CRISP DB INGV 2021- Subsoil Model

This document reports the standard analysis performed routinely and archived in the section Geophysics.

Note: all the parameters here reported are to be considered as indicative, the values actually used depend on the available data and the analyst experience.

1. Array analysis 1D-2D Velocity profiles - VELOCITY PROFILE SA

Velocity profile computation is specified in individual reports and archived as “Investigation Type”: SA (Seismic Array). The general criteria are listed in the following:
Software: Geopsy 2.4.1 (http://www.geopsy.org)

Noise Array 1D

Input parameters: Total Record length:from 150 to 20 min for multichannel geophone 4.5 Hz
Window length: from 30 to 240 sec
AntiTrigger no
Grid step and grid size: as Geopsy default
Band width: 0.1

Active seismic 1D multichannel

Input parameters: play with parameters depending on results. At the first run,
taper on window,
window of analysis: from 0.5 to 2 s.
distance normalization 1/sqrt
no high resolution,
frequency band ratio from 0.1 to 0.2;

Noise Array 2D

Input parameters: Total Record length: from 180 to 120 min (minimum 60 min)
Window length: depending on frequency, up to 100T
AntiTrigger - STA=1s, LTA=30s, Min STA/LTA= 0.2, Max STA/LTA=2.5
Grid step and grid size: as Geopsy default
Band width: 0.1