 for 0.5f0 < f < 2f0] (OK)

=== Criteria for a clear H/V peak (at least 5 should be fullfilled) ==========

#1. [exists f- in the range [f0/4, f0] | AH/V(f-) < A0/2]: yes, at frequency 2.1Hz (OK)

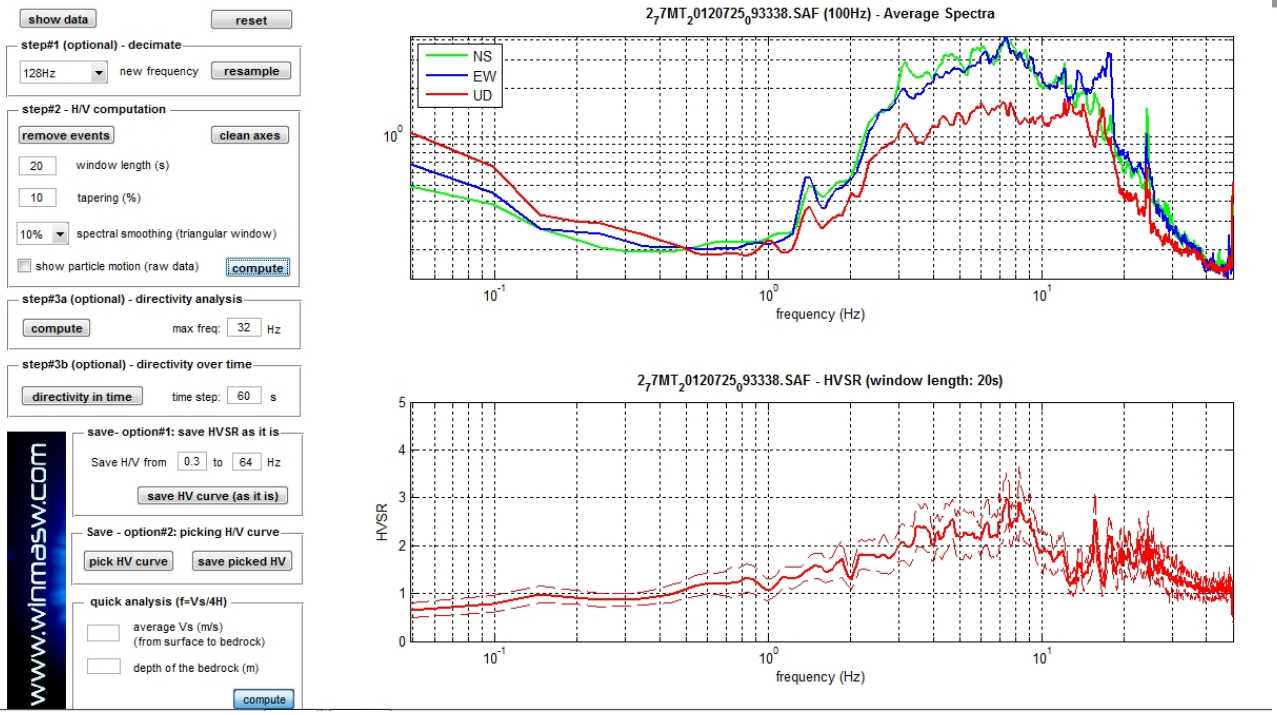
#2. [exists f+ in the range [f0, 4f0] | AH/V(f+) < A0/2]: yes, at frequency 12.5Hz (OK)

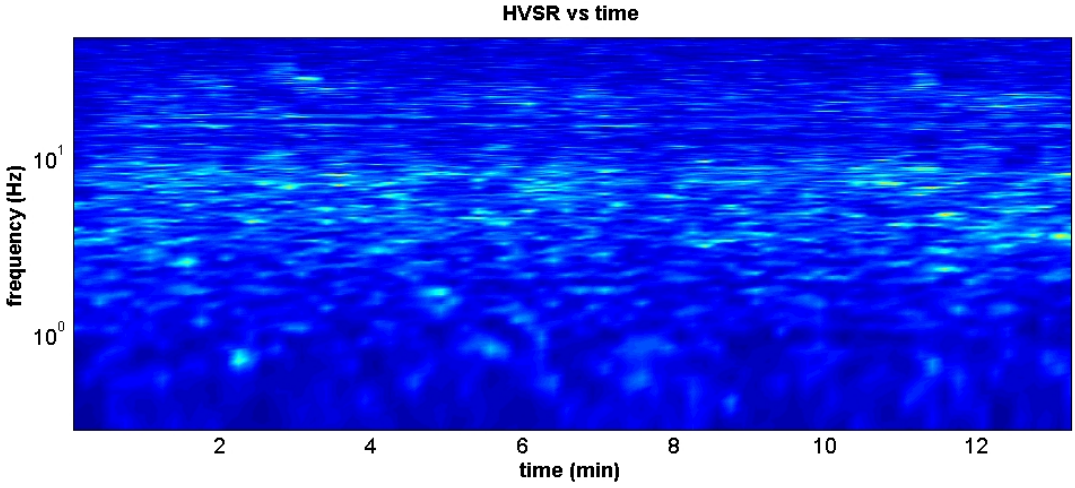
#3. [A0 > 2]: 3.0 > 2 (OK)

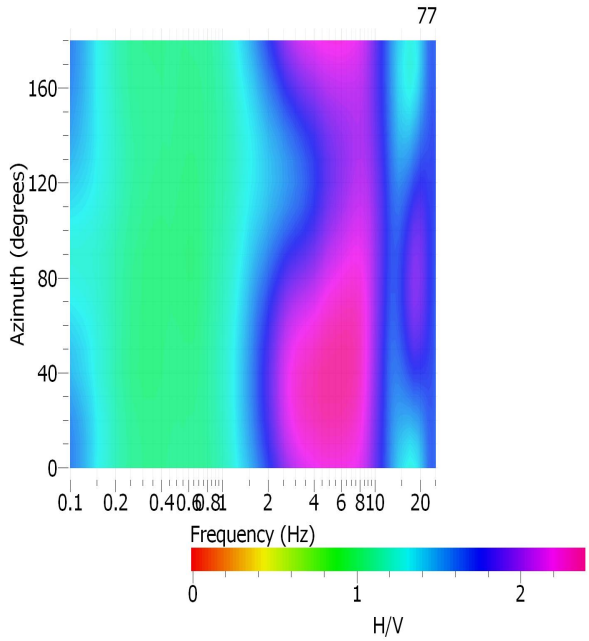
#4. [fpeak[Ah/v(f) ± sigmaA(f)] = f0 ± 5%]: (NO)

#5. [sigmaf < epsilon(f0)]: 4.194 > 0.374 (NO)

#6. [sigmaA(f0) < theta(f0)]: 0.546 < 1.58 (OK)


show data
reset
step#1 (optional) - decimate
128Hz
new frequency
resample
step#2 - H/V computation
remove events
clean axes
20
window length (s)
10
tapering (%)
10%
spectral smoothing (triangular window)
show particle motion (raw data)
compute
step#3a (optional) - directivity analysis
compute
max freq:
32
Hz
step#3b (optional) - directivity over time
directivity in time
time step:
60
s
www.winmasw.com
save- option#1: save HVSR as it is
Save H/V from
0.3
to
64
Hz
save HV curve (as it is)
Save - option#2: picking H/V curve
pick HV curve
save picked HV
quick analysis (f=Vs/4H)
average Vs (m/s)
(from surface to bedrock)
depth of the bedrock (m)
compute
2_7MT_20120725_093338.SAF (100Hz) - Average Spectra
NS
EW
UD
frequency (Hz)
2_7MT_20120725_093338.SAF - HVSR (window length: 20s)
HVSR
frequency (Hz)


HVSR vs time
frequency (Hz)
time (min)


77
Azimuth (degrees)
Frequency (Hz)
H/V