

Applications of Geophysical Technologies

Geotechnical

- Mapping bedrock topography
- Determining in-situ rock properties
- Subsurface imaging in karst terrain
- Locating buried utilities

Structural

- Bridge deck assessment
- Pavement investigations
- Detecting voids beneath pavement
- Locating leaks in earth-filled dams and levees

Environmental

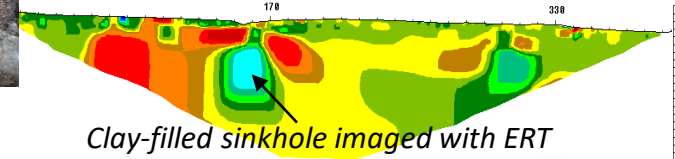
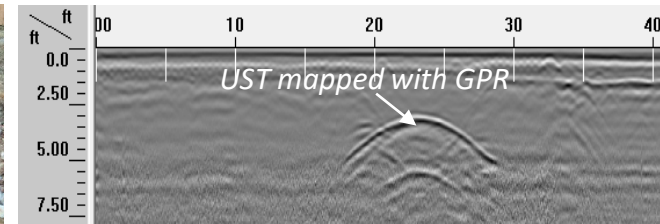
- Mapping underground abandoned mines
- Locating underground storage tanks (USTs)
- Mapping landfills

Archeological

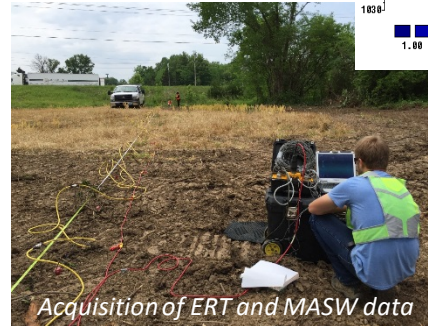
- Mapping burials in modern and historical cemeteries



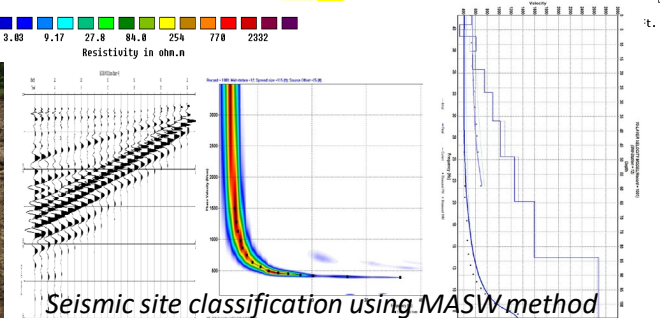
Sinkhole opened up in a residential area, and was quickly assessed with geophysical tools for further repair



Clay-filled sinkhole imaged with ERT



Acquisition of ERT and MASW data



Seismic site classification using MASW method

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Keywords

Sinkhole, solution-widened joints, karst, geophysical imaging

Current projects

- City Utilities of Springfield – Waste Landfill Site Investigation
- Geophysical imaging of the subsurface for site characterization in Joplin, MO
- Geophysical imaging of the subsurface for sinkhole evaluation in Harrison, AR