Once the Ground Penetrating Radar (GPR) data collection in the field is complete, the next step is to pull out the key information and images and generate a final report.

The EKKO_Project software makes complex GPR analysis easy with intuitive tools to organize, edit, process and plot your GPR data. Powerful visualization, analysis and integration tools allow you to quickly and easily produce impressive reports.

The reporting capability outputs interpretations and other information into consumable formats such as PDF, spreadsheet (csv), Google Earth™ (kmz) and CAD (dxf) files. Less time spent organizing, editing and processing means more time to analyze and interpret the data, extract valuable insights, and provide superior deliverables to your clients.

### Computer Requirements
Operating System: Windows 7 or later; CPU: > 2 GHz; Memory: > 2 GB RAM; Screen Resolution: minimum 1024 x 768
LineView Module

Modify and Display GPR Lines

Plot GPR lines with
- Gain
- Background Subtraction Filter
- Axes
- Distance Units
- Fonts

Save GPR lines with
- Graphics files (jpg, bmp, etc.)
- GPR Summary Report
- Clipboard
- Printer

Image options
- Zoom & Pan
- Display multiple lines at once
- Link parallel GPR lines to scroll and zoom together
- Add an interpretation to multiple GPR lines at the same time (requires Interpretation module)
- Use the mouse cursor to see the Latitude-Longitude of any point on the GPR line

Topographic corrections

Multiple Color Palettes

Hyperbola Velocity Calibration

Color or Wiggle Trace Palettes

Legend with data display details

Quickly launch Google Earth™ to pinpoint the location of a GPR target
Add Interpretations to GPR Lines

Types of Interpretations:
Points, Polylines, Boxes, Annotations

- Extract polyline interpretations to generate surface plots in third-party software

Interpretation Module

Available Processes
- Attributes > Envelope, Instantaneous Frequency, Instantaneous Phase
- 2D Filters > Migration
- Spatial Filters > Background Subtraction, Horizontal
- Time Filters > Bandpass, Highpass, Lowpass, Dewow, DynaT, Vertical First Break Editing
- Editing > Reposition, Reposition using GPS
- Gains > AGC, Constant, SEC
- Operations > Amplitude Spectra, Average Trace, Flip Polarity, Mute, NMO Correction, Rectify

Filter, Migrate, Edit GPR Lines

Processing Module

- Average Time Amplitude Plot
- Average Frequency Spectrum Plot
- Trace Plot

After: Dewow, Background Subtraction, Filter, Migration & Envelope

Plot Interpretations in MapView, GIS and Google Earth™
SliceView Module

Plot GPR grid lines and depth slices simultaneously

Slice up and down in depth through the 3D data cube

Output depth slices in a variety of formats for reports or as layers in GIS and CAD systems

- View, rotate and slice data as a 3D cube using Voxler (available from Sensors & Software)
- Modify the opacity to make weaker signals invisible and “melt out” stronger targets
- Create Animations

Plot GPR depth slices on Google Earth™

Software Required

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One click to generate a PDF GPR Summary Report with your company logo

Pavement structure report module
Extracts subsurface layer interpretations such as bottom of asphalt and generates thickness charts, tables and statistics

Bridge deck condition report module
Extracts rebar interpretations and generates ASTM-standard maps of amplitude variations associated with bridge deck deterioration

Sensors & Software Inc.
1040 Stacey Court
Mississauga, ON
Canada L4W 2XB

sales@sensoft.ca
www.sensoft.ca

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