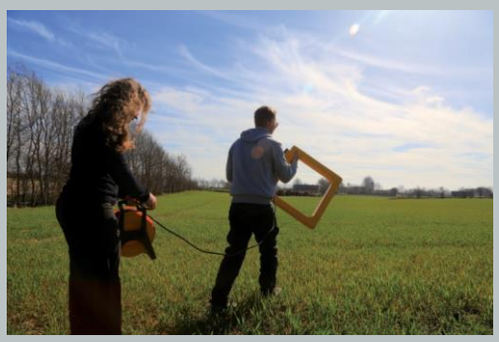
SPIA
SOFTWARE

OVER VIEW

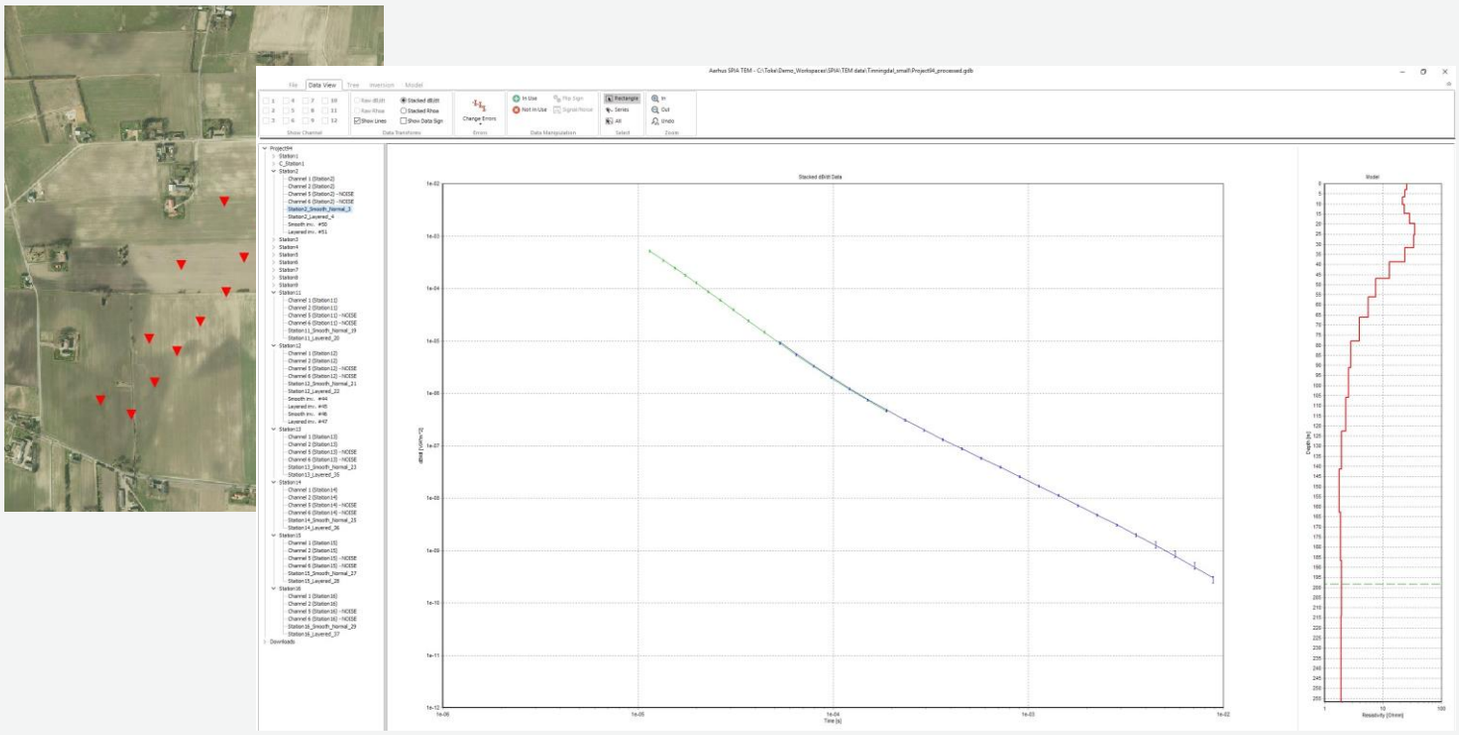
SPIA is a processing and inversion software for ground based TEM and VES data. Using SPIA, the processing and inversion process is simplified by the possibility of editing data and models in a visual and intuitive user interface. The uncertainty of each measurement is user controlled, a priori information can be added to the starting model and inversion models can be adjusted before initiating further inversions. SPIA uses the robust and fast AarhusInv inversion code.







SPIA SOFTWARE



Key features

- Supports all ground based TEM systems.
- Easy to use data import of VES data and direct support for ABEM SAS instruments.
- Integrated IP inversion for SPIA DC.
- Cole-Cole and MPA inversion for TEM data with IP effects.
- Fully developed processing and inversion tools.
- Support for the EPSG coordinate reference system.
- Move GPS position and reciever location for offset configurations.
- Click to see sounding position in Open Street Maps.
- Model based calculation of Depth Of Investigation (DOI).
- Simple model report function with one page report in pdf format for each sounding.
- Easy export of plots and data in XYZ, png and csv formats.
- 1D few-, blocky- and smooth inversion with AarhusInv code.
- load external start model or use inversion model as new starting model.
- Easy import of models to Aarhus Workbench for profile and GIS visualization.
- Import processed data to Aarhus Workbench for SCI inversion.

SPIA Inversion

SPIA performs a 1D inversion with the robust and fast AarhusInv inversion code. SPIA contains several inversion setups:

- A simple one-click inversion setup where a few - and a many layered model is generated for each sounding.
- An advanced inversion setup where the starting model can be fully configured in terms of number of layers, resistivity, thickness and depths of each layer and adding a priori information for each layer parameter.

SPIA TEM module

Electromagnetic data can be plotted in different ways, e.g. raw dB/dt, stacked dB/dt and apparent resistivity. Noise and spike filtering are done automatically on data import. The processed data and inversion models are saved in one SPIA database and can be imported directly into Aarhus Workbench for easy visualization of the results. Support for Cole-Cole and Maximum Phase Angle inversion for TEM data with IP effects.

The SPIA TEM module have importers for:

- ABEM WalkTEM
- AEMR TEMFAST
- Monox GeoScope TerraTEM
- Zonge TEM instruments
- Geonics ProTEM47/57
- HGG WalkTEM
- Extended USF file format
- AMIRA/ESF file format

SPIA DC module

The SPIA DC module suports all 4-electrode configurations (Schlumberger, Wenner, Dipole-Dipole etc.) and IP data.
SPIA DC supports a simple ASCII file format and also the data files from the ABEM Terrameter SAS instrument. UTM coordinates can be added to each sounding upon import.