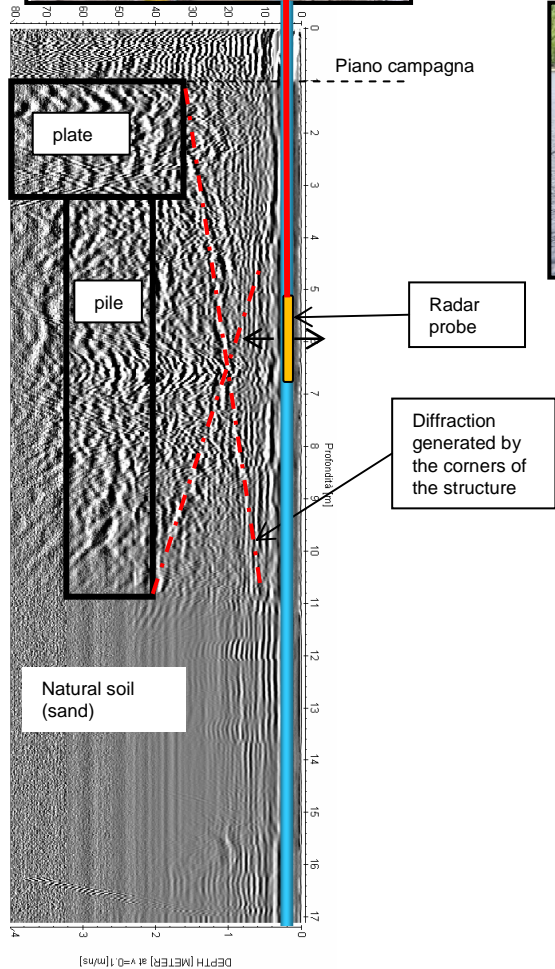
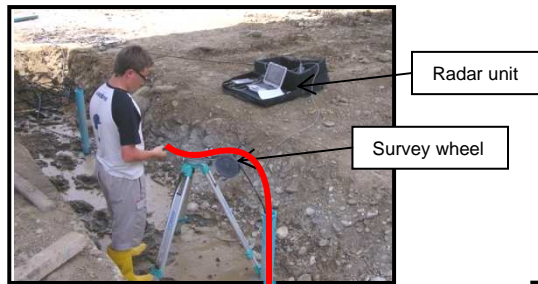
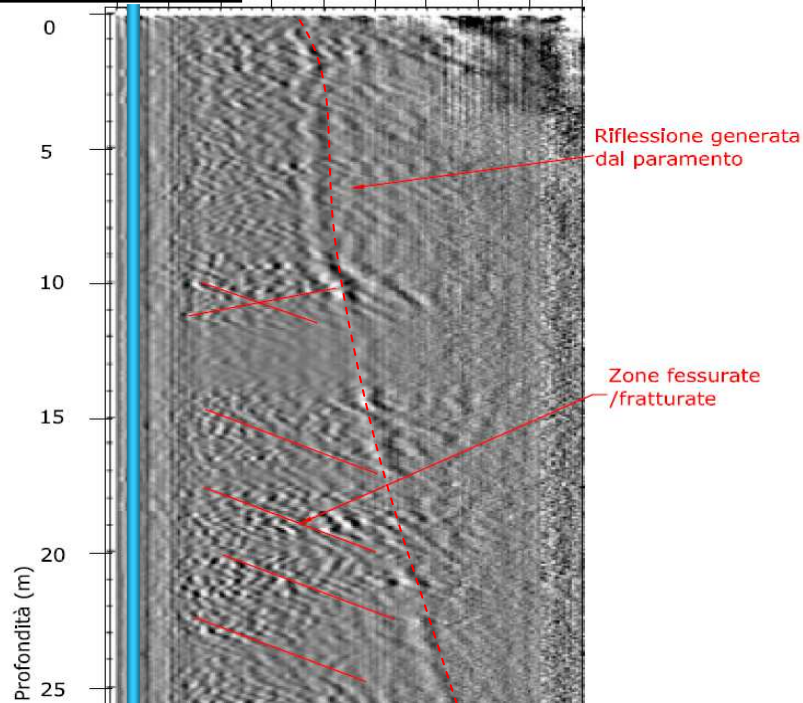


EVALUATION OF BRIDGE FOUNDATION BOREHOLE GROUND PROBING RADAR

Case 1 –Pieragostini bridge



Case 2 –Badana dam



The borehole GPR differs from the conventional GPR for the fact that the antenna (probe of cylindrical shape) is lowered inside a hole specially coated with a PVC piping. The antenna (omnidirectional) is able to detect (down to 40 m depth of borehole, maximum cable length) the structures adjacent to the hole, and is therefore particularly effective to investigate portions of the subsoil or structures otherwise unreachable. The most common applications are:

- 1) Verify the presence and length of foundation piles (Example 1 - Bridge Pieragostini - Genoa - 2008)
- 2) Verification on the state of fracturing of concrete structures (example 2 - Dam of Badana - Alessandria - 2007)
- 3) Check the thickness and continuity of columns of consolidated soil (jet-grouting)

